

PROSPECTOR

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1. PROFILE

- Fujitsu Ltd. Japan
- FAI
- Storage Product Lines



FUJITSU



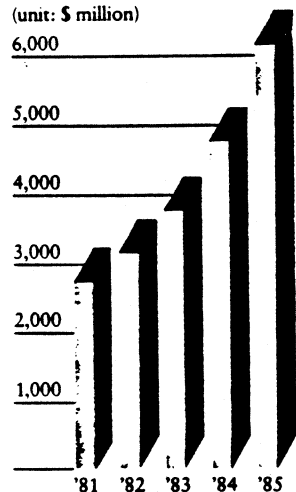
Consolidated Financial Highlights

(In millions of yen and thousands of U.S. dollars except per share data)

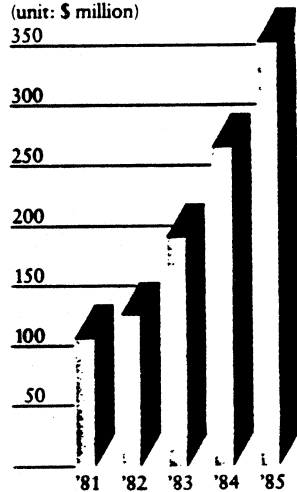
Year ended March 31	1985	1984	1985	1984
Net sales	¥1,562,260	¥1,209,871	\$6,174,941	\$4,782,099
Net income	89,028	66,669	351,889	263,514
Per share (primary)	70.2	60.3	0.277	0.238
Cash dividends paid	9,667	8,084	38,209	31,953
Per share	9.0	7.75	0.036	0.031
As of March 31				
Total assets	¥1,720,645	¥1,276,640	\$6,800,968	\$5,046,008
Shareholders' equity	608,467	433,387	2,405,008	1,712,992
Number of employees	74,187	62,071		
Net sales by main product category				
Computers and data processing systems	¥938,967	¥727,374	\$3,711,332	\$2,874,996
Communications systems	210,802	186,070	833,209	735,455
Semiconductors and electronic components	326,031	217,850	1,288,660	861,067
Car audio and car electronics	58,530	54,023	231,344	213,530
Others	27,930	24,554	110,396	97,051
Total	1,562,260	1,209,871	6,174,941	4,782,099
Net overseas sales	420,932	282,586	1,663,763	1,116,941

- Notes: 1. See Note 1(P) of Notes to the Consolidated Financial Statements in respect to the calculation of income per share amounts.
 2. U.S. dollar amounts above and elsewhere in this Annual Report are converted from yen, for convenience only, at the rate of ¥253 = U.S.\$1.
 3. The Company's fiscal year runs from April 1 through March 31 of the following year.

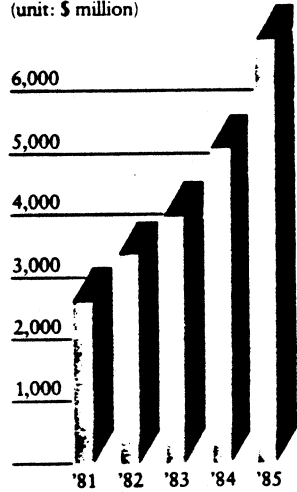
Net Sales
(Year ended March 31)
(unit: \$ million)



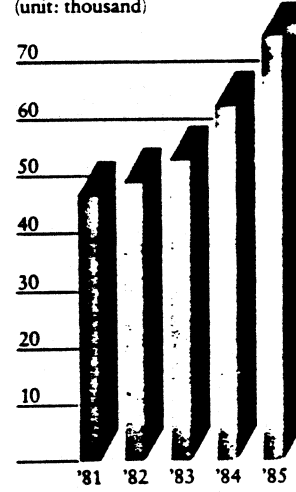
Net Income
(Year ended March 31)
(unit: \$ million)



Total Assets
(As of March 31)
(unit: \$ million)



Employees
(As of March 31)
(unit: thousand)



Corporate structure of Fujitsu

Board of Directors
Chairman Taiyu Kobayashi
President Takuma Yamamoto

General Administration
Kazuo Watanabe

Computer and Telecommunication Systems Marketing Group
Yukimaro Kawatani

Office Automation Systems Marketing Group
Mutsuro Umezu

Sales Group
Fusanosuke Kurosaki

Systems Engineering Group
Mamoru Mitsugi

Customers Engineering Group
Seiichi Sonoda

International Operation Group
Rinzo Iwai

Telecommunications
Bun-ichi Oguchi

Switching Group
Tadashi Sekizawa

Transmission Group
Mikio Otsuki

Information Processing Administration Group
Shoichi Ninomiya

Computer Systems Group
Toshio Hiraguri

Entry Products Group
Koichi Nozawa

Information Processing Devices Group
Tokio Tatsuta

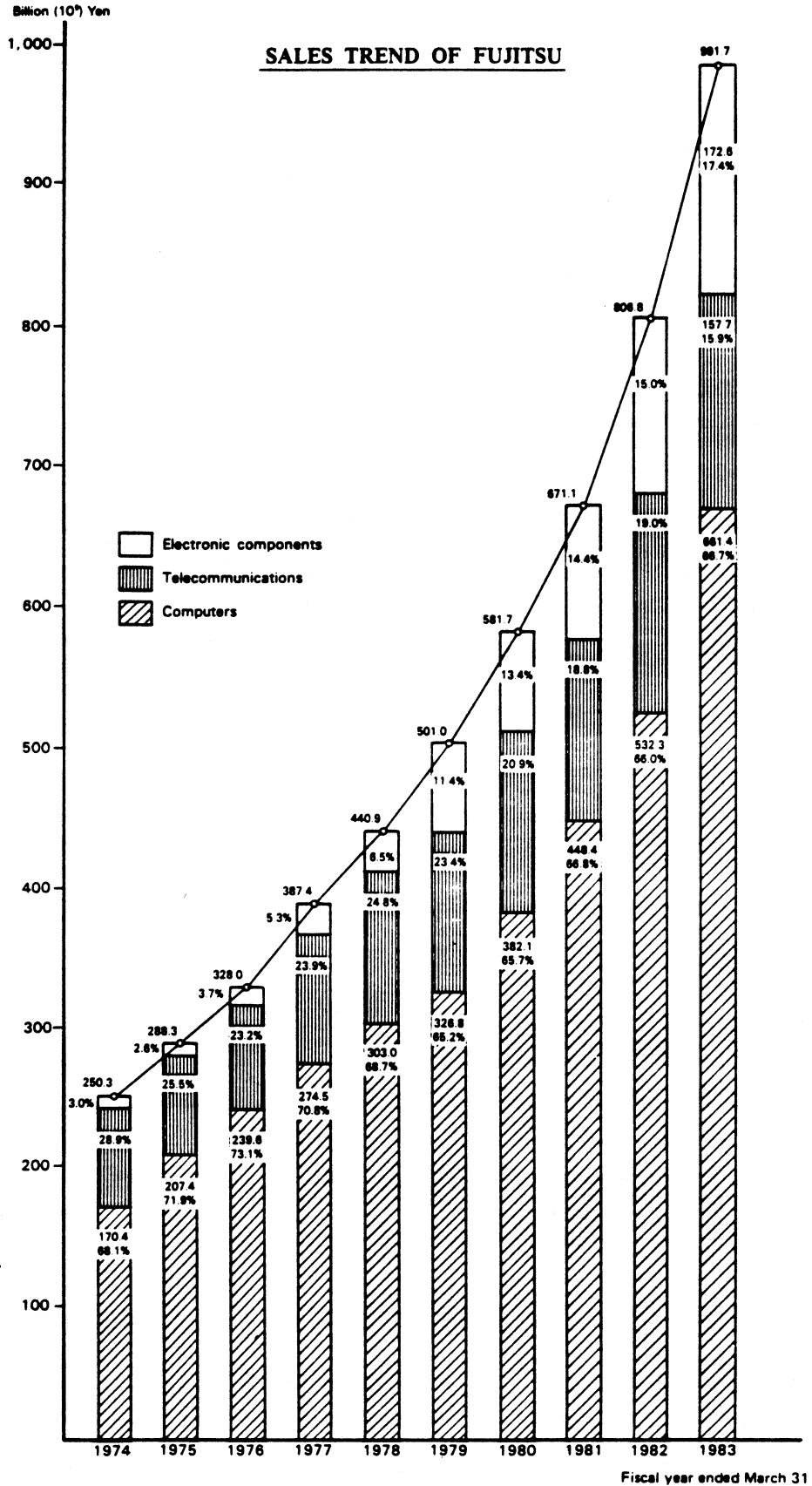
Electronic Device Group
Matami Yasufuku

Fujitsu Laboratories Ltd.
Bun-ichi Oguchi

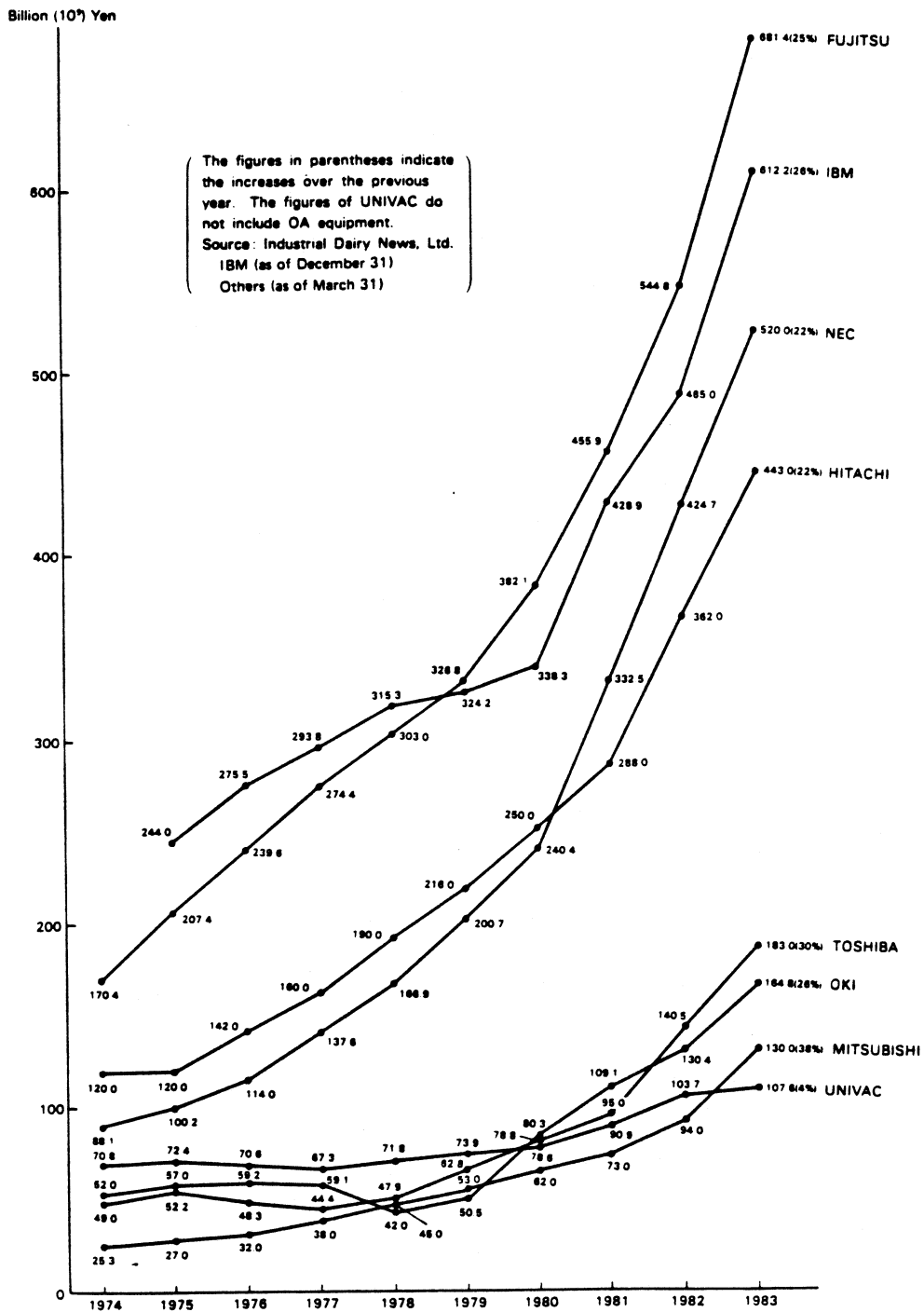
Source: Fujitsu Ltd.

Overseas Offices & Subsidiaries

Overseas Offices		Telephone	Telex
Algiers Office	6, Boulevard Colonel, Amirouche, Alger, Algeria	(213) 63-42-55/57 (213) 63-91-90	
Amman Office	P.O. Box 5420, Ammán, Jordan	662417	
Bangkok Office	Room 405, 4th Floor, Dusit Thani Bldg., 1-3, Rama IV, Bangkok, Thailand	(66) 233-1197 (66) 235-6696	86-87956
Beijing Office	Room 304, National Culture Palace, Beijing, China	66-5424	85-22405
Bogota Office	Cra. 13 No. 27-50, Edificio Centro Internacional Tequendama, Oficina No. 326, Bogotá, D.E. Colombia	(57) 296-8076	35-45408
Hawaii Branch	6660 Hawaii Kai Dr., Honolulu, HI 96825, USA	(1-808) 395-2314	705-7430204
Hong Kong Office	Room 1831, Sun Hung Kai Centre, 30 Harbour Rd., Hong Kong	(852-5) 8915780	802-62667
Jakarta Office	16th Floor, Skyline Bldg., Jalan M.H. Thamrin No. 9, Jakarta, Indonesia	(62-21) 333245	73-45944
Kuala Lumpur Office	17th Floor, MUI Plaza, Jalan P. Ramlee, Kuala Lumpur, Malaysia	(60-3) 425512	84-31005
London Office	Royal Trust House, 54 Jermyn St., London SW1, England	(44-1) 408-0043	51-263871
Munich Office	% D V4 Siemens AG, Otto-Hahn-Ring 6, D-8000, Munich 83, F.R. Germany	(49-89) 636-3244	41-5210935
New Delhi Office	801, 8th Floor, New Delhi House, 27 Barakhamba Rd., New Delhi 110001, India	331-1311/1312	31-2964
New York Office	680 Fifth Ave., New York, NY 10019, USA	(1-212) 265-5360	23-234969
Paris Office	207 Rue de Bercy, Tour MATTEL, 75012, Paris, France	(33-1) 307-0161	42-216905
Singapore Branch	16 Raffles Quay No. 27-01A, Hong Leong Bldg., Singapore 0104, Singapore	(65) 224-0159	87-20138
Taipei Office	Sunglow Bldg. 66, Sung Chiang Rd., Taipei, Taiwan	(886-2) 561-7715	785-26773
Overseas Subsidiaries		Telephone	Telex
FKL Dong Hwa Ltd.	338-13 Dae Hong-Ri, Sunghwan-Eub, Chunwon-Gun, Chungnam, Republic of Korea	(82-417) 4-3660	
Fujitsu America, Inc.	3055 Orchard Drive, San Jose, CA 95134-2017, USA	(1-408) 946-8777	230-176207
Fujitsu Australia Finance Pty. Ltd.	41 McLaren St., North Sydney, N.S.W. 2060, Australia	(61-2) 922-7394	71-25233
Fujitsu Australia Ltd.	41 McLaren St., North Sydney, N.S.W. 2060, Australia	(61-2) 959-6555	71-25233
Fujitsu Business Communications of America, Inc.	3190 Mira Loma Ave., Anaheim, CA 92806, USA	(1-714) 630-7721	230-685571
Fujitsu Canada, Inc.	6280 Northwest Dr., Mississauga, Toronto, Ontario, Canada	(1-416) 673-8666	
Fujitsu Component Europe, B.V.	Rijnkade 19B, 1382 GS, Weesp, The Netherlands	(31-2940) 18748	44-11966
Fujitsu Component (Malaysia) SDN. BHD.	No. 1 Lorong Satu Kawasan Perindustrian Parit Raja, Batu Pahat, Johor, Malaysia	(60-7) 481392-4	84-60577
Fujitsu Component of America, Inc.	3320 Scott Blvd., Santa Clara, CA 95054-3197, USA	(1-408) 727-1700	910-338-0190
Fujitsu Customer Service of America, Inc.	10995 Torreyana Rd., San Diego, CA 92121-1195, USA	(1-619) 453-5303	25-910-337-1127
Fujitsu do Brasil Comunicação Eletrônica Máquinas e Serviços Ltda.	Rua Manoel da Nóbrega, 1280 2º Andar, C.E.P. 04001, São Paulo, SP, Brazil	(55-11) 289-7099	38-1121777
Fujitsu Elektronik GmbH	Sonnen Straße 29, D-8000 München 2, F.R. Germany	(49-89) 592891-4	41-5213994
Fujitsu España, S.A.	Avenida del Brasil, 5, Edificio Iberia Mart II, 8ª. Planta, 28020 Madrid, Spain	(34-1) 455-2938/45	52-23887
Fujitsu Europe Ltd.	Royal Trust House, 54 Jermyn St., London SW1, England	(44-1) 408-0043	51-263871
Fujitsu Italia S.p.A.	Via Lazzaroni, 4, 20124 Milano, Italy	(39-2) 607-3601	43-350142
Fujitsu Korea Ltd.	9th Floor, Korean Reinsurance Bldg., 80, Susong-Dong, Chongro-Gu, Seoul Special City, Republic of Korea	(82-2) 313-3281	801-24553
Fujitsu Microelectronics, Inc.	3320 Scott Blvd., Santa Clara, CA 95054-3197, USA	(1-408) 727-1700	910-338-0190
Fujitsu Microelectronics Ireland Ltd.	Unit D Greenhills Centre, Greenhills Rd., Tallaght, Dublin 24, Ireland	(353-1) 520 744/325	500-30152
Fujitsu Microelectronics Ltd.	Vaughan St., West Gorton, Manchester M12 5DU, England	(44-61) 231-6676	51-667403
Fujitsu Microsystems of America, Inc.	3055 Orchard Drive, San Jose, CA 95134-2017, USA	(1-408) 946-8777	230-176207
Fujitsu Mikroelektronik GmbH	Arabella Centre 9. OG./A, Lyoner Straße 44-48, D-6000 Frankfurt am Main 71, F.R. Germany	(49-69) 66320	41-411963
Fujitsu New Zealand Ltd.	Cnr Khyber Pass Road & Nugent St., Grafton 3, Auckland, New Zealand	(64-9) 34-869	74-60157
Fujitsu Nordic AB	Industrigatan 2A Plan 7, 112 46 Stockholm, Sweden	(46) 8-785-0060	54-13411
Fujitsu (Singapore) Pte. Ltd.	No. 2 Second Chin Bee Rd., Jurong Town, Singapore 2261, Singapore	(65) 265-6511	87-22194
Fujitsu Systems of America, Inc.	10995 Torreyana Rd., San Diego, CA 92121-1195, USA	(1-619) 453-5303	25-910-337-1127
Fujitsu Vitória Computadores e Serviços Ltda.	Avenida Nossa, Senhora da Penha, 570 8º Andar, Praia do Canto-Vitória-Espirito Santo, Brazil	(55-27) 225-0355/ 0532/0709/0954	38-272218

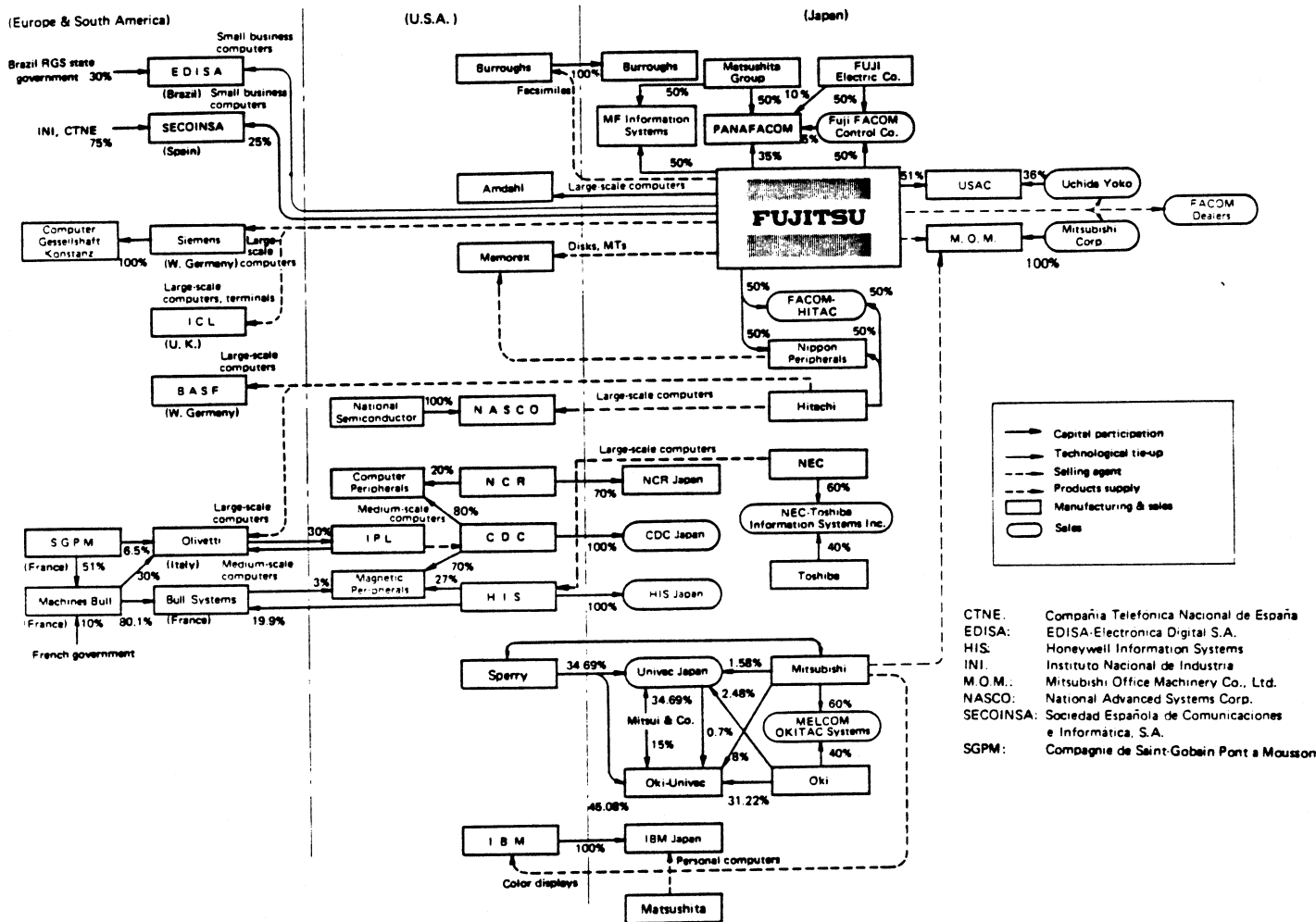


RECENT SALES TRENDS OF MAJOR COMPUTER MANUFACTURERS IN JAPAN



JAPAN'S COMPUTER MANUFACTURERS AND THEIR BUSINESS ASSOCIATES

(As of March 1984)



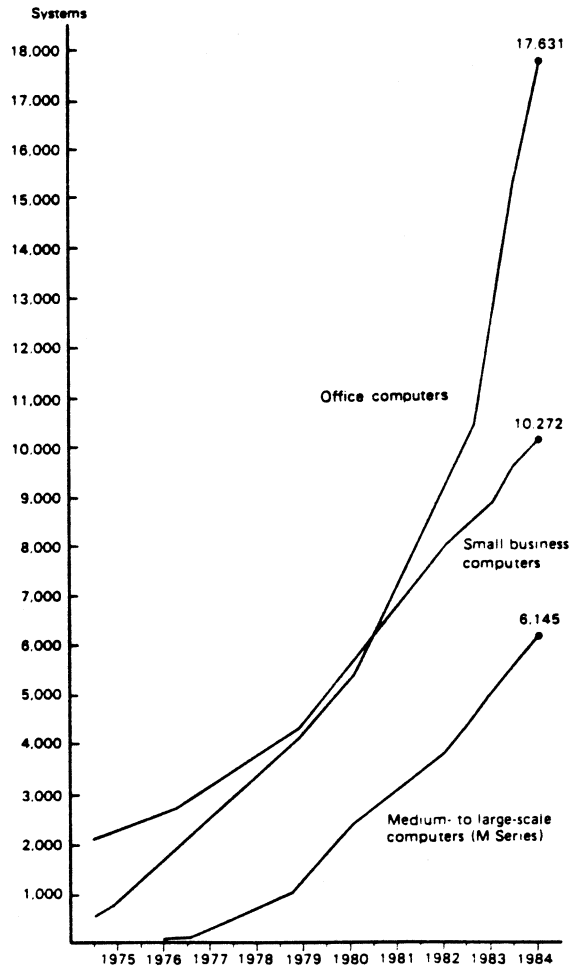
CTNE: Compañía Telefónica Nacional de España
 EDISA: EDISA-Electronica Digital S.A.
 HIS: Honeywell Information Systems
 INI: Instituto Nacional de Industria
 M. O. M.: Mitsubishi Office Machinery Co., Ltd.
 NASCO: National Advanced Systems Corp.
 SECOINSA: Sociedad Española de Comunicaciones e Informática, S.A.
 SGPM: Compagnie de Saint-Gobain Pont à Mousson

CUMULATIVE SHIPMENTS PLUS BACKLOG ORDERS OF FACOM SYSTEMS

(As of March 1984)

(Systems)

Earlier large-scale computers	230-85		16
	230-75		85
	DIPS		59
	Total		160
Supercomputers			3
Medium-to large-scale computers	M Series	M-382/380/380S/380R	175
		M-360/360R	304
		M-340/340S/340R	476
		M-320/310	889
		M-200	137
		M-190	53
		M-180II	283
		M-160	189
		M-160S	150
		M-140	267
		M-130	389
		M-170F	294
		M-160F	495
		M-150F	382
		M-140F	831
		M-130F	831
		Subtotal	
Large-scale processors	APS	731	
8 Series		2,367	
Total		9,243	
Small business computers	V Series	V-870	313
		V-850	1,738
		V	1,578
		V-830	3,736
	Subtotal		7,365
230-15		2,907	
Total		10,272	
Office computers	SYSTEM 80		12,480
	Others		5,151
Total		17,631	
Minicomputers		5,590	
Others		7,595	
Grand Total		50,494	
Japanese word processors (OASYS)		41,000	
Japanese processing system (JEF)		2,372*	



*Number of users

Fiscal year ended March 31

Overseas Operations

North America

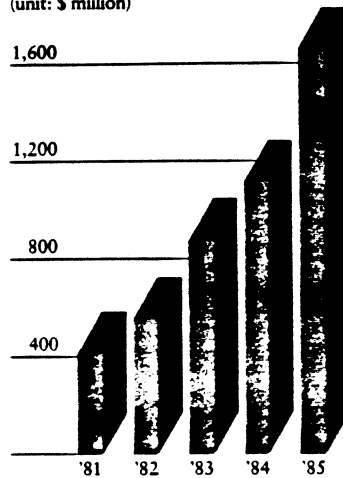
Fiscal 1984 activities in the U.S. were brisk, centering on four Fujitsu subsidiaries, which are now firmly in place. Fujitsu America, Inc.'s (FAI's) Dallas Works, which was completed in fiscal 1983, further promoted the production of optical fiber transmission systems and other transmission systems. Also in fiscal 1984, Fujitsu announced plans to build two production facilities in Oregon for FAI and Fujitsu Microelectronics, Inc. (FMI). The FAI facility will produce magnetic disk drives, while the FMI facility will produce semiconductor devices. The completion of these two new works will greatly enhance Fujitsu's manufacturing capabilities in the U.S., significantly strengthening Fujitsu's local activities in this region.

FAI business in the telecommunications field enjoyed steady growth throughout fiscal 1984. Supply of 405Mbps optical fiber transmission equipment to MCI Telecommunications Corporation progressed well, and inquiries from other telephone companies for 405Mbps systems increased sharply. In the data processing field, OEM sales of disk drives, printers and modems were active in response to brisk market demand.

At the end of March 1985, American Telecom, Inc. (ATI) was reorganized as a subsidiary of FAI, and given a new name on April 1 — Fujitsu Business Communications of America, Inc. (FBC). The main reason for the name change was that FBC will diversify operations, expanding into the integrated business communications and office automation systems markets.

At Fujitsu Systems of America, Inc. (FSA), the FAI subsidiary provid-

Net Sales
(Year ended March 31)
(unit: \$ million)



Overseas operations in fiscal 1984 progressed well in all sales regions. Digital switching systems and optical transmission systems, large-scale M Series computers, OEM equipment, and semiconductors — all reached excellent sales levels. Overseas sales were 49% higher than in fiscal 1983, reaching a total of \$1,664 million.

ing end-user marketing, accumulated sales of the 7880 POS terminal from Fujitsu reached 10,000 units in September 1984, reflecting the excellent sales of the terminals in the U.S. In response to the demand for banking terminals, shipments of ACT2000 automatic teller machines (ATMs) also began in 1984. These activities accentuate the company's presence in U.S. financial and retail industries.

Business with Amdahl Corp. in the U.S. also continued successfully, marked by the installation of our first FACOM VP-200 super computer in fiscal 1984.

In the business personal computer marketplace, FMI introduced the Fujitsu Micro 16sx, which features a built-in hard disk drive, in fiscal 1984. The 16sx is the latest product in the Fujitsu Micro 16s Series lineup. In addition to introducing this new product during the year, the company continued to strengthen its software and sales network.

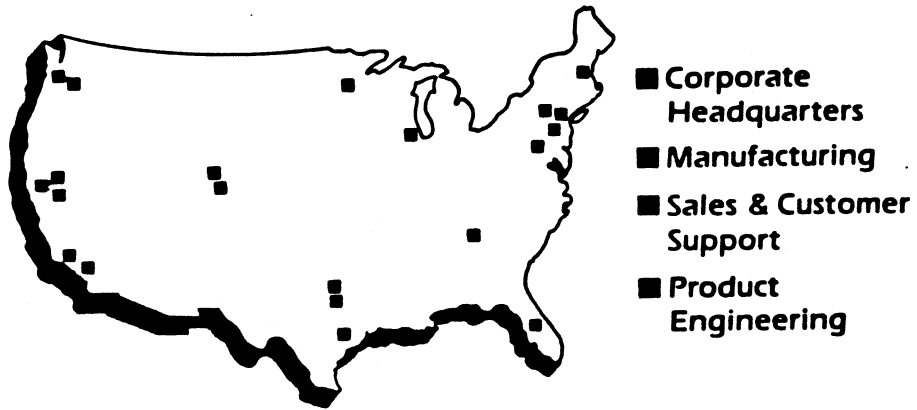
In the U.S. semiconductor market, the progress of personal computers and office automation equipment spurred semiconductor demand. Fujitsu answered the demand by beefing up production of a wide variety of memory LSIs and microprocessors. Much of the production came from the company's state-of-the-art manufacturing facility in San Diego, California.

In the field of gate arrays, commercially available, user-friendly design workstations were promoted to speed the development of gate array LSIs. Following the precedent set last year with Texas Instruments, a five-year alternate source contract was signed in June 1984 with Monolithic Memories, Inc. for bipolar TTL gate arrays.



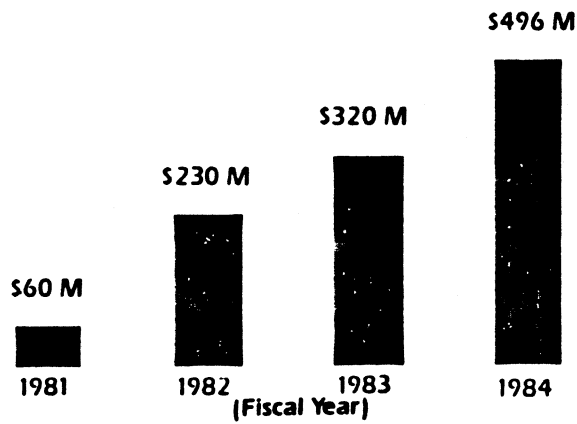
FUJITSU AMERICA

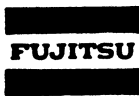
FACILITIES



REVENUE GROWTH

(Including Subsidiaries)





FUJITSU AMERICA

FIVE SUBSIDIARIES

FUJITSU SYSTEMS OF AMERICA

Automated Teller Machines

Cash Dispenser

Point-Of-Sale Systems

Customer End-User Systems

FUJITSU BUSINESS COMMUNICATIONS

**Private Branch Exchange
Systems**

FUJITSU MICROSYSTEMS OF AMERICA

Business Computers

Fujitsu Customer Service Of America

Fujitsu Canada



FUJITSU

FUJITSU AMERICA

THREE PRODUCT DIVISIONS

TELECOMMUNICATIONS

Fiber Optic Transmission Equipment

Microwave Radio Equipment

Satellite Communications Systems

Cellular Mobile Telephones

DATA PRODUCTS DIVISION

Standalone & Card Modems

Printed Wiring Boards

Office Automation Products

STORAGE & PERIPHERAL PRODUCTS DIVISION

Winchester Disk Drives

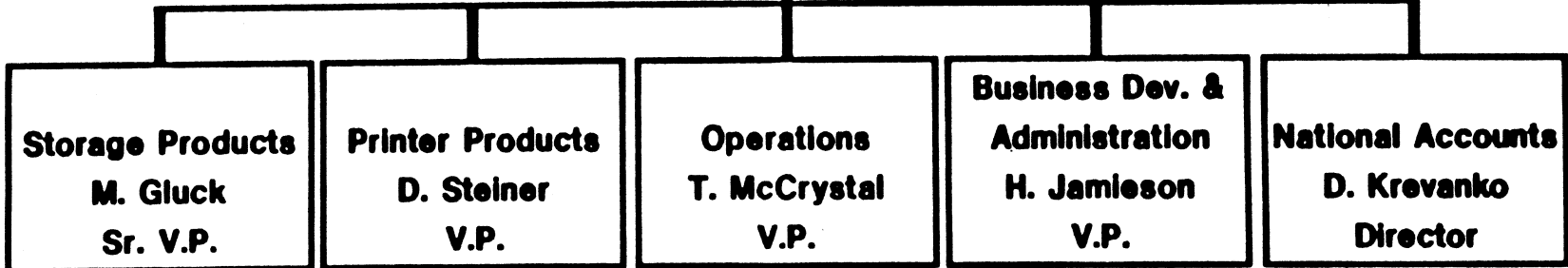
Magnetic Tape Drives

Serial Printers

Band Printers

Laser Printers

**OEM Storage &
Peripheral Products
N. Petersen
President**



- **M. Wilson, Director, Product Marketing**
- **R. Van Dyke, Manager, Technical Services**
- **B. Rafalovlch, Director, Western Region Sales**
- **B. Robertson, Director, Eastern Region Sales**
- **R. Scott, Director, Central Region Sales**
- **G. Boudreau, Director, Flexible Disk Products**
- **A. Vasudeva, Director, Product Planning**

3.5", 5.25" DRIVE PRODUCT SUMMARY

MODEL	SIZE (Inches)	CAPACITY (MB)	ACCESS (MS)	XFACE STD	XFER (MB/S)	STATUS
M222X	3.5	13/19	88	ST506	.625	PROD
M222X	3.5	25/38/50	50	ST506	.625	3Q86
M223X	5.25	13/20/26	86	ST506	.625	PROD
M224X	5.25	55/86	33	ST506	.625	PROD
M2246E	5.25	86/120/172	25	ESDI SCSI/IDC SCSI/EMB	1.25	PROD PROD 4Q86
H4	5.25	320+	20	ESDI SCSI/IDC SCSI/EMB	1.25	2Q87 3Q87

8" DRIVE PRODUCT SUMMARY

MODEL	SIZE (Inches)	CAPACITY (MB)	ACCESS (MS)	XFACE STD	XFER (MB/S)	STATUS
M2312	8	84	20	SMD	1.2	PROD
M2322	8	168	20	SMD	1.2	1Q87
M2333	8	337	20	HSMD SCSI/IDC IPI2	2.4	PROD PROD 2Q87
SW4	8	520+	18	HSMD SCSI/IDC IPI2	2.4	4Q86 1Q87 2Q87

10.5" DRIVE PRODUCT SUMMARY

MODEL	SIZE (Inches)	CAPACITY (MB)	ACCESS (MS)	XFACE STD	XFER (MB/S)	STATUS
M2351A	10.5	474	18	MSMD	1.8	PROD
M2361A	10.5	689	18	HSMD	2.4	PROD
M2361B	10.5	689	18	SCSI/IDC	2.4	2Q86
EAGLE III	10.5	1260	16	IPI	3.0	2H87
M2350 (PTD)	10.5	474	18	MSMD	9.3	PROD
M2360 (PTD)	10.5	689	18	HSMD	12.3	3Q86

14" DRIVE PRODUCT SUMMARY

MODEL	SIZE (Inches)	CAPACITY (MB)	ACCESS (MS)	XFACE STD	XFER (MB/S)	STATUS
M2284	14	168	27	SMD	1.0	PROD
M2294	14	336	27	SMD	1.0	PROD
M2298	14	671	27	MSMD	1.8	PROD

TAPE DRIVE PRODUCT SUMMARY

MODEL	TYPE	SPEEDS (IPS)	DENSITY (BPI)	XFACE	STATUS
M2451	1/2" CARTRIDGE (120 MB)	50 S/S 50/75 STR	12,000	ESDI SCSI	PROD
M245X	1/2" CARTRIDGE (240+MB)	50 S/S 50/75 STR	12,000	ESDI SCSI	1Q87
M244X	GCR STREAMER	12.5 OR 25 S/S 100 OR 75 STR	1600/6250	CIPHER PERTEC	PROD
M244XAC	CACHE BUFFER MODEL	12.5 OR 25 S/S 100 OR 75 STR	1600/6250	CIPHER PERTEC	PROD
M244XAC	CACHE BUFFER MODEL	12.5 OR 25 S/S 100 OR 75 STR	1600/6250	SCSI	4Q86
M2435	GCR SUBSYSTEM	125 S/S 200 STR	1600/6250	STC	PROD
M2436	GCR SUBSYSTEM	200 S/S	1600/6250	STC	PROD
F6470	1/2" CARTRIDGE	79 S/S	38,000	IBM BMC IPI3	1H87 2H87

FLEXIBLE DISK DRIVE FAMILY

5 1/4" Disk Drive

Half Height

- .5 MB
- 1.0 MB
- 1.6 MB
- 1.0/1.6 MB
- 3.3 MB

3 1/2" Disk Drive

Half Height

- .5 MB
- 1.0 MB
- 1.6 MB
- 1.0/1.6 MB
- 2.0 MB

One-third Height

- 1.6 MB

2. OVERVIEW

- Prospects, All U.S. Companies
(Oems, Vars, Subsystem Houses, Distributors, Chains)

PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 □ Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
A.B. DICK	CN	IL	OEM	450	CHICAGO	312-647-8800	ROBERT VERRANDO	VP, MKTG	SIANTA	5002
A.K. INDUSTRIES	---	---	OEM	---	---	---	---	---	---	---
A.M. JACQUARD	---	---	OEM	---	---	---	---	---	---	---
ABL COMPUTER TECHNOLOGIES	EA	MA	VAR	10	---	(617)433-5211	JAMES H. GROH	C.E.O.	SHARRIO	480
ABLE COMPUTER	SW	CA	OEM	25	COSTA MESA	714-979-7030	LESLIE WELLINGTON	VP, R & D	CARGILO	330X
ACCESS CORP.	CN	MN	DIST	2	---	(612) 490-0221	MEL SMITH	C.E.O.	LOGELIN	590
ACCU-SORT SYSTEMS, INC.	EA	PA	VAR	5	---	(215)723-0981	JOHN P. SCHULTZ	H.E.	ZNOTENS	495
ACORN COMPUTERS	EA	MA	OEM	---	WOBURN	617-935-1190	ROBERT ANGELO	VP, MKTG	SHARRIO	4002
ACPI LTD.	EA	NY	VAR	5	---	(516)248-7700	MORRIS MOLIVER	C.E.O.	ELSON	490
ACT SYSTEMS	SW	CA	OEM	3	SAN DIEGO	619-695-2661	ARAM PASHAIAN	PRESIDENT	FISHER	330X
ACT TECHNOLOGIES CORP	EA	MD	SUBS	---	---	(301) 628-0260	---	---	ZNOTENS	485
ACTION COMPUTER	SW	CA	OEM	5	PASADENA	818-351-5451	H. SIEGEL	PRESIDENT	FISHER	330X
ACTRIX (ACCESS MATRIX)	NW	CA	OEM	---	SAN JOSE	408-263-3660	GLENN BROWN	VP, ENGR	BURTON	310X
ACTUARIAL COMPUTER TECHNOLOGY	SW	CA	VAR	8	---	(213)641-5600	MARIA R.KATZ	C.E.O.	RAFALOVICH	395
ADD ELECTRONICS CORPORATION	EA	NY	DIST	10	---	(315) 437-0300	RONALD HIMBERG	C.E.O.	ELSON	490
* ADV. ELECTRONICS DESIGN	NW	CA	OEM	15	SUNNYVALE	408-733-3555	MICHAEL LONG	PRESIDENT	BOSCH	3102
ADVANCED COMPUTER MANAGEMENT	CN	MI	VAR	7	---	(313)649-1800	HARVE C. LIGHT	C.E.O.	LOGELIN	595
ADVANCED COMPUTER SUPPLIES	EA	NJ	DIST	8	---	(201) 329-6988	S. LEE SMITH	C.E.O.	ZNOTENS	495
ADVANCED COMPUTER TECHNIQUE	EA	NY	VAR	15	---	(212)696-3600	SCOTT GELLIS	H.E.	ELSON	490
ADVANCED DIGITAL CORP.	SW	CA	OEM	12	HUNTINGTON BC	714-891-4004	ROGER ALEXANDER	DIR, MKTG	CARGILO	330X
ADVANCED INFO	---	---	OEM	---	---	---	---	---	---	---
ADVANCED INTEGRATED TECHNOLOGY	EA	TN	VAR	5	---	(615)381-4388	GENE CHEATHAM	C.E.O.	BROWN	470
ADVANCED TECHNOLOGY	NW	CA	DIST	2	---	(415) 785-8346	WALTER C. THOMAS	C.E.O.	RAFALOVICH	395
ADVANCED TECHNOLOGY INTERNT'L	EA	NY	DIST	15	---	(212) 869-8686	Y. ZEIRA	C.E.O.	ELSON	490
ADVANTAGE SYSTEMS	EA	FL	VAR	15	---	(813)536-4765	JAMES WALTER JR.	C.E.O.	BROWN	470
AERO SYSTEMS ENGINEERING	CN	MN	VAR	13	---	(612)227-7515	RAYMOND RICHARDSON	H.E.	LOGELIN	590
AEROCOMP INC.	CN	TX	SUBS	---	---	(214) 339-8324	---	---	HAMKINSON	570
AEROJET ELECTROSYSTEMS CO.	SW	CA	VAR	10	---	(213)334-6211	CRAIG W. HAMMILL	H.E.	RAFALOVICH	395
AGENT SYSTEMS	CN	TX	VAR	6	---	(214)369-8108	ADRIAN CURIN	H.E.	HAMKINSON	570
ALBIN BUSINESS COMPUTERS	CN	MI	VAR	6	---	(313)478-0023	H.C. ALBIN	C.E.O.	LOGELIN	595
ALCYON	SW	CA	OEM	5	SAN DIEGO	619-578-0860	WILLIAM KEHRET	EX VP	FISHER	330X
ALF PRODUCTS INC.	NW	CO	DIST	2	---	(303) 234-0871	PHIL TUBB	C.E.O.	EVERETT	370
ALLEN & ASSOCIATES, MILTON	CN	OH	DIST	3	---	(216) 861-8100	MILTON ALLEN	C.E.O.	LOGELIN	595
* ALLOY COMPUTER	EA	MA	OEM	15	FRAMINGHAM	617-875-6100	NIGEL SPICER	VP, MKTG	ZNOTENS	4004
ALPHA DATA	SW	CA	SUBS	---	---	(818) 882-6500	---	---	RAFALOVICH	395
* ALPHA MICRO	SW	CA	OEM	51	SANTA ANA	714-957-8500	LEONARD PALLADINO	VP, CMPTR SYS	CARGILO	3304
ALPHA OMEGA	SW	CA	SUBS	---	---	(818) 345-4422	---	---	RAFALOVICH	395
ALPHA-BIT COMPUTERS	CD	CD	VAR	10	---	(403)475-5555	WILLIAM GROSVENOR	C.E.O.	---	---
ALPINE DATASYSTEMS	NW	OR	VAR	10	---	(503)641-8100	BERND VONLINTEL	C.E.O.	RAFALOVICH	395
ALPS	NW	UT	VAR	5	---	(801)375-0090	RON MAHONEY	C.E.O.	EVERETT	370
ALSPA COMPUTER	NW	CA	OEM	---	CAMPBELL	408-370-3000	RICHARD BROOKS	VP, MKTG	SCHWITT	310X
* ALTOS COMPUTER	NW	CA	OEM	103	SAN JOSE	408-946-6700	DAVID LIGGETT	VP, OPERATIONS	BURTON	3104
AMATIX INC.	SW	CA	DIST	2	---	(213) 417-8989	EDWARD GOODFIELD	C.E.O.	RAFALOVICH	395
* AMDAHL	NW	CA	OEM	779	SUNNYVALE	408-746-6000	ANTHONY POZOS	VP, CORP SVCS	BURTON	3104
AMERICAN APPRAISAL ASS.	CN	WI	VAR	60	---	(414)271-7240	L.P. HACKETT	C.E.O.	SIANTO	580
AMERICAN COMPUTER GROUP INC.	EA	MA	DIST	25	---	(617) 437-1100	ADOLF MONOSSON	C.E.O.	SHARRIO	480
AMERICAN COMPUTER SUPPLIES	EA	NY	DIST	3	---	(212) 736-4524	ANTHONY SHONE	C.E.O.	ELSON	490
AMERICAN DIGITAL	CN	IL	OEM	---	CHICAGO	312-588-4500	MICHAEL SCOBY	MKT DIR	SIANTA	5002
AMERICAN MANAGEMENT SYSTEMS	EA	VA	VAR	80	---	(703)841-6000	FRANK A. NICOLAI	H.E.	ZNOTENS	485
AMERICAN MITAC CORP.	NW	CA	SUBS	---	---	(408) 988-0258	---	---	RAFALOVICH	395
AMHERST ASSOC.	CN	IL	VAR	22	---	(312)332-0500	M. KING DEETS	C.E.O.	SIANTO	580
AMI	NW	WA	VAR	20	---	(206)643-2050	TIM TEAGUE	H.E.	RAFALOVICH	395
AMNET, INC.	EA	MA	VAR	10	---	(617)923-1850	PETER COLE	H.E.	SHARRIO	480
* AMPLEX MEMORY PROD.	NW	CA	OEM	600	REDWOOD CITY	415-367-2011	CHARLES GINSBURG	VP, TECH. PLNG	GAILEY	3306
AMPRO COMPUTERS	NW	CA	OEM	2	MOUNTAIN VIEW	415-962-0230	RICHARD LEHRBAUM	VP, ENGR	SCHWITT	310X
ANACOMP, INC.	CN	IN	VAR	100	---	(317)844-9666	L.P. FERRARO	C.E.O.	SIANTO	580
ANALOGIC CORP.	EA	MA	VAR	150	---	(616)777-4500	DANIEL ABENAIM	H.E.	SHARRIO	480
ANDERSON JACOBSON	NW	CA	OEM	51	SAN JOSE	408-263-8520	WAYNE SEPPELER	VP, OPERATIONS	BURTON	310X
ANDROMEDA SYSTEMS	SW	CA	OEM	3	CANOGA PARK	213-709-7600	J. REYNOLDS	PRESIDENT	FISHER	330X
ANN ARBOR COMPUTER	CN	MI	VAR	5	---	(313)973-7875	ROGER BUITEN	C.E.O.	LOGELIN	595
APF ELECTRONICS	EA	---	OEM	---	---	---	---	---	---	---
* APOLLO COMPUTER	EA	MA	OEM	80	CHELMSFORD	617-256-6600	DAVID NELSON	VP, R & D	ELSON	4003
APPALACHIAN COMPUTER SERVICES	CN	KY	DIST	17	---	(606) 878-7900	KEN JAMES	C.E.O.	LOGELIN	595

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

(sorted by company)

* Present customer
 * Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
APPARAT INC.	NW	CO	SUBS	---	---	(303) 741-1778	---	---	EVERETT	370
APPL.DIG. DATA SYST	EA	NY	OEM	70	HAUPPAUGE	516-231-5400	ROBIN WHITE	VP, SYSTEMS	ZNOTENS	4004
APPLE	NW	CA	OEM	1,516	CUPERTINO	408-996-1010	WILLIAM CAMPBELL	VP, SALES	BURTON	310X
APPLE COMPUTER	NW	CA	SUBS	---	---	(408) 996-1010	---	---	RAFALOVICH	395
APPLIED AUTOMATION INC.	CN	OK	VAR	25	---	(918)661-6141	R.S. MCCONNELL	C.E.O.	HAWKINS	570
APPLIED BUSINESS CMPTR	SW	CA	OEM	1	ANAHEIM	714-666-2604	ALLEN LIU	PRESIDENT	FISHER	330X
APPLIED COMPUTER SYS.	NW	---	OEM	---	---	---	---	---	---	---
APPLIED DATA COMMS.	SW	CA	OEM	13	TUSTIN	714-731-9000	LAURENCE RUOFF	VP, ENGR	CARGILO	330X
APPLIED DATA SYSTEMS INC.	SW	AZ	VAR	6	---	(602)998-3980	HANS AGER	C.E.O.	GOODMAN	385
APPLIED DIGITAL DATA	EA	NY	OEM	70	HAUPPAUGE	516-231-5400	KEITH LOHMULLER	MKTG DIR	ZNOTENS	4004
APPLIED SYSTEMS	CN	IL	VAR	7	---	(312)534-5575	ROBERT EUSTACE	C.E.O.	SIANTO	580
APRICOT CMPTR	NW	CA	OEM	---	FREMONT	415-659-8500	SIHON HUNT	CEO	BOSCH	310X
APTECH COMPUTER SYSTEMS	EA	PA	VAR	6	---	(412)782-5550	JAY TROUTMAN	H.E.	ZNOTENS	495
AQUATROL	CN	MN	OEM	8	ROSEVILLE	612-636-3950	PATRICK DURGIN	VP, MKTG	LOGELIN	5001
AQUIDNECK DATA CORP.	EA	RI	VAR	11	---	(401)847-7260	KENNETH A. PARKER	H.E.	SHARRIO	480
ARA MAINTENANCE MNGMT SYS	EA	VA	VAR	6	---	(703)243-3800	EMANUAL GREBER	C.E.O.	ZNOTENS	485
ARBY CORP.	EA	MA	SUBS	---	---	(617) 864-5058	---	---	SHARRIO	480
ARCHIVES, INC.	SW	CA	OEM	38	COSTA MESA	714-641-0279	J.V. HOWELL	VP, R & D	CARGILO	330X
ARDENT COMPUTER	EA	NY	OEM	3	DOBBS FERRY	914-693-6900	GILBERT HEIM	VP	ZNOTENS	4004
AREGON INTERN'L, INC.	EA	CT	VAR	6	---	(203)964-1700	RICHARD OSBORNE	C.E.O.	SHARRIO	480
* ARETE SYSTEMS	NW	CA	OEM	20	SAN JOSE	408-263-9711	MICHAEL FALLON	VP, ENGR	BURTON	3104
ARINCO COMPUTER SYSTEMS INC.	SW	NM	DIST	15	---	(505) 988-9743	JAMES A. ARIAS	C.E.O.	GOODMAN	385
ARKANSAS SYSTEMS INC.	CN	AR	DIST	2	---	(501) 227-8471	JAMES HENDREN	C.E.O.	HAWKINS	570
ARROW ELECTRONICS	EA	NY	DIST	480	---	(212) 563-0055	STEVE KAUFMAN	C.E.O.	ELSON	490
ARTEC ELECTRONICS	NW	CA	OEM	2	SAN CARLOS	415-592-2740	ROBERT JONES	PRESIDENT	BURTON	310X
ARTONIX	EA	NJ	OEM	5	---	---	---	---	ZNOTENS	4004
ARTRONICS, INC.	EA	NJ	VAR	5	---	(201)756-6868	TIMOTHY CUNHA	C.E.O.	ZNOTENS	495
ASK COMPUTER SYSTEMS	NW	CA	VAR	65	---	(415)969-4442	KENNETH FOX	H.E.	RAFALOVICH	395
ASSOCIATED COMPUTER SYSTEM	EA	GA	VAR	7	---	(404)496-1041	JIM SWYMER	C.E.O.	BROWN	470
ASSOCIATED DATA SUPPLY CO.	SW	CA	DIST	3	---	(213) 453-8822	ROBERT LEVINE	C.E.O.	RAFALOVICH	395
ASSOCIATED DATAMASTERS	SW	CA	VAR	8	---	(714)381-3491	FRANK BRADFORD	C.E.O.	RAFALOVICH	395
* AST RESEARCH	SW	CA	SUBS	---	---	(714) 836-1333	---	---	CARGILO	3304
ASTRAEA COMPUTER	NW	CA	OEM	---	SUNNYVALE	408-773-8500	RAYMOND BURKLEY	PRESIDENT	BURTON	310X
ASTROCOM	CN	MN	OEM	11	ST. PAUL	612-227-8651	MICHAEL ANDERSON	VP	LOGELIN	5001
* AT&T	NL	NY	OEM	33,000	NEW YORK	212-605-5500	WILL BETTERIDGE	VP	WEBB	5111
ATARI	NW	CA	OEM	---	SUNNYVALE	408-745-2000	SIG SCHREYER	VP/GM	BURTON	310X
ATV SYSTEMS	SW	CA	OEM	---	SANTA ANA	714-261-2390	FRANK GLEASON	EXC VP	GATLEY	330X
AUGUST SYSTEMS	NW	OR	OEM	12	TIGARD	503-684-3550	ANTON FREDERICKSON	VP, CTRL ENGR	BOSCH	320
AURAGEN SYSTEMS	EA	NJ	OEM	10	FT. LEE	201-461-3400	ROBERT GARDNER	VP, SALES	ZNOTENS	4004
AUROTECH INC.	NW	CO	DIST	3	---	(303) 388-1612	DAN ROSEN	C.E.O.	EVERETT	370
AUTO TELL SERVICES	EA	PA	VAR	7	---	(215)525-9526	FRANK GORMAN	H.E.	ZNOTENS	495
AUTO-TROL TECHNOLOGY CORP.	NW	CO	VAR	50	---	(303)452-4919	E. JOSEPH ZEMKE	C.E.O.	EVERETT	370
AUTOCONTROL, INC.	CN	MO	VAR	5	---	(314)739-0055	JOHN MIZIS	C.E.O.	LOGELIN	590
AUTOMATED BUSINESS TECHNOLOGY	EA	MD	DIST	8	---	(301) 924-5900	TERRY J. NOREN	C.E.O.	ZNOTENS	485
AUTOMATED INSURANCE RES SYS	CN	IL	VAR	6	---	(312)369-2121	DONALD LANDGRAF	C.E.O.	SIANTO	580
AUTOMATED SCIENCES GROUP, INC.	EA	MD	VAR	16	---	(301)587-8750	TED FERGUSON	H.E.	ZNOTENS	485
AUTOMATION INTELLIGENCE, INC.	EA	FL	VAR	12	---	(305)843-7030	RICHARD Q. FOX	H.E.	BROWN	470
AUTOMETRIC, INC.	EA	VA	VAR	5	---	(703)998-7606	HARRY A. NIEDZWIADK	H.E.	ZNOTENS	485
AUXTON CMPTR ENTERPRISES	EA	FL	VAR	19	---	(305)660-8400	CHERYL GALLOWAY	C.E.O.	BROWN	470
AVANT-GARDE COMPUTING	EA	NJ	VAR	15	---	(609)778-7000	TIMOTHY AHLSTROM	C.E.O.	ZNOTENS	495
AYDIN SYSTEMS	NW	CA	VAR	160	---	(415)968-7680	AYHAN HAKIMOGLU	C.E.O.	RAFALOVICH	395
AZERTY INFO PROCESSING SPLYS	EA	NY	DIST	10	---	(716) 691-6724	LARRY GRIFFITHS	C.E.O.	ELSON	490
AZTEK, INC.	SW	CA	VAR	5	---	(714)770-8406	PHILLIP LIPPINCOTT	C.E.O.	RAFALOVICH	395
AZURDATA INC.	NW	WA	VAR	15	---	(206)881-5100	S.W. JOHNSON	H.E.	RAFALOVICH	395
B. G. ENTERPRISES INC.	SW	CA	DIST	3	---	(714) 771-7770	BEVERLY G. BROWN	C.E.O.	RAFALOVICH	395
BANCMWARE INC.	EA	MA	DIST	2	---	(617) 341-1895	WILLIAM E. POPP	C.E.O.	SHARRIO	480
BARRISTER INFORMATION SYSTEMS	EA	NY	VAR	18	---	(716)845-5010	JAMES D. MORGAN	H.E.	ELSON	490
BARTLETT ASSOCIATES	EA	PA	DIST	14	---	(215) 666-7100	JOSEPH MESSEMER	C.E.O.	ZNOTENS	495
* BASIC FOUR CORP.	SW	CA	OEM	437	TUSTIN	714-731-5100	JIM CHRISTID	VP, MKTG	MAXIMOWSKI	3331
BASIC TIME	---	---	OEM	---	---	---	---	---	---	---
BASIC TIME, INC.	NW	CA	SUBS	---	---	(408) 727-0877	---	---	RAFALOVICH	395
BASIS, INC.	NW	CA	OEM	---	SCOTT'S VALLEY	408-438-5804	---	---	BURTON	310X
BASIX CONTROLS SYSTEMS	SW	CA	VAR	10	---	(213)638-0400	JIM POWER	C.E.O.	RAFALOVICH	395

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
BATTELLE SOFTWARE PROD. CENTER	CN	OH	VARS	450	---	(616)424-5524	RONALD PAUL	C.E.O.	LOGELIN	595
BDS CORPORATION	NH	CA	DIST	7	---	(415) 964-2115	HAIG J. ERMOIAN	C.E.O.	RAFALOVICH	395
BEAMS CO.	CN	IA	DIST	8	---	(515) 255-1148	CARL BOBENHOUSE	C.E.O.	LOGELIN	590
* BEDFORD ASSOCIATES, INC.	EA	CT	VARS	5	---	(203)846-0230	RICHARD L. SANDERS	H.E.	SHARRIO	4002
BEEHIVE INT'L	NH	UT	OEM	30	SALT LAKE	801-355-6000	DICK HODGE	VP, MKTG	EVERETT	310
* BERING INDUSTRIES INC.	NH	CA	SUBS	---	---	(414) 651-3300	---	---	BOSCH	3102
BFA CORP. (NM)	SW	NM	VARS	10	---	(505)292-1212	JEROME BECKES	C.E.O.	GOODMAN	385
BFA CORPORATION	SW	AZ	DIST	30	---	(602) 994-5400	GEORGE M. AEED	C.E.O.	GOODMAN	385
* BILLINGS	CN	MO	OEM	5	INDEPENDENCE	816-373-0000	ROGER BILLINGS	PRESIDENT	LOGELIN	5001
BIO-RAD LABORATORIES	EA	MA	VARS	12	---	(617)868-4330	WARREN HOWELL	C.E.O.	SHARRIO	480
BIS SALES, INC.	SW	CA	VARS	7	---	(213)245-3691	RICHARD SLOAN	C.E.O.	RAFALOVICH	395
BITECH ENTERPRISES	EA	NY	SUBS	---	---	(516) 567-8155	---	---	ELSON	490
BKW, INC.	EA	NH	VARS	10	---	(603)888-8400	ALFRED FICHERA, JR.	C.E.O.	SHARRIO	480
BOEING COMPUTER SERVICES	EA	VA	VARS	174	---	(703)821-6200	ROBERT DRYDEN	C.E.O.	ZNOTENS	485
BOEING ENGINEERING CO.	NH	MA	VARS	11	---	(206)773-9962	A.S. KAWAGUCHI	H.E.	RAFALOVICH	395
BONDWELL	NH	CA	OEM	5	FREMONT	415-490-4300	JOHN CONSTANTINE	PRESIDENT	SCHMITT	310X
BOROFKY ASSOCIATES LTD.	EA	NY	DIST	15	---	(516) 484-2900	SAM BOROFSCY	C.E.O.	ELSON	490
BOSTON SYSTEMS OFFICE	EA	MA	VARS	7	---	(617)894-7800	MICHAEL ROONEY	C.E.O.	SHARRIO	480
BRASINGTON & ASSOC., W.A.	CN	TX	VARS	8	---	(713)444-2166	WILLIAM BRASINGTON	C.E.O.	HAMKINSON	570
BRD, INC.	---	---	OEM	---	---	---	---	---	---	---
BRIDGE COMPUTER CO.	EA	MA	DIST	3	---	(617) 244-8190	WINFIELD HILL	C.E.O.	SHARRIO	480
BRISTOL BABCOCK	EA	CT	VARS	50	---	(203)575-3000	ROY FINE	C.E.O.	SHARRIO	480
BRS LEASING INC.	SW	AZ	DIST	3	---	(602) 277-3282	DAVE PBLAND	C.E.O.	GOODMAN	385
BRUNING	CN	IL	DIST	614	---	(312) 351-2900	JERRY WILLIAMS	C.E.O.	SIANTO	580
BTI	NH	CA	OEM	24	SUNNYVALE	408-733-1122	CARROLL STEELE	DIR, MFG	SCHMITT	310X
BUNKER RAMO INFO SYS	EA	CT	OEM	100	TRUMBULL	203-382-2000	MICHAEL COOPER	VP, MKTG	ELSON	4003
BURR-BROWN (APLD MICRO)	SW	AZ	OEM	70	TUCSON	602-747-0711	RICHARD FRETWELL	MKTG MGR	RAFALOVICH	340
* BURROUGHS	NL	MI	OEM	4,876	DETROIT	313-972-7000	HOLLIS CASWELL	VP, SYS PROD	WEBB	3111
BUSINESS EQPMT & SUPPLY	EA	MS	VARS	11	---	(601)328-6860	IRWIN TATE	C.E.O.	BROWN	470
BUSINESS INFORMATION SYSTEMS	SW	CA	VARS	10	---	(213)245-3691	RICK T. BELL	H.E.	RAFALOVICH	395
BUSINESS OPERATING SYS	NH	CO	OEM	---	COLORADO SPRG	303-634-1541	JOHN OLSON	PRESIDENT	EVERETT	310
BUSINESS PRODUCTS UNLIMITED	EA	MA	DIST	5	---	(617) 296-0090	MEL BRAVEMAN	C.E.O.	SHARRIO	480
BUSINESSLAND	NH	CA	CHAIN	350	---	(408) 554-9300	CHARLES HALL	VP S&K	RAFALOVICH	395
BUTLER ASSOC.	EA	MA	VARS	12	---	(617)964-5270	CHRISTOPHER ALLEN	C.E.O.	SHARRIO	480
BYTE INDUSTRIES INC.	NH	CA	DIST	30	---	(415) 783-8272	DAVID PAVA	C.E.O.	RAFALOVICH	395
BYTE SHOP	NH	WA	DIST	9	---	(206) 622-BYTE	P. TERRELL	C.E.O.	RAFALOVICH	395
BYTRONIX	SW	CA	OEM	6	FULLERTON	714-871-8763	K. WAKELING	VP	CARGILO	330X
C & W INCOTEL LTD.	EA	NY	VARS	5	---	(212)594-8340	DICK BIANCULLY	H.E.	ELSON	490
C TEK SOFTWARE	EA	NY	VARS	5	---	(212)246-7733	ROBERT CHAMBERS	C.E.O.	ELSON	490
CABLEDATA	NH	CA	VARS	60	---	(916)636-5800	ROBERT MATHEWS	C.E.O.	RAFALOVICH	395
CADET INC.	CN	IL	SUBS	---	---	(312) 932-0790	---	---	SIANTO	580
CADLINC, INC.	CN	IL	VARS	16	---	(312)228-7300	JOHN WEST	C.E.O.	SIANTO	580
CADMIUS CHPTR SYS	EA	MA	OEM	5	LOWELL	617-453-2899	FRANK BATTAGLIA	VP, MKTG	SHARRIO	4002
* CADO	SW	CA	OEM	50	TORRANCE	213-323-8170	AUBREY EASTERLIN	VP, MKTG	MAXINOWSKI	3331
CADRE CORP.	EA	GA	VARS	10	---	(404)458-9521	GERALD R. SMITH	C.E.O.	BROWN	470
CAELUS CHPTR EQPMT & SPLYS	NH	CA	DIST	6	---	(408) 729-1800	EDWARD FARRIS	C.E.O.	RAFALOVICH	395
CALCULUS/LOGICON	CD	CD	VARS	7	---	(514)282-1215	GILLES LAPORTE	C.E.O.	---	---
CALDWELL-VAN RIPER	CN	IN	VARS	24	---	(317)632-6501	FRANK WEMHOFF	C.E.O.	SIANTO	580
* CALIFORNIA COMPUTER	NH	CA	OEM	12	SUNNYVALE	408-734-5811	MIKE WESHLER	VP, MKTG	FISHER	3303
CALIFORNIA COMPUTER GROUP	SW	CA	DIST	10	---	(714) 966-1661	ZE'EV ROTE	C.E.O.	RAFALOVICH	395
CALIFORNIA DIGITAL INC.	SW	CA	DIST	19	---	(213) 217-0500	TERRY REITER	C.E.O.	RAFALOVICH	395
* CALLAN DATA SYSTEMS	SW	CA	OEM	PV	WESTLAKE VLG	805-437-6837	WILLIAM POHLMAN	VP, ENGR	GAILLEY	3306
CALMA CO.	NH	CA	VARS	230	---	(408)434-4000	DANIEL MCGLAUGHLIN	C.E.O.	SCHMITT	3103
CAMBEX	EA	MA	OEM	8	WALTHAM	617-890-6000	JAMES KRZYNSKI	VP, MKTG	SHARRIO	4002
* CAMBRIDGE DIGITAL SYS	EA	MA	OEM	12	CAMBRIDGE	617-491-2700	ROBERT FRANK	VP, MKTG	ELSON	4003
CAMEX INDUSTRIES INC.	SW	CA	DIST	5	---	(805) 987-8628	GREGORY J. WOLFE	C.E.O.	RAFALOVICH	395
CAMPBELL & GEORGE CO.	NH	CA	DIST	3	---	(415) 697-2965	RONALD JOHNSON	C.E.O.	RAFALOVICH	395
CANAAM COMPUTER	EA	CT	OEM	---	TRUMBULL	203-372-8100	RONALD RITCHIE	PRESIDENT	ELSON	4003
CANADA SYSTEMS GROUP	CD	CD	VARS	110	---	(416)964-7640	J.R. RICKETTS	C.E.O.	---	---
CANADIAN ASTRONAUTICS LTD.	CD	CD	VARS	12	---	(613)820-8280	JAMES D. TAYLOR	C.E.O.	---	---
CANON	EA	NY	OEM	770	LAKE SUCCESS	516-488-6700	M. TAMAI	VP, MKTG	ZNOTENS	4004
CANTON AUTOMATED SYSTEMS	CN	OH	DIST	3	---	(216) 489-3738	LARRY MACHAN	C.E.O.	LOGELIN	595
CAP INDUSTRIES INC.	EA	FL	DIST	4	---	(305) 925-1002	ARTHUR P. PICKMAN	C.E.O.	BROWN	470

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 ** Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
CAP INFORMATION SYSTEMS, INC.	EA	NY	VAR	40	---	(212)999-7000	C.A. HAYES	C.E.O.	ELSON	490
CAPITAL DATA PROCSG SUPPLY	CN	WI	DIST	2	---	(608) 222-5500	W. WEISE	C.E.O.	SIANTO	580
CAPITAL SYSTEMS, INC.	EA	VA	VAR	16	---	(703)892-1150	ALFRED QUENNEVILLE	H.E.	ZNOTENS	485
CARE COMPUTER SYSTEMS	NW	WA	VAR	5	---	(206)451-8272	JAMES L. INGALLS	C.E.O.	RAFALOVICH	395
CARE INTERNATIONAL	---	---	SUBS	---	---	---	---	---	---	---
CARLYLE CORP., DAVID JAMISON	SW	CA	DIST	37	---	(213) 410-9250	PETER RICKARD	C.E.O.	RAFALOVICH	395
CARLYN COMPUTER SYSTEM INC.	EA	VA	VAR	5	---	(703)642-1950	L. THOMAS BROWN	C.E.O.	---	485
CARTER & CRAWLEY, INC.	EA	SC	VAR	5	---	(803)288-6250	TOM COX	H.E.	BROWN	470
CARTERPHONE COMMUNICATIONS	CN	TX	DIST	30	---	(214) 630-9700	TOM BRADY	C.E.O.	HAWKINSON	570
CASCADE DATA INC.	---	---	OEM	---	---	---	---	---	---	---
CASCADE DATA SYSTEMS	SW	CA	VAR	50	---	(714)835-6660	KEN BARNEY	C.E.O.	RAFALOVICH	395
CASEY-JOHNSTON INC.	NW	CA	DIST	25	---	(415) 328-6892	NOEL CASEY	C.E.O.	RAFALOVICH	395
CASIO	EA	NJ	OEM	---	FAIRFIELD	201-575-7400	WILLIAM DURR	MKTG DIR	ZNOTENS	4004
CASS MARKETING SERVICES, INC.	SW	CA	VAR	5	---	(818)994-9400	CLARK I. BUCH	C.E.O.	RAFALOVICH	395
CBC SERVICES	CN	OH	VAR	12	---	(614)222-5496	WILLIAM PRICE	C.E.O.	LOGELIN	595
CDEX CORPORATION	NW	CA	DIST	5	---	(408) 263-0430	BRUCE J. FRISCH	C.E.O.	RAFALOVICH	395
CDI INFORMATION SYSTEMS	NW	WA	DIST	5	---	(800) 426-8931	DENNIS M. BROWN	C.E.O.	RAFALOVICH	395
* CELERITY COMPUTING	SW	CA	OEM	---	SAN DIEGO	619-271-9940	TOM LYDON	VP, MKTG	CARGILO	3304
CENTEC CORPORATION	EA	VA	DIST	10	---	(703) 471-6300	PAUL MINOR	C.E.O.	ZNOTENS	485
CENTEL FINANCIAL SYSTEMS	EA	NY	DIST	30	---	(212) 514-7800	ED WHITE	C.E.O.	ELSON	490
CENTRAL COMPUTER SERVICES	EA	NY	DIST	2	---	(716) 225-8824	VERNON GOODRICH	C.E.O.	ELSON	490
CENTRON-DPL CO. INC.	CN	NH	DIST	25	---	(612) 944-9161	ROBERT L. MILLER	C.E.O.	LOGELIN	590
CENTROX FINANCIAL SYSTEMS	SW	CA	DIST	5	---	(714) 498-2824	WILLIAM A. SLAVEN	C.E.O.	RAFALOVICH	395
CENTURIAN COMPUTER	CN	TX	OEM	15	RICHARDSON	214-644-3628	TOMMY ATWOOD	VP, ENGR	HAWKINSON	550
CENTURY BUSINESS TECHNOLOGIES	NW	CA	VAR	20	---	(415)686-9300	RICK KONLON	H.E.	RAFALOVICH	395
CENTURY COMPUTER CORP.	CN	TX	OEM	3	DALLAS	214-233-3238	WILLIAM FEHZELL	VP, MKTG	HAWKINSON	550
CF CORP.	EA	MA	VAR	12	---	(617)255-5593	J.R. REDFERN	C.E.O.	SHARRIO	480
CHAK L. WON	EA	NJ	VAR	52	---	(201)542-1500	TOM CASSA	H.E.	ZNOTENS	495
CHAMPION SOFTWARE CORP.	NW	CO	DIST	6	---	(303) 278-8666	ROLLAND FRASER	C.E.O.	EVERETT	370
* CHARLES RIVER DATA	EA	MA	OEM	18	FRAMINGHAM	617-626-1000	GRAHAM BRIGGS	VP, FINANCE	SHARRIO	4002
CHART INC.	EA	NY	DIST	3	---	(518) 458-7666	DONALD V. JELLIG	C.E.O.	ELSON	490
CHARTER INFORMATION	CN	TX	OEM	---	AUSTIN	512-835-1111	JOE BELL	VP, MKTG	HAWKINSON	550
CHRISLIN INDUSTRIES	SW	CA	SUBS	---	---	(818) 991-2254	---	---	RAFALOVICH	395
CHROMATICS	EA	GA	OEM	---	TUCKER	404-493-7000	TERRENCE HUGHEY	PRESIDENT	BROWN	4501
* CIE SYSTEMS	SW	CA	OEM	---	IRVINE	714-660-1800	JAY KEAR	EX VP	CARGILO	3304
CINCINNATI MILACRON	CN	OH	OEM	---	CINCINNATI	513-841-8100	GEORGE REHFELDT	VP	LOGELIN	5001
CINCINNATI TIME	CN	OH	VAR	22	---	(513)241-5500	WALTER J. HELMS	H.E.	LOGELIN	595
CITY NATIONAL BANK	SW	CA	VAR	30	---	(213)480-7221	ALEX KYMAN	C.E.O.	RAFALOVICH	395
* CL SYSTEMS, INC.	EA	MA	VAR	21	---	(617)965-6310	RICHARD GOLDBERG	C.E.O.	ELSON	4003
CLARK EQUIPMENT CO.	CN	MI	VAR	1,021	---	(616)966-4222	JOHN R. SMITH	H.E.	LOGELIN	595
CLARY DATA SYSTEMS	---	---	OEM	---	---	---	---	---	---	---
CLIMAX COMPUTER	---	---	OEM	---	---	---	---	---	---	---
CLINTON COMPUTERS	EA	MD	VAR	15	---	(301)856-2500	ARTHUR LUNDQUIST	C.E.O.	ZNOTENS	485
CNC INTERNATIONAL	NW	WA	SUBS	---	---	(206) 885-1600	---	---	RAFALOVICH	395
CNC/COMPUTER MARKETING CORP.	SW	AZ	VAR	10	---	(602)264-5151	CHARLES CAMERON	H.E.	GOODMAN	385
CMPTR TRANSCEIVER SYSTEMS	EA	NJ	DIST	6	---	(201) 261-6800	ALLEN JACOBSON	C.E.O.	ZNOTENS	495
CMPTRZED BUSINESS SYSTEMS	CN	TX	DIST	2	---	(817) 332-1610	MARSHALL BRACHMAN	C.E.O.	HAWKINSON	570
CMPTRZED LOGGING SYSTEMS	SW	CA	DIST	5	---	(213) 385-0291	D. BERKUS	C.E.O.	RAFALOVICH	395
CMS INC.	SW	CA	SUBS	---	---	(714) 953-1498	---	---	RAFALOVICH	395
COASTAL CMPTR CONSULTANTS	EA	MA	DIST	3	---	(617) 526-4301	JON LEAVITT	C.E.O.	SHARRIO	480
CODATA SYSTEMS	NW	CA	OEM	---	SUNNYVALE	408-735-1744	MATT PEREZ	VP	BURTON	310X
COGNITRONICS CORP.	EA	CT	VAR	14	---	(203)327-5307	DAVID SHEPARD	C.E.O.	SHARRIO	480
COGNOS CORP.	NW	CA	VAR	19	---	(415)943-7277	M.U. POTTER	C.E.O.	RAFALOVICH	395
COHERENT COMMUNICATIONS SYS.	EA	NY	VAR	10	---	(516)231-1550	ARTHUR J. WILLIAMS	H.E.	ELSON	490
COIN FINANCIAL SYSTEMS	EA	GA	VAR	12	---	(404)447-6103	MARK SINGLETON	C.E.O.	BROWN	470
COLBY	NW	CA	OEM	---	MOUNTAIN VIEW	415-968-1410	---	---	SCHMITT	310X
COLECO INDUSTRIES	EA	CT	OEM	597	---	203-725-6000	ALFRED KAHN	---	ELSON	4003
COLEX TECHNOLOGY	NW	CA	OEM	10	FOSTER CITY	415-345-7999	KEN BRANDT	CEO	SCHMITT	310X
COLLIER-JACKSON, INC.	EA	FL	VAR	10	---	(813)872-9990	CHARLES W. JACKSON	C.E.O.	BROWN	470
COLONIAL DATA SERVICES	EA	CT	DIST	3	---	(203) 355-3178	ROBERT SCHOCK	C.E.O.	SHARRIO	480
COLORADO PERIPHERALS INC.	NW	CO	DIST	3	---	(303) 424-0692	JAMES C. THOMSON	C.E.O.	EVERETT	370
COLUMBIA DATA	EA	MD	OEM	75	COLUMBIA	301-992-3400	SAM IRWIN	OPER CHIEF	ZNOTENS	4004
COLUMBINE SYSTEMS	NW	CO	VAR	16	---	(303)279-4000	DAVIS WEIDNER	C.E.O.	EVERETT	370

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PROSPECTORS
(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
* Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
COM DEV	EA	FL	OEM	10	SARASOTA	813-753-6411	ROBERT RITCHEY	VP, MKTG	BROWN	4501
COM ENTERPRISES INC.	SW	CA	DIST	2	---	(213) 822-1970	GARY MANTHORNE	C.E.O.	RAFALOVICH	395
COMARK INC.	CN	IL	DIST	10	---	(312) 351-9700	C. WOLANDE	C.E.O.	SIANTO	580
COMCON, INC.	EA	NJ	VARs	6	---	(609)764-1720	FREDERICK SCOTT	C.E.O.	ZNOTENS	495
CONNECT'N CABLES & CONNCTRS	CN	OH	DIST	3	---	(614) 828-2468	ART SHICK	C.E.O.	LOGELIN	595
COMMODORE	NW	CA	OEM	304	SANTA CLARA	408-727-1130	IRVING GOLD	CHAIRMAN	ZNOTENS	4004
COMMUNICATIONS SIGNALING	SW	CA	DIST	4	---	(213) 765-5511	DALE RICE	C.E.O.	RAFALOVICH	395
COMP. DESIGN & APPLIC.	EA	MA	OEM	14	WALTHAM	617-647-1900	DAVID BIRKNER	VP, ENGR	SHARRIO	4002
COMPAC MICROELECTRONICS	NW	CA	DIST	16	---	(408) 773-0444	BOB HUANG	C.E.O.	RAFALOVICH	395
COMPAL	SW	CA	OEM	---	BEVERLY HILLS	213-652-2263	MITCHEL KADISH	VP	FISHER	330X
* COMPAQ	CN	TX	OEM	329	HOUSTON	713-370-0670	JAMES ECKHART	SR VP	WEBB	5111
COMPETITIVE COMPUTER	EA	PA	OEM	---	LANCASTER	717-299-3189	GARY LEINBERGER	PRESIDENT	ZNOTENS	4004
COMPILER SYSTEMS	---	---	OEM	---	---	---	---	---	---	---
COMPLETE MANAGEMENT SYST.	SW	CA	SUBS	---	---	(714) 953-1498	---	---	RAFALOVICH	395
COMPU-TONE INC.	SW	CA	DIST	2	---	(818) 796-9371	DARLENE WILLS	C.E.O.	RAFALOVICH	395
COMPUADD CORP.	CN	TX	SUBS	---	---	(512) 250-1489	---	---	HAWKINSON	570
COMPUAMERICA	SW	CA	VARs	15	---	(213)450-8600	ALLEN WEISS	C.E.O.	RAFALOVICH	395
COMPUABLE CORP.	SW	CA	DIST	15	---	(619) 471-2040	WILLIAM LEAMAN	C.E.O.	RAFALOVICH	395
COMPUCON	CN	TX	VARs	15	---	(214)680-1000	PHILIP LINDSLEY	C.E.O.	HAWKINSON	570
COMPUCORP	SW	CA	OEM	40	SANTA MONICA	213-829-7453	MIKE GRAZIANO	VP, SALES	FISHER	330X
COMPUFLEX	SW	CA	OEM	---	FULLERTON	714-680-4024	JAMES HALL	VP, MKTG	CARGILO	330X
* COMPUPRO	NW	CA	OEM	---	HAYWARD	415-786-0909	LEIGH TOWNSEND	---	BOSCH	3102
COMUSERVE INC.	CN	OH	VARs	47	---	(614)457-8600	SANDY TREVOR	H.E.	LOGELIN	595
COMPUTE-R-SYSTEMS	EA	PA	VARs	7	---	(215)825-7500	HARRY L. BEISSWENGER	C.E.O.	ZNOTENS	495
COMPUK	EA	MA	OEM	---	BURLINGTON	617-272-8100	---	---	SHARRIO	4002
COMPUTER ACQUISITIONS CO.	EA	GA	DIST	7	---	(404) 955-3080	GEORGE W. AKIN	C.E.O.	BROWN	470
COMPUTER AUTOMATION	SW	CA	OEM	61	IRVINE	714-833-8830	MARK STEIN	VP, CMPTR PROD	CARGILO	330X
COMPUTER BUSINESS SPLYs	EA	MD	DIST	15	---	(301) 770-3850	JOHN W. NUCCI	C.E.O.	ZNOTENS	485
COMPUTER CENTRE INC.	EA	FL	DIST	3	---	(813) 484-0421	BRAD BAKER	C.E.O.	BROWN	470
COMPUTER CONSOLES	EA	NY	OEM	131	ROCHESTER	716-482-5000	DAVID DANCHAK	VP, CTRL ENGR	ZNOTENS	4004
COMPUTER CORP. OF AM.	EA	MA	VARs	30	---	(617)492-8860	JAMES ROTHNIE	C.E.O.	SHARRIO	480
COMPUTER CURRICULUM	NW	CA	VARs	20	---	(415)494-8450	PATRICK SUPPES	C.E.O.	RAFALOVICH	395
* COMPUTER DATA SYSTEMS	NW	CO	OEM	---	ENGLEWOOD	303-762-1640	PHIL MUELLER	MKTG MGR	EVERETT	370
COMPUTER DATA SYSTEMS, INC.	EA	MD	VARs	55	---	(301)921-7000	---	---	ZNOTENS	485
COMPUTER DATACOM INC.	SW	CA	DIST	5	---	(714) 261-8200	NEIL GLEASON	C.E.O.	RAFALOVICH	395
COMPUTER DESIGNED SYSTEMS	CN	HN	DIST	4	---	(612) 545-2855	G. T. PULOS	C.E.O.	LOGELIN	590
COMPUTER DEVICES	EA	MA	OEM	20	NUTTING LAKE	617-663-4980	GERALD GALICKI	VP, ENGR	SHARRIO	4002
COMPUTER DYNAMICS INC.	EA	VA	DIST	5	---	(804) 490-9296	R. A. FUENTES	C.E.O.	ZNOTENS	485
COMPUTER ELECTION SYSTEMS	NW	CA	VARs	14	---	(415)527-5150	L. CHUCK KRIEGER	H.E.	RAFALOVICH	395
COMPUTER EXTENSION SYS	CN	TX	OEM	4	HOUSTON	713-488-8830	D.A. MARCUCCIO	VP, MKTG	HAWKINSON	590
COMPUTER HARDWARE, INC.	NW	CA	OEM	2	SACRAMENTO	916-929-2020	---	---	SCHMITT	310X
COMPUTER INFORMATION SYSTEMS	EA	MA	VARs	5	---	(617)848-7515	WADE POOLER	H.E.	SHARRIO	480
COMPUTER INPUT CORP.	SW	CA	VARs	11	---	(213)372-2177	J.W. BRADLEY	C.E.O.	RAFALOVICH	395
COMPUTER INTEGRATION	EA	NJ	SUBS	---	---	(201) 370-3900	---	---	ZNOTENS	495
COMPUTER INTERFACE	---	---	OEM	---	---	---	---	---	---	---
COMPUTER LINK CORP.	EA	MA	VARs	10	---	(617)272-7400	DAVID J. GOLDMAN	H.E.	SHARRIO	480
* COMPUTER MAINTENANCE CORP.	EA	NJ	DIST	6	---	(201) 866-6400	ROBERT A. WEBER	C.E.O.	ZNOTENS	4004
COMPUTER MARKETING CORP.	CN	HN	DIST	3	---	(612) 894-7150	RICHARD P. DOLAN	C.E.O.	LOGELIN	590
COMPUTER MARKETING SVCS	EA	NJ	DIST	5	---	(609) 424-5055	DIETER H. AMMANN	C.E.O.	ZNOTENS	495
COMPUTER MATE INC.	CN	TX	DIST	10	---	(214) 669-9370	BOB McDOWELL	C.E.O.	HAWKINSON	570
COMPUTER MEDIA PRODUCTS	SW	CA	DIST	3	---	(619) 565-7802	GENE HARDWICK	C.E.O.	RAFALOVICH	395
COMPUTER MERCHANT, LTD.	EA	MA	VARs	10	---	(617)749-4634	JOHN DANIELI	C.E.O.	SHARRIO	480
COMPUTER PLACE, THE	CN	OH	DIST	5	---	(216) 351-7444	LAWRENCE DONAT JR.	C.E.O.	LOGELIN	595
COMPUTER PRODUCTS INT'L.	NW	CA	SUBS	---	---	(408) 945-0100	---	---	RAFALOVICH	395
COMPUTER RESALE EXCHANGE	EA	DC	VARs	5	---	(202)737-1401	MARSHALL WOODELL	H.E.	ZNOTENS	485
COMPUTER RESEARCH, INC.	EA	PA	VARs	8	---	(412)831-6276	JAMES SCHULTZ	C.E.O.	ZNOTENS	495
COMPUTER ROOM	EA	NY	VARs	10	---	(518)456-8162	JAY ROSOVSKY	C.E.O.	ELSON	490
COMPUTER SCIENCES CORP.	SW	CA	VARs	695	---	(213)615-0311	WILLIAM R. HOOVER	C.E.O.	RAFALOVICH	395
COMPUTER SOFTWARE DESIGN	SW	CA	VARs	8	---	(714)634-1401	CHRIS J. HORROCKS	H.E.	RAFALOVICH	395
COMPUTER SPECIALTIES, INC.	EA	FL	DIST	4	---	(305) 725-6574	LINDA A. LUTZ	C.E.O.	BROWN	470
COMPUTER STRATEGIES, INC.	CN	MI	VARs	5	---	(616)531-6160	HERMAN J. MEILINGER	H.E.	LOGELIN	595
COMPUTER SUPERSTORES	SW	NM	DIST	10	---	(505) 292-6668	STEVE KADNER	C.E.O.	GOODMAN	385
COMPUTER SUPPLIES WHOLESAL	EA	PA	DIST	6	---	(215) 434-8200	D. JORDAN	C.E.O.	ZNOTENS	495

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 ■ Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
COMPUTER SUPPLY CORP.	EA	FL	DIST	2	—	(305) 620-6400	RON RUDGES	C.E.O.	BROWN	470
COMPUTER SYNERGY	NW	CA	VAR	12	—	(415)444-3434	TOM CULLIGAN	C.E.O.	RAFALOVICH	395
COMPUTER SYS DYNAMICS	NW	CO	OEM	4	THORNTON	303-450-5252	DAVID JOSEPH	SALES DIR	EVERETT	310
COMPUTER SYSTEMS DEVELOPMENT	EA	MS	VAR	6	—	(617)875-0680	MORRIS M. HOGG	C.E.O.	BROWN	470
COMPUTER TALK	NW	CO	OEM	1	MORRISON	303-697-5485	A.J. FARRINGTON	VP, MKTG	EVERETT	310
COMPUTER TECH.	CN	OH	OEM	—	MILFORD	513-831-2340	A.J. VIERLING	PRESIDENT	LOGELIN	5001
COMPUTER TECHNOLOGY, INC.	NW	WA	VAR	5	—	(206)625-9765	DAN E. ENSLOW	C.E.O.	RAFALOVICH	395
COMPUTER TRANSCEIVER	EA	NJ	OEM	6	PARAMUS	201-261-6800	D. TERRONE	DIR, TECH OP.	ZNOTENS	4004
COMPUTER USAGE CO.	NW	CA	VAR	8	—	(415)543-3940	VICTOR E. BARTOLETTI	C.E.O.	RAFALOVICH	395
COMPUTERCRAFT	CN	TX	CHAIN	220	—	(713) 977-8419	AVERY MORE	VP P&S	HAMKINSON	570
COMPUTERIZED BUS. SOLUTIONS	EA	FL	VAR	5	—	(813)873-1848	DAN D. COTTER	C.E.O.	BROWN	470
COMPUTERLAND	NW	CA	CHAIN	1,900	—	(415) 568-2283	ROGER LEWIS	VP M&D	RAFALOVICH	395
COMPUTERS TO GO	CN	TX	VAR	9	—	(512)469-5621	K.F. CARTER	C.E.O.	HAMKINSON	570
COMPUTERTOWN	EA	PA	VAR	95	—	(215)275-8696	—	—	ZNOTENS	495
* COMPUTERVISION	EA	MA	VAR	65	—	(617)275-1800	RICHARD PAULSON	H.E.	SHARRIO	4002
COMPUTERWARE, INC.	EA	VA	DIST	3	—	(703) 821-8200	CHARLES S. EVANS	C.E.O.	ZNOTENS	485
COMPUTERWORKS	EA	CT	DIST	20	—	(203) 226-9977	SEYMOUR MERRIN	C.E.O.	SHARRIO	480
COMPUTIME, INC.	CN	MO	DIST	3	—	(314) 991-2991	LEWIS D. LEVEY	C.E.O.	LOGELIN	590
COMPUTONE	EA	GA	CHAIN	75	—	(404) 393-3010	TIM SULLIVAN	VP MKT	BROWN	470
COMPUTRON BUSINESS SOLUT'NS	EA	NY	DIST	4	—	(212) 221-2517	RICHARD NORTHRUP	C.E.O.	ELSON	490
COMSEL CORP.	EA	VA	DIST	5	—	(703) 734-3880	W. DOUGLAS ROSS	C.E.O.	ZNOTENS	485
COMSPEC, INC.	CN	TX	DIST	10	—	(713) 461-4487	THOMAS A. PAINE	C.E.O.	HAMKINSON	570
COMTEC	CN	MI	OEM	4	FARMINGTON HL	313-478-8775	DONN ULMER	PRESIDENT	LOGELIN	5001
COMTEC	CN	TX	OEM	1	SAN ANTONIO	512-340-8253	THOMAS HAYES	PRESIDENT	HAMKINSON	550
COMTEL INSTRUMENTS CO.	CN	OH	VAR	20	—	(216)442-8080	HARRY CROWS	C.E.O.	LOGELIN	595
COMTEL MIDWEST CO.	CN	IL	DIST	12	—	(312) 539-4838	T.W. PHINNEY	C.E.O.	SIANTO	580
CONDOR COMPUTER	CN	MI	VAR	8	—	(313)769-3988	AL LUNK	H.E.	LOGELIN	595
CONSOLIDATED DATA SYSTEMS	EA	NJ	VAR	35	—	(201)487-7737	ANTHONY MUNATO	H.E.	ZNOTENS	495
CONSOLIDATED MICROGRAPHICS	SW	CA	VAR	33	—	(714)643-0400	CLYDE LEFEVRE	H.E.	RAFALOVICH	395
CONTEL CODATA SYSTEMS CORP.	NW	CA	DIST	9	—	(408) 735-1744	JIM NAKASUJI	C.E.O.	RAFALOVICH	395
CONTEL DATA SERVICES CORP.	EA	GA	VAR	13	—	(404)391-8000	ROBERT E. THOMAS	C.E.O.	BROWN	470
CONTEL INFORMATION SYSTEMS	EA	NY	DIST	30	—	(516) 829-5900	DR. HOWARD FRANK	C.E.O.	ELSON	490
CONTEL INFORMATION SYSTEMS	EA	MD	VAR	50	—	(301)654-9120	DAVID G. ALLEN	H.E.	ZNOTENS	485
CONTINENTAL HEALTHCARE	CN	KS	VAR	10	—	(913)451-6161	RICH BENDIS	C.E.O.	HAMKINSON	570
CONTRACT PROGRAMS INTRNT'L	SW	CA	DIST	3	—	(213) 273-3090	RICHARD H. GORDON	C.E.O.	RAFALOVICH	395
CONTROL APPLICATIONS	CN	TX	VAR	10	—	(713)484-4440	BILL ATHANS	H.E.	HAMKINSON	570
CONTROL DATA	CN	MN	OEM	5,127	MINNEAPOLIS	612-853-8100	J.W. LACEY	VP, TECH & PLNG	LOGELIN	5001
CONTROL ELECTRONICS	EA	FL	OEM	—	WINTER PARK	305-628-3850	TOM BEARD	PRESIDENT	BROWN	4501
CONTROL-O-MATION, INC.	CN	MI	VAR	65	—	(313)426-3935	ROBERT WALLACE	H.E.	LOGELIN	595
* CONVERGENT TECH.	NW	CA	OEM	361	SAN JOSE	408-945-8877	ELIOT WIGBREIT	CHIEF TECH OFCR	EVERETT	3130
CONVEX COMPUTER	CN	TX	OEM	—	RICHARDSON	214-669-3700	BARRY ROSENBAUM	VP, MARKETING	HAMKINSON	550
CORNELL COMPUTER	EA	NY	VAR	17	—	(212)594-8543	JEROME GILBERT	C.E.O.	ELSON	490
* CORONA	SW	CA	OEM	80	THOUSAND OAKS	805-495-5800	ROBERT BASS	VP, OPERATIONS	GAILEY	3306
CORPORATE DATA SCIENCES	NW	CA	VAR	5	—	(408)980-9747	PHILIP MARTINEZ	C.E.O.	RAFALOVICH	395
CORPORATE SOFTWARE, INC.	EA	MA	DIST	6	—	(617) 890-5350	CHRIS ROBERT	C.E.O.	SHARRIO	480
CORVUS SYSTEMS	NW	CA	OEM	50	SAN JOSE	408-559-7000	JOHN MCMAINS	VP, ENGR	BURTON	310X
CPT CORP	CN	MN	OEM	200	MINNEAPOLIS	612-937-8000	FIELDING LUCAS	VP, ENGR	LOGELIN	5001
CPX	SW	CA	DIST	15	—	(818) 709-4003	LARRY LEVINSON	C.E.O.	RAFALOVICH	395
* CRAY	CN	MN	OEM	229	MINNEAPOLIS	612-333-5889	LESTER DAVIS	VP, MFG & ENGR	LOGELIN	5001
CRC INFORMATION SYSTEMS	CN	MI	DIST	2	—	(616) 942-8970	HENRY J. HEBING	C.E.O.	LOGELIN	595
CREATIVE CMPTR SOLUTIONS	NW	CA	VAR	5	—	(415)790-2073	GREGORY CLARKE	C.E.O.	RAFALOVICH	395
CREATIVE COMMUNICATIONS	NW	UT	OEM	4	PROVO	801-373-9843	JOHN McMULLEN	PRESIDENT	EVERETT	310
CREATIVE COMPUTING CO.	CN	OH	DIST	4	—	(216) 447-1313	VINCENT JANOWICH	C.E.O.	LOGELIN	595
CREATIVE MANAGEMENT SYSTEMS	EA	VA	DIST	3	—	(703) 556-2300	W.G. CARTER	C.E.O.	ZNOTENS	485
CREATIVE MICRO SYS	SW	CA	OEM	3	LOS ALAMITOS	213-493-2484	PETER PROSSEN	VP	GAILEY	330X
CREATIVE MICROSALES	NW	CA	SUBS	—	—	(415) 945-1201	—	—	RAFALOVICH	395
CROCKER CO. INC., H. S.	NW	CA	DIST	65	—	(415) 692-1471	LEE JOHNSON	C.E.O.	RAFALOVICH	395
CROMEMCO	NW	CA	OEM	52	MOUNTAIN VIEW	415-964-7400	ROGER MELEN	SR VP, R & D	SCHMITT	310X
CROWN COMPUTER SUPPLIES	EA	TX	DIST	3	—	(214) 733-1000	ED GREENBERGER	C.E.O.	HAMKINSON	570
CROWNTEK INC.	CD	CD	VAR	10	—	(416)493-0800	MICHAEL BAETZ	C.E.O.	—	—
CRYSTAL COMPUTERS, INC.	CN	KS	VAR	10	—	(800)541-3030	GARY L. YANTIS	C.E.O.	HAMKINSON	570
CSS TELECOMMUNICATIONS	NW	CA	DIST	12	—	(415) 964-4335	STANLEY F. SITKO	C.E.O.	RAFALOVICH	395
CUESTA & CO. INC., J.E.	EA	PA	DIST	5	—	(215) 265-5800	CHRIS CUESTA	C.E.O.	ZNOTENS	495

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 ■ Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
CURRIE PEAK & FRAZIER, INC.	EA	FL	DIST	20	---	(305) 855-0843	W. CURRIE	C.E.O.	BROWN	470
CURRY CONTROLS CO.	EA	FL	VAR	5	---	(813)646-5781	RICHARD TAYLOR	H.E.	BROWN	470
CURTIS 1000	EA	GA	VAR	250	---	(404)491-1000	BILL CULBERTSON	H.E.	BROWN	470
CUSTOM APPLICATION SYSTEMS	SW	CA	DIST	2	---	(213) 820-5800	GEORGE PORTER JR.	C.E.O.	RAFALOVICH	395
CUTLER-WILLIAMS, INC.	CN	TX	DIST	10	---	(214) 243-3421	GEORGE H. ENOCHS	C.E.O.	HAWKINSON	570
CVM SYSTEMS	NW	CA	DIST	3	---	(916) 895-8324	RAY L. BOWEN	C.E.O.	RAFALOVICH	395
CYB SYSTEMS	CN	TX	OEM	5	AUSTIN	512-458-3224	MARK ELLSWORTH	VP, MKTG	HAWKINSON	550
CYBER SYSTEMS, INC.	SW	CA	OEM	---	ANAHEIM	714-772-2051	R.A. DEVITO	PRESIDENT	FISHER	330X
CYBERNETICS & SYSTEMS	EA	FL	VAR	30	---	(904)359-3150	J.M. COOPER	C.E.O.	BROWN	470
CYBORG CORP.	EA	MA	VAR	5	---	(617)964-9020	J. MICHAEL JAMES	H.E.	SHARRIO	480
CYCAR SYSTEMS, INC.	CN	IA	VAR	40	---	(319)556-3131	JIM H. HOUTZ	C.E.O.	LOGEL IN	590
D/B DATA INC.	EA	NY	VAR	9	---	(212)886-2124	ROBERT PARSONS	H.E.	ELSON	490
DA/COM SYSTEMS, INC.	SW	CA	DIST	6	---	(818) 703-7983	M. STAMMIRE	C.E.O.	RAFALOVICH	395
DAISY WHEEL RIBBON CO.	SW	CA	DIST	2	---	(714) 989-5585	SHARON M. BAER	C.E.O.	RAFALOVICH	395
DAISYTEK, INC.	CN	TX	DIST	5	---	(214) 340-8100	DAVID A. HEAP	C.E.O.	HAWKINSON	570
DALLAS COMMUNICATIONS CORP.	CN	TX	DIST	3	---	(214) 680-0300	DAVID FLORENCE	C.E.O.	HAWKINSON	570
DANYL CORP.	EA	NJ	DIST	4	---	(609) 234-8000	ALAN STOUGHTON	C.E.O.	ZNOTENS	495
DATA 3 SYSTEMS, INC.	SW	CA	VAR	6	---	(707)528-6560	RICHARD C. ANDERSON	C.E.O.	RAFALOVICH	395
DATA ACCESS SYSTEMS, INC.	EA	NJ	DIST	48	---	(609) 228-0700	HOWARD B. CRYSTAL	C.E.O.	ZNOTENS	495
DATA APPLICATIONS CORP.	CN	TX	DIST	5	---	(214) 931-1100	OLIVER H. KOLLOCK	C.E.O.	HAWKINSON	570
DATA ARCHITECTS, INC.	EA	MA	VAR	13	---	(617)890-7730	EDWARD MAYBURY	H.E.	SHARRIO	480
DATA CENTER TECHNOLOGY	---	---	OEM	---	---	---	---	---	---	---
DATA COMMUNICATIONS SYSTEMS	EA	VA	DIST	5	---	(703) 361-2666	G. DENNIS MURPHY	C.E.O.	ZNOTENS	485
DATA COMPASS	SW	CA	DIST	4	---	(714) 630-7450	RICH KRUEGER	C.E.O.	RAFALOVICH	395
DATA CONCEPTS CORP.	EA	PA	DIST	3	---	(215) 625-8400	GARY P. MODZEL	C.E.O.	ZNOTENS	495
DATA DIRECTIONS, INC. (CT)	EA	CT	DIST	3	---	(203) 242-8551	THOMAS J. ROSSMAN	C.E.O.	SHARRIO	480
DATA EXCHANGE, INC.	CN	IL	VAR	5	---	(312)963-4424	DARRELL F. VOITIK	C.E.O.	SIANTO	580
* DATA GENERAL	EA	MA	OEM	1,160	WESTBOROUGH	617-366-8911	FRANK SILKMAN	VP, FIELD ENGR	HENRY	4005
DATA GROUP CORP.	EA	MA	VAR	8	---	(617)863-0400	GEORGE KELLY	C.E.O.	SHARRIO	480
DATA IMPRESSIONS, INC.	SW	CA	DIST	5	---	(213) 630-8788	HENRY GERBERSHAGEN	C.E.O.	RAFALOVICH	395
DATA PRO, LTD.	NW	CO	DIST	3	---	(303) 777-8655	D.A. RENICK	C.E.O.	EVERETT	370
DATA PROCESSING SCIENCES CORP.	CN	OH	VAR	10	---	(513)961-0776	STEVE MORGAN	H.E.	LOGEL IN	595
DATA RENTALS/SALES, INC.	SW	CA	VAR	5	---	(213)559-3822	STEWART M. KRAKOVER	C.E.O.	RAFALOVICH	395
DATA RESEARCH ASSOCIATES	EA	NJ	DIST	25	---	(201) 569-2620	HOWARD BASSUK	C.E.O.	ZNOTENS	495
DATA SYSTEMS (VA)	EA	VA	VAR	12	---	(804)264-7300	A. PAUL COX	C.E.O.	ZNOTENS	485
DATA SYSTEMS ANALYSTS, INC.	EA	NJ	VAR	10	---	(609)665-6088	CHARLES MARGOLIN	C.E.O.	ZNOTENS	495
DATA SYSTEMS MARKETING	NW	CA	DIST	20	---	(415) 969-4305	JOHN BURKE	C.E.O.	RAFALOVICH	395
DATA TECH. SYSTEMS LTD.	CD	CD	VAR	15	---	(604)437-3751	EARL W. LARGER	C.E.O.	---	---
DATA TECHNOLOGY	NW	CA	OEM	50	SANTA CLARA	408-496-0434	MIKE KIRBY	VP, MKTG	BURTON	310X
DATA TERMINAL MART	CD	CD	DIST	15	---	(416) 677-0184	LAURENCE POLLEY	C.E.O.	---	---
DATA TERMINALS & COMM.	NW	CA	OEM	8	CAMPBELL	408-554-5776	ROY WORTHINGTON	PRESIDENT	BOSCH	310X
DATA THREE COMPUTER CORP.	CN	MN	DIST	10	---	(612) 941-9495	ROBERT D. JOHNSON	C.E.O.	LOGEL IN	590
DATA-MED CORP.	EA	DE	VAR	5	---	(800)441-9345	J. DAVID POLLARD	C.E.O.	ZNOTENS	485
DATA-TRON, INC.	CN	OH	VAR	6	---	(216)585-8421	DAVE LEHRER	H.E.	LOGEL IN	595
DATACOUNT CORP.	SW	CA	VAR	6	---	(213)775-3645	Y.H. RUTENBERG	C.E.O.	RAFALOVICH	395
DATACENTER DESIGN CONCEPTS	CN	OH	DIST	3	---	(513) 434-3241	ROBERT M. JOHNSON	C.E.O.	LOGEL IN	595
DATACOM SOLUTION INC., A	SW	CA	DIST	5	---	(213) 402-2666	GARY GREENING	C.E.O.	RAFALOVICH	395
DATACOM, INC.	EA	FL	VAR	5	---	(904)244-6121	J.C. MILLER	H.E.	BROWN	470
DATACOMP GROUP, INC.	CN	IL	DIST	50	---	(312) 323-1200	THOMAS OWENS	C.E.O.	SIANTO	580
DATACORE, INC.	NW	WA	DIST	5	---	(206) 455-1968	JON J. JAMIESON	C.E.O.	RAFALOVICH	395
DATAFLEX CORP.	EA	NJ	DIST	8	---	(201) 321-1100	JEFF LAMM	C.E.O.	ZNOTENS	495
DATALINE SYSTEMS & FINANCL	SW	CA	DIST	16	---	(714) 632-6986	GEORGE R. SELDIN	C.E.O.	RAFALOVICH	395
DATALINE INC.	CD	CD	VAR	12	---	(416)964-9515	JOSEPH C. PARADI	C.E.O.	---	---
DATALINK READY, INC.	EA	FL	DIST	4	---	(305) 676-0500	HARRY KRUM	C.E.O.	BROWN	470
DATAMAC COMPUTER	NW	CA	OEM	---	SUNNYVALE	408-735-0323	---	---	SCHMITT	310X
DATAMARC, INC.	CN	TX	DIST	8	---	(214) 340-7100	JOHN L. LEICHT	VP ENG	HAWKINSON	570
DATAMATE COMPUTER	---	---	OEM	---	---	---	---	---	---	---
DATAMAXX USA CORP.	EA	FL	DIST	10	---	(904) 224-8213	THOMAS C. PROCTOR	C.E.O.	BROWN	470
DATAMEDIA	EA	NJ	OEM	22	PENNSAUKEN	609-665-5400	JOHN GILDAY	VP, MFG	ZNOTENS	4004
DATAMEDIC CORP.	EA	NY	VAR	6	---	(516)435-8880	PETER FETTEROLF	C.E.O.	ELSON	490
DATAMEX LTD.	CD	CD	VAR	10	---	(416)665-1808	DANIEL K. HARUNI	C.E.O.	---	---
* DATAPPOINT	CN	TX	OEM	600	SAN ANTONIO	512-699-7000	JOHN HALE	VP, OPERATIONS	HAWKINSON	550
DATAPPAREL, INC.	SW	CA	VAR	5	---	(213)645-9061	STUART D. WEISS	C.E.O.	RAFALOVICH	395

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

(sorted by company)

* Present customer
 * Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
DATASOLVE CORP.	CN	IL	DIST	4	—	(312) 943-9052	WILLIAM BOEHLKE	C.E.O.	SIANTO	580
DATSTORE INC.	EA	NJ	VARS	12	—	(609)779-0200	JAMES E. MEGARGEL	C.E.O.	ZNOTENS	495
DATATEL	EA	VA	VARS	9	—	(703)549-4300	THOMAS R. DAVIDSON	C.E.O.	ZNOTENS	485
DATATRONIC SYSTEMS CORP.	SW	CA	VARS	11	—	(213)988-5290	M.P. MILANE	C.E.O.	RAFALOVICH	395
DATAVUE	EA	GA	OEM	5	NORCROSS	404-449-5961	JOSEPH ROMASCO	VP, MKTG	BROWN	4501
DATREX INC.	SW	AZ	SUBS	—	—	(602) 272-9491	—	—	GOODMAN	385
DATRON COMPUTER PRODUCTS	EA	NY	DIST	5	—	(716) 328-8390	JEROME DIENSTAG	C.E.O.	ELSON	490
DATUM	SW	CA	OEM	—	ANAHEIM	714-533-6333	RONALD SCHLUND	VP, ENGR	CARGILO	330X
DAVID JAMISON CARLYLE CORP.	SW	CA	VARS	37	—	(213)410-9250	RICHARD SMITH	H.E.	RAFALOVICH	395
DAVIDGE	SW	CA	OEM	1	BUELLTON	805-688-9598	DEAN DAVIDGE	PRESIDENT	FISHER	330X
DAVONG SYSTEMS	NW	CA	SUBS	—	—	(408) 734-4900	—	—	RAFALOVICH	395
DAVOX CORP.	EA	MA	VARS	10	—	(617)667-4455	JAMES MITCHELL	H.E.	SHARRIO	480
DAVY MCKEE CORP.	EA	NJ	VARS	73	—	(201)665-0100	JOHN P. MEYERS	H.E.	ZNOTENS	495
DAYSTROM SYSTEMS	CN	OH	OEM	—	CLEVELAND	216-421-8737	—	—	LOGELIN	5001
DAYTON-FORESTER ASSOCIATES	SW	CA	VARS	6	—	(213)701-0127	NORMAN L. EYSTER	C.E.O.	RAFALOVICH	395
DAYTRONIC	CN	OH	OEM	10	MIAMISBURG	513-866-3300	JOHN PERKINS	VP, MKTG	LOGELIN	5001
DBS INTERNATIONAL	EA	PA	OEM	—	MONTGOMERYVILLE	215-628-4810	LESTER MCCOUN	VP, SALES	ZNOTENS	4004
DCB, INC.	CN	IL	DIST	2	—	(217) 352-3207	RUSSEL STRAAYER	C.E.O.	SIANTO	580
DEALERS OFFICE EQUIPMENT	CN	WI	DIST	14	—	(414) 784-7850	JON DEGLOPPER	C.E.O.	SIANTO	580
* DEC	EA	MA	OEM	5,584	MAYNARD	617-897-5111	JOHN SMITH	VP, MFG & ENGR	SHARRIO	4002
DECCOMP INC.	SW	CA	VARS	6	—	(714)730-5116	PRADEEP SAGGAR	C.E.O.	RAFALOVICH	395
DECISION DATA	EA	PA	OEM	103	HORSHAM	215-674-3300	MICHAEL BRODY	VP, MKTG	ZNOTENS	4004
DEFINABLE DATA DEVICES, INC.	NW	OR	VARS	5	—	(503)682-3131	PAUL MOHLFARTH	H.E.	RAFALOVICH	395
DELPHI SYSTEMS, INC.	SW	CA	VARS	12	—	(213)706-8989	PAUL PRAGER	H.E.	RAFALOVICH	395
DELTA DATA SYSTEMS	EA	PA	VARS	30	—	(215)322-5400	R. SMALLACOMBE	C.E.O.	ZNOTENS	495
DENELCOR	NW	CO	OEM	15	AURORA	303-337-7900	OMKARNATH GUPTA	VP, TECH & ENGR	EVERETT	310
DENNISON NATIONAL	EA	MA	DIST	100	—	(413) 539-9811	R. FEINSTEIN	C.E.O.	SHARRIO	480
DEREX, INC.	EA	FL	DIST	2	—	(305) 753-0840	JAMES RULE	C.E.O.	BROWN	470
DEXEL SYSTEMS CORP.	EA	VA	VARS	8	—	(703)448-9400	W. BRAUN JONES	C.E.O.	ZNOTENS	485
DIABLO SYSTEMS, INC.	NW	CA	OEM	—	FREMONT	415-498-7000	BERNIE HORN	VP, MKTG	BOSCH	310X
DIALOGUE INC.	EA	NY	VARS	5	—	(212)425-2665	ARTHUR I. STERN	C.E.O.	ELSON	490
DIGIAC	EA	NY	OEM	2	—	516-234-2100	HAROLD FREESE	—	ZNOTENS	4004
DIGICOMP RESEARCH	EA	NY	OEM	1	ITHACA	607-273-5900	JEFF COX	VP, MKTG	ZNOTENS	4004
DIGIGRAPHIC	CN	MN	OEM	14	MINNETONKA	612-935-9111	GARY PARADISE	VP, MKTG	LOGELIN	5001
DIGITAL ASSOCIATES CORP.	EA	CT	VARS	8	—	(203)327-9210	CHARLES LAIDLAW	H.E.	SHARRIO	480
DIGITAL BUSINESS SYSTEMS	SW	AZ	DIST	10	—	(602) 991-9831	V.A. POND	C.E.O.	GOODMAN	385
DIGITAL COMPUTER	SW	CA	OEM	6	SAN DIEGO	619-566-8500	JOE PELLETIER	VP, SALES	GAILLEY	330X
DIGITAL CONTROLS CORP.	CN	OH	DIST	10	—	(513) 435-5455	GREGORY COLLINS	C.E.O.	LOGELIN	595
* DIGITAL DATACOMP	SW	—	OEM	—	—	—	—	—	CARGILO	3304
DIGITAL ELECTRONIC SERVICES	EA	LA	VARS	10	—	(318)636-2672	GARY L. HONEYCUTT	C.E.O.	BROWN	470
DIGITAL ELECTRONIC SYST.	EA	TN	SUBS	—	—	(615) 649-5137	—	—	BROWN	470
DIGITAL EQUIPMENT CORP.	EA	MA	SUBS	—	—	(617) 897-7063	—	—	SHARRIO	480
DIGITAL MASTERS	EA	NY	OEM	—	NEW YORK	212-683-9479	RALPH PRESS	PRESIDENT	ZNOTENS	4004
* DIGITAL MICROSYSTEMS	NW	CA	OEM	15	OAKLAND	415-261-1034	PETER GARDINER	DIR, ENGR	BOSCH	3102
DIGITAL SALES ASSOCIATES	EA	MA	DIST	5	—	(617) 899-4300	JACOB B. GILLER	C.E.O.	SHARRIO	480
DIGITAL SCIENTIFIC	—	—	OEM	—	—	—	—	—	—	—
DIGITAL SEARCH	EA	SC	SUBS	—	—	(803) 877-9444	—	—	BROWN	470
DIGITAL SYSTEMS	EA	MD	OEM	7	WALKERSVILLE	301-845-4141	WILLIAM ROBERTSON	EX VP	ZNOTENS	4004
DIGITAL SYSTEMS SALES	CN	MO	DIST	6	—	(816) 765-3337	R.T. HANKINS	C.E.O.	LOGELIN	590
DIGITAN SYSTEMS	EA	NY	OEM	16	BROOKLYN	212-436-3777	ABE PFEIFER	VP, MKTG	ZNOTENS	4004
DIGITUS	EA	MD	OEM	1	BALTIMORE	301-467-3223	JUN-SING LEE	PRESIDENT	ZNOTENS	4004
DIMENSIONAL DATA, INC.	CN	IL	DIST	3	—	(312) 457-1700	JOSEPH GUCCIONE	C.E.O.	SIANTO	580
DIPLOMAT ELECTRONICS	EA	NY	DIST	125	—	(516) 454-6334	ALBERT ROTH	C.E.O.	ELSON	490
DIRECT INC.	NW	CA	OEM	20	SANTA CLARA	408-980-1414	HOMER JAMISON	VP, MKTG	BURTON	310X
DISC TECH ONE INC.	SW	CA	SUBS	—	—	(805) 964-3535	—	—	RAFALOVICH	395
DISCOUNT COMPUTER SPLYS	EA	NJ	DIST	3	—	(201) 685-2211	CHRIS REARDON	C.E.O.	ZNOTENS	495
* DISPLAY DATA	EA	MD	OEM	45	HUNT VALLEY	301-667-9211	RONALD ZANARELLA	VP, MKTG	ZNOTENS	4004
DISTRBTED MICRO SYSTEMS	NW	CA	DIST	2	—	(415) 692-5855	GEORGE M. BARLOW	C.E.O.	RAFALOVICH	395
DISTRIBUTED CPTR SYS	EA	MA	OEM	—	WALTHAM	617-890-8200	I. SHAIR	VP, ENGR	SHARRIO	4002
DISTRIBUTION & MFG SYSTEMS	NW	CO	VARS	5	—	(303)839-5527	LYNN JENSEN	C.E.O.	EVERETT	370
DIVERSIFIED COMPUTER	NW	WA	DIST	5	—	(206) 223-9326	DONALD D. MEEK	C.E.O.	RAFALOVICH	395
DOCUTEL/OLIVETTI	CN	TX	OEM	150	IRVING	214-258-5400	ENRICO PESATORI	PRESIDENT	HANKINSON	550
DOW JONES & CO., INC.	EA	NJ	DIST	867	—	(609) 452-1511	RAY SHAW	C.E.O.	ZNOTENS	495

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 - Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
DOWTY RFL INDUSTRIES, INC.	EA	NJ	VAR	22	---	(201)334-3100	C.K. CURTIS	H.E.	ZNOTENS	495
DP COMMUNICATIONS	EA	NY	VAR	8	---	(212)244-7800	H. PRESS	C.E.O.	ELSON	490
DP SYSTEMS & SVCS	EA	NC	VAR	12	---	(919)852-0455	MICHAEL FALK	C.E.O.	BROWN	470
DRAVAC	EA	NJ	OEM	---	OAKLAND	201-337-8350	MICHAEL LEWIS	PRESIDENT	ZNOTENS	4004
DRAVO ENGINEERS, INC.	EA	PA	VAR	45	---	(412)566-3600	DANIEL J. MCDEWITT	H.E.	ZNOTENS	495
DSC	CN	MN	VAR	17	---	(612)935-9111	WILLIAM GILSTER	C.E.O.	LOGEL IN	590
DSM & ASSOCIATES	SW	CA	SUBS	---	---	(818) 991-9901	---	---	RAFALOV ICH	395
DTC	---	---	OEM	---	---	---	---	---	---	---
* DUAL SYSTEM CONTROL	NW	CA	OEM	10	BERKELEY	415-549-3854	ALBERT PFELTZ	VP, SALES	BOSCH	3102
DURR-FILLAUER MEDICAL INC.	EA	AL	VAR	300	---	(205)271-3512	W.A. WILLIAMSON	C.E.O.	BROWN	470
DYATROM CORP.	EA	AL	VAR	32	---	(205)956-7500	J. LOTZ	C.E.O.	BROWN	470
DYER, WELLS & ASSOC.	EA	GA	VAR	9	---	(404)432-5888	PHILLIP FAUVER	C.E.O.	BROWN	470
DYNAMION RESEARCH, LTD.	CD	CD	DIST	3	---	(902) 429-3175	PETER MASON	C.E.O.	---	---
DYNABYTE	NW	CA	OEM	10	MILPITAS	408-263-1221	---	---	BURTON	310X
DYNAMIC CONTROL	EA	FL	VAR	24	---	(305)831-8444	STEPHEN DOUGHERTY	C.E.O.	BROWN	470
DYTEC NORTH, INC.	CN	MN	DIST	15	---	(612) 645-5816	TOM OLSON	C.E.O.	LOGEL IN	590
DYTEC SOUTH	CN	MO	VAR	14	---	(314)569-2990	H.B. CRAIN	C.E.O.	LOGEL IN	590
E-O DATA CORP.	EA	NJ	DIST	8	---	(609) 482-2580	MARIO CAPONEGRO	C.E.O.	ZNOTENS	495
E.B.S. DATA PROCESSING	NW	CO	VAR	6	---	(303)773-1313	RAY ROBERTS	H.E.	EVERETT	370
EAGLE COMPUTERS	NW	CA	OEM	---	LOS GATOS	408-399-4200	E. RYAN	VP, SALES	BOSCH	310X
EAGLE SIGNAL CONTROLS	CN	TX	VAR	50	---	(512)873-8300	---	---	HAMK INSON	570
* EAKINS ASSOCIATES, INC.	NW	CA	DIST	2	---	(415) 969-5109	GILBERT EAKINS	C.E.O.	SCHMITT	3103
EAST TEXAS PERIODICALS	CN	TX	VAR	85	---	(713)748-8120	JAN MOORE	H.E.	HAMK INSON	570
EASTERN SFTWRE DISTRBTRS	EA	MD	DIST	13	---	(301) 366-5100	J.S. EDWARDS	C.E.O.	ZNOTENS	485
EBS, INC.	EA	FL	VAR	23	---	(305)660-2550	PAUL HAGSTROM	C.E.O.	BROWN	470
ECOM SYSTEMS INC.	EA	TN	VAR	6	---	(901)794-5501	DEWAYNE P. BOLTON	C.E.O.	BROWN	470
EDP SUPPLY NORTH	EA	NH	DIST	2	---	(603) 893-6118	ROBERT FAULKNER	C.E.O.	SHARRIO	480
EDP SYSTEMS INC.	CN	OK	VAR	6	---	(405)943-9818	MIKE DEATON	H.E.	HAMK INSON	570
EDWARDS & CO., J.D.	NW	CO	VAR	14	---	(303)773-3732	DANIEL L. GREGORY	H.E.	EVERETT	370
EEC SYSTEMS	EA	MA	DIST	2	---	(617) 443-5106	ERIC DICKMAN	C.E.O.	SHARRIO	480
* EECO COMPUTER	SW	CA	VAR	10	---	(714)835-6000	C. JEREMIAS	C.E.O.	FISHER	3303
EICON RESEARCH	EA	NY	SUBS	---	---	(212) 719-9390	---	---	ELSON	490
ELECTOR USA, INC.	NW	CA	DIST	6	---	(408) 727-1506	MICHAEL PAULL	C.E.O.	RAFALOV ICH	395
ELECTRALERT, LTD.	CD	CD	DIST	2	---	(416) 475-6730	K. DAG	C.E.O.	---	---
ELECTRO DESIGN	SW	CA	OEM	1	SAN MARCOS	619-471-0680	CLIFF GRIFFIN	GENERAL MGR	GAILLEY	330X
ELECTRO REP, INC.	EA	NY	DIST	22	---	(516) 938-0540	MARK LEMELMAN	C.E.O.	ELSON	490
ELECTRO SALES ASSOCIATES	CN	OH	DIST	10	---	(513) 426-5551	JOHN SHEFFS	C.E.O.	LOGEL IN	595
ELECTRONIC ASSOCIATES, INC.	EA	NJ	VAR	30	---	(201)224-1100	ROBERT FINNEY	VP/GM	ZNOTENS	495
ELECTRONIC DATA SYSTEMS	CN	TX	VAR	775	---	(214)661-6000	ROGER W. BOLL	H.E.	HAMK INSON	570
ELECTRONIC SYSTEMS USA	CN	KY	DIST	3	---	(502) 589-1000	DARRELL NEWTON	C.E.O.	LOGEL IN	595
ELITE COMPUTER	CN	KS	OEM	---	WICHITA	316-942-6619	SAM KNECHT	H.E.	HAMK INSON	550
* ELXSI	NW	CA	OEM	40	SAN JOSE	408-942-0900	JEFF OROMANER	VP, MKTG	BOSCH	3102
EMERALD SYSTEMS	SW	CA	SUBS	---	---	(619) 270-1994	---	---	RAFALOV ICH	395
EMPIRICAL RESEARCH	---	---	OEM	---	---	---	---	---	---	---
* EMULEX CORP.	SW	CA	SUBS	---	---	(714) 662-5600	---	---	CARGILO	3304
ENCORE COMPUTER	EA	MA	OEM	---	WELLESLEY HILLS	617-273-1022	KENNETH FISHER	PRESIDENT	SHARRIO	4002
ENDATA, INC.	EA	TN	VAR	52	---	(615)244-0244	DOUGLAS ALTENBERN	C.E.O.	BROWN	470
ENERGY INC.	NW	ID	VAR	27	---	(209)529-1000	JAMES HUSTON	H.E.	EVERETT	370
ENERGY/CONTROL SYSTEMS	EA	NH	DIST	5	---	(603) 889-6470	JOHN H. DYER	C.E.O.	SHARRIO	480
ENID DATA SYSTEMS	CN	OK	DIST	4	---	(405) 233-1125	MICHAEL BASEHART	C.E.O.	HAMK INSON	570
ENSCO	EA	VA	VAR	16	---	(703)321-9000	NORMAN BUSH	C.E.O.	ZNOTENS	485
ENVAX SYSTEMS, INC.	CN	TX	DIST	6	---	(214) 986-1151	GIL NOAKES	C.E.O.	HAMK INSON	570
ENCOM ELECTRONIC SYSTEMS	SW	CA	VAR	7	---	(714) 730-5051	RICHARD GILLESPIE	H.E.	RAFALOV ICH	395
EPIC COMPUTER PROD.	SW	CA	OEM	5	FOUNTAIN VLY	714-964-4722	---	---	CARGILO	330X
EPSON AMERICA	SW	CA	OEM	---	TORRANCE	213-533-8277	Y. TSUBOTA	PRESIDENT	GAILLEY	330X
EQS SYSTEMS	CN	OH	DIST	9	---	(216) 729-2222	TONY OLIVERIO	C.E.O.	LOGEL IN	595
EQUATORIAL COMMUNICATIONS CO.	NW	CA	VAR	17	---	(415)969-9500	EDWIN D. PARKER	H.E.	RAFALOV ICH	395
ERICSSON	SW	CA	OEM	160	GARDEN GROVE	714-895-3962	R.H. FAUTEUX	VP, MKTG	GAILLEY	330X
ERICSSON INFO SYS	EA	CT	OEM	---	GREENWICH	203-661-1666	BJORN NORDWALL	MKTG MGR	ELSON	4003
ERIN DATA SYSTEMS & SVCS	EA	NY	DIST	15	---	(516) 293-4114	FRANK KELLY	C.E.O.	ELSON	490
ERISCO	EA	NY	VAR	22	---	(212) 765-8500	PAT D'AMATO	C.E.O.	ELSON	490
ESCA CORP.	NW	WA	VAR	6	---	(206)885-5077	ED KRZYANOWSKI	H.E.	RAFALOV ICH	395
ESCOM, INC.	NW	WA	DIST	4	---	(206) 641-4990	T.J. LIGGETT	C.E.O.	RAFALOV ICH	395

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
ESI	EA	FL	DIST	3	---	(904) 224-5182	DAVID S. MURPHY	C.E.O.	BROWN	470
ESPRIT CMPTR PROD	EA	NY	OEM	---	MELVILLE	516-293-5600	NEIL SALDIN	VP, ENGR	ZNOTENS	4004
ESPRIT SYSTEMS	EA	NY	OEM	30	MELVILLE	516-293-5600	JOHN SASSO	PRESIDENT	ZNOTENS	4004
ESTIMATION, INC.	EA	MD	VAR	10	---	(301)636-5680	JOEL KEHM	H.E.	ZNOTENS	485
EVEREX SYSTEMS	NW	CA	SUBS	---	---	(415) 498-1111	---	---	RAFALOVICH	395
EVOLUTION COMPUTER	---	---	OEM	---	---	---	---	---	---	---
EXECUTIVE BUSINESS SYSTEMS	SW	CA	VAR	7	---	(213)906-1060	JOHN A. MARTIN	C.E.O.	RAFALOVICH	395
EXECUTIVE DATA SOLUTIONS	CN	MI	DIST	4	---	(313) 477-4006	DIANE L. GRIEVES	C.E.O.	LOGELIN	595
EXECUTONE	EA	NY	DIST	170	---	(516) 681-4000	JOHN R. JESTER	C.E.O.	LOGELIN	490
EXIDY SYSTEMS	---	---	OEM	---	---	---	---	---	---	---
EXPRESS SYSTEMS INC.	CN	IL	SUBS	---	---	(312) 882-7733	---	---	SIANTO	580
EXXON OFFICE SYS	EA	CT	OEM	---	STAMFORD	203-329-5000	R.A. CONTINO	PRESIDENT	ELSON	4003
EYRING RESEARCH INSTITUTE INC.	NW	UT	VAR	16	---	(801)375-2434	RONALD G. HANSEN	C.E.O.	EVERETT	370
FA COMPONENTS	EA	NY	DIST	40	---	(212) 507-1444	JAY FREEMAN	C.E.O.	ELSON	490
FACIT/DATAROYAL	EA	NH	OEM	---	MERRIMACK	603-424-8000	PAUL RAMSDEN	VP, ENGR	SHARRIO	4002
FAIRCHILD WESTON SYSTMS	EA	FL	VAR	70	---	(813)371-0811	R.J. KELLER	C.E.O.	BROWN	470
FAIRFIELD INDUSTRIES	CN	TX	VAR	35	---	(713)981-8181	A.L. WARREN	C.E.O.	HAMKINSON	570
FALCON TECHNLOGY	NW	WA	SUBS	---	---	(800) 722-2510	---	---	RAFALOVICH	395
FANNIE MAE	EA	GA	VAR	6	---	(404)446-2533	JEFF LEBOWITZ	C.E.O.	BROWN	470
FEDERAL COMPUTER CORP.	EA	VA	VAR	5	---	(703)691-4056	WILLIAM HUMMEL	H.E.	ZNOTENS	485
FEDERAL SALES SERVICE	EA	VA	DIST	11	---	(703) 922-9400	W.H. MUEHLEIB	C.E.O.	ZNOTENS	485
FEDERAL SYSTEMS, INC.	CN	MO	VAR	30	---	(314)487-8427	GARY W. LEIENDECKER	C.E.O.	LOGELIN	590
FIFTH GENERATION TECH	EA	NJ	OEM	---	SECAUCUS	201-348-2001	CHARLES DAVIS	VP, SALES	ZNOTENS	4004
FIGGIE SYSTEMS MGMT. GROUP	CN	OH	VAR	12	---	(216)946-9000	MALLY HAYES	C.E.O.	LOGELIN	595
FINALCO, INC.	EA	VA	VAR	67	---	(703)790-0970	JON J. PRAGER	C.E.O.	ZNOTENS	485
FINANCIAL BUSINESS	NW	UT	OEM	---	SALT LAKE	801-328-2202	---	---	EVERETT	310
FINANCIAL COMPUTER	---	---	OEM	---	---	---	---	---	---	---
FINANCIAL SOFTWARE, INC.	EA	GA	VAR	8	---	(404)446-2533	---	---	BROWN	470
FINDEX	---	---	OEM	---	---	---	---	---	---	---
FIPSCO	CN	IL	DIST	4	---	(312) 823-8455	BARRY WATKINS	C.E.O.	SIANTO	580
FIRST CHOICE ENTERPRISES	CN	MI	DIST	12	---	(313) 836-9500	WILLIAM HARTSOCK	C.E.O.	LOGELIN	595
FIRST CLASS PERIPHERALS	NW	NV	SUBS	---	---	(800) 538-1307	---	---	EVERETT	370
* FIRST COMPUTER CORP.	CN	IL	VAR	10	---	(312)920-1050	JEROME A. MARTIN	C.E.O.	SIANTA	5002
FIRST COMPUTER CORP. (TX)	CN	TX	DIST	17	---	(713) 666-3033	S. DRUCK	C.E.O.	HAMKINSON	570
FIRST REP. CO.	CN	IL	DIST	16	---	(312) 530-2450	JIM IHRIG	C.E.O.	SIANTO	580
FIRST SOFTWARE CORP.	EA	MA	DIST	175	---	(617) 689-0077	RICH FAULK	C.E.O.	SHARRIO	480
FISHER CONTROLS INTERNATIONAL	EA	LA	VAR	600	---	(515)754-3011	MICHAEL A. WEAVER	H.E.	BROWN	470
FLEISHBEIN	SW	CA	OEM	1	SAN DIEGO	619-563-1835	CLIFFORD TAYLOR	PRESIDENT	CARGILO	330X
* FLEXIBLE COMPUTER	CN	TX	OEM	---	DALLAS	214-869-1234	JAY HINTON	VP, OPERATIONS	HAMKINSON	550
* FLOATING POINT SYS	NW	OR	OEM	118	BEAVERTON	503-641-3151	JOHN HARTE	MKTG DIR	BOSCH	3102
FLOPPY DISK SERVICES	EA	NJ	DIST	3	---	(609) 799-4440	MARK H. WOLINSKY	C.E.O.	ZNOTENS	495
FM ASSOCIATES, LTD.	EA	FL	DIST	10	---	(305) 851-5710	J. FIELDS	C.E.O.	BROWN	470
FORCE 4 DP SUPPLIES	NW	OR	DIST	5	---	(503) 620-8888	FRED WHITE	C.E.O.	RAFALOVICH	395
* FORD-HIGGINS	NW	CO	OEM	7	BOULDER	303-449-8803	C. REED FORD	VP	EVERETT	370
FORMASTER CORP.	NW	CA	VAR	10	---	(408)942-1771	L.E. THOMPSON	C.E.O.	RAFALOVICH	395
FORMATION	EA	NJ	OEM	17	MT. LAUREL	609-234-5020	W.A. REENIE	VP, FIELD ENGR	ZNOTENS	4004
FORMATION, INC.	EA	NJ	VAR	17	---	(609)234-5020	ARTHUR D. BEARD	C.E.O.	ZNOTENS	495
FORMS & SUPPLIES	EA	TN	DIST	6	---	(901) 346-1249	RICHARD MASON	C.E.O.	BROWN	470
* FORTUNE SYSTEMS	NW	CA	OEM	70	REDWOOD CITY	415-595-8444	ROBERT RUEBEL	SR VP, MKTG	SCHMITT	3103
* FORWARD TECHNOLOGY	NW	CA	OEM	4	SANTA CLARA	408-988-2378	HOWARD SILVER	VP, ENGR	BURTON	3104
FOSTER-MILLER, INC.	EA	MA	VAR	13	---	(617)890-3200	WILLIAM RIBICH	H.E.	SHARRIO	480
FOTO-MEN	---	---	OEM	---	---	---	---	---	---	---
FRANKLIN COMPUTER	EA	NJ	OEM	---	PENNSAUKEN	609-488-0600	EDWARD GOLDERER	VP, MKTG	ZNOTENS	4004
FRANKLIN RESEARCH CENTER	EA	PA	VAR	20	---	(215)448-1403	JEREMY A. LIFSEY	H.E.	ZNOTENS	495
FRENCH GERLEMAN ELECTRIC CO.	CN	MO	VAR	10	---	(314)569-3122	JAMES W. FRENCH	C.E.O.	LOGELIN	590
FREY ASSOCIATES, INC.	EA	NH	VAR	7	---	(603)472-2800	BETSY W. FREY	H.E.	SHARRIO	480
FREY FEDERAL SYSTEMS CORP.	EA	VA	VAR	7	---	(703)352-7790	HARRISON MORSE	H.E.	ZNOTENS	485
FRIEDMAN ASSOCIATES	EA	NJ	DIST	5	---	(201) 964-6200	JEROME FRIEDMAN	C.E.O.	ZNOTENS	495
FRONTIER COMPUTER CORP.	CN	TX	VAR	6	---	(214)330-7243	---	---	HAMKINSON	570
FRONTIER SYSTEMS	EA	NJ	VAR	250	---	(609)596-7736	ROBERT M. RAMSEY	C.E.O.	ZNOTENS	495
* FUJITSU	---	JP	OEM	5,167	---	03-216-3211	---	---	BOSCH	3102
* FUJITSU MICRO	NW	CA	OEM	3	SAN JOSE	408-434-1160	ED SCHAUER	MKTG DIR	BURTON	3104
GALAXY DISTRIBUTING	EA	NC	DIST	14	---	(704) 394-0319	VALARIA DEVINE	C.E.O.	BROWN	470

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PROSPECTORS
(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
* Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
GATEWAY	SW	CA	CHAIN	100	---	(714) 895-3931	JIM WENDELL	MNGR	RAFALOVICH	395
GAVILAN COMPUTERS	NW	CA	OEM	---	CAMPBELL	408-379-8000	JOHN DUFFY	VP, MKTG	BURTON	310X
GBC	CN	IL	VAR	140	---	(312)495-4420	WARREN ROTHWELL	C.E.O.	SIANTO	580
GEAC COMPUTERS INTERNATIONAL	CD	CD	VAR	50	---	(416)475-0520	CHARLES WILLIAM	C.E.O.	---	---
GELCO CORP.	CN	MN	VAR	10	---	(612)828-2400	STEVEN F. FISCHER	---	LOGELIN	590
GEN-TECH ELECTRONICS	EA	NY	DIST	12	---	(315) 451-3480	GEORGE T. CORP	C.E.O.	ELSON	490
GENASYS CORP.	EA	MD	VAR	8	---	(301)770-4600	JOHN P. PUHALA	C.E.O.	ZNOTENS	485
GENERAL AUTOMATION	SW	CA	OEM	75	ANAHEIM	714-778-4800	RENE CARON	VP, MKTG	GAILEY	330X
GENERAL BUSINESS COMPUTERS	EA	NJ	VAR	20	---	(609)424-6500	NORMAN SOME	C.E.O.	ZNOTENS	495
GENERAL BUSINESS SERVICES	EA	MD	VAR	13	---	(301)424-1040	BERNARD S. BROWNING	C.E.O.	ZNOTENS	485
GENERAL COMMUNICATIONS	EA	NJ	OEM	---	EATONTOWN	201-938-6560	---	---	ZNOTENS	4004
GENERAL DIGITAL CORP.	EA	CT	VAR	5	---	(203)528-9041	LEONARD M. LAZAR	H.E.	SHARRIO	480
GENERAL DIGITAL CORP.	EA	MD	VAR	7	---	(301)294-0515	RALPH HUFFMAN	H.E.	ZNOTENS	485
GENERAL DYNAMICS	CN	TX	VAR	3,400	---	(817)763-4149	DAVE HAGEN	H.E.	HAWKINSON	570
GENERAL ELECTRIC CO.	CN	WI	VAR	500	---	(414)647-4074	---	---	SIANTA	5002
GENERAL INSTRUMENT CORP.	EA	MD	VAR	911	---	(301)683-3370	GORDON WOOLLEY	C.E.O.	ZNOTENS	485
GENERAL KINETICS INC.	EA	ND	VAR	7	---	(301)881-2044	LOUIS R. SCHAP	C.E.O.	ZNOTENS	485
GENERAL MICRO	CN	IN	CHAIN	125	---	(219) 232-0991	RICHARD FARRELL	VP MCH	SIANTO	580
GENERAL PHYSICS CORP.	EA	MD	VAR	40	---	(800)638-3838	TOM STEVENS	H.E.	ZNOTENS	485
GENERAL ROBOTICS	CN	WI	OEM	5	HARTFORD	414-673-6800	CARL PICK	CEO	SIANTA	5002
GENERAL SYSTEMS (MI)	CN	MI	DIST	6	---	(313) 626-6200	G.E. ROBERTS	C.E.O.	LOGELIN	595
GENERAL SYSTEMS MKTG.	---	---	OEM	---	---	---	---	---	---	---
GENIE TECHNOLOGIES	SW	CA	SUBS	---	---	(818) 991-6210	---	---	RAFALOVICH	395
GENISCO	SW	CA	VAR	30	---	(714)220-0720	OTTO BATCH	H.E.	RAFALOVICH	395
GENOA SYSTEMS CORP.	NW	CA	SUBS	---	---	(408) 945-9720	---	---	RAFALOVICH	395
GENRAD, INC.	EA	MA	VAR	250	---	(617)369-4400	WILLIAM THURSTON	C.E.O.	SHARRIO	480
GENTRY, INC.	NW	CA	DIST	3	---	(415) 547-6134	GRACE GENTRY	C.E.O.	RAFALOVICH	395
GERBER SYSTEMS TECH	EA	CT	VAR	25	---	(203)644-2581	W.S. MANN	C.E.O.	SHARRIO	480
GERHARD & ASSOCIATES, INC.	CN	OH	VAR	9	---	(614)488-9751	CHARLES F. SPADEMAN	H.E.	LOGELIN	595
GESCO CORP.	SW	CA	DIST	22	---	(209) 224-8373	MICHAEL MITCHELL	C.E.O.	RAFALOVICH	395
GIANGARLO SCIENTIFIC	EA	PA	VAR	5	---	(412)922-8850	V. GIANGARLO	C.E.O.	ZNOTENS	495
GIFFORD COMPUTER SYST.	NW	CA	OEM	8	SAN LEANDRO	415-895-0798	GERALD HOUSTON	VP, MRKTG	SCHMITT	310X
GILBERT ASSOCIATES, INC.	EA	PA	VAR	200	---	(215)775-2600	FREDERICK L. MOREADITH	H.E.	ZNOTENS	495
GIMIX	CN	IL	OEM	3	CHICAGO	312-927-5510	RICHARD DON	VP, MKTG	SIANTA	5002
GLASGAL COMMUNICATIONS	EA	NJ	DIST	20	---	(201) 768-8082	RALPH GLASGAL	C.E.O.	ZNOTENS	495
GLOBAL TURNKEY SYSTEMS	EA	NJ	VAR	35	---	(201)445-5050	DAVID AMSTERDAM	H.E.	ZNOTENS	495
GLOBAL U.S.I.	EA	NJ	OEM	20	WALDWICK	201-445-5050	ROBERT BEARDEN	VP, MKTG	ZNOTENS	4004
GLOBE TICKET CO.	EA	PA	DIST	50	---	(215) 657-4230	A.J. CLEGG	C.E.O.	ZNOTENS	495
GLYNN ELECTRONICS, INC.	EA	MA	DIST	4	---	(617) 947-4262	JOHN M. GLYNN	C.E.O.	SHARRIO	480
GMR INC.	SW	CA	OEM	5	CARSON	213-639-4663	---	---	FISHER	330X
GNAT COMPUTERS, INC.	---	---	OEM	---	---	---	---	---	---	---
GOOD(E) BUSINESS SYSTEMS	CN	WI	DIST	4	---	(414) 355-6990	FRAN WICKENHAUSER	C.E.O.	SIANTO	580
GOULD COMPUTER	CN	IL	OEM	1,399	ROLLING HEAD.	312-640-4000	RICHARD ABRAHAM	VP, ELEC CMPNTS	BROWN	4501
GOVRNMT CMPTR ENTERPRISES	NW	NV	DIST	7	---	(702) 786-7557	DOUG KYLE	C.E.O.	EVERETT	370
GRA-MAR, INC.	EA	FL	DIST	14	---	(305) 894-3351	B.J. GRACE	C.E.O.	BROWN	470
GRAFFPOINT	NW	CA	OEM	---	SAN JOSE	408-249-7951	CORLEY PHILLIPS	PRESIDENT	BURTON	310X
GRAFTEK	NW	CO	VAR	13	---	(303)449-1138	PHILLIP POIRIGR	H.E.	EVERETT	370
GRAHAM ELECTRONICS	CN	IN	DIST	48	---	(317) 634-8202	GORDON GRAHAM	C.E.O.	SIANTO	580
GRAMCO COMPUTER SALES	CN	TX	VAR	20	---	(512)366-1107	DON GRAMMER	C.E.O.	HAWKINSON	570
GRANVILLE ASSOCIATES	EA	PA	DIST	3	---	(412) 276-3588	JAMES H. ROGERS	C.E.O.	ZNOTENS	495
GRAPHICS SYSTEMS, INC.	EA	NJ	DIST	23	---	(609) 663-1533	JON WRIGHT	C.E.O.	ZNOTENS	495
GRI COMPUTER	---	---	OEM	---	---	---	---	---	---	---
GRID SYSTEMS	NW	CA	OEM	30	MOUNTAIN VIEW	415-961-4800	JOHN ELLENBY	SR VP, R&D/ENGR	BOSCH	310X
GRIFFIN TECHNOLOGY	SW	CA	VAR	6	---	(213)604-8739	JOHN C. DARJANY	H.E.	RAFALOVICH	395
GROUP THREE ELECTRONICS	SW	CA	DIST	25	---	(213) 643-6997	WILLIAM PENCE	C.E.O.	FISHER	3303
GSI TRANSCOMM	EA	PA	DIST	3	---	(412) 963-6770	MARC BUCAILLE	C.E.O.	ZNOTENS	495
GTE	EA	CT	OEM	14,547	STAMFORD	701-474-3042	ALLAN RAYFIELD	VP, PROD & SVCS	ELSON	4003
GULFSTREAM MICRO SYS	EA	FL	OEM	13	BOCA RATON	305-994-6500	GREGORY FRIEDMAN	PRESIDENT	BROWN	4501
GULL RESOURCE MGMT. SYSTEMS	EA	NY	VAR	6	---	(516)435-0600	ALAN ROSENBLUM	H.E.	ELSON	490
GUMMED PAPER OF AMERICA	CN	IL	DIST	5	---	(312) 243-6860	DAVID COHN	C.E.O.	SIANTO	580
GVC	EA	MA	OEM	---	CAMBRIDGE	617-576-1804	ANDY GRUBER	MKTG DIR	SHARRIO	4002
H & E COMPUTRONICS, INC.	EA	NY	DIST	4	---	(914) 425-1535	HOWARD Y. GOSMAN	C.E.O.	ELSON	490
HAGEN SYSTEMS INC.	CN	MN	VAR	10	---	(612)546-3351	RICHARD J. HAGEN	---	LOGELIN	590

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 ■ Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
HAGERSTOWN CASH REGISTER	EA	MD	DIST	3	---	(301) 739-4933	KENNETH COOK	C.E.O.	ZNOTENS	485
HAL SYSTEMS AND SERVICES	CN	TX	DIST	5	---	(214) 385-2300	JAMES LANGHAM JR.	C.E.O.	HAWKINSON	570
HALL-MARK ELECTRONICS	CN	TX	DIST	357	---	(214) 343-5000	JACK TURPIN	C.E.O.	HAWKINSON	570
HAMILTON/AVNET	SW	CA	DIST	800	---	(213) 558-2000	W.C. CACCIATORE	C.E.O.	RAFALOVICH	395
HARD DISK SYSTEMS	NW	CA	SUBS	---	---	(408) 226-6260	---	---	RAFALOVICH	395
HARD DRIVE SPECIALISTS	CN	TX	SUBS	---	---	(713) 480-6000	---	---	HAWKINSON	570
HARDWARE COMPUTER CORP.	CN	IN	VARs	13	---	(317)841-6155	ALLEN ARTHUR	H.E.	SIANTO	580
HARDY COMPUTER CORP.	CN	TX	OEM	1	DALLAS	214-620-8340	---	---	SIANTO	580
* HARRIS	EA	FL	OEM	1,995	MELBOURNE	305-727-9100	RICARDO DIAZ	VP, MFG PRGMS	HAWKINSON	550
HARRIS DATA SERVICE	CN	MI	VARs	5	---	(414)475-1760	TOM HARRIS	C.E.O.	BROWN	4501
HARRISON EQUIPMENT CO.	CN	TX	DIST	40	---	(713) 879-2600	MIKE W. TATE	C.E.O.	SIANTO	580
HARTE-HANKS COMMUNICATIONS	NW	CO	DIST	500	---	(303) 534-2097	ROBERT G. MARBUT	C.E.O.	HAWKINSON	570
HARTFORD OFFICE SUPPLY (MA)	EA	MA	DIST	2	---	(617) 366-7190	EVERETT PATTERSON	C.E.O.	EVERETT	370
HARTFORD OFFICE SUPPLY CO.	EA	CT	DIST	20	---	(203) 525-8641	RICH KILPATRICK	C.E.O.	SHARRIO	480
HARTLEY COURSEWARE, INC.	CN	MI	DIST	3	---	(517) 646-6458	ROSIE BOGO	C.E.O.	SHARRIO	480
HARVARD DATA EQUIPMENT	EA	MA	VARs	5	---	(617)384-7767	GEORGE L. RICE	C.E.O.	LOGELIN	595
HEALTH INFO SYSTEMS	EA	NY	VARs	13	---	(718)435-6300	GEORGE WEINBERGER	C.E.O.	SHARRIO	480
HEATH	CN	MI	OEM	---	BENTON HARBOR	616-982-3200	WILLIAM JOHNSON	PRESIDENT	ELSON	490
HETRA CMPTR & COMM.	EA	FL	OEM	5	MELBOURNE	305-723-7731	KEITH MILLIGAN	PRESIDENT	LOGELIN	5001
* HEURIKON	CN	MI	OEM	---	MADISON	608-271-8700	JOE RAMUNNI	VP, MKTG	BROWN	4501
* HEWLETT-PACKARD	NW	CA	OEM	6,000	PALO ALTO	415-857-1501	RICHARD HACKBORN	VP, PERIPH GRP	SIANTO	580
HEXACE TECH	NW	CA	OEM	---	SUNNYVALE	408-730-4457	ROBERT SITERWOOD	PRESIDENT	WEBB	3114
HIGHSMITH & CO.	EA	NC	VARs	7	---	(704)527-2382	JAMES L. HIGHSMITH	C.E.O.	BURTON	310X
HIS	CN	MI	OEM	6,074	MINNEAPOLIS	612-870-5401	RICHARD BOYLE	VP, IND SYS	BROWN	470
HITACHI AMERICA	EA	NY	OEM	1000	TARRYTOWN	914-332-5800	I. BEPPU	GM	LOGELIN	5001
HITECH INT'L	NW	CA	OEM	---	SUNNYVALE	408-738-0601	---	---	ZNOTENS	4004
HMW ENTERPRISES, INC.	EA	PA	DIST	3	---	(717) 938-4691	H.M. WUTZ	C.E.O.	BOSCH	310X
HOLVICK CORP.	CN	MI	DIST	3	---	(313) 259-9090	TIM HOLVICK, II	C.E.O.	ZNOTENS	495
HOOD COMPUTER	NW	CA	DIST	3	---	(408) 294-3529	DON LARSON	C.E.O.	LOGELIN	595
HOPKINS ASSOC.	EA	PA	VARs	5	---	(215)828-7191	JOHN HOPKINS	C.E.O.	RAFALOVICH	395
HOWARD SYSTEMS INTERNAT'L	EA	NY	DIST	6	---	(212) 682-2400	HOWARD PERSKY	C.E.O.	ZNOTENS	495
HUNTINGTON DATA SYSTEMS	SW	CA	SUBS	---	---	(714) 960-7498	---	---	ELSON	490
I 2 INTERFACE	SW	CA	SUBS	---	---	(619) 270-3990	---	---	RAFALOVICH	395
I-O MARKETING, INC.	NW	UT	DIST	3	---	(801) 973-6767	JOHN LEVER	C.E.O.	RAFALOVICH	395
I.P. SHARP ASSOCIATES LTD.	CD	CD	VARs	47	---	(416)364-5361	IAN P. SHARP	C.E.O.	EVERETT	370
IBC	SW	CA	OEM	12	CHATSWORTH	818-882-9007	RANDY ROGERS	PRESIDENT	---	---
IBEX COMPUTER CORP.	SW	CA	DIST	3	---	(818) 709-8100	ROBERT E. CONTI	C.E.O.	FISHER	330X
* IBM	EA	NY	OEM	45,937	ARMONK	914-765-1900	RALPH GOMORY	SR VP, RESEARCH	RAFALOVICH	395
ICL	EA	CT	OEM	72	STAMFORD	203-968-7200	BOB SMITH	VP, MKTG	BROWN	4501
ICON SYSTEMS	NW	UT	OEM	---	OREM	801-225-6888	DENNIS FAIRCLOUGH	PRESIDENT	ELSON	4003
IDC SERVICES INC.	SW	CA	VARs	35	---	(213)550-0285	GEORGE A. BRENNER	H.E.	EVERETT	310
IDEA ASSOCIATES	EA	MA	SUBS	---	---	(800) 257-5027	---	---	RAFALOVICH	395
IDEAS, INC.	EA	MD	VARs	16	---	(301)937-3600	THOMAS E. GOOLDY	H.E.	SHARRIO	480
ILENE INDUSTRIES	EA	TN	OEM	3	SHELBYVILLE	615-684-8731	JOHN SMITH	PRESIDENT	ZNOTENS	485
IMS INT'L.	NW	NV	OEM	25	CARSON CITY	702-883-7611	JAMES ZAKESKI	DIR, MKTG	BROWN	4501
IMSAI	---	---	OEM	---	---	---	---	---	EVERETT	310
IMTEC GROUP	EA	NJ	OEM	6	PENNSAUKEN	609-663-3212	---	---	---	---
INACOMP	CN	MI	CHAIN	90	---	(313) 649-0910	GARETH EVANS	PRESIDENT	ZNOTENS	4004
INCOMNET	SW	CA	OEM	---	WESTLAKE VLG	818-707-0818	THOMAS POINTE	VP SLS	LOGELIN	595
INDEPENDENT BUS. SYS.	NW	CA	OEM	1	LIVERMORE	415-443-3131	GLEN KELLY	SR VP, ENGR	GAILEY	330X
INDUSTRIAL CMPTR DSGNS	SW	CA	OEM	2	WESTLAKE VLG	818-889-3179	ALFRED PEASE	PRESIDENT	BOSCH	310X
INFAX	EA	GA	SUBS	---	---	(404) 981-4520	MICHAEL RAGSDALE	PRESIDENT	GAILEY	330X
INFO.SUPPORT SYST.	---	---	OEM	---	---	---	---	---	BROWN	470
INFOCEL, INC.	EA	NC	VARs	12	---	(919)848-0001	JAN M. LODAL	C.E.O.	---	---
INFOCENTRE LTD.	CD	CD	VARs	5	---	(514)337-5007	IAN FARQUHARSON	C.E.O.	BROWN	470
* INFOREX	EA	MA	OEM	---	BURLINGTON	617-272-6470	J.L. HALE	PRESIDENT	---	---
INFORMATICS GENERAL	SW	CA	VARs	191	---	(818)887-9040	WALTER BAUER	C.E.O.	SHARRIO	4002
INFORMATICS GENERAL CORP.	CN	OH	VARs	20	---	(614)459-7500	JOE BEVAN	H.E.	RAFALOVICH	395
INFORMATION MANAGEMENT INT'L.	NW	CA	VARs	12	---	(408)248-8250	ALLEN GUGGENHEIM	C.E.O.	LOGELIN	595
INFORMATION SOLUTIONS (CO)	NW	CO	DIST	13	---	(303) 694-9180	DAVE DEYOUNG	C.E.O.	RAFALOVICH	395
INFORMATION TECH.	CN	NE	OEM	10	LINCOLN	402-423-2682	DONALD DILLON	PRESIDENT	EVERETT	370
INFOTECs	EA	NH	OEM	---	MANCHESTER	603-624-2700	---	---	HAWKINSON	550
INGERSOLL ENGINEERS	CN	IL	VARs	15	---	(815)987-6110	JULIAN JARET	H.E.	SHARRIO	4002
									SIANTO	580

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

(sorted by company)

- * Present customer
- Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
INLAND ASSOCIATES, INC.	CN	KS	DIST	16	—	(913) 764-7977	DON OMER	C.E.O.	HAMKINSON	570
INNOVATIVE COMPUTER LEASING	EA	NJ	VARs	5	—	(201)625-8700	JOHN DIGIACOMO	C.E.O.	ZNOTENS	495
INNOVATIVE DATA TECH.	SW	CA	SUBS	—	—	(619) 587-0555	—	—	RAFALOVICH	395
INSTRUM. LAB/PIXEL	—	—	OEM	—	—	—	—	—	—	—
INSTRUMENT DYNAMICS, INC.	EA	MA	DIST	10	—	(617) 245-5100	EUGENE W. HAAS	C.E.O.	SHARRIO	480
INT'L PARALLEL MACH.	EA	MA	OEM	—	NEW BEDFORD	617-990-2977	—	—	SHARRIO	4002
INT'L TECH GROUP	EA	NY	OEM	15	WHITE PLAINS	914-681-0030	MARTIN LEIMDORFER	PRESIDENT	ZNOTENS	4004
INTECOLOR	EA	GA	OEM	26	NORCROSS	404-449-5961	DAVID DEANS	PRESIDENT	BROWN	4501
* INTEGR. BUS. COMPUTERS	SW	CA	OEM	—	CHATSWORTH	818-882-9007	RANDY ROGERS	PRESIDENT	GAILEY	3306
INTEGRAPH	—	—	OEM	—	—	—	—	—	—	—
INTEGRATED DIGITAL PROD	SW	CA	OEM	4	ANAHEIM	714-993-5300	PATRICK GOODRICH	PRESIDENT	GAILEY	330X
INTEGRATED MICROCOMPUTER	EA	MD	VARs	10	—	(301)984-8434	JOHN YEH	C.E.O.	ZNOTENS	485
■ INTEGRATED SOLUTIONS	NW	CA	OEM	3	SAN JOSE	408-943-1902	STAN COFFEE	VP, MKTG	BURTON	3104
* INTEL	NW	CA	OEM	1,629	SANTA CLARA	408-987-8080	JACK CARSTEN	VP, COMPNT GRP	GOODMAN	3330
INTELAB APPLIED PHYSICS	EA	MA	OEM	3	HINGHAM	617-749-3550	G. MARKSTEIER	PRESIDENT	SHARRIO	4002
INTELLIGENT COMM. NET.	SW	CA	OEM	2	WESTLAKE VLG	818-707-0818	CHARAN LOHARA	PRESIDENT	GAILEY	330X
INTELLIGENT TECH INT'L	NW	CA	OEM	—	PALO ALTO	415-328-2411	GRAHAM MUIR	PRESIDENT	BURTON	310X
INTELLIMAC	EA	MD	OEM	6	ROCKVILLE	301-984-8000	ROBERT HUBERFELD	PRESIDENT	ZNOTENS	4004
INTERACTIVE DATA	EA	MA	VARs	100	—	(617)890-1234	JOHN RUTHERFURD	C.E.O.	SHARRIO	480
INTERACTIVE SYST. TECH.	NW	—	OEM	—	—	—	—	—	—	—
INTERACTIVE, INC.	SW	CA	VARs	5	—	(619)560-8525	B. VERNON	C.E.O.	RAFALOVICH	395
INTERBUSINESS CORP.	CN	IL	DIST	9	—	(312) 459-8866	M. TOUMAYAN	C.E.O.	SIANTO	580
INTERFACE ELECTRONICS	CN	HI	OEM	1	FARMINGTON HL	313-553-9820	KIRIT BAKSHI	PRESIDENT	LOGEL IN	5001
INTERLINK SYSTEMS	NW	CA	DIST	2	—	(408) 720-8838	C.J. FREY	C.E.O.	RAFALOVICH	395
INTERMETRICS, INC.	EA	MA	VARs	31	—	(617)661-1840	JOHN MILLER	C.E.O.	SHARRIO	480
INTERN'L TOTALIZATOR	SW	CA	VARs	10	—	(619)457-4680	JAMES WALTERS	C.E.O.	RAFALOVICH	395
INTERNATIONAL ELECTRONICS	CN	TX	DIST	4	—	(915) 598-3406	JOE LOPEZ	C.E.O.	HAWK INSON	570
INTERNATIONAL RESEARCH	CN	MN	VARs	18	—	(612)888-9635	—	—	LOGEL IN	590
INTERN'L DATA EQPMT & ACC.	NW	CA	DIST	6	—	(408) 745-1911	ARNIE LEVIN	C.E.O.	RAFALOVICH	395
* INTERPHASE CORP.	CN	TX	SUBS	—	—	(214) 350-9000	—	—	WEBB	5111
INTERSIL	NW	CA	OEM	—	CUPERTINO	408-996-5000	FRED KASHKOOL I	VP, R & D ENGR	BURTON	310X
INTERTEC DATA SYSTEMS	EA	SC	OEM	10	WEST COLUMBIA	803-796-7800	CHARLES FUCHS	VP, MKTG	BROWN	4501
IPL	EA	MA	OEM	10	WALTHAM	617-890-6620	G.L. NEUMAN	VP, SALES	SHARRIO	4002
IRONICS	EA	NY	OEM	—	ITHACA	607-277-4060	S. SILVERSTEIN	PRESIDENT	ZNOTENS	4004
IRT CORP.	SW	CA	VARs	25	—	(619)450-4343	ROBERT MERTZ	C.E.O.	RAFALOVICH	395
* ISC SYSTEMS	NW	WA	OEM	—	SPOKANE	800-538-7818	BRUCE MCGILAWAY	VP, MKTG	BOSCH	320
ISI INT'L	NW	CA	OEM	40	SUNNYVALE	408-743-4300	LEE JENSEN	PRESIDENT	BURTON	310X
ISOTRON	EA	CT	OEM	—	FAIRFIELD	203-255-7443	ROBERT LEWIS	PRESIDENT	ELSON	4003
ISTEL, INC.	EA	MA	VARs	53	—	(617)272-7333	SEYMOUR ROSEN	C.E.O.	SHARRIO	480
ITHACA DATA SYSTEMS	EA	NY	OEM	6	ITHACA	607-273-2500	J.H. WATSON	PRESIDENT	ZNOTENS	4004
ITT	EA	NY	OEM	19,553	NEW YORK	212-752-6000	ROBERT HANSEN	MGR, ENGR	ZNOTENS	4004
IVY MICROCOMPUTER CORP	EA	MA	OEM	32	WORCESTER	617-853-6914	R. KENNEY	VP, MKTG	SHARRIO	4002
JADE COMPUTER PROD	SW	CA	OEM	15	HAWTHORNE	213-973-7707	SCOTT ANDERSON	PRESIDENT	CARGILO	330X
JC INFO SYSTEMS	NW	CA	OEM	5	MILPITAS	408-945-0318	JAI CHOI	PRESIDENT	BOSCH	310X
JEFFERSON-PILOT BROADCASTING	EA	NC	VARs	5	—	(704)525-3901	LOU PFEIFER	H.E.	BROWN	470
JENKS ASSOCIATES, INC.	EA	MA	DIST	16	—	(617) 938-0488	MICHAEL P. JENKS	C.E.O.	SHARRIO	480
JERSEY MICRO SYSTEMS	EA	NJ	VARs	6	—	(609)665-7611	DALE PRITCHETT	C.E.O.	ZNOTENS	495
JMS COMPUTER ASSOCIATES	EA	GA	DIST	11	—	(404) 475-1000	DWIGHT L. MIESSE	C.E.O.	BROWN	470
JOBTRACK	CN	MN	VARs	17	—	(612)935-9111	WILLIAM GILSTER	C.E.O.	LOGEL IN	590
JOHNSON CONTROLS, INC.	CN	TX	VARs	30	—	(214)242-6521	JIM LANDON	H.E.	HAWK INSON	570
JONAS & ERICKSON SFTMRE	CD	CD	VARs	5	—	(416)491-6620	DAVID PRENTICE	C.E.O.	—	—
JONOS INTERNATIONAL	SW	CA	OEM	—	FULLERTON	714-999-6661	JOSEPH TAYLOR	VP	CARGILO	330X
JOSEPHINE COUNTY TECH.	NW	OR	SUBS	—	—	(503) 474-5678	—	—	RAFALOVICH	395
JTS CMPTR SYSTEMS	CD	CD	VARs	5	—	(416)665-8910	JOE STRUL	C.E.O.	—	—
JUPITER SYSTEMS	NW	CA	OEM	6	ALAMEDA	415-523-9000	ED CORELL	PRESIDENT	SCHMITT	310X
KALTRONICS DISTRIBUTORS	CN	IL	DIST	15	—	(312) 291-1220	HARVEY KALMAN	C.E.O.	SIANTO	580
KALYAR CORP.	CN	MN	DIST	25	—	(612) 375-1711	BRIAN OSTENSON	C.E.O.	LOGEL IN	590
KAMERMAN LABS	NW	OR	SUBS	—	—	(800) 522-2237	—	—	RAFALOVICH	395
KANJANRUS CORP.	EA	MA	VARs	5	—	(617)237-2285	RUSSELL E. CRAMER, III	V.P.	SHARRIO	480
KAYE INSTRUMENTS	EA	MA	VARs	13	—	(617)275-0300	JAY PRAGER	H.E.	SHARRIO	480
KAYPRO CORP	SW	CA	OEM	100	SOLANO BEACH	619-481-3900	DAVID KAT	VP, MKTG	CARGILO	330X
KEANE, INC.	EA	MA	VARs	30	—	(617)742-5210	JOHN KEANE	C.E.O.	SHARRIO	480
KERONIX	—	—	OEM	—	—	—	—	—	—	—

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
* Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
KESELL ASSOCIATES	EA	NY	VAR	5	---	(212)873-5556	ROBERT R. KESELL	C.E.O.	ELSON	490
KEY RESOURCES, LTD.	EA	VA	DIST	3	---	(703) 989-7925	HUGH KEY	C.E.O.	ZNOTENS	485
KEY SYSTEMS, INC.	EA	NH	VAR	5	---	(603)898-9800	JEFFREY J. FENCER	H.E.	SHARRIO	480
KEYDATA	EA	MA	OEM	---	NEWTON	800-343-6982	JIM STODDARD	MGR, MKTG	SHARRIO	4002
KEYSTONE DISTRIBUTING CO.	EA	MA	DIST	40	---	(617) 769-3225	STEPHEN SPECTOR	C.E.O.	SHARRIO	480
KEYSTONE INFO SYSTEMS	EA	NJ	VAR	6	---	(609)662-0050	JUDD VAN DERVORT	C.E.O.	ZNOTENS	495
KIERULFF ELECTRONICS, INC.	NW	CA	DIST	350	---	(415) 968-6292	D. BELL	C.E.O.	RAFALOVICH	395
KINETIC SYSTEMS CORP.	CN	IL	VAR	9	---	(815)838-0005	MICHAEL L. HAYES	H.E.	SIANTO	580
KIRSCH ASSOCIATES	CN	MN	DIST	150	---	(612) 944-3355	WILLIAM KIRSCH	C.E.O.	LOGELIN	590
KOEPF ASSOCIATES, W.C.	CN	OH	DIST	16	---	(216) 247-5129	WILLARD C. KOEPF	C.E.O.	LOGELIN	595
KONIX INTERNAT'L CORP.	---	---	OEM	---	---	---	---	---	---	---
* KPS, INC.	SW	CA	DIST	12	---	(818) 991-5106	WILLIAM E. KIELY	C.E.O.	GAILEY	3306
KSM ELECTRONICS, INC.	EA	FL	DIST	14	---	(305) 971-5900	S. BENJAMIN	C.E.O.	BROWN	470
KUSTOM ELECTRONICS	CN	KS	SUBS	---	---	(913) 492-1400	---	---	HAMKINSON	570
L/F TECHNOLOGIES	NW	CA	OEM	20	CARSON CITY	702-883-7611	AL FIEGHEH	PRESIDENT	BURTON	310X
LABORATORY CONSULTING	CN	WI	DIST	5	---	(608) 241-4151	G.P. HICKS	C.E.O.	SIANTO	580
LACHMAN ASSOCIATES, INC.	CN	IL	DIST	4	---	(312) 986-8840	R. LACHMAN	C.E.O.	SIANTO	580
LANCORE TECHNOLOGIES	SW	CA	SUBS	---	---	(818) 991-5100	---	---	RAFALOVICH	395
LANIER	EA	GA	OEM	389	ATLANTA	404-329-8000	RANDY COURTNEY	PROD MKTG MGR	BROWN	4501
LANPAR TECHNOLOGIES, INC.	CD	CD	DIST	40	---	(416) 475-9123	D. WHITESIDE	C.E.O.	---	---
* LANTOR, INC.	SW	CA	VAR	20	---	(213)324-7070	VICTOR A. JAUCH	C.E.O.	GAILEY	3306
LARSE CORP.	NW	CA	VAR	8	---	(408)988-6600	HENRY A. MOURAD	H.E.	RAFALOVICH	395
LASER MICRO SYSTEMS	SW	CA	OEM	---	SANTA ANA	714-953-7411	---	---	CARGILO	330X
LASERMASTER	CN	MN	OEM	1	MINNETONKA	612-934-0680	MEL NEWSOM	PRESIDENT	LOGELIN	5001
LAWSON ASSOC.	CN	MN	VAR	8	---	(612)379-2633	JERRY SNYDER	C.E.O.	LOGELIN	590
LCA SALES CO.	EA	NY	DIST	15	---	(914) 961-4700	J. SCHWARTZ	C.E.O.	ELSON	490
LEADING EDGE	EA	MA	OEM	---	CANTON	617-828-8150	WILLIAM SELLERS	VP, MKTG	SHARRIO	4002
LEAR SIEGLER	SW	CA	OEM	1,900	ANAHEIM	714-778-3500	J.E. KEENER	VP, ENGR	CARGILO	330X
LEASAMETRIC, INC.	NW	CA	DIST	90	---	(415) 574-4441	R. RINGE	C.E.O.	RAFALOVICH	395
LEE DATA	CN	MN	OEM	98	MINNEAPOLIS	612-828-0300	JAMES VELLENGA	VP, OPERATIONS	LOGELIN	5001
LEVI, RAY & SHOUP	CN	TX	VAR	7	---	(214)324-2635	RICHARD LEVI	C.E.O.	HAMKINSON	570
LEVISON SALES CO., INC.	EA	NY	DIST	6	---	(516) 266-5020	IVAN I. ROBBINS	C.E.O.	ELSON	490
LEVITZ RETAIL SYSTEMS	SW	CA	VAR	10	---	(619)457-3888	GARY REIF	C.E.O.	RAFALOVICH	395
LEVY INC.	NW	CA	VAR	7	---	(408)371-4466	S. LEVY	C.E.O.	RAFALOVICH	395
LEXOCORP CORP.	SW	CA	DIST	10	---	(619) 457-4405	WILLIAM OTTERSON	C.E.O.	RAFALOVICH	395
LIBRA PROGRAMMING, INC.	NW	UT	VAR	7	---	(800)453-3827	WILLIAM A. MAASBERG	C.E.O.	EVERETT	370
LISP MACHINE	SW	CA	OEM	20	LOS ANGELES	213-642-1116	FRANK SPITZNOGLE	PRESIDENT	GAILEY	330X
LITTON INDUSTRIES	CN	MI	VAR	5,000	---	(616)772-6321	TOM HAINSWORTH	H.E.	LOGELIN	595
LOBO SYSTEMS INC.	SW	CA	SUBS	---	---	(805) 564-3356	---	---	RAFALOVICH	395
LOCAL DIGITAL DIST.	EA	MD	VAR	15	---	(301)258-8848	RICHARD PALERMO	C.E.O.	ZNOTENS	485
LOCKHEED ELECTRONICS	SW	CA	OEM	---	BURBANK	818-847-6121	R.M. POWELL	VP, ASTRONAUTICS	CARGILO	330X
LOCKWOOD GREENE SYSTEMS CORP.	EA	SC	VAR	18	---	(803)578-2143	OTIS C. JONES	H.E.	BROWN	470
LOGICA INC.	EA	NY	VAR	20	---	(212)599-0828	STEVE STEVENSON	C.E.O.	ELSON	490
LOGICAL BUS. MACHINES	NW	CA	OEM	10	SUNNYVALE	408-737-1911	JOHN QUINN	VP, MKTG	BURTON	310X
LOGICAL MICROCOMPUTER	CN	IL	OEM	---	CHICAGO	312-282-9667	---	---	SIANTA	5002
LOGICON, INC.	SW	CA	VAR	103	---	(213)373-0220	JOHN WOODHULL	C.E.O.	RAFALOVICH	395
LOGISTICON, INC.	NW	CA	VAR	7	---	(408)988-3811	ROBERT G. BARTIZAL	C.E.O.	RAFALOVICH	395
LOGON, INC.	EA	NJ	VAR	10	---	(201)646-9222	ALBERT BECKMAN	C.E.O.	ZNOTENS	495
LOMAS DATA	EA	MA	OEM	1	WESTBORO	617-366-6434	RICHARD LOMAS	PRESIDENT	SHARRIO	4002
LONE STAR MICRO	CN	TX	DIST	3	---	(214) 521-2931	PAUL D. WILLIAMS	C.E.O.	HAMKINSON	570
LOONAM CMPTR CENTER	CN	MN	DIST	60	---	(612) 831-1616	JIM LOONAN	C.E.O.	LOGELIN	590
LOUIS ALBERT ASSOCIATES INC.	CD	CD	VAR	5	---	(613)748-9741	LOUIS P. ALBERT	C.E.O.	---	---
* LOWRY COMPUTER PRODUCTS	CN	MI	VAR	20	---	(313)228-7200	MICHAEL LUMM	H.E.	LOGELIN	5001
LTA COMPUTER SERVICES	CN	IL	DIST	3	---	(312) 470-1806	WALTER KAPECKI	C.E.O.	SIANTO	580
LUNDY ELECTRONICS & SYSTEMS	EA	NY	VAR	43	---	(516)671-9000	PETER BARANISHYN	---	ELSON	490
LYNCH COMMUNICATIONS SYS.	NW	NV	DIST	60	---	(702) 786-4020	J.H. VOGT	C.E.O.	EVERETT	370
M/A-COM	EA	MD	VAR	100	---	(301)428-5582	TOM SCHOLL	H.E.	ZNOTENS	485
MAD COMPUTER	NW	CA	OEM	---	SANTA CLARA	408-980-0840	---	---	SCHMITT	310X
MAD INTELLIGENT SYS	NW	CA	OEM	---	SAN JOSE	408-943-1711	HAL KRAUTER	PRESIDENT	SCHMITT	310X
MADIC CORP.	NW	CA	VAR	18	---	(408)988-8311	ROBERT RICHTER	H.E.	RAFALOVICH	395
MAGIC COMPUTER	EA	NJ	OEM	---	FAIRFIELD	201-227-8833	ANGELO SALVEMINI	VP, MKTG	ZNOTENS	4004
MAGNETIC TAPE SERVICES	CN	TX	DIST	3	---	(713) 933-6262	GEORGE W. SALES	C.E.O.	HAMKINSON	570
MAGNOLIA MICROSYSTEMS	NW	WA	OEM	1	SEATTLE	206-285-7266	B.K. GJERDING	VP, ENGR	BOSCH	320

PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
MAGNUSON	NW	CA	OEM	10	SAN JOSE	408-946-8100	CHARLES STRAUCH	PRESIDENT	BURTON	310X
MAGUIRE & ASSOC.	EA	CT	DIST	5	---	(203) 226-4281	T.H. MAGUIRE, JR.	C.E.O.	SHARRIO	480
MANAGEMENT INFO SOFTWARE	EA	NY	DIST	5	---	(212) 686-0800	GENE SMILGEWICZ	C.E.O.	ELSON	490
MANAGEMENT INFO SYSTEMS	EA	MA	DIST	2	---	(617) 893-1331	GERRY DE GRUITER	C.E.O.	SHARRIO	480
MANAGEMENT SCIENCE AMERICA	EA	GA	VAR	130	---	(404)239-2000	DENNIS VOHS	H.E.	BROWN	470
MANAGMT ANALYSIS & CONTROL	NW	WA	DIST	3	---	(206) 939-5676	HONARD JOHNSON	C.E.O.	RAFALOVICH	395
MANCHESTER EQUIPMENT	EA	MA	VAR	44	---	(617)739-1555	ROBERT RIBAVDO	H.E.	SHARRIO	480
MANOF COMMUNICATIONS SYSTEMS	EA	NY	VAR	7	---	(212)490-2010	JACOB SHALEV	H.E.	ELSON	490
MANUS SERVICES CORP.	NW	WA	VAR	13	---	(206)285-3260	CLIFFORD M. ASPLUND	C.E.O.	RAFALOVICH	395
MARION CO., WILLIAM	EA	NJ	VAR	15	---	(201)343-4554	WILLIAM MARION	C.E.O.	ZNOTENS	495
MARKETECHS, INC.	EA	MA	DIST	6	---	(617) 237-4343	CHARLES HESNER	C.E.O.	SHARRIO	480
MARKETLINE SYSTEMS, INC.	EA	PA	DIST	3	---	(215) 355-5400	ROBERT DONAGHY	C.E.O.	ZNOTENS	495
MARRA & ASSOCIATES	NW	WA	DIST	4	---	(206) 641-3535	P. GERALD MARRA	C.E.O.	RAFALOVICH	395
MARTEC INTERNATIONAL	EA	MA	DIST	50	---	(617) 237-2115	H. YOSHIDA	C.E.O.	SHARRIO	480
MARTIN MARIETTA CORP.	EA	MD	VAR	3,500	---	(301)982-6500	---	---	ZNOTENS	485
MARYLAND COMPUTER SERVICES	EA	MD	VAR	6	---	(301)879-3366	PAUL KISHTER	H.E.	ZNOTENS	485
* MASS COMPUTER	EA	MA	OEM	PV	WESTFORD	617-692-6200	LORRIN GALE	VP, ENGR	SHARRIO	4002
MATERIALS DEVELOPMENT	SW	CA	OEM	2	CHATSWORTH	818-700-8290	BARTON GORDON	PRESIDENT	GAILEY	330X
MATHBOX	EA	MD	CHAIN	130	---	(301) 984-7717	ARMEN MANOOGIAN	VP SLS	ZNOTENS	485
MATRIX/SYSTEMS GROUP CORP.	EA	MA	VAR	10	---	(617)350-6614	NICHOLAS MANSFIELD	H.E.	SHARRIO	480
MAVIS COMPUTER	NW	CA	OEM	2	RANCHO CORDVA	916-635-2467	GARY HOFF	PRESIDENT	BURTON	310X
MAXICOM	CN	TX	OEM	4	HOUSTON	713-946-5783	JAN SCHWENK	PRESIDENT	HAWKINSON	550
MAYNARD ELECTRIC	EA	FL	SUBS	---	---	(305) 331-6402	---	---	BROWN	470
MBA-SYSTEMS AUTOMATION	CN	OH	DIST	3	---	(614) 231-2130	MR. RAFIZADEH	C.E.O.	LOGELIN	595
MCAUTO	CN	MO	VAR	444	---	(800)325-1551	RAYMOND PITTMAN	H.E.	LOGELIN	590
* MCDONNELL DOUGLAS	SW	CA	OEM	200	IRVINE	714-250-1000	GREG LAWSON	VP, MFG	GOODMAN	3330
MCKESSON OFFICE PRODUCTS	EA	CT	DIST	160	---	(203) 358-7000	JACK DELANEY	C.E.O.	SHARRIO	480
* MDB SYSTEMS	SW	CA	OEM	---	ORANGE	714-998-6900	AMOS DEACON, JR	PRESIDENT	FISHER	3303
* MDS QANTEL	NW	CA	OEM	---	HAYWARD	415-887-7777	ELEUTHERE POUMAKIS	VP, ENGR	BOSCH	3102
MED-DEN SYSTEMS, INC.	EA	GA	DIST	3	---	(404) 952-9487	DANIEL W. HOLLIS	C.E.O.	BROWN	470
MEDCOMP TECHNOLOGIES, INC.	EA	NY	VAR	12	---	(914)273-6480	ABE STUNDEL	H.E.	ELSON	490
MEDIA MANAGEMENT & MAGTCS	CN	WI	DIST	3	---	(414) 783-5423	THOMAS BLONG	C.E.O.	SIANTO	580
MEDIA MASTERS	EA	GA	DIST	2	---	(404) 261-6628	BOBBY SANDERS	C.E.O.	BROWN	470
MEDIA RECOVERY, INC.	CN	TX	DIST	12	---	(817) 549-5462	R.C. FOLEY	C.E.O.	HAWKINSON	570
MEDICAL DATA SERVICES CORP.	EA	VA	VAR	5	---	(804)794-2818	J. RODNEY SEAY	H.E.	ZNOTENS	485
MEDICAL DATA SVCS	EA	VA	VAR	20	---	(804)794-2818	ROD SEAY	C.E.O.	ZNOTENS	485
MEDICAL INFO TECH	EA	MA	VAR	19	---	(617)329-5300	NEIL PAPPALARDO	C.E.O.	SHARRIO	480
MEGADATA	EA	NY	OEM	15	BOHEMIA	516-589-6800	A. BACHANA	PRESIDENT	ZNOTENS	4004
MEMBERSHIP SERVICES, INC.	CN	TX	VAR	7	---	(214)438-0581	JOE CLEVELAND	C.E.O.	HAWKINSON	570
MEMCOM INTERNATIONAL, INC.	SW	CA	VAR	8	---	(714)771-0800	PETER R. KLOSSE	H.E.	RAFALOVICH	395
MEMOTECH	EA	MA	OEM	---	NEEDHAM	617-449-6614	---	---	SHARRIO	4002
MENTOR GRAPHICS CORP.	NW	OR	VAR	88	---	(503)626-7000	THOMAS BRUGGERE	C.E.O.	RAFALOVICH	395
MEPCOM INT'L	CN	TX	OEM	1	DALLAS	214-660-1900	R.D. MOORE	PRESIDENT	HAWKINSON	550
MERIT MACHINERY, INC.	EA	PA	DIST	5	---	(412) 931-6800	GEORGE STAMETS	C.E.O.	ZNOTENS	495
* MESA TECHNOLOGY CORP.	EA	MD	VAR	20	---	(301)948-4350	BUD BINK	H.E.	ZNOTENS	4004
METAFILE INFO SYSTEMS	CN	MN	VAR	10	---	(507)289-8967	ALLAN SPRAU	C.E.O.	LOGELIN	590
* METAPHOR COMPTR SYS	NW	CA	OEM	---	MOUNTAIN VIEW	415-961-3600	YOGEN DALAL	VP, SYS DEV.	SCHMITT	3103
METIER MANAGEMENT SYSTEMS	CN	TX	DIST	63	---	(713) 988-9100	ROBIN W.I. LODGE	C.E.O.	HAWKINSON	570
MICRO BUSINESS APPLICA.	CN	MN	OEM	2	BURNSVILLE	612-894-3470	---	---	LOGELIN	5001
MICRO COMPUTER	EA	MA	DIST	50	---	(617) 848-1000	R.Y. HOLDEN, SR.	C.E.O.	SHARRIO	480
MICRO CRAFT	EA	AL	OEM	1	HUNTSVILLE	205-534-4190	---	---	BROWN	4501
MICRO D, INC.	SW	CA	DIST	71	---	(714) 540-4781	HAROLD L. CLARK	C.E.O.	RAFALOVICH	395
MICRO DATA SYSTEMS (ID)	NW	ID	VAR	6	---	(208)667-7402	PHIL JENISON	C.E.O.	EVERETT	370
MICRO DESIGN	CN	TX	SUBS	---	---	(512) 441-7890	---	---	HAWKINSON	570
MICRO DESIGN INT'L	EA	FL	SUBS	---	---	(305) 677-8333	---	---	BROWN	470
MICRO EXPANDER	EA	NY	OEM	---	NEW YORK	212-308-2328	---	---	ZNOTENS	4004
MICRO FIVE CORP.	SW	CA	OEM	PV	COSTA MESA	714-957-1517	BRUCE MENN	VP, ENGR	GAILEY	330X
MICRO LINK	CN	IN	OEM	4	CARMEL	317-846-1721	A. DONALD DUKE	PRESIDENT	SIANTA	5002
MICRO NETWORK CORP.	CN	MN	SUBS	---	---	(612) 788-1099	---	---	LOGELIN	590
MICRO PRODUCTS	EA	VA	OEM	70	RESTON	703-471-6000	DENNIS O'DONNELL	PRESIDENT	ZNOTENS	4004
MICRO SOURCE	---	---	OEM	---	---	---	---	---	---	---
MICRO STAR, INC.	NW	CA	DIST	3	---	(415) 547-1920	JERZY KULESZA	C.E.O.	RAFALOVICH	395
MICRO TECH. UNLMTD	EA	NC	OEM	---	RALEIGH	919-833-1458	DAVID COX	PRESIDENT	BROWN	4501

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
MICRO-DESIGN	CN	TX	SUBS	—	—	(512) 441-7890	—	—	HAMKINSON	570
MICROAGE	SW	AZ	CHAIN	250	—	(602) 968-3168	CHARLES REDFERN	DR MKT	GOODMAN	385
MICROAMERICA	EA	MA	DIST	125	—	(617) 480-0780	GORDON HOFFSTEIN	C.E.O.	SHARRIO	480
MICROBILT CORP.	EA	GA	DIST	5	—	(404) 935-0313	P.E. SADLER	C.E.O.	BROWN	470
MICROCODE	NW	CA	SUBS	—	—	(415) 657-4411	—	—	RAFALOVICH	395
* MICRODATA	SW	CA	OEM	—	IRVINE	714-250-1000	JEREMY CAUSLEY	VP	GOODMAN	3330
MICROGRAPHICS INTERN'L	EA	PA	DIST	3	—	(717) 459-2213	JOSEPH CERULLO	C.E.O.	ZNOTENS	495
MICROMATION	NW	CA	OEM	15	SAN FRANCISCO	415-626-5960	A. KRAY	VP, SALES	SCHMITT	310X
MICROPLUS	EA	GA	SUBS	—	—	(404) 446-5659	—	—	BROWN	470
MICROPRODUCTS & SYS	EA	TN	OEM	1	KINGSFORT	615-245-8081	LARRY JOHNSON	PRESIDENT	BROWN	4501
MICROS SYSTEMS	EA	MD	VARs	22	—	(301)779-7511	J. ROBERT SCHULTZ	C.E.O.	ZNOTENS	485
MICROSERVE	EA	NY	OEM	1	NEW YORK	212-683-2811	HAROLD BONDY	PRESIDENT	ZNOTENS	4004
MICROSPARC, INC.	EA	MA	DIST	3	—	(617) 371-1660	MIKE HARVEY	C.E.O.	SHARRIO	480
MICROSYSTEMS DIST.	SW	AZ	DIST	3	—	(602) 948-1110	L.L. POND	C.E.O.	GOODMAN	385
MICROVOICE	SW	CA	VARs	6	—	(714)859-1091	GREG PEACOCK	C.E.O.	RAFALOVICH	395
MICROWARE DISTRIBUTORS INC.	NW	OR	VARs	13	—	(503)642-7692	RICK TERRELL	C.E.O.	RAFALOVICH	395
MID-WEST MKTG MFCTR'S REP	CN	MO	DIST	5	—	(314) 426-2500	ART HARPER	C.E.O.	LOGELIN	590
MIDEC, INC.	EA	PA	VARs	5	—	(412)963-6011	THOMAS STYSLINGER	C.E.O.	ZNOTENS	495
MIDTOWN STATIONERY & SPLY	EA	MD	DIST	2	—	(301) 588-6777	MARK STEIN	C.E.O.	ZNOTENS	485
MIDWEST COMMERCE DATA	CN	IN	VARs	5	—	(219)294-6621	RICHARD HERSHBERGER	C.E.O.	SIANTO	580
MIDWEST DATA SYSTEMS	CN	OH	VARs	6	—	(419)586-5181	MARTIN HERF	C.E.O.	LOGELIN	595
MIDWEST SCIENTIFIC	—	—	OEM	—	—	—	—	—	—	—
MILTRONICS	CN	IN	DIST	2	—	(812) 376-6321	JOHN BINKLEY	C.E.O.	SIANTO	580
MINDSET	NW	CA	OEM	—	—	408-737-8555	WILLIAM LANE	—	BOSCH	310X
MINI DATA SYSTEMS	SW	CA	OEM	5	EL SEGUNDO	213-640-0404	WILLIAM MYERS	PRESIDENT	FISHER	330X
* MINI-COMPUTER SYSTEMS	EA	NY	OEM	8	WHITE PLAINS	914-694-1101	MICHAEL BRENNAN	PRESIDENT	—	999
MINICOM DATA CORP.	CD	CD	VARs	5	—	(416)225-4209	HOWARD HONICKMAN	C.E.O.	—	—
MINICOM SYSTEMS	EA	NY	OEM	8	WHITE PLAINS	914-694-1101	ANDY POWLO	NAT'L SALES MGR	ZNOTENS	4004
* MINICOMP	—	—	OEM	—	—	—	—	—	—	999
MINICOMPUTER EXCHANGE	NW	CA	DIST	4	—	(408) 733-4400	W.E. GRUENINGER	C.E.O.	RAFALOVICH	395
MININGHAM & OELLERICH	EA	NY	DIST	4	—	(212) 349-4410	JOHN OELLERICH	C.E.O.	ELSON	490
MINOLTA	EA	NJ	OEM	—	RAMSEY	201-825-4000	LEN SALVO	NAT'L SALES MGR	ZNOTENS	4004
MISCO, INC., CMPTR SPLYs	EA	NJ	DIST	10	—	(201) 264-8200	JOSEPH V. POPOLO	C.E.O.	ZNOTENS	495
MITEC CMPTR BUSINESS	SW	CA	OEM	2	WOODLAND HILS	213-999-2311	HAROLD KURTH	PRESIDENT	GAILEY	330X
MITSUBISHI ELECTRONICS	JP	JP	OEM	876	—	714-957-4000	ORVILLE NEELY	—	—	—
MNC INTERNATIONAL	CN	MN	SUBS	—	—	(612) 788-1099	—	—	LOGELIN	590
MNGMT CONTROL SYSTEMS	EA	GA	VARs	20	—	(404)432-1996	CHARLIE PAPARELLI	C.E.O.	BROWN	470
MNGMT DECISION SYSTEMS	EA	MA	VARs	25	—	(617)890-1100	JOHN WURTS	C.E.O.	SHARRIO	480
MODULAR COMPUTER SYST.	EA	FL	OEM	75	FT LAUDERDALE	305-974-1380	HAROLD KOPLow	VP, R & D	BROWN	4501
MODULAR DATA SYSTEMS, INC.	CN	TX	VARs	5	—	(713)486-1712	GARY BASSETT	H.E.	HAWKINSON	570
MODULAR INFO SYSTEMS	EA	FL	VARs	10	—	(305)422-4160	JAMES HOLMES	C.E.O.	BROWN	470
MOHAWK DATA SCIENCES	EA	NJ	OEM	363	PARSIPPANY	201-540-9080	MICHAEL COOPER	VP, MKTG	ZNOTENS	4004
* MOLECULAR COMP., DURANGO	NW	CA	OEM	PV	SAN JOSE	408-262-2122	HARVEY HARTMAN	VP, MKTG	BURTON	3104
MOM CORP., THE	EA	GA	DIST	8	—	(404) 351-2902	MICHAEL JONES	C.E.O.	BROWN	470
MOMENTUM COMPUTER	NW	CA	OEM	6	SAN JOSE	408-942-0638	GEORGE O'LEARY	PRESIDENT	BURTON	310X
MONOLITHIC	NW	CA	OEM	10	SANTA CLARA	408-970-9700	H.T. CHUA	VP, PROD/TECH DEV	SCHMITT	310X
MONROE SYSTEMS FOR BUS.	EA	NJ	OEM	—	MORRIS PLAINS	201-993-2000	JOHN ALTONJI	VP, MKTG	ZNOTENS	4004
MOORE PAPER CO.	CN	TX	DIST	30	—	(713) 228-9191	GENE MOORE	C.E.O.	HAWKINSON	570
MORLEY CO., THE	EA	NH	DIST	4	—	(603) 436-5430	JOHN A. TAYLOR	C.E.O.	SHARRIO	480
MORROW DESIGNS	NW	CA	OEM	29	SAN LEANDRO	415-430-1970	KEVIN MANKER	DIR, ENGR	BOSCH	310X
MOSAIC TECH	EA	MA	OEM	—	BILLERICA	617-667-2383	—	—	SHARRIO	4002
MOSTEK	CN	TX	OEM	—	CARROLLTON	214-466-6000	—	—	HAWKINSON	550
* MOTOROLA	CN	IL	OEM	5,534	SCHAUMBURG	312-397-5000	RUDOLPH DEMICHELE	VP, MFG	GOODMAN	3330
MOTOROLA/CODEX	EA	MA	OEM	250	MANSFIELD	617-364-2000	RUDOLPH DEMICHELE	VP, MFG	SHARRIO	4002
* MOTOROLA/FOUR PHASE	NW	CA	OEM	618	CUPERTINO	408-255-0900	EDGAR VANCE	VP, SYS DEV	EVERETT	3130
* MOUNTAIN COMPUTER	NW	CA	SUBS	—	—	(408) 438-6650	—	—	BURTON	3104
MOUNTAIN MICRO MARKETING	NW	CO	DIST	5	—	(303) 761-7115	JOSEPH L. BOTERO	C.E.O.	EVERETT	370
MOXON ELECTRONICS	SW	CA	DIST	70	—	(714) 635-7600	JAMES JORDAN	C.E.O.	RAFALOVICH	395
MTI SYSTEMS INC.	EA	NY	VARs	14	—	(516)621-6200	BERT RUDOFsky	C.E.O.	ELSON	490
MULTIPLE FINANCIAL SERVICES	CD	CD	VARs	18	—	(416)365-5801	A. PROZES	C.E.O.	—	—
MULTITECH SYSTEMS	CN	MN	OEM	9	NEW BRIGHTON	612-631-3550	WARREN MESENBRING	VP	LOGELIN	5001
* MUSYS CORP.	SW	CA	DIST	4	—	(714) 250-8101	JIM HOFFMAN	C.E.O.	FISHER	3303
MUTAGO DATA CORP.	SW	CA	VARs	15	—	(714)859-8666	MICHAEL S. GOLDSTEIN	C.E.O.	RAFALOVICH	395

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

(sorted by company)

* Present customer
 ** Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
MYLEE DIGITAL	CN	MO	OEM	4	MARYLAND HGTS	314-567-3420	THOMAS FISHER		LOGELIN	5001
N. AMERICAN MICROTECH	CD	OD	OEM	2	RICHMOND	604-276-8214	SAM SEOW	PRESIDENT		
N. C. S. INC.	EA	VA	VAR	50		(304)387-2630	RICHARD MEYERS	H.E.	ZNOTENS	485
NABHS INC.	CN	IL	VAR	7		(312)869-6140	N. MANGOUBI	C.E.O.	SIANTO	580
NABU		CD	OEM		OTTAWA	613-596-6700	KEITH SOLEY	VP, MKTG		
NAC SYSTEMS, INC.	EA	NH	DIST	2		(603) 431-8883	BRIAN KAVANAGH	C.E.O.	SHARRIO	480
NAS	NW	CA	OEM	1,200	MOUNTAIN VIEW	415-962-6000	JERRY UNGERMAN	VP, MKTG	BOSCH	310X
NAT'L CMPTR COMMUNIC'NS	EA	CT	DIST	16		(203) 357-0004	ROBERT M. LOONIN	C.E.O.	SHARRIO	480
NAT'L CMPTR SYSTEMS	EA	GA	VAR	125		(404)391-1700	DAVID HALLBERG	C.E.O.	BROWN	470
NAT'L COMPUTER TECH	NW	CA	OEM	2	ROSEVILLE	916-924-9994	DAVID ALLING	MKTG DIR	SCHMITT	310X
NAT'L DATA CORP.	EA	GA	VAR	140		(404)329-8500	L.C. WHITNEY	C.E.O.	BROWN	470
NAT'L DATA PRODUCTS OF TX	CN	TX	DIST	2		(713) 271-9191	EARL JOHNSON	C.E.O.	HAWKINSON	570
NAT'L MICROGRAPHICS SYS	EA	MD	DIST	6		(301) 588-3200	RICHARD SHANK	C.E.O.	ZNOTENS	485
NAT'L SEMICONDUCTOR	NW	CA	OEM	1660	SANTA CLARA	408-721-5000	C.E. SPORCK	PRESIDENT	BOSCH	310X
NAT'L UNLTD BUSINESS SYS	EA	NY	VAR	9		(212)597-1160	J. ROTH	C.E.O.	ELSON	490
* NAT'L. MEMORY SYSTEMS	NW	CA	SUBS			(415) 443-1669			BOSCH	3102
NATIONAL CMPTR SYNDICATE	CN	IL	DIST	7		(312) 459-6400	DONNA PANFIL	C.E.O.	SIANTO	580
NATIONAL COMPUTER CORP.	EA	CT	VAR	13		(203)357-0004	WILLIAM F. TILLEY	C.E.O.	SHARRIO	480
NATIONAL COMPUTER SUPPLY	CN	IL	DIST	3		(312) 665-0155	JOHN E. HILBORN	C.E.O.	SIANTO	580
NATIONAL DATA CORP.	EA	MD	VAR	10		(301)258-9200	D. J. JAMES	C.E.O.	ZNOTENS	485
NATIONAL INSTRUMENT DIST	NW	WA	DIST	4		(206) 746-6032	JOHN SHOWALTER	C.E.O.	RAFALOVICH	395
NBC COMPUTER SERVICE	CN	NE	DIST	7		(402) 472-4440	DENNIS STELZER	C.E.O.	HAWKINSON	570
NBI	NW	CO	OEM	177	BOULDER	303-444-5710	HERSCHEL KRANITZ	VP, MKTG	EVERETT	310
* NCR	NL	OH	OEM	4,074	DAYTON	513-445-5000	R.M. FLEET	VP	WEBB	4111
NEC HOME ELECTRONICS	CN	IL	OEM	7,400	ELK GROVE VLG	312-228-5900	YUGI OHASHI	PRESIDENT	SIANTO	5002
NEC INFORMATION SYSTEMS	EA	MA	OEM	200	BOXBOROUGH	617-264-8635	SAMUEL ADAMS	VP, MKTG	SHARRIO	4002
NELMA DATA	CD	OD	OEM	5	MISSISSAUGA	416-624-0334	RON WILSON	PRESIDENT		
NES, INC.	CN	IL	VAR	25		(312)289-8820	C. MANNING	H.E.	SIANTO	580
NETCOM PRODUCTS	NW	CA	OEM		SUNNYVALE	408-734-8732	ROBERT HURLEY	PRESIDENT	BURTON	310X
NETWORK SOLUTIONS (VA)	EA	VA	VAR	7		(703)442-0400	TYRONE GRIGSBY	C.E.O.	ZNOTENS	485
NETWORKS, INC.	EA	FL	DIST	3		(305) 822-6750	ROBERT TOOMBS	C.E.O.	BROWN	470
NEW ENGLAND DIGITAL CORP.	EA	VT	DIST	5		(802) 295-5800	S. ALONSO	C.E.O.	SHARRIO	480
NEW ENGLAND TECH'L SALES	EA	MA	DIST	150		(617) 272-0434	WILLIAM MCGRAIL	C.E.O.	SHARRIO	480
NEW GENERATION SFTWRE	NW	CA	VAR	6		(916)9202200	ALLAN SHABET	C.E.O.	RAFALOVICH	395
NEWCORP PRODUCTS, INC.	EA	PA	DIST	3		(215) 485-8180	JOSEPH CARRONE	C.E.O.	ZNOTENS	495
NEWMAR, INC.	EA	MA	DIST	2		(617) 245-7960	BOB SCHERMEHORN	C.E.O.	SHARRIO	480
NFLD. & LABRADOR COMP. SVCS.	CD	CD	VAR	10		(709)737-6146	H. S. MILLER	C.E.O.		
NIARKWA MANAGEMENT SERVICES	CN	IL	VAR	8		(312)291-0850	GERARD J. DEDERICH	C.E.O.	SIANTO	580
NICHOLAS INT'L	EA	FL	OEM	1	PALM HARBOR	813-786-1671	P. VOSOTAS	PRESIDENT	BROWN	4501
* NIXDORF	EA	MA	OEM	1,038	WALTHAM	617-273-0480	ROBERT NICEWICZ	SR VP	ELSON	4003
NMF, INC.	EA	NC	VAR	8		(704)568-5180	K.R. ADAMS	C.E.O.	BROWN	470
* NNC ELECTRONICS	SW	CA	OEM	2	HUNTINGTON BC	714-895-8000	THOMAS CONNEEN	VP, MKTG	FISHER	3303
NOHALT	EA	NY	OEM		FARMINGDALE	516-225-2121	BRIAN KEANE	DIR, MKTG	ZNOTENS	4004
NORDATA INC.	EA	NJ	VAR	5		(201)288-8573	ROBERT PIZZYBOROWSKI	H.E.	ZNOTENS	495
NORRELL SERVICES	EA	GA	VAR	120		(404)262-2100	C. DOUGLAS MILLER	C.E.O.	BROWN	470
NORSK DATA		NOR	OEM			02-29-54-00	ODD GRONDAL			
NORTH ATLANTIC IND.	EA	NY	OEM	23	HAUPPAUGE	516-582-6060	S.R. RAUSCH	VP, MKTG	ZNOTENS	4004
NORTH BAY SYSTEMS, INC.	NW	CA	DIST	2		(415) 331-3664	THOMAS ANDERSON	C.E.O.	RAFALOVICH	395
NORTH STAR COMPUTERS	NW	CA	OEM	41	SAN LEANDRO	415-357-8500	MARK GREENBERG	VP, R & D	SCHMITT	310X
NORTH SUPPLY CO.	CN	KS	DIST	423		(913) 791-7000	STAN FISHER	C.E.O.	HAWKINSON	570
NORTHEAST DATA SYSTEMS, INC.	EA	MA	VAR	6		(617)273-2920	RANDY NAYLOR	C.E.O.	SHARRIO	480
NORTHEAST DATACOM, INC.	EA	CT	VAR	12		(203)265-3455	LAWRENCE B. MORSE	C.E.O.	SHARRIO	480
NORTHEAST SERVICES, INC.	EA	CT	DIST	8		(203) 265-0907	MARTY JAROSZ	C.E.O.	SHARRIO	480
NORTHEASTERN DISTRIBUTORS	EA	MA	DIST	27		(617) 547-8000	EDWARD LYNCH	C.E.O.	SHARRIO	480
NORTHERN COMPUTER SALES	EA	MA	DIST	20		(617) 326-3454	PAT WEST	C.E.O.	SHARRIO	480
NORTHERN DATA SYSTEMS	EA	MA	VAR	12		(617)329-7800	PETER A. THOMPSON	C.E.O.	SHARRIO	480
NORTHERN TECHNOLOGIES	CD	CD	DIST	42		(416) 475-9123	DAVID WHITESIDE	C.E.O.		
* NORTHERN TELECOM	CN	TN	OEM	3,196	NASHVILLE	615-256-5900	L. COLIN BEAUMONT	EX VP, TECH	BURTON	3104
NORTHERN WIRE AND CABLE	CN	MI	DIST	18		(313) 589-0515	JAMES C. HINSHAW	C.E.O.	LOGELIN	595
NORTHROP CORP.	SW	CA	VAR	100		(805)373-2512	JIM MOULE	H.E.	RAFALOVICH	395
* NOVELL SYSTEMS	NW	UT	OEM	4	OREM	801-226-8202	DAVID OHEN	VP, ENGR	EVERETT	370
NOVVA CMPTR SYSTEMS	NW	HI	VAR	5		(808)521-8011	HOWARD TAN	C.E.O.	RAFALOVICH	395
NUCLEAR DATA	EA	GA	VAR	5		(404)434-9889	ED DE ST. AUBIN	C.E.O.	BROWN	470

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

(sorted by company)

* Present customer
 * Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
NUMERIC MICRO, INC.	CN	TX	VARS	5	---	(214)788-2871	DAVID BIRK	C.E.O.	HAWKINSON	570
NUS CORP.	EA	MD	VARS	20	---	(301)258-6000	PETER ARROWSMITH	H.E.	ZNOTENS	485
NUTRONICS	CN	TX	OEM	---	DALLAS	214-630-2562	JOEL STEPHENS	PRESIDENT	HAWKINSON	550
NW MICROCOMPUTERS	---	---	OEM	---	---	---	---	---	---	---
O'BRIEN & GERE ENGRS	EA	NY	VARS	21	---	(315)451-4700	JOHN LOVELAND	C.E.O.	ELSON	490
OASYS	EA	MA	DIST	3	---	(617) 491-4180	JOEL M. SCHACHT	C.E.O.	SHARRIO	480
OCEAN DATA SYSTEMS, INC.	EA	MD	DIST	20	---	(301) 881-3031	JEROME MOSENOFF	C.E.O.	ZNOTENS	485
OCLC ONLINE COMPUTER	CN	OH	VARS	50	---	(614)764-6000	A. MARTIN SELLERS	H.E.	LOGELIN	595
ODELL INDUSTRIES	---	---	OEM	---	---	---	---	---	---	---
ODIN DATA SYSTEMS, INC.	NW	CA	DIST	2	---	(415) 433-2165	FLOYD OSBORN	C.E.O.	RAFALOVICH	395
OEMTEK	NW	CA	OEM	---	SAN JOSE	408-247-1100	JAMES SIEHL	PRESIDENT	BOSCH	310X
OFFICE MACHINES, INC.	CN	AR	DIST	3	---	(501) 534-4830	C.L. WOOSLEY	C.E.O.	HAWKINSON	570
OLIVETTI	---	IT	OEM	---	---	514-282-1880	PHILIPPE SUYS	---	---	---
OLYMPIA USA	EA	NJ	OEM	---	SOMERVILLE	201-722-7000	WILLIAM LUBRANO	VP, MKTG	ZNOTENS	4004
OMNIBYTE	CN	IL	OEM	6	W. CHICAGO	312-231-6880	G.S. URBAN	PRESIDENT	SIANTO	5002
OMNITEC (BIT)	---	---	OEM	---	---	---	---	---	---	---
ONE POINT	NW	CA	DIST	11	---	(415) 947-0850	STEVAN CLOUDTREE	C.E.O.	RAFALOVICH	395
ONTEL	EA	NY	OEM	150	WOODBURY	516-364-2121	B. STEPHENS	VP, MKTG	ZNOTENS	4004
ONYX	NW	CA	OEM	26	SAN JOSE	408-946-6330	MIKE CALLAGHAN	VP, MKTG	BURTON	310X
ORLANDO, JR. & CO., FRANK	CN	IL	DIST	5	---	(312) 364-9220	FRANK ORLANDO JR.	C.E.O.	SIANTO	580
OSBORNE COMPUTER CO.	NW	CA	OEM	---	FREMONT	415-490-6885	DAVID MILLER	VP, MKTG	BOSCH	310X
OSICOM	EA	NJ	SUBS	---	---	(201) 540-0144	---	---	ZNOTENS	495
OSM COMPUTER	NW	CA	OEM	---	MOUNTAIN VIEW	415-961-8680	SURESH PANIKAR	VP, ENGR	BURTON	310X
OSSMANN CMPR TECHN'GIES	EA	NY	DIST	15	---	(315) 437-6666	HERBERT WEBB	C.E.O.	ELSON	490
OTRONA CORP.	NW	CO	OEM	---	BOULDER	303-444-8100	JOSEPH CALABRIA	VP	EVERETT	310
OWENS ASSOCIATES, JOHN D.	EA	NY	DIST	3	---	(212) 448-6283	J.D. OWENS	C.E.O.	ELSON	490
P.C. SERVICES, INC.	CN	IL	DIST	3	---	(312) 620-8664	D.E. POLLITT	C.E.O.	SIANTO	580
PAGE DISTRIBUTORS	EA	NJ	DIST	8	---	(201) 652-7055	ART HANSEN	C.E.O.	ZNOTENS	495
PACIFIC COMPUTER PRODUCTS	SW	CA	DIST	12	---	(714) 549-7535	BERNARD R. LOPER	C.E.O.	RAFALOVICH	395
PACIFIC COMPUTER REPS	SW	CA	DIST	5	---	(213) 519-0679	ANN NEWMAN	C.E.O.	RAFALOVICH	395
PACIFIC DATA GROUP	NW	CA	VARS	5	---	(408)732-4770	THOMAS P. SCHUTTER	H.E.	RAFALOVICH	395
PACIFIC DATANET	NW	CA	SUBS	---	---	(408) 980-0693	---	---	RAFALOVICH	395
PACIFIC HEALTH RESOURCES	SW	CA	VARS	24	---	(213)742-6245	ROBERT J. FLANAGAN	C.E.O.	RAFALOVICH	395
PACIFIC MICROCOMPUTERS	SW	CA	OEM	5	CARDIFF	619-436-8649	JIM BROWNING	PRESIDENT	GAILEY	330X
PACKARD INSTRUMENT CO.	CN	IL	VARS	750	---	(312)969-6000	---	---	SIANTO	580
PAGE AMERICA	EA	NY	DIST	10	---	(212) 286-8901	STEVEN SINN	C.E.O.	ELSON	490
PANASONIC	EA	NJ	OEM	---	SECAUCUS	201-348-7000	ED GELB	NAT'L SALES MGR	ZNOTENS	4004
PAR ASSOCIATES, INC.	NW	CO	DIST	10	---	(303) 363-6636	PETER KERTESZ	C.E.O.	EVERETT	370
PARADISE SYSTEMS INC.	NW	CA	SUBS	---	---	(415) 468-6000	---	---	RAFALOVICH	395
PARADYNE	EA	FL	OEM	210	LARGO	813-530-2000	JERRY KENDALL	SR VP, MKTG	BROWN	4501
PARAGON TECHNOLOGY	NW	CA	VARS	10	---	(415)676-4741	PHILIP MONEGO	C.E.O.	RAFALOVICH	395
* PARALLEL COMPUTER	NW	CA	OEM	PV	SANTA CRUZ	408-429-1338	RICHARD EPEL	VP, ENGR	BURTON	3104
PARKER BUSINESS SERVICES	CN	IL	DIST	7	---	(312) 852-5500	GERALD C. PARKER	C.E.O.	SIANTO	580
PARKIN PRINTING & STAT'Y	CN	AR	DIST	6	---	(501) 375-7231	BOB HUNT	C.E.O.	HAWKINSON	570
PARKING SYSTEMS & ANAL'S	CN	OH	DIST	2	---	(216) 621-7764	HARVEY SCHWARTZ	C.E.O.	LOGELIN	595
PASCO INT'L	EA	NJ	OEM	4	SADDLEBROOK	201-794-8881	EDWARD CARABETTA	PRESIDENT	ZNOTENS	4004
PC DESIGNS	CN	OK	OEM	2	TULSA	918-494-9765	PATRICK GRIFFIN	PRESIDENT	HAWKINSON	550
PC'S LIMITED	CN	TX	SUBS	---	---	(512) 452-0323	---	---	HAWKINSON	570
PCE SYSTEMS	NW	CA	OEM	1	SACRAMENTO	916-921-5454	---	---	BURTON	310X
PD3 ENGINEERING	NW	CO	DIST	2	---	(303) 443-4996	PHILLIS D. DOYLE	C.E.O.	EVERETT	370
PEACHTREE TECHNOLOGY	EA	GA	SUBS	---	---	(404) 662-5158	---	---	BROWN	470
PECO-PERIPHERAL CO., INC.	EA	NJ	DIST	3	---	(609) 596-1660	R. CORSINI	C.E.O.	ZNOTENS	495
PEN-TECH ASSOCIATES	EA	NC	DIST	8	---	(919) 852-6000	HAL KOGER	C.E.O.	BROWN	470
PENTEL OF AMERICA	SW	CA	OEM	---	TORRANCE	213-775-1256	---	---	FISHER	330X
PERCOM DATA	CN	TX	SUBS	---	---	(800) 527-1222	---	---	HAWKINSON	570
PERIPHERAL EQUIPMENT, INC.	NW	UT	DIST	4	---	(801) 224-5883	DAVID AFFLECK	C.E.O.	EVERETT	370
PERIPHERAL MARKETING, INC.	EA	NJ	DIST	3	---	(201) 227-8411	T.G. BERTOLI	C.E.O.	ZNOTENS	495
PERIPHERAL SYSTEMS	EA	MA	DIST	2	---	(617) 729-7715	ELINOR MCDONOUGH	C.E.O.	SHARRIO	480
PERIPHERALS PLUS	NW	CA	DIST	2	---	(415) 459-1000	G. SORKIN	C.E.O.	RAFALOVICH	395
* PERKIN ELMER	EA	CT	OEM	1,182	NORWALK	203-762-1000	JAMES SIMS	VP, DATA SYS GRP	ZNOTENS	4004
PERLE GSD, LTD.	CN	IL	DIST	3	---	(312) 461-0860	C.S. BALSLEY	C.E.O.	SIANTO	580
PERO SYSTEMS	CN	PA	OEM	PV	PITTSBURGH	412-355-0900	BARRY HARRIS	PROD MKTG DIR	ZNOTENS	4004
PERSOFT, INC. (WI)	CN	WI	DIST	2	---	(608) 273-6000	ROBERT JANOSKI	C.E.O.	SIANTO	580

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PROSPECTORS

(Oems,Vars,Distributors,Subsystem Houses,Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
PERSONAL COMPUTER PROD	SW	CA	OEM	6	SANDIEGO	619-485-8411	EDWARD SAVARESE	PRESIDENT	GAILEY	330X
PERSONAL MICRO COMP.	NW	CA	OEM	—	SUNNYVALE	408-737-8444	LESTER LEE	PRESIDENT	BURTON	310X
PERSONNEL DATA SYS	EA	PA	VAR	8	—	(215)828-4294	STEVE BRODY	C.E.O.	ZNOTENS	495
PERTEC COMPUTER CORP.	SW	CA	OEM	—	IRVINE	714-660-0488	HAROLD HAAGSMA	VP, MFG	FISHER	330X
* PGI CORP.	SW	AZ	DIST	14	—	(602) 967-1421	JAMES G. MANTON	C.E.O.	EVERETT	380
PH ASSOCIATES	EA	VA	SUBS	—	—	(703) 281-5762	—	—	ZNOTENS	485
PHAZE INFO MACHINES	SW	AZ	OEM	10	SCOTTSDALE	602-991-6855	BRIAN BENZAR	VP, ENGR	RAFALOVICH	340
PHILIPS INFO SYSTEMS	CN	TX	OEM	62	DALLAS	214-980-2000	J. LINDNER	PRESIDENT	HAWKINSON	550
PHOENIX LEASING, INC.	NW	CA	VAR	34	—	(415)485-4500	GUS CONSTANTIN	C.E.O.	RAFALOVICH	395
PHOENIX SYSTEMS	NW	UT	DIST	2	—	(801) 272-8601	M. NED BRINER	C.E.O.	EVERETT	370
PHYSICS INTERNATIONAL CO.	EA	VA	DIST	5	—	(703) 385-6860	ANDY MAKOMKA	C.E.O.	ZNOTENS	485
PIEPER ELECTRIC INC.	CN	WI	VAR	10	—	(414)462-7700	RONALD H. REIMER	H.E.	SIANTO	580
PINNACLE SYSTEMS	CN	TX	OEM	—	DALLAS	214-340-4941	—	—	HAWKINSON	550
PIONEER COMPUTER MARKETING	CN	TX	VAR	14	—	(214)343-2904	BOB R. DEAN	C.E.O.	HAWKINSON	570
PIONEER-STANDARD ELECT.	CN	OH	DIST	285	—	(216) 587-3600	JIM BAYMAN	C.E.O.	LOGELIN	595
PIXEL COMPTER	EA	MA	OEM	—	WOBURN	617-933-7735	ERNIE RIOUX	VP, MKTG	SHARRIO	4002
PLANNING RESEARCH	EA	VA	VAR	321	—	(703)556-1000	JOHN TOUPS	C.E.O.	ZNOTENS	485
PLANTE & MORAN	CN	MI	VAR	12	—	(313)352-2500	EDWARD PARKS	C.E.O.	LOGELIN	595
* PLESSEY PERIPHERAL SYS	SW	CA	OEM	—	IRVINE	714-540-9945	WARREN SINSHEIMER	PRESIDENT	FISHER	3303
* PLEXUS	NW	CA	OEM	PV	SAN JOSE	408-943-9433	JAY FLATLEY	VP, ENGR	BURTON	3104
PLS ASSOCIATES, INC.	NW	CO	DIST	16	—	(303) 773-1218	DONALD RUSKAUP	C.E.O.	EVERETT	370
* POINT 4 DATA	SW	CA	OEM	15	IRVINE	714-863-1111	DONALD SAVITT	VP, ENGR	FISHER	3303
POLARIS COMPUTER SYSTEMS LTD.	CD	CO	VAR	6	—	(416)920-5777	TERRY GRAHAM	C.E.O.	—	—
POLICY MANAGEMENT SYSTEMS	EA	SC	DIST	62	—	(803) 748-2512	G. LARRY WILSON	C.E.O.	BROWN	470
POLO MICROSYSTEMS	NW	CA	OEM	—	MOUNTAIN VIEW	415-948-2990	ROBERT SHERWOOD	VP, MKTG	BURTON	310X
POLYCOMPUTERS	SW	CA	OEM	3	ANAHEIM	714-632-0144	LAWRENCE WEISS	SR VP, MKTG	FISHER	330X
POLYGON DATA PRODUCTS	EA	NJ	DIST	4	—	(201) 773-3100	FRANK GACCIONE	C.E.O.	ZNOTENS	495
POLYGON INDUSTRIES INC.	EA	LA	SUBS	—	—	(504) 282-5372	—	—	BROWN	470
POLYMORPHIC SYSTEMS	SW	CA	OEM	—	SANTA BARBARA	805-967-0468	SIROUS PARSAEI	PRESIDENT	FISHER	330X
POLYRIANDA	SW	CA	OEM	3	ANAHEIM	714-821-0911	RICHARD WILL	CEO	FISHER	330X
POST SOFTWARE INTERNATIONAL	EA	NC	VAR	10	—	(919)556-6721	EARL FRANKLIN	H.E.	BROWN	470
POST-TRON SYSTEMS	EA	MA	VAR	25	—	(617)699-4200	GIACOMO CATUCCI	C.E.O.	SHARRIO	480
POMELL COMPUTER SUPPLIES	EA	NJ	DIST	70	—	(201) 894-0800	ARTHUR NANNOS	C.E.O.	ZNOTENS	495
PRACTICORP INTERNATIONAL	EA	MA	DIST	4	—	(617) 965-9870	ROBERT SHAPIRO	C.E.O.	SHARRIO	480
PRC REALTY SYSTEMS	EA	VA	VAR	50	—	(703)556-2500	JOHN CORSE	C.E.O.	ZNOTENS	485
PRES INC.	CN	OH	VAR	40	—	(513)274-2167	GEORGE E. DORIN	V.P.	LOGELIN	595
PRIAM	NW	CA	SUBS	—	—	(408) 946-4600	—	—	RAFALOVICH	395
* PRICE ELECTRONICS CORP.	CN	IL	VAR	30	—	(312)541-6400	MANNY I. PRICE	C.E.O.	SIANTO	5002
* PRIME	EA	MA	OEM	642	NATICK	617-655-8000	ROLAND PAMPEL	VP, R & D	HENRY	4005
PRINTER SYSTEMS CORP.	EA	MD	DIST	15	—	(301) 258-5060	ARTHUR D. GALLO	C.E.O.	ZNOTENS	485
PRINTRONIC DATA PRODUCTS	EA	NJ	DIST	4	—	(201) 634-5400	MARCELINO PEREZ	C.E.O.	ZNOTENS	495
PRIORITY ONE ELECTRONICS	SW	CA	SUBS	—	—	(818) 709-6789	—	—	RAFALOVICH	395
PROCESS CONTROL IND., INC.	EA	MA	VAR	10	—	(617)668-8415	F. J. WASSON	H.E.	SHARRIO	480
PROCESSOR TECHNOLOGY	—	—	OEM	—	—	—	—	—	—	—
PROCOM LEASING & MANAGEMENT	EA	NY	VAR	9	—	(212)279-1717	KENNETH POND	C.E.O.	ELSON	490
* PRODIGY SYSTEMS	EA	NJ	DIST	9	—	(201) 283-2000	L. STEIN	C.E.O.	SCHMITT	3103
PROFNL CMPTR RESOURCES	CN	IL	VAR	8	—	(312)932-2200	J.F. CARR	C.E.O.	SIANTO	580
PROGRAM RESOURCES, INC.	EA	MD	DIST	35	—	(301) 858-6700	RICHARD WHITE	C.E.O.	ZNOTENS	485
PROGRAMMED CONTROL	—	—	OEM	—	—	—	—	—	—	—
PROGRAMS & ANALYSIS	EA	MA	VAR	6	—	(617)272-7723	PAUL BRIGHTON	C.E.O.	SHARRIO	480
PROLAN	CN	TX	VAR	5	—	(512)877-1155	BEN MAGUIRE	C.E.O.	HAWKINSON	570
PRONTO COMPUTERS	SW	CA	OEM	16	TORRANCE	213-539-6400	HENRY GASBARRO	PRESIDENT	GAILEY	330X
PROPHET 21, INC.	EA	PA	VAR	14	—	(215)493-8900	THOMAS A. COSTANZA	H.E.	ZNOTENS	495
PROTEK COMPUTER SERVICES INC.	SW	CA	VAR	5	—	(714)898-9012	—	—	RAFALOVICH	395
PRYOR CORP.	CN	IL	DIST	50	—	(312) 644-5650	GEORGE PORTER	C.E.O.	SIANTO	580
PSYTEK, INC.	SW	CA	OEM	—	FOUNTAIN VLY	714-964-7818	HERBERT BERKMITS	EX VP	FISHER	330X
PULAU ELECTRONICS	—	—	OEM	—	—	—	—	—	—	—
* PYRAMID TECHNOLOGY	NW	CA	OEM	PV	MOUNTAIN VIEW	415-965-7200	EDWARD DOLINAR	PRESIDENT	BOSCH	3102
Q1 CORPORATION	EA	NY	OEM	2	HAUPPAUGE	516-732-3800	MARC AYES	—	ZNOTENS	4004
QDP COMPUTER	CN	OH	OEM	2	CLEVELAND	216-526-0838	WILLIAM FEENEY	VP, MKTG	LOGELIN	5001
QE1, INC.	EA	NJ	VAR	10	—	(201)379-7400	VINCENT INGATO	H.E.	ZNOTENS	495
QIC RESEARCH INC.	NW	CA	SUBS	—	—	(408) 942-8086	—	—	RAFALOVICH	395
QUADRAM	EA	GA	SUBS	—	—	(404) 923-6666	—	—	BROWN	470

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 - Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
QUADREX COMPUTER SYSTEMS INC.	NM	CA	VARS	50	---	(408)866-4510	DON L. WENTZ	H.E.	RAFALOVICH	395
QUADSTAR CORP.	CN	TX	VARS	10	---	(214)980-9601	JACK CHANG	C.E.O.	HAMKINSON	570
QUALTECH ASSOCIATES, INC.	NM	CA	DIST	12	---	(408) 732-4800	PAUL SCHWARTZ	C.E.O.	RAFALOVICH	395
QUALTECH, INC.	SW	AZ	DIST	3	---	(602) 967-4655	DICK CUNNINGHAM	C.E.O.	GOODMAN	385
QUARK INC.	NM	CO	SUBS	---	---	(303) 934-2211	---	---	EVERETT	370
QUAY CORP.	EA	NJ	OEM	7	EATONTOWN	201-542-7340	GEORGE HILL	VP, MKTG	ZNOTENS	4004
QUBIE DISTRIBUTING	SW	CA	DIST	15	---	(805) 987-9741	MARK MALLOY	C.E.O.	RAFALOVICH	395
* QUBIX GRAPHIC SYSTEMS	NM	CA	OEM	---	SAN JOSE	408-370-9229	---	---	BURTON	3104
QUCES INC.	EA	NJ	SUBS	---	---	(201) 548-2135	---	---	ZNOTENS	495
QUENTIN CORP.	SW	CA	SUBS	---	---	(213) 709-6500	---	---	RAFALOVICH	395
QUIET DESIGNS/WHOLESALE	NM	CA	DIST	3	---	(408) 980-1010	D. POTTEN	C.E.O.	RAFALOVICH	395
R SYSTEMS, INC.	CN	TX	DIST	3	---	(214) 343-9188	W.E. KIELY	C.E.O.	HAMKINSON	570
R&D ASSOCIATES	NM	WA	VARS	50	---	(206)581-1322	LYNN G. GREF	H.E.	RAFALOVICH	395
R.D. NICKEL & ASSOCIATES	CD	CD	VARS	6	---	(519)623-0889	ROBERT D. NICKEL	C.E.O.	---	---
* RZE OF AMERICA	NM	---	OEM	---	---	---	---	---	EVERETT	370
RACAL-MILGO	EA	FL	OEM	240	SUNRISE	305-475-1601	RAYMOND COLUCCI	PRES, MFG	BROWN	4501
RACAL-REDAC, INC.	EA	MA	DIST	15	---	(617) 692-4900	MICHAEL G. MARSH	C.E.O.	SHARRIO	480
RACET COMPUTERS	SW	CA	SUBS	---	---	(714) 997-4950	---	---	RAFALOVICH	395
RADIAN CORP.	CN	TX	VARS	50	---	(512)454-4797	F. SCOTT LAGRONE	H.E.	HAMKINSON	570
RAGEN INFO SYSTEMS	EA	NJ	VARS	32	---	(201)997-1000	IRA LOPATA	C.E.O.	ZNOTENS	495
RAIR MICROCOMPUTER	NM	CA	OEM	24	SANTA CLARA	408-988-1790	MARK POTTS	PRESIDENT	BOSCH	310X
RANCORE CORP.	NM	CA	SUBS	---	---	(408) 438-7255	---	---	RAFALOVICH	395
RANDAL DATA SYSTEMS	---	---	OEM	---	---	---	---	---	---	---
RAPATTONI CORP.	SW	CA	DIST	2	---	(213) 208-6363	A. RAPATTONI	C.E.O.	RAFALOVICH	395
RAYTHEON	SW	CA	OEM	5,996	GOLETA	805-967-5511	STAN KARP	MGR, IND REL	CARGILO	330X
RB DATA SYSTEMS, INC.	EA	NY	DIST	3	---	(212) 757-0080	RALPH D. BANKS	C.E.O.	ELSON	490
RCA SERVICE	EA	NJ	OEM	50	CHERRY HILL	609-488-7300	D.M. COOK	PRESIDENT	ZNOTENS	4004
REACT CORP.	NM	CA	VARS	12	---	(415)326-4587	RICHARD HERTLE	H.E.	RAFALOVICH	395
REAL-TIME TECHNOLOGY	EA	NY	DIST	3	---	(212) 239-0230	VICTOR FRIEDMAN	C.E.O.	ELSON	490
RECOGNITION EQUIPMENT	CN	TX	OEM	143	DALLAS	214-579-6000	JAMES DONOHO	VP, FIELD ENGR	HAMKINSON	550
RECOR CORP.	---	---	OEM	---	---	---	---	---	---	---
REDSHAW INC.	EA	PA	VARS	40	---	(412)221-1661	FRANK THOMPSON, JR.	C.E.O.	ZNOTENS	495
REGENCY SYSTEMS	CN	IL	OEM	3	CHAMPAIGN	217-398-8067	JANE EADES	PRESIDENT	SIANTO	5002
RELATIONAL TECHNOLOGY	NM	CA	VARS	8	---	(415)769-1400	GARY MORGENTHAUER	C.E.O.	RAFALOVICH	395
RENAISSANCE TECHNOLOGY	NM	CA	DIST	10	---	(415) 676-5757	GLEN R. BAYLOR	C.E.O.	RAFALOVICH	395
REP-SAC CORP.	NM	WA	DIST	2	---	(206) 821-8552	JOE CASPER	C.E.O.	RAFALOVICH	395
REPLITECH CORP.	EA	NY	DIST	19	---	(718) 596-4100	MORRIS HANDLER	C.E.O.	ELSON	490
RESEARCH INC.	CN	MN	VARS	25	---	(612)941-3300	---	---	LOGELIN	590
RESPONSIVE TERMINAL SYSTEMS	CN	TX	VARS	10	---	(214)548-0761	M. DANNY MITCHELL	H.E.	HAMKINSON	570
RETAIL INFO SYSTEMS	CN	OH	DIST	4	---	(216) 234-8440	BILL ZIMMERMAN	C.E.O.	LOGELIN	595
RETAIL SCIENCES	---	---	OEM	---	---	---	---	---	---	---
REXNORD DATA SYSTEMS	CN	WI	DIST	780	---	(414) 643-3703	DON TAYLOR	C.E.O.	SIANTO	580
REXON BUS.MACHINES	SW	CA	OEM	12	CULVER CITY	213-641-7110	CLIFTON LEWIS	EX VP	GAILEY	330X
REYNOLDS & REYNOLDS	CN	OH	VARS	252	---	(513)443-2000	TERRY CARDER	C.E.O.	LOGELIN	595
RGI, INC.	EA	VA	VARS	18	---	(703)820-4900	RICHARD QUIGG	C.E.O.	ZNOTENS	485
RIBBLE ENGINEERING CO.	EA	NJ	VARS	6	---	(201)794-9500	ROBERT BELL	H.E.	ZNOTENS	495
RICH, INC.	EA	NY	VARS	15	---	(212)825-0834	MICHAEL GRAHAM	H.E.	ELSON	490
* RIDGE COMPUTERS	NM	CA	OEM	10	SANTA CLARA	408-986-8500	HUGH MARTIN	VP, ENGR	BURTON	3104
RNA	NM	CA	OEM	8	LIVERMORE	415-449-8652	LISA WHITEHURST	PRESIDENT	BOSCH	310X
ROBEC, INC.	EA	PA	DIST	14	---	(215) 368-9300	ROBERT BECKETT	C.E.O.	ZNOTENS	495
ROCKWELL INTERNATIONAL	CN	PA	VARS	8,000	---	(412)247-3000	JAMES N. MORELAND	H.E.	ZNOTENS	495
ROI SYSTEMS	CN	MN	VARS	5	---	(612)559-8263	G. MICHAEL CARNAHAN	C.E.O.	LOGELIN	590
* ROLM CORP.	NM	CA	OEM	700	SANTA CLARA	408-986-1000	DENNIS PABOOJIAN	VP, SYS DEV	BURTON	3104
ROMAR SYSTEMS, INC.	CN	IL	DIST	2	---	(312) 640-7555	RON PUTZELL	C.E.O.	SIANTO	580
ROSS SYSTEMS	NM	CA	VARS	9	---	(415)856-1100	KENNETH ROSS	C.E.O.	RAFALOVICH	395
ROYAL BUS. MACHINES	EA	CT	OEM	---	WINDSOR	203-683-2222	ZENE KUMAGAI	EX VP	ELSON	4003
RPW SYSTEMS & SERVICES	CD	CD	DIST	4	---	(514) 340-1420	TERRY ROTH	C.E.O.	---	---
RTC SYSTEMS	EA	MA	VARS	5	---	(617)339-5503	JOHN ROBINSON	C.E.O.	SHARRIO	480
RUBICON SYSTEMS	EA	FL	OEM	20	MAITLAND	305-834-2393	JERRY HORN	PRESIDENT	BROWN	4501
RUDD & ASSOCIATES	EA	NC	DIST	5	---	(919) 288-0222	CLYDE RUDD, JR.	C.E.O.	BROWN	470
RUSH DRAKE ELECTRONICS	NM	OR	DIST	7	---	(503) 224-3145	T.W. MACLEAH	C.E.O.	RAFALOVICH	395
* S & S ELECTRONICS, INC.	EA	MA	VARS	7	---	(617)458-4100	STUART P. ROBERTS	C.E.O.	SHARRIO	4002
S-CUBED	SW	CA	VARS	45	---	(619)453-0060	DON GRINE	C.E.O.	RAFALOVICH	395

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PROSPECTORS

(Oems,Vars,Distri butors,Subsystem Houses,Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
S.E.A. DISTRIBUTORS	CN	IN	DIST	6	---	(317) 846-2593	A. DONALD DUKE	C.E.O.	SIANTO	580
SABER TECH	NW	CA	OEM	---	SAN JOSE	408-945-9600	ROBERT MURDEN	PRESIDENT	BURTON	310X
SACHS/FREEMAN ASSOC. INC.	EA	MD	VAR	8	---	(301)262-4400	HERBERT M. SACHS	H.E.	ZNOTENS	485
SADDLE BROOK CONTROL SYSTEMS	EA	NJ	VAR	5	---	(201)794-9588	ROBERT L. BELL	H.E.	ZNOTENS	495
SADDLEBROOK CORP.	EA	MA	VAR	19	---	(617)661-8100	MICHAEL D. KINKEAD	C.E.O.	SHARRIO	480
SAFEGUARD BUSINESS SYSTEMS	EA	PA	VAR	180	---	(215)641-5000	VINCENT G. BELL	C.E.O.	ZNOTENS	495
SAI COMSYSTEMS, INC.	SW	CA	VAR	20	---	(619)293-7500	RICHARD FITZER	H.E.	RAFALOVICH	395
SAMSUNG ELECTRONICS	SW	CA	OEM	200	COMPTON	213-637-0254	Y.S. LEE	PRESIDENT	CARGILO	330X
SANTA CLARA SYSTEMS	NW	CA	OEM	---	SAN JOSE	408-729-6700	DARRELL EVORA	VP, MKTG	BURTON	310X
SANYO	EA	NJ	OEM	200	MOONACHIE	201-440-9300	SANDY WALTERS	MKTG MGR	ZNOTENS	4004
SARTORIS, INC.	SW	CA	VAR	10	---	(916)446-8094	BRUCE JOPLIN	C.E.O.	RAFALOVICH	395
SBE	NW	CA	OEM	6	CONCORD	415-680-7722	THOMAS ANDERSON	PRESIDENT	BURTON	310X
SCAN-OPTICS INC.	EA	CT	VAR	30	---	(203)289-6001	RONALD E. GOCHT	H.E.	SHARRIO	480
SCAN-TRON CORP.	SW	CA	VAR	14	---	(213)638-0520	JOHN SAUNDERS	C.E.O.	RAFALOVICH	395
SCHWEBER ELECTRONICS	EA	NY	DIST	500	---	(516) 334-7474	ROBERT JOHNSON	C.E.O.	ELSON	490
SCI SALES, INC.	CN	TX	DIST	12	---	(214) 931-1487	HOWARD CASE	C.E.O.	HANKINSON	570
SCI SYSTEMS	EA	AL	OEM	400	HUNTSVILLE	205-882-4800	THOMAS COOK	SR VP	BROWN	4501
SCIENCE APPLICTNS INTN'L	SW	CA	VAR	354	---	(619)454-3811	J.R. BEYSTER	C.E.O.	RAFALOVICH	395
SCIENCE DYNAMICS CORP.	SW	CA	VAR	14	---	(213)320-1101	KENNETH J. BOODGER	H.E.	RAFALOVICH	395
SCIENTIFIC CALCULATIONS	EA	NY	VAR	35	---	(716)924-9303	PAUL WATKINS	C.E.O.	ELSON	490
SCIENTIFIC MICRO SYSTEMS	NW	CA	VAR	25	---	(415)964-5700	---	---	RAFALOVICH	395
SCIENTIFIC SYSTEMS	EA	FL	VAR	21	---	(305)725-1300	VINCENT LAMB, JR.	C.E.O.	BROWN	470
SCOPE INC.	EA	VA	VAR	15	---	(703)471-5600	EDWARD C. DRIESE	C.E.O.	ZNOTENS	485
SCOTT COMPUTING SYSTEMS	EA	GA	VAR	10	---	(404)432-7000	C. RYLAND SCOTT	C.E.O.	BROWN	470
SCOTTSDALE SYSTEMS	SW	AZ	OEM	4	SCOTTSDALE	602-941-5856	CARL ALBRIZZI	PRESIDENT	RAFALOVICH	340
SD SYSTEMS	CN	TX	OEM	5	DALLAS	214-340-0303	---	---	HANKINSON	550
SEATTLE COMPUTER	NW	WA	OEM	2	SEATTLE	206-575-1830	DEBBIE BROCK	VP	BOSCH	320
SECOND SOURCE CMPTRS	SW	CA	OEM	7	TUSTIN	714-832-7724	FRANK JACOBSON	PRESIDENT	FISHER	330X
SECTOR SYSTEMS, INC.	NW	AK	DIST	2	---	(907) 276-4268	PHIL RAMOS	C.E.O.	RAFALOVICH	395
SEQUA	EA	MD	OEM	---	ODENTON	301-672-3600	JAMES HOFFMAN	DIR, MKTG	ZNOTENS	4004
SELECTERM, INC.	EA	MA	DIST	28	---	(617) 246-1300	PHILLIP CIOLFI	C.E.O.	SHARRIO	480
SEMICONDUCTOR SPECIALISTS	CN	IL	DIST	20	---	(312) 279-1005	PAUL F. CARROLL	C.E.O.	SIANTO	580
SENDERO CORP.	SW	AZ	DIST	2	---	(602) 225-0555	CLIFF MYERS	C.E.O.	GOODMAN	385
SENECA DATA DISTRIBUTORS	EA	NY	DIST	3	---	(315) 637-9861	GEORGE SAMIOS	C.E.O.	ELSON	490
SENSOR-BASED SYSTEMS	CN	MN	VAR	8	---	(507)867-4440	ALLAN C. SPRAU	C.E.O.	LOGELIN	590
* SENTINEL COMPUTER	CN	OH	OEM	---	CINCINNATI	513-984-6622	ELI LADUKE	VP, OPERATIONS	LOGELIN	5001
SENTRY OFFICE SUPPLY CO.	EA	MA	DIST	5	---	(617) 935-7770	JOHN O'CONNELL	C.E.O.	SHARRIO	480
* SEQUIENT	NW	OR	OEM	---	PORTLAND	503-626-5700	---	---	---	3105
* SEQUOIA SYSTEMS	EA	MA	OEM	---	MARLBOROUGH	617-480-0800	AL DEI MAGGI	VP, MKTG	ELSON	4003
SERCOMP CORP.	SW	CA	DIST	10	---	(213) 341-1680	KARL WAGNER	VP ENG	RAFALOVICH	395
SERVICEWORLD	NW	CA	VAR	5	---	(415)788-6580	W. JAMES CROSS	C.E.O.	RAFALOVICH	395
SEVERN COMPANIES	EA	MD	VAR	5	---	(301)267-0432	JACK STEERE	C.E.O.	ZNOTENS	485
SGS SEMICONDUCTOR	SW	AZ	OEM	250	PHOENIX	602-867-6245	DAVE HAGE	DIR, SYS MKTG	RAFALOVICH	340
SHARED UNION SYSTEMS, INC.	EA	PA	VAR	5	---	(215)628-2741	KENNETH F. KAHN	C.E.O.	ZNOTENS	495
SHAREDATA	CN	MN	OEM	14	EDEN PRAIRE	612-829-0409	JOHN ZENTZ	PRESIDENT	LOGELIN	5001
SHARP ELECTRONICS CORP	EA	NJ	OEM	800	PARAMUS	201-265-5600	SKIP KENDRICK	MGR, MKTG	ZNOTENS	4004
SHASTA GENERAL SYS	NW	CA	VAR	30	---	(408)727-7662	RICHARD CALFEE	C.E.O.	RAFALOVICH	395
SHOWALTER SYSTEMS	NW	WA	VAR	6	---	(206)746-6032	JOHN D. SHOWALTER	C.E.O.	RAFALOVICH	395
SIERRA NATIONAL CORP.	SW	CA	VAR	6	---	(619)277-4810	DENNIS C. WILSON	H.E.	RAFALOVICH	395
* SIGMA DESIGN	NW	CO	VAR	10	---	(303)773-0666	WALTER VON SEGGERN	C.E.O.	EVERETT	370
SIGNATRON INC.	EA	MA	VAR	7	---	(617)861-1500	PAUL F. MAHONEY	H.E.	SHARRIO	480
* SILICON GRAPHICS	NW	CA	OEM	---	MOUNTAIN VIEW	415-960-1980	EDWARD MCCrackEN	PRESIDENT	BOSCH	3102
SILICRON TECH	EA	MD	OEM	---	FREDERICK	301-695-9560	---	---	ZNOTENS	4004
SILTON AMS	SW	CA	VAR	5	---	(213)585-1161	LARRY WAGNER	C.E.O.	RAFALOVICH	395
SILVAR LISCO	NW	CA	VAR	15	---	(415)324-0700	JOHN HICKS	H.E.	RAFALOVICH	395
SIMCON INC.	EA	VA	VAR	5	---	(703)448-8600	ROBERT R. BURKE	C.E.O.	ZNOTENS	485
SIMMONS PRECISION	EA	NC	VAR	10	---	(919)872-9500	WILLIAM ALLEN	H.E.	BROWN	470
SIMULATION SYSTEMS	EA	NY	VAR	45	---	(516)454-6300	P. POLLACK	H.E.	ELSON	490
SINCLAIR	---	---	OEM	---	---	---	---	---	---	---
SINGER	NW	CA	OEM	2,518	SUNNYVALE	408-720-5500	KENNETH BUTLER	DIR, ENGR	SCHMITT	310X
SINGLE SOURCE SOLUTION	NW	CA	VAR	5	---	(415)680-0202	MICHAEL L. DEAN	C.E.O.	RAFALOVICH	395
SJI CORP.	NW	WA	DIST	4	---	(206) 763-8981	OLIVER J. JUDD	C.E.O.	RAFALOVICH	395
SMC SEICOM	EA	NJ	OEM	---	BRIDGEWATER	201-685-0070	DOUGLAS DAVIDSON	PRESIDENT	ZNOTENS	4004

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
SMITH, DENNIS & GAYLORD, INC.	NW	CA	VAR	6	---	(408)727-1870	DAVID L. DUNBAR	C.E.O.	RAFALOVICH	395
SMOKE SIGNAL BRDCTG.	SW	CA	OEM	---	WESTLAKE VLG	818-889-9340	GARY KILLEN	MGR, PRODUCTION	GAILEY	330X
SMS	EA	PA	VAR	260	---	(215)296-6300	JEARY VOGT	H.E.	ZNOTENS	495
SOFTTEAM, INC.	SW	CA	DIST	60	---	(213) 604-7400	MARK VIDOVICH	C.E.O.	RAFALOVICH	395
SOFTTECH MICROSYSTEMS	SW	CA	DIST	9	---	(619) 451-1230	GARY PRITCHETT	ENG DR	RAFALOVICH	395
SOFTWARE CLEARING HOUSE	CN	OH	DIST	9	---	(513) 451-6742	WILLIAM IVERS	C.E.O.	LOGELIN	595
SOFTWARE RESOURCE	NW	CA	DIST	25	---	(415) 485-0800	ISSAC ASH	C.E.O.	RAFALOVICH	395
SOFTWARE SHOP SYSTEMS	EA	NJ	VAR	7	---	(201)938-3200	RON KOVAL	C.E.O.	ZNOTENS	495
SOFTWARE SUPPORT INC.	EA	MA	SUBS	---	---	(617) 872-9090	---	---	SHARRIO	480
SOFTWARE SYSTEMS INTERN'L	EA	NJ	DIST	2	---	(201) 891-0458	CHRIS LEE	C.E.O.	ZNOTENS	495
SOLAR TURBINES INC.	SW	CA	VAR	200	---	(619)238-5667	A. LUDWIG	H.E.	RAFALOVICH	395
SOLARIS COMPUTER	NW	CA	OEM	5	MILPITAS	408-943-1818	CHARLES GREATREX	PRESIDENT	BURTON	310X
SOLVATION	EA	MA	OEM	1	SOUTHBORO	617-481-9390	STEVEN KLUDT	PRESIDENT	SHARRIO	4002
SONY	EA	NY	OEM	---	NEW YORK	212-371-5800	WILLIAM KENDRICK	MGR, NAT'L MKTG	ZNOTENS	4004
SORD COMPUTER	EA	NY	OEM	---	NEW YORK	212-759-0140	---	---	ZNOTENS	4004
SOURCE ASSOCIATES	EA	MD	DIST	2	---	(301) 725-5330	ROBB KARL	C.E.O.	ZNOTENS	485
SOURCE ONE SYSTEMS	CN	MO	OEM	1	KANSAS CITY	816-931-5455	JERRY ELLIS	PRESIDENT	LOGELIN	5001
SOURCE SYSTEM, INC.	CN	IL	DIST	3	---	(312) 628-1055	PETER J. SMITH	C.E.O.	SIANTO	580
SOUTHERN ENGINEERG ASSOC.	EA	FL	DIST	7	---	(813) 577-7700	WILLIAM BATCHELOR	C.E.O.	BROWN	470
SOUTHWEST DATA EQPMT	CN	TX	DIST	3	---	(214) 931-7009	WALTER A. BUCKLEY	C.E.O.	HAMKINSON	570
SOUTHWEST TECH PROD	CN	TX	OEM	10	SAN ANTONIO	512-344-0241	JERRY O'BRIEN	DIR, MKTG	HAMKINSON	550
SPACE BYTE COMPUTER	---	---	OEM	---	---	---	---	---	---	---
SPACE COAST SYSTEMS	EA	FL	SUBS	---	---	(305) 268-0872	---	---	BROWN	470
SPARTAN INDUSTRIES	EA	MD	DIST	4	---	(301) 621-5508	EDWARD NAJJR	C.E.O.	ZNOTENS	485
SPECTRAVIDEO	NW	CA	OEM	---	FREMONT	415-490-4300	JOHN CONSTANTINE	PRESIDENT	BURTON	310X
SPECTRIX MICROSYSTEMS	CD	CD	OEM	7	MARKHAM	416-474-1955	RONALD ROSS	PRESIDENT	---	---
SPECTRO ASSOCIATES	EA	MD	DIST	5	---	(301) 294-9770	STEPHEN CADES	C.E.O.	ZNOTENS	485
* SPERRY	NL	NY	OEM	5,687	NEW YORK	212-484-4444	CLYDE ALLEN	VP, CMPTR SYS	WEBB	3114
SSCI	SW	CA	VAR	6	---	(714)832-7724	B.J. PORCELLA	H.E.	RAFALOVICH	395
* STANDARD DATA CORP.	EA	NY	VAR	5	---	(212)586-3100	MARK IOBST	C.E.O.	BROWN	4501
STANDARD ENGINEERING	NW	CA	OEM	5	FREMONT	415-657-7555	JOEL KORELITZ	PRESIDENT	BURTON	310X
STAR DATA SYSTEMS	CN	TX	DIST	6	---	(512) 822-8582	HARVEY NAJIM	C.E.O.	HAMKINSON	570
STAR TECH	NW	OR	OEM	---	PORTLAND	503-227-2052	LARRY INGHERSEN	VP, R & D	BOSCH	320
STAR-TRONIC DISTRIBUTOR	CN	MI	DIST	10	---	(313) 477-7586	JIM PEIRCE	C.E.O.	LOGELIN	595
STARSOFT CORP.	NW	CA	DIST	5	---	(415) 424-8311	ELIZABETH SHIRLEY	C.E.O.	RAFALOVICH	395
STEARNS CATALYTIC	EA	NC	VAR	59	---	(704)542-4220	---	---	BROWN	470
STEARNS COMPUTER	CN	MN	OEM	---	EDEN PRAIRIE	612-829-0361	ROBERT BODEN	PRESIDENT	LOGELIN	5001
STERLING SYSTEMS INC.	EA	VA	VAR	18	---	(703)827-9000	EDWARD FIELDS	C.E.O.	ZNOTENS	485
STM ELECTRONICS	NW	CA	OEM	---	MENLO PARK	415-326-6226	TONY HEO	VP, SALES	BURTON	310X
STOREX CORP.	EA	MA	DIST	10	---	(617) 769-3400	MARTIN FITZGERALD	C.E.O.	SHARRIO	480
* STRATUS COMPUTER	EA	MA	OEM	42	MARLBORO	617-460-2000	BOB FREIBURGHOUSE	VP, ENGR	SHARRIO	4002
STRIDE MICRO	NW	NV	OEM	14	RENO	702-322-6868	AL BENNETT	VP, MFG	EVERETT	310
STS SYSTEMS LTD.	CD	OD	VAR	11	---	(514)631-7291	HOWARD C. STOTLAND	C.E.O.	---	---
STS SYSTEMS, INC.	EA	CT	VAR	11	---	(203)348-8055	BILL LASSNER	H.E.	SHARRIO	480
SULCUS COMPUTER	EA	PA	OEM	5	GREENSBURG	412-836-2000	JEFFREY RATNER	PRESIDENT	ZNOTENS	4004
SUMITRONICS	NW	CA	OEM	15	SUNNYVALE	408-737-7683	T. ALAIYAMA	PRESIDENT	SCHMITT	310X
SUMMIT CAD CORP.	CN	TX	VAR	8	---	(713)440-1468	GREGG YOUNG	C.E.O.	HAMKINSON	570
SUN DATA, INC.	EA	GA	VAR	25	---	(404)449-6116	JOHN CRILLY	C.E.O.	BROWN	470
* SUN MICROSYSTEMS	NW	CA	OEM	PV	MOUNTAIN VIEW	415-960-1300	SCOTT MCNEALY	PRESIDENT	SCHMITT	3103
SUN-FLEX CO.	NW	CA	DIST	15	---	(415) 883-1221	ERIK THOMSEN	C.E.O.	RAFALOVICH	395
SUNBELT DATA SERVICES	CN	TX	DIST	4	---	(713) 777-6515	DICK SCHMOECKEL	C.E.O.	HAMKINSON	570
SUNDSTRAND AVIATION	CN	IL	VAR	1,000	---	(815)226-6000	---	---	SIANTO	580
SUNDSTRAND DATA CONTROL INC.	EA	MA	VAR	10	---	(617)861-1500	PAUL F. MAHONEY	H.E.	SHARRIO	480
SUNLAND SUPPLY CO.	CN	TX	DIST	5	---	(915) 533-5901	JON SHAPIRO	C.E.O.	HAMKINSON	570
SUNOL SYSTEMS	NW	CA	SUBS	---	---	(415) 484-3322	---	---	RAFALOVICH	395
SUPER COMPUTER	SW	CA	OEM	5	GARDENA	213-532-2133	JUNUS LEE	VP, MKTG	CARGILO	330X
SUPERSET	SW	CA	OEM	5	SAN DIEGO	619-452-8665	IAN HIRSCHSOHN	PRESIDENT	FISHER	330X
SUPPLY DEPOT, INC.	SW	CA	DIST	5	---	(805) 583-0505	NICK TERANI	C.E.O.	RAFALOVICH	395
SWENSON ASSOCIATES	CN	OH	DIST	3	---	(513) 866-3233	SWEDE SWENSON	C.E.O.	LOGELIN	595
* SYDIS	NW	CA	OEM	---	SAN JOSE	408-945-1100	JOHN CLARK	PRESIDENT	BURTON	3104
SYKES DATATRONICS	EA	NY	VAR	34	---	(716)458-8000	ROBERT SYKES	C.E.O.	ELSON	490
* SYMBOLICS	EA	MA	OEM	40	CAMBRIDGE	617-577-7500	RUSSELL NOFTSKER	PRESIDENT	GAILEY	3306
SYMCRO SYSTEMS	---	---	OEM	---	---	---	---	---	---	---

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

(sorted by company)

* Present customer
 * Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
SYNAPSE	NH	CA	OEM	PV	MILPITAS	408-946-3191	ELLIOT NESTLE	VP, HRDWARE ENGR	SCHMITT	310X
SYNERCOM TECHNOLOGY, INC.	CN	TX	VAR	9	---	(713)240-5000	GARY W. STOWELL	H.E.	HAWKINSON	570
SYNERGY ACCOUNTING, INC.	SW	CA	DIST	2	---	(213) 532-2331	LOU MARRACCI	C.E.O.	RAFALOVICH	395
SYNERLOGIC, INC.	CD	CD	DIST	8	---	(613) 238-2992	KENNETH F. TONGUE	C.E.O.	---	---
SYNTECH DATA SYSTEMS	---	---	OEM	---	---	---	---	---	---	---
SYSCOM CORP.	EA	DC	VAR	104	---	(202)342-4000	J.J. YGLESIAS	C.E.O.	ZNOTENS	485
* SYSGEN INDUSTRIES	NW	CA	SUBS	---	---	(415) 490-6770	---	---	RAFALOVICH	395
SYSTEC, IC.	EA	FL	DIST	3	---	(305) 323-0230	GEORGE FLETCHER	C.E.O.	BROWN	470
SYSTEL COMPUTERS	NW	CA	DIST	20	---	(408) 986-8280	SCOT STERN	VP, MKT.	RAFALOVICH	395
SYSTEM AUTOMATION CORP.	EA	MD	VAR	9	---	(301)565-9400	HOWARD TISCHLER	H.E.	ZNOTENS	485
SYSTEM DEVELOPMENT CORP.	SW	CA	VAR	300	---	(213)820-4111	JACK CAMPBELL	H.E.	RAFALOVICH	395
* SYSTEM INDUSTRIES	NW	CA	VAR	121	---	(408)942-1212	ARLEN TORBETT	H.E.	MACCABE	3112
SYSTEM INTEGRATORS, INC.	NW	CA	VAR	50	---	(916)929-9481	F. MICHAEL FAUBERT	H.E.	RAFALOVICH	395
SYSTEM TECHNOLOGY ASSOCIATES	CN	TX	VAR	6	---	(713)440-8340	ROGER D. FLINK	C.E.O.	HAWKINSON	570
* SYSTEME CORP.	EA	FL	VAR	20	---	(305)298-8180	DANIEL B. HOSKINS	H.E.	BROWN	4501
SYSTEMHOUSE LTD.	CD	CD	VAR	40	---	(613)236-9734	PETER A. SANDIFORD	C.E.O.	---	---
SYSTEMHOUSE, INC.	NW	CA	VAR	40	---	(415)572-2970	PETER A. SANDIFORD	C.E.O.	RAFALOVICH	395
SYSTEMS & SOFTWARE INC.	SW	AZ	SUBS	---	---	(602) 948-7313	---	---	GOODMAN	385
SYSTEMS ARCHITECTS INC.	EA	MA	VAR	18	---	(617)961-2700	VICTOR KAN	H.E.	SHARRIO	480
* SYSTEMS ASSOCIATES INC.	EA	NC	VAR	30	---	(704)333-1276	ALLAN W. LACKEY	H.E.	BROWN	4501
SYSTEMS BY HICA	SW	AZ	VAR	5	---	(602)987-9576	FRANK ROBERTS	C.E.O.	GOODMAN	385
SYSTEMS COMPUTER CORP.	---	---	OEM	---	---	---	---	---	---	---
SYSTEMS CONCEPTS	NW	CA	OEM	---	SAN FRANCISCO	415-442-1500	MICHAEL LEVITT	PRESIDENT	BURTON	310X
SYSTEMS CONTROL INC.	NW	CA	VAR	45	---	(415)494-1165	TOM STEDING	H.E.	RAFALOVICH	395
SYSTEMS ENGINEERING	---	---	OEM	---	---	---	---	---	---	---
SYSTEMS GROUP	SW	CA	OEM	2	ORANGE	714-633-4460	---	---	GAILLEY	330X
SYSTEMS INTEGRATED	SW	CA	VAR	5	---	(619)578-7880	LARRY POMATTO	C.E.O.	RAFALOVICH	395
SYSTEMS MEASUREMENT	---	---	OEM	---	---	---	---	---	---	---
SYSTEMS PERIPH. CSLTNTS	SW	CA	SUBS	---	---	(619) 693-8611	---	---	RAFALOVICH	395
SYSTEMS RESEARCH LABS, INC.	CN	OH	VAR	40	---	(513)426-6000	KAROL A. ONDICK	H.E.	LOGEL IN	595
SYSTEMS SUPPLYWARE, INC.	NW	OR	DIST	2	---	(503) 684-2716	STEPHEN BRAUN	C.E.O.	RAFALOVICH	395
SYSTEMS SUPPORT, INC.	CN	IL	VAR	36	---	(312)323-1200	THOMAS M. OWENS	C.E.O.	SIANTO	580
SYSTONETICS, INC.	SW	CA	VAR	6	---	(714)680-0910	MAYNARD B. THOMPSON	H.E.	RAFALOVICH	395
SYZYGY COMPUTER SYS	SW	CA	OEM	---	SAN DIMAS	714-592-2851	ROXANNE JONES	PRESIDENT	GAILLEY	330X
T AND B COMPUTING	CN	MI	VAR	12	---	(313)973-1900	ROGER L. VARBLOW	H.E.	LOGEL IN	595
TAB PRODUCTS	NW	CA	OEM	110	PALO ALTO	415-852-2400	JOHN PETRY	VP, MFG	BOSCH	310X
TAB PRODUCTS CO. OF AZ	SW	AZ	DIST	3	---	(602) 864-0311	CHRIS ACKEL	C.E.O.	GOODMAN	385
TALLGRASS TECHNOLOGIES	CN	KS	SUBS	---	---	(913) 492-6002	---	---	HAWKINSON	570
TAMM ASSOCIATES	CN	MI	DIST	8	---	(313) 538-6188	J.T. TAMM	C.E.O.	LOGEL IN	595
* TANDEM	NL	CA	OEM	532	CUPERTINO	408-725-6000	LAWRENCE LAURICH	VP, ENGR	MACCABE	3113
TANDY/RADIO SHACK	CN	TX	OEM	2,736	FT. WORTH	817-390-3921	RON STEGALL	SR VP	HAWKINSON	550
TANO CORP.	EA	LA	OEM	31	NEW ORLEANS	504-254-3500	MICHAEL ARON	DIR, MFG	BROWN	4501
TARBELL ELECTRONICS	SW	CA	OEM	1	CARSON	213-538-4251	DONALD TARBELL	PRESIDENT	FISHER	330X
TATA CONSULTANCY SERVICES	EA	NY	VAR	14	---	(212)557-8038	F.C. KOHLI	C.E.O.	ELSON	490
TAVA	---	---	OEM	---	---	---	---	---	---	---
TAYLOR MERCHANT CORP.	EA	NY	DIST	3	---	(212) 757-7700	HARVEY SCHNEIDER	C.E.O.	ELSON	490
TEAMMATE	NW	CA	SUBS	---	---	(408) 986-9545	---	---	RAFALOVICH	395
TECHLAND SYSTEMS	EA	NY	VAR	7	---	(212)684-7788	DAN KELLY	H.E.	ELSON	490
TECHNALYSIS CORP.	CN	MN	VAR	10	---	(612)925-5900	VIC ROCCHIO	C.E.O.	LOGEL IN	590
TECHNIC COMPUTER SVC	SW	CA	DIST	7	---	(714) 751-0315	ROBERT ETHERTON	C.E.O.	RAFALOVICH	395
TECHNICAL ANALYSIS GROUP	EA	LA	DIST	2	---	(504) 895-1474	TIMOTHY SLATER	C.E.O.	BROWN	470
TECHNICAL ASSOCIATES	EA	FL	DIST	6	---	(305) 277-4980	ERNEST AMIOT	C.E.O.	BROWN	470
TECHNICAL MARKETING SYSTEMS	EA	TN	VAR	25	---	(615)833-7662	JOE YOUNG	H.E.	BROWN	470
TECHNICAL SALES ASSOC.	EA	MD	DIST	5	---	(301) 340-0600	M. GUTHRIE	C.E.O.	ZNOTENS	485
TECHNICO	EA	MD	OEM	2	BALTIMORE	301-669-4100	---	---	ZNOTENS	4004
TECHNOLOGY FOR ENERGY	EA	TN	VAR	20	---	(615)966-5856	JAMES C. ROBINSON	H.E.	BROWN	470
TECHNOLOGY INDUSTRIES	NW	CA	DIST	5	---	(415) 638-1206	BILL CHAMBERLAIN	C.E.O.	RAFALOVICH	395
TECHNOLOGY MARKETING	SW	CA	VAR	8	---	(714)863-1100	GEORGE WELLS	C.E.O.	RAFALOVICH	395
TECHNOLOGY SERVICES	EA	VA	DIST	6	---	(703) 354-8668	KEVIN O'DONNELL	C.E.O.	ZNOTENS	485
TECHNOLOGY, INC.	CN	OH	VAR	6	---	(513)426-2405	RON ROCKAFELLOW	C.E.O.	LOGEL IN	595
TECHTRAN INDUSTRIES	EA	NY	VAR	6	---	(716)334-9640	DAVID L. DECKER	C.E.O.	ELSON	490
TECMAR	CN	OH	SUBS	---	---	(216) 349-0600	---	---	LOGEL IN	595
TEKTRONIX	NW	OR	OEM	1,331	BEAVERTON	503-627-7111	GEORGE KERSELS	VP, ELEC COMP	BOSCH	320

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 ■ Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
TEL-TEX, INC.	CN	TX	VARS	12	---	(713)868-6000	THOMAS W. MOORE	C.E.O.	HAWKINSON	570
TELAUTOGRAPH/OMNIFAX	SW	CA	DIST	35	---	(213) 641-3690	GENE SWEAT	C.E.O.	RAFALOVICH	395
TELECOM RESEARCH	EA	TN	VARS	6	---	(615)329-0031	JAMES JEWETT	C.E.O.	BROWN	470
TELCOM INDUSTRIES	---	---	OEM	---	---	---	---	---	---	---
TELE TERMINALS INC.	CN	MN	VARS	18	---	(612)536-6000	TOM LOEFFLER	H.E.	LOGELIN	590
TELEBYTE TECHNOLOGY	EA	NY	SUBS	---	---	(516) 423-3232	---	---	ELSON	490
TELECOMPUTE INTGRD SYS.	CD	CD	DIST	5	---	(416) 241-3511	CHAND MEHTA	C.E.O.	---	---
TELEFILE COMPUTER	SW	CA	OEM	9	IRVINE	714-250-1830	NORMAN VOGEL	VP, MKTG	CARGILO	330X
TELEGENIX, INC.	EA	NJ	VARS	6	---	(609)424-5220	STEPHEN MESSAROS	H.E.	ZNOTENS	495
TELEMATICS INT'L	EA	FL	OEM	12	FT LAUDERDALE	305-772-3070	JOHN PITT	PRESIDENT	BROWN	4501
TELEPHONICS CORP.	EA	NY	VARS	50	---	(516)549-6000	CHARLES MIXER	H.E.	ELSON	490
TELEPRINTER CORP.	EA	NJ	DIST	5	---	(201) 464-5310	LOWELL VANT SLOT	C.E.O.	ZNOTENS	495
TELERAM COMM. CORP.	EA	NY	OEM	9	WHITE PLAINS	914-694-9270	MALCOLM CHARMAN	VP, MKTG	ZNOTENS	4004
TELESCIENCES, INC.	EA	NJ	VARS	55	---	(609)866-1000	JOHN REIS	C.E.O.	ZNOTENS	495
TELESIS SYSTEMS	EA	MA	VARS	13	---	(617)256-2300	PAT DE CAVAINAC	C.E.O.	SHARRIO	480
TELETEK ENTERPRISES	NM	CA	VARS	8	---	(916)920-4600	J.A. MCCAULEY	C.E.O.	RAFALOVICH	395
TELEVIDEO SYSTEMS	NM	CA	OEM	163	SAN JOSE	408-745-7760	K. PHILIP HWANG	PRESIDENT	BOSCH	310X
TELEX COMPUTER PROD	CN	OK	OEM	400	TULSA	918-627-1111	GEORGE BRAGG	PRESIDENT	HAWKINSON	550
TELOS FEDERAL SYSTEMS	SW	CA	VARS	37	---	(213)450-2424	LIN CONGER	C.E.O.	RAFALOVICH	395
TELTON CORP.	CH	WA	VARS	36	---	(206)827-9626	DAVE EITELBACH	H.E.	RAFALOVICH	395
TERAK	SW	AZ	OEM	---	SCOTTSDALE	602-998-4800	---	---	RAFALOVICH	340
TERMINAL RENTALS, INC.	SW	CA	DIST	6	---	(714) 832-2414	KARL KOVAC	C.E.O.	RAFALOVICH	395
TERMINALS UNLIMITED	EA	VA	DIST	26	---	(703) 237-8666	DAVID OWENS	C.E.O.	ZNOTENS	485
TESCO, INC.	EA	MD	DIST	7	---	(301) 695-5300	MARK ISMACH	C.E.O.	ZNOTENS	485
* TEXAS INSTRUMENTS	CN	TX	OEM	5,742	DALLAS	214-995-2011	PETER FIELD	VP, MKTG	HAWKINSON	550
THE COMPUTER SHOP	---	---	OEM	---	---	---	---	---	---	---
THOMAS ENGINEERING CO.	NM	CA	DIST	4	---	(415) 680-8640	T.J. FANCETT	C.E.O.	RAFALOVICH	395
THORPE, JACK M., CO.	CN	HI	DIST	5	---	(313) 779-6363	JACK M. THORPE	C.E.O.	LOGELIN	595
THREE RIVER COMPUTER	EA	PA	OEM	---	PITTSBURG	412-621-6250	---	---	ZNOTENS	4004
TIMBERLINE SYSTEMS	NM	OR	VARS	10	---	(503)644-8155	LESLIE F. CLARKE	H.E.	RAFALOVICH	395
TIME BROKERS OF CA.	SW	CA	DIST	35	---	(213) 986-2411	M. KLEINMAN	C.E.O.	RAFALOVICH	395
TIME BROKERS OF NE.	EA	MA	DIST	3	---	9617) 769-4060	PAUL CAMPISANO	C.E.O.	SHARRIO	480
TIMESHARING UNLIMITED INC.	EA	TN	VARS	7	---	(615)242-4477	TREVOR M. EVANS	C.E.O.	BROWN	470
TIMPLEX INC.	EA	NJ	VARS	43	---	(201)930-4600	EDWARD BOTWINICK	C.E.O.	ZNOTENS	495
TLC COMPUTER SERVICES	EA	GA	DIST	22	---	(404) 475-8000	JOHN FINCH	C.E.O.	BROWN	470
TMA	EA	NY	DIST	5	---	(516) 883-2432	WARD CODET	C.E.O.	ELSON	490
TMA/LOGON, INC.	EA	NJ	DIST	15	---	(201) 646-9222	ALBERT BECKMAH	C.E.O.	ZNOTENS	495
* TOLERANT SYSTEMS	NM	CA	OEM	---	SAN JOSE	408-946-5667	DAVID CAPLAN	PRESIDENT	BOSCH	3102
TOM SOFTWARE	NM	WA	VARS	20	---	(206)246-7022	HOWARD M. BING	C.E.O.	RAFALOVICH	395
TOMINY, INC.	CN	OH	DIST	9	---	(513) 984-6605	L. THACKER	C.E.O.	LOGELIN	595
TORYO INC	---	---	OEM	---	---	---	---	---	---	---
TOSHIBA	NM	CA	OEM	13,372	SUNNYVALE	408-739-0560	ROBERT COLE	VP, OPERATIONS	BURTON	310X
* TOTAL TEC SYSTEMS	EA	NJ	VARS	12	---	(201)231-0300	GEORGE ZUPECK	H.E.	ZNOTENS	4004
TOTAL TECHNICAL SVCS	CN	OH	VARS	23	---	(216)237-8363	GEORGE STACKFLETH	C.E.O.	LOGELIN	595
TOWER SYSTEMS IND	NM	CO	OEM	3	BOULDER	303-444-1956	RAYMOND MOORE	PRESIDENT	EVERETT	310
TRACAN ELECTRONICS CORP.	CD	CD	VARS	6	---	(416)625-7752	VALDU LOIT	C.E.O.	---	---
TRANS DATACORP	NM	CA	DIST	5	---	(415) 591-5705	HERBERT STOLLORZ	C.E.O.	RAFALOVICH	395
TRANSCAPITAL CORP.	EA	VA	VARS	5	---	(703)790-8210	JOSEPH F. CAMPAGNA	C.E.O.	ZNOTENS	485
TRANSNET CORP.	EA	NJ	DIST	15	---	(201) 688-7800	JOHN WILK	C.E.O.	ZNOTENS	495
TRANSPORT INFORMATION SYSTEMS	NM	WA	VARS	5	---	(206)641-7787	JOSEPH K. TAUSSIG	C.E.O.	RAFALOVICH	395
TRANTRON SYSTEMS	---	---	SUBS	---	---	---	---	---	---	---
TRI-MARK SYSTEMS INC.	EA	PA	DIST	2	---	(215) 860-1500	DOMINIC TRIOLO	C.E.O.	ZNOTENS	495
TRICOM GROUP	EA	NY	VARS	6	---	(516)483-9700	BRUCE COLUIN	H.E.	ELSON	490
TRIEK TECHNOLOGY	SW	CA	OEM	---	SANTA ANA	714-550-9615	ROY HONDA	MKTG	FISHER	330X
TRIMARCHT & ASSOC.	EA	PA	OEM	4	STATE COLLEGE	814-234-5659	SCOTT DENO	VP, SALES	ZNOTENS	4004
TRINITY SOLUTIONS	NM	CA	DIST	2	---	(408) 226-0170	SALLY MARLER	C.E.O.	RAFALOVICH	395
TRIOS MICRO SYSTEMS	NM	CA	OEM	---	SAN FRANCISCO	415-583-7733	DON SPEIRS	VP, MKTG	SCHMITT	310X
TRISTAR DATA SYSTEMS	EA	NJ	VARS	5	---	(609)424-4700	DANIEL F. BROWN	C.E.O.	ZNOTENS	495
TRITEK, INC.	EA	NJ	DIST	16	---	(609) 429-1551	JOHN BARRETT	C.E.O.	ZNOTENS	495
TRW DATACOM	SW	CA	VARS	9	---	(213)475-9861	ALEX A. INFELD	H.E.	RAFALOVICH	395
TRW-FUJITSU CORP.	CN	OH	OEM	6,062	CLEVELAND	216-383-2121	H.L. CATERSON	VP, PLNG & TECH	LOGELIN	5001
TSR, INC.	EA	NY	DIST	17	---	(516) 231-0333	JOSEPH HUGHES	C.E.O.	ELSON	490
TW TECHNOLOGIES	SW	AZ	SUBS	---	---	(602) 581-0669	---	---	GOODMAN	385

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

(sorted by company)

- * Present customer
- Likely prospect

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
TWO-M CORP.	EA	NJ	DIST	6	---	(201) 625-8100	MICHAEL CANU	C.E.O.	ZNOTENS	495
TYLUS SYSTEMS INC.	SW	CA	VAR	6	---	(714)970-9321	DAVE MCDUEL	H.E.	RAFALOVICH	395
■ TYMSHARE, INC.	NW	CA	VAR	300	---	(408)446-6000	WARREN F. PRINCE	H.E.	BOSCH	3102
U.S. DESIGN	EA	MD	SUBS	---	---	(301) 577-2880	---	---	ZNOTENS	485
UCCEL CORP.	CN	TX	VAR	153	---	(214)353-7100	GREGORY LIEMANDT	C.E.O.	HAWKINSON	570
ULTINACC SYSTEMS	NW	CA	DIST	17	---	(800) 538-7900	GIL KELLERSMAN	C.E.O.	RAFALOVICH	395
■ ULTIMATE COMPUTER SERVICES	EA	NJ	VAR	12	---	(201)625-8700	ROBERT LA ROCCA	C.E.O.	ZNOTENS	4004
ULTRA SPECIALTY, INC.	SW	CA	DIST	15	---	(213) 498-3887	DON WONG	C.E.O.	RAFALOVICH	395
ULTRASYSTEMS DEFENSE/SPACE	SW	CA	VAR	22	---	(714)863-0350	PHILLIP B. SIMONS	H.E.	RAFALOVICH	395
UNICOM	---	---	OEM	---	---	---	---	---	---	---
UNICOMP	---	---	OEM	---	---	---	---	---	---	---
UNIDOT	NW	CO	OEM	1	GOLDEN	303-526-9263	ROBERT MCCLURE	PRESIDENT	EVERETT	310
UNIQ DIGITAL TECHNOLOGIES	CN	IL	VAR	7	---	(312)879-1008	CHARLES E. RICHTER, JR.	C.E.O.	SIANTO	580
UNITED SFTWRE OF AMERICA	EA	NY	DIST	2	---	(212) 682-0347	J. GOTTLIEB	C.E.O.	ELSON	490
■ UNITED SYSTEMS	SW	CA	SUBS	---	---	(714) 832-3613	---	---	GAILEY	3305
UNITRACE, INC.	NW	CA	DIST	5	---	(408) 727-7530	JACK W. LANG	C.E.O.	RAFALOVICH	395
■ UNITRONIX	EA	NJ	OEM	16	SOMERVILLE	201-231-9400	FRANK ZIMMER	PRESIDENT	ZNOTENS	4004
UNIVAIR, INC.	CN	MO	DIST	6	---	(314) 426-1099	S. NIELSEN	C.E.O.	LOGELIN	590
UNIVATION INC.	NW	CA	SUBS	---	---	(408) 745-0180	---	---	RAFALOVICH	395
UNIVERSAL COMMUNC'N SYS	EA	VA	DIST	65	---	(703) 362-3701	FRED SHAFTMAN	C.E.O.	ZNOTENS	485
UNIVERSAL DATA RESEARCH	EA	NY	OEM	1	BUFFALO	716-631-3011	JOEL HECKMAN	PRESIDENT	ZNOTENS	4004
US PLUS, INC.	EA	CT	DIST	10	---	(203) 269-8222	ERNIE CORRIVEAU	C.E.O.	SHARRIO	480
USED COMPUTERS, INC.	EA	PA	DIST	4	---	(215) 647-1881	NEIL HOUGHTON	C.E.O.	ZNOTENS	495
USL DATA SYSTEMS	NW	CA	DIST	75	---	(415) 572-6600	JOHN J. TAYLOR	C.E.O.	RAFALOVICH	395
VALCOM	CN	NE	CHAIN	90	---	(402) 359-2201	DALE SHUSTER	DR SLS	HAWKINSON	570
VANGUARD TECHNOLOGIES CORP.	EA	VA	VAR	17	---	(703)273-0500	DEAN W. CRAWFORD	C.E.O.	ZNOTENS	485
VCA CORP.	EA	VA	VAR	10	---	(703)281-4666	KEITH R. MUSSON	H.E.	ZNOTENS	485
VECTOR GRAPHIC	SW	CA	OEM	30	THOUSAND OAKS	805-499-5831	RICHARD HAHN	SR VP, MKTG	CARGILO	330X
VECTRON GRAPHIC SYSTEMS	NW	CA	VAR	5	---	(408)737-0460	CHARLES J. SIMON	C.E.O.	RAFALOVICH	395
VENTURCOM, INC.	EA	MA	DIST	2	---	(617) 661-1230	MYRON ZIMMERMAN	C.E.O.	SHARRIO	480
■ VIASYN CORP	NW	CA	OEM	---	HAYWARD	415-786-0909	MARK PUHALOVICH	VP, OPERATIONS	BOSCH	3102
VICTOR TECH.	NW	CA	OEM	---	SCOTT'S VALLEY	408-438-6680	DAN SEALE	VP, MKTG	BURTON	310X
VICTORY COMPUTER	NW	CA	OEM	4	SAN JOSE	408-259-7370	JIM WILLOTT	VP, ENGR	BOSCH	310X
VIDEO TECHNOLOGY	CN	IL	OEM	---	ELK GROVE VLG	312-640-1776	J. HIRSCH	PRESIDENT	SIANTA	5002
VIDON SYSTEMS	SW	CA	SUBS	---	---	(714) 834-0532	---	---	RAFALOVICH	395
VIRTUAL MICROSYSTEMS	NW	CA	OEM	4	BERKELEY	415-841-9595	GARRETT GRUENER	PRESIDENT	BOSCH	310X
VISTA TECHNOLOGY INC.	SW	CA	VAR	15	---	(619)744-8305	BILL LAWRENCE	H.E.	RAFALOVICH	395
VISUAL COMPUTER	EA	MA	OEM	---	TEWKSBURY	617-851-5000	JOHN BRUNI	VP, MKTG	SHARRIO	4002
VISUAL METHODS, INC.	EA	NJ	DIST	2	---	(201) 666-3950	W.T. SANDIN	C.E.O.	ZNOTENS	495
VITEK	SW	CA	VAR	9	---	(619)744-8305	TOM PINE	C.E.O.	RAFALOVICH	395
VOTRAX	CN	MI	OEM	---	TROY	313-588-2050	JOHN LAUDER	PRESIDENT	LOGELIN	5001
VU COM DATA SERVICES	CN	MI	DIST	3	---	(517) 393-8610	RONALD G. WARD	C.E.O.	LOGELIN	595
W.G. COMPUTER PRODUCTS	SW	CA	DIST	3	---	(805) 495-0593	WALTER DEEGE	C.E.O.	RAFALOVICH	395
WAHL AND WAHL, INC.	CN	MN	DIST	11	---	(612) 729-7301	JERRY WAHL	C.E.O.	LOGELIN	590
WALCH, PUBLISHER, WESTON	EA	ME	DIST	5	---	(207) 772-2846	SUZANNE AUSTIN	C.E.O.	SHARRIO	480
WANG	EA	MA	OEM	2,185	LOWELL	617-459-5000	NORMAN LEDOUX	DIR, OPER SVCS	SHARRIO	4002
WANGTEK INC.	SW	CA	SUBS	2	---	(805) 583-5255	---	---	RAFALOVICH	395
WAVE MATE	SW	CA	OEM	2	HANTHORNE	213-978-8600	JEFF POST	VP, MKTG	GAILEY	330X
WEATHERFORD, R.V., CO.	SW	CA	DIST	44	---	(213) 849-3451	R.V. WEATHERFORD	C.E.O.	RAFALOVICH	395
WEBB CO., JERVIS	CN	MI	VAR	6	---	(313)973-7875	MARION COLLIE	H.E.	LOGELIN	595
■ WEBSTER COMPUTER CORP.	NW	CA	DIST	2	---	(408) 749-1089	DAVID WEBSTER	C.E.O.	BOSCH	3102
WESTEC ASSOCIATES	NW	WA	DIST	3	---	(206) 454-2901	ROBERTO DAVILA	C.E.O.	RAFALOVICH	395
WESTERN CO. OF NA	CN	TX	VAR	600	---	(817)731-5100	J. FANNING	C.E.O.	HAWKINSON	570
WESTERN DATA	SW	CA	VAR	11	---	(714)768-3345	JOHN COATES	H.E.	RAFALOVICH	395
■ WESTERN MICRO SYSTEMS	NW	CA	DIST	50	---	(415) 964-2050	BERNARD MARREN	C.E.O.	---	1101
WESTERN NY CHPTG SYS	EA	NY	VAR	8	---	(716)381-4120	RAY HUTCH	C.E.O.	ELSON	490
WESTERN SCIENTIFIC MKT	SW	CA	VAR	12	---	(619)565-6699	THOMAS HUTTON	H.E.	RAFALOVICH	395
WESTINGHOUSE ELECTRIC	CN	PA	OEM	10,265	---	412-642-3800	R. GAVERT	---	ZNOTENS	4004
WESTWIND COMPUTER	NW	CA	SUBS	---	---	(800) 831-3144	---	---	RAFALOVICH	395
WHIPPLETREE ENTERPRISES	CD	CD	VAR	5	---	(604)420-8058	KENNETH E. BROWN	C.E.O.	---	---
WHITE HAT SYSTEMS, INC.	SW	CA	VAR	8	---	(818)706-3148	BRIAN BOYLE	C.E.O.	RAFALOVICH	395
■ WICAT	NW	UT	OEM	27	OREM	801-224-6400	JIM WALTZ	VP, GEN. SYS	EVERETT	370
WILCO WIRE & CABLE CO.	NW	CA	DIST	3	---	(408) 926-8880	J. WILSON	C.E.O.	RAFALOVICH	395

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PROSPECTORS

(Oems, Vars, Distributors, Subsystem Houses, Chains)

* Present customer
 * Likely prospect

(sorted by company)

COMPANY	RG	ST	CLASS	SALES \$(M)	CITY	PHONE	CONTACT	TITLE	SALESMAN	TERR
WILD HARE COMPUTER	NW	CO	OEM	3	BOULDER	303-442-0324	BRUCE RAY	PRESIDENT	EVERETT	310
WILLIAMS ASSOC., G.L.	EA	NJ	DIST	5	—	(609) 428-6060	GENE WILLIAMS	C.E.O.	ZNOTENS	495
WILLIAMS ELECTRONICS	CN	IL	OEM	68	CHICAGO	312-267-2240	KENNETH FEDESNA	VP. ENGR	SIANTA	5002
WILSON JONES CO.	CN	IL	DIST	100	—	(312) 774-7700	THOMAS K. MILLER	C.E.O.	SIANTA	580
WINTEK COMPUTER	CN	IL	OEM	1	SCHAUMBURG	312-529-3080	JACQUES ANDERSEN	PRESIDENT	SIANTA	5002
WKM ASSOCIATES	EA	PA	DIST	21	—	(412) 892-2953	ROBERT MELHADO	C.E.O.	ZNOTENS	495
WOLFSON CO., P.J.	EA	NY	DIST	5	—	(914) 235-3203	P.J. WOLFSON	C.E.O.	ELSON	490
WORDPLEX	SW	CA	OEM	—	WESTLAKE VLG	818-889-4455	DAVID BASTEN	GENERAL MGR	GAILEY	330X
WORICO DATA SYSTEMS	EA	PA	VARs	10	—	(215) 337-8100	EDWARD A. ROFI	C.E.O.	ZNOTENS	495
WORLD DISK DRIVES	SW	CA	DIST	30	—	(714) 855-1761	DICK SARGENT	C.E.O.	RAFALOVICH	395
WYSE	NW	CA	OEM	20	SAN JOSE	408-946-3075	DIANE SIMON	VP, MATERIALS	SCHMITT	310X
XCOMP	SW	CA	SUBS	—	—	(619) 573-0077	—	—	RAFALOVICH	395
XEROX	EA	CT	OEM	8,792	STAMFORD	203-329-8700	DAVID KEARNS	PRESIDENT	ELSON	4003
XMARK	SW	CA	OEM	2	COSTA MESA	714-556-9210	PHILIP HAINES	PRESIDENT	CARGILO	330X
XMARK CORP.	SW	CA	DIST	6	—	(714) 556-9210	PHILIP C. HAINES	C.E.O.	RAFALOVICH	395
XYVISION	EA	MA	OEM	—	WOBURN	617-938-8095	LAURENCE LIEBSON	PRESIDENT	SHARRIO	4002
XYZTEK	NW	CO	OEM	1	PUEBLO	303-850-9400	ROGER ROACH	PRESIDENT	EVERETT	310
ZAISAN	CN	TX	OEM	—	HOUSTON	713-580-6191	BOB DELTAVEN	VP, MKTG	HAWKINSON	550
ZAX	SW	CA	OEM	4	IRVINE	714-474-1170	HAL HORROCKS	VP, SALES	GAILEY	330X
ZEDA COMPUTERS INT'L	NW	UT	OEM	3	PROVO	801-377-9948	JOHN McMULLEN	PRESIDENT	EVERETT	310
ZENDEX	NW	CA	OEM	5	DUBLIN	415-828-3000	TONY GIGLIOTTI	PRESIDENT	BOSCH	310X
ZENITH	CN	IL	OEM	1,716	GLENVIEW	312-391-8860	HOY CHANG	VP, ENGR	SIANTA	5002
ZENTEC	NW	CA	OEM	25	SANTA CLARA	408-727-7662	RICHARD PIEHL	VP, ENGR	BOSCH	310X
* ZILOG	NW	CA	OEM	—	CAMPBELL	408-370-8000	THOMAS POPEK	SR VP, COMP	BURTON	3104
ZOBEX	SW	CA	OEM	—	SANTEE	619-562-9306	EVA ZOBOKI	VP	GAILEY	330X
ZOLTECH	SW	CA	OEM	5	VAN NUYS	818-780-1800	LES LAZAR	PRESIDENT	GAILEY	330X

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3. COMPUTERS

- Manufacturers
- Top Companies/Models
- Market Forecast
- Product Specifications

COMPUTER MANUFACTURERS
(Headquarters & Divisions)

* Present Customer
* Likely Prospect

(sorted by company)

COMPANY	DIVISION	ST	CITY	REG	TERR	1984 - PERFORMANCE (\$M)			CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
						COMPUTER SALES	TOTAL SALES	TOTAL INCOME					
A.B. DICK	HDQTRS	IL	CHICAGO	CN		4	450		ROBERT VERRANDO	VP, MKTG	312-647-8800	5700 W. TOWHY	60648
A.K. INDUSTRIES	HDQTRS												
A.M. JACQUARD	HDQTRS												
ABLE COMPUTER	HDQTRS	CA	COSTA MESA	SW		1	25		LESLIE WELLINGTON	VP, R & D	714-979-7030	3080 AIRWAY AVE.	92626
ACORN COMPUTERS	HDQTRS	MA	MOBURN	EA					ROBERT ANGELO	VP, MKTG	617-935-1190	400 UNICORN PARK DR.	01801
ACT SYSTEMS	HDQTRS	CA	SAN DIEGO	SW			3		ARAM PASHAIAN	PRESIDENT	619-695-2661	8515 ARJONS DR., STE. A	92126
ACTION COMPUTER	HDQTRS	CA	PASADENA	SW			5		H. SIEGEL	PRESIDENT	818-351-5451	430 N. HALSTEAD ST.	91107
ACTRIX (ACCESS MATRIX)	HDQTRS	CA	SAN JOSE	NM		6			GLENN BROWN	VP, ENGR	408-263-3660	2159 BERING DR.	95131
* ADV. ELECTRONICS DESIGN	HDQTRS	CA	SUNNYVALE	NM	3102	15			MICHAEL LONG	PRESIDENT	408-733-3555	440 POTRERO AVE.	94086
ADVANCED DIGITAL CORP.	HDQTRS	CA	HUNTINGTON BC	SW		11	12		ROGER ALEXANDER	DIR, MKTG	714-891-4004	5432 PRODUCTION DR.	92649
ADVANCED INFO	HDQTRS												
ALCYON	HDQTRS	CA	SAN DIEGO	SW			5		WILLIAM KEHRET	EX VP	619-578-0860	8716 PRODUCTION AVE.	92121
* ALLOY COMPUTER	HDQTRS	MA	FRAMINGHAM	EA	4004	1	15		NIGEL SPICER	VP, MKTG	617-875-6100	100 PENNSYLVANIA AVE.	01701
* ALPHA MICRO	HDQTRS	CA	SANTA ANA	SW	3304	65		2	LEONARD PALLADINO	VP, CMPTR SYSTEMS	714-957-8500	17332 VON KARMAN	92714
ALSPA COMPUTER	HDQTRS	CA	CAMPBELL	NM		4			RICHARD BROOKS	VP, MKTG	408-370-3000	477 DIVISION ST.	95008
* ALTOS COMPUTER	HDQTRS	CA	SAN JOSE	NM	3104	177		10	DAVID LIGGETT	VP, OPERATIONS	408-946-6700	2641 ORCHARD PKWY	95134
* AMDAHL	HDQTRS	CA	SUNNYVALE	NM	3104	793	779	36	ANTHONY POZOS	VP, CORP. SVCS	408-746-6000	1250 E. ARQUES AVE.	94086
AMDAHL	COMMUNICATIONS SYS.	CA	MARINA DEL REY	SW					ALEX KENDALL	VP, OPERATIONS	(213)822-3202	2500 WALNUT AVE.	90291
AMERICAN DIGITAL	HDQTRS	IL	CHICAGO	CN					MICHAEL SCOBY	MKT DIR	312-588-4500	3525 W. PETERSON	60659
* AMPEX	HDQTRS	CA	REDWOOD CITY	NM	3306		600		CHARLES GINSBURG	VP, TECH. PLNG	415-367-2011	401 BROADWAY	94063
AMPEX	CMPTR PRODUCTS MANUF	CA	EL SEGUNDO	SW							(213)640-0150	200 N. NASH ST.	90245
AMPEX	VIDEO SYSTEMS	CO	COLORADO SPRGS	NM							(303)596-2000	600 WOOTEN RD.	80915
AMPRO COMPUTERS	HDQTRS	CA	MOUNTAIN VIEW	NM			2		RICHARD LEHRBAUM	VP, ENGR	415-962-0230	67 EVELYN AVE.	94041
ANDERSON JACOBSON	HDQTRS	CA	SAN JOSE	NM			51		WAYNE SEPPELER	VP, OPERATIONS	408-263-8520	521 CHARCOT AVE.	95131
ANDROMEDA SYSTEMS	HDQTRS	CA	CANOGA PARK	SW			3		J. REYNOLDS	PRESIDENT	213-709-7600	9000 ETON AVE.	91304
APF ELECTRONICS	HDQTRS			EA									
* APOLLO COMPUTER	HDQTRS	MA	CHELMSFORD	EA	4003	273		133	DAVID NELSON	VP, R & D	617-256-6600	330 BILLERICA RD.	01821
APPL.DIG. DATA SYST	HDQTRS	NY	HAUPTAUAGE	EA		175			ROBIN WHITE	VP, SYSTEMS	516-231-5400	100 MARCUS BLVD.	11788
APPLE	HDQTRS	CA	CUPERTINO	NM		2,399		64	WILLIAM CAMPBELL	VP, SALES	408-996-1010	20525 MARIANI AVE.	95014
APPLE	APPLE MFG	TX	CARROLLTON	CN					JOE O'KEEFFE	PLANT MGR	(214)323-5500	1215 MARSH LANE	75011
APPLIED BUSINESS CMPTR	HDQTRS	CA	ANAHEIM	SW			1		ALLEN LIU	PRESIDENT	714-666-2604	1509 N. CRAMER BLVD., STE	92806
APPLIED COMPUTER SYS.	HDQTRS			NM									
APPLIED DATA COMMS.	HDQTRS	CA	TUSTIN	SW			13		LAURENCE RUOFF	VP, ENGINEERING	714-731-9000	14272 CHAMBERS RD.	92680
APPLIED DIGITAL DATA	HDQTRS	NY	HAUPTAUAGE	EA			70		KEITH LOHMULLER	MKTG DIR	516-231-5400	100 MARCUS BLVD.	11788
APRICOT CMPTR	HDQTRS	CA	FREMONT	NM					SIMON HUNT	CEO	415-659-8500	47173 BENICIA ST.	94538
AQUATROL	HDQTRS	MN	ROSEVILLE	CN			8		PATRICK DURGIN	VP, MKTG	612-636-3950	2256 TERMINAL RD.	55113
ARCHIVE	HDQTRS	CA	COSTA MESA	SW			38		J.V. HOWELL	VP, R & D	714-641-0279	3540 CADILLAC AVE.	92626
ARDENT COMPUTER	HDQTRS	NY	DOBBS FERRY	EA		1	3		GILBERT HEIM	VP	914-693-6900	145 PALISADES ST.	10522
* ARETE SYSTEMS	HDQTRS	CA	SAN JOSE	NM	3104	10	20		MICHAEL FALLON	VP, ENGINEERING	408-263-9711	2040 HARTOG DR.	95131
ARTEC ELECTRONICS	HDQTRS	CA	SAN CARLOS	NM			2		ROBERT JONES	PRESIDENT	415-592-2740	605 OLD COUNTY RD.	94070
ARTONIX	HDQTRS	NJ		EA			5		HUGH SMYSER		201-756-6868		
ASTRAEA COMPUTER	HDQTRS	CA	SUNNYVALE	NM					RAYMOND BURKLEY	PRESIDENT	408-773-8500	846 DEL REY AVE.	94086
ASTROCOM	HDQTRS	MN	ST. PAUL	CN			11		MICHAEL ANDERSON	VP	612-227-8651	120 W. PLATO BLVD.	55107
* AT&T	HDQTRS	NY	NEW YORK	NL	5111	697	33,000	1,370	WILL BETTERIDGE	VP	212-605-5500	550 MADISON AVE.	10022
AT&T	AT&T BELL LABS	NJ	PARSIPPANY	EA					K.D. BOWERS	VP, ELECTRONICS	(201)299-3234	260 CHERRY HILL RD.	07054
AT&T	AT&T COMMUNICATIONS	NJ	BASKING RIDGE	EA					JAMES CONNERTY	VP	(212)221-2000	295 N. MAPLE AVE.	07920
AT&T	AT&T INFO SYSTEMS	NJ	MORRISTOWN	EA					TONY SQUEGLIA	MGR, EXT AFFAIRS	(201)898-8000	100 SOUTHGATE PKWY	07960
AT&T	AT&T TECHNOLOGIES	NJ	BERKELEY HIGHTS	EA					BRYAN EICHENWALD	VP	(201)771-2000	ONE OAK WAY	07922
AT&T	DIV	NJ	SPRINGFIELD	EA					JOHN CUTRONE	SENIOR ENGINEER	(201)467-7117	50 LAWRENCE ROAD	07081
AT&T	DIV	IL	NAPERVILLE	CN					MARIA MARTINEZ	SUPVR CMPTR SYS.	(312)979-7180	1100 E. WARRENVILLE RD.	60566
AT&T	DIV	CA	SUNNYVALE	NM					E.F. VOLLMER	DEPT. CHIEF	(408)746-5213	1090 E. DUANE AVENUE	94086
AT&T	DIV	IL	LISLE	CN					BRUCE CUTTING	SR.PRODUCT PLNR	(312)971-7999	4513 WESTERN AVENUE	60532
AT&T	DIV	OK	OKLAHOMA CITY	CN					C. E. WEED	BUYER	(405)491-3747	7725 W. RENO AVENUE	73125
ATARI	HDQTRS	CA	SUNNYVALE	NM		130			SIG SCHREYER	VP/GENERAL MGR	408-745-2000	1196 VORREGAS	94086
ATV SYSTEMS	HDQTRS	CA	SANTA ANA	SW		60			FRANK GLEASON	EXC VP	714-261-2390	2921 S. DAIMLER	92705
AUGUST SYSTEMS	HDQTRS	OR	TIGARD	EA			12		ANTON FREDERICKSON	VP, CNTRL ENGR	503-684-3550	18277 SW BOONES FERRY RD.	97224
AURAGEN SYSTEMS	HDQTRS	NJ	FT. LEE	EA		3	10		ROBERT GARDNER	VP, SALES	201-461-3400	2 EXECUTIVE DR.	07024
* BASIC FOUR CORP.	HDQTRS	CA	TUSTIN	SW	3331	230	437	(8)	JIM CHRISTID	VP, MKTG	714-731-5100	14101 MYFORD RD.	92680
BASIC TIME	HDQTRS												
BASIS, INC.	HDQTRS	CA	SCOTTS VALLEY	NM							408-438-5804	5435 SCOTTS VALLEY DR.	95066
BEEHIVE INT'L	HDQTRS	UT	SALT LAKE	NM			30		DICK HODGE	VP, MKTG	801-355-6000	4910 AMELIA EARHART DR.	84116
* BILLINGS	HDQTRS	MO	INDEPENDENCE	CN	5001		5		ROGER BILLINGS	PRESIDENT	816-373-0000	18600 E. 37TH TERR, BOX 18	64055
BONDWELL	HDQTRS	CA	FREMONT	NM			5		JOHN CONSTANTINE	PRESIDENT	415-490-4300	3300 SELDON CT, STE 10	94539

COMPUTER MANUFACTURERS
(Headquarters & Divisions)

* Present Customer
* Likely Prospect

(sorted by company)

1984 - PERFORMANCE (\$M)

COMPANY	DIVISION	ST	CITY	REG	TERR	COMPUTER SALES	TOTAL SALES	TOTAL INCOME	CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
BRD, INC.	HDQTRS					2							
BTI	HDQTRS	CA	SUNNYVALE	NW		5	24		CARROLL STEELE	DIR, MFG	408-733-1122	870 W. MAUDE AVE.	94086
BUNKER RAMO INFO SYS	HDQTRS	CT	TRUMBULL	EA			100		MICHAEL COOPER	VP, MKTG	203-382-2000	35 NUTMEG DR.	06611
BURR-BROWN (APLD MICRO)	HDQTRS	AZ	TUCSON	SW			70		RICHARD FRETWELL	MKTG MGR	602-747-0711	6730 S. TUCSON BLVD.	85706
* BURROUGHS	HDQTRS	MI	DETROIT	NL	3111	3,072	4,876	245	HOLLIS CASWELL	VP, SYSTEM PROD	313-972-7000	ONE BURROUGHS PLACE	48232
BURROUGHS	COMPUTER PERIPHERALS	FL	CORAL SPRINGS	EA					ROD BUNKER	GENERAL MGR	(305)753-3600	4000 N.W. CORAL RIDGE	33065
BURROUGHS	GEN PURPOSE CMPTRS	CA	PASADENA	SW					C.W. KELLY	GENERAL MGR	(818)351-6551	460 SIERRA MADRE VILLA	91109
BURROUGHS	MICRO COMPTS - HDQ	CA	SAN DIEGO	SW					ROBERT ELFANT	GENERAL MGR	(619)451-3000	10850 VIA FRONTERA	92128
BURROUGHS	MICRO COMPONENTS	CA	CARLSBAD	SW					BRUCE KLINE	MGR, ENGINEERING	(619)438-3000	5600 AVENIDA ENCINAS	92008
BURROUGHS	SYSTEM PRODUCTS	CA	MISSION VIEJO	SW					EDWARD NELSON	GENERAL MGR	(714)768-2170	25725 JERONIMO RD.	92691
BURROUGHS	TREDFYFRIN PLANT	PA	PAOLI	EA					JOHN BURKE	GENERAL MGR	(215)648-4316	2476 SWEDESFORD RD.	19301
BUSINESS OPERATING SYS	HDQTRS	CO	COLORADO SPRG	NW					JOHN OLSON	PRESIDENT	303-634-1541	2835 E. PLATTE AVE.	80909
BYTRONIX	HDQTRS	CA	FULLERTON	SW		18			K. WAKELING	VP	714-871-8763	2701 E. CHAPMAN AVE.	92631
CADMUS CMPTR SYS	HDQTRS	MA	LOMELL	EA			5		FRANK BATTAGLIA	VP, MKTG	617-453-2899	600 SUFFOLK ST.	01854
* CADO	HDQTRS	CA	TORRANCE	SW	3330	68			AUBREY EASTERLIN	VP, MKTG	213-323-8170	2055 W. 190TH ST.	90510
* CALIFORNIA COMPUTER	HDQTRS	CA	SUNNYVALE	NW	3303	4	12		MIKE WESHLER	VP, MKTG	408-734-5811	250 CARIBBEAN DR.	94089
* CALLAN DATA SYSTEMS	HDQTRS	CA	WESTLAKE VLG	SW	3306	67	PV		WILLIAM FOHLMAN	VP, ENGR	805-437-6837	2645 TOMNSGATE RD.	91361
* CAMEX	HDQTRS	MA	WALTHAM	EA		4	8		JAMES KRZYNSKI	VP, MKTG	617-890-6000	360 SECOND AVE.	02154
* CAMBRIDGE DIGITAL SYS	HDQTRS	MA	CAMBRIDGE	EA	4003	6	12		ROBERT FRANK	VP, MKTG	617-491-2700	65 BEHT ST.	02139
CANAAN COMPUTER	HDQTRS	CT	TRUMBULL	EA					RONALD RITCHIE	PRESIDENT	203-372-8100	39 LINDEMAN DR.	06611
CANON	HDQTRS	NY	LAKE SUCCESS	EA			770		N. TAMAI	VP, MKTG	516-488-6700	ONE CANON PLAZA	11042
CASCADE DATA INC.	HDQTRS												
CASIO	HDQTRS	NJ	FAIRFIELD	EA					WILLIAM DURR	MKTG DIR	201-575-7400	15 GARDNER RD.	07006
* CELERITY COMPUTING	HDQTRS	CA	SAN DIEGO	SW	3304	6			TOM LYDON	VP, MKTG	619-271-9940	9692 VIA EXCELENCIA	92126
CENTURIAN COMPUTER	HDQTRS	TX	RICHARDSON	CN		6	15		TOMMY ATWOOD	VP, ENGR	214-644-3628	1111 S. SHERMAN	75081
CENTURY COMPUTER CORP.	HDQTRS	TX	DALLAS	CN		66			WILLIAM FEZELL	VP, MKTG	214-233-3238	14453 GILLIS RD.	75234
* CHARLES RIVER DATA	HDQTRS	MA	FRAMINGHAM	EA	4002	32			GRAHAM BRIGGS	VP, FINANCE	617-626-1000	983 CONCORD ST.	01701
CHARTER INFORMATION	HDQTRS	TX	AUSTIN	CN					JOE BELL	VP, MKTG	512-835-1111	2421 RUTLAND DR.	78758
CHROMATICS	HDQTRS	GA	TUCKER	EA					TERRENCE HUGHEY	PRESIDENT	404-493-7000	2558 MOUNTAIN INDUSTRIAL B	30084
* CIE SYSTEMS	HDQTRS	CA	IRVINE	SW	3304	45			JAY KEAR	EX VP	714-660-1800	2515 MCCABE WAY	92713
CINCINNATI MILACRON	HDQTRS	OH	CINCINNATI	CN					GEORGE REHFELDT	VP	513-841-8100	4701 HARBURG AVE.	45209
CLARY DATA SYSTEMS	HDQTRS												
CLIMAX COMPUTER	HDQTRS					2							
CODATA SYSTEMS	HDQTRS	CA	SUNNYVALE	NW		21			MATT PEREZ	VP	408-735-1744	285 N. WOLFE RD.	94086
COLBY	HDQTRS	CA	MOUNTAIN VIEW	NW		5					415-968-1410	849 INDEPENDENCE AVE.	94043
COLECO INDUSTRIES	HDQTRS	CN		EA		140	597		ALFRED KAHN		203-725-6000		
COLEX TECHNOLOGY	HDQTRS	CA	FOSTER CITY	NW			10		KEN BRANDT	CEO	415-345-7999	737 LINCOLN CENTRE DR.	94404
COLUMBIA DATA	HDQTRS	MD	COLUMBIA	EA		200			SAH IRWIN	CHIEF OPERTG OFC	301-992-3400	9150 RUMSEY RD.	21045
COM DEV	HDQTRS	FL	SARASOTA	EA			10		ROBERT RITCHEY	VP, MKTG	813-753-6411	2006 WHITFIELD INDUSTRIAL	34243
* COMMODORE	HDQTRS	CA	SANTA CLARA	NW	4004	904		44	JAY MINER	VP, PRODUCT DEV.	408-727-1130	3330 SCOTT BLVD.	95050
COMMODORE	MOS TECHNOLOGY	PA	MORRISTOWN	EA					ROBERT BOWIE	VP	(215)666-7950	950 RITTENHOUSE RD.	19403
COMP. DESIGN & APPLIC.	HDQTRS	MA	WALTHAM	EA		15			DAVID BIRKNER	VP, ENGR	617-647-1900	411 WAVERLY OAKS RD.	02154
COMPAL	HDQTRS	CA	BEVERLY HILLS	SW					MITCHEL KADISH	VP	213-652-2263	8500 WILSHIRE BLVD.	90211
* COMPAQ	HDQTRS	TX	HOUSTON	CN	5111	480		13	JAMES ECKHART	SR VP	713-370-0670	20555 FM 149	77070
COMPAQ	COMPAQ TELECOMM.	TX	DALLAS	CN					MURRAY FRANCOIS	PRESIDENT	(214)484-4200	15182 MARSH LANE	75244
COMPETITIVE COMPUTER	HDQTRS	PA	LANCASTER	EA					GARY LEINBERGER	PRESIDENT	717-299-5189	48 W. CHESTNUT ST.	17603
COMPILER SYSTEMS	HDQTRS												
COMPUCORP	HDQTRS	CA	SANTA MONICA	SW		125			MIKE GRAZIANO	VP, SALES	213-829-7453	2211 MICHIGAN AVE.	90404
COMPUFLEX	HDQTRS	CA	FULLERTON	SW					JAMES HALL	VP, MKTG	714-680-4024	2601 E. CHAPMAN AVE, STE 1	92631
* COMPUPRO	HDQTRS	CA	HAYWARD	NW	3102				LEIGH TOMNSEND		415-786-0909	3506 BREAKWATER CT.	94545
COMPUTEK	HDQTRS	MA	BURLINGTON	EA		9					617-272-8100	63 SECOND AVE.	01803
COMPUTER AUTOMATION	HDQTRS	CA	IRVINE	SW		53	61	(1)	MARK STEIN	VP, CMPTR PROD	714-833-8830	2181 DUPONT DR.	92713
COMPUTER AUTOMATION	DATA PROCESSING SYS.	TX	RICHARDSON	CN					MARTHA RYAN	VP, OPERATIONS	(214)783-0993	1800 JAY ELL DR.	75081
COMPUTER CONSOLES	HDQTRS	NY	ROCHESTER	EA		18	131	6	DAVID DANCIK	VP, CONTRL ENGR	716-482-5000	97 HUMBOLDT ST.	14609
* COMPUTER DATA SYSTEMS	HDQTRS	CO	ENGLEWOOD	NW	370	4			PHIL MUELLER	MKTG MGR	303-762-1640	3301 W. HAMPTON AVE.	80110
COMPUTER DEVICES	HDQTRS	MA	NUTTING LAKE	EA			20		GERALD GALICKI	VP, ENGR	617-663-4980	749 MIDDLESEX TRNPK.	01865
COMPUTER EXTENSION SYS	HDQTRS	TX	HOUSTON	CN			4		D.A. MARCUCCIO	VP, MKTG	713-488-8830	16850 TITAN DR.	77058
COMPUTER HARDWARE, INC.	HDQTRS	CA	SACRAMENTO	NW			2				916-929-2020	4350 PELL DR.	95838
COMPUTER INTERFACE	HDQTRS												
COMPUTER SYS DYNAMICS	HDQTRS	CO	THORNTON	NW			4		DAVID JOSEPH	SALES DIR	303-450-5252	12130 PENNSYLVANIA	80241
COMPUTER TALK	HDQTRS	CO	MORRISON	NW		0.1	1		A.J. FARRINGTON	VP, MKTG	303-697-5485	2800 S. ROONEY RD.	80465
COMPUTER TECH.	HDQTRS	OH	MILFORD	CN		5			A.J. VIERLING	PRESIDENT	513-831-2340	2002 FORD CIRCLE	45150
COMPUTER TRANSCIEVER	HDQTRS	NJ	PARAMUS	EA			6		D. TERRONE	DIR, TECH OPERTNS	201-261-6800	66 E. MIDLAND AVE.	07652

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COMPANY	DIVISION	ST	CITY	REG	TERR	COMPUTER SALES	TOTAL SALES	TOTAL INCOME	CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
COMTEC	HDQTRS	MI	FARMINGTON HL	CN				4	DONN ULMER	PRESIDENT	313-478-8775	24350 INDOPLEX	48018
COMTEC	HDQTRS	TX	SAN ANTONIO	CN				1	THOMAS HAYES	PRESIDENT	512-340-8253	309 BREESPORT	78216
CONTROL DATA	HDQTRS	MN	MINNEAPOLIS	CN		464	5,127	31	J.W. LACEY	VP, TECH. & PLNG	612-853-8100	8100 34TH AVE. S.	55440
CONTROL DATA	COMMUNICATIONS SYS.	CA	ANAHEIM	SW					T.W. WOODHALL	MGR, CYBER 1000	(714)999-1556	3285 E. CARPENTER AVE.	92806
CONTROL DATA	DEVELOPMENT	CA	SUNNYVALE	NW					D.E. CARRIGER	GENERAL MGR	(408)744-5000	215 MOFFETT PARK DR.	94089
CONTROL DATA	DIV	CO	ENGLEWOOD	NW					REGIS FRANK	DIST. SALES MGR.	(303)779-2800	7995 E. PRENTICE AVE.	80111
CONTROL DATA	DIV	CA	IRVINE	SW					REGENE PETERSON	OEM ACC'T. REP.	(714)851-5778	18831 VON KARMAN AVE.	92715
CONTROL DATA	ENGINEERING SERVICES	MN	MINNETONKA	CN					W. FITZGERALD	VP, ENGR SERVICES	612-931-3131	5720 SMETANA DR.	55343
CONTROL ELECTRONICS	HDQTRS	FL	WINTER PARK	EA					TOM BEARD	PRESIDENT	305-628-3850	707 NICOLET AVE.	32789
* CONVERGENT TECH.	HDQTRS	CA	SAN JOSE	NW	3130	516		(14)	ELIOT WIGBREIT	CHIEF TECH OFCR	408-945-8877	30 E. PLUMERIA	95134
CONVEX COMPUTER	HDQTRS	TX	RICHARDSON	CN		4			BARRY ROSENBAUM	VP, MARKETING	214-669-3700	1819 FIRMAN, STE. 101	75081
CONVEX COMPUTER	DIV	TX	RICHARDSON	CN					FRANK MARSHALL	V.P. OF DEVELOPMT	(214)952-0200	701 PLANO ROAD	75081
* CORONA	HDQTRS	CA	THOUSAND OAKS	SW	3306	176			ROBERT BASS	VP, OPERATIONS	805-495-5800	275 E. HILLCREST DR.	91360
CORVUS SYSTEMS	HDQTRS	CA	SAN JOSE	NW		59			JOHN MCMAINS	VP, ENGINEERING	408-559-7000	2100 CORVUS DR.	95124
CPT CORP	HDQTRS	MN	MINNEAPOLIS	CN		25	200		FIELDING LUCAS	VP, ENGINEERING	612-937-8000	8100 MITCHELL RD.	55440
* CRAY RESEARCH, INC.	HDQTRS	MN	MINNEAPOLIS	CN	5001	185	229		LESTER DAVIS	VP, MFG & ENGR	612-333-5889	608 2ND AVE. S.	55400
CRAY RESEARCH, INC.	DIV	WI	CHIPPewa FALLS	CN					M. DEAN ROUSH	V.P. ENGINEERING	(715)723-5501	HIGHWAY 178 NORTH	54729
CREATIVE COMMUNICATIONS	HDQTRS	UT	PROVO	NW		4			JOHN MCMULLEN	PRESIDENT	801-373-9843	1662 WEST 820 NORTH	84601
CREATIVE MICRO SYS	HDQTRS	CA	LOS ALAMITOS	SW		3			PETER PROSSEN	VP	213-493-2484	3822 CERRITOS AVE.	90720
CRONEMCO	HDQTRS	CA	MOUNTAIN VIEW	NW		27	52		ROGER MELEN	SR VP, R & D	415-964-7400	PO BOX 7400	94039
CYB SYSTEMS	HDQTRS	TX	AUSTIN	CN		9			MARK ELLSWORTH	VP, MKTG	512-458-3224	6448 HWY 290 E.	78723
CYBER SYSTEMS, INC.	HDQTRS	CA	ANAHEIM	SW					R.A. DEVITO	PRESIDENT	714-772-2051	2570 E. CERRITOS AVE.	92806
* DATA GENERAL	HDQTRS	MA	WESTBOROUGH	EA	4005	913	1,160	83	FRANK SILKMAN	SR VP, FIELD ENGR	617-366-8911	4400 COMPUTER DR.	01580
DATA GENERAL	DIV	ME	WESTBROOK	EA					JOHN GAJDUHKO	QUALITY ASSUR	(207)854-9701	80 EISENHOWER DR.	04092
DATA GENERAL	DIV	MA	WELLESLEY	EA					JEFFREY MERZEL	SYSTEMS ENGINEER	(617)235-8171	888 WORCESTER RD.	02181
DATA GENERAL	DIV	MA	MILFORD	EA					A.M. ANDRADE	SENIOR BUYER	(617)478-4000	50 MAPLE STREET	01757
DATA GENERAL	SEMICONDUCTORS	CA	SUNNYVALE	NW					VARHE SARKISSIAN	VP	(408)739-9200	433 N. MATHILDA AVE.	94086
DATA TECHNOLOGY	HDQTRS	CA	SANTA CLARA	NW		3	50		MIKE KIRBY	VP, MKTG	408-496-0434	2775 NORTHWESTERN PKWY.	95051
DATA TERMINALS & COMM.	HDQTRS	CA	CAMPBELL	NW			8		ROY WORTHINGTON	PRESIDENT	408-554-5776	590 DIVISION ST.	95008
DATAMAC COMPUTER	HDQTRS	CA	SUNNYVALE	NW							408-735-0323	595 PASTORIA AVE.	94086
DATAMATE COMPUTER	HDQTRS												
DATAMEDIA	HDQTRS	NJ	PENNSAUKEN	EA		28			JOHN GILDAY	VP, MFG	609-665-5400	7401 CENTRAL HWY	08109
* DATAPOINT	HDQTRS	TX	SAN ANTONIO	CN	550	223	600	28	JOHN HALE	VP, OPERATIONS	512-699-7000	9725 DATAPOINT DR.	78284
DATAVUE	HDQTRS	GA	NORCROSS	EA		6			JOSEPH ROMASCO	VP, MKTG	404-449-5961	225 TECHNOLOGY PARK	30092
DATUM	HDQTRS	CA	ANAHEIM	SW					RONALD SCHLUND	VP, ENGR	714-533-6333	1363 S. STATE COLLEGE BLVD	92806
DATUM	FREQ. & TIME SYSTEMS	MA	BEVERLY	EA					PAUL ROGERS	VP, MANUF.	(617)927-8220	34 TOZER RD.	01915
DAVIDGE	HDQTRS	CA	BUELLETON	SW				1	DEAN DAVIDGE	PRESIDENT	805-688-9598	292 E. HWY 246, BOX 1869	93427
DAYSTROM SYSTEMS	HDQTRS	OH	CLEVELAND	CN							216-421-8737	11206 EUCLID AVE.	44106
DAYTRONIC	HDQTRS	OH	MIAMISBURG	CN			10		JOHN PERKINS	VP, MKTG	513-866-3300	2589 CORPORATE PLACE	45342
DBS INTERNATIONAL	HDQTRS	PA	MONTGOMERYVILLE	EA					LESTER MCCOUN	VP, SALES	215-628-4810	PO BOX 425	18936
* DEC	HDQTRS	MA	MATYARD	EA	4002	3,266	5,584	328	JOHN SMITH	VP, MFG & ENGR	617-897-5111	146 MAIN ST.	01754
DEC	DIV	MA	SHREWSBURY	EA					MARK O. MILLER	SR. PRODUCT MGR	(617)841-3787	333 SO. STREET	01545
DEC	DIV	MA	WOBURN	EA					WALTER RYAN	CONTRACTS ADMIN.	(617)938-2356	36 CABOT ROAD	01801
DEC	DIV	MA	STOW	EA					GEORGE PREHATIN	PRODCY MANAGER	(617)496-8569	40 OLD BOLTON ROAD	01775
DEC	MANUF. PLANT	AZ	PHOENIX	SW					LES GOLDMAN	PLANT MGR	(602)869-5111	2500 W. UNION HILLS DR.	85069
DEC	MANUF. PLANT	CA	MOUNTAIN VIEW	NW					MIKE DOLAN	PLANT MGR	(415)969-5990	1400 TERRA BELLA AVE.	94040
DEC	MANUF. PLANT	CO	COLORADO SPRGS	CN					JOE COSGROVE	PLANT MGR	(303)594-2900	301 ROCKRIMMON BLVD. S.	80963
DECISION DATA	HDQTRS	PA	HORSHAM	EA			103		MICHAEL BRODY	VP, MKTGT	215-674-3300	100 WITMER RD.	19044
DELTA DATA	HDQTRS	PA	TREVOSE	CN			30		EPHRAIM GITELMAN	SR VP, OPERATIONS	215-322-5400	2595 METROPOLITAN DR.	19047
DENELCOR	HDQTRS	CO	AURORA	NW		5	15		OMKARNATH GUPTA	VP, TECH & ENGR	303-337-7900	17000 E. OHIO PLACE	80041
DIABLO SYSTEMS, INC.	HDQTRS	CA	FREMONT	NW					BERNIE HORN	VP, MKTG	415-498-7000	901 PAGE AVE.	94537
DIGIAC	HDQTRS	NY		EA				2	HAROLD FREESE		516-234-2100		
DIGICOMP RESEARCH	HDQTRS	NY	ITHACA	EA		1	1		JEFF COX	VP, MKTG	607-273-5900	TERRACE HILL	14850
DIGIGRAPHIC	HDQTRS	MN	MINNETONKA	CN			14		GARY PARADISE	VP, MKTG	612-935-9111	10273 YELLOW CIRCLE DR.	55343
DIGITAL COMPUTER	HDQTRS	CA	SAN DIEGO	SW		0.1	6		JOE PELLETIER	VP, SALES	619-566-8500	7430 TRADE ST.	92121
* DIGITAL DATACOMP	HDQTRS	CA	LAGUNA NIGUEL	SW	3304	7						27721 LA PAZ RD.	92677
DIGITAL MASTERS	HDQTRS	NY	NEW YORK	EA					RALPH PRESS	PRESIDENT	212-683-9479	461 PARK AVE., S.	10016
* DIGITAL MICROSYSTEMS	HDQTRS	CA	OAKLAND	NW	3102	15			PETER GARDINER	DIR, ENGR	415-261-1034	1755 EMBARCADERO	94606
DIGITAL SCIENTIFIC	HDQTRS												
DIGITAL SYSTEMS	HDQTRS	MD	WALKERSVILLE	EA			7		WILLIAM ROBERTSON	EX VP	301-845-4141	3 MAIN ST.	21793
DIGITAN SYSTEMS	HDQTRS	NY	BROOKLYN	EA			16		ABE PFEIFER	VP, MKTG	212-436-3777	5007 16TH AVE.	11204
DIGITUS	HDQTRS	MD	BALTIMORE	EA			1		JUN-SING LEE	PRESIDENT	301-467-3223	22 WEST 25TH ST.	21218

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DIRECT INC.	HDQTRS	CA	SANTA CLARA	NW			20		HOMER JAMISON	VP, MKTG	408-980-1414	4201 BURTON DR.	95054
* DISPLAY DATA	HDQTRS	MD	HUNT VALLEY	EA	4004	49			RONALD ZANZARELLA	VP, MKTG	301-667-9211	EXECUTIVE PLAZA IV	21031
DISTRIBUTED CPTR SYS	HDQTRS	MA	WALTHAM	EA		1			I. SHAIR	VP, ENGR	617-890-8200	330 BEAR HILL RD.	02154
DOCUTEL/OLIVETTI	HDQTRS	TX	IRVING	CN			150		ENRICO PESATORI	PRESIDENT	214-258-5400	5615 HIGHPOINT RD.	56062
DRAVAC	HDQTRS	NJ	OAKLAND	EA					MICHAEL LEWIS	PRESIDENT	201-337-8350	16 MULLER RD.	07436
DTC	HDQTRS												
* DUAL SYSTEM CONTROL	HDQTRS	CA	BERKELEY	NW	3102	21			ALBERT PFELTZ	VP, SALES	415-549-3854	2530 SAN PABLO AVE.	94702
DYNABYTE	HDQTRS	CA	MILPITAS	NW		41					408-263-1221	521 COTTONWOOD DR.	95035
EAGLE COMPUTERS	HDQTRS	CA	LOS GATOS	NW		115			E. RYAN	VP, SALES	408-399-4200	983 UNIVERSITY AVE.	95030
ELECTRO DESIGN	HDQTRS	CA	SAN MARCOS	SW		3			CLIFF GRIFFIN	GENERAL MGR	619-471-0680	690 RANCHEROS DR.	92069
ELECTRONIC ASSOCIATES	HDQTRS	NJ	W. LONG BRANCH	EA			55		ROBERT FINNEY	VP	201-229-1100	185 MONMOUTH PKWY.	07764
ELITE CORP.	HDQTRS	KS	WICHITA	CN		1			SAH KNECHT		316-942-6619	4129 MAY ST.	67209
* ELXSI	HDQTRS	CA	SAN JOSE	NW	3102	19	40		JEFF OROMANER	VP, MKTG	408-942-0900	2344 LUNDY PLACE	95131
EMPIRICAL RESEARCH	HDQTRS					3							
ENCORE COMPUTER	HDQTRS	MA	WELLESLEY HILLS	EA					KENNETH FISHER	PRESIDENT	617-273-1022	15 WALNUT ST.	02181
EPIC COMPUTER PROD.	HDQTRS	CA	FOUNTAIN VLY	SW			5				714-964-4722	18381 BANDILIER	92708
EPSON AMERICA	HDQTRS	CA	TORRANCE	SW		101			Y. TSUBOTA	PRESIDENT	213-533-8277	23530 HAMTHORNE BLVD.	90505
EPSON AMERICA	DIV	CA	TORRANCE	SW					VINCENT TARPEY	DIRECTOR OF SALES	(213)534-4500	23600 TELO ST.	90505
ERICSSON	HDQTRS	CA	GARDEN GROVE	SW			160		R.H. FAUTEUX	VP, MKTG	714-895-3962	7465 LAMPSON	92641
ERICSSON INFO SYS	HDQTRS	CT	GREENWICH	EA					BJORN NORDMALL	MKTG MGR	203-661-1666	GREENWICH OFFICE PARK	06902
ESPRIT CPTR PROD	HDQTRS	NY	MELVILLE	EA		65			NEIL SALDIN	VP, ENGR	516-293-5600	100 MARCUS DR.	11747
ESPRIT SYSTEMS	HDQTRS	NY	MELVILLE	EA			30		JOHN SASSO	PRESIDENT	516-293-5600	100 MARCUS DR.	11747
EVOLUTION COMPUTER	HDQTRS					110							
EXIDY SYSTEMS	HDQTRS												
EXXON OFFICE SYS	HDQTRS	CT	STAMFORD	EA					R.A. CONTINO	PRESIDENT	203-329-5000	777 LONG RIDGE RD.	06902
FACIT/DATAROYAL	HDQTRS	NH	MERRIMACK	EA		2			PAUL RAMSDEN	VP, ENGR	603-424-8000	9 EXECUTIVE PARK DR.	03054
FIFTH GENERATION TECH	HDQTRS	NJ	SECAUCUS	EA		2			CHARLES DAVIS	VP, SALES	201-348-2001	600 MEADOWLAND PKWY.	07094
FINANCIAL BUSINESS	HDQTRS	UT	SALT LAKE	NW		2					801-328-2202	9 EXCHANGE PL.	84111
FINANCIAL COMPUTER	HDQTRS					7							
FINDEX	HDQTRS												
FLEISHBEIN	HDQTRS	CA	SAN DIEGO	SW			1		CLIFFORD TAYLOR	PRESIDENT	619-563-1835	3511 CAMINO DEL RIO, S.	92108
* FLEXIBLE COMPUTER	HDQTRS	TX	DALLAS	CN	550				JAY HINTON	VP, OPERATIONS	214-869-1234	1801 ROYAL LANE, STE 810	75229
* FLOATING POINT SYS	HDQTRS	OR	BEAVERTON	NW	3102		118		JOHN HARTE	MKTG DIR	503-641-3151	3601 S.W. MURRAY BLVD.	97005
* FORD-HIGGINS	HDQTRS	CO	BOULDER	NW	370		7		C. REED FORD	VP	303-449-8803	4755 WALNUT ST.	80301
FORMATION	HDQTRS	NJ	MT. LAUREL	EA			17		W.A. REENIE	VP, FIELD ENGR	609-234-5020	823 E. GATE DR.	08054
* FORTUNE SYSTEMS	HDQTRS	CA	REDWOOD CITY	NW	3103	165		(21)	ROBERT RUEBEL	SR VP, MKTG	415-595-8444	101 TWIN DOLPHIN	94065
* FORWARD TECHNOLOGY	HDQTRS	CA	SANTA CLARA	NW	3104	3	4		HOWARD SILVER	VP, ENGR	408-988-2378	2175 MARTIN AVE.	95050
FOTO-MEN	HDQTRS												
FRANKLIN COMPUTER	HDQTRS	NJ	PENNSAUKEN	EA		56			EDWARD GOLDERER	VP, MKTG	609-488-0600	1070 BUSCH MEMORIAL HWY	08110
* FUJITSU	HDQTRS	JP			3102	76	5,167	253			03-216-3211		
* FUJITSU MICRO	HDQTRS	CA	SAN JOSE	NW	3104		3		ED SCHAUER	MKTG DIR	408-434-1160	3025 ORCHARD PKWY.	95134
GAVILAN COMPUTERS	HDQTRS	CA	CAMPBELL	NW		7			JOHN DUFFY	VP, MKTG	408-379-8000	240 HACIENDA AVE.	95008
GENERAL AUTOMATION	HDQTRS	CA	ANAHEIM	SW		35	75	(3)	RENE CARON	VP, MKTG	714-778-4800	1045 S.E. ST.	92803
GENERAL COMMUNICATIONS	HDQTRS	NJ	EATONTOWN	EA	4004						201-938-6560	ONE MAIN ST., STE 502	07724
GENERAL ROBOTICS	HDQTRS	WI	HARTFORD	CN			5		CARL PICK	CEO	414-673-6800	57 N. MAIN ST.	53027
GENERAL SYSTEMS MKTG.	HDQTRS												
GIFFORD COMPUTER SYST.	HDQTRS	CA	SAN LEANDRO	NW		1	8		GERALD HOUSTON	VP, MKTG	415-895-0798	2446 VERNA COURT	94577
GIMIX	HDQTRS	IL	CHICAGO	CN		7			RICHARD DON	VP, MKTG	312-927-5510	1337 W. 37TH PLACE	60609
GLOBAL U.S.I.	HDQTRS	NJ	WALDWICK	EA		46			ROBERT BEARDEN	VP, MKTG	201-445-5050	4 NORTH ST.	07463
GMR INC.	HDQTRS	CA	CARSON	SW		25					213-639-4663	1048 E. BURGROVE S.	90746
GNAT COMPUTERS, INC.	HDQTRS												
* GOULD COMPUTER	HDQTRS	IL	ROLLING MEAD.	CN	4501	177	1,399	89	RICHARD ABRAHAM	VP, ELEC COMPNTS	312-640-4000	TEN GOULD CENTER	60008
GOULD COMPUTER	AMI SEMICONDUCTORS	CA	SANTA CLARA	NW					ROBERT PENN	GENERAL MGR	(408)246-0330	3800 HOMESTEAD RD.	95051
GOULD COMPUTER	COMPUTER SYSTEMS	FL	FT LAUDERDALE	EA					SHELTON JAMES	PRESIDENT	(305)587-2900	6901 W. SUNRISE BLVD.	33313
GOULD COMPUTER	IMAGING & GRAPHICS	CA	SAN JOSE	NW					MIKE BATTAGLIA	VP, SALES	408-263-7155	1870 LUNDY AVE.	95131
GOULD COMPUTER	PROGRAMMABLE CONTROL	MA	ANDOVER	EA					MICHAEL BERNATH	PRESIDENT	(617)475-4700	PO BOX 3083	01810
GOULD COMPUTER	RECORDING SYSTEMS	OH	CLEVELAND	CN					GEORGE TRUDEAU	VP, MARKETING	216-361-3315	3631 PERKINS AVE.	44114
GRAFFPOINT	HDQTRS	CA	SAN JOSE	NW					CORLEY PHILLIPS	PRESIDENT	408-249-7951	4340 STEVENS CREEK BLVD	95129
GRI COMPUTER	HDQTRS												
GRID SYSTEMS	HDQTRS	CA	MOUNTAIN VIEW	NW		108			JOHN ELLENBY	SR VP, R&D & ENGR	415-961-4800	2535 GARCIA AVE.	94043
GTE	HDQTRS	CT	STAMFORD	EA			14,547	1,092	ALLAN RAYFIELD	SR VP, PROD & SVCS	701-474-3042	1 STAMFORD FORUM	06904
GTE	COMMUNICATION SYSTEMS	AZ	PHOENIX	SW					JOHN REDMOND	VP, R & D	(602)582-7000	2500 W. UTOPIA RD.	85027
GTE	COMMUNICATION SYSTEMS	MA	NEEDHAM	EA					FRANCIS GICCA	VP	(617)449-2000	77 A ST.	02194

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GTE	SPRINT COMM.	CA	BURLINGAME	NW					DAVID HOLKAND	VP, MRKTG	415-692-5600	PO BOX 794	94010
GTE	TELENET COMMUNICATIONS	VA	RESTON	EA					MICHAEL VIDNOVIC	VP, PROD OPER	(703)689-6000	12490 SUNRISE VALLEY DR.	22096
GTE	WESTERN	CA	MOUNTAIN VIEW	NW					CLARK FIESTER	VP	(415)966-9111	PO BOX 7188	94039
GULFSTREAM MICRO SYS	HDQTRS	FL	BOCA RATON	EA			13		GREGORY FRIEDMAN	PRESIDENT	305-994-6500	5500 N. FEDERAL HWY.	33431
GVC	HDQTRS	MA	CAMBRIDGE	EA					ANDY GRUBER	MKTG DIR	617-576-1804	222 THIRD ST.	02142
HARDY COMPUTER CORP.	HDQTRS	TX	DALLAS	CN		2					214-620-8340	11430 DENTON DR.	75229
* HARRIS	HDQTRS	FL	MELBOURNE	EA	4501	158	1,995	80	RICARDO DIAZ	VP, MFG PROGRAMS	305-727-9100	1025 W. NASA BLVD.	32919
HARRIS	COMPUTER SYSTEMS	FL	FT LAUDERDALE	EA					JAMES OYLER	VP	(305)974-1700	2101 W. CYPRESS CREEK RD.	33309
HARRIS	DIGITAL TELEPHONE SYS.	CA	NOVATO	NW					STUART HARRISON	VP, MRKTG	415-472-2500	ONE DIGITAL DR.	94948
HARRIS	DISTRIBUTED OFFICE SYS.	FL	MELBOURNE	EA					WHITNEY HANEY	VP	305-242-5000	505 JOHN RODES BLVE.	32901
HARRIS	GOVERNMENT SYSTEMS	FL	MELBOURNE	EA					FRANK LEWIS	SR. VP	(305)727-4000	PO BOX 37	32902
HARRIS	INFORMATION TERMINALS	TX	DALLAS	CN					JACK BARRY	VP, MRKTG	214-386-2000	16001 DALLAS PKMY.	75240
HARRIS	RF COMMUNICATIONS	NY	ROCHESTER	EA					BRUCE FENNIE	VP, SALES	716-244-5830	1680 UNIVERSITY AVE.	14610
HARRIS	SEMICONDUCTORS	FL	MELBOURNE	EA					JON CORNELL	SR. VP	(305)724-7000	PO BOX 883	32902
HEATH	HDQTRS	MI	BENTON HARBOR	CN					WILLIAM JOHNSON	PRESIDENT	616-982-3200	PO BOX 167	49022
HETRA CMPTR & COMM.	HDQTRS	FL	MELBOURNE	EA			5		KEITH MILLIGAN	PRESIDENT	305-723-7731	1151 S. EDDIE ALLEN RD.	32901
* HEURIKON	HDQTRS	WI	MADISON	CN	580	7			JOE RAMUNNI	VP, MKTG	608-271-8700	3201 LATHAM DR.	53713
* HEWLETT PACKARD	HDQTRS	CA	PALO ALTO	NW	3114	2,680	6,000	665	RICHARD HACKBORN	VP, PERIPH GRP	415-857-1501	3000 HANOVER ST.	94304
HEWLETT PACKARD	BOISE	ID	BOISE	NW					RAY SMELEK	GENERAL MGR	(208)376-6000	11311 CHINDEN BLVD.	83707
HEWLETT PACKARD	DISC MEMORY	ID	BOISE	NW					DOUG CLIFFORD	DIR, R & D			
HEWLETT PACKARD	DISC MEMORY	ID	BOISE	NW					GARY PAULSON	SEC MGR, R & D			
HEWLETT PACKARD	DIV	ID	BOISE	NW					MIKE COVAULT	DISC MEMORY DIV	(208)323-2483	11413 CHINDEN BLVD.	83714
HEWLETT PACKARD	GREELEY	CO	GREELEY	NW					FRANK GARAN	SEC MGR, R & D			
HEWLETT PACKARD	GREELEY	CO	GREELEY	NW					DUNCAN TERRY	DIR, R & D			
HEWLETT PACKARD	SAN DIEGO	CA	SAN DIEGO	SW					BRIAN MOORE	GENERAL MGR	(714)487-4100	16399 W. BERNARDO DR.	92127
HEWLETT PACKARD	SIGNAL ANALYSIS	CA	ROHNERT PARK	SW					DUANE HARTLEY	GENERAL MGR	(707)794-1212	1212 VALLEY HOUSE DR.	94928
HEWLETT PACKARD	VANCOUVER	WA	VANCOUVER	NW					JAMES DOUB	GENERAL MGR	(206)254-8110	PO BOX C-006	98668
HEXACE TECH	HDQTRS	CA	SUNNYVALE	NW					ROBERT SITERHOOD	PRESIDENT	408-730-4457	271 N. MATHILDA AVE.	94086
HIS	HDQTRS	MN	MINNEAPOLIS	CN		1,820	6,074	239	RICHARD BOYLE	VP, INDUST SYS	612-870-5401	HONEYWELL PLAZA	55408
HIS	COMMUNICATION NTRKKS	TX	DALLAS	CN					HOMER HUDDLESTON	VP	(214)386-3500	4401 BELTWOOD PKMY S.	75234
HIS	CUSTOMER SERVICES	MA	NEWTON	EA					SY KRAUT	VP/GM	617-552-6000	141 NEEDHAM ST.	02161
HIS	LARGE COMPUTER PROD.	AZ	PHOENIX	SW					R.J. LITSCHGI	VP, PRODUCT DEV.	(602)862-8000	PO BOX 8000	85066
HIS	OFFICE SYSTEMS MRKTG	MA	BILLERICA	EA					WILLIAM GOULD	VP, PRODUCT DEV.	617-671-7000	300 CONCORD RD.	01821
HIS	OPTOELECTRONICS	TX	RICHARDSON	CN					JAMES WILHITE	DIR, OPERATIONS	(214)234-4271	830 E. ARAPAHO RD.	75081
HIS	PROCESS MNGMNT SYS.	AZ	PHOENIX	SW					R.A. HENZEL	DIR, ENGINEERING	(602)863-5000	16404 N. BLACK CANYN HWY	85023
HIS	SPACE/STRAT. AVIONICS	FL	CLEARWATER	EA					C.L. VIGNALI	VP	(813)531-4611	13350 U.S. HWY 19 S.	33546
HIS	TEST INSTRUMENTS	CO	DENVER	NW					L. KNOBLAUCH	VP/GM	303-773-4700	PO BOX 5227	80217
HITACHI AMERICA	HDQTRS	NY	TARRYTOWN	EA			1000		I. BEPPU	GM	914-332-5800	50 PROSPECT AVE.	10591
HITECH INT'L	HDQTRS	CA	SUNNYVALE	NW							408-738-0601	1180-M MIRALOMA WAY	94086
IBC	HDQTRS	CA	CHATSWORTH	SW			12		RANDY ROGERS	PRESIDENT	818-882-9007	21621 NORDHOFF ST.	91311
* IBM	HDQTRS	NY	ARMONK	EA	4501	29,802	45,937	6,582	RALPH GOMORY	SR VP, RESEARCH	914-765-1900	OLD ORCHARD DR.	10504
IBM	DIV	CA	SAN JOSE	NW					WILLIAM BERNARD	MGR, TECH EVAL	(408)284-1077	5600 COTTLE ROAD	95193
IBM	DIV	CA	SAN JOSE	NW					ED CALKINS	PROGRAM MGR.	(408)294-7222	133 BERNAL ROAD	95193
IBM	DIV	CA	SAN JOSE	NW					CHRIS WOOD	PROGRAM MANAGER	(408)284-7219	P32/107	95193
IBM	ENTRY SYSTEMS	FL	BOCA RATON	EA					DAN WILKIE	SITE GENERAL MGR	(305)998-2000	1000 N.W. 51ST ST.	33432
IBM	GENERAL PRODUCTS	AZ	TUCSON	SW					W.E. NELSON	PLANT MGR	(602)741-6400	9000 RITA RD.	85744
IBM	IRVING	TX	IRVING	CN					PAT KEARNEY	DIR, PROG DEV.	(214)956-4595	220 LAS COLINAS BLVD.	75061
IBM	NATIONAL ACCOUNTS	OR	SALEM	NW					ROBERT STEBNER	LEGISLATIVE REP.	(503)399-3800	4263 COMMERCIAL ST, S.E.	97309
ICL	HDQTRS	CT	STAMFORD	EA			72		BOB SMITH	VP, MKTG	203-968-7200	PO BOX 10276	06904
ICON SYSTEMS	HDQTRS	UT	OREM	NW					DENNIS FAIRCLOUGH	PRESIDENT	801-225-6888	774 SOUTH 400 EAST	84058
ILENE INDUSTRIES	HDQTRS	TN	SHELBYVILLE	EA			3		JOHN SMITH	PRESIDENT	615-684-8731	301 STANLEY BLVD.	37160
IMS INT'L	HDQTRS	NV	CARSON CITY	NW			78		JAMES ZAKZESKI	DIR, MKTG	702-883-7611	2800 LOCKHEED WAY	89701
IMSAI	HDQTRS												
IMTEC GROUP	HDQTRS	NJ	PENNSAUKEN	EA			6		GARETH EVANS	PRESIDENT	609-663-3212	1083 THOMAS BUSCH MEM HWY	08110
INCOMNET	HDQTRS	CA	WESTLAKE VLG	SW					GLEN KELLY	SR VP, SYS & ENGR	818-707-0818	5795 LINDERO CANYON RD.	91362
INDEPENDENT BUS. SYS.	HDQTRS	CA	LIVERMORE	NW			2		ALFRED PEASE	PRESIDENT	415-443-3131	5915 GRAHAM COURT	94550
INDUSTRIAL CMPTR DSGNS	HDQTRS	CA	WESTLAKE VLG	SW			2		MICHAEL RAGSDALE	PRESIDENT	818-889-3179	31264 LA BAYA DR., STE A	91362
INFO.SUPPORT SYST.	HDQTRS												
* INFOREX	HDQTRS	MA	BURLINGTON	EA	4002				J.L. HALE	PRESIDENT	617-272-6470	186 MIDDLESEX TPKE.	01803
INFORMATION TECH.	HDQTRS	NH	LINCOLN	CN			10		DONALD DILLON	PRESIDENT	402-423-2682	1345 OLD CHENEY RD.	68512
INFOTEC	HDQTRS	NE	MANCHESTER	EA			23				603-624-2700	ONE PERIMETER RD.	03103
INSTRUM. LAB/PIXEL	HDQTRS												
INT'L PARALLEL MACH.	HDQTRS	MA	NEW BEDFORD	EA							617-990-2977	700 PLEASANT ST.	02740

COMPUTER MANUFACTURERS

(Headquarters & Divisions)

(sorted by company)

* Present Customer
 * Likely Prospect

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COMPANY	DIVISION	ST	CITY	REG	TERR	COMPUTER SALES	TOTAL SALES	TOTAL INCOME	CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
INT'L TECH GROUP	HDQTRS	NY	WHITE PLAINS	EA			15		MARTIN LEINDORFER	PRESIDENT	914-681-0030	3 BARKER AVE.	10601
INTECOLOR	HDQTRS	GA	NORCROSS	EA			26		DAVID DEANS	PRESIDENT	404-449-5961	225 TECHNOLOGY PARK	30092
* INTEGR. BUS. COMPUTERS	HDQTRS	CA	CHATSWORTH	SW	3306	124			RANDY ROGERS	PRESIDENT	818-882-9007	21621 NORDHOFF ST.	91311
INTEGRAPH	HDQTRS												
INTEGRATED DIGITAL PROD	HDQTRS	CA	ANAHEIM	SW			4		PATRICK GOODRICH	PRESIDENT	714-993-5300	4208 E. LA PALMA AVE.	92807
INTEGRATED SOLUTIONS	HDQTRS	CA	SAN JOSE	NW	3104	22			STAN COFFEE	VP, MKTG	408-943-1902	2240 LUNDY AVE.	95131
* INTEL	HDQTRS	CA	SANTA CLARA	NW	3330	123	1,629	198	JACK CARSTEN	SR VP, COMP GRP	408-987-8080	3065 BOMERS AVE.	95051
INTEL	MEMORY PRODUCTS	OR	HILLSBORO	NW					DEAN TOOMBS	GENERAL MGR	(503)681-8080	5200 NE ELAM YOUNG PKWY	97123
INTEL	SPECIAL COMPONENTS	AZ	PHOENIX	SW					JOHN EKISS	GENERAL MGR	(602)869-4390	2402 W. BEARDSLEY RD.	85027
INTELAB APPLIED PHYSICS	HDQTRS	MA	HINGHAM	EA			3		G. MARKSTEIER	PRESIDENT	617-749-3550	40 INDUSTRIAL PARK RD.	02043
INTELLIGENT COMM. NET.	HDQTRS	CA	WESTLAKE VLG	SW			2		CHARAN LOHARA	PRESIDENT	818-707-0818	5795 LINDERO CANYON RD.	91362
INTELLIGENT TECH INT'L	HDQTRS	CA	PALO ALTO	NW					GRAHAM MUIR	PRESIDENT	415-328-2411	151 UNIVERSITY AVE.	94301
INTELLIMAC	HDQTRS	MD	ROCKVILLE	EA		6	6		ROBERT HUBERFELD	PRESIDENT	301-984-8000	6001 MONTESSO RD.	20852
INTERACTIVE SYST. TECH.	HDQTRS			NW									
INTERFACE ELECTRONICS	HDQTRS	MI	FARMINGTON HL	CN			1		KIRIT BAKSHI	PRESIDENT	313-553-9820	37500 ENTERPRISE CRT.	48018
INTERFIL	HDQTRS	CA	CUPERTINO	NW					FRED KASHKOOI	VP, R & D ENGR	408-996-5000	10600 RIDGEVIEW COURT	95014
INTERTEC DATA SYSTEMS	HDQTRS	SC	WEST COLUMBIA	EA		44			CHARLES FUCHS	VP, MKTG	803-796-7800	3243 SUNSET BLVD.	29169
IPL	HDQTRS	MA	WALTHAM	EA		24			G.L. NEUMAN	VP, SALES	617-890-6620	360 SECOND AVE.	02254
IRONICS	HDQTRS	NY	ITHACA	EA					S. SILVERSTEIN	PRESIDENT	607-277-4060	798 CASCADILLA ST.	14850
* ISC SYSTEMS	HDQTRS	WA	SPOKANE	NW	320				BRUCE MCGILANAY	VP, MKTG	800-538-7818	901 E. 2ND AVE.	99220
ISI INT'L	HDQTRS	CA	SUNNYVALE	NW		0.1	40		LEE JENSEN	PRESIDENT	408-743-4300	1275 HAMMERWOOD AVE.	94089
ISOTRON	HDQTRS	CT	FAIRFIELD	EA					ROBERT LEWIS	PRESIDENT	203-255-7443	140 SHERMAN ST.	06430
ITHACA DATA SYSTEMS	HDQTRS	NY	ITHACA	EA		4	6		J.H. WATSON	PRESIDENT	607-273-2500	1650 HANSHAW RD.	14850
ITT	HDQTRS	NY	NEW YORK	EA		125	19,553	448	ROBERT HANSEN	MGR, ENGR	212-752-6000	320 PARK AVE.	10022
ITT	DIV	AZ	TEMPE	SW					WILLIAM MOORE	MGR, OEM SALES	(602)894-7418	1717 WEAT 16TH ST.	85281
IVY MICROCOMPUTER CORP	HDQTRS	MA	WORCESTER	EA		1	32		R. KENNEY	VP, MKTG	617-853-6914	15 ARARAT ST.	01606
JADE COMPUTER PROD	HDQTRS	CA	HAWTHORNE	SW			15		SCOTT ANDERSON	PRESIDENT	213-973-7707	4901 W. ROSECRANS	90250
JC INFO SYSTEMS	HDQTRS	CA	MILPITAS	NW			5		JAI CHOI	PRESIDENT	408-945-0318	469 VALLEY WAY	95035
JONOS INTERNATIONAL	HDQTRS	CA	FULLERTON	SW		5			JOSEPH TAYLOR	VP	714-999-6661	1835 DAMNS WAY	92631
JUPITER SYSTEMS	HDQTRS	CA	ALAMEDA	NW			6		ED CORELL	PRESIDENT	415-523-9000	1100 MARINA VILLAGE PKWY.	95401
KAYPRO CORP	HDQTRS	CA	SOLANO BEACH	SW		204			DAVID KAY	VP, MKTG	619-481-3900	533 STEVENS AVE.	92075
KERONIX	HDQTRS												
KEYDATA	HDQTRS	MA	NEWTON	EA		14			JIM STODDARD	MGR, MKTG	800-343-6982	580 WASHINGTON ST.	02158
KONIX INTERNAT'L CORP.	HDQTRS												
L/F TECHNOLOGIES	HDQTRS	CA	CARSON CITY	NW			20		AL FIEGHEHEN	PRESIDENT	702-883-7611	2800 LOCKHEED WAY	89701
LANIER	HDQTRS	GA	ATLANTA	EA		75	389		RANDY COURTNEY	PROD MKTG MGR	404-329-8000	1700 CHANTILLY DR, N.E.	30324
LASER MICRO SYSTEMS	HDQTRS	CA	SANTA ANA	SW							714-953-7411	1701 E. EDINGER, STE J-4	92705
LASERMASTER	HDQTRS	MI	MINNETONKA	CN			1		MEL NEWSOM	PRESIDENT	612-934-0680	6111 CREEK VIEW TRAIL	55345
LEADING EDGE	HDQTRS	MA	CANTON	EA		42			WILLIAM SELLERS	VP, MKTG	617-828-8150	225 TURNPIKE ST.	02021
LEAR SIEGLER	HDQTRS	CA	ANAHEIM	SW			1,900		J.E. KEENER	VP, ENGR	714-778-3500	901 BALL RD.	92805
LEAR SIEGLER	ASTRONICS	CA	SANTA MONICA	SW					ROBERT HALLOWELL	VP, MFG	(213)452-6000	3400 AIRPORT AVE.	90406
LEAR SIEGLER	AVIONIC SYSTEMS	NJ	FLORHAM PARK	EA					DAVID SHARP	VP, ENGINEERING	(201)822-1300	7-11 VRELAND RD.	07932
LEAR SIEGLER	DATA PRODUCTS	CA	ANAHEIM	SW					J.E. KEENER	VP, ENGINEERING	(714)778-3500	901 E. BALL RD.	92805
LEAR SIEGLER	ELECTRONICS GROUP	CA	SANTA MONICA	SW					RONALD PAOLUCCI	VP	(213)452-6000	2850 OCEAN PARK BLVD.	90405
LEE DATA	HDQTRS	MN	MINNEAPOLIS	CN		15	98		JAMES VELLENGA	SR VP, OPERATIONS	612-828-0300	7075 FLYING CLOUD DR.	55344
LEE DATA	COMPUTER SYSTEMS	MA	LOWELL	EA					G. MILLARD ALLEN	GM	617-453-9911	847 ROGERS ST.	01852
LISP MACHINE	HDQTRS	CA	LOS ANGELES	SW			20		FRANK SPITZNOGLE	PRESIDENT	213-642-1116	6033 W. CENTURY BLVD.	90045
LOCKHEED	HDQTRS - ELEC.	CA	BURBANK	SW					R.M. POWELL	VP, ASTRONAUTICS	818-847-6121	2555 N. HOLLYWOOD WAY	91520
LOCKHEED	AUSTIN	TX	AUSTIN	CN							(512)488-5555	PO BOX 17100	78760
LOCKHEED	SPACE OPERATIONS	FL	TITUSVILLE	EA					C.H. BRAMLEY	VP, HUMAN RESRCS	(305)268-3800	3880 S. WASHINGTON AVE.	32780
LOGICAL BUS. MACHINES	HDQTRS	CA	SUNNYVALE	NW		15			JOHN QUINN	VP, MKTG	408-737-1911	264 SANTA ANA COURT	94089
LOGICAL MICROCOMPUTER	HDQTRS	IL	CHICAGO	CN		3					312-282-9667	4200 W. DIVERSEY AVE.	60639
LOMAS DATA	HDQTRS	MA	WESTBORO	EA		1	1		RICHARD LOMAS	PRESIDENT	617-366-6434	66 HOPKINTON RD.	01581
MAD COMPUTER	HDQTRS	CA	SANTA CLARA	NW							408-980-0840	3350 SCOTT BLVD., BDG 13	95051
MAD INTELLIGENT SYS	HDQTRS	CA	SAN JOSE	NW					HAL KRAUTER	PRESIDENT	408-943-1711	2950 ZANKER RD.	95134
MAGIC COMPUTER	HDQTRS	NJ	FAIRFIELD	EA		2			ANGELO SALVEMINI	VP, MKTG	201-227-8833	333 RT. 46, W.	07006
MAGNOLIA MICROSYSTEMS	HDQTRS	WA	SEATTLE	NW			1		B.K. GJERDING	VP, ENGR	206-285-7266	4039 21ST AVE., W.	98199
MAGNUSON	HDQTRS	CA	SAN JOSE	NW			10		CHARLES STRAUCH	PRESIDENT	408-946-8100	2902 ORCHARD PKWY.	95134
* MASS COMPUTER	HDQTRS	MA	WESTFORD	EA	4002	37	PV		LORRIN GALE	VP, ENGR	617-692-6200	ONE TECHNOLOGY PARK	01886
MATERIALS DEVELOPMENT	HDQTRS	CA	CHATSWORTH	SW		1	2		BARTON GORDON	PRESIDENT	818-700-8290	21541 NORDHOFF ST.	91361
MAVIS COMPUTER	HDQTRS	CA	RANCHO CORDVA	NW			2		GARY HOFF	PRESIDENT	916-635-2467	11257 COLOMA RD., STE A-1	95670
MAXICOM	HDQTRS	TX	HOUSTON	CN			4		JAN SCHMENK	PRESIDENT	713-946-5783	9030 MONROE RD.	77061
* MCDONNELL DOUGLAS	HDQTRS	CA	IRVINE	SW	3330	119	200		GREG LAMSON	VP, MFG	714-250-1000	PO BOX 19501	

COMPUTER MANUFACTURERS

(Headquarters & Divisions)

* Present Customer
 * Likely Prospect

(sorted by company)

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COMPANY	DIVISION	ST	CITY	REG	TERR	COMPUTER SALES	TOTAL SALES	TOTAL INCOME	CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
MCDONNELL DOUGLAS	INFORMATION SYSTEMS	MO	ST. LOUIS	CN					JAMES DONOVAN	VP, MRKTG	314-233-4718	MCDONNELL BLVD., BOX 516	63166
MCDONNELL DOUGLAS	TYMNET	CA	CUPERTINO	NW					AL FENN	VP, NETWORK TECH.	(408)446-6000	20705 VALLEY GREEN DR.	95014
* MDS SYSTEMS	HDQTRS	CA	ORANGE	SW	3303				AMOS DEACON, JR	PRESIDENT	714-998-6900	1995 N. BATAVIA ST.	92665
* MDS QANTEL	HDQTRS	CA	HAYWARD	NW	3102	97			ELEUTHERE POUMAKIS	VP, ENGR	415-887-7777	4142 POINT EDEN WAY	94545
MEGADATA	HDQTRS	NY	BOHEMIA	EA			15		A. BACHANA	PRESIDENT	516-589-6800	35 ORVILLE DR.	11716
MEMOTECH	HDQTRS	MA	NEEDHAM	EA							617-449-6614	99 CABOT ST.	02194
MEPOM INT'L	HDQTRS	TX	DALLAS	CN			1		R.D. MOORE	PRESIDENT	214-660-1900	PO BOX 610719	75261
* METAPHOR COMPTR SYS	HDQTRS	CA	MOUNTAIN VIEW	NW	3103	1			YOGEN DALAL	VP, SYSTEMS DEV.	415-961-3600	1965 CHARLESTON RD.	94043
MICRO BUSINESS APPLICA.	HDQTRS	MN	BURNSVILLE	MN			2				612-894-3470	12281 NICOLLET AVE. S.	55337
MICRO CRAFT	HDQTRS	AL	HUNTSVILLE	EA			1				205-534-4190	2001 WHITESBURG DR.	35801
MICRO EXPANDER	HDQTRS	NY	NEW YORK	EA							212-308-2328	527 MADISON AVE.	10022
MICRO FIVE CORP.	HDQTRS	CA	COSTA MESA	SW		7	PV		BRUCE MENN	VP, ENGR	714-957-1517	3560 HYLAND AVE.	92626
MICRO LINK	HDQTRS	IN	CARMEL	CN			4		A. DONALD DUKE	PRESIDENT	317-846-1721	14602 N. U.S. HWY. 31	46032
MICRO PRODUCTS	HDQTRS	VA	RESTON	EA			70		DENNIS O'DONNELL	PRESIDENT	703-471-6000	11425 ISSAC NEWTON SQ., S.	22090
MICRO SOURCE	HDQTRS					29			DAVID COX	PRESIDENT	919-833-1458	2806 HILLSBOROUGH ST.	27605
* MICROTECH UNLMTD	HDQTRS	NC	RALEIGH	EA					JEREMY CAUSLEY	VP	714-250-1000	PO BOX 19501	92713
* MICRODATA	HDQTRS	CA	IRVINE	SW	3330				GREGORY LAMSON	V.P. U.S. MFG	(714)250-1000	17481 REDHILL AVENUE	92713
MICRODATA	DIV	CA	IRVINE	SW					KEN MASCO	DIR, FIELD OPER	(714)250-1000	2361 MCGAW AVE.	92713
MICRODATA	DIV	CA	IRVINE	SW					A. KRAY	VP, SALES	415-626-5960	165 8TH ST.	94103
MICROMATION	HDQTRS	CA	SAN FRANCISCO	NW		62			LARRY JOHNSON	PRESIDENT	615-245-8081	2307 E. CENTER ST.	37664
MICROPRODUCTS & SYS	HDQTRS	TN	KINGSPORT	EA			1		HAROLD BONDY	PRESIDENT	212-683-2811	276 5TH AVE.	10007
MICROSERVE	HDQTRS	NY	NEW YORK	EA			1						
MIDWEST SCIENTIFIC	HDQTRS					13			WILLIAM LANE		408-737-8555		
MINDSET	HDQTRS	CA		NW					WILLIAM MYERS	PRESIDENT	213-640-0404	2041 ROSECRANS, STE 359	90245
MINI DATA SYSTEMS	HDQTRS	CA	EL SEGUNDO	SW			5		MICHAEL BRENNAN	PRESIDENT	914-694-1101	5 CORPORATE PARK DR.	10604
* MINI-COMPUTER SYSTEMS	HDQTRS	NY	WHITE PLAINS	EA	999		8		ANDY POWLO	NAT'L SALE MGR	914-694-1101	5 CORPORATE PARK DR.	10604
MINICOM SYSTEMS	HDQTRS	NY	WHITE PLAINS	EA			8						
* MINICOMP	HDQTRS				999								
MINOLTA	HDQTRS	NJ	RAMSEY	EA			2		LEN SALVO	NAT'L SALES MGR	201-825-4000	101 WILLIAMS DR.	07446
MITEC COMPTR BUSINESS	HDQTRS	CA	WOODLAND HILLS	SW					HAROLD KURTH	PRESIDENT	213-999-2311	21250 CALIFA ST., STE 102	91367
MITSUBISHI ELECTRONICS	HDQTRS	JP		JP		10	876		ORVILLE NEELY		714-957-4000		
MITSUBISHI ELECTRONICS	DIV	TX	CARROLLTON	CN					MIKE MOCKE	APPLICATIONS ENGR	(214)241-5300	2105 LUNA ROAD	75066
MITSUBISHI ELECTRONICS	DIV	UT	SALT LAKE CITY	NW					RICHARD KACIK	OEM SALES REP.	(801)531-9481	50 S. MAIN ST.	84144
MODULAR COMPUTER SYST.	HDQTRS	FL	FT LAUDERDALE	EA		37	75	(24)	HAROLD KOPLOW	VP, R & D	305-974-1380	1650 W. MCNAB RD.	33310
MOHAWK DATA SCIENCES	HDQTRS	NJ	PARSIPPANY	EA		81	363		MICHAEL COOPER	VP, MKTG	201-540-9080	7 CENTURY DR.	07054
* MOLECULAR COMP., DURANGO	HDQTRS	CA	SAN JOSE	NW	3104	129	PV		HARVEY HARTMAN	VP, MKTG	408-262-2122	251 RIVER OAKS PKWY	95134
MOMENTUM COMPUTER	HDQTRS	CA	SAN JOSE	NW		8			GEORGE O'LEARY	PRESIDENT	408-942-0638	2730 JUNCTION AVE.	95134
MONOLITHIC	HDQTRS	CA	SANTA CLARA	NW		1	10		H.T. CHUA	VP, PROD & TECH	408-970-9700	2175 MISSION COLLEGE BLVD	95054
MONROE SYSTEMS FOR BUS.	HDQTRS	NJ	MORRIS PLAINS	EA		16			JOHN ALTONJI	VP, MKTG	201-993-2000	THE AMERICAN RD.	07950
MORROW DESIGNS	HDQTRS	CA	SAN LEANDRO	NW		154			KEVIN MANKER	DIR, ENGR	415-430-1970	600 MCCORMICK ST.	94577
MOSAIC TECH	HDQTRS	MA	BILLERICA	EA							617-667-2383	47 MANNING RD.	01821
MOSTEK	HDQTRS	TX	CARROLLTON	CN		8			RNOLD MYRICK	VP	214-466-6000	1215 W. CROSBY RD.	75006
* MOTOROLA	HDQTRS	IL	SCHAUMBURG	CN	3330		5,534	349	RUDOLPH DEMICHELE	VP, MFG	312-397-5000	1301 E. ALGONQUIN RD.	60196
MOTOROLA	GOVERNMENT ELECT.	AZ	SCOTTSDALE	SW					KENNETH PORTER	DIR, R & D	(602)949-3033	8201 E. MCDOWELL RD.	85252
MOTOROLA	INFORMATION GROUP	AZ	TEMPE	SW					NED DOHERTY	SITE MGR	(602)994-6580	3013 S. 52ND ST.	85282
MOTOROLA	SEMICONDUCTOR PROD.	AZ	PHOENIX	SW					ROBERT JENKINS	DIR, TECHNOLOGY	(602)244-6900	5005 E. MCDOWELL RD.	85008
MOTOROLA	UNIVERSAL DATA SYS.	AL	HUNTSVILLE	EA					MARK SMITH	PRESIDENT	(205)837-8100	5000 BRADFORD DR.	35805
MOTOROLA/CODEX	HDQTRS	MA	MANSFIELD	EA		39	250		RUDOLPH DEMICHELE	VP, MFG	617-364-2000	20 CABOT BLVD.	02048
* MOTOROLA/FOUR PHASE	HDQTRS	CA	CUPERTINO	NW	3130	96	618		EDGAR VANCE	SR VP, SYS DEV	408-255-0900	10700 N. DEANZA BLVD	95014
MULTITECH SYSTEMS	HDQTRS	MN	NEW BRITGTON	CN		0.2	9		WARREN MESENBRING	VP	612-631-3550	82 SECOND AVE. S.E.	55112
MYLEE DIGITAL	HDQTRS	MO	MARYLAND HGTS	CN		1	4		THOMAS FISHER		314-567-3420	155 WELDON PKWY.	63043
N. AMERICAN MICROTCH	HDQTRS	CD	RICHMOND	CD			2		SAM SEOW	PRESIDENT	604-276-8214	106-11511 BRIDGEPORT RD.	
NABU	HDQTRS	CD	OTTAWA						KEITH SOLEY	VP, MKTG	613-596-6700	1051 BAXTER RD.	
NAS	HDQTRS	CA	MOUNTAIN VIEW	NW		525	1,200		JERRY UNDERMAN	VP, MKTG	415-962-6000	800 E. MIDDLEFIELD RD.	94043
NAT'L COMPUTER TECH	HDQTRS	CA	ROSEVILLE	NW			2		DAVID ALLING	MKTG DIR	916-924-9994	658 COMMERCE CIRCLE	95678
NAT'L SEMICONDUCTOR	HDQTRS	CA	SANTA CLARA	NW			1660		C.E. SPORCK	PRESIDENT	408-721-5000	2900 SEMICONDUCTOR DR.	95051
NBI	HDQTRS	CO	BOULDER	NW		52	177	14	HERSCHEL KRANITZ	VP, MKTG	303-444-5710	3450 MITCHELL LANE	80301
* NCR	HDQTRS	OH	DAYTON	NL	4111	1,023	4,074	343	R.M. FLEET	VP	513-445-5000	S. MAIN & K STS.	45379
NCR	COMTEN	MN	ST. PAUL	CN					EDWARD CLARK	VP, MRKTG	612-638-7777	2700 SNELLING AVE., N.	55113
NCR	DIV	SC	WEST COLUMBIA	EA					NANCY WALKER	COMMODITY BUYER	(803)796-9250	3325 PLATT SPRINGS RD.	29169
NCR	ENGR & MFG	CA	SAN DIEGO	SW					JAMES SHELTON	DIR, SYS ENGR	(619)485-1220	16550 W. BERNARDO DR.	92127
NCR	GENERAL PURPOSE SYS.	FL	LAKE MARY	EA					LES SISSON	GM	305-323-9250	584 S. LAKE EMMA DR.	32746
NCR	SYSTEMEDIA GROUP	OH	MIAMISBURG	CN					DON CLASON	GM	513-439-8301	9095 WASHINGTON CHURCH	45342

COMPUTER MANUFACTURERS

(Headquarters & Divisions)

(sorted by company)

* Present Customer
 * Likely Prospect

COMPANY	DIVISION	ST	CITY	REG	TERR	1984 - PERFORMANCE (\$M)			CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
						COMPUTER SALES	TOTAL SALES	TOTAL INCOME					
NEC	DIV	JP	TOKYO, 183	JP					SHUN KANEKO	ASS'T. GEN. MGR	0423 64-1111	10, NISSHINCHO I-CHOME	
NEC	DIV	WG	MUNICH	WG					GUNTER SCHAFFT	SALES ENGINEER	089/932041	KLAUSENBURGER STRABE 4	
NEC	DIV	WG	WEST GERMANY	WG					ETICH HERTER	SALES ENGR DISK		WEISESTRABE 148	
NEC	DIV	CA	SUNNYVALE	NW					HAL MALONE	DIST SALES MGR.	(401)245-6191	599 N. MATHILDA AVE.	94086
NEC	DIV	SM	SWEDEN	SM					BENGT WINROTH	SALES MANAGER	(08)99 83 40	VARUVAGEN 9B	
NEC	DIV	MA	WELLESLEY	EA					MICHAEL NOTTAGE	REG. SALES MGR	(617)431-1140	57 RIVER STREET	02181
NEC HOME ELECTRONICS	HDQTRS	IL	ELK GROVE VLG	CN		60	7,400	187	GARY MORRIS	VP	312-228-5900	1401 ESTES AVE.	60007
NEC INFORMATION SYSTEMS	HDQTRS	MA	BOXBOROUGH	EA		61	200		SAMUEL ADAMS	VP, MKTG	617-264-8635	1414 MASSACHUSETTS AVE.	01719
NELMA DATA	HDQTRS	CD	MISSISSAUGA	CD			5		RON WILSON	PRESIDENT	416-624-0334	5170A TIMBERLEA BLVD.	
NETCOM PRODUCTS	HDQTRS	CA	SUNNYVALE	NW					ROBERT HURLEY	PRESIDENT	408-734-8732	430 TOYAMA DR.	94089
NEW ENGLAND DIGITAL	HDQTRS	VT	WHITE RVR JCT	EA			5		JOHN MCQUADE	VP, MFG	802-295-5800	49 N. MAIN ST.	05001
NICHOLAS INT'L	HDQTRS	FL	PALM HARBOR	EA			1		P. VOSOTAS	PRESIDENT	813-786-1671	2320 U.S. 19, N.	33563
* MIXDORF	HDQTRS	MA	WALTHAM	EA	4003	22	1,038		ROBERT NICEWICZ	SR VP	617-273-0480	300 THIRD AVE.	02154
* NMC ELECTRONICS	HDQTRS	CA	HUNTINGTON BC	SM	3303	6			THOMAS CONNEEN	VP, MKTG	714-895-8000	15641 COMPUTER LANE	92649
NOHALT	HDQTRS	NY	FARMINGDALE	EA		1			BRIAN KEANE	DIR, MKTG	516-225-2121	1750 NEW HWY.	11735
NORSK DATA	HDQTRS	NOR				142			ODD GRONLAD		02-29-54-00		
NORTH ATLANTIC IND.	HDQTRS	NY	HAUPTAUAGE	EA			23		S.R. RAUSCH	VP, MKTG	516-982-6060	60 PLANT AVE.	11788
NORTH STAR COMPUTERS	HDQTRS	CA	SAN LEANDRO	NW		166			MARK GREENBERG	VP, R & D	415-357-8500	14440 CATALINA ST.	94577
* NORTHERN TELECOM	HDQTRS	TN	NASHVILLE	CN	3104	374	3,196	232	L. COLIN BEAUMONT	EX VP, TECH	615-256-5900	259 CUMBERLAND BEND	37228
NORTHERN TELECOM	BNR	CA	MOUNTAIN VIEW	NW					RICHARD SEVCIK	VP, SWITCHING SYS	(415)969-9170	685-A E. MIDDLEFIELD	94043
NORTHERN TELECOM	BUSINESS COMMUNICATNS	CA	SANTA CLARA	NW					ROBERT KELSCH	GENERAL MGR	(408)988-5550	2305 MISSION COLLEGE BLD	95050
NORTHERN TELECOM	DIV	CA	NEWPORT BEACH	SW					GARY GOODMAN	REG SALES MGR	(714)955-0450	4000 MAC ARTHUR BLVD.	92660
NORTHERN TELECOM	ELEC. COMPONENTS	FL	W. PALM BEACH	EA					DIJU RAHA	GENERAL MGR	(305)845-8455	1601 HILL AVE.	33407
NORTHERN TELECOM	INTEGRATED OFFICE SYS.	TX	RICHARDSON	CN					ROBERT POTTER	VP	(214)234-5300	1001 E. ARAPAH0 RD.	75081
NORTHERN TELECOM	SEMICONDUCTOR CMPNTS	CA	SAN DIEGO	SW					KENNETH BRADLEY	GENERAL MGR	(619)485-8900	16350 W. BERNARDO DR.	92127
NORTHERN TELECOM	SPECTRUM	NJ	MARLTON	EA					PAUL MARUN	VP	(609)996-2500	8000 LINCOLN DR. E.	08053
* NOVELL SYSTEMS	HDQTRS	UT	OREM	NW	370	16			DAVID OWEN	VP, ENGR	801-226-8202	1170 N. INDUSTRIAL PARK DR	84057
NUTRONICS	HDQTRS	TX	DALLAS	CN					JOEL STEPHENS	PRESIDENT	214-630-2562	4747 IRVING BLVD., STE 214	75247
NW MICROCOMPUTERS	HDQTRS												
ODELL INDUSTRIES	HDQTRS												
OEMTEK	HDQTRS	CA	SAN JOSE	NW					JAMES SIENL	PRESIDENT	408-247-1100	3707 WILLIAMS RD.	95117
OLIVETTI	HDQTRS	IT				47			PHILIPPE SUYS		514-282-1880		
OLYMPIA USA	HDQTRS	NJ	SOMERVILLE	EA		12			WILLIAM LUBRANO	VP, MKTG	201-722-7000	RT. 22, PO BOX 22	08876
OMNIBYTE	HDQTRS	IL	W. CHICAGO	CN			6		G.S. URBAN	PRESIDENT	312-231-6880	245 W. ROOSEVELT RD., BLDG	60185
OMNITEC (BIT)	HDQTRS												
ONTEL	HDQTRS	NY	WOODBURY	EA		65	150		B. STEPHENS	VP, MKTG	516-364-2121	250 CROSSWAY PARK DR.	11797
ONYX	HDQTRS	CA	SAN JOSE	NW		194			MIKE CALLAGHAN	VP, MKTG	408-946-6330	25 E. TRIMBLE RD.	95131
OSBORNE COMPUTER CO.	HDQTRS	CA	FREMONT	NW		16			DAVID MILLER	VP, MKTG	415-490-6885	42680 CHRISTY ST.	94538
OSM COMPUTER	HDQTRS	CA	MOUNTAIN VIEW	NW					SURESH PANIKAR	VP, ENGR	415-961-8680	665 CLYDE AVE.	94043
OTRONA CORP.	HDQTRS	CO	BOULDER	NW		68			JOSEPH CALABRIA	VP	303-444-8100	4725 WALNUT ST.	80301
PACIFIC MICROCOMPUTERS	HDQTRS	CA	CARDIFF	SW			5		JIM BROWNING	PRESIDENT	619-436-8649	160 CHESTERFIELD DR.	92007
PANASONIC	HDQTRS	NJ	SECAUCUS	EA		16			ED GELB	NAT'L SALES MGR	201-348-7000	ONE PANASONIC WAY	07094
PARADYNE	HDQTRS	FL	LARGO	EA			210		JERRY KENDALL	SR VP, MKTG	813-530-2000	8550 ULMERTON RD.	33540
* PARALLEL COMPUTER	HDQTRS	CA	SANTA CRUZ	NW	3104	2	PV		RICHARD EPPEL	VP, ENGR	408-429-1338	3004 MISSION ST.	95060
PASCO INT'L	HDQTRS	NJ	SADDELBROOK	EA			4		EDWARD CARABETTA	PRESIDENT	201-794-8881	293 N. MIDLAND AVE.	07662
PC DESIGNS	HDQTRS	OK	TULSA	CN			2		PATRICK GRIFFIN	PRESIDENT	918-494-9765	8238 S. GARY AVE.	74137
PCE SYSTEMS	HDQTRS	CA	SACRAMENTO	NW			1				916-921-5454	4219 S. MARK CRT.	95834
PENTEL OF AMERICA	HDQTRS	CA	TORRANCE	SW		1					213-775-1256	2715 COLUMBIA ST.	90503
* PERKIN-ELMER	HDQTRS	CT	NORWALK	EA	4004	181	1,182	66	JAMES SIMS	VP, DATA SYS GRP	203-762-1000	MAIN AVE.	06859
PERKIN-ELMER	DATA SYSTEMS	NJ	HOLMDALE	EA					JAMES SIMS	VP	(201)870-4500	15 MAIN ST, RTE 520	07733
PERKIN-ELMER	DIV	CD	ONTARIO	CD					EDDIE LAM	TECH. SER. MGR.	(416)677-8990	6486 VISCOUNT RD.	L4V1H3
PERKIN-ELMER	OPTICAL TECHNOLOGY	CT	DANBURY	EA					PAUL PETTY	VP	(203)797-5000	100 WOOSTER HEIGHTS RD.	06810
PERQ SYSTEMS	HDQTRS	PA	PITTSBURGH	CN		15	PV		BARRY HARRIS	PROD MKTG DIR	412-355-0900	2600 LIBERTY AVE.	15230
PERSONAL COMPUTER PROD	HDQTRS	CA	SAN DIEGO	SW			6		EDWARD SAVARESE	PRESIDENT	619-485-8411	11590 W. BERNARDO CRT.	92127
PERSONAL MICRO COMP.	HDQTRS	CA	SUNNYVALE	NW		3			LESTER LEE	PRESIDENT	408-737-8444	275 SANTA ANA COURT	94086
PERTEC COMPUTER CORP.	HDQTRS	CA	IRVINE	SW		43			HAROLD HAAGSMA	VP, MFG & OPER	714-660-0488	17112 ARMSTRONG AVE.	92714
PERTEC COMPUTER CORP.	PERIPHERALS	CA	SAN JOSE	NW					DARELL MEYER	PRODUCT SALES MGR	(408)287-6558	50 W. BROKAW ROAD	95110
PHAZE INFO MACHINES	HDQTRS	AZ	SCOTTSDALE	SW			10		BRIAN BENZAR	VP, ENGR	602-991-6855	7650 E. REDFIELD RD.	85260
PHILIPS INFO SYSTEMS	HDQTRS	TX	DALLAS	CN			62		J. LINDNER	PRESIDENT	214-980-2000	15301 DALLAS PKWY., STE 30	75248
PINNAACLE SYSTEMS	HDQTRS	TX	DALLAS	CN							214-340-4941	10410 MARKISON RD.	75238
PIXEL CMPTR	HDQTRS	MA	WOBRUN	EA		28			ERNIE RIOUX	VP, MKTG	617-933-7735	300 WILDWOOD ST.	01081
* PLESSEY PERIPHERAL SYS	HDQTRS	CA	IRVINE	SW	3303				WARREN SINSHEIMER	PRESIDENT	714-540-9945	17466 DAHMLER, PO BOX 1961	92714
* PLEXUS	HDQTRS	CA	SAN JOSE	NW	3104	24	PV		JAY FLATLEY	VP, ENGR	408-943-9433	3833 N. FIRST ST.	95134

COMPUTER MANUFACTURERS
(Headquarters & Divisions)

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(sorted by company)

COMPANY	DIVISION	ST	CITY	REG	TERR	1984 - PERFORMANCE (\$M)			CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
						COMPUTER SALES	TOTAL SALES	TOTAL INCOME					
* POINT 4 DATA	HDQTRS	CA	IRVINE	SW	3303	45			DONALD SAVITT	VP, ENGR	714-863-1111	2569 MCCABE WAY	92714
POLO MICROSYSTEMS	HDQTRS	CA	MOUNTAIN VIEW	NW		1			ROBERT SHERWOOD	VP, MKTG	415-948-2990	2570 EL CAMINO REAL, W.	94040
POLYCOMPUTERS	HDQTRS	CA	ANAHEIM	SW		1	3		LAWRENCE WEISS	SR VP, MKTG	714-632-0144	3822 E. LAPALMA AVE.	92807
POLYMORPHIC SYSTEMS	HDQTRS	CA	SANTA BARBARA	SW					SIROUS PARSAEI	PRESIDENT	805-967-0468	5330 DEBBIE RD.	93111
POLYTRIANDA	HDQTRS	CA	ANAHEIM	SW			3		RICHARD WILL	CEO	714-821-0911	2535 VIA PALMA	92801
* PRIME	HDQTRS	MA	NATICK	EA	4005	449	642	28	ROLAND PAMPEL	VP, R & D	617-655-8000	PRIME PARK	01760
PRIME	PHOENIX	AZ	PHOENIX	SW					ROBERT LITTLEFIELD	BRANCH MGR	(602)957-0125	2198 E. CAMELBACK	85016
PROCESSOR TECHNOLOGY	HDQTRS					19							
* PRODIGY SYSTEMS	HDQTRS	NJ	ISELIN	EA	3103		9		MARTIN MANES	VP, SALES	201-283-2000	497 LINCOLN HWY.	08830
PROGRAMMED CONTROL	HDQTRS					3							
PRONTO COMPUTERS	HDQTRS	CA	TORRANCE	SW			16		HENRY GASBARRO	PRESIDENT	213-539-6400	3730 SKYPARK DR.	90505
PSYTEX, INC.	HDQTRS	CA	FOUNTAIN VLY	SW					HERBERT BERKOWITS	EX VP	714-964-7818	18368 BANDILIER CIRCLE	92708
PULAU ELECTRONICS	HDQTRS												
* PYRAMID TECHNOLOGY	HDQTRS	CA	MOUNTAIN VIEW	NW	3102	30	PV		EDWARD DOLINAR	PRESIDENT	415-965-7200	1295 CHARLESTON RD.	94039
Q1 CORPORATION	HDQTRS	NY	HAMPSHAIRE	EA		0.4	2		MARC AYES		516-732-3800	125 RICEFIELD LANE	11787
QDP COMPUTER	HDQTRS	OH	CLEVELAND	CN		6			WILLIAM FEENEY	VP, MKTG	216-526-0838	10330 BRECKSVILLE RD.	44141
QUAY CORP.	HDQTRS	NJ	EATONTOWN	EA			7		GEORGE HILL	VP, MKTG	201-542-7340	22 MERIDIAN RD.	07724
* QUBIX GRAPHIC SYSTEMS	HDQTRS	CA	SAN JOSE	NW	3104						408-370-9229	1295 PARKMOOR AVE.	95126
R2E OF AMERICA	HDQTRS					370	0.4						
RACAL-MILGO	HDQTRS	FL	SUNRISE	EA			240		RAYMOND COLUCCI	PRES, MFG	305-475-1601	1601 N. HARRISON PKWY	33323
RAIR MICROCOMPUTER	HDQTRS	CA	SANTA CLARA	NW		8	24		MARK POTTS	PRESIDENT	408-988-1790	4101 BURTON DR.	95054
RANDAL DATA SYSTEMS	HDQTRS					3							
RAYTHEON	HDQTRS	CA	GOLETA	SW			5,996	243	STAN KARP	MGR, IND RELATNS	805-967-5511	6380 HOLLISTER AVE.	93117
RAYTHEON	SEMICONDUCTOR	CA	MOUNTAIN VIEW	NW					JEFF MUSCATINE	MGR, MKTG COMM.	(415)968-9211	350 ELLIS ST.	94043
RCA SERVICE	HDQTRS	NJ	CHERRY HILL	EA			50		D.H. COOK	PRESIDENT	609-488-7300	RT. 38, BLDG. 204-2	08385
RECOGNITION EQUIPMENT	HDQTRS	TX	DALLAS	CN		3	143		JAMES DONOHO	VP, MW FIELD ENGR	214-579-6000	PO BOX 660204	75266
RECOR CORP.	HDQTRS												
REGENCY SYSTEMS	HDQTRS	IL	CHAMPAIGN	CN			3		JANE EADES	PRESIDENT	217-398-8067	3200 FARBER DR.	61821
RETAIL SCIENCES	HDQTRS												
REXON BUS. MACHINES	HDQTRS	CA	CULVER CITY	SW		47			CLIFTON LEWIS	EX VP	213-641-7110	5800 UPLANDER WAY	90230
* RIDGE COMPUTERS	HDQTRS	CA	SANTA CLARA	NW	3104	8	10		HUGH MARTIN	VP, ENGR	408-986-8500	2451 MISSION COLLEGE BLVD	95054
RNA	HDQTRS	CA	LIVERMORE	NW			8		LISA WHITEHURST	PRESIDENT	415-449-8652	2456 ARMSTRONG ST.	94550
* ROLM CORP.	HDQTRS	CA	SANTA CLARA	NW	3104		700		DENNIS KABOOJIAN	VP, SYSTEMS DEV	408-986-1000	4900 OLD IRONSIDES DR.	95054
ROYAL BUS. MACHINES	HDQTRS	CT	WINDSOR	EA		0.4			ZENE KAWAGAI	EX VP	203-683-2222	500 DAY HILL RD.	06095
RUBICON SYSTEMS	HDQTRS	FL	MAITLAND	EA			20		JERRY HORN	PRESIDENT	305-834-2393	215 CANDACE DR.	32751
SABER TECH	HDQTRS	CA	SAN JOSE	NW					ROBERT MURDEN	PRESIDENT	408-945-9600	2381 BERING DR.	95131
SAMSUNG ELECTRONICS	HDQTRS	CA	COMPTON	SW			200		Y.S. LEE	PRESIDENT	213-637-0254	1309 WALNUT PKWY.	90220
SANTA CLARA SYSTEMS	HDQTRS	CA	SAN JOSE	NW		3			DARRELL EVORA	VP, MKTG	408-729-6700	1610 BERRYESSA RD.	95133
SANYO	HDQTRS	NJ	MOONACHIE	EA		35	200		SANDY WALTERS	MKTG MGR	201-440-9300	51 JOSEPH ST.	07074
SBE	HDQTRS	CA	CONCORD	NW			6		THOMAS ANDERSON	PRESIDENT	415-680-7722	2400 BISSO LANE	94520
SCI SYSTEMS	HDQTRS	AL	HUNTSVILLE	EA		15	400		THOMAS COOK	SR VP	205-882-4800	5000 TECHNOLOGY DR.	35807
SCOTTSDALE SYSTEMS	HDQTRS	AZ	SCOTTSDALE	SW			4		CARL ALBRIZZI	PRESIDENT	602-941-5856	617 N. SCOTTSDALE RD., STE	85257
SD SYSTEMS	HDQTRS	TX	DALLAS	CN			55				214-340-0303	10111 MILLER RD.	75238
SEATTLE COMPUTER	HDQTRS	WA	SEATTLE	NW		0.3	2		DEBBIE BROCK	VP	206-575-1830	1114 INDUSTRY DR.	98188
SECOND SOURCE CMPTRS	HDQTRS	CA	TUSTIN	SW			7		FRANK JACOBSON	PRESIDENT	714-832-7724	14712 BENTLEY CIRCLE	92680
SEEQUA	HDQTRS	MO	ODENTON	EA		11			JAMES HOFFMAN	DIR, MKTG	301-672-3600	8305 TELEGRAPH RD.	21113
* SENTINEL COMPUTER	HDQTRS	OH	CINCINNATI	CN	5001		7		ELI LADUKE	VP, OPERATIONS	513-984-6622	9902 CARVER DR.	45242
* SEQUENT	HDQTRS	OR	PORTLAND	NW	3105						503-626-5700	14360 N.W. SCIENCE PARK DR	97229
* SEQUOIA SYSTEMS	HDQTRS	MA	MARLBOROUGH	EA	4003				AL DEVI MAGGI	VP, MKTG	617-480-0800	3 METROPOLITAN CORP. CNTR.	01752
SGS SEMICONDUCTOR	HDQTRS	AZ	PHOENIX	SW		16	250		DAVE HAGE	DIR, SYSTEMS MKTG	602-867-6245	1000 E. BELL RD.	85022
SHAREDATA	HDQTRS	MN	EDEN PRAIRE	CN			14		JOHN ZENTZ	PRESIDENT	612-829-0409	7132 SHADY OAK RD.	55344
* SHARP ELECTRONICS CORP	HDQTRS	NJ	PARAMUS	EA	3102	40	800		SKIP KENDRICK	MGR, MKTG	201-265-5600	10 SHARP PLAZA	07652
SILICON GRAPHICS	HDQTRS	CA	MOUNTAIN VIEW	NW					EDWARD MCCRACKEN	PRESIDENT	415-960-1980	630 CLYDE CRT.	94043
SILICON TECH	HDQTRS	MD	FREDERICK	EA							301-695-9560	102 W. CHURCH ST.	21701
SINCLAIR	HDQTRS					4							
SINGER	HDQTRS	CA	SUNNYVALE	NW			2,518	65	KENNETH BUTLER	DIR, ENGR	408-720-5500	1077 E. ARQUES AVE.	94088
SMC SEICOM	HDQTRS	NJ	BRIDGEWATER	EA		14			DOUGLAS DAVIDSON	PRESIDENT	201-685-0070	981 RT. 22	08807
SMOKE SIGNAL BRDCSTG.	HDQTRS	CA	WESTLAKE VLG	SW			8		GARY KILLEN	MGR, PRODUCTION	818-889-9340	31336 VIA COLINAS	91362
SOLARIS COMPUTER	HDQTRS	CA	MILPITAS	NW			5		CHARLES GREATREX	PRESIDENT	408-943-1818	1994 TAROB CRT.	95035
SOLVATION	HDQTRS	MA	SOUTHBORO	EA			1		STEVEN KLUDT	PRESIDENT	617-481-9390	302 TURNPIKE RD.	01772
SONY	HDQTRS	NY	NEW YORK	EA		3			WILLIAM KENDRICK	MGR, NAT'L MKTG	212-371-5800	9 W. 57TH ST.	10019
SONY	INFORMATION PRODUCTS	NJ	PARK RIDGE	EA					ROBERT BRYSON	VP, MKTG	201-930-6585	ONE SONY DR.	07656
SONY	MANUFACTURING	CA	SAN DIEGO	SW					MIKE MORIMOTO	PRESIDENT	(619)487-8500	16450 W. BERNARDO DR.	92127

COMPUTER MANUFACTURERS
(Headquarters & Divisions)

(sorted by company)

* Present Customer
* Likely Prospect

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1984 - PERFORMANCE (\$M)

COMPANY	DIVISION	ST	CITY	REG	TERR	COMPUTER SALES	TOTAL SALES	TOTAL INCOME	CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
SONY	TECHNOLOGY CENTER	CA	PALO ALTO	NW					GRANT SMITH	VP	(415)965-8700	1003 ELMELL CRT.	94303
SORD COMPUTER	HDQTRS	NY	NEW YORK	EA		11			JERRY ELLIS	PRESIDENT	212-759-0140	645 5TH AVE.	10022
SOURCE ONE SYSTEMS	HDQTRS	MO	KANSAS CITY	CN			1		JERRY ELLIS	PRESIDENT	816-531-5455	3101 MERCIER, STE 407	64111
SOUTHWEST TECH PROD	HDQTRS	TX	SAN ANTONIO	CN		21			JERRY O'BRIEN	DIR, MKTG	512-344-0241	219 W. RHAPSODY	78216
SPACE BYTE COMPUTER	HDQTRS												
SPECTRAVIDEO	HDQTRS	CA	FREMONT	NW					JOHN CONSTANTINE	PRESIDENT	415-490-4300	3300 SELDON CRT., STE 10	94539
SPECTRIX MICROSYSTEMS	HDQTRS	CD	MARKHAM	CD			7		RONALD ROSS	PRESIDENT	416-474-1955	431 ALDEN RD., UNIT 10	
* SPERRY	HDQTRS	NY	NEW YORK	NL	3114	1,816	5,687	287	CLYDE ALLEN	VP, ENGR CMPTR SYS	212-484-4444	1290 AVE. OF THE AMERICAS	10104
SPERRY	DIV	PA	BLUE BELL	EA					VICTOR VELLIVIS	PROD. DIRECTOR	(215)542-4539	P.O. BOX 500	19424
SPERRY	DIV	MN	ST. PAUL	CN					BOB BREITENSTN	SR. SYS CONSULT	(612)635-3247	P.O. BOX 64942	55164
SPERRY	DIV	UT	SALT LAKE CITY	NW					PHIL MARSH	MGR. DISK QUAL	(801)539-6144	322 N. SPERRY WAY	84116
STANDARD ENGINEERING	HDQTRS	CA	FREMONT	NW			5		JOEL KORELITZ	PRESIDENT	415-657-7555	48500 KATO RD.	94538
STAR TECH	HDQTRS	OR	PORTLAND	NW		40			LARRY INGEMSEN	VP, R & D	503-227-2052	111 S.W. FIFTH AVE.	97204
STEARNS COMPUTER	HDQTRS	MN	EDEN PRAIRIE	CN					ROBERT BODEN	PRESIDENT	612-829-0361	10371 N. 70TH ST.	55344
STM ELECTRONICS	HDQTRS	CA	MENLO PARK	NW		20			TONY HEO	VP, SALES	415-326-6226	535 MIDDLEFIELD RD.	94025
* STRATUS COMPUTER	HDQTRS	MA	MARLBORO	EA	4002	119		5	BOB FREIBURGHOUSE	VP, ENGR	617-460-2000	55 FAIRBANKS BLVD.	01752
STRIDE MICRO	HDQTRS	NV	RENO	NW			14		AL BENNETT	VP, MFG	702-322-6868	4905 ENERGY WAY	89520
SULCUS COMPUTER	HDQTRS	PA	GREENSBURG	EA			5		JEFFREY RATNER	PRESIDENT	412-836-2000	BANK AND TRUST BLDG.	15601
SUMITRONICS	HDQTRS	CA	SUNNYVALE	NW			15		T. ALAIYAMA	PRESIDENT	408-737-7683	580 N. PASTORIA AVE.	94086
* SUN MICROSYSTEMS	HDQTRS	CA	MOUNTAIN VIEW	NW	3103	23	PV		SCOTT MCNEALY	PRESIDENT	415-960-1300	2550 GARCIA AVE.	94043
SUPER COMPUTER	HDQTRS	CA	GARDENA	SW			5		JUNUS LEE	VP, MKTG	213-532-2133	17813 S. MAIN ST., STE 123	90248
SUPERSET	HDQTRS	CA	SAN DIEGO	SW			5		IAN HIRSCHSOHN	PRESIDENT	619-452-8665	11025 ROSELLE ST.	92121
* SYDIS	HDQTRS	CA	SAN JOSE	NW	3104				JOHN CLARK	PRESIDENT	408-945-1100	410 E. PLUMERIA DR.	95134
* SYMBOLICS	HDQTRS	MA	CAMBRIDGE	EA	3306		40		RUSSELL NOFTSKER	PRESIDENT	617-577-7500	11 CAMBRIDGE CNTR.	02142
SYNCR0 SYSTEMS	HDQTRS												
SYNAPSE	HDQTRS	CA	MILPITAS	NW		2	PV		ELLIOT NESTLE	VP, HARDWARE ENGR	408-946-3191	801 BUCKEYE COURT	95035
SYNTECH DATA SYSTEMS	HDQTRS					2							
SYSTEL	HDQTRS	CA	SANTA CLARA	NW			20		SCOT STERN	VP, MKTG	408-986-8280	3307 EDWARD AVE.	95054
SYSTEMS COMPUTER CORP.	HDQTRS	CA	SAN FRANCISCO	NW					MICHAEL LEVITT	PRESIDENT	415-442-1500	520 3RD ST.	94107
SYSTEMS CONCEPTS	HDQTRS												
SYSTEMS ENGINEERING	HDQTRS	CA	ORANGE	SW			2				714-633-4460	1601 ORANGWOOD AVE.	92668
SYSTEMS GROUP	HDQTRS												
SYSTEMS MEASUREMENT	HDQTRS					1							
SYZYGY COMPUTER SYS	HDQTRS	CA	SAN DIMAS	SW					ROXANNE JONES	PRESIDENT	714-592-2851	465 BORREGO CRT., STE D	91773
TAB PRODUCTS	HDQTRS	CA	PALO ALTO	NW			110		JOHN PETRY	VP, MFG	415-852-2400	1400 PAGE MILL RD.	94304
* TANDEM	HDQTRS	CA	CUPERTINO	NL	3113	415	532	43	LAWRENCE LAURICH	VP, ENGR	408-725-6000	19333 VALCO PKWY	95014
TANDEM	DIV	CA	CUPERTINO	NW					DEREK GINGER	MGR - DISK STRG	(408)725-5701	19191 VALCO PARKWAY	95014
TANDEM	DIV	TX	AUSTIN	CN					DENNIS O'CONNELL	PRODUCT MGR.	(512)244-8000	14231 TANDEM BLVD.	78728
TANDEM	DIV	TX	AUSTIN	CN					PETE PRIMAVERA	MFTG. MANAGER	(512)244-8000	2116 KRAMER LANE	78758
TANDY/RADIO SHACK	HDQTRS	TX	FT. WORTH	CN		867	2,736	282	RON STEGALL	SR VP	817-390-3921	1800 ONE TANDY CENTER	76102
TANO CORP.	HDQTRS	LA	NEW ORLEANS	EA		2	31		MICHAEL ARON	DIR, MFG	504-254-3500	4301 POCHÉ CRT W.	70129
TARBELL ELECTRONICS	HDQTRS	CA	CARSON	SW		8			DONALD TARBELL	PRESIDENT	213-538-4251	950 DOVLEN PLACE	90746
TAVA	HDQTRS					11							
TECHNICO	HDQTRS	MD	BALTIMORE	EA			2				301-669-4100	2901 DRUID PARK DR.	21215
TEKTRONIX	HDQTRS	OR	BEAVERTON	NW			1,331	112	GEORGE KERSELS	VP, ELECT COMP	503-627-7111	PO BOX 500	97077
TEKTRONIX	GRASS VALLEY	CA	GRASS VALLEY	NW					BIRNEY DAYTON	VP, ENGR R&D	(916)273-8421	PO BOX 1114	
TELCON INDUSTRIES	HDQTRS					13							
TELEFILE COMPUTER	HDQTRS	CA	IRVINE	SW			9		NORMAN VOGEL	VP, MKTG	714-250-1830	17131 DAIMLER ST.	92714
TELEMATICS INT'L	HDQTRS	FL	FT LAUDERDALE	EA			12		JOHN PITT	PRESIDENT	305-772-3070	1415 NORTHWEST 62ND ST.	33309
TELERAM COMM. CORP.	HDQTRS	NY	WHITE PLAINS	EA		1	9		MALCOLM CHARMAN	VP, MKTG	914-694-9270	2 CORPORATE PARK DR.	10604
TELEVIDEO SYSTEMS	HDQTRS	CA	SAN JOSE	SW		275		5	K. PHILIP HWANG	PRESIDENT	408-745-7760	550 E. BROKAW RD.	95150
TELEX COMPUTER PROD	HDQTRS	OK	TULSA	CN			400		GEORGE BRAGG	PRESIDENT	918-627-1111	6422 EAST 41ST	74135
TERAK	HDQTRS	AZ	SCOTTSDALE	SW							602-958-4800	14151 N. 76TH ST.	85260
* TEXAS INSTRUMENTS	HDQTRS	TX	DALLAS	CN	550	346	5,742	316	PETER FIELD	VP, MKTG	214-995-2011	PO BOX 229012, MS 57	75265
THE COMPUTER SHOP	HDQTRS					8							
THREE RIVER COMPUTER	HDQTRS	PA	PITTSBURG	EA							412-621-6250	720 GROSS ST.	15224
* TOLERANT SYSTEMS	HDQTRS	CA	SAN JOSE	NW	3102				DAVID CAPLAN	PRESIDENT	408-946-5667	81 E. DAGGETT DR.	95134
TORYO INC	HDQTRS					3							
TOSHIBA	HDQTRS	CA	SUNNYVALE	NW			13,372	344	ROBERT COLE	VP, OPERATIONS	408-739-0560	1220 MIDAS WAY	94086
TOSHIBA	DIV	NJ	CHERRY HILL	EA					GEORGE PHILLIPS	SR. SALES REP.	(609)751-1522	1873 ROUTE 70	08003
TOSHIBA	DIV		TOKYO 105	JP					TONOKO DOYAMA	INT'L. OPERATIONS	(03) 457-3220	1-1, SHIBAURA 1-CHOME	
TOSHIBA	DIV	CA	TUSTIN	SW					HIDEMI MIURA	MKTG. MANAGER	(714)730-5000	2441 MICHELLE DRIVE	92680
TOWER SYSTEMS IND	HDQTRS	CO	BOULDER	NW			3		RAYMOND MOORE	PRESIDENT	303-444-1956	75 MANHATTAN DR., STE 205	80303

COMPUTER MANUFACTURERS
(Headquarters & Divisions)

* Present Customer
* Likely Prospect

(sorted by company)

1984 - PERFORMANCE (\$M)

COMPANY	DIVISION	ST	CITY	REG	TERR	1984 - PERFORMANCE (\$M)			CONTACT	TITLE	PHONE	ADDRESS 1	ZIP CODE
						COMPUTER SALES	TOTAL SALES	TOTAL INCOME					
TRIECH TECHNOLOGY	HDQTRS	CA	SANTA ANA	SW					ROY RONDA	MKTG	714-550-9615	2110 EAST 1ST ST., STE 105	92705
TRIMARCT & ASSOC.	HDQTRS	PA	STATE COLLEGE	EA			4		SCOTT DEMO	VP, SALES	814-234-5659	139 N. GILL ST.	16801
TRIOS MICRO SYSTEMS	HDQTRS	CA	SAN FRANCISCO	NW					DON SPEIRS	VP, MKTG	415-583-7733	147 BEACON ST.	94080
TRM-FUJITSU CORP.	HDQTRS	OH	CLEVELAND	CN			6,062	266	H.L. CATERSON	VP, PLNG & TECH.	216-383-2121	23955 EUCLID AVE.	44117
TRM-FUJITSU CORP.	CUSTOMER SERVICE	NJ	FAIRFIELD	EA					RAYMOND WOLKTZ	DIR, MRKTG	201-575-7110	15 LAM DR.	07006
TRM-FUJITSU CORP.	ESL	CA	SUNNYVALE	NW					DONALD JACOBS	PRESIDENT	(408)738-2888	495 JAVA DR.	94088
TRM-FUJITSU CORP.	OPTOELECTRONICS	TX	CARROLLTON	CN					KEN HAGGE	VP/GM	214-323-2200	1207 TAPPAN CIRCLE	75006
UNICOM	HDQTRS												
UNICOMP	HDQTRS						1		ROBERT MCCLURE	PRESIDENT	303-526-9263	602 PARK POINT DR.	80401
UNIDOT	HDQTRS	CO	GOLDEN	NW				16	FRANK ZIMMER	PRESIDENT	201-231-9400	50 COUNTY LINE RD.	08876
* UNITRONIX	HDQTRS	NJ	SOMERVILLE	EA	4004			1	JOEL HECKMAN	PRESIDENT	716-631-3011	2457 WEHRLE DR.	14221
UNIVERSAL DATA RESEARCH	HDQTRS	NY	BUFFALO	EA					RICHARD HAHN	SR VP, MKTG	805-499-5831	500 N. VENTU PARK RD.	91320
VECTOR GRAPHIC	HDQTRS	CA	THOUSAND OAKS	SW			95		MARK PUHALOVICH	VP, OPERATIONS	415-786-0909	3506 BREAKWATER COURT	94545
* VIASYN CORP.	HDQTRS	CA	HAYWARD	NW	3102		42		DAN SEALE	VP, MKTG	408-438-6680	380 EL PUEBLO RD.	95066
VICTOR TECH.	HDQTRS	CA	SCOTT'S VALLEY	NW			179		JIM WILLOTT	VP, ENGR	408-259-7370	1610 BERRYESSA RD.	95133
VICTORY COMPUTER	HDQTRS	CA	SAN JOSE	NW			7		J. HIRSCH	PRESIDENT	312-640-1776	2633 GREENLEAF	60007
VIDEO TECHNOLOGY	HDQTRS	IL	ELK GROVE VLG	CN				4	GARRETT GRUENER	PRESIDENT	415-841-9595	2150 SHATTUCK AVE., STE 30	94704
VIRTUAL MICROSYSTEMS	HDQTRS	CA	BERKELEY	NW					JOHN BRUNI	VP, MKTG	617-851-5000	540 MAIN ST.	01876
VISUAL COMPUTER	HDQTRS	MA	TEWKSBURY	EA			8		JOHN LAUDER	PRESIDENT	313-588-2050	1394 RANKIN DR.	48083
VOTRAX	HDQTRS	MI	TROY	CN				210	NORMAN LEDOUX	DIR, OPERATIONS	617-459-5000	ONE INDUSTRIAL AVE.	01851
WANG	HDQTRS	MA	LOWELL	EA			765	210	COURTNY WANG	PRESIDENT	(303)773-0773	6251 S. ULSTER ST.	80111
WANG	COMMUNICATIONS	CO	ENGLEWOOD	NW					JEFF POST	VP, MKTG	213-978-8600	14009 CRENSHAW BLVD.	90250
WAVE MATE	HDQTRS	CA	HAWTHORNE	SW			5		R. GAVERT		412-642-3800		
WESTINGHOUSE ELECTRIC	HDQTRS	PA		CN				536	JIM WALTZ	VP, GENERAL SYS	801-224-6400	1875 S. STATE ST.	84057
* WICAT	HDQTRS	UT	OREM	NW	370		21	27	BRUCE RAY	PRESIDENT	303-442-0324	PO BOX 3581	80307
WILD HARE COMPUTER	HDQTRS	CO	BOULDER	NW				3	KEN FEDESNA	VP, ENGR	312-267-2240	3401 N. CALIFORNIA AVE.	60618
WILLIAMS ELECTRONICS	HDQTRS	IL	CHICAGO	CN				68	JACQUES ANDERSEN	PRESIDENT	312-529-3080	528 MORSE AVE.	60193
WINTEX COMPUTER	HDQTRS	IL	SCHAUMBERG	CN				1	DAVID BASTEN	GENERAL MGR	818-889-4455	141 TRIUNFO CANYON RD.	91359
WORDPLEX	HDQTRS	CA	WESTLAKE VLG	SW			6	20	DIANE SIMON	VP, MATERIALS	408-946-3075	3040 N. FIRST ST.	95131
WYSE	HDQTRS	CA	SAN JOSE	NW			6		DAVID KEARNS	PRESIDENT	203-329-8700	PO BOX 1600	06904
XEROX	HDQTRS	CT	STAMFORD	EA				291	KEN ISAAC	VP, ENGINEERING	(714)632-7500	1270 N. KRAEMER BLVD.	92806
XEROX	CENTURY DATA SYS.	CA	ANAHEIM	SW					GREG BLAMPIED	VP, TECH DEV.	(213)306-4000	5310 BEETHOVEN ST.	90066
XEROX	COMPUTER SERVICES	CA	LOS ANGELES	SW					VINCE CIULLA	VP	(415)498-7000	901 PAGE AVE.	94545
XEROX	DIABLO SYSTEMS	CA	FREMONT	NW					V.J. CIULLA	VP, OPERATIONS	(214)689-6000	1341 W. MOCKINGBIRD LANE	75247
XEROX	INFORMATION PROD.	TX	DALLAS	CN					DOUGLAS DRAKE	GRP MGR	716-422-8081	800 PHILLIPS RD.	14580
XEROX	PARTS REHAB, SPARES	NY	WEBSTER	EA					W.W. CASTOR	VP, MRKTG	213-536-7000	880 APOLLO ST.	90245
XEROX	PRINTING SYSTEMS	CA	EL SEGUNDO	NW					LOUIS KARAGIANIS	VP	(818)351-2351	250 N. HALSTEAD ST.	91109
XEROX	SPECIAL INFO SYS.	CA	PASADENA	SW					ROBERT JOHNSON	VP, ENGINEERING	(408)988-2800	2710 WALSH AVE	95051
XEROX	VERSATEC	CA	SANTA CLARA	NW				2	PHILIP HAINES	PRESIDENT	714-556-9210	3176 PULLMAN ST., STE 119	92626
XMARK	HDQTRS	CA	COSTA MESA	SW					LAURENCE LIEBSON	PRESIDENT	617-938-8095	52 CUMMINGS PARK	01801
XYVISION	HDQTRS	MA	WOBURN	EA				1	ROGER ROACH	PRESIDENT	303-850-9400	PO BOX 11190	81001
XZYTEK	HDQTRS	CO	PUEBLO	NW				1	BOB DELTAVEN	VP, MKTG	713-580-6191	14511 FALLING CREEK	77014
ZAISAN	HDQTRS	TX	HOUSTON	CN					HAL HORROCKS	VP, SALES	714-474-1170	2572 WHITE RD.	92714
ZAX	HDQTRS	CA	IRVINE	SW				4	JOHN McMULLEN	PRESIDENT	801-377-9948	1662 WEST 820 NORTH	84601
ZEDA COMPUTERS INT'L	HDQTRS	UT	PROVO	NW				3	TONY GIGLIOTTI	PRESIDENT	415-828-3000	6700 SIERRA LANE	94568
ZENDEX	HDQTRS	CA	DUBLIN	NW				5	HOY CHANG	VP, ENGR	312-391-8860	1000 MILWAUKEE AVE.	60025
ZENITH	HDQTRS	IL	GLENVIEW	CN			1,080	1,716	RICHARD PIEHL	VP, ENGR	408-727-7662	2400 WALSH AVE.	95051
ZENTEC	HDQTRS	CA	SANTA CLARA	NW			27		THOMAS POPEK	SR VP, COMPONENTS	408-370-8000	1315 DELL AVE.	95008
* ZILOG	HDQTRS	CA	CAMPBELL	NW	3104				EVA ZOBOKI	VP	619-562-9306	10845-A WHEATLANDS AVE.	92071
ZOBEX	HDQTRS	CA	SANTEE	SW			0.1		LES LAZAR	PRESIDENT	818-780-1800	7023 VALJEAN AVE.	91406
ZOLTECH	HDQTRS	CA	VAN NUYS	SW				5					

COMPUTER MARKET FORECAST
WORLDWIDE

	IDC (units - K)							CATAGORIES
	1984	1985	1986	1987	1988	1989	1990	
PC	9582	9901	11000	11900	13100	14800	16700	1 user (<\$10K)
SMALL	372	418	496	583	675	771	866	2-16 users (\$10K - \$100K)
MEDIUM	38	38	45	53	61	70	78	17-128 users (\$100K - \$1000K)
LARGE	3.8	2.8	3.5	4.6	4.7	4.2	5	>128 users (>\$1000K)

	INFOCORP (units - K)							CATEGORIES
	1984	1985	1986	1987	1988	1989	1990	
MICRO	11545	12461	15224	19614	24593	30292	35807	\$0 - \$11K
SMALL	533	574	655	762	881	1015	1125	\$12K - \$349K
LARGE	13.8	17.1	18.9	20.5	21.9	23.1	24.2	\$350K+

	DATAQUEST (units - K)							CATEGORIES
	1984	1985	1986	1987	1988	1989	1990	
PC	15567	20179	23736	27733	34551	39174		< \$10K
BUSINESS	2309	3261	4615	5539	6719	7271		BUSINESS ENVIRONMENT
TECHNICAL	454	671	983	1502	2284	3476		TECHNICAL ENVIRONMENT (education, research, design)

TOP COMPANY MARKET SHARES - 1984

COMPUTERS
(Large, Medium, Small, Pc)

SOURCE: IDC

COMPANY	L		MARKET SHARE	TOTAL - 1984	
	(\$M)	UNITS		SALES (\$M)	INCOME (\$M)
* IBM	15,430	2,533	75%	45,937	6,582
* BURROUGHS	1,339	339	6%	4,876	245
HIS	1,090	269	5%	6,074	239
* SPERRY	989	149	5%	5,687	287
* AMDAHL	753	215	4%	779	36
NAS	451	149	2%	1,200	
CONTROL DATA	389	58	2%	5,127	31
* CRAY	185	22	1%	229	
* DEC	57	40	0%	5,584	328
* NCR	22	10	0%	4,074	343
DENELCOR	5	4	0%	15	

COMPANY	M		MARKET SHARE	TOTAL - 1984	
	(\$M)	UNITS		SALES (\$M)	INCOME (\$M)
* IBM	5,500	8,445	40%	45,937	6,582
* DEC	1,968	11,370	14%	5,584	328
* BURROUGHS	1,007	1,363	7%	4,876	245
* HEWLETT-PACKARD	1,006	4,100	7%	6,000	665
HIS	544	1,589	4%	6,074	239
* A T & T	517	1,150	4%	33,000	1,370
* SPERRY	446	616	3%	5,687	287
* TANDEM	415	2,440	3%	532	43
* PRIME	391	1,160	3%	642	28
* DATA GENERAL	369	950	3%	1,160	83
* NCR	191	257	1%	4,074	343
* GOULD COMPUTER	165	530	1%	1,399	89
* BASIC FOUR CORP.	143	953	1%	437	(8)
NORSK DATA	128	580	1%		
* HARRIS	127	560	1%	1,995	80
WANG	120	520	1%	2,185	210
* MCDONNELL DOUGLAS	105	650	1%	200	
CONTROL DATA	75	72	1%	5,127	31
NAS	74	148	1%	1,200	
* STRATUS COMPUTER	71	318	1%	42	5
* PERKIN ELMER	69	307	1%	1,182	66
GLOBAL U.S.I.	46	244	0%	20	
* MDS QANTEL	32	140	0%		
* PYRAMID TECHNOLOGY	30	100	0%	PV	
MODULAR COMPUTER SYST.	26	130	0%	75	(24)
IPL	24	72	0%	10	

COMPANY	S		MARKET SHARE	TOTAL - 1984	
	(\$M)	UNITS		SALES (\$M)	INCOME (\$M)
* IBM	2,932	62,680	28%	45,937	6,582
* HEWLETT-PACKARD	798	21,173	8%	6,000	665
* DEC	767	34,215	7%	5,584	328
* NCR	621	12,592	6%	4,074	343
* DATA GENERAL	459	17,371	4%	1,160	83
* BURROUGHS	347	5,130	3%	4,876	245
WANG	321	8,471	3%	2,185	210
* TEXAS INSTRUMENTS	301	11,210	3%	5,742	316
* SPERRY	295	1,610	3%	5,687	287
ONYX	194	15,664	2%	26	
HIS	186	4,239	2%	6,074	239
* ALTOS COMPUTER	177	17,400	2%	103	10
APPL.DIG. DATA SYST	175	2,500	2%	70	
* DATAPOINT	170	6,903	2%	600	28
* FORTUNE SYSTEMS	165	19,650	2%	70	(21)
* CONVERGENT TECH.	164	7,500	2%	361	(14)
TELEVIDEO SYSTEMS	159	18,000	2%	163	5
* INTEL	123	9,200	1%	1,629	198
* INTEGR.BUS.COMPUTERS	123	10,910	1%		
* PERKIN ELMER	109	1,848	1%	1,182	66
MOHAWK DATA SCIENCES	81	3,855	1%	363	
* MOTOROLA/FOUR PHASE	80	1,135	1%	618	
* BASIC FOUR CORP.	80	2,446	1%	437	(8)
* CADO	68	2,735	1%	50	
NORTH STAR COMPUTERS	67	9,350	1%	41	
* CALLAN DATA SYSTEMS	67	3,100	1%	PV	
* MDS QANTEL	66	1,740	1%		
* ALPHA MICRO	62	3,970	1%	51	2
* MOLECULAR COMP., DURANGO	60	5,800	1%	PV	
CENTURY COMPUTER CORP.	60	1,225	1%	3	

COMPANY	PC		MARKET SHARE	TOTAL - 1984	
	(\$M)	UNITS		SALES (\$M)	INCOME (\$M)
* IBM	5,940	1,913,300	31%	45,937	6,582
APPLE	2,399	1,375,100	12%	1,516	64
ZENITH	1,080	200,000	6%	1,716	63
* COMMODORE	904	3,573,000	5%	304	44
* HEWLETT-PACKARD	876	187,550	5%	6,000	665
TANDY/RADIO SHACK	867	562,500	5%	2,736	282
* COMPAQ	480	160,000	2%	329	13
* DEC	474	122,300	2%	5,584	328
* BURROUGHS	378	26,300	2%	4,876	245
* CONVERGENT TECH.	353	95,000	2%	361	(14)
* NORTHERN TELECOM	344	26,800	2%	3,196	232
WANG	325	81,200	2%	2,185	210
* APOLLO COMPUTER	273	7,000	1%	80	133
KAYPRO CORP	204	112,000	1%	100	
COLUMBIA DATA	200	52,842	1%	75	
* NCR	189	47,600	1%	4,074	343
VICTOR TECH.	179	54,000	1%		
* CORONA	174	60,100	1%	80	
MORROW DESIGNS	153	31,000	1%	29	
COLECO INDUSTRIES	140	255,000	1%	597	
ATARI	130	200,000	1%		
* A T & T	129	30,000	1%	33,000	1,370
ITT	125	40,000	1%	19,553	448
COMPUCORP	122	16,975	1%	40	
TELEVIDEO SYSTEMS	116	44,050	1%	163	5
EAGLE COMPUTERS	115	23,900	1%		
EXIDY SYSTEMS	110	19,950	1%		
GRID SYSTEMS	108	18,000	1%	30	
EPSON AMERICA	101	51,000	1%		
NORTH STAR COMPUTERS	99	35,900	1%	41	

TOP COMPUTER MARKET SHARES - 1984

(By Size Class & Model)

Source: IDC

MANUFACTURERS	MODEL	SIZE CLASS	ASP (\$K)	WW BASE 1984	WW SHPMTS - '84		MARKET SHARE
					UNITS	(\$M)	
IBM	5150 (PC)	PC	3	1,955,000	1,100,000	3,300	18%
IBM	XT	PC	4	435,000	390,000	1,560	8%
ZENITH	Z110,Z120,Z150,Z160	PC	5	200,000	200,000	1,080	6%
APPLE	APPLE II, IIe	PC	1	1,970,000	650,000	926	5%
COMMODORE	64	PC	0.3	3,950,000	2,700,000	675	4%
APPLE	MACINTOSH	PC	2	275,000	275,000	604	3%
COMPAQ	COMPAQ/OMPRO+, DESKPRO	PC	3	212,000	160,000	480	3%
APPLE	LISA II	PC	5	100,000	100,000	450	2%
APPLE	APPLE IIc	PC	1	350,000	350,000	418	2%
TANDY/RADIO SHACK	TRS-80/16	PC	9	77,000	45,000	405	2%
HEWLETT-PACKARD	150	PC	4	110,000	100,000	400	2%
BURROUGHS	TC500/700/3000/5000	PC	16	22,500	22,500	360	2%
IBM	PC 3270	PC	9	40,000	40,000	340	2%
WANG	ALL PC BUT TEMPEST	PC	4	112,200	81,200	325	2%
IBM	PC JR	PC	1	250,000	250,000	300	2%
APOLLO COMPUTER	DN SERIES	PC	39	7,000	7,000	273	1%
CONVERGENT TECH.	NGEN	PC	3	82,000	82,000	230	1%
DEC	RAINBOW 100	PC	3	141,150	70,000	227	1%
IBM	PORTABLE	PC	2	100,000	100,000	220	1%
KAYPRO CORP	KAPRO 2, 10	PC	2	230,000	110,000	197	1%
TANDY/RADIO SHACK	TRS-80/2000 SERIES	PC	3	65,000	65,000	182	1%
NCR	DECISION MATE V	PC	4	44,200	44,200	177	1%
CORONA	PC, PORTABLE, PCXT	PC	3	85,000	60,000	174	1%
VICTOR TECH.	9000	PC	3	125,000	50,000	165	1%
MORROW DESIGNS	MICRODECISION	PC	5	30,000	30,000	150	1%
IBM	PC-AT	PC	6	25,000	25,000	145	1%
COLECO INDUSTRIES	ADAM	PC	1	255,000	255,000	140	1%
DEC	DECIMATE II	PC	4	57,000	35,000	133	1%
ATARI	400,800,600/800/1200XL	PC	1	916,000	200,000	130	1%
AT&T	6300	PC	4	30,000	30,000	129	1%

MANUFACTURERS	MODEL	SIZE CLASS	ASP (\$K)	WW BASE 1984	WW SHPMTS - '84		MARKET SHARE
					UNITS	(\$M)	
IBM	SYSTEM/36	S	57	36,000	32,000	1,828	17%
IBM	SERIES 1	S	31	64,500	12,200	373	4%
DEC	PDP-11/44	S	60	27,495	6,000	360	3%
IBM	8100	S	143	12,500	1,920	274	3%
NCR	9300	S	60	5,000	4,500	271	3%
BURROUGHS	1990	S	120	1,550	1,550	186	2%
IBM	SYS/23 DATAMASTER	S	13	34,700	14,700	184	2%
APPL DIG DATA SYS	2000,4000,5000	S	70	2,500	2,500	175	2%
DATA GENERAL	ECLIPSE MV/4000	S	71	2,980	2,380	170	2%
HEWLETT-PACKARD	1000-A/600	S	20	12,670	7,670	153	1%
IBM	SYSTEM 38-6	S	120	1,275	1,275	153	1%
SPERRY UNIVAC	SYS/80-8	S	440	350	343	151	1%
TEXAS INSTRUMENTS	600	S	40	7,325	3,700	148	1%
DEC	PDP-11/24	S	37	14,690	3,900	144	1%
TELEVIDEO SYSTEMS	PM/16	S	9	15,000	15,000	135	1%
ONYX	ZEUS 3	S	12	12,000	11,150	134	1%
CONVERGENT TECH.	MEGAFRAME	S	33	4,000	4,000	132	1%
HEWLETT-PACKARD	1000-E (MX-E)	S	41	30,700	3,200	131	1%
DEC	VAX-11/730	S	42	5,550	3,100	130	1%
ALTOS COMPUTER	ACS 586/986 SERIES	S	11	16,500	11,500	127	1%
HEWLETT-PACKARD	1000-A/900	S	50	4,340	2,340	117	1%
FORTUNE SYSTEMS	32:16	S	7	31,500	15,500	109	1%
HEWLETT-PACKARD	3000-42	S	113	971	900	102	1%
DEC	PDP/LSI-11/03,11/23	S	5	121,300	20,250	101	1%
HIS	6/40	S	40	2,600	2,276	91	1%
INTEL	310 SERIES	S	12	8,200	7,900	91	1%
WANG	VS-25	S	46	2,765	1,975	91	1%
NCR	9020	S	29	10,080	3,100	89	1%
DATAPoint	8800	S	50	6,100	1,714	86	1%
NCR	8555 11	S	426	515	190	81	1%

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MANUFACTURERS	MODEL	SIZE CLASS	ASP (\$K)	WW BASE 1984	WW SHPMTS - '84		MARKET SHARE
					UNITS	(\$M)	
IBM	4381-2,1	M	900	2,400	2,400	2,160	16%
IBM	4341-2/11/12	M	969	6,400	1,340	1,298	10%
IBM	4361-4,-5	M	465	2,300	2,300	1,070	8%
DEC	VAX-11/750	M	100	16,340	8,100	810	6%
DEC	VAX-11/780	M	320	11,350	2,500	800	6%
IBM	SYSTEM 38-8	M	408	1,860	1,570	641	5%
HEWLETT-PACKARD	3000-48	M	194	3,040	2,800	543	4%
TANDEM	NONSTOP/NNSTP II, TXP	M	170	8,835	2,440	415	3%
AT&T	3820 DUPLEX	M	600	690	690	414	3%
BURROUGHS	4955	M	1,805	305	200	361	3%
DEC	VAX 11/785	M	440	700	700	308	2%
HEWLETT-PACKARD	3000-68	M	375	860	800	300	2%
IBM	4331-2/11	M	394	3,875	655	258	2%
BURROUGHS	A9-F	M	1,200	170	170	204	1%
DATA GENERAL	ECLIPSE MV/10000	M	520	590	390	203	1%
PRIME	9950	M	520	700	385	200	1%
BURROUGHS	2925	M	369	800	500	185	1%
DATA GENERAL	ECLIPSE MV/8000	M	300	1,470	550	165	1%
SPERRY-UNIVAC	1100/70/71	M	500	330	330	165	1%
HEWLETT-PACKARD	3000-64	M	325	1,641	500	163	1%
SPERRY-UNIVAC	1100/60	M	1,941	1,617	80	155	1%
BASIC FOUR	MAI 8000 SERIES (810)	M	150	2,317	953	143	1%
NORSK DATA	MD-500 SERIES	M	220	580	580	128	1%
HIS	DPS 7	M	512	817	240	123	1%
HIS	DPS 8/52	M	2,034	177	55	112	1%
BURROUGHS	5930	M	579	450	170	98	1%
HIS	6/4X,5X,7X	M	177	12,871	550	97	1%
McDONNELL DOUGLAS	9000	M	150	600	600	90	1%
WANG	VS-100	M	270	1,756	320	86	1%
NCR	8635,8645,8655	M	1,300	76	63	82	1%

MANUFACTURERS	MODEL	SIZE CLASS	ASP (\$K)	WW BASE 1984	WW SHPMTS - '84		MARKET SHARE
					UNITS	(\$M)	
IBM	3083B,E,J	L	4,590	3,225	1,700	7,803	38%
IBM	3081D,G,K	L	7,781	2,750	525	4,085	20%
IBM	3084	L	11,500	320	308	3,542	17%
BURROUGHS	B-7900 FHK	L	6,732	205	170	1,144	6%
HIS	DPS 8/70	L	3,816	492	224	855	4%
AMDAHL	580/58XX	L	3,500	400	215	753	4%
SPERRY UNIVAC	1100/90/91	L	7,000	68	68	476	2%
SPERRY UNIVAC	1100/80/81/82	L	5,806	438	70	406	2%
BURROUGHS	6925	L	1,009	345	160	161	1%
CDC	CYBER 170-875	L	6,497	25	20	130	1%
CRAY	XMP 22,24	L	10,659	18	12	128	1%
CDC	CYBER 205	L	11,735	29	10	117	1%
NAS	AS/906	L	3,784	75	31	117	1%
CDC	CYBER 170-865	L	4,956	25	20	99	0%
HIS	H-66 DPS,BC	L	3,759	359	25	94	0%
NAS	AS/9000	L	4,582	73	16	73	0%
HIS	DPS 88/81	L	6,059	20	12	73	0%
HIS	DPS 88/82	L	8,609	10	8	69	0%

COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE
				BITS	TYPE	CYCLE	MIN MHz	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNCS	
												Sz	MB	Mn	Mx					
A.B. DICK	GEC SERIES 63	S	80	32			1	16							OS-6000	UNIX	Y	CB,F,C,B,P		
A.B. DICK	KNOWLEDGE WORKER	PC	8	16	80186	8	0.3	1				5	0.6	10	32	CTOS	Y	B,F,P,CB,C		
ACORN COMPUTERS	ACORN MICRO	PC	3	8	6502A	2	0.1	0.1				5	0.4	10	30	CP/M-80	N	B,P,F,CB,LO,L	ECO	
ACT SYSTEMS	911 TURBO-MICRO	PC	8	16	80186	8	0.1	1				5		25		MS-DOS	Y	CB,F,C,B,P,FR	ARC/ACT	
ACT SYSTEMS	SERIES 8000 TURBO-MICRO	PC	8	8	8088	8	0.1	1				8		25		MS-DOS	Y	CB,F,C,B,P,FR	ACT	
ACTION COMPUTER	DISCOVERY 1600	PC	10		280A		0.1	16					0.6	65						
ACTION COMPUTER	DISCOVERY 500	PC	6		280A		0.1	7					0.6	20						
ADV.ELECTRONICS DESIGN	COLORWARE SYSTEM 73/10	PC	32		6502		0.5	4				8		10	40					
ADV.ELECTRONICS DESIGN	COLORWARE SYSTEM 73/5	PC	28		6502		0.5	4				8		10	40					
ADV.ELECTRONICS DESIGN	COLORWARE SYSTEM 73/7	PC	30		6502		0.5	4				8		10	40					
ADV.MICRO DIGITAL	SUPER SYSTEM II	PC	5		80186		0.3	1				8	1.0	52						
ADV.MICRO DIGITAL	SUPERSTAR	PC	4		280B		0.1	0.1				5	0.4	25						
ALCYON	APX EXTENDED PROCESSOR	S	45	16	68000	10	0.5	4		VME				67	430	REGULUS	UNIX	Y	F,C,B,P	ETH
ALCYON	APS	PC	10		68000		0.3	2						10	112					
ALCYON	APS,RMS	PC	10		68000		0.3	4						10	112					
ALCYON	APX	PC	30		68000		0.5	4						76	430					
ALLOY COMPUTER PROD.	PC-SLAVE 16	PC	1		8088		0.3	1												
ALPHA MICROSYSTEMS	AM-1000 SERIES	S	8		68000		0.1	1						10	55					
ALPHA MICROSYSTEMS	AM-1042E	PC	22	32	68000	500ns	0.5	3						60	240	AMOS/L	Y	B,P,F,CB		
ALPHA MICROSYSTEMS	AM-1072	S	31	32	68000	500ns	0.5	4						70	280	AMOS/L	Y	B,P,F,CB		
ALPHA MICROSYSTEMS	AM-1082	S	48	32	68000	500ns	0.5	4						140	280	AMOS/L	Y	B,P,F,CB		
ALPHA MICROSYSTEMS	AM-1092	S	56	32	68000	500ns	0.5	4						400	1600	AMOS/L	Y	B,P,F,CB		
ALPHA MICROSYSTEMS	AM-1100E	S	16	16	68010	8	1							30		UNIMOS	Y	CB,F,C,B		
ALPHA MICROSYSTEMS	AM-1172	S	34	32	68010	500ns	1.0	4						70	280	UNIX/V	Y	CB,B,C		
ALPHA MICROSYSTEMS	AM-1192	S	49	32	68010	500ns	1.0	4						400	1600	UNIX/V	Y	CB,B,C		
ALPHA MICROSYSTEMS	AM-506	PC	3	8	8088	5	0.1	0.6					0.4			MS-DOS	N	B		PC
ALPHA MICROSYSTEMS	AM-510	PC	5	8	8088	5	0.1	0.6					0.4			MS-DOS	N	B		PC
ALPHA MICROSYSTEMS	AM-680 ELS	PC	7	16	68000	8	0.1	1					0.4	10		MS-DOS	Y	B		
ALTOS COMPUTER	ALTOS 3068	PC	7	32	68020	13	1	16	8								UNIX V	Y	B,C,B,F,P,C	WRK
ALTOS COMPUTER SYST.	186	PC	6		80186		0.5						0.7	10						
ALTOS COMPUTER SYST.	2086	PC	21		80286		1.0	16					1.2	68						
ALTOS COMPUTER SYST.	3068	S	40	32	68020	17	1	16	8	P			1.2	33	65	UNIX V				WRK
ALTOS COMPUTER SYST.	486	PC	6		80186		0.5	1					0.7	20	40					
ALTOS COMPUTER SYST.	580-40	PC	5	8	280	4	0.2	0.2				5	0.7	20	33	MP/M-80	Y	P,B,F,CB		
ALTOS COMPUTER SYST.	586	PC	14		8086	10	0.5	1		MULT			1.2	20	40	MP/M-86	XENIX			ETH,WRK
ALTOS COMPUTER SYST.	986	PC	12		8086		1.0						0.7	40						
ALTOS COMPUTER SYST.	986T	PC	13		8086		1.0						0.7	40	80					
ALTOS COMPUTER SYST.	ALTOS 6800	PC	12		6800		1.0						0.7	20	40					
AMDAHL	MDL 1100	L	9000	64		32	128	32								MVS/370	Y	F		
AMDAHL	MDL 1200	L	9999	64		64	256	64								MVS/370	Y	F		
AMDAHL	MDL 1400	L	16M	64		16M	256									VP/ADS	Y	F		
AMDAHL	MDL 500	L	8000	64		128										VP/ADS	Y	F		
AMDAHL	MDL 5840	L	1600	32		16	64	64								MVS/XA	UTS	Y	CB,F,B,P,R,AP	
AMDAHL	MDL 5850	L	2100	32		16	64	64								MVS/SP	UTS	Y	CB,F,B,P,R,PL	
AMDAHL	MDL 5860	L	2500	32		16	64	64								VM/SP	UTS	Y	CB,B,F,P,R,PL	
AMDAHL	MDL 5867	L	3400	32		24	96	128								VM/SP	UTS	Y	CB,F,B,P,R,PL	
AMDAHL	MDL 5868	L	4310	32	P	32	128	128								MVS/XA	UTS	Y	CB,F,PL,B,AP,R	
AMDAHL	MDL 5870	L	4100	32		32	96	128					1270	4560		MVS/SP	UTS	Y	CB,F,B,P,R,AP	
AMDAHL	MDL 5880	L	4600	32		32	128	128								VM/SP	UTS	Y	CB,B,PL,F,P,R	
AMERICAN DIGITAL	SYSTEM 73-1	S	25	16			0.5	4								RSX-11M	UNIX	Y	CB,F,C,B,R,MP	
AMPRO COMPUTERS	122	PC	1		280A		0.1					5	0.4							
AMPRO COMPUTERS	1410	PC	2		280A		0.1					5	0.8	10						
AMPRO COMPUTERS	142	PC	1		280A		0.1					5	0.8							
AMPRO COMPUTERS	BOOKSHELF SERIES 100	PC	2	8	280A	4	0.1									CP/M		N		
AMPRO COMPUTERS	BOOKSHELF SERIES 200	PC	2	16	80186	8	0.1	0.5								PC-DOS	Y			
ANDERSON JACOBSON	AJ PASSPORT MBA	PC	3	8	8088	5	0.3	0.6								TELEDOS	N	B		
ANDERSON JACOBSON	AJ PASSPORT PHD	PC	4	8	8088	5	0.3	0.6								MS-DOS	N	B		
ANDERSON JACOBSON	PROFESSIONAL	PC	3	16	8088	5	0.3	1				5	0.4	10		TELEDOS	N	B		
ANDROMEDA SYSTEMS	11/B72-W56	PC	11		11/23		0.3	4				8	0.5	56						
ANDROMEDA SYSTEMS	11/B73-W20	PC	9		11/23		0.3	4				8	0.5	20						
ANDROMEDA SYSTEMS	11/M12-W20	PC	7		11/23		0.3	4				5	0.5	20						
ANDROMEDA SYSTEMS	MDL 11/A	PC	4	16		13	0.3	4		Q				76	147	RT-11	Y	F,B,P,AP		
ANDROMEDA SYSTEMS	MDL 11/H231	PC	10	16		13	0.3	4		Q						RT-11	Y	F,B,P,AP		
ANDROMEDA SYSTEMS	11/B73-W56	PC	0		11/23		0.3	4												
APOLLO	DN300	S	28	16	68010	8	1.0	3		P	4		1.2	34	70	AEGIS	AUX		F,P,C,L	ETH
APOLLO	DN320	S	35	16	68010	8	1.5	3		P	4		1.2	34	70	AEGIS	AUX		F,P,C,L	ETH
APOLLO	DN460	S	55	16	68XXX		1.0	4	16	MULT	7		1.2	80	167	AEGIS	AUX		F,P,C,L	ETH

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE	
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNGS		
												Sz	MB	Mn	Mx						
APOLLO	DN550	S	42	16	68010	8	1.0	3													
APOLLO	DN660	S	70	16	68XXX		1.0	4													ETH
APOLLO COMPUTER	DN330	S	16	16	68020		2	3													ETH
APOLLO COMPUTER	DN560	S	36	16	68020	8	2	3	4												ETH
APPLE	APPLE II, IIe	PC	2	8	65C02	1	0.1	0.1													ETH
APPLE	APPLE III PLUS	PC	3	8	6502B		0.3														
APPLE	APPLE IIc	PC	2	8	65C02	1	0.1	0.1													
APPLE	MACINTOSH	PC	4	16	68000	8	0.1	1													
APPLIED BUSINESS CMPTR	BUSINESS SYSTEM	PC	4	8	8088	4	0.3	1													
APPLIED DIGITAL DATA	MENTOR 1500	PC	5	8	8088	4	0.3	0.6													
APPLIED DIGITAL DATA	MENTOR 3500	S	90	16		10	0.5	2													
APPLIED DIGITAL DATA	2000	S	15		28000		0.3	1													
APPLIED DIGITAL DATA	4000EP	S	42		28000		0.5	1													
APPLIED DIGITAL DATA	5000EP	S	68		28000		0.5	1													
APPLIED DIGITAL DATA	PC/1	PC	3	16	8088	5	0.3	1													
APPLIED DIGITAL DATA	PC/11	PC	4	16	8088	5	0.3	1													
APPLIED MICRO TECH.	MS2000	PC	7		Z80A		0.1	0.1													
APPLIED MICRO TECH.	MS3000	PC	5		Z80A		0.1	0.1													
APPLIED SYSTEMS	ASC/68	S	35	32	68000	100ns	0.3	2	4												
APRICOT	APRICOT XI; XI-20	PC	3	16	8086	5	0.3	1													
APRICOT CMPTR	F SERIES	PC	2		8086	5	0.3	0.8													
AQUATROL	MDL 8016	M	150	16	80286	8	0.6	1													
ARDENT COMPUTER	ARDENT 5	PC	8	16			0.1	1													
ARDENT COMPUTER	MDL 15	PC	5	16			0.1	0.1													
ARDENT COMPUTER	MDL 20/40	PC	7	16			0.1	0.3													
ARDENT COMPUTER	MINI/MAX	PC	4	16			0.1	0.1													
ARETE SYSTEMS	ARETE 1100/1200	S	70		68000		1.0	16													
ASTRAEA COMPUTER	SYSTEM 9100 SERIES	S	16	16	68010	13	0.3	4													
AT&T INFO. SYSTEMS	3B15	S	75	32	32100	14	2	16	8	VME											
AT&T INFO. SYSTEMS	3B2/300	S	10	32	32000	7	0.5	2		P											
AT&T INFO. SYSTEMS	3B2/400	S	38	32	32100	10	1	4	8	P											
AT&T INFO. SYSTEMS	3B20A	M	330	32	AMD 2901	4.0	12	12	8	P											
AT&T INFO. SYSTEMS	3B20B	M	230	32	AMD 2901	4	16	8	8	P											
AT&T INFO. SYSTEMS	3B200	M	340	32	P	4.0	16	16													
AT&T INFO. SYSTEMS	3B20S	M	230	32	AMD 2901	4.0	12	8	8	P											
AT&T INFO. SYSTEMS	3B5/100	S	113	32	32000	7	1.0	8	8	P											
AT&T INFO. SYSTEMS	3B5/200	S	136	32	32000	10	2.0	8	8	P											
AT&T INFO. SYSTEMS	3B5/300	S	65	32	32000	10	1.0	8	8	P											
AT&T INFO. SYSTEMS	6300 PLUS	PC	6		80286	6	0.5	1													
AT&T INFO. SYSTEMS	AT&T UNIX PC	PC	5	16	68010	10	0.5	2													
AT&T INFO. SYSTEMS	PC 6300	PC	4	16	8086	8	0.1	1													
AT&T INFO. SYSTEMS	UNIX PC 7300	PC	9	16	68010	10	0.5	2													
AT&T INFO. SYSTEMS	520ST	PC	2		68000	8	0.5	0.5													
AT&T INFO. SYSTEMS	600XL	PC	1	8	6502C	2	0.1	0.1													
ATV SYSTEMS	J100	S	57	16			0.1														
ATV SYSTEMS	J200	S	72	16			0.1	0.5													
ATV SYSTEMS	J300	S	100	16			0.1	0.5													
ATV SYSTEMS	J500	S	15	16			0.1														
ATV SYSTEMS	J600	S	25	16			0.1														
AUGUST SYSTEMS	CS330	S	85	16	CS330		0.3	1													
AUGUST SYSTEMS	SERIES 330, TRI-DAC	S	125	16	8086	500ns	0.3	1													
AUGUST SYSTEMS	SERIES 330, TRI-GARD	S	50	16	SBC 86/30	500ns	0.3	1													
AURAGEN SYSTEMS	4000	S	75	32	68010	220ns	1.0	8	64												
AURAGEN SYSTEMS	SYSTEM 4000	M	250	32	68010	2.0	256														
AURAGEN SYSTEMS	AUTOCONTROL	PC	2	8	8088-2	8	1														
BARRISTER INFORMATION	MODEL 140	S	106	16	DG ECLIPS	400ns	1.0	2													
BARRISTER INFORMATION	MODEL 145	S	142	16	SUP ECLIPS	150ns	2.0														
BARRISTER INFORMATION	MODEL 150	S	33	16	BAR 150	400ns	1.0	2													
BARRISTER INFORMATION	MODEL 160	S	67	16	BAR 160	400ns	1.0	2													
BEEHIVE INT'L.	TOPPER	PC	3	8	Z80A	4	0.1	0.1													
BEEHIVE INT'L.	TOPPER 2	PC	4	8	Z80A	4	0.1	0.1													
BILLINGS	B-500	PC	3	8	Z80A	4	0.1														
BILLINGS	BC-12FD	PC	2	8	Z80A	4	0.1														
BILLINGS	SERIES 6000	PC	5	8	Z80A	4	0.1														
BONDWELL	MDL 32/34/36 XT	PC	8		8088	5	0.1	0.3													
BTI CMPTR SYS	BTI 6000	S	41	16	P		0.1	1													
BTI CMPTR SYS	BTI 8000	M	110	32	P	250ns	1.0	16													

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE		
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNCS			
												Sz	MB	Mn	Mx							
BTI COMPUTER SYS	MDL 4800	S	31	16			0.1								MULTUS		Y	B				
BUNKER RAMO INFO SYS	ALADDIN 20	PC	6	16	68000		0.3	1								UNIX	Y	F,C,B,P,CB	BNA			
BURROUGHS	A3	M	130	59			3	48		3					MCP			CB,F,P,B,R,AL				
BURROUGHS	A9 MDL D	L	2100	48	P		6	12				252	868		MCP			CB,F,PL,P,B,R				
BURROUGHS	B 1000 SERIES	S	75	24			0.5	1								Y		B,R,CB,F,UP,SD				
BURROUGHS	B 1800 SERIES	S	90	16			0.1	0.3								Y		CB,F,B,R,SD				
BURROUGHS	B 20	S	15	16			0.1	0.5							BTOS	N		CB,F,B,P				
BURROUGHS	B 2925	L	150	32		143ns	1	2		7		6	540		MCP-VI			CB,R,F,B,P,BP	BNA			
BURROUGHS	B 3955	L	225	32		143ns	2	5		7		6	540		MCP-VI			CB,R,F,B,P,BP	BNA			
BURROUGHS	B 4925	L	395	40		110ns	2	5		8		6	540		MCP-IX			CB,R,F,B,P,LI	BNA			
BURROUGHS	B 4955	L	800	40		110ns	5	5		16		6	540		MCP-IX			CB,R,F,B,P,LI	BNA			
BURROUGHS	B 7900 SERIES	L	2000	52			6	144		24		6	540		MCP			CB,F,AP,B,R	BNA			
BURROUGHS	B 80	S	19	8			0.1	0.1								Y		CB,R				
BURROUGHS	B 800 SERIES	S	66	16			0.1	0.1								Y		CB,R,ML				
BURROUGHS	B1900 SERIES	S	59	16	P	250ns	0.1	2	16			65	8000		REALTIME	Y		CB,F,B,R,N,P				
BURROUGHS	B1990 DP	M	160	24	P	6	0.5	2	16	P		0.243	130	542	MCP II							
BURROUGHS	B21	PC	7	16	8086	8	0.3	0.5				5	0.6		BTOS	Y		CB,F,B,P				
BURROUGHS	B22	S	18	16	8086	5	0.3	0.6		MULT		0.4			MS-DOS	Y		CB,F,B,P				
BURROUGHS	B5920	M	385	48	P		3	20		P			252	26000	MCP IV							
BURROUGHS	B90 SERIES	S	24	8	P		0.1	2				18	231		REALTIME	Y		CB,R,N,ML				
BURROUGHS	B900 SERIES	S	35	8	P		0.6	3		P		0.2	19	402	MCP	Y		CB,R,N,ML				
BURROUGHS	B95	S	18	16			0.3	0.5				0.7	10		MCP	Y		CB,R				
BURROUGHS	B25	PC	7	16	80186	8	0.3	1		MULT		5	0.6	10	40	MS-DOS	Y		B,CB,F,P	B		
BURROUGHS	XE520	S	26		MULTIPLE		1.0	--				--	--	38	--							
BUSINESS OPERATING SYS	BOS-M SYSTEM	S	20	16	80286	8	0.1	1						45	TURBODOS	Y		CB	ETH			
BUSINESS OPERATING SYS	LYTE	PC	6	16	80186	8	0.1	1						10	TURBODOS	Y		CB				
BYTRONIX	4000	S	0		2901		0.1	--				--	--	20	--							
BYTRONIX	4300	S	0		BIT-SLICE		0.1	--				--	--	20	--							
BYTRONIX	5000	S	0		2901		0.3	1				--	--	20	--							
BYTRONIX	5300	S	0		BIT SLICE		0.3	1				--	--	20	--							
BYTRONIX	MIKROM	S	11		F-9445		0.1	--				--	--	20	--							
CADMIUS CMPTR SYS.	9700	PC	0		68010		1.0	4				--	--	65	--							
CADMIUS CMPTR SYS.	9730	S	16	32	68010		1.0	4		Q	4	--	2.0	54	474	UNIXV	Y		C,F	ETH		
CADMIUS CMPTR SYS.	9790	S	22	32	68010	10	1.0	4		Q	4	--	2.0	65	474	UNIX			C,F	ETH		
CADMIUS CMPTR SYS.	9800	PC	0		68020		1.0	8				--	--	--	--							
CADMIUS COMPUTER	9760 474 MB FILE SERVER	S	41	16	68010	10	1	4		Q				474	UNIXON	UNIX V	Y		C	ETH		
CADMIUS COMPUTER	9890 GRAPHICS WRKSTATN	S	22	32	68020	17	1	8						40	BERKELEY	UNIX V	Y		C,F	ETH		
CADMIUS COMPUTER	9891 CADMAC HR GR WKSTN	S	23	32	68020	17	1	8		VME					BERKELEY	UNIX V	Y		C,F	ETH		
CADMIUS COMPUTER	CADMAC MDL 9791	S	23	16	68010	10	1	3						65	UNIXON	UNIX V	Y		CB,C,B,P,L,F	ETH		
CADMIUS COMPUTER	MDL 9770	S	37	16	68010	10	1	4		Q				65	UNIXON	UNIX V	Y		B,CB,P,AP,C,L	ETH		
CADO SYSTEM	TIGER ATS 32	S	37	16	8086	500ns	0.3	1			1	1.2	15	144	REALTIME	Y			B			
CADO SYSTEM	TIGER ATS 64	S	45	16	8086	500ns	0.3	1			1	1.2	30	568	REALTIME	Y			B			
CADO SYSTEM	TIGER ATS 8	PC	8	16	80186	8	0.3	1				5	1.2	10	36	ATS O/S	Y					
CADO SYSTEMS	CAT III	S	12	8	8085	3	0.1			MULT							Y					
CADO SYSTEMS	SYSTEM 20/24	S	18	8	8085	3	0.1					1.2	13		CADO	Y						
CADO SYSTEMS	SYSTEM 20/28	S	38	8	8085	3	0.1					1.2	26		CADO	Y						
CADO SYSTEMS	TIGER ATS 16	S	13	16	80186		0.5									Y						
CALIFORNIA COMPUTER	C-MICRO-11A	S	15	16			0.3	4						110	RSTS/E	Y		CB,P,DB,B,R,F		DEC		
CALIFORNIA COMPUTER	CALSTAR III	PC	5	8	Z80B	6	0.1	0.5				8	1.2	10	MP/M			CB,F,C,B,P				
CALIFORNIA COMPUTER	CCG VAX 750	S	87	32			1	8						300	VMS	UNIX	Y		F,C,B,P,CB,AP		DEC	
CALIFORNIA COMPUTER	MDL 2300	PC		8			0.1	0.3							MP/M			CB,F,C,B,P				
CALIFORNIA COMPUTER	MDLS 200/300/400	PC	4	8	Z80B	6	0.1	1							MP/M			CB,F,C,B,P				
CALIFORNIA COMPUTER	MICROSTAR 42/43/4400	PC	10	8	8088	5	0.1	1				8			MP/M-86	Y		CB,F,C,B,P				
CALIFORNIA COMPUTER	SLIMLINE 3000	PC	7	8	Z80B	6	0.1	1				8	1.2		MP/M	Y		CB,F,C,B,P				
CALIFORNIA COMPUTER	TURBOSTAR	PC	10	8	Z80B	6	0.1	0.1					1.2	10	MP/M	Y		CB,F,C,B,P				
CALIFORNIA COMPUTER	U32	S	19	16	80186	8	0.1					8	1.2	14	MS-DOS	Y						
CALIFORNIA COMPUTER	U8	S	12	16	80186	8	0.1					8	1.2	20	MS-DOS	Y						
CALIFORNIA COMPUTER	ULTRAVAX SERIES	M	130	32			1	8		CM1					VAX/VMS	UNIX	Y		B,CB,F,C,PL,CR			
CALIFORNIA COMPUTER SYST.	TURBOSTAR IV	PC	9		Z80A		0.1	0.3				--	--	20	50							
CALIFORNIA COMPUTER SYST.	TURBOSTAR VIII	PC	15		Z80A		0.1	0.3				--	--	20	50							
CALLAN DATA SYSTEMS	UNISTAR 100	PC	13	16	68000	8	0.5	2		M		5	0.6	21	43	UNIXV	N		C,F,CB,B,P,A		ETH	
CALLAN DATA SYSTEMS	UNISTAR 200	S	14	16	68000	8	0.5	2		M		5	0.6	21		UNIXV	Y		F,CB,B,P,A		ETH	
CALLAN DATA SYSTEMS	UNISTAR 300	S	24	16	68010	10	0.5	2		MULT		5	0.6	43	172+	UNIXV	Y		C,F,CB,B,P,A		ETH	
CAMBEX	1600 SERIES	M	150	32		50ns	2	16			2				DOS/VS							
CANAAN COMPUTER	5100	S	24		P		1.0	4				--	--	85	--							
CANAAN COMPUTER	5400	S	24		P		1.0	4				--	--	85	--							
CANON USA	AS-100	PC	3	8	8088	4	0.1	0.5							MS-DOS	Y			CB,B,P		ARC/OMN	

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE		
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNCS			
												Sz	MB	Mn	Mx							
DATAMEDIA	1620	PC	22	68010			1.0	12						52								
DATAMEDIA	1624	PC	30	68010			1.0	10						143								
DATAMEDIA	20P	PC	17	68000			0.5	1						5								
DATAMEDIA	30P	PC	20	68000			1.0	2						52								
DATAPPOINT	8400	S	20	80286			0.5	1							130	MULTI	Y			ARC		
DATAPPOINT	8600	S	20	P			0.1	1					1.0		180	MULTI	Y	B,RB,CB		ARC		
DATAPPOINT	8800	S	60	P			0.3	1			1			202	1012	MULTI	Y	B,F,CB,R		ARC		
DATAPPOINT	MDL 1560	PC		Z80A			0.1									MP/M	Y	B,F				
DATAPPOINT	VISTA-PC	PC	3	80186			0.3	1					0.6	20								
DATAPPOINT	VISTA-STATION 84	PC		80186			0.5	1								RMS	N	CB,B,R		ARC		
DATAPPOINT	3200 SYSTEM	S	15	68000			1.0	8					1.0	160								
DATAVUE	DV4000W	PC	7	80186			0.3	8						19		CON-DOS	Y	F,B,PL,P,C,CB		DR		
DAVIDGE	DS1-4000,6000	PC		Z80A/B			6	0.1								CP/M	N	B,F,A,C		CP		
DAVIDGE	DS4-4000/20,6000/20	PC		Z80A/B			6	0.1	0.3							CP/M	N	B,P,FR,C				
DAYSTRON SYSTEMS	M-5	S	29	68010			0.5	2							300		UNIX	Y				
DAYTRONIC	MDL IPC	PC	2	8			0.3	1					0.4			MS-DOS	N	B				
DEC	AI VAXSTATION	S	49	32			5	9		Q				71		MIC-VMS	N	L		ETH/DEC		
DEC	DECmate II	PC	5	6120			8	0.1					5			WFS-8	N	B,CB				
DEC	DECsystem-10	M	400	36	33ns		0.51	8			12			176		TOPS-10		CB,F,B,AP,CP		DEC		
DEC	MDL 2020	M	100	36	150ns		0.76	1			4			176		TOPS-10		CB,F,B,AP,P,CP		DEC		
DEC	MDL 2060/65	M	400	36	33ns		0.76	4			12			176		TOPS-20		CB,F,B,AP,P,CP		DEC		
DEC	MICRO PDP-11	S	8	16	P		0.3	4		Q			0.8	10	32	RS-11M	UNIX	Y	C,F,CB,B,CR	DEC		
DEC	MICRO PDP-11/73	S	19	16	J11	276ns	0.3	4		8	Q		0.4	11	31+	CTS-300		C,F,CB,B,CR		DEC,ETH		
DEC	MICRO PDP-11/SV	PC	6	16	P		0.5	4					0.4	10		ULTRIX-11	Y	C,P,AP,F,MP,CP				
DEC	MICRO VAX I	PC	15	32	MicroVAX I		0.5	3		8	Q		0.4	10	32	VMS,VAX	ULTRIX-32	Y	C,F,CB,B,P,AP	ETH/DEC		
DEC	MICROVAX II	S	45	32	P	40	2	9			Q		0.8	31	456	MicVMS	ULTRIX-32			DEC		
DEC	PDP 11/23-S	S	4	16	P		0.1				Q			11	31+	CTS-300		C,F,CB,B,CR		DEC		
DEC	PDP-11/23	S	7	16	P		0.3	4						11	31	REALTIME	Y	B,F,CB,CR		DEC		
DEC	PDP-11/23-PLUS	S	13	16	P		0.3	4			Q			0.5	20	40+	CTS-300	Y	C,F,CB,B,P,MC		DEC,ETH	
DEC	PDP-11/24	S	13	16	F11		1.0	4			UNI					RSX-11M	Y	C,F,CB,B,CR,P		DEC,ETH		
DEC	PDP-11/44	S	29	16	P		1.0	4		8	UNI	1		0.1	121	456	RSTS/E	Y	C,F,CB,B,P,MC		DEC,ETH	
DEC	PDP-11/70	S	90	16			1									DSM-11	Y	CB,B,AP,F,R				
DEC	PDP-11/84	S	16		J11		1.0	4														
DEC	PRO 325	PC	3	16	PDP-11/23		0.5									RT-11	XENIX	N	P,L,C,B,F,CB		ETH/DEC	
DEC	PRO 350	PC	6	16	PDP-11/23		0.5	1							10	RT-11	XENIX	N	P,C,DB,B,F,CB		ETH/DEC	
DEC	PRO 380	PC	9	16	J-11		0.5	1								CTS-300	XENIX	N	P,C,B,F,CB,MC		DEC/ETH	
DEC	PROFESSIONAL 350	PC	0		F-11		0.3	1					5	0.4	10	32						
DEC	PROFESSIONAL 380	PC	0		J-11		0.3	1					5	0.4	10	32						
DEC	RAINBOW 100	PC	0		8086		0.1	0.3					5	0.4	10	32	MS-DOS	N	C,B,F		DEC	
DEC	RAINBOW 100	PC	3	8	8088		4	0.1	0.3								MS-DOS	VENIX/86	N	F,C,B		DEC
DEC	RAINBOW 100 PLUS	PC	4	8	8088		4	0.1	0.9					0.8	10							
DEC	RAINBOW 190	PC	8	8	8088		4	0.64	0.89				5	0.4	10							
DEC	RAINBOW 190	PC	6	8	8088		0.6										MS-DOS	N	B		DEC	
DEC	VAX 11/725	S	35	32	P		1.0	3			UNI	1		52		VAX/VMS	Y	C,F,CB,B,P,AP		ETH/DEC		
DEC	VAX 11/730	S	75	32	P		1.0	5			UNI	1		121	460	VAX/VMS	ULTRIX-32	Y	C,F,CB,B,P,AP		ETH/DEC	
DEC	VAX 11/750	M	85	32	P		2.0	8		4	UNI	5		121		VAX/VMS	ULTRIX-32	Y	C,F,CB,B,P,AP		ETH/DEC	
DEC	VAX 11/780	M	176	32	P		2.0	32		8	UNI	13		121		VAX/VMS	ULTRIX-32	Y	C,F,CB,B,P,AP		ETH/DEC	
DEC	VAX 11/782	M	351	32	P		4.0	8		8	UNI	13		121	3000+	VAX/VMS	Y	C,F,CB,B,P,AP		ETH/DEC		
DEC	VAX 11/785	M	275	32	P		2.0	32		32	UNI			121	516	VAX/VMS	ULTRIX-32	Y	C,F,CB,B,P,AP		ETH/DEC	
DEC	VAX 8600	M	750	32	P		80ns	12.0	32		16	UNI	20		121	516	VAX/VMS	Y	C,F,CB,B,P,AP		ETH/DEC	
DEC	VAXSTATION II	S		32	78032		3	9								MIC-VMS	N	A			ETH/DEC	
DEC	VAXstation I	PC	21	32			1.0	2			P			0.4	31	MicroVMS	Y	C,F,B,P,DB,PL		ETH/DEC		
DECISION DATA CMPTR	MDL 5021	PC	5	8	8088		5	0.3	0.6					0.4	10	MS-DOS	N	B				
DELTA DATA SYS	MDL 8400T	PC	8	8	8088		0.3	0.6								MS-DOS	Y				ETH	
DELTA DATA SYSTEMS	SERIES 9000T	PC	16	68010			10	0.5	2								UNIX V	Y				
DENELCOR	H1000 HEP	L	4000	64			40		1000			UNI		0.3	600		HEP/UPX	Y	F,C		ETH	
DIGICOMP RESEARCH	SYSTEM 100	PC	10	8	Z80A		3	0.1								CP/M	Y	B,P,A			ETH	
DIGITAL ELECTRONIC SYS	TENNESSEE MAINFRAME	PC	5	32	68020		0.1									CON-DOS	UNIX V	Y	CB,P,FR,A,F,B		ETH	
DIGITAL MASTERS	KNOWMIND/1	PC	4	16	8086		8	0.3	1					0.6	20	MS-DOS	N	B,CB,F,P,C		CT		
DIGITAL MASTERS	KNOWMIND/2	S	25	16	68000		10	0.5	2					0.6			UNIX	Y	B,CB,F,P,C		ETH	
DIGITAL MASTERS	KNOWMIND/3	S	35	16	68000		10	0.5	2						50		UNIX	Y	B,CB,F,P,C		ETH	
DIGITAL MICROSYSTEMS	DMS-2000	S	13	8	Z80		8	0.1	0.1							MP/M	Y				HI	
DIGITAL MICROSYSTEMS	DMS-3B	PC	1	8	Z80A		4	0.1								CP/M	N				HI	
DIGITAL MICROSYSTEMS	DMS-5087	S	14	16	8086		5	0.5	1							MS-DOS	N				HI	
DIGITAL MICROSYSTEMS	DMS-816	S	17	8	8088		5	0.1	0.5							MS-DOS	N				HI	
DIGITAL SYSTEMS	GALAXY/3	S	44	8			0.1	0.3								GALAXY	Y					
DIGITAL SYSTEMS	GALAXY/5	S	78	8			0.1	1							80	GALAXY	Y	CB,B,PL				

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MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNGS	
												Sz	MB	Mn	Mx					
DIGITAN SYSTEMS	DE-1000	PC	2	8	Z80		0.1								CP/M		N	CB,F,B		
DIGITAN SYSTEMS	DE-2000	PC	8	8	Z80		0.1								CP/M		N	CB,F,B		
DIGITAN SYSTEMS	DE-4000	S	17	8	8088		0.1	0.5							MS-DOS		Y	CB,F,B,P,PL		
DIGITUS	DAS-16	S	15	16	8086	5	0.1	0.3							MS-DOS		Y	F,B,PL		
DISPLAY DATA	IN* SIGHT	S		8	DDC8300	200ns	0.06	0.1			2				REALTIME		Y		OMNI	
DOCUTEL/OLIVETTI	M18 DESKTOP	PC	2	8	8088	5	0.3	0.5					0.4	13	192		Y	B	PC	
DOCUTEL/OLIVETTI	OLIVETTI M24 PC	PC	3	16	8086-2	7	0.3	0.5					0.3				N	B	X/PC	
DRAVAC	D/STATION	PC	10	16	68000	10	0.1	16					34				Y	CB,C,B	OMNI	
DUAL SYSTEMS	CHAPPARAL I	PC	11	32	68020	16	1	19		VME			1.6	44			Y	CB,F,C,B,P,A,L	ETH	
DUAL SYSTEMS	CHAPPARAL III	S	17	32	68020	16	1	19		VME			1.6	85			Y	CB,F,B,P,A,L,C		
DUAL SYSTEMS	CHAPPARAL 111	S	25	32	68020	16	1	19		VME			170				Y	CB,F,B,P,A,L	ETH	
DUAL SYSTEMS	SYSTEM 83/160	S	24	16	68000	10	0.5	7					1.3	160			Y	C,P,B,F,CB	ETH/B	
DUAL SYSTEMS	SYSTEM 83/20E	S	17	16	68000	10	0.5	6					1.3				Y	C,F,CB,B,P	ETH/B	
DUAL SYSTEMS	83/500	PC	66		68000		2.0	6					1.0	513						
DUAL SYSTEMS	83/80	PC	22		68000		0.5	3					1.0	80						
DYNABYTE BUS. COMPUTERS	6000	PC	6		Z80B		0.3						0.8	19						
DYNABYTE BUS. COMPUTERS	6600	PC	7		Z80B		0.3	1					0.8	19	46					
DYNABYTE BUS. COMPUTERS	6900	PC	9		Z80B		0.3	1					0.8	19	92					
EAGLE	PC PLUS SERIES	PC	2	16	8088	5	0.3	1					5	0.4	10			N	B	
EAGLE	TURBO SERIES	PC	5	16	8088	5	0.3	1					5	0.4	10	40			N	B
EAGLE COMPUTER	SPIRIT 1,2, XL	PC	2	8	8088	5	0.3	0.6					0.4	10				N	B	ETH/OMNI
ELECTRO-DESIGN	IMP PC (IMP-6)	PC	2	8	8088	5	0.1	1					0.4					N	B	PC/QUA
ELECTRO-DESIGN	IMP-12	PC	2	8	8088	5	0.1	0.3					0.4					N	B	PC/QUA
ELECTRO-DESIGN	IMP-18	PC	2	8	8088	5	0.3						0.4					N	B	PC/QUA
ELITE COMPUTER	CONSULTANT	S	18	16	32016		0.5	12	32	VME							Y	C,P,F,MO		
ELITE COMPUTER	CONSULTANT II	S	19	32	32032		0.5	12	32	VME							Y	C,P,F,MO		
ELITE COMPUTER	EXPERT 32,32/RM	S	18	32	32032		0.5	16	32								Y	C,P,F,MO		
ELXSI	SYSTEM 6400	M	400	64	P		4.0	192	16	P	64			300	1000+		Y	C,F,CB,P,M	ETH	
ENCORE COMPUTER	MULTIMAX	M	200	32	32032		32										Y	F,C,P	ETH	
EPSON	EQUITY 1,11	PC	2		8088	5	0.3	0.6					0.36	20				N	B	
EPSON	EQUITY 111	PC	5		80286	6	0.6	16					1.2	20				N	B	
EPSON AMERICA	QX-10	PC	3	8	Z80A	4	0.1	0.3										N	B	
EPSON AMERICA	QX-16	PC	8	8	8088	6	0.3	0.5										N	B	
ERICSSON	ALFASKOP PC	PC	8	8	APX-88		0.3											N	B	
ERICSSON	ALFASKOP SYS 41	PC	8	8	6800		0.1											N	B,F,P	
ERICSSON	ERICSSON PC	PC	3	8	8088	5	0.3						0.4					N	B,F,P	
ERICSSON INFO SYS	ERICSSON PC	PC	3	8	8088	5	0.3						0.4					N	B	ETH
ESPRIT COMPUTER PROD.	DBS 16 DESKTOP	PC	3	16	80186	8	0.3	4					5	0.8	12	105		Y		
ESPRIT COMPUTER PROD.	DBS 16 DESKTOP	PC	3	16	80186	8	0.3	1					5	0.8	12	105		Y		
ESPRIT COMPUTER PROD.	X16	PC	3	16	80186	8	0.5	1					5	0.8	12	105		Y		
ESPRIT SYSTEMS	ESP9310	PC	2	8	8088	5	0.3	0.6										N	B	
EXXON OFFICE SYS	EXXON 510 INFO PROC	PC	5	8	Z80		0.1											N		
EXXON OFFICE SYS	EXXON 520 INFO PROC	PC	7	8	Z80		0.1											N		
EXXON OFFICE SYS	EXXON 530 INFO PROC	PC	10	8	Z80		0.2											N		
EXXON OFFICE SYS	EXXON 750 PRO WRKSTATION	S	13	16	Z8000	6	0.5	1					0.6	10				N		
FIFTH GENERATION TECH	SYSTEM/2001-10	PC	3	8	8088	8	0.1	0.5					2					Y	CB,F,B,P	
FIFTH GENERATION TECH	SYSTEM/2001-15	PC	5	8	8088	6	0.1	1					1	20				Y	CB,F,C,B,P	
FIRST COMPUTER	SX7XRND-XX	S	29	16			0.3	4		8				160			Y	F,B		
FIRST COMPUTER CORP.	GEMINI 23 PLUS	PC	0		PDP-11/23-PLUS		0.3	4						80.0		160				
FIRST COMPUTER CORP.	GEMINI 73	PC	0		PDP-11/73		0.3	4						80.0		160				
FIRST COMPUTER CORP.	SPIRIT 23	PC	0		PDP-11/23															
FIRST COMPUTER CORP.	SPIRIT 68	PC	0		68010															
FIRST COMPUTER CORP.	SPIRIT 73	PC	0		PDP-11/23															
FIRST COMPUTER CORP.	TAURUS 73	PC	0		PDP-11/73		0.3	4							160					
FLEISHBEIN	MP-16	PC	10	16	8086	8	0.1	1					8					Y	CB,B,F,P,R,C	ETH/ARC
FLEISHBEIN	MP-8	PC	5	16	8086	8	0.1	1					8					Y	CB,B,F,P,C,R	ETH/ARC
FLEXIBLE COMPUTER CORP.	FLEX/32 MULTICOMPUTER	PC	150		32032		1.0							0.8	168					
FLOATING POINT SYS.	FPS SCIENTIFIC	L	700	64		6	12	58										Y	F	
FORD-HIGGINS	POWER FRAME 2340	S	14	16			0.3	4		UNI								Y	CB,B,FR,F,P	DEC/ETH
FORD-HIGGINS	POWER FRAME 6840	S	16	16	68010	10	0.5	4		Q				20				Y	C	ETH
FORMATION	F4000 INFO SYS	M	100	32	2900	200ns	0.3	8			5			70	5000			Y	CB,F,B,R,PL	SNA
FORMATION	F4000-AP INFO SYS	M	124	32		200ns	0.3	8			5			70	5000			Y	CB,F,B,PL	SNA
FORTUNE SYSTEMS	32:16	PC	7		6800		0.5	2					5	0.8	45					
FORTUNE SYSTEMS	FORTUNE XP 30/45	S	20	16	68000	6	0.5	2						30	45			Y	B,CB,F,P,C,S	ARC
FORTUNE SYSTEMS	PS SYSTEMS 10,20	PC	11	16	68000	6	0.5	1						10	20			Y	CB,F,C,B,P,S	ARC
FORTUNE SYSTEMS	XP MDL 45	PC	19	16	68000	8	0.5	2		MULT				0.8	45			Y		ETH
FORTUNE SYSTEMS	1000	PC	8		8088		0.1	1					5	0.4	10					
FOUR-PHASE SYS	MODEL 260	S	10	32	68010	8	0.5	1							369			Y	CB,B,P,C	ETH

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE			SOFTWARE				COMM. TYPE	
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY FIXED (MB)			OS	UNIX	MU	LNCS		
												Sz	MB	Mn						Mx
HARRIS	H700	M	56	48	P	0.4	12		P	19			80	22.7K	VOS		Y	C,F,CB,B,P,AP	ETH	
HARRIS	H800	M	164	48	P	0.8	12	6	P	19			80	22.7K	VOS		Y	C,F,CB,B,P,AP	ETH	
HARRIS	HARRIS 1200	S	294		5 MIPS															
HARRIS	HARRIS STATION	PC	33		68000	1.0	6						50							
HARRIS	HGX-7	S	225		7 MIPS															
HEATH	H-1108-42	PC	2	8	8088	8	0.3	0.8				0.4			MS-DOS		N	C,F,B,P	ZL	
HEATH	HS-148-42	PC	1	8	8088	8	0.3	0.6				0.4			MS-DOS		N	C,F,C,B,P	ETH	
HEATH	HS-158-42	PC	2	8	8088	8	0.3	0.6				0.4			MS-DOS		N	C,F,C,B,P	ETH	
HEATH	HSA-1128-42	PC	2	8	8088	8	0.3	0.8				0.4			MS-DOS		N	C,F,B,P	ZL	
HETRA CMPTR & COMM.	MARK I	PC	4	8	Z80A	4	0.1	0.3				3			CP/M		N		HET	
HETRA CMPTR & COMM.	MARK V	PC	10	8	Z80		0.1								HETROS		N			
HETRA CMPTR & COMM.	MARK VII	S	15	8	Z80		0.1								HETROS		N			
HETRA COMPUTER & COMM.	MARK X	S	100	8			0.1	0.3							HETROS		Y	B,CB,F,P		
HEURIKON	814/68010	PC	14		68000		0.3	8												
HEURIKON	814/MLZ	PC	7		Z80A		0.02	1				8	1.2	10	40					
HEURIKON	MINIBOX	PC	14		68000		0.3	1					0.7	30	140					
HEWLETT-PACKARD	110	PC	3		8086		0.3					3	0.3							
HEWLETT-PACKARD	150	PC	4		8088		0.3	1				3	0.3	5	15					
HEWLETT-PACKARD	216S	PC	5		68000		0.1	1												
HEWLETT-PACKARD	220S	PC	6		68000		0.1	4												
HEWLETT-PACKARD	226S	PC	11		68000		0.1	2												
HEWLETT-PACKARD	236CS	PC	17		68000		0.1	2				0.3								
HEWLETT-PACKARD	236S	PC	14		68000		0.1	2				0.3								
HEWLETT-PACKARD	520	PC	35		NMOS III		0.3	5				0.3	10							
HEWLETT-PACKARD	530	PC	23		NMOS		0.5	5					65							
HEWLETT-PACKARD	540	PC	42		NMOS III		0.5	5					65							
HEWLETT-PACKARD	550	PC	36				0.5	2												
HEWLETT-PACKARD	A600	S	6		AMD 2901C		0.1	8												
HEWLETT-PACKARD	A700	S	13				0.1	8				0.3	15							
HEWLETT-PACKARD	A900	S	24				0.8	24				0.3	15							
HEWLETT-PACKARD	HP 260	PC	10		P		0.3	1				0.7	15							
HEWLETT-PACKARD	HP 3000 SERIES 37XE	S	20		P		1.0	2												
HEWLETT-PACKARD	HP-120 SERIES	PC	3	8	Z80A'S	4	0.1	0.1				5	0.2	5		CP/M-80		N	B	P
HEWLETT-PACKARD	HP-150 TOUCH SCREEN II	PC	5		8088	8	0.3	1				3	0.7	10	20	MS-DOS				
HEWLETT-PACKARD	HP-85B	PC	4	8	NMOS		0.1	1				3	0.3	5	17	P		N	B	P
HEWLETT-PACKARD	HP-86B	PC	2	8	NMOS		0.1	1				3	0.3	5	17	P		N	B	P
HEWLETT-PACKARD	HP1000 E/F SERIES	S	24	16	P		0.3	2			1	10	3200		REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MDL 16	S	27	16			0.1	4				17			RTE-A		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MDL 17	S	35	16			0.3	4				17			RTE-A		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MDL 19	S	44	16			0.8	6				17			RTE-A		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MDL 2103L	PC	5	16			0.1	0.5							RTE-XL		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MDL 26	S	16	16	HP A600+		0.5	8			4		16	50000	REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MDL 27	S	24	16	HP A700		0.5	8			4		17	50000	REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MDL 29	S	34	16	HP A900		0.8	24	4		4		17	50000	REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MDL 5	S	10	16			0.1	0.5							RTE-XL		N		F,B,P	
HEWLETT-PACKARD	HP1000 MDL 6	S	18	16			0.1	3							RTE-A		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MDLS 40/45	S	48	16			0.1	2					20		RTE-IVB		Y		F,B,P	
HEWLETT-PACKARD	HP1000 MICRO 26	S	10	16	HP A600		0.5	8			1	10	10000		REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MICRO 27	S	13	16	HP A700		0.5	8			4	10	10000		REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000 MICRO 29	S	29	16	HP A900		0.8	6	4		1	10	1000		REALTIME				B,F,P	
HEWLETT-PACKARD	HP1000-A600	S	12	16	P		0.1	4			4		0.3	10	RTE-A		Y		F,B,P	D/N
HEWLETT-PACKARD	HP1000-A700	S	22	16	P		0.1	4			4		0.3	16	132+	RTE-A		Y	F,B,P	D/N
HEWLETT-PACKARD	HP1000-A900	S	56	16	P		0.8	21	4		3		0.3	16	132+	RTE-A		Y	F,B,P	D/N
HEWLETT-PACKARD	HP250 SERIES	S	17	16			0.3	0.9				8		27	OS/6		Y		B	
HEWLETT-PACKARD	HP3000 SERIES 37	S	30	16	P		0.5	2			P	1	55	404	MPE		Y		B,CB,P,F,R,SP	LAN
HEWLETT-PACKARD	HP3000 SERIES 39	S	85	16			0.5	3					28		MPE-V/E		Y		F,B,P,R,CB,SP	
HEWLETT-PACKARD	HP3000 SERIES 42	S	166	16			1.0	3				1	3200		REALTIME		Y		B,CB,P,F,SP	
HEWLETT-PACKARD	HP3000 SERIES 44	S	186	16			1.0	4				1	4200		REALTIME		Y		B,CB,P,F,R,SP	
HEWLETT-PACKARD	HP3000 SERIES 48	S	40	16			3.0	8	8		56		50	9700	REALTIME		Y		B,CB,P,F,R,SP	
HEWLETT-PACKARD	HP9000 MDL 236	S	31	32	68000		0.9	16	16		2		1600		HP-UX		Y		C,F,P	
HEWLETT-PACKARD	HP9000-550	S	36	32	P		0.5	10			2		1600		HP-UX		Y		C,F,P	
HEWLETT-PACKARD	INTEGRAL PC	PC	5	16	68000		8	0.5	6		HP	5			HP-UX		Y		C,F,P,B	ETH
HEWLETT-PACKARD	PORTABLE	PC	4		8086		5	0.3	0.3						HP-UX		N		B,C	
HEWLETT-PACKARD	PORTABLE PLUS	PC	4		80C86		5	0.1	0.9				0.71						B,P	
HEWLETT-PACKARD	SERIES 200	S	5	16	68000		0.1	4					0.71		MS-DOS					
HEWLETT-PACKARD	SYSTEMSAFE/1000 MDL 60/65	M	220	16			0.3	2					0.5		RTE-6/VM		Y		C,F,P,B	

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE		
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNGS			
												Sz	MB	Mn	Mx							
MOLECULAR COMPUTER	SERIES 12 MODEL 11	PC	0	80186			0.6	1					1.2	20	40							
MOLECULAR COMPUTER	SERIES 36	PC	25	Z80			0.1	1					36.0	60	180							
MOLECULAR COMPUTER	SERIES 4	PC	5	Z80			0.1	—					0.4	10	—							
MOLECULAR COMPUTER	SERIES 9	PC	6	Z80			0.1	1					36.0	10	60							
MOLECULAR COMPUTER	SYSTEM 16/100	PC	5	80186	8		0.1	0.6					1.2	10	—	MS-DOS		Y	C,B,CB,F,P		ETH	
MOLECULAR COMPUTER	SYSTEM 16/200	PC	7	80186	8		0.5	1				5	1.2	20	40	MS-DOS	XENIX	Y				
MOLECULAR COMPUTER	SYSTEM 16/400	PC	15	80186	8		1.0	32				5	0.4	40	—	MS-DOS	XENIX	Y				
MOLECULAR COMPUTER	SYSTEM 16/600	PC	42	80186	8		1.0	64				5	0.4	60	—	MS-DOS	XENIX	Y				
MOLECULAR COMPUTER	SYSTEM 16/600	PC	14	68010	8		0.5	4				5	0.8	10	160	UNIX		Y	F,P,B,CB,C		SY	
MOMENTUM CMPTR SYSTEMS	32E	PC		Z80A	4		0.1	0.1								MP/M		Y			CP	
MONOLITHIC SYSTEMS	MSC 8802	PC		80186			0.3	1				5	0.7	—	—							
MONROE SYSTEMS	2112	PC	3	80186			0.1	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2111/MS	PC	3	80186			0.1	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2121	PC	4	80186			0.1	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2122	PC	4	80186			0.3	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2211	PC	3	80186			0.1	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2212	PC	4	80186			0.3	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2221	PC	4	80186			0.1	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2222	PC	4	80186			0.3	1				5	0.7	—	—							
MONROE SYSTEMS	MS 2311	PC	5	80186			0.1	1				5	0.7	10	—							
MONROE SYSTEMS	MS 2312	PC	5	80186			0.3	1				5	0.7	10	—							
MONROE SYSTEMS	MS 2321	PC	6	80186			0.1	1				5	0.7	10	—							
MONROE SYSTEMS	MS 2322	PC	6	80186			0.3	1				5	0.7	10	—							
MONROE SYSTEMS	MS 3114	PC	7	80186			0.5	1				5	0.7	10	—							
MONROE SYSTEMS	MS 3124	PC	13	80186			0.5	1				5	0.7	33	—							
MONROE SYSTEMS	MS 3134	PC	15	80186			0.5	1				5	0.7	33	—							
MONROE SYSTEMS	OC 8828	PC	4	Z80A	3		0.3									CP/M		N	B,P		DR	
MONROE SYSTEMS	SYSTEM 2000	PC	3	68010	8		0.1	0.9				5	0.72	10	33	CP/M-86			B			
MONROE SYSTEMS	Z80A	PC	2	Z80A			0.1	0				—	0.4	—	—							
MORROW DESIGNS	MICRO DECISION 3	PC	2	Z80A			0.1	0				—	0.4	5	34							
MORROW DESIGNS	MICRO DECISION 5/11/16/34	PC	2	Z80A			0.1	0				—	0.4	—	—							
MORROW DESIGNS	PIVOT	PC	3	80C86	5		0.1	1				5	0.4	—	—	MS-DOS						
MORROW DESIGNS	TRICEP	PC	8	68000			0.5	2				—	—	16	—							
MOSAIC TECH	SVS 110	S	26	32032	10		1.0	4	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 120	S	26	32032	10		2.0	4	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 150	S	26	32032	10		2.0	4	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 152	S	26	32032	10		1.0	8	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 210	S	26	32032	10		1.0	8	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 220	S	26	32032	10		1.0	8	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 250	S	26	32032	10		2.0	8	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOSAIC TECH	SVS 252	S	26	32032	10		2.0	8	16	MULT	48	—	1.0	85	85				MOSAIX	C,F,P	ETH	
MOTOROLA/FOUR PHASE	IV/40	S	36	24			0.1	0.1							3	IDOS		Y		CB		
MOTOROLA/FOUR PHASE	IV/50	S	47	24			0.1	0.1							3	IDOS		Y		CB		
MOTOROLA/FOUR PHASE	IV/60	S	69	24		5	0.2	0.7							5	MFE		Y		CB		
MOTOROLA/FOUR PHASE	IV/65	S	80	24		5	0.3	0.8							5	MFE		Y		CB		
MOTOROLA/FOUR PHASE	IV/70	S	75	24		7	0.1	0.1							68	IDOS		Y		CB		
MOTOROLA/FOUR PHASE	IV/90-S	S	76	24		5	0.2	0.5							68	MFE		Y		CB		
MOTOROLA/FOUR PHASE	SERIES 2000, SYS 240	S	15	8	6809E		0.2	0.8					2.5	68		MFE		Y		CB		
MOTOROLA/FOUR PHASE	SERIES 2000, SYS 290	S	21	16	68010		0.5	2					0.7	15		ISOS		Y		B,CB		
MOTOROLA/FOUR PHASE	SERIES 5000, SYS 800	M	214	24		8	1.5							138		IDOS		Y		CB		
MOTOROLA/FOUR-PHASE	6300	PC	0	68010			0.5	2				—	—	—	—							
MOTOROLA/FOUR-PHASE	6600	PC	0	68010			0.5	4				—	—	—	—							
MOTOROLA/FOUR-PHASE	700/800	S	0	P			1.5					—	—	—	—							
MOTOROLA/FOUR-PHASE	IV/80	S	0	P			0.3	1				—	—	—	—							
MOTOROLA/FOUR-PHASE	IV/95	S	0	P			0.5	2				—	—	—	—							
MUSYS	8816 - MULTIPROC	S	15	16	8086	8	0.3	11								MS-DOS		Y		CB	ETH	
MUSYS	MDL 8820	S	20	16	8086	8	0.1	1								MS-DOS		Y		CB	ARC,ETH	
NAS	AS/6660	L	1400	64	P	43ns	8	16	64	P				512	2520	DOS/VS					P	
NAS	AS/80X3 SERIES	L	2000	32		33ns	8	32								VM/370						
NAS	AS/9080	L	4100	64	P	30ns	16	64	512					318	5000	MVS/SP						
NAS	AS/91X0 SERIES	L	3500	32		30ns	8	64								VM/370						
NAS	AS/XL-60	L	4800	64			64	256								VM/370			Y			
NAS	AS/XL-80	L	8400	64			64	256								VM/370			Y			
NAT'L COMPUTER TECH	VOYAGER 1,11,111	S	30	32	32032	6	0.1	18				8	1		47	MP/M		Y		F,C,B,P,PL,L		
NAT'L SEMICONDUCTOR	NS32000 FAMILY	PC		32	32032	10	0.5									UNIX		Y		F,C,B,P,PL,R,A		
NBI	OASYS 2000 PC WKS	PC	3	16	80186	8	0.3	1								MS-DOS		Y		B,CB,F,P	MLT	
NBI	OASYS 4100S/X	PC	5	8	8088		0.1	0.6										N				
NBI	SI TECH CMPTR SYS	PC		16	68010		1.2	4										UNIX	Y			ETH
NBI	SYSTEM ONE ISS 5/10	S	22	16	68010	10	1.3	4		Q								UNIX	Y		L,C,F,CB	ETH

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNCS	
												Sz	MB	Mn	Mx					
NBI	SYSTEM ONE/IWS	S	20	16	68010	8	0.5	1				0.6	12			UNIX	Y	B,C,F	ETH	
NBI	UI TECH WRK STN	PC	18	32	68010	8	1.0	2		P	20	—	0.6	22	45	UNIX 4.2		C,F,P,L,PR	ETH	
NCR	9300	M	113	32	150ns	1.0	4				2			4000		ITX	Y	CB,B,P	SNA	
NCR	DECISION MATE V	PC	3	8	8088	5	0.1	0.5				0.7				MS-DOS	N	B,CB,F,P,P1	OMNI	
NCR	1-9020	S	50	16			0.1	0.5								IMOS III	Y	B,CB		
NCR	1-9050	M	150	32			1	4					162		IRX	Y	B,CB			
NCR	1-TOWER	S	29	16	68000	10	0.5	2		MULT				46	RM/COS	UNIX	Y	CB		
NCR	INTERACTV	PC	9	8	8088		0.1	0.5							MS-DOS	N	B			
NCR	PC IV	PC	4		8088		0.3	0.6				0.36	10		NCR-DOS		B			
NCR	PCB	PC	6		80286	8	0.3	8							NCR-DOS	XENIX	B			
NCR	TOWER 1632	S	24	32	68000		0.5	2			5			230	MULTI	Y	CB,B,F,P,C	ETH		
NCR	TOWER 1632XP	PC	24	16	68010	10	1	8		MULT		0.75	46	84	UNIX III					
NCR	TOWER XP	S	27	16	68010		1	8			4				UNIX V	Y	F,C,P,CB,B	TOW		
NCR	V-8545-11	M	108	32			1	2							VRX	Y	B,CB,F			
NCR	V-8565-11 E	M	100	32			2	8							VRX	Y	B,CB,F			
NCR	V-8595-11	L	967	32	P	84ns	4	16			8		81	1000	VRX/MP		CB,F,B,R	NCR		
NCR	V-8665	L	1215	32	P	38ns	8	32	160	P	32		5	0.5	13	1000	VRX		NCR	
NCR	PC6	PC	4	8	8088	5	0.3	1				5	0.4	20	—	NCR-DOS	N	B	OMNI	
NEC (U.S. ONLY)	APC	PC	3		8086		0.1	1				8	1.0	10	—					
NEC (U.S. ONLY)	PC 8200	PC	3		80C85	5	0.02	0				—	0.4	—	—			B		
NEC (U.S. ONLY)	PC 8800	PC	1		8086		0.1	0				—	0.4	—	—					
NEC (U.S. ONLY)	PC-8801A	PC	2		PD780C-1	4	0.06	0.12				5		—	—	CP/M				
NEC (U.S. ONLY)	STARLET	PC	1				0.1	—				—	0.7	—	—					
NEC INFO SYSTEMS	APC	PC	3	16	8086		0.12	0.51				8	1	10		CP/M-86		CB,B,R		
NEC INFO SYSTEMS	ASTRA 220-200	S	17	16			0.4	0.5						60	ASTRA-OS	Y	CB,B,F,ST			
NEC INFO SYSTEMS	PC 8401 SERIES	PC	3		UPD7008C	4	0.06	0.09					0.32		CP/M					
NEC INFO. SYSTEMS	APC 111	PC	3	16	8086-2	8	0.1	1				5	0.4	10	20	MS-DOS	PCUX	N	B,CB,LO	
NEC INFO. SYSTEMS	ASTRA 3000 SERIES	S	10	32	P	200ns	0.5	8					1.0	63	1000	MULTI	Y	B,CB,C	ITOS	
NEC INFO. SYSTEMS	ASTRA 330 VS	S	15		CUSTOM		0.5	1				—	1.0	256	—					
NEC INFO. SYSTEMS	ASTRA 350 VS	S	20		CUSTOM		1.0	2				—	1.0	500	—					
NEC INFO. SYSTEMS	ASTRA 370 VS	S	25		CUSTOM		1.0	4				—	1.0	1	—					
NELMA DATA	PERSONA 16	PC	2	8	8088	4	0.1	0.6					0.4			MS-DOS	N		NET	
NELMA DATA	PERSONA 16XT	PC	3	8	8088	4	0.3	0.6					0.4	10		MS-DOS	N		NET	
NETCOM PRODUCTS	ANTARES	S	37	16	68000	8	1			MULT			1	84		UNIX	Y	CB,F,C,B,P	ETH	
NETCOM PRODUCTS	OMS 16/UNIX	S	15	16	68000	8	0.3	3		MULT			1	40		OMS/UNIX	Y	B,CB,F,P,C	ETH	
NETCOM PRODUCTS	LYRA	S	14	16	68000	8	0.5			MULT			1	20	40	UNIX	Y	CB,F,C,B,P	ETH	
NETCOM PRODUCTS	ORION	S	50	16	68000	8	1			MULT				474		UNIX	Y	CB,F,C,B,P	ETH	
NEW ENGLAND DIGITAL	A-60	S	12	16			0.1	0.1								N			KIE	
NEW ENGLAND DIGITAL	ABLE SERIES	S	60	16		250ns	0.1	1			22		0.2		40	REALTIME	N	PL		
NICHOLAS INT'L	EL6341,-4,-5,-7	M	50	128			1	8	64	MULT									ETH	
NIXDORF CMPTR	600 SERIES DIST DATA	S	50	16			0.1									DPEX-V	Y		LQ	
NIXDORF CMPTR	8810/65	PC	9		80186		0.3	1				5	1.0	10	—					
NIXDORF CMPTR	8850/35	S	37	16		1100ns	0.1							8	66	MULTI	Y			
NIXDORF CMPTR	8850/45	S	74	16		700ns	0.1							8	132	MULTI	Y			
NIXDORF CMPTR	8850/55	S	105	16		450ns	0.1								528	VRT/MULT	Y			
NIXDORF CMPTR	8850/65	S	117	16		375ns	0.1		2						528	VRT/MULT	Y			
NIXDORF CMPTR	8870	S	19				0.3	1						16	32					
NIXDORF CMPTR	8890	PC	88		P		1.0	8						200						
NIXDORF CMPTR	MDL 15	S	19	16	NIXDORF	300ns	0.3	1						16	65	REAL/MLT	Y	B		
NIXDORF CMPTR	MDL 35	S	32	16	NIXDORF	150ns	0.3	1						26	52	REAL/MLT	Y	B		
NIXDORF CMPTR	MDL 55	S	45	16	NIXDORF	150ns	0.3	1						42	264	REAL/MLT	Y	B		
NIXDORF CMPTR	MICRO 7	PC	13				0.3						0.8	10	—					
NIXDORF COMPUTER	8170 COMPATIBLE DISPLAY	S	61	8	280		0.1										Y			
NIXDORF COMPUTER	8810 MDL 25	PC	3	8	8088		0.3	0.6												
NMC ELECTRONICS	SYSTEM 520/540	PC	8	8	Z80B	6	0.3	1				5		20	40	MS-DOS	Y	B,C		
NOHALT CMPTRS	RELIANT II	S	35	16	8086		0.1	16			5	—	1.0	30	140+	NHDOS	Y	C,F,CB,B,P,PL	P	
NOHALT COMPUTERS	RELIANT	S	35	16	8086	6	0.1	0.5					1	30		MP/M	Y	CB,F,A,P,AP,C	ETH	
NORSK DATA N.A.	ND 100	S	23	16	ND100	180ns	0.5	4	2		2			23	2100	REAL/BAT	Y	CB,F,A,P,AP,C	ETH	
NORSK DATA N.A.	ND 100/CX	S	103	16	ND100/CX	150ns	0.5	4	2	2	2			23	2100	REAL/BAT	Y	CB,F,A,P,AP,C	ETH	
NORSK DATA N.A.	ND-530/550	M	315	32		120ns	1.3	72		2	2			70	7200	SINTRAN	Y	CB,F,A,P,AP,C	ETH,HDL	
NORSK DATA N.A.	ND-560	M	450	32		120ns	2.3	72	16	2	2			70	7200	SINTRAN	Y	CB,F,A,P,AP,C	ETH,HDL	
NORSK DATA N.A.	ND-570	M	525	32		120ns	2.3	72	64	2	2			70	7200	SINTRAN	Y	CB,F,A,P,AP,C	ETH,HDL	
NORTH AMERICAN MICROTECH	SOLUTION 5000 PC	PC	3	8	8088	5	0.1	0.6								MS-DOS	N	B		
NORTH STAR CMPTRS	ADVANTAGE	PC	5	8	8088	4	0.1	0.3				5	0.4	5	30	MS-DOS	N	B,CB,F,P	NRT	
NORTH STAR CMPTRS	DIMENSION	PC	8	16	80186	8	0.1	1				5	0.4	15	119	MS-DOS	Y		ETH/PC	
NORTH STAR CMPTRS	HORIZON 8/16	PC	7	8	8088	4	0.1	1				5	0.4	5	30	CP/M-80	N	B,CB,F,P		
NORTH STAR COMPUTERS	ADVANTAGE 8/16	PC	6	8	8088-2	8	0.1	0.3					0.4			MS-DOS	N	B,F,CB,P	NRT	

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP (\$K)	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM. TYPE	
				BITS	TYPE	CYCLE MHz	MIN MB	MAX MB	CCH KB	BUS	BW MB/s	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNGS		
												Sz	MB	Mn	Mx						
NORTHERN TELECOM	503	S	5	8	8085	286ns	0.3						0.8	2	11	MULTI		N	CB		
NORTHERN TELECOM	565	S	15	8	8085	167ns	0.3	1						22		MULTI	Y		CB	OMNI	
NORTHERN TELECOM	585	S	20	8	8085	167ns	0.3	1						22	342	MULTI	Y		CB	OMNI	
NORTHERN TELECOM	MDL 445	PC	10	8	8085	4	0.1	0.5						10		OMNITASK	Y		B, CB, T	OMNI	
NORTHERN TELECOM	MERIDIAN DV/1	S	25	32	68010		1.0	4		20				40	200	XMS/REAL	Y		CB, F, C, B, P	P	
NUTRONICS	DIMENSION 68000	PC	4	16	68000	7	0.3	4				5	0.8	20	50	MS-DOS	UNIX	N	B, CB, F, P		
OEMTEK	83000 SERIES	PC		8	8088		0.1	0.6								MS-DOS	N			ETH/ARC	
OEMTEK	OTI-1,2	PC		16	80286	8	1	5									Y				
OLYMPIA, USA	PEOPLE COMPUTER	PC	5	16	8086	5	0.1	1				5	0.6	10	20		Y		B		
OMNIBYTE CORP.	OB68K/SYS+	PC	13		68000		0.1	16				8	1.2	20	80						
OMNIBYTE CORP.	OB68K/SYS11	PC	0		68000		0.1	16				8	1.6	80	378						
ONYX SYSTEMS	ONYX 6001 SERIES	PC	9	16	80186	8	0.3	0.8						12		CON-DOS	XENIX	Y	CB, C, B		
ONYX SYSTEMS	186 SERIES	PC	7		80186		0.3	1						12	40						
ONYX SYSTEMS	5010 SERIES	PC	6		Z808		0.4	1						14	40						
ONYX SYSTEMS	5011 SERIES	PC	6		Z80A		0.2							14	21						
ONYX SYSTEMS	5012 SERIES	PC	10		Z8001A		0.5	1						14	40						
ONYX SYSTEMS	6810 SERIES	PC	0		68010		1.0	8						18							
OSBORNE COMPUTER	EXECUTIVE	PC	3		Z80A		0.1					5	0.5								
OSBORNE COMPUTER	VIXEN	PC	1		Z80A		0.1					5	0.5	5							
OSM COMPUTER	ZEUS 3X	PC	11	8	Z80A	4	0.1	2						10		MP/M		Y			
OSM COMPUTER	ZEUS 3X	PC	11	8	Z80A	4	0.06					8			130	CP/M					
OSM COMPUTER	ZEUS 4B	PC	5	8	Z80A	4	0.1	2					0.6	10		MP/M		Y			
OSM COMPUTER	ZEUS 4B	PC	5	8	Z80A	4	0.06					5	0.616		25	CP/M					
OSM COMPUTER CORP.	ZEUS PC	PC	0		8088	5	0.3	1				5	0.4			MS-DOS		N	B		
OSM COMPUTER CORP.	ZEUS V.1.PC	PC	0		8088	5	0.3	1				5	0.4	10	20	MS-DOS		N	B		
OSM COMPUTER CORP.	ZEUS XPC	PC	0		8088	5	0.3	1				5	0.4	10	20	MS-DOS		N	B		
OSM COMPUTER CORP.	ZEUSMATE	PC	0		8088		0.3	1													
PACIFIC MICROCOMPUTERS	PM68D	PC	3	16	68010	12	0.3	8		MULT							UNIX	Y	CB, B, F, P, C, A	ETH	
PACIFIC MICROCOMPUTERS	PM200	PC	16		68010		1.0	4					1.0	20	85						
PACIFIC MICROCOMPUTERS	PM400	PC	30		68010		1.0	4						80	300						
PANASONIC CONSUMER PROD	RL-H7100	PC	4	8	8088	5	0.3	0.6						10		MS-DOS		N	B		
PANASONIC IND.	EXECUTIVE PARTNER	PC	3		8086	5	0.25	0.64						0.36		MS-DOS			B		
PANASONIC IND.	SENIOR PARTNER	PC	4		8088	5	0.12	0.51						0.36		MS-DOS					
PARADISE SYSTEMS	CONVERTIBLE	PC	2	8	Z80A	4	0.1									CP/M		N			
PARADYNE	7812	PC	2		80188		0.1	1					0.4	10							
PARADYNE	7814	PC	2		80188		0.2	1					0.4	10							
PARADYNE	7913	PC	3		80188		0.2	1					0.4	10							
PARADYNE	ANALYSIS WKS	PC	6	16	80188		0.2	0.6								CON-DOS		N	C, B, P, F, CB, PL	PIX	
PARADYNE	OFFICE SYSTEM 8400	S	43	16	80186	4	0.6	1		MULT			0.6	26			XENIX	Y	CB, P, C	PIX	
PARADYNE	PDX MESSENGER	PC		16	80186	8	0.2	1				5	0.4	10		MS-DOS		N	C, CB, B, F, P, PL		
PARADYNE	PRS-9220	S	105	32		32	2	8						160		TRANS-OS		Y	CB	PIX	
PARALLEL COMPUTERS	PARALLEL 300	S	89	32	68010	100ns	1.0	4		MULT	3			65	168		UNIX 4.2	Y	C, F, CB, P, B	ETH	
PARALLEL COMPUTERS	PARALLEL 300XR	S	50	16	68010	10	1	8		MULT							UNIX	Y	CB, C, B, P, F	ETH	
PASCO INT'L	ATLANTIS, MDL 256/64-PC	PC		8	8088	6	0.5									MS-DOS		N	B, P		
PC DESIGNS	FD-1000	PC	2	8	8088-2	8	0.1	1	64			5				MS-DOS	XENIX	N	B	ETH	
PC DESIGNS	HD-1000	PC	2	8	8088-2	8	0.1	1	64				0.4	10	20	MS-DOS	XENIX	Y	B, P	ETH	
PC'S LIMITED	TURBO PC	PC	1	8	8088-2	7	0.6						0.4								
PC'S LIMITED	TURBO PC AT	PC	2	16	80286	6	1						1.2								
PCE SYSTEMS	VOYAGER 1/11/111	PC	50		Z80		0.1	18					1.0	47							
PERKIN-ELMER	3200 MPS	M	271	32	P		2.0	16	8	P				10		OS/32	XELOS	Y	F, P, B, CB, R	ETH	
PERKIN-ELMER	3205	S	27	32	P		0.5	4		P				25		OS/32	UNIX	Y	C, CB, B, P, F, R	ETH	
PERKIN-ELMER	3210	S	52	32	P		0.5	16		P				25		OS/32	XELOS	Y	C, CB, F, B, P	ETH	
PERKIN-ELMER	3230	S	146	32	P		1.0	16	1					67	1440+	OS/32	XELOS	Y	C, CB, F, B, P, CR	ETH	
PERKIN-ELMER	3250XP	M	380	32	P		1.0	16	8	P				67	536	OS/32	XELOS	Y	C, F, CB, B, P, R	ETH	
PERKIN-ELMER	7350A	PC	11	16	68000	8	1.0	3		VERS		5	0.3	15	40	UNIPLUS		Y	C, CB, F, B, S	ETH	
PERKIN-ELMER	7350AC	PC		32	68000	8	0.51	3				5	0.32	15	59	UNIPLUS		Y	C, B, F, CB, S	ETH	
PERKIN-ELMER	7350AM	PC		16	68000	8	0.5	3				5	0.3	15	59	UNIPLUS		Y	C, B, F, S, CB	ETH	
PERKIN-ELMER	XF/200	PC	10	16	68000		1	3									UNIX V	Y			
PERKIN-ELMER	XF/210	PC	11	16	68000		1	4									UNIX V	Y			
PERKIN-ELMER	XF/400	S	22	32			2	4	1								XELOS	UNIX V	Y		
PERKIN-ELMER	XF/600,610	S	35	32			2	16	1								XELOS	UNIX V	Y	CB, UN	
PERKIN-ELMER	3203	S	17		P		0.5	4						51							
PERKIN-ELMER	3260MPS	S	222		P		2.0	16						300							
PERQ SYSTEMS	LN3000	PC	33	16	P	170ns	1.0	2		P	5	8	1.0	43	144	ACCENT	PNX		P, C, F, L	LQ/ETH	
PERQ SYSTEMS	LN3100	S	29	16	P	170ns	1.0	2	16		1		1.0	43	144	REALTIME		N	P, F, C, L	ETH	
PERQ SYSTEMS	LN3200	S	27	16	P	170ns	1.0	2	16		1		1.0	43	144	REALTIME		N	P, F, C, L	ETH	
PERQ SYSTEMS	LN3300	S	70	16	P	170ns	1.0	2	16		1		1.0	43	144	REALTIME		N	P, F, C, L	ETH	

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM.	
				(\$K)	BITS	TYPE	CYCLE	MIN	MAX	CCH	BUS	BW	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNCS	TYPE
													Mhz	MB	MB	KB					
STRATUS CMPTR	XA 600	M	192	32	68010		8.0	16		STRA	4			180		VOS		Y	F, CB, P, PL	STRT	
STRIDE MICRO	STRIDE 420	PC	3	16	68000	10	0.3	2		VME		5	0.6			P-SYS	UNIX V	Y		OMNI	
STRIDE MICRO	STRIDE 440	PC	6	16	68000	10	0.3	8		VME		5	0.6	10	33	P-SYS	UNIX V	Y		OMNI	
STRIDE MICRO	STRIDE 460	PC	9	16	68000	10	0.3	12		VME		5	0.6	15	224	P-SYS	UNIX V	Y		OMNI	
SULCUS COMPUTER	SULCUS 6100 SERIES	PC	10	8	Z80A	4	0.1						0.4	13		MS-DOS	UNIX	Y	B, PI	ETH/RAG	
SULCUS COMPUTER	SULCUS 6800 SERIES	S	35	16	80186	8	0.1	8					0.8	40		P		Y	B, PI	ETH/RAG	
SUMITRONICS	SYSTEM 830	PC	4	8	Z80B	5	0.1	0.3				8	1			CP/M		N	F, CB, B, P, PL		
SUMITRONICS	SUMICOM 330	PC	3		8088		0.1	0				5	0.7	32							
SUN MICROSYSTEMS	SUN 2/120	PC	26	32	68010	10	1.0	4		MULT				50	168		UNIX 4.2		C, F, P	ETH	
SUN MICROSYSTEMS	SUN 2/160	PC	33	16	68010		1.0	4		MULT				71	380+		UNIX 4.2		C, F, P	ETH	
SUN MICROSYSTEMS	SUN 2/170	PC	42	32	68010	10	2.0	4		MULT				168	474		UNIX 4.2		C, F, P	ETH	
SUPER COMPUTER	SUPER XT PLUS	PC	5	8	8088	5	0.3	0.6								DOS		N		AST/PC	
SUPERSET INC.	PGM-2	S	35		AMD 2900		0.4	2						160	635						
SUPERSET INC.	PGM-3	S	40		AMD 2900		0.8	3						160	635						
SYDIS	SIM	PC		16	68010	8	0.5	2									SYDIX	Y	C		
SYKES DATARONICS	GENUS-GC/3	PC	15		8086		0.5	1													
SYMBOLICS	3640	S	73		P	200ns	2.0	8		P	20			140	140				L, F, P	ETH	
SYMBOLICS	3670	S	88		P		2.0	30		P	20			168	470		ZETAL		L, F, P	ETH	
SYNAPSE	SYNAPSE N+1	M	340	32	68000		6.0	16	16		64			151	413+		SYNTH	Y	CB, P		
SYSCON	T184	PC		16			0.3										RSTS/E	Y	CB, F, AP, R, B		
SYSCON	T284	PC		16			0.3										RSTS/E	Y	CB, F, AP, R, B		
SYSCON	T400	PC		16			0.3										RSTS/E	Y	CB, F, AP, R, B		
SYSCON	T500	PC		16			0.3										RSTS/E	Y	CB, F, AP, R, B		
SYSTEMS CONCEPTS	SC-30M	L	500	36		13	144		64	MAS							TOPS-10	Y		ETH	
SYSTEME COMPUTERS LTD.	S2600	PC	0		8086		1.0						0.8	128							
SYSTEME COMPUTERS LTD.	S300	PC	0		8086		0.3	1					0.8								
SYSTEME COMPUTERS LTD.	S400	PC	0		80286		0.5	2					0.8	40	80						
SYSTEME COMPUTERS LTD.	S4000	PC	0		80286		1.0	8					0.8	128							
SYSTEME COMPUTERS LTD.	S600	PC	0		8086		0.3	1					0.8	40							
SYZYGY COMPUTER SYS	SYZYGY CMPTR SYS	S	15	8	Z80H	8	0.3	0.5								MP/M		Y	B, CB		
TANDEM	NONSTOP EXT	M	225	32	P		4	32		DYNA				128	540		GUARDIAN			FOX	
TANDEM	NONSTOP 1+	M	89		P			4		DYNA	26			64			GUARDN	Y	F, CB, B, T, MP	EXP/SNK	
TANDEM	NONSTOP 11	M	130	16	P		4.0	128		DYNA	26			64	540+		GUARDN	Y	C, F, CB, MP, T	EXP/SNK	
TANDEM	NONSTOP TXP	M	240	32	P		4.0	128	64	DYNA				800+			GUARDN	Y	F, CB, B, MP, T	EXP/FOX	
TANDEM COMPUTERS	DYNAMITE 6549	PC	5	16	8086		0.3	0.6					0.4	10			MS-DOS	N	B		
TANDY	MDL 100	PC	2		8085	2	0.00	0.03					0.184								
TANDY	MDL 200	PC	2		80C85	2	0.02	0.07					0.184				TRS-DOS		B		
TANDY	MODEL 2000	PC	4	16	80186	8	0.3	1				5	0.7	10			MS-DOS	N	B, F, CB	VIA	
TANDY	TANDY 1000	PC	1	16	8088	5	0.1	1				5	0.4				MS-DOS	N	B		
TANDY	TANDY 1200	PC	3	16	8088	5	0.3	1				5	0.4	10			MS-DOS	N	B, F, CB		
TANDY	TANDY 600	PC	2		80C88	4	0.03	0.2					0.36								
TANDY	TANDY 6000	PC	6	16	68000	8	0.5	1		MULT		8	1.3	15	35		TRS-DOS	TRS-XENIX	Y	B, F, CB, P	VIA
TANDY	TRS-80 MDL 4/4P	PC	2		Z80A	4	0.06	0.1					0.184				TRS-DOS		B		
TANDY/RADIO SHACK	MODEL 12	PC	4	8	Z80A	4	0.1	0.1				8	1.3	15			TRS-DOS	N	B, F, CB, P	ARC	
TANDY/RADIO SHACK	MODEL 4	PC	1	8	Z80A	4	0.02	0.1				5	0.2	5			TRS-DOS	N	CB, P, B, F		
TARBELL ELECTRONICS	EMPIRE SERIES	S	12	8	Z80	6	0.1	1									CP/M	N	CB, B, PL, F, P		
TARBELL ELECTRONICS	REBEL	PC	7	8	Z80B	6	0.1	1									MP/M	Y			
TECMAR	TEC-86/86M4	PC	8	16	8086	5	0.1	1				8	0.6				MS-DOS	Y	B, CB, F, P, FR		
TECMAR	TEC-86W/86W4W	PC	11	16	8086	5	0.3	1				8	0.6	31			MS-DOS	Y	B, CB, F, P, FR		
TELEMATICS INTN'L	SERIES 1	S	45	32		8	1	4	16								TRAX	Y	C, P		
TELERAM COMMUNICATIONS	T-3000/3500	PC	4	8	Z80L	3	0.1	0.3					0.3				P-SYS	N		ETH	
TELEVIDEO SYSTEMS	MDL 2605	PC	3	8	8088	5	0.3										MS-DOS	N	B	ETH	
TELEVIDEO SYSTEMS	PERSONAL MINI-SERIES	PC	9	16	80186	8	0.3	0.51		P			0.72	10	71		PC-DOS				
TELEVIDEO SYSTEMS	PM/16	PC	9	16	80186	8	0.3										PC-DOS	Y			
TELEVIDEO SYSTEMS	PM/4T	PC	7	16	80186	8	0.3							20			PC-DOS	Y			
TELEVIDEO SYSTEMS	TELE-PC, XT PLUS	PC	4	8	8088	5	0.3										MS-DOS	N	B		
TELEVIDEO SYSTEMS	TELEVIDEO-AT	PC		16	80286	8	0.6										MS-DOS	Y			
TELEVIDEO SYSTEMS	TS 1603	PC	3	16	8088	5	0.1	0.3				5	0.7				MS-DOS	N	CB		
TELEVIDEO SYSTEMS	TS 1605/1605H	PC	5	16	8088	5	0.1	0.3				5	0.4	10			PC-DOS	N	CB		
TELEVIDEO SYSTEMS	TS 804	PC	5	8	Z80A	5	0.3					5	0.7	10			MP/M	Y			
TELEVIDEO SYSTEMS	TS 806/20, 816/40	PC	13	8	Z80A	4	0.1	0.1				5	0.4	15	43		CP/M-80	Y	CB		
TELEX COMPUTER	TELEX 1260	PC	4	16	80186	8	0.3	0.6					0.4				MS-DOS	N	B		
TELEX COMPUTER PROD	TC 1186	PC	5	16	80186	6	0.3	0.6									MS-DOS	N	CB, B		
TELEX COMPUTER PROD	TELEX 1280	PC	6	16	80286	6	0.5	2					1.2	20			MS-DOS	N	B		
TERAK	8510	S	27	16	LSI-11/23	600ns	0.1	1			2		1.2	2	4		RT-11	VENIX	N	F, P, B, C	
TERAK	8600	S	39	16	LSI-11/23	600ns	0.1	1			2		1.2	2	4		RT-11	VENIX	N	F, P, B, C	
TEXAS INSTRUMENTS	300 SERIES	PC	16	16	T199000		0.3	2		P			1.2	38	114		DX10			ETH	

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM.		
			(\$K)	BITS	TYPE	CYCLE	MIN	MAX	CCH	BUS	BW	FLOPPY	FIXED	(MB)	OS	UNIX	MU	LNCS	TYPE			
					MHz	MB	KB		MB/s		Sz	MB	Mn	Mx								
VIDEO TECHNOLOGY	LASER 3000	PC	1	8	6502A	2	0.1	0.2										CP/M		N	B	
VIRTUAL MICROSYSTEMS	PC-BRIDGE PRO-350	PC	2	16	8086	8	0.3											POS		N		
VISUAL TECHNOLOGY	COMMUTER	PC	2		8088		0.3	1			5	0.4										
VISUAL TECHNOLOGY	VISUAL 1050	PC	3	8	Z80A	4	0.1	0.3			5	0.4						CP/M-80		N	B	
VOTRAX	APPLICATION PROCESSOR	PC		16	8086	8	0.4	1												Y		
WANG LABS	2200LVP	S	9		P		0.03	0				1.0										
WANG LABS	2200LPC	S	10		P		0.1	1				1.0										
WANG LABS	2200MVP	S	4		P		0.03	0														
WANG LABS	2200MVP-P10	S	10		P		0.1	1				0.3	10									
WANG LABS	2200MVPC	S	5		P		0.1	1														
WANG LABS	2200SVP	S	6		P		0.03	0				1.0										
WANG LABS	MICROVP	PC	6	8			0.1	0.5											Y		B	WANG
WANG LABS	OFFICE ASSISTANT	PC	2		80186		0.3	1			5	0.4										
WANG LABS	PROFESSIONAL COMPUTER	PC	4	16	8086	8	0.3	1			5	0.4	10	30			MS-DOS		N	B, F, CB, P		WANG
WANG LABS	VS 15	S	19	16	P	400ns	0.3	2		P		0.4	33	147			VS-OS	UVS	Y	CB, B, F, PL, R		WANG
WANG LABS	VS 25	S	34	16	P	500ns	0.5	2				1.2	34	76			REALTIME		Y	CB, B, F, PL, R		WANG
WANG LABS	VS 45	S	42	16	P	500ns	0.5	2				1.2	34	2500			REALTIME		Y	CB, B, F, PL, R		WANG
WANG LABS	VS 50	S					0.1	0.5									UVS		Y	B, PL, R, CB, F		
WANG LABS	VS100	M	96	32	P	480ns	1.0	8	32			0.4		10200			VS-OS		Y	CB, F, B, R, PL		WANG
WANG LABS	VS300	M	181	32	P	480ns	4.0	16	32		5	0.4		20400			VS-OS		Y	CB, F, B, R, PL		WANG
WANG LABS	VS65	S	59	32	P	200ns	1.0	4	16	P		0.4	76	288			VS-OS		Y	CB, F, B, R, PL		WANG
WANG LABS	VS85	M	80	32	P	480ns	1.0	4	32			0.4	147	5100			VS-OS		Y	CB, F, B, R, PL		WANG
WANG LABS	VS90	M	150	32	P	480ns	1.0	4	32	P		0.3	75	640			VS-OS		Y	CB, F, B, R, PL		WANG
WAVE MATE	BULLET IV	PC	2	8	Z80A	4	0.1	0.1			5	0.8					CP/M-80		Y	B, PL, CB, F		WAV
WAVE MATE	SUPER BULLET 510	PC	4	8	Z80A	4	0.1	0.3			5	0.8	10				CP/M-80		Y	B, PL, CB, F		WAV
WAVE MATE	SUPER BULLET 515	PC	4	8	Z80A	4	0.3	0.3			5	0.8	15				CP/M-80		Y	B, PL, CB, F		WAV
WAVE MATE	SUPER BULLET 520	PC	4		Z80A		0.1	0			5	0.8	20						Y	B, PL, CB, F		WAV
WEBSTER COMPUTER	PRISM	S	18	16			0.3	2		Q				105			RT-11		Y	CB, F, B		DEC
WICAT SYSTEMS	S160	S	37	16	68000	125ns	0.5	5						10	474		WMCS		Y	AP, B, CB, F, P		ETH, ARC
WICAT SYSTEMS	S200	S	46	16	68000	125ns	0.5	5						80	474		WMCS		Y	AP, B, CB, F, P		ETH, ARC
WICAT SYSTEMS	S220	S	51	16	68000	125ns	0.5	12						80	474		WMCS		Y	AP, B, CB, F, P		ETH, ARC
WICAT SYSTEMS	S2220	S	59	16	68000	80ns	0.5	12	4					80	474		WMCS		Y	AP, B, CB, F, P		ETH, ARC
WICAT SYSTEMS	SYSTEM 1250	S	15	16	68000	13	1	5											Y	AP, B, CB, F, P		
WICAT SYSTEMS	SYSTEM 1255	S	19	16	68000	13	1	12		MULT				28			PICK	UNIX V	Y	C, B, P, F, AP, CB		ETH
WICAT SYSTEMS	SYSTEM 1260	S	23	16	68000	13	1	12				0.6	28				PICK	UNIX V	Y	F, B, CB, AP, P, C		ETH
WICAT SYSTEMS	SYSTEM 140	PC	8	16	68000	8	0.5	1						80			PICK	UNIX V	Y	C, B, P, AP, CB, F		ETH
WICAT SYSTEMS	S150	S	11	16	68000	8	0.5	2			5	0.6	10	15			MCS		Y	N, CB, F, AP, P		
WICAT SYSTEMS	S155	S	16	16	68000	8	0.5	5		MULT		0.6	10	39			WMOS	UNIPLUS	Y	F, P, C, B, AP		ETH
WILD HARE COMPUTER	HARE BRAIN SYS	S	17	16	68000	8	0.5	14		MULT		0.6	30	39			WMOS	UNIPLUS	Y	C, F, P, B, AP		ETH
WINTOX COMPUTER	MT-86	S	15	16	8086	5	0.3	1	32								CP/M-86		Y	B, P, AP, C, F, CB		ETH
WYSE TECH	WY-1000	PC	3	16	80186	8	0.1	1			5	0.4	10				MS-DOS		N	CB, F, B, P, PL		
WYSE TECHNOLOGY	WY-1100-2	PC	3	8	8088	5	0.3	0.6									MS-DOS		N		B	ETH/PC
XEROX	16/8 OEM	PC	4	16	8086	5	0.1	0.3			8	0.8	5	10			MS-DOS		N		B	ETH
XEROX	8010 INFO SYS	PC		16			0.2	0.8											Y	CB, B		
XEROX	820-11	PC	0		Z80A		0.1				8	0.5	8									
XEROX	DIABLO 3200	PC		8	8080		0.1	0.1										CP/M		N	B	
XMARK	TURBO TOWER JR	PC		8	8088	8	0.3	1									MS-DOS					
XYVISION	XYCOMP	S	85	16	68010	8	2	11														
XYZTEK	MAXIMA 16	S	40	32	68020	13	1	64		VERS				300				UNIX V	Y	C		ETH
XYZTEK	MAXIMA 16	PC	45		68020		1.0	64						500			XYZNIX	UNIX	Y	B, CB, F, C, P		ETH
ZAX CORP	THE BOX	PC		16	8086	5	0.5	1			8	1.0	40				MS-DOS		N	P, C, PM		
ZAX CORP	THE BOX	PC		8	Z80	6	0.1	1			8	1.0	40				CP/M		Y			
ZENDEX	835	PC	9		8085		0.1					0.5										
ZENDEX	94/136	PC	7		80186		0.5	1				0.4	10									
ZENDEX	94/186	PC	7		80186		0.5	1				0.4	40									
ZENDEX	95/36B	PC	8		8086		0.3	1				1.0										
ZENDEX	95/86B	PC	14		8086		0.5	1				1.0	40									
ZENITH	Z-150	PC	5	16	8088	5	0.3	1			5	0.4	10				MS-DOS		N	B, P, CB, F		
ZENITH	Z-160	PC	3		8088		0.3	1			5	0.4										
ZENITH	Z-171	PC	3	16	80C88	5	0.25	0.5				0.36					MS-DOS					
ZENITH	Z-100	PC	4		8088		0.2				5	0.3										
ZENITH DATA SYSTEMS	Z-200 ADVANCED PC	PC	5	16	80286		0.5	1.5									MS-DOS					
ZENTEC	2000	PC	10		8086		0.3	1				0.7	20				MS-DOS	XENIX				
ZILOG	SYSTEM 8000/11	PC	15	16	Z8001		0.5	2		Z			19	33			UNIX III					ETH
ZILOG	SYSTEM 8000/11 PLUS	PC	17	16	Z8001		0.5	2					52									
ZILOG	SYSTEM 8000/12	PC	20		Z8001A		0.5	4					52									
ZILOG	SYSTEM 8000/22	PC	24	16	Z8001A		0.5	8					52									

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COMPUTERS - PRODUCT SPECIFICATIONS

MFR	MODEL	CL	ASP	CPU			MEMORY			I/O		STORAGE				SOFTWARE				COMM.		
				BITS	TYPE	CYCLE	MIN	MAX	CCH	BUS	BW	FLOPPY		FIXED (MB)		OS	UNIX	MU	LNGS	TYPE		
												Hz	MB	MB	KB						Sz	MB
ZILOG ZOLTECH	SYSTEM 8000/32 VQ-11	PC S	30 17	16 16	Z8001A	0.5 0.1	8 4							52 70					RSX-11M XENIX	Y	CB,F,C,B,P,A	ETH/DEC

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COMPUTERS - PRODUCT SPECIFICATION GLOSSARY

CLASS

CL - CLASS SIZE OF COMPUTER.

VL - VERY LARGE
L - LARGE
M - MEDIUM
S - SMALL
PC - PERSONAL

ASP

(\$K) - AVERAGE SELLING PRICE.
(IN THOUSANDS)

CPU - CENTRAL PROCESSING UNIT

BITS - # OF BITS IN CPU.
TYPE - MAKE OF CHIP.
CYCLE - CLOCK CYCLE TIME (MEGAHERTZ).

MEMORY - RANDOM ACCESS MEMORY

Min - MINIMUM AMOUNT OF MEMORY ALLOWED (MEGABYTES).
Max - MAXIMUM AMOUNT OF MEMORY ALLOWED (MEGABYTES).
CCH - CACHE MEMORY AVAILABLE (KILOBYTES).

I/O - INPUT/OUTPUT

BUS - TYPE OF I/O BUS.

QMI - QMI-BUS	PC - PC-BUS
DYNA - DYNA-BUS	Q - Q-BUS
EX - EX-BUS	SBI - SBI-BUS
EXR - EXOR-BUS	SCSI - SCSI
HP - HP-CIO	SEL - SEL-BUS
I/O - I/O-BUS	STD - STD-BUS
IEE - IEE-696	STRA - STRATA-BUS
MAS - MASS-BUS	UNI - UNI-BUS
MEGA - MEGA-BUS	VERS - VERSA-BUS
MICR - MICRO I/O	VME - VME
MP - MP-BUS	X - X-BUS
MULT - MULTI-BUS	XOD - XODIAC
P - PROPRIETARY	Z - Z-BUS

BW - I/O BUS BANDWIDTH (MEGABYTES PER SECOND).

STORAGE - PERMANENT MEMORY STORAGE

FLOPPY - FLEXIBLE DISK STORAGE.

Sz(In) - DIAMETER IN INCHES.
Cap(Kb) - CAPACITY IN KILOBYTES.

FIXED (Mb) - FIXED DISK STORAGE IN MEGABYTES.

Mn - LEAST AVAILABLE HARD DISK STORAGE.
Mx - MAXIMUM AVAILABLE HARD DISK STORAGE.

SOFTWARE

OS - OPERATING SYSTEMS USED.
UNIX - UNIX TYPE OPERATING SYSTEMS USED.
MU - MULTI-USER ENVIRONMENT POSSIBLE (Y/N).
LNGS - SOFTWARE LANGUAGES AVAILABLE.

A - ADA	ML - MPL
AB - ABOL	MO - MODULA
AC - ACCESS	MP - HUMPS
AG - AG/L	N - NDL
AL - ALGOL	NA - NATURAL
AN - ANS174	O - OFFICEPOWER
AP - APL	P - PASCAL
B - BASIC	PI - PILOT
BP - BPL	PL - PL/I
C - C	PM - PL/M
CB - COBOL	PR - PROLOG 7
CP - CPL	Q - QUERY
CR - CORAL 66	R - RPG II
D - DG/L	RB - RPB
DB - DIBOL	RE - RECALL
E - ENGLISH	RF - RATFOR
ES - ESCORT	RG - REGAL
F - FORTRAN	S - SYBOL
FR - FORTH	SD - SDL
GW - GWDOS	ST - SMART
H - HUGO	SM - SMC
L - LISP	SP - SPL
LI - LINO	T - TAL
LO - LOGO	TE - TEXT
M - MAINSAIL	U - UPDATE
MA - MAPPER	UN - UNIBOL
MC - MACRO-11	UP - UPL
ME - META	W - WPS8

COMM - INTER-COMMUNICATIONS NETWORK

TYPE - NETWORK PROTOCOL.

JB - JBNET	LQ - LINO
ACCL - ACCELNET	MAG - MAGNET
ACT - ACTNET	MAX - MAXNET
ADV - ADVANCENET	MIC - MICNET
ANC - ANCNET	MLT - MULTINET
APL - APPLETTALK	MS - MSNET
ARC - ARCNET	NCR - NCR/DLC
ARP - ARPANET	NET - NET/ONE
AST - ASTNET	NRT - NORTHNET
AURA - AURANET	NSC - NSC
B - BNET	OMG - OMEGANET
B4 - B4NET	OMNI - OMNINET
BAR - BARI STERNET	P - PROPRIETARY
BEST - BESTNET	PC - PC NETWORK
BNA - BNA	PEN - PENNET PLUS
C - C-NET	PIX - PIXNET
CDC - CDC/LCH	PLX - PLEXUS-NET
CENT - CENTURION	POLY - POLYNET
CP - CPNET	PRM - PRIMENET
CT - CTNET	QUA - QUADNET
D/N - DSN/MRJE	RAG - RAGNET
DCA - DCA	SEL - SELNET
DEC - DECNET	SFT - SOFTNET
DR - DRNET	SNX - SNAX
DSA - DSA	SPR - SPERRYLINK
DTA - DATANET	STA - STARLAN
ECO - ECONET	STRT - STRATNET
ETH - ETHERNET	SY - SYTEK
EXP - EXPAND	SYFA - SYFANET
FOX - FOX	TOW - TOWNET
G - G-NET	ULTI - ULTINET
HDL - HDLC	UNIV - UNIVERSENET
HET - HETNET	USER - USERNET
HI - HINET	VIA - VIANET
INC - INCOMNET	WANG - WANGNET
ITOS - ITOSNET	WAY - WAVE NET
KIE - KIEWITNET	WRK - WORKNET
L - LNET	XOD - XODIAC
L/F - L/FNET	ZL - ZLAN
LAN - LANIEEE 802	

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SUBJECT: FAI Prospector Book

CC: A. Vasudeva

Attached, you will find two files to be inserted in your FAI Prospector Book. These files list computer models sold through the VARS channel of distribution. They should be put into Chapter 4 directly after the VARS listout.

Please let me know if any further types of information may be of help to you. Thank you.

Regards,



Doug Steiner, Product Planning, x3405

Attachment
/ds

4. CHANNELS OF DISTRIBUTION

VALUE ADDERS

- OEMS (See Chapter 3)
- Subsystem Houses
- VARS
- Distributors
- Company Specialty Chains

COMPUTER MODELS sold through VARS

(Sorted by model)

VARS	Models Sold	VARS	Models Sold
COMPUTER STRATEGIES, INC.	ADDS	NES, INC.	Apple
CONSOLIDATED MICROGRAPHICS	ADDS	PIEPER ELECTRIC INC.	Apple
DATATEL	ADDS	PLANTE & MORAN	Apple
KEYSTONE INFO SYSTEMS	ADDS	QUADREX COMPUTER SYSTEMS INC.	Apple
MADIC CORP.	ADDS	SYSTEMS ARCHITECTS INC.	Apple
MANCHESTER EQUIPMENT	ADDS	SYSTEMS RESEARCH LABS, INC.	Apple
MEDICAL DATA SERVICES CORP.	ADDS	TEL-TEX, INC.	Apple
MEDICAL DATA SVCS	ADDS	ENERGY INC.	Aydin
MICRO DATA SYSTEMS (ID)	ADDS	TIMESHARING UNLIMITED INC.	BTI
NORTHEAST DATA SYSTEMS, INC.	ADDS	EDP SYSTEMS INC.	Basic Four
NOVVA CMPTR SYSTEMS	ADDS	ENDATA, INC.	Basic Four
RADIAN CORP.	ADDS	JONAS & ERICKSON SFTWRE	Basic Four
ROI SYSTEMS	ADDS	PLANTE & MORAN	Basic Four
TRICOM GROUP	ADDS	CURTIS 1000	Burroughs
ASSOCIATED DATAMASTERS	AT&T	INFORMATION MANAGEMENT INT'L.	Burroughs
CONSOLIDATED DATA SYSTEMS	AT&T	MODULAR INFO SYSTEMS	Burroughs
INFOCEL, INC.	AT&T	NORRELL SERVICES	Burroughs
MTI SYSTEMS INC.	AT&T	REACT CORP.	Burroughs
RELATIONAL TECHNOLOGY	AT&T	RELATIONAL TECHNOLOGY	Burroughs
S & S ELECTRONICS, INC.	AT&T	SARTORIS, INC.	Burroughs
SYKES DATATRONICS	AT&T	SYSTEM DEVELOPMENT CORP.	Burroughs
SYSTEMHOUSE LTD.	AT&T	CLINTON COMPUTERS	C. Itoh
SYSTEMHOUSE, INC.	AT&T	GENERAL DIGITAL CORP. (MD)	C. Itoh
CARTER & CRAWLEY, INC.	Allen Bradley	GLOBAL TURNKEY SYSTEMS	CDC
CONTROL-O-MATION, INC.	Allen Bradley	JERSEY MICRO SYSTMS	CIE Systems
HARDWARE COMPUTER CORP.	Allen Bradley	FIRST COMPUTER CORP.	Cadmus
IDEAS, INC.	Alpha Micro	BUSINESS INFORMATION SYSTEMS	Cado
WESTERN NY CMTG SYS	Alpha Micro	NORTHERN DATA SYSTEMS	Cado
ULTIMATE COMPUTER SERVICES	Alspa	WHIPPLETREE ENTERPRISES	Callan Data
ASSOCIATED DATAMASTERS	Altos	CONTEL INFORMATION SYSTEMS	Codata
COMPUTER DATA SYSTEMS, INC.	Altos	MARTIN MARIETTA CORP.	Cogent Data
COMPUTER MERCHANT, LTD.	Altos	COMPUTERTOWN	Columbia Data
CRYSTAL COMPUTERS, INC.	Altos	CRYSTAL COMPUTERS, INC.	Columbia Data
DELPHI SYSTEMS, INC.	Altos	RGI, INC.	Columbia Data
ESTIMATION, INC.	Altos	T AND B COMPUTING	Columbia Data
GENERAL BUSINESS SERVICES	Altos	COMPUTERTOWN	Commodore
HARDWARE COMPUTER CORP.	Altos	D/B DATA INC.	Commodore
INTERNATIONAL RESEARCH	Altos	EAST TEXAS PERIODICALS	Commodore
KEY SYSTEMS, INC.	Altos	MEMCOM INTERNATIONAL, INC.	Commodore
MICRO DATA SYSTEMS (ID)	Altos	NAT'L UNLTD BUSINESS SYS	Commodore
MIDWEST DATA SYSTEMS	Altos	SYSTEMS ARCHITECTS INC.	Commodore
NORTHEAST DATA SYSTEMS, INC.	Altos	BRISTOL BABCOCK	Compaq
NUCLEAR DATA	Altos	MANCHESTER EQUIPMENT	Compaq
NUMERIC MICRO, INC.	Altos	PRC REALTY SYSTMS	Compaq
PROGRAMS & ANALYSIS	Altos	GENERAL DYNAMICS	Compupro
S & S ELECTRONICS, INC.	Altos	COMPUTE-R-SYSTEMS	Compuscan
SAFEGUARD BUSINESS SYSTEMS	Altos	DATA COM, INC.	Computer Auto
SHASTA GENERAL SYS	Altos	I.P. SHARP ASSOCIATES LTD.	Computer Auto
SYKES DATATRONICS	Altos	LARSE CORP.	Computer Auto
TRICOM GROUP	Altos	TELEGENIX, INC.	Computer Auto
PHOENIX LEASING, INC.	Amdahl	COMPUTER ROOM	Computone
RELATIONAL TECHNOLOGY	Amdahl	CARE COMPUTER SYSTEMS	Convergent
AUTO-TROL TECHNOLOGY CORP.	Apollo	INFORMATION MANAGEMENT INT'L.	Convergent
CALMA CO.	Apollo	M/A-COM	Convergent
MENTOR GRAPHICS CORP.	Apollo	SYSTEM AUTOMATION CORP.	Convergent
SILVAR LISCO	Apollo	TECHNOLOGY MARKETING	Convergent
ALPS	Apple	TRW DATACOM	Convergent
AMI	Apple	CYCARE SYSTEMS, INC.	Corona Data
BFA CORP. (NM)	Apple	MICROWARE DISTRIBUTORS INC.	Corona Data
BUSINESS EQPMT & SUPPLY	Apple	VISTA TECHNOLOGY INC.	Corona Data
CLINTON COMPUTERS	Apple	VITEK	Corona Data
COMPUTERTOWN	Apple	GENERAL DYNAMICS	Cromemco
CYBORG CORP.	Apple	ISTEL, INC.	Cromemco
ENDATA, INC.	Apple	VCA CORP.	Cromemco
FOSTER-MILLER, INC.	Apple	ACCU-SORT SYSTEMS, INC.	DEC
FRENCH GERELEMAN ELECTRIC CO.	Apple	ADVANCED COMPUTER TECHNIQUE	DEC
IDEAS, INC.	Apple	ADVANCED INTEGRATED TECHNOLOGY	DEC
KANJANRUS CORP.	Apple	ALBIN BUSINESS COMPUTERS	DEC
LARSE CORP.	Apple	ALPINE DATASYSTEMS	DEC
MATRIX/SYSTEMS GROUP CORP.	Apple	ALPS	DEC
NABIHS INC.	Apple	AMHERST ASSOC.	DEC
NAT'L UNLTD BUSINESS SYS	Apple	AMI	DEC

COMPUTER MODELS sold through VARS

(Sorted by model)

VARS	Models Sold	VARS	Models Sold
AMNET, INC.	DEC	GELCO CORP.	DEC
ANALOGIC CORP.	DEC	GENERAL BUSINESS SERVICES	DEC
ANN ARBOR COMPUTER	DEC	GENERAL DIGITAL CORP. (CT)	DEC
AREGON INTERN'L, INC.	DEC	GENERAL DIGITAL CORP. (MD)	DEC
ASK COMPUTER SYSTEMS	DEC	GENERAL DYNAMICS	DEC
ASSOCIATED DATAMASTERS	DEC	GENRAD, INC.	DEC
AUTO-TROL TECHNOLOGY CORP.	DEC	HARDWARE COMPUTER CORP.	DEC
AUTOMETRIC, INC.	DEC	HIGHSMITH & CO.	DEC
AYDIN SYSTEMS	DEC	HOPKINS ASSOC.	DEC
BATTELLE SOFTWARE PROD. CENTER	DEC	I.P. SHARP ASSOCIATES LTD.	DEC
BEDFORD ASSOCIATES, INC.	DEC	IDEAS, INC.	DEC
BOSTON SYSTEMS OFFICE	DEC	INTEGRATED MICROCOMPUTER	DEC
BRISTOL BABCOCK	DEC	INTERMETRICS, INC.	DEC
C & W INCOTEL LTD.	DEC	INTERNATIONAL RESEARCH	DEC
CADRE CORP.	DEC	ISTEL, INC.	DEC
CALCULUS/LOGICON	DEC	JOHNSON CONTROLS, INC.	DEC
CANADIAN ASTRONAUTICS LTD.	DEC	KEANE, INC.	DEC
CARTER & CRAWLEY, INC.	DEC	KESELL ASSOCIATES	DEC
CBC SERVICES	DEC	KINETIC SYSTEMS CORP.	DEC
CINCINNATI TIME	DEC	LANTOR, INC.	DEC
CL SYSTEMS, INC.	DEC	LARSE CORP.	DEC
CLARK EQUIPMENT CO.	DEC	LAWSON ASSOC.	DEC
CLINTON COMPUTERS	DEC	LEVY INC.	DEC
COGNOS CORP.	DEC	LITTON INDUSTRIES	DEC
COLLIER-JACKSON, INC.	DEC	LOCKWOOD GREENE SYSTEMS CORP.	DEC
COMCON, INC.	DEC	LOGICA INC.	DEC
COMPUCON	DEC	LOGICON, INC.	DEC
COMPUSERVE INC.	DEC	LUNDY ELECTRONICS & SYSTEMS	DEC
COMPUTE-R-SYSTEMS	DEC	M/A-COM	DEC
COMPUTER CORP. OF AM.	DEC	MANUS SERVICES CORP.	DEC
COMPUTER INFORMATION SYSTEMS	DEC	MARTIN MARIETTA CORP.	DEC
COMPUTER INPUT CORP.	DEC	MATRIX/SYSTEMS GROUP CORP.	DEC
COMPUTER LINK CORP.	DEC	MCAUTO	DEC
COMPUTER STRATEGIES, INC.	DEC	MEDICAL INFO TECH	DEC
COMPUTER SYNERGY	DEC	MODULAR DATA SYSTEMS, INC.	DEC
COMPUTER SYSTEMS DEVELOPMENT	DEC	MTI SYSTEMS INC.	DEC
COMPUTER USAGE CO.	DEC	NAT'L CMPTR SYSTEMS	DEC
COMPUTERTOWN	DEC	NAT'L DATA CORP.	DEC
CONTEL INFORMATION SYSTEMS	DEC	NATIONAL COMPUTER CORP.	DEC
CONTROL APPLICATIONS	DEC	NES, INC.	DEC
CONTROL-O-MATION, INC.	DEC	NORTHEAST DATA SYSTEMS, INC.	DEC
DATA ARCHITECTS, INC.	DEC	NORTHROP CORP.	DEC
DATA GROUP CORP.	DEC	NUCLEAR DATA	DEC
DATA-TRON, INC.	DEC	NUS CORP.	DEC
DATAKOM, INC.	DEC	PARAGON TECHNOLOGY	DEC
DATAPPAREL, INC.	DEC	PLANNING RESEARCH	DEC
DATATRONIC SYSTEMS CORP.	DEC	PROCESS CONTROL IND., INC.	DEC
DAVID JAMISON CARLYLE CORP.	DEC	QEI, INC.	DEC
DECCOMP INC.	DEC	QUADREX COMPUTER SYSTEMS INC.	DEC
DELTA DATA SYSTEMS	DEC	RAGEN INFO SYSTEMS	DEC
DIGITAL ASSOCIATES CORP.	DEC	RELATIONAL TECHNOLOGY	DEC
DOWTY RFL INDUSTRIES, INC.	DEC	RESEARCH INC.	DEC
DP COMMUNICATIONS	DEC	ROCKWELL INTERNATIONAL	DEC
DRAVO ENGINEERS, INC.	DEC	ROI SYSTEMS	DEC
E.B.S. DATA PROCESSING	DEC	ROSS SYSTEMS	DEC
ECOM SYSTEMS INC.	DEC	SADDLEBROOK CORP.	DEC
EDP SYSTEMS INC.	DEC	SCAN-OPTICS INC.	DEC
ENDATA, INC.	DEC	SCIENCE APPLICTNS INTN'L	DEC
ENERGY INC.	DEC	SCIENTIFIC CALCULATIONS	DEC
EOCOM ELECTRONIC SYSTEMS	DEC	SCIENTIFIC MICRO SYSTEMS	DEC
ESCA CORP.	DEC	SCIENTIFIC SYSTEMS	DEC
FAIRCHILD WESTON SYSTMS	DEC	SCOTT COMPUTING SYSTEMS	DEC
FEDERAL SYSTEMS, INC.	DEC	SEVERN COMPANIES	DEC
FIGGIE SYSTEMS MGMT. GROUP	DEC	SHOWALTER SYSTEMS	DEC
FINALCO, INC.	DEC	SILVAR LISCO	DEC
FIRST COMPUTER CORP.	DEC	SIMMONDS PRECISION	DEC
FISHER CONTROLS INTERNATIONAL	DEC	SMS	DEC
FORMASTER CORP.	DEC	SOLAR TURBINES INC.	DEC
FOSTER-MILLER, INC.	DEC	STEARNS CATALYTIC	DEC
FREY ASSOCIATES, INC.	DEC	STERLING SYSTEMS INC.	DEC
FREY FEDERAL SYSTEMS CORP.	DEC	SUNDSTRAND DATA CONTROL INC.	DEC
FRONTIER SYSTEMS	DEC	SYNERCOM TECHNOLOGY, INC.	DEC

COMPUTER MODELS sold through VARS

(Sorted by model)

VARS	Models Sold	VARS	Models Sold
SYSCON CORP.	DEC	MCAUTO	Data General
SYSTEM TECHNOLOGY ASSOCIATES	DEC	MEDICAL INFO TECH	Data General
SYSTEME CORP.	DEC	NAT'L DATA CORP.	Data General
SYSTEMHOUSE LTD.	DEC	NATIONAL DATA CORP.	Data General
SYSTEMHOUSE, INC.	DEC	OCLC ONLINE COMPUTER	Data General
SYSTEMS ARCHITECTS INC.	DEC	PLANNING RESEARCH	Data General
SYSTEMS ASSOCIATES INC.	DEC	QUADREX COMPUTER SYSTEMS INC.	Data General
SYSTEMS BY MICA	DEC	RADIAN CORP.	Data General
SYSTEMS RESEARCH LABS, INC.	DEC	RAGEN INFO SYSTEMS	Data General
T AND B COMPUTING	DEC	REACT CORP.	Data General
TATA CONSULTANCY SERVICES	DEC	SIMCON INC.	Data General
TECHNOLOGY FOR ENERGY	DEC	STANDARD DATA CORP.	Data General
TECHNOLOGY MARKETING	DEC	STERLING SYSTEMS INC.	Data General
TECHNOLOGY, INC.	DEC	STS SYSTEMS LTD.	Data General
TEL-TEX, INC.	DEC	STS SYSTEMS, INC.	Data General
TELCO RESEARCH	DEC	SYSTEMS ARCHITECTS INC.	Data General
TELESIS SYSTEMS	DEC	SYSTEMS RESEARCH LABS, INC.	Data General
TOTAL TEC SYSTEMS	DEC	TATA CONSULTANCY SERVICES	Data General
TYMSHARE, INC.	DEC	TELESCIENCES, INC.	Data General
UCCEL CORP.	DEC	WORICO DATA SYSTEMS	Data General
ULTRASYSTEMS DEFENSE/SPACE	DEC	RADIAN CORP.	Data Printer
UNIQ DIGITAL TECHNOLOGIES	DEC	DATATEL	Datamedia
VANGUARD TECHNOLOGIES CORP.	DEC	GLOBAL TURNKEY SYSTEMS	Datamedia
VECTRON GRAPHIC SYSTEMS	DEC	CARE COMPUTER SYSTEMS	Datapoint
WEBB CO., JERVIS	DEC	DATA GROUP CORP.	Datapoint
WESTERN SCIENTIFIC MKT	DEC	FINALCO, INC.	Datapoint
WHITE HAT SYSTEMS, INC.	DEC	MIDWEST COMMERCE DATA	Datapoint
PRES INC.	DTS	N. C. S. INC.	Datapoint
ADVANCED COMPUTER TECHNIQUE	Data General	SYSTEMS ARCHITECTS INC.	Datapoint
AERO SYSTEMS ENGINEERING	Data General	GLOBAL TURNKEY SYSTEMS	Dataproducs
ALPS	Data General	RADIAN CORP.	Dataproducs
AUTOMETRIC, INC.	Data General	SYSTEMS ASSOCIATES INC.	Datavue
BARRISTER INFORMATION SYSTEMS	Data General	COIN FINANCIAL SYSTEMS	Digilog
BASIX CONTROLS SYSTEMS	Data General	GENERAL DIGITAL CORP. (MD)	Digilog
BIO-RAD LABORATORIES	Data General	RADIAN CORP.	Documation
BUSINESS EQPMT & SUPPLY	Data General	CALMA CO.	Domain
COGNOS CORP.	Data General	INNOVATIVE COMPUTER LEASING	Durango
COMCON, INC.	Data General	SIMCON INC.	Durango
COMPUTER ELECTION SYSTEMS	Data General	ULTIMATE COMPUTER SERVICES	Durango
COMPUTER INPUT CORP.	Data General	ULTIMATE COMPUTER SERVICES	Dynabyte
COMPUTER SYSTEMS DEVELOPMENT	Data General	PACIFIC HEALTH RESOURCES	Eagle
COMPUTERIZED BUS. SOLUTIONS	Data General	DATA TECH. SYSTEMS LTD.	Eagle Signal
CONTEL INFORMATION SYSTEMS	Data General	FEDERAL SYSTEMS, INC.	Eagle Signal
CONTROL APPLICATIONS	Data General	RIBBLE ENGINEERING CO.	Eagle Signal
DATA GROUP CORP.	Data General	SCIENCE DYNAMICS CORP.	Eagle Signal
DATACOM, INC.	Data General	ECOM SYSTEMS INC.	Emulex
DASTORE INC.	Data General	GENERAL DIGITAL CORP. (MD)	Emulex
DATATRONIC SYSTEMS CORP.	Data General	CLINTON COMPUTERS	Epson
DELPHI SYSTEMS, INC.	Data General	RGI, INC.	Ericsson
DISTRIBUTION & MFG SYSTEMS	Data General	COIN FINANCIAL SYSTEMS	Esprit
DP COMMUNICATIONS	Data General	INTEGRATED MICROCOMPUTER	Fortune
DYATRON CORP.	Data General	SMS	Four Phase
EAGLE SIGNAL CONTROLS	Data General	GENERAL DIGITAL CORP. (MD)	Fujitsu
EBS, INC.	Data General	C TEK SOFTWARE	General Automation
EECO COMPUTER	Data General	DATATEL	General Automation
ELECTRONIC DATA SYSTEMS	Data General	MEDICAL DATA SERVICES CORP.	General Automation
ENDATA, INC.	Data General	MEDICAL DATA SVCS	General Automation
FINALCO, INC.	Data General	BOEING ENGINEERING CO.	Gould
GENERAL BUSINESS COMPUTERS	Data General	CADRE CORP.	Gould
GENERAL DIGITAL CORP. (CT)	Data General	CURRY CONTROLS CO.	Gould
GENERAL DYNAMICS	Data General	DATACOM, INC.	Gould
GENERAL ELECTRIC CO.	Data General	ELECTRONIC ASSOCIATES, INC.	Gould
GLOBAL TURNKEY SYSTEMS	Data General	GRAFTEK	Gould
HIGHSMITH & CO.	Data General	IDEAS, INC.	Gould
I.P. SHARP ASSOCIATES LTD.	Data General	INFORMATION MANAGEMENT INT'L.	Gould
INTERNATIONAL RESEARCH	Data General	JTS CMPTR SYSTEMS	Gould
KANJANRUS CORP.	Data General	MODULAR DATA SYSTEMS, INC.	Gould
LAWSON ASSOC.	Data General	SCIENCE APPLICITNS INTN'L	Gould
LEVITZ RETAIL SYSTEMS	Data General	SIMULATION SYSTEMS	Gould
LOGICON, INC.	Data General	CROWNTEK INC.	Grid Systems
M/A-COM	Data General	LOCKWOOD GREENE SYSTEMS CORP.	Grid Systems
MANCHESTER EQUIPMENT	Data General	ENDATA, INC.	Grid Systems

COMPUTER MODELS sold through VARS

(Sorted by model)

VARS	Models Sold	VARS	Models Sold
ALPS	HP	ADVANCED COMPUTER TECHNIQUE	Honeywell
ANN ARBOR COMPUTER	HP	ANACOMP, INC.	Honeywell
ASK COMPUTER SYSTEMS	HP	COMPUTER STRATEGIES, INC.	Honeywell
AUTOMATED SCIENCES GROUP, INC.	HP	CONDOR COMPUTER	Honeywell
AUTOMETRIC, INC.	HP	CYCARE SYSTEMS, INC.	Honeywell
AZTEK, INC.	HP	DATA TECH. SYSTEMS LTD.	Honeywell
CANADIAN ASTRONAUTICS LTD.	HP	FIGGIE SYSTEMS MGMT. GROUP	Honeywell
CITY NATIONAL BANK	HP	FINALCO, INC.	Honeywell
CLINTON COMPUTERS	HP	FRONTIER SYSTEMS	Honeywell
COGNOS CORP.	HP	INFORMATICS GENERAL CORP.	Honeywell
COLLIER-JACKSON, INC.	HP	JEFFERSON-PILOT BROADCASTING	Honeywell
COMPUTERTOWN	HP	MEDICAL DATA SERVICES CORP.	Honeywell
CONTEL INFORMATION SYSTEMS	HP	MEDICAL DATA SVCS	Honeywell
CONTROL APPLICATIONS	HP	NORDATA INC.	Honeywell
CROWNTEK INC.	HP	NORTHEAST DATA SYSTEMS, INC.	Honeywell
CURRY CONTROLS CO.	HP	ROI SYSTEMS	Honeywell
DATA RENTALS/SALES, INC.	HP	SARTORIS, INC.	Honeywell
DATACOM, INC.	HP	STERLING SYSTEMS INC.	Honeywell
DATATRONIC SYSTEMS CORP.	HP	SYSTEMS ARCHITECTS INC.	Honeywell
DAVY MCKEE CORP.	HP	TECHNALYSIS CORP.	Honeywell
DIGITAL ASSOCIATES CORP.	HP	ACPI LTD.	IBM
DOWTY RFL INDUSTRIES, INC.	HP	ADVANCED COMPUTER MANAGEMENT	IBM
DP COMMUNICATIONS	HP	ADVANCED COMPUTER TECHNIQUE	IBM
EYRING RESEARCH INSTITUTE INC.	HP	ADVANTAGE SYSTEMS	IBM
FIGGIE SYSTEMS MGMT. GROUP	HP	ALPINE DATASYSTEMS	IBM
FINALCO, INC.	HP	ALPS	IBM
FISHER CONTROLS INTERNATIONAL	HP	AMERICAN APPRAISAL ASS.	IBM
FOSTER-MILLER, INC.	HP	AMHERST ASSOC.	IBM
FRANKLIN RESEARCH CENTER	HP	AMI	IBM
GENERAL BUSINESS COMPUTERS	HP	ANACOMP, INC.	IBM
GENERAL DIGITAL CORP. (CT)	HP	ANN ARBOR COMPUTER	IBM
GENERAL DYNAMICS	HP	APPLIED SYSTEMS	IBM
GENERAL INSTRUMENT CORP.	HP	AQUIDNECK DATA CORP.	IBM
GERBER SYSTEMS TECH	HP	ARA MAINTENANCE MNGMT SYS	IBM
GRAFTEK	HP	ARTRONICS, INC.	IBM
HARDWARE COMPUTER CORP.	HP	ASSOCIATED COMPUTER SYSTEM	IBM
I.P. SHARP ASSOCIATES LTD.	HP	AUTO TELL SERVICES	IBM
IDEAS, INC.	HP	AUTOMATED INSURANCE RES SYS	IBM
INFOCENTRE LTD.	HP	AUTOMETRIC, INC.	IBM
INTERNATIONAL RESEARCH	HP	AUXTON CMPTR ENTERPRISES	IBM
LARSE CORP.	HP	AZURDATA INC.	IBM
LOGISTICON, INC.	HP	BATTELLE SOFTWARE PROD. CENTER	IBM
MARTIN MARIETTA CORP.	HP	BEDFORD ASSOCIATES, INC.	IBM
MARYLAND COMPUTER SERVICES	HP	BFA CORP. (NM)	IBM
MEMCOM INTERNATIONAL, INC.	HP	BOEING COMPUTER SERVICES	IBM
NORTHROP CORP.	HP	BRASINGTON & ASSOC., W.A.	IBM
NUCLEAR DATA	HP	BRISTOL BABCOCK	IBM
PERSONNEL DATA SYS	HP	BUSINESS EQPMT & SUPPLY	IBM
PIEPER ELECTRIC INC.	HP	BUSINESS INFORMATION SYSTEMS	IBM
PLANNING RESEARCH	HP	CAPITAL SYSTEMS, INC.	IBM
PLANTE & MORAN	HP	CARE COMPUTER SYSTEMS	IBM
SAFEGUARD BUSINESS SYSTEMS	HP	CARLYN COMPUTER SYSTEM INC.	IBM
SARTORIS, INC.	HP	CASS MARKETING SERVICES, INC.	IBM
SCAN-OPTICS INC.	HP	CF CORP.	IBM
SILTON AMS	HP	CLINTON COMPUTERS	IBM
SIMCON INC.	HP	COGNITRONICS CORP.	IBM
SMITH, DENNIS & GAYLORD, INC.	HP	COIN FINANCIAL SYSTEMS	IBM
SUNDSTRAND DATA CONTROL INC.	HP	COLUMBINE SYSTEMS	IBM
SYSCON CORP.	HP	COMPUCON	IBM
SYSTEM AUTOMATION CORP.	HP	COMPUTER INFORMATION SYSTEMS	IBM
SYSTEMHOUSE LTD.	HP	COMPUTER INPUT CORP.	IBM
SYSTEMHOUSE, INC.	HP	COMPUTER RESALE EXCHANGE	IBM
SYSTEMS INTEGRATED	HP	COMPUTER STRATEGIES, INC.	IBM
SYSTEMS RESEARCH LABS, INC.	HP	COMPUTER SYSTEMS DEVELOPMENT	IBM
TATA CONSULTANCY SERVICES	HP	COMPUTER USAGE CO.	IBM
TECHNALYSIS CORP.	HP	COMPUTERIZED BUS. SOLUTIONS	IBM
TELEPHONICS CORP.	HP	COMPUTERS TO GO	IBM
TELESCIENCES, INC.	HP	COMPUTERTOWN	IBM
TELESIS SYSTEMS	HP	COMPUTERVISION	IBM
WEBB CO., JERVIS	HP	CONSOLIDATED DATA SYSTEMS	IBM
ADVANCED COMPUTER TECHNIQUE	Harris	CONTEL INFORMATION SYSTEMS	IBM
VECTRON GRAPHIC SYSTEMS	Harris	CONTINENTAL HEALTHCARE	IBM

COMPUTER MODELS sold through VARS

(Sorted by model)

VARS	Models Sold	VARS	Models Sold
CONTROL APPLICATIONS	IBM	MANCHESTER EQUIPMENT	IBM
CONTROL-O-MATION, INC.	IBM	MANOF COMMUNICATIONS SYSTEMS	IBM
CORNELL COMPUTER	IBM	MARION CO., WILLIAM	IBM
CORPORATE DATA SCIENCES	IBM	MARTIN MARIETTA CORP.	IBM
CROWNTEK INC.	IBM	MATRIX/SYSTEMS GROUP CORP.	IBM
CURTIS 1000	IBM	MEDICAL DATA SERVICES CORP.	IBM
CYBERNETICS & SYSTEMS	IBM	MEDICAL DATA SVCS	IBM
CYBORG CORP.	IBM	MEDICAL INFO TECH	IBM
D/B DATA INC.	IBM	MEMBERSHIP SERVICES, INC.	IBM
DATA 3 SYSTEMS, INC.	IBM	METAFILE INFO SYSTEMS	IBM
DATA EXCHANGE, INC.	IBM	MICROS SYSTEMS	IBM
DATA RENTALS/SALES, INC.	IBM	MICROVOICE	IBM
DATA SYSTEMS (VA)	IBM	MINICOM DATA CORP.	IBM
DATA-TRON, INC.	IBM	MNGMT CONTROL SYSTEMS	IBM
DATALINE INC.	IBM	MNGMT DECISION SYSTM	IBM
DATAMEDIC CORP.	IBM	MUTAGO DATA CORP.	IBM
DATATRONIC SYSTEMS CORP.	IBM	NABIHS INC.	IBM
DAVID JAMISON CARLYLE CORP.	IBM	NAT'L CMPTR SYSTEMS	IBM
DELPHI SYSTEMS, INC.	IBM	NAT'L DATA CORP.	IBM
DELTA DATA SYSTEMS	IBM	NATIONAL DATA CORP.	IBM
DEXEL SYSTEMS CORP.	IBM	NES, INC.	IBM
DIGITAL ASSOCIATES CORP.	IBM	NETWORK SOLUTIONS (VA)	IBM
DP SYSTEMS & SVCS	IBM	NEW GENERATION SFTWRE	IBM
DURR-FILLAUER MEDICAL INC.	IBM	NFLD. & LABRADOR COMP. SVCS.	IBM
DYATRON CORP.	IBM	NMF, INC.	IBM
DYNAMIC CONTROL	IBM	NORDATA INC.	IBM
DYTEC SOUTH	IBM	NORTHEAST DATA SYSTEMS, INC.	IBM
EAGLE SIGNAL CONTROLS	IBM	NORTHROP CORP.	IBM
EBS, INC.	IBM	NUCLEAR DATA	IBM
EDP SYSTEMS INC.	IBM	NUMERIC MICRO, INC.	IBM
EDWARDS & CO., J.D.	IBM	O'BRIEN & GERE ENGRS	IBM
ENDATA, INC.	IBM	OCLC ONLINE COMPUTER	IBM
ERISCO	IBM	PACIFIC HEALTH RESOURCES	IBM
FANNIE MAE	IBM	PACKARD INSTRUMENT CO.	IBM
FEDERAL COMPUTER CORP.	IBM	PHOENIX LEASING, INC.	IBM
FEDERAL SYSTEMS, INC.	IBM	PIEPER ELECTRIC INC.	IBM
FINALCO, INC.	IBM	PIONEER COMPUTER MARKETING	IBM
FINANCIAL SOFTWARE, INC.	IBM	PLANNING RESEARCH	IBM
FOSTER-MILLER, INC.	IBM	PLANTE & MORAN	IBM
FRENCH GERELEMAN ELECTRIC CO.	IBM	POST SOFTWARE INTERNATIONAL	IBM
FREY FEDERAL SYSTEMS CORP.	IBM	POST-TRON SYSTEMS	IBM
FRONTIER COMPUTER CORP.	IBM	PRC REALTY SYSTM	IBM
GENERAL BUSINESS COMPUTERS	IBM	PRICE ELECTRONICS CORP.	IBM
GENERAL PHYSICS CORP.	IBM	PROCESS CONTROL IND., INC.	IBM
GRAMMCO COMPUTER SALES	IBM	PROCOM LEASING & MANAGEMENT	IBM
HARDWARE COMPUTER CORP.	IBM	PROFSNL CMPTR RESOURCES	IBM
HARRIS DATA SERVICE	IBM	PROLAN	IBM
HEALTH INFO SYSTEMS	IBM	QUADREX COMPUTER SYSTEMS INC.	IBM
IDEAS, INC.	IBM	QUADSTAR CORP.	IBM
INFOCEL, INC.	IBM	RAGEN INFO SYSTEMS	IBM
INFORMATICS GENERAL	IBM	REYNOLDS & REYNOLDS	IBM
INFORMATICS GENERAL CORP.	IBM	ROCKWELL INTERNATIONAL	IBM
INTEGRATED MICROCOMPUTER	IBM	ROI SYSTEMS	IBM
INTERACTIVE DATA	IBM	RTC SYSTEMS	IBM
INTERNATIONAL RESEARCH	IBM	S & S ELECTRONICS, INC.	IBM
IRT CORP.	IBM	SAFEGUARD BUSINESS SYSTEMS	IBM
ISTEL, INC.	IBM	SARTORIS, INC.	IBM
JEFFERSON-PILOT BROADCASTING	IBM	SCAN-TRON CORP.	IBM
JOBTRACK	IBM	SCIENCE DYNAMICS CORP.	IBM
JOHNSON CONTROLS, INC.	IBM	SCOTT COMPUTING SYSTEMS	IBM
KANJANRUS CORP.	IBM	SENSOR-BASED SYSTEMS	IBM
KEANE, INC.	IBM	SERVICeworld	IBM
KESELL ASSOCIATES	IBM	SEVERN COMPANIES	IBM
KEY SYSTEMS, INC.	IBM	SHARED UNION SYSTEMS, INC.	IBM
KINETIC SYSTEMS CORP.	IBM	SHOWALTER SYSTEMS	IBM
LAWSON ASSOC.	IBM	SILTON AMS	IBM
LEVI, RAY & SHOUP	IBM	SILVAR LISCO	IBM
LIBRA PROGRAMMING, INC.	IBM	SMS	IBM
LOCKWOOD GREENE SYSTEMS CORP.	IBM	SOFTWARE SHOP SYSTEMS	IBM
LOWRY COMPUTER PRODUCTS	IBM	SOLAR TURBINES INC.	IBM
M/A-COM	IBM	STANDARD DATA CORP.	IBM
MADIC CORP.	IBM	STERLING SYSTEMS INC.	IBM

COMPUTER MODELS sold through VARS

(Sorted by model)

VARs	Models Sold	VARs	Models Sold
SUMMIT CAD CORP.	IBM	ROI SYSTEMS	Mentor
SUN DATA, INC.	IBM	ANACOMP, INC.	Microdata
SUNDSTRAND DATA CONTROL INC.	IBM	COMPUTER STRATEGIES, INC.	Microdata
SYSCON CORP.	IBM	CREATIVE CMPTR SOLUTIONS	Microdata
SYSTEME CORP.	IBM	INFOCEL, INC.	Microdata
SYSTEMS ARCHITECTS INC.	IBM	MEDICAL DATA SERVICES CORP.	Microdata
SYSTEMS SUPPORT, INC.	IBM	MEDICAL DATA SVCS	Microdata
T AND B COMPUTING	IBM	MUTAGO DATA CORP.	Microdata
TATA CONSULTANCY SERVICES	IBM	NOVVA CMPTR SYSTEMS	Microdata
TECHNICAL MARKETING SYSTEMS	IBM	ROI SYSTEMS	Microdata
TEL-TEX, INC.	IBM	CADRE CORP.	Modcomp
TELE TERMINALS INC.	IBM	DATACOM, INC.	Modcomp
TIMPLEX INC.	IBM	ENERGY INC.	Modcomp
TOTAL TEC SYSTEMS	IBM	JOHNSON CONTROLS, INC.	Modcomp
TOTAL TECHNICAL SVCS	IBM	LOCKWOOD GREENE SYSTEMS CORP.	Modcomp
TRISTAR DATA SYSTEMS	IBM	MODULAR DATA SYSTEMS, INC.	Modcomp
TYMSHARE, INC.	IBM	QUADREX COMPUTER SYSTEMS INC.	Modcomp
VECTRON GRAPHIC SYSTEMS	IBM	TECHNOLOGY FOR ENERGY	Modcomp
VISTA TECHNOLOGY INC.	IBM	CARTER & CRAWLEY, INC.	Modicon
WEBB CO., JERVIS	IBM	DATACOUNT CORP.	Mohawk Data
WESTERN CO. OF NA	IBM	DELPHI SYSTEMS, INC.	Molecular
WESTERN SCIENTIFIC MKT	IBM	MICRO DATA SYSTEMS (ID)	Molecular
ENERGY INC.	IDT	SEVERN COMPANIES	Molecular
RGI, INC.	ITT Courier	EYRING RESEARCH INSTITUTE INC.	Mostek
TELESIS SYSTEMS	Int'l Courier	AGENT SYSTEMS	Motorola
DATACOUNT CORP.	Int'l Data Sci	ANALOGIC CORP.	Motorola
JTS CMPTR SYSTEMS	Int'l Entry	BIO-RAD LABORATORIES	Motorola
ACCU-SORT SYSTEMS, INC.	Integrated Sol	CADLINC, INC.	Motorola
ALPINE DATASYSTEMS	Intel	CONTROL APPLICATIONS	Motorola
AMNET, INC.	Intel	DP COMMUNICATIONS	Motorola
AUTOCONTROL, INC.	Intel	EYRING RESEARCH INSTITUTE INC.	Motorola
BRISTOL BABCOCK	Intel	GENERAL DIGITAL CORP. (CT)	Motorola
EQUATORIAL COMMUNICATIONS CO.	Intel	TECHNOLOGY MARKETING	Motorola
FOSTER-MILLER, INC.	Intel	TELEGENIX, INC.	Motorola
GENERAL DIGITAL CORP. (CT)	Intel	WEBB CO., JERVIS	Motorola
GENERAL INSTRUMENT CORP.	Intel	CALDWELL-VAN RIPER	NCR
GENISCO	Intel	CONSOLIDATED MICROGRAPHICS	NCR
IDEAS, INC.	Intel	FIRST COMPUTER CORP.	NCR
KAYE INSTRUMENTS	Intel	KEY SYSTEMS, INC.	NCR
KEY SYSTEMS, INC.	Intel	MEDICAL DATA SERVICES CORP.	NCR
LOGICA INC.	Intel	MEDICAL DATA SVCS	NCR
LUNDY ELECTRONICS & SYSTEMS	Intel	RAGEN INFO SYSTEMS	NCR
MESA TECHNOLOGY CORP.	Intel	RELATIONAL TECHNOLOGY	NCR
MTI SYSTEMS INC.	Intel	REYNOLDS & REYNOLDS	NCR
PLANNING RESEARCH	Intel	TRICOM GROUP	NCR
PROCESS CONTROL IND., INC.	Intel	COIN FINANCIAL SYSTEMS	NEC
RICH, INC.	Intel	GIANGARLO SCIENTIFIC	NEC
ROCKWELL INTERNATIONAL	Intel	MEDCOMP TECHNOLOGIES, INC.	NEC
SCIENTIFIC MICRO SYSTEMS	Intel	NAT'L UNLTD BUSINESS SYS	NEC
SUNDSTRAND AVIATION	Intel	PRICE ELECTRONICS CORP.	NEC
TECHNOLOGY MARKETING	Intel	SYSTEM AUTOMATION CORP.	NEC
TECHNOLOGY, INC.	Intel	TECHNOLOGY MARKETING	National Sem
TELEPHONICS CORP.	Intel	COMPUTER SYSTEMS DEVELOPMENT	Nixdorf
TELETEK ENTERPRISES	Intel	AMI	Nor th Star
TOTAL TECHNICAL SVCS	Intel	CRYSTAL COMPUTERS, INC.	Nor th Star
TYLUS SYSTEMS INC.	Intel	GBC	Nor th Star
ENERGY INC.	Intelligent Equip	GENERAL BUSINESS COMPUTERS	Nor th Star
D/B DATA INC.	Kaypro	HARDWARE COMPUTER CORP.	Nor th Star
DATA RENTALS/SALES, INC.	Kaypro	MICROWARE DISTRIBUTORS INC.	Nor th Star
EAGLE SIGNAL CONTROLS	Kaypro	SYSTEMS ARCHITECTS INC.	Nor th Star
MICRO DATA SYSTEMS (ID)	Kaypro	TRW DATACOM	Nor th Star
MNGMT DECISION SYSTMS	Kaypro	COMPUTER MERCHANT, LTD.	OSM
NAT'L UNLTD BUSINESS SYS	Kaypro	DATA GROUP CORP.	OSM
WESTERN SCIENTIFIC MKT	Kaypro	MICRO DATA SYSTEMS (ID)	OSM
GENERAL DIGITAL CORP. (MD)	Kennedy	COIN FINANCIAL SYSTEMS	Okidata
MNGMT DECISION SYSTMS	Leading Edge	MICRO DATA SYSTEMS (ID)	Okidata
PROLAN	Leading Edge	POST-TRON SYSTEMS	Omn on
HOPKINS ASSOC.	Lear Siegler	DELPHI SYSTEMS, INC.	Onyx
LOCAL DIGITAL DIST.	M/A-Com	DURR-FILLAUER MEDICAL INC.	Onyx
DATA GROUP CORP.	MSI	REYNOLDS & REYNOLDS	Onyx
VECTRON GRAPHIC SYSTEMS	Masscomp	AZURDATA INC.	Panasonic
CALDWELL-VAN RIPER	Mentor	CLINTON COMPUTERS	Panasonic

COMPUTER MODELS sold through VARS

(Sorted by model)

VARs	Models Sold	VARs	Models Sold
MANCHESTER EQUIPMENT	Panasonic	PLANTE & MORAN	Seiko
MEDCOMP TECHNOLOGIES, INC.	Panasonic	FIRST COMPUTER CORP.	Sequent
NAT'L UNLTD BUSINESS SYS	Panasonic	ASSOCIATED COMPUTER SYSTEM	Smith Corona
ECOM SYSTEMS INC.	Perception Tech	COMPUTER CURRICULUM	Sony
APPLIED AUTOMATION INC.	Perkin-Elmer	NAT'L DATA CORP.	Sperry
AVANT-GARDE COMPUTING	Perkin-Elmer	SARTORIS, INC.	Sperry
DELPHI SYSTEMS, INC.	Perkin-Elmer	ANN ARBOR COMPUTER	Stratus
INTERN'L TOTALIZATOR	Perkin-Elmer	LOGICA INC.	Stratus
FAIRFIELD INDUSTRIES	Perkin-Elmer	POST-TRON SYSTEMS	Stratus
LOGICON, INC.	Perkin-Elmer	SYSTEM DEVELOPMENT CORP.	Stratus
VECTRON GRAPHIC SYSTEMS	Perkin-Elmer	WEBB CO., JERVIS	Stratus
BIS SALES, INC.	Per tec	SIGMA DESIGN	Sun Micro
BUSINESS INFORMATION SYSTEMS	Per tec	M/A-COM	Synapse
MUTAGO DATA CORP.	Per tec	ADVANCED COMPUTER TECHNIQUE	Tandem
KESELL ASSOCIATES	Pixel Cmptr	CABLEDATA	Tandem
LOGON, INC.	Plexus	COMPUTER SCIENCES CORP.	Tandem
BUSINESS EQPMT & SUPPLY	Point 4 Data	COMPUTER USAGE CO.	Tandem
EEOO COMPUTER	Point 4 Data	DATA ARCHITECTS, INC.	Tandem
HAGEN SYSTEMS INC.	Point 4 Data	EYRING RESEARCH INSTITUTE INC.	Tandem
JTS CMPTR SYSTEMS	Point 4 Data	LOGICA INC.	Tandem
MINICOM DATA CORP.	Point 4 Data	M/A-COM	Tandem
SYSTEMS ASSOCIATES INC.	Point 4 Data	MIDEC, INC.	Tandem
ACTUARIAL COMPUTER TECHNOLOGY	Prime	NAT'L DATA CORP.	Tandem
ANACOMP, INC.	Prime	SMITH, DENNIS & GAYLORD, INC.	Tandem
BATTELLE SOFTWARE PROD. CENTER	Prime	SYSTEM INTEGRATORS, INC.	Tandem
BIS SALES, INC.	Prime	CONSOLIDATED DATA SYSTEMS	Televideo
BUSINESS INFORMATION SYSTEMS	Prime	CONSOLIDATED MICROGRAPHICS	Televideo
COMPUTER STRATEGIES, INC.	Prime	CONTINENTAL HEALTHCARE	Televideo
DATATEL	Prime	DATAMEX LTD.	Televideo
DIALOGUE INC.	Prime	DAVID JAMISON CARLYLE CORP.	Televideo
DSC	Prime	DAYTON-FORESTER ASSOCIATES	Televideo
GENERAL PHYSICS CORP.	Prime	DELPHI SYSTEMS, INC.	Televideo
GULL RESOURCE MGMT. SYSTEMS	Prime	ENDATA, INC.	Televideo
INFOCEL, INC.	Prime	EXECUTIVE BUSINESS SYSTEMS	Televideo
INTERACTIVE, INC.	Prime	GERHARD & ASSOCIATES, INC.	Televideo
ISTEL, INC.	Prime	HARVARD DATA EQUIPMENT	Televideo
JOBTRACK	Prime	INTERNATIONAL RESEARCH	Televideo
KEYSTONE INFO SYSTEMS	Prime	MATRIX/SYSTEMS GROUP CORP.	Televideo
MADIC CORP.	Prime	MICRO DATA SYSTEMS (ID)	Televideo
MCAUTO	Prime	NOVVA CMPTR SYSTEMS	Televideo
MEDICAL DATA SERVICES CORP.	Prime	PLANTE & MORAN	Televideo
MEDICAL DATA SVCS	Prime	PRES INC.	Televideo
NORTHEAST DATA SYSTEMS, INC.	Prime	ADVANCED INTEGRATED TECHNOLOGY	Texas Instruments
NOVVA CMPTR SYSTEMS	Prime	AMI	Texas Instruments
QUADREX COMPUTER SYSTEMS INC.	Prime	APPLIED DATA SYSTEMS INC.	Texas Instruments
RAGEN INFO SYSTEMS	Prime	AUTO TELL SERVICES	Texas Instruments
ROI SYSTEMS	Prime	CARTER & CRAWLEY, INC.	Texas Instruments
SHARED UNION SYSTEMS, INC.	Prime	COIN FINANCIAL SYSTEMS	Texas Instruments
SYSCON CORP.	Prime	COMPUTER RESEARCH, INC.	Texas Instruments
SYSTONETICS, INC.	Prime	COMPUTERTOWN	Texas Instruments
T AND B COMPUTING	Prime	CONTROL-O-MATION, INC.	Texas Instruments
TATA CONSULTANCY SERVICES	Prime	CURTIS 1000	Texas Instruments
TRANSPORT INFORMATION SYSTEMS	Prime	DATA RENTALS/SALES, INC.	Texas Instruments
COMPUTER STRATEGIES, INC.	Printronic	DATA-MED CORP.	Texas Instruments
FIRST COMPUTER CORP.	Pyramid	DATA-TRON, INC.	Texas Instruments
UNIQ DIGITAL TECHNOLOGIES	Pyramid	DAVY MCKEE CORP.	Texas Instruments
COMPUTER USAGE CO.	Qantel	DIGITAL ELECTRONIC SERVICES	Texas Instruments
COMPUTERIZED BUS. SOLUTIONS	Quantel	DYATRON CORP.	Texas Instruments
COIN FINANCIAL SYSTEMS	Qume	ENDATA, INC.	Texas Instruments
AMI	Radio Shack	EYRING RESEARCH INSTITUTE INC.	Texas Instruments
DOWTY RFL INDUSTRIES, INC.	Radio Shack	GLOBAL TURNKEY SYSTEMS	Texas Instruments
LARSE CORP.	Radio Shack	IDEAS, INC.	Texas Instruments
N. C. S. INC.	Radio Shack	INTEGRATED MICROCOMPUTER	Texas Instruments
PIEPER ELECTRIC INC.	Radio Shack	LOCKWOOD GREENE SYSTEMS CORP.	Texas Instruments
SOLAR TURBINES INC.	Radio Shack	MARTIN MARIETTA CORP.	Texas Instruments
SYSTEMS RESEARCH LABS, INC.	Radio Shack	MEDCOMP TECHNOLOGIES, INC.	Texas Instruments
BUSINESS INFORMATION SYSTEMS	Rexon	MEDICAL DATA SERVICES CORP.	Texas Instruments
COMCON, INC.	Roim	MEDICAL DATA SVCS	Texas Instruments
GENISCO	Roim	MEMBERSHIP SERVICES, INC.	Texas Instruments
SCIENTIFIC SYSTEMS	SEL	MTI SYSTEMS INC.	Texas Instruments
DELPHI SYSTEMS, INC.	Sage	NAT'L CMPTR SYSTEMS	Texas Instruments
MEDCOMP TECHNOLOGIES, INC.	Sanyo Business	NAT'L DATA CORP.	Texas Instruments

COMPUTER MODELS sold through VARS

(Sorted by model)

VARs	Models Sold	VARs	Models Sold
NES, INC.	Texas Instruments	DATAKOM, INC.	Zilog
NORDATA INC.	Texas Instruments	DP COMMUNICATIONS	Zilog
PRC REALTY SYSTEMS	Texas Instruments	GENERAL DIGITAL CORP. (CT)	Zilog
PROPHET 21, INC.	Texas Instruments	GENERAL INSTRUMENT CORP.	Zilog
RESPONSIVE TERMINAL SYSTEMS	Texas Instruments	KEY SYSTEMS, INC.	Zilog
RIBBLE ENGINEERING CO.	Texas Instruments	TELETEK ENTERPRISES	Zilog
SYSTEMS ARCHITECTS INC.	Texas Instruments	TRICOM GROUP	Zilog
SYSTEMS RESEARCH LABS, INC.	Texas Instruments		
TATA CONSULTANCY SERVICES	Texas Instruments		
TELE TERMINALS INC.	Texas Instruments		
TELEPHONICS CORP.	Texas Instruments		
TIMBERLINE SYSTEMS	Texas Instruments		
TOTAL TECHNICAL SVCS	Texas Instruments		
AUTOMETRIC, INC.	Toshiba		
DATATEL	Ultimate		
DSC	Ultimate		
EYRING RESEARCH INSTITUTE INC.	Ultimate		
INTERACTIVE, INC.	Ultimate		
JOBTRACK	Ultimate		
NORTHEAST DATA SYSTEMS, INC.	Ultimate		
ROI SYSTEMS	Ultimate		
SHARED UNION SYSTEMS, INC.	Ultimate		
KANJANRUS CORP.	Visual Tech		
BUTLER ASSOC.	Visual Tech		
ADVANCED COMPUTER TECHNIQUE	Wang		
ADVANTAGE SYSTEMS	Wang		
AMI	Wang		
APTECH COMPUTER SYSTEMS	Wang		
BATTELLE SOFTWARE PROD. CENTER	Wang		
BKW, INC.	Wang		
COIN FINANCIAL SYSTEMS	Wang		
COMPUAMERICA	Wang		
COMPUTER INPUT CORP.	Wang		
COMPUTER TECHNOLOGY, INC.	Wang		
CROWNTEK INC.	Wang		
DAYTON-FORESTER ASSOCIATES	Wang		
DYER, WELLS & ASSOC.	Wang		
IDC SERVICES INC.	Wang		
INFORMATICS GENERAL	Wang		
INFORMATICS GENERAL CORP.	Wang		
INTERNATIONAL RESEARCH	Wang		
KEANE, INC.	Wang		
LEVI, RAY & SHOUP	Wang		
MANCHESTER EQUIPMENT	Wang		
NIAKWA MANAGEMENT SERVICES	Wang		
NORTHEAST DATAKOM, INC.	Wang		
REDSHAW INC.	Wang		
S & S ELECTRONICS, INC.	Wang		
S-CUBED	Wang		
SEVERN COMPANIES	Wang		
STERLING SYSTEMS INC.	Wang		
SYSTEMHOUSE LTD.	Wang		
SYSTEMHOUSE, INC.	Wang		
SYSTEMS ARCHITECTS INC.	Wang		
AGENT SYSTEMS	Wicat		
MICRO DATA SYSTEMS (ID)	Wyse		
TRICOM GROUP	Wyse		
COMPUTERTOWN	Xerox		
SCOTT COMPUTING SYSTEMS	Xerox		
SHASTA GENERAL SYS	Xerox		
CURRY CONTROLS CO.	Xycom		
LITTON INDUSTRIES	Zenith Data		
MICROWARE DISTRIBUTORS INC.	Zenith Data		
RESEARCH INC.	Zenith Data		
TECHTRAN INDUSTRIES	Zenith Data		
VANGUARD TECHNOLOGIES CORP.	Zenith Data		
CYCARE SYSTEMS, INC.	Zentec		
SHASTA GENERAL SYS	Zentec		
ALPINE DATASYSTEMS	Zilog		
ANALOGIC CORP.	Zilog		
AUTOCONTROL, INC.	Zilog		

* Present customer (sorted by region, then company name)
 ■ Likely prospect

COMPANY	RG	ST	SALES (\$M)	1 1 1	Computer Models sold through VARS									
ACTUARIAL COMPUTER TECHNOLOGY	SW	CA	8	Prime										
AEROJET ELECTROSYSTEMS CO.	SW	CA	10											
APPLIED DATA SYSTEMS INC.	SW	AZ	6	Texas Inst										
ASSOCIATED DATAMASTERS	SW	CA	8	Altos	DEC		AT&T							
AZTEK, INC.	SW	CA	5	HP										
BASIX CONTROLS SYSTEMS	SW	CA	10	Data Gen										
BFA CORP. (NM)	SW	NM	10	Apple	IBM									
BIS SALES, INC.	SW	CA	7	Per tec	Prime									
BUSINESS INFORMATION SYSTEMS	SW	CA	10	Cado	IBM		Per tec	Prime	Rexon					
CASCADE DATA SYSTEMS	SW	CA	50											
CASS MARKETING SERVICES, INC.	SW	CA	5	IBM										
CITY NATIONAL BANK	SW	CA	30	HP										
CMC/COMPUTER MARKETING CORP.	SW	AZ	10											
COMPUAMERICA	SW	CA	15	Wang										
COMPUTER INPUT CORP.	SW	CA	11	Data Gen	DEC		IBM	Wang						
COMPUTER SCIENCES CORP.	SW	CA	695	Tandem										
COMPUTER SOFTWARE DESIGN	SW	CA	8											
CONSOLIDATED MICROGRAPHICS	SW	CA	33	NCR	ADD5		Televideo							
DATA 3 SYSTEMS, INC.	SW	CA	6	IBM										
DATA RENTALS/SALES, INC.	SW	CA	5	HP	IBM		Texas Inst	Kaypro						
DATAACCOUNT CORP.	SW	CA	6	Mohawk Data	Int'l Entry									
DATAPAREL, INC.	SW	CA	5	DEC										
DATATRONIC SYSTEMS CORP.	SW	CA	11	Data Gen	DEC		HP	IBM						
DAVID JAMISON CARLYLE CORP.	SW	CA	37	DEC	IBM		Televideo							
DAYTON-FORESTER ASSOCIATES	SW	CA	6	Televideo	Wang									
DECCOMP INC.	SW	CA	6	DEC										
DELPHI SYSTEMS, INC.	SW	CA	12	Data Gen	IBM		Perkin Elmer	Altos	Molecular	Onyx	Sage	Televideo		
* EECO COMPUTER	SW	CA	10	Data Gen	Point 4 Data									
ECCOM ELECTRONIC SYSTEMS	SW	CA	7	DEC										
EXECUTIVE BUSINESS SYSTEMS	SW	CA	7	Televideo										
GENISCO	SW	CA	30	Intel	Roim									
GRIFFIN TECHNOLOGY	SW	CA	6											
IDC SERVICES INC.	SW	CA	35	Wang										
INFORMATICS GENERAL	SW	CA	191	IBM	Wang		Ultimate							
INTERACTIVE, INC.	SW	CA	5	Prime										
INTERN'L TOTALIZATOR	SW	CA	10	Perkin Elmer										
IRT CORP.	SW	CA	25	IBM										
* LANTOR, INC.	SW	CA	20	DEC										
LEVITZ RETAIL SYSTEMS	SW	CA	10	Data Gen										
LOGICON, INC.	SW	CA	103	Data Gen	DEC		Perkin-Elmer							
MEMCOM INTERNATIONAL, INC.	SW	CA	8	HP	Commodore									
MICROVOICE	SW	CA	6	IBM										
MUTAGO DATA CORP.	SW	CA	15	Microdata	Per tec		IBM							
NORTHROP CORP.	SW	CA	100	HP	DEC									
PACIFIC HEALTH RESOURCES	SW	CA	24	Eagle	IBM									
PROTEK COMPUTER SERVICES INC.	SW	CA	5											
S-CUBED	SW	CA	45	Wang										
SAI COMSYSTEMS, INC.	SW	CA	20											
SARTORIS, INC.	SW	CA	10	Burroughs	HP		Honeywell	IBM	Sperry					
SCAN-TRON CORP.	SW	CA	14	IBM										
SCIENCE APPLICTNS INTN'L	SW	CA	354	DEC	Gould									
SCIENCE DYNAMICS CORP.	SW	CA	14	IBM	Eagle Signal									
SIERRA NATIONAL CORP.	SW	CA	6											
SILTON AMS	SW	CA	5	HP	IBM									
SOLAR TURBINES INC.	SW	CA	200	DEC			Radio Shack							
SSCI	SW	CA	6											
SYSTEM DEVELOPMENT CORP.	SW	CA	300	Stratus	Burroughs									
SYSTEMS BY MICA	SW	AZ	5	DEC										
SYSTEMS INTEGRATED	SW	CA	5	HP										
SYSTEMONICS, INC.	SW	CA	6	Prime										
TECHNOLOGY MARKETING	SW	CA	8	Convergent	DEC		Intel	Motorola	National Semi					
TELOS FEDERAL SYSTEMS	SW	CA	37											
TRW DATACOM	SW	CA	9	North Star	Convergent									
TYLUS SYSTEMS INC.	SW	CA	6	Intel										
ULTRASYSTEMS DEFENSE/SPACE	SW	CA	22	DEC										
VISTA TECHNOLOGY INC.	SW	CA	15	IBM	Corona Data									
VITEK	SW	CA	9	Corona Data										
WESTERN DATA	SW	CA	11											
WESTERN SCIENTIFIC MKT	SW	CA	12	DEC	IBM		Kaypro							

* Present customer (sorted by region, then company name)
 * Likely prospect

COMPANY	RG	ST	SALES (\$M)	Computer Models sold through VARS	
				Present customer	Likely prospect
WHITE HAT SYSTEMS, INC.	NW	CA	8	DEC	
ALPINE DATASYSTEMS	NW	OR	10	DEC	IBM
ALPS	NW	UT	5	Apple	Data Gen
AMI	NW	WA	20	Apple	DEC
ASK COMPUTER SYSTEMS	NW	CA	65	DEC	HP
AUTO-TROL TECHNOLOGY CORP.	NW	CO	50	DEC	Apollo
AYDIN SYSTEMS	NW	CA	160	DEC	
AZURDATA INC.	NW	WA	15	IBM	Panasonic
BOEING ENGINEERING CO.	NW	WA	11	Gould	
CABLEDATA	NW	CA	60	Tandem	
* CALMA CO.	NW	CA	230	Apollo	Domain
CARE COMPUTER SYSTEMS	NW	WA	5	Convergent	Datapoint
CENTURY BUSINESS TECHNOLOGIES	NW	CA	20		IBM
COGNOS CORP.	NW	CA	19	Data Gen	DEC
COLUMBINE SYSTEMS	NW	CO	16	IBM	HP
COMPUTER CURRICULUM	NW	CA	20	Sony	
COMPUTER ELECTION SYSTEMS	NW	CA	14	Data Gen	
COMPUTER SYNERGY	NW	CA	12	DEC	
COMPUTER TECHNOLOGY, INC.	NW	WA	5	Wang	
COMPUTER USAGE CO.	NW	CA	8	DEC	IBM
CORPORATE DATA SCIENCES	NW	CA	5	IBM	Tandem
CREATIVE CMPTR SOLUTIONS	NW	CA	5	Microdata	Qentel
DEFINABLE DATA DEVICES, INC.	NW	OR	5		
DISTRIBUTION & MFG SYSTEMS	NW	CO	5	Data Gen	
E.B.S. DATA PROCESSING	NW	CO	6	DEC	
EDWARDS & CO., J.D.	NW	CO	14	IBM	
ENERGY INC.	NW	ID	27	DEC	Modcomp
EQUATORIAL COMMUNICATIONS CO.	NW	CA	17	Intel	Aydin
ESCA CORP.	NW	WA	6	DEC	IDT
EYRING RESEARCH INSTITUTE INC.	NW	UT	16	HP	Intelligent Eq
FORMASTER CORP.	NW	CA	10	DEC	
GRAFTEK	NW	CO	13	Gould	
INFORMATION MANAGEMENT INT'L.	NW	CA	12	Convergent	Ultimate
LARSE CORP.	NW	CA	8	Computer Auto	DEC
LEVY INC.	NW	CA	7	DEC	Burroughs
LIBRA PROGRAMMING, INC.	NW	UT	7	IBM	HP
LOGISTICON, INC.	NW	CA	7	HP	Apple
MADIC CORP.	NW	CA	18	Prime	Radio Shack
MANUS SERVICES CORP.	NW	WA	13	DEC	
MENTOR GRAPHICS CORP.	NW	OR	88	Apollo	
MICRO DATA SYSTEMS (ID)	NW	ID	6	ADDS	IBM
MICROWARE DISTRIBUTORS INC.	NW	OR	13	North Star	Altos
NEW GENERATION SFTWRE	NW	CA	6	IBM	Kaypro
NOVVA CMPTR SYSTEMS	NW	HI	5	ADDS	Corona Data
PACIFIC DATA GROUP	NW	CA	5		Molecular
PARAGON TECHNOLOGY	NW	CA	10	DEC	OSM
PHOENIX LEASING, INC.	NW	CA	34	IBM	Televideo
QUADREX COMPUTER SYSTEMS INC.	NW	CA	50	Data Gen	Prime
R&D ASSOCIATES	NW	WA	50	DEC	Apple
REACT CORP.	NW	CA	12	Data Gen	IBM
RELATIONAL TECHNOLOGY	NW	CA	8	Burroughs	Modcomp
ROSS SYSTEMS	NW	CA	9	DEC	Prime
SCIENTIFIC MICRO SYSTEMS	NW	CA	25	DEC	Burroughs
SERVICEWORLD	NW	CA	5	IBM	NCR
SHASTA GENERAL SYS	NW	CA	30	Altos	Amdahl
SHOWALTER SYSTEMS	NW	WA	6	DEC	DEC
* SIGMA DESIGN	NW	CO	10	Sun Micro	Modcomp
SILVAR LISCO	NW	CA	15	DEC	Prime
SINGLE SOURCE SOLUTION	NW	CA	5		Televideo
SMITH, DENNIS & GAYLORD, INC.	NW	CA	6	HP	Wang
* SYSTEM INDUSTRIES	NW	CA	121		AT&T
SYSTEM INTEGRATORS, INC.	NW	CA	50	Tandem	
SYSTEMHOUSE, INC.	NW	CA	40	DEC	
SYSTEMS CONTROL INC.	NW	CA	45	HP	
TELETEK ENTERPRISES	NW	CA	8	Intel	
TIMBERLINE SYSTEMS	NW	OR	10	Texas Inst	
TOM SOFTWARE	NW	WA	20		
TRANSPORT INFORMATION SYSTEMS	NW	WA	5	Prime	
* TYMSHARE, INC.	NW	CA	300	DEC	IBM

* Present customer (sorted by region, then company name)
 * Likely prospect

COMPANY	RG	ST	SALES (\$M)	1 1 1	----->	Computer Models sold through VARS	-----<	1 1 1
VECTRON GRAPHIC SYSTEMS	NW	CA	5	DEC	IBM	Perkin-Elmer	Masscomp	Harris
ABL COMPUTER TECHNOLOGIES	EA	MA	10	DEC	Intel			
ACCU-SORT SYSTEMS, INC.	EA	PA	5	DEC				
ACPI LTD.	EA	NY	5	IBM				
ADVANCED COMPUTER TECHNIQUE	EA	NY	15	Data Gen	DEC	Harris	Honeywell	IBM Tandem Wang
ADVANCED INTEGRATED TECHNOLOGY	EA	TN	5	DEC	Texas Inst			
ADVANTAGE SYSTEMS	EA	FL	15	IBM	Wang			
AMERICAN MANAGEMENT SYSTEMS	EA	VA	80					
AMNET, INC.	EA	MA	10	DEC	Intel			
ANALOGIC CORP.	EA	MA	150	DEC	Motorola	Zilog		
APTCH COMPUTER SYSTEMS	EA	PA	6	Wang				
AQUIDNECK DATA CORP.	EA	RI	11	IBM				
ARA MAINTENANCE MNGMT SYS	EA	VA	6	IBM				
AREGON INTERN'L, INC.	EA	CT	6	DEC				
ARTRONICS, INC.	EA	NJ	5	IBM				
ASSOCIATED COMPUTER SYSTEM	EA	GA	7	IBM	Smith Coron			
AUTO TELL SERVICES	EA	PA	7	Texas Inst	IBM			
AUTOMATED SCIENCES GROUP, INC.	EA	MD	16	HP				
AUTOMATION INTELLIGENCE, INC.	EA	FL	12					
AUTOMETRIC, INC.	EA	VA	5	Data Gen	DEC	HP	IBM	Toshiba
AUXTON CMPTR ENTERPRISES	EA	FL	19	IBM				
AVANT-GARDE COMPUTING	EA	NJ	15	Perkin Elm				
BARRISTER INFORMATION SYSTEMS	EA	NY	18	Data Gen				
BEDFORD ASSOCIATES, INC.	EA	CT	5	DEC	IBM			
BIO-RAD LABORATORIES	EA	MA	12	Data Gen	Motorola			
BKW, INC.	EA	NH	10	Wang				
BOEING COMPUTER SERVICES	EA	VA	174	IBM				
BOSTON SYSTEMS OFFICE	EA	MA	7	DEC				
BRISTOL BABCOCK	EA	CT	50	Compaq	DEC	IBM	Intel	
BUSINESS EQPMT & SUPPLY	EA	MS	11	Apple	Data Gen	IBM	Point 4	
BUTLER ASSOC.	EA	MA	12	Visual Tech				
C & W INCOTEL LTD.	EA	NY	5	DEC				
C TEK SOFTWARE	EA	NY	5	General Auto				
CADRE CORP.	EA	GA	10	DEC	Gould	Modcomp		
CAP INFORMATION SYSTEMS, INC.	EA	NY	40					
CAPITAL SYSTEMS, INC.	EA	VA	16	IBM				
CARLYN COMPUTER SYSTEM INC.	EA	VA	5	IBM				
CARTER & CRAWLEY, INC.	EA	SC	5	DEC	Texas Inst	Modicon	Allen Brad	
CF CORP.	EA	MA	12	IBM				
CHAK L. WON	EA	NJ	52					
CL SYSTEMS, INC.	EA	MA	21	DEC				
CLINTON COMPUTERS	EA	MD	15	Apple	C. Itoh	DEC	Epson	HP IBM Panasonic
COGNITRONICS CORP.	EA	CT	14	IBM				
COHERENT COMMUNICATIONS SYS.	EA	NY	10					
COIN FINANCIAL SYSTEMS	EA	GA	12	Digilog	Esprit	IBM	NEC	Okidata Qume Texas Inst Wang
COLLIER-JACKSON, INC.	EA	FL	10	DEC	HP			
COMCON, INC.	EA	NJ	6	Data Gen	DEC	Roim		
COMPUTE-R-SYSTEMS	EA	PA	7	DEC	Compuscan			
COMPUTER CORP. OF AM.	EA	MA	30	DEC				
COMPUTER DATA SYSTEMS, INC.	EA	MD	55	Aitos				
COMPUTER INFORMATION SYSTEMS	EA	MA	5	DEC	IBM			
COMPUTER LINK CORP.	EA	MA	10	DEC				
COMPUTER MERCHANT, LTD.	EA	MA	10	Aitos	OSM			
COMPUTER RESALE EXCHANGE	EA	DC	5	IBM				
COMPUTER RESEARCH, INC.	EA	PA	8	Texas Inst				
COMPUTER ROOM	EA	NY	10	Computone				
COMPUTER SYSTEMS DEVELOPMENT	EA	MS	6	Data Gen	DEC	Nixdorf	IBM	
COMPUTERIZED BUS. SOLUTIONS	EA	FL	5	Data Gen	IBM	Quantel		
COMPUTERTOWN	EA	PA	95	DEC	HP	IBM	Apple	Commodore Texas Inst Xerox Columbia Data
COMPUTERVISION	EA	MA	65	IBM				
CONSOLIDATED DATA SYSTEMS	EA	NJ	35	AT&T	IBM	Televideo		
CONTEL DATA SERVICES CORP.	EA	GA	13					
CONTEL INFORMATION SYSTEMS	EA	MD	50	Data Gen	DEC	HP	Codata	IBM
CORNELL COMPUTER	EA	NY	17	IBM				
CURRY CONTROLS CO.	EA	FL	5	HP	Xycom	Gould		
CURTIS 1000	EA	GA	250	Texas Inst	IBM	Burroughs		
CYBERNETICS & SYSTEMS	EA	FL	30	IBM				
CYBORG CORP.	EA	MA	5	Apple	IBM			
D/B DATA INC.	EA	NY	9	Commodore	IBM	Kaypro		

* Present customer
 * Likely prospect

(sorted by region, then company name)

COMPANY	RG	ST	SALES (\$M)	Computer Models sold through VARS	
DATA ARCHITECTS, INC.	EA	MA	13	DEC	Tandem
DATA GROUP CORP.	EA	MA	8	Data Gen	Datapoint
DATA SYSTEMS (VA)	EA	VA	12	IBM	DEC
DATA SYSTEMS ANALYSTS, INC.	EA	NJ	10		OSM
DATA-MED CORP.	EA	DE	5	Texas Inst	MSI
DATAACOM, INC.	EA	FL	5	Computer Auto	Data Gen
DATAMEDIC CORP.	EA	NY	6	IBM	DEC
DATASTORE INC.	EA	NJ	12	Data Gen	Gould
DATATEL	EA	VA	9	ADDS	HP
DAVOX CORP.	EA	MA	10		Modcomp
DAVY MCKEE CORP.	EA	NJ	73	HP	Zilog
DELTA DATA SYSTEMS	EA	PA	30	DEC	
DEXEL SYSTEMS CORP.	EA	VA	8	IBM	
DIALOGUE INC.	EA	NY	5	Prime	
DIGITAL ASSOCIATES CORP.	EA	CT	8	IBM	DEC
DIGITAL ELECTRONIC SERVICES	EA	LA	10	Texas Inst	HP
DOWTY RFL INDUSTRIES, INC.	EA	NJ	22	HP	DEC
DP COMMUNICATIONS	EA	NY	8	Data Gen	Radio Shack
DP SYSTEMS & SVCS	EA	NC	12	IBM	HP
DRAVO ENGINEERS, INC.	EA	PA	45	DEC	Motorola
DURR-FILLAUER MEDICAL INC.	EA	AL	300	IBM	Zilog
DYATRON CORP.	EA	AL	32	IBM	
DYER, WELLS & ASSOC.	EA	GA	9	Wang	Data Gen
DYNAMIC CONTROL	EA	FL	24	IBM	Texas Inst
EBS, INC.	EA	FL	23	Data Gen	IBM
ECOM SYSTEMS INC.	EA	TN	6	DEC	Emulex
ELECTRONIC ASSOCIATES, INC.	EA	NJ	30	Gould	Perception Tech
ENDATA, INC.	EA	TN	52	Data Gen	IBM
ENSCO	EA	VA	16		Apple
ERISCO	EA	NY	22	IBM	DEC
ESTIMATION, INC.	EA	MD	10	Aitos	Basic Four
FAIRCHILD WESTON SYSTMS	EA	FL	70	DEC	Televideo
FANNIE MAE	EA	GA	6	IBM	Texas Inst
FEDERAL COMPUTER CORP.	EA	VA	5	IBM	Grid Systems
FINALCO, INC.	EA	VA	67	Data Gen	DEC
FINANCIAL SOFTWARE, INC.	EA	GA	8	IBM	Datapoint
FISHER CONTROLS INTERNATIONAL	EA	LA	600	DEC	HP
FORMATION, INC.	EA	NJ	17		HP
FOSTER-MILLER, INC.	EA	MA	13	DEC	Apple
FRANKLIN RESEARCH CENTER	EA	PA	20	HP	IBM
FREY ASSOCIATES, INC.	EA	NH	7	DEC	Intel
FREY FEDERAL SYSTEMS CORP.	EA	VA	7	DEC	
FRONTIER SYSTEMS	EA	NJ	250	DEC	IBM
GENASYS CORP.	EA	MD	8		Honeywell
GENERAL BUSINESS COMPUTERS	EA	NJ	20	Data Gen	HP
GENERAL BUSINESS SERVICES	EA	MD	13	DEC	IBM
GENERAL DIGITAL CORP.	EA	MD	7	Data Gen	North Star
GENERAL DIGITAL CORP.	EA	CT	5	DEC	DEC
GENERAL INSTRUMENT CORP.	EA	MD	911	HP	HP
GENERAL KINETICS INC.	EA	MD	7		Intel
GENERAL PHYSICS CORP.	EA	MD	40	IBM	Fujitsu
GENRAD, INC.	EA	MA	250	DEC	Motorola
GERBER SYSTEMS TECH	EA	CT	25	HP	Kennedy
GIANGARLO SCIENTIFIC	EA	PA	5	NEC	Zilog
GILBERT ASSOCIATES, INC.	EA	PA	200		C. Itoh
GLOBAL TURNKEY SYSTEMS	EA	NJ	35	CDC	Data Gen
GULL RESOURCE MGMT. SYSTEMS	EA	NY	6	Prime	Datamedia
HARVARD DATA EQUIPMENT	EA	MA	5	Televideo	Dataproducs
HEALTH INFO SYSTEMS	EA	NY	13	IBM	Texas Inst
HIGHSMITH & CO.	EA	NC	7	Data Gen	
HOPKINS ASSOC.	EA	PA	5	DEC	
IDEAS, INC.	EA	MD	16	Gould	Learn Stiegler
INFOCEL, INC.	EA	NC	12	Prime	IBM
INNOVATIVE COMPUTER LEASING	EA	NJ	5	Durango	Microdata
INTEGRATED MICROCOMPUTER	EA	MD	10	DEC	IBM
INTERACTIVE DATA	EA	MA	100	IBM	Fortune
INTERMETRICS, INC.	EA	MA	31	DEC	IBM
ISTEL, INC.	EA	MA	53	Cromemco	DEC
JEFFERSON-PILOT BROADCASTING	EA	NC	5	Honeywell	IBM

VARS (1984)

* Present customer
 * Likely prospect

(sorted by region, then company name)

COMPANY	RG	ST	SALES (\$M)	----->		Computer Models sold through VARS						-----<		
				↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	
JERSEY MICRO SYSTMS	EA	NJ	6	CIE Systems										
KANJANRUS CORP.	EA	MA	5	Data Gen	IBM	Apple	Visual							
KAYE INSTRUMENTS	EA	MA	13	Intel										
KEANE, INC.	EA	MA	30	IBM	Wang	DEC								
KESELL ASSOCIATES	EA	NY	5	DEC	IBM	Pixel Cmptr								
KEY SYSTEMS, INC.	EA	NH	5	Altos	IBM		NCR	Zilog						
KEYSTONE INFO SYSTEMS	EA	NJ	6	ADDS	Prime									
LOCAL DIGITAL DIST.	EA	MD	15	M/A-Com										
LOCKWOOD GREENE SYSTEMS CORP.	EA	SC	18	DEC	Texas Inst	IBM	Modcomp	Grid System						
LOGICA INC.	EA	NY	20	DEC	Tandem	Stratus	Intel							
LOGON, INC.	EA	NJ	10	Plexus										
LUNDY ELECTRONICS & SYSTEMS	EA	NY	43	DEC	Intel									
M/A-COM	EA	MD	100	Data Gen	DEC	Convergent	IBM	Tandem	Synapse					
MANAGEMENT SCIENCE AMERICA	EA	GA	130											
MANCHESTER EQUIPMENT	EA	MA	44	ADDS	Data Gen	IBM	Wang	Compaq	Panasonic					
MANOF COMMUNICATIONS SYSTEMS	EA	NY	7	IBM										
MARION CO., WILLIAM	EA	NJ	15	IBM										
MARTIN MARIETTA CORP.	EA	MD	3,500	DEC	IBM	HP	Texas Inst	Cogent Data						
MARYLAND COMPUTER SERVICES	EA	MD	6	HP										
MATRIX/SYSTEMS GROUP CORP.	EA	MA	10	DEC	IBM	Apple	Televideo							
MEDCOMP TECHNOLOGIES, INC.	EA	NY	12	Texas Inst	Sanyo Business	NEC	Panasonic							
MEDICAL DATA SERVICES CORP.	EA	VA	5	ADDS	General Auto	Honeywell	IBM	Microdata	NCR	Prime	Texas Inst			
MEDICAL DATA SVCS	EA	VA	20	ADDS	General Auto	Honeywell	IBM	Microdata	NCR	Prime	Texas Inst			
MEDICAL INFO TECH	EA	MA	19	Data Gen	DEC	IBM								
* MESA TECHNOLOGY CORP.	EA	MD	20	Intel										
MICROS SYSTEMS	EA	MD	22	IBM										
MIDEC, INC.	EA	PA	5	Tandem										
MNGMT CONTROL SYSTEMS	EA	GA	20	IBM										
MNGMT DECISION SYSTEMS	EA	MA	25	Leading Edge	IBM	Kaypro								
MODULAR INFO SYSTEMS	EA	FL	10	Burroughs										
MTI SYSTEMS INC.	EA	NY	14	DEC	Texas Inst	Intel	AT&T							
N. C. S. INC.	EA	VA	50	Datapoint	Radio Shack									
NAT'L CMPTR SYSTEMS	EA	GA	125	DEC	IBM	Texas Inst								
NAT'L DATA CORP.	EA	GA	140	Data Gen	IBM	DEC	Tandem	Sperry	Texas Inst					
NAT'L UNLTD BUSINESS SYS	EA	NY	9	Apple	Commodore	Kaypro	NEC	Panasonic						
NATIONAL COMPUTER CORP.	EA	CT	13	DEC										
NATIONAL DATA CORP.	EA	MD	10	Data Gen	IBM									
NETWORK SOLUTIONS (VA)	EA	VA	7	IBM										
NMF, INC.	EA	NC	8	IBM										
NORDATA INC.	EA	NJ	5	Honeywell	IBM	Texas Inst								
NORRELL SERVICES	EA	GA	120	Burroughs										
NORTHEAST DATA SYSTEMS, INC.	EA	MA	6	Honeywell	Prime	Ultimate	IBM	DEC	ADDS	Altos				
NORTHEAST DATACOM, INC.	EA	CT	12	Wang										
NORTHERN DATA SYSTEMS	EA	MA	12	Cado										
NUCLEAR DATA	EA	GA	5	HP	DEC	Altos	IBM							
NUS CORP.	EA	MD	20	DEC										
O'BRIEN & GERE ENGRS	EA	NY	21	IBM										
PERSONNEL DATA SYS	EA	PA	8	HP										
PLANNING RESEARCH	EA	VA	321	Data Gen	DEC	HP	IBM	Intel						
POST SOFTWARE INTERNATIONAL	EA	NC	10	IBM										
POST-TRON SYSTEMS	EA	MA	25	IBM	Stratus	Omron								
PRC REALTY SYSTEMS	EA	VA	50	Compaq	IBM	Texas Inst								
PROCESS CONTROL IND., INC.	EA	MA	10	DEC	IBM	Intel								
PROCOM LEASING & MANAGEMENT	EA	NY	9	IBM										
PROGRAMS & ANALYSIS	EA	MA	6	Altos										
PROPHET 21, INC.	EA	PA	14	Texas Inst										
QEI, INC.	EA	NJ	10	DEC										
RAGEN INFO SYSTEMS	EA	NJ	32	Data Gen	DEC	IBM	NCR	Prime						
REDSHAW INC.	EA	PA	40	Wang										
RGI, INC.	EA	VA	18	Columbia Data	ITT Courier	Ericsson								
RIBBLE ENGINEERING CO.	EA	NJ	6	Texas Inst	Eagle Signal									
RICH, INC.	EA	NY	15	Intel										
RTC SYSTEMS	EA	MA	5	IBM										
* S & S ELECTRONICS, INC.	EA	MA	7	IBM	Altos	Wang	AT&T							
SACHS/FREEMAN ASSOC. INC.	EA	MD	8											
SADDLE BROOK CONTROL SYSTEMS	EA	NJ	5											
SADDLEBROOK CORP.	EA	MA	19	DEC										
SAFEGUARD BUSINESS SYSTEMS	EA	PA	180	Altos	IBM	HP								
SCAN-OPTICS INC.	EA	CT	30	DEC	HP									

* Present customer
 * Likely prospect

(sorted by region, then company name)

COMPANY	RG	ST	SALES (\$M)	Computer Models sold through VARS																	
				1	1	1	1	1	1	1	1	1									
SCIENTIFIC CALCULATIONS	EA	NY	35	DEC																	
SCIENTIFIC SYSTEMS	EA	FL	21	DEC	SEL																
SCOPE INC.	EA	VA	15																		
SCOTT COMPUTING SYSTEMS	EA	GA	10	DEC	IBM	Xerox															
SEVERN COMPANIES	EA	MD	5	DEC	IBM	Molecular	Wang														
SHARED UNION SYSTEMS, INC.	EA	PA	5	IBM	Prime	Ultimate															
SIGNATRON INC.	EA	MA	7																		
SIMCON INC.	EA	VA	5	Data Gen	HP	Durango															
SIMMONDS PRECISION	EA	NC	10	DEC																	
SIMULATION SYSTEMS	EA	NY	45	Gould																	
SMS	EA	PA	260	DEC	IBM	Four Phase															
SOFTWARE SHOP SYSTEMS	EA	NJ	7	IBM																	
* STANDARD DATA CORP.	EA	NY	5	Data Gen	IBM																
STEARNS CATALYTIC	EA	NC	59	DEC																	
STERLING SYSTEMS INC.	EA	VA	18	Data Gen	DEC	IBM	Wang	Honeywell													
STS SYSTEMS, INC.	EA	CT	11	Data Gen																	
SUN DATA, INC.	EA	GA	25	IBM																	
SUNDSTRAND DATA CONTROL INC.	EA	MA	10	DEC	HP	IBM															
SYKES DATATRONICS	EA	NY	34	Altos	AT&T																
SYSCON CORP.	EA	DC	104	DEC	HP	IBM	Prime														
SYSTEM AUTOMATION CORP.	EA	MD	9	HP	Convergent	NEC															
* SYSTEME CORP.	EA	FL	20	DEC	IBM																
SYSTEMS ARCHITECTS INC.	EA	MA	18	Data Gen	Datapoint	DEC	IBM	Wang	Honeywell	Apple	Commodore	North Star	Texas Inst								
* SYSTEMS ASSOCIATES INC.	EA	NC	30	DEC	Point 4 Data	Datavue															
TATA CONSULTANCY SERVICES	EA	NY	14	Data Gen	DEC	HP	IBM	Prime	Texas Inst												
TECHLAND SYSTEMS	EA	NY	7																		
TECHNICAL MARKETING SYSTEMS	EA	TN	25	IBM																	
TECHNOLOGY FOR ENERGY	EA	TN	20	DEC	Modcomp																
TECHTRAN INDUSTRIES	EA	NY	6	Zenith Data																	
TECO RESEARCH	EA	TN	6	DEC																	
TELEGENIX, INC.	EA	NJ	6	Computer Auto	Motorola																
TELEPHONICS CORP.	EA	NY	50	HP	Texas Inst	Intel															
TELESCIENCES, INC.	EA	NJ	55	Data Gen	HP																
TELESIS SYSTEMS	EA	MA	13	DEC	HP	Int'l Data Sci															
TIMESHARING UNLIMITED INC.	EA	TN	7	BTI																	
TIMPLEX INC.	EA	NJ	43	IBM																	
* TOTAL TEC SYSTEMS	EA	NJ	12	DEC	IBM																
TRANSCAPITAL CORP.	EA	VA	5																		
TRICOM GROUP	EA	NY	6	ADDS	NCR	Wyse	Zilog	Altos													
TRISTAR DATA SYSTEMS	EA	NJ	5	IBM																	
* ULTIMATE COMPUTER SERVICES	EA	NJ	12	Durango	Dynabyte	Alspa															
VANGUARD TECHNOLOGIES CORP.	EA	VA	17	DEC	Zenith Data																
VCA CORP.	EA	VA	10	Cromemco																	
WESTERN NY CMPTG SYS	EA	NY	8	Alpha Micro																	
WORICO DATA SYSTEMS	EA	PA	10	Data Gen																	
ADVANCED COMPUTER MANAGEMENT	CN	MI	7	IBM																	
AERO SYSTEMS ENGINEERING	CN	MN	13	Data Gen																	
AGENT SYSTEMS	CN	TX	6	Wicat	Motorola																
ALBIN BUSINESS COMPUTERS	CN	MI	6	DEC																	
AMERICAN APPRAISAL ASS.	CN	WI	60	IBM																	
AMHERST ASSOC.	CN	IL	22	DEC	IBM																
ANACOMP, INC.	CN	IN	100	Honeywell	IBM	Microdata	Prime														
ANN ARBOR COMPUTER	CN	MI	5	DEC	HP	IBM	Stratus														
APPLIED AUTOMATION INC.	CN	OK	25	Perkin Elm																	
APPLIED SYSTEMS	CN	IL	7	IBM																	
AUTOCONTROL, INC.	CN	MO	5	Intel	Zilog																
AUTOMATED INSURANCE RES SYS	CN	IL	6	IBM																	
BATTELLE SOFTWARE PROD. CENTER	CN	OH	450	DEC	IBM	Prime	Wang														
BRASINGTON & ASSOC., W.A.	CN	TX	8	IBM																	
CADLINC, INC.	CN	IL	16	Motorola																	
CALDWELL-VAN RIPER	CN	IN	24	NCR	Mentor																
CBC SERVICES	CN	OH	12	DEC																	
CINCINNATI TIME	CN	OH	22	DEC																	
CLARK EQUIPMENT CO.	CN	MI	1,021	DEC																	
COMPUCON	CN	TX	15	DEC	IBM																
COMPUERVE INC.	CN	OH	47	DEC																	
COMPUTER STRATEGIES, INC.	CN	MI	5	ADDS	DEC	Honeywell	IBM	Microdata	Printronic	Prime											
COMPUTERS TO GO	CN	TX	9	IBM																	
COMTEL INSTRUMENTS CO.	CN	OH	20																		

* Present customer (sorted by region, then company name)
 * Likely prospect

COMPANY	RG	ST	SALES (\$M)	Computer Models sold through VARS															
				Honeywell	IBM	DEC	Altos	Corona Data	IBM	Other									
CONDOR COMPUTER	CN	MI	8	Honeywell															
CONTINENTAL HEALTHCARE	CN	KS	10	IBM	Televideo														
CONTROL APPLICATIONS	CN	TX	10	Data Gen	DEC	Motorola	HP	IBM											
CONTROL-O-MATION, INC.	CN	MI	65	DEC	IBM	Texas Inst	Allen Brad												
CRYSTAL COMPUTERS, INC.	CN	KS	10	Altos	North Star	Columbia Data													
CYCARE SYSTEMS, INC.	CN	IA	40	Corona Data	Honeywell	Zentec													
DATA EXCHANGE, INC.	CN	IL	5	IBM															
DATA PROCESSING SCIENCES CORP.	CN	OH	10																
DATA-TRON, INC.	CN	OH	6	DEC	IBM	Texas Inst													
DSC	CN	MN	17	Prime	Ultimate														
DYTEC SOUTH	CN	MO	14	IBM															
EAGLE SIGNAL CONTROLS	CN	TX	50	Data Gen	IBM	Kaypro													
EAST TEXAS PERIODICALS	CN	TX	85	Commodore															
EDP SYSTEMS INC.	CN	OK	6	DEC	IBM	Basic Four													
ELECTRONIC DATA SYSTEMS	CN	TX	775	Data Gen															
FAIRFIELD INDUSTRIES	CN	TX	35	Perkin-Elmer															
FEDERAL SYSTEMS, INC.	CN	MO	30	DEC	IBM	Eagle Signal													
FIGGIE SYSTEMS MGMT. GROUP	CN	OH	12	Honeywell	DEC	HP													
* FIRST COMPUTER CORP.	CN	IL	10	DEC	NCR	Cadmus	Pyramid	Sequent											
FRENCH GERLEMAN ELECTRIC CO.	CN	MO	10	Apple	IBM														
FRONTIER COMPUTER CORP.	CN	TX	6	IBM															
GBC	CN	IL	140	North Star															
GELCO CORP.	CN	MN	10	DEC															
GENERAL DYNAMICS	CN	TX	3,400	Data Gen	DEC	Hp	Cromemco	Compupro											
* GENERAL ELECTRIC CO.	CN	WI	500	Data Gen															
GERHARD & ASSOCIATES, INC.	CN	OH	9	Televideo															
GRAMMCO COMPUTER SALES	CN	TX	20	IBM															
HAGEN SYSTEMS INC.	CN	MN	10	Point 4 Data															
HARDWARE COMPUTER CORP.	CN	IN	13	IBM	Altos	North Star	DEC	HP	Allen Brad										
HARRIS DATA SERVICE	CN	WI	5	IBM															
INFORMATICS GENERAL CORP.	CN	OH	20	Honeywell	Wang	IBM													
INGERSOLL ENGINEERS	CN	IL	15																
INTERNATIONAL RESEARCH	CN	MN	18	Data Gen	DEC	HP	IBM	Altos	Televideo	Wang									
JOBTRACK	CN	MN	17	IBM	Prime	Ultimate													
JOHNSON CONTROLS, INC.	CN	TX	30	DEC	Modcomp														
KINETIC SYSTEMS CORP.	CN	IL	9	DEC	IBM														
LAWSON ASSOC.	CN	MN	8	Data Gen	DEC	IBM													
LEVI, RAY & SHOUP	CN	TX	7	IBM	Wang														
LITTON INDUSTRIES	CN	MI	5,000	DEC	Zenith														
* LOWRY COMPUTER PRODUCTS	CN	MI	20	IBM															
MCAUTO	CN	MO	444	Data Gen	DEC	Prime													
MEMBERSHIP SERVICES, INC.	CN	TX	7	IBM	Texas Inst														
METAFILE INFO SYSTEMS	CN	MN	10	IBM															
MIDWEST COMMERCE DATA	CN	IN	5	Datapoint															
MIDWEST DATA SYSTEMS	CN	OH	6	Altos															
MODULAR DATA SYSTEMS, INC.	CN	TX	5	DEC	Gould	Modcomp													
NABIHS INC.	CN	IL	7	Apple	IBM														
NES, INC.	CN	IL	25	IBM	Texas Inst	DEC	Apple												
NIAKWA MANAGEMENT SERVICES	CN	IL	8	Wang															
NUMERIC MICRO, INC.	CN	TX	5	Altos	IBM														
OCLC ONLINE COMPUTER	CN	OH	50	Data Gen	IBM														
PACKARD INSTRUMENT CO.	CN	IL	750	IBM															
PIEPER ELECTRIC INC.	CN	WI	10	Apple	HP	IBM	Radio Shack												
PIONEER COMPUTER MARKETING	CN	TX	14	IBM															
PLANTE & MORAN	CN	MI	12	HP	Apple	IBM	Basic Four	Televideo	Seiko										
PRES INC.	CN	OH	40	DTS	Televideo														
* PRICE ELECTRONICS CORP.	CN	IL	30	IBM	NEC														
PROFNL CMPTR RESOURCES	CN	IL	8	IBM															
PROLAN	CN	TX	5	IBM	Leading Edge														
QUADSTAR CORP.	CN	TX	10	IBM															
RADIAN CORP.	CN	TX	50	ADDS	Data Gen	Data Printer	Dataproducts	Documation											
RESEARCH INC.	CN	MN	25	DEC	Zenith Data														
RESPONSIVE TERMINAL SYSTEMS	CN	TX	10	Texas Inst															
REYNOLDS & REYNOLDS	CN	OH	252	IBM	Onyx	NCR													
ROCKWELL INTERNATIONAL	CN	PA	8,000	DEC	Intel	IBM	Microdata	Prime	Mentor	Ultimate									
ROI SYSTEMS	CN	MN	5	ADDS	DEC														
SENSOR-BASED SYSTEMS	CN	MN	8	IBM															
SUMMIT CAD CORP.	CN	TX	8	IBM															
SUNDSTRAND AVIATION	CN	IL	1,000	Intel															

* Present customer
 * Likely prospect

(sorted by region, then company name)

COMPANY	RG	ST	SALES (\$M)	Computer Models sold through VARS	
				1	1
SYNERCOM TECHNOLOGY, INC.	CN	TX	9	DEC	
SYSTEM TECHNOLOGY ASSOCIATES	CN	TX	6	DEC	
SYSTEMS RESEARCH LABS, INC.	CN	OH	40	DEC	Data Gen HP Apple Radio Shack Texas Inst
SYSTEMS SUPPORT, INC.	CN	IL	36	IBM	
T AND B COMPUTING	CN	MI	12	DEC	Prime
TECHNALYSIS CORP.	CN	MN	10	HP	Honeywell IBM Columbia Data
TECHNOLOGY, INC.	CN	OH	6	DEC	Intel
TEL-TEX, INC.	CN	TX	12	Apple	DEC IBM
TELE TERMINALS INC.	CN	MN	18	IBM	Texas Inst
TELTONE CORP.	CN	WA	36		
TOTAL TECHNICAL SVCS	CN	OH	23	IBM	Intel Texas Inst
UCCEL CORP.	CN	TX	153	DEC	
UNIQ DIGITAL TECHNOLOGIES	CN	IL	7	DEC	Pyramid
WEBB CO., JERVIS	CN	MI	6	DEC	HP IBM Stratus Motorola
WESTERN CO. OF NA	CN	TX	600	IBM	
ALPHA-BIT COMPUTERS	CD	CAN	10		
CALCULUS/LOGICON	CD	CAN	7	DEC	
CANADA SYSTEMS GROUP	CD	CAN	110		
CANADIAN ASTRONAUTICS LTD.	CD	CAN	12	DEC	HP
CROMNTEK INC.	CD	CAN	10	HP	IBM Wang Grid Systems
DATA TECH. SYSTEMS LTD.	CD	CAN	15	Honeywell	Eagle Signal
DATALINE INC.	CD	CAN	12	IBM	
DATAMEX LTD.	CD	CAN	10	Televideo	
GEAC COMPUTERS INTERNATIONAL	CD	CAN	50		
I.P. SHARP ASSOCIATES LTD.	CD	CAN	47	Computer Auto	Data Gen DEC HP
INFOCENTRE LTD.	CD	CAN	5	HP	
JONAS & ERICKSON SFTWRE	CD	CD	5	Basic Four	
JTS CMPTR SYSTEMS	CD	CD	5	Gould	Point 4 Data Integrated Sol
LOUIS ALBERT ASSOCIATES INC.	CD	CAN	5		
MINICOM DATA CORP.	CD	CD	5	IBM	Point 4 Data
MULTIPLE FINANCIAL SERVICES	CD	CAN	18		
NFLD. & LABRADOR COMP. SVCS.	CD	CAN	10	IBM	
POLARIS COMPUTER SYSTEMS LTD.	CD	CAN	6		
R.D. NICKEL & ASSOCIATES	CD	CAN	6		
STS SYSTEMS LTD.	CD	CAN	11	Data Gen	
SYSTEMHOUSE LTD.	CD	CAN	40	DEC	HP AT&T Wang
TRACAN ELECTRONICS CORP.	CD	CAN	6		
WHIPPLETREE ENTERPRISES	CD	CAN	5	Callan Data	

SUBSYSTEM HOUSES (1984)

* Present customers (sorted by company)
 * Likely prospects

COMPANY	RG	ST	TERR	PHONE
ACT TECHNOLOGIES CORP	EA	MD		(301) 628-0260
AEROCOMP INC.	CN	TX		(214) 339-8324
ALPHA DATA	SW	CA		(818) 882-6500
ALPHA OMEGA	SW	CA		(818) 345-4422
AMERICAN MITAC CORP.	NW	CA		(408) 988-0258
APPARAT INC.	NW	CO		(303) 741-1778
APPLE COMPUTER	NW	CA		(408) 996-1010
ARBY CORP.	EA	MA		(617) 864-5058
* AST RESEARCH	SW	CA	3304	(714) 836-1333
BASIC TIME, INC.	NW	CA		(408) 727-0877
* BERING INDUSTRIES INC.	NW	CA	3102	(414) 651-3300
BITECH ENTERPRISES	EA	NY		(516) 567-8155
CADET INC.	CN	IL		(312) 932-0790
CARE INTERNATIONAL	—	—		—
CHRISLIN INDUSTRIES	SW	CA		(818) 991-2254
CMC INTERNATIONAL	NW	WA		(206) 885-1600
CMS INC.	SW	CA		(714) 953-1498
COMPLETE MANAGEMENT SYST.	SW	CA		(714) 953-1498
COMPUADD CORP.	CN	TX		(512) 250-1489
COMPUTER INTEGRATION	EA	NJ		(201) 370-3900
COMPUTER PRODUCTS INT'L.	NW	CA		(408) 945-0100
CREATIVE MICROSALES	NW	CA		(415) 945-1201
DATREX INC.	SW	AZ		(602) 272-9491
DAVONG SYSTEMS	NW	CA		(408) 734-4900
DIGITAL ELECTRONIC SYST.	EA	TN		(615) 649-5137
DIGITAL EQUIPMENT CORP.	EA	MA		(617) 897-7063
DIGITAL SEARCH	EA	SC		(803) 877-9444
DISC TECH ONE INC.	SW	CA		(805) 964-3535
DSM & ASSOCIATES	SW	CA		(818) 991-9901
EICON RESEARCH	EA	NY		(212) 719-9390
EMERALD SYSTEMS	SW	CA		(619) 270-1994
* EMULEX CORP.	SW	CA	3304	(714) 662-5600
EVEREX SYSTEMS	NW	CA		(415) 498-1111
EXPRESS SYSTEMS INC.	CN	IL		(312) 882-7733
FALCON TECHNLOGY	NW	WA		(800) 722-2510
FIRST CLASS PERIPHERALS	NW	NV		(800) 538-1307
GENIE TECHNOLOGIES	SW	CA		(818) 991-6210
GENOA SYSTEMS CORP.	NW	CA		(408) 945-9720
HARD DISK SYSTEMS	NW	CA		(408) 226-6260
HARD DRIVE SPECIALISTS	CN	TX		(713) 480-6000
HUNTINGTON DATA SYSTEMS	SW	CA		(714) 960-7498
I 2 INTERFACE	SW	CA		(619) 270-3990
IDEA ASSOCIATES	EA	MA		(800) 257-5027
INFAX	EA	GA		(404) 981-4520
INNOVATIVE DATA TECH.	SW	CA		(619) 587-0555
* INTERPHASE CORP.	CN	TX	5111	(214) 350-9000
JOSEPHINE COUNTY TECH.	NW	OR		(503) 474-5678
KAMERMAN LABS	NW	OR		(800) 522-2237
KUSTOM ELECTRONICS	CN	KS		(913) 492-1400
LANCORE TECHNOLOGIES	SW	CA		(818) 991-5100
LOBO SYSTEMS INC.	SW	CA		(805) 564-3356
MAYNARD ELECTRIC	EA	FL		(305) 331-6402
MICRO DESIGN	CN	TX		(512) 441-7890
MICRO DESIGN INT'L	EA	FL		(305) 677-8333
MICRO NETWORK CORP.	CN	MN		(612) 788-1099
MICRO-DESIGN	CN	TX		(512) 441-7890
MICROCODE	NW	CA		(415) 657-4411
MICROPLUS	EA	GA		(404) 446-5659
MNC INTERNATIONAL	CN	MN		(612) 788-1099
* MOUNTAIN COMPUTER	NW	CA	3104	(408) 438-6650
* NAT'L. MEMORY SYSTEMS	NW	CA	3102	(415) 443-1669
OSICOM	EA	NJ		(201) 540-0144
PACIFIC DATANET	NW	CA		(408) 980-0693
PARADISE SYSTEMS INC.	NW	CA		(415) 468-6000
PC'S LIMITED	CN	TX		(512) 452-0323
PEACHTREE TECHNOLOGY	EA	GA		(404) 662-5158

SUBSYSTEM HOUSES (1984)

* Present customers (sorted by company)
 ■ Likely prospects

COMPANY	RG	ST	TERR	PHONE
PERCOM DATA	CN	TX		(800) 527-1222
PH ASSOCIATES	EA	VA		(703) 281-5762
POLYGON INDUSTRIES INC.	EA	LA		(504) 282-5372
PRIAM	NW	CA		(408) 946-4600
PRIORITY ONE ELECTRONICS	SW	CA		(818) 709-6789
QIC RESEARCH INC.	NW	CA		(408) 942-8086
QUADRAM	EA	GA		(404) 923-6666
QUARK INC.	NW	CO		(303) 934-2211
QUCES INC.	EA	NJ		(201) 548-2135
QUENTIN CORP.	SW	CA		(213) 709-6500
RACET COMPUTERS	SW	CA		(714) 997-4950
RANCORE CORP.	NW	CA		(408) 438-7255
SOFTWARE SUPPORT INC.	EA	MA		(617) 872-9090
SPACE COAST SYSTEMS	EA	FL		(305) 268-0872
SUNOL SYSTEMS	NW	CA		(415) 484-3322
* SYSGEN INDUSTRIES	NW	CA		(415) 490-6770
SYSTEMS & SOFTWARE INC.	SW	AZ		(602) 948-7313
SYSTEMS PERIPH. CSLTNTS	SW	CA		(619) 693-8611
TALLGRASS TECHNOLOGIES	CN	KS		(913) 492-6002
TEAMMATE	NW	CA		(408) 986-9545
TECMAR	CN	OH		(216) 349-0600
TELEBYTE TECHNOLOGY	EA	NY		(516) 423-3232
TRANTOR SYSTEMS	—	—		—
TW TECHNOLOGIES	SW	AZ		(602) 581-0669
U.S. DESIGN	EA	MD		(301) 577-2880
■ UNITED SYSTEMS	SW	CA	3305	(714) 832-3613
UNIVATION INC.	NW	CA		(408) 745-0180
VIDON SYSTEMS	SW	CA		(714) 834-0532
WANGTEK INC.	SW	CA		(805) 583-5255
WESTWIND COMPUTER	NW	CA		(800) 831-3144
XCOMP	SW	CA		(619) 573-0077

* Present customer
 * Likely prospect

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
1	ROCKWELL INTERNATIONAL	CN	PA		8,000	19.4%	JAMES N. MORELAND	(412)247-3000
2	LITTON INDUSTRIES	CN	MI		5,000	31.5%	TOM HAINSWORTH	(616)772-6321
3	MARTIN MARIETTA CORP.	EA	MD		3,500	39.9%	---	(301)982-6500
4	GENERAL DYNAMICS	CN	TX		3,400	48.2%	DAVE HAGEN	(817)763-4149
5	CLARK EQUIPMENT CO.	CN	MI		1,021	50.7%	JOHN R. SMITH	(616)966-4222
6	SUNDSTRAND AVIATION	CN	IL		1,000	53.1%	---	(815)226-6000
7	GENERAL INSTRUMENT CORP.	EA	MD		911	55.3%	GORDON WOOLLEY	(301)683-3370
8	ELECTRONIC DATA SYSTEMS	CN	TX		775	57.2%	ROGER W. BOLL	(214)661-6000
9	PACKARD INSTRUMENT CO.	CN	IL		750	59.0%	---	(312)969-6000
10	COMPUTER SCIENCES CORP.	SW	CA		695	60.7%	WILLIAM R. HOOVER	(213)615-0311
11	FISHER CONTROLS INTERNATIONAL	EA	LA		600	62.1%	MICHAEL A. WEAVER	(515)754-3011
12	WESTERN CO. OF NA	CN	TX		600	63.6%	J. FANNING	(817)731-5100
13	* GENERAL ELECTRIC CO.	CN	WI	5002	500	64.8%	---	(414)647-4074
14	BATTELLE SOFTWARE PROD. CENTER	CN	OH		450	65.9%	RONALD PAUL	(616)424-5524
15	MCAUTO	CN	MO		444	66.9%	RAYMOND PITTMAN	(800)325-1551
16	SCIENCE APPLICTNS INTN'L	SW	CA		354	67.8%	J.R. BEYSTER	(619)454-3811
17	PLANNING RESEARCH	EA	VA		321	68.6%	JOHN TOUPS	(703)556-1000
18	DURR-FILLAUER MEDICAL INC.	EA	AL		300	69.3%	W.A. WILLIAMSON	(205)271-3512
19	SYSTEM DEVELOPMENT CORP.	SW	CA		300	70.0%	JACK CAMPBELL	(213)820-4111
20	* TYMSHARE, INC.	NW	CA	3102	300	70.7%	WARREN F. PRINCE	(408)446-6000
21	SMS	EA	PA		260	71.4%	JEARY VOGT	(215)296-6300
22	REYNOLDS & REYNOLDS	CN	OH		252	72.0%	TERRY CARDER	(513)443-2000
23	CURTIS 1000	EA	GA		250	72.6%	BILL CULBERTSON	(404)491-1000
24	FRONTIER SYSTEMS	EA	NJ		250	73.2%	ROBERT M. RAMSEY	(609)596-7736
25	GENRAD, INC.	EA	MA		250	73.8%	WILLIAM THURSTON	(617)369-4400
26	* CALMA CO.	NW	CA	3103	230	74.4%	DANIEL MCGLAUGHLIN	(408)434-4000
27	GILBERT ASSOCIATES, INC.	EA	PA		200	74.8%	FREDERICK L. MOREADITH	(215)775-2600
28	SOLAR TURBINES INC.	SW	CA		200	75.3%	A. LUDWIG	(619)238-5667
29	INFORMATICS GENERAL	SW	CA		191	75.8%	WALTER BAUER	(818)887-9040
30	SAFEGUARD BUSINESS SYSTEMS	EA	PA		180	76.2%	VINCENT G. BELL	(215)641-5000
31	BOEING COMPUTER SERVICES	EA	VA		174	76.6%	ROBERT DRYDEN	(703)821-6200
32	AYDIN SYSTEMS	NW	CA		160	77.0%	AYHAN HAKIMOGLU	(415)968-7680
33	UCCEL CORP.	CN	TX		153	77.4%	GREGORY LIEMANDT	(214)353-7100
34	ANALOGIC CORP.	EA	MA		150	77.8%	DANIEL ABENAIM	(616)777-4500
35	GBC	CN	IL		140	78.1%	WARREN ROTHWELL	(312)495-4420
36	NAT'L DATA CORP.	EA	GA		140	78.4%	L.C. WHITNEY	(404)329-8500
37	MANAGEMENT SCIENCE AMERICA	EA	GA		130	78.8%	DENNIS VOHS	(404)239-2000
38	NAT'L CMPTR SYSTEMS	EA	GA		125	79.1%	DAVID MALMBERG	(404)391-1700
39	* SYSTEM INDUSTRIES	NW	CA	3112	121	79.4%	ARLEN TORBETT	(408)942-1212
40	NORRELL SERVICES	EA	GA		120	79.6%	C. DOUGLAS MILLER	(404)262-2100
41	CANADA SYSTEMS GROUP	CD	CAN		110	79.9%	J.R. RICKETTS	(416)964-7640
42	SYSCON CORP.	EA	DC		104	80.2%	J.J. YGLESIAS	(202)342-4000
43	LOGICON, INC.	SW	CA		103	80.4%	JOHN WOODHULL	(213)373-0220
44	ANACOMP, INC.	CN	IN		100	80.7%	L.P. FERRARO	(317)844-9666
45	INTERACTIVE DATA	EA	MA		100	80.9%	JOHN RUTHERFURD	(617)890-1234
46	M/A-COM	EA	MD		100	81.1%	TOM SCHOLL	(301)428-5582
47	NORTHROP CORP.	SW	CA		100	81.4%	JIM MOULE	(805)373-2512
48	COMPUTERTOWN	EA	PA		95	81.6%	---	(215)275-8696
49	MENTOR GRAPHICS CORP.	NW	OR		88	81.8%	THOMAS BRUGGERE	(503)626-7000
50	EAST TEXAS PERIODICALS	CN	TX		85	82.0%	JAN MOORE	(713)748-8120
51	AMERICAN MANAGEMENT SYSTEMS	EA	VA		80	82.2%	FRANK A. NICOLAI	(703)841-6000
52	DAVY MCKEE CORP.	EA	NJ		73	82.4%	JOHN P. MEYERS	(201)665-0100
53	FAIRCHILD WESTON SYSTMS	EA	FL		70	82.6%	R.J. KELLER	(813)371-0811
54	FINALCO, INC.	EA	VA		67	82.7%	JON J. PRAGER	(703)790-0970
55	ASK COMPUTER SYSTEMS	NW	CA		65	82.9%	KENNETH FOX	(415)969-4442
56	* COMPUTERVISION	EA	MA	4002	65	83.1%	RICHARD PAULSON	(617)275-1800
57	CONTROL-O-MATION, INC.	CN	MI		65	83.2%	ROBERT WALLACE	(313)426-3935
58	AMERICAN APPRAISAL ASS.	CN	WI		60	83.4%	L.P. HACKETT	(414)271-7240
59	CABLEDATA	NW	CA		60	83.5%	ROBERT MATHEWS	(916)636-5800
60	STEARNS CATALYTIC	EA	NC		59	83.6%	-----	(704)542-4220
61	COMPUTER DATA SYSTEMS, INC.	EA	MD		55	83.8%	---	(301)921-7000
62	TELESCIENCES, INC.	EA	NJ		55	83.9%	JOHN REIS	(609)866-1000
63	ISTEL, INC.	EA	MA		53	84.0%	SEYMOUR ROSEN	(617)272-7333
64	CHAK L. WON	EA	NJ		52	84.2%	TOM CASSA	(201)542-1500
65	ENDATA, INC.	EA	TN		52	84.3%	DOUGLAS ALTENBERN	(615)244-0244

* Present customer
 * Likely prospect

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
66	AUTO-TROL TECHNOLOGY CORP.	NW	CO		50	84.4%	E. JOSEPH ZEMKE	(303)452-4919
67	BRISTOL BABCOCK	EA	CT		50	84.5%	ROY FINE	(203)575-3000
68	CASCADE DATA SYSTEMS	SW	CA		50	84.6%	KEN BARNEY	(714)835-6660
69	CONTEL INFORMATION SYSTEMS	EA	MD		50	84.8%	DAVID G. ALLEN	(301)654-9120
70	EAGLE SIGNAL CONTROLS	CN	TX		50	84.9%	—	(512)873-8300
71	GEAC COMPUTERS INTERNATIONAL	CD	CAN		50	85.0%	CHARLES WILLIAM	(416)475-0520
72	N. C. S. INC.	EA	VA		50	85.1%	RICHARD MEYERS	(304)387-2630
73	OCLC ONLINE COMPUTER	CN	OH		50	85.3%	A. MARTIN SELLERS	(614)764-6000
74	PRC REALTY SYSTMS	EA	VA		50	85.4%	JOHN CORSE	(703)556-2500
75	QUADREX COMPUTER SYSTEMS INC.	NW	CA		50	85.5%	DON L. WENTZ	(408)866-4510
76	R&D ASSOCIATES	NW	WA		50	85.6%	LYNN G. GREF	(206)581-1322
77	RADIAN CORP.	CN	TX		50	85.7%	F. SCOTT LAGRONE	(512)454-4797
78	SYSTEM INTEGRATORS, INC.	NW	CA		50	85.9%	F. MICHAEL FAUBERT	(916)929-9481
79	TELEPHONICS CORP.	EA	NY		50	86.0%	CHARLES MIXER	(516)549-6000
80	COMPUSERVE INC.	CN	OH		47	86.1%	SANDY TREVOR	(614)457-8600
81	I.P. SHARP ASSOCIATES LTD.	CD	CAN		47	86.2%	IAN P. SHARP	(416)364-5361
82	DRAVO ENGINEERS, INC.	EA	PA		45	86.3%	DANIEL J. MCDERMOTT	(412)566-3600
83	S-CUBED	SW	CA		45	86.4%	DON GRINE	(619)453-0060
84	SIMULATION SYSTEMS	EA	NY		45	86.5%	P. POLLACK	(516)454-6300
85	SYSTEMS CONTROL INC.	NW	CA		45	86.6%	TOM STEDING	(415)494-1165
86	MANCHESTER EQUIPMENT	EA	MA		44	86.8%	ROBERT RIBAVDO	(617)739-1555
87	TIMPLEX INC.	EA	NJ		43	86.9%	EDWARD BOTWINICK	(201)930-4600
88	LUNDY ELECTRONICS & SYSTEMS	EA	NY		43	87.0%	PETER BARANISHYN	(516)671-9000
89	CAP INFORMATION SYSTEMS, INC.	EA	NY		40	87.1%	C.A. HAYES	(212)599-7000
90	CYCARE SYSTEMS, INC.	CN	IA		40	87.2%	JIM H. HOUTZ	(319)556-3131
91	GENERAL PHYSICS CORP.	EA	MD		40	87.2%	TOM STEVENS	(800)638-3838
92	PRES INC.	CN	OH		40	87.3%	GEORGE E. DORIN	(513)274-2167
93	REDSHAW INC.	EA	PA		40	87.4%	FRANK THOMPSON, JR.	(412)221-1661
94	SYSTEMHOUSE LTD.	CD	CAN		40	87.5%	PETER A. SANDIFORD	(613)236-9734
95	SYSTEMHOUSE, INC.	NW	CA		40	87.6%	PETER A. SANDIFORD	(415)572-2970
96	SYSTEMS RESEARCH LABS, INC.	CN	OH		40	87.7%	KAROL A. ONDICK	(513)426-6000
97	TELOS FEDERAL SYSTEMS	SW	CA		37	87.8%	LIN CONGER	(213)450-2424
98	DAVID JAMISON CARLYLE CORP.	SW	CA		37	87.9%	RICHARD SMITH	(213)410-9250
99	SYSTEMS SUPPORT, INC.	CN	IL		36	88.0%	THOMAS M. OWENS	(312)323-1200
100	TELTONE CORP.	CN	WA		36	88.1%	DAVE EITELBACH	(206)827-9626
101	CONSOLIDATED DATA SYSTEMS	EA	NJ		35	88.2%	ANTHONY MUNATO	(201)487-7737
102	FAIRFIELD INDUSTRIES	CN	TX		35	88.3%	A.L. WARREN	(713)981-8181
103	GLOBAL TURNKEY SYSTEMS	EA	NJ		35	88.3%	DAVID AMSTERDAM	(201)445-5050
104	IDC SERVICES INC.	SW	CA		35	88.4%	GEORGE A. BRENNER	(213)550-0285
105	SCIENTIFIC CALCULATIONS	EA	NY		35	88.5%	PAUL WATKINS	(716)924-9303
106	PHOENIX LEASING, INC.	NW	CA		34	88.6%	GUS CONSTANTIN	(415)485-4500
107	SYKES DATATRONICS	EA	NY		34	88.7%	ROBERT SYKES	(716)458-8000
108	CONSOLIDATED MICROGRAPHICS	SW	CA		33	88.8%	CLYDE LEFEVRE	(714)643-0400
109	DYATRON CORP.	EA	AL		32	88.8%	J. LOTZ	(205)956-7500
110	RAGEN INFO SYSTEMS	EA	NJ		32	88.9%	IRA LOPATA	(201)997-1000
111	INTERMETRICS, INC.	EA	MA		31	89.0%	JOHN MILLER	(617)661-1840
112	DELTA DATA SYSTEMS	EA	PA		30	89.1%	R. SMALLACOMBE	(215)322-5400
113	CITY NATIONAL BANK	SW	CA		30	89.1%	ALEX KYMAN	(213)480-7221
114	COMPUTER CORP. OF AM.	EA	MA		30	89.2%	JAMES ROTHNIE	(617)492-8860
115	CYBERNETICS & SYSTEMS	EA	FL		30	89.3%	J.M. COOPER	(904)359-3150
116	ELECTRONIC ASSOCIATES, INC.	EA	NJ		30	89.4%	ROBERT FINNEY	(201)224-1100
117	FEDERAL SYSTEMS, INC.	CN	MO		30	89.4%	GARY W. LEIENDECKER	(314)487-8427
118	GENISCO	SW	CA		30	89.5%	OTTO BATCH	(714)220-0720
119	JOHNSON CONTROLS, INC.	CN	TX		30	89.6%	JIM LANDON	(214)242-6521
120	KEANE, INC.	EA	MA		30	89.6%	JOHN KEANE	(617)742-5210
121	* PRICE ELECTRONICS CORP.	CN	IL	5002	30	89.7%	MANNY I. PRICE	(312)541-6400
122	SCAN-OPTICS INC.	EA	CT		30	89.8%	RONALD E. GOCHT	(203)289-6001
123	SHASTA GENERAL SYS	NW	CA		30	89.9%	RICHARD CALFEE	(408)727-7662
124	* SYSTEMS ASSOCIATES INC.	EA	NC	4501	30	89.9%	ALLAN W. LACKEY	(704)333-1276
125	ENERGY INC.	NW	ID		27	90.0%	JAMES HUSTON	(209)529-1000
126	APPLIED AUTOMATION INC.	CN	OK		25	90.1%	R.S. MCCONNELL	(918)661-6141
127	GERBER SYSTEMS TECH	EA	CT		25	90.1%	W.S. MANN	(203)644-2581
128	IRT CORP.	SW	CA		25	90.2%	ROBERT MERTZ	(619)450-4343
129	MNGMT DECISION SYSTMS	EA	MA		25	90.2%	JOHN WURTS	(617)890-1100
130	NES, INC.	CN	IL		25	90.3%	C. MANNING	(312)289-8820
131	POST-TRON SYSTEMS	EA	MA		25	90.4%	GIACOMO CATUCCI	(617)699-4200
132	RESEARCH INC.	CN	MN		25	90.4%	—	(612)941-3300

(sorted by sales)

* Present customer
 □ Likely prospect

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
133	SCIENTIFIC MICRO SYSTEMS	NW	CA		25	90.5%	—	(415)964-5700
134	SUN DATA, INC.	EA	GA		25	90.5%	JOHN CRILLY	(404)449-6116
135	TECHNICAL MARKETING SYSTEMS	EA	TN		25	90.6%	JOE YOUND	(615)833-7662
136	CALDWELL-VAN RIPER	CN	IN		24	90.7%	FRANK WEMHOFF	(317)632-6501
137	DYNAMIC CONTROL	EA	FL		24	90.7%	STEPHEN DOUGHERTY	(305)831-8444
138	PACIFIC HEALTH RESOURCES	SW	CA		24	90.8%	ROBERT J. FLANAGAN	(213)742-6245
139	EBS, INC.	EA	FL		23	90.8%	PAUL HAGSTROM	(305)660-2550
140	TOTAL TECHNICAL SVCS	CN	OH		23	90.9%	GEORGE STACKFLETH	(216)237-8363
141	AMHERST ASSOC.	CN	IL		22	90.9%	M. KING DEETS	(312)332-0500
142	CINCINNATI TIME	CN	OH		22	91.0%	WALTER J. HELMS	(513)241-5500
143	DOWTY RFL INDUSTRIES, INC.	EA	NJ		22	91.0%	C.K. CURTIS	(201)334-3100
144	ERISCO	EA	NY		22	91.1%	PAT D'AMATO	(212)765-8500
145	MICROS SYSTEMS	EA	MD		22	91.2%	J. ROBERT SCHULTZ	(301)779-7511
146	ULTRASYSTEMS DEFENSE/SPACE	SW	CA		22	91.2%	PHILLIP B. SIMONS	(714)863-0350
147	□ CL SYSTEMS, INC.	EA	MA	4003	21	91.3%	RICHARD GOLDBERG	(617)965-6310
148	O'BRIEN & GERE ENGRS	EA	NY		21	91.3%	JOHN LOVELAND	(315)451-4700
149	SCIENTIFIC SYSTEMS	EA	FL		21	91.4%	VINCENT LAMB, JR.	(305)725-1300
150	AMI	NW	WA		20	91.4%	TIM TEAGUE	(206)643-2050
151	CENTURY BUSINESS TECHNOLOGIES	NW	CA		20	91.5%	RICK KONLON	(415)686-9300
152	COMPUTER CURRICULUM	NW	CA		20	91.5%	PATRICK SUPPES	(415)494-8450
153	COMTEL INSTRUMENTS CO.	CN	OH		20	91.6%	HARRY CROWS	(216)442-8080
154	FRANKLIN RESEARCH CENTER	EA	PA		20	91.6%	JEREMY A. LIFSEY	(215)448-1403
155	GENERAL BUSINESS COMPUTERS	EA	NJ		20	91.7%	NORMAN SOME	(609)424-6500
156	GRAMMCO COMPUTER SALES	CN	TX		20	91.7%	DON GRAMMER	(512)366-1107
157	INFORMATICS GENERAL CORP.	CN	OH		20	91.7%	JOE BEVAN	(614)459-7500
158	* LANTOR, INC.	SW	CA	3306	20	91.8%	VICTOR A. JAUCH	(213)324-7070
159	LOGICA INC.	EA	NY		20	91.8%	STEVE STEVENSON	(212)599-0828
160	* LOWRY COMPUTER PRODUCTS	CN	MI	5001	20	91.9%	MICHAEL LUMM	(313)228-7200
161	MEDICAL DATA SVCS	EA	VA		20	91.9%	ROD SEAY	(804)794-2818
162	* MESA TECHNOLOGY CORP.	EA	MD	4004	20	92.0%	BUD BINCK	(301)948-4350
163	MNGMT CONTROL SYSTEMS	EA	GA		20	92.0%	CHARLIE PAPARELLI	(404)432-1996
164	NUS CORP.	EA	MD		20	92.1%	PETER ARROWSMITH	(301)258-6000
165	SAI COMSYSTEMS, INC.	SW	CA		20	92.1%	RICHARD FITZER	(619)293-7500
166	* SYSTEME CORP.	EA	FL	4501	20	92.2%	DANIEL B. HOSKINS	(305)298-8180
167	TECHNOLOGY FOR ENERGY	EA	TN		20	92.2%	JAMES C. ROBINSON	(615)966-5856
168	TOM SOFTWARE	NW	WA		20	92.3%	HOWARD M. BING	(206)246-7022
169	AUXTON CMPTR ENTERPRISES	EA	FL		19	92.3%	CHERYL GALLOWAY	(305)660-8400
170	COGNOS CORP.	NW	CA		19	92.4%	M.U. POTTER	(415)943-7277
171	MEDICAL INFO TECH	EA	MA		19	92.4%	NEIL PAPPALARDO	(617)329-5300
172	SADDLEBROOK CORP.	EA	MA		19	92.5%	MICHAEL D. KINKEAD	(617)661-8100
173	STERLING SYSTEMS INC.	EA	VA		18	92.5%	EDWARD FIELDS	(703)827-9000
174	BARRISTER INFORMATION SYSTEMS	EA	NY		18	92.6%	JAMES D. MORGAN	(716)845-5010
175	INTERNATIONAL RESEARCH	CN	MN		18	92.6%	—	(612)888-9635
176	MADIC CORP.	NW	CA		18	92.6%	ROBERT RICHTER	(408)988-8311
177	MULTIPLE FINANCIAL SERVICES	CD	CAN		18	92.7%	A. PROZES	(416)365-5801
178	RGI, INC.	EA	VA		18	92.7%	RICHARD QUIGG	(703)820-4900
179	SYSTEMS ARCHITECTS INC.	EA	MA		18	92.8%	VICTOR KAN	(617)961-2700
180	TELE TERMINALS INC.	CN	MN		18	92.8%	TOM LOEFFLER	(612)536-6000
181	LOCKWOOD GREENE SYSTEMS CORP.	EA	SC		18	92.9%	OTIS C. JONES	(803)578-2143
182	DSC	CN	MN		17	92.9%	WILLIAM GILSTER	(612)935-9111
183	EQUATORIAL COMMUNICATIONS CO.	NW	CA		17	92.9%	EDWIN D. PARKER	(415)969-9500
184	FORMATION, INC.	EA	NJ		17	93.0%	ARTHUR D. BEARD	(609)234-5020
185	JOBTRACK	CN	MN		17	93.0%	WILLIAM GILSTER	(612)935-9111
186	VANGUARD TECHNOLOGIES CORP.	EA	VA		17	93.1%	DEAN W. CRAWFORD	(703)273-0500
187	CORNELL COMPUTER	EA	NY		17	93.1%	JEROME GILBERT	(212)594-8543
188	AUTOMATED SCIENCES GROUP, INC.	EA	MD		16	93.1%	TED FERGUSON	(301)587-8750
189	CADLINC, INC.	CN	IL		16	93.2%	JOHN WEST	(312)228-7300
190	CAPITAL SYSTEMS, INC.	EA	VA		16	93.2%	ALFRED C. QUENNEVILLE	(703)892-1150
191	COLUMBINE SYSTEMS	NW	CO		16	93.3%	DAVIS WEIDNER	(303)279-4000
192	ENSCO	EA	VA		16	93.3%	NORMAN BUSH	(703)321-9000
193	EYRING RESEARCH INSTITUTE INC.	NW	UT		16	93.3%	RONALD G. HANSEN	(801)375-2434
194	IDEAS, INC.	EA	MD		16	93.4%	THOMAS E. GOOLDY	(301)937-3600
195	AVANT-GARDE COMPUTING	EA	NJ		15	93.4%	TIMOTHY AHLSTROM	(609)778-7000
196	ADVANCED COMPUTER TECHNIQUE	EA	NY		15	93.4%	SCOTT GELLIS	(212)696-3600
197	ADVANTAGE SYSTEMS	EA	FL		15	93.5%	JAMES WALTER JR.	(813)536-4765
198	AZURDATA INC.	NW	WA		15	93.5%	S.W. JOHNSON	(206)881-5100
199	CLINTON COMPUTERS	EA	MD		15	93.6%	ARTHUR LUNQUIST	(301)856-2500

(sorted by sales)

* Present customer
 " Likely prospect

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
200	COMPUAMERICA	SW	CA		15	93.6%	ALLEN WEISS	(213)450-8600
201	COMPUCON	CN	TX		15	93.6%	PHILIP LINDSLEY	(214)680-1000
202	DATA TECH. SYSTEMS LTD.	CD	CAN		15	93.7%	EARL W. LARGER	(604)437-3751
203	INGERSOLL ENGINEERS	CN	IL		15	93.7%	JULIAN JARET	(815)987-6110
204	LOCAL DIGITAL DIST.	EA	MD		15	93.7%	RICHARD PALERMO	(301)258-8848
205	MARION CO., WILLIAM	EA	NJ		15	93.8%	WILLIAM MARION	(201)343-4554
206	MUTAGO DATA CORP.	SW	CA		15	93.8%	MICHAEL S. GOLDSTEIN	(714)859-8666
207	RICH, INC.	EA	NY		15	93.8%	MICHAEL GRAHAM	(212)825-0834
208	SCOPE INC.	EA	VA		15	93.9%	EDWARD C. DRIESE	(703)471-5600
209	SILVAR LISCO	NW	CA		15	93.9%	JOHN HICKS	(415)324-0700
210	VISTA TECHNOLOGY INC.	SW	CA		15	94.0%	BILL LAWRENCE	(619)744-8305
211	COGNITRONICS CORP.	EA	CT		14	94.0%	DAVID SHEPARD	(203)327-5307
212	COMPUTER ELECTION SYSTEMS	NW	CA		14	94.0%	L. CHUCK KRIEGER	(415)527-5150
213	DYTEC SOUTH	CN	MO		14	94.1%	H.B. CRAIN	(314)569-2990
214	EDWARDS & CO., J.D.	NW	CO		14	94.1%	DANIEL L. GREGORY	(303)773-3732
215	MTI SYSTEMS INC.	EA	NY		14	94.1%	BERT RUDOFSKY	(516)621-6200
216	PIONEER COMPUTER MARKETING	CN	TX		14	94.2%	BOB R. DEAN	(214)343-2904
217	PROPHET 21, INC.	EA	PA		14	94.2%	THOMAS A. COSTANZA	(215)493-8900
218	SCAN-TRON CORP.	SW	CA		14	94.2%	JOHN SAUNDERS	(213)638-0520
219	SCIENCE DYNAMICS CORP.	SW	CA		14	94.3%	KENNETH J. BODGER	(213)320-1101
220	TATA CONSULTANCY SERVICES	EA	NY		14	94.3%	F.C. KOHLI	(212)557-8038
221	AERO SYSTEMS ENGINEERING	CN	MN		13	94.3%	RAYMOND RICHARDSON	(612)227-7515
222	FOSTER-MILLER, INC.	EA	MA		13	94.4%	WILLIAM RIBICH	(617)890-3200
223	GENERAL BUSINESS SERVICES	EA	MD		13	94.4%	BERNARD S. BROWNING	(301)424-1040
224	GRAFTEK	NW	CO		13	94.4%	PHILLIP POIRIGR	(303)449-1138
225	KAYE INSTRUMENTS	EA	MA		13	94.5%	JAY PRAGER	(617)275-0300
226	MANUS SERVICES CORP.	NW	WA		13	94.5%	CLIFFORD M. ASPLUND	(206)285-3260
227	TELESIS SYSTEMS	EA	MA		13	94.5%	PAT DE CAVAIGNAC	(617)256-2300
228	CONTEL DATA SERVICES CORP.	EA	GA		13	94.5%	ROBERT E. THOMAS	(404)391-8000
229	HEALTH INFO SYSTEMS	EA	NY		13	94.6%	GEORGE WEINBERGER	(718)435-6300
230	DATA ARCHITECTS, INC.	EA	MA		13	94.6%	EDWARD MAYBURY	(617)890-7730
231	HARDWARE COMPUTER CORP.	CN	IN		13	94.6%	ALLEN ARTHUR	(317)841-6155
232	MICROWARE DISTRIBUTORS INC.	NW	OR		13	94.7%	RICK TERRELL	(503)642-7692
233	NATIONAL COMPUTER CORP.	EA	CT		13	94.7%	WILLIAM F. TILLEY	(203)357-0004
234	AUTOMATION INTELLIGENCE, INC.	EA	FL		12	94.7%	RICHARD Q. FOX	(305)843-7030
235	BIO-RAD LABORATORIES	EA	MA		12	94.8%	WARREN HOWELL	(617)868-4330
236	BUTLER ASSOC.	EA	MA		12	94.8%	CHRISTOPHER ALLEN	(617)964-5270
237	CANADIAN ASTRONAUTICS LTD.	CD	CAN		12	94.8%	JAMES D. TAYLOR	(613)820-8280
238	CBC SERVICES	CN	OH		12	94.8%	WILLIAM PRICE	(614)222-5496
239	CF CORP.	EA	MA		12	94.9%	J.R. REDFERN	(617)255-5593
240	COIN FINANCIAL SYSTEMS	EA	GA		12	94.9%	MARK SINGLETON	(404)447-6103
241	COMPUTER SYNERGY	NW	CA		12	94.9%	TOM CULLIGAN	(415)444-3434
242	DATA SYSTEMS (VA)	EA	VA		12	95.0%	A. PAUL COX	(804)264-7300
243	DATALINE INC.	CD	CAN		12	95.0%	JOSEPH C. PARADI	(416)964-9515
244	DATASTORE INC.	EA	NJ		12	95.0%	JAMES E. MEGARGEL	(609)779-0200
245	DELPHI SYSTEMS, INC.	SW	CA		12	95.0%	PAUL PRAGER	(213)706-8989
246	DP SYSTEMS & SVCS	EA	NC		12	95.1%	MICHAEL FALK	(919)852-0455
247	FIGGIE SYSTEMS MGMT. GROUP	CN	OH		12	95.1%	WALLY HAYES	(216)946-9000
248	INFOCEL, INC.	EA	NC		12	95.1%	JAN M. LODAL	(919)848-0001
249	INFORMATION MANAGEMENT INT'L.	NW	CA		12	95.2%	ALLEN GUGGENHEIM	(408)248-8250
250	MEDCOMP TECHNOLOGIES, INC.	EA	NY		12	95.2%	ABE STUNDEL	(914)273-6480
251	NORTHEAST DATACOM, INC.	EA	CT		12	95.2%	LAWRENCE B. MORSE	(203)265-3455
252	NORTHERN DATA SYSTEMS	EA	MA		12	95.2%	PETER A. THOMPSON	(617)329-7800
253	PLANTE & MORAN	CN	MI		12	95.3%	EDWARD PARKS	(313)352-2500
254	REACT CORP.	NW	CA		12	95.3%	RICHARD HERTLE	(415)326-4587
255	T AND B COMPUTING	CN	MI		12	95.3%	ROGER L. VARBLOW	(313)973-1900
256	TEL-TEX, INC.	CN	TX		12	95.4%	THOMAS W. MOORE	(713)868-6000
257	* TOTAL TEC SYSTEMS	EA	NJ	4004	12	95.4%	GEORGE ZUPECK	(201)231-0300
258	" ULTIMATE COMPUTER SERVICES	EA	NJ	4004	12	95.4%	ROBERT LA ROCCA	(201)625-8700
259	WESTERN SCIENTIFIC MKT	SW	CA		12	95.5%	THOMAS HUTTON	(619)565-6699
260	DATATRONIC SYSTEMS CORP.	SW	CA		11	95.5%	M.P. MILANE	(213)988-5290
261	BOEING ENGINEERING CO.	NW	WA		11	95.5%	A.S. KAWAGUCHI	(206)773-9962
262	BUSINESS EQPMT & SUPPLY	EA	MS		11	95.5%	IRWIN TATE	(601)328-6860
263	COMPUTER INPUT CORP.	SW	CA		11	95.6%	J.W. BRADLEY	(213)372-2177
264	STS SYSTEMS LTD.	CD	CAN		11	95.6%	HOWARD C. STOTLAND	(514)631-7291
265	STS SYSTEMS, INC.	EA	CT		11	95.6%	BILL LASSNER	(203)348-8055
266	AQUIDNECK DATA CORP.	EA	RI		11	95.6%	KENNETH A. PARKER	(401)847-7260

* Present customer
 ■ Likely prospect

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
267	WESTERN DATA	SW	CA		11	95.7%	JOHN COATES	(714)768-3345
268	NFLD. & LABRADOR COMP. SVCS.	CD	CAN		10	95.7%	H. S. MILLER	(709)737-6146
269	TECHNALYSIS CORP.	CN	MN		10	95.7%	VIC ROCCHIO	(612)925-5900
270	ABL COMPUTER TECHNOLOGIES	EA	MA		10	95.7%	JAMES H. GROH	(617)433-5211
271	AEROJET ELECTROSYSTEMS CO.	SW	CA		10	95.8%	CRAIG W. HAMMILL	(213)334-6211
272	ALPHA-BIT COMPUTERS	CD	CAN		10	95.8%	WILLIAM GROSVENOR	(403)475-5555
273	ALPINE DATASYSTEMS	NW	OR		10	95.8%	BERND VONINTEL	(503)641-8100
274	AMNET, INC.	EA	MA		10	95.8%	PETER COLE	(617)923-1850
275	BASIX CONTROLS SYSTEMS	SW	CA		10	95.9%	JIM POWER	(213)638-0400
276	BFA CORP. (NM)	SW	NM		10	95.9%	JEROME BECKES	(505)292-1212
277	BKW, INC.	EA	NH		10	95.9%	ALFRED J. FICHERA, JR.	(603)888-8400
278	BUSINESS INFORMATION SYSTEMS	SW	CA		10	95.9%	RICK T. BELL	(213)245-3691
279	CADRE CORP.	EA	GA		10	96.0%	GERALD R. SMITH	(404)458-9521
280	CMC/COMPUTER MARKETING CORP.	SW	AZ		10	96.0%	CHARLES CAMERON	(602)264-5151
281	COHERENT COMMUNICATIONS SYS.	EA	NY		10	96.0%	ARTHUR J. WILLIAMS	(516)231-1550
282	COLLIER-JACKSON, INC.	EA	FL		10	96.0%	CHARLES W. JACKSON	(813)872-9990
283	COMPUTER LINK CORP.	EA	MA		10	96.1%	DAVID J. GOLDMAN	(617)272-7400
284	COMPUTER ROOM	EA	NY		10	96.1%	JAY ROSOVSKY	(518)456-8162
285	CONTINENTAL HEALTHCARE	CN	KS		10	96.1%	RICH BENDIS	(913)451-6161
286	CONTROL APPLICATIONS	CN	TX		10	96.1%	BILL ATHANS	(713)484-4440
287	CRYSTAL COMPUTERS, INC.	CN	KS		10	96.2%	GARY L. YANTIS	(800)541-3030
288	DATA PROCESSING SCIENCES CORP.	CN	OH		10	96.2%	STEVE MORGAN	(513)961-0776
289	DATA SYSTEMS ANALYSTS, INC.	EA	NJ		10	96.2%	CHARLES MARGOLIN	(609)665-6088
290	DATAMEX LTD.	CD	CAN		10	96.2%	DANIEL K. HARUNI	(416)665-1808
291	DAVOX CORP.	EA	MA		10	96.2%	JAMES MITCHELL	(617)667-4455
292	DIGITAL ELECTRONIC SERVICES	EA	LA		10	96.3%	GARY L. HONEYCUTT	(318)636-2672
293	* EECO COMPUTER	SW	CA	3303	10	96.3%	C. JEREMIAS	(714)835-6000
294	ESTIMATION, INC.	EA	MD		10	96.3%	JOEL KEHM	(301)636-5680
295	* FIRST COMPUTER CORP.	CN	IL	5002	10	96.3%	JEROME A. MARTIN	(312)920-1050
296	FORMASTER CORP.	NW	CA		10	96.4%	L.E. THOMPSON	(408)942-1771
297	FRENCH GERLEMAN ELECTRIC CO.	CN	MO		10	96.4%	JAMES W. FRENCH	(314)569-3122
298	GELCO CORP.	CN	MN		10	96.4%	STEVEN F. FISCHER	(612)828-2400
299	HAGEN SYSTEMS INC.	CN	MN		10	96.4%	RICHARD J. HAGEN	(612)546-3351
300	INTERN'L TOTALIZATOR	SW	CA		10	96.5%	JAMES WALTERS	(619)457-4680
301	LEVITZ RETAIL SYSTEMS	SW	CA		10	96.5%	GARY REIF	(619)457-3888
302	LOGON, INC.	EA	NJ		10	96.5%	ALBERT BECKMAN	(201)646-9222
303	MATRIX/SYSTEMS GROUP CORP.	EA	MA		10	96.5%	NICHOLAS MANSFIELD	(617)350-6614
304	METAFILE INFO SYSTEMS	CN	MN		10	96.6%	ALLAN SPRAU	(507)289-8967
305	MODULAR INFO SYSTEMS	EA	FL		10	96.6%	JAMES HOLMES	(305)422-4160
306	NATIONAL DATA CORP.	EA	MD		10	96.6%	D. J. JAMES	(301)258-9200
307	PARAGON TECHNOLOGY	NW	CA		10	96.6%	PHILIP MONEGO	(415)676-4741
308	PIEPER ELECTRIC INC.	CN	WI		10	96.7%	RONALD H. REIMER	(414)462-7700
309	POST SOFTWARE INTERNATIONAL	EA	NC		10	96.7%	EARL FRANKLIN	(919)556-6721
310	PROCESS CONTROL IND., INC.	EA	MA		10	96.7%	F. J. WASSON	(617)668-8415
311	QEI, INC.	EA	NJ		10	96.7%	VINCENT INGATO	(201)379-7400
312	QUADSTAR CORP.	CN	TX		10	96.8%	JACK CHANG	(214)980-9601
313	RESPONSIVE TERMINAL SYSTEMS	CN	TX		10	96.8%	M. DANNY MITCHELL	(214)548-0761
314	SARTORIS, INC.	SW	CA		10	96.8%	BRUCE JOPLIN	(916)446-8094
315	SCOTT COMPUTING SYSTEMS	EA	GA		10	96.8%	C. RYLAND SCOTT	(404)432-7000
316	* SIGMA DESIGN	NW	CO	370	10	96.9%	WALTER VON SEGGERN	(303)773-0666
317	SIMMONDS PRECISION	EA	NC		10	96.9%	WILLIAM ALLEN	(919)872-9500
318	SUNDSTRAND DATA CONTROL INC.	EA	MA		10	96.9%	PAUL F. MAHONEY	(617)861-1500
319	TIMBERLINE SYSTEMS	NW	OR		10	96.9%	LESLIE F. CLARKE	(503)644-8155
320	VCA CORP.	EA	VA		10	96.9%	KEITH R. MUSSON	(703)281-4666
321	WORICO DATA SYSTEMS	EA	PA		10	97.0%	EDWARD A. ROFI	(215)337-8100
322	CROWNTEK INC.	CD	CAN		10	97.0%	MICHAEL BAETZ	(416)493-0800
323	COMPUTER MERCHANT, LTD.	EA	MA		10	97.0%	JOHN DANIELI	(617)749-4634
324	INTEGRATED MICROCOMPUTER	EA	MD		10	97.0%	JOHN YEH	(301)984-8434
325	DATATEL	EA	VA		9	97.1%	THOMAS R. DAVIDSON	(703)549-4300
326	DYER, WELLS & ASSOC.	EA	GA		9	97.1%	PHILLIP FAUVER	(404)432-5888
327	KINETIC SYSTEMS CORP.	CN	IL		9	97.1%	MICHAEL L. HAYES	(815)838-0005
328	NAT'L UNLTD BUSINESS SYS	EA	NY		9	97.1%	J. ROTH	(212)597-1160
329	PROCOM LEASING & MANAGEMENT	EA	NY		9	97.2%	KENNETH POSS	(212)279-1717
330	ROSS SYSTEMS	NW	CA		9	97.2%	KENNETH ROSS	(415)856-1100
331	SYSTEM AUTOMATION CORP.	EA	MD		9	97.2%	HOWARD TISCHLER	(301)565-9400
332	TRW DATACOM	SW	CA		9	97.2%	ALEX A. IMFELD	(213)475-9861
333	VITEK	SW	CA		9	97.2%	TOM PINE	(619)744-8305

(sorted by sales)

* Present customer
 = Likely prospect

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
334	SYNERCOM TECHNOLOGY, INC.	CN	TX		9	97.3%	GARY W. STOWELL	(713)240-5000
335	D/B DATA INC.	EA	NY		9	97.3%	ROBERT PARSONS	(212)886-2124
336	COMPUTERS TO GO	CN	TX		9	97.3%	K.F. CARTER	(512)469-5621
337	GERHARD & ASSOCIATES, INC.	CN	OH		9	97.3%	CHARLES F. SPADEMAN	(614)488-9751
338	SACHS/FREEMAN ASSOC. INC.	EA	MD		8	97.3%	HERBERT M. SACHS	(301)262-4400
339	RELATIONAL TECHNOLOGY	NW	CA		8	97.4%	GARY MORGENTHALER	(415)769-1400
340	ACTUARIAL COMPUTER TECHNOLOGY	SW	CA		8	97.4%	MARIA R.KATZ	(213)641-5600
341	COMPUTER RESEARCH, INC.	EA	PA		8	97.4%	JAMES SCHULTZ	(412)831-6276
342	COMPUTER SOFTWARE DESIGN	SW	CA		8	97.4%	CHRIS J. HORROCKS	(714)634-1401
343	COMPUTER USAGE CO.	NW	CA		8	97.4%	VICTOR E. BARTOLETTI	(415)543-3940
344	CONDOR COMPUTER	CN	MI		8	97.5%	AL LUNK	(313)769-3988
345	DATA GROUP CORP.	EA	MA		8	97.5%	GEORGE KELLY	(617)863-0400
346	DEXEL SYSTEMS CORP.	EA	VA		8	97.5%	W. BRAUN JONES	(703)448-9400
347	DIGITAL ASSOCIATES CORP.	EA	CT		8	97.5%	CHARLES LAIDLAW	(203)327-9210
348	DP COMMUNICATIONS	EA	NY		8	97.5%	H. PRESS	(212)244-7800
349	FINANCIAL SOFTWARE, INC.	EA	GA		8	97.6%		(404)446-2533
350	GENASYS CORP.	EA	MD		8	97.6%	JOHN P. PUHALA	(301)770-4600
351	LARSE CORP.	NW	CA		8	97.6%	HENRY A. MOURAD	(408)988-6600
352	LAWSON ASSOC.	CN	MN		8	97.6%	JERRY SNYDER	(612)379-2633
353	MEMCOM INTERNATIONAL, INC.	SW	CA		8	97.6%	PETER R. KLOSSE	(714)771-0800
354	NIAKWA MANAGEMENT SERVICES	CN	IL		8	97.7%	GERARD J. DEDERICH	(312)291-0850
355	NMF, INC.	EA	NC		8	97.7%	K.R. ADAMS	(704)568-5180
356	PROFSNL CMPTR RESOURCES	CN	IL		8	97.7%	J.F. CARR	(312)932-2200
357	SENSOR-BASED SYSTEMS	CN	MN		8	97.7%	ALLAN C. SPRAU	(507)867-4440
358	SUMMIT CAD CORP.	CN	TX		8	97.7%	GREGG YOUNG	(713)440-1468
359	TELETEK ENTERPRISES	NW	CA		8	97.7%	J.A. MCCAULEY	(916)920-4600
360	WHITE HAT SYSTEMS, INC.	SW	CA		8	97.8%	BRIAN BOYLE	(818)706-3148
361	TECHNOLOGY MARKETING	SW	CA		8	97.8%	GEORGE WELLS	(714)863-1100
362	PERSONNEL DATA SYS	EA	PA		8	97.8%	STEVE BRODY	(215)828-4294
363	ASSOCIATED DATAMASTERS	SW	CA		8	97.8%	FRANK BRADFORD	(714)381-3491
364	BRASINGTON & ASSOC., W.A.	CN	TX		8	97.8%	WILLIAM A. BRASINGTON	(713)444-2166
365	WESTERN NY CMTG SYS	EA	NY		8	97.9%	RAY HUTCH	(716)381-4120
366	TIMESHARING UNLIMITED INC.	EA	TN		7	97.9%	TREVOR M. EVANS	(615)242-4477
367	ADVANCED COMPUTER MANAGEMENT	CN	MI		7	97.9%	HARVE C. LIGHT	(313)649-1800
368	APPLIED SYSTEMS	CN	IL		7	97.9%	ROBERT EUSTACE	(312)534-5575
369	BIS SALES, INC.	SW	CA		7	97.9%	RICHARD SLOAN	(213)245-3691
370	BOSTON SYSTEMS OFFICE	EA	MA		7	97.9%	MICHAEL ROONEY	(617)894-7800
371	CALCULUS/LOGICON	CO	CAN		7	98.0%	GILLES LAPORTE	(514)282-1215
372	COMPUTE-R-SYSTEMS	EA	PA		7	98.0%	HARRY L. BEISSWENGER	(215)825-7500
373	EOCOM ELECTRONIC SYSTEMS	SW	CA		7	98.0%	RICHARD GILLESPIE	(714)730-5051
374	FREY ASSOCIATES, INC.	EA	NH		7	98.0%	BETSY W. FREY	(603)472-2800
375	GENERAL DIGITAL CORP.	EA	MD		7	98.0%	RALPH HUFFMAN	(301)294-0515
376	GENERAL KINETICS INC.	EA	MD		7	98.0%	LOUIS R. SCHAP	(301)881-2044
377	HIGHSMITH & CO.	EA	NC		7	98.1%	JAMES L. HIGHSMITH	(704)527-2382
378	LEVY INC.	NW	CA		7	98.1%	S. LEVY	(408)371-4466
379	LOGISTICON, INC.	NW	CA		7	98.1%	ROBERT G. BARTIZAL	(408)988-3811
380	MANOF COMMUNICATIONS SYSTEMS	EA	NY		7	98.1%	JACOB SHALEV	(212)490-2010
381	MEMBERSHIP SERVICES, INC.	CN	TX		7	98.1%	JOE CLEVELAND	(214)438-0581
382	NETWORK SOLUTIONS (VA)	EA	VA		7	98.1%	TYRONE GRIGSBY	(703)442-0400
383	* S & S ELECTRONICS, INC.	EA	MA	4002	7	98.2%	STUART P. ROBERTS	(617)458-4100
384	SIGNATRON INC.	EA	MA		7	98.2%	PAUL F. MAHONEY	(617)861-1500
385	SOFTWARE SHOP SYSTEMS	EA	NJ		7	98.2%	RON KOVAL	(201)938-3200
386	TECHLAND SYSTEMS	EA	NY		7	98.2%	DAN KELLY	(212)684-7788
387	UNIQ DIGITAL TECHNOLOGIES	CN	IL		7	98.2%	CHARLES E. RICHTER, JR.	(312)879-1008
388	ASSOCIATED COMPUTER SYSTEM	EA	GA		7	98.3%	JIM SWYMER	(404)496-1041
389	EXECUTIVE BUSINESS SYSTEMS	SW	CA		7	98.3%	JOHN A. MARTIN	(213)906-1060
390	AUTO TELL SERVICES	EA	PA		7	98.3%	FRANK GORMAN	(215)525-9526
391	FREY FEDERAL SYSTEMS CORP.	EA	VA		7	98.3%	HARRISON MORSE	(703)352-7790
392	LEVI, RAY & SHOUP	CN	TX		7	98.3%	RICHARD LEVI	(214)324-2635
393	LIBRA PROGRAMMING, INC.	NW	UT		7	98.3%	WILLIAM A. MAASBERG	(800)453-3827
394	NABIHS INC.	CN	IL		7	98.3%	N. MANGOUBI	(312)869-6140
395	GRIFFIN TECHNOLOGY	SW	CA		6	98.4%	JOHN C. DARJANY	(213)604-8739
396	MIDWEST DATA SYSTEMS	CN	OH		6	98.4%	MARTIN HERF	(419)586-5181
397	AGENT SYSTEMS	CN	TX		6	98.4%	ADRIAN CURIN	(214)369-8108
398	ALBIN BUSINESS COMPUTERS	CN	MI		6	98.4%	H.C.ALBIN	(313)478-0023
399	APPLIED DATA SYSTEMS INC.	SW	AZ		6	98.4%	HANS AGER	(602)998-3980
400	ARA MAINTENANCE MNGMT SYS	EA	VA		6	98.4%	EMANUAL GREBER	(703)243-3800

(sorted by sales)

* Present customer
 " Likely prospect

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
401	AREGON INTERN'L, INC.	EA	CT		6	98.4%	RICHARD OSBORNE	(203)964-1700
402	AUTOMATED INSURANCE RES SYS	CN	IL		6	98.5%	DONALD LANDGRAF	(312)369-2121
403	COMCON, INC.	EA	NJ		6	98.5%	FREDERICK SCOTT	(609)764-1720
404	COMPUTER SYSTEMS DEVELOPMENT	EA	MS		6	98.5%	MORRIS M. HOGG	(617)875-0680
405	DATA 3 SYSTEMS, INC.	SW	CA		6	98.5%	RICHARD C. ANDERSON	(707)528-6560
406	DATA-TRON, INC.	CN	OH		6	98.5%	DAVE LEHRER	(216)585-8421
407	DATACOUNT CORP.	SW	CA		6	98.5%	Y.H. RUTENBERG	(213)775-3645
408	DATAMEDIC CORP.	EA	NY		6	98.6%	PETER FETTEROLF	(516)435-8880
409	DAYTON-FORESTER ASSOCIATES	SW	CA		6	98.6%	NORMAN L. EYSTER	(213)701-0127
410	DECCOMP INC.	SW	CA		6	98.6%	PRADEEP SAGGAR	(714)730-5116
411	E.B.S. DATA PROCESSING	NW	CO		6	98.6%	RAY ROBERTS	(303)773-1313
412	ECOM SYSTEMS INC.	EA	TN		6	98.6%	DEWAYNE P. BOLTON	(901)794-5501
413	EDP SYSTEMS INC.	CN	OK		6	98.6%	MIKE DEATON	(405)943-9818
414	ESCA CORP.	NW	WA		6	98.6%	ED KRZYANOWSKI	(206)885-5077
415	FANNIE MAE	EA	GA		6	98.7%	JEFF LEBOWITZ	(404)446-2533
416	FRONTIER COMPUTER CORP.	CN	TX		6	98.7%	—	(214)330-7243
417	GULL RESOURCE MGMT. SYSTEMS	EA	NY		6	98.7%	ALAN ROSENBLUM	(516)435-0600
418	JERSEY MICRO SYSTMS	EA	NJ		6	98.7%	DALE PRITCHETT	(609)665-7611
419	KEYSTONE INFO SYSTEMS	EA	NJ		6	98.7%	JUDD VAN DERVORT	(609)662-0050
420	MARYLAND COMPUTER SERVICES	EA	MD		6	98.7%	PAUL KISHTER	(301)879-3366
421	MICRO DATA SYSTEMS (ID)	NW	ID		6	98.7%	PHIL JENISON	(208)667-7402
422	MICROVOICE	SW	CA		6	98.8%	GREG PEACOCK	(714)859-1091
423	NEW GENERATION SFTWRE	NW	CA		6	98.8%	ALLAN SHABET	(916)9202200
424	NORTHEAST DATA SYSTEMS, INC.	EA	MA		6	98.8%	RANDY SAYLOR	(617)273-2920
425	POLARIS COMPUTER SYSTEMS LTD.	CD	CAN		6	98.8%	TERRY GRAHAM	(416)920-5777
426	PROGRAMS & ANALYSIS	EA	MA		6	98.8%	PAUL BRIGHTON	(617)272-7723
427	SHOWALTER SYSTEMS	NW	WA		6	98.8%	JOHN D. SHOWALTER	(206)746-6032
428	SIERRA NATIONAL CORP.	SW	CA		6	98.8%	DENNIS C. WILSON	(619)277-4810
429	SMITH, DENNIS & GAYLORD, INC.	NW	CA		6	98.9%	DAVID L. DUNBAR	(408)727-1870
430	SSCI	SW	CA		6	98.9%	B.J. PORCELLA	(714)832-7724
431	SYSTEM TECHNOLOGY ASSOCIATES	CN	TX		6	98.9%	ROGER D. FLINK	(713)440-8340
432	SYSTONETICS, INC.	SW	CA		6	98.9%	MAYNARD B. THOMPSON	(714)680-0910
433	TECHNOLOGY, INC.	CN	OH		6	98.9%	RON ROCKAFELLOW	(513)426-2405
434	TECHTRAN INDUSTRIES	EA	NY		6	98.9%	DAVID L. DECKER	(716)334-9640
435	TELCO RESEARCH	EA	TN		6	98.9%	JAMES JEWETT	(615)329-0031
436	TELEGENIX, INC.	EA	NJ		6	99.0%	STEPHEN MESSAROS	(609)424-5220
437	TRACAN ELECTRONICS CORP.	CD	CAN		6	99.0%	VALDU LOIT	(416)625-7752
438	TRICOM GROUP	EA	NY		6	99.0%	BRUCE COLUIN	(516)483-9700
439	APTECH COMPUTER SYSTEMS	EA	PA		6	99.0%	JAY TROUTMAN	(412)782-5550
440	R.D. NICKEL & ASSOCIATES	CD	CAN		6	99.0%	ROBERT D. NICKEL	(519)623-0889
441	RIBBLE ENGINEERING CO.	EA	NJ		6	99.0%	ROBERT BELL	(201)794-9500
442	TYLUS SYSTEMS INC.	SW	CA		6	99.0%	DAVE MCDUEL	(714)970-9321
443	WEBB CO., JERVIS	CN	MI		6	99.1%	MARION COLLIE	(313)973-7875
444	* STANDARD DATA CORP.	EA	NY	4501	5	99.1%	MARK IOBST	(212)586-3100
445	SINGLE SOURCE SOLUTION	NW	CA		5	99.1%	MICHAEL L. DEAN	(415)680-0202
446	MIDEC, INC.	EA	PA		5	99.1%	THOMAS STYSLINGER	(412)963-6011
447	ACCU-SORT SYSTEMS, INC.	EA	PA		5	99.1%	JOHN P. SCHULTZ	(215)723-0981
448	ACPI LTD.	EA	NY		5	99.1%	MORRIS MOLIVER	(516)248-7700
449	ADVANCED INTEGRATED TECHNOLOGY	EA	TN		5	99.1%	GENE CHEATHAM	(615)381-4388
450	ALPS	NW	UT		5	99.1%	RON MAHONEY	(801)375-0090
451	ANN ARBOR COMPUTER	CN	MI		5	99.2%	ROGER BUITEN	(313)973-7875
452	ARTRONICS, INC.	EA	NJ		5	99.2%	TIMOTHY CUNHA	(201)756-6868
453	AUTOCONTROL, INC.	CN	MO		5	99.2%	JOHN MIZIS	(314)739-0055
454	AUTOMETRIC, INC.	EA	VA		5	99.2%	HARRY A. NIEDZWIADK	(703)998-7606
455	AZTEK, INC.	SW	CA		5	99.2%	PHILLIP LIPPINCOTT	(714)770-8406
456	* BEDFORD ASSOCIATES, INC.	EA	CT	4002	5	99.2%	RICHARD L. SANDERS	(203)846-0230
457	C & W INCOTEL LTD.	EA	NY		5	99.2%	DICK BIANCULLY	(212)594-8340
458	C TEK SOFTWARE	EA	NY		5	99.2%	ROBERT CHAMBERS	(212)246-7733
459	CARE COMPUTER SYSTEMS	NW	WA		5	99.2%	JAMES L. INGALLS	(206)451-8272
460	CARLYN COMPUTER SYSTEM INC.	EA	VA		5	99.3%	L. THOMAS BROWN	(703)642-1950
461	CARTER & CRAWLEY, INC.	EA	SC		5	99.3%	TOM COX	(803)288-6250
462	CASS MARKETING SERVICES, INC.	SW	CA		5	99.3%	CLARK I. BUCH	(818)994-9400
463	COMPUTER INFORMATION SYSTEMS	EA	MA		5	99.3%	WADE POOLER	(617)848-7515
464	COMPUTER RESALE EXCHANGE	EA	DC		5	99.3%	MARSHALL WOODELL	(202)737-1401
465	COMPUTER STRATEGIES, INC.	CN	MI		5	99.3%	HERMAN J. MEILINGER	(616)531-6160
466	COMPUTER TECHNOLOGY, INC.	NW	WA		5	99.3%	DAN E. ENSLOW	(206)625-9765
467	COMPUTERIZED BUS. SOLUTIONS	EA	FL		5	99.3%	DAN D. COTTER	(813)873-1848

(sorted by sales)

* Present customer
 " Likely prospect

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
468	CORPORATE DATA SCIENCES	NW	CA		5	99.4%	PHILIP MARTINEZ	(408)980-9747
469	CREATIVE CMPTR SOLUTIONS	NW	CA		5	99.4%	GREGORY CLARKE	(415)790-2073
470	CURRY CONTROLS CO.	EA	FL		5	99.4%	RICHARD TAYLOR	(813)646-5781
471	CYBORG CORP.	EA	MA		5	99.4%	J. MICHAEL JAMES	(617)964-9020
472	DATA EXCHANGE, INC.	CN	IL		5	99.4%	DARRELL F. VOITIK	(312)963-4424
473	DATA RENTALS/SALES, INC.	SW	CA		5	99.4%	STEWART M. KRAKOVER	(213)559-3822
474	DATA-MED CORP.	EA	DE		5	99.4%	J. DAVID POLLARD	(800)441-9345
475	DATACOM, INC.	EA	FL		5	99.4%	J.C. MILLER	(904)244-6121
476	DATAPPAREL, INC.	SW	CA		5	99.5%	STUART D. WEISS	(213)645-9061
477	DEFINABLE DATA DEVICES, INC.	NW	OR		5	99.5%	PAUL WOHLFARTH	(503)682-3131
478	DIALOGUE INC.	EA	NY		5	99.5%	ARTHUR I. STERN	(212)425-2665
479	DISTRIBUTION & MFG SYSTEMS	NW	CO		5	99.5%	LYNN JENSEN	(303)839-5527
480	FEDERAL COMPUTER CORP.	EA	VA		5	99.5%	WILLIAM HUMMEL	(703)691-4056
481	GENERAL DIGITAL CORP.	EA	CT		5	99.5%	LEONARD M. LAZAR	(203)528-9041
482	GIANGARLO SCIENTIFIC	EA	PA		5	99.5%	V. GIANGARLO	(412)922-8850
483	HARRIS DATA SERVICE	CN	WI		5	99.5%	TOM HARRIS	(414)475-1760
484	HARVARD DATA EQUIPMENT	EA	MA		5	99.6%	GEORGE L. RICE	(617)384-7767
485	HOPKINS ASSOC.	EA	PA		5	99.6%	JOHN HOPKINS	(215)828-7191
486	INFOCENTRE LTD.	CD	CAN		5	99.6%	IAN FARQUHARSON	(514)337-5007
487	INNOVATIVE COMPUTER LEASING	EA	NJ		5	99.6%	JOHN DIGIACOMO	(201)625-8700
488	INTERACTIVE, INC.	SW	CA		5	99.6%	B. VERNON	(619)560-8525
489	JEFFERSON-PILOT BROADCASTING	EA	NC		5	99.6%	LOU PFEIFER	(704)525-3901
490	JONAS & ERICKSON SFTWRE	CD	CD		5	99.6%	DAVID PRENTICE	(416)491-6620
491	JTS CMPTR SYSTEMS	CD	CD		5	99.6%	JOE STRUL	(416)665-8910
492	KANJANRUS CORP.	EA	MA		5	99.6%	RUSSELL E. CRAMER, III	(617)237-2285
493	KESELL ASSOCIATES	EA	NY		5	99.7%	ROBERT R. KESELL	(212)873-5556
494	KEY SYSTEMS, INC.	EA	NH		5	99.7%	JEFFREY J. FENCER	(603)898-9800
495	LOUIS ALBERT ASSOCIATES INC.	CD	CAN		5	99.7%	LOUIS P. ALBERT	(613)748-9741
496	MEDICAL DATA SERVICES CORP.	EA	VA		5	99.7%	J. RODNEY SEAY	(804)794-2818
497	MIDWEST COMMERCE DATA	CN	IN		5	99.7%	RICHARD HERSHBERGER	(219)294-6621
498	MINICOM DATA CORP.	CD	CD		5	99.7%	HOWARD HONICKMAN	(416)225-4209
499	MODULAR DATA SYSTEMS, INC.	CN	TX		5	99.7%	GARY BASSETT	(713)486-1712
500	NORDATA INC.	EA	NJ		5	99.7%	ROBERT PIZZYBOROWSKI	(201)288-8573
501	NOVVA CMPTR SYSTEMS	NW	HI		5	99.8%	HOWARD TAN	(808)521-8011
502	NUCLEAR DATA	EA	GA		5	99.8%	ED DE ST. AUBIN	(404)434-9889
503	NUMERIC MICRO, INC.	CN	TX		5	99.8%	DAVID BIRK	(214)788-2871
504	PACIFIC DATA GROUP	NW	CA		5	99.8%	THOMAS P. SCHUTTER	(408)732-4770
505	PROLAN	CN	TX		5	99.8%	BEN MAGUIRE	(512)877-1155
506	PROTEK COMPUTER SERVICES INC.	SW	CA		5	99.8%	—	(714)898-9012
507	ROI SYSTEMS	CN	MN		5	99.8%	G. MICHAEL CARNAHAN	(612)559-8263
508	RTC SYSTEMS	EA	MA		5	99.8%	JOHN ROBINSON	(617)339-5503
509	SADDLE BROOK CONTROL SYSTEMS	EA	NJ		5	99.9%	ROBERT L. BELL	(201)794-9588
510	SERVICORLD	NW	CA		5	99.9%	W. JAMES CROSS	(415)788-6580
511	SEVERN COMPANIES	EA	MD		5	99.9%	JACK STEERE	(301)267-0432
512	SHARED UNION SYSTEMS, INC.	EA	PA		5	99.9%	KENNETH F. KAHN	(215)628-2741
513	SILTON AMS	SW	CA		5	99.9%	LARRY WAGNER	(213)585-1161
514	SIMCON INC.	EA	VA		5	99.9%	ROBERT R. BURKE	(703)448-8600
515	SYSTEMS BY MICA	SW	AZ		5	99.9%	FRANK ROBERTS	(602)987-9576
516	SYSTEMS INTEGRATED	SW	CA		5	99.9%	LARRY POMATTO	(619)578-7880
517	TRANSCAPITAL CORP.	EA	VA		5	100.0%	JOSEPH F. CAMPAGNA	(703)790-8210
518	TRANSPORT INFORMATION SYSTEMS	NW	WA		5	100.0%	JOSEPH K. TAUSSIG	(206)641-7787
519	TRISTAR DATA SYSTEMS	EA	NJ		5	100.0%	DANIEL F. BROWN	(609)424-4700
520	VECTRON GRAPHIC SYSTEMS	NW	CA		5	100.0%	CHARLES J. SIMON	(408)737-0460
521	WHIPPLETREE ENTERPRISES	CD	CAN		5	100.0%	KENNETH E. BROWN	(604)420-8058

DISTRIBUTORS (1984)

* Present customer
 * Likely customer

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
1	DOW JONES & CO., INC.	EA	NJ		867	7.4%	RAY SHAW	(609) 452-1511
2	HAMILTON/AVNET	SW	CA		800	14.1%	W.C. CACCIATORE	(213) 558-2000
3	REXNORD DATA SYSTEMS	CN	WI		780	20.8%	DON TAYLOR	(414) 643-3703
4	BRUNING	CN	IL		614	26.0%	JERRY WILLIAMS	(312) 351-2900
5	HARTE-HANKS COMMUNICATIONS	NW	CO		500	30.2%	ROBERT G. MARBUT	(303) 534-2097
6	SCHWEBER ELECTRONICS	EA	NY		500	34.5%	ROBERT JOHNSON	(516) 334-7474
7	ARROW ELECTRONICS	EA	NY		480	38.5%	STEVE KAUFMAN	(212) 563-0055
8	NORTH SUPPLY CO.	CN	KS		423	42.1%	STAN FISHER	(913) 791-7000
9	HALL-MARK ELECTRONICS	CN	TX		357	45.1%	JACK TURPIN	(214) 343-5000
10	KIERULFF ELECTRONICS, INC.	NW	CA		350	48.1%	D. BELL	(415) 968-6292
11	PIONEER-STANDARD ELECT.	CN	OH		285	50.5%	JIM BAYMAN	(216) 587-3600
12	FIRST SOFTWARE CORP.	EA	MA		175	52.0%	RICH FAULK	(617) 689-0077
13	EXECUTONE	EA	NY		170	53.5%	JOHN R. JESTER	(516) 681-4000
14	MCKESSON OFFICE PRODUCTS	EA	CT		160	54.8%	JACK DELANEY	(203) 358-7000
15	KIRSCH ASSOCIATES	CN	MN		150	56.1%	WILLIAM KIRSCH	(612) 944-3355
16	NEW ENGLAND TECH'L SALES	EA	MA		150	57.4%	WILLIAM MCGRAIL	(617) 272-0434
17	DIPLOMAT ELECTRONICS	EA	NY		125	58.4%	ALBERT ROTH	(516) 454-6334
18	MICROAMERICA	EA	MA		125	59.5%	GORDON HOFFSTEIN	(617) 480-0780
19	DENNISON NATIONAL	EA	MA		100	60.3%	R. FEINSTEIN	(413) 539-9811
20	WILSON JONES CO.	CN	IL		100	61.2%	THOMAS K. MILLER	(312) 774-7700
21	LEASAMETRIC, INC.	NW	CA		90	61.9%	R. RINGE	(415) 574-4441
22	USL DATA SYSTEMS	NW	CA		75	62.6%	JOHN J. TAYLOR	(415) 572-6600
23	MICRO D, INC.	SW	CA		71	63.2%	HAROLD L. CLARK	(714) 540-4781
24	MOXON ELECTRONICS	SW	CA		70	63.8%	JAMES JORDAN	(415) 635-7600
25	POWELL COMPUTER SUPPLIES	EA	NJ		70	64.4%	ARTHUR NANNOS	(201) 894-0800
26	CROCKER CO. INC., H. S.	NW	CA		65	64.9%	LEE JOHNSON	(415) 692-1471
27	UNIVERSAL COMMUN'C'N SYS	EA	VA		65	65.5%	FRED SHAFITMAN	(703) 362-3701
28	METIER MANAGEMENT SYSTEMS	CN	TX		63	66.0%	ROBIN W.I. LODGE	(713) 988-9100
29	POLICY MANAGEMENT SYSTEMS	EA	SC		62	66.5%	G. LARRY WILSON	(803) 748-2512
30	LOONAM CMPTR CENTER	CN	MN		60	67.0%	JIM LOONAN	(612) 831-1616
31	LYNCH COMMUNICATIONS SYS.	NW	NV		60	67.6%	J.H. VOGT	(702) 786-4020
32	SOFTEAM, INC.	SW	CA		60	68.1%	MARK VIDOVICH	(213) 604-7400
33	DATAComp GROUP, INC.	CN	IL		50	68.5%	THOMAS OWENS	(312) 323-1200
34	GLOBE TICKET CO.	EA	PA		50	68.9%	A.J. CLEGG	(215) 657-4230
35	MARTEC INTERNATIONAL	EA	MA		50	69.3%	H. YOSHIDA	(617) 237-2115
36	MICRO COMPUTER	EA	MA		50	69.8%	R.Y. HOLDEN, SR.	(617) 848-1000
37	PRYOR CORP.	CN	IL		50	70.2%	GEORGE PORTER	(312) 644-5650
38	* WESTERN MICRO SYSTEMS	NW	CA	1101	50	70.6%	BERNARD MARREN	(415) 964-2050
39	DATA ACCESS SYSTEMS, INC.	EA	NJ		48	71.0%	HOWARD B. CRYSTAL	(609) 228-0700
40	GRAHAM ELECTRONICS	CN	IN		48	71.4%	GORDON GRAHAM	(317) 634-8202
41	WEATHERFORD, R.V., CO.	SW	CA		44	71.8%	R.V. WEATHERFORD	(213) 849-3451
42	NORTHERN TECHNOLOGIES	CD	CD		42	72.2%	DAVID WHITESIDE	(416) 475-9123
43	FA COMPONENTS	EA	NY		40	72.5%	JAY FREEMAN	(212) 507-1444
44	HARRISON EQUIPMENT CO.	CN	TX		40	72.8%	MIKE W. TATE	(713) 879-2600
45	KEYSTONE DISTRIBUTING CO.	EA	MA		40	73.2%	STEPHEN SPECTOR	(617) 769-3225
46	LANPAR TECHNOLOGIES, INC.	CD	CD		40	73.5%	D. WHITESIDE	(416) 475-9123
47	CARLYLE CORP., DAVID JAMISON	SW	CA		37	73.8%	PETER RICKARD	(213) 410-9250
48	PROGRAM RESOURCES, INC.	EA	MD		35	74.1%	RICHARD WHITE	(301) 858-6700
49	TELAUTOGRAPH/OMNIFAX	SW	CA		35	74.4%	GENE SWEAT	(213) 641-3690
50	TIME BROKERS OF CA.	SW	CA		35	74.7%	M. KLEINMAN	(213) 986-2411
51	BFA CORPORATION	SW	AZ		30	75.0%	GEORGE M. AED	(602) 994-5400
52	BYTE INDUSTRIES INC.	NW	CA		30	75.2%	DAVID PAVA	(415) 783-8272
53	CARTERFONE COMMUNICATIONS	CN	TX		30	75.5%	TOM BRADY	(214) 630-9700
54	CENTEL FINANCIAL SYSTEMS	EA	NY		30	75.7%	ED WHITE	(212) 514-7800
55	CONTEL INFORMATION SYSTEMS	EA	NY		30	76.0%	DR. HOWARD FRANK	(516) 829-5900
56	MOORE PAPER CO.	CN	TX		30	76.2%	GENE MOORE	(713) 228-9191
57	WORLD DISK DRIVES	SW	CA		30	76.5%	DICK SARGENT	(714) 855-1761
58	SELECTERM, INC.	EA	MA		28	76.7%	PHILLIP CIOLFI	(617) 246-1300
59	NORTHEASTERN DISTRIBUTORS	EA	MA		27	77.0%	EDWARD LYNCH	(617) 547-8000
60	TERMINALS UNLIMITED	EA	VA		26	77.2%	DAVID OWENS	(703) 237-8666
61	AMERICAN COMPUTER GROUP INC.	EA	MA		25	77.4%	ADOLF MONOSSON	(617) 437-1100
62	CASEY-JOHNSTON INC.	NW	CA		25	77.6%	NOEL CASEY	(415) 328-6892
63	CENTRON-DPL CO. INC.	CN	MN		25	77.8%	ROBERT L. MILLER	(612) 944-9161
64	DATA RESEARCH ASSOCIATES	EA	NJ		25	78.0%	HOWARD BASSUK	(201) 569-2620
65	* GROUP THREE ELECTRONICS	SW	CA	3303	25	78.2%	WILLIAM PENCE	(213) 643-6997
66	KALVAR CORP.	CN	MN		25	78.5%	BRIAN OSTENSO	(612) 375-1711

DISTRIBUTORS (1984)

* Present customer
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(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
67	SOFTWARE RESOURCE	NW	CA		25	78.7%	ISSAC ASH	(415) 485-0800
68	GRAPHICS SYSTEMS, INC.	EA	NJ		23	78.9%	JON WRIGHT	(609) 663-1533
69	ELECTRO REP, INC.	EA	NY		22	79.0%	MARK LEMELMAN	(516) 938-0540
70	GESCO CORP.	SW	CA		22	79.2%	MICHAEL MITCHELL	(209) 224-8373
71	TLC COMPUTER SERVICES	EA	GA		22	79.4%	JOHN FINCH	(404) 475-8000
72	WKM ASSOCIATES	EA	PA		21	79.6%	ROBERT MELHADO	(412) 892-2953
73	COMPUTERWORKS	EA	CT		20	79.8%	SEYMOUR MERRIN	(203) 226-9977
74	CURRIE PEAK & FRAZIER, INC.	EA	FL		20	79.9%	W. CURRIE	(305) 855-0843
75	DATA SYSTEMS MARKETING	NW	CA		20	80.1%	JOHN BURKE	(415) 969-4305
76	GLASGAL COMMUNICATIONS	EA	NJ		20	80.3%	RALPH GLASGAL	(201) 768-8082
77	HARTFORD OFFICE SUPPLY CO.	EA	CT		20	80.4%	RICH KILPATRICK	(203) 525-8641
78	NORTHERN COMPUTER SALES	EA	MA		20	80.6%	PAT WEST	(617) 326-3454
79	OCEAN DATA SYSTEMS, INC.	EA	MD		20	80.8%	JEROME MOSENOFF	(301) 881-3031
80	SEMICONDUCTOR SPECIALISTS	CN	IL		20	81.0%	PAUL F. CARROLL	(312) 279-1005
81	SYSTEL COMPUTERS	NW	CA		20	81.1%	SCOT STERN	(408) 986-8280
82	CALIFORNIA DIGITAL INC.	SW	CA		19	81.3%	TERRY REITER	(213) 217-0500
83	REPLITECH CORP.	EA	NY		19	81.4%	MORRIS HANDLER	(718) 596-4100
84	NORTHERN WIRE AND CABLE	CN	MI		18	81.6%	JAMES C. HINSHAW	(313) 589-0515
85	APPALACHIAN COMPUTER SERVICES	CN	KY		17	81.7%	KEN JAMES	(606) 878-7900
86	FIRST COMPUTER CORP. (TX)	CN	TX		17	81.9%	S. DRUCK	(713) 666-3033
87	ULTIMACC SYSTEMS	NW	CA		17	82.0%	GIL KELLERSMAN	(800) 538-7900
88	TSR, INC.	EA	NY		17	82.2%	JOSEPH HUGHES	(516) 231-0333
89	COMPAC MICROELECTRONICS	NW	CA		16	82.3%	BOB HUANG	(408) 773-0444
90	DATALEASE SYSTEMS & FANCL	SW	CA		16	82.4%	GEORGE R. SELDIN	(714) 632-6986
91	FIRST REP. CO.	CN	IL		16	82.6%	JIM IHRIG	(312) 530-2450
92	INLAND ASSOCIATES, INC.	CN	KS		16	82.7%	DON OMER	(913) 764-7977
93	JENKS ASSOCIATES, INC.	EA	MA		16	82.8%	MICHAEL P. JENKS	(617) 938-0488
94	KOEPF ASSOCIATES, W.C.	CN	OH		16	83.0%	WILLARD C. KOEPF	(216) 247-5129
95	NAT'L CMPTR COMMUNIC'NS	EA	CT		16	83.1%	ROBERT M. LOONIN	(203) 357-0004
96	PLS ASSOCIATES, INC.	NW	CO		16	83.3%	DONALD RUSKAUP	(303) 773-1218
97	TRITEK, INC.	EA	NJ		16	83.4%	JOHN BARRETT	(609) 429-1551
98	ADVANCED TECHNOLOGY INTERN'L	EA	NY		15	83.5%	Y. ZEIRA	(212) 869-8686
99	ARINCO COMPUTER SYSTEMS INC.	SW	NM		15	83.6%	JAMES A. ARIAS	(505) 988-9743
100	BOROFKY ASSOCIATES LTD.	EA	NY		15	83.8%	SAM BOROFSCY	(516) 484-2900
101	COMPUCABLE CORP.	SW	CA		15	83.9%	WILLIAM LEAMAN	(619) 471-2040
102	COMPUTER BUSINESS SPLYS	EA	MD		15	84.0%	JOHN W. NUCCI	(301) 770-3850
103	CPX	SW	CA		15	84.2%	LARRY LEVINSON	(818) 709-4003
104	DATA TERMINAL MART	CD	CD		15	84.3%	LAURENCE POLLEY	(416) 677-0184
105	DYTEC NORTH, INC.	CN	MN		15	84.4%	TOM OLSON	(612) 645-5816
106	ERIN DATA SYSTEMS & SVCS	EA	NY		15	84.5%	FRANK KELLY	(516) 293-4114
107	KALTRONICS DISTRIBUTORS	CN	IL		15	84.7%	HARVEY KALMAN	(312) 291-1220
108	LCA SALES CO.	EA	NY		15	84.8%	J. SCHWARTZ	(914) 961-4700
109	OSSMANN CMPTR TECHN'GIES	EA	NY		15	84.9%	HERBERT WEBB	(315) 437-6666
110	PRINTER SYSTEMS CORP.	EA	MD		15	85.0%	ARTHUR D. GALLO	(301) 258-5060
111	QUBIE DISTRIBUTING	SW	CA		15	85.2%	MARK MALLOY	(805) 987-9741
112	RACAL-REDAC, INC.	EA	MA		15	85.3%	MICHAEL G. MARSH	(617) 692-4900
113	SUN-FLEX CO.	NW	CA		15	85.4%	ERIK THOMSEN	(415) 883-1221
114	TMA/LOGON, INC.	EA	NJ		15	85.6%	ALBERT BECKMAN	(201) 646-9222
115	TRANSNET CORP.	EA	NJ		15	85.7%	JOHN WILK	(201) 688-7800
116	ULTRA SPECIALTY, INC.	SW	CA		15	85.8%	DON WONG	(213) 498-3887
117	BARTLETT ASSOCIATES	EA	PA		14	85.9%	JOSEPH MESSEMER	(215) 666-7100
118	DEALERS OFFICE EQUIPMENT	CN	WI		14	86.0%	JON DEGLOPPER	(414) 784-7850
119	GALAXY DISTRIBUTING	EA	NC		14	86.2%	VALARIA DEVINE	(704) 394-0319
120	GRA-MAR, INC.	EA	FL		14	86.3%	B.J. GRACE	(305) 894-3351
121	KSM ELECTRONICS, INC.	EA	FL		14	86.4%	S. BENJAMIN	(305) 971-5900
122	" PGI CORP.	SW	AZ	380	14	86.5%	JAMES G. MANTON	(602) 967-1421
123	ROBEC, INC.	EA	PA		14	86.6%	ROBERT BECKETT	(215) 368-9300
124	EASTERN SFTWRE DISTRBTRS	EA	MD		13	86.8%	J.S. EDWARDS	(301) 366-5100
125	INFORMATION SOLUTIONS (CO)	NW	CO		13	86.9%	DAVE DEYOUNG	(303) 694-9180
126	COMTEL MIDWEST CO.	CN	IL		12	87.0%	T.W. PHINNEY	(312) 539-4838
127	CSS TELECOMMUNICATIONS	NW	CA		12	87.1%	STANLEY F. SITKO	(415) 964-4335
128	FIRST CHOICE ENTERPRISES	CN	MI		12	87.2%	WILLIAM HARTSOCK	(313) 836-9500
129	GEN-TECH ELECTRONICS	EA	NY		12	87.3%	GEORGE T. CORP	(315) 451-3480
130	* KPS, INC.	SW	CA	3306	12	87.4%	WILLIAM E. KIELY	(818) 991-5106
131	MEDIA RECOVERY, INC.	CN	TX		12	87.5%	R.C. FOLEY	(817) 549-5462
132	PACIFIC COMPUTER PRODUCTS	SW	CA		12	87.6%	BERNARD R. LOPER	(714) 549-7535

DISTRIBUTORS (1984)

* Present customer

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RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
133	QUALTECH ASSOCIATES, INC.	NW	CA		12	87.7%	PAUL SCHWARTZ	(408) 732-4800
134	SCI SALES, INC.	CN	TX		12	87.8%	HOWARD CASE	(214) 931-1487
135	ONE POINT	NW	CA		11	87.9%	STEVAN CLOUDTREE	(415) 947-0850
136	FEDERAL SALES SERVICE	EA	VA		11	88.0%	W.H. MUEHLEIB	(703) 922-9400
137	WAHL AND WAHL, INC.	CN	MN		11	88.1%	JERRY WAHL	(612) 729-7301
138	JMS COMPUTER ASSOCIATES	EA	GA		11	88.2%	DWIGHT L. MIESSE	(404) 475-1000
139	ADD ELECTRONICS CORPORATION	EA	NY		10	88.2%	RONALD HIMBERG	(315) 437-0300
140	AZERTY INFO PROCESSING SPLYS	EA	NY		10	88.3%	LARRY GRIFFITHS	(716) 691-6724
141	CALIFORNIA COMPUTER GROUP	SW	CA		10	88.4%	ZE'EV ROTE	(714) 966-1661
142	CENTEC CORPORATION	EA	VA		10	88.5%	PAUL MINOR	(703) 471-6300
143	COMARK INC.	CN	IL		10	88.6%	C. WOLANDE	(312) 351-9700
144	COMPUTER MATE INC.	CN	TX		10	88.7%	BOB MCDOWELL	(214) 669-9370
145	COMPUTER SUPERSTORES	SW	NM		10	88.7%	STEVE KADNER	(505) 292-6668
146	COMSPEC, INC.	CN	TX		10	88.8%	THOMAS A. PAINE	(713) 461-4487
147	CUTLER-WILLIAMS, INC.	CN	TX		10	88.9%	GEORGE H. ENOCHS	(214) 243-3421
148	DATA THREE COMPUTER CORP.	CN	MN		10	89.0%	ROBERT D. JOHNSON	(612) 941-9495
149	DATAMAXX USA CORP.	EA	FL		10	89.1%	THOMAS C. PROCTOR	(904) 224-8213
150	DIGITAL BUSINESS SYSTEMS	SW	AZ		10	89.2%	V.A. POND	(602) 991-9831
151	DIGITAL CONTROLS CORP.	CN	OH		10	89.3%	GREGORY COLLINS	(513) 435-5455
152	ELECTRO SALES ASSOCIATES	CN	OH		10	89.3%	JOHN SHEFFS	(513) 426-5551
153	FM ASSOCIATES, LTD.	EA	FL		10	89.4%	J. FIELDS	(305) 851-5710
154	INSTRUMENT DYNAMICS, INC.	EA	MA		10	89.5%	EUGENE W. HAAS	(617) 245-5100
155	LEXOCORP CORP.	SW	CA		10	89.6%	WILLIAM OTTERSON	(619) 457-4405
156	MISCO, INC., CMPTR SPLYS	EA	NJ		10	89.7%	JOSEPH V. POPOLO	(201) 264-8200
157	PAGE AMERICA	EA	NY		10	89.8%	STEVEN SINN	(212) 286-8901
158	PAR ASSOCIATES, INC.	NW	CO		10	89.9%	PETER KERTESZ	(303) 363-6636
159	RENAISSANCE TECHNOLOGY	NW	CA		10	89.9%	GLEN R. BAYLOR	(415) 676-5757
160	SERCOMP CORP.	SW	CA		10	90.0%	KARL WAGNER	(213) 341-1680
161	STAR-TRONIC DISTRIBUTOR	CN	MI		10	90.1%	JIM PEIRCE	(313) 477-7586
162	STOREX CORP.	EA	MA		10	90.2%	MARTIN FITZGERALD	(617) 769-3400
163	US PLUS, INC.	EA	CT		10	90.3%	ERNIE CORRIVEAU	(203) 269-8222
164	INTERBUSINESS CORP.	CN	IL		9	90.4%	M. TOUMAYAN	(312) 459-8866
165	BYTE SHOP	NW	WA		9	90.4%	P. TERRELL	(206) 622-BYTE
166	CONTEL CODATA SYSTEMS CORP.	NW	CA		9	90.5%	JIM NAKASUJI	(408) 735-1744
167	EQS SYSTEMS	CN	OH		9	90.6%	TONY OLIVERIO	(216) 729-2222
168	SOFTTECH MICROSYSTEMS	SW	CA		9	90.7%	GARY PRITCHETT	(619) 451-1230
169	SOFTWARE CLEARING HOUSE	CN	OH		9	90.7%	WILLIAM IVERS	(513) 451-6742
170	TOMINY, INC.	CN	OH		9	90.8%	L. THACKER	(513) 984-6605
171	* PRODIGY SYSTEMS	EA	NJ	3103	9	90.9%	L. STEIN	(201) 283-2000
172	ADVANCED COMPUTER SUPPLIES	EA	NJ		8	91.0%	S. LEE SMITH	(201) 329-6988
173	AUTOMATED BUSINESS TECHNOLOGY	EA	MD		8	91.0%	TERRY J. NOREN	(301) 924-5900
174	DATAFLEX CORP.	EA	NJ		8	91.1%	JEFF LAMM	(201) 321-1100
175	E-O DATA CORP.	EA	NJ		8	91.2%	MARIO CAPONEGRO	(609) 482-2580
176	MOM CORP., THE	EA	GA		8	91.2%	MICHAEL JONES	(404) 351-2902
177	NORTHEAST SERVICES, INC.	EA	CT		8	91.3%	MARTY JAROSZ	(203) 265-0907
178	PAGE DISTRIBUTORS	EA	NJ		8	91.4%	ART HANSEN	(201) 652-7055
179	PEN-TECH ASSOCIATES	EA	NC		8	91.4%	HAL KOGER	(919) 852-6000
180	SYNERLOGIC, INC.	CD	CD		8	91.5%	KENNETH F. TONGUE	(613) 238-2992
181	BEAMS CO.	CN	IA		8	91.6%	CARL BOBENHOUSE	(515) 255-1148
182	DATAMARC, INC.	CN	TX		8	91.6%	JOHN L. LEICHT	(214) 340-7100
183	TAMM ASSOCIATES	CN	MI		8	91.7%	J.T. TAMM	(313) 538-6188
184	GOVRNMT CMPTR ENTERPRISES	NW	NV		7	91.7%	DOUG KYLE	(702) 786-7557
185	NATIONAL CMPTR SYNDICATE	CN	IL		7	91.8%	DONNA PANFIL	(312) 459-6400
186	NBC COMPUTER SERVICE	CN	NE		7	91.9%	DENNIS STELZER	(402) 472-4440
187	RUSH DRAKE ELECTRONICS	NW	OR		7	91.9%	T.W. MACLEAN	(503) 224-3145
188	TECHNIC COMPUTER SVC	SW	CA		7	92.0%	ROBERT EHTERTON	(714) 751-0315
189	TESCO, INC.	EA	MD		7	92.0%	MARK ISMACH	(301) 695-5300
190	COMPUTER ACQUISITIONS CO.	EA	GA		7	92.1%	GEORGE W. AKIN	(404) 955-3080
191	BDS CORPORATION	NW	CA		7	92.2%	HAIG J. ERMOIAN	(415) 964-2115
192	PARKER BUSINESS SERVICES	CN	IL		7	92.2%	GERALD C. PARKER	(312) 852-5500
193	SOUTHERN ENGINEERG ASSOC.	EA	FL		7	92.3%	WILLIAM BATCHELOR	(813) 577-7700
194	CAELUS CMPTR EQPMT & SPLYS	NW	CA		6	92.3%	EDWARD FARRIS	(408) 729-1800
195	CHAMPION SOFTWARE CORP.	NW	CO		6	92.4%	ROLLAND FRASER	(303) 278-8666
196	CMPTR TRANSCEIVER SYSTEMS	EA	NJ		6	92.4%	ALLEN JACOBSON	(201) 261-6800
197	* COMPUTER MAINTENANCE CORP.	EA	NJ	4004	6	92.5%	ROBERT A. WEBER	(201) 866-6400
198	COMPUTER SUPPLIES WHOLESAL	EA	PA		6	92.5%	D. JORDAN	(215) 434-8200
199	CORPORATE SOFTWARE, INC.	EA	MA		6	92.6%	CHRIS ROBERT	(617) 890-5350

DISTRIBUTORS (1984)

* Present customer
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RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
200	DA/COM SYSTEMS, INC.	SW	CA		6	92.6%	M. STAMMIRE	(818) 703-7983
201	DIGITAL SYSTEMS SALES	CN	MO		6	92.7%	R.T. HAWKINS	(816) 765-3337
202	ELECTOR USA, INC.	NW	CA		6	92.7%	MICHAEL PAULL	(408) 727-1506
203	ENVAX SYSTEMS, INC.	CN	TX		6	92.8%	GIL NOAKES	(214) 986-1151
204	FORMS & SUPPLIES	EA	TN		6	92.8%	RICHARD MASON	(901) 346-1249
205	GENERAL SYSTEMS (MI)	CN	MI		6	92.9%	G.E. ROBERTS	(313) 626-6200
206	HOWARD SYSTEMS INTERNAT'L	EA	NY		6	92.9%	HOWARD PERSKY	(212) 682-2400
207	INTERN'T'L DATA EQPMT & ACC.	NW	CA		6	93.0%	ARNIE LEVIN	(408) 745-1911
208	MARKETECHS, INC.	EA	MA		6	93.0%	CHARLES HESNER	(617) 237-4343
209	NAT'L MICROGRAPHICS SYS	EA	MD		6	93.1%	RICHARD SHANK	(301) 588-3200
210	PARKIN PRINTING & STAT'Y	CN	AR		6	93.1%	BOB HUNT	(501) 375-7231
211	S.E.A. DISTRIBUTORS	CN	IN		6	93.2%	A. DONALD DUKE	(317) 846-2593
212	TECHNICAL ASSOCIATES	EA	FL		6	93.2%	ERNEST AMIOT	(305) 277-4980
213	TECHNOLOGY SERVICES	EA	VA		6	93.3%	KEVIN O'DONNELL	(703) 354-8668
214	TERMINAL RENTALS, INC.	SW	CA		6	93.3%	KARL KOVAC	(714) 832-2414
215	TWO-M CORP.	EA	NJ		6	93.4%	MICHAEL CANU	(201) 625-8100
216	XMARK CORP.	SW	CA		6	93.4%	PHILIP C. HAINES	(714) 596-9210
217	LEVISON SALES CO., INC.	EA	NY		6	93.5%	IVAN I. ROBBINS	(516) 266-5020
218	STAR DATA SYSTEMS	CN	TX		6	93.5%	HARVEY NAJIM	(512) 822-8582
219	UNIVAIR, INC.	CN	MO		6	93.6%	S. NIELSEN	(314) 426-1099
220	COMPUTER DYNAMICS INC.	EA	VA		5	93.6%	R. A. FUENTES	(804) 490-9296
221	BUSINESS PRODUCTS UNLIMITED	EA	MA		5	93.7%	MEL BRAVEMAN	(617) 296-0090
222	CDEX CORPORATION	NW	CA		5	93.7%	BRUCE J. FRISCH	(408) 263-0430
223	CDI INFORMATION SYSTEMS	NW	WA		5	93.8%	DENNIS M. BROWN	(800) 426-8931
224	CMPTRZED LODGING SYSTEMS	SW	CA		5	93.8%	D. BERKUS	(213) 385-0291
225	COMPUTER DATACOM INC.	SW	CA		5	93.8%	NEIL GLEASON	(714) 261-8200
226	COMPUTER MARKETING SVCS	EA	NJ		5	93.9%	DIETER H. AMMANN	(609) 424-5055
227	COMPUTER PLACE, THE	CN	OH		5	93.9%	LAWRENCE DONAT JR.	(216) 351-7444
228	CUESTA & CO. INC., J.E.	EA	PA		5	94.0%	CHRIS CUESTA	(215) 265-5800
229	DAISYTEK, INC.	CN	TX		5	94.0%	DAVID A. HEAP	(214) 340-8100
230	DATA COMMUNICATIONS SYSTEMS	EA	VA		5	94.1%	G. DENNIS MURPHY	(703) 361-2666
231	DATA IMPRESSIONS, INC.	SW	CA		5	94.1%	HENRY GERBERSHAGEN	(213) 630-8788
232	DATACOM SOLUTION INC., A	SW	CA		5	94.1%	GARY GREENING	(213) 402-2666
233	DATACORE, INC.	NW	WA		5	94.2%	JON J. JAMIESON	(206) 455-1968
234	DIGITAL SALES ASSOCIATES	EA	MA		5	94.2%	JACOB B. GILLER	(617) 899-4300
235	ENERGY/CONTROL SYSTEMS	EA	NH		5	94.3%	JOHN H. DYER	(603) 889-6470
236	FORCE 4 DP SUPPLIES	NW	OR		5	94.3%	FRED WHITE	(503) 620-8888
237	FRIEDMAN ASSOCIATES	EA	NJ		5	94.4%	JEROME FRIEDMAN	(201) 964-6200
238	GUMMED PAPER OF AMERICA	CN	IL		5	94.4%	DAVID COHN	(312) 243-6860
239	HAL SYSTEMS AND SERVICES	CN	TX		5	94.4%	JAMES LANGHAM JR.	(214) 385-2300
240	LABORATORY CONSULTING	CN	WI		5	94.5%	G.P. HICKS	(608) 241-4151
241	MANAGEMENT INFO SOFTWARE	EA	NY		5	94.5%	GENE SMILGIEWICZ	(212) 686-0800
242	MERIT MACHINERY, INC.	EA	PA		5	94.6%	GEORGE STAMETS	(412) 931-6800
243	MICROBILT CORP.	EA	GA		5	94.6%	P.E. SADLER	(404) 955-0313
244	MID-WEST MKTG MFCTR'S REP	CN	MO		5	94.6%	ART HARPER	(314) 426-2500
245	MOUNTAIN MICRO MARKETING	NW	CO		5	94.7%	JOSEPH L. BOTERO	(303) 761-7115
246	NEW ENGLAND DIGITAL CORP.	EA	VT		5	94.7%	S. ALONSO	(802) 295-5800
247	PACIFIC COMPUTER REPS	SW	CA		5	94.8%	ANN NEWMAN	(213) 519-0679
248	PHYSICS INTERNATIONAL CO.	EA	VA		5	94.8%	ANDY MAKOWKA	(703) 385-6860
249	SENTRY OFFICE SUPPLY CO.	EA	MA		5	94.9%	JOHN O'CONNELL	(617) 935-7770
250	SPECTRO ASSOCIATES	EA	MD		5	94.9%	STEPHEN CADES	(301) 294-9770
251	STARSOFT CORP.	NW	CA		5	94.9%	ELIZABETH SHIRLEY	(415) 424-8311
252	SUNLAND SUPPLY CO.	CN	TX		5	95.0%	JON SHAPIRO	(915) 533-5901
253	SUPPLY DEPOT, INC.	SW	CA		5	95.0%	NICK TERANI	(805) 583-0505
254	TECHNICAL SALES ASSOC.	EA	MD		5	95.1%	M. GUTHRIE	(301) 340-0600
255	TECHNOLOGY INDUSTRIES	NW	CA		5	95.1%	BILL CHAMBERLAIN	(415) 638-1206
256	TELECOMPUTE INTGRD SYS.	CD	CD		5	95.2%	CHAND MEHTA	(416) 241-3511
257	THORPE, JACK M., CO.	CN	MI		5	95.2%	JACK M. THORPE	(313) 779-6363
258	TRANS DATACORP	NW	CA		5	95.2%	HERBERT STOLLORZ	(415) 591-5705
259	UNITRACE, INC.	NW	CA		5	95.3%	JACK W. LANG	(408) 727-7530
260	WALCH, PUBLISHER, WESTON	EA	ME		5	95.3%	SUZANNE AUSTIN	(207) 772-2846
261	WILLIAMS ASSOC., G.L.	EA	NJ		5	95.4%	GENE WILLIAMS	(609) 428-6060
262	TELEPRINTER CORP.	EA	NJ		5	95.4%	LOWELL VANT SLOT	(201) 464-5310
263	TMA	EA	NY		5	95.4%	WARD CODET	(516) 883-2432
264	CAMEX INDUSTRIES INC.	SW	CA		5	95.5%	GREGORY J. WOLFE	(805) 987-8628
265	CENTROX FINANCIAL SYSTEMS	SW	CA		5	95.5%	WILLIAM A. SLAVEN	(714) 498-2824
266	COMSEL CORP.	EA	VA		5	95.6%	W. DOUGLAS ROSS	(703) 734-3880

DISTRIBUTORS (1984)

* Present customer
 ▫ Likely customer

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
267	DATA APPLICATIONS CORP.	CN	TX		5	95.6%	OLIVER H. KOLLOCK	(214) 931-1100
268	DATRON COMPUTER PRODUCTS	EA	NY		5	95.6%	JEROME DIENSTAG	(716) 328-8390
269	DIVERSIFIED COMPUTER	NW	WA		5	95.7%	DONALD D. MEEK	(206) 223-9326
270	MAGUIRE & ASSOC.	EA	CT		5	95.7%	T.H. MAGUIRE, JR.	(203) 226-4281
271	ORLANDO, JR. & CO., FRANK	CN	IL		5	95.8%	FRANK ORLANDO JR.	(312) 364-9220
272	RUDD & ASSOCIATES	EA	NC		5	95.8%	CLYDE RUDD, JR.	(919) 288-0222
273	WOLFSON CO., P.J.	EA	NY		5	95.8%	P.J. WOLFSON	(914) 233-3203
274	COMPUTRON BUSINSS SOLUT'NS	EA	NY		4	95.9%	RICHARD NANTHRUP	(212) 221-2517
275	CREATIVE COMPUTING CO.	CN	OH		4	95.9%	VINCENT JANOWICH	(216) 447-1313
276	DATALINK READY, INC.	EA	FL		4	95.9%	HARRY KRUM	(305) 676-0500
277	DATASOLVE CORP.	CN	IL		4	96.0%	WILLIAM BOEHLKE	(312) 943-9052
278	ESCOM, INC.	NW	WA		4	96.0%	T.J. LIGGETT	(206) 641-4990
279	EXECUTIVE DATA SOLUTIONS	CN	MI		4	96.0%	DIANE L. GRIEVES	(313) 477-4006
280	FIPSCO	CN	IL		4	96.1%	BARRY WATKINS	(312) 823-8455
281	GLYNN ELECTRONICS, INC.	EA	MA		4	96.1%	JOHN M. GLYNN	(617) 947-4262
282	GOOD(E) BUSINESS SYSTEMS	CN	WI		4	96.1%	FRAN WICKENHAUSER	(414) 355-6990
283	H & E COMPUTRONICS, INC.	EA	NY		4	96.2%	HOWARD Y. GOSMAN	(914) 425-1535
284	INTERNATIONAL ELECTRONICS	CN	TX		4	96.2%	JOE LOPEZ	(915) 598-3406
285	MARRA & ASSOCIATES	NW	WA		4	96.2%	P. GERALD MARRA	(206) 641-3535
286	MINICOMPUTER EXCHANGE	NW	CA		4	96.3%	W.E. GRUENINGER	(408) 733-4400
287	MININGHAM & OELLERICH	EA	NY		4	96.3%	JOHN OELLERICH	(212) 349-4410
288	MORLEY CO., THE	EA	NH		4	96.3%	JOHN A. TAYLOR	(603) 436-5430
289	MUSYS CORP.	SW	CA	3303	4	96.4%	JIM HOFFMAN	(714) 250-8101
290	NATIONAL INSTRUMENT DIST	NW	WA		4	96.4%	JOHN SHOWALTER	(206) 746-6032
291	PERIPHERAL EQUIPMENT, INC.	NW	UT		4	96.4%	DAVID AFFLECK	(801) 224-5883
292	POLYGON DATA PRODUCTS	EA	NJ		4	96.5%	FRANK GACCIONE	(201) 773-3100
293	PRACTICORP INTERNATIONAL	EA	MA		4	96.5%	ROBERT SHAPIRO	(617) 965-9870
294	RETAIL INFO SYSTEMS	CN	OH		4	96.5%	BILL ZIMMERMAN	(216) 234-8440
295	SJI CORP.	NW	WA		4	96.6%	OLIVER J. JUDD	(206) 763-8981
296	SUNBELT DATA SERVICES	CN	TX		4	96.6%	DICK SCHMOEKEL	(713) 777-6515
297	THOMAS ENGINEERING CO.	NW	CA		4	96.6%	T.J. FANCETT	(415) 680-8640
298	USED COMPUTERS, INC.	EA	PA		4	96.7%	NEIL HOUGHTON	(215) 647-1881
299	SPARTAN INDUSTRIES	EA	MD		4	96.7%	EDWARD NAJR	(301) 621-5508
300	LACHMAN ASSOCIATES, INC.	CN	IL		4	96.7%	R. LACHMAN	(312) 986-8840
301	COMMUNICATIONS SIGNALING	SW	CA		4	96.8%	DALE RICE	(213) 765-5511
302	CAP INDUSTRIES INC.	EA	FL		4	96.8%	ARTHUR P. PICKMAN	(305) 925-1002
303	COMPUTER DESIGNED SYSTEMS	CN	MN		4	96.8%	G. T. PULOS	(612) 545-2855
304	COMPUTER SPECIALTIES, INC.	EA	FL		4	96.9%	LINDA A. LUTZ	(305) 725-6574
305	DANYL CORP.	EA	NJ		4	96.9%	ALAN STOUGHTON	(609) 234-8000
306	DATA COMPASS	SW	CA		4	96.9%	RICH KRUEGER	(714) 630-7450
307	ENID DATA SYSTEMS	CN	OK		4	97.0%	MICHAEL BASEHART	(405) 233-1125
308	PRINTRONIC DATA PRODUCTS	EA	NJ		4	97.0%	MARCELINO PEREZ	(201) 634-5400
309	RPW SYSTEMS & SERVICES	CD	CD		4	97.0%	TERRY ROTH	(514) 340-1420
310	B. G. ENTERPRISES INC.	SW	CA		3	97.0%	BEVERLY G. BROWN	(714) 771-7770
311	COMMUNCT'N CABLES & CONNCTRS	CN	OH		3	97.1%	ART SHICK	(614) 828-2468
312	R SYSTEMS, INC.	CN	TX		3	97.1%	W.E. KIELY	(214) 343-9188
313	SYSTEC, IC.	EA	FL		3	97.1%	GEORGE FLETCHER	(305) 323-0230
314	WILCO WIRE & CABLE CO.	NW	CA		3	97.2%	J. WILSON	(408) 926-8880
315	ALLEN & ASSOCIATES, MILTON	CN	OH		3	97.2%	MILTON ALLEN	(216) 861-8100
316	AMERICAN COMPUTER SUPPLIES	EA	NY		3	97.2%	ANTHONY SHONE	(212) 736-4524
317	ASSOCIATED DATA SUPPLY CO.	SW	CA		3	97.2%	ROBERT LEVINE	(213) 453-8822
318	AUROTECH INC.	NW	CO		3	97.3%	DAN ROSEN	(303) 388-1612
319	BRIDGE COMPUTER CO.	EA	MA		3	97.3%	WINFIELD HILL	(617) 244-8190
320	CAMPBELL & GEORGE CO.	NW	CA		3	97.3%	GERALD JOHNSON	(415) 697-2965
321	CANTON AUTOMATED SYSTEMS	CN	OH		3	97.3%	LARRY MACHAN	(216) 489-3738
322	COASTAL CMPTR CONSULTANTS	EA	MA		3	97.4%	JON LEAVITT	(617) 526-4301
323	COLORADO PERIPHERALS INC.	NW	CO		3	97.4%	JAMES C. THOMSON	(303) 424-0692
324	COMPUTER CENTRE INC.	EA	FL		3	97.4%	BRAD BAKER	(813) 484-0421
325	COMPUTER MEDIA PRODUCTS	SW	CA		3	97.4%	GENE HARDWICK	(619) 565-7802
326	COMPUTERWARE, INC.	EA	VA		3	97.5%	CHARLES S. EVANS	(703) 821-8200
327	COMPUTIME, INC.	CN	MO		3	97.5%	LEWIS D. LEVEY	(314) 991-2991
328	CROWN COMPUTER SUPPLIES	EA	TX		3	97.5%	ED GREENBERGER	(214) 733-1000
329	DATA CONCEPTS CORP.	EA	PA		3	97.5%	GARY P. MODZEL	(215) 625-8400
330	DATA DIRECTIONS, INC. (CT)	EA	CT		3	97.6%	THOMAS J. ROSSMAN	(203) 242-8551
331	DATA PRO, LTD.	NW	CO		3	97.6%	D.A. RENICK	(303) 777-8655
332	DATACENTER DESIGN CONCEPTS	CN	OH		3	97.6%	ROBERT M. JOHNSON	(513) 434-3241
333	DIMENSIONAL DATA, INC.	CN	IL		3	97.6%	JOSEPH GUCCIONE	(312) 457-1700

DISTRIBUTORS (1984)

* Present customer
 " Likely customer

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
334	DISCOUNT COMPUTER SPLYS	EA	NJ		3	97.7%	CHRIS REARDON	(201) 685-2211
335	FLOPPY DISK SERVICES	EA	NJ		3	97.7%	MARK H. WOLINSKY	(609) 799-4440
336	GRANVILLE ASSOCIATES	EA	PA		3	97.7%	JAMES H. ROGERS	(412) 276-3588
337	GSI TRANSCOMM	EA	PA		3	97.7%	MARC BUCAILLE	(412) 963-6770
338	HAGERSTOWN CASH REGISTER	EA	MD		3	97.8%	KENNETH COOK	(301) 739-4933
339	HMM ENTERPRISES, INC.	EA	PA		3	97.8%	H.M. WUTZ	(717) 938-4691
340	IBEX COMPUTER CORP.	SW	CA		3	97.8%	ROBERT E. CONTI	(818) 709-8100
341	LONE STAR MICRO	CN	TX		3	97.8%	PAUL D. WILLIAMS	(214) 521-2931
342	LTA COMPUTER SERVICES	CN	IL		3	97.9%	WALTER KAPECKI	(312) 470-1806
343	MED-DEN SYSTEMS, INC.	EA	GA		3	97.9%	DANIEL W. HOLLIS	(404) 952-9487
344	MEDIA MANAGEMENT & MAGTCS	CN	WI		3	97.9%	THOMAS BLONG	(414) 783-5423
345	MICROGRAPHICS INTERN'L	EA	PA		3	97.9%	JOSEPH CERULLO	(717) 459-2213
346	MICROSPARC, INC.	EA	MA		3	98.0%	MIKE HARVEY	(617) 371-1660
347	NATIONAL COMPUTER SUPPLY	CN	IL		3	98.0%	JOHN E. HILBORN	(312) 665-0155
348	NETWORKS, INC.	EA	FL		3	98.0%	ROBERT TOOMBS	(305) 822-6750
349	OASYS	EA	MA		3	98.0%	JOEL M. SCHACHT	(617) 491-4180
350	OFFICE MACHINES, INC.	CN	AR		3	98.1%	C.L. WOOSLEY	(501) 534-4830
351	OWENS ASSOCIATES, JOHN D.	EA	NY		3	98.1%	J.D. OWENS	(212) 448-6283
352	PERIPHERAL MARKETING, INC.	EA	NJ		3	98.1%	T.G. BERTOLI	(201) 227-8411
353	QUALTECH, INC.	SW	AZ		3	98.1%	DICK CUNNINGHAM	(602) 967-4655
354	QUIET DESIGNS/WHOLESALE	NW	CA		3	98.2%	D. POTTEN	(408) 980-1010
355	REAL-TIME TECHNOLOGY	EA	NY		3	98.2%	VICTOR FRIEDMAN	(212) 239-0230
356	SENECA DATA DISTRIBUTORS	EA	NY		3	98.2%	GEORGE SAMIOS	(315) 637-9861
357	SOURCE SYSTEM, INC.	CN	IL		3	98.2%	PETER J. SMITH	(312) 628-1055
358	SOUTHWEST DATA EQPMT	CN	TX		3	98.3%	WALTER A. BUCKLEY	(214) 931-7009
359	SWENSON ASSOCIATES	CN	OH		3	98.3%	SWEDE SWENSON	(513) 866-3233
360	TAB PRODUCTS CO. OF AZ	SW	AZ		3	98.3%	CHRIS ACKEL	(602) 864-0311
361	TIME BROKERS OF NE.	EA	MA		3	98.3%	PAUL CAMPISANO	9617) 769-4060
362	VU COM DATA SERVICES	CN	MI		3	98.4%	RONALD G. WARD	(517) 393-8610
363	W.G. COMPUTER PRODUCTS	SW	CA		3	98.4%	WALTER DEEGE	(805) 495-0593
364	WESTEC ASSOCIATES	NW	WA		3	98.4%	ROBERTO DAVILA	(206) 454-2901
365	NEWCORP PRODUCTS, INC.	EA	PA		3	98.4%	JOSEPH CARRONE	(215) 485-8180
366	CHART INC.	EA	NY		3	98.5%	DONALD V. JELLIG	(518) 458-7666
367	KEY RESOURCES, LTD.	EA	VA		3	98.5%	HUGH KEY	(703) 989-7925
368	TAYLOR MERCHANT CORP.	EA	NY		3	98.5%	HARVEY SCHNEIDER	(212) 757-7700
369	BRS LEASING INC.	SW	AZ		3	98.5%	DAVE PBLAND	(602) 277-3282
370	COLONIAL DATA SERVICES	EA	CT		3	98.6%	ROBERT SCHOCK	(203) 355-3178
371	COMPUTER MARKETING CORP.	CN	MN		3	98.6%	RICHARD P. DOLAN	(612) 894-7150
372	CONTRACT PROGRAMS INTRNT'L	SW	CA		3	98.6%	RICHARD H. GORDON	(213) 273-3090
373	CREATIVE MANAGEMENT SYSTEMS	EA	VA		3	98.6%	W.G. CARTER	(703) 556-2300
374	CVM SYSTEMS	NW	CA		3	98.6%	RAY L. BOWEN	(916) 895-8324
375	DALLAS COMMUNICATIONS CORP.	CN	TX		3	98.7%	DAVID FLORENCE	(214) 680-0300
376	DYMAXION RESEARCH, LTD.	CD	CD		3	98.7%	PETER MASON	(902) 429-3175
377	ELECTRONIC SYSTEMS USA	CN	KY		3	98.7%	DARRELL NEWTON	(502) 589-1000
378	ESI	EA	FL		3	98.7%	DAVID S. MURPHY	(904) 224-5182
379	GENTRY, INC.	NW	CA		3	98.8%	GRACE GENTRY	(415) 547-6134
380	HARTLEY COURSEWARE, INC.	CN	MI		3	98.8%	ROSIE BOGO	(517) 646-6458
381	HOLVICK CORP.	CN	MI		3	98.8%	TIM HOLVICK, II	(313) 259-9090
382	HOOD COMPUTER	NW	CA		3	98.8%	DON LARSON	(408) 294-3529
383	I-O MARKETING, INC.	NW	UT		3	98.8%	JOHN LEVER	(801) 973-6767
384	MAGNETIC TAPE SERVICES	CN	TX		3	98.9%	GEORGE W. SALES	(713) 933-6262
385	MANAGMT ANALYSIS & CONTROL	NW	WA		3	98.9%	HOWARD JOHNSON	(206) 939-5676
386	MARKETLINE SYSTEMS, INC.	EA	PA		3	98.9%	ROBERT DONAGHY	(215) 355-5400
387	MBA-SYSTEMS AUTOMATION	CN	OH		3	98.9%	MR. RAFIZADEH	(614) 231-2130
388	MICRO STAR, INC.	NW	CA		3	98.9%	JERZY KULESZA	(415) 547-1920
389	MICROSYSTEMS DIST.	SW	AZ		3	99.0%	L.L. POND	(602) 948-1110
390	P.C. SERVICES, INC.	CN	IL		3	99.0%	D.E. POLLITT	(312) 620-8664
391	PECO-PERIPHERAL CO., INC.	EA	NJ		3	99.0%	R. CORSINI	(609) 596-1660
392	PERLE GSD, LTD.	CN	IL		3	99.0%	C.S. BALSLEY	(312) 461-0860
393	RB DATA SYSTEMS, INC.	EA	NY		3	99.1%	RALPH D. BANKS	(212) 757-0080
394	AMATIX INC.	SW	CA		2	99.1%	EDWARD GOODFIELD	(213) 417-8989
395	ARKANSAS SYSTEMS INC.	CN	AR		2	99.1%	JAMES HENDREN	(501) 227-8471
396	ALF PRODUCTS INC.	NW	CO		2	99.1%	PHIL TUBB	(303) 234-0871
397	COM ENTERPRISES INC.	SW	CA		2	99.1%	GARY MANTHORNE	(213) 822-1970
398	CRC INFORMATION SYSTEMS	CN	MI		2	99.1%	HENRY J. HEBING	(616) 942-8970
399	NEWMAR, INC.	EA	MA		2	99.2%	BOB SCHERMERHORN	(617) 245-7960
400	ACCESS CORP.	CN	MN		2	99.2%	MEL SMITH	(612) 450-0221

DISTRIBUTORS (1984)

* Present customer
 ** Likely customer

(sorted by sales)

RANK	COMPANY	RG	ST	TERR	SALES (\$M)	CUM PCT	CONTACT	PHONE
401	ADVANCED TECHNOLOGY	NW	CA		2	99.2%	WALTER C. THOMAS	(415) 785-8346
402	BANCWARE INC.	EA	MA		2	99.2%	WILLIAM E. POPP	(617) 341-1895
403	CAPITAL DATA PROCSG SUPPLY	CN	WI		2	99.2%	W. WEISE	(608) 222-5500
404	CENTRAL COMPUTER SERVICES	EA	NY		2	99.3%	VERNON GOODRICH	(716) 225-8824
405	CMPTRZED BUSINESS SYSTEMS	CN	TX		2	99.3%	MARSHALL BRACHMAN	(817) 332-1610
406	COMPU-TOME INC.	SW	CA		2	99.3%	DARLENE WILLS	(818) 796-9371
407	COMPUTER SUPPLY CORP.	EA	FL		2	99.3%	RON RUDGES	(305) 620-6400
408	CUSTOM APPLICATION SYSTEMS	SW	CA		2	99.3%	GEORGE PORTER JR.	(213) 820-5800
409	DAISY WHEEL RIBBON CO.	SW	CA		2	99.3%	SHARON M. BAER	(714) 989-5585
410	DCB, INC.	CN	IL		2	99.4%	RUSSEL STRAAYER	(217) 352-3207
411	DEREX, INC.	EA	FL		2	99.4%	JAMES RULE	(305) 753-0840
412	DISTRBTED MICRO SYSTEMS	NW	CA		2	99.4%	GEORGE M. BARLOW	(415) 692-5855
413	* EAKINS ASSOCIATES, INC.	NW	CA	3103	2	99.4%	GILBERT EAKINS	(415) 969-5109
414	EDP SUPPLY NORTH	EA	NH		2	99.4%	ROBERT FAULKNER	(603) 893-6118
415	EEC SYSTEMS	EA	MA		2	99.4%	ERIC DICKMAN	(617) 443-5106
416	ELECTRALERT, LTD.	CD	CD		2	99.5%	K. OAG	(416) 475-6730
417	HARTFORD OFFICE SUPPLY (MA)	EA	MA		2	99.5%	EVERETT PATTERSON	(617) 366-7190
418	INTERLINK SYSTEMS	NW	CA		2	99.5%	C.J. FREY	(408) 720-8838
419	MANAGEMENT INFO SYSTEMS	EA	MA		2	99.5%	GERRY DE GRUITER	(617) 893-1331
420	MEDIA MASTERS	EA	GA		2	99.5%	BOBBY SANDERS	(404) 261-6628
421	MIDTOWN STATIONERY & SPLY	EA	MD		2	99.5%	MARK STEIN	(301) 588-6777
422	MILTRONICS	CN	IN		2	99.6%	JOHN BINKLEY	(812) 376-6321
423	NAC SYSTEMS, INC.	EA	NH		2	99.6%	BRIAN KAVANAGH	(603) 431-8883
424	NAT'L DATA PRODUCTS OF TX	CN	TX		2	99.6%	EARL JOHNSON	(713) 271-9191
425	NORTH BAY SYSTEMS, INC.	NW	CA		2	99.6%	THOMAS ANDERSON	(415) 331-3664
426	ODIN DATA SYSTEMS, INC.	NW	CA		2	99.6%	FLOYD OSBORN	(415) 433-2165
427	PARKING SYSTEMS & ANAL'S	CN	OH		2	99.6%	HARVEY SCHWARTZ	(216) 621-7764
428	PDJ ENGINEERING	NW	CO		2	99.7%	PHILLIS D. DOYLE	(303) 443-4996
429	PERIPHERAL SYSTEMS	EA	MA		2	99.7%	ELINOR MCDONOUGH	(617) 729-7715
430	PERIPHERALS PLUS	NW	CA		2	99.7%	G. SORKIN	(415) 459-1000
431	PERSOFT, INC. (WI)	CN	WI		2	99.7%	ROBERT JANOSKI	(608) 273-6000
432	PHOENIX SYSTEMS	NW	UT		2	99.7%	M. NED BRINER	(801) 272-8601
433	RAPATTONI CORP.	SW	CA		2	99.7%	A. RAPATTONI	(213) 208-6363
434	REP-SAC CORP.	NW	WA		2	99.8%	JOE CASPER	(206) 821-8552
435	ROMAR SYSTEMS, INC.	CN	IL		2	99.8%	RON PUTZELL	(312) 640-7555
436	SECTOR SYSTEMS, INC.	NW	AK		2	99.8%	PHIL RAMOS	(907) 276-4268
437	SENDERO CORP.	SW	AZ		2	99.8%	CLIFF MYERS	(602) 225-0555
438	SOFTWARE SYSTEMS INTERN'L	EA	NJ		2	99.8%	CHRIS LEE	(201) 891-0458
439	SOURCE ASSOCIATES	EA	MD		2	99.8%	ROBB KARL	(301) 725-5330
440	SYNERGY ACCOUNTING, INC.	SW	CA		2	99.9%	LOU MARRACCI	(213) 532-2331
441	SYSTEMS SUPPLYWARE, INC.	NW	OR		2	99.9%	STEPHEN BRAUN	(503) 684-2716
442	TECHNICAL ANALYSIS GROUP	EA	LA		2	99.9%	TIMOTHY SLATER	(504) 895-1474
443	TRI-MARK SYSTEMS INC.	EA	PA		2	99.9%	DOMINIC TRIOLO	(215) 860-1500
444	TRINITY SOLUTIONS	NW	CA		2	99.9%	SALLY MARLER	(408) 226-0170
445	UNITED SFTWRE OF AMERICA	EA	NY		2	99.9%	J. GOTTLIEB	(212) 682-0347
446	VENTURCOM, INC.	EA	MA		2	100.0%	MYRON ZIMMERMAN	(617) 661-1230
447	VISUAL METHODS, INC.	EA	NJ		2	100.0%	W.T. SANDIN	(201) 666-3950
448	* WEBSTER COMPUTER CORP.	NW	CA	3102	2	100.0%	DAVID WEBSTER	(408) 749-1089

CHAIN STORES (1984)

(sorted by sales)

RANK	COMPANY	RG	ST	SALES (\$M)	CONTACT	PHONE
1	COMPUTERLAND	NW	CA	1,900	ROGER LEWIS	(415) 568-2283
2	BUSINESSLAND	NW	CA	350	CHARLES HALL	(408) 554-9300
3	MICROAGE	SW	AZ	250	CHARLES REDFERN	(602) 968-3168
4	COMPUTERCRAFT	CN	TX	220	AVERY MORE	(713) 977-8419
5	MATHBOX	EA	MD	130	ARMEN MANOOGIAN	(301) 984-7717
6	GENERAL MICRO	CN	IN	125	RICHARD FARRELL	(219) 232-0991
7	GATEWAY	SW	CA	100	JIM WENDELL	(714) 895-3931
8	INACOMP	CN	MI	90	THOMAS POINTE	(313) 649-0910
9	VALCOM	CN	NE	90	DALE SHUSTER	(402) 359-2201
10	COMPUTONE	EA	GA	75	TIM SULLIVAN	(404) 393-3010

5. REGIONAL ANALYSIS

- Northwest Region
- Southwest Region
- Central Region
- Eastern Region

COMPUTER MANUFACTURERS
NORTHWEST REGION
(In order of '84 performance)

PC	S	M	L
<ul style="list-style-type: none"> APPLE ™ COMMODORE * HEWLETT-PACKARD * CONVERGENT TECH. VICTOR TECH. MORROW DESIGNS ATARI TELEVIDEO SYSTEMS EAGLE COMPUTERS GRID SYSTEMS NORTH STAR COMPUTERS IMS INT'L. * MOLECULAR COMP., DURANGO OTRONA CORP. CORVUS SYSTEMS ZENTEC CROMEMCO * SUN MICROSYSTEMS STM ELECTRONICS OSBORNE COMPUTER CO. MINDSET LOGICAL BUS. MACHINES MICROMATION CODATA SYSTEMS GAVILAN COMPUTERS MOMENTUM COMPUTER WYSE ACTRIX (ACCESS MATRIX) COLBY * CALIFORNIA COMPUTER * COMPUTER DATA SYSTEMS NBI ALSPA COMPUTER PERSONAL MICRO COMP. SANTA CLARA SYSTEMS DATA TECHNOLOGY INDEPENDENT BUS. SYS. GIFFORD COMPUTER SYST. POLO MICROSYSTEMS * WICAT MONOLITHIC 	<ul style="list-style-type: none"> * HEWLETT-PACKARD ONYX * ALTOS COMPUTER * FORTUNE SYSTEMS * CONVERGENT TECH. TELEVIDEO SYSTEMS * INTEL * MOTOROLA/FOUR PHASE NORTH STAR COMPUTERS * MDS QANTEL * MOLECULAR COMP., DURANGO MICROMATION NBI * VIASYN CORP STAR TECH * PLEXUS ™ INTEGRATED SOLUTIONS * DUAL SYSTEM CONTROL * WICAT * NOVELL SYSTEMS CODATA SYSTEMS * ARETE SYSTEMS * RIDGE COMPUTERS RAIR MICROCOMPUTER VICTORY COMPUTER CROMEMCO BTI * FORWARD TECHNOLOGY LOGICAL BUS. MACHINES * PARALLEL COMPUTER MOMENTUM COMPUTER * METAPHOR COMPTR SYS MORROW DESIGNS 	<ul style="list-style-type: none"> * HEWLETT-PACKARD * TANDEM NAS * MDS QANTEL * PYRAMID TECHNOLOGY * ELXSI * MOTOROLA/FOUR PHASE BTI SYNAPSE 	<ul style="list-style-type: none"> * AMDAHL NAS DENELCOR
<ul style="list-style-type: none"> * Present customer ™ Likely prospect 			

NORTHWEST REGION

sales rank	VARS	DIST	SUBS	CHAINS	
20	TYMSHARE, INC.	5	HARTE-HANKS COMMUNICATIONS	1 AMERICAN MITAC CORP.	COMPUTERLAND
27	CALMA CO.	10	KIERULFF ELECTRONICS, INC.	2 AMPEX CORP.	BUSINESSLAND
34	AYDIN SYSTEMS	21	LEASAMETRIC, INC.	APPARAT INC.	
41	SYSTEM INDUSTRIES	22	USL DATA SYSTEMS	APPLE COMPUTER	
52	MENTOR GRAPHICS CORP.	26	CROCKER CO. INC., H. S.	BASIC TIME, INC.	
58	ASK COMPUTER SYSTEMS	31	LYNCH COMMUNICATIONS SYS.	BERING INDUSTRIES INC.	
62	CABLEDATA	39	WESTERN MICRO SYSTEMS	CNC INTERNATIONAL	
69	AUTO-TROL TECHNOLOGY CORP.	50	WESTERN MICROTECHNOLOGY	COMPUTER PRODUCTS INT'L.	
79	QUADREX COMPUTER SYSTEMS	56	BYTE INDUSTRIES INC.	CORVUS SYSTEMS	
80	R&D ASSOCIATES	67	CASEY-JOHNSTON INC.	CREATIVE MICROSALES	
82	SYSTEM INTEGRATORS, INC.	72	SOFTWARE RESOURCE	DAVONG SYSTEMS	
89	SYSTEMS CONTROL INC.	81	DATA SYSTEMS MARKETING	EVEREX SYSTEMS	
99	SYSTEMHOUSE, INC.	87	SYSTEL COMPUTERS	FALCON TECHNOLGY	
111	PHOENIX LEASING, INC.	93	ULTIMACC SYSTEMS	FIRST CLASS PERIPHERALS	
130	SHASTA GENERAL SYS	95	COMPAC MICROELECTRONICS	GENOA SYSTEMS CORP.	
132	ENERGY, INC.	102	PLS ASSOCIATES, INC.	HARD DISK SYSTEMS	
133	ENERGY INC.	119	SUN-FLEX CO.	HEWLETT-PACKARD CO.	
134	ONYX SYSTEMS	131	INFORMATION SOLUTIONS (CO)	JOSEPHINE COUNTY TECH.	
144	SCIENTIFIC MICRO SYSTEMS	134	CSS TELECOMMUNICATIONS	KAMERMAN LABS	
162	AMI	142	QUALTECH ASSOCIATES, INC.	MICROCODE	
163	CENTURY BUSINESS TECH	144	ONE POINT	* MOUNTAIN COMPUTER	
164	COMPUTER CURRICULUM	170	PAR ASSOCIATES, INC.	* NAT'L. MEMORY SYSTEMS	
184	TOM SOFTWARE	171	RENAISSANCE TECHNOLOGY	PACIFIC DATANET	
186	COGNOS CORP.	177	BYTE SHOP	PARADISE SYSTEMS INC.	
193	MADIC CORP.	178	CONTEL CODATA SYSTEMS CORP.	PERSONAL MICROCOMPUTER	
194	MADIC CORP.	202	GOVNRMT CMPTR ENTERPRISES	PRIAM	
201	EQUATORIAL COMMUNICATIONS	205	RUSH DRAKE ELECTRONICS	QIC RESEARCH INC.	
209	COLUMBINE SYSTEMS	210	BDS CORPORATION	QUARK INC.	
212	EYRING RESEARCH INSTITUTE	213	CAELUS CMPTR EQPMT & SPLYS	RANCORE CORP.	
218	AZURDATA INC.	214	CHAMPION SOFTWARE CORP.	SANTA CLARA SYSTEMS	
233	SILVAR LISCO	222	ELECTOR USA, INC.	* SIGMA DESIGNS	
236	COMPUTER ELECTION SYSTEMS	227	INTERN'TL DATA EQPMT & ACC.	SUNOL SYSTEMS	
238	EDWARDS & CO., J.D.	244	CDEX CORPORATION	* SYSGEN INDUSTRIES	
239	MINICOMPUTER EXCHANGE	245	CDI INFORMATION SYSTEMS	TEAMMATE	
250	GRAFTEK	256	DATACORE, INC.	UNIVATION INC.	
252	MANUS SERVICES CORP.	259	FORCE 4 DP SUPPLIES	WESTWIND COMPUTER	
258	MICROWARE DISTRIBUTORS INC.	268	MOUNTAIN MICRO MARKETING		
267	COMPUTER SYNERGY	275	STARSOFT CORP.		
277	INFORMATION MGMT INTERN'L	279	TECHNOLOGY INDUSTRIES		
282	REACT CORP.	283	TRANS DATACORP		
289	BOEING ENGINEERING CO.	284	UNITRACE, INC.		
301	ALPINE DATASYSTEMS	294	DIVERSIFIED COMPUTER		
324	FORMASTER CORP.	303	ESCOM, INC.		
336	PARAGON TECHNOLOGY	311	MARRA & ASSOCIATES		
345	SIGMA DESIGN	312	MINICOMPUTER EXCHANGE		
349	TIMBERLINE SYSTEMS	316	NATIONAL INSTRUMENT DIST		
360	ROSS SYSTEMS	317	PERIPHERAL EQUIPMENT, INC.		
369	RELATIONAL TECHNOLOGY	321	SJI CORP.		
373	COMPUTER USAGE CO.	323	THOMAS ENGINEERING CO.		
381	LARSE CORP.	340	WILCO WIRE & CABLE CO.		
389	TELETEK ENTERPRISES	344	AUROTOCH INC.		
410	LEVY INC.	346	CAMPBELL & GEORGE CO.		
411	LOGISTICON, INC.	349	COLORADO PERIPHERALS INC.		
425	LIBRA PROGRAMMING, INC.	357	DATA PRO, LTD.		
445	E.B.S. DATA PROCESSING	382	QUIET DESIGNS/WHOLESALE		
448	ESCA CORP.	392	WESTEC ASSOCIATES		
456	MICRO DATA SYSTEMS (ID)	402	CVM SYSTEMS		
458	NEW GENERATION SFTWRE	407	GENTRY, INC.		
462	SHOWALTER SYSTEMS	410	HOOD COMPUTER		
464	SMITH, DENNIS & GAYLORD	411	I-O MARKETING, INC.		
482	SINGLE SOURCE SOLUTION	413	MANAGMT ANALYSIS & CONTROL		
487	ALPS	416	MICRO STAR, INC.		
496	CARE COMPUTER SYSTEMS	424	INTEGRATED SOLUTIONS, INC.		
503	COMPUTER TECHNOLOGY, INC.	425	ALF PRODUCTS INC.		
505	CORPORATE DATA SCIENCES	430	ADVANCED TECHNOLOGY		
506	CREATIVE CMPTR SOLUTIONS	441	DISTRBTED MICRO SYSTEMS		
514	DEFINABLE DATA DEVICES	442	EAKINS ASSOCIATES, INC.		
516	DISTRIBUTION & MFG SYSTEMS	447	INTERLINK SYSTEMS		
532	LIBRA PROGRAMMING	454	NORTH BAY SYSTEMS, INC.		
539	NOVVA CMPTR SYSTEMS	455	ODIN DATA SYSTEMS, INC.		
542	PACIFIC DATA GROUP	457	PO3 ENGINEERING		
548	SERVICORLD	459	PERIPHERALS PLUS		
556	TRANSPORT INFORMATION SYS	461	PHOENIX SYSTEMS		
558	VECTRON GRAPHIC SYSTEMS	463	REP-SAC CORP.		
		465	SECTOR SYSTEMS, INC.		
		470	SYSTEMS SUPPLYWARE, INC.		
		473	TRINITY SOLUTIONS		
		477	WEBSTER COMPUTER CORP.		

* present customer
 " likely prospect

COMPUTER MANUFACTURERS
SOUTHWEST REGION
(In order of '84 performance)

PC	S	M	L
KAYPRO CORP * CORONA COMPUCORP EPSON AMERICA VECTOR GRAPHIC ATV SYSTEMS * CIE SYSTEMS SGS SEMICONDUCTOR PERTEC COMPUTER CORP. TARBELL ELECTRONICS * BASIC FOUR CORP. ADVANCED DIGITAL CORP. SMOKE SIGNAL BRDCSTG. WAVE MATE JONOS INTERNATIONAL ELECTRO DESIGN * ALPHA MICRO * INTEGR.BUS.COMPUTERS MATERIALS DEVELOPMENT PENTELE OF AMERICA	* INTEGR.BUS.COMPUTERS * BASIC FOUR CORP. * CADO " CALLAN DATA SYSTEMS * ALPHA MICRO COMPUTER AUTOMATION REXON BUS.MACHINES * POINT 4 DATA GENERAL AUTOMATION PERTEC COMPUTER CORP. * CIE SYSTEMS BYTRONIX * MCDONNELL DOUGLAS * DIGITAL DATAComp VECTOR GRAPHIC MICRO FIVE CORP. * NNC ELECTRONICS WORDPLEX ADVANCED DIGITAL CORP. COMPUCORP * CORONA SMOKE SIGNAL BRDCSTG. POLYCOMPUTERS ABLE COMPUTER	* BASIC FOUR CORP. * MCDONNELL DOUGLAS	NONE

* Present customer
" Likely prospect

SOUTHWEST REGION

sales rank	VARS	DIST	SUBS	CHAINS	
10	COMPUTER SCIENCES CORP.	2	HAMILTON/AVNET	3	MICROAGE
16	SCIENCE APPLICATNS INTN'L	23	MICRO D, INC.	7	GATEWAY
19	SYSTEM DEVELOPMENT CORP.	24	MOXON ELECTRONICS		
29	SOLAR TURBINES INC.	32	SOFTTEAM, INC.		
30	INFORMATICS GENERAL	42	WEATHERFORD, R.V., CO.		
45	LOGICOM, INC.	48	TELOS SOFTWARE PRODUCTS		
49	NORTHROP CORP.	49	CARLYLE CORP., DAVID JAMISON		
50	ROCKWELL INTERNATIONAL	52	TELAUTOGRAPH/OMNIFAX		
71	CASCADE DATA SYSTEMS	53	TIME BROKERS OF CA.		
87	S-CUBED	55	BFA CORPORATION		
101	TELOS FEDERAL SYSTEMS	62	WORLD DISK DRIVES		
102	DAVID JAMISON CARLYLE CORP.	70	GROUP THREE ELECTRONICS		
109	IDC SERVICES INC.	75	GESCO CORP.		
113	CONSOLIDATED MICROGRAPHICS	88	CALIFORNIA DIGITAL INC.		
119	CITY NATIONAL BANK	96	DATLEASE SYSTEMS & FINANCL		
124	GENISCO	105	ARINCO COMPUTER SYSTEMS INC.		
138	IRT CORP.	107	COMPUCABLE CORP.		
139	MCDONNELL DOUGLAS	109	CPX		
150	PACIFIC HEALTH RESOURCES	117	QUBIE DISTRIBUTING		
158	ULTRASYSTEMS DEFENSE/SPACE	122	ULTRA SPECIALTY, INC.		
172	LANTOR, INC.	128	PGI CORP.		
180	SAI COMSYSTEMS, INC.	139	KPS, INC.		
214	MCDONNELL DOUGLAS PHYS SYS	141	PACIFIC COMPUTER PRODUCTS		
220	COMPUAMERICA	151	CALIFORNIA COMPUTER GROUP		
230	MUTAGO DATA CORP.	155	COMPUTER SUPERSTORES		
234	VISTA TECHNOLOGY INC.	161	DIGITAL BUSINESS SYSTEMS		
243	SCAN-TRON CORP.	167	LEXOCORP CORP.		
244	SCIENCE DYNAMICS CORP.	172	SERCOMP CORP.		
271	DELPHI SYSTEMS, INC.	181	SOFTTECH MICROSYSTEMS		
273	ECCO COMPUTER, INC.	196	SYSTONETICS, INC.		
287	WESTERN SCIENTIFIC MKT	207	TECHNIC COMPUTER SVC		
288	DATATRONIC SYSTEMS CORP.	219	DA/COM SYSTEMS, INC.		
291	COMPUTER INPUT CORP.	234	TERMINAL RENTALS, INC.		
295	WESTERN DATA	237	MARK CORP.		
299	AEROJET ELECTROSYSTEMS CO.	246	CHPTRZED LODGING SYSTEMS		
303	BASIX CONTROLS SYSTEMS	247	COMPUTER DATACOM INC.		
304	BFA CORP. (NM)	254	DATA IMPRESSIONS, INC.		
306	BUSINESS INFORMATION SYSTEMS	255	DATACOM SOLUTION INC., A		
308	CMC/COMPUTER MARKETING CORP.	270	PACIFIC COMPUTER REPS		
321	ECCO COMPUTER	273	SIERRA NATIONAL CORP.		
329	INTERN'L TOTALIZATOR	277	SUPPLY DEPOT, INC.		
330	LEVITZ RETAIL SYSTEMS	289	CAMEX INDUSTRIES INC.		
343	SARTORIS, INC.	290	CENTROX FINANCIAL SYSTEMS		
362	TRW DATACOM	310	LOBO SYSTEMS, INC.		
363	VITEK	315	MUSYS CORP.		
370	ACTUARIAL COMPUTER TECHNOLOGY	327	COMMUNICATIONS SIGNALING		
372	COMPUTER SOFTWARE DESIGN	332	DATA COMPASS		
383	MEMCOM INTERNATIONAL, INC.	336	B. G. ENTERPRISES INC.		
390	WHITE HAT SYSTEMS, INC.	343	ASSOCIATED DATA SUPPLY CO.		
391	TECHNOLOGY MARKETING	351	COMPUTER MEDIA PRODUCTS		
393	ASSOCIATED DATAMASTERS	366	IBEX COMPUTER CORP.		
400	BIS SALES, INC.	381	QUALTECH, INC.		
405	ECCOM ELECTRONIC SYSTEMS	388	TAB PRODUCTS CO. OF AZ		
421	EXECUTIVE BUSINESS SYSTEMS	391	W.G. COMPUTER PRODUCTS		
427	GRIFFIN TECHNOLOGY	397	BRS LEASING INC.		
432	APPLIED DATA SYSTEMS INC.	400	CONTRACT PROGRAMS INTRNT'L		
436	CHRISLIN INDUSTRIES, INC.	417	MICROSYSTEMS DIST.		
439	DATA 3 SYSTEMS, INC.	422	AMATIX INC.		
441	DATACOUNT CORP.	426	COM ENTERPRISES INC.		
443	DAYTON-FORESTER ASSOCIATES	435	COMPU-TOME INC.		
444	DECCOMP INC.	437	CUSTOM APPLICATION SYSTEMS		
457	MICROVOICE	438	DAISY WHEEL RIBBON CO.		
463	SIERRA NATIONAL CORP.	462	RAPATTONI CORP.		
465	SSCI	466	SENDERO CORP.		
467	SYSTONETICS, INC.	469	SYNERGY ACCOUNTING, INC.		
479	TYLUS SYSTEMS INC.				
492	AZTEK, INC.				
499	CASS MARKETING SERVICES, INC.				
510	DATA RENTALS/SALES, INC.				
513	DATAPPAREL, INC.				
525	INTERACTIVE, INC.				
544	PROTEK COMPUTER SERVICES INC.				
551	SILTON AMS				
553	SYSTEMS BY MICA				
554	SYSTEMS INTEGRATED				

* present customer
 * likely prospect

COMPUTER MANUFACTURERS
CENTRAL REGION
(In order of '84 performance)

PC	S	M	L
ZENITH	* NCR	* BURROUGHS	* BURROUGHS
TANDY/RADIO SHACK	* BURROUGHS	HIS	HIS
* COMPAQ	* TEXAS INSTRUMENTS	* NCR	CONTROL DATA
* BURROUGHS	HIS	" GOULD COMPUTER	* CRAY
" NORTHERN TELECOM	" DATAPOINT	CONTROL DATA	* NCR
* NCR	CENTURY COMPUTER CORP.	CONVEX COMPUTER	
" DATAPOINT	" NORTHERN TELECOM		
* TEXAS INSTRUMENTS	PERQ SYSTEMS		
CPT CORP	" GOULD COMPUTER		
SOUTHWEST TECH PROD	CYB SYSTEMS		
LEE DATA	MOSTEK		
QDP COMPUTER	* HEURIKON		
CENTURY COMPUTER CORP.	GIMIX		
COMPUTER TECH.	" SENTINEL COMPUTER		
A.B. DICK	CENTURIAN COMPUTER		
WILLIAMS ELECTRONICS	LOGICAL MICROCOMPUTER		
ZAISAN	RECOGNITION EQUIPMENT		
	MYLEE DIGITAL		
	ELITE CORP.		

* Present customer
" Likely prospect

CENTRAL REGION

1

sales rank	VARS		VARS		DIST
1	ROCKWELL INTERNATIONAL	264	CBC SERVICES	3	REXNORD DATA SYSTEMS
2	LITTON INDUSTRIES	274	FIGGIE SYSTEMS MGMT. GROUP	4	BRUNING
4	GENERAL DYNAMICS	281	PLANTE & MORAN	8	NORTH SUPPLY CO.
5	CLARK EQUIPMENT CO.	283	T AND B COMPUTING	9	HALL-MARK ELECTRONICS
6	SUNDSTRAND AVIATION	284	TEL-TEX, INC.	11	PIONEER-STANDARD ELECT.
8	ELECTRONIC DATA SYSTEMS	297	TECHNALYSIS CORP.	15	KIRSCH ASSOCIATES
9	PACKARD INSTRUMENT CO.	313	CONTINENTAL HEALTHCARE	20	WILSON JONES CO.
12	WESTERN CO. OF NA	314	CONTROL APPLICATIONS	28	METIER MANAGEMENT SYSTEMS
13	GENERAL ELECTRIC CO.	315	CRYSTAL COMPUTERS, INC.	30	LOONAM CMPTR CENTER
14	BATTELLE SOFTWARE PROD. CTR	316	DATA PROCESSING SCIENCES CORP.	33	DATAComp GROUP, INC.
15	MCAUTO	323	FIRST COMPUTER CORP.	34	GENERAL MICROCOMPUTER
23	REYNOLDS & REYNOLDS	325	FRENCH GERELEMAN ELECTRIC CO.	38	PRYOR CORP.
35	UCCEL CORP.	326	GELCO CORP.	41	GRAHAM ELECTRONICS
37	GBC	328	HAGEN SYSTEMS INC.	45	HARRISON EQUIPMENT CO.
46	ANACOMP, INC.	333	METAFILE INFO SYSTEMS	57	CARTERPHONE COMMUNICATIONS
53	EAST TEXAS PERIODICALS	337	PIEPER ELECTRIC INC.	60	LOONAM COMPUTER PRODUCTS
60	CONTROL-O-MATION, INC.	341	QUADSTAR CORP.	61	MOORE PAPER CO.
61	AMERICAN APPRAISAL ASS.	342	RESPONSIVE TERMINAL SYSTEMS	68	CENTRON-DPL CO. INC.
73	EAGLE SIGNAL CONTROLS	347	STAR-TRONIC DISTRIBUTOR CO.	71	KALVAR CORP.
77	OCLC ONLINE COMPUTER	357	KINETIC SYSTEMS CORP.	79	COMTEL INSTRUMENTS CO.
81	RADIAN CORP.	364	SYNERCOM TECHNOLOGY, INC.	86	SEMICONDUCTOR SPECIALISTS
84	COMPUSERVE INC.	366	COMPUTERS TO GO	90	NORTHERN WIRE AND CABLE
94	CYCARE SYSTEMS, INC.	367	GERHARD & ASSOCIATES, INC.	91	APPALACHIAN COMPUTER SVS.
96	PRES INC.	374	CONDOR COMPUTER	92	FIRST COMPUTER CORP. (TX)
100	SYSTEMS RESEARCH LABS, INC.	382	LAWSON ASSOC.	97	FIRST REP. CO.
103	SYSTEMS SUPPORT, INC.	384	NIAKWA MANAGEMENT SERVICES	98	INLAND ASSOCIATES, INC.
104	TELTONE CORP.	386	PROFSNL CMPTR RESOURCES	100	KOEPF ASSOCIATES, W.C.
106	DATAComp COMPUTER LEASING	387	SENSOR-BASED SYSTEMS	111	DYTEC NORTH, INC.
107	FAIRFIELD INDUSTRIES	388	SUMMIT CAD CORP.	113	KALTRONICS DISTRIBUTORS
117	ELECTRONIC DATA SYS	394	BRASINGTON & ASSOC., W.A.	124	DEALERS OFFICE EQUIPMENT
123	FEDERAL SYSTEMS, INC.	398	ADVANCED COMPUTER MANAGEMENT	133	COMTEL MIDWEST CO.
126	JOHNSON CONTROLS, INC.	399	APPLIED SYSTEMS	135	DATA PROCESSING SCIENCES
128	PRICE ELECTRONICS CORP.	413	MEMBERSHIP SERVICES, INC.	137	FIRST CHOICE ENTERPRISES
136	APPLIED AUTOMATION INC.	419	UNIQ DIGITAL TECHNOLOGIES	140	MEDIA RECOVERY, INC.
141	NES, INC.	424	LEVI, RAY & SHOUP	143	SCI SALES, INC.
143	RESEARCH INC.	426	NABIHS INC.	146	FRONTIER COMPUTER CORP.
147	CALDWELL-VAN RIPER	428	MIDWEST DATA SYSTEMS	147	WAHL AND WAHL, INC.
152	TOTAL TECHNICAL SVCS	429	AGENT SYSTEMS	153	COMARK INC.
153	AMHERST ASSOC.	430	ALBIN BUSINESS COMPUTERS	154	COMPUTER MATE INC.
154	CINCINNATI TIME	431	ALBIN BUSINESS COMPUTERS	156	COMSPEC, INC.
165	COMTEL INSTRUMENTS CO.	435	AUTOMATED INSURANCE RES SYS	157	CUTLER-WILLIAMS, INC.
169	GRAMMCO COMPUTER SALES	440	DATA-TRON, INC.	158	DATA THREE COMPUTER CORP.
170	INFORMATICS GENERAL CORP.	447	EDP SYSTEMS INC.	162	DIGITAL CONTROLS CORP.
174	LOWRY COMPUTER PROD.	450	FRONTIER COMPUTER CORP.	163	ELECTRO SALES ASSOCIATES
175	LOWRY COMPUTER PRODUCTS	466	SYSTEM TECHNOLOGY ASSOCIATES	165	GERHARD & ASSOCIATES
181	SEMICONDUCTOR SPECIALISTS	468	TECHNOLOGY, INC.	173	STAR-TRONIC DISTRIBUTOR
191	INTERNATIONAL RESEARCH	474	WKM ASSOCIATES INC.	176	INTERBUSINESS CORP.
198	TELE TERMINALS INC.	475	UNIQ DIGITAL TECHNOLOGIES	180	EQS SYSTEMS
200	DSC	480	WEBB CO., JERVIS	182	SOFTWARE CLEARING HOUSE
203	JOBTRACK	488	ANN ARBOR COMPUTER	183	TOMINY, INC.
207	CADLINC, INC.	490	AUTOCONTROL, INC.	198	BEAMS CO.
221	COMPUCON	502	COMPUTER STRATEGIES, INC.	199	DATA-TRON, INC.
223	DIGIGRAPHIC SYSTEMS CORP.	509	DATA EXCHANGE, INC.	200	DATAMARC, INC.
224	DYTEC/SOUTH INC.	520	HARRIS DATA SERVICE	201	TAMM ASSOCIATES
226	INGERSOLL ENGINEERS	535	MIDWEST COMMERCE DATA	203	NATIONAL CMPTR SYNDICATE
237	DYTEC SOUTH	537	MODULAR DATA SYSTEMS, INC.	204	NBC COMPUTER SERVICE
241	PIONEER COMPUTER MARKETING	541	NUMERIC MICRO, INC.	211	PARKER BUSINESS SERVICES
246	AERO SYSTEMS ENGINEERING	543	PROLAN	221	DIGITAL SYSTEMS SALES
247	COMTELL CORP.	545	ROI SYSTEMS	223	ENVAX SYSTEMS, INC.
257	HARDWARE COMPUTER CORP.			225	GENERAL SYSTEMS (MI)
				230	PARKIN PRINTING & STAT'Y

CENTRAL REGION
2

sales rank	DIST	SUBS	CHAINS
231	S.E.A. DISTRIBUTORS	AEROCOMP INC.	4 COMPUTERCRAFT
239	STAR DATA SYSTEMS	CADET INC.	6 GENERAL MICRO
240	UNIVAIR, INC.	COMPUADD CORP.	8 INACOMP
249	COMPUTER PLACE, THE	CONTROL DATA	9 VALCOM
250	CONDOR COMPUTER CORP.	DATAMAC	
252	DAISYTEK, INC.	EXPRESS SYSTEMS INC.	
261	GUMMED PAPER OF AMERICA	HARD DRIVE SPECIALISTS	
262	HAL SYSTEMS AND SERVICES	INTERPHASE CORP.	
263	LABORATORY CONSULTING	KUSTOM ELECTRONICS	
267	MID-WEST MKTG MFCTR'S REP	MICRO DESIGN	
276	SUNLAND SUPPLY CO.	MICRO NETWORK CORP.	
281	THORPE, JACK M., CO.	MICRO-DESIGN	
292	DATA APPLICATIONS CORP.	MNC INTERNATIONAL	
296	ORLANDO, JR. & CO., FRANK	* NCR CORP.	
300	CREATIVE COMPUTING CO.	PC'S LIMITED	
302	DATASOLVE CORP.	PERCOM DATA	
304	EXECUTIVE DATA SOLUTIONS	TALLGRASS TECHNOLOGIES	
305	FIPSCO	TECMAR	
307	GOOD(E) BUSINESS SYSTEMS		
309	INTERNATIONAL ELECTRONICS		
320	RETAIL INFO SYSTEMS		
322	SUNBELT DATA SERVICES		
326	LACHMAN ASSOCIATES, INC.		
329	COMPUTER DESIGNED SYSTEMS		
333	ENID DATA SYSTEMS		
337	COMMUNCT'N CABLES & CONNCTRS		
338	R SYSTEMS, INC.		
341	ALLEN & ASSOCIATES, MILTON		
347	CANTON AUTOMATED SYSTEMS		
353	COMPUTIME, INC.		
358	DATACENTER DESIGN CONCEPTS		
359	DIMENSIONAL DATA, INC.		
368	LONE STAR MICRO		
369	LTA COMPUTER SERVICES		
372	MEDIA MANAGEMENT & MAGTCS		
375	NATIONAL COMPUTER SUPPLY		
378	OFFICE MACHINES, INC.		
385	SOURCE SYSTEM, INC.		
386	SOUTHWEST DATA EQPMT		
387	SWENSON ASSOCIATES		
390	VU COM DATA SERVICES		
399	COMPUTER MARKETING CORP.		
403	DALLAS COMMUNICATIONS CORP.		
405	ELECTRONIC SYSTEMS USA		
408	HARTLEY COURSEWARE, INC.		
409	HOLVICK CORP.		
412	MAGNETIC TAPE SERVICES		
415	MBA-SYSTEMS AUTOMATION		
418	P.C. SERVICES, INC.		
420	PERLE GSD, LTD.		
423	ARKANSAS SYSTEMS INC.		* present customer
427	CRC INFORMATION SYSTEMS		" likely prospect
429	ACCESS CORP.		
432	CAPITAL DATA PROCSG SUPPLY		
434	CMPTRZED BUSINESS SYSTEMS		
439	DCB, INC.		
451	MILTRONICS		
453	NAT'L DATA PRODUCTS OF TX		
456	PARKING SYSTEMS & ANAL'S		
460	PERSOFT, INC. (WI)		
464	ROMAR SYSTEMS, INC.		

COMPUTER MANUFACTURERS
EASTERN REGION
(In order of '84 performance)

PC	S	M	L
* IBM	* IBM	* IBM	* IBM
* DEC	* DEC	* DEC	* SPERRY
WANG	* DATA GENERAL	* A T & T	* DEC
* APOLLO COMPUTER	WANG	* SPERRY	
COLUMBIA DATA	* SPERRY	* PRIME	
COLECO INDUSTRIES	APPL.DIG. DATA SYST	* DATA GENERAL	
* A T & T	* PERKIN ELMER	* HARRIS	
ITT	MOHAWK DATA SCIENCES	WANG	
* SPERRY	* PRIME	* STRATUS COMPUTER	
* DATA GENERAL	* A T & T	* PERKIN ELMER	
LANIER	* DISPLAY DATA	GLOBAL U.S.I.	
ONTEL	* MASS COMPUTER	MODULAR COMPUTER SYST.	
ESPRIT CMPTR PROD	NEC INFORMATION SYSTEMS	IPL	
FRANKLIN COMPUTER	* HARRIS	CAMBEX	
* STRATUS COMPUTER	PIXEL COMPTR	AURAGEN SYSTEMS	
INTERTEC DATA SYSTEMS	DATAMEDIA		
LEADING EDGE	* NIXDORF		
SHARP ELECTRONICS CORP	COMPUTER CONSOLES		
SANYO	KEYDATA		
MOTOROLA/CODEX	MODULAR COMPUTER SYST.		
* CHARLES RIVER DATA	* CAMBRIDGE DIGITAL SYS		
MICRO TECH. UNLMTD	COMPUK		
NEC INFORMATION SYSTEMS	INTELLIMAC		
PANASONIC	MOTOROLA/CODEX		
MONROE SYSTEMS FOR BUS.	DATAVUE		
COMP. DESIGN & APPLIC.	ESPRIT CMPTR PROD		
SCI SYSTEMS	NOHALT		
SMC SEICOM	DISTRIBUTED CPTR SYS		
OLYMPIA USA	ARDENT COMPUTER		
SEEQUA			
VISUAL COMPUTER			
ITHACA DATA SYSTEMS			
* PERKIN ELMER			
COMPUK			
SONY			
FIFTH GENERATION TECH			
TANO CORP.			
MAGIC COMPUTER			
FACIT/DATAROYAL			
DATAVUE			
" ALLOY COMPUTER			
IVY MICROCOMPUTER CORP			
TELERAM COMM. CORP.			
DIGICOMP RESEARCH			
LOMAS DATA			
ARDENT COMPUTER			
* Present customer			
" Likely prospect			

EASTERN REGION
1

sales rank	VARS	VARS	VARS	DIST			
3	MARTIN MARIETTA CORP.	185	AUXTON CMPTR ENTERPRISES	368	SACHS/FREEMAN ASSOC. INC.	1	DOM JONES & CO., INC.
7	GENERAL INSTRUMENT CORP.	187	MEDICAL INFO TECH	371	COMPUTER RESEARCH, INC.	6	SCHWEBER ELECTRONICS
11	FISHER CONTROLS INTERNATIONAL	188	SADDLEBROOK CORP.	375	DATA GROUP CORP.	7	ARROW ELECTRONICS
17	PLANNING RESEARCH	189	STERLING SYSTEMS INC.	376	DEXEL SYSTEMS CORP.	12	FIRST SOFTWARE CORP.
18	DURR-FILLAUER MEDICAL INC.	190	BARRISTER INFORMATION SYS	377	DIGITAL ASSOCIATES CORP.	13	EXECUTONE
21	MARTIN MARIETTA DATA SYS	192	LOGICA, INC.	378	DP COMMUNICATIONS	14	MCKESSON OFFICE PRODUCTS
22	SMS	196	RGI, INC.	379	FINANCIAL SOFTWARE, INC.	16	NEW ENGLAND TECH'N SALES
24	CURTIS 1000	197	SYSTEMS ARCHITECTS INC.	380	GENASYS CORP.	17	DIPLOMAT ELECTRONICS
25	FRONTIER SYSTEMS	199	LOCKWOOD GREENE SYSTEMS CORP.	385	NMF, INC.	18	MICROAMERICA
26	GENRAD, INC.	202	FORMATION, INC.	392	PERSONNEL DATA SYS	19	DENNISON NATIONAL
28	GILBERT ASSOCIATES, INC.	204	VANGUARD TECHNOLOGIES CORP.	396	WESTERN NY CMPGT SYS	25	POWELL COMPUTER SUPPLIES
31	SAFEGUARD BUSINESS SYSTEMS	205	CORNELL COMPUTER	397	TIMESHARING UNLIMITED INC.	27	UNIVERSAL COMMUN'C N SYS
32	SCI SYSTEMS INC.	206	AUTOMATED SCIENCES GROUP	401	BOSTON SYSTEMS OFFICE	29	POLICY MANAGEMENT SYSTEMS
33	BOEING COMPUTER SERVICES	208	CAPITAL SYSTEMS, INC.	403	COMPUTE-R-SYSTEMS	35	GLOBE TICKET CO.
36	ANALOGIC CORP.	210	ENSCO	404	COMPUTERLAND	36	MARTEC INTERNATIONAL
38	NAT'L DATA CORP.	211	ERISCO INC.	406	FREY ASSOCIATES, INC.	37	MICRO COMPUTER
39	MANAGEMENT SCIENCE AMERICA	213	IDEAS, INC.	407	GENERAL DIGITAL CORP.	40	DATA ACCESS SYSTEMS, INC.
40	NAT'L CMPTR SYSTEMS	215	AVANT-GARDE COMPUTING	408	GENERAL KINETICS INC.	44	FA COMPONENTS
42	NORRELL SERVICES	216	ADVANCED COMPUTER TECHNIQUE	409	HIGHSMITH & CO.	46	KEYSTONE DISTRIBUTING CO.
44	SYSCOM CORP.	217	ADVANTAGE SYSTEMS	412	MANOF COMMUNICATIONS SYSTEMS	51	PROGRAM RESOURCES, INC.
47	INTERACTIVE DATA	219	CLINTON COMPUTERS	414	NETWORK SOLUTIONS (VA)	54	IVY MICROCOMPUTER CORP.
48	M/A-COM	225	FAIRCHILD WESTON SYSTEMS	415	S & S ELECTRONICS, INC.	58	CENTEL FINANCIAL SYSTEMS
51	COMPUTERTOWN	227	LOCAL DIGITAL DIST.	416	SIGNATRON INC.	59	CENTEL INFORMATION SYSTEMS
54	AMERICAN MANAGEMENT SYSTEMS	228	MARION CO., WILLIAM	417	SOFTWARE SHOP SYSTEMS	63	SELECTERM, INC.
55	DAVY MCKEE CORP.	229	MARION CO., WILLIAM	418	TECHLAND SYSTEMS	64	NORTHEASTERN DISTRIBUTORS
56	FAIRCHILD WESTON SYSTMS	231	RICH, INC.	420	ASSOCIATED COMPUTER SYSTEM	65	TERMINALS UNLIMITED
57	FINALCO, INC.	232	SCOPE INC.	422	AUTO TELL SERVICES	66	AMERICAN COMPUTER GROUP INC.
59	COMPUTERVISION	235	COGNITRONICS CORP.	423	FREY FEDERAL SYSTEMS CORP.	69	DATA RESEARCH ASSOCIATES
63	STEARNS CATALYTIC	240	MTI SYSTEMS INC.	433	ARA MAINTENANCE MNGMT SYS	73	GRAPHICS SYSTEMS, INC.
64	COMPUTER DATA SYSTEMS, INC.	242	PROPHET 21, INC.	434	AREGON INTERN'L, INC.	74	ELECTRO REP. INC.
65	TELESCIENCES, INC.	245	TATA CONSULTANCY SERVICES	437	COMCON, INC.	76	TLC COMPUTER SERVICES
66	ISTEL, INC.	248	FOSTER-MILLER, INC.	438	COMPUTER SYSTEMS DEVELOPMENT	77	MMK ASSOCIATES
67	CHAK L. WONG	249	GENERAL BUSINESS SERVICES	442	DATAMEDIC CORP.	78	COMPUTERWORKS
68	ENDATA, INC.	251	KAYE INSTRUMENTS	446	ECOM SYSTEMS INC.	80	CURRIE PEAK & FRAZIER, INC.
70	BRISTOL BABCOCK	253	TELESIS SYSTEMS	449	FANNIE MAE	82	GLASGAL COMMUNICATIONS
72	CENTEL INFORMATION SYSTEMS	254	CENTEL DATA SERVICES CORP.	451	GULL RESOURCE MGMT. SYSTEMS	83	HARTFORD OFFICE SUPPLY CO.
75	M/A-COM ALANTHUS DATA INC.	255	HEALTH INFO SYSTEMS	452	JERSEY MICRO SYSTEMS	84	NORTHERN COMPUTER SALES
76	N. C. S. INC.	256	DATA ARCHITECTS, INC.	453	KEY SYSTEMS (NH)	85	OCEAN DATA SYSTEMS, INC.
78	PRC REALTY SYSTEMS	259	NATIONAL COMPUTER CORP.	454	KEYSTONE INFO SYSTEMS	89	REPLITECH CORP.
83	TELEPHONICS CORP.	260	AUTOMATION INTELLIGENCE	455	MARYLAND COMPUTER SERVICES	94	TSR, INC.
86	DRAVO ENGINEERS, INC.	261	BIO-RAD LABORATORIES	459	NORTHEAST DATA SYSTEMS, INC.	99	JENKS ASSOCIATES, INC.
88	SIMULATION SYSTEMS	262	BUTLER ASSOC.	461	PROGRAMS & ANALYSIS	101	NAT'L CMPTR COMMUN'C NS
90	MANCHESTER EQUIPMENT	265	CF CORP.	469	TECHTRAN INDUSTRIES	103	TRITEK, INC.
91	TIMPLEX INC.	266	COIN FINANCIAL SYSTEMS	470	TELCO RESEARCH	104	ADVANCED TECHNOLOGY INT'L
92	LUNDY ELECTRONICS & SYSTEMS	268	DATA SYSTEMS (VA)	471	TELEGENIX, INC.	106	BOROFKY ASSOCIATES LTD.
95	CAP INFORMATION SYSTEMS, INC.	270	DATASTORE INC.	473	TRICOM GROUP	108	COMPUTER BUSINESS SPLYS
95	GENERAL PHYSICS CORP.	272	DP SYSTEMS & SVCS	476	APTECH COMPUTER SYSTEMS	112	ERIN DATA SYSTEMS & SVCS
97	REDSHAW INC.	275	INFOCEL, INC.	478	RIBBLE ENGINEERING CO.	114	LCA SALES CO.
105	CONSOLIDATED DATA SYSTEMS	278	MEDCOMP TECHNOLOGIES, INC.	481	STANDARD DATA CORP.	115	OSSMANN CMPTR TECHN'GIES
108	GLOBAL TURNKEY SYSTEMS	279	NORTHEAST DATACOM, INC.	483	MIDEC, INC.	116	PRINTER SYSTEMS CORP.
110	SCIENTIFIC CALCULATIONS	280	NORTHERN DATA SYSTEMS	484	ACCU-SORT SYSTEMS, INC.	118	RACAL-REDAC, INC.
112	SYKES DATATRONICS	285	TOTAL TEC SYSTEMS	485	ACPI LTD.	120	TMA/LOGON, INC.
114	DYATRON CORP.	286	ULTIMATE COMPUTER SERVICES	486	ADVANCED INTEGRATED TECH	121	TRANSEXT CORP.
115	RAGEN INFO SYSTEMS	290	BUSINESS EQPMT & SUPPLY	489	ARTRONICS, INC.	123	BARTLETT ASSOCIATES
116	INTERMETRICS, INC.	293	STS SYSTEMS, INC.	491	AUTOMETRIC, INC.	125	GALAXY DISTRIBUTING
118	DELTA DATA SYSTEMS	294	AQUIDNECK DATA CORP.	493	BEDFORD ASSOCIATES, INC.	126	GAR-MAR, INC.
120	COMPUTER CORP. OF AM.	298	ABL COMPUTER TECHNOLOGIES	494	C & W INCOTEL LTD.	127	KSM ELECTRONICS, INC.
121	CYBERNETICS & SYSTEMS	302	AMNET, INC.	495	C TEK SOFTWARE	129	ROBEC, INC.
122	ELECTRONIC ASSOCIATES, INC.	305	BKW, INC.	497	CARLYN COMPUTER SYSTEM INC.	130	EASTERN SFTWRE DISTRBTRS
125	HARRIS CONTROLS	307	CADRE CORP.	498	CARTER & CRAWLEY, INC.	132	CF CORPORATION
127	KEANE, INC.	309	COHERENT COMMUNICATIONS SYS.	500	COMPUTER INFORMATION SYSTEMS	136	DATASTORE, INC.
129	SCAN-OPTICS INC.	310	COLLIER-JACKSON, INC.	501	COMPUTER RESALE EXCHANGE	138	GEN-TECH ELECTRONICS
131	SYSTEMS ASSOCIATES INC.	311	COMPUTER LINK CORP.	504	COMPUTERIZED BUS. SOLUTIONS	145	FEDERAL SALES SERVICE
135	AMERICAN COMPUTER GROUP INC.	312	COMPUTER ROOM	507	CURRY CONTROLS CO.	148	JMS COMPUTER ASSOCIATES
137	GERBER SYSTEMS TECH	317	DATA SYSTEMS ANALYSTS, INC.	508	CYBORG CORP.	149	ADD ELECTRONICS CORPORATION
140	MNGMT DECISION SYSTEMS	319	DAVOX CORP.	511	DATA-MED CORP.	150	AZERTY INFO PROCESSING SPLYS
142	POST-TRON SYSTEMS	320	DIGITAL ELECTRONIC SERVICES	512	DATACOM, INC.	152	CENTEC CORPORATION
145	SUN DATA, INC.	322	ESTIMATION, INC.	515	DIALOGUE INC.	159	DATAMAXX USA CORP.
146	TECHNICAL MARKETING SYSTEMS	327	GENERAL BUSINESS CMPTRS	517	FEDERAL COMPUTER CORP.	164	FM ASSOCIATES, LTD.
148	DYNAMIC CONTROL	331	LOGON, INC.	518	GENERAL DIGITAL CORP.	166	INSTRUMENT DYNAMICS, INC.
149	DYNAMIC CONTROL	332	MATRIX/SYSTEMS GROUP CORP.	519	GIANGARLO SCIENTIFIC	168	MISCO, INC., CMPTR SPLYS
151	EBS, INC.	334	MODULAR INFO SYSTEMS	521	HARVARD DATA EQUIPMENT		
155	DOWTY RFL INDUSTRIES, INC.	335	NATIONAL DATA CORP.	522	HOPKINS ASSOC.		
156	ERISCO	338	POST SOFTWARE INTERNATIONAL	524	INNOVATIVE COMPUTER LEASING		
157	MICROS SYSTEMS	339	PROCESS CONTROL IND., INC.	526	JEFFERSON-PILOT BROADCASTING		
159	CL SYSTEMS, INC.	340	QEI, INC.	529	KANJANRUS CORP.		
160	O'BRIEN & GERE ENGRS	344	SCOTT COMPUTING SYSTEMS	530	KESELL ASSOCIATES		
161	SCIENTIFIC SYSTEMS	346	SIMMONDS PRECISION	531	KEY SYSTEMS, INC.		
166	FRANKLIN RESEARCH CENTER	348	SUNDSTRAND DATA CONTROL INC.	534	MEDICAL DATA SERVICES CORP.		
167	GENERAL BUSINESS COMPUTERS	350	VCA CORP.	538	NORDATA INC.		
168	GLOBAL TURNKEY SYSTMS	351	WORICO DATA SYSTEMS	540	NUCLEAR DATA		
171	KEANE, INC.	353	COMPUTER MERCHANT, LTD.	546	RTC SYSTEMS		
173	LOGICA INC.	354	INTEGRATED MICROCOMPUTER	547	SADDLE BROOK CONTROL SYSTEMS		
176	MEDICAL DATA SVCS	355	DATATEL	549	SEVERN COMPANIES		
177	MESA TECHNOLOGY CORP.	356	DYER, WELLS & ASSOC.	550	SHARED UNION SYSTEMS, INC.		
178	MNGMT CONTROL SYSTEMS	358	NAT'L UNLTD BUSINESS SYS	552	SIMCOM INC.		
179	NUS CORP.	359	PROCOM LEASING & MANAGEMENT	555	TRANSCAPITAL CORP.		
182	SYSTEME CORP.	361	SYSTEM AUTOMATION CORP.	557	TRISTAR DATA SYSTEMS		
183	TECHNOLOGY FOR ENERGY	365	D/B DATA INC.	560	WOLFSON CO., P.J.		

* present customer
 = likely prospect

DOUG STEINER

EASTERN REGION
2

sales rank	DIST	DIST	SUBS	CHAINS	
169	PAGE AMERICA	328	CAP INDUSTRIES INC.	5	MATHBOX
174	STOREX CORP.	330	COMPUTER SPECIALTIES, INC.	10	COMPUTONE
175	US PLUS, INC.	331	DANYL CORP.		
179	DIGITAL ASSOCIATES CORP.	334	PRINTRONIC DATA PRODUCTS		
184	PRODIGY SYSTEMS, INC.	339	SYSTEC, IC.		
185	TELERAM COMMUNICATIONS	342	AMERICAN COMPUTER SUPPLIES		
186	ADVANCED COMPUTER SUPPLIES	345	BRIDGE COMPUTER CO.		
187	AUTOMATED BUSINESS TECH	348	COASTAL CMPTR CONSULTANTS		
188	COMPUTER RESEARCH, INC.	350	COMPUTER CENTRE INC.		
189	DATAFLEX CORP.	352	COMPUTERWARE, INC.		
190	E-O DATA CORP.	354	CROWN COMPUTER SUPPLIES		
191	MOM CORP., THE	355	DATA CONCEPTS CORP.		
192	NORTHEAST SERVICES, INC.	356	DATA DIRECTIONS, INC. (CT)		
193	PAGE DISTRIBUTORS	360	DISCOUNT COMPUTER SPLY		
194	PEN-TECH ASSOCIATES	361	FLOPPY DISK SERVICES		
197	NORTHEAST DATACOM, INC.	362	GRANVILLE ASSOCIATES		
206	TECHLAND SYSTEMS, INC.	363	GTI TRANSCOMM		
208	TESCO, INC.	364	HAGERSTOWN CASH REGISTER		
209	COMPUTER ACQUISITIONS CO.	365	HMM ENTERPRISES, INC.		
212	SOUTHERN ENGINEER ASSOC.	367	INNOVATIVE CMPTR LEASING		
215	CMPTR TRANSCEIVER SYSTEMS	370	MARYLAND COMPUTER SVCS		
216	COMPUTER MAINTENANCE CORP.	371	MED-DEN SYSTEMS, INC.		
217	COMPUTER SUPPLIES WHOLESALE	373	MICROGRAPHICS INTERN'L		
218	CORPORATE SOFTWARE, INC.	374	MICROSPARC, INC.		
220	DEXEL SYSTEMS CORP.	376	NETWORKS, INC.		
224	FORMS & SUPPLIES	377	OASYS		
226	HOWARD SYSTEMS INTERNAT'L	379	OWENS ASSOCIATES, JOHN D.		
228	MARKETECHS, INC.	380	PERIPHERAL MARKETING, INC.		
229	NAT'L MICROGRAPHICS SYS	383	REAL-TIME TECHNOLOGY		
232	TECHNICAL ASSOCIATES	384	SENECA DATA DISTRIBUTORS		
233	TECHNOLOGY SERVICES	389	TIME BROKERS OF NE.		
236	TWO-M CORP.	393	NEWCORP PRODUCTS, INC.		
238	LEVISON SALES CO., INC.	394	CHART INC.		
241	SIMCON, INC.	395	KEY RESOURCES, LTD.		
242	COMPUTER DYNAMICS INC.	396	TAYLOR MERCHANT CORP.		
243	BUSINESS PRODUCTS UNLIMITED	398	COLONIAL DATA SERVICES		
248	COMPUTER MARKETING SVCS	401	CREATIVE MANAGEMENT SYSTEMS		
251	CUESTA & CO. INC., J.E.	406	ESI		
253	DATA COMMUNICATIONS SYSTEMS	414	MARKETLINE SYSTEMS, INC.		
257	DIGITAL SALES ASSOCIATES	419	PECO-PERIPHERAL CO., INC.		
258	ENERGY/CONTROL SYSTEMS	421	RB DATA SYSTEMS, INC.		
260	FRIEDMAN ASSOCIATES	428	NEWMAR, INC.		
264	MANAGEMENT INFO SOFTWARE	431	BANWARE INC.		
265	MERIT MACHINERY, INC.	433	CENTRAL COMPUTER SERVICES		
266	MICROBILT CORP.	436	COMPUTER SUPPLY CORP.		
269	NEW ENGLAND DIGITAL CORP.	440	DEREX, INC.		
271	PHYSICS INTERNATIONAL CO.	443	EDP SUPPLY NORTH		
272	SENTRY OFFICE SUPPLY CO.	444	EEC SYSTEMS		
274	SPECTRO ASSOCIATES	446	HARTFORD OFFICE SUPPLY (MA)		
278	TECHNICAL SALES ASSOC.	448	MANAGEMENT INFO SYSTEMS		
282	TOTAL TEC	449	MEDIA MASTERS		
285	WALCH, PUBLISHER, WESTON	450	MIDTOWN STATIONERY & SPLY		
286	WILLIAMS ASSOC., G.L.	452	NAC SYSTEMS, INC.		
287	TELEPRINTER CORP.	458	PERIPHERAL SYSTEMS		
288	TMA	467	SOFTWARE SYSTEMS INTERN'L		
291	COMSEL CORP.	468	SOURCE ASSOCIATES		
293	DATRON COMPUTER PRODUCTS	471	TECHNICAL ANALYSIS GROUP		
295	MAGUIRE & ASSOC.	472	TRI-MARK SYSTEMS INC.		
297	RUDD & ASSOCIATES	474	UNITED SFTWRE OF AMERICA		
298	WOLFSON CO., P.J.	475	VENTURCOM, INC.		
299	COMPUTRON BUSINSS SOLUT'NS	476	VISUAL METHODS, INC.		
301	DATALINK READY, INC.				
306	GLYNN ELECTRONICS, INC.				
308	H & E COMPUTRONICS, INC.				
313	MININGHAM & OELLERICH				
314	MORLEY CO., THE				
318	POLYGON DATA PRODUCTS				
319	PRACTICORP INTERNATIONAL				
324	USED COMPUTERS, INC.				
325	SPARTAN INDUSTRIES				

* present customer
" likely prospect

6. COMPETITOR PROFILES

- Top 10

Cipher Data Systems

Control Data

Hitachi

IBM

Maxtor

Micropolis

NEC

Priam

Seagate

Tandon

Cipher Data Products

Cipher Data Products designs and manufactures computer memory peripheral products. The company's primary product area is magnetic tape drives, which are often employed as secondary mass storage devices for computer systems. Sales are made largely to original equipment manufacturers (OEMs).

Cipher Data is the leading maker of 1/2-inch streaming tape drives. These drives offer a low-cost means for users to transfer large blocks of data rapidly between Winchester disks and magnetic tape. Major products include the Microstreamer, which is used as a back-up for eight-inch and 14-inch Winchester drives. It has storage capability of up to 92 megabytes, or more with a dual-density option. For higher-performance markets, Cipher offers CacheTape and GCR Cachetape, which are aimed at moving the company into the super minicomputer and mainframe computer markets. CacheTape utilizes a 64K RAM cache memory controlled by a 16-bit microprocessor, while the GCR version combines the streaming mechanical device with a more sophisticated cache memory.

Cipher also makes 1/4-inch streaming tape drives, which serve as back-ups for lower-capacity 5 1/4-inch and eight-inch Winchester disk drives. Products include the Quarterback, for which rights were acquired in 1981, and the 540-CT and the Floppy Tape, which were developed more recently for use in microcomputer and personal computer systems.

Important Developments

Aug. '85—Cipher said that it expected the adverse conditions in the computer industry to continue to affect its operations into mid-fiscal 1986. Management implemented a number of cost control measures late in fiscal 1985, including two workforce reductions of 5% and 13% each. A number of streamlining measures were also taken in an effort to ensure operational efficiency.

CIPHER DATA PRODUCTS, INC.
9815 Carroll Canyon Rd., San Diego, Cal. 92138
Tel. 619-693-7200

*Chrm. Pres, Chief Exec & Oper Officer—Don M. Muller
V-P (Fin), Chief Fin Officer & Treas—Thomas R. Anderson
V-P (Adv Tech)—William M. Barton, Jr.
V-P (Strategic Devel)—Norman R. Farquhar
V-P & Div Gen Mgr (OEM Mktg)—Larry D. Hemmerich
V-P & Div Gen Mgr (MPD)—Henry L. Tinker
V-P & Div Gen Mgr (HPD)—Robert F. Prether
Cont—Dan E. Steimie

Cipher's sales mix has been trending increasingly toward streaming tape drives in recent years (sales of start-stop tape drives account for less than 16% of revenues). Other products include conventional start-stop tape drives, plus a line of controllers that came with the November, 1984, acquisition of Spectra Logic Corp. (see Finances).

In fiscal 1985, Cipher spent \$13.1 million, or 7.8% of revenues, on engineering, research and development, compared with \$8.7 million (7.0%) the year before. Export revenues represented 22% of total sales in fiscal 1985.

Revenues for fiscal 1986 are likely to approximate those of fiscal 1985, due to general weakness in the computer industry. Continued softness in the minicomputer market, limiting demand for 1/2-inch drives, will likely restrain earnings in the first half. Prospects for the second half hinge on Cipher's success in obtaining additional OEM orders for its 1/2-inch drives, and the degree of the recovery in the microcomputer industry (which would aid sales of lower-margin 1/4-inch drives). A lower tax rate as the company benefits from offshore production will help to offset margin pressure.

Income Data (Million \$)

Year Ended June 30	Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	% Net Inc.	% Net Inc. of Revs.
1985	169	26.5	15.7%	9.60	3.09	Nil	25.8	43.0%	14.7	8.7%
1984	116	18.7	16.1%	5.30	2.29	Nil	21.2	45.9%	11.5	9.9%
1983	76	11.9	15.5%	2.30	1.61	0.82	9.4	45.3%	5.2	6.8%
1982	55	6.3	11.4%	2.36	1.00	1.61	3.7	39.0%	2.2	4.1%
1981	23	1.0	4.4%	1.10	0.35	0.58	0.1	Nil	0.1	0.4%
1980	22	1.8	8.4%	1.40	0.19	0.44	1.2	24.6%	0.9	4.1%
1979	14	1.6	11.0%	0.42	0.15	0.24	1.2	54.1%	0.6	3.8%

Balance Sheet Data (Million \$)

June 30	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1985	16.4	117	18.4	6.4	145	10.6%	Nil	124	126	Nil	12.5%
1984	42.1	107	20.6	5.2	126	9.9%	Nil	105	106	Nil	11.5%
1983	45.0	87	11.6	7.5	105	5.5%	Nil	92	93	Nil	8.3%
1982	0.9	33	10.5	3.1	50	6.8%	19.9	19	40	50.2%	17.2%
1981	0.3	13	4.3	3.1	15	0.5%	4.5	7	11	40.3%	1.3%
1980	0.1	11	5.6	2.1	13	7.6%	0.5	6	7	7.2%	22.1%
1979	NA	NA	NA	NA	9	7.8%	0.1	2	3	5.0%	31.4%

Data prior to 1982 as reprinted in prospectus dated 10-6-81. 1. Ret. eq. 2. Bef. results of disc. ops. in 1980 & 1979. 3. Net of int. inc. & Debit. NA-Not Available.

PRODUCTS

1985 OEM TAPE DRIVES

MANUFACTURER	MODEL	DATABASE CLASS	CAPACITY (MB)	I/O INTERFACE	FCS	PRICE \$	UNITS
CIPHER	7	H/TA/PE	11.50 U	PERTEC	70-XX	2794	500
CIPHER	SERIES 70	H/TA	12.00 U	PERTEC	77-XX	—	—
CIPHER	F420-90	Q/STR/F	20.00 F	QIC-02	—	750	500
CIPHER	420-90	Q/STR/F	20.00 F	PROPRIETARY	—	750	500
CIPHER	8B	H/TA/PE	23.00 U	PERTEC	70-XX	3191	500
CIPHER	80	H/TA	23.00 U	PERTEC	77-XX	—	—
CIPHER	525-CT	Q/STR/M	32.00 U	FLOPPY	83-XX	300	5000
CIPHER	440-CT	Q/STR/F	45.00 F	QIC-02	—	750	500
CIPHER	540-CT	Q/STR/M	45.00 F	QIC-02	—	750	500
CIPHER	100	H/TA	46.00 U	PERTEC	73-XX	3301	250
CIPHER	920	H/VC/PE	46.00 U	PERTEC	78-XX	4914	250
CIPHER	MOD10	H/TA	46.00 U	PERTEC	—	3430	250
CIPHER	F880 MICROSTR.	H/STR/PE	46.00 U	PROPRIETARY	80-2Q	2450	250
CIPHER	MOD8	H/TA	46.00 U	PERTEC	—	3751	1
CIPHER	910	H/VC/PE	46.00 U	PERTEC	78-XX	4067	250
CIPHER	MOD11	H/TA	46.00 U	PERTEC	—	6780	1
CIPHER	1880 IPI MICROSTR.	H/STR/PE	92.00 U	IPI	85-3Q	—	—
CIPHER	M890 CACHE TAPE	H/STR/PE	92.00 U	PROPRIETARY	83-1Q	2975	250
CIPHER	M891 CACHE TAPE	H/STR/PE	92.00 U	PROPRIETARY	—	3600	250
CIPHER	F880 MICROSTR. 2	H/STR/PE	92.00 U	PROPRIETARY	81-2Q	2825	250
CIPHER	M991 GCR CACHE TAPE	H/STR/GCR	180.00 U	PROPRIETARY	84-3Q	8000	1
CIPHER	M990 GCR CACHE TAPE	H/STR/GCR	180.00 U	PROPRIETARY	84-3Q	6150	250

Cipher Sales Offices

North American

Eastern Region

255 Ballardvale St.
Wilmington, Massachusetts 01887
Telephone: 617/658-7941, TWX: 710-393-0830

621 Shrewsbury Avenue, Suite A
Shrewsbury, New Jersey 07701
Telephone: 201/741-2755

Central Region

12860 Hillcrest Road, Suite 201
Dallas, Texas 75230
Telephone: 214/458-1853, TWX: 910-860-5774

2501 E. Commercial Blvd.
Ft. Lauderdale, Florida 33308
Telephone: 305/772-2900, TWX: 510-955-4162

650 East Devon Avenue, Suite 180
Itasca, Illinois 60143
Telephone: 312/250-0100, TWX: 910-651-4730

Western Region

4000 Westerly Place, Suite 285
Newport Beach, California 92660
Telephone: 714/833-8751, TWX: 910-333-0915

1737 North First Street, Suite 505
San Jose, California 95112
Telephone: 408/298-6252, TWX: 910-333-0908

2659 Townsgate Road, Suite 101
Westlake Village, California 91361
Telephone: 805/495-8844, TWX: 910-333-0912

CONTRACTS

TAPE

SUPPLIER	DATE	CUSTOMER	\$M	CAP. (MB)	TYPE	FF	NOTES
CIPHER DATA	06/85	ALPHA MICROSYST.	--	--	--	--	--
CIPHER DATA	04/85	AT&T	--	--	1/4" CART	--	FLOPPYTAPE FOR 382
CIPHER DATA	06/85	AUTOMATIC DATA PROC.	--	--	1/2"	--	--
CIPHER DATA	06/85	C3 INC.	--	--	1/2"	--	--
CIPHER DATA	06/85	COMPUTER CONSOLES	\$31 M	--	--	--	1-2 YRS.
CIPHER DATA	02/85	CROMEMCO	\$12 M	--	1/4", 1/2" STR/CART	--	\$24M - 1/2"; \$24M - 1/4"
CIPHER DATA	02/85	DATA STORAGE	--	--	--	--	--
CIPHER DATA	10/84	DES	\$2 M	92	1/2" STR/CART	8.75"	MICROSTREAM
CIPHER DATA	06/85	EMIL LOFFELAHARDT GmbH	--	--	1/4" CART	--	--
CIPHER DATA	06/85	ENTRE COMPUTER	\$2 M	--	--	--	2 YRS.
CIPHER DATA	02/85	HARRIS COMPUTER	--	--	--	--	--
CIPHER DATA	10/84	KPS	--	--	--	--	CACHETAPE
CIPHER DATA	06/85	MICRODATA U.K.	--	--	--	--	--
CIPHER DATA	06/85	MODULAR COMPUTER SYST.	--	--	1/2"	--	--
CIPHER DATA	09/84	NCR	--	--	1/2" STR/CART	8.75"	MICROSTREAMER
CIPHER DATA	02/85	OTHERS	\$36 M	--	--	--	--
CIPHER DATA	06/85	PLEXUS COMPUTER	--	--	--	--	--
CIPHER DATA	06/85	PRIME COMPUTER	--	--	--	--	--
CIPHER DATA	02/85	QUEST AUTOMATION	--	--	--	--	--
CIPHER DATA	02/85	REXON BUS. MACH.	--	--	--	--	--
CIPHER DATA	10/84	RIDGE	--	--	--	--	--
CIPHER DATA	06/85	VARIANT TECH.	--	--	1/4" CART	--	--
CIPHER DATA *	10/84	ALLOY COMPUTER	\$5 M	--	1/4" CART	--	FLOPPY TAPE; * OFFERING LICENSE

Cipher Data Products Signs \$56 Million in Major VAR and OEM Contracts

Cipher Data Products has signed an agreement during its first fiscal quarter to deliver products valued at more than \$56 million during the next two years. These orders represent new or renewed contracts for 1/2- and 1/4-inch tape drives and include such major OEMs as IBM, Intergraph, Perkin-Elmer, and Wang. (PR, 10/21/85)

ACTIVITIES

Began a series of regional previews of its full-height, 5 1/4" form factor 1/2" cartridge tape drives offering 200MB storage capacity. The IBM 3480-class drives are aimed at backing up high capacity 5 1/4" Winchester disk drives and for archival storage. Pricing will fall below \$1,500 with volume availability mid- to late-1986. EN Dec. 2, pg. 32

Observers seem unimpressed by Cipher's 1/2" cartridge tape drive due to its slower-than-expected data transfer rate, and are concerned that there is little demand for 200MB products. CSN Dec. 16, pg. 22

Is reportedly negotiating an OEM agreement with IBM for Cipher's Model 540 60MB 1/4" streaming tape drive to be incorporated into IBM's anticipated Model 801 engineering workstation. CSN Aug. 12, pg. 1

Control Data

CONTROL DATA CORP.

8100 34th Ave., S., Minneapolis, Minn. 55440
Tel. 612-853-8100

- *Chrm & Chief Exec Officer—William C. Norris
- *Pres & Chief Oper Officer—Robert M. Price
- *Dep Chrm—Norbert R. Berg
- *Chrm, Pres & Chief Exec Officer (Coml Credit Co)—Joseph D. Minutilli
- Pres (United School Services of America, Inc.)—Walter H. Bruning
- Pres (Computer & Consulting Serv Group)—George F. Troy
- Pres (Peripheral Products Co.)—Lawrence Perlman
- Pres (Tech Support Serv)—Thomas W. Miller
- Pres (Intl Oper)—Thomas C. Roberts
- Pres (Bus Devl Group)—Herbert F. Trader
- Pres (Bus Serv Group)—David P. White
- Exec V-P (Peripherals Mktg & Plan)—Gordon R. Brown
- Exec V-P (Tech & Plan)—John W. Lacey
- *Exec V-P & Chief Fin Officer—Marvin G. Rogers
- Sr V-P (Human Resources Mgt & Admin Serv)—Eugene L. Baker
- Sr V-P (Cor Mktg & Strategic Devel)—Robert W. Duncan
- Sr V-P (Oper Fin) & Cont—L. Charles Roskam
- Sr V-P (Oper) & Asst to Pres—Henry J. White

A period of growth and vitality at Control Data Corp. appeared to end abruptly in 1984. Plagued by setbacks in its usually strong computer peripherals and computer service businesses, by increased competition in its mainframe business, and by management shake-ups in its peripherals division, CDC had a rough year. The corporation saw earnings dip 80%, to \$31.6 million from 1983's \$161.7 million. The news isn't all bad, however. Corporate revenues continued to climb, growing 9.6% to \$5.03 billion from \$4.58 billion. Dp revenues increased 7% to \$3.76 billion.

Though CDC continues to be a leader in the disk drive market, with 1984 sales estimated at \$600 million, its market share has steadily shrunk, from almost 50% five years ago to 29%. Analysts say the company has been slow to respond to changes in the market. Last year's substantial drop in earnings is a result of a \$70.3 million after-tax charge levied because the company dropped its IBM plug-compatible disk drive business.

CDC also discontinued its Cricket line of 3½-inch disk drives for microcomputers. Drastic price cutting and increased competition from IBM have made matters worse. Insiders say Control Data is now stuck with a huge inventory of overpriced 5¼-inch drives that it must sell at a loss.

The company recently overhauled the peripheral unit's management, demoting its chief executive and replacing him with Lawrence Perlman. Perlman is credited with turning around the Commercial Credit subsidiary by slashing expenses and changing its market direction.

CDC has a large services business, but analysts say the company has an image problem in that it is perceived primarily as a mainframe manufacturer (mainframes constitute less than 20% of total business) and not a computer services supplier. And even this segment of the company has not escaped stormy weather. Revenues were down in 1984, and profits from CDC's timesharing business, once a fortune-maker, are said to be dwindling. With the emergence of pcs, timesharing is no longer in demand. The company has closed regional Cybernet timesharing centers in California, Minnesota, and Texas in an effort to restore profitability to the business.

The company intends to sell its Commercial Credit Co. unit. While the service contributed 24% of 1984 total revenues, Commercial Credit's involvement in the recent collapse of Ohio thrift institutions has cost it in excess of \$20 million. The sale is said to be an indication that the company intends to concentrate its full attention on the dp business.

Amid the turmoil, there's been talk of a takeover—indeed, some analysts say that CDC's best move would be to become a subsidiary of another company. Chairman William C. Norris, however, adamantly opposes a takeover. But it may take serious reorganization for the company to make a comeback.

Important Developments

Nov. '85—In addition to the planned sale of one-third of its finance unit's assets, CDA said it would continue to shrink its peripherals business, sell Ticketron and its business products and retail media and disk drive business, divest or shut-down its international service business, and examine its investments in affiliates.

Business Summary

Control Data Corp. is a major supplier of computer services, systems and peripherals, and provides financial and insurance services.

Revenues	1984	1983	1982
Information			
Sales & rentals	47%	49%	48%
Services	28%	27%	29%
Financial	25%	23%	24%

The U.S. Government provided 12% of revenues in 1984 and foreign customers 27%.

Information services and products (41% of 1984 operating income before a one-time charge) include scientific and engineering, data processing, educational and other services; the Cyber series of medium-to-superscale computer systems and specialized aerospace and defense systems; and a line of disk drives, tape drives, media and other peripheral equipment for use with its own and other computers.

Income Data (Million \$)

Year Ended Dec. 31	Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	EFF. Tax Rate	Net Inc.	% Net Inc. of Revs.
1984	5,027	893	17.8%	*203	208	604	*2	NM	32	0.6%
1983	4,583	820	17.9%	*257	199	472	*213	21.5%	162	3.5%
1982	4,292	847	19.7%	*261	223	436	*223	28.3%	155	3.6%
1981	3,101	464	15.0%	*271	179	77	*209	40.3%	170	5.5%
1980	2,766	407	14.7%	409	194	85	*173	46.0%	148	5.3%
1979	2,249	300	13.3%	274	147	47	*129	47.6%	119	5.3%
1978	1,846	247	13.4%	219	133	46	*88	57.3%	85	4.6%
1977	1,493	195	13.0%	134	120	47	*48	54.9%	82	4.2%
1976	1,331	186	14.0%	177	129	58	*27	55.3%	47	3.6%
1975	1,218	187	15.3%	167	115	68	*32	58.3%	41	3.3%

Balance Sheet Data (Million \$)

Dec. 31	Cash	— Current —			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1984	93	NA	1,819	NA	9,589	0.3%	5,260	1,764	7,104	74.0%	1.7%
1983	156	NA	1,628	NA	8,778	2.0%	4,571	1,814	6,549	69.8%	9.0%
1982	104	NA	NA	NA	6,912	3.2%	*3,661	1,714	5,580	65.8%	9.4%
1981	46	1,298	749	1.7	2,826	6.3%	380	1,564	2,032	18.7%	11.3%
1980	74	1,136	636	1.8	2,535	5.9%	327	1,420	1,882	17.6%	10.8%
1979	23	1,027	625	1.6	2,261	5.6%	338	1,160	1,600	21.1%	10.7%
1978	8	809	451	1.8	1,959	4.4%	337	1,023	1,474	22.9%	8.5%
1977	8	756	465	1.6	1,844	3.4%	305	935	1,345	22.7%	6.7%
1976	5	704	460	1.5	1,828	2.6%	354	871	1,337	26.5%	5.5%
1975	4	715	489	1.5	1,823	2.1%	385	796	1,296	29.7%	4.6%

Data as orig. reptd. 1. Reflects in 1981, 1980, 1979, 1978, 197 orig. reptd. NA—Not Available. NA

6-5

2. Incl. curr. portion. 3. Incl. equity in earn. of nonconsol. subs. 4. Bef. spec. item(s) 5. 5. Net of curr. retirements & disposals. 6. Excl. Commercial Credit prior to 1982. 7. A. Angful. d-Deficit.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC
			IN.	F	R	\$			
CONTROL DATA	14	9762 SHD	—	82.9	—	6715	100	75-10 SHD	30
CONTROL DATA	14	9771 SHD	825.0	—	—	10660	100	83-30 HDD SHD/ISI/SDI	16
CONTROL DATA	14	9730-160 HDD	165.9	—	—	3785	100	75-20 SHD	30
CONTROL DATA	14	9797	651.6	—	—	—	—	77-X SPECIAL	50
CONTROL DATA	14	9448-32	16.3	16.3	—	—	—	78-30 SHD	30
CONTROL DATA	14	9766 SHD	—	313.2	12355	100	76-10 SHD	30	
CONTROL DATA	14	9448-64	48.9	16.3	—	—	—	78-30 SHD	30
CONTROL DATA	14	9775 FHD	675.0	—	15155	100	80-20 SHD	25	
CONTROL DATA	14	9772 SHD-II	858.0	—	9475	100	85-40 SHD-E	16	
CONTROL DATA	14	9448-96	81.5	16.3	—	—	—	78-30 SHD	40
CONTROL DATA	5	9415-321 WREN	21.0	—	1105	100	83-20 FINCH	40	
CONTROL DATA	5	9415-336 WREN	36.0	—	1225	100	83-20 ST412	40	
CONTROL DATA	5	9415-321 WREN	21.0	—	1105	100	83-20 ST412	40	
CONTROL DATA	5	94156-67 WREN II	67.4	—	1455	100	84-20 ESDI	30	
CONTROL DATA	5	94156-67 WREN II	67.4	—	1175	100	83-20 ST412	40	
CONTROL DATA	5	9415-328 WREN	28.0	—	2255	100	84-20 ST412	30	
CONTROL DATA	5	94155-86 WREN II	86.7	—	1455	100	84-20 ST412	40	
CONTROL DATA	5	94155-67 WREN II	67.4	—	1455	100	84-20 ST412	30	
CONTROL DATA	5	94156-48 WREN II	48.1	—	1270	100	84-20 ESDI	30	
CONTROL DATA	5	9415-335 WREN	36.0	—	1225	100	83-20 FINCH	40	
CONTROL DATA	5	94156-86 WREN II	86.7	—	2255	100	84-20 ESDI	30	
CONTROL DATA	5	94155-48 WREN II	48.1	—	1270	100	84-20 ST412	30	
CONTROL DATA	8	9720 SHD	368.0	—	4850	100	85-40 SHD, SHD-E	18	
CONTROL DATA	8	9457 LANK	25.0	25.0	3440	100	82-40 LDI, SHD	35	
CONTROL DATA	9	9710 RSD	—	82.9	—	4915	100	83-10 SHD/ISI	30
CONTROL DATA	9	9715-500 FSD	516.0	—	8530	100	83-40 HDD SHD/ISI	20	
CONTROL DATA	9	9715-160 FSD	163.9	—	4960	100	82-40 SHD/ISI	30	
CONTROL DATA	9	9715-340 FSD	344.0	—	7290	100	83-40 SHD/ISI	20	

1985 OEM FLEXIBLE DISK DRIVES

MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC
			IN.	F	\$	Q			
CDC	5.25	9429	0.50	1.00	195	1000	83-40	2/80	15
CDC	5.25	9408	0.13	0.25	190	1000	80-10	1/40	15
CDC	5.25	9409-T	0.50	1.00	225	1000	81-XX	2/80	15
CDC	5.25	9409	0.25	0.50	196	1000	80-XX	2/40	15
CDC	5.25	9428	0.25	0.50	163	1000	83-40	2/40	15
CDC	8	9406-4	0.80	1.60	310	500	81-XX	DISKETTE 1,2,2D	15
CDC	8	94048	0.40	0.80	373	500	79-20	CDC 9821/9823	75

1985 OEM TAPE DRIVES

MANUFACTURER	MODEL	DATABASE CLASS	CAPACITY (MB)	I/O INTERFACE	FCS	PRICE	
						\$	UNITS
CDC	92141	H/TA/PE	46/23 U	PERTEC	80-40	3625	1
CDC	92148	H/TA/PE	46/23 U	PERTEC	80-40	2785	1
CDC	92146	H/TA/PE	46/23 U	PERTEC	80-40	2785	1
CDC	92149	H/TA/PE	46/23 U	PERTEC	80-40	2785	1
CDC	92144	H/TA/PE	46/23 U	PERTEC	80-40	3625	1
CDC	92143	H/TA/PE	46/23 U	PERTEC	80-40	3625	1
CDC	92142	H/TA/PE	46/23 U	PERTEC	80-40	3625	1
CDC	92147	H/TA/PE	46/23 U	PERTEC	80-40	1785	1
CDC	92322	H/VC/PE	46.00 U	PROPRIETARY	78-XX	—	—
CDC	92181	H/STR/PE	46.00 U	PERTEC	83-20	2880	1
CDC	94144	H/TA	46.00 U	PERTEC	79-40	5000	1
CDC	94149	H/TA	46.00 U	PERTEC	79-40	5000	1
CDC	92180	H/STR/PE	46.00 U	PERTEC	81-20	2750	100
CDC	92332	H/VC/PE	46.00 U	PROPRIETARY	78-XX	—	—
CDC	92312	H/VC/PE	46.00 U	PROPRIETARY	78-XX	—	—
CDC	92190	Q/STR/F	48.70 F	PROPRIETARY	82-20	940	100
CDC	92192	Q/STR/F	68.00 F	PROPRIETARY	82-20	1020	100
CDC	92324	H/VC/GCR	180.00 U	PROPRIETARY	78-XX	—	—
CDC	92185	H/STR/GCR	180.00 U	PERTEC	83-40	6150	100
CDC	92314	H/VC/GCR	180.00 U	PROPRIETARY	78-XX	—	—
CDC	92334	H/VC/GCR	180.00 U	PROPRIETARY	78-XX	16000	100

U.S. OEM Sales Offices

Arizona
Tempe
(602) 968-8791

California
Irvine
(714) 851-5806
Los Angeles
(213) 642-2222
Sacramento
(916) 929-4433
San Diego
(619) 585-8300
Sunnyvale
(408) 744-5244
Colorado
Denver
(303) 779-2800

Maryland
Rockville
(301) 468-9000

Massachusetts
Boston
(617) 890-4800

Minnesota
Minneapolis
(612) 835-8262

New Jersey
Edison (N.Y. area)
(201) 225-8100

New York
Albany
(518) 786-3317

Connecticut
Glastonbury
(203) 633-6781
Greenwich
(203) 822-2440

Florida
Coral Springs
(305) 753-2030
Tampa
(813) 879-7672

Georgia
Atlanta
(404) 399-2217

Illinois
Chicago
(312) 980-7545

Oregon
Portland
(503) 297-4591

Pennsylvania
Valley Forge
(215) 666-5000

Texas
Austin
(512) 345-9880
Dallas
(214) 385-5822
Houston
(713) 985-5400
San Antonio
(512) 225-8300

CONTRACTS

DISKS

SUPPLIER	DATE	CUSTOMER	\$M	DIA "	CAP. (MB)	DURATION	NOTES
CDC	84-XX T1		7	5.25	21,36		WINNER UNKNOWN
CDC	84-09 HP		5	5.25			

TAPE

Control Data in Deal with Apollo

Control Data Corporation (CDC) said it received a multimillion-dollar OEM contract to supply Apollo Computer with its Keystone series 1/2-inch tape drives. Under the multiyear agreement--terms of which were not disclosed--CDC will ship an unspecified number of Keystone tape drives for use in Apollo's Domain family of 32-bit workstations. The CDC tape drive will serve as a backup storage for CDC's fixed disk drives in the Domain systems.
(CSN, 12/09/85)

ACTIVITIES

Introduced the Wren 2SL half-height 5 1/4" disk drive featuring 51MB of capacity and an ST506 interface. It is priced at \$800 for quantity deliveries. Volume production will begin in the first quarter of 1986. The firm also introduced the Wren 3 full-height 5 1/4" Winchester disk drive, which features 182MB of storage and an ESDI interface. It is priced at \$1,500. Volume production will begin in the second quarter of 1986. EN Nov. 18, pg. 37

Will shut down its Magnetic Peripherals plant in Santa Clara, CA, by next July and lay off the 1,100 employees at the facility, in the company's ongoing efforts to control costs. CSN Oct. 7, pg. 1; CW Oct. 7, pg. 2; EN Oct. 7, pg. 1

IBM Mini Gets CDC Disk System

Control Data Corporation (CDC) has announced its first 5.25-inch fixed disk memory system for IBM's Series/1 minicomputer. The CDC Certainty 220, available to OEMs and end users, provides up to 64.5 Mbytes of storage capacity and works in combination with the existing Certainty 810 tape backup system. The Certainty 220 disk system is based on the same technology as CDC's Wren 5.25-inch Winchester disk drive. Prices for the disk drive range from \$6,500 to \$9,285, depending on the quantity ordered. (CW, 11/11/85, pg.41)

CDC Resuming R&D in 3.5-inch Winchester Drives

Control Data Corporation (CDC) has resumed in-house micro-Winchester research and development and is expected to enter the OEM 3.5-inch Winchester market by 1987 with units in the 60- to 80-Mbyte capacity range. Separately, CDC showed potential OEM customers a 300-Mbyte, 9-inch fixed rigid disk storage device--the FSD-300--which is plug interchangeable with its SMD-300 14-inch removable device. The unit will be in volume production in the first quarter of 1986 and priced at approximately \$5,500 in OEM quantities of 250, compared with the \$8,500 to \$9,000 price that the 14-inch version has carried.
(EN, 11/25/85, pg.16)

Hitachi, Ltd.

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 Exec Mgn Dir—Takeo Miura
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Hitachi had cause for celebration in 1984. During its 75th anniversary, Hitachi's revenues rose by an estimated 15% to \$21.05 billion (¥5 trillion), while profits advanced more than 17% to \$824.8 million. Not bad, considering that the previous year Japan's number four computer maker was eating humble pie after getting fingered by IBM for stealing software. The resulting settlement with IBM barely caused a ripple in the 1984 cash flow. Rewriting software took time, but absorbing a lesson in humility made Japan's giant energy and electronics conglomerate reconsider the rough and tumble nature of the pcm business.

The electronics division that includes Hitachi's computer business accounts for about 60% of total profits but only 31% of total sales. Semiconductors have been the real cash cow. Lavish R&D expenses, growing about 12% annually, help Hitachi keep up with and occasionally set the pace for competitors. This R&D spending has helped the company develop a technological autonomy unusual for a Japanese corporation. Hitachi poured mega-yen into developing gallium arsenide LSI and Josephson junction gate arrays. Profit margins improved with a shift from 64K to 256K DRAM production in 1984. This didn't hurt Hitachi's computer business a bit, since nearly 75% of Hitachi's semiconductors find their way into the company's computer wares.

Hitachi played on price/performance to eat into IBM's mainframe market share both at home and abroad. Computer exports jumped 16%, with North American partner National Advanced Systems taking about half of those shipments. BASF and Olivetti in Europe took most of the other half. China and other Southeast Asian nations purchased some small systems directly from Hitachi.

Advanced thin-film magnetic head technology allowed Hitachi to increase sales of IBM 3380-compatible storage devices by more than 30% in 1984. The unveiling of erasable optical disk prototypes showed Hitachi's potential in peripherals. Toward the end of the year Hitachi hinted that shipments would begin by the end of 1985.

Under the terms of the IBM settlement, the company must allow Big Blue to scrutinize any of its new products. That doesn't seem to frighten Hitachi, which is gaining confidence in its software capability. Indeed, last year Hitachi software engineers matched IBM's extended channel architecture and helped prepare a response to Big Blue's Sierra. The much touted Hitac S-810/20 supercomputers found homes at Japanese universities and at Hitachi research labs. Software development at Hitachi focused on developing in-house programming productivity tools and expert systems applications in the sluggish nuclear power industry.

Hitachi, which derived less than 10% of its '84 revenues from telecom sales, is notoriously weak on the communications side. This weakness promises to slow Hitachi's efforts to sell integrated data processing systems.

Business Summary

Hitachi is Japan's largest diversified manufacturer of electronic and electrical products. Sales by product lines in the past two fiscal years:

	1984-5	1983-4
Power systems & equipment..	14%	17%
Consumer products.....	22%	21%
Information & communication systems, and electronic devices.....	30%	27%
Industrial machinery and plants.....	16%	17%
Wire & cable, metals, chemicals, and other	18%	18%

Income Data (Million \$)

Year Ended Mar. 31'	Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	Net Inc.	% Net Inc. of Revs.
1984	20,053	2,893	14.4%	1,821	1,105	320	\$2,035	53.1%	841	4.2%
1983	19,410	2,560	13.3%	1,696	988	367	\$1,810	52.3%	743	3.8%
1982	18,432	2,117	12.9%	1,386	698	349	\$1,573	52.7%	627	3.8%
1981	16,411	1,976	12.8%	1,026	581	368	\$1,426	52.3%	571	3.7%
1980	15,996	1,999	11.9%	1,022	554	446	\$1,448	50.3%	615	3.8%
1979	13,388	1,665	12.4%	688	452	319	\$1,237	50.9%	524	3.9%
1978	12,260	1,502	12.3%	576	404	282	\$1,090	51.1%	462	3.8%
1977	10,804	1,183	11.0%	482	349	329	\$ 805	51.1%	354	3.3%
1976	8,022	917	11.4%	348	257	292	\$ 567	51.8%	253	3.2%
1975	6,005	626	10.4%	243	218	290	\$ 320	52.0%	137	2.3%

Balance Sheet Data (Million \$)

Mar. 31'	--- Current ---				Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
	Cash	Assets	Liab.	Ratio							
1984	4,727	13,274	10,018	1.3	20,296	4.1%	1,292	6,549	9,134	14.1%	13.0%
1983	4,510	13,463	10,198	1.3	20,494	3.9%	1,445	6,409	9,153	15.8%	12.6%
1982	3,516	11,378	8,782	1.3	17,330	3.7%	1,089	5,402	7,595	14.3%	12.2%
1981	3,644	11,180	8,578	1.3	16,358	3.4%	1,079	4,825	6,900	15.6%	11.8%
1980	3,347	11,014	8,693	1.3	16,281	4.0%	1,122	4,693	6,657	16.8%	14.2%
1979	2,767	9,646	7,660	1.3	14,117	3.8%	1,149	3,912	5,682	20.2%	13.9%
1978	2,889	8,811	7,036	1.3	13,264	3.7%	1,338	3,806	5,481	24.4%	13.8%
1977	2,400	7,533	6,057	1.2	11,561	3.5%	1,416	3,044	4,881	29.0%	13.6%
1976	1,688	5,859	4,693	1.2	8,841	3.1%	1,159	2,167	3,595	32.2%	12.7%
1975	1,564	5,122	4,069	1.2	7,586	1.9%	1,031	1,802	3,041	33.9%	7.7%

Data as orig. reptd. 1. Of fol. cal. yr. 2. Ret. on equity in earn. of nonconsol. subs.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB(UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
HITACHI, LTD.	14	DKU-97S	697.0	—	—	—	83-30	SMD	20
HITACHI, LTD.	14	H-8576-12	635.0	F	—	—	80-40	IBM	20
HITACHI, LTD.	14	DKU-981	1260.0	F	—	—	82-40	IBM	16
HITACHI, LTD.	14	H-8576-22	635.0	F	—	—	80-40	IBM	20
HITACHI, LTD.	14	H-8598-22	1260.0	F	—	—	82-40	IBM	16
HITACHI, LTD.	14	DKU-971	635.0	F	—	—	81-10	IBM	20
HITACHI, LTD.	14	H-8598-12	1260.0	F	—	—	82-40	IBM	16
HITACHI, LTD.	3	DK301-1 (HH)	12.7	—	550	100	85-20	ST412	85
HITACHI, LTD.	3	DK301-2	19.1	—	675	100	85-20	ST412	85
HITACHI, LTD.	5	DK505-2 (HH)	25.6	—	875	100	85-10	ST412	85
HITACHI, LTD.	5	DK502-1	13.3	—	—	—	83-40	ST506	85
HITACHI, LTD.	5	DK511-8	85.7	—	2275	100	—	SCSI/ST506	30
HITACHI, LTD.	5	DK512-12	120.0	—	2775	100	85-10	ESDI	23
HITACHI, LTD.	5	DK512-8	85.7	—	2475	100	85-10	ESDI	23
HITACHI, LTD.	5	DK502-3	26.6	—	—	—	83-40	ST506	85
HITACHI, LTD.	5	DK503-2 (HH)	13.3	—	—	—	83-40	ST506	85
HITACHI, LTD.	5	DK503-1	6.7	—	—	—	83-40	ST506	85
HITACHI, LTD.	5	DK502-2	20.0	—	—	—	83-40	ST506	85
HITACHI, LTD.	5	DK511-5	51.0	—	—	—	84-10	SCSI/ST506	30
HITACHI, LTD.	5	DK511-3	36.4	—	—	—	84-10	SCSI/ST506	30
HITACHI, LTD.	5	DK512-17	171.0	—	—	—	85-10	ESDI/SMD/SCSI	30
HITACHI, LTD.	8	DK812S-5	51.0	—	—	—	83-30	SMD	25
HITACHI, LTD.	8	DK811-4	48.0	F	—	—	80-40	SMD/MOD	25
HITACHI, LTD.	8	DK811-2	24.0	F	—	—	80-40	SMD/MOD	25
HITACHI, LTD.	8	DKU-80	427.7	—	—	—	83-40	IBM/SMD	18
HITACHI, LTD.	8	DK814S-17	170.0	—	4325	100	84-40	SMD-E	20
HITACHI, LTD.	8	DK814S-34	340.0	—	5250	100	84-40	SMD-E	20
HITACHI, LTD.	8	DK812S-17	170.1	—	—	—	83-20	SMD	25
HITACHI, LTD.	8	DK811-8	89.1	F	—	—	82-10	SMD/MOD	25
HITACHI, LTD.	8	DK814S-24	234.0	—	4650	100	84-40	SMD-E	20
HITACHI, LTD.	8	DK812S-8	85.0	—	—	—	83-30	SMD	25
HITACHI, LTD.	8	DK812S-12	119.0	—	—	—	83-20	SMD	25
HITACHI, LTD.	9	DK815-5	525.0	—	—	—	84-40	MOD.SMD/IP1-3	18

1985 OEM FLEXIBLE DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB(UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
HITACHI	3	HFD 305SX	0.13	0.25	—	—	82-30	MAXELL FLOPPY CD	15
HITACHI	3	HFD 309D	0.25	0.50	—	—	83-40	MAXELL FLOPPY CD	15
HITACHI	5.25	HFD 516C	0.80	1.60	—	—	83-20	MAXELL HD2-HD	15
HITACHI	5.25	FDD 541	6.50	—	—	—	85-10	MAXELL HD2-EH	2
HITACHI	5.25	HFD 516DA	1.00	1.60	—	—	85-20	MAXELL HD2-HD	15
HITACHI	5.25	HFD 510C	0.50	1.00	—	—	83-40	Z/80	15
HITACHI	5.25	HFD 505C	0.25	0.50	—	—	82-30	Z/40	15
HITACHI	8	FDD-441	9.60	—	700	500	84-10	MAXELL FD2-HD	2

OPTICAL DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	CAPACITY (MB)		PRICE		FCS	INTERFACE	AVE. ACCESS (msec)
			FRMT	RAW	\$	Q			
HITACHI	12	OD301-1	1311	—	7500	100	84-20	SMD, GP1B	200
HITACHI	4	—	225	—	—	—	8X-XX	—	100
HITACHI	4	CDR-1502S	552	—	800	1000	85-10	IBM PC	500
HITACHI	4	CDR-2500	552	—	500	100	85-30	SCSI	500

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CONTRACTS

DISKS

Hitachi Signs Deals with NCR, Tandem

Hitachi America has signed OEM agreements with NCR and Tandem Computers to supply hard disk drives. The \$25 million, three-year agreement with NCR calls for Hitachi's 8-inch Winchester disk drive to be integrated into NCR's 6099 storage subsystem for its mini- and mainframe computers. Hitachi will begin shipping the drives in the third quarter. Hitachi will supply the same product to Tandem for its new NonStop EXT computer system over a three-year period. The value of the contract was not disclosed.
(MIS, 05/15/85)

ACTIVITIES

Hitachi-Maxell Develops 2.5-inch Flexible Diskette

Hitachi-Maxell has developed a 2.5-inch flexible diskette with a capacity of 0.5 Mbytes and 200 tpi. The diskette will also have a hard jacket.
(JNS, 09/27/85)

Announced that it will begin manufacturing mainframe disk storage units at a plant in Norman, OK, in 1987, under a new subsidiary, Hitachi Computer Products America. The company also announced an agreement with Sperry to "explore mutually beneficial research and marketing ventures." CSN Dec. 2, pg. 8; CW Dec. 2, pg. 93

Int'l Business Machines

INTERNATIONAL BUSINESS MACHINES CORP.

Old Orchard Rd., Armonk, N. Y. 10504
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Yes, IBM can fail, as it finally proved with its PCjr. Yet that blot hardly obscures the firm's successes throughout last year. Revenues and profits continued their upward spiral, overcoming the drag of currency translations that affected 40% of its business. Total corporate revenues reached \$45.94 billion, up 14% over 1983. Earnings did even better, up 20% to \$6.58 billion. DATAMATION estimates that dp revenues increased 21% to \$44.29 billion. The company completed the largest acquisition in its 70-year history. It introduced key new products in all areas, and paved the way for the early 1985 debut of the Sierra generation of mainframes. It reached a settlement with the European Commission, ending the Common Market's four-year-old antitrust case. It continued to develop new technologies, such as a 1Mb memory chip. And it introduced a raft of micro products that helped increase its domination of the pc industry.

The Rolm merger cost \$1.26 billion and required administrative reshuffling to transform the Santa Clara firm into a true-Blue IBM operation, but in return it gave IBM an entrée into the PBX market.

IBM itself trotted out key new products, more sharply defining those it considered strategically important. Mainframe introductions included the 308xx interim series, several 4300 models, the 3480 tape cartridge subsystem, and cache-equipped models of the 3880 disk controllers.

In the middle of its line, IBM positioned the System/36 as its choice for departmental level and small business applications. In data communications, the IBM Cabling System disappointed many who had expected the token passing ring network, now scheduled for 1986. In software, IBM extended PROFS and DISOSS to enable mainframes, System/36s, and PCs to interchange final-form documents.

The feisty Entry Systems Division debuted the PC AT—an 80286-based multi-user pc—but supplies dried up due to disk shortages. ESD also premiered its PC Network, developed in conjunction with Sytek, to connect as many as 72 PCs. IBM also entered the micro software market in a big way, at one point bringing out 31 programs. The company shipped nearly 2 million PCs in 1984.

Outside the U.S., the PC finally achieved domination in worldwide micro sales. The EC settlement enabled the company to sell unhindered; the constraint was that it now has to provide detailed interface specs 120 days after product announcements.

The firm realigned its management structure to give more responsibility to foreign operating units, dividing its European operations into five relatively autonomous groups and its Americas/Far East subsidiary into three groups.

The Asia/Pacific unit remained the only subsidiary unable to dominate its market. Since 1979, the unit has trailed Fujitsu in Japanese sales, despite locally developing and manufacturing most of its products like the 5550 kanji workstation and JX pc.

- * Pres & Chief Exec Officer—John F. Akers
- * Chrm—John R. Opel
- * Vice-Chrm—Paul J. Rizzo
 - Sr V-P & Group Exec—C. Michael Armstrong
- * Sr V-P—George B. Beitzel
 - Sr V-P & Group Exec—John E. Bertram
 - Sr V-P—Kasper V. Cassani
 - Sr V-P—Ralph E. Gomory
- * Sr V-P (Law & External Rel)—Nicholas deB. Katzenbach
 - Sr V-P (Fin & Plan)—Allen J. Krowe
 - Sr V-P—Jack D. Kuehler
 - Sr V-P—Ralph A. Pfeiffer, Jr.
- * Sr V-P—Dean P. Phipps
 - Sr V-P & Group Exec—Clarence B. Rogers, Jr.
 - V-P & Group Exec—George H. Conrades
 - V-P & Group Exec—Carl J. Conti
 - V-P & Group Exec—Frank A. Metz, Jr.
 - V-P & Secy—John H. Grady
 - V-P & Cont—James J. Forese
 - V-P & Gen Coun—Donato A. Evangelista

Business Summary

IBM is the largest manufacturer of data processing equipment and systems. Industry segment contributions in recent years:

Gross revenues	1984	1983
Processors/peripherals	51%	54%
Office products	21%	20%
Programs/maint./other	24%	23%
Federal systems	4%	3%

Sales provided 65% of revenues in 1984, rentals 14%, and services 21%. Foreign operations contributed 40% of revenues and 39% of profits.

Income Data (Million \$)

Year Ended Dec. 31	Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	Net Inc.	% Net Inc. of Revs.
1984	45,937	14,704	32.0%	6,276	3,473	408	21,623	43.4%	6,582	14.3%
1983	40,180	13,262	33.0%	4,930	3,673	390	9,940	44.8%	5,485	13.7%
1982	34,364	11,199	32.6%	6,685	3,143	514	7,930	44.4%	4,409	12.8%
1981	29,070	8,928	30.7%	6,845	2,899	480	5,988	44.8%	3,308	11.4%
1980	26,213	8,102	30.9%	6,592	2,362	325	5,897	39.6%	3,562	13.6%
1979	22,863	7,215	31.6%	5,991	1,970	140	5,553	45.8%	3,011	13.2%
1978	21,076	7,265	34.5%	4,046	1,824	55	5,798	46.3%	3,111	14.8%
1977	18,133	6,657	36.7%	3,395	1,999	40	5,092	46.6%	2,719	15.0%
1976	16,304	5,928	36.4%	2,518	1,858	45	4,519	46.9%	2,398	14.7%
1975	14,437	5,245	36.3%	2,439	1,822	63	3,721	46.5%	1,990	13.8%

Balance Sheet Data (Million \$)

Dec. 31	Cash	Assets	Current Liab.	Ratio	Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
1984	4,362	20,375	9,640	2.1	42,808	16.4%	3,269	26,489	31,815	10.3%	26.4%
1983	5,536	17,270	9,507	1.8	37,243	15.6%	2,874	23,219	26,606	10.1%	25.2%
1982	3,300	13,014	8,209	1.6	32,541	14.1%	2,851	19,960	23,134	12.3%	22.9%
1981	2,029	10,303	7,320	1.4	29,586	11.7%	2,669	18,161	21,082	12.7%	19.0%
1980	2,112	9,925	6,526	1.5	26,703	13.9%	2,099	16,453	18,734	11.2%	22.7%
1979	3,771	10,851	6,445	1.7	24,530	13.3%	1,589	14,961	16,690	9.5%	21.2%
1978	4,031	10,321	5,810	1.8	20,771	15.7%	286	13,494	13,889	2.1%	24.0%
1977	5,407	10,073	5,209	1.9	18,978	15.0%	256	12,618	12,962	2.0%	21.7%
1976	6,156	9,920	4,082	2.1	17,723	14.4%	275	12,749	13,088	2.1%	19.8%
1975	4,768	8,115	3,363	2.1	15,531	13.4%	295	11,416	11,756	2.5%	18.4%

Data as orig. reptd. 1. Reflects accounting c. 2. Ret. on assets incl. equity in earn. of nonconsol. subs. 3. Net of interest income.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
IBM	8	5525-040	64.5 F	—	—	—	80-40	IBM	27
IBM	8	5525-050	64.5 F	—	—	—	80-40	IBM	27
IBM	8	676	38.6	—	2750	100	82-40	IBM	38

ACTIVITIES

IBM Comes Out with a Barrage of New Products

The announcements IBM made January 21, 1986, included a 55-Mbyte streaming tape drive thought to be made by Cipher Data Products and the company's first ever 3.5-inch microflexible featured in a new version of its 5085 graphics system. The PC RT models include the 6150 Model 20, a floor-standing model that also comes standard with a 40-Mbyte disk drive. Two 70-Mbyte Winchesters can be added to boost its storage capacity to 180 Mbytes. The floor-mounted model sells for \$14,945. The 6150 Model 25 and Model A25, both of which also sit on the floor, are available with up to 210 Mbytes of storage consisting of three 70-Mbyte disk drives. IBM said it will offer quantity discounts of up to 34 percent on its PC RT units. All of the PC RT models are equipped with a 1.2-Mbyte 5.25-inch diskette drive, with an optional 360-Kbyte diskette designed to allow the PC RT to run PC DOS programs used on PCs and PC XT's. IBM enhanced its System/36 by offering almost twice the maximum 800 Mbytes of disk storage formerly offered on its high-end Model 5360. The enhanced version can be equipped with up to 1,432 Mbytes of disk capacity. Also, IBM is now offering the 6157, a 1/4-inch 55-Mbyte streaming tape drive to back up the System/36 and the PC RT. It is priced at \$1,795.

IBM Developing 20-Mbyte, 3.5-inch Drive in Japan

IBM is developing a 20-Mbyte, 3.5-inch Winchester at its facility in Fujiwasa, Japan, for use as a mid-life enhancement on its PC XT. The drive is expected to be available by the third quarter. In its Japanese PC, IBM Japan currently uses 3.5-inch flexible drives supplied by Matsushita. It has been stated that SyQuest Technology is supplying IBM with its 5- and 10-Mbyte removable Winchesters. (EN, 11/25/85, pg.16)

IBM Cuts Price on Double-Capacity DASD

IBM cut the price of its double-capacity 3380 Direct Access Storage Device (DASD) by approximately 10 percent. IBM began shipping its double-capacity DASD early in October, one quarter ahead of schedule, placing added pressure on the plug-compatible vendors. Effective immediately, IBM has reduced the quantity one purchase price of its double-capacity 3380E lead drive, AE4, from \$134,740 to \$122,480 and the price of a BE4 string drive from \$110,400 to \$98,140. At the same time, IBM decreased the prices of its 3880 cache controllers (EN, 10/28/85, pg.20)

IBM Adds First Microflexible Support

IBM has announced its long-anticipated initial implementation of a microflexible disk drive. Introduced as a component of the 5085 graphics processor, the 3.5-inch flexible disk drive provides 720 Kbytes of formatted capacity. An IBM spokeswoman confirmed that the drive is being made by an outside vendor, which she declined to identify. She noted that the disk drive is being used to hold the 5085's microcode and is not for customer use. However, IBM is known to be using 3.5-inch flexibles from Matsushita Electric for the JX version of the PCjr. That IBM brought out its first 3.5-inch flexible disk drive with graphics processor puzzled many industry watchers, who noted that the diskettes are not interchangeable with any other current IBM system.

Maxtor Corp.

THE COMPANY

Maxtor Corporation designs, manufactures and markets high-capacity, high-performance 5¼-inch Winchester disk drives. The Company is shipping the highest capacity 5¼-inch Winchester disk drives currently available in the marketplace and believes it is the leading supplier in the high capacity (over 100 megabyte) segment of that market. Maxtor's three product lines, the XT-1000, XT-2000 and EXT-4000, are designed to provide capacities between 85 megabytes and 380 megabytes. Maxtor has shipped over 35,000 XT-1000 drives with capacities up to 140 megabytes. The XT-2000, with capacities up to 190 megabytes, is in pilot production, and limited shipments of evaluation units of the EXT-4000, with capacities up to 380 megabytes, have commenced.

Maxtor's disk drives are used in sophisticated computer applications such as artificial intelligence; computer-aided design ("CAD"), manufacturing ("CAM") and engineering ("CAE"); multi-user business systems; digital voice and sound storage; high resolution graphics; and local area networks. These types of applications have required increasingly greater storage capacity. Recognizing this need, Maxtor's strategy has been to apply emerging disk drive technologies to create the highest-capacity 5¼-inch disk drives, using an architecture which allows the Company to create new products having substantially increased storage capacity with minimal redesign of the basic drive.

Business Summary

Maxtor Corporation designs and manufactures high-capacity, high-performance 5¼-inch Winchester disk drives. From the inception of Maxtor's business on June 8, 1982, to March 27, 1983, activities were in the development stage and no revenues were generated. Maxtor shipped its first product during the 1983-4 fiscal year.

As of mid-November 1985, Maxtor had four available product lines of high-capacity Winchester disk drives, consisting of the XT-1000, XT-2000, XT-3000 (introduced in November 1985; see Important Developments), and EXT-4000. At that time, the company had shipped over 50,000 XT-1000 drives, which offer capacities of 85 to 140 megabytes. In addition, Maxtor began volume shipments of the XT-2000 family (with capacity of up to 190 megabytes) in August 1985, and the EXT-4000 evaluation units (capacity of up to 380 megabytes) in September 1985. The company expected volume production of the XT-3000 to begin in the first quarter of 1986-7. Management believed that Maxtor was the leading supplier in the high-capacity (over 100 megabyte) segment of its market.

Maxtor's disk drives are used in sophisticated computer applications such as artificial intelligence; computer-aided design (CAD), manufacturing (CAM) and engineering (CAE); multi-user business systems; digital voice and sound storage; high-resolution graphics; and local area networks. Output is sold to a broad range of original equipment manufacturers (OEMs) by a direct sales force and through distributors. For 1984-5, direct sales to more than 40 OEMs accounted for some 52% of operating revenues; sales through distributors to domestic OEMs for 35%, with sales through Anthem Electronics and Pioneer-Standard Electronics to about 250 OEMs representing 20% and 11%, respectively; and foreign business for 13%. Manufacturing operations are conducted in San Jose, Calif., and in Singapore.

Executive Officers and Directors

Name	Position
James M. McCoy.....	President and Director
Jack S. Swartz	Senior Vice President, Advanced Development
Robert G. Teal.....	Vice President, Marketing and Product Assurance
William J. Dobbin ...	Vice President, Finance and Administration, Secretary, Treasurer
Steven P. Kitrosser ...	Vice President, Manufacturing
Richard T. Jessen	Vice President, Corporate Development and Planning
W. Charles Hazel	Director
B. J. Cassin	Director

Important Developments

Nov. '85—The company introduced the XT-3000 line of high-capacity Winchester drives. Scheduled for volume production in the first quarter of 1986-7, the XT-3000's have capacities of 170 to 280 megabytes and feature an embedded small computer system interface controller.

Income Data (Million \$)

Year Ended Mar. 31	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Tot. Taxes	GR. Yr. Rate	Net Inc.	% Inc. of Revs.
1985	43.8	1.6	3.6%	4.49	1.18	0.48	6.9	68.7%	NM	0.1%
1984	8.1	d12.4	NM	2.31	0.53	0.04	d12.6	NM	d12.6	NM
1983	NM	d2.1	NM	0.22	0.03	NM	d2.1	NM	d2.1	NM

Balance Sheet Data (Million \$)

Mar. 31	Cash	--- Current ---		Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Debt	% LT Debt of Cap.	Ret. on Equit
		Assets	Liab.							
1985	0.54	22.3	9.93	2.2	29.0	0.2%	2.07	117.0	18.1%	0.3%
1984	1.76	12.2	3.48	3.5	15.2	NM	0.34	111.4	11.7%	2.9%
1983	NA	NA	NA	NA	1.1	NM	NM	0.7	0.7%	NM

Data as reported in prospectus dated 6-7-85 6-17 (caption 6-6-82, 2. Incl. pfd. stk. (conv. into com. upon filing), 100-1000 shares) Incl. NA-Not Available. d-Deduct.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA	MODEL	MB(UNF)		PRICE		FCS	INTERFACE	ACC
			F	R	\$	Q			
	IN.								mS
MAXTOR	5	XT-1140	143.6	—	3430	100	83-2Q	ST506	30
MAXTOR	5	XT-2140	140.2	—	2930	100	84-3Q	ST506	30
MAXTOR	5	EXT-4280	280.5	—	4960	100	84-4Q	ESDI	30
MAXTOR	5	XT-1105	105.3	—	2660	100	83-2Q	ST506	30
MAXTOR	5	XT-2085	89.2	—	2080	100	84-3Q	ST506	30
MAXTOR	5	XT-2190	191.2	—	3775	100	84-3Q	ST506	30
MAXTOR	5	EXT-4125	127.3	—	2535	100	84-4Q	ESDI	29
MAXTOR	5	EXT-4175	178.5	—	3550	100	84-4Q	ESDI	30
MAXTOR	5	EXT-4380	382.5	—	6165	100	84-4Q	ESDI	30
MAXTOR	5	XT-1085	85.3	—	1890	100	83-2Q	ST412	28

CONTRACTS

DISKS

Maxtor Signs Three OEM Pacts

Maxtor said it has begun deliveries under three new two-year OEM contracts with a total potential value of \$10 million. Workstation manufacturer Calma, supermicrocomputer maker Applied Digital Data Systems, and systems vendor Lanier Business Systems Division have agreed to buy Maxtor's XT-1000 and XT-2000 drives. Calma uses Maxtor 85- and 140-Mbyte disk drives in its GDSII/32 32-bit workstation. Applied Digital Data, a subsidiary of NCR, also will use 140-Mbyte units from both product lines in its Mentor family of multiuser business systems. Harris subsidiary Lanier uses Maxtor's 140-Mbyte XT-1140 in the Concept 6000 controller for its 168-station base-band network. (CSN, 12/30/85)

Signed three multiyear OEM contracts worth an aggregate of \$10 million with subsidiaries of General Electric, NCR, and Harris, to supply a mix of its high-capacity, 5 $\frac{1}{4}$ " Winchester disk drives. EN Dec. 16, pg. 29

✓ Maxtor Gains Access to Brazilian Market

Maxtor has inked an agreement with a Sao Paulo-headquartered supplier of automated banking systems, gaining access to Brazil's tightly controlled market for disk drives. Digirede S.A. has started purchasing completed drives from Maxtor for incorporation in its systems. Between now and the end of 1986, it plans to begin producing Maxtor-designed Winchester disk drives in stages entirely on its own. The agreement is estimated to be worth about \$5 million to Maxtor by year-end 1986. (CSN, 11/25/85, pg. 22)

Maxtor Gets IBM Accord

Maxtor has won an OEM contract to supply its high-performance 5.25-inch Winchester disk drives to IBM, reportedly for new graphics and instrumentation products. The contract is believed to cover Maxtor's 85- and 140-Mbyte 5.25-inch drives. While Maxtor officials declined to estimate the value of the IBM agreement, they said it will not exceed 15 percent of the company's business. Maxtor has confirmed orders for \$40 million worth of disk drives in 1985. The drives will be used in new IBM products that have not yet been disclosed. Maxtor is currently in volume production of its 85- and 140-Mbyte drives, and in low volume production of its 190-Mbyte drive. Maxtor is currently manufacturing about 140 drives per day. (EN, 05/13/85)

ACTIVITIES

Will introduce the XT-3000 series of 5 $\frac{1}{4}$ ", SCSI-compatible Winchester disk drives with 170MB and 280MB of unformatted capacity. Pricing will be between \$3,000 and \$5,000 in quantities of 100 and volume production will begin in the first quarter of 1986. EN Nov. 11, pg. 20

Micropolis Corp.

MICROPOLIS CORP.

21123 Nordhoff St., Chatsworth, Cal. 91311
Tel. 818-709-3300

*Chrm & Pres—S. P. Mabon
*V.P & Secy—E. M. Dunstan
V.P & Chief Fin Officer—D. I. Flaherty
V.P—Chester Baffa
V.P—Constance J. Friedman
V.P—Edwin P. Heacox
V.P—S. T. Schell
V.P—P. N. Vicars

Micropolis Corporation produces and markets disk drives for use by original equipment manufacturers (OEMs) in minicomputer systems and in microcomputer systems such as personal and small business computers, professional workstations and word processors. Products are Winchester-technology, rigid disk drives for the high-capacity, high-performance segments of their market.

Operations commenced in 1977, when Micropolis introduced a line of high-capacity 5 1/4-inch floppy disk drives. In 1979, the company first marketed its 1200 Series of fast-access eight-inch Winchester disk drives. The company introduced its 110 Series of floppy disks during 1982, while shipments of the company's 1300 Series 5 1/4-inch Winchester drives began in April, 1983. The 1300s became a major source of revenues for Micropolis during 1984, but the company's inability to attain targeted production efficiencies and material costs on the drives dragged down earnings for the year. During 1984, the 1320 series was introduced as an enhanced 5 1/4-inch product with up to 85 megabytes capacity, 28-millisecond average access time and a more cost effective design.

Output is marketed primarily through Micropolis' own sales force, based at offices in California (3), Massachusetts, Florida, Pennsylvania, Germany and England. In addition, members of senior management participate actively in sales to OEM customers. Independent distributors are used to a limited extent in the U.S. and for certain markets abroad. In 1984, the company's major customer was International Computers Limited, which accounted for 16% of sales (22% in 1983).

Important Developments

Nov. '85—Micropolis added a new family of high-performance 5 1/4-inch Winchester disk drives to its product line with the introduction of the SCSI-interfaced 1370 Series. In September, the company announced that it had commenced shipments of its ESDI-interfaced 1350 Series, which extends the capacity of the company's 5 1/4-inch Winchester drives to 170 megabytes.

Income Data (Million \$)

Year Ended Dec. 31	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	Net Inc.	% Net Inc. of Revs.
1984	60.1	d0.21	NM	6.58	1.55	0.09	0.71	NM	0.82	1.4%
1983	51.6	3.68	7.1%	4.87	0.86	0.06	4.55	22.2%	3.54	6.9%
1982	33.0	0.84	2.5%	2.22	0.81	0.14	0.09	10.0%	0.08	0.3%
1981	23.9	0.87	2.8%	1.22	0.34	0.13	0.21	NM	0.25	1.0%
1980	11.5	d0.60	NM	0.94	0.23	0.20	d1.03	NM	d0.51	NM
1979	8.3	NA	NA	NA	NA	NA	1.29	45.8%	0.70	8.4%
1978	3.2	NA	NA	NA	NA	NA	0.44	35.4%	0.29	9.0%

Balance Sheet Data (Million \$)

Dec. 31	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1984	20.0	54.4	6.80	8.0	67.8	1.2%	Nil	60.7	61.0	Nil	1.4%
1983	29.8	60.1	8.12	7.4	68.4	5.2%	Nil	59.8	60.3	Nil	5.9%
1982	4.1	18.4	5.57	3.3	22.7	0.5%	Nil	17.1	17.1	Nil	0.6%
1981	0.5	10.8	3.07	3.5	13.4	2.2%	Nil	10.3	10.3	Nil	3.2%
1980	NA	NA	NA	NA	9.3	NM	1.74	5.1	6.8	25.4%	NM
1979	NA	NA	NA	NA	5.5	19.0%	Nil	3.6	3.6	Nil	28.2%
1978	NA	NA	NA	NA	1.9	NA	Nil	1.3	1.3	Nil	NA

Data prior to 1983 as reprinted in prospectus 6-3-83. 1. Net of int. inc. prior to 1983. NM-Not Meaningful. NA-Not Available. d-Deficit.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC
	IN.		F	R	\$	Q			mS
MICROPOLIS	5	1323A	53.3	—	995	1000	84-2Q	ST412	28
MICROPOLIS	5	1325	85.3	—	1980	100	84-2Q	ST506	28
MICROPOLIS	5	1375	154.0	—	1695	1000	86-1Q	SCSI	28
MICROPOLIS	5	1353A	106.7	—	1495	1000	85-3Q	ESDI	11
MICROPOLIS	5	1323	42.7	—	1600	100	84-2Q	ST506	28
MICROPOLIS	5	1373	77.0	—	1295	1000	86-1Q	SCSI	28
MICROPOLIS	5	1324	64.0	—	1800	100	84-2Q	ST506	28
MICROPOLIS	5	1353	85.3	—	2000	100	85-2Q	ESDI	25
MICROPOLIS	5	1354	128.0	—	2250	100	85-2Q	ESDI	25
MICROPOLIS	5	1374	115.5	—	1610	1000	86-1Q	SCSI	28
MICROPOLIS	5	1354A	149.3	—	1540	1000	85-3Q	ESDI	28
MICROPOLIS	5	1324A	74.7	—	1055	1000	84-2Q	ST412	28
MICROPOLIS	5	1355	170.6	—	2475	100	85-2Q	ESDI	25

REGIONAL OFFICES

Mountain View,
California 94043
(415) 964-8300
Altamonte Springs,
Florida 32714
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King of Prussia,
Pennsylvania 19406
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Irvine,
California 92715-1165
(714) 476-0411

Woburn,
Massachusetts 01801
(617) 933-1665

CONTRACTS

DISKS

SUPPLIER	DATE	CUSTOMER	\$M	DIA "	CAP.(MB)	DURATION	NOTES
MICROPOLIS	85-02	DEC	50-60	5.25	85	3 YRS.	
MICROPOLIS	85-02	SUN		5.25			
MICROPOLIS	85-02	ALTOS		5.25	85		PRIMARY SOURCE
MICROPOLIS	85-02	DG	36	5.25	85		2ND SOURCE
MICROPOLIS	85-02	ATT		5.25	85		2ND SOURCE
MICROPOLIS	85-02	APPOLLO		5.25	85		
MICROPOLIS	85-01	MOSAIC					
MICROPOLIS	85-01	STANDARD EMERALD					
MICROPOLIS	85-01	SYNTREX					
MICROPOLIS	84-XX	QUANTEL	10	5.25			
MICROPOLIS	84-XX	DATA MEDIA	5	5.25	52		DATA M. MODEL #1304
MICROPOLIS	84-XX	APOLLO	10	5.25	25-170		APOLLO 1300 SERIES
MICROPOLIS	84-XX	INT.COM.LTD.	13	5.25			
MICROPOLIS	84-XX	MEAS.SYS/CONT.	1.3	5.25		3 YRS.	
MICROPOLIS	84-XX	TEKTRONIX	10	5.25	52	2 YRS.	
MICROPOLIS	84-XX	HASSCOMP	3.1	5.25			
MICROPOLIS	84-XX	BASIC FOUR	3.5	5.25			

Micropolis to Supply Prime with ESDI Drives

Micropolis has signed Prime Computer as the first customer for its 170-Mbyte 5.25-inch Winchester, marking the industry's first major OEM agreement for a disk drive with the Enhanced Small Device Interface (ESDI). Under a sole-source contract that also covers Micropolis' 85-Mbyte Model 1325, Prime has promised to purchase more than \$5 million worth of Micropolis drives during a three-year period. Orders will be evenly split between the 85-Mbyte, ST 506/412-compatible Model 1325 and the 170-Mbyte ESDI Model 1355. The balance will shift gradually in favor of the ESDI drive. Prime plans to make its own ESDI controller but will use a host adapter card supplied by Emulex. Prime has purchased larger-format drives from Control Data, Priam, and Century Data Systems.

ACTIVITIES

Introduced five 5 1/4" SCSI disk drives, ranging in formatted capacity from 77MB to 154MB. The drives are based on the company's existing head disk assembly and feature a 28 msec. average seek time. Pricing in 2,500-unit quantities ranges from \$1,320 for the 77MB Model 1373 to \$1,625 for the 154MB 1375. Volume production will begin in the third quarter of 1986. CSN Nov. 18, pg. 32

NEC Corp.

NEC CORP.

33-1 Shiba 5-chome, Minato-ku
Tokyo 108, Japan
(81-3) 454-1111

S. Nakanuma (*Pres.*)
E. Neubauer (*Sr. V.P.-Sales, Mktg., Tech. Centers*)
S. Kirimoto (*Sr. V.P. & Chief Fin. Officer*)
T. Arrieta (*V.P.-Ops.*)
T. McDannold (*V.P.-Admin.*)
R. Hinckley (*General Counsel & Sec.*)
F. Jelenko (*V.P.-Mktg.*)
J. Kelley (*V.P.-Tech. Centers*)
R. Condon (*Dir.-Human Resources*)
L. Cogswell (*Mgr.-External Affairs*)

NEC has been nurturing its dp sector with a passion, and more than one third of its \$7.59 billion corporate revenues now comes from dp. Anxious to promote itself as a high-tech superpower, NEC has followed the familiar formula of touting its computer and communications capabilities. These capabilities are indeed formidable, particularly on NEC's home turf, where it derives 80% of its dp and datacom sales, which DATAMATION estimates totaled \$2.79 billion in calendar 1984. NEC, which ranks as Japan's third largest dp supplier, has the most muscle domestically in the mainframe and micro fields. It has captured close to 70% of the Japanese micro market, an achievement even IBM would envy. The company has also shown significant strength on the telecom side, with its big push in PBXs. The Japanese company currently owns about 8% of the world PBX market.

NEC's largest foreign market is North America, where it pulls in 7% of its dp and datacom revenue. So far, NEC has had mixed results in the U. S., where sales of its micros and small business systems have been decidedly sluggish. The outlook for NEC PBXs in the U.S., however, is much brighter. The company currently has roughly 10% of the U.S. switching market. The product to watch in that market is the NEAX-2400 digital PBX, which has won juicy contracts from the divested Bell operating companies.

Last year NEC was very active in the American arena. In March it signed up Honeywell to distribute its large System 1000 mainframe (called the Acos 1000 in Japan). Earlier this year NEC returned the favor to its partner and agreed to buy Honeywell's slumping Japanese operation.

On the communications front, NEC combined forces with GE in the United States. The two companies are collaborating on an international network service that will connect NEC's value-added network in Japan with GE's 600-city network in the U.S. NEC also got together with Hewlett-Packard Ltd. in Japan to produce a micro development support system. The Japanese company was busy in Europe as well last year. Broadening its Continental business base, it opened up NEC Business Systems (Deutschland), which will handle peripherals, business computers, and fax machines. In France, NEC teamed up with Bull in a distribution agreement for the Acos 1000.

The Acos mainframe got a new operating system in 1984. Called the MS-UX, the Unix lookalike was available only in Japan. The company also came up with new 16-bit and 32-bit models for its 150 minis. The most unusual development, however, was the OBC-I, the world's smallest computer to be mounted on a satellite.

This year NEC became the first Japanese mainframer to challenge IBM's Sierra. NEC, which announced the air-cooled Acos 1500 series in March, claims a performance of 37MIPS for the system's uni-processor. Indeed, it's at the high end of the market where the determined NEC could nick IBM and climb even higher in the dp domain.

Business Summary

Most of the products of NEC Corporation (formerly Nippon Electric Co.) fall into four main categories. Contributions to sales in recent fiscal years were:

	1985	1984	1983
Communications	29%	32%	36%
Computers & industrial electronic systems	32%	31%	25%
Electron devices	27%	24%	25%
Home electronics	8%	10%	10%
Other	4%	3%	4%

Computer and industrial electronic systems consist of various general-purpose computers, mini-computers, small business computers, data communications equipment, software, peripheral equipment, word processors, office automation equipment and robots.

The company's product development and marketing strategy is centered on the integration of communications and computers, which it calls the C&C concept. Applications of the concept are being developed in such areas as office automation, large-scale computers, industrial automation, home electronics, business communications and public systems.

Income Data (Million \$)

Year Ended Mar. 31'	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	*Net Bef. Taxes	Eff. Tax Rate	Net Inc.	% Net Inc. of Revs.
1984	8,998	1,374	15.3%	1,472	665	292	596	52.3%	267	3.0%
1983	7,830	1,040	13.3%	925	490	*270	417	51.3%	198	2.5%
1982	6,013	794	13.2%	849	353	*232	299	51.9%	138	2.3%
1981	4,872	590	12.1%	596	249	*203	225	49.6%	109	2.2%
1980	4,711	579	12.3%	485	231	*220	206	49.7%	99	2.1%
*1979	3,954	418	10.6%	338	174	171	142	61.0%	67	1.7%
1978	3,591	321	8.9%	259	159	152	78	53.9%	36	1.0%
1977	3,249	303	9.3%	209	145	168	67	49.3%	34	1.0%
1976	2,273	265	11.6%	180	98	127	81	58.3%	28	1.2%
1975	1,757	181	10.3%	89	83	111	19	62.2%	6	0.3%

Balance Sheet Data (Million \$)

Mar. 31'	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1984	2,105	7,087	6,280	1.1	10,802	2.7%	1,708	1,901	3,702	46.1%	14.3%
1983	1,894	5,902	5,190	1.1	9,243	2.3%	1,597	1,818	3,481	45.9%	12.6%
1982	1,061	4,190	3,987	1.1	6,880	2.2%	1,175	1,194	2,422	48.5%	13.6%
1981	860	3,388	3,215	1.1	5,405	2.0%	958	812	1,811	52.9%	13.5%
1980	906	3,314	3,127	1.1	5,174	2.0%	848	782	1,663	51.0%	13.9%
1979	711	2,960	2,783	1.1	4,540	1.5%	798	598	1,417	56.3%	12.3%
1978	757	2,779	2,448	1.1	4,234	0.9%	924	450	1,427	64.7%	8.2%
1977	705	2,664	2,302	1.2	4,004	1.0%	920	417	1,383	66.6%	9.2%
1976	509	1,873	1,857	6-25	2,952	1.1%	717	313	1,063	67.4%	9.6%
1975	400	1,500	1,220		2,345	NA	831	272	926	68.1%	NA

Data as orig. reptd. 1. Of the following calendar year. 2. Refl. acctg. change. 3. Net of int. inc. 4. Incl. equity in earn. of nonconsol. subs. NA-Not Available.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
NEC	14	D1245	84.8	—	—	—	80-3Q	SMD	29
NEC	14	N7722	41.5	—	—	—	78-3Q	SMD	40
NEC	14	N7723	84.8	—	—	—	80-3Q	SMD	29
NEC	14	D1220	41.5	—	—	—	78-3Q	SMD	40
NEC	3	D3126	25.6	—	387	1000	85-3Q	ST412	85
NEC	3	D3116 (HH)	12.8	—	—	—	85-3Q	ST412	85
NEC	3.5	D3126	25.6	—	387	1000	85-3Q	ST412	85
NEC	5	D5146 (HH)	51.2	—	—	—	85-2Q	ST412	85
NEC	5	D5126 (HH)	25.6	—	430	1000	84-4Q	ST412	85
NEC	5	D5224	12.9	—	725	100	83-2Q	ST506	85
NEC	5	D5244	25.8	—	—	—	83-2Q	ST412	85
NEC	5	D5124	12.9	—	650	100	84-1Q	ST506	85
NEC	5	D5244	25.8	—	875	100	83-2Q	ST506	85
NEC	5	D5244	12.9	—	—	—	83-2Q	ST412	85
NEC	5	D5224	12.9	—	430	1000	84-4Q	ST412	85
NEC	5	D5124	12.9	—	—	—	83-2Q	ST412	85
NEC	8	D2232	337.1	—	—	—	83-2Q	SMD	15
NEC	8	N7729	167.7	—	3675	100	83-2Q	SMD	20
NEC	8	D2246	85.0	—	2390	100	82-2Q	SMD	25
NEC	8	D2257	167.7	—	3675	100	83-2Q	SMD	20
NEC	8	D2247E	104.8	—	3200	100	83-2Q	SMD	20
NEC	8	D2268	337.1	—	4120	100	85-2Q	SMD-E	20
NEC	8	D2247	82.9	—	2600	100	83-2Q	SMD	18.5
NEC	8	N7726	85.0	—	2390	100	82-2Q	SMD	25
NEC	8	N7737	337.1	—	—	—	85-2Q	SMD	15
NEC	8	N7737	337.1	—	—	—	85-2Q	SMD	15
NEC	9	D2352	523.9	—	6715	100	85-1Q	SMD-E	15
NEC	9	N7738	523.9	—	6715	100	85-1Q	SMD-E	15

1985 OEM FLEXIBLE DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
NEC	5.25	FD 1155B	1.00	1.60	—	—	84-4Q	MAXELL MD2-HD	15

OPTICAL DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	CAPACITY (MB)		PRICE		FCS	INTERFACE	AVE. ACCESS (msec)
			FRMT	RAW	\$	Q			
NEC	12	ND-1600	1000	—	13750	1	84-4Q	SASI, SMD	300

Peripheral Field Sales Offices

EASTERN REGION

Regional Office:

60 Walnut Street, Wellesley, MA 02181
(617) 431-1140

District Offices:

1945 Old Gallows Road, Suite 201, Vienna, VA 22180
(703) 556-9420

2801 Ocean Drive, Suite 202B, Vero Beach, FL 32963
(305) 231-0840

400 Post Ave., Westbury, NY 11590
(516) 334-8551

1400 Lake Hearn Drive, Suite 130, Atlanta, GA 30319
(404) 252-6778

CENTRAL REGION

Regional Office:

3 Crossroads of Commerce, Suite 220, Rolling Meadows, IL 60008
(312) 577-5234

District Offices:

2715 Avenue E East, Suite 614, Arlington, TX 76011
(817) 640-5146

5450 Far Hills Ave., Suite 205, Dayton, OH 45429
(513) 439-1023

1 Corporate Center Office Bldg., 7301 Ohms Lane, 3rd Floor, Edina, MN 55435
(612) 835-9191

SOUTHWEST REGION

Regional Office:

1503 South Coast Drive, Suite 301, Costa Mesa, CA 92626
(714) 540-2851

NORTHWEST REGION

Regional Office:

110 Rio Robles, San Jose, CA 95134
(408) 433-1390

CONTRACTS

DISKS

NEC Gets Orders from Apollo and CPT

NEC Information Systems has signed OEM disk drive contracts with Apollo Computer and CPT. Separately, NEC has added an 8-inch, 337-Mbyte Winchester disk drive to the high-end of its D2200 line. Under the terms of the agreement with Apollo, NEC will supply its 85-Mbyte D2246 and 168-Mbyte D2257 8-inch Winchesters, and the FD1165 half-height, dual-sided, double-density, 5.25-inch flexibles. The contract with CPT, valued at \$3 million, calls for NEC to supply its FD1035 3.5-inch, 1-Mbyte flexible drive. NEC's new D2268 high-end disk drive is priced at about \$4,000 in unspecified OEM quantities. Evaluation samples of the drive are available 30 to 60 days ARO, with volume production scheduled for August.
(EN, 05/27/85)

ACTIVITIES

NEC Begins Shipping 5.25-Inch Drives

NEC began shipping three 5.25-inch rigid disk drives in November 1985—models D5652, 5146H, and 5126H. First-year production target is 250,000 units, and production shipments are scheduled to begin between February and April 1986.

NEC Increases Disk Drive Production Rate

NEC has increased its production rate of 5.25-inch rigid disk drives from 40,000 units per month to 60,000 per month. Evaluation units of the company's 3.5-inch drives have been shipping, and production rate for these drives is expected to reach 100,000 drives per month. Domestic market share for 5.25-inch drives is 50 percent and worldwide share is 12 percent. Current production capacity is 100,000 drives per month; by the end of 1986, capacity is expected to reach 300,000 units per month.

Introduced a new 9" Winchester disk drive that offers 800MB of storage, a 15 msec. average access time, a data transfer rate of 2.46MB per second, and a disk rotation speed of 3600 rpm. It is priced at about \$8,000 in quantities of 100. CSN Dec. 2, pg. 28

Introduced the 172MB Model D5652 full-height 5 1/4" Winchester disk drive, which provides an average access time of 28 msec. and data transfer rate of 1.25MB per second. It employs voice-coil technology and supports the ESDI interface. The price is about \$2,200 in OEM quantities of 100. Initial deliveries will begin in March. CSN Dec. 2, pg. 28

Introduced the Model D5146 5 1/4" half-height Winchester disk drive, which offers 51MB of storage, an average access time of 85 msec., and data transfer rate of 5M bps. The price is \$550 each in OEM quantities of 1,000. CSN Dec. 2, pg. 28

Introduced the Model F1036A reduced-height 3.5" floppy disk drive, designed for desktop and portable personal computers. It measures 1.18" high and consumes 2.1W of power. It is priced at about \$100 each in quantities of 100. CSN Dec. 2, pg. 28

Priam Corp.

Priam Corporation makes compact, high-capacity 5¼-inch, eight-inch and 14-inch Winchester disk drive memory storage units. Products are sold to original equipment manufacturers (OEMs) for use in their high-performance microprocessor and microcomputer-based systems. These systems include multi-user business systems, shared-logic word processors, professional workstations, telecommunications systems, computer-aided design/computer-aided manufacturing (CAD/CAM) systems and local area networks. Priam also produces intelligent interfaces that permit the company to market its products to a broader base of potential customers. The company's OEM customers generally require higher storage capacities and faster access times than do single-user/single-task systems such as personal computers.

Disk storage systems incorporating either floppy or rigid disks are used in computer systems to record and retrieve information. The company makes Winchester (rigid) disk drives, using voice coil motor technology. These disk drives, sealed to keep out contaminants, contain several disks attached to a spindle-like stack of records. Magnetic read/write heads can track across each disk in much the same manner as a phonograph stylus, to record or retrieve information.

The company began shipping its initial 14-inch, 34-megabyte disk drive in early fiscal 1981. (A megabyte is a measure of memory storage, equaling one million bytes of information.) Since then, Priam has introduced additional products, including higher-capacity 14-inch drives, as well as a family of eight-inch products. A data storage subsystem also is marketed. Since commencing production, Priam has shipped more than 140,000 disk drives to a customer base exceeding 200 original equipment manufacturers.

PRIAM CORP.

20 W. Montague Expwy., San Jose, Cal. 95134
Tel. 408-946-4600

*Chrm & Chief Exec Officer—William J. Schroeder
*Pres & Chief Oper Officer—Joe T. Booker
Exec V-P—James W. Adkisson
Exec V-P—A. A. Wilson
V-P & Chief Fin Officer—D. S. Dury
V-P—Norman Hayes
V-P—Richard Garlick
V-P—J. B. Smith
V-P—B. T. Taniguchi
V-P—R. P. Lawrence
V-P—G. P. Klein

Important Developments

Aug. '85—The company said it had reached purchase agreements valued at a total of \$44 million over the next 18 to 24 months. The firms represented by the agreements include Apollo Computer Inc., CTM GMBH, Counterpoint Computers, Inc., Finnegan Corp., Hewlett-Packard Co., ROLM Corp., 3Com Corp. and Terminals Unlimited. All of Priam's products were represented in these pacts.

Income Data (Million \$)

Year Ended Jun. 30	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	'Net Inc.	% Net Inc. of Revs.
*1985	105	d17.2	NM	*16.1	6.93	1.58	d21.8	NM	d20.9	NM
1984	94	10.7	11.3%	*19.9	2.75	1.15	12.2	23.5%	9.3	9.9%
1983	63	7.8	12.3%	* 6.2	0.78	*1.49	5.6	50.0%	2.8	4.4%
1982	30	2.2	7.4%	* 1.8	0.18	*0.52	1.5	50.1%	0.8	2.6%
1981	6	d3.8	NM	0.3	0.06	NA	d3.8	Nil	d3.8	NM
1980	Nil	d3.1	NM	0.4	0.02	NA	d2.9	Nil	d2.9	NM
*1979	Nil	NA	NA	NA	NA	NA	d1.1	Nil	d1.1	NM

Balance Sheet Data (Million \$)

Jun. 30	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1985	24.9	68.6	20.5	3.3	106	NM	7.90	77.6	85.5	9.2%	NM
1984	48.1	84.5	12.3	6.8	110	9.0%	5.22	91.0	97.7	5.3%	10.8%
1983	58.6	87.3	10.2	8.6	95	4.7%	5.05	79.7	84.8	6.0%	7.5%
1982	0.1	21.2	10.9	1.9	24	4.9%	4.93	d5.9	13.4	36.9%	NM
1981	0.1	6.0	3.1	1.9	7	NM	0.15	d7.4	3.8	3.9%	NM
1980	NA	NA	NA	NA	4	NM	0.08	d3.7	3.3	NM	NM
1979	NA	NA	NA	NA	1	NM	Nil	d0.8	0.5	NM	NM

Data prior to 1983 as repd. in prospectus dated 6-2-83. 1. Bef. spec. items. 2. From inception 3-16-78. 3. Net of int. inc. 4. Net. 5. Ref. merger or acq. NM-Not Meaningful. NA-Not Available

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC
			F	R	\$	Q			
	IN.								mS
PRIAM	14	15450	158.5	—	3895	100	81-3Q	PRIAM, SMD	46
PRIAM	14	6650	67.9	—	2660	100	80-3Q	PRIAM, SMD	46
PRIAM	5	V130	30.8	—	1450	100	83-4Q	ST412	30
PRIAM	5	V170	72.0	—	1850	100	83-4Q	ST412	30
PRIAM	5	V150	51.4	—	1580	100	83-4Q	ST412	30
PRIAM	5	V185	85.0	—	1930	100	84-3Q	ST412	30
PRIAM	5	514	140.2	—	2270	100	86-1Q	ST412	20
PRIAM	5	519	191.2	—	2475	100	86-1Q	ST412	20
PRIAM	8	3450	35.3	—	2325	100	80-4Q	PRIAM, SMD	42
PRIAM	8	808	495.3	—	4630	100	84-3Q	PRIAM, MODIFIED SMD	25
PRIAM	8	807	330.2	—	4105	100	84-2Q	PRIAM, SMD	25
PRIAM	8	803	85.7	—	2950	100	83-3Q	PRIAM, SMD	35
PRIAM	8	806	188.5	—	3450	100	84-2Q	PRIAM, SMD	20
PRIAM	8	7050	70.5	—	2850	100	81-4Q	PRIAM, SMD	42

SALES OFFICES:

Boston, MA Area: (617) 444-3973

Minneapolis, MN Area: (612) 854-3900

Costa Mesa, CA: (714) 662-7266

Atlanta, GA: (404) 396-7680

Chicago, IL Area: (312) 882-5760

San Jose, CA: (408) 946-4600

New York/New Jersey Area: (201) 938-2740

Dallas, TX Area: (214) 690-0980

Westlake, CA: (818) 706-0251

INTERNATIONAL:

Reading, UK (011-44) 734-509621

CONTRACTS

DISKS

SUPPLIER	DATE	CUSTOMER	\$M	DIA "	CAP.(MB)	DURATION	NOTES
PRIAM	84-04	ROCKWELL		8			
PRIAM	83-XX	MOLECULAR	7			2 YR.	
PRIAM	83-11	PLANTRONICS	1.5	8			
PRIAM	83-10	ROLM	6.5	8,14	158		
PRIAM	83-02	CALMA	2.1	14	34,158		

Priam Receives Contracts

Priam has received contracts from eight companies for its line of rigid disk drives. The contracts, running over the next two years, were valued at \$44 million. The buyers include Apollo Computer, Counterpoint Computers, Finnegan, Hewlett-Packard, ROLM, 3Com, and Terminals Unlimited.
(SJM, 08/19/85)

Priam Lands Three Contracts Totaling About \$15 Million

Priam has disclosed three one-year contracts with a combined potential value totaling approximately \$15 million. The Ultimate Corporation will begin using Priam's 227- and 334-Mbyte 8-inch Winchester disk drives and will continue purchasing 14-inch disk drives under an agreement worth more than \$8 million. Quotron Systems, under an agreement valued at \$5 million, also will use Priam's Model 806 and 807 8-inch Winchesters. Under a deal worth more than \$2 million, Syntex will begin using Priam's 30- and 70-Mbyte 5.25-inch Winchesters and will renew orders for 14-inch disk drives. Deliveries under all three agreements have begun.
(CSN, 11/11/85)

Priam Announces Contract with Perkin-Elmer

Priam announced an OEM agreement with Perkin-Elmer to supply its Vertex 5.25-inch Winchester disk drives. The value of the agreement was set at more than \$5 million; the number of drives involved was not disclosed. The agreement calls for the purchase of drives with capacities of up to 85 Mbytes over a 24-month period. The drives are to be installed in Perkin-Elmer's new superminicomputer System 3205. The system supports up to 16 users and is used for a variety of communications and technological applications.
(PR, 03/27/85)

Priam Signs OEM Pacts

Priam has signed contracts valued at \$22 million with seven computer industry OEMs. The terms range from one to two years; other details were not disclosed. Products included in the agreement are DataTower and DataDrawer mass storage systems, various models of Priam's 8-inch and advanced 8-inch Winchester disk products, and the 85-Mbyte model of its 5.25-inch Winchester disk drive. The contracts are with the following companies: Action Computer Enterprise, Bell Telephone Manufacturing, Prolan, Integrated Automation, Meas Technology, NBI, and Onyx Systems.
(PR, 05/23/85)

ACTIVITIES

Introduced two 5 1/4" ESDI-compatible drives featuring 172.3MB and 234.9MB of unformatted storage. The Winchester drives are priced at \$1,495 and \$1,795, respectively. CSN Nov. 18, pg. 32; EN Nov. 18, pg. 38

Introduced the 725, a 5 1/4" Winchester disk drive that features a SCSI port, 254.9MB of storage, a 6.67M-bps data transfer rate, and an average access time of 20 msec. It is priced at \$1,995. Full production is scheduled for the second quarter of 1986. CSN Nov. 18, pg. 32; EN Nov. 18, pg. 38

Priam Announces Tape Backup for InnerSpace Disk Drives

Priam has introduced the InnerSpace IT60, a tape backup kit for the IBM PC and compatible computers that creates an archival copy to protect data stored on a disk from accidental damage or loss. The InnerSpace IT60, designed for use with Priam's 5 1/4-inch InnerSpace, operates at 90 Kbytes per second, and can transfer the contents of an entire InnerSpace 60-Mbyte disk in less than 15 minutes. The internal tape backup system carries a manufacturer's suggested list price of \$1,595 and is available immediately through Priam distributors and dealers (PR, 10/08/85)

Seagate Technology

SEAGATE TECHNOLOGY
920 Disc Dr., Scotts Valley, Cal. 95066
Tel. 408-438-6550.

- * Chief Exec Officer—Alan F. Shugart
- * Pres & Chief Oper Officer—David T. Mitchell
- Sr V-P & Chief Tech Officer—Douglas K. Mahon
- Sr V-P, Chief Fin Officer & Secy—Donald L. Waite
- Sr V-P (Far East Oper)—Sing C. Tien
- V-P—Sanjoy Ghose
- V-P (Engr)—James O. Jacques
- V-P (Mktg)—Fred Schudel
- V-P (Sales)—Robert Martell
- V-P (Engr)—Anthony L. Perlick
- V-P (Cor Materials)—Robert A. Sandie
- V-P (Dom Oper)—Ronald D. Verdoorn

Seagate was flying high until midyear, when revenues plummeted 50%—a consequence of IBM's decision to cut orders for the Winchester disk drives that go into its microcomputers. But despite Seagate's troubles, it was the only supplier of Winchester drives to IBM that remained profitable.

Seagate's net sales for the first half of calendar 1984 were nearly \$201.6 million; sales for the final half were \$102.4 million. Nonetheless, Seagate ended calendar 1984 with revenues of \$304 million, compared with last year's \$222 million. Income for the first half was \$23 million; for the second half it was only \$807,000, bringing income for the calendar year to \$23.8 million, 19.6% less than last year's \$29.6 million.

Seagate, which developed and shipped the first 5¼-inch Winchester disk drive in 1980, has become the leading independent manufacturer of these drives. The company built its business on customers like IBM, which uses Seagate drives in its PC XT.

Personal computer manufacturers, confronted with low demand for their products and excess inventory, cut back on disk drive orders in 1984. When IBM failed to order Seagate drives, Seagate lost its biggest customer. IBM's policy of never paying more than it has to, as well as competition among disk drive manufacturers, contributed to plunging prices for Winchester disks—a 10 million-character disk that went for \$450 in early 1984 cost only \$300 in 1985. To cut costs Seagate laid off 800 employees and shut down a domestic plant, sending the bulk of its manufacturing offshore to Singapore.

The light at the end of the tunnel was the hope that IBM would turn to Seagate as a supplier of disk drives for its PC AT, and Seagate finally reached the light when IBM placed a \$200 million order in March 1985.

Seagate has signed an agreement to acquire Grenex Inc., a producer of thin-film media. This thin-film, or sputtered, medium is a disk coating that provides greater storage density. Grenex's media are still in the R&D stage, so production will not ramp up for another year or so.

New products introduced during the year included a 3½-inch 10MB drive, a 5½-inch half-height 20MB drive, and a full-height 40MB drive.

Important Developments

Aug. '85—SGAT announced a one-year contract to supply its ST 225 20-megabyte drives to Hewlett-Packard Co. A one-year contract to supply the ST 4000 series to IBM Corp., SGAT's largest customer, would be up for review in January or February, 1986. SGAT management said that, as the lowest-cost producer and the highest-volume manufacturer, SGAT was positioned to do well as a survivor in a difficult industry environment.

Business Summary

Seagate Technology designs and manufactures Winchester-technology magnetic disc drives. It sells these to original equipment manufacturers (OEMs) for incorporation into such products as small business and desktop computers, word processors and intelligent terminals, where they are used to record, store and retrieve digital information that cannot be stored entirely in the system's central memory unit. The two largest customers in fiscal 1985 were IBM (49% of sales) and Digital Equipment Corp. (10%). Foreign sales, which included foreign sales to domestic purchasers, constituted 49% of sales in fiscal 1985, compared with 10% in each of the two preceding fiscal years.

Winchester technology employs low-mass, lightly-loaded read/write heads that provide greater storage capacity, faster access time and higher reliability than flexible disc drive systems. The company pioneered this class of drive in 1980 with what it believes was the world's first mini-rigid disc drive—the five-megabyte ST 506.

SGAT's strategy is to produce disc drive products to meet the performance, size and volume requirements of major OEMs. The company has recently changed its product mix in accordance with what it believes is an increasing demand for disc drives with higher performance and capacity. During the first quarter of fiscal 1986, SGAT ceased production of the ST 412 12.76-megabyte drive (which historically has accounted for a substantial portion of sales), and has been concentrating its efforts on a new ST 4000 series of 20- to 40-megabyte, full-height, 5¼-inch drives and the ST 225 20-megabyte, half-height 5¼-inch drive.

Seagate has moved substantially all of its production operations offshore, primarily in Singapore and, to a lesser extent, Bangkok, Thailand, in an effort to increase production capacity and lower operating costs. The company maintains sales offices in California, Massachusetts, Texas, Florida, West Germany, Singapore and Japan.

Income Data (Million \$)

Year Ended June 30	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	*Net Inc.	% Net Inc. of Revs.
*1985	215	0.1	NM	27.7	12.1	1.76	d10.3	NM	1.0	0.5%
1984	344	63.5	18.5%	34.4	7.8	0.86	65.3	35.6%	42.0	12.2%
1983	110	18.8	17.0%	38.4	2.7	0.40	18.5	29.2%	13.1	11.9%
1982	40	10.7	26.5%	4.8	0.8	0.19	12.7	45.3%	6.9	17.2%
1981	10	0.9	8.9%	2.5	0.2	0.09	2.9	42.5%	1.7	17.2%
1980	Nil	d0.7	NM	0.4	Nil	0.01	d0.3	NM	d0.3	NM

Balance Sheet Data (Million \$)

June 30	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1985	7.5	169	67.9	2.5	275	0.4%	17.8	172	207	8.6%	0.6%
1984	13.8	127	30.7	4.1	215	22.5%	9.7	165	184	5.3%	29.3%
1983	23.6	110	27.3	4.0	157	12.6%	7.3	121	130	5.6%	16.1%
1982	12.3	38	6.7	5.4	44	25.4%	0.4	38	37	1.2%	35.7%
1981	0.1	7	6.0	1.2	9	26.8%	0.6	3	4	16.3%	NM
1980	0.8	1	0.3	2.6	6-33	NM	Nil	d1	1	Nil	NM

Data prior to 1982 as reprinted in prospectus dated 9/10/79 (date of inception). 2. Bef. spec. item in 1981. 3. Incl. equity in earn. of nonconsol. subs. 4. Ref. merger or

Meaningful; d: Deficit.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
SEAGATE TECH.	5	ST4051	50.9	—	—	—	85-1Q	ST412	40
SEAGATE TECH.	5	ST212	12.8	—	435	2500	84-4Q	ST506	65
SEAGATE TECH.	5	ST4026	25.6	—	—	—	84-4Q	ST412	40
SEAGATE TECH.	5	ST225	25.6	—	—	—	84-4Q	ST412	65
SEAGATE TECH.	5	ST4038	38.2	—	—	—	85-1Q	ST412	40

Regional Sales Offices:

1150 N. First Street, Suite 130, San Jose, California 95112 Telephone (408) 286-7580
 9700 Koger Boulevard, Suite 310, St. Petersburg, Florida 33702 Telephone (813) 577-1199
 435 King Street, Littleton, Massachusetts 01460 Telephone (617) 486-9711
 9451 LBJ Freeway, Suite 220, Dallas, Texas 75243 Telephone (214) 783-6711

Authorized U.S. Distributor: Hamilton/Avnet

CONTRACTS

DISKS

SUPPLIER	DATE	CUSTOMER	\$M	DIA "	CAP. (MB)	DURATION	NOTES
SEAGATE	85-03	IBM		3.5	20		ST 125, UNANNOUNCED
SEAGATE	85-03	IBM		5.25	25/50		ST 4000, 3 MODELS
SEAGATE	84-XX	WYSE					
SEAGATE	84-XX	COMPAQ					
SEAGATE	84-XX	ATT					
SEAGATE	84-06	SEQUA	100	5.25	10		
SEAGATE	84-06	IND.MICRO.SYS.	100	5.25	10		
SEAGATE	84-06	CONV.TECH.	100	5.25	10		
SEAGATE	84-06	NCR	100	5.25	10		
SEAGATE	84-06	ALTOS	100	5.25	10		
SEAGATE	84-06	LANIER	100	5.25	10		
SEAGATE	84-06	ZENITH	40				
SEAGATE	84-03	KAYPRO	25	5.25	10		
SEAGATE	84-02	GRID		5.25	10		
SEAGATE	83-XX	CONV.TECH.					
SEAGATE	83-XX	WANG					
SEAGATE	83-XX	APPLE					
SEAGATE	83-XX	DEC					
SEAGATE	83-11	HP		5.25	6,19		
SEAGATE	83-11	IBM	80-120	5.25	20	1 YR. \$550 PER UNIT	
SEAGATE	83-05	PHILLIPS	10	5.25			

Seagate Seals 40-Mbyte Deal

Seagate Technology said that it has sealed the first major OEM deal for its 40-Mbyte ST4051 Winchester disk drive. Hewlett-Packard is using the full-height drive in combination with its own controller in the recently unveiled Vectra PC. Terms of the agreement were not released.
(CSN, 11/18/85)

Seagate Inks Pact to Provide HP with Winchesters

Seagate Technology has signed a one-year agreement to provide an unspecified number of its ST225 half-height 20-Mbyte 5.25-inch Winchester disk drives to Hewlett-Packard (HP). Seagate had begun shipping the drives to HP in May, 1985. HP will use the drives in two of its subsystems, the 9133H and the 9134H, which are supported on HP's personal computer as well as IBM PCs and compatibles. The two subsystems were introduced in July.
(EN, 09/09/85)

ACTIVITIES

Will ship its ST4096 80MB Winchester disk drive in January, three months earlier than originally planned, in order to meet the requirements of a major OEM prospect. CSN Nov. 4, pg. 55; EN Nov. 4, pg. 27

Is expected to begin volume shipments of 30MB 5 $\frac{1}{4}$ " Winchester disk drives to IBM in the first quarter of 1986. Observers say IBM can buy the drives from Seagate cheaper than it can make them itself. EN Nov. 25, pg. 16

Will introduce the LAN Data Manager, a file and print server offering between 40MB and 320MB of storage, to be marketed to OEMs for LANs. OEM customers will be able to mix and match a variety of Seagate drives when configuring the server.

The company will also introduce three 5 $\frac{1}{4}$ " Winchester disk drives, including the full-height ST4096 which features 96MB of unformatted capacity using a linear voice coil actuator, the half-height ST251 offering 51MB of unformatted capacity using a stepper motor technology, and the half-height 25MB ST225N drive, which uses oxide media and features an imbedded SCSI controller. The ST4096 and ST251 utilize thin-film sputtered media from the company's Grenex subsidiary. CSN Oct. 21, pg. 4; EN Oct. 28, pg. 26

Tandon Corp.

It's amazing the difference a year can make. An oem deal with IBM sent Tandon's revenues skyrocketing 94% to \$346.9 million in 1983. Profits that year were up 43% to \$27.2 million for the Cinderella company. While not exactly going rags-to-riches-to-rags, 1984 was a different story. Revenue increased only 14.8% over 1983 to \$398.5 million. Profits nose-dived 83% to \$4.7 million. The company also suffered its first-ever quarterly loss—\$724,000 in the fourth quarter. It could just be the first in a series of disappointing quarters.

What happened? The company, which manufactures floppy drives, Winchester disks, and cartridge tape products in the oem market, says the leveling in net sales resulted from a significant decrease in the growth rate of the microcomputer industry that is served by Tandon's disk drive products. The company also says that competition from the Japanese and others selling into its market has decreased the profitability of disk drive products. But the real competitive battle was over who would supply disk drives to IBM for its microcomputers, and in this bout, Tandon came out the loser.

Virtually the entire top management changed during the year. Four vice presidents resigned, four new executive officers from inside the company were elected, and some key management responsibilities were shifted.

To meet stiff price competition, particularly from the Japanese, Tandon has moved a large share of domestic production to its Singapore subsidiary. The company's California manufacturing operations were reorganized to produce products based on newer technologies, products less sensitive to price competition.

Tandon is planning a new generation of smaller, higher-capacity, lower-priced memory storage products for microcomputers. These will come to market in 1985 and '86. In particular, the company will address the Winchester hard disk market.

IBM's decision to drop Tandon's disk drive will hurt and hurt bad: the contract for floppy disk drives accounted for 58% of Tandon's sales last year. But Tandon management says that it has a letter of intent from IBM saying that Tandon will supply advanced floppy disk technology for such IBM products as the PC AT.

Important Developments

Feb. '86—Revenues for the first quarter of fiscal 1986 included income from license and royalty fees paid by various Japanese licensees of Tandon's double-sided disk drive patent. Tandon settled a number of patent infringement disputes during fiscal 1985 that resulted in provisions for Tandon to receive lump-sum fees and royalties on sales of double-sided disk drives.

TANDON CORPORATION
20320 Prairie St., Chatsworth, Cal. 91311
Tel. 213-993-6644

- **Chrm & Pres**—Sirjang Lal Tandon
- V-P (Oper)—Stephen Huenemeier
- V-P (Fin)—W. Clarice Gerkey
- **V-P (Plan)**—Ranjit Sitlani
- V-P (Mgt Sys)—Jack Reynolds
- V-P—Steven R. Elsner
- V-P (Singapore Oper)—Hari Apte
- V-P (Mktg)—Michel Fromont
- V-P & Treas—Dennis J. Trafecanty
- Cont & Data Proc Mgr—G. Pete Hogelin
- Natl Sales Mgr—Earl Edwards
- Per Dir—Darlene Lewis
- Product Mgr—Robert Abraham
- Natl Accts Mgr—Jeff Segers
- Gen Mgr (Wintech/PCBA)—Jim Casey
- Gen Mgr (Chatsworth)—Dick Arnold
- Gen Mgr (Voyager)—John O. O'Brien
- Gen Mgr (Megastor)—Sham Tandon
- Gen Mgr (Microtek)—Brent Nilson

Business Summary

Tandon Corp. designs, manufactures and markets flexible and rigid disk drive products for personal computers, as well as microcomputer systems and disk drive subsystems. Contributions to revenues in recent fiscal years were:

	1985	1984	1983
Flexible drives	43%	80%	82%
Rigid drives.....	19%	8%	15%
Microcomputer systems & subsystems.....	29%	---	---
Other	9%	12%	3%

The company's disk drive product line includes 5¼- and eight-inch flexible (floppy) disk drives, 5¼- and 3½-inch Winchester technology rigid disk drives and disk drive subsystems incorporating these drives. Tandon's flexible drives have memory capacity ranging from 0.25 to 1.6 megabytes, while its rigid drives have capacities of 12.7 to 51 megabytes. These products are used in the company's own computer systems, are sold to OEMs for incorporation into their microcomputer and disk drive systems and are marketed through retail channels under the Tandon label. Sales of flexible drives to IBM Corp. accounted for about 34% of Tandon's sales in fiscal 1985, compared with 58% in fiscal 1984.

Income Data (Million \$)

Year Ended Sep. 30	Oper. Revs.	Oper. Inc.	% Oper. Inc. of Revs.	Cap. Exp.	Depr.	Int. Exp.	Net Bef. Taxes	Eff. Tax Rate	Net Inc.	% Net Inc. of Revs.
1985	269	d154	NM	12.6	14.4	NA	d166	NM	d135	NM
1984	401	56	13.9%	13.6	12.5	NA	42	30.0%	29	7.3%
1983	303	41	13.5%	21.2	8.0	NA	36	34.9%	24	7.8%
1982	150	28	18.9%	18.3	3.0	NA	28	44.5%	16	10.5%
1981	54	9	16.3%	6.1	0.8	NA	8	44.3%	5	8.3%
1980	23	3	14.7%	1.4	0.3	NA	3	46.8%	2	6.6%
1979	7	Nil	7.0%	0.5	0.1	NA	Nil	NM	Nil	2.5%
1978	3	NA	NA	NA	NA	NA	Nil	11.9%	Nil	5.1%
1977	1	NA	NA	NA	NA	NA	Nil	27.6%	Nil	6.5%

Balance Sheet Data (Million \$)

Sep. 30	Cash	--- Current ---			Total Assets	Ret. on Assets	Long Term Debt	Common Equity	Total Cap.	% LT Debt of Cap.	Ret. on Equity
		Assets	Liab.	Ratio							
1985	45.6	129	52.3	2.5	167	NM	Nil	108	114	Nil	NM
1984	31.9	321	83.8	3.8	361	8.8%	Nil	242	277	Nil	13.0%
1983	15.0	274	83.8	3.3	310	9.7%	Nil	212	226	Nil	14.6%
1982	13.1	134	58.5	2.3	156	14.5%	0.09	98	98	0.1%	23.7%
1981	5.4	42	20.1	2.1	50	11.4%	0.21	29	30	0.7%	27.3%
1980	0.4	14	9.0	1.5	6-37	NA	0.31	2	7	4.7%	NA

Data as orig. reptd. NA-Not Available. d-Deficit. NM

7/ul.

PRODUCTS

1985 OEM RIGID DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	ACC mS
			F	R	\$	Q			
TANDON	3	TM362	25.6	—	375	2500	85-2Q	ST412	80
TANDON	5	TM755	51.0	—	850	2500	85-2Q	ST412	35
TANDON	5	TM502	12.8	—	418	2500	82-3Q	ST506	206
TANDON	5	TM503	19.1	—	473	2500	82-3Q	ST506	206
TANDON	5	TM703	30.1	—	945	2500	83-1Q	ST506	39
TANDON	5	TM252	12.8	—	456	2500	83-3Q	ST506	100

1985 OEM FLEXIBLE DISK DRIVES

MANUFACTURER	DIA IN.	MODEL	MB (UNF)		PRICE		FCS	INTERFACE GENERIC	ACC mS
					\$	Q			
TANDON	3.5	TM-304	0.50	1.00	—	—	85-1Q	SONY OM-D4440	15
TANDON	3.5	TM-303	0.25	0.50	—	—	85-1Q	SONY OM-D3440	15
TANDON	5.25	TM-75-2	0.50	—	80	2500	85-4Q	2/40	15
TANDON	5.25	TM-65-8	0.80	1.60	112	2500	84-XX	MAXELL MD2-HD	15
TANDON	5.25	TM-100-2	0.25	0.50	110	2500	78-4Q	2/40	15
TANDON	5.25	TM-65-1L	0.13	0.25	75	2500	82-3Q	1/40	15
TANDON	5.25	TM-100-1	0.13	0.25	110	2500	78-4Q	SA 104	15
TANDON	5.25	TM-75-8	1.00	1.60	112	2500	85-4Q	MAXELL MD2-HD	15
TANDON	5.25	TM-65-4	0.50	1.00	104	2500	82-3Q	2/80	15
TANDON	5.25	TM-65-2L	0.25	0.50	80	2500	82-3Q	2/40	15
TANDON	8	TM-848E-1	0.40	0.80	250	2500	81-2Q	DISKETTE 1	15
TANDON	8	TM-848E-2	0.80	1.60	285	2500	81-2Q	DISKETTE 1,2,2D	15

Regional Sales Offices: Atlanta, GA (404) 662-1542 • Boston, MA (603) 888-8612 • Dallas, TX (214) 423-6260 • Elmhurst, IL (312) 530-7401 • Santa Clara, CA (408) 727-4545 • Kelsterbach, West Germany (6107) 2091, Telex: 411547 • Reading, Berkshire, England (0734) 664-676, Telex: 848411

CONTRACTS

DISKS

SUPPLIER	DATE	CUSTOMER	\$M	DIA "	CAP.(MB)	DURATION	NOTES
TANDON	85-01	IBM		5.25	20		
TANDON	85-01	PEACHTREE	10	5.25	30		
TANDON	84-XX	SYQUEST		3.9			REMOVEABLE CARTRIDGE
TANDON	84-XX	ATARI	130	5.25	FLEX		
TANDON	84-XX	COLUMBIA			5,10,15		
TANDON	84-XX	DAVONG			5,10,15		
TANDON	84-XX	CORONA			5,10,15		
TANDON	84-12	IBM	100	3.25	20		PENDING — NO CONFIRMATION
TANDON	84-07	TANDY	125	5.25	FLEX	18 MOS.	TANDON IS SOLE SUPPLIER

Tandon Nets Key Pacts with Xerox and Tandem (12/23/86)

Tandon has reached agreements in principle to supply Xerox and Tandem Computers with microcomputers and disk drive products valued at up to \$300 million over three years, according to industry sources. A Tandon spokesman said the first agreement calls for Tandon to supply a family of IBM PC XT- and PC AT-compatible workstations to a "major office equipment and systems firm," which sources identified as Xerox. The workstations will use Tandon disk drives. The Tandon spokesman said the second agreement calls for Tandon to provide IBM-compatible PCs, memory storage subsystems, and other disk drive products over a two-year period to a "large computer manufacturer," which sources said is Tandem Computers.

Tandon in Pact Worth Up to \$27 Million

Tandon entered into an agreement to supply as much as \$27 million worth of Winchester disk drives to GreatWest Technology. GreatWest Technology supplies add-on memory subsystems to ComputerLand. Tandon is supplying Winchester disk drives ranging in formatted capacities from 10 to 40 Mbytes to GreatWest. The Tandon Drives will be a combination of both full- and half-height configurations. Also included in the agreement is Tandon's new 20-Mbyte 3.5-inch Winchester disk drive. Deliveries are scheduled to continue through the third calendar quarter of 1986. (6/3/85)

In its first attempt to sell disk drives and subsystems under its own label, signed a distribution agreement with Sears. CSN Sept. 16, pg. 4; EN Sept. 16, pg. 67

ACTIVITIES

Introduced the TM75 series of PC AT-compatible half-height, 5¼" floppy disk drives. They provide 500KB and 1.6MB of storage and are quantity-priced at \$80 and \$100, respectively. Both are available immediately. EN Dec. 16, pg. 30

Tandon Signs Canon, Copal

Increasing its stable of Japanese vendors paying royalties for the use of technology covered by its double-sided flexible disk drive patent, Tandon recently said that Canon and Copal, a subsidiary of Fujitsu, have been granted manufacturing licenses. As in past cases, Tandon declined to reveal the terms of the nonexclusive accords. (EBN, 12/23/85)

Tandon Unveils Winchester Mounted on a Board

Add Tandon to the growing list of disk drive vendors unveiling add-in Winchesters mounted on a board. Tandon will announce a 21.3-Mbyte, 3.5-inch unit to be called Diskard 21. The company also will bring out two IBM PC AT-compatible flexible disk drives with capacities of 360 Kbytes and 1.2 Mbytes. Furthermore, Tandon will disclose the formation of the Tandon Computer Products group, which will be responsible for marketing products with its own label through a nationwide dealer network. (EN, 11/18/85, pg.18)

7. DISK PRODUCTS

- By Company
- By Product Segment
- By Product Specifications

1985 OEM RIGID DISK DRIVES

Table with columns: GRP, MKT, MANUFACTURER, DIA, MODEL, MB(UHF), PRICE, FCS, INTERFACE, XFR, RPM, ACC, DATA STRUCTURE, BPI, CODE, TPI, ACT, HEADS, MEDIA, SRF. Rows include various OEM and OEM/CAP models from manufacturers like FUJITSU, LTO, and others.

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1985 OEM RIGID DISK DRIVES

Table with columns: GRP, MKT, MANUFACTURER, DIA, MODEL, MB(UHF), PRICE, FCS, INTERFACE, XFR, RPM, ACC, DATA STRUCTURE, BPI, CODE, TPI, ACT, HEADS, MEDIA. Rows list various disk drive models and specifications.

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1985 OEM RIGID DISK DRIVES - (CONT.)

GRP	MKT	MANUFACTURER	DIA IN.	MODEL	MB(UNF)		SIZE (IN.)				WT LBS	POWER		A.	MTBF	ER	SHOCK		NONOP		VIBRATION		NONOP	dba @ 1'				
					F	R	H	W	D	TYP		MAX	TYP				MAX	POH	SF	HD	SK	Hz			G	mS	Hz	G
5	OEM/CAP	OLIVETTI	5	HD 563/13	19.1																							
5	OEM	OLIVETTI	5	HD 512/3	21.7																							
5	OEM	OLIVETTI	5	HD 662/12	25.5																							
5	OEM	OLIVETTI	5	HD 670/12	25.5																							
5	OEM	OTARI ELECTRIC CO	5	C-507	6.4																							
5	OEM	OTARI ELECTRIC CO	5	C-214	12.8																							
5	OEM	OTARI ELECTRIC CO	5	C-226	12.8																							
5	OEM	OTARI ELECTRIC CO.	5	C-514	12.8																							
5	OEM	OTARI ELECTRIC CO.	5	C-519	19.1																							
5	OEM	OTARI ELECTRIC CO.	5	C-526	25.5																							
5	OEM	PERIPHERAL TECH.	3	PT-325	25.5																							
6	OEM	PERIPHERAL TECH.	3	PT-338	38.2																							
1	OEM/CAP	PERSCI	14	VT-2221	6.3	6.3																						
1	OEM/CAP	PERSCI	14	VT-2222	6.3	6.3																						
1	OEM/CAP	PERSCI	14	VF-2221	6.3	6.3																						
1	OEM/CAP	PERSCI	14	VF-2222	6.3	6.3																						
2	OEM	PERSCI	14	VT-2422	12.5	12.5																						
7	OEM	PERTEC	8	DX199	199.0																							
7	OEM	PERTEC	8	DX265	265.0																							
8	OEM	PERTEC	8	DX332	332.0																							
6	OEM	PRIAM	5	V130	30.8																							
6	OEM	PRIAM	8	3450	39.3		4.6	8.6	14.3	20	1.5	2.0	0.4	0.7	24.0	5.0												
6	OEM	PRIAM	5	V150	51.4																							
6	OEM	PRIAM	14	6650	67.9																							
6	OEM	PRIAM	8	7050	70.5		4.6	8.6	14.3	20	1.5	2.0	0.4	0.7	24.0	5.0												
6	OEM	PRIAM	5	V170	72.0																							
6	OEM	PRIAM	5	V185	85.0																							
6	OEM	PRIAM	8	803	85.7		4.6	8.6	14.3	20	1.5	2.0	0.4	0.7	24.0	5.0												
7	OEM	PRIAM	5	514	140.2																							
7	OEM	PRIAM	14	15450	158.5																							
7	OEM	PRIAM	8	806	188.5		4.6	8.6	14.3	25	1.7	2.2			24.0	7.0												
7	OEM	PRIAM	5	519	191.2																							
8	OEM	PRIAM	8	807	330.2		4.6	8.6	14.3	25	1.7	2.2			24.0	7.0												
8	OEM	PRIAM	8	808	495.3		4.6	8.6	14.3	25	1.7	2.2			24.0	7.0												
5	OEM	QUANTUM	8	Q20 10	10.7																							
5	OEM	QUANTUM	8	Q20 20	21.3																							
5	OEM	QUANTUM	8	Q20 30	32.0																							
5	OEM	QUANTUM	5	Q530	32.0																							
5	OEM	QUANTUM	5	Q540	42.7																							
6	OEM	QUANTUM	8	Q20 40	42.7																							
6	OEM	QUANTUM	5	Q250	53.4	F	1.7	5.8	8.1	3.5		1.8		2.3														
6	OEM	QUANTUM	5	Q280	80.1	F	1.7	5.8	8.1	3.5		1.8		2.3														
6	OEM	QUANTUM	8	Q20 80	85.5																							
2	OEM	RICOH	5	RH5130	12.8																							
5	OEM	RODIME	5	351	6.4		5.8	4.0	1.6	2.2	0.5		0.9	2.5			3	10		30	10	60-500	1.00		30-500	2.00		
5	OEM	RODIME	5	251	6.4																							
5	OEM	RODIME	5	201	6.7		8.0	5.8	3.3		0.7		2.0															
5	OEM	RODIME	3	252	12.8																							
5	OEM	RODIME	3	352	12.8		5.8	4.0	1.6	2.2	0.5		0.9	2.5			3	10		30	10	60-500	1.00		30-500	2.00		
5	OEM	RODIME	5	202	13.3		8.0	5.8	3.3		0.7		2.0															
5	OEM	RODIME	5	201E	13.3		8.0	5.8	3.3	6.4	0.7		2.0	4.0														
5	OEM	RODIME	5	203	20.0		8.0	5.8	3.3		0.7		2.0															
5	OEM	RODIME	5	204	26.7		8.0	5.8	3.3		0.7		2.0															
5	OEM	RODIME	5	202E	26.7		8.0	5.8	3.3	6.4	0.7		2.0	4.0														
6	OEM	RODIME	5	203E	40.0		8.0	5.8	3.3	6.4	0.7		2.0	4.0														
6	OEM	RODIME	5	204E	53.3		8.0	5.8	3.3	6.4	0.7		2.0	4.0														
5	OEM	SEAGATE TECH.	5	ST212	12.8		1.6	5.8	8.0	3	1.0	1.2	1.0	3.2			11	K	10	12	10							
5	OEM	SEAGATE TECH.	5	ST40 26	25.6		3.3	5.8	8.0	6	1.2	1.5	1.5	4.5			12	K	10	12	6							
5	OEM	SEAGATE TECH.	5	ST225	25.6		1.6	5.8	8.0		0.8	1.2	0.9	2.6			11	K	10	12	6							
6	OEM	SEAGATE TECH.	5	ST40 38	38.2		3.3	5.8	8.0	6	1.2	1.5	1.5	4.5			12	K	10	12	6							
6	OEM	SEAGATE TECH.	5	ST40 51	50.9		3.3	5.8	8.0	6	1.2	1.5	1.5	4.5			12	K	10	12	6							
7	OEM	SIEMENS	5	1100	102.8		3.3	5.8	8.0	7.28	2.0		1.6				15	K	10	12	6							
7	OEM	SIEMENS	5	1200	205.6		3.3	5.8	8.0	7.28	2.0		1.6				15	K	10	12	6							
8	OEM	SIEMENS	5	1300	308.4		3.3	5.8	8.0	7.28	2.0		1.6				15	K	10	12	6							
5	OEM/CAP	SORD	5	HD-503	10.0																							
5	OEM/CAP	SORD	5	HD-513	27.5																							
1	OEM	SYQUEST TECH.	3	SQ306RD			6.4	1.6	4.8	8.0	2.4	0.9		0.7			11	K	9	12	6							
2	OEM	SYQUEST TECH.	3	SQ312RD		12.7	1.6	4.8	8.0	2.4	0.9	1.5	0.7				11	K	9	12	6							
5	OEM	SYQUEST TECH.	3	SQ325F	25.5		1.6	4.8	8.0	2.9	0.9		0.8	1.5														

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1985 OEM RIGID DISK DRIVES

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)		PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	CODE	TPI	ACT	HEADS	MEDIA
					F	R							\$	Q	KB/S						
6	OEM	SYQUEST TECH.	5	SQ338F	38.2	—	1000 100	84-20	ST506	625	3547	90	10,416	6	1	612	12223	764	BSM	FE	PL
5	OEM	TANDON	5	TM252	12.8	—	456 2500	83-30	ST506	625	3600	100	10,416	4	1	306	9074	345	RBSM	FE	PL
5	OEM	TANDON	5	TM502	12.8	—	418 2500	82-30	ST506	625	3600	206	10,416	4	1	306	9074	345	RBSM	FE	OX
5	OEM	TANDON	5	TM503	19.1	—	473 2500	82-30	ST506	625	3600	206	10,416	6	1	306	9074	345	RBSM	FE	OX
5	OEM	TANDON	5	TM362	25.6	—	375 2500	85-20	ST412	625	3568	80	10,416	4	1	615	13739	804	RPSM	FE	PL
6	OEM	TANDON	5	TM703	30.1	—	945 2500	83-10	ST506	625	3600	39	10,416	5	1	578	9528	600	RVC	FE	PL
6	OEM	TANDON	5	TM755	51.0	—	850 2500	85-20	ST412	625	3600	35	10,416	5	1	981	9528	960	LVC	FE	PL
5	OEM	TEAC	5	SD-506	6.4	—	—	82-30	ST506	625	3600	170	10,417	4	1	153	7690	255	BSM	FE	OX
5	OEM	TEAC	5	SD-412	12.8	—	—	82-30	ST506	625	3600	170	10,417	4	1	306	9074	345	BSM	FE	OX
5	OEM	TEAC	5	SD-510	12.8	—	—	84-20	ST506	625	3600	85	10,416	4	1	306	9074	345	BSM	FE	OX
5	OEM	TEAC	5	SD-520	25.5	—	—	85-20	ST412	625	3600	85	10,416	4	1	612	9074	690	BSM	FE	OX
8	OEM	TECSTOR	14	3/320	315.2	—	—	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/316	315.2	—	—	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/315	315.2	—	5600 100	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/317	315.2	—	—	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/318	315.2	—	—	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/319	315.2	—	—	82-40	SMD	1209	3600	29	20,160	9.5	2	1646	6450	680	RVC	FE	OX
8	OEM	TECSTOR	14	3/332	331.8	—	5700 100	82-40	SMD	1209	3600	29	20,160	10	2	1646	6450	680	RVC	FE	OX
5	OEM	TOKICO	5	DK503-1	6.7	—	—	83-40	ST506	625	3600	85	10,416	2	1	320	9260	360	BSM	FE	OX
5	OEM	TOKICO	5	DK503-2	13.3	—	—	83-40	ST506	625	3600	85	10,416	4	1	320	9260	360	BSM	FE	OX
5	OEM	TOKICO	5	DK502-1	13.3	—	—	83-40	ST506	625	3600	85	10,416	4	1	320	9260	360	BSM	FE	OX
5	OEM	TOKICO	5	DK502-2	20.0	—	—	83-40	ST506	625	3600	85	10,416	6	1	320	9260	360	BSM	FE	OX
5	OEM	TOKICO	5	DK505-2	25.5	—	—	85-10	ST412	625	3550	85	10,416	4	1	612	9490	670	BSM	FE	OX
5	OEM	TOKICO	5	DK502-3	26.6	—	—	83-40	ST506	625	3600	85	10,416	8	1	320	9260	360	BSM	FE	OX
5	OEM	TOKYO ELECTRIC CO.	5	TD-5512	12.8	—	—	85-30	ST412	625	3573	65	10,416	2	1	612	10568	550	BSM	FE	OX
5	OEM	TOKYO ELECTRIC CO.	5	TD-5526	25.5	—	—	85-30	ST412	625	3573	65	10,416	4	1	612	10568	550	BSM	FE	OX
5	OEM/CAP	TOSHIBA	8	MK-80F-10	15.3	—	—	81-20	SMD	1210	3600	40	20,160	2	1	380	8824	450	RVC	FE	OX
2	OEM/CAP	TOSHIBA	14	MK-800R-32	16.3	16.3	—	80-20	SMD	1209	3600	30	20,160	1/1	2/1	823	6274 F	367 F	RVC	FE	OX
5	OEM/CAP	TOSHIBA	8	MK-80F-20	23.0	—	—	81-20	SMD	1210	3600	40	20,160	3	1	380	8824	450	RVC	FE	OX
6	OEM/CAP	TOSHIBA	8	MK-80F-30	38.3	—	—	81-20	SMD	1210	3600	40	20,160	5	1	380	8824	450	RVC	FE	OX
6	OEM	TOSHIBA	5	MK-55FAB	43.2	—	1540	85-10	ST412	625	3600	25	10,416	5	1	830	9383	900	RVC	FE	OX
2	OEM/CAP	TOSHIBA	14	MK-800R-64	48.9	16.3	—	80-20	SMD	1209	3600	30	20,160	3/1	2/1	823	6274 F	367 F	RVC	FE	OX
6	OEM	TOSHIBA	5	MK-54FAB	60.5	—	1605	85-10	ST412	625	3600	25	10,416	7	1	830	9383	900	RVC	FE	OX
2	OEM/CAP	TOSHIBA	14	MK-800R-96	80.5	16.3	—	80-20	SMD	1209	3600	30	20,160	5/1	2/1	823	6274 F	367 F	RVC	FE	OX
6	CAP/OEM	TOSHIBA	8	MK-182FB	83	—	2345 100	83-20	SMD	1210	3600	18	20,160	5	1	823	9000	900	RVC	FE	OX
6	CAP/OEM	TOSHIBA	8	MK-182FA	83	—	2345 100	83-20	SMD	1210	3600	18	20,160	5	1	823	9000	900	RVC	FE	OX
6	OEM	TOSHIBA	5	MK-56FAB	86.5	—	1665	85-10	ST412	625	3600	25	10,416	10	1	830	9383	900	RVC	FE	OX
7	CAP/OEM	TOSHIBA	8	MK-184FA	116.1	—	2455 100	83-20	SMD	1210	3600	18	20,160	7	1	823	9000	900	RVC	FE	OX
7	CAP/OEM	TOSHIBA	8	MK-184FB	116.1	—	2455 100	83-20	SMD	1210	3600	18	20,160	7	1	823	9000	900	RVC	FE	OX
7	CAP/OEM	TOSHIBA	8	MK-186FA	165.9	—	2680 100	83-40	SMD	1210	3600	18	20,160	10	1	823	9000	900	RVC	FE	OX
7	CAP/OEM	TOSHIBA	8	MK-186FB	165.9	—	2680 100	83-40	SMD	1210	3600	18	20,160	10	1	823	9000	900	RVC	FE	OX
5	OEM	TULIH	5	TL226	26.7	—	850 100	84-10	ST506	625	3600	85	10,416	4	1	640	10000	656	RBSM	FE	PL
6	OEM	TULIH	5	TL240	40.0	—	1055 100	84-10	ST506	625	3600	85	10,416	6	1	640	10000	656	RBSM	FE	PL
2	OEM	VERMONT RESEARCH	14	5017-4	26.2 F	26.2 F	13065 100	75-X		673	3165	45	12,800 F	4	1	1024	4000	500	LVC	FE	OX
5	OEM	VICTOR CO.OF JAPAN	3	JD-3806M	6.3	—	—	85-30	MOD ST412	400	2322	130	10,416	2	1	306	11439	566	BSM	FE	PL
5	OEM	VICTOR CO.OF JAPAN	3	JD-3812M	12.7	—	—	85-30	MOD ST412	400	2322	135	10,416	2	1	612	12808	849	BSM	FE	PL
1	OEM	WESTERN DYNEX	14	DD-6121	—	3.1	—	72-X	VARIOUS OPTIONS	195/312.5	1500/2400	35	7,812	2	1	203	2200	100	LVC	FE	OX
1	OEM	WESTERN DYNEX	5	WD-505	—	6.4 F	—	84-30	ST506	625	3600	45	10,416	2	1	306	9022	345	RVC	FE	OX
1	OEM	WESTERN DYNEX	14	DD-6122	—	6.3	—	73-X	VARIOUS OPTIONS	195/312.5	1500/2400	35	7,812	2	1	406	2200	200	LVC	FE	OX
1	OEM	WESTERN DYNEX	14	DD-6221	3.1	3.1	—	72-X	VARIOUS OPTIONS	195/312.5	1500/2400	35	7,812	4	1	203	2200	100	LVC	FE	OX
2	OEM	WESTERN DYNEX	14	DD-6222	6.3	6.3	—	73-X	VARIOUS OPTIONS	195/312.5	1500/2400	35	7,812	4	1	406	2200	200	LVC	FE	OX
5	OEM	XEBEC	5	4000 OML	10.6 F	—	795 100	84-40	SASI	625	3600	85	8,704 F	4	1	306	8842	367	BSM	FE	OX

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1985 OEM RIGID DISK DRIVES - (CONT.)

GRP	MKT	MANUFACTURER	DIA	MODEL	MB (UNF)		SIZE (IN.)			WT		POWER				SHOCK						VIBRATION				dBA					
												+5 V		+12 V		+		NONOP		NONOP		NONOP									
					F	R	H	W	D	LBS	TYP	MAX	TYP	MAX			Hz	G	mS	Hz	G	mS	Hz	G	DA		Hz	G	DA	θ 1'	
6	OEM	SYQUEST TECH.	3	SQ38F	38.2	---	1.6	4.8	8.0	2.9	0.9	---	0.8	1.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TANDON	5	TM252	12.8	---	1.6	5.8	8.0	---	0.8	---	1.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TANDON	5	TM502	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TANDON	5	TM503	19.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TANDON	5	TM362	25.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
6	OEM	TANDON	5	TM703	30.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
6	OEM	TANDON	5	TM755	51.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TEAC	5	SD-506	6.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TEAC	5	SD-412	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TEAC	5	SD-510	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
5	OEM	TEAC	5	SD-520	25.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
8	OEM	TECSTOR	14	3/320	315.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
8	OEM	TECSTOR	14	3/316	315.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
8	OEM	TECSTOR	14	3/315	315.2	---	10.5	19.0	28.2	110	---	---	---	---	10 K	10	12	6	---	2	10	10	3	---	50-500	0.02	---	50-500	2.00	---	
8	OEM	TECSTOR	14	3/317	315.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
8	OEM	TECSTOR	14	3/318	315.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
8	OEM	TECSTOR	14	3/319	315.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
8	OEM	TECSTOR	14	3/332	331.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK503-1	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK503-2	13.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK502-1	13.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK502-2	20.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK505-2	25.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKIO	5	DK502-3	26.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKYO ELECTRIC CO.	5	TD-5512	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TOKYO ELECTRIC CO.	5	TD-5526	25.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM/CAP	TOSHIBA	8	MK-80F-10	15.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2	OEM/CAP	TOSHIBA	14	MK-800R-32	16.3	16.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM/CAP	TOSHIBA	8	MK-80F-20	23.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	OEM/CAP	TOSHIBA	8	MK-80F-30	38.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	OEM	TOSHIBA	5	MK-53FAB	43.2	---	3.3	5.8	8.0	6.6	1.5	---	2.5	3.8	---	20 K	10	12	6	---	4	---	30	---	5-200	0.25	---	---	---	---	
2	OEM/CAP	TOSHIBA	14	MK-800R-64	48.9	16.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	OEM	TOSHIBA	5	MK-54FAB	60.5	---	3.3	5.8	8.0	6.6	1.5	---	2.5	3.8	---	20 K	10	12	6	---	4	---	30	---	5-200	0.25	---	---	---	---	
2	OEM/CAP	TOSHIBA	14	MK-800R-96	80.5	16.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	CAP/OEM	TOSHIBA	8	MK-182FB	83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	CAP/OEM	TOSHIBA	8	MK-182FA	83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	OEM	TOSHIBA	5	MK-56FAB	86.5	---	3.3	5.8	8.0	6.6	1.5	---	2.5	3.8	---	20 K	10	12	6	---	4	---	30	---	5-200	0.25	---	---	---	---	
7	CAP/OEM	TOSHIBA	8	MK-184FA	116.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7	CAP/OEM	TOSHIBA	8	MK-184FB	116.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7	CAP/OEM	TOSHIBA	8	MK-186FA	165.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7	CAP/OEM	TOSHIBA	8	MK-186FB	165.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	TULIN	5	TL226	26.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	OEM	TULIN	5	TL240	40.0	---	1.6	5.8	8.0	3.6	0.9	1.0	1.0	3.0	---	12 K	10	12	6	---	10	---	40	---	17-150	0.55	---	5-200	0.50	---	55
2	OEM	VERMONT RESEARCH	14	5017-4	26.2 F	26.2 F	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	VICTOR CO. OF JAPAN	3	JD-3806M	6.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	VICTOR CO. OF JAPAN	3	JD-3812M	12.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	OEM	WESTERN DYNEX	14	DD-6121	---	---	3.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	OEM	WESTERN DYNEX	5	MD-505	---	---	6.4 F	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	OEM	WESTERN DYNEX	14	DD-6122	---	---	6.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	OEM	WESTERN DYNEX	14	DD-6221	---	---	3.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2	OEM	WESTERN DYNEX	14	DD-6222	---	---	6.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	OEM	XEBEC	5	4000 ONL	10.6 F	---	1.6	5.8	8.0	---	1.2	1.3	0.8	3.5	---	15 K	---	12	---	---	---	---	---	---	---	---	---	---	---		

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1985 OEM FIXED DISK DRIVES - 3 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)		PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE		BPI	CODE	TPI	ACT	HEADS	MEDIA	SRF		
					F	R							\$	Q								KB/S	MS
5	OEM	VICTOR CO.OF JAPAN	3	JD-3806M	6.3	—	—	—	85-3Q	MOD	ST412	400	2322	130	10,416	2	1	306	11439	566	BSM	FE	PL
5	OEM	FUJITSU, LTD.	3	M2220A (HH)	6.4	—	—	—	85-3Q	ST412	625	3600	88	10,416	2	1	306	12500	450	BSM	FE	OX	
5	CAP/OEM	HEWLETT PACKARD	3	79901A	10.0	F	—	—	85-1Q	HP	300	3000	75	7,168	F	2	1	698	12000	1100	RBSM	FE	SP
5	OEM	FUJITSU, LTD.	3	M2223A	12.7	—	500	100	85-3Q	ST412	625	3600	88	10,416	4	1	306	12500	450	BSM	FE	OX	
5	OEM	HITACHI, LTD.	3	DK301-1 (HH)	12.7	—	590	100	85-2Q	ST412	625	3600	85	10,416	4	1	306	12600	485	BSM	FE	OX	
5	OEM	LAPINE TECH.	3	3512 RANGER	12.7	—	400	100	85-1Q	ST412	625	3600	66	10,416	4	1	306	11200	600	RBSM	FE	OX	
5	OEM	MITSUBISHI ELEC.	3	MR321 (HH)	12.7	—	—	—	86-1Q	ST412	625	3536	70	13,840	2	1	618	13840	821	RBSM-E	FE	PL	
5	OEM	VICTOR CO.OF JAPAN	3	JD-3812M	12.7	—	—	—	85-3Q	MOD	ST412	400	2322	135	10,416	2	1	612	12808	849	BSM	FE	PL
5	OEM	ALPS ELECTRIC	3	DRLO 10A	12.8	—	—	—	85-2Q	ST412	625	3600	80	10,416	4	1	306	10913	640	RBSM	FE	PL	
5	OEM	MICROCOMP. MEM.	3	M-112	12.8	—	—	—	84-1Q	ST506	625	3600	85	10,416	4	1	306	10943	588	RPSM	FE	OX/PL	
5	OEM	MICROSCIENCE INT.	3	HH-312	12.8	—	890	100	84-2Q	ST506	625	3550	70	10,416	4	1	306	11000	648	BSM	FE	PL	
5	OEM	NEC	3	D3116 (HH)	12.8	—	—	—	85-3Q	ST412	625	3564	85	10,416	2	1	615	15000	750	BSM	FE	PL	
5	OEM	RODINE	3	252	12.8	—	430	2500	83-3Q	ST506	625	3600	85	10,416	4	1	306	11000	600	RBSM	FE	OX/PL	
5	OEM	RODINE	3	352	12.8	—	430	2500	83-3Q	ST506	625	3600	85	10,416	4	1	306	11000	600	RBSM	FE	OX/PL	
5	OEM	MATSUSHITA COMM.IND.	3	JU-104	13.3	—	—	—	85-3Q	ST412	625	3600	85	10,416	4	1	320	12100	506	BSM	FE	OX	
5	OEM	NIPPON PERIPH.	3	NFO3-13	13.3	—	—	—	85-1Q	ST506	625	3600	88	10,416	4	1	320	13500	440	BSM	FE	OX	
5	OEM	FUJITSU, LTD.	3	M2224A (HH)	19.1	—	625	100	85-3Q	ST412	625	3600	88	10,416	6	1	306	12500	450	BSM	FE	OX	
5	OEM	HITACHI, LTD.	3	DK301-2	19.1	—	675	100	85-2Q	ST412	625	3600	85	10,416	6	1	306	12600	485	BSM	FE	OX	
5	OEM	NIPPON PERIPH.	3	NFO3-20	20.0	—	—	—	85-1Q	ST506	625	3600	88	10,416	6	1	320	13500	440	BSM	FE	OX	
5	OEM	ALPS ELECTRIC	3	DRMO 20A	25.5	—	—	—	85-3Q	ST412	625	3600	80	10,416	4	1	612	12350	875	RBSM	FE	PL	
5	OEM	LAPINE TECH.	3	3525 TITAN	25.5	—	590	100	85-3Q	ST412	625	3600	68	10,416	4	1	612	11700	900	RBSM	FE	OX	
5	OEM	MICROCOMP. MEM.	3	M-125	25.5	—	—	—	85-1Q	ST506	625	3600	85	10,416	8	1	306	10943	588	RPSM	FE	OX/PL	
5	OEM	MICROSCIENCE INT.	3	HH-325 (HH)	25.5	—	475	2500	85-1Q	ST412	625	3550	80	10,416	4	1	612	13014	855	BSM	FE	SP	
5	OEM	MITSUBISHI ELEC.	3	MR322	25.5	—	—	—	86-1Q	ST412	625	3536	70	13,840	4	1	618	13840	821	RBSM-E	FE	PL	
5	OEM	NEWBURY DATA	3	320 PENNY	25.5	—	—	—	85-3Q	ST412	625	3578	40	10,416	4	1	612	12673	980	LVC	FE	PL	
5	OEM	PERIPHERAL TECH.	3	PT-325	25.5	—	—	—	86-X	ST412	625	3573	40	10,404	4	1	612	12000	983	LDCM	FE	OX	
5	OEM	SYQUEST TECH.	3	SQ325F	25.5	—	890	100	84-2Q	ST506	625	3547	90	10,416	4	1	612	12223	764	BSM	FE	PL	
5	OEM	MINISCRIBE	3	8425 (HH)	25.6	—	590	100	84-3Q	ST412	625	3600	68	10,416	4	1	615	13412	804	RPSM	FE	OX	
5	OEM/CAP	NEC	3.5	D3126	25.6	—	387	1000	85-3Q	ST412	625	3564	85	10,416	4	1	615	15000	750	LBSM	FE	PL	
5	OEM	NEC	3	D3126	25.6	—	387	1000	85-3Q	ST412	625	3564	85	10,416	4	1	615	15000	750	BSM	FE	PL	
5	OEM	TANDON	3	TN362	25.6	—	375	2500	85-2Q	ST412	625	3568	80	10,416	4	1	615	13739	804	RPSM	FE	PL	
6	OEM	PERIPHERAL TECH.	3	PT-338	38.2	—	—	—	86-X	ST412	625	3573	40	10,404	6	1	612	12000	983	LDCM	FE	OX	
6	OEM	SYQUEST TECH.	3	SQ338F	38.2	—	1000	100	84-2Q	ST506	625	3547	90	10,416	6	1	612	12223	764	BSM	FE	PL	
6	OEM	NEWBURY DATA	3	340 PENNY	50.1	—	—	—	85-3Q	ST412	625	3578	40	10,416	8	1	612	12673	980	LVC	FE	PL	

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1985 OEM FIXED DISK DRIVES - 5 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)		PRICE		FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	CODE	TPI	ACT	HEADS MEDIA		
					F	R	\$	Q						KB/S	MS	B/TK					DS	HD/S	CYL
7	OEM	PRIAM	5	514	140.2	—	2270	100	86-10	ST412	625	3600	20	10,416	11	1	1224	10924	1070	LVC	FE	PL/SP	
7	OEM	NEWBURY DATA	5	1140	143.4	—	—	—	84-40	ST506	625	3600	30	10,416	15	1	918	9875	980	RVC	FE	PL	
7	OEM	MAXTOR	5	XT-1140	143.6	—	3430	100	83-20	ST506	625	3600	30	10,416	15	1	918	9875	980	RVC	FE	PL	
7	OEM	MICROPOLIS	5	1354A	149.3	—	1540	1000	85-30	ESD1	1250	3600	28	20,832	7	1	1024	19794	2,7	1000	RVC	FE	PL
7	OEM	MICROPOLIS	5	1375	154.0	—	1695	1000	86-10	SCSI	1250	3600	28	19,456	8	1	1024	19794	2,7	1000	RVC	FE	PL
7	OEM	ADV STORAGE TECH	5	AST 38158	158.0	—	—	—	85-40	ESD1	1250	3600	30	21,000	5	1	1500	21300	2,7	1330	LVC	TFH	SP
7	OEM	MICROPOLIS	5	1355	170.6	—	2475	100	85-20	ESD1	1250	3600	25	17,920	8	1	1024	19648	1000	RVC	FE	PL	
7	OEM	HITACHI, LTD.	5	DK512-17	171.0	—	—	—	85-10	ESD1/SMD/SCSI	1209	3600	30	20,832	10	1	823	18500	925	RVC	FE	OX	
6	CAP/OEM	FUJITSU, LTD.	5	M2246E	171.7	—	—	—	85-30	ESD1	1250	3600	28	20,864	10	1	823	20400	2,7	850	RVC	FE	OX
7	OEM	MAXTOR	5	EXT-4175	178.5	—	3590	100	84-40	ESD1	1250	3600	30	20,832	7	1	1224	22310	980	RVC	FE	PL	
7	OEM	MAXTOR	5	XT-2190	191.2	—	3775	100	84-30	ST506	625	3600	30	10,416	15	1	1224	11155	980	RVC	FE	PL	
7	OEM	PRIAM	5	519	191.2	—	2475	100	86-10	ST412	625	3600	20	10,416	15	1	1224	10924	1070	LVC	FE	PL/SP	
7	OEM	SIEMENS	5	1200	205.6	—	3427	100	85-40	ANSI,ESD1	1250	3571	25	21,000	8	12	1224	19077	1207	RVC	TFH	PL	
7	OEM	MAXTOR	5	EXT-4280	280.5	—	4960	100	84-40	ESD1	1250	3600	30	20,832	11	1	1224	22310	980	RVC	FE	PL	
8	OEM	SIEMENS	5	1300	308.4	—	3825	100	85-40	ANSI,ESD1	1250	3571	25	21,000	1	1	1224	19077	1207	RVC	TFH	PL	
8	OEM	MAXTOR	5	EXT-4380	382.5	—	6165	100	84-40	ESD1	1250	3600	30	20,832	15	1	1224	22310	980	RVC	FE	PL	

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1985 OEM FIXED DISK DRIVES - 8 INCH / 9 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE		FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	CODE	TP1	ACT	HEADS	MEDIA	
					F	R	\$	Q						KB/S	mS	B/TK							DS
7	OEM	NORTHERN TELECOM	8	8210X	234.2	—	5380	100	83-30	SMD	1209	3313	23	21,912	10	1	1069	10242	1000	RTM	FE	OX	
7	OEM	MITSUBISHI ELEC.	8	M4870F	251.4	—	6000	100	84-40	MSMD	1209	3544	20	20,480	12	1	1023	10000	1000	RVC	FE	OX	
7	OEM	PERTEC	8	DX265	265.0	—	3850	100	85-20	ANSI, SMD	1208	3600	22	20,160	8	1	1649	12022	2,7	1083	RVC	FE	OX
8	OEM	PRIAM	8	807	330.2	—	4105	100	84-20	PRIAM, SMD	1210	3600	25	20,160	11	1	1489	12096	1000	LVC	FE	PL	
8	OEM	PERTEC	8	DX332	332.0	—	4100	100	85-20	ANSI, SMD	1208	3600	22	20,160	10	1	1649	12022	2,7	1083	RVC	FE	OX
8	OEM	FUJITSU, LTD.	8	M2333K	337.0	—	5350	100	84-40	MOD/SMD/SCSI	2458	3600	20	40,960	10	1	823	19734	2,7	683	RVC	FE	OX
8	OEM	FUJITSU, LTD.	8	M2333KS	337.0	—	5350	100	84-40	MOD/SMD/SCSI	2458	3600	20	40,960	10	1	823	19734	2,7	683	RVC	FE	OX
8	OEM	NEC	8	D2232	337.1	—	—	—	85-20	SMD	1209	3544	15	20,480	10	2	1646	10900	1080	RVC	FE	PL	
8	OEM	NEC	8	D2268	337.1	—	4120	100	85-20	SMD-E	1859	2720	20	40,960	10	1	823	18900	2,7	780	RVC	FE	OX
8	OEM	NEC	8	N7737	337.1	—	—	—	85-20	SMD	1209	3544	15	20,480	10	2	1646	10900	1080	RVC	FE	PL	
8	OEM	MEGAVULT	8	MV330	338.0	—	—	—	86-XX	SMD/SCSI	1228	3600	18	20,480	13	1	1272	11057	1000	RVC	FE	OX	
7	OEM	HITACHI, LTD.	8	DK814S-34	340.0	—	5250	100	84-40	SMD-E	1815	2632	20	32,768	10	1	823	18900	2,7	800	RVC	FE	OX
8	OEM	NORTHERN TELECOM	8	8212X	350.2	—	3950	100	85-20	SMD/SCSI	1209	3313	22	21,912	12	1	1332	10238	1280	RTM	FE	PL	
8	OEM	CONTROL DATA	8	9720 EMD	368.0	—	4850	100	85-40	SMD, SMD-E	1875	3600	18	30,240	10	1	1217	15185	2,7	960	RVC	TFH	OX
8	OEM	NORTHERN TELECOM	8	8310	378.6	—	6028	100	84-40	MODIFIED SMD	1895	3313	20	34,300	10	1	1104	16200	1056	RTM	TFH	OX	
8	OEM	CENTURY DATA SYS.	8	C2400	408.0	—	6610	100	85-20	SMD	1209	3600	15	20,160	12	2	845	9900	960	LVC	TFH	HDOX	
8	OEM	MITSUBISHI ELEC.	8	MR4875	408.5	—	—	—	85-30	SMD-E	1814	3544	20	30,720	13	1	1023	14100	1000	RVC	TFH	OX	
8	OEM	HITACHI, LTD.	8	DKU-80	427.7	—	—	—	83-40	IBM/SMD	1344	3000	18	26,880	13	2	1224	NA	NA	RVC	FE	OX	
8	OEM	CENTURY DATA SYS.	8	C2476	475.9	—	7450	100	85-10	MOD, SMD	1859	3961	15	28,160	10	2	845	17900	2,7	1143	LVC	TFH	HDOX
8	OEM	PRIAM	8	808	495.3	—	4630	100	84-30	PRIAM, MODIFIED SMD	1810	3600	25	30,240	11	1	1489	18144	2,7	1000	LVC	FE	PL
9	OEM	MEGAVULT	8	MV660	671.0	—	—	—	86-XX	SMD/SCSI	1838	3600	18	30,720	13	1	1680	19557	RLL	1034	RVC	FE	OX
7	OEM	CONTROL DATA	9	9715-180 FSD	165.9	—	4960	100	82-40	SMD/ISI	1209	3600	30	20,160	10	1	823	10000	2,7	550	RVC	FE	OX
8	OEM	CONTROL DATA	9	9715-340 FSD	344.0	—	7290	100	83-40	SMD/ISI	1209	3600	20	20,160	12	2	1422	9492	960	LVC	TFH	OX	
9	OEM	CONTROL DATA	9	9715-300 FSD	516.0	—	8530	100	83-40	MOD SMD/ISI	1825	3600	20	30,240	12	2	1422	15159	2,7	960	LVC	TFH	OX
9	OEM	NEC	9	N7738	523.9	—	6715	100	85-10	SMD-E	1859	3070	15	36,288	9.5	2	1520	18600	2,7	1020	RVC	FE	PL
9	OEM	NEC	9	D2352	523.9	—	6715	100	85-10	SMD-E	1859	3070	15	36,288	9.5	2	1520	18600	2,7	1020	RVC	FE	PL
9	OEM	HITACHI, LTD.	9	DK815-5	525.0	—	—	—	84-40	MOD, SMD/	1800	3600	18	30,240	14	1	1241	14736	2,7	885	RVC	FE	OX

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1985 OEM FIXED DISK DRIVES - 10.5 INCH/14 INCH

GRP	MKT	MANUFACTURER	DIA IN.	MODEL	MB(UNF)		PRICE \$ Q	FCS	INTERFACE	XFR KB/S	RPM	ACC mS	DATA STRUCTURE			BPI	CODE	TP1	ACT	HEADS	MEDIA		
					F	R							B/TK	DS	HD/S							CYL	
6	OEM	BULL	10.5	D162/4	60.2	F	2850	100	81-3Q CYNTHIA	920	3600	40	12,800	F	4	1	1176	4850	900	LVC	TFH	OX	
6	OEM	BULL	10.5	D160/4	60.2	F	2850	100	81-3Q CYNTHIA	920	3600	40	12,800	F	4	1	1176	4850	900	LVC	TFH	OX	
6	OEM	BULL	10.5	D162/6	90.3	F	3100	100	81-3Q CYNTHIA	920	3600	40	12,800	F	6	1	1176	4850	900	LVC	TFH	OX	
6	OEM	BULL	10.5	D160/6	90.3	F	3100	100	81-3Q CYNTHIA	920	3600	40	12,800	F	6	1	1176	4850	900	LVC	TFH	OX	
7	OEM	BULL	10.5	D160/8	120.4	F	3350	100	81-3Q CYNTHIA	920	3600	40	12,800	F	8	1	1176	4850	900	LVC	TFH	OX	
7	OEM	BULL	10.5	D162/8	120.4	F	3350	100	81-3Q CYNTHIA	920	3600	40	12,800	F	8	1	1176	4850	900	LVC	TFH	OX	
8	OEM	FUJITSU, LTD.	10.5	M2390A	473.6	F	28000	25	84-1Q MOD/SMD	9300	3961	18	28,160	F	10	2	1684	12790	880	RVC	FE	OX	
8	OEM	FUJITSU, LTD.	10.5	M2351A	474.2	F	8800	100	82-1Q MOD/SMD	1859	3961	18	28,160	F	10	2	1684	12790	880	RVC	FE	OX	
9	OEM	FUJITSU, LTD.	10.5	M2361A	689.8	F	9775	100	85-2Q MOD/SMD	2458	3600	18	40,960	F	10	2	1684	18620	2,7	880	RVC	FE	OX
6	CAP/OEM	NEC	14	D1220	41.5	F	—	—	78-3Q SMD	1198	3600	40	19,968	F	2	2	1040	6370	480	RVC	FE	OX	
6	CAP/OEM	NEC	14	N7722	41.5	F	—	—	78-3Q SMD	1198	3600	40	19,968	F	2	2	1040	6370	480	RVC	FE	OX	
6	OEM	PRIAM	14	6650	67.9	F	2660	100	80-3Q PRIAM,SMD	1040	3100	46	20,160	F	1.5	2/1	2242	6430	960	LVC	FE	OX	
6	OEM	DISC TECH ONE	14	3306	84.0	F	3500	100	77-3Q SMD,PRIAM	1000	2964	38	20,160	F	6	2	704	6122	286	RVC	FE	OX	
6	CAP/OEM	NEC	14	N7723	84.8	F	—	—	80-3Q SMD	1198	3600	29	19,968	F	4	2	1040	6370	480	RVC	FE	OX	
6	CAP/OEM	NEC	14	D1245	84.8	F	—	—	80-3Q SMD	1198	3600	29	19,968	F	4	2	1040	6370	480	RVC	FE	OX	
7	OEM	PRIAM	14	15450	158.5	F	3895	100	81-3Q PRIAM,SMD	1040	3100	46	20,160	F	3.5	2/1	2242	6430	960	LVC	FE	OX	
7	OEM	CENTURY DATA SYS.	14	M160-MARKSMAN	160.7	F	4050	100	82-1Q MARKSMAN/SMD	1280	2400	50	32,000	F	3	2	1690	10000	712	BTM	FE	OX	
7	OEM	AMPEX	14	CAPRICORN 165	165.9	F	5155	100	81-3Q SMD	1209	3600	21	20,160	F	5	2	1646	5950	960	LVC	FE	OX	
7	OEM	AMPEX	14	CAPRICORN 165E	165.9	F	5155	100	81-3Q SMD	1209	3600	21	20,160	F	5	2	1646	5950	960	LVC	FE	OX	
7	OEM/CAP	CONTROL DATA	14	9730-160 MMD	165.9	F	5785	100	79-2Q SMD	1209	3600	30	20,160	F	5	2	1646	6220	680	RVC	FE	OX	
7	OEM	DISC TECH ONE	14	4160	165.9	F	4000	100	83-1Q SMD	1209	3600	38	20,160	F	5	2	1646	6270	706	RVC	FE	OX	
7	OEM	FUJITSU, LTD.	14	M2284	168.6	F	4775	100	79-2Q SMD	1012	2964	27	20,480	F	5	2	1646	6580	680	RVC	FE	OX	
7	OEM	DISC TECH ONE	14	4230	232.3	F	9000	100	84-1Q PRIAM STAN.	1209	2964	38	20,160	F	7	2	1664	6270	706	RVC	FE	OX	
8	OEM	DISC TECH ONE	14	4300	301.0	F	9000	100	83-1Q SMD	1278	2964	38	25,872	F	7	2	1664	8072	706	RVC	FE	OX	
8	OEM	CENTURY DATA SYS.	14	AMS 315	315.2	F	6780	100	82-4Q SMD	1209	3600	25	20,160	F	9.5	2	1646	6363	712	LVC	FE	OX	
8	OEM	TECSTOR	14	3/318	315.2	F	—	—	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	TECSTOR	14	3/320	315.2	F	—	—	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	TECSTOR	14	3/315	315.2	F	5600	100	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	TECSTOR	14	3/317	315.2	F	—	—	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	TECSTOR	14	3/316	315.2	F	—	—	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	TECSTOR	14	3/319	315.2	F	—	—	82-4Q SMD	1209	3600	29	20,160	F	9.5	2	1646	6450	680	RVC	FE	OX	
8	OEM	AMPEX	14	CAPRICORN 330	330.3	F	7050	100	81-3Q SMD	1209	3600	21	20,160	F	8	2	2048	6250	960	LVC	FE	OX	
8	OEM	AMPEX	14	A-330	330.3	F	5895	100	84-4Q MOD SMD,SCSI	1859	2766	18	40,320	F	4	2	2048	12500	2,7	960	LVC	FE	OX
8	OEM	TECSTOR	14	3/332	331.8	F	5700	100	82-4Q SMD	1209	3600	29	20,160	F	10	2	1646	6450	680	RVC	FE	OX	
8	OEM	FUJITSU, LTD.	14	M2294K	335.5	F	5800	100	83-2Q SMD	1012	2964	27	20,480	F	8	2	2048	6500	858	RVC	FE	OX	
8	OEM	FUJITSU, LTD.	14	M2294M	335.5	F	5800	100	83-2Q SMD	1012	2964	27	20,480	F	8	2	2048	6500	858	RVC	FE	OX	
9	OEM	CENTURY DATA SYS.	14	AMS 513	513.7	F	7200	100	83-1Q SMD	1280	2400	25	32,064	F	9.5	2	1690	10000	712	LVC	FE	OX	
9	OEM	CENTURY DATA SYS.	14	AMS 571	590.2	F	9000	100	83-3Q MOD SMD	1980	3600	19	33,012	F	9.5	2	1882	10295	800	LVC	TFH	OX	
9	OEM	HITACHI, LTD	14	DKU-971	635.0	F	—	—	81-1Q IBM	1198	3600	20	19,069	F	20	2	1666	6425	720	DRVC	FE	OX	
9	OEM	HITACHI, LTD.	14	H-8576-22	635.0	F	—	—	80-4Q IBM	1198	3600	20	19,069	F	20	2	1666	6425	720	DRVC	FE	OX	
9	OEM	HITACHI, LTD.	14	H-8576-12	635.0	F	—	—	80-4Q IBM	1198	3600	20	19,069	F	20	2	1666	6425	720	DRVC	FE	OX	
9	OEM	CONTROL DATA	14	9797	651.6	F	—	—	77-X SPECIAL	4840	3600	50	20,160	F	40	1	822	6000	384	LVC	FE	OX	
9	OEM	AMPEX	14	A-660	660.6	F	7195	100	84-4Q MOD SMD,SCSI	1859	2766	18	40,320	F	8	2	2048	12500	2,7	960	LVC	FE	OX
9	OEM	FUJITSU, LTD.	14	M2298M	671.0	F	7045	100	84-3Q SMD/MOD	1859	2722	27	40,960	F	8	2	2048	13000	858	RVC	FE	OX	
9	OEM	FUJITSU, LTD.	14	M2298K	671.0	F	7045	100	84-3Q SMD/MOD	1859	2722	27	40,960	F	8	2	2048	13000	858	RVC	FE	OX	
9	OEM	CONTROL DATA	14	9775 FMD	675.0	F	15155	100	80-2Q SMD	1209	3600	25	20,160	F	20	2	1686	6350	660	LVC	FE	OX	
9	OEM	HITACHI, LTD.	14	DKU-975	697.0	F	—	—	83-3Q SMD	1240	3600	20	20,672	F	20	2	1682	6425	720	DRVC	FE	OX	
9	OEM	CONTROL DATA	14	9771 XMD	825.0	F	10660	100	83-3Q MOD SMD/ISI/SDI	1825	2160	16	50,400	F	8	2	2046	15400	2,7	960	LVC	TFH	OX
9	OEM	AMPEX	14	A-825	825.7	F	8250	100	84-4Q MOD SMD,SCSI	1859	2766	18	40,320	F	10	2	2048	12500	2,7	960	LVC	FE	OX
9	OEM	CONTROL DATA	14	9772 XMD-11	858.0	F	9475	100	85-4Q SMD-E	3000	3000	16	50,400	F	8	2	2128	15400	2,7	960	LVC	TFH	OX
9	OEM	NIPPON PERIPH.	14	NP755-1	868.8	F	—	—	84-3Q SMD	1859	2964	19	32,768	F	12	2	1924	12128	2,7	810	DLVC	FE	OX
9	CAP/OEM	HITACHI, LTD.	14	H-8598-22	1260.0	F	—	—	82-4Q IBM	3000	3600	16	47,476	F	20	2	1328	15240	2,7	600	DRVC	FE	OX
9	CAP/OEM	HITACHI, LTD.	14	DKU-981	1260.0	F	—	—	82-4Q IBM	3000	3600	16	47,476	F	20	2	1328	15240	2,7	600	DRVC	FE	OX
9	CAP/OEM	HITACHI, LTD.	14	H-8598-12	1260.0	F	—	—	82-4Q IBM	3000	3600	16	47,476	F	20	2	1328	15240	2,7	600	DRVC	FE	OX
9	OEM	IBIS	14	1400	1409.0	F	—	—	83-4Q CUSTOM	12000	3600	16	49,728	F	16	2	1776	15294	769	LVC	FE	PL	

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COMPETITION

COMPETITION

8"/9"

CDC (8")	368	MB
PRIAM (8")	480	MB
NEC (9")	520	MB
HITACHI (8.8")	525	MB

5 -1/4" >100 MB

SIEMENS	102, 204, 306	MB
AIM	130, 250	MB
MAXTOR	143, , 382	MB
AST	103, 202	MB
HITACHI	171	MB
MICROPOLIS	171	MB
CDC		320 MB

3-1/2" | 12 - 51 MB

MINISCRIBE	12,25	MB
RODIME	12	MB
MICRO. MEMORIES	12,25	MB
TANDON	25	MB
LAPINE	12	MB
MICROSCIENCE	12	MB
NPL	13,20	MB
NEWBURY	25,51	MB

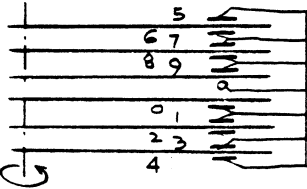
8"/9" COMPETITION

CDC 8" 368MB

DATA STRUCTURES

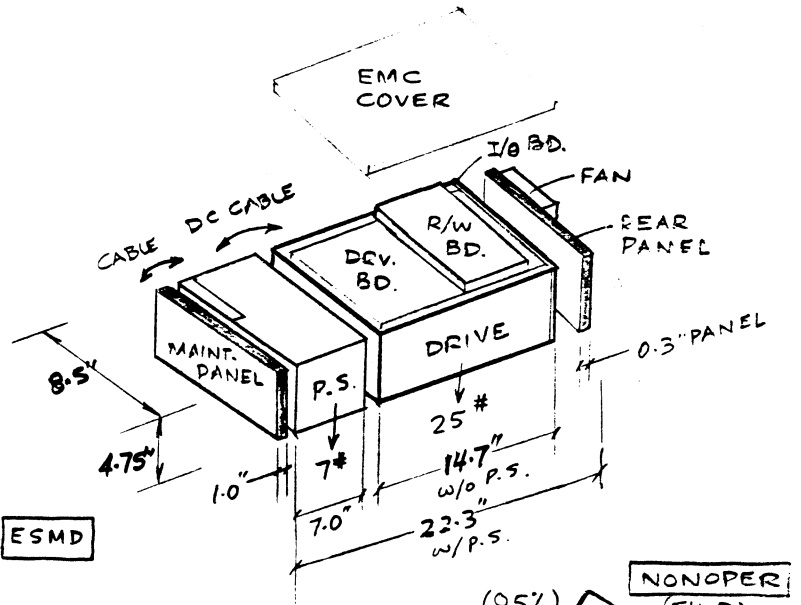
1217 cyl	30,240 B/TK
960 TPI	15,185 BPI (2,7)

2.5356" 0.789" 3.3244"

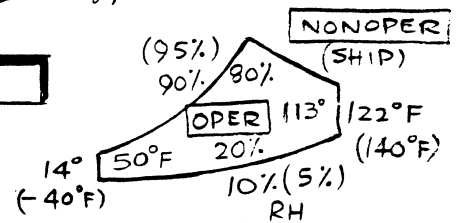


ESMD
1815KB/s
5/10/35 ms
RVC

3600 rpm
dc motor
Start 35 sec
Stop 15/30 sec
10+1 HEADS (THIN FILM)
6 PLATTERS



ENVIRONMENTAL



FEATURES

- Single or Dual Channel Field Convertible
- Rack or Cabinet Mount
- Factory Shipped w/ Index & Sector in 'A' Cable but modifiable to 'B' or 'A & B' Cable
- With or Without Pwr. Supply.

OPTIONS

- Pwr Supp, DC Cable up to 8'
- Back Panel/Fan Assy
- Cable, Maint./Cntl. Panel
- Front Panel - 1/2 drives
- Pan Mount Kit - 1/2 drives
- Field Exerciser

MAINTENANCE PANEL - OPER. FUNCTION

(Consists: Oper. Panel + Maint. Kibpd + LCD Display)

- Unit Selected - Status
- Current Cylinder & Address
- Fault - Type & History of Occurrence
- Internal Machine Status
- Offline Diagnostic Control & Display

ALT.	K Fc.	OPER.	NON-OP.	SHIP
VIB.	3-10 Hz	0.3g	3g	0.5g
	10-50			
	50-100	1.0g		
	100-300			
SHOCK	10ms	3g		
	PER/SEC	< 2		12" Drop to Floor.
NOISE				

PWR.	+5V	-5V	-12V	+24V
TYP.				3.0A
MAX.				7.5A

DATA INTEGRITY

MTBF: Drive 20,000 POH
Dru. TPS 24,000 POH

ERROR RATE: 10, 12 (27 Retries), 6 Recov, Non Recov. Seek

DEFECT MGMT:

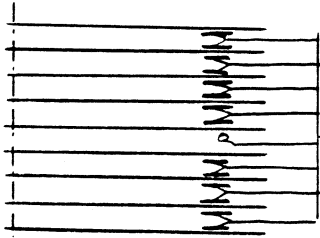
- Skip Displacement Technique
- ≤ 1 Defect/TK
- False Address Mark
- Flow Map of Defects Logged in Logging Area with Hd Cyl, Defect (Location + Length)
- Cyl. 0 Hds 0 & 1 Defect Free

HITACHI | 8.8" | 525MB

DATA STRUCTURE

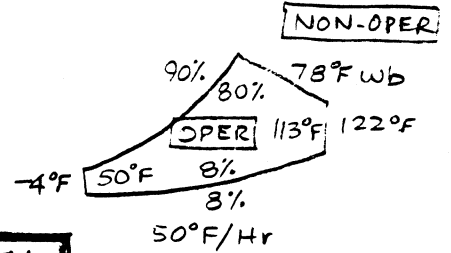
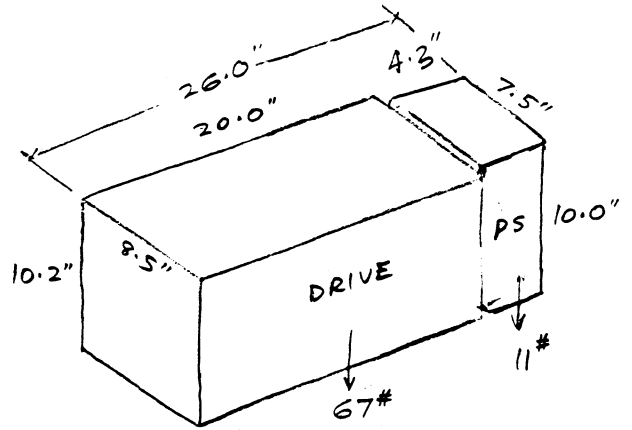
1241+1 Gf	30,240 B/Tr
885 TPI	14,585 BPI (2,7)

2.640" ↓ 1.4034" ↓ 4.0433"



1815 KB/s
5/20/45 ms → SMD-E

3600rpm
dc motor
Start 30sec



FEATURES

- Marginalized Testing
- Extended Burn In
- 10,000 Start Stops
- Standard SMD-EIS I/F

OPTIONS

- Dual Port
- DC Pwr. Supply

ENVIRONMENTAL

		OPER.	NON-OPER	SHIP
ALT	Kft			
VIBR	5-500Hz	0.25g	2g	
SHOCK	11ms	2g	5g	
	1/2 SINUS.			
	PerSec	0.2		
NOISE				

PWR.	AC	+5V	-5V	+24V	-24V	+40V
TYP	300W	6.0	3.5	1.6	1.0	4.0
MAX	700W	6.0	3.5	2.4	1.0	10.0

Regulatory: UL478, CSA 22-2-154
FCC Part 15 Class A
(Mounted in Std. 19" Rack)

DATA INTEGRITY

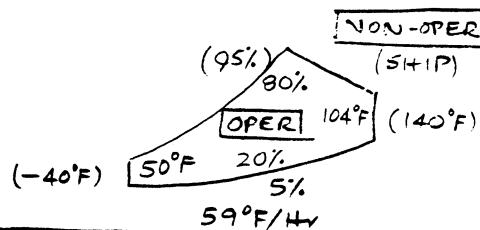
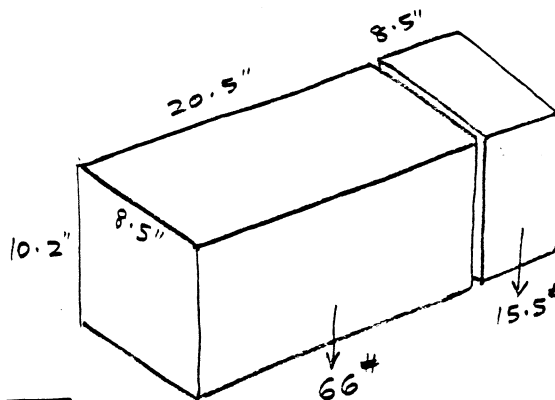
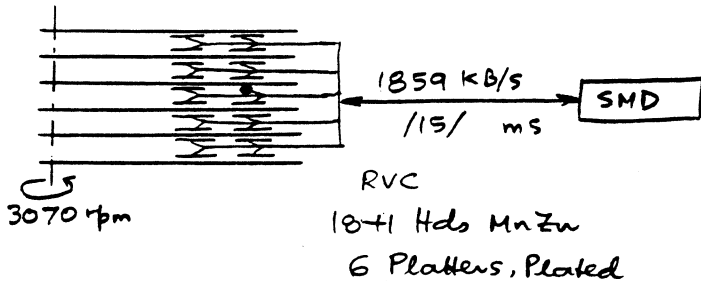
- MTBF: 20,000 POH Drive
100,000 POH Pwr. Supply
- Error Rate: 10,13,7
Recov, Non Recov, Seek

NEC 9" 520 MB

DATA STRUCTURE

760x2 cyl	36,288 B/TK
1000 TPI	18,600 BPI (2,7)

2.4841" \downarrow 0.76" x 2 \downarrow



FEATURES

OPTIONS

- Dual Port
- Front Panel
- Pwr. Supply
- Slide Rails
- Diagnostic Panel
- 19" Rack Mounted Hardware

ENVIRONMENTAL

		OPER	NON-OPER	SHIP
ALT	kft	10	40	
VIBR.	5-50 HZ	0.2g	1g	
	50-500	0.4g	1g	
SHOCK	10ms	3g	3g	5g

PWR	+5V	-5.2V	-2.2V	+12V	-12V	+38V
TYP	3.5	5.0	2.5	1.0	1.0	4.0
MAX	3.5	5.0	2.5	1.0	1.0	7.5

TYP 225W
MAX 360W

DATA INTEGRITY

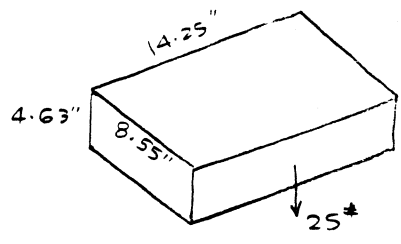
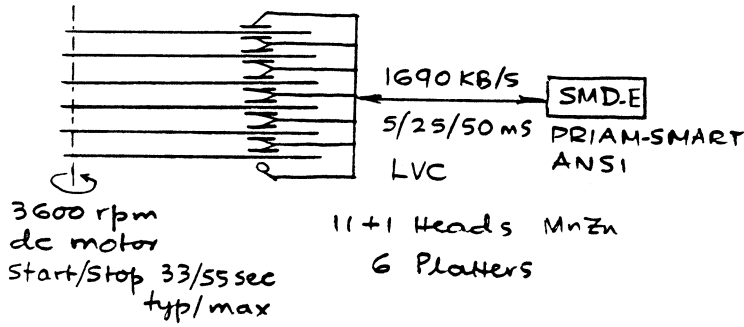
- MTBF: 20,000 PoH Drive
- Error Rate: 10, 13, 7
Recov, Non Recov, Seek
- Defect Mgmt:
Cyl 0, Hds 0, 1 Defect Free Tks

PRIAM 8" 480MS

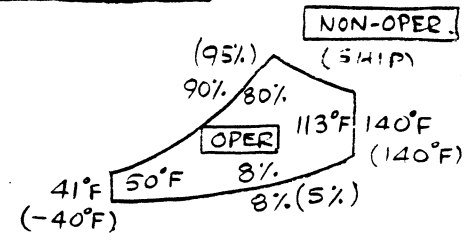
DATA STRUCTURE

1552 Cyl	28,160 B/TK
1040 tpi	16,896 BPI(37)

2.1221" ↓ 1.492" ↓ 3.6144"



ENVIRONMENTAL



FEATURES

- Auto Lock Assy
- Defect Map Hardcopy
- Cyl, Hd, Defect Loc. + Length
- Fixed/Variable Tk. Format

OPTIONS

- Various Interfaces:
- Priam (Bi Directional)
- SMD, ANSI
- Dual Port (w/ SMD I/F)
with Arbitration logic

ALT	Kft	OPER.	NON-OP.	SHIP
VIBR.	2-14	.005"	.01"	I.C.C. Fed. Test 101B
	14-45	0.1g		
	45-60		2g	
	60-100	0.0003"		
	100-300	0.3g		
SHOCK	11ms 1/2 SINUS.	1g	25g	METHOD B3D.LVI.A
	PER/SEC	< 0.2	< 0.2	
NOISE	@1m	60 db	-	-

PWR	-5V	+5V	+24V	AC 110/240
Typ	2.5A	1.7A	2.5A	280W
Max	3.0A	2.2A	7.0A	

Operating Environment: SubClass P1
 1-5µ > 5µ
 Particles/m³ 4x10⁶ 4x10⁵

Regulatory: UL478; CSA 22-2-154

DATA INTEGRITY

MTBF: 10,000 P04
 ERROR RATE: 10, 13 (6 Retries). 6
 Recov, Non Recov, Seefe

DEFECT MGMT:

- ≤ 3 Defects/Tk
 < 174 Bad Tks/Drive ?
 < 532 Defects/Drive ?
- Cyl. 0 Hds 0,1,2 Defect Free
- Flaw Map Hardcopy

MB

2000

1500

1200

1000

800

500

300

200

100

80

50

30

20

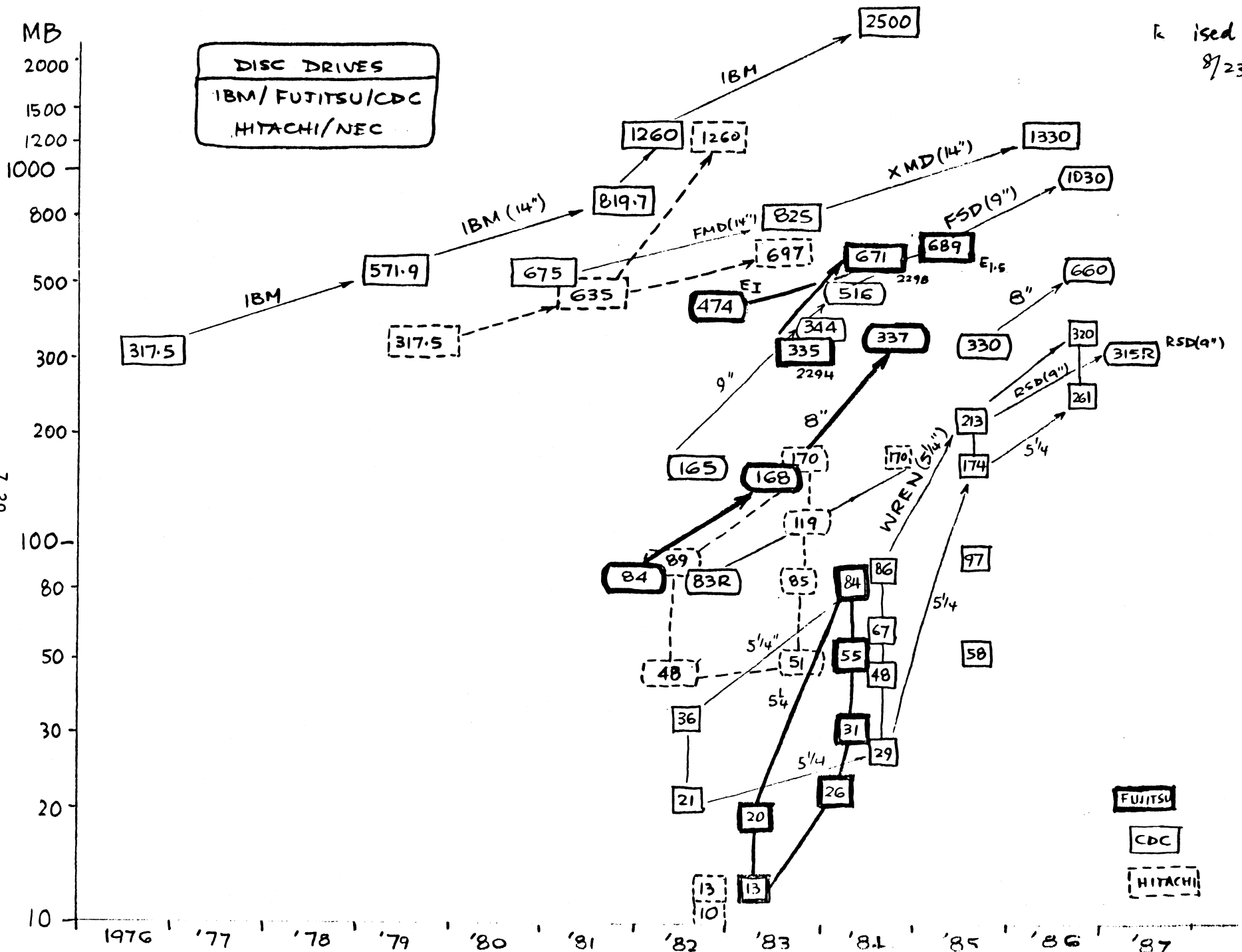
10

DISC DRIVES
 IBM/FUJITSU/CDC
 HITACHI/NEC

used 8/23/84
 8/23/84

7-39

1976 '77 '78 '79 '80 '81 '82 '83 '84 '85 '86 '87

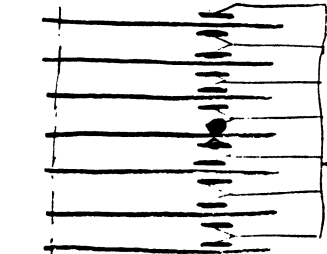


5-1/4" COMPETITION

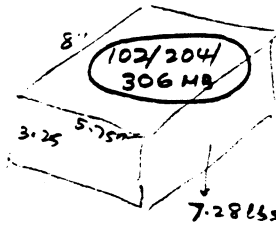
5 1/4" COMPETITION > 100 MB

SIEMENS 306 MB

19077 bpi
1.402 Ri
1224 Cyl
1207 tpi
21000 B/Tr
(35+1) 512 Fmt



1250 KB/s
5/25/50 ms
RVC (B+E Servo)
ESDI
SCSI
C/ Ctrl/ V



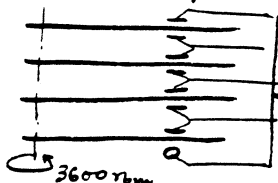
Internal Shock/
Vibration Protection
50-113°F 20-80% RH
75°F 60% RH

3571 rpm
8.4 ms
TFH
12+1 Whitney Hds

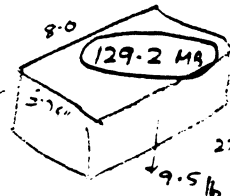
15K/25K POH ER 10,12,6
25/30W (12V 1.6A, 5V 2.0A)

A1M 130 MB

18,534 bpi
1.385 Ri
916 Cyl
1000 tpi
20,160 B/Tr
30,240 B/Tr
920 cyl
27,801 bpi (2.7)
1000 tpi 5 Platters. 1



1.209 MA/s
3/17/36 ms
LVC-D (Coast Stop)
SMD
SCSI
10/1.2
3-2K



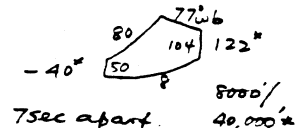
18K POH
10, 12, 6 (10 Retina)
12V (2.0/4.1A) 5 (2.0A)
36W < 52 dba @ 1 meter

Spindle Brake/ dc
Lock 7+1 Whitney Hds
S/S 25x4/10sec

0.15µ Filter
3 PCB's (R/W, Servo/Spindle, I/F)

Spun/Red Media
7µm O-Pk Substrate
1µm AAR Underlayer
1µm Overlay
Certified + defect Mapped

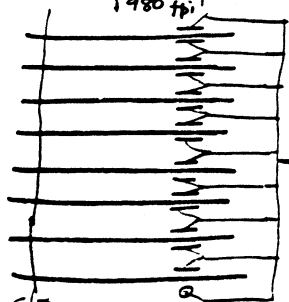
Resident Diagnostics @ Power On
Sequenced Drive Power Up @ 7sec apart
Solenoid Spindle Brake/Lock
Landing Zone (auto ab dc off)



Vibr.	open	non open	storage
5-22	0.01 EP	0.01 EP	
23-63	0.25g	2g	
63-500			
Shock 11ms 1/2 sine	1g	10g	25g
Parsec	1	5	In Container

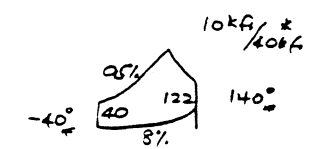
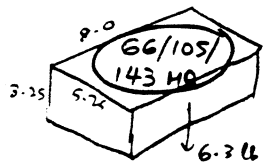
MAXTOR 143 MB

9875 bpi
MFH
918 Cyl
980 tpi
10416 B/Tr
33x256



382 MB
20808 B/Tr
22310 BPI (2.7)
980 tpi
1224 Cyl
Ri =
Ro =
51506

625 KB/s
5/30/45 ms
RVC-D 52 ms max
ST506



11K POH, ER 10,12,6 (2 1/2 Retina)
25W/28W 12V (1.4/1.5A) 5V (1.7A/1.9A)

Ri =
Ro =

3600 rpm
15+1 Whitney Mo Zn Hds
NiCo Plated/Oxide Media
Air 3 cfm across disk

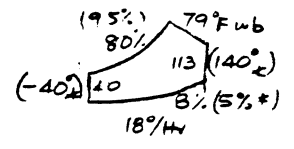
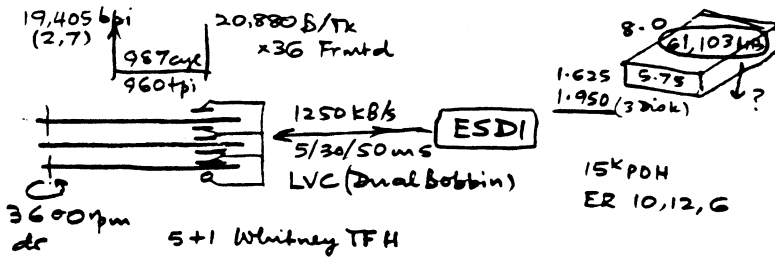
Dynamic Braking
Shock Mounted
Buffered Seek (1µs-3ms)
7-43

	open	non op	Storage
Vibr.			
Shock			
Noise	50 dbA		

COMPETITION 5 1/4" > 100 MB

AST 103 MB

85.8/103.0 MB

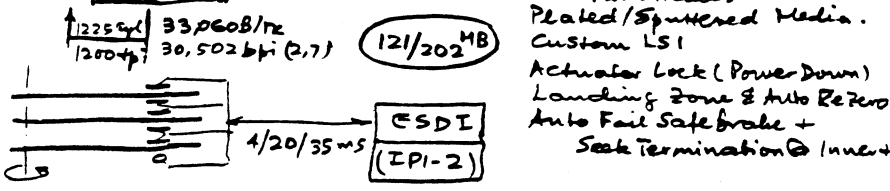


	op	nop	stor
Altitude (Kft)	-0.2/10	-0.2/40	-
Vibr.	2-22 Hz 22-600 Hz	0.01 pp 0.25 g	0.04 pp 1.0 g
Shock	11ms 1/2 sine	10g	20g
Noise	50 dba 12' away	-	-

Packaged 4.2" Drop
25g into 4H.

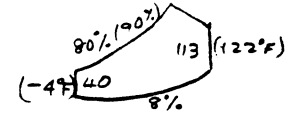
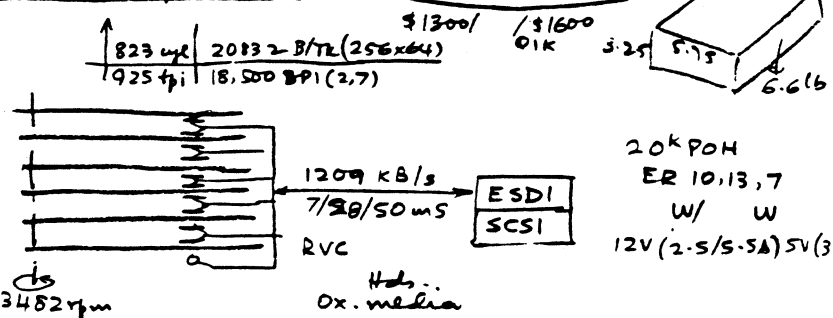
202 MB

121/202 MB



HITACHI 171 MB

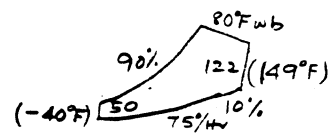
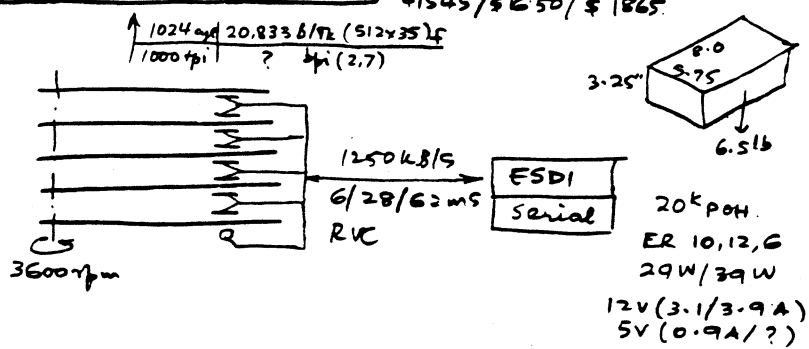
85.7/120/171.4 MB



	op	nop	stor
Vibr.	≤ 0.25g	≤ 2g	
Shock	≤ 2g	≤ 5g	
Noise	-	-	-

MICROPOUS 171 MB

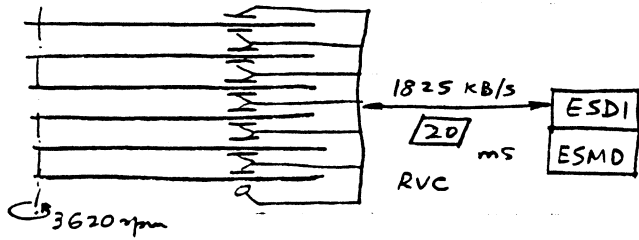
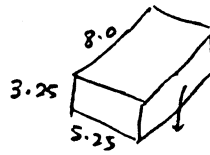
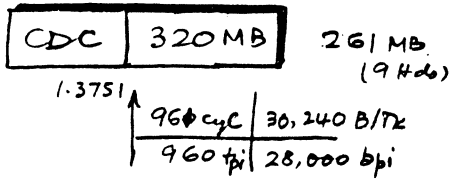
85.3/128.0/170.6 MB



	op	nop	stor
Altitude kft	-0.2/10	-1/40	
Vibr	5-10	10-40	40-89
	0.006 pp	0.02 pp	0.2 pp
		1g	1g
	69-98	0.5g	0.004 pp
	98-300		0.01 pp
		2g	5g
Shock 1/2 sine			
5 ms	3g	40g	
11 ms		20g	
20 ms	1g	15g	50g
50 ms		15g	
100 ms		20g	
FREE FALL		0.75"	
NOISE	< 5 dba	-	-

FEATURES

- Dedicated Landing Zone
- Auto Actuator Lock
- Chassis within a Chassis
- Auto Brake + Retract (Power Off)
- No electronic adj. (µP based Adaptive RLE)

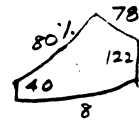
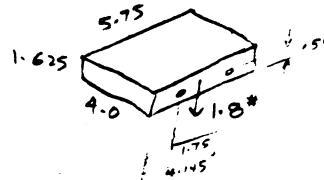
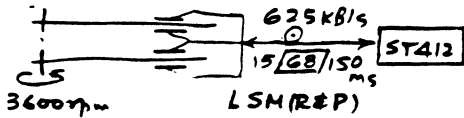


3-1/2" COMPETITION

COMPETITION 3 1/2" WINCH.

MINISCRIBE 12/25 MB

↑ 615 cyl | 10,416 B/TR (512x17)
804 tpi | 13,412 BPI



Features.

- Burn In 96 Hrs
- Landing Zone

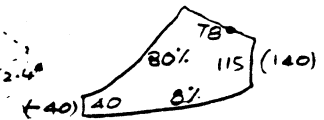
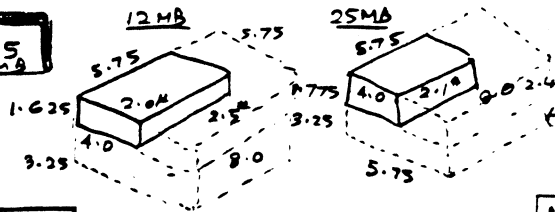
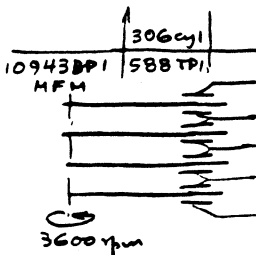
Whitney Helo
ThinFilm Media
1 PCB/3 Custom LSI

20K P0H
ER 10,12,6

Power	W	12V	5V
Typ	9.7	0.6	0.5
Max	26.5	2.0	0.5

Mounting same as 5.5" Floppy

MICRO. MEMORY. INC 12/25 MB



Whitney Mnz Helo
Ox/Pl Media

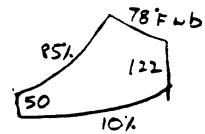
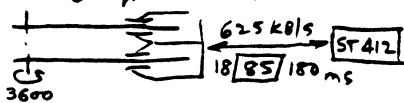
12K P0H
ER 10,12,6

	W	+12V	+5V
Typ	12.4	0.7	0.8
Max	29.0	2.0	1.0

	op	net	stor
A	Kfl		
V	5-30 30-60 60-500	.006 PP 1g	.05ft 2g
S	11ms 1/2 sine	12g	50g

RODIME 12.7 MB

1.184 | 306 cyl | 10416 B/TR (32x256)
600 tpi | 11,200 bpi



RBSM
1 PCB with custom LSI

Features

- Overlapped seeks possible
- Auto pur. up sequence, disk spd. check, index pulse selection, fault latching & LED indication
- Bipolar stepper motor.
- Self Diagnostic - Prog 10 different faults + display on LED (Drv, P.S., Ctrlr.)
- Auto Thermal Compensation.

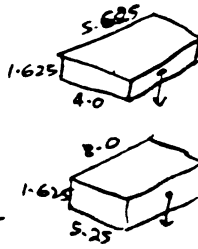
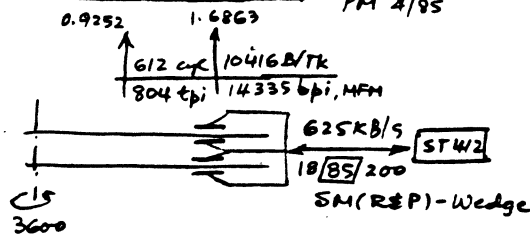
ER

	W	12V	5V
Typ	13.3	0.9	0.5
Max	2.5	0.5	

	op	net	stor
A	Kfl		
V	5-30 30-60 60-500	.006 PP 1g	.04ft 2g
S	10ms 1/2 sine 10%/sec	3g	30g

TANDON 25.5MB

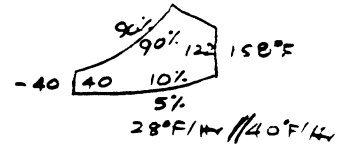
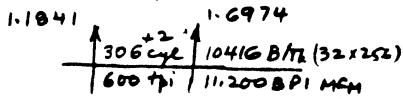
\$300.00 ecm
PM 4/95



4 Whitney Hubs
Plated Media

	W	12V	5V
TYP	14.0		
MAX			

LAPINE 12.7MB



3600 rpm
s/s 2sec/

1 PCB (4 layer)

Features.

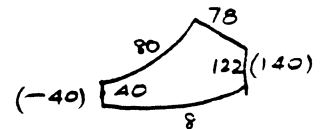
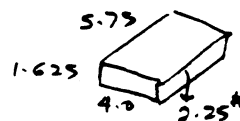
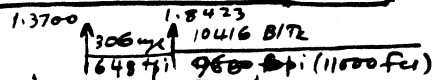
- Push down - Hubs lifted + locked
- On Board Diagnostics for P.S., Controller + Drive
- Fault Conditions on CED's on Bd.

20K POH/30ms/5Vvs
10.12 (16 Retry) 0.5x7

	W	12V	5V
TYP	12.8	0.9	0.4
MAX	2.5	0.4	

	Op	map	Stow
A	Kfr	-1K/10K	
V	5-20	.01	0.2
	20-40		5g
	40-50	1.1g	
S	10ms	4g	40g
	max/s	2	0.5
N	1m	5446	-

MICROSCIENCE 12.7



3550 rpm

4 Whitney Hubs
2

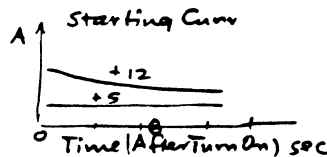
Features.

- Thermally Isolated Stepper
- Proprietary Linear Actuator
- Buffered Seek Mode

18K POH/ /5Vvs
ER 10, 12, 6

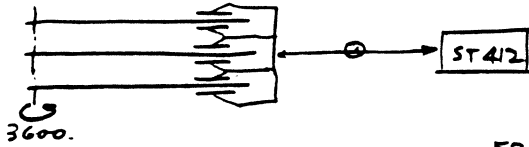
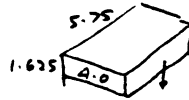
	W	12V	5V
TYP		0.9	0.6
MAX	2.5	0.7	

	Op	map	Transit
A	Kfr		
V	5-30	.006	104pt
	30-60	pt	
	60-80	0.35g	2g
S	11ms	10g	



FUJITSU 12.7/25.4/38.2

0.8733A ↑ 1.6661
 612 cyl | 10416 B/Tr (32x256)
 772 tpi | 15485 bpi MFH



EM 1/86
 PM 7/86

Whitney Hds.
 Sputtered Media.

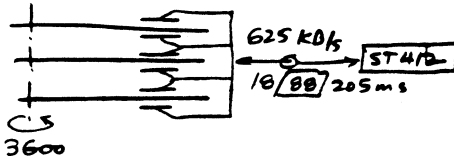
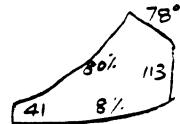
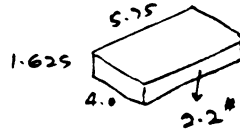
ER

	W	12V	5V
Typ	12.0	0.9	0.4
Max	26.0	3.0	0.4

		op	rep	Sta
A	Kfr			
V				
S				
N	dba	-	-	

NPL 13.3/20.0MB

0.9824 ↑ 1.700
 320 cyl | 10416 B/Tr
 440 tpi | 13,500 bpi



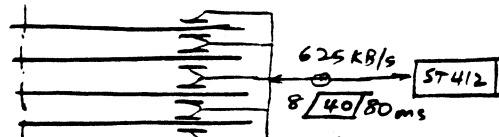
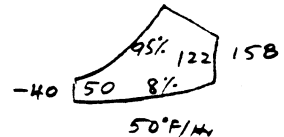
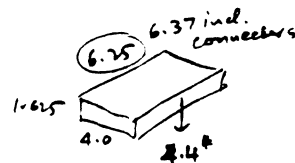
ER

	W	12V	5V
Typ		1.0	0.5
Max		2.0	0.5

		op	rep	Sta
A	Kfr			
V				
S				

NEWBURY 25.5/51.0 MB

1.0455 ↑ 1.6700 (17x512) F18M
 612 cyl | 10,416 B/Tr (32x256) FST
 980 tpi | 12,685 bpi (MFH)



15K P/H/30ms/5Yrs
 ER 10,12°, G (16 Retry)

	W	12V	5V
Typ	13.5	1.0	0.3
Max	26.5	2.0	0.5

		op	rep	Trans
A	Kfr	-1/10	-1/6	
V	5-30 30-60 60-500	1006 pp	10416 pp	0.2 pp
S	10 ms max/sec	3g	30g	1m drop
N	dba	50		

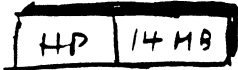
3578 rpm
 S/S 30sec/30sec dynamic
 3p dc within Hub
 Wedge Servo
 Band/DC Motor w/
 Optical Encoder
 8 Whitney Hds for Trk
 4 Plated 3-4pin Xing
 1 PCB (p.P, custom LSI, Surf. mounted, danch)

FEATURES

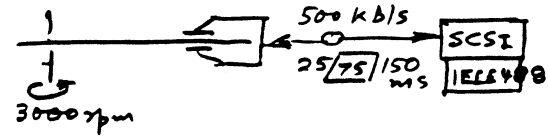
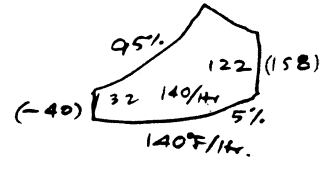
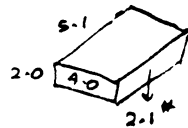
- Media Defect Map C.H. Bytes from Index
- Defect Free Cyl 0
- Max Defects/Surf 10
- Ready/Selected Indicator
- Power Off Actuator Lock
- Mounting in ANY ORIENTATION
- Industry Std. Mounting Hds (6-32)
- Up to 4 drives Daisy Chained
- Edge + Molex Dual Connector for P.S.
- Auto Cyl 0 @ Power On
- Auto Retract to LZ at Power Off
- No write precompensation

REQUIREMENTS

- UL478
- CSA E22-2/154M
- VDE 0806/8.81
- IEC 380
- Requires 3cfm Airflow
- Total
- Daisy Cable 34 Pin 20ft max
- Radiat Cable 20Pin 20ft max



1.1266
 1.98+5
 1100 tpi
 10,000+61B (256 x 2841)
 12,000 tpi 4R4



40KPOH

ER 10.12

	W	12V	5V
1025C max	9.0	0.84	0.14
		1.7	0.18

		σp	map	Transit
A	kF	-/15	-/50	
V	3-25	10g	0.25pF	
	25-350		6g	
	350-1000		*	
S	3-11ms 1/2 sine	10g	50g	
N	0-20 kHz @ 0.1m @ 1m	41dB 37dB	-	-

A weighted # 4g rms (5-1000 Hz) Random Scale Spectrum

3 1/2" / 5 1/4" WINCHESTERS

- GHUGART** . 5 1/4" HH 10MB \$440 (oem) ST506 \$630 (oem) SCSI (on Board) Pden 7/84
- CM I** ▶ HH 25.5 MB, CM3426, 2 Peakers, 690TPI, CLStepp 4, 85ms, ST506 \$625 (Q1K) 3 f. 54
 . HH 12.7 MB, CM, 3412 1P1A4H \$525 (Q1K) . CM5000 FH-12.7MB \$625, 19MB \$725
 . 26MB \$875, CM6000 13MB \$895, 26.7MB \$995, 40MB \$1095
 . CM6000 FH 60MB \$1345, 80MB \$1695
- AMPX** . FH 6, 13, 20, 26.7MB Plated Media. 40 84.
- MICROPOLIS** ▶ FH 85/127/170MB ESDI \$1469/1669/1837 (Q1K) Eval 10/85
 . FH 42.6/63.9MB \$1285/\$1420 (Q1K) Eval 7/85 Pden 9/85
- TEAC** . HH 10MB \$500 (Q500) Pden 9/85
- QUANTUM** - FH 20MB \$1245 (Q100) 30MB \$1365 (Q100) 40MB \$1485 (Q100) ST506 53ms
- GOGITO** ▶ HH PT912/915 10/20MB format 10W Par, 3axis Shovel Mount, TFH, P1 Media, Whitney
 75ms, ST412 I/F, 10MB \$400 (oem), 20MB \$695 (oem)
 . HH CG 912 10MB \$465 85ms
- MICROSCIENCE** ▶ 3 1/2" 10MB Eval 7/84 Pden 10/84
 ▶ 5 1/4" HH, 20MB CLStepp Eval 7/84 Pden 9/84 . 5 1/4" HH 10MB
- MITSUBISHI** ▶ 5 1/4" HH 25MB.
- PRIAM** . 5 1/4" FH 86MB \$2240 (Q100) 111MB \$2860 (Q100) Eval 7/84 Pden
- VERTEX** ▶ 5 1/4" FH 85MB, ST506 30ms \$1700 (oem)
 . 5 1/4" FH 30, 50, 70 MB \$1480 (oem) / \$ / \$
- CYNTHIA** . 5 1/4" FH 30, " " 30ms, ST412, 10416 B/T, 987cyl, 9920 B/D x 960 H/D
- TANDON** . 5 1/4" HH 10MB \$500 (oem) . 5 1/4" FH 31MB \$1000 (oem) 600tpi, 10000 bpi, 30ms
- LAPINE** ▶ 3 1/2" Range 5/10MB, 1/4 Space ST506 80ms
- SYQUEST** ▶ 3.9" 25MB \$700 (oem) 38.2MB \$850 (Q1K) 85ms ST506
 . 3.9" 25MB \$700 (oem)
- AIM** ▶ 129 MB 18ms, 1.209 MB/s, SMD, 20160 B/T, 916 cyl (900 TPI), 1853 x 301 23W
 ▶ 250 MB " 1.814 MB/s SMD/SCSI/101.2 30240 B/T, 920 cyl, 1070 TPI, 2780 B/D
 SPATTERED MEDIA. 22W
- MRX** . 30, 50, 70 MB 21ms ST412/ESDI, 960 cyl, 10416 B/T.
- CDC** . Wren I 21/35 MB ST506/ESDI
II 83 MB.
- AST** ▶ 61/103 MB \$150/\$1475 (Q1K) 4Q 30ms, 1250 KB/s, ESDI, 20720 B/D, 937cyl
 ▶ 121/202 MB TFH Plated Media 20ms, 1784 KB/s ESDI/101.2 30000 B/D, 1070cyl
- QUME** ▶ 5 1/4" HH 13 → 40 MB Plated Media, Rotary format ULIN.
- MAXTOR** .

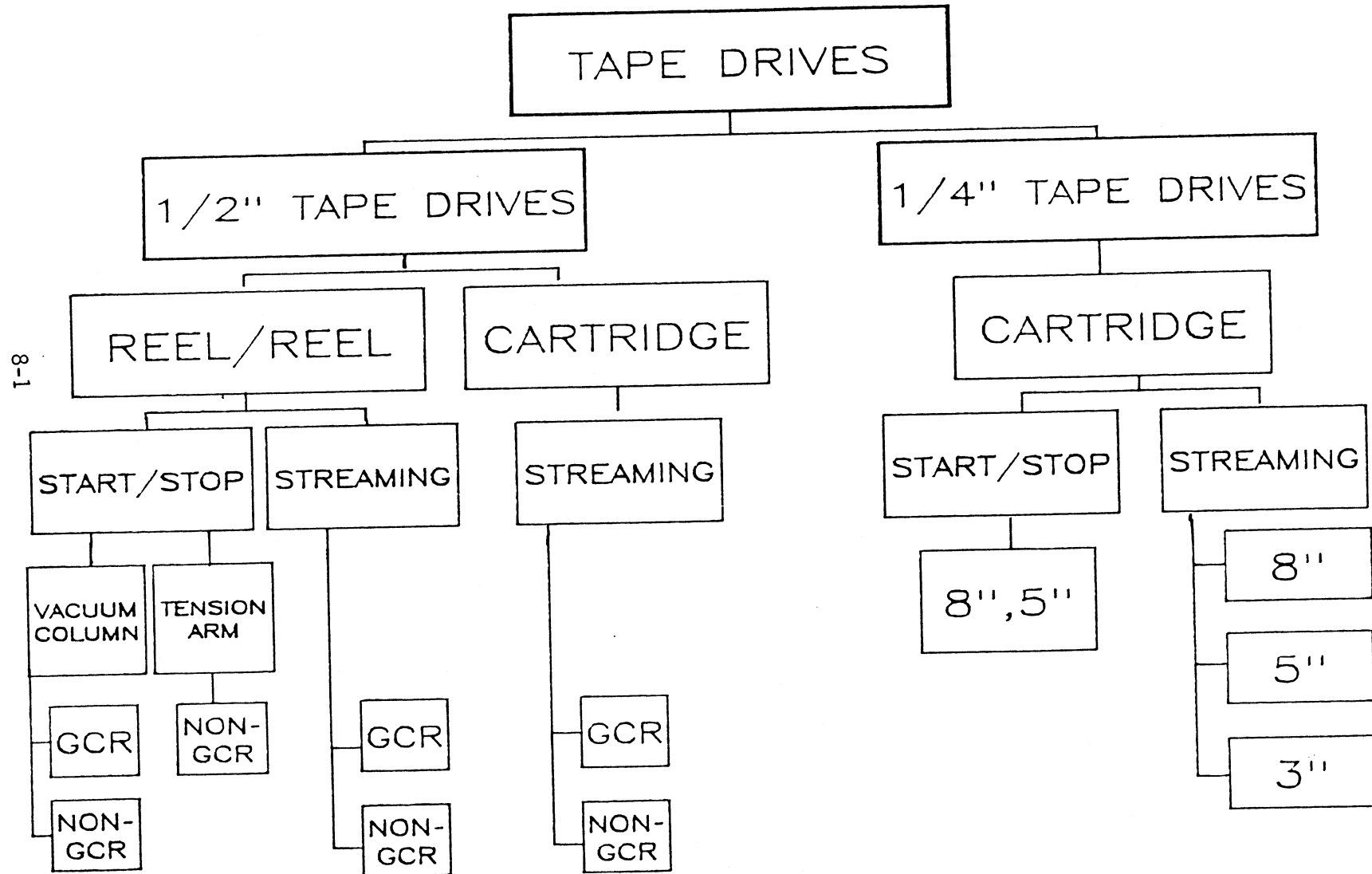
65 ¹⁸	1890 (Q100)	90 MB	\$2080	75	2595
105	2660	140	2930	175	2595
140	3430	190	3775	280	3665
	ST-506		ST506	380	4715.

 ESDI 7-59 Eval 9/85 PM YE85
- HITACHI** ▶ 5 1/4" 36/51/85MB. 30ms, ST-412, 625 LBS
 171 MB . 30ms, 1.209 KB/s, ESDI/SMD/SCSI, 20160 x 923 cyl /
- QUANTUM** Q280. 100 MB HH 5 1/4" SCSI Embedded 3, 2 Peakers 815 Cyl, 20,000 bpi 1.7 Code
 Spattered Media Whitney 4890 tpi 3260 tpi \$1000 (Q574)

8. TAPE PRODUCTS

- By Company
- By Product Segment

COMPUTER TAPE DRIVE INDUSTRY PRODUCT FORECAST SEGMENTATION



1985 OEM TAPE DRIVES

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (lps)	SPEED STR (lps)	XFR RATE	I/O INTERFACE
3M	DCD-2	---	0.15 CART	E/CRT	0.15 CT	140	0.67 U	PE	2	1600	SERPENTINE	30	N/A	4.8	PROPRIETARY
3M	HCD-75/60	---	0.25 STR	Q/STR/F	0.25 CT	600	67.00 F	MFM	16	10000	SERPENTINE	N/A	60	75	PROPRIETARY
3M	DCD-1	---	0.15 CART	E/CRT	0.15 CT	140	0.16 U	PE	4	800	SERIAL	30	N/A	2.4	PROPRIETARY
3M	DCD-3	---	0.25 S/S	Q/SS/F	0.25 CT	450	4.30 U	PE	4	1600	SERPENTINE	30	N/A	6	PROPRIETARY
ANRITSU	DMT 2000	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	100	25	160	PERTEC
ANRITSU	DMT 3000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600/800	PARALLEL	37.5	N/A	60	PERTEC
ANRITSU	DMT 730C	---	0.25 S/S	Q/SS/F	0.25 CT	550	48.00 U	MFM	8	7700	SERPENTINE	30	N/A	28.9	PROPRIETARY
ANRITSU	DMT 730E	---	0.25 STR	Q/STR/F	0.25 CT	550	48.00 F	MFM	8	7700	SERPENTINE	N/A	90	86.7	PROPRIETARY
APTEC	MT1000	---	0.15 CART	E/CRT	0.15 CT	185	12.39 F	MFM	8	6400	SERIAL	N/A	39	31.2	FLOPPY
ARCHIVE	9045L	---	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	NRZI, RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	5920L	---	0.25 STR	Q/STR/M	0.25 CT	450	20.00 F	NRZI, RLL	4	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	9045B	---	0.25 STR	Q/STR/F	0.25 CT	450	48.60 U	N/M,OP,OP	9	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	3020B	---	0.25 STR	Q/STR/F	0.25 CT	450	21.60 U	N/M,OP,OP	4	8000	SERPENTINE	N/A	30	30	PROPRIETARY
ARCHIVE	9020B	---	0.25 STR	Q/STR/F	0.25 CT	450	21.60 U	N/M,OP,OP	4	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	3020L	---	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	NRZI, RLL	4	8000	SERPENTINE	N/A	30	30	QIC-02
ARCHIVE	5945C	---	0.25 STR	Q/STR/M	0.25 CT	450	48.60 U	N/M,OP,OP	9	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	5945L	---	0.25 STR	Q/STR/M	0.25 CT	450	45.00 F	NRZI, RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	9020L	---	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, RLL	4	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	5920C	---	0.25 STR	Q/STR/M	0.25 CT	450	21.60 U	N/M,OP,OP	4	8000	SERPENTINE	N/A	90	90	QIC-36
CDC	92181	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PERTEC
CDC	92190	---	0.25 STR	Q/STR/F	0.25 CT	450	48.70 F	GCR	11	8000	SERPENTINE	N/A	55	55	PROPRIETARY
CDC	92334	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PROPRIETARY
CDC	92332	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	200	N/A	1250	PROPRIETARY
CDC	94149	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600	PARALLEL	45	N/A	72	PERTEC
CDC	92149	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	45	N/A	72	PERTEC
CDC	92324	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	150	N/A	937.5	PROPRIETARY
CDC	92185	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25	100	625	PERTEC
CDC	92141	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	8	1600/1800	PARALLEL	18.75	N/A	30	PERTEC
CDC	92314	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	100	N/A	0	PROPRIETARY
CDC	92142	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	25	N/A	40	PERTEC
CDC	92192	---	0.25 STR	Q/STR/F	0.25 CT	600	68.00 F	GCR	11	8000	SERPENTINE	N/A	55	55	PROPRIETARY
CDC	92143	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	37.5	N/A	60	PERTEC
CDC	92143	---	0.50 TA	H/TA/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600	PARALLEL	45	N/A	77	PERTEC
CDC	94144	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/1800	PARALLEL	45	N/A	72	PERTEC
CDC	92144	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	45	N/A	0	PROPRIETARY
CDC	92322	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	150	N/A	0	PROPRIETARY
CDC	92146	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	18.75	N/A	30	PERTEC
CDC	92148	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	37.5	N/A	60	PERTEC
CDC	92312	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	100	N/A	160	PROPRIETARY
CDC	92180	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PERTEC
CDC	92147	---	0.50 TA	H/TA/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	25	N/A	40	PERTEC
CIPHER	1880 IPI MICROSTR.	---	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	0	IPI
CIPHER	SERIES 70	---	0.50 TA	H/TA	0.50 RR	600	12.00 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
CIPHER	M890 CACHE TAPE	---	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	100	N/A	120	PROPRIETARY
CIPHER	MOD11	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC
CIPHER	M991 GCR CACHE TAPE	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/3200/1600	PARALLEL	N/A	100	790	PROPRIETARY
CIPHER	MOD10	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
CIPHER	8B	---	0.50 TA	H/TA/PE	0.50 RR	1200	23.00 U	PE	9	1600	PARALLEL	37.5	N/A	60	PERTEC
CIPHER	910	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC
CIPHER	7	---	0.50 TA	H/TA/PE	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	12.5	N/A	20	PERTEC
CIPHER	MO08	---	0.50 TA	H/TA	0.50 RR	1600	46.00 U	PE	9	1600	PARALLEL	37.5	N/A	60	PERTEC
CIPHER	525-CT	---	0.25 STR	Q/STR/M	0.25 CT	450	32.00 U	MFM	6	6400	SERPENTINE	N/A	90	87	QIC-02
CIPHER	540-CT	---	0.25 STR	Q/STR/M	0.25 CT	450	45.00 F	GCR, RLL	9	8000	SERPENTINE	N/A	90	87	QIC-02
CIPHER	F880 MICROSTR.	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PROPRIETARY
CIPHER	80	---	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE, NRZI	9	1600/800	PARALLEL	38	N/A	60	PERTEC
CIPHER	100	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
CIPHER	M990 GCR CACHE TAPE	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/3200/1600	PARALLEL	N/A	70	450	PROPRIETARY
CIPHER	440-CT	---	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	GCR, RLL	9	8000	SERPENTINE	N/A	90	87	QIC-02
CIPHER	M891 CACHE TAPE	---	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	100	N/A	384	PROPRIETARY
CIPHER	420-90	---	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	PROPRIETARY
CIPHER	F420-90	---	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	QIC-02
CIPHER	920	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	800/1600	PARALLEL	125	N/A	200	PERTEC
CIPHER	F880 MICROSTR. 2	---	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	160	PROPRIETARY
COOK ELECT.	2200-103	---	0.50 TA	H/TA	0.50 RR	2400	23.00 U	NRZI	9	800	PARALLEL	12.5	N/A	10	PERTEC
COOK ELECT.	2216-151	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2216-153	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2200-107	---	0.50 TA	H/TA	0.50 RR	2400	24.00 U	NRZI	9	800	PARALLEL	25	N/A	20	PERTEC
COOK ELECT.	2216-155	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2200-125	---	0.50 TA	H/TA	0.50 RR	2400	24.00 U	NRZI	9	800	PARALLEL	25	N/A	20	PERTEC

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1985 OEM TAPE DRIVES (CONT.)

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS					PRICE \$	COMMENTS
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT	CNTR	DIMENSIONS (IN) H X W X D	DIST CHANNEL	FCS	LCS	UNITS		
3M	DCD-2	4	OPT	OPT	OPT	4.00 X 5.75 X 4.50	OEM	79-20	—	427	100	MODEL 2 ONLY—\$10610; MODEL 3 DRIVE WITH POWER—\$11960.
3M	HCD-75/60	N/M	INC	OPT	OPT	4.56 X 6.85 X 8.60	OEM	80-XX	—	782	500	
3M	DCD-1	4	INC	OPT	OPT	4.00 X 5.75 X 12.00	OEM	76-20	—	387	100	
3M	DCD-3	N/M	INC	OPT	OPT	7.00 X 8.75 X 11.70	OEM	73-20	—	887	100	STREAMS AT 50 Ips IN 3200 bpi MODE; DRIVE ACQUIRED FROM 3RD PARTY.
ANRITSU	DMT 2000	N/M	INC	INC	OPT	10.40 X 18.90 X 24.00	OEM	—	—	—	—	—
ANRITSU	DMT 3000	4	INC	OPT	OPT	23.90 X 19.20 X 14.00	OEM	—	—	—	—	MODEL 2 ONLY—\$10610; MODEL 3 DRIVE WITH POWER—\$11960.
ANRITSU	DMT 730C	1	INC	INC	INC	—	OEM	—	—	—	—	OPTIONAL CIPHER/KENNEDY INTERFACES; LICENSED AMPEX "VIRGO".
ANRITSU	DMT 730E	1	INC	INC	—	4.40 X 8.50 X 9.10	OEM	—	—	—	—	SLAVE TRANSPORT.
APTEC	MT1000	—	INC	INC	OPT	1.63 X 5.75 X 8.00	OEM	—	—	—	—	1 110 VAC OPTION; TELECOMMUNICATIONS APPLICATIONS.
ARCHIVE	9045L	4	INC	INC	INC	4.90 X 8.55 X 10.00	OEM	82-10	—	1280	1	1 DEVICE LEVEL INTERFACE; MASTER; STANDALONE TRANSPORT.
ARCHIVE	5920L	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	1145	1	1 DEVICE LEVEL INTERFACE; INCLUDES DAISYCHAIN CAPABILITY.
ARCHIVE	9045B	N/M	INC	OPT	OPT	4.50 X 8.55 X 10.00	OEM	82-10	—	905	1	1 DEVICE LEVEL INTERFACE; SLAVE TO 1753.
ARCHIVE	3020B	N/M	INC	OPT	OPT	4.50 X 8.55 X 10.00	OEM	80-40	—	770	1	1 MASTER; STANDALONE WITH DAISYCHAIN FEATURE.
ARCHIVE	9020B	N/M	INC	OPT	OPT	4.50 X 8.55 X 10.00	OEM	80-40	—	770	1	1 DEVICE LEVEL INTERFACE.
ARCHIVE	3020L	1	INC	INC	INC	4.50 X 8.55 X 10.00	OEM	80-40	—	1145	1	1 AVAILABLE WITH 4 INTERFACES.
ARCHIVE	5945C	N/M	INC	OPT	OPT	1.63 X 5.75 X 8.00	OEM	—	—	905	1	
ARCHIVE	5945L	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	1280	1	
ARCHIVE	9020L	4	INC	INC	INC	4.50 X 8.55 X 10.00	OEM	80-XX	—	1145	1	
ARCHIVE	5920C	N/M	INC	OPT	OPT	1.63 X 5.75 X 8.00	OEM	—	—	770	1	
ARCHIVE	92181	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	OEM	82-20	—	2880	1	1 FORMATTER; INCLUDES DAISYCHAIN CAPABILITY.
CDC	92190	N/M	INC	INC	OPT	4.50 X 8.50 X 13.50	OEM	82-20	—	940	100	
CDC	92334	N/M	INC	OPT	OPT	64.00 X 30.50 X 30.00	OEM	78-XX 83-XX	—	16000	100	
CDC	92332	N/M	INC	OPT	OPT	64.00 X 30.50 X 30.00	OEM	78-XX 83-XX	—	—	—	
CDC	94149	N/M	INC	OPT	OPT	24.00 X 19.00 X 16.00	OEM	79-40	—	5000	1	
CDC	92149	N/A	—	OPT	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	2785	1	
CDC	92324	N/M	INC	OPT	OPT	64.00 X 30.50 X 30.00	OEM	78-XX 83-XX	—	—	—	
CDC	92185	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	OEM	83-40	—	6150	100	100 AVAIL W/O ELECTR. \$462/1; W/ CNTRLR FOR \$703.
CDC	92141	N/A	—	INC	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	3625	1	1 OPTIONAL: 9495-33M FORMATTER; 9499-21 CONTROLLER.
CDC	92314	N/M	INC	OPT	OPT	64.00 X 30.50 X 30.00	OEM	78-XX 83-XX	—	—	—	
CDC	92142	N/A	—	INC	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	3625	1	1 OPTIONAL: 9495-33M; FORMATTER 9499-21 CONTROLLER.
CDC	92192	N/M	INC	INC	OPT	4.50 X 8.50 X 13.50	OEM	82-20	—	1020	100	
CDC	92143	N/A	—	INC	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	3625	1	1 OPTIONAL: FORMATTER/CONTROLLER
CDC	94144	N/M	INC	INC	OPT	24.00 X 19.00 X 16.00	OEM	79-40	—	5000	1	1 OPTIONAL: FORMATTER/CONTROLLER
CDC	92144	N/A	—	INC	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	3625	1	1 OPTIONAL: FORMATTER/CONTROLLER
CDC	92322	N/M	INC	OPT	OPT	64.50 X 30.50 X 30.00	OEM	78-XX 83-XX	—	—	—	
CDC	92146	N/A	—	OPT	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	2785	1	
CDC	92148	N/A	—	OPT	OPT	24.00 X 19.00 X 16.00	OEM	80-40	—	2785	1	
CDC	92312	N/M	INC	OPT	OPT	64.00 X 30.50 X 30.00	OEM	78-XX 83-XX	—	—	—	
CDC	92180	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	OEM	81-20 83-40	—	2750	100	
CDC	92147	N/A	—	OPT	OPT	24.00 X 17.00 X 16.00	OEM	80-40	—	1785	1	
CIPHER	1880 IPI MICROSTR.	1	INC	INC	INC	8.75 X 17.00 X 25.00	OEM	85-30	—	—	—	
CIPHER	SERIES 70	N/M	INC	OPT	OPT	8.75 X 19.00 X 13.75	OEM	77-XX 83-XX	—	—	—	
CIPHER	M890 CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	83-10	—	2975	250	
CIPHER	MOD11	N/M	INC	INC	OPT	24.00 X 19.00 X 11.00	OEM	—	—	6780	1	1 FORM FACTOR OF HALF-HEIGHT MINIFLOPPY; CLOSED-LOOP SERVO DESIGN.
CIPHER	M991 GOR CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	84-30	—	8000	1	
CIPHER	MOD10	N/M	INC	OPT	OPT	24.00 X 19.00 X 11.00	OEM	—	—	3430	250	
CIPHER	88	N/A	—	OPT	OPT	12.30 X 19.00 X 8.50	OEM	70-XX	—	3191	500	
CIPHER	910	N/M	INC	OPT	OPT	24.00 X 18.00 X 19.00	OEM	78-XX	—	4067	250	MICROFLOPPY FORM FACTOR; PREFORMATTED DC1000 CARTRIDGE.
CIPHER	7	N/A	—	OPT	OPT	8.80 X 19.00 X 8.50	OEM	70-XX	—	2794	500	
CIPHER	MOD8	N/M	INC	OPT	OPT	12.25 X 19.00 X 8.50	OEM	—	—	3751	1	
CIPHER	525-CT	N/M	INC	INC	OPT	3.25 X 5.75 X 8.00	OEM	83-XX	—	300	5000	5000 FORM FACTOR OF HALF-HEIGHT MINIFLOPPY; CLOSED-LOOP SERVO DESIGN.
CIPHER	540-CT	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	750	500	SINGLE-REEL CART; 3.5" DISK FORM FACTOR AND 5 TO 40 MB MODELS.
CIPHER	F880 MICROSTR.	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	80-20	—	2450	250	
CIPHER	80	N/M	INC	OPT	OPT	12.25 X 19.00 X 13.25	OEM	77-XX 83-XX	—	—	—	
CIPHER	100	N/M	INC	OPT	OPT	24.00 X 19.00 X 15.25	OEM	73-XX	—	3301	250	MICROFLOPPY FORM FACTOR; CLOSED-LOOP SERVO DESIGN.
CIPHER	M990 GOR CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	84-30	—	6150	250	
CIPHER	440-CT	1	INC	INC	INC	4.50 X 8.55 X 14.00	OEM	—	—	750	500	
CIPHER	M891 CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	—	—	3600	250	
CIPHER	420-90	N/M	INC	OPT	OPT	4.50 X 8.55 X 14.00	OEM	—	—	750	500	SUBSYS FOR SYS. 8600; SUPERCEDED BY 3RD PARTY DRIVE, MODEL 9339 IN 1985.
CIPHER	F420-90	4	INC	INC	INC	4.50 X 8.55 X 14.00	OEM	—	—	750	500	
CIPHER	920	N/M	INC	OPT	OPT	24.00 X 18.00 X 19.00	OEM	78-XX	—	4914	250	
CIPHER	F880 MICROSTR. 2	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	OEM	81-20	—	2825	250	
COOK ELECT.	2200-103	N/M	INC	OPT	OPT	24.00 X 19.00 X 15.00	OEM	75-10	—	—	—	— BEING PHASED OUT IN 1984.
COOK ELECT.	2216-151	N/M	OPT	OPT	OPT	—	OEM	—	—	—	—	— TAKES UP HALF OF 19" RACK. 128 KB CACHE.
COOK ELECT.	2216-153	N/M	INC	OPT	OPT	—	OEM	—	—	—	—	— DUAL DENSITY
COOK ELECT.	2200-107	N/M	INC	INC	OPT	24.00 X 19.00 X 15.00	OEM	75-10	—	—	—	
COOK ELECT.	2216-155	N/M	INC	INC	OPT	—	OEM	—	—	—	—	
COOK ELECT.	2200-125	N/M	OPT	OPT	OPT	24.00 X 18.00 X 15.00	OEM	75-10	—	—	—	— OPTIONAL: 7/9 TR NRZ1

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1985 OEM TAPE DRIVES

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (Ips)	SPEED STR (Ips)	XFR RATE	I/O INTERFACE
CORVUS SYST.	THE BANK	—	0.50 CART	H/CRT	0.50 CT	328	200.00 U	MFM	100	4620	SERIAL	N/A	216	125	PROPRIETARY
DATA ELECT.	MINI QIC-STREAM III	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	88	QIC-02
DATA ELECT.	7130 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	10.00 F	GCR	2	7500	SERPENTINE	N/A	30	29	PROPRIETARY
DATA ELECT.	1230 STREAKER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	N/M, OP, OP	4	10000	SERPENTINE	N/A	30	30	PROPRIETARY
DATA ELECT.	31004401 SUPER FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	600	50.00 U	MFM	7	8533	SERPENTINE	90	N/A	40	PROPRIETARY
DATA ELECT.	7290 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	7500	SERPENTINE	N/A	90	88	PROPRIETARY
DATA ELECT.	310022 SERP. FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	600	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DATA ELECT.	301091 FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 F	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DATA ELECT.	MICROTAPE EL-5	—	0.25 S/S	Q/SS/M	0.25 CT	600	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DATA ELECT.	1290 STREAKER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	N/M, OP, OP	4	10000	SERPENTINE	N/A	90	88	PROPRIETARY
DATA ELECT.	7190 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	10.00 F	GCR	2	7500	SERPENTINE	N/A	30	29	PROPRIETARY
DATA ELECT.	7230 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	7500	SERPENTINE	N/A	30	29	PROPRIETARY
DATA ELECT.	MICROTAPE EL-6	—	0.25 S/S	Q/SS/M	0.25 CT	600	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DDF	BANDSTOR 2000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	800/1600	PARALLEL	45	N/A	72	PROPRIETARY
DDF	STORSTREAMER	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PROPRIETARY
DDF	BANDSTOR 1000	—	0.50 TA	H/TA	0.50 RR	600	12.00 U	NRZI, PE	9	800/1600	PARALLEL	25	N/A	40	PERTEC
DIGI-DATA	2021	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	12.5	100 160	—	PERTEC
DIGI-DATA	2022	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	31.25	125 160	—	PERTEC
DIGI-DATA	1140	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	7/7	1600/800	PARALLEL	25	N/A 40	—	PERTEC
DIGI-DATA	6410	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DIGI-DATA	1640	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE, NRZI	7/7	1600/800	PARALLEL	25	N/A 40	—	PERTEC
DIGI-DATA	6420	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DIGI-DATA	1840	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	1600/800	PARALLEL	75	N/A	120	PERTEC
DIGI-DATA	6430	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DIGI-DATA	2012	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	3200/1600	PARALLEL	31.25	125 160	—	PERTEC
DIGI-DATA	6440	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DIGI-DATA	1740	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A 75	—	PERTEC
DIGI-DATA	8310	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERIAL	37.5	N/A	39	PROPRIETARY
DIGI-DATA	2000	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	160	PERTEC
DIGI-DATA	8320	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERPENTINE	37.5	N/A	39	PROPRIETARY
DIGI-DATA	2011	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	3200/1600	PARALLEL	12.5	100 160	—	PERTEC
DIGI-DATA	8330	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERIAL	37.5	N/A	39	PROPRIETARY
DIGI-DATA	8340	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERPENTINE	37.5	N/A	39	PROPRIETARY
DIGI-DATA	2020	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100 160	—	PERTEC
DIGI-DATA	2010	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100 160	—	PERTEC
ELECT.PROC.	STR-STREAM	2451	0.25 S/S	Q/SS/F	0.25 CT	600	23.00 U	MFM	4	6400	SERIAL	30	N/A	24	PERTEC
ELECT.PROC.	STR-LINK III	—	0.15 CART	E/CRT	0.15 CT	140	0.31 F	PE	2	800	SERIAL	N/A	18	1.8	PARALLEL
ELECT.PROC.	STR-610A	—	0.15 CART	E/CRT	0.15 CT	140	0.31 F	PE	2	800	SERIAL	N/A	18	1.8	PARALLEL
ELECT.PROC.	STR-812	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.30 U	PE	4	1600	SERIAL	38	N/A	6	SERIAL
ELECT.PROC.	STR-STREAM II	—	0.50 CART	H/CRT	0.50 CT	400	130 F	MFM	20	12000	SERPENTINE	50	75	225	ESDI
FAI	M2436L1	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PROPRIETARY
FAI	M2433L	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	125	200	320	PERTEC
FAI	M2434L1	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	125	781	IBM
FAI	2431R	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	200	N/A
FAI	M2435L1	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	2433L	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	320	N/A
FAI	M2435L2	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	M2430L	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PROPRIETARY
FAI	M2436L8	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PERTEC
FAI	M2432L	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	M2440	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	12.5	100	625	EMBEDDED
FAI	2432R	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	75	125	1250	N/A
FAI	M2442A	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	12.5	100	625	PERTEC
FAI	M2431L	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	125	200	IBM
FAI	2433R	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	320	N/A
FAI	2430R	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	75	125	781	N/A
FAI	M2444A	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25.5	75	625	PERTEC
HITACHI	MT-230	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	31.25	100	160	PERTEC
HITACHI	MT-256	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25	75	469	—
HITACHI	154	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	80	N/A	500	—
HITACHI	156	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	—
IBEX	PCT-1000	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PERTEC
INNOV. DATA	1754	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV. DATA	1752	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV. DATA	1751	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV. DATA	1753	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV. DATA	1051	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV. DATA	TD 3000	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.32 U	PE	4	1600	SERIAL	12.5	N/A	6	PROPRIETARY

1985 OEM TAPE DRIVES (CONT.)

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS						COMMENTS				
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	CNTR	DIMENSIONS (IN)				DIST CHANNEL	FCS		LCS	PRICE \$ UNITS		
						H	X	W	X	D						
CORVUS SYST.	THE BANK	1	INC	INC	INC	5.75	X	12.00	X	16.00	OEM	83-40	—	2195	1	KENNEDY'S PICO INS; PERTEC INTERFACE OPTION INTELLIGENT DMA TYPE DEVICE.
DATA ELECT.	MINI QIC-STREAM III	1	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-XX	—	895	1000	\$6140 @ Q1 W/AVAILABLE FORMATTER; OPTIONAL: 7/9 TR NRZI, 12.5, 37.5 IPS.
DATA ELECT.	7130 STREAMER	1	INC	INC	INC	4.52	X	8.57	X	14.06	OEM	—	84-XX	—	—	TAKES UP HALF OF 19" RACK.
DATA ELECT.	1230 STREAKER	N/M	INC	OPT	OPT	4.52	X	8.57	X	6.00	OEM	81-20	84-XX	610	501	ASYNCHRONOUS DRIVE WITH DUAL BUFFERS.
DATA ELECT.	31004401 SUPER FUNNEL	N/M	INC	OPT	OPT	4.25	X	6.96	X	5.72	OEM	83-40	—	1043	501	300 MB CARTRIDGES PRICED AT \$90 EACH IN CASES OF TEN.
DATA ELECT.	7290 STREAMER	1	INC	INC	INC	4.52	X	8.57	X	14.06	OEM	—	84-XX	—	—	TAKES UP HALF OF 19" RACK. 128 KB CACHE.
DATA ELECT.	310022 SERP.FUNNEL	N/M	INC	OPT	OPT	4.25	X	6.96	X	5.72	OEM	83-30	—	941	501	TAKES UP HALF OF 19" RACK.
DATA ELECT.	301091 FUNNEL	N/M	INC	OPT	OPT	4.25	X	6.96	X	5.72	OEM	76-40	—	890	501	
DATA ELECT.	MICROTAPE EL-5	N/M	INC	OPT	OPT	3.25	X	5.75	X	8.00	OEM	83-40	—	700	501	
DATA ELECT.	1290 STREAKER	N/M	INC	OPT	OPT	4.52	X	8.57	X	6.00	OEM	81-20	84-XX	610	501	75 Ips IN PE/NRZI MODE; INTERFACE OPTIONS INCL. PICO, STORAGETEX, TELEX.
DATA ELECT.	7190 STREAMER	1	INC	INC	INC	4.52	X	8.57	X	14.06	OEM	—	84-XX	—	—	HALF-HEIGHT, QIC-36. 16KB BUFFER; FULL-HEIGHT, QIC-02 VERSION AT \$1275.
DATA ELECT.	7230 STREAMER	1	INC	INC	INC	4.52	X	8.57	X	14.06	OEM	—	84-XX	—	—	AUTO-THREADING, DRAMER MOUNT.
DATA ELECT.	MICROTAPE EL-6	N/M	INC	OPT	OPT	3.25	X	5.75	X	8.00	OEM	83-40	—	750	501	
DDF	BANDSTOR 2000	N/M	INC	OPT	OPT	24.40	X	19.30	X	10.40	OEM	—	—	—	—	120 KB CACHE; SWITCH SELECTABLE TRANSFER RATE.
DDF	STORSTREAMER	N/M	INC	INC	OPT	8.90	X	17.00	X	24.00	OEM	—	—	—	—	
DDF	BANDSTOR 1000	N/M	INC	OPT	OPT	8.90	X	19.00	X	14.00	OEM	—	—	—	—	
DIGI-DATA	2021	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	2050	500	SUBSTITUTE FOR IBM-3420-6.
DIGI-DATA	2022	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	2175	500	
DIGI-DATA	1140	4	INC	INC	OPT	8.75	X	19.00	X	11.00	OEM	78-40	—	2660	100	128 KB CACHE; SWITCH SELECTABLE TRANSFER RATE.
DIGI-DATA	6410	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	81-XX	—	595	1000	500 MB CARTRIDGES; \$110 EACH IN CASES OF TEN.
DIGI-DATA	1640	4	INC	INC	OPT	12.25	X	19.00	X	11.00	OEM	78-40	—	2835	1000	
DIGI-DATA	6420	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	695	1000	NO PRICES YET ESTABLISHED; NOT AVAILABLE UNTIL LATE 1985.
DIGI-DATA	1840	4	INC	INC	OPT	24.00	X	19.00	X	11.00	OEM	79-10	—	3835	100	MASTER; MODEL 3262 WITH TWO CONTROL UNITS AVAILABLE FOR \$89,210.
DIGI-DATA	6430	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	695	1000	SLAVE; FOR INTERNATIONAL MARKETS; EQUIVALENT TO IBM 3420-4.
DIGI-DATA	2012	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	1950	500	SUBSTITUTE FOR IBM 3420-7.
DIGI-DATA	6440	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	795	1000	ARCHIVE-LIKE INTERFACE; OPTIONAL 30 Ips MODEL.
DIGI-DATA	1740	4	INC	INC	OPT	24.00	X	19.00	X	11.00	OEM	78-40	—	3135	100	SLAVE; EQUIVALENT TO IBM 3420-5.
DIGI-DATA	8310	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	695	1000	SUBSTITUTE FOR IBM 3420-8.
DIGI-DATA	2000	2	INC	INC	OPT	24.00	X	8.75	X	18.50	OEM	83-XX	—	2140	100	READS/WRITES TWO TRACKS IN PARALLEL.
DIGI-DATA	8320	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	795	1000	SLAVE; EQUIVALENT TO IBM 3420-8.
DIGI-DATA	2011	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	1850	500	SLAVE; EQUIVALENT TO IBM 3420-6.
DIGI-DATA	8330	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	795	1000	MASTER; MODEL 3442 WITH TWO CONTROL UNITS AVAILABLE FOR \$89,210.
DIGI-DATA	8340	N/M	INC	OPT	OPT	3.25	X	6.90	X	57.50	OEM	83-XX	—	895	1000	MASTER; MODEL 3282 WITH TWO CONTROL UNITS AVAILABLE FOR \$73,000.
DIGI-DATA	2020	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	2050	500	
DIGI-DATA	2010	—	—	INC	OPT	8.75	X	19.00	X	21.50	OEM	83-10	—	1850	500	
DIGI-DATA	2010	—	—	INC	OPT	4.10	X	7.00	X	12.00	OEM	82-XX	—	874	10000	
ELECT.PROC.	STR-STREAM	4	INC	INC	OPT	—	—	—	—	—	OEM	81-XX	—	1100	5000	
ELECT.PROC.	STR-LINK III	4	INC	INC	INC	—	—	—	—	—	OEM	81-XX	—	363	1000	
ELECT.PROC.	STR-610A	4	INC	INC	INC	3.10	X	5.10	X	3.80	OEM	81-XX	—	929	10000	OPTIONAL: 7/9 TR NRZI 25, 37.5 IPS
ELECT.PROC.	STR-812	N/M	INC	OPT	OPT	5.20	X	7.80	X	12.80	OEM	83-XX	—	960	1000	OPTIONAL: 7/9 TR NRZI PE/NRZI 25, 27.5, 37.5 IPS.
ELECT.PROC.	STR-STREAM II	N/M	INC	INC	OPT	3.25	X	5.75	X	8.00	OEM	84-20	—	16000	100	OPTIONAL: PE/NRZI
FAI	M2436L1	8	INC	INC	OPT	55.10	X	39.40	X	29.90	OEM	85-10	—	8950	50	
FAI	M2435L	8	INC	OPT	OPT	55.10	X	19.40	X	29.90	OEM	84-20	—	26250	1	SCSI INTERFACE OPTION; 30 Ips. 37.5 KBS OPTIONS.
FAI	M2434L1	8	INC	INC	OPT	55.10	X	39.40	X	29.90	OEM	84-20	—	—	—	SCSI INTERFACE OPTION; 30 Ips. 24 KBS OPTIONS.
FAI	2431R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	OEM	81-30	—	—	—	INTELLIGENT MODEL; USING NEW LSI SINCE 1984.
FAI	M2435L1	8	INC	INC	OPT	55.10	X	39.40	X	29.90	OEM	84-20	—	16150	100	BASIC MODEL
FAI	2433L	—	—	OPT	OPT	55.10	X	19.40	X	29.70	OEM	81-30	—	—	—	
FAI	M2435L2	8	INC	INC	OPT	55.10	X	39.40	X	29.90	OEM	84-XX	—	24200	100	45 Ips AVAIL; OPT. FRMTR & CNTRLRS FOR DATA GENERAL, DEC.
FAI	M2430L	8	INC	OPT	OPT	55.10	X	19.40	X	29.90	OEM	84-20	—	14550	1	BASIC MODEL; CAPACITY 21.6 MB.
FAI	M2436L8	8	INC	INC	OPT	55.10	X	19.40	X	29.90	OEM	85-10	—	11360	100	SERP. OR "SEPARATE CHANNEL" MODE; USES 1/2 " TP COMMANDS.
FAI	M2432L	8	INC	OPT	OPT	55.10	X	19.40	X	29.90	OEM	84-20	—	8950	50	SCSI MCD-75/60 CNTRLR AVAIL @ \$690/1; PREFRMTD CART.
FAI	M2440	—	—	—	—	39.40	X	19.70	X	28.00	OEM	84-10	—	7500	100	
FAI	2432R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	OEM	81-30	—	—	—	SUBSYS FOR IBM PC & COMPAT.; DRV DESIGNED BY APTEC.
FAI	M2442A	8	INC	INC	OPT	24.30	X	19.00	X	22.00	OEM	83-10	—	9800	1	1 TRACK MDL AVAIL.
FAI	M2431L	8	INC	OPT	OPT	55.10	X	19.40	X	29.90	OEM	84-20	—	14550	1	OPT MICRO-FLOPPY FF & 62.5 KB/S DATA XFR RATE.
FAI	2433R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	OEM	81-30	—	—	—	INTELLIGENT MODEL; USING NEW LSI SINCE 1984.
FAI	2430R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	OEM	81-30	—	—	—	
FAI	M2444A	8	INC	INC	OPT	24.30	X	19.00	X	22.00	OEM	—	—	9300	1	
HITACHI	MT-230	—	—	INC	INC	24.50	X	19.00	X	27.20	OEM	83-XX	—	—	—	
HITACHI	MT-256	4	INC	INC	INC	24.50	X	19.00	X	27.20	OEM	84-20	—	8000	100	
HITACHI	154	—	—	OPT	OPT	25.00	X	19.00	X	24.00	OEM	—	—	9000	1	
HITACHI	156	—	—	NO	NO	25.00	X	19.00	X	24.00	OEM	—	—	9000	1	
IBEX	PCT-1000	N/M	INC	OPT	OPT	14.00	X	19.00	X	5.25	OEM	85-10	—	1950	250	
INNOV..DATA	1754	N/M	INC	INC	OPT	—	—	—	—	—	OEM	—	—	8100	1	
INNOV..DATA	1752	N/M	INC	OPT	OPT	—	—	—	—	—	OEM	—	—	6100	1	
INNOV..DATA	1751	N/M	INC	OPT	OPT	—	—	—	—	—	OEM	—	—	5950	1	
INNOV..DATA	1753	N/M	INC	INC	OPT	—	—	—	—	—	OEM	—	—	8450	1	
INNOV..DATA	1051	N/M	INC	OPT	OPT	24.00	X	19.00	X	14.30	OEM	—	—	—	—	
INNOV..DATA	TD 3000	4	INC	INC	OPT	5.20	X	8.27	X	15.80	OEM	—	—	—	—	

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1985 OEM TAPE DRIVES

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (Ips)	SPEED STR (Ips)	XFR RATE	I/O INTERFACE
INNOV.DATA	1054	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1053	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1012	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PROPRIETARY
INNOV.DATA	1052	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INTERDYNE	ID 1010	---	0.25 STR	Q/STR/M	0.25 CT	325	10.00 F	MFM	4	6800	SERPENTINE	N/A	36	250	FLOPPY
IRWIN MAGN.	IRWIN 125	---	0.15 CART	E/CRT	0.15 CT	185	21.80 F	MFM	12	9000	SERPENTINE	N/A	55	61.8	FLOPPY
IRWIN MAGN.	IRWIN 110	---	0.15 CART	E/CRT	0.15 CT	185	10.35 F	MFM	8	6400	SERPENTINE	N/A	39	31.2	FLOPPY
IRWIN MAGN.	IRWIN 210	---	0.15 CART	E/CRT	0.15 CT	185	10.35 F	MFM	8	6400	SERPENTINE	N/A	39	31.2	FLOPPY
IRWIN MAGN.	IRWIN 225	---	0.15 CART	E/CRT	0.15 CT	185	21.80 F	MFM	12	9000	SERPENTINE	N/A	55	61.8	FLOPPY
KENNEDY	6450	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.00 U	GCR	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
KENNEDY	9400	244X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	45	N/A	281	PERTEC
KENNEDY	9300	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	125	N/A	200	PROPRIETARY
KENNEDY	6455	---	0.25 S/S	Q/SS/F	0.25 CT	600	23.00 U	GCR	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
KENNEDY	9100	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	37.5	N/A	60	PROPRIETARY
KENNEDY	9800	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
KENNEDY	9000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	100	160	PERTEC
KENNEDY	9600	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PERTEC
KENNEDY	6809	---	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	NRZI	7/7	800	PARALLEL	25	N/A	20	PROPRIETARY
KENNEDY	9832	---	0.50 TA	H/TA	0.50 RR	1200	11.50 U	NRZI	7/7	800	PARALLEL	12.5	100	160	PERTEC
KENNEDY	6470	---	0.25 S/S	Q/SS/F	0.25 CT	600	57.60 U	GCR	10	6400	SERPENTINE	37.5	N/A	30	PROPRIETARY
KENNEDY	9700	---	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	7/7	1600/800	PARALLEL	37.5	N/A	60	PROPRIETARY
KENNEDY	6500	---	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
MEGATAPE	MT-300HC	---	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300C	---	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-300H	---	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-300H	---	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300HC	---	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-300	---	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300C	---	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300	---	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEMOREX	1110	---	0.50 CART	H/CRT	0.50 CT	400	130.00 F	MFM	20	12000	SERPENTINE	50	75	225	ESDI
MEMTEC	420	---	0.15 CASS.	E/CASS	0.15 CAS	450	25.50 U	GCR	4	10000	SERPENTINE	N/A	90	112.5	PROPRIETARY
MEMTEC	445	---	0.15 CASS.	E/CASS	0.15 CAS	450	57.40 U	GCR	9	10000	SERPENTINE	N/A	90	112.5	PROPRIETARY
MEMTEC	510	---	0.15 CASS.	E/CASS	0.15 CAS	450	10.00 F	GCR	4	6400	SERPENTINE	N/A	90	72	QIC-02
MEMTEC	520	---	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	10000	SERPENTINE	N/A	90	112.5	QIC-02
MEMTEC	520	---	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
NORTH. TELECOM	MCT-6109-Q1C	---	0.25 STR	Q/STR/F	0.25 CT	450	49.00 F	RLL	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
NORTH. TELECOM	MCT-6109-BASIC	---	0.25 STR	Q/STR/F	0.25 CT	450	48.60 U	RLL	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
NORTH. TELECOM	MCT-6112-BASIC	---	0.25 STR	Q/STR/F	0.25 CT	450	64.80 U	RLL	12	8000	SERPENTINE	N/A	90	90	QIC-02
NORTH. TELECOM	MCT-6112-Q1C	---	0.25 STR	Q/STR/F	0.25 CT	450	60.00 F	RLL	12	8000	SERPENTINE	N/A	90	90	QIC-02
PERTEC	FT-1940-96	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PERTEC
PERTEC	FS-1000 SERIES	---	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PERTEC
PERTEC	FT-9000	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC
PERTEC	T-8000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	T-1940-96	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PERTEC
PERTEC	T-9000	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC
PERTEC	FT-6000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT9000F	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
PERTEC	T-7000	---	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
PERTEC	FT8000F	---	0.50 TA	H/TA/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
PERTEC	T-1640-98	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	125	N/A	200	PERTEC
PERTEC	FT7000F	---	0.50 TA	H/TA/PE	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
PERTEC	T-6000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT-7000	---	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
PERTEC	FT-1640-98	---	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	125	N/A	200	PERTEC
PERTEC	FT-8000	---	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	HD6400	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
PERTEC	HD6400 Mk 11	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
PERTEC	JETSTREAM 16	---	0.25 STR	Q/STR/F	0.25 CT	555	99.00 F	GCR	16	0	SERPENTINE	N/A	N/A	72	QIC-02
QUANTEX	451	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
QUANTEX	450	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
QUANTEX	450	---	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	PE	4	6400	SERIAL	30	N/A	24	PROPRIETARY
QUALSTAR	MINISTREAMER 701	---	0.50 STR	H/STR/PE	0.50 RR	600	23.00 U	MFM	9	1600/3200	PARALLEL	N/A	50	80	PROPRIETARY
ROSSCOMP	D5161	---	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	QIC-02
ROSSCOMP	D169	---	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PERTEC
ROSSCOMP	D161	---	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	QIC-02
ROSSCOMP	D5160	---	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PROPRIETARY
ROSSCOMP	D160	2451	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PROPRIETARY
SIEMENS	MG 12E	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	IIM
SIEMENS	MG 12	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	N/A	470	IIM

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1985 OEM TAPE DRIVES (CONT.)

CONTROL TECHNOLOGY					MARKETING FACTORS				COMMENTS							
MANUFACTURER	MODEL	DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	DIMENSIONS (IN)				DIST CHANNEL	FCS	LCS	PRICE				
					H	X	W	X				D	\$	UNITS		
INNOV.DATA	1054		4	INC	INC	24.00	X	19.00	X	14.30	OEM		6200	1		
INNOV.DATA	1053		4	INC	INC	24.00	X	19.00	X	14.30	OEM		6500	1		
INNOV.DATA	1012		N/M	INC	INC						OEM					
INNOV.DATA	1052		N/M	INC	OPT	24.00	X	19.00	X	14.30	OEM		4700	1		
INTERDYNE	ID 1010		N/M	INC	INC	1.63	X	4.00	X	6.00	OEM	84-4Q	450	1		
IRWIN MAGN.	IRWIN 125		N/M	INC	INC	1.63	X	5.75	X	8.00	OEM	85-2Q	330	5000		
IRWIN MAGN.	IRWIN 110		N/M	INC	INC	1.63	X	5.75	X	5.00	OEM	84-2Q	260	5000		
IRWIN MAGN.	IRWIN 210		N/M	INC	INC	1.70	X	4.00	X	5.00	OEM	84-2Q	275	5000		
IRWIN MAGN.	IRWIN 225		N/M	INC	INC	1.70	X	4.00	X	5.00	OEM	85-3Q	345	5000	SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE EQUIVALENT TO IBM 3420-6.	
KENNEDY	6450		N/M	INC	INC	4.50	X	8.50	X	16.50	OEM	80-XX 84-XX			SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE; EQUIVALENT TO IBM 3420-8.	
KENNEDY	9400		N/M	INC	INC	24.50	X	19.00	X	19.00	OEM		8900	100	SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE EQUIVALENT TO IBM 3420-4.	
KENNEDY	9300		N/M	INC	OPT	24.50	X	19.00	X	21.00	OEM	76-XX	5100	100	DUAL DENSITY MODEL; SOLD IN U.S. AND EUROPE; EQUIVALENT TO IBM 3420-8.	
KENNEDY	6455		N/M	INC	INC	4.50	X	8.50	X	14.00	OEM	81-XX	1100	1000	OPTIONAL FORMATTER M1006B WITH STC INTERFACE	
KENNEDY	9100		N/M	INC	OPT	24.50	X	19.00	X	21.00	OEM	74-4Q	4380	100	OPTIONAL FORMATTER M1006B WITH STC INTERFACE	
KENNEDY	9800		N/M	INC	OPT	12.50	X	19.00	X	13.00	OEM		2625	100	OPTIONAL FORMATTER M1006A WITH STC INTERFACE	
KENNEDY	9000		N/M	INC	OPT	24.50	X	19.00	X	11.00	OEM	72-XX	3450	100	SLAVE TO M2435L	
KENNEDY	9600		N/M	INC	OPT	8.75	X	17.00	X	22.00	OEM	84-4Q	3400	500	OPTIONAL FORMATTER M1006A WITH STC INTERFACE	
KENNEDY	6809		8	INC	INC	16.00	X	22.75	X	8.75	OEM	81-2Q	2890	100	"FUNNEL" INTERFACE	
KENNEDY	9832		N/M	INC	OPT	12.25	X	19.00	X	14.25	OEM		4275	100	81 MB (72 lps AND 10000 bpl) WITH 600 CART.; 30 lps OPTION; \$545/500.	
KENNEDY	6470		N/M	INC	INC	4.50	X	8.50	X	14.00	OEM	83-4Q	1200	1000	\$4,795/250.	
KENNEDY	9700		N/M	INC	OPT	8.75	X	19.00	X	13.00	OEM	72-XX	2550	100	"FUNNEL" INTERFACE	
KENNEDY	6500		1	INC	OPT	1.63	X	5.75	X	8.00	OEM	84-4Q	875	1	3 MODELS AVAILABLE; 3200 bpl. 1600 bpl. OR DUAL; \$2500/250.	
MEGATAPE	MT-300HC		N/M	INC	INC	10.20	X	8.40	X	29.00	OEM	85-1Q	4325	100		
MEGATAPE	MT-500C		N/M	INC	INC	8.75	X	19.00	X	17.50	OEM	85-1Q	4725	100	75 MB (72 lps AND 10000 bpl) WITH 600 CART.; 30 lps OPTION; \$855/500.	
MEGATAPE	MT-500H		N/M	INC	INC	10.20	X	8.40	X	29.00	OEM	84-3Q	4050	100		
MEGATAPE	MT-300H		N/M	INC	INC	10.20	X	8.40	X	29.00	OEM	84-2Q	3450	100	108 MB (72 lps AND 10000 bpl) WITH 600 CART.; 30 lps OPTION; \$625/500.	
MEGATAPE	MT-500HC		N/M	INC	INC	10.20	X	8.40	X	29.00	OEM	85-1Q	4925	100	100 MB (72 lps AND 10000 bpl) WITH 600 CART.; 30 lps OPTION; \$935/500.	
MEGATAPE	MT-500		N/M	INC	INC	8.75	X	19.00	X	17.50	OEM	84-3Q	3850	100		
MEGATAPE	MT-300C		N/M	INC	INC	8.75	X	19.00	X	17.50	OEM	85-2Q	4075	100	\$3,795/250; READ-ONLY MODELS ALSO AVAILABLE.	
MEGATAPE	MT-300		N/M	INC	INC	8.75	X	19.00	X	17.50	OEM	83-3Q	3200	100	\$5,975/250.	
MEMOREX	1110		N/M	INC	INC	3.25	X	5.75	X	8.00	OEM	84-2Q	1060	1000	OPTIONAL: FORMATTER/CONTROLLER * JAPAN ONLY	
MEMTEC	420		1	INC	OPT	1.63	X	5.75	X	7.60	OEM	84-2Q	250	5000	OPTIONAL: FCU-160 FORMATTER/CONTROLLER	
MEMTEC	445		1	INC	OPT	1.63	X	5.75	X	7.60	OEM	85-2Q			OPTIONAL: FORMATTER/CONTROLLER * JAPAN ONLY	
MEMTEC	510		1	INC	INC	3.25	X	5.75	X	7.60	OEM	83-3Q	250	5000	OPTIONAL: FCU-160 FORMATTER/CONTROLLER	
MEMTEC	520		1	INC	INC	3.25	X	5.75	X	7.60	OEM	83-3Q	275	5000	OPTIONAL: 7803-24 FORMATTER/CONTROLLER, NRZI * JAPAN ONLY	
NORTH, TELECOM	MCT-6109-01C		1	INC	INC	3.90	X	7.75	X	5.75	OEM	83-2Q	1132	100	OPTIONAL: 7803-24 FORMATTER/CONTROLLER, PE * NAS/JAPAN	
NORTH, TELECOM	MCT-6109-BASIC		N/M	INC	OPT	3.34	X	7.75	X	5.75	OEM	83-3Q	899	100	DUAL MODE; GOR AND PE.	
NORTH, TELECOM	MCT-6112-BASIC		N/M	INC	OPT	3.34	X	7.75	X	5.75	OEM	83-3Q	929	100	NO LONGER ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.	
NORTH, TELECOM	MCT-6112-01C		1	INC	INC	3.90	X	7.75	X	5.75	OEM	83-3Q	1162	100		
PERTEC	FT-1940-96		N/M	INC	INC	24.50	X	19.00	X	26.00	OEM					
PERTEC	FS-1000 SERIES		N/M	INC	INC	8.75	X	17.00	X	22.00	OEM	81-XX	2890	100	NO LONGER ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.	
PERTEC	FT-9000		N/M	INC	INC	24.00	X	19.00	X	18.00	OEM	74-XX	5795	100		
PERTEC	T-8000		N/M	INC	OPT	24.00	X	19.00	X	13.00	OEM	70-XX	3930	100	\$2,760/250.	
PERTEC	T-1940-96		N/M	INC	OPT	24.50	X	19.00	X	26.00	OEM	70-XX	9310	250	\$3,775/250.	
PERTEC	T-9000		N/M	INC	OPT	24.00	X	19.00	X	18.00	OEM	74-XX	4420	250	NO LONGER ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.	
PERTEC	FT-6000		N/M	INC	INC	24.00	X	19.00	X	2.50	OEM	69-XX	5470	100		
PERTEC	FT9000F				INC	OPT	24.00	X	19.00	X	18.00	OEM	74-XX	5575	250	OPTIONAL: PE/NRZI UNIBUS I/O * JAPAN ONLY
PERTEC	T-7000		N/M	INC	OPT	8.00	X	9.00	X	13.00	OEM	69-XX	2845	100	OPTIONAL: UNIBUS I/O * JAPAN ONLY	
PERTEC	FT8000F				INC	OPT	24.00	X	19.00	X	16.00	OEM	73-XX	4795	250	BASIC MODEL
PERTEC	T-1640-98		N/M	INC	OPT	24.50	X	19.00	X	23.00	OEM	70-XX			INTELLIGENT MODEL USING NEW LSI SINCE 1984.	
PERTEC	FT7000F				INC	OPT	8.80	X	19.00	X	9.00	OEM	69-XX	3775	250	BASIC MODEL
PERTEC	T-6000		N/M	INC	OPT	24.00	X	19.00	X	14.25	OEM	69-XX	4430	100	BASIC MODEL	
PERTEC	FT-7000		N/M	INC	INC	8.00	X	9.00	X	13.00	OEM	69-XX	3900	100	BASIC MODEL	
PERTEC	FT-1640-98		N/M	INC	INC	24.50	X	19.00	X	23.00	OEM				INTELLIGENT MODEL; USING NEW LSI SINCE 1984.	
PERTEC	FT-8000		N/M	INC	INC	24.00	X	19.00	X	13.00	OEM	70-XX	4970	100		
PERTEC	HD6400		N/M	INC	OPT	4.50	X	7.00	X	6.70	OEM				SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-4.	
PERTEC	HD6400 Mk11		N/M	INC	OPT	4.50	X	7.00	X	6.70	OEM				SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-7.	
QANTEX	JETSTREAM 16		1	INC	INC						OEM	84-2Q	942	500	SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-7.	
QANTEX	451		N/M	INC	OPT	4.25	X	7.00	X	5.75	OEM	82-3Q	871	1		
QANTEX	450		N/M	INC	OPT	4.25	X	7.00	X	5.75	OEM	82-3Q	871	1		
QUALSTAR	MINISTREAMER 701		N/M	INC	INC	6.00	X	15.00	X	8.75	OEM	85-1Q	1739	200		
ROSSCOMP	D5161		1	INC	INC	3.25	X	5.75	X	8.00	OEM	84-2Q	1295	500	NO LONGER ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.	
ROSSCOMP	D169		1	INC	INC	4.62	X	8.55	X	11.00	OEM	84-XX	1615	500	SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-6.	
ROSSCOMP	D161		1	INC	INC	4.62	X	8.55	X	11.00	OEM	83-XX	1440	500	SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-8.	
ROSSCOMP	D5160		N/M	INC	OPT	3.25	X	5.75	X	8.00	OEM	84-2Q	995	500	FOR SYSTEMS 210, 310, 410 LICENSED FROM DEI; "FUNNEL EQUIVALENT".	
ROSSCOMP	D160		N/M	INC	OPT	4.62	X	8.55	X	11.00	OEM	83-XX	940	500		
SIEMENS	MS 12E		N/M	INC	OPT	35.70	X	19.00	X	30.70	OEM					
SIEMENS	MS 12		N/M	INC	OPT	24.50	X	19.00	X	30.70	OEM	84-XX				

1985 OEM TAPE DRIVES

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (Ips)	SPEED STR (Ips)	XFR RATE	I/O INTERFACE
STC	1921	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	N/A 470		PROPRIETARY
STC	1961	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY
STC	1966	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY
STC	3470	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	200	N/A	320	IBM
STC	1968	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY
STC	1922	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PROPRIETARY
STC	1951	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY
STC	2920	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	50	N/A	312.5	PROPRIETARY
STC	1953	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY
STC	1963	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	780	PROPRIETARY
TALLGRASS	GRASSHOPPER MC-20	—	0.25 STR	Q/STR/M	0.25 CT	200	20.00 F	GCR	12	10000	SERPENTINE	N/A	75	93.75	PROPRIETARY
TALLGRASS	GRASSHOPPER MC-40	—	0.25 STR	Q/STR/M	0.25 CT	200	40.00 F	GCR	24	10000	SERPENTINE	N/A	75	93.75	PROPRIETARY
TANDBERG	3000	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.32 U	PE	4	1600	SERIAL	30	N/A	6	PROPRIETARY
TANDBERG	3304	—	0.25 STR	Q/STR/M	0.25 CT	600	27.00 F	N/M, OP, OP	4	8000	SERPENTINE	N/A	90	88	PROPRIETARY
TANDBERG	3314	—	0.25 STR	Q/STR/M	0.25 CT	600	27.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	88	Q1C-02
TANDBERG	3309	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	N/M, OP, OP	9	8000	SERPENTINE	N/A	90	88	PROPRIETARY
TANDBERG	3214	—	0.25 STR	Q/STR/F	0.25 CT	450	40.00 F	NRZI, GCR	8	8128	SERPENTINE	N/A	90	88	Q1C-02
TANDBERG	3229	—	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	86	Q1C-02
TANDBERG	3204	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, GCR	4	8128	SERPENTINE	N/A	90	88	Q1C-02
TANDBERG	3224	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	86	Q1C-02
TANDBERG	3224	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	88	Q1C-02
TANDBERG	3224	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	88	Q1C-02
TANDBERG	TDC 3319	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	40	250	PROPRIETARY
TANDBERG	TM 951W	—	0.50 CART	H/CRT	0.50 CT	260	50 U	MFM	20	6400	SERPENTINE	—	40	32	SERIAL
TANDBERG	TM951	2451	0.50 CART	H/CRT	0.50 CT	260	50.00 U	MFM	20	6400	SERPENTINE	—	40	32	SERIAL
TEAC	MT-2-24	—	0.15 CASS.	E/CASS	0.15 CAS	300	1.44 U	PE	2	1600	SERIAL	15	N/A	24	PROPRIETARY
TEAC	MT-1000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
TEAC	MT-2-01	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-04	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-03	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2ST	—	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	8000	SERPENTINE	45	N/A	43.7	Q1C-02
TEAC	MT-800	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	NRZI, PE	9	800/1600	PARALLEL	45	N/A	72	PROPRIETARY
TEAC	MT-2-02	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-02	—	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	8000	SERPENTINE	90	N/A	87.4	Q1C-02
TEAC	MT-2st	—	0.15 CASS.	E/CASS	0.15 CAS	300	1.44 U	PE	2	1600	SERIAL	15	N/A	24	PROPRIETARY
TEAC	MT-2-23	—	0.15 CASS.	E/CASS	0.15 CAS	300	1.44 U	PE	2	1600	SERIAL	15	N/A	24	PROPRIETARY
TEAC	MT1100	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	100	160	TEAC
TEC	LM 110 11	—	0.50 CART	H/CRT	0.50 CT	150	100.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE
TEC	LM 100 1	—	0.50 CART	H/CRT	0.50 CT	100	60.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE
TEC	LM-110	—	0.50 CART	H/CRT	0.50 CT	328	200.00 U	MFM	100	4620	SERIAL	N/A	216	125	PROPRIETARY
TEC	LM 110 111	—	0.50 CART	H/CRT	0.50 CT	300	200.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE
TELEBYTE	TDX-75/PE	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9/7	1600	PARALLEL	75	N/A	120	PROPRIETARY
TELEBYTE	TDX-75/NRZ	—	0.50 TA	H/TA	0.50 RR	2400	23.00 U	NRZI	9/7	800	PARALLEL	75	N/A	60	PROPRIETARY
TELEBYTE	TDX-75/DUAL DENSITY	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9/7	1600/800	PARALLEL	75	N/A	120	PROPRIETARY
TELEBYTE	TDX-45	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
TELEX	6253-66	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	18.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY
TELEX	9250 SHAMROCK	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	50	N/A	312.5	PROPRIETARY
TELEX	6253-33	244X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	50	N/A	312.5	PROPRIETARY
TELEX	6253-44	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	75	N/A	469	PROPRIETARY
THORN EMI	9900	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PERTEC
THORN EMI	9800	—	0.50 STR	H/STR/PE	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	N/A	100	160	PERTEC
THORN EMI	8900	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	50	100	160	PERTEC
WANGTEK	5-2090	—	0.25 STR	Q/STR/M	0.25 CT	450	21.60 U	GCR	4	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5099EG24	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	Q1C-02
WANGTEK	5099EG11	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5-2090F	—	0.25 STR	Q/STR/M	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	Q1C-02
WANGTEK	5099EK24	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5099EN	—	0.25 STR	Q/STR/M	0.25 CT	600	64.84 U	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY

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1985 OEM TAPE DRIVES (CONT.)

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS				PRICE \$	COMMENTS	
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	CNTR	DIMENSIONS (IN) H X W X D	DIST CHANNEL	FCS	LCS			UNITS
STC	1921	4	INC	OPT	OPT	24.50 X 19.00 X 20.00	OEM	77-30	---	6990	100	100 NO LONGER ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.
STC	1961	4	INC	OPT	OPT	61.75 X 23.50 X 29.00	OEM	80-XX	---	9223	100	100 SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-6.
STC	1966	4	INC	INC	INC	61.75 X 25.00 X 29.00	OEM	80-XX	---	16235	100	1 DRIVE IS MADE FOR IBM BY CIPHER FOR USE ONLY W/ SERIES 1; OPT: PE/NRZI
STC	3470	4	INC	OPT	OPT	66.00 X 30.00 X 30.00	OEM	71-XX	---	15245	100	1 DRIVE IS MADE FOR IBM BY CIPHER FOR USE ONLY W/ SERIES 1; OPT: DUAL DENSITY
STC	1968	4	INC	INC	INC	61.75 X 25.00 X 29.00	OEM	80-XX	---	17420	100	100 SOLD IN EUROPE; DRIVE ACQUIRED FROM 3RD PARTY; EQUIVALENT TO IBM 3420-5.
STC	1922	4	INC	OPT	OPT	24.50 X 19.00 X 20.00	OEM	78-40	---	6990	100	
STC	1922	4	INC	OPT	OPT	29.70 X 19.00 X 24.00	OEM	79-40	---	8470	100	
STC	1951	4	INC	INC	INC	24.50 X 19.00 X 18.00	OEM	83-XX	---	6779	100	
STC	2920	1	INC	INC	INC	29.70 X 19.00 X 24.00	OEM	80-20	---	9248	100	
STC	1953	4	INC	OPT	OPT	29.70 X 19.00 X 24.00	OEM	80-XX	---	9998	100	100 READ/WRITE SINGLE GAP PER CHANNEL MODEL AVAILABLE; \$4,295/250.
STC	1963	4	INC	OPT	OPT	66.75 X 23.50 X 29.00	OEM	80-30	---	---	---	---
TALLGRASS	GRASSHOPPER MC-20	---	INC	INC	OPT	1.63 X 5.75 X 8.50	OEM	85-30	---	---	---	---
TALLGRASS	GRASSHOPPER MC-40	---	INC	INC	OPT	1.63 X 5.75 X 8.50	OEM	---	---	---	---	---
TANDBERG	3000	N/M	INC	OPT	OPT	5.20 X 8.27 X 15.80	OEM	---	---	---	---	---
TANDBERG	3304	N/M	INC	OPT	OPT	1.63 X 5.75 X 8.00	OEM	83-20	---	1520	1	---
TANDBERG	3314	4	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	83-20	---	1500	1	---
TANDBERG	3314	4	INC	INC	INC	1.63 X 5.75 X 8.00	OEM	83-20	---	1325	1	1 LOWER SPEEDS AVAILABLE.
TANDBERG	3309	N/M	INC	OPT	OPT	4.30 X 7.80 X 13.80	OEM	82-30	84-XX	---	---	---
TANDBERG	3214	4	INC	INC	OPT	4.30 X 7.80 X 13.80	OEM	83-20	---	1750	1	1 \$1450/1, \$1015/100 WITH OPTIONAL FORMATTER.
TANDBERG	3229	1	INC	INC	OPT	4.30 X 7.80 X 13.80	OEM	82-30	84-XX	1525	1	1 \$5295/250.
TANDBERG	3204	4	INC	INC	OPT	4.30 X 7.80 X 13.80	OEM	83-20	---	1525	1	1 OPTIONAL: 7 TR, 1/0 TO RS232, IEEE 488, PAR. I/O, S100, INTEL
TANDBERG	3224	1	INC	INC	OPT	4.30 X 7.80 X 13.80	OEM	83-20	---	1575	1	1 \$1450/1, \$1015/100 WITH OPTIONAL FORMATTER.
TANDBERG	TDC 3319	4	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	83-40	84-20	545	1000	1000 READS ALL QIC-02/QIC-24 CARTRIDGES.
TANDBERG	TM 951W	N/M	INC	INC	OPT	3.25 X 5.75 X 8.00	OEM	83-30	---	500	5000	---
TANDBERG	TM951	N/M	INC	INC	OPT	4.10 X 4.70 X 3.10	OEM	81-XX	---	395	500	500 ARCHIVE-LIKE INTERFACE.
TEAC	MT-2-24	N/M	INC	OPT	OPT	23.60 X 19.00 X 10.50	OEM	---	---	---	---	---
TEAC	MT-1000	N/M	INC	OPT	OPT	4.10 X 4.75 X 3.10	OEM	78-XX	---	225	500	500 SOLD ONLY IN COMECON COUNTRIES
TEAC	MT-2-01	N/M	INC	INC	INC	4.10 X 4.75 X 3.60	OEM	78-XX	---	335	500	500 SOLD ONLY IN COMECON COUNTRIES
TEAC	MT-2-04	1	INC	INC	INC	4.10 X 4.75 X 3.10	OEM	78-XX	---	250	500	500 SOLD ONLY IN COMECON COUNTRIES
TEAC	MT-2-03	N/M	INC	OPT	OPT	4.10 X 4.75 X 3.10	OEM	84-20	---	---	---	---
TEAC	MT-2ST	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	---	---	---	---	---
TEAC	MT-800	N/M	INC	OPT	OPT	12.00 X 19.00 X 10.50	OEM	---	---	---	---	---
TEAC	MT-2-02	1	INC	INC	INC	4.10 X 4.75 X 3.60	OEM	78-XX	---	315	500	500 SOLD ONLY IN COMECON COUNTRIES
TEAC	MT-2st	1	INC	INC	INC	---	OEM	84-20	---	---	---	---
TEAC	MT-2-23	N/M	INC	INC	INC	---	OEM	81-XX	---	310	500	500 SOLD ONLY IN COMECON COUNTRIES
TEAC	MT1100	---	---	---	---	23.90 X 19.00 X 11.80	OEM	---	---	---	---	---
TEC	LM 110 11	---	---	---	---	5.50 X 9.00 X 13.40	OEM	83-20	---	500	5000	5000 EMULATES 9-TRACK START-STOP DRIVE.
TEC	LM 100 1	---	---	---	---	5.50 X 9.00 X 13.40	OEM	83-20	---	500	5000	5000 MODEL 162, FEATURING SCSI INTERFACE, ALSO AVAILABLE.
TEC	LM-110	N/M	INC	OPT	OPT	5.64 X 9.20 X 13.60	OEM	---	---	---	---	---
TEC	LM 110 111	---	---	---	---	5.50 X 9.00 X 13.40	OEM	83-20	---	500	5000	---
TELEBYTE	TDX-75/PE	4	INC	INC	OPT	24.40 X 19.00 X 14.60	OEM	83-40	---	6275	1	1 RACK-MOUNT; DUAL-DENSITY.
TELEBYTE	TDX-75/NRZ	4	INC	INC	OPT	24.40 X 19.00 X 14.60	OEM	83-40	---	7200	1	1 RACK-MOUNTED; OPTIONS INCL. 200 lps, F 12E FORMATTER; FLOOR MODEL.
TELEBYTE	TDX-75/DUAL DENSITY	4	INC	INC	OPT	13.80 X 19.00 X 25.40	OEM	83-40	---	5700	1	1 ARCHIVE-LIKE BASIC INTERFACE.
TELEBYTE	TDX-45	4	INC	INC	OPT	24.50 X 19.00 X 22.50	OEM	80-10	---	9445	100	100 RACK-MOUNTED; OPTIONS INCL. 25/50 lps, FLOOR-STANDING, F 12 FORMATTER.
TELEX	6253-66	N/M	INC	OPT	OPT	24.50 X 19.00 X 22.50	OEM	84-XX	---	14635	1	1 RACK-MOUNT; DUAL-DENSITY.
TELEX	9250 SHAMROCK	4	INC	INC	OPT	24.50 X 19.00 X 22.50	OEM	80-10	---	9245	100	---
TELEX	6253-33	N/M	INC	OPT	OPT	24.50 X 19.00 X 22.50	OEM	80-10	---	9245	100	100 RACK-MOUNT; DUAL-DENSITY; 50 lps AND 75 lps ALSO AVAILABLE.
TELEX	6253-44	N/M	INC	INC	OPT	8.70 X 19.00 X 22.25	OEM	84-20	---	3000	100	100 \$2850 LESS FORMATTER AND POWER SUPPLY
THORN EMI	9500	N/M	INC	INC	OPT	8.50 X 8.90 X 15.20	OEM	83-XX	---	2000	100	---
THORN EMI	9800	N/M	INC	INC	OPT	23.90 X 18.70 X 11.40	OEM	83-XX	---	4000	100	---
THORN EMI	8900	N/M	INC	INC	OPT	1.63 X 5.75 X 8.00	OEM	83-XX	84-40	495	1000	1000 TRI-DENSITY; FLOOR-STANDING MTU ONLY; 50 & 75 lps ALSO AVAILABLE.
WANGTEK	5-2090	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	84-XX	---	801	1000	1000 DUAL-DENSITY; FLOOR-STANDING SUBSYSTEM WITH FORMATTER/CONTROLLER.
WANGTEK	5099EG24	N/M	INC	INC	OPT	3.25 X 5.75 X 8.00	OEM	84-XX	---	1520	1	1 BASED ON 1950 SERIES, BUT FLOOR-STANDING MTU ONLY; 50 & 75 lps AVAIL.
WANGTEK	5099EG11	N/M	INC	INC	OPT	3.25 X 5.75 X 8.00	OEM	83-XX	84-40	735	1000	1000 DUAL-DENSITY; FLOOR-STANDING SUBSYSTEM WITH FORMATTER/CONTROLLER.
WANGTEK	5-2090F	1	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	84-XX	---	1540	1	1 RACK-MOUNT; TRI-DENSITY; 50 lps AND 75 lps ALSO AVAILABLE.
WANGTEK	5099EK24	N/M	INC	INC	INC	3.25 X 5.75 X 8.00	OEM	84-XX	---	---	---	---
WANGTEK	5099EN	N/M	INC	OPT	OPT	1.63 X 5.75 X 8.00	OEM	84-XX	---	553	1000	1000 OPT.: 100 lps STREAMING AVAILABLE 10/84; PERTEC INTERFACE.

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1985 OEM TAPE DRIVES - 1/2-INCH CARTRIDGE

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (Ips)	SPEED STR (Ips)	XFR RATE	I/O INTERFACE
CORVUS SYST.	THE BANK	—	0.50 CART	H/CRT	0.50 CT	328	200.00 U	MFM	100	4620	SERIAL	N/A	216	125	PROPRIETARY
ELECT.PROC.	STR-STREAM II	—	0.50 CART	H/CRT	0.50 CT	400	130 F	MFM	20	12000	SERPENTINE	50	75	225	ESDI
MEGATAPE	MT-500H	—	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-300H	—	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300C	—	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-500	—	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300	—	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-500HC	—	0.50 CART	H/CRT	0.50 CT	1000	330 U	GCR	24	9600	SERPENTINE	50	200	240	PERTEC
MEGATAPE	MT-300HC	—	0.50 CART	H/CRT	0.50 CT	1500	500.00 U	GCR	24	9600	SERIAL	50	200	240	PERTEC
MEGATAPE	MT-500C	—	0.50 CART	H/CRT	0.50 CT	400	130.00 F	MFM	20	12000	SERPENTINE	50	75	225	ESDI
MEMOREX	1110	—	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	QIC-02
ROSSCOMP	D161	—	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PROPRIETARY
ROSSCOMP	D160	2451	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PROPRIETARY
ROSSCOMP	D5160	—	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PERTEC
ROSSCOMP	D169	—	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	QIC-02
ROSSCOMP	D5161	—	0.50 CART	H/CRT	0.50 CT	600	160.00 U	NRZI, GCR	24	8000	SERPENTINE	N/A	90	90	PROPRIETARY
TANDON	TM 951W	—	0.50 CART	H/CRT	0.50 CT	260	50 U	MFM	20	6400	SERPENTINE	N/A	40	250	PROPRIETARY
TANDON	TM951	2451	0.50 CART	H/CRT	0.50 CT	260	50.00 U	MFM	20	6400	SERPENTINE	—	40	32	SERIAL
TEC	LM 110 II	—	0.50 CART	H/CRT	0.50 CT	150	100.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE
TEC	LM 110 III	—	0.50 CART	H/CRT	0.50 CT	300	200.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE
TEC	LM-110	—	0.50 CART	H/CRT	0.50 CT	328	200.00 U	MFM	100	4620	SERIAL	N/A	216	125	PROPRIETARY
TEC	LM 100 I	—	0.50 CART	H/CRT	0.50 CT	100	60.00 U	MFM	100	4620	SERIAL	—	216.5	125	FLOPPY-LIKE

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1985 OEM TAPE DRIVES - 1/2-INCH CARTRIDGE

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS					PRICE \$	PRICE UNITS	COMMENTS			
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT	CNTR	DIMENSIONS (IN)										
					H	X	W	X	D	DIST CHANNEL	FCS	LCS				
CORVUS SYST.	THE BANK	1	INC	INC	INC	5.75	X	12.00	X	16.00	OEM	83-40	---	2195	1	1000 DUAL DENSITY MODEL; SOLD IN U.S. AND EUROPE; EQUIVALENT TO IBM 3420-8.
ELECT.PROC.	STR-STREAM II	N/M	INC	INC	OPT	3.25	X	5.75	X	8.00	OEM	84-20	---	960	100	
MEGATAPE	MT-500H	N/M	INC	INC	OPT	10.20	X	8.40	X	29.00	OEM	84-30	---	4050	100	RACK-MOUNT; TRI-DENSITY; 50 ips AND 75 ips ALSO AVAILABLE.
MEGATAPE	MT-300H	N/M	INC	INC	OPT	10.20	X	8.40	X	29.00	OEM	84-20	---	3450	100	TRI-DENSITY; FLOOR-STANDING MTU ONLY; 50 & 75 ips ALSO AVAILABLE.
MEGATAPE	MT-300C	N/M	INC	INC	OPT	8.75	X	19.00	X	17.50	OEM	85-20	---	4075	100	BASED ON 1950 SERIES, BUT FLOOR-STANDING MTU ONLY; 50 & 75 ips AVAIL.
MEGATAPE	MT-500	N/M	INC	INC	OPT	8.75	X	19.00	X	17.50	OEM	84-30	---	3850	100	
MEGATAPE	MT-300	N/M	INC	INC	OPT	8.75	X	19.00	X	17.50	OEM	83-30	---	3200	100	OPT.; 100 ips STREAMING AVAILABLE 10/84; PERTEC INTERFACE.
MEGATAPE	MT-500HC	N/M	INC	INC	OPT	10.20	X	8.40	X	29.00	OEM	85-10	---	4925	100	
MEGATAPE	MT-300HC	N/M	INC	INC	OPT	10.20	X	8.40	X	29.00	OEM	85-10	---	4325	100	DUAL-DENSITY; FLOOR-STANDING SUBSYSTEM WITH FORMATTER/CONTROLLER.
MEGATAPE	MT-500C	N/M	INC	INC	OPT	8.75	X	19.00	X	17.50	OEM	85-10	---	4725	100	DUAL-DENSITY; FLOOR-STANDING SUBSYSTEM WITH FORMATTER/CONTROLLER.
MEMOREX	1110	N/M	INC	INC	OPT	3.25	X	5.75	X	8.00	OEM	84-20	---	1060	1000	EQUIVALENT TO IBM 3420-3; REFURBISHED UNITS ONLY.
ROSSCOMP	D161	1	INC	INC	INC	4.62	X	8.55	X	11.00	OEM	83-XX	---	1440	500	INTELLIGENT; FULL-HEIGHT.
ROSSCOMP	D160	N/M	INC	OPT	OPT	4.62	X	8.55	X	11.00	OEM	83-XX	---	940	500	500 HALF-HEIGHT, 45 ips MODEL AVAILABLE.
ROSSCOMP	D5160	N/M	INC	OPT	OPT	3.25	X	5.75	X	8.00	OEM	84-20	---	995	500	
ROSSCOMP	D169	1	INC	INC	INC	4.62	X	8.55	X	11.00	OEM	84-XX	---	1615	500	HALF-HEIGHT, 45 ips MODEL AVAILABLE.
ROSSCOMP	D5161	1	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-20	---	1295	500	INTELLIGENT; FULL-HEIGHT.
TANDON	TM 951M	N/M	INC	INC	OPT	3.38	X	5.88	X	8.00	OEM	83-40	84-20	545	1000	SLAVE @ \$5900/1; INTERFACES FOR DEC, RS-232, DG, IEEE 488, MULTIBUS.
TANDON	TM951	---	---	---	INC	OPT	3.25	X	5.75	X	8.00	OEM	83-30	---	500	5000 SIMILAR TO FLOPPY
TEC	LM 110 II	---	---	---	INC	INC	5.50	X	9.00	X	13.40	OEM	83-20	---	500	5000 UNIDIRECTIONAL ENDLESS LOOP
TEC	LM 110 III	---	---	---	INC	INC	5.50	X	9.00	X	13.40	OEM	83-20	---	500	5000 UNIDIRECTIONAL ENDLESS LOOP
TEC	LM-110	N/M	INC	OPT	OPT	5.64	X	9.20	X	13.60	OEM	---	---	---	---	---
TEC	LM 100 I	---	---	---	INC	INC	5.50	X	9.00	X	13.40	OEM	83-20	---	500	5000 UNIDIRECTIONAL ENDLESS LOOP

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1985 OEM TAPE DRIVES - 1/2-INCH STREAMER (GCR & PE)

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (Ips)	SPEED STR (Ips)	XFR RATE	I/O INTERFACE
ANRITSU	DMT 2000	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	100	25	160	PERTEC
CDC	92180	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PERTEC
CDC	92185	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25	100	625	PERTEC
CDC	92181	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PERTEC
CIPHER	1880 IPI MICROSTR.	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	0	IPI
CIPHER	M891 CACHE TAPE	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	100	N/A	384	PROPRIETARY
CIPHER	F880 MICROSTR. 2	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	160	PROPRIETARY
CIPHER	M990 GCR CACHE TAPE	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/3200/1600	PARALLEL	N/A	70	490	PROPRIETARY
CIPHER	M991 GCR CACHE TAPE	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/3200/1600	PARALLEL	N/A	100	790	PROPRIETARY
CIPHER	F880 MICROSTR.	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PROPRIETARY
CIPHER	M890 CACHE TAPE	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	100	N/A	120	PROPRIETARY
DDF	STORSTREAMER	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PROPRIETARY
DIGI-DATA	2010	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PERTEC
DIGI-DATA	2021	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	12.5	100	160	PERTEC
DIGI-DATA	2022	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	31.25	125	160	PERTEC
DIGI-DATA	2020	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PERTEC
DIGI-DATA	2011	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	3200/1600	PARALLEL	12.5	100	160	PERTEC
DIGI-DATA	2000	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	1600/3200	PARALLEL	25	100	160	PERTEC
DIGI-DATA	2012	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	3200/1600	PARALLEL	31.25	125	160	PERTEC
FAI	M2431L	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	125	200	IBM
FAI	M2430L	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	125	781	IBM
FAI	M2435L1	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	M2435L2	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	M2444A	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25.5	75	625	PERTEC
FAI	M2440	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	12.5	100	625	EMBEDDED
FAI	M2433L	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	125	200	320	PERTEC
FAI	M2434L1	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	125	781	IBM
FAI	M2432L	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	200	1250	PERTEC
FAI	M2442A	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	12.5	100	625	PERTEC
HITACHI	MT-230	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	31.25	100	160	PERTEC
HITACHI	MT-256	—	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	25	75	469	—
IBEX	PCT-1000	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PERTEC
INNOV.DATA	1012	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PROPRIETARY
KENNEDY	6809	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	12.5	100	160	PERTEC
KENNEDY	9600	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	100	160	PERTEC
PERTEC	FS-1000 SERIES	—	0.50 STR	H/STR/PE	0.50 RR	2400	92.00 U	PE	9	3200/1600	PARALLEL	25	100	160	PERTEC
QUALSTAR	MINISTREAMER 701	—	0.50 STR	H/STR/PE	0.50 RR	600	23.00 U	PE	9	1600/3200	PARALLEL	N/A	50	80	PROPRIETARY
STC	2920	244X	0.50 STR	H/STR/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	50	N/A	312.5	PROPRIETARY
THORN EMI	9800	—	0.50 STR	H/STR/PE	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	N/A	100	160	PERTEC
THORN EMI	8900	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	50	100	160	PERTEC
THORN EMI	9900	—	0.50 STR	H/STR/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	100	160	PERTEC

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1985 OEM TAPE DRIVES - 1/2-INCH STREAMER (GCR & PE)

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				DIMENSIONS (IN) H X W X D	DIST CHANNEL	MARKETING FACTORS			COMMENTS
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT	CNTR			FCS	LCS	PRICE \$ UNITS	
ANRITSU	DMT 2000	N/M	INC	INC	OPT	10.40 X 18.90 X 24.00	RESALE	—	—	—	
CDC	92180	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	RESALE	81-20	83-40	2750	100
CDC	92185	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	RESALE	83-40	—	6150	100
CDC	92181	N/M	INC	INC	OPT	24.00 X 19.00 X 10.90	RESALE	82-20	—	2880	1
CIPHER	1880 IPI MICROSTR.	1	INC	INC	INC	8.75 X 17.00 X 25.00	RESALE	85-30	—	—	—
CIPHER	M891 CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	—	—	3600	250
CIPHER	F880 MICROSTR. 2	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	81-20	—	2825	250
CIPHER	M990 GCR CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	84-30	—	6150	250
CIPHER	M991 GCR CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	84-30	—	8000	1
CIPHER	F880 MICROSTR.	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	80-20	—	2450	250
CIPHER	M890 CACHE TAPE	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	83-10	—	2975	250
DDF	STORSTREAMER	N/M	INC	INC	OPT	8.90 X 17.00 X 24.00	RESALE	—	—	—	—
DIGI-DATA	2010	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-10	—	1850	500
DIGI-DATA	2021	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-10	—	2050	500
DIGI-DATA	2022	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-10	—	2175	500
DIGI-DATA	2020	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-10	—	2050	500
DIGI-DATA	2011	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-10	—	1850	500
DIGI-DATA	2011	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	83-XX	—	2140	100
DIGI-DATA	2000	2	INC	INC	OPT	24.00 X 8.75 X 18.50	RESALE	83-10	—	1950	500
DIGI-DATA	2012	—	—	INC	OPT	8.75 X 19.00 X 21.50	RESALE	84-20	—	14550	1
FAI	M2431L	8	INC	OPT	OPT	55.10 X 19.40 X 29.90	RESALE	84-20	—	14550	1
FAI	M2430L	8	INC	OPT	OPT	55.10 X 19.40 X 29.90	RESALE	84-20	—	16150	100
FAI	M2435L1	8	INC	INC	OPT	55.10 X 39.40 X 29.90	RESALE	84-20	—	24200	100
FAI	M2435L2	8	INC	INC	OPT	55.10 X 39.40 X 29.90	RESALE	84-XX	—	9300	1
FAI	M2444A	8	INC	INC	OPT	24.30 X 19.00 X 22.00	RESALE	—	—	7500	100
FAI	M2440	—	—	INC	OPT	39.40 X 19.70 X 28.00	RESALE	84-10	—	8950	50
FAI	M2433L	8	INC	OPT	OPT	55.10 X 19.40 X 29.90	RESALE	84-20	—	26250	1
FAI	M2434L1	8	INC	INC	OPT	55.10 X 39.40 X 29.20	RESALE	84-20	—	8950	50
FAI	M2432L	8	INC	OPT	OPT	55.10 X 19.40 X 29.90	RESALE	84-20	—	9800	1
FAI	M2442A	8	INC	INC	OPT	24.30 X 19.00 X 22.00	RESALE	83-10	—	—	—
HITACHI	MT-230	—	—	INC	INC	24.50 X 19.00 X 27.20	RESALE	83-XX	—	—	—
HITACHI	MT-256	4	INC	INC	INC	24.50 X 19.00 X 27.20	RESALE	84-20	—	8000	100
IBEX	PCT-1000	N/M	INC	INC	OPT	14.00 X 19.00 X 5.25	RESALE	85-10	—	1950	250
INNOV.DATA	1012	N/M	INC	INC	OPT	—	RESALE	—	—	—	—
KENNEDY	6809	8	INC	INC	OPT	16.00 X 22.75 X 8.75	RESALE	81-20	—	2850	100
KENNEDY	9600	N/M	INC	OPT	OPT	8.75 X 17.00 X 22.00	RESALE	84-40	—	3400	500
PERTEC	FS-1000 SERIES	N/M	INC	INC	OPT	8.75 X 17.00 X 22.00	RESALE	81-XX	—	2850	100
QUALSTAR	MINISTREAMER 701	N/M	INC	INC	OPT	6.00 X 15.00 X 8.75	RESALE	85-10	—	1739	200
STC	2920	1	INC	INC	INC	24.50 X 19.00 X 18.00	RESALE	83-XX	—	6779	100
THORN EMI	9800	N/M	INC	INC	OPT	8.50 X 8.90 X 15.20	RESALE	83-XX	—	2000	100
THORN EMI	8900	N/M	INC	INC	OPT	23.90 X 18.70 X 11.40	RESALE	83-XX	—	4000	100
THORN EMI	9900	N/M	INC	INC	OPT	8.70 X 19.00 X 22.25	RESALE	84-20	—	3000	100

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1985 OEM TAPE DRIVES - 1/2-INCH VACUUM-COLUMN (GCR & PE)

RECORDING TECHNOLOGY

CONTROL TECHNOL

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (lps)	SPEED STR (lps)	XFR RATE	I/O INTERFACE	DRIVES/ CNTRLR	DRIVE ELECTR.
CDC	92334	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PROPRIETARY	N/M	INC
CDC	92324	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	150	N/A	937.5	PROPRIETARY	N/M	INC
CDC	92314	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	100	N/A	0	PROPRIETARY	N/M	INC
CDC	92332	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	200	N/A	1250	PROPRIETARY	N/M	INC
CDC	92312	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	100	N/A	160	PROPRIETARY	N/M	INC
CDC	92322	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	150	N/A	0	PROPRIETARY	N/M	INC
CIPHER	920	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	800/1600	PARALLEL	125	N/A	200	PERTEC	N/M	INC
CIPHER	910	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC	N/M	INC
FAI	M2436L1	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PROPRIETARY	8	INC
FAI	2431R	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	200	N/A	—	—
FAI	2432R	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	75	125	1250	N/A	—	—
FAI	M2436L8	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	PROPRIETARY	8	INC
FAI	2430R	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	75	125	781	N/A	—	—
FAI	2433L	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	320	N/A	—	—
FAI	2433R	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	200	320	N/A	—	—
FAI	2433R	—	0.50 VC	H/VC/PE	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	125	N/A	781	—	—	—
HITACHI	156	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	80	N/A	500	—	—	—
HITACHI	154	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180/46 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	200	PROPRIETARY	N/M	INC
HITACHI	154	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	75	N/A	120	PROPRIETARY	N/M	INC
KENNEDY	9300	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	75	N/A	120	PROPRIETARY	N/M	INC
KENNEDY	9100	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	281	PERTEC	N/M	INC
KENNEDY	9400	244X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	200	PERTEC	N/M	INC
PERTEC	FT-1640-98	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC	N/M	INC
PERTEC	T-9000	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC	—	—
PERTEC	FT9000F	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC	—	—
PERTEC	FT-1940-96	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PERTEC	N/M	INC
PERTEC	T-1940-96	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PERTEC	N/M	INC
PERTEC	FT-9000	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PERTEC	N/M	INC
PERTEC	T-1640-98	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	125	N/A	200	PERTEC	N/M	INC
SIEMENS	MG 12E	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	200	N/A	1250	IBM	N/M	INC
SIEMENS	MG 12	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	N/A	470	IBM	N/M	INC
STC	1953	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY	4	INC
STC	1966	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY	4	INC
STC	1963	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	780	PROPRIETARY	4	INC
STC	1961	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY	4	INC
STC	1951	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	125	N/A	781	PROPRIETARY	4	INC
STC	1922	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	75	N/A	120	PROPRIETARY	4	INC
STC	1968	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY	4	INC
STC	3470	—	0.50 VC	H/VC/PE	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	200	N/A	320	IBM	4	INC
STC	1921	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	75	N/A	470	PROPRIETARY	4	INC
TELEX	6253-33	244X	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	50	N/A	312.5	PROPRIETARY	N/M	INC
TELEX	9250 SHAMROCK	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR, PE	9	6250/1600	PARALLEL	50	N/A	312.5	PROPRIETARY	4	INC
TELEX	6253-66	243X	0.50 VC	H/VC/GCR	0.50 RR	2400	18.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	125	N/A	781	PROPRIETARY	N/M	INC
TELEX	6253-44	—	0.50 VC	H/VC/GCR	0.50 RR	2400	180.00 U	GCR,PE,NRZI	9	6250/1600/800	PARALLEL	75	N/A	469	PROPRIETARY	N/M	INC

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1985 OEM TAPE DRIVES - 1/2-INCH VACUUM-COLUMN (GCR & PE)

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS					COMMENTS						
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	DNTR	DIMENSIONS (IN)						DIST CHANNEL	FCS	LCS	PRICE \$ UNITS		
						H	X	W	X	D							
CDC	92334	N/M	INC	OPT	OPT	64.00	X	30.50	X	30.00	RESALE	78-XX	83-XX	16000	100	—	FORM FACTOR OF HALF-HEIGHT MINIFLOPPY; CLOSED-LOOP SERVO DESIGN.
CDC	92324	N/M	INC	OPT	OPT	64.00	X	30.50	X	30.00	RESALE	78-XX	83-XX	—	—	—	
CDC	92314	N/M	INC	OPT	OPT	64.00	X	30.50	X	30.00	RESALE	78-XX	83-XX	—	—	—	
CDC	92332	N/M	INC	OPT	OPT	64.00	X	30.50	X	30.00	RESALE	78-XX	83-XX	—	—	—	SINGLE-REEL CART; 3.5" DISK FORM FACTOR AND 5 TO 40 MB MODELS.
CDC	92312	N/M	INC	OPT	OPT	64.00	X	30.50	X	30.00	RESALE	78-XX	83-XX	—	—	—	MICROFLOPPY FORM FACTOR; PREFORMATTED DC1000 CARTRIDGE.
CDC	92322	N/M	INC	OPT	OPT	64.50	X	30.50	X	30.00	RESALE	78-XX	83-XX	—	—	—	
CIPHER	920	N/M	INC	OPT	OPT	24.00	X	18.00	X	19.00	RESALE	78-XX	—	4914	—	—	250 ASYNCHRONOUS DRIVE WITH DUAL BUFFERS.
CIPHER	910	N/M	INC	OPT	OPT	24.00	X	18.00	X	19.00	RESALE	78-XX	—	4067	—	—	250 TAKES UP HALF OF 19" RACK.
FAI	M2436L1	8	INC	INC	OPT	55.10	X	39.40	X	29.90	RESALE	85-10	—	16000	—	—	100 108 MB (72 ips AND 10000 bpi) WITH 600 CART.; 30 ips OPTION; \$625/500.
FAI	2431R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	RESALE	81-30	—	—	—	—	OPTIONAL FORMATTER M1006B WITH STC INTERFACE
FAI	2432R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	RESALE	81-30	—	—	—	—	OPTIONAL FORMATTER M1006A WITH STC INTERFACE
FAI	M2436L8	8	INC	OPT	OPT	55.10	X	39.40	X	29.90	RESALE	85-10	—	11360	—	—	100 100 MB (72 ips AND 10000 bpi) WITH 600 CART.; 30 ips OPTION; \$935/500.
FAI	2430R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	RESALE	81-30	—	—	—	—	OPTIONAL FORMATTER M1006B WITH STC INTERFACE
FAI	2433L	—	—	OPT	OPT	26.10	X	19.00	X	27.60	RESALE	81-30	—	—	—	—	SLAVE TO M2435L
FAI	2433R	—	—	OPT	OPT	26.10	X	19.00	X	27.60	RESALE	81-30	—	—	—	—	OPTIONAL FORMATTER M1006A WITH STC INTERFACE
HITACHI	156	—	—	NO	NO	25.00	X	19.00	X	24.00	RESALE	—	—	9000	—	—	1 OPTIONAL: FCU-160 FORMATTER/CONTROLLER
HITACHI	154	—	—	OPT	OPT	25.00	X	19.00	X	24.00	RESALE	—	—	9000	—	—	1 OPTIONAL: FCU-160 FORMATTER/CONTROLLER
KENNEDY	9300	N/M	INC	OPT	OPT	24.50	X	19.00	X	21.00	RESALE	76-XX	—	5100	—	—	100 RACK-MOUNTED; OPTIONS INCL. 200 ips, F 12E FORMATTER; FLOOR MODEL.
KENNEDY	9100	N/M	INC	OPT	OPT	24.50	X	19.00	X	21.00	RESALE	74-40	—	4380	—	—	100 RACK-MOUNTED; DUAL-DENSITY.
KENNEDY	9400	N/M	INC	INC	OPT	24.50	X	19.00	X	19.00	RESALE	—	—	8900	—	—	100 ARCHIVE-LIKE BASIC INTERFACE.
PERTEC	FT-1640-98	N/M	INC	INC	OPT	24.50	X	19.00	X	23.00	RESALE	—	—	—	—	—	SUBSYSTEM; DRIVE WITH CONTROLLER; BASE PRICE BEFORE OPTIONS.
PERTEC	T-9000	N/M	INC	OPT	OPT	24.00	X	19.00	X	18.00	RESALE	74-XX	—	4420	—	—	250 TRI-DENSITY; SLAVE; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-6.
PERTEC	FT9000F	—	—	INC	OPT	24.00	X	19.00	X	18.00	RESALE	74-XX	—	5575	—	—	250 OPTIONAL: NRZI PE/NRZI 45 IPS
PERTEC	FT-1940-96	N/M	INC	INC	OPT	24.50	X	19.00	X	26.00	RESALE	—	—	—	—	—	SLAVE DRIVE; RESALE DRIVE WITH STORAGETEK INTERFACE FOR \$16,425/1.
PERTEC	T-1940-96	N/M	INC	OPT	OPT	24.50	X	19.00	X	26.00	RESALE	70-XX	—	9310	—	—	250 TRI-DENSITY; MASTER; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-6.
PERTEC	FT-9000	N/M	INC	INC	OPT	24.00	X	19.00	X	18.00	RESALE	74-XX	—	5795	—	—	100 TRI-DENSITY; MASTER; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-4.
PERTEC	T-1640-98	N/M	INC	OPT	OPT	24.50	X	19.00	X	23.00	RESALE	70-XX	—	—	—	—	DUAL-DENSITY; SLAVE; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-4.
SIEMENS	MG 12E	N/M	INC	OPT	OPT	35.70	X	19.00	X	30.70	RESALE	—	—	—	—	—	
SIEMENS	MG 12	N/M	INC	OPT	OPT	24.50	X	19.00	X	30.70	RESALE	84-XX	—	—	—	—	ST506-LIKE INTERFACE; MODEL TM 951F OFFERS FLOPPY-LIKE INTERFACE.
STC	1953	4	INC	OPT	OPT	29.70	X	19.00	X	24.00	RESALE	80-20	—	9248	100	—	
STC	1966	4	INC	INC	INC	61.75	X	25.00	X	29.00	RESALE	80-XX	—	16235	100	—	
STC	1963	4	INC	OPT	OPT	66.75	X	23.50	X	29.00	RESALE	80-XX	—	9998	100	—	
STC	1961	4	INC	OPT	OPT	61.75	X	23.50	X	29.00	RESALE	80-XX	—	9223	100	—	INTEGRAL LSI CONTROLLER
STC	1951	4	INC	OPT	OPT	29.70	X	19.00	X	24.00	RESALE	79-40	—	8470	100	—	
STC	1922	4	INC	OPT	OPT	24.50	X	19.00	X	20.00	RESALE	78-40	—	6990	100	—	
STC	1968	4	INC	INC	INC	61.75	X	25.00	X	29.00	RESALE	80-XX	—	17420	100	—	
STC	3470	4	INC	OPT	OPT	66.00	X	30.00	X	30.00	RESALE	71-XX	—	15245	1	—	
STC	1921	4	INC	OPT	OPT	24.50	X	19.00	X	20.00	RESALE	77-30	—	6990	100	—	
TELEX	6253-33	N/M	INC	OPT	OPT	24.50	X	19.00	X	22.50	RESALE	80-10	—	9245	100	—	3200 bpi OPTION.
TELEX	9250 SHAMROCK	4	INC	INC	OPT	24.50	X	19.00	X	22.50	RESALE	84-XX	—	14635	1	—	TELEX 6253-33 INTERFACE; TRI-DENSITY; OTHER INTERFACES TO BE AVAIL.
TELEX	6253-66	N/M	INC	OPT	OPT	24.50	X	19.00	X	22.50	RESALE	80-10	—	9445	100	—	
TELEX	6253-44	N/M	INC	OPT	OPT	24.50	X	19.00	X	22.50	RESALE	80-10	—	9245	100	—	

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1985 OEM TAPE DRIVES - 1/2-INCH TENSION ARM, ALL DENSITIES

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (ips)	SPEED STR (ips)	XFR RATE	I/O INTERFACE
ANRITSU	DMT 3000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600/800	PARALLEL	37.5	N/A	60	PERTEC
CDC	94149	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600	PARALLEL	45	N/A	72	PERTEC
CDC	92146	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	18.75	N/A	30	PERTEC
CDC	92147	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	25	N/A	40	PERTEC
CDC	92143	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	37.5	N/A	60	PERTEC
CDC	92148	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	37.5	N/A	60	PERTEC
CDC	92149	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	45	N/A	72	PERTEC
CDC	94144	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600	PARALLEL	45	N/A	77	PERTEC
CDC	92142	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	25	N/A	40	PERTEC
CDC	92144	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/1800	PARALLEL	45	N/A	72	PERTEC
CDC	92144	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	8	1600/1800	PARALLEL	18.75	N/A	30	PERTEC
CDC	92141	—	0.50 TA	H/TA	0.50 RR	2400	46/23 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
CIPHER	SERIES 70	—	0.50 TA	H/TA	0.50 RR	600	12.00 U	PE, NRZI	9	1600/800	PARALLEL	12.5	N/A	20	PERTEC
CIPHER	7	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	38	N/A	60	PERTEC
CIPHER	80	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE, NRZI	9	1600/800	PARALLEL	37.5	N/A	60	PERTEC
CIPHER	8B	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
CIPHER	MOD11	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
CIPHER	100	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
CIPHER	MOD10	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	37.5	N/A	60	PERTEC
CIPHER	MOD8	—	0.50 TA	H/TA	0.50 RR	1600	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2216-155	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2216-151	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2216-153	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
COOK ELECT.	2200-107	—	0.50 TA	H/TA	0.50 RR	2400	24.00 U	NRZI	9	800	PARALLEL	25	N/A	20	PERTEC
COOK ELECT.	2200-103	—	0.50 TA	H/TA	0.50 RR	2400	23.00 U	NRZI	9	800	PARALLEL	12.5	N/A	10	PERTEC
COOK ELECT.	2200-125	—	0.50 TA	H/TA	0.50 RR	2400	24.00 U	NRZI	9	800	PARALLEL	25	N/A	20	PERTEC
DOF	BANDSTOR 2000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	800/1600	PARALLEL	45	N/A	72	PROPRIETARY
DOF	BANDSTOR 1000	—	0.50 TA	H/TA	0.50 RR	600	12.00 U	NRZI, PE	9	800/1600	PARALLEL	25	N/A	40	PERTEC
DIGI-DATA	1640	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE, NRZI	7/7	1600/800	PARALLEL	25	N/A	40	PERTEC
DIGI-DATA	1140	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	7/7	1600/800	PARALLEL	25	N/A	40	PERTEC
DIGI-DATA	1740	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	75	PERTEC
DIGI-DATA	1840	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	1600/800	PARALLEL	75	N/A	120	PERTEC
INNOV.DATA	1754	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV.DATA	1052	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1751	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV.DATA	1053	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1753	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	75	N/A	120	PERTEC
INNOV.DATA	1752	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1051	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
INNOV.DATA	1054	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	37.5	N/A	60	PROPRIETARY
KENNEDY	9700	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
KENNEDY	9000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	37.5	N/A	60	PROPRIETARY
KENNEDY	9800	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	PE, NRZI	7/7	1600/800	PARALLEL	25	N/A	20	PROPRIETARY
KENNEDY	9832	—	0.50 TA	H/TA	0.50 RR	1200	11.50 U	NRZI	7/7	800	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT-6000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT-7000	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
PERTEC	T-6000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	T-8000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT7000F	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE	9	1600	PARALLEL	25	N/A	40	PERTEC
PERTEC	FT8000F	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	N/A	72	PERTEC
PERTEC	FT-8000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9	1600/800	PARALLEL	45	N/A	72	PERTEC
PERTEC	T-7000	—	0.50 TA	H/TA	0.50 RR	600	11.50 U	PE, NRZI	9	1600/800	PARALLEL	25	N/A	40	PERTEC
TEAC	MT-1000	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	NRZI, PE	9	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
TEAC	MT1100	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9	1600	PARALLEL	45	100	160	TEAC
TEAC	MT-800	—	0.50 TA	H/TA	0.50 RR	1200	23.00 U	NRZI, PE	9	800/1600	PARALLEL	45	N/A	72	PROPRIETARY
TELEBYTE	TDX-75/NRZ	—	0.50 TA	H/TA	0.50 RR	2400	23.00 U	NRZI	9/7	800	PARALLEL	75	N/A	60	PROPRIETARY
TELEBYTE	TDX-45	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	7/7	1600/800	PARALLEL	45	N/A	72	PROPRIETARY
TELEBYTE	TDX-75/DUAL DENSITY	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE, NRZI	9/7	1600/800	PARALLEL	75	N/A	120	PROPRIETARY
TELEBYTE	TDX-75/PE	—	0.50 TA	H/TA	0.50 RR	2400	46.00 U	PE	9/7	1600	PARALLEL	75	N/A	120	PROPRIETARY

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1985 OEM TAPE DRIVES - 1/2-INCH TENSION ARM, ALL DENSITIES

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS					COMMENTS					
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT	CNTR	DIMENSIONS (IN)			DIST	FCS		LCS	PRICE \$ UNITS			
						H	X	W	X	D	CHANNEL					
ANRITSU	DMT 3000	4	INC	OPT	OPT	23.90	X	19.20	X	14.00	OEM	—	—	—	—	MODEL 2 ONLY—\$10610; MODEL 3 DRIVE WITH POWER—\$11960.
CDC	94149	N/M	INC	OPT	OPT	24.00	X	19.00	X	16.00	OEM	79-40	—	5000	1	MICROFLOPPY FORM FACTOR; CLOSED-LOOP SERVO DESIGN.
CDC	92146	N/A	—	OPT	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	2785	1	
CDC	92147	N/A	—	OPT	OPT	24.00	X	17.00	X	16.00	OEM	80-40	—	1785	1	
CDC	92143	N/A	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	3625	1	
CDC	92148	N/A	—	OPT	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	2785	1	
CDC	92149	N/A	—	OPT	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	2785	1	
CDC	94144	N/M	INC	INC	OPT	24.00	X	19.00	X	16.00	OEM	79-40	—	5000	1	
CDC	92142	N/A	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	3625	1	
CDC	92144	N/A	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	3625	1	
CDC	92144	N/A	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	3625	1	
CDC	92141	N/A	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	80-40	—	3625	1	
CIPHER	SERIES 70	N/M	INC	OPT	OPT	8.75	X	19.00	X	13.75	OEM	77-XX	83-XX	—	—	
CIPHER	7	N/A	—	OPT	OPT	8.80	X	19.00	X	8.50	OEM	70-XX	—	2794	500	OPTIONAL: 7/9 TR NRZI
CIPHER	80	N/M	INC	OPT	OPT	12.25	X	19.00	X	13.25	OEM	77-XX	83-XX	—	—	KENNEDY'S PICO INS; PERTEC INTERFACE OPTION INTELLIGENT DMA TYPE DEVICE.
CIPHER	88	N/A	—	OPT	OPT	12.30	X	19.00	X	8.50	OEM	70-XX	—	3191	500	\$6140 @ Q1 W/AVAILABLE FORMATTER; OPTIONAL: 7/9 TR NRZI, 12.5, 37.5 IPS.
CIPHER	MOD11	N/M	INC	INC	OPT	24.00	X	19.00	X	11.00	OEM	—	—	6780	1	
CIPHER	100	N/M	INC	OPT	OPT	24.00	X	19.00	X	15.25	OEM	73-XX	—	3301	250	BEING PHASED OUT IN 1984.
CIPHER	MOD10	N/M	INC	OPT	OPT	24.00	X	19.00	X	11.00	OEM	—	—	3430	250	AUTO-THREADING, DRAWER MOUNT.
CIPHER	MOD8	N/M	INC	OPT	OPT	12.25	X	19.00	X	8.50	OEM	—	—	3751	1	120 KB CACHE; SWITCH SELECTABLE TRANSFER RATE.
COOK ELECT.	2216-155	N/M	INC	INC	OPT	—	—	—	—	—	OEM	—	—	—	—	500 MB CARTRIDGES; \$110 EACH IN CASES OF TEN.
COOK ELECT.	2216-151	N/M	OPT	OPT	OPT	—	—	—	—	—	OEM	—	—	—	—	
COOK ELECT.	2216-153	N/M	INC	OPT	OPT	—	—	—	—	—	OEM	—	—	—	—	128 KB CACHE; SWITCH SELECTABLE TRANSFER RATE.
COOK ELECT.	2200-107	N/M	INC	INC	OPT	24.00	X	19.00	X	15.00	OEM	75-10	—	—	—	
COOK ELECT.	2200-103	N/M	INC	OPT	OPT	24.00	X	19.00	X	15.00	OEM	75-10	—	—	—	
COOK ELECT.	2200-103	N/M	OPT	OPT	OPT	24.00	X	18.00	X	15.00	OEM	75-10	—	—	—	SUBSTITUTE FOR IBM-3420-6.
COOK ELECT.	2200-125	N/M	OPT	OPT	OPT	24.40	X	19.30	X	10.40	OEM	—	—	—	—	SCSI INTERFACE OPTION; 30 ips. 37.5 KBS OPTIONS.
DDF	BANDSTOR 2000	N/M	INC	OPT	OPT	8.90	X	19.00	X	14.00	OEM	—	—	—	—	
DDF	BANDSTOR 1000	N/M	INC	OPT	OPT	8.90	X	19.00	X	14.00	OEM	—	—	—	—	
DIGI-DATA	1640	4	INC	INC	OPT	12.25	X	19.00	X	11.00	OEM	78-40	—	2835	100	
DIGI-DATA	1140	4	INC	INC	OPT	8.75	X	19.00	X	11.00	OEM	78-40	—	2660	100	
DIGI-DATA	1740	4	INC	INC	OPT	24.00	X	19.00	X	11.00	OEM	78-40	—	3135	100	
DIGI-DATA	1840	4	INC	INC	OPT	24.00	X	19.00	X	11.00	OEM	79-10	—	3835	100	
INNOV.DATA	1754	N/M	INC	INC	OPT	—	—	—	—	—	OEM	—	—	8100	1	\$1450/1, \$1015/100 WITH OPTIONAL FORMATTER.
NOV.DATA	1052	N/M	INC	OPT	OPT	24.00	X	19.00	X	14.30	OEM	—	—	4700	1	LOWER SPEEDS AVAILABLE.
NOV.DATA	1751	N/M	INC	OPT	OPT	—	—	—	—	—	OEM	—	—	5950	1	
NOV.DATA	1053	4	INC	INC	INC	24.00	X	19.00	X	14.30	OEM	—	—	6500	1	\$7,765/250.
NOV.DATA	1753	N/M	INC	INC	OPT	—	—	—	—	—	OEM	—	—	8450	1	
NOV.DATA	1752	N/M	INC	OPT	OPT	—	—	—	—	—	OEM	—	—	6100	1	LOWER SPEEDS AVAILABLE.
INNOV.DATA	1051	N/M	INC	OPT	OPT	24.00	X	19.00	X	14.30	OEM	—	—	—	—	LOWER SPEEDS AVAILABLE.
INNOV.DATA	1054	4	INC	INC	INC	24.00	X	19.00	X	14.30	OEM	—	—	6200	1	
KENNEDY	9700	N/M	INC	OPT	OPT	8.75	X	19.00	X	13.00	OEM	72-XX	—	2550	100	RACK-MOUNT; DUAL-DENSITY.
KENNEDY	9000	N/M	INC	OPT	OPT	24.50	X	19.00	X	11.00	OEM	72-XX	—	3450	100	
KENNEDY	9800	N/M	INC	OPT	OPT	12.50	X	19.00	X	13.00	OEM	—	—	2625	100	
KENNEDY	9832	N/M	INC	OPT	OPT	12.25	X	19.00	X	14.25	OEM	—	—	4275	100	RACK-MOUNT; DUAL-DENSITY; 50 ips AND 75 ips ALSO AVAILABLE.
PERTEC	FT-6000	N/M	INC	INC	OPT	24.00	X	19.00	X	2.50	OEM	69-XX	—	5470	100	DUAL-DENSITY; SLAVE; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-6.
PERTEC	FT-7000	N/M	INC	INC	OPT	8.00	X	9.00	X	13.00	OEM	69-XX	—	3900	100	USES 3M DC2000 TYPE MINI-CART.; VARIOUS HOST INTERFACE OPTIONS PLANNED.
PERTEC	T-6000	N/M	INC	OPT	OPT	24.00	X	19.00	X	14.25	OEM	69-XX	—	4430	100	TRI-DENSITY; SLAVE; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-4.
PERTEC	T-8000	N/M	INC	OPT	OPT	24.00	X	19.00	X	13.00	OEM	70-XX	—	3930	100	DUAL-DENSITY; MASTER; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-4.
PERTEC	FT7000F	—	—	INC	OPT	8.80	X	19.00	X	9.00	OEM	69-XX	—	3775	250	OPTIONAL: NRZI 12.5 IPS
PERTEC	FT8000F	—	—	INC	OPT	24.00	X	19.00	X	16.00	OEM	73-XX	—	4795	250	OPTIONAL: NRZI PE/NRZI 25 IPS
PERTEC	FT-8000	N/M	INC	INC	OPT	24.00	X	19.00	X	13.00	OEM	70-XX	—	4970	100	DUAL-DENSITY; MASTER; 1 X 8 STRING OPTION; EQUIVALENT TO IBM 3420-6.
PERTEC	T-7000	N/M	INC	OPT	OPT	8.00	X	9.00	X	13.00	OEM	69-XX	—	2845	100	SUBSYSTEM: DRIVE WITH CONTROLLER; RESALE PRODUCT FOR 34,640/1.
TEAC	MT-1000	N/M	INC	OPT	OPT	23.60	X	19.00	X	10.50	OEM	—	—	—	—	
TEAC	MT1100	—	—	INC	OPT	23.90	X	19.00	X	11.80	OEM	—	—	—	—	JAPAN ONLY
TEAC	MT-800	N/M	INC	OPT	OPT	12.00	X	19.00	X	10.50	OEM	—	—	—	—	
TELEBYTE	TDX-75/NRZ	4	INC	INC	OPT	24.40	X	19.00	X	14.60	OEM	83-40	—	6275	1	80223 SUBSYSTEM (TWO DRIVES AND CONTROLLER) FOR \$55,800.
TELEBYTE	TDX-45	4	INC	INC	OPT	13.80	X	19.00	X	25.40	OEM	83-40	—	5700	1	80225 SUBSYSTEM (TWO DRIVES AND CONTROLLER) FOR \$56,100.
TELEBYTE	TDX-75/DUAL DENSITY	4	INC	INC	OPT	24.40	X	19.00	X	14.60	OEM	83-40	—	7200	1	80224 SUBSYSTEM (TWO DRIVES AND CONTROLLER) FOR \$52,600.
TELEBYTE	TDX-75/PE	4	INC	INC	OPT	24.40	X	19.00	X	14.60	OEM	83-40	—	6900	1	80226 SUBSYSTEM (TWO DRIVES AND CONTROLLER) FOR \$57,600.

1985 OEM TAPE DRIVES - 1/4-INCH START/STOP & STREAMER, FLOPPY-SIZE/MINIFLOPPY-SIZE

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (lps)	SPEED STR (lps)	XFR RATE	I/O INTERFACE
3M	DCD-3	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.30 U	PE	4	1600	SERPENTINE	30	N/A	6	PROPRIETARY
ANRITSU	DMT 730C	—	0.25 S/S	Q/SS/F	0.25 CT	550	48.00 U	MFM	8	7700	SERPENTINE	30	N/A	28.9	PROPRIETARY
DATA ELECT.	301091 FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 F	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DATA ELECT.	MICROTAPE EL-5	—	0.25 S/S	Q/SS/M	0.25 CT	600	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DATA ELECT.	31004401 SUPER FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	600	90.00 U	MFM	7	8533	SERPENTINE	90	N/A	40	PROPRIETARY
DATA ELECT.	MICROTAPE EL-6	—	0.25 S/S	Q/SS/M	0.25 CT	600	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DATA ELECT.	310022 SERP.FUNNEL	—	0.25 S/S	Q/SS/F	0.25 CT	600	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DIGI-DATA	6420	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DIGI-DATA	8310	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERIAL	37.5	N/A	39	PROPRIETARY
DIGI-DATA	6410	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DIGI-DATA	8340	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERPENTINE	37.5	N/A	39	PROPRIETARY
DIGI-DATA	8330	—	0.25 S/S	Q/SS/F	0.25 CT	600	30.00 U	MFM	4	8333	SERIAL	37.5	N/A	39	PROPRIETARY
DIGI-DATA	6440	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
DIGI-DATA	6430	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
DIGI-DATA	8320	—	0.25 S/S	Q/SS/F	0.25 CT	555	21.30 U	MFM	4	6400	SERPENTINE	37.5	N/A	39	PROPRIETARY
ELECT.PROC	STR-STREAM	2431	0.25 S/S	Q/SS/F	0.25 CT	600	23.00 U	MFM	4	6400	SERIAL	30	N/A	24	PERTEC
ELECT.PROC.	STR-812	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.30 U	PE	4	1600	SERIAL	38	N/A	6	SERIAL
INNOV.DATA	TD 3000	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.32 U	PE	4	1600	SERIAL	12.5	N/A	6	PROPRIETARY
KENNEDY	6450	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.00 U	GCR	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
KENNEDY	6470	—	0.25 S/S	Q/SS/F	0.25 CT	600	97.60 U	GCR	10	6400	SERPENTINE	37.5	N/A	30	PROPRIETARY
KENNEDY	6455	—	0.25 S/S	Q/SS/F	0.25 CT	600	23.00 U	GCR	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
PERTEC	HD6400 Mk II	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
PERTEC	HD6400	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
QANTEX	451	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERPENTINE	30	N/A	24	PROPRIETARY
QANTEX	450	—	0.25 S/S	Q/SS/F	0.25 CT	450	17.30 U	MFM	4	6400	SERIAL	30	N/A	24	PROPRIETARY
TANDBERG	3000	—	0.25 S/S	Q/SS/F	0.25 CT	450	4.32 U	PE	4	1600	SERIAL	30	N/A	6	PROPRIETARY
3M	HCD-75/60	—	0.25 STR	Q/STR/F	0.25 CT	600	67.00 F	MFM	16	10000	SERPENTINE	N/A	60	75	PROPRIETARY
ANRITSU	DMT 730E	—	0.25 STR	Q/STR/F	0.25 CT	550	48.00 F	MFM	8	7700	SERPENTINE	N/A	90	86.7	PROPRIETARY
ARCHIVE	5920L	—	0.25 STR	Q/STR/M	0.25 CT	450	20.00 F	NRZI, RLL	4	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	5945C	—	0.25 STR	Q/STR/M	0.25 CT	450	48.60 U	N/M, OP, OP	9	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	9045L	—	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	NRZI, RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	9020L	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, RLL	4	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	5945L	—	0.25 STR	Q/STR/M	0.25 CT	450	45.00 F	NRZI, RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	9045B	—	0.25 STR	Q/STR/F	0.25 CT	450	48.60 U	N/M, OP, OP	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
ARCHIVE	9020B	—	0.25 STR	Q/STR/F	0.25 CT	450	21.60 U	N/M, OP, OP	4	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	5920C	—	0.25 STR	Q/STR/M	0.25 CT	450	21.60 U	N/M, OP, OP	4	8000	SERPENTINE	N/A	90	90	QIC-36
ARCHIVE	3020B	—	0.25 STR	Q/STR/F	0.25 CT	450	21.60 U	N/M, OP, OP	4	8000	SERPENTINE	N/A	90	90	QIC-02
ARCHIVE	3020L	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	NRZI, RLL	4	8000	SERPENTINE	N/A	30	30	QIC-02
CDC	92192	—	0.25 STR	Q/STR/F	0.25 CT	600	68.00 F	GCR	11	8000	SERPENTINE	N/A	55	55	PROPRIETARY
CDC	92190	—	0.25 STR	Q/STR/F	0.25 CT	450	48.70 F	GCR	11	8000	SERPENTINE	N/A	90	90	PROPRIETARY
CIPHER	420-90	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	FLOPPY
CIPHER	525-CT	—	0.25 STR	Q/STR/M	0.25 CT	450	32.00 U	MFM	6	6400	SERPENTINE	N/A	78	63	FLOPPY
CIPHER	540-CT	—	0.25 STR	Q/STR/M	0.25 CT	450	45.00 F	GCR, RLL	9	8000	SERPENTINE	N/A	90	87	QIC-02
CIPHER	F420-90	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	QIC-02
CIPHER	440-CT	—	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	GCR, RLL	9	8000	SERPENTINE	N/A	90	88	QIC-02
DATA ELECT.	MINI QIC-STREAM III	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	88	QIC-02
DATA ELECT.	7230 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	7500	SERPENTINE	N/A	30	29	PROPRIETARY
DATA ELECT.	7130 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	10.00 F	GCR	2	7500	SERPENTINE	N/A	90	90	PROPRIETARY
DATA ELECT.	1290 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	N/M, OP, OP	4	10000	SERPENTINE	N/A	90	88	PROPRIETARY
DATA ELECT.	7190 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	10.00 F	GCR	2	7500	SERPENTINE	N/A	90	88	PROPRIETARY
DATA ELECT.	7290 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	GCR	4	7500	SERPENTINE	N/A	90	88	PROPRIETARY
DATA ELECT.	1230 STREAMER	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 U	N/M, OP, OP	4	10000	SERPENTINE	N/A	36	250	FLOPPY
INTERDINE	ID 1010	—	0.25 STR	Q/STR/M	0.25 CT	325	10.00 F	MFM	4	6800	SERPENTINE	N/A	90	90	PROPRIETARY
KENNEDY	6500	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
NORTH. TELECOM	MCT-6112-BASIC	—	0.25 STR	Q/STR/F	0.25 CT	450	64.80 U	RLL	12	8000	SERPENTINE	N/A	90	90	PROPRIETARY
NORTH. TELECOM	MCT-6109-BASIC	—	0.25 STR	Q/STR/F	0.25 CT	450	48.60 U	RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
NORTH. TELECOM	MCT-6112-QIC	—	0.25 STR	Q/STR/F	0.25 CT	450	60.00 F	RLL	12	8000	SERPENTINE	N/A	90	90	QIC-02
NORTH. TELECOM	MCT-6109-QIC	—	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	RLL	9	8000	SERPENTINE	N/A	90	90	QIC-02
QANTEX	JETSTREAM 16	—	0.25 STR	Q/STR/F	0.25 CT	555	99.00 F	GCR	16	0	SERPENTINE	N/A	N/A	72	QIC-02
TALLGRASS	GRASSHOPPER MC-20	—	0.25 STR	Q/STR/M	0.25 CT	200	20.00 F	GCR	12	10000	SERPENTINE	N/A	75	93.75	PROPRIETARY
TALLGRASS	GRASSHOPPER MC-40	—	0.25 STR	Q/STR/M	0.25 CT	200	40.00 F	GCR	24	10000	SERPENTINE	N/A	75	93.75	PROPRIETARY
TANDBERG	3314	—	0.25 STR	Q/STR/M	0.25 CT	600	27.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	88	QIC-02
TANDBERG	3224	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	88	QIC-02
TANDBERG	3309	—	0.25 STR	Q/STR/M	0.25 CT	600	20.00 F	NRZI, GCR	4	8000	SERPENTINE	N/A	90	88	PROPRIETARY
TANDBERG	3304	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	N/M, OP, OP	9	8000	SERPENTINE	N/A	90	88	PROPRIETARY
TANDBERG	3229	—	0.25 STR	Q/STR/F	0.25 CT	450	27.00 F	N/M, OP, OP	4	8000	SERPENTINE	N/A	90	86	QIC-02
TANDBERG	3229	—	0.25 STR	Q/STR/F	0.25 CT	450	45.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	88	QIC-02
TANDBERG	TDC 3319	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	NRZI, GCR	9	8000	SERPENTINE	N/A	90	88	QIC-02
TANDBERG	3204	—	0.25 STR	Q/STR/F	0.25 CT	450	20.00 F	NRZI, GCR	4	8128	SERPENTINE	N/A	90	88	QIC-02

GT-C

1985 OEM TAPE DRIVES - 1/4-INCH START/STOP & STREAMER, FLOPPY-SIZE/MINIFLOPPY-SIZE

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS				PRICE		COMMENTS
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	DIMENSIONS (IN) H X W X D	DIST CHANNEL	FCS	LCS	PRICE \$	UNITS		
3M	DCD-3	N/M	INC	OPT	7.00 X 8.75 X 11.70	OEM	73-2Q	—	887	100		
ANRITSU	DMT 730C	1	INC	INC	—	OEM	—	—	—	—		
DATA ELECT.	301091 FUNNEL	N/M	INC	OPT	4.25 X 6.96 X 5.72	OEM	76-4Q	—	890	501	501 SLAVE; FOR INTERNATIONAL MARKETS; EQUIVALENT TO IBM 3420-4.	
DATA ELECT.	MICROTAPE EL-5	N/M	INC	OPT	3.25 X 5.75 X 8.00	OEM	83-4Q	—	700	501	501 SLAVE; EQUIVALENT TO IBM 3420-6.	
DATA ELECT.	31004401 SUPER FUNNEL	N/M	INC	OPT	4.25 X 6.96 X 5.72	OEM	83-4Q	—	1043	501	501 ARCHIVE-LIKE INTERFACE; OPTIONAL 30 Ips MODEL.	
DATA ELECT.	MICROTAPE EL-6	N/M	INC	OPT	3.25 X 5.75 X 8.00	OEM	83-4Q	—	790	501	501 MASTER; MODEL 3442 WITH TWO CONTROL UNITS AVAILABLE FOR \$89,210.	
DATA ELECT.	310022 SERP.FUNNEL	N/M	INC	OPT	4.25 X 6.96 X 5.72	OEM	83-3Q	—	941	501	501 SUBSTITUTE FOR IBM 3420-7.	
DIGI-DATA	6420	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	695	1000		
DIGI-DATA	8310	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	695	1000		
DIGI-DATA	6410	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	81-XX	—	595	1000		
DIGI-DATA	8340	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	895	1000		
DIGI-DATA	8330	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	795	1000		
DIGI-DATA	8330	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	795	1000		
DIGI-DATA	6440	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	695	1000		
DIGI-DATA	6430	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	795	1000		
DIGI-DATA	8320	N/M	INC	OPT	3.25 X 6.90 X 57.50	OEM	83-XX	—	874	10000		
ELECT.PROC	STR-STREAM	4	INC	INC	4.10 X 7.00 X 12.00	OEM	82-XX	—	929	10000	SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE; EQUIVALENT TO IBM 3420-8.	
ELECT.PROC	STR-812	N/M	INC	OPT	5.20 X 7.80 X 12.80	OEM	83-XX	—	—	—	\$5295/250.	
INNOV.DATA	TD 3000	4	INC	INC	5.20 X 8.27 X 15.80	OEM	—	—	—	—		
KENNEDY	6450	N/M	INC	INC	4.50 X 8.50 X 16.50	OEM	80-XX 84-XX	—	1200	1000	MODEL 162, FEATURING SCSI INTERFACE, ALSO AVAILABLE.	
KENNEDY	6470	N/M	INC	INC	4.50 X 8.50 X 14.00	OEM	83-4Q	—	1100	1000	EMULATES 9-TRACK START-STOP DRIVE.	
KENNEDY	6455	N/M	INC	INC	4.50 X 8.50 X 14.00	OEM	81-XX	—	—	—	USES 3M DC2000 TYPE MINI-CART.; VARIOUS HOST INTERFACE OPTIONS PLANNED.	
PERTEX	HD6400 Mk11	N/M	INC	OPT	4.50 X 7.00 X 6.70	OEM	—	—	—	—	45 Ips OPTION.	
PERTEX	HD6400	N/M	INC	OPT	4.50 X 7.00 X 6.70	OEM	—	—	—	—	1 SOLD IN U.S. ONLY THROUGH INNOVATIVE DATA TECHNOLOGY (IDT).	
QANTEX	451	N/M	INC	OPT	4.25 X 7.00 X 5.75	OEM	82-3Q	—	871	1	45 Ips OPTION.	
QANTEX	450	N/M	INC	OPT	4.25 X 7.00 X 5.75	OEM	82-3Q	—	871	1	SLAVE @ \$5900/1; INTERFACES FOR DEC, RS-232, DG, IEEE 488, MULTIBUS.	
TANDBERG	3000	N/M	INC	OPT	5.20 X 8.27 X 15.80	OEM	—	—	782	500	STREAMS AT 50 Ips IN 3200 bpi MODE; DRIVE ACQUIRED FROM 3RD PARTY.	
3M	HCD-75/60	N/M	INC	OPT	4.56 X 6.85 X 8.60	OEM	80-XX	—	—	—	OPTIONAL CIPHER/KENNEDY INTERFACES; LICENSED AMPLEX "VIRGO".	
ANRITSU	DMT 730E	1	INC	INC	4.40 X 8.50 X 9.10	OEM	—	—	—	—		
ARCHIVE	5920L	1	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	1145	1	1 MASTER; STANDALONE WITH DAISYCHAIN FEATURE.	
ARCHIVE	5945C	N/M	INC	OPT	1.63 X 5.75 X 8.00	OEM	—	—	905	1	1 DEVICE LEVEL INTERFACE.	
ARCHIVE	9045L	4	INC	INC	4.50 X 8.55 X 10.00	OEM	82-1Q	—	1280	1	1 FORMATTER; INCLUDES DAISYCHAIN CAPABILITY.	
ARCHIVE	9020L	4	INC	INC	4.50 X 8.55 X 10.00	OEM	80-XX	—	1145	1		
ARCHIVE	5945L	1	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	1280	1	1 AVAILABLE WITH 4 INTERFACES.	
ARCHIVE	9045B	N/M	INC	OPT	4.50 X 8.55 X 10.00	OEM	82-1Q	—	905	1		
ARCHIVE	9020B	N/M	INC	OPT	4.50 X 8.55 X 10.00	OEM	80-4Q	—	770	1		
ARCHIVE	5920C	N/M	INC	OPT	1.63 X 5.75 X 8.00	OEM	—	—	770	1	1 DEVICE LEVEL INTERFACE; SLAVE TO 1753.	
ARCHIVE	3020B	N/M	INC	OPT	4.50 X 8.55 X 10.00	OEM	80-4Q	—	770	1	1 DEVICE LEVEL INTERFACE; MASTER; STANDALONE TRANSPORT.	
ARCHIVE	3020B	N/M	INC	OPT	4.50 X 8.55 X 10.00	OEM	80-4Q	—	1145	1	1 DEVICE LEVEL INTERFACE; INCLUDES DAISYCHAIN CAPABILITY.	
ARCHIVE	3020L	1	INC	INC	4.50 X 8.50 X 13.50	OEM	82-2Q	—	1020	100		
DC	92192	N/M	INC	INC	4.50 X 8.50 X 13.50	OEM	82-2Q	—	940	100		
CDC	92190	N/M	INC	INC	4.50 X 8.50 X 13.50	OEM	—	—	750	500	TAKES UP HALF OF 19" RACK. 128 KB CACHE.	
CIPHER	420-90	N/M	INC	OPT	4.50 X 8.55 X 14.00	OEM	—	—	300	5000		
CIPHER	525-CT	N/M	INC	INC	3.25 X 5.75 X 8.00	OEM	83-XX	—	750	500		
CIPHER	540-CT	1	INC	INC	3.25 X 5.75 X 8.00	OEM	—	—	750	500	300 MB CARTRIDGES PRICED AT \$90 EACH IN CASES OF TEN.	
CIPHER	F420-90	4	INC	INC	4.50 X 8.55 X 14.00	OEM	—	—	750	500	DUAL DENSITY	
CIPHER	440-CT	1	INC	INC	4.50 X 8.55 X 14.00	OEM	—	—	895	1000	MASTER; MODEL 3282 WITH TWO CONTROL UNITS AVAILABLE FOR \$73,000.	
DATA ELECT.	MINI QIC-STREAM 111	1	INC	INC	3.25 X 5.75 X 8.00	OEM	84-XX	—	—	—	— READS/Writes TWO TRACKS IN PARALLEL.	
DATA ELECT.	7230 STREAMER	1	INC	INC	4.52 X 8.57 X 14.06	OEM	—	84-XX	—	—	— SLAVE; EQUIVALENT TO IBM 3420-5.	
DATA ELECT.	7130 STREAMER	1	INC	INC	4.52 X 8.57 X 14.06	OEM	—	84-XX	—	—	501 MASTER; MODEL 3262 WITH TWO CONTROL UNITS AVAILABLE FOR \$89,210.	
DATA ELECT.	1290 STREAKER	N/M	INC	OPT	4.52 X 8.57 X 6.00	OEM	81-2Q 84-XX	—	610	—	— SUBSTITUTE FOR IBM 3420-6.	
DATA ELECT.	7190 STREAMER	1	INC	INC	4.52 X 8.57 X 14.06	OEM	—	84-XX	—	—	— SLAVE; EQUIVALENT TO IBM 3420-8.	
DATA ELECT.	7290 STREAMER	1	INC	INC	4.52 X 8.57 X 14.06	OEM	—	84-XX	—	—	501 NO PRICES YET ESTABLISHED; NOT AVAILABLE UNTIL LATE 1985.	
DATA ELECT.	1230 STREAKER	N/M	INC	OPT	4.52 X 8.57 X 6.00	OEM	81-2Q 84-XX	—	610	—	1 \$1490/1, \$1015/100 WITH OPTIONAL FORMATTER.	
INTERDYNE	ID 1010	N/M	INC	INC	1.63 X 4.00 X 6.00	OEM	84-4Q	—	490	1	1 MODEL D-162 AVAILABLE WITH EMBEDDED SCSI INTERFACE.	
KENNEDY	6500	1	INC	OPT	1.63 X 5.75 X 8.00	OEM	84-4Q	—	875	100	100 EQUIVALENT TO IBM 3420-8; RESALE VERSION FOR \$18,480/1.	
NORTH. TELECOM	MCT-6112-BASIC	N/M	INC	OPT	3.34 X 7.75 X 5.75	OEM	83-3Q	—	929	100	EQUIVALENT TO IBM 3420-4.	
NORTH. TELECOM	MCT-6109-BASIC	N/M	INC	OPT	3.34 X 7.75 X 5.75	OEM	83-3Q	—	899	100		
NORTH. TELECOM	MCT-6112-QIC	1	INC	INC	3.90 X 7.75 X 5.75	OEM	83-3Q	—	1162	100		
NORTH. TELECOM	MCT-6109-QIC	1	INC	INC	3.90 X 7.75 X 5.75	OEM	83-2Q	—	1132	100	EQUIVALENT TO IBM 3420-6.	
QANTEX	JETSTREAM 16	1	INC	INC	—	OEM	84-2Q	—	942	500	45 Ips OPTION; BEING PHASED OUT IN 1984.	
TALLGRASS	GRASSHOPPER MC-20	—	INC	INC	1.63 X 5.75 X 8.50	OEM	85-3Q	—	—	—	— INTEGRAL LSI CONTROLLER	
TALLGRASS	GRASSHOPPER MC-40	—	INC	INC	1.63 X 5.75 X 8.50	OEM	—	—	—	—		
TANDBERG	3314	4	INC	INC	3.25 X 5.75 X 8.00	OEM	83-2Q	—	1500	1	1 FULL-HEIGHT MINIFLOPPY SIZE	
TANDBERG	3224	1	INC	INC	4.30 X 7.80 X 13.80	OEM	83-2Q	—	1525	1	1 HALF-HEIGHT MINIFLOPPY SIZE	
TANDBERG	3309	N/M	INC	OPT	1.63 X 5.75 X 8.00	OEM	83-2Q	—	1325	1	1 OEM MODEL AVAILABLE WITH RS-232 INTERFACE	
TANDBERG	3304	N/M	INC	OPT	1.63 X 5.75 X 8.00	OEM	83-2Q	—	1520	1	1 SLAVE @ \$4200/1; INTERFACES FOR DEC, RS-232, DG, IEEE 488, MULTIBUS.	
TANDBERG	3229	1	INC	INC	4.30 X 7.80 X 13.80	OEM	83-2Q	—	1750	1		
TANDBERG	TDC 3319	4	INC	INC	3.25 X 5.75 X 8.00	OEM	83-2Q	—	1575	1	1 CURRENTLY MARKETED IN THE U.S. BY CORVUS SYSTEMS AS "THE BANK".	
TANDBERG	320	4	INC	INC	4.30 X 7.80 X 13.80	OEM	82-3Q 84-XX	—	1525	1		

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1985 OEM TAPE DRIVES - 1/4-INCH START/STOP & STREAMER, FLOPPY-SIZE/MINIFLOPPY-SIZE

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (lps)	SPEED STR (lps)	XFR RATE	I/O INTERFACE
TANDBERG	3214	—	0.25 STR	Q/STR/F	0.25 CT	450	40.00 F	NRZI, GCR	8	8128	SERPENTINE	N/A	90	88	QIC-02
WANGTEK	5-2090F	—	0.25 STR	Q/STR/M	0.25 CT	450	20.00 F	GCR	4	8000	SERPENTINE	N/A	90	90	QIC-02
WANGTEK	5099EG24	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	QIC-02
WANGTEK	5099EG11	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5-2090	—	0.25 STR	Q/STR/M	0.25 CT	450	21.60 U	GCR	4	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5099EK24	—	0.25 STR	Q/STR/M	0.25 CT	600	60.00 F	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY
WANGTEK	5099EN	—	0.25 STR	Q/STR/M	0.25 CT	600	64.84 U	GCR	9	8000	SERPENTINE	N/A	90	90	PROPRIETARY

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1985 OEM TAPE DRIVES - 1/4-INCH START/STOP & STREAMER, FLOPPY-SIZE/MINIFLOPPY-SIZE

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS					COMMENTS					
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT CNTR	CNTR	DIMENSIONS (IN) H X W X D				DIST CHANNEL		FCS	LCS	PRICE \$ UNITS		
TANDBERG	3214	4	INC	INC	OPT	4.30	X	7.80	X	13.80	OEM	82-3Q	84-XX	—	—	1000 QIC-24 DATA FORMAT; 45 MB WITH DC300XL (450-FOOT) CARTRIDGE. 1000 30 Ips OPT; 27.6 MB (f) WITH 600 CART.; OUT OF PRODUCTION; PILOT ONLY. 1 QIC-11 DATA FORMAT, PREDECESSOR TO QIC-24; 45 MB WITH DC300XL. 1000 BASIC I/F (QIC-36); NEVER IN FULL PRODUCTION, PILOT PRODUCTION ONLY. 1 IBM PC INTERFACE
WANGTEK	5-2090F	1	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	83-XX	84-4Q	735	801	
WANGTEK	5099EG24	1	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-XX	—	801	1520	
WANGTEK	5099EG11	N/M	INC	INC	OPT	3.25	X	5.75	X	8.00	OEM	84-XX	—	495	1000	
WANGTEK	5-2090	N/M	INC	OPT	OPT	1.63	X	5.75	X	8.00	OEM	83-XX	84-4Q	1540	1	
WANGTEK	5099EK24	N/M	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-XX	—	553	1000	
WANGTEK	5099EK24	N/M	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-XX	—	553	1000	
WANGTEK	5099EN	N/M	INC	OPT	OPT	1.63	X	5.75	X	8.00	OEM	84-XX	—	553	1000	

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1985 TAPE DRIVES - 1/8-INCH CARTRIDGE & CASSETTE

RECORDING TECHNOLOGY

MANUFACTURER	MODEL	FAI EQUIV	GENERIC CLASS	DATABASE CLASS	MEDIA TYPE	MEDIA LENGTH (FT)	CAPACITY (MB)	ENCODING	TKS	DENSITY (BPI)	MODE	SPEED SS (lps)	SPEED STR (lps)	XFR RATE	I/O INTERFACE
		—	0.15 CART	E/CRT	0.15 CT	140	0.16 U	PE	1	800	SERIAL	30	N/A	2.4	PROPRIETARY
3M	DCD-1	—	0.15 CART	E/CRT	0.15 CT	140	0.67 U	PE	2	1600	SERPENTINE	30	N/A	4.8	PROPRIETARY
3M	DCD-2	—	0.15 CART	E/CRT	0.15 CT	185	12.39 F	MFM	8	6400	SERIAL	N/A	39	31.2	FLOPPY
APTEC	MT1000	—	0.15 CART	E/CRT	0.15 CT	140	0.31 F	PE	2	800	SERIAL	N/A	18	1.8	PARALLEL
ELECT.PROC.	STR-610A	—	0.15 CART	E/CRT	0.15 CT	140	0.31 F	PE	2	800	SERIAL	N/A	18	1.8	PARALLEL
ELECT.PROC.	STR-LINK III	—	0.15 CART	E/CRT	0.15 CT	140	0.31 F	PE	2	800	SERIAL	N/A	18	1.8	PARALLEL
IRWIN MAGN.	IRWIN 110	—	0.15 CART	E/CRT	0.15 CT	185	10.35 F	MFM	8	6400	SERPENTINE	N/A	39	31.2	FLOPPY
IRWIN MAGN.	IRWIN 125	—	0.15 CART	E/CRT	0.15 CT	185	21.80 F	MFM	12	9000	SERPENTINE	N/A	55	61.8	FLOPPY
IRWIN MAGN.	IRWIN 125	—	0.15 CART	E/CRT	0.15 CT	185	10.35 F	MFM	8	6400	SERPENTINE	N/A	39	31.2	FLOPPY
IRWIN MAGN.	IRWIN 210	—	0.15 CART	E/CRT	0.15 CT	185	21.80 F	MFM	12	9000	SERPENTINE	N/A	55	61.8	FLOPPY
IRWIN MAGN.	IRWIN 225	—	0.15 CART	E/CRT	0.15 CT	185	21.80 F	MFM	12	9000	SERPENTINE	N/A	90	112.5	PROPRIETARY
MEMTEC	420	—	0.15 CASS.	E/CASS	0.15 CAS	450	25.90 U	GCR	4	10000	SERPENTINE	N/A	90	112.5	PROPRIETARY
MEMTEC	445	—	0.15 CASS.	E/CASS	0.15 CAS	450	57.40 U	GCR	9	10000	SERPENTINE	N/A	90	112.5	PROPRIETARY
MEMTEC	510	—	0.15 CASS.	E/CASS	0.15 CAS	450	10.00 F	GCR	4	6400	SERPENTINE	N/A	90	72	QIC-02
MEMTEC	520	—	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	10000	SERPENTINE	N/A	90	112.5	QIC-02
MEMTEC	520	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-01	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-02	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-03	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-04	—	0.15 CASS.	E/CASS	0.15 CAS	300	0.36 U	PE	1	800	SERIAL	15	N/A	12	PROPRIETARY
TEAC	MT-2-23	—	0.15 CASS.	E/CASS	0.15 CAS	300	1.44 U	PE	2	1600	SERIAL	15	N/A	24	PROPRIETARY
TEAC	MT-2-24	—	0.15 CASS.	E/CASS	0.15 CAS	300	1.44 U	PE	2	1600	SERIAL	15	N/A	24	PROPRIETARY
TEAC	MT-2ST	—	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	8000	SERPENTINE	45	N/A	43.7	QIC-02
TEAC	MT-2st	—	0.15 CASS.	E/CASS	0.15 CAS	450	20.00 F	GCR	4	8000	SERPENTINE	90	N/A	87.4	QIC-02

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1985 TAPE DRIVES - 1/8-INCH CARTRIDGE & CASSETTE

MANUFACTURER	MODEL	CONTROL TECHNOLOGY				MARKETING FACTORS						COMMENTS				
		DRIVES/ CNTRLR	DRIVE ELECTR.	FRMT	CNTR	DIMENSIONS (IN)					DIST		FCS	LCS	PRICE	
						H	X	W	X	D	CHANNEL				\$	UNITS
3M	DCD-1	4	INC	OPT	OPT	4.00	X	5.75	X	12.00	OEM	76-2Q	---	387	100	MODEL 2 ONLY--\$10610; MODEL 3 DRIVE WITH POWER--\$11960.
3M	DCD-2	4	OPT	OPT	OPT	4.00	X	5.75	X	4.50	OEM	79-2Q	---	427	100	
APTEC	MT1000	---	INC	INC	OPT	1.63	X	5.75	X	8.00	OEM	---	---	---	---	SLAVE TRANSPORT.
ELECT.PROC.	STR-610A	4	INC	INC	INC	3.10	X	5.10	X	3.80	OEM	81-XX	---	363	1000	SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE EQUIVALENT TO IBM 3420-6.
ELECT.PROC.	STR-LINK III	4	INC	INC	INC	---	---	---	---	---	OEM	81-XX	---	1100	5000	SUPPLIED BY HITACHI; SOLD IN U.S. AND EUROPE EQUIVALENT TO IBM 3420-4.
IRWIN MAGN.	IRWIN 110	N/M	INC	INC	OPT	1.63	X	5.75	X	5.00	OEM	84-2Q	---	260	5000	READS ALL QIC-02/QIC-24 CARTRIDGES.
IRWIN MAGN.	IRWIN 125	N/M	INC	INC	OPT	1.63	X	5.75	X	8.00	OEM	85-2Q	---	330	5000	
IRWIN MAGN.	IRWIN 210	N/M	INC	INC	OPT	1.70	X	4.00	X	5.00	OEM	84-2Q	---	275	5000	ARCHIVE-LIKE INTERFACE.
IRWIN MAGN.	IRWIN 225	N/M	INC	INC	OPT	1.70	X	4.00	X	5.00	OEM	85-3Q	---	345	5000	23 MB AT 3200 bpI/25Ips; 11.5 MB AT 1600 bpI/50 Ips; TABLE TOP UNIT.
MEMTEC	420	1	INC	OPT	OPT	1.63	X	5.75	X	7.60	OEM	84-2Q	---	250	5000	EQUIVALENT TO IBM 3420-7; REFURBISHED UNITS ONLY.
MEMTEC	445	1	INC	OPT	OPT	1.63	X	5.75	X	7.60	OEM	85-2Q	---	---	---	EQUIVALENT TO IBM 3420-5; REFURBISHED UNITS ONLY.
MEMTEC	510	1	INC	INC	INC	3.25	X	5.75	X	7.60	OEM	83-3Q	---	250	5000	REFURBISHED UNITS ONLY.
MEMTEC	520	1	INC	INC	INC	3.25	X	5.75	X	7.60	OEM	83-3Q	---	275	5000	NOT ACTIVELY MARKETED; EXISTING CONTRACTS ONLY.
TEAC	MT-2-01	N/M	INC	OPT	OPT	4.10	X	4.75	X	3.10	OEM	78-XX	---	225	500	
TEAC	MT-2-02	1	INC	INC	INC	4.10	X	4.75	X	3.60	OEM	78-XX	---	315	500	
TEAC	MT-2-03	N/M	INC	OPT	OPT	4.10	X	4.75	X	3.10	OEM	78-XX	---	250	500	
TEAC	MT-2-04	1	INC	INC	INC	4.10	X	4.75	X	3.60	OEM	78-XX	---	335	500	
TEAC	MT-2-23	N/M	INC	OPT	OPT	4.10	X	4.70	X	3.10	OEM	81-XX	---	310	500	SLAVE @ \$3600/1; INTERFACES FOR DEC, RS-232, DG, IEEE 488, MULTIBUS.
TEAC	MT-2-24	N/M	INC	OPT	OPT	4.10	X	4.70	X	3.10	OEM	81-XX	---	395	500	
TEAC	MT-2ST	1	INC	INC	INC	3.25	X	5.75	X	8.00	OEM	84-2Q	---	---	---	
TEAC	MT-2st	1	INC	INC	INC	---	---	---	---	---	OEM	84-2Q	---	---	---	

9. FLEX PRODUCTS

- By Company
- By Product Segment

1985 OEM FLEXIBLE DISK DRIVES

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)		PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	TPI	ACT	MEDIA	SIZE							
														B/TK	DS					TK/S	SCTR	SRF	H	X	W	X	D
			IN.			\$	Q	GENERIC		KB/S	MS																
16	OEM	VICTOR OF JAPAN	5.25	MOP-3000	1.00	1.60	---	---	84-40	MAXELL MD2-HD	63	300	15	10416	2	80	S	9646	96	BSM	HDOX	1.63	X	5.75	X	7.90	
17	OEM	VICTOR OF JAPAN	3.5	MOP-30	0.50	---	---	---	85-10	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.10	X	4.00	X	5.10	
17	OEM	VICTOR OF JAPAN	3.5	MOP-30FDW	1.00	---	---	---	85-20	SONY OM-D4440	31	300	20	6250	2	80	S	8717	135	LSSM	HDOX	1.57	X	4.00	X	6.40	
13	OEM	VIDEOTON	8	MFM-4	0.26	F	---	---	77-XX	DISKETTE 1	31	360	40	3328	F	1	77	S	3268	48	LSSM	OX	10.50	X	19.00	X	22.00
13	OEM	VIDEOTON	8	MOFLEX 3200	0.40	---	---	---	78-XX	DISKETTE 1	31	360	40	5208	1	77	H	3268	48	LSSM	OX	5.28	X	8.50	X	14.80	
13	OEM	VIDEOTON	5.25	MOFLEX 900	109.40	---	---	---	83-40	1/40	16	300	10	3125	1	35	S/H	2616	48	CSM	OX	3.27	X	5.75	X	8.00	
13	OEM	VIDEOTON	8	MFM-2	0.26	F	---	---	77-XX	DISKETTE 1	31	360	40	3328	F	1	77	S	3268	48	LSSM	OX	10.50	X	19.00	X	22.00
13	OEM	VIDEOTON	8	MOFLEX 6400	0.40	0.80	---	---	80-XX	DISKETTE 1	63	360	15	10416	1	77	S/H	6536	48	BSM	OX	4.40	X	8.50	X	13.90	
15	OEM	WELTEC DIGITAL	5.25	M 485	0.13	0.25	69	1000	83-30	1/40	31	300	10	6250	1	40	S/H	5536	48	BSM	OX	1.63	X	5.75	X	8.00	
15	OEM	WELTEC DIGITAL	5.25	M 965	0.25	0.50	82	1000	83-30	1/80	31	300	10	6250	1	80	S/H	5576	96	BSM	OX	1.63	X	5.75	X	8.00	
16	OEM	WELTEC DIGITAL	5.25	M 960	0.50	1.00	92	1000	83-30	2/80	31	300	10	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00	
16	OEM	WELTEC DIGITAL	5.25	M 48D	0.25	0.50	79	1000	83-30	2/40	31	300	10	6250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00	
16	OEM	WONG'S TECH.	5.25	WSY 212-5 TITAN	0.25	0.50	---	---	83-20	2/40	31	300	20	6250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00	
15	OEM	WONG'S TECH.	5.25	WST 112-5 TITAN	0.13	0.25	---	---	83-20	1/40	31	300	20	6250	1	40	S/H	5536	48	BSM	OX	3.25	X	5.75	X	8.00	
16	OEM	WONG'S TECH.	5.25	WST 211-5 ZEUS	0.25	0.50	---	---	82-20	2/40	31	300	15	6250	2	40	S/H	5876	48	BSM	OX	3.25	X	5.75	X	8.00	
16	OEM	WONG'S TECH.	5.25	WST 221-5 ZEUS	0.50	1.00	---	---	81-40	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	3.25	X	5.75	X	8.00	
17	OEM	YE DATA	3.5	YD-640	0.50	1.00	---	---	84-20	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.63	X	4.00	X	6.00	
16	OEM	YE DATA	5.25	YD-380-1710	0.80	1.60	---	---	82-10	MAXELL MD2-HD	63	360	15	10416	2	77	S	9646	96	BSM	HDOX	1.63	X	5.75	X	8.00	
17	OEM	YE DATA	3.5	YD-620	0.25	0.50	---	---	84-20	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	BSM	HDOX	1.63	X	4.00	X	6.00	
16	OEM	YE DATA	5.25	YD-480	0.50	1.00	---	---	82-40	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00	
16	OEM	YE DATA	5.25	YD-380-1714	0.80	1.60	---	---	84-XX	MAXELL MD2-HD	63	360	15	10416	2	80	S	9646	96	BSM	HDOX	1.63	X	5.75	X	8.00	
14	OEM	YE DATA	8	YD-180	0.80	1.60	---	---	81-30	DISKETTE 1,2,2D	63	360	15	10416	2	77	S/H	6816	48	BSM	OX	2.25	X	8.55	X	12.60	
17	OEM	YE DATA	3.5	YD-645	0.50	1.00	---	---	84-20	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.63	X	4.00	X	6.00	
14	OEM	YE DATA	8	YD-174D	0.80	1.60	---	---	77-XX	DISKETTE 1,2,2D	63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.50	X	8.55	X	14.57	
16	OEM	YE DATA	5.25	YD-580	0.25	0.50	---	---	82-40	2/40	31	300	15	6250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00	
17	OEM	YE DATA	3.5	YD-625	0.25	0.50	---	---	84-20	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	BSM	HDOX	1.63	X	4.00	X	6.00	
16	OEM	YE DATA	5.25	YD-380T	0.80	1.60	---	---	82-10	MAXELL MD2-HD	63	360	15	10416	2	77	S	9646	96	BSM	HDOX	1.63	X	5.75	X	8.00	
16	OEM	YE DATA	5.25	YD-274	0.25	0.50	---	---	79-10	2/40	31	300	15	6250	2	40	S/H	5876	48	LSSM	OX	3.25	X	5.75	X	8.00	
16	OEM	YE DATA	5.25	YD-280	0.50	1.00	---	---	81-20	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	3.25	X	5.75	X	8.00	
11	OEM	YE DATA	8	YD-74C	0.40	---	---	---	73-40	DISKETTE 1	31	360	20	5208	1	77	S/H	3268	48	LSSM	OX	4.50	X	9.00	X	14.10	

1985 OEM FLEXIBLE DISK DRIVES - 8 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)	PRICE		FCS	INTERFACE	XFR	RPM	ACC	DATA STRU TURE			BPI	TPI	ACT	MEDIA	SIZE									
						\$	Q						GENERIC	KB/S	mS					B/TK	DS	TK/S	SCTR	SRF	H	X	W	X	D
			IN.																										
18	OEM	IOMEGA	8.00	ALPHA-20H	21.40	F	—	1280	1	85-30	ALPHA-20	CART.	1130	1500	—	32768	F	1	654	S	24000	641	RVC	HDOX	2.32	X	8.54	X	12.00
18	OEM	IOMEGA	8.00	ALPHA-10H	10.50	F	—	1025	1	84-40	ALPHA-10	CART.	1130	1500	—	34304	F	1	306	S	24000	300	RVC	HDOX	2.32	X	8.54	X	12.00
16	OEM	IOMEGA	8.00	ALPHA-10	10.03	F	—	1295	1	82-30	ALPHA-10	CART.	1130	1500	10	32768	F	1	306	S	24000	300	RVC	HDOX	4.50	X	8.54	X	14.09
14	OEM	HITACHI	8.00	FDD-441	9.60	—	—	700	500	84-10	MAXELL	FD2-HD	188	360	2	31250	2	154	S	20560	96	BSM	HDOX	2.24	X	8.54	X	12.90	
14	OEM	ELCOMATIC	8.00	ACP 1500	1.60	3.20	—	—	—	83-XX	SPECIAL		63	360	32	10416	2	154	S	6816	96	BSM	OX	4.35	X	8.55	X	12.00	
14	OEM	BASF	8.00	6104	0.80	1.60	—	—	—	78-XX	DISKETTE 1,2,2D		63	360	14	10416	2	77	S/H	6816	48	LSSM	OX	4.33	X	8.66	X	14.17	
14	OEM	CDC	8.00	9406-4	0.80	1.60	510	500	81-XX	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.65	X	8.55	X	14.00		
14	OEM	ELCOMATIC	8.00	ACP 750	0.80	1.60	—	—	—	81-40	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.35	X	8.55	X	12.00	
14	OEM	ELCOMATIC	8.00	ACP 700	0.80	1.60	—	—	—	81-40	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.35	X	8.55	X	12.00	
12	OEM	MATSUSHITA	8.00	JK-885	0.80	1.60	—	—	—	77-40	DISKETTE 1,2,2D		63	360	15	5208	2	77	S/H	3408	48	BSM	OX	—	—	—	—	—	
14	OEM	MATSUSHITA	8.00	JA-751	0.80	1.60	—	—	—	77-40	DISKETTE 1,2,2D		63	360	15	5208	2	77	S/H	3408	48	BSM	OX	2.20	X	8.60	X	12.10	
12	OEM	MATSUSHITA	8.00	JK-888	0.80	1.60	—	—	—	77-40	DISKETTE 1,2,2D		63	360	15	5208	2	77	S/H	3408	48	BSM	OX	—	—	—	—	—	
12	OEM	MATSUSHITA	8.00	JK-886	0.80	1.60	—	—	—	77-40	DISKETTE 1,2,2D		63	360	15	5208	2	77	S/H	3408	48	BSM	OX	4.62	X	8.55	X	14.25	
12	OEM	MICRO PERIPH.	8.00	42	0.80	1.60	—	—	—	77-40	DISKETTE 1,2,2D		63	360	15	5208	2	77	S/H	3268	48	BSM	OX	2.00	X	8.55	X	11.50	
14	OEM	MILTOPE	8.00	DD 550	0.80	1.60	4000	500	82-XX	DISKETTE 2,2D		63	360	10	10416	2	77	S	6816	48	BSM	OX	5.44	X	8.44	X	18.00		
14	OEM	MILTOPE	8.00	DD 450	0.80	1.60	5400	500	80-XX	DISKETTE 2,2D		63	360	10	10416	2	77	S	6816	48	BSM	OX	5.44	X	8.44	X	18.00		
14	OEM	MITSUBISHI	8.00	M2896-63	1.60	—	350	500	82-XX	DISKETTE 2,2D		63	360	15	10416	2	77	S	6816	48	BSM	OX	2.25	X	8.55	X	12.40		
14	OEM	QUME	8.00	242 QUME TRAK	0.80	1.60	415	500	82-20	DISKETTE 1,2,2D		63	360	15	5208	2	77	S	3408	48	BSM	OX	2.25	X	8.55	X	12.60		
12	OEM	TANDON	8.00	TH-848E-2	0.80	1.60	285	2500	81-20	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.50	X	8.55	X	13.13		
14	OEM	YE DATA	8.00	YD-174D	0.80	1.60	—	—	—	77-XX	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	4.50	X	8.55	X	14.57	
14	OEM	YE DATA	8.00	YD-180	0.80	1.60	—	—	—	81-30	DISKETTE 1,2,2D		63	360	15	10416	2	77	S/H	6816	48	BSM	OX	2.25	X	8.55	X	12.60	
13	OEM	BASF	8.00	6102	0.40	0.80	—	—	—	76-XX	DISKETTE 1		63	360	14	10416	1	77	S/H	6536	48	LSSM	OX	4.33	X	8.66	X	14.17	
11	OEM	CDC	8.00	9404B	0.40	0.80	375	500	79-20	CDC 9821/9823		63	360	75	5208	1	77	S/H	3268	48	LSSM	OX	5.00	X	8.80	X	14.00		
13	OEM	ELCOMATIC	8.00	ACP 550	0.40	0.80	—	—	—	81-40	DISKETTE 1,2,2D		63	360	15	10416	1	77	S/H	6536	48	BSM	OX	4.35	X	8.55	X	12.00	
13	OEM	ELCOMATIC	8.00	ACP 500	0.40	0.80	—	—	—	81-40	DISKETTE 1,2,2D		63	360	15	10416	1	77	S/H	6536	48	BSM	OX	4.38	X	9.00	X	14.00	
11	OEM	INNOTRONICS	8.00	420	0.40	0.80	—	—	—	77-10	DISKETTE 1		63	360	8	5208	1	77	S	3408	48	BSM	OX	4.38	X	9.00	X	14.00	
11	OEM	INNOTRONICS	8.00	410	0.40	0.80	—	—	—	77-10	DISKETTE 1		63	360	8	5208	1	77	S	3408	48	BSM	OX	4.38	X	9.00	X	14.00	
11	OEM	MATSUSHITA	8.00	JK-881	0.40	0.80	—	—	—	76-30	DISKETTE 1		63	360	8	5208	1	77	S/H	3268	48	LSSM	OX	—	—	—	—	—	
11	OEM	MATSUSHITA	8.00	JK-880	0.40	0.80	—	—	—	76-30	DISKETTE 1		63	360	8	5208	1	77	S/H	3268	48	LSSM	OX	—	—	—	—	—	
11	OEM	MICRO PERIPH.	8.00	41	0.40	0.80	320	500	82-30	DISKETTE 1		63	360	15	5208	1	77	S/H	3268	48	BSM	OX	2.00	X	8.55	X	11.50		
13	OEM	MILTOPE	8.00	DD 400	0.40	0.80	4950	500	77-XX	DISKETTE 1		63	360	10	10416	1	77	S	6536	48	LSSM	OX	5.44	X	8.44	X	18.00		
13	OEM	TANDON	8.00	TH-848E-1	0.40	0.80	250	2500	81-20	DISKETTE 1		63	360	15	10416	1	77	S/H	6536	48	BSM	OX	4.40	X	8.50	X	13.90		
13	OEM	VIDEOTON	8.00	MONIFLEX 6400	0.40	0.80	—	—	—	80-XX	DISKETTE 1		63	360	15	10416	1	77	S/H	6536	48	BSM	OX	2.30	X	8.55	X	13.13	
11	OEM	METRONEX	8.00	PLX45D	0.40	—	—	—	—	77-XX	DISKETTE 1		31	360	28	5208	1	77	S	3268	48	LSSM	OX	8.66	X	12.20	X	12.40	
13	OEM	VIDEOTON	8.00	MONIFLEX 3200	0.40	—	—	—	—	78-XX	DISKETTE 1		31	360	40	5208	1	77	H	3268	48	LSSM	OX	5.28	X	8.90	X	14.80	
11	OEM	YE DATA	8.00	YD-74C	0.40	—	—	—	—	73-40	DISKETTE 1		31	360	20	5208	1	77	S/H	3268	48	LSSM	OX	4.50	X	9.00	X	14.10	
13	OEM	VIDEOTON	8.00	MFM-2	0.26	F	—	—	—	77-XX	DISKETTE 1		31	360	40	3328	F	1	77	S	3268	48	LSSM	OX	10.50	X	19.00	X	22.00
13	OEM	VIDEOTON	8.00	MFM-4	0.26	F	—	—	—	77-XX	DISKETTE 1		31	360	40	3328	F	1	77	S	3268	48	LSSM	OX	10.50	X	19.00	X	22.00

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1985 OEM FLEXIBLE DISK DRIVES - 5 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UNF)	PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	TPI	ACT	MEDIA		SIZE					
			IN.				\$	Q	GENERIC	KB/S	MS	B/TK	DS	TK/S	SCTR			SRF	H	X	W	X	D		
16	OEM	FUJITSU	5.25	M2552A	0.50	1.00	121 500	86-10	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	HI-TECH PERIPH.	5.25	H596-10	0.50	1.00	140 500	83-30	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	HITACHI	5.25	HFD 310C	0.50	1.00	—	83-40	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	KYOCERA	5.25	KFD-525	0.50	1.00	—	—	SA 164	31	300	15	3125	2	80	S	2961	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	MATSUSHITA	5.25	JU-465	1.00	—	131 500	82-20	2/80	31	300	15	6250	2	80	S/H	5876	96	BSM	OX	1.63	X	5.75	X	8.50
16	OEM	MATSUSHITA	5.25	JA-561	1.00	—	131 500	82-20	2/80	31	300	15	6250	2	80	S/H	5876	96	BSM	OX	1.63	X	5.75	X	8.50
16	OEM	MATSUSHITA	5.25	JU-591	0.50	1.00	—	83-40	MAXELL MD2-HD	63	300	15	6250	2	77	S	5876	96	BSM	HDOX	1.63	X	5.75	X	8.00
14	OEM	MATSUSHITA	5.25	JU-591	0.50	1.00	210 500	83-10	SA 164	31	300	10	3125	2	80	S/H	2961	96	BSM	OX	3.25	X	5.75	X	7.75
14	OEM	MICRO PERIPH.	5.25	902D	0.50	1.00	230 500	80-20	SA 164	31	300	25	3125	2	80	S/H	2961	96	BSM	OX	3.25	X	5.75	X	8.00
14	OEM	MICRO PERIPH.	5.25	92	0.50	1.00	258 500	82-30	SA 164	31	300	15	6250	2	80	S/H	5921	96	LSSM	OX	3.25	X	5.75	X	8.00
14	OEM	MICROPOLIS	5.25	1115-VI	1.00	—	210 500	82-XX	SA 164	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	MITSUBISHI	5.25	M4853	1.00	—	210 500	82-30	SA 164	31	300	15	6250	2	80	S	5922	96	BSM	OX	3.25	X	5.75	X	8.00
14	OEM	MITSUBISHI	5.25	M4852	1.00	—	210 500	82-30	SA 164	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	MITSUBISHI	5.25	D 507	1.00	—	—	85-30	2/80	31	300	30	6250	2	80	S	5922	96	LSM	OX	1.10	X	5.75	X	8.00
16	OEM	MITSUMI	5.25	GM 3415B	1.00	—	—	84-XX	2/80	31	300	30	6250	2	80	S	5922	96	LSM	OX	1.10	X	5.75	X	8.00
16	OEM	OKI ELECTRIC	5.25	GM 3405B	1.00	—	—	84-XX	2/80	31	300	30	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	OKI ELECTRIC	5.25	GM 3405B	1.00	—	—	85-10	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	7.90
16	OEM	OMEX	5.25	OM56	1.00	—	170 500	83-30	SA 164	31	300	15	6250	2	80	S	5876	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	PHILIPS	5.25	X 3134	0.50	1.00	188 500	82-30	SA 164	31	300	15	3125	2	80	S/H	2961	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	SHUGART	5.25	S 465	0.50	1.00	104 2500	82-30	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	TANDON	5.25	TM-65-4	0.50	1.00	95 1000	82-20	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	TEAC	5.25	FD-55FV	0.50	1.00	141 1000	84-10	MAXELL MD2-HD	63	300	15	6250	2	80	S	5922	96	BSM	HDOX	1.63	X	5.75	X	8.00
14	OEM	TEAC	5.25	FD-55GF	0.50	1.00	121 1000	82-20	SA 164	31	300	15	3125	2	80	S/H	2961	96	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	TEAC	5.25	FD-55F	0.50	1.00	—	83-10	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	TOKYO ELECTRIC	5.25	FB-504	1.00	—	—	84-20	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.60
16	OEM	VICTOR OF JAPAN	5.25	MDP-1	1.00	—	—	84-20	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	7.90
16	OEM	VICTOR OF JAPAN	5.25	MDP-100	1.00	—	—	84-40	2/80	31	300	15	6250	2	80	S	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	VICTOR OF JAPAN	5.25	MDP-300	1.00	—	—	84-40	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	WELTEC DIGITAL	5.25	M 96D	0.50	1.00	92 1000	83-30	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	3.25	X	5.75	X	8.00
16	OEM	WONG'S TECH.	5.25	WST 221-5 ZEUS	0.50	1.00	—	81-40	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	3.25	X	5.75	X	8.00
16	OEM	YE DATA	5.25	YD-280	0.50	1.00	—	81-20	2/80	31	300	15	6250	2	80	S/H	5922	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	YE DATA	5.25	YD-480	0.50	1.00	—	82-40	2/80	31	300	15	6250	2	80	S/H	5549	100	LSSM	OX	3.25	X	5.75	X	8.00
14	OEM	MICROPOLIS	5.25	1115-IV	0.96	—	258 500	82-30	MICROPOLIS 1081	31	300	15	6250	2	77	S/H	4823	96	BSM	HDOX	1.63	X	5.75	X	8.00
15	OEM	ELCOMATIC	5.25	ACP596-08	0.80	—	—	84-XX	MAXELL MD2-HD	31	360	15	10416	1	77	S	2788	100	BSM	OX	3.25	X	5.75	X	7.75
13	OEM	MICRO PERIPH.	5.25	101	0.26	0.53	220 500	81-XX	MICROPOLIS 1081	31	300	25	3125	1	84	S/H	5876	48	BSM	OX	1.28	X	5.75	X	8.50
16	OEM	BASF	5.25	6129	0.25	0.50	—	83-XX	2/40	31	300	20	6250	2	40	S	5876	48	BSM	OX	1.28	X	5.75	X	8.50
16	OEM	BASF	5.25	6128	0.25	0.50	—	78-40	BASF 606; 2/40	31	300	15	6250	2	40	S/H	5876	48	CSM	OX	2.10	X	5.75	X	7.50
16	OEM	BASF	5.25	6108	0.25	0.50	95 1000	83-20	2/40	31	300	20	6250	2	40	S	5876	48	BSM	OX	1.28	X	5.75	X	8.50
16	OEM	CANON	5.25	HDD 211	0.25	0.50	180 1000	84-10	2/40	31	300	20	6250	2	40	S	5876	48	BSM	OX	2.26	X	5.75	X	8.50
16	OEM	CANON	5.25	HDD 413	0.25	0.50	—	82-40	SA 154	31	300	60	3125	2	40	S	2938	48	BSM	OX	2.30	X	5.80	X	7.70
14	OEM	CANON	5.25	HDD 210	0.25	0.50	165 1000	83-40	2/40	31	300	15	6250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	CDC	5.25	9428	0.25	0.50	196 1000	80-XX	2/40	31	300	15	6250	2	40	S/H	5876	48	BSM	OX	3.38	X	5.88	X	8.00
16	OEM	CDC	5.25	9409	0.25	0.50	—	84-20	2/40	31	300	20	6250	2	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.70
16	OEM	CHINON	5.25	F-502	0.25	0.50	—	85-30	2/40	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	COPAL	5.25	F-5002	0.25	0.50	—	85-30	2/40	31	300	15	3125	2	40	S	2938	48	LVC	OX	1.10	X	5.80	X	9.30
14	OEM	EPSON	5.25	SD-320	0.25	0.50	130 1000	83-30	SA 154	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.63	X	5.75	X	7.70
16	OEM	EPSON	5.25	SD-521	0.25	0.50	70 1000	83-40	2/40	31	300	15	6250	2	40	S	2938	48	LVC	OX	1.10	X	5.80	X	9.30
14	OEM	EPSON	5.25	SD-321	0.25	0.50	130 1000	83-40	SA 154	31	300	15	3125	2	40	S	2938	48	LVC	OX	1.10	X	5.80	X	9.30
16	OEM	FUJITSU	5.25	M2551A	0.25	0.50	83 500	86-10	2/40	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.60	X	5.80	X	8.00
13	OEM	HI-TECH PERIPH.	5.25	H596-05	0.25	0.50	140 500	83-30	SA 114	31	300	15	3125	1	80	S	2788	96	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	HI-TECH PERIPH.	5.25	H548-90	0.25	0.50	120 500	83-30	2/40	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	HI-TECH PERIPH.	5.25	H548-50FS	0.25	0.50	120 500	83-30	2/40	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.60	X	5.80	X	8.00
14	OEM	HI-TECH PERIPH.	5.25	H548-30LS	0.25	0.50	120 500	83-30	SA 154	31	300	15	3125	2	40	S	2938	48	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	HITACHI	5.25	HFD 505C	0.25	0.50	—	82-30	2/40	31	300	15	6250	2	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.00
14	OEM	MATSUSHITA	5.25	JK-875	0.25	0.50	—	79-30	SA 154	31	300	15	3125	2	40	S/H	2768	48	CSM	OX	3.25	X	5.75	X	8.25
13	OEM	MICRO PERIPH.	5.25	91	0.25	0.50	200 500	80-20	SA 104	31	300	25	3125	1	80	S/H	2788	96	BSM	OX	3.25	X	5.75	X	7.75
14	OEM	MICRO PERIPH.	5.25	902D	0.25	0.50	155 500	83-10	SA 154	31	300	10	3125	2	40	S/H	2938	48	BSM	OX	3.25	X	5.75	X	7.75
14	OEM	MICRO PERIPH.	5.25	92	0.25	0.50	195 500	79-10	SA 154	31	300	15	3125	2	40	S/H	2938	48	BSM	OX	1.63	X	5.		

1985 OEM FLEXIBLE DISK DRIVES - 5 INCH

GRP	MKT	MANUFACTURER	DIA	MODEL	MB(UHF)	PRICE		FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	TPI	ACT	MEDIA	SIZE							
						\$	Q						GENERIC	KB/S	mS					B/TK	DS	TK/S	SCTR	SRF	H	X	W
IN.																											
16	OEM	WONG'S TECH.	5.25	WSY 212-5	TITAN	0.25	0.50	—	—	83-20	2/40	31	300	20	5250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00
16	OEM	YE DATA	5.25	YD-274		0.25	0.50	—	—	79-10	2/40	31	300	15	6250	2	40	S/H	5876	48	LSSM	OX	3.25	X	5.75	X	8.00
16	OEM	YE DATA	5.25	YD-380		0.25	0.50	—	—	82-40	2/40	31	300	15	6250	2	40	S/H	5876	48	BSM	OX	1.63	X	5.75	X	8.00
13	OEM	BASF	5.25	6106		0.13	0.25	—	—	78-30	BASF 606	31	300	15	3125	1	40	S/H	2768	48	CSM	OX	2.10	X	5.80	X	7.5
13	OEM	CANON	5.25	MDD 6106		0.13	0.25	—	—	79-30	SA 104	31	300	83	3125	1	40	S/H	2768	48	CSM	OX	2.10	X	5.80	X	7.70
13	OEM	CDC	5.25	9408		0.13	0.25	190	1000	80-10	1/40	31	300	15	6250	1	40	S/H	5536	48	BSM	OX	3.38	X	5.88	X	8.00
15	OEM	CHINON	5.25	F-051A		0.13	0.25	—	—	83-30	1/40	31	300	20	6250	1	40	S	5536	48	BSM	OX	1.63	X	5.75	X	8.70
15	OEM	CHINON	5.25	F-051D		0.13	0.25	—	—	83-30	1/40	31	300	20	6250	1	40	S	5536	48	BSM	OX	1.63	X	5.75	X	8.70
15	OEM	CHINON	5.25	F-051M		0.13	0.25	—	—	83-30	1/40	31	300	20	6250	1	40	S	5536	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	HI-TECH PERIPH.	5.25	H548-25		0.13	0.25	120	500	83-30	1/40	31	300	15	6250	1	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	HI-TECH PERIPH.	5.25	H548-25		0.13	0.25	120	500	83-30	1/40	31	300	15	6250	1	40	S	5876	48	BSM	OX	1.63	X	5.75	X	8.00
13	OEM	MATSUSHITA	5.25	JA-200		0.13	0.25	—	—	83-10	SA 104	31	300	20	3125	1	40	S	2768	48	CSM	OX	2.05	X	5.75	X	7.87
13	OEM	MICRO PERIPH.	5.25	901		0.13	0.25	125	500	82-30	SA 104	31	300	10	3125	1	40	S/H	2768	48	BSM	OX	1.63	X	5.75	X	7.50
13	OEM	MICRO PERIPH.	5.25	901C		0.13	0.25	120	500	82-30	SA 104	31	300	10	3125	1	40	S/H	2768	48	BSM	OX	1.63	X	5.75	X	7.50
13	OEM	MICRO PERIPH.	5.25	901C		0.13	0.25	155	500	77-40	SA 104	31	300	15	3125	1	40	S/H	2768	48	BSM	OX	3.25	X	5.75	X	7.75
13	OEM	MICRO PERIPH.	5.25	51		0.13	0.25	110	2500	78-40	SA 104	31	300	15	3125	1	40	S/H	2768	48	BSM	OX	3.25	X	5.75	X	8.00
13	OEM	TANDON	5.25	TM-100-1		0.13	0.25	110	2500	78-40	SA 104	31	300	15	3125	1	40	S/H	5536	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	TANDON	5.25	TM-65-1L		0.13	0.25	75	2500	82-30	1/40	31	300	15	6250	1	40	S/H	2768	48	BSM	OX	1.63	X	5.75	X	8.00
13	OEM	TEAC	5.25	FD-53A		0.13	0.25	97	1000	82-20	SA 104	31	300	15	3125	1	40	S/H	2768	48	BSM	OX	1.63	X	5.75	X	8.00
13	OEM	TEAC	5.25	FD-55A		0.13	0.25	97	1000	82-20	SA 104	31	300	15	3125	1	40	S/H	2768	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	TEAC	5.25	FD-55AV		0.13	0.25	76	1000	82-20	1/40	31	300	15	6250	1	40	S/H	5536	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	MELTEC DIGITAL	5.25	M 485		0.13	0.25	69	1000	83-30	1/40	31	300	10	6250	1	40	S/H	5536	48	BSM	OX	1.63	X	5.75	X	8.00
15	OEM	WONG'S TECH.	5.25	WST 112-5	TITAN	0.13	0.25	—	—	83-20	1/40	31	300	20	6250	1	40	S/H	5536	48	BSM	OX	1.63	X	5.75	X	8.00

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1985 OEM FLEXIBLE DISK DRIVES - MICROFLEX

GRP	MKT	MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE			BPI	TPI	ACT	MEDIA	SIZE				
				IN.			\$	Q	GENERIC	KB/S	MS	B/TK	DS	TK/S	SCTR	SRF	H	X	W	X	D			
17	OEM	FUJITSU	3.5	M2536A	2.00		145	500	86-1Q		63	300	15	12500	2	80	S	17434	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	TEAC	3.5	FD-35H	2.00				86-XX		63	300	15	12500	2	80	S	17434	135	BSM	HDOX	1.57 X	4.00 X	5.30
17	OEM	CHINON	3.5	F-356	0.80	1.60					63	360	15	10416	2	77	S	14184	135	BSM	HDOX	1.26 X	4.00 X	6.10
17	OEM	FUJITSU	3.5	M2534A	1.00	1.60	134	500	86-1Q		63	360	15	10416	2	80	S	14528	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	FUJITSU	3.5	M2533A	1.60		124	500	86-1Q		63	360	15	10416	2	77	S	14528	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	MITSUBISHI	3.5	MF355	1.60				86-1Q		63	300	15	12500	2	80	S	17434	135	BSM	HDOX	1.63 X	4.00 X	5.75
17	OEM	MITSUBISHI	3.5	MF354	1.60				86-1Q		63	360	15	10416	2	77	S	14184	135	BSM	HDOX	1.63 X	4.00 X	5.75
17	OEM	TEAC	3.5	FD-35GF	1.00	1.60			86-XX		63	360	15	10416	2	80	S	14184	135	BSM	HDOX	1.57 X	4.00 X	5.30
17	OEM	TEAC	3.5	FD-35G	1.00	1.60			86-XX		63	360	15	10416	2	80	S	14184	135	BSM	HDOX	1.57 X	4.00 X	5.30
17	OEM	TEAC	3.5	FD-35GF 11	1.60				86-XX		63	360	15	10416	2	80	S	14184	135	BSM	HDOX	1.57 X	4.00 X	5.30
17	OEM	AKAN	3.5	3525	0.50	1.00			85-3Q	SONY OM-D4440	31	300	15	6250	2	80	S	8118	135	LSSM	HDOX	1.18 X	4.00 X	5.75
17	OEM	ALPS ELECTRIC	3.5	DFL 413	1.00				85-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.46 X	4.10 X	4.90
17	OEM	ALPS ELECTRIC	3.5	FDV 223A	1.00				85-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.46 X	4.10 X	4.90
17	OEM	ALPS ELECTRIC	3.5	FDV 263A	1.00				84-2Q	SONY OM-D4440	63	600	15	6250	2	80	S	8720	135	LSSM	HDOX	1.50 X	4.10 X	4.90
15	OEM	ALPS ELECTRIC	3.5	AP-300DS	0.50	1.00	95	500	86-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8718	135	LSSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	AU PERIPHERALS	3.5	6164	0.50	1.00			82-2Q	SONY OM-D4440	31	300	20	6250	2	80	S	8718	135	BSM	HDOX	1.26 X	4.13 X	6.06
17	OEM	BASF	3.5	MDD 350	0.50	1.00	95	1000	84-4Q	SONY OM-D4440	31	300	20	6250	2	80	S	8717	135	BSM	HDOX	1.26 X	4.00 X	5.90
17	OEM	CANON	3.5	F-354	0.50	1.00			84-4Q	SONY OM-D4440	31	300	20	6250	2	80	S	8717	135	BSM	HDOX	1.26 X	4.00 X	6.38
17	OEM	CHINON	3.5	F-354C	0.50	1.00			84-4Q	SONY OM-D4440	31	300	20	6250	2	80	S	8717	135	BSM	HDOX	1.26 X	4.00 X	6.38
17	OEM	CITIZEN	3.5	OND1-30B	0.50	1.00			85-XX	SONY OM-D4440	31	300	32	6250	2	80	S	8718	135	LSSM	HDOX	1.00 X	3.90 X	5.20
17	OEM	CITIZEN	3.5	OND1-30A	0.50	1.00	207	500	85-1Q	SONY OM-D4440	31	300	15	3125	2	80	S	4359	135	BSM	HDOX	1.00 X	4.00 X	5.20
15	OEM	CITIZEN	3.5	OND1-70A	0.50	1.00			86-1Q	SONY OM-D4440	31	300	32	6250	2	80	S	8718	135	BSM	HDOX	1.00 X	3.90 X	5.20
15	OEM	CITIZEN	3.5	OND1-30A	0.50	1.00	245	500	84-3Q	SONY OM-D4440	31	300	15	3125	2	80	S	4359	135	BSM	HDOX	1.00 X	3.90 X	5.20
15	OEM	CITIZEN	3.5	OND1-10A	0.50	1.00			84-3Q	SONY OM-D4440	31	300	15	3125	2	80	S	8718	135	BSM	HDOX	1.00 X	3.90 X	5.20
17	OEM	COPAL	3.5	F-3504	0.50	1.00			85-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.10 X	4.00 X	5.87
17	OEM	EPSON	3.5	SMD-280	1.00		80	1000	85-3Q	SONY OM-D4440	31	300	15	6250	2	80	S	8720	135	LSSM	HDOX	1.57 X	4.00 X	5.80
17	OEM	EPSON	3.5	SMD-180	0.50	1.00	95	1000	83-4Q	SONY OM-D4440	31	300	15	3125	2	80	S	4360	135	BSM	HDOX	1.60 X	4.00 X	5.80
17	OEM	EPSON	3.5	SMD-140	0.50	1.00	130	1000	83-4Q	SONY OM-D3440	31	300	15	3125	2	80	S	8717	135	BSM	HDOX	1.57 X	3.50 X	5.90
17	OEM	FUJITSU	3.5	M2532A	0.50	1.00	107	500	86-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8718	135	BSM	HDOX	1.57 X	4.00 X	5.30
17	OEM	JANOME	3.5	MF0-91D	0.50	1.00			84-4Q	SONY OM-D4440	31	300	15	6250	2	80	S	8718	135	BSM	HDOX	1.57 X	4.00 X	5.90
15	OEM	MATSUSHITA	3.0	EME-230	0.50	1.00			85-1Q		31	300	15	3125	2	80	S	9830	200	LSSM	HDOX	1.90 X	3.90 X	5.90
17	OEM	MATSUSHITA	3.0	EME-231	1.00				85-XX		31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.26 X	4.00 X	5.90
17	OEM	MATSUSHITA	3.5	JU-364	0.50	1.00	106	500	84-XX	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.26 X	4.00 X	6.30
17	OEM	MATSUSHITA	3.5	JU-363	0.50	1.00	106	500	84-XX	SONY OM-D4440	31	300	15	3125	2	80	S	4359	135	BSM	HDOX	1.26 X	4.00 X	5.87
17	OEM	MATSUSHITA	3.5	JU-362	0.50	1.00			83-2Q	SONY OM-D4440	31	300	15	3125	2	80	S	4358	135	BSM	HDOX	1.63 X	4.00 X	5.90
15	OEM	MITSUBISHI	3.5	MF353L2	0.50	1.00			85-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.26 X	4.00 X	5.90
15	OEM	MITSUBISHI	3.5	MF353	0.50	1.00	150	500	84-2Q	SONY OM-D4440	31	300	15	3125	2	80	S	4358	135	BSM	HDOX	1.26 X	4.00 X	5.90
17	OEM	MITSUBISHI	3.5	MF353A	1.00		100	500	85-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.26 X	4.00 X	5.90
17	OEM	MITSUBISHI	3.5	MF353AF	1.00		110	500	85-4Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.26 X	4.00 X	5.90
17	OEM	RICOH	3.5	RF4050	0.50	1.00			85-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.57 X	4.00 X	5.85
17	OEM	SANKYO SEIKI	3.5	FDU-355-DA	0.50	1.00			84-4Q	SONY OM-D4440	31	300	30	6250	2	80	S	8717	68	BSM	HDOX	1.57 X	4.00 X	6.00
17	OEM	SEIKOSHA	3.5	S 350	1.00				85-XX	SONY OM-D4440	31	300	15	6250	2	80	S	8187	135	BSM	HDOX	1.63 X	4.00 X	5.50
15	OEM	SHUGART	3.5	OA-032M	0.50	1.00	167	500	84-1Q	SONY OM-D4440	31	300	15	3125	2	80	S	4102	135	LSSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	SONY	3.5	S 350	0.50	1.00	235	500	84-1Q	SONY OM-D4440	31	300	15	3125	2	80	S	8717	135	LSSM	HDOX	2.00 X	4.00 X	5.10
17	OEM	SONY	3.5	OA-033M	0.50	1.00			84-2Q	SONY OM-D4440	31	300	30	3125	2	80	S	4359	135	LSSM	HDOX	2.00 X	4.00 X	5.10
17	OEM	TANDON	3.5	TM-304	0.50	1.00			85-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	TEAC	3.5	FD-135F	0.50	1.00	87	1000	85-3Q	SONY OM-D4440	31	300	15	6250	2	80	S	8718	135	BSM	HDOX	1.63 X	4.00 X	5.30
17	OEM	TEAC	3.5	FD-35F	0.50	1.00	94	1000	84-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.18 X	4.00 X	5.70
17	OEM	TOKYO ELECTRIC	3.5	FB-354	1.00				84-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.18 X	4.00 X	5.30
17	OEM	VICTOR OF JAPAN	3.5	MOP-40	1.00				85-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.57 X	4.00 X	6.40
17	OEM	VICTOR OF JAPAN	3.5	MOP-30FDW	1.00				85-2Q	SONY OM-D4440	31	300	20	6250	2	80	S	8717	135	LSSM	HDOX	1.57 X	4.00 X	6.40
17	OEM	VICTOR OF JAPAN	3.5	MOP-20	1.00				85-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	YE DATA	3.5	YD-640	0.50	1.00			84-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	YE DATA	3.5	YD-645	0.50	1.00			84-2Q	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	BSM	HDOX	1.63 X	4.00 X	6.00
17	OEM	ALPS ELECTRIC	3.5	DFL 223	0.50				85-XX	SONY OM-D4440	31	300	15	6250	2	80	S	8717	135	LSSM	HDOX	1.46 X	4.10 X	4.90
15	OEM	ALPS ELECTRIC	3.5	FDV 253A	0.50				84-2Q	SONY OM-D3440	63	600	15	6250	1	80	S	8190	135	LSSM	HDOX	1.50 X	4.10 X	4.90
17	OEM	ALPS ELECTRIC	3.5	FDV 123A	0.50				85-1Q	SONY OM-D4440	31	300	15	6250	2	80	S	8647	68	LSSM	HDOX	1.46 X	4.10 X	4.90
17	OEM	ALPS ELECTRIC	3.5	DFL 313	0.50				84-2Q	SONY OM-D3440	31	300	15	6250	1	80	S	8190	135	LSSM	HDOX	1.46 X	4.10 X	4.90
17	OEM	ALPS ELECTRIC	3.5	FDV 213A	0.50				84-2Q	SONY OM-D3440	31	300	15	6250	1	80	S	8204	135	LSSM	HDOX	1.		

1985 OEM FLEXIBLE DISK DRIVES - MICROFLEX

GRP	MKT	MANUFACTURER	DIA	MODEL	MB (UNF)		PRICE	FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE				BPI	TPI	ACT	MEDIA	SIZE					
			IN.			\$	Q		GENERIC	KB/S	MS	B/TK	DS	TK/S	SCTR	SRF				H	X	W	X	D		
15	OEM	COPAL	3.5	F-3503	0.25	0.50	—	—	85-20	SONY OM-D3440	31	300	15	3125	1	80	S	4094	135	CSM	HDOX	1.30	X	4.00	X	6.10
15	OEM	EPSON	3.5	SMD-130	0.25	0.50	120	1000	83-40	SONY OM-D3440	31	300	15	3125	1	80	S	4095	135	BSM	HDOX	1.60	X	4.00	X	5.80
15	OEM	EPSON	3.5	SMD-120	0.25	0.50	110	1000	83-40	SONY OM-D3440	31	300	15	3125	2	40	S	4325	68	BSM	HDOX	1.60	X	4.00	X	5.80
17	OEM	EPSON	3.5	SMD-160	0.25	0.50	85	1000	83-40	SONY OM-D4440	31	300	15	6250	2	40	S	8650	68	BSM	HDOX	1.57	X	4.00	X	5.80
17	OEM	EPSON	3.5	SMD-170	0.25	0.50	90	1000	83-40	SONY OM-D3440	31	300	15	6250	1	80	S	8190	135	BSM	HDOX	1.57	X	4.00	X	5.80
17	OEM	HITACHI	3.5	M2531A	0.25	0.50	96	500	86-10	SONY OM-D4440	31	300	15	6250	1	80	S	8187	135	BSM	OX	1.26	X	4.00	X	6.00
17	OEM	HITACHI	3.0	HFD 305D	0.25	0.50	—	—	83-40	MAXELL FLOPPY CD	31	300	15	6250	2	40	S	9830	100	BSM	HDOX	1.57	X	4.00	X	5.83
17	OEM	JANOME	3.0	MFD-80	0.25	0.50	—	—	84-20	MAXELL FLOPPY CD	31	300	15	6250	1	40	S	8946	100	LSSM	OX	1.57	X	3.54	X	5.90
17	OEM	JANOME	3.5	MFD-91	0.25	0.50	—	—	84-40	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.57	X	4.00	X	5.30
15	OEM	MATSUSHITA	3.0	EME-202	0.25	0.50	—	—	83-40	MATSUSH. EBF-CF2D	31	300	30	3125	2	40	S	4915	100	BSM	HDOX	1.57	X	3.50	X	5.90
17	OEM	MATSUSHITA	3.5	JU-324	0.25	0.50	—	—	84-XX	SONY OM-D3440	31	300	15	6250	1	80	S	8186	135	BSM	HDOX	1.26	X	4.00	X	5.90
17	OEM	MATSUSHITA	3.5	JU-323	0.25	0.50	—	—	84-XX	SONY OM-D3440	31	300	15	6250	1	80	S	8186	135	BSM	HDOX	1.26	X	4.00	X	5.90
15	OEM	MATSUSHITA	3.5	JU-322	0.25	0.50	—	—	83-20	SONY OM-D3440	31	300	15	3125	1	80	S	4093	135	BSM	HDOX	1.26	X	4.00	X	6.30
17	OEM	MATSUSHITA	3.0	EME-131	0.50	—	—	—	85-XX	—	31	300	15	6250	1	80	S	8946	200	LSSM	HDOX	1.50	X	3.50	X	5.90
15	OEM	MATSUSHITA	3.0	EME-130	0.25	0.50	—	—	85-10	—	31	300	15	3125	1	80	S	4498	200	BSM	HDOX	1.57	X	3.50	X	5.90
15	OEM	MATSUSHITA	3.5	JU-312	0.13	0.50	—	—	83-20	SONY OM-D3440	31	300	15	3125	1	40	S	4102	68	BSM	HDOX	1.26	X	4.00	X	6.30
17	OEM	MITSUBISHI	3.5	MF351A	0.50	—	—	—	85-20	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	LSSM	HDOX	1.26	X	4.00	X	5.90
15	OEM	MITSUBISHI	3.5	MF351	0.25	0.50	120	500	83-XX	SONY OM-D3440	31	300	15	3125	1	80	S	4094	135	BSM	HDOX	1.63	X	4.00	X	5.87
17	OEM	MITSUBISHI	3.5	D 355	0.50	—	—	—	85-20	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.26	X	4.00	X	6.10
17	OEM	RICOH	3.5	RF4100	0.25	0.50	—	—	85-20	SONY OM-D4440	31	300	15	6250	2	80	S	8649	135	BSM	HDOX	1.57	X	4.00	X	5.85
17	OEM	SANKYO SEIKI	3.5	FDU-355-SA	0.25	0.50	—	—	84-20	SONY OM-D3440	31	300	30	6250	1	80	S	8187	135	BSM	HDOX	1.58	X	4.00	X	6.00
17	OEM	SANKYO SEIKI	3.0	FDU-300-O	0.25	0.50	—	—	83-20	MAXELL FLOPPY CD	31	300	30	6250	2	40	S	9830	100	BSM	OX	1.57	X	3.54	X	5.90
17	OEM	SEIKOSHA	3.5	SD3505	0.50	—	—	—	85-XX	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.57	X	4.00	X	5.90
17	OEM	SHINMA	3.5	FDS-36	0.25	0.50	—	—	85-XX	SONY OM-D4440	31	300	15	6250	2	80	S	8187	135	BSM	HDOX	1.30	X	4.00	X	7.00
15	OEM	SHUGART	3.5	S 300	0.25	0.50	145	500	83-20	SONY OM-D3440	31	300	15	3125	1	80	S	4102	135	LSSM	HDOX	1.63	X	4.00	X	6.00
17	OEM	SONY	3.5	OA-033V	0.25	0.50	185	500	83-30	SONY OM-D3440	31	300	30	6250	1	80	S	8187	135	LSSM	HDOX	2.00	X	4.00	X	5.10
17	OEM	SONY	3.5	OA-032V	0.25	0.50	185	500	83-30	SONY OM-D3440	63	600	30	6250	1	80	S	8187	135	LSSM	HDOX	2.00	X	4.00	X	5.10
17	OEM	TANDON	3.5	TM-303	0.25	0.50	—	—	85-10	SONY OM-D3440	31	300	15	6250	1	80	S/H	8188	135	RPSM	HDOX	1.63	X	4.00	X	6.00
17	OEM	TEAC	3.5	FD-35B	0.25	0.50	79	1000	84-20	SONY OM-D4440	31	300	15	6250	2	40	S	8650	68	BSM	HDOX	1.63	X	4.00	X	5.30
17	OEM	TEAC	3.5	FD-135B	0.25	0.50	80	1000	85-30	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	LSSM	HDOX	1.00	X	4.00	X	5.90
17	OEM	TEAC	3.5	FD-35E	0.25	0.50	79	1000	84-20	SONY OM-D3440	31	300	15	6250	1	80	S	8188	135	BSM	HDOX	1.63	X	4.00	X	5.30
17	OEM	TEAC	3.5	FD-135E	0.25	0.50	74	1000	85-30	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	LSSM	HDOX	1.00	X	4.00	X	5.90
17	OEM	TEAC	3.5	FD-35A	0.25	0.50	—	—	84-30	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	LSSM	HDOX	1.18	X	4.00	X	5.30
17	OEM	TOKYO ELECTRIC	3.5	FB-353	0.50	—	—	—	84-30	SONY OM-D4440	31	300	15	6250	1	80	S	8187	135	LSSM	HDOX	1.18	X	4.00	X	5.30
17	OEM	TOKYO ELECTRIC	3.5	FB-352	0.50	—	—	—	84-10	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.10	X	4.00	X	5.10
17	OEM	VICTOR OF JAPAN	3.5	MDP-30	0.50	—	—	—	85-10	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.63	X	4.00	X	5.10
17	OEM	VICTOR OF JAPAN	3.5	MDP-10	0.50	—	—	—	85-10	SONY OM-D3440	31	300	15	6250	1	80	S	8187	135	BSM	HDOX	1.63	X	4.00	X	5.10
17	OEM	VICTOR OF JAPAN	3.5	MDP-30FD	0.50	—	—	—	85-20	SONY OM-D3440	31	300	20	6250	1	80	S	8187	135	LSSM	HDOX	1.57	X	4.00	X	6.40
17	OEM	YE DATA	3.5	YD-625	0.25	0.50	—	—	84-20	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	BSM	HDOX	1.63	X	4.00	X	6.00
17	OEM	YE DATA	3.5	YD-620	0.25	0.50	—	—	84-20	SONY OM-D4440	31	300	15	6250	2	40	S	8647	68	BSM	HDOX	1.63	X	4.00	X	6.00
17	OEM	ALPS ELECTRIC	3.5	DFL 123	0.25	—	—	—	85-XX	SONY OM-D3440	31	300	15	6250	1	40	S	8126	68	LSSM	HDOX	1.46	X	4.10	X	4.90
17	OEM	ALPS ELECTRIC	3.5	FDV 113A	0.25	—	—	—	85-XX	SONY OM-D3440	31	300	15	6250	1	40	S	8126	68	LSSM	HDOX	1.46	X	4.10	X	4.90
17	OEM	BASF	3.5	6161	0.13	0.25	—	—	82-20	SONY OM-D3440	31	300	20	6250	1	40	S	8128	68	BSM	HDOX	1.26	X	4.13	X	6.06
17	OEM	CANON	3.5	MDD 353	0.13	0.25	90	1000	84-40	SONY OM-D3440	31	300	20	6250	1	40	S	8126	68	BSM	HDOX	1.18	X	4.00	X	5.90
17	OEM	CHINON	3.5	F-351	0.13	0.25	—	—	83-40	SONY OM-D3440	31	300	20	6250	1	40	S	8125	68	BSM	HDOX	1.26	X	4.00	X	6.38
17	OEM	CHINON	3.0	F-301	0.13	0.25	—	—	83-30	MAXELL FLOPPY CD	31	300	20	6250	1	40	S	8946	100	BSM	HDOX	1.63	X	3.50	X	5.90
15	OEM	COPAL	3.5	F-3501	0.13	0.25	—	—	85-20	SONY OM-D3440	31	300	15	3125	1	40	S	4063	68	CSM	HDOX	1.30	X	4.00	X	5.80
17	OEM	EPSON	3.5	SMD-150	0.13	0.25	110	1000	83-40	SONY OM-D3440	31	300	15	6250	1	40	S	8128	68	BSM	HDOX	1.57	X	4.00	X	5.80
15	OEM	EPSON	3.5	SMD-110	0.13	0.25	100	1000	83-40	SONY OM-D3440	31	300	15	6250	1	40	S	8128	68	BSM	HDOX	1.57	X	4.00	X	5.80
17	OEM	HITACHI	3.0	HFD 305SX	0.13	0.25	—	—	82-30	MAXELL FLOPPY CD	31	300	15	6250	1	40	S	8946	100	BSM	HDOX	1.57	X	4.00	X	5.83
17	OEM	HITACHI	3.5	MFD-90	0.13	0.25	—	—	84-40	SONY OM-D3440	31	300	15	6250	1	40	S	8130	68	BSM	HDOX	1.57	X	4.00	X	5.30
17	OEM	JANOME	3.5	MFD-50	0.13	0.25	—	—	84-XX	SONY OM-D3440	31	300	15	6250	1	40	S	8186	68	BSM	HDOX	1.26	X	4.00	X	5.90
17	OEM	MATSUSHITA	3.5	JU-314	0.13	0.25	—	—	84-XX	SONY OM-D3440	31	300	15	6250	1	40	S	8946	100	LSSM	HDOX	1.50	X	3.50	X	5.90
17	OEM	MATSUSHITA	3.0	EME-155	0.25	—	—	—	85-XX	MATSUSH. EBF-CF2	31	300	15	6250	1	40	S	8186	68	BSM	HDOX	1.26	X	4.00	X	5.90
17	OEM	MATSUSHITA	3.5	JU-313	0.13	0.25	—	—	84-XX	SONY OM-D3440	31	300	15	6250	1	40	S	8946	100	LSSM	HDOX	1.57	X	3.50	X	5.90
15	OEM	MATSUSHITA	3.0	EME-102	0.13	0.25	—	—	83-40	MATS																

1985 OEM FLEXIBLE DISK DRIVES - MICROFLEX

GRP	MKT	MANUFACTURER	DIA IN.	MODEL	MB (UNF)	PRICE		FCS	INTERFACE	XFR	RPM	ACC	DATA STRUCTURE				BPI	TPI	ACT	MEDIA	SIZE						
						\$	Q						GENERIC	KB/S	MS	B/TK					DS	TK/S	SCTR	SRF	H	X	W
16	OEM	TOKYO ELECTRIC	2.57	MC-108	0.01	F	--	--	82-40	SPECIAL	3	405	N/A	8000	F	1	1	N/A	1069	33	N/A	OX	1.61	X	3.00	X	4.90
18	OEM	SANKYO SEIKI	2.6	FMC-170	0.01		--	--	83-20	SPECIAL DISK	2	405	N/A	.008	1	1	N/A	1069	N/A	N/A	OX	2.68	X	3.05	X	4.90	

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10. OPTICAL PRODUCTS

- By Company
- By Product Segment

1985 OPTICAL DISK DRIVES

GRP	MKT	MANUFACTURER	DIA	MODEL	CAPACITY (MB)		PRICE	FCS	INTERFACE	XFR	RPM	AVE. ACCESS	DATA STRUCTURE		DIMENSIONS (IN)					WEIGHT	BPI	CODE	TPI	ACT	HDS	MEDIA						
					FRMT	RAM	\$	Q		KB/S		(msec)	B/TK	DS	HD/S	CYL	H	X	W	X	D	LBS.					SRF					
10	OEM	ALCATEL-THOMSON	12	GD 1001	1024	1340	6900	100	84-30	SCSI	625	1122	100	25600	2	1	40000	7.00	X	17.90	X	24.20	55	15300	---	14500	LVC	DL	---			
10	OEM	CANON	8	---	---	---	---	---	8X-XX	---	1500	1800	500	---	---	---	---	7.80	X	20.00	X	16.00	---	---	---	---	---	---	---			
10	OEM	CHEROKEE DATA	5	PATHFINDER	250	335	5200	100	85-40	ESDI, SCSI	1250	5	87	15360	1	1	13035	---	---	---	---	---	18	---	---	---	---	---	---			
10	OEM	CHEROKEE DATA	<5	PAPOOSE	---	---	1000	---	86-XX	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
10	OEM	DENON	4	---	500	---	400	1200	85-40	SASI	153	220-500	300	---	---	---	---	3.25	X	5.75	X	8.00	5.5	---	---	---	---	---	---			
10	OEM	FUJITSU, LTD.	12	FACOM 6441-B1	1376	2368	---	---	85-40	BMC, SCSI	784	---	250	---	2	1	44800	39.40	X	18.50	X	27.60	59	---	M2FM	15875	---	---	BIOx			
10	OEM	HITACHI	12	00301-1	1311	---	7500	100	84-20	SMD, GPIB	440	---	200	31744	2	1	41300	6.30	X	15.00	X	25.60	55	19500	2.7	16000	LVC	---	PbTeSe			
10	OEM	HITACHI	4	---	225	---	---	---	8X-XX	---	440	5	100	---	---	---	---	6.00	X	10.00	X	15.00	---	---	---	---	---	---	TbFeCo			
10	OEM	HITACHI	4	---	552	---	800	1000	85-10	IBM PC	154	---	500	---	1	1	20000	3.35	X	17.12	X	11.38	13	---	---	---	---	---	---			
10	OEM	HITACHI	4	CDR-1502S	552	---	500	100	85-30	SCSI	154	---	500	---	1	1	---	3.25	X	5.75	X	8.00	6.6	---	---	---	---	---	---			
10	OEM	HITACHI	5	CDR-2500	552	---	500	100	85-30	SCSI	313	---	1800	---	2	1	---	3.25	X	5.75	X	8.00	4.5	11500	---	14000	---	---	---	---		
10	OEM	ISI	5	525WC	120	170	800	100	85-20	ESDI, SCSI, IBM PC	153	---	500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
10	OEM	DENSHI/LOGITECH	4	---	550	---	800	---	---	---	---	---	---	---	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	KODAK	14	---	4500	---	20000	100	85-30	---	---	---	---	---	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	LASERDRIVE	5	PROTOTYPE	200	---	250	---	86-XX	---	125	---	3000W	---	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	LASERDRIVE	4	SQ-0100	600	---	750	1000	84-40	---	153	---	500	---	---	---	---	4.72	X	7.09	X	13.38	---	---	---	---	---	---	---	TeOx		
10	OEM	HATSUSHITA	4	LD-10/TQ-3000	700	1000	6000	1000	83-40	8 BIT PROP., SCSI	625	---	900	---	1	1	---	8.50	X	22.40	X	19.90	81.4	---	---	---	---	---	---	---		
10	OEM	HATSUSHITA	8	ND-1600	1000	---	13750	---	84-40	SASI, SMD	785	---	900	---	300	3276	B	1	40000	21.10	X	10.20	X	17.70	---	23000	---	15200	LVC	---	---	
10	OEM	NEC	12	MD-1600	1000	---	2900	---	86-40	ESDI, SCSI	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	OPTIMEM	5	---	---	---	---	---	84-20	SCSI	625	1122	150	25600	2	1	40000	6.81	X	17.60	X	24.00	50	15300	MFM	14500	RVC	---	Au	ALLB		
10	OEM	OPTIMEM	12	OPTIMEM 1000	1024	1340	6200	250	84-20	SCSI	300	---	---	---	2	1	---	---	---	---	---	---	---	20000	---	---	---	---	---	---	---	
10	OEM	OPTOTECH	3	5985	100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	OPTOTECH	5	5986	500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	OPTOTECH	5	5984	203	---	1000	100	85-40	ESDI, SCSI, IBM PC	275	5	1200	131	11264	2	1	18000	3.27	X	5.75	X	8.00	5.2	15210	---	14854	---	---	---	---	
10	OEM	OPTOTECH	5	5984	203	---	---	---	86-XX	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	OSI	5	LASERDRIVE 500	---	---	---	---	84-10	SCSI, ISI	2000	480	140	32768	2	1	32000	5.24	X	19.00	X	29.60	55	14111	2.9	15875	---	---	---	TeSe		
10	OEM	OSI	12	LASERDRIVE 1200	1024	1228	7400	100	84-10	SCSI, ISI	153	---	1000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	PHILIPS	4	CDR-X1000	552	---	500	100	---	SCSI	153	---	530	---	---	---	---	4.50	X	10.50	X	12.60	11	---	---	---	---	---	---	---	---	
10	OEM	PHILIPS	4	CM-100	550	---	500	100	85-10	PHILIPS SCSI	250	---	480	---	---	---	---	5.60	X	19.30	X	21.70	44	---	---	---	---	---	---	---	---	
10	OEM	PHILIPS	12	DOR P3491, P3492	1000	---	20000	---	85-40	CDC, ISI, DEC/DMA	63	---	450	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	PIONEER	5	---	1400	---	5500	---	---	SCSI	138	---	700	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	PIONEER	8	OD-20	700	---	5000	100	85-40	SCSI	138	---	700	---	---	---	---	10.20	X	27.60	X	17.30	---	---	---	---	---	---	---	---	---	
10	OEM	PIONEER	8	RO-8070 ML	700	---	---	---	---	SCSI, ESDI	500	---	---	---	---	---	---	5.30	X	17.70	X	23.60	---	---	---	---	---	---	---	---	---	
10	OEM	PIONEER	8	RO-8070 ML	700	---	---	---	---	SCSI, ESDI	500	---	---	---	---	---	---	5.10	X	17.30	X	15.00	---	---	---	---	---	---	---	---	---	---
10	OEM	SANYO	4	ERASABLE CD PRO	---	---	---	---	---	---	---	---	---	---	---	---	---	19.70	X	27.60	X	27.60	---	---	---	---	---	---	---	---	GdTbFeB	
10	OEM	SANYO	12	DF-8061-11	860	1200	---	---	84-30	VIDEO, RS232	138	---	690	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	SHARP	5	---	150	---	---	---	---	GPIB	200	---	900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	SHARP	4	CDU-1	540	1000	300	2000	86-20	SCSI	153	---	530	---	2	1	---	3.25	X	5.75	X	8.00	6.6	---	---	---	---	---	---	---	---	
10	OEM	SONY	8/12	---	1050/600	1000/2410	---	---	---	SCSI	650	---	900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	SONY	8	MDD-2000	375/500	810	5300	100	84-40	SCSI, SONY	3005	---	900	250/300	---	2	1	18750	7.10	X	14.80	X	20.20	30.3	---	---	---	---	---	---	---	---
10	OEM	SONY	12	MDD-3000	1050/1600	1600	3700	5000	84-40	SONY PROP., SCSI	3005	---	720	350/800	---	2	1	---	7.10	X	14.80	X	20.20	36.3	---	---	---	---	---	---	---	---
10	OEM	SONY	5	51R	100	---	6000	---	85-40	ESDI, SCSI	313	---	1800	200W	---	---	---	8.20	X	11.10	X	13.00	25.0	---	---	---	---	---	---	---	---	---
10	OEM	SPERRY	5	51M	260	---	14000	---	86-40	ESDI, SCSI	625	---	3600	100W	---	---	---	7.63	X	10.13	X	12.60	25.0	---	---	---	---	---	---	---	---	---
10	OEM	STC	14	7640	4000	9000	130000	1	83-40	IBM, IPI III, CTL-1	2000	1314	61.9	118500	1	1	34224	52.00	X	55.00	X	32.00	900	20000	2.7	13500	LVC	---	---	Te-C		
10	OEM	TOSHIBA	5	DF-050	350	---	1000	100	86-XX	SCSI	1000	---	900	---	---	---	---	3.30	X	5.70	X	8.10	27.6	21900	---	---	---	---	---	---	Te-C	
10	OEM	TOSHIBA	12	DF-0400	1200	---	8333	100	84-20	GPIB, IEEE 488	213	---	400	---	---	---	---	9.10	X	19.70	X	22.00	77	---	MNRZ	15875	---	---	---	---	Te-C	
10	OEM	TOSHIBA	12	DF-0450	1800	---	12500	100	84-40	GPIB, SCSI	313	---	460	1000	40000	2	1	45000	9.10	X	19.70	X	22.00	77	---	MFM	16000	LVC	---	---	---	---
10	OEM	TOSHIBA	12	DF-0450	1800	---	12500	100	84-40	GPIB, SCSI	313	---	460	1000	40000	2	1	---	23.60	X	32.10	X	32.30	150	---	---	---	---	---	---	---	---
10	OEM	VAN DER HEEM	12	DOR-R1	1000	1250	120000	1	83-XX	DMA/DEC, ISI	250	---	480	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	TeFeCo	
10	OEM	VERBATIM	3	MOD 1	40	---	300	---	87-XX	TBD	125	---	600	---	---	---	---	1.97	X	4.13	X	5.91	---	15800	---	6350	---	---	---	---	---	
10	OEM	VERBATIM	3	MOD 2	100	---	350	---	87-XX	TBD	625	---	2000	---	---	---	---	1.97	X	4.13	X	5.91	---	---	---	---	---	---	---	---	---	---

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L. KURCHIN

1985 OPTICAL DISK DRIVES (CONTINUED)

GRP	MKT	MANUFACTURER	DIA	MODEL	MEDIA	MEDIA COMPAT.	-EE	TYPE	EC TYPE	LASER		HEAD	VENDOR	CNTRLR	CNTRLR VENDOR	CNTRLR MDL	POWER REQ.	PRDCTN. CAP.	CAV/CLV	CONC/SP			
										WVLNGTH (nm)	POWER (mW)										WRITE	READ	WVLNGTH (nm)
10	OEM	ALCATEL-THOMSON	12	GD 1001	CART	OPTIMEM 1000	12	W/O B	R/S	830	830	9.0	1.0	SOPELEM	I	ATG	GC-1001	180	5000	---	---		
10	OEM	CANON	8	---	PCKGD	---	---	E MO	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	CHEROKEE DATA	5	PATHFINDER	---	TOSHIBA	12	W/O	---	---	---	11.0	---	LEITZ,CANADA	---	ZEBEC	---	---	---	---	---		
10	OEM	CHEROKEE DATA	<5	PAPOOSE	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	DENON	4	---	CART	---	12	R/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	FUJITSU, LTD.	12	FACOM 6441-B1	CART	F644282	10	W/O	B1-A	830	830	7.5	1.2	OLYMPUS OPT.	E	FACOM	1781-A1	400	---	---	---		
10	OEM	HITACHI	12	OD301-1	CART	HITACHI DFS	12	W/O	R/S,DRAM	820	820	10.0	4.0	HITACHI	E	HITACHI	DF-301-1	300	40,000	---	---		
10	OEM	HITACHI	4	---	BARE	---	12	E MO	INTERL.BCH	---	---	---	7.5	---	---	---	---	---	---	---	---		
10	OEM	HITACHI	4	CDR-1502S	BARE	ALL CD-ROM DR.	12	R/O	CIRC	---	780	---	1.0	HITACHI	I	HITACHI	---	---	100,000	CLV	---		
10	OEM	HITACHI	4	CDR-2500	BARE	---	12	R/O	CIRC	---	780	---	1.0	HITACHI	E	HITACHI	---	---	---	CLV	---		
10	OEM	ISI	5	525MC	CART	---	12	W/O	R/S	830	830	6.0	0.8	---	E	ISI	PC/525	20	150,000	---	---		
10	OEM	DENSHI/LOGITECH	4	---	BARE	---	10	R/O	CIRC	---	---	---	---	---	---	---	---	---	---	CLV	S		
10	OEM	KODAK	14	---	---	---	13	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	LASERDRIVE	5	PROTOTYPE	---	---	13	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	MATSUSHITA	4	SQ-0100	BARE	---	12	R/O	---	---	800	---	---	---	---	---	---	---	---	CLV	---		
10	OEM	MATSUSHITA	8	LD-10/TQ-3000	BARE	PANAFILE DFS	8	W/O	FIRE,DRAM	830	830	7.0	1.0	MATSUSHITA	E	MATSUSHITA	FC-10	200	---	---	CAV	---	
10	OEM	NEC	12	ND-1600	CART	NEOFILE-1000 DFS	12	W/O B	R/S,DRAM	---	---	---	---	NEC	E	NEC	MS	---	5,000	---	---		
10	OEM	OPTIMEM	5	---	---	---	---	E MO	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	OPTIMEM	12	OPTIMEM 1000	CART	ATG	12	W/O BH	R/S,DRAM	830	830	8.5	1.0	OPTIMEM	I	OPTIMEM	7600	250	---	---	---	SPIRAL	
10	OEM	OPTOTECH	3	5985	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	OPTOTECH	5	5986	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	OPTOTECH	5	5984	CART	---	12	W/O H	---	---	---	7.5	1.0	...OPTOTECH	I	OPTOTECH	---	12	5000	---	---		
10	OEM	OSI	5	LASERDRIVE 500	---	---	---	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	OSI	12	LASERDRIVE 1200	CART	PHILIPS P3491	12	W/O	R/S	820	820	16.0	0.7	OSI	I	OSI	---	250	2,200	---	---		
10	OEM	PHILIPS	4	CDR-X1000	BARE	---	16	R/O	---	---	---	---	---	---	---	---	---	---	---	---	CLV	S	
10	OEM	PHILIPS	4	CM-100	BARE	ALL CD-ROM DR.	16	R/O	CIRC	---	780	---	1.0	PHILIPS	E	DEC,XEBEC	---	30	10000+	---	---	CLV	
10	OEM	PHILIPS	12	DOR P3491,P3492	CART	OSI 1200	12	W/O	---	820	820	19.0	---	PHILIPS	I	---	---	400	500	---	---	---	
10	OEM	PIONEER	5	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	PIONEER	8	OD-20	BARE	---	12	W/O	CIRC	830	830	7.0	1.0	OLYMPUS	I	---	---	---	---	---	CLV	S	
10	OEM	RICOH	8	RO-8070 ML	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	OEM	SANYO	4	ERASABLE CD PRO.	BARE	---	9	E	---	830	830	3.0	1.0	---	---	---	---	---	---	---	---	---	
10	OEM	SANYO	12	DF-8061-11	BARE	SANYO SOF-8300D	10	W/O	MOD. CIRC	830	830	12.0	1.0	SANYO	---	SANYO	---	1000	---	---	---	---	
10	OEM	SHARP	5	---	CART	SHARP DFS	8	E MO	---	780	780	4.0	1.2	SHARP	---	---	---	---	---	---	---	---	
10	OEM	SONY	4	CDU-1	CART	ALL CD-ROM DR.	12	R/O	CIRC	---	780	---	1.0	SONY	---	SONY	---	---	---	---	---	CLV	---
10	OEM	SONY	8/12	---	CART	---	12	E	---	830	830	5.0	1.0	SONY	E	---	---	---	---	---	---	---	
10	OEM	SONY	8	MDD-2000	CART	---	12	W/O	CIRC	830	830	3.5	1.0	SONY	E	SONY	MDC-2000	40	12,000	---	---	CAV/CLV	
10	OEM	SONY	12	MDD-3000	CART	SIOS DFS	12	W/O	CIRC	830	830	3.5	1.0	SONY	---	SONY	MDC-2000	40	12,000	---	---	CAV/CLV	
10	OEM	SPERRY	5	51R	CART	---	12	W/O	---	---	---	20.0	5.0	---	---	---	---	150	---	---	---	---	
10	OEM	SPERRY	5	51M	CART	---	12	W/O	---	---	---	1.0	2.5	---	---	---	---	150	---	---	---	---	
10	OEM	STC	14	7640	CART	---	13	W/O	R/S,DRAM	835	633	---	---	STORAGETEK	I	STORAGETEK	8880	1950	---	---	---	---	
10	OEM	TOSHIBA	5	DF-050	CART	---	12	W/O	---	---	---	---	---	---	---	---	---	55	20000	---	---	CAV	
10	OEM	TOSHIBA	12	DF-0400	BARE	TOSFILE DF-3200	12	W/O	R/S	830	830	10.0	1.0	TOSHIBA	---	TOSHIBA	DF-C300	200	400 DFS	---	---	---	
10	OEM	TOSHIBA	12	DF-0450	CART	---	12	W/O	---	830	---	---	---	TOSHIBA	I	TOSHIBA	---	200	---	---	---	CLV	
10	OEM	VAN DER HEEM	12	DOR-R1	PCKGD	OSI	12	W/O	---	820	870	19.0	2.0	PHILIPS	I	SAME AS DRIVE	---	750	500	---	---	---	
10	OEM	VERBATIM	3	MOD 1	BARE	---	12	E MO	---	800	---	10.0	0.7	---	---	---	---	---	---	---	---	CAV	
10	OEM	VERBATIM	3	MOD 2	BARE	---	12	E MO	---	800	---	15.0	0.7	---	---	---	---	---	---	---	---	CAV	

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1985 OEM OPTICAL DISK DRIVES

GRP	MKT	MANUFACTURER	DIA	MODEL	CAPACITY (MB)		PRICE		FCS	INTERFACE	XFR	RPM	AVE. ACCESS		DATA STRUCTURE			DIMENSIONS (IN)					WEIGHT	BPI	CODE	TPI	ACT	HDS			
					FRMT	RAW	\$	Q					(msec)	B/TK	DS	HD/S	CYL	H	X	M	X	D							LBS.		
10	OEM	KODAK	14	—	4500	—	20000	100	85-30	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—				
10	OEM	STC	14	7640	4000	5000	130000	1	83-40	IBM, IPI III, CTL-I	3000	1314	61.9	118500	1	1	34224	52.00	X	55.00	X	32.00	900	20000	2.7	13500	LVC	—			
10	OEM	TOSHIBA	12	DF-0450	1800	—	12500	100	84-40	GP1B, SCS1	313	460	1000	40000	2	1	49000	9.10	X	19.70	X	22.00	77	—	MFM	16000	LVC	—			
10	OEM	PIONEER	5	—	1400	—	5500	—	—	SCS1	63	490	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
10	OEM	FUJITSU, LTD.	12	FACOM 6441-B1	1376	2368	—	—	85-40	BMC, SCS1	784	900	250	—	2	1	44800	39.40	X	18.50	X	27.60	59	—	M2FM	15875	—	—			
10	OEM	HITACHI	12	OD301-1	1311	—	7500	100	84-20	SMD, GP1B	440	600	200	31744	2	1	41300	6.30	X	15.00	X	25.60	55	19500	2.7	16000	LVC	—			
10	OEM	TOSHIBA	12	DF-0400	1200	—	8333	100	84-20	GP1B, IEEE 488	213	400	500	—	2	1	—	9.10	X	19.70	X	22.00	77	—	MNRZ	15875	—	—			
10	OEM	OSI	12	LASERDRIVE 1200	1024	1228	7400	100	84-10	SCS1, ISI	2000	480	140	32768	2	1	32000	5.24	X	19.00	X	25.60	55	14111	2.9	15875	—	—			
10	OEM	OPTIMEM	12	OPTIMEM 1000	1024	1340	6200	250	84-20	SCS1	625	1122	150	25600	2	1	40000	6.81	X	17.60	X	24.00	50	15300	MFM	14500	RVC	—			
10	OEM	ALCATEL-THOMSON	12	GD 1001	1024	1340	6900	100	84-30	SCS1	625	1122	100	25600	2	1	40000	7.00	X	17.90	X	24.20	55	15300	—	14500	LVC	DL			
10	OEM	NEC	12	ND-1600	1000	—	13750	1	84-40	SASI, SMD	785	900	300	3276 B	1	1	40000	21.10	X	10.20	X	17.70	—	23000	—	15200	LVC	—			
10	OEM	YAN DER HEEM	12	DOR-R1	1000	1250	120000	1	83-XX	DMA/DEC, ISI	250	480	65	—	2	1	—	23.60	X	32.10	X	32.30	150	—	—	—	—	—			
10	OEM	PHILIPS	12	DOR P3491, P3492	1000	—	20000	1	85-40	CDC, ISI, DEC/DMA	250	480	65	—	—	—	—	5.60	X	19.30	X	21.70	44	—	—	—	—	—			
10	OEM	SANYO	12	DF-8061-11	860	1200	—	—	84-30	VIDEO, RS232	138	690	300	—	—	—	—	19.70	X	27.60	X	27.60	—	—	—	—	—	—			
10	OEM	RICOH	8	RO-8070 ML	700	—	—	—	—	SCS1, ESD1	500	—	—	—	2	1	—	5.30	X	17.70	X	23.60	—	—	—	—	—	—			
10	OEM	MATSUSHITA	8	LD-10/TQ-3000	700	1000	6000	1000	83-40	8 BIT PROP., SCS1	625	900	500	—	1	1	—	8.50	X	22.40	X	19.90	81.4	—	—	—	—	—			
10	OEM	PIONEER	8	OD-20	700	—	5000	100	85-40	SCS1	138	700	300	—	2	1	—	10.20	X	27.60	X	17.30	—	—	—	—	—	—			
10	OEM	MATSUSHITA	4	SQ-D100	600	—	750	1000	84-40	—	153	500	500	—	—	—	—	4.72	X	7.09	X	13.38	—	—	—	—	—	—			
10	OEM	HITACHI	4	CDR-2500	552	—	500	100	85-30	SCS1	154	500	500	—	—	—	—	3.25	X	5.75	X	8.00	6.6	—	—	—	—	—			
10	OEM	PHILIPS	4	CDR-X1000	552	—	500	100	—	SCS1	153	—	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
10	OEM	HITACHI	4	CDR-1502S	552	—	800	1000	85-10	IBM PC	154	500	500	—	1	1	20000	3.35	X	17.12	X	11.38	13	—	—	—	—	—			
10	OEM	DENSHI/LOGITECH	4	—	550	—	800	1	—	—	153	500	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
10	OEM	PHILIPS	4	CM-100	550	—	500	100	85-10	PHILIPS SCS1	153	530	1000	—	—	—	—	4.50	X	10.50	X	12.60	11	—	—	—	—	—			
10	OEM	SONY	4	CDU-1	540	1000	300	2000	86-20	SCS1	153	530	500	—	2	1	—	3.25	X	5.75	X	8.00	6.6	—	—	—	—	—			
10	OEM	DENON	4	—	500	—	400	1200	85-40	SASI	153	220-500	300	—	—	—	—	3.25	X	5.75	X	8.00	5.5	—	—	—	—	—			
10	OEM	OPTOTECH	5	5986	500	—	—	—	—	—	500	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—			
10	OEM	TOSHIBA	5	DF-050	350	—	1000	100	86-XX	SCS1	1000	900	100	—	2	1	—	3.30	X	5.70	X	8.10	27.6	21900	2.7	16000	—	—			
10	OEM	CHEROKEE DATA	5	PATHFINDER	250	335	9200	100	85-40	ESD1, SCS1	1250	3500	87	15360	1	1	13035	—	—	—	—	—	18	—	—	—	—	—			
10	OEM	HITACHI	4	—	225	—	—	—	8X-XX	—	440	1200	100	—	2	1	—	6.00	X	10.00	X	15.00	—	—	—	—	—	—	—		
10	OEM	OPTOTECH	5	5984	203	—	1000	100	85-40	ESD1, SCS1, IBM PC	275	1200	131	11264	2	1	18000	3.27	X	5.75	X	8.00	5.2	15210	—	—	—	—	—		
10	OEM	LASERDRIVE	5	PROTOTYPE	200	—	250	—	86-XX	—	125	—	3000W	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—		
10	OEM	SHARP	5	—	150	—	—	—	—	GP1B	200	900	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—		
10	OEM	ISI	5	525WC	120	170	800	100	85-20	ESD1, SCS1, IBM PC	313	1800	165	—	2	1	—	3.25	X	5.75	X	8.00	4.5	11500	—	—	—	—	—		
10	OEM	VERBATIM	3	MOD 2	100	—	350	—	87-XX	TBD	625	2000	50	—	1	1	—	1.97	X	4.13	X	5.91	—	20000	—	—	—	—	—		
10	OEM	OPTOTECH	3	5985	100	—	—	—	—	—	500	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—		
10	OEM	VERBATIM	3	MOD 1	40	—	300	—	87-XX	TBD	125	600	50	—	1	1	4000	1.97	X	4.13	X	5.91	—	15800	—	—	—	—	—	—	
10	OEM	SONY	8	MOD-2000	375/500	810	5300	100	84-40	SCS1, SONY	3005	900	250/300	—	2	1	18750	7.10	X	14.80	X	20.20	30.3	—	—	—	—	—	—	—	
10	OEM	SPERRY	5	51M	260	—	14000	—	86-40	ESD1, SCS1	625	3600	100W	—	1	1	—	7.63	X	10.13	X	12.60	25.0	—	—	—	—	—	—	—	
10	OEM	SONY	8/12	—	1050/600	1000/2410	—	—	—	SCS1	650	900	100	—	—	—	—	7.90	X	17.30	X	23.60	36.3	—	—	—	—	—	—	—	
10	OEM	SONY	12	MOD-3000	1050/1600	1600	3700	3000	84-40	SONY PROPR., SCS1	3005	720	350/800	—	2	1	—	7.10	X	14.80	X	20.20	36.3	—	—	—	—	—	—	—	
10	OEM	SPERRY	5	51R	100	—	6000	—	85-40	ESD1, SCS1	313	1800	200W	—	1	1	—	8.20	X	11.10	X	13.00	25.0	—	—	—	—	—	—	—	
10	OEM	SANYO	4	ERASABLE CD PRO	—	—	—	—	—	—	—	530	—	—	—	—	—	5.10	X	17.30	X	15.00	—	—	—	—	—	—	—	—	
10	OEM	OSI	5	LASERDRIVE 500	—	—	—	—	86-XX	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	OEM	OPTIMEM	5	—	—	—	2500	—	86-40	ESD1, SCS1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	OEM	CANON	8	—	—	—	—	—	8X-XX	—	1500	1800	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	OEM	CHEROKEE DATA	<5	PAPOOSE	—	—	—	1000	—	86-XX	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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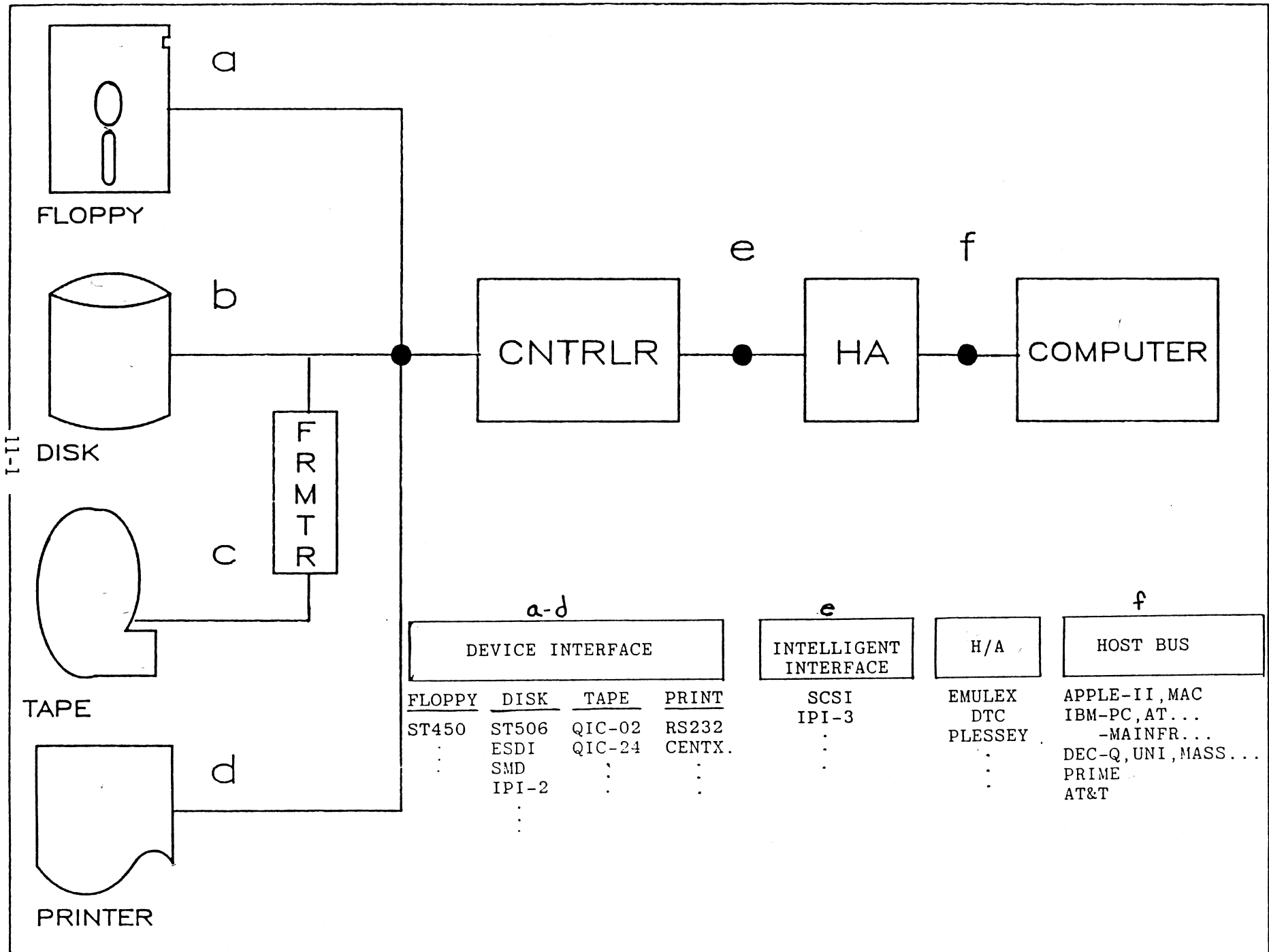
1985 OEM OPTICAL DISK DRIVES (CONT.)

GRP	MKT	MANUFACTURER	DIA	MODEL	MEDIA	MEDIA COMPAT.	-EE	TYPE	EC TYPE	LASER		HEAD	VENDOR	CNTRLR	CNTRLR	VENDOR	CNTRLR	MDL	POWER REQ.	PRDCTN. CAP.	CAV/CLV	CONC/SP		
										MVLENGTH (nm)	POWER (mW)												WRITE	READ
10	OEM	KODAK	14	---	---	---	13	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	STC	14	7640	Te-C	CART	---	13	W/O	R/S, DRAW	835	633	---	---	---	---	---	---	---	---	---	---		
10	OEM	TOSHIBA	12	DF-0450	Te-C	CART	---	12	W/O	---	830	---	---	---	---	---	---	---	---	---	---	CLV		
10	OEM	PIONEER	5	---	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---		
10	OEM	FUJITSU, LTD.	12	FACOM 6441-B1	B10x	CART	F644282	10	W/O	B1-A	830	830	7.5	1.2	OLYMPUS OPT.	E	FACOM	1781-A1	400	---	---	CONC		
10	OEM	HITACHI	12	00301-1	PbTeSe	CART	HITACHI DFS	12	W/O	R/S, DRAW	820	820	10.0	4.0	HITACHI	E	HITACHI	OF-301-1	300	40,000	---	---		
10	OEM	TOSHIBA	12	DF-0400	Te-C	BARE	TOSFILE DF-3200	12	W/O	R/S	830	830	10.0	1.0	TOSHIBA	---	TOSHIBA	DF-C300	200	400 DFS	---	---		
10	OEM	OSI	12	LASERDRIVE 1200	TeSe	CART	PHILIPS P3491	12	W/O	R/S	820	820	16.0	0.7	OSI	I	OSI	---	250	---	---	---		
10	OEM	OPTIMEM	12	OPTIMEM 1000	Au ALLOY	CART	ATG	12	W/O	BH R/S, DRAW	830	830	8.5	1.0	OPTIMEM	I	OPTIMEM	7600	250	---	---	SPIRAL		
10	OEM	ALCATEL-THOMSON	12	GD 1001	---	CART	OPTIMEM 1000	12	W/O	B R/S	830	830	9.0	1.0	SOPELEM	I	ATG	GC-1001	180	5000	---	---		
10	OEM	NEC	12	ND-1600	---	CART	NEOFIL-1000 DFS	12	W/O	B R/S, DRAW	---	---	---	---	NEC	E	NEC	MS	---	5,000	---	---		
10	OEM	VAN DER HEEM	12	DOR-R1	---	PKGDD	OSI	12	W/O	---	820	870	19.0	2.0	PHILIPS	I	SAME AS DRIVE	---	750	500	---	---		
10	OEM	PHILIPS	12	DOR P3491, P3492	---	CART	OSI 1200	12	W/O	---	820	820	19.0	---	PHILIPS	I	---	---	400	500	---	---		
10	OEM	SANYO	12	DF-8061-11	---	BARE	SANYO SOF-8300D	10	W/O	MOD. CIRC	830	830	12.0	1.0	SANYO	---	SANYO	---	1000	---	---	---		
10	OEM	RICOH	8	RO-8070 ML	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	CLV		
10	OEM	MATSUSHITA	8	LD-10/TQ-3000	TeOx	BARE	PANAFIL DFS	8	W/O	FIRE, DRAW	830	830	7.0	1.0	MATSUSHITA	E	MATSUSHITA	FC-10	200	---	---	---		
10	OEM	PIONEER	8	00-20	---	BARE	---	12	W/O	CIRC	830	830	7.0	1.0	OLYMPUS	I	---	---	---	---	---	---		
10	OEM	MATSUSHITA	4	SQ-D100	---	BARE	---	12	R/O	---	---	800	---	---	---	---	---	---	---	---	---	CLV		
10	OEM	HITACHI	4	CDR-2500	---	BARE	---	12	R/O	CIRC	---	780	---	1.0	HITACHI	E	HITACHI	---	---	---	---	---	CLV	
10	OEM	PHILIPS	4	CDR-X1000	---	BARE	---	16	R/O	---	---	---	---	---	PHILIPS	---	---	---	---	---	---	---	CLV	
10	OEM	HITACHI	4	CDR-1902S	---	BARE	ALL CD-ROM DR.	12	R/O	CIRC	---	780	---	1.0	HITACHI	I	HITACHI	---	---	---	100,000	---	---	
10	OEM	DENSHI/LOGITECH	4	---	---	BARE	---	10	R/O	CIRC	---	---	---	---	---	---	---	---	---	---	---	---	CLV	
10	OEM	PHILIPS	4	CM-100	---	BARE	ALL CD-ROM DR.	16	R/O	CIRC	---	780	---	1.0	PHILIPS	E	DEC, XEBEC	---	30	10000+	---	---	---	
10	OEM	SONY	4	CDU-1	---	CART	ALL CD-ROM DR.	12	R/O	CIRC	---	780	---	1.0	SONY	---	SONY	---	---	---	---	---	---	CLV
10	OEM	DENON	4	---	---	CART	---	12	R/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	CLV
10	OEM	OPTOTECH	5	5986	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	55	20000	---	---	CAV
10	OEM	TOSHIBA	5	DF-050	---	CART	---	12	W/O	DRAW	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	CHEROKEE DATA	5	PATHFINDER	---	---	TOSHIBA	12	W/O	---	---	---	11.0	---	LEITZ, CANADA	---	ZEBEC	---	---	---	---	---	---	---
10	OEM	HITACHI	4	---	TbFeCo	BARE	---	12	E MO	INTERL. BCH	---	---	7.5	1.5	---	E	---	---	---	---	---	---	---	---
10	OEM	OPTOTECH	5	5984	---	CART	---	12	W/O	H	---	---	7.5	1.0	...OPTOTECH	I	OPTOTECH	---	---	12	5000	---	---	---
10	OEM	LASERDRIVE	5	PROTOTYPE	---	---	---	13	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	SHARP	5	---	GdTbFeCo	CART	SHARP DFS	8	E MO	---	780	780	4.0	1.2	SHARP	E	---	---	---	---	---	---	---	---
10	OEM	ISI	5	525WC	---	CART	---	12	W/O	R/S	830	830	6.0	0.8	---	E	ISI	PC/525	20	150,000	---	---	---	---
10	OEM	VERBATIM	3	MOD 2	---	BARE	---	12	E MO	---	---	---	15.0	0.7	---	---	---	---	---	---	---	---	---	---
10	OEM	OPTOTECH	3	5985	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	VERBATIM	3	MOD 1	TeFeCo	BARE	---	12	E MO	---	800	---	10.0	0.7	---	---	---	---	---	---	---	---	---	---
10	OEM	SONY	8	WDD-2000	---	CART	---	12	W/O	CIRC	830	830	3.5	1.0	SONY	E	SONY	WDC-2000	40	12,000	---	---	---	CAV/CLV
10	OEM	SPERRY	5	51H	---	CART	---	12	W/O	---	---	---	1.0	2.5	---	---	---	---	---	---	---	---	---	---
10	OEM	SONY	8/12	---	---	CART	---	12	E	---	830	830	5.0	1.0	SONY	E	---	---	---	---	---	---	---	---
10	OEM	SONY	12	WDD-3000	---	CART	S10S DFS	12	W/O	CIRC	830	830	3.5	1.0	SONY	---	SONY	WDC-2000	40	12,000	---	---	---	---
10	OEM	SPERRY	5	51R	---	CART	---	12	W/O	---	---	---	20.0	5.0	---	---	---	---	---	---	---	---	---	---
10	OEM	SANYO	4	ERASABLE CD PRO	---	BARE	---	9	E	---	830	830	3.0	1.0	---	---	---	---	---	---	---	---	---	---
10	OEM	OSI	5	LASERDRIVE 500	---	---	---	---	W/O	DRAW	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	OPTIMEM	5	---	---	---	---	---	E MO	DRAW	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	OEM	CANON	8	---	---	PKGDD	---	---	E MO	---	---	---	7.0	2.0	CANON	---	---	---	---	---	---	---	---	---
10	OEM	CHEROKEE DATA	<5	PAPOOSE	---	---	---	12	W/O	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

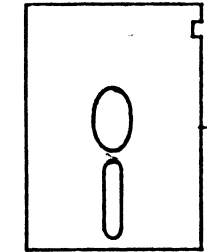
10-4

11. CONTROLLERS

- By Company
- By Product Segment

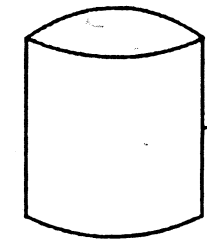


I-II



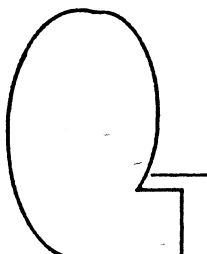
FLOPPY

a



DISK

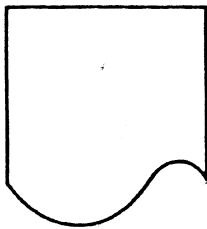
b



TAPE

c

FRMTR



PRINTER

d

CNTRLR

e

HA

f

COMPUTER

a-d

DEVICE INTERFACE

FLOPPY	DISK	TAPE	PRINT
ST450	ST506	QIC-02	RS232
⋮	ESDI	QIC-24	CENTX.
⋮	SMD	⋮	⋮
⋮	IPI-2	⋮	⋮
⋮	⋮	⋮	⋮

e

INTELLIGENT INTERFACE

- SCSI
- IPI-3
- ⋮
- ⋮

f

H/A

- EMULEX
- DTC
- PLESSEY
- ⋮
- ⋮

HOST BUS

- APPLE-II, MAC
- IBM-PC, AT...
- MAINFR...
- DEC-Q, UNI, MASS...
- PRIME
- AT&T

TECHNICAL CONTROLLER GLOSSARY

I/F - INTERFACE

SA1 - SA1000
 ST5 - ST506
 SA8 - SA800
 ST/4 - ST412
 SA4/45 - SA400/450
 KOD.3.3 - KODAK 3.3
 ST5/4 - ST506/412
 SA4/8 - SA400/800
 SA45/46 - SA450/460

DRIVES

F - FLOPPY
 W - WINCHESTER
 T - TAPE

ERROR CORRECTION

R/W - READ AFTER WRITE
 S-B/# BITS - SINGLE BURST/NUMBER OF BITS
 D-B/# BITS - DOUBLE BURST/NUMBER OF BITS
 S-T/# BITS - SINGLE TRACK/NUMBER OF BITS
 SGL TRK - SINGLE TRACK
 BLK RE-W - BLOCK RE-WRITE

SCSI LEVEL

S/I - SINGLE INITIATOR
 R/D - RECONNECT/DISCONNECT

FLAW SKIPPING

T-L or TRK LEVEL - TRACK LEVEL
 S-L or SEC LEVEL - SECTOR LEVEL
 BLK RE-W - BLOCK REWRITE
 SEC TRK - SECTOR or TRACK LEVEL

1986 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	FCS	PRICE		I/F	#	SECTOR SIZE	DRIVE	ERROR CORRECTION	FLAW SKIPPING	SCSI LEVEL	BUFFER KB	XFR MB/SEC	MIN. LEAV	DIMENSIONS												
				\$	Q											F	M	T	DETECTION	CORRECTION	SKIPPING	SCSI	R/D	N/A	2:1	13.00	4.40	0.75
ADAPTEC, INC.	ACB-2002	IBM PC	NOW	235	100	ST506/412	--	2	---	32-BIT ECC	S-B/11 BITS	S-L	---	---	2:1	13.00	4.40	0.75										
ADAPTEC, INC.	ACB-2010A	IBM PC	NOW	265	100	ST506/412, HD/SECT.REM.	--	2	---	32-BIT ECC	S-B/11 BITS	S-L	---	---	2:1	13.00	4.40	0.75										
ADAPTEC, INC.	ACB-2002A	IBM PC	NOW	245	100	ST506/412	--	2	---	32-BIT ECC	S-B/11 BITS	S-L	---	---	2:1	13.00	4.40	0.75										
ADAPTEC, INC.	ACB-3530	SCSI	NOW	425	100	QIC-36	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	8.00	1.5	N/A	8.75	5.50	0.50									
ADAPTEC, INC.	AIC-300	LSI	NOW	21	100	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	ACB-5500	SCSI	NOW	560	100	ST506/412	--	4	256-2048	32-BIT ECC	S-B/8 BITS	S-L	R/D	2.00	1.5	1:1	7.75	5.75	0.50									
ADAPTEC, INC.	ACB-4010	SCSI	NOW	225	100	ST506/412	--	2	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50									
ADAPTEC, INC.	ACB-4070	SCSI	NOW	280	100	ST506/412	--	2	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50									
ADAPTEC, INC.	AHA-1530	H/A	NOW	460	---	---	--	---	---	---	---	---	---	2	---	12.00	6.75	0.50										
ADAPTEC, INC.	ACB-5580	SCSI	NOW	800	100	SMD	--	8	256-2048	32-BIT ECC	S-B/8 BITS	S-L	R/D	2.00	1.5	1:1	14.00	7.00	0.50									
ADAPTEC, INC.	AIC-010	LSI	NOW	50	2500	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	AIC-270	LSI	NOW	24	100	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	AIC-250	LSI	NOW	16	100	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	AIC-010	LSI	86-10	115	2500	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	AIC-100	LSI	NOW	65	100	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTEC, INC.	ACB-4000	SCSI	NOW	225	100	ST506/412	--	2	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50									
ADAPTIVE DATA	COMBO-1	SCSI	86-10	480	100	ST506/412, QIC-36	--	2	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.90	5.25	0.90									
ADAPTIVE DATA	SABER-11	SCSI	85-40	295	100	ST506/412	--	4	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.90	5.25	0.90									
ADAPTIVE DATA	RAPIER-11	SCSI	85-40	350	100	ESDI	--	4	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.90	5.25	0.90									
ADAPTIVE DATA	COMBO-11	SCSI	86-10	525	100	ESDI, QIC-36	--	2	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.90	5.25	0.90									
ADAPTIVE DATA	PYTHON-11	SCSI	85-40	305	100	QIC-36	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	16.00	2.0	N/A	7.75	5.60	0.50									
ADAPTIVE DATA	PC MASTER LINK	H/A	NOW	250	---	---	--	---	---	---	---	---	R/D	---	2	---	10.00	4.20	0.80									
ADAPTIVE DATA	ADS-1000	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTIVE DATA	ADS-3050	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTIVE DATA	ADS-4360	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADAPTIVE DATA	ADS-3570	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADV. MICRO DEVICES	Am9580	LSI	86-20	65	5	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADV. MICRO DEVICES	Am9581	LSI	86-20	20	5	---	--	---	---	---	---	---	---	---	---	---	---	---	---									
ADV.ELEC DESIGN	WINC 05/08	DEC	NOW	1575	1	ST506/SA800	2	2	128-1000	N/A	N/A	N/A	N/A	N/A	2:1	1	DUAL	WIDTH	BOARD									
ADV.ELEC DESIGN	FLEX-02	DEC	NOW	975	1	SA800	2	---	256-1000	N/A	N/A	N/A	N/A	N/A	N/A	1	DUAL	WIDTH	BOARD									
ADV.ELEC DESIGN	WINC 05/05	DEC	NOW	1575	1	ST506/SA460	2	2	128-1000	N/A	N/A	N/A	N/A	N/A	2:1	1	DUAL	WIDTH	BOARD									
ADV.STORAGE	ASC-525	SCSI	NOW	992	100	ST506/412	--	2	256-1024	32-BIT ECC	S-B/5 BITS	S-L	R/D	320.00	1.5	1:1	8.00	5.75	0.75									
AMPRO COMPUTERS	LITTLE BRD/186	SCSI	NOW	424	100	SA450/460, SCSI	4	---	128-1024	16-BIT CRC	N/A	N/A	R/D	N/A	1.5	N/A	7.75	5.75	0.75									
AMPRO COMPUTERS	LITTLE BRD/PLUS	SCSI	NOW	297	100	SA450/460, SCSI	4	---	128-1024	16-BIT CRC	N/A	N/A	R/D	N/A	1.5	N/A	7.75	5.75	0.75									
ANDROMEDA SYSTEMS	RDC11	DEC	85-10	1695	1	ST506	--	4	128-1000	N/A	N/A	N/A	---	---	---	---	---	---	---									
ANDROMEDA SYSTEMS	WDC11-D	DEC	NOW	1595	1	SA1/ST5(W), SA8/4(F)	2	4	128-1000	N/A	N/A	N/A	---	---	---	3:1	1	DUAL	WIDTH	BOARD								
ANDROMEDA SYSTEMS	UDC11	DEC	85-10	1795	1	ST506, SA800/460	4	4	128-1000	N/A	N/A	N/A	---	---	---	2:1	1	DUAL	WIDTH	BOARD								
ANDROMEDA SYSTEMS	WDC11-C	DEC	NOW	1595	1	SA1/ST5(W), SA8/4(F)	2	4	128-1000	N/A	N/A	N/A	---	---	---	3:1	1	DUAL	WIDTH	BOARD								
ANDROMEDA SYSTEMS	SDC11	DEC	NOW	1395	1	ST506	--	4	PROGRAMMABLE	N/A	N/A	N/A	---	---	---	N/A	1	DUAL	WIDTH	BOARD								
ANDROMEDA SYSTEMS	WDC11-B	DEC	NOW	1595	1	SA1/ST5(W), SA8/4(F)	2	4	128-1000	N/A	N/A	N/A	---	---	---	3:1	1	DUAL	WIDTH	BOARD								
ARCHIVE CORP.	SC400	IBM PC	---	---	---	QIC-36	--	1	---	16-BIT CRC	BLK RE-W	R/W	---	---	---	N/A	12.00	4.00	0.75									
AVIV	DFC 8078	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	2.00	---	N/A	SGL	HEX	WIDTH	BRD								
AVIV	DFC 8088	DEC	NOW	4400	1	SMD (2.4 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	8.00	---	2:1	SGL	HEX	WIDTH	BRD								
AVIV	DFC 607A	DEC	NOW	8950	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	6.00	---	N/A	EXTENDED	HEX	BRD									
AVIV	TFC 925	DEC	85-20	2800	1	PERTEC	--	4	UP TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	---	N/A	---	N/A	SGL	HEX	WIDTH	BRD								
AVIV	DFC 607B	DEC	NOW	8950	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	6.00	---	N/A	EXTENDED	HEX	BRD									
AVIV	DFC 907A	DEC	NOW	2850	1	SMD	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	2.00	---	N/A	SGL	QUAD	WIDTH	BRD								
AVIV	TFC 805	DEC	NOW	9100	1	STC 1953	--	4	UP TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	---	4.00	---	N/A	SGL	HEX	WIDTH	BRD								
AVIV	DFC 807A	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	2.00	---	N/A	SGL	HEX	WIDTH	BRD								
AVIV	TFC 825	DEC	NOW	2800	1	PERTEC	--	4	UP TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	---	16.00	---	N/A	SGL	HEX	WIDTH	BRD								
AVIV	DFC 907B	DEC	NOW	2850	1	SMD	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	2.00	---	N/A	SGL	QUAD	WIDTH	BRD								
AVIV	DFC 808A	DEC	NOW	4400	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	8.00	---	2:1	SGL	HEX	WIDTH	BRD								
AVIV	DFC 807C	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	PROGRAMMABLE	32-BIT ECC	11-BIT BURST	N/A	---	2.00	---	N/A	SGL	HEX	WIDTH	BRD								
CENTAN CORP.	MDC-3011	SCSI	NOW	135	100	ST506/412	--	2	256-1024	32-BIT ECC	S-B/11 BITS	T-L	XSASI	1.00	1.0	1:1	5.75	4.02	0.50									
CENTAN CORP.	MDC-5027	IBM PC	NOW	135	100	ST506/412	--	2	---	32-BIT ECC	S-B/11 BITS	S-L	---	---	---	3:1	8.00	3.85	0.50									
COMPUTER STOR.TECH	CC-300	DEC	NOW	1800	1	QIC-02	--	1	512 BYTES	N/A (FRMTR)	N/A (FRMTR)	N/A	---	---	---	N/A	1	DUAL	WIDTH	BOARD								
COMPUTER STOR.TECH	TC-200	DEC	NOW	3000	1	PERTEC	--	4	UP TO 2K	CRC, PARITY	SGL TRK (PE)	N/A	---	0.06	---	N/A	SGL	HEX	WIDTH	BRD								
DATA TECH. CORP.	DTC1507	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	---								
DATA TECH. CORP.	DTC1506	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	---								
DATA TECH. CORP.	DTC1505	LSI	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	---								
DATA TECHNOLOGY	MODEL 75	H/A	NOW	140	---	---	--	---	---	---	---	---	S/I	---	1	---	7.00	3.05	0.50									
DATA TECHNOLOGY	MODEL 69	H/A	NOW	980	---	---	--	---	---	---	---	---	S/I	---	1	---	14.50	9.25	0.50									
DATA TECHNOLOGY	MODEL 10	H/A	NOW	195	---	---	--	---	---	---	---	---	S/I	---	1	---	10.00	5.25	0.50									
DATA TECHNOLOGY	MODEL 68	H/A	NOW	350	---	---	--	---	---	---	---	---	S/I	---	1	---	9.75	5.50	0.50									
DATA TECHNOLOGY	MODEL 10	H/A	NOW	350	---	---	--	---	---	---	---	---	S/I	---	1	---	9.75	5.50	0.50									
DATA TECHNOLOGY	803C	SCSI	NOW	500	100	ESDI	--	4	256-1024	32-BIT ECC	S-B/8 BITS	T-L	R/D	2.00	1.6	1:1	10.00	5.75	0.49									
DATA TECHNOLOGY	MODEL 51	H/A	NOW	190	---	---	--	---	---	---	---	---	S/I	---	1	---	8.00	3.90	0.50									
DATA TECHNOLOGY	515CU	SCSI	NOW	287	100	DMA SYSTEMS/OMEGA	--	2	256	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	8.25	8.00	0.49									

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1985 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	POWER				TEMP. C	BIOS ROM	HOST CHARACTERISTICS		FUNCTION	CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE		
			+5	-5	+12	-12			HOST BUS TYPE	HOST FEATURES				DUAL	PLCC	OTHER
ADAPTEC, INC.	ACB-2002	IBM PC	1.5A	---	.1A	.04A	---	W/O	---	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-2010A	IBM PC	1.5A	---	.1A	.04A	---	INC	---	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-2002A	IBM PC	1.5A	---	.1A	.04A	---	INC	---	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-3530	SCSI	1.7A	---	0.1A	---	---	---	---	---	---	---	---	---	---	
ADAPTEC, INC.	A1C-300	LSI	YES	YES	---	---	0-70	---	---	---	10 MHz	SIL.GATE NMOS	40	---	---	
ADAPTEC, INC.	ACB-3500	SCSI	1.5A	---	0.3A	---	---	---	---	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-4010	SCSI	1.5A	---	0.3A	---	---	---	---	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-4070	SCSI	1.5A	---	0.3A	---	---	---	---	---	---	---	---	---	---	
ADAPTEC, INC.	AHA-1530	H/A	2.0A	---	---	---	---	MULTI.1	8 TSK/8 LUN;CONCUR.	---	---	---	---	---	---	
ADAPTEC, INC.	ACB-5580	SCSI	3.0A	---	0.6A	---	---	---	---	---	---	---	---	---	---	
ADAPTEC, INC.	A1C-010	LSI	YES	YES	---	---	0-70	---	---	CNTRLR CHIP	5/10/15 MHz	CMOS	40	44	---	
ADAPTEC, INC.	A1C-270	LSI	YES	YES	---	---	0-70	---	---	ENC/DEC	500 KHz-10MHz	SIL.GATE NMOS	24	---	---	
ADAPTEC, INC.	A1C-250	LSI	YES	YES	---	---	0-70	---	---	ENC/DEC	500 KHz-10MHz	SIL.GATE NMOS	24	---	---	
ADAPTEC, INC.	A1C-010	LSI	YES	YES	---	---	0-70	---	---	CNTRLR CHIP	24 MHz	CMOS	40	44	---	
ADAPTEC, INC.	A1C-100	LSI	YES	YES	---	---	0-70	---	---	WNCH.CNTRLR	10 MHz	SIL.GATE NMOS	40	---	---	
ADAPTEC, INC.	ACB-4000	SCSI	1.5A	---	0.3A	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	COMBO-1	SCSI	1.5A	---	0.1A	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	SABER-11	SCSI	1.0A	---	---	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	RAPIER-11	SCSI	1.0A	---	---	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	COMBO-11	SCSI	1.5A	---	0.1A	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	PYTHON-11	SCSI	1.5A	---	0.1A	---	---	---	---	---	---	---	---	---	---	
ADAPTIVE DATA	PC MASTER LINK	H/A	2.5A	---	---	---	---	PC, XT	DMA; PRGMD. I/O MODES	---	---	---	---	---	---	
ADAPTIVE DATA	ADS-1000	LSI	YES	YES	---	---	0-70	---	---	WNCH.CNTRLR	24 MHz	CMOS	---	68	---	
ADAPTIVE DATA	ADS-5050	LSI	YES	YES	---	---	0-70	---	---	SCSI BUS TRN	N/A	Bipolar	24	---	---	
ADAPTIVE DATA	ADS-4360	LSI	YES	YES	---	---	0-70	---	---	Tape Serdes	6 Mhz	CMOS	---	68	---	
ADAPTIVE DATA	ADS-3570	LSI	YES	YES	---	---	0-70	---	---	BUFF.MGR.+	15 Mhz	CMOS	---	68	---	
ADV. MICRO DEVICES	Aa9580	LSI	YES	YES	---	---	0-70	---	---	WNCH/FL CNTRLR	15 Mbits/sec.	NMOS	---	68	---	
ADV. MICRO DEVICES	Aa9581	LSI	YES	YES	---	---	0-70	---	---	WNCH DATA SEP.	16 Mbits/sec	Bipolar	48	---	---	
ADV.ELEC DESIGN	WINC 05/08	DEC	4.5A	---	.1A	---	---	Q BUS	RLO1/O2,RMD2,RX50	---	---	---	---	---	---	
ADV.ELEC DESIGN	FLEX-02	DEC	3.5A	---	.1A	---	---	Q BUS	RMD1/O2	---	---	---	---	---	---	
ADV.ELEC DESIGN	WINC 05/05	DEC	4.5A	---	.1A	---	---	Q BUS	RLO1/O2,RMD2,RX50	---	---	---	---	---	---	
ADV.STORAGE	ASC-525	SCSI	3.0A	---	---	---	---	---	---	---	---	---	---	---	---	
AMPRO COMPUTERS	LITTLE BRD/186	SCSI	.95A	---	.05A	---	---	---	---	---	---	---	---	---	---	
AMPRO COMPUTERS	LITTLE BRD/PLUS	SCSI	.95A	---	.05A	---	---	---	---	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	RDC11	DEC	2.5A	---	---	---	---	Q BUS	MSOP, RD TYPE WNCH.	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	WDC11-0	DEC	2.7A	---	.1A	---	---	Q BUS	RPO2(W),RMD2(F)	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	UDC11	DEC	2.5A	---	---	---	---	Q BUS	MSOP,RX50(F) & RD(W)	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	WDC11-C	DEC	2.7A	---	.1A	---	---	Q BUS	RLO1/O2(W),RMD2(F)	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	SDC11	DEC	2.5A	---	---	---	---	Q BUS	RLO2	---	---	---	---	---	---	
ANDROMEDA SYSTEMS	WDC11-B	DEC	2.7A	---	.1A	---	---	Q BUS	RK05(W)/RMD2(F)	---	---	---	---	---	---	
ARCHIVE CORP.	SC400	IBM PC	1.5A	---	.13A	---	---	INC	---	---	---	---	---	---	---	
AVIV	DFC 807B	DEC	7.0A	---	.7A	---	---	UNIBUS	RK711 W/ RK07 DRIVES	---	---	---	---	---	---	
AVIV	DFC 808B	DEC	7.0A	---	.7A	---	---	UNIBUS	RMD2/O5	---	---	---	---	---	---	
AVIV	DFC 607A	DEC	9.0A	---	.7A	---	---	CMI BUS	RH750 W/ RMD3/O5	---	---	---	---	---	---	
AVIV	TFC 925	DEC	5.0A	---	---	---	---	Q BUS	TS-11	---	---	---	---	---	---	
AVIV	DFC 607B	DEC	9.0A	---	.7A	---	---	CMI BUS	RH750 W/ RPO6	---	---	---	---	---	---	
AVIV	DFC 907A	DEC	6.5A	---	.7A	---	---	Q BUS	RH11/70 W/ RMD2/O5	---	---	---	---	---	---	
AVIV	TFC 805	DEC	5.0A	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---	---	
AVIV	DFC 807A	DEC	7.0A	---	.7A	---	---	UNIBUS	RH11 W/ RMD2/O5	---	---	---	---	---	---	
AVIV	TFC 825	DEC	5.0A	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---	---	
AVIV	DFC 907B	DEC	6.5A	---	.7A	---	---	Q BUS	RK711 W/ RK07 DRIVES	---	---	---	---	---	---	
AVIV	DFC 808A	DEC	7.0A	---	.7A	---	---	UNIBUS	RMD2/O5	---	---	---	---	---	---	
AVIV	DFC 807C	DEC	7.0A	---	.7A	---	---	UNIBUS	RMD3/O5	---	---	---	---	---	---	
CENTAN CORP.	NDC-3011	SCSI	1.0A	---	---	---	---	---	---	---	---	---	---	---	---	
CENTAN CORP.	NDC-5027	IBM PC	1.4A	---	---	---	---	INC	---	---	---	---	---	---	---	
COMPUTER STOR.TECH	CC-300	DEC	5.0A	---	---	---	---	Q-BUS	TM-11	---	---	---	---	---	---	
COMPUTER STOR.TECH	TC-200	DEC	8.5A	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---	---	
DATA TECH. CORP.	DTC1507	LSI	YES	YES	---	---	0-70	---	---	---	10 MHz	CMOS	24	---	---	
DATA TECH. CORP.	DTC1506	LSI	YES	YES	---	---	0-70	---	---	DATA SEP.	10 MHz	CMOS	---	68	---	
DATA TECH. CORP.	DTC1505	LSI	YES	YES	---	---	0-70	---	---	BUF.MEM.CNTRLR	15 MHz	CMOS	---	68	---	
DATA TECHNOLOGY	MODEL 75	H/A	.5A	---	---	---	---	---	APPLE 11/11+/11e	SUPP. DOS 3.3	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 69	H/A	2.8A	---	---	---	---	---	VERSA.68000,IBM SYST.9000	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 10	H/A	1.4A	---	---	---	---	---	S-100	PRGRMD I/O	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 68	H/A	1.0A	---	---	---	---	---	EXORclSor11	---	---	---	---	---	---	
DATA TECHNOLOGY	803C	SCSI	2.6A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 51	H/A	1.0A	---	---	---	---	PC,XT	---	---	---	---	---	---	---	
DATA TECHNOLOGY	515CU	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	

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1988 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	FCS	PRICE		I/F	#	SECTOR SIZE	DRIVE			HOST		DIMENSIONS						
				\$	Q				E	R	E	S	X	M.	L	W	H			
DATA TECHNOLOGY	MODEL 12	H/A	NOW	828	--	--	--	--	--	--	S/I	--	1	--	16.00	9.00	0.50			
DATA TECHNOLOGY	510CU	SCSI	NOW	287	100	DMA SYSTEMS/OMEGA	--	2	256	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	8.25	8.00	0.49	
DATA TECHNOLOGY	MODEL 11-2	H/A	NOW	395	--	--	--	--	--	--	S/I	--	--	1	--	8.40	5.20	0.50		
DATA TECHNOLOGY	700	SCSI	NOW	793	100	SA1000/Q2000, Q1C-02	--	4	1	256-1024	24-BIT ECC	T-L	S/I	1.00	1.0	2:1	16.00	8.50	0.49	
DATA TECHNOLOGY	MODEL 11	H/A	NOW	395	--	--	--	--	--	--	S/I	--	--	1	--	8.40	5.20	0.50		
DATA TECHNOLOGY	540D/DB	SCSI	NOW	440	100	ST5/4, SA4/45, KOD. 3.3, Q1C-02	2	2	1	256-1024	32-BIT ECC	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49	
DATA TECHNOLOGY	3251	IBM PC	NOW	209	100	SA400/450, KOD. 3.3	2	--	--	--	16-BIT CRC	NONE	N/A	--	--	N/A	8.00	3.85	0.50	
DATA TECHNOLOGY	520D/DB	SCSI	NOW	286	100	ST5/412, SA4/450, KOD. 3.3	2	2	--	256-1024	32-BIT ECC	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49	
DATA TECHNOLOGY	5051	IBM PC	85-40	185	100	Q1C-02	--	--	1	--	16-BIT CRC	NONE	BLK RE-W	--	--	N/A	13.38	3.90	0.75	
DATA TECHNOLOGY	MODEL 86	H/A	NOW	270	--	--	--	--	--	--	--	--	S/I	--	1	--	12.00	6.75	0.50	
DATA TECHNOLOGY	5091	IBM PC	85-40	185	100	Q1C-02	--	--	1	--	16-BIT CRC	NONE	BLK RE-W	--	--	N/A	13.38	3.90	0.75	
DATA TECHNOLOGY	MODEL 75-1	H/A	NOW	158	--	--	--	--	--	--	--	--	S/I	--	1	--	7.00	3.05	0.50	
DATA TECHNOLOGY	5150BX	IBM PC	NOW	155	100	ST506/412	--	2	--	--	24-BIT ECC	S-B/4 BITS	T-L	--	--	2:1	13.38	3.90	0.75	
DATA TECHNOLOGY	802C	SCSI	NOW	900	100	ANSI	--	4	--	256-1024	32-BIT ECC	S-B/8 BITS	T-L	R/D	2.00	1.6	1:1	8.00	5.75	0.49
DATA TECHNOLOGY	5150BXE	IBM PC	NOW	195	100	ST506/412	--	2	--	--	24-BIT ECC	S-B/4 BITS	T-L	--	--	2:1	13.38	3.90	0.75	
DATA TECHNOLOGY	510D/DB	SCSI	NOW	247	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49
DATA TECHNOLOGY	5190	IBM PC	NOW	238	100	ST506/412	--	2	--	--	32-BIT ECC	S-B/11 BITS	S-L	--	--	2:1	13.38	3.90	0.75	
DATA TECHNOLOGY	530D/DB	SCSI	NOW	360	100	ST506/412, Q1C-02	--	2	1	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49
DATA TECHNOLOGY	5250CX	IBM PC	NOW	295	100	ST5/412, SA4/450, KOD. 3.3	2	2	--	--	24-BIT ECC	S-B/4 BITS	T-L	--	--	2:1	13.38	3.90	0.75	
DATA TECHNOLOGY	MODEL 75-2	H/A	NOW	195	--	--	--	--	--	--	--	--	S/I	--	1	--	7.00	3.05	0.50	
DATA TECHNOLOGY	5290	IBM PC	NOW	264	100	ST5/412, SA4/450, KOD. 3.3	2	2	--	--	32-BIT ECC	S-B/11 BITS	S-L	--	--	2:1	13.38	3.90	0.75	
DATA TECHNOLOGY	5150D	SCSI	NOW	287	100	HONEYMELL BULL 520	--	2	--	256	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	8.25	8.00	0.49
DATA TECHNOLOGY	5350	IBM PC	NOW	428	100	ST506/412, Q1C-02	--	2	1	--	32-BIT ECC	S-B/11 BITS	S-L	--	--	2:1	13.25	3.90	0.94	
DATA TECHNOLOGY	MODEL 86-1	H/A	NOW	270	--	--	--	--	--	--	--	--	S/I	--	1	--	12.00	6.75	0.50	
DATA TECHNOLOGY	703	SCSI	NOW	767	100	SA1000/Q2000, SA800/850	4	4	--	256-1024	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	13.50	8.90	0.49
DATA TECHNOLOGY	801C	SCSI	NOW	700	100	SMD(2.4 Mb/sec)	--	2	--	256-1024	32-BIT ECC	S-B/8 BITS	T-L	R/D	2.00	1.6	1:1	13.00	8.00	0.49
DATA TECHNOLOGY	MODEL 10-1	H/A	NOW	225	--	--	--	--	--	--	--	--	S/I	--	1	--	10.00	5.25	0.50	
DILOG	DQ 342	DEC	NOW	1550	1	CDC SENTINEL	--	2	N/A	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 228	DEC	NOW	2090	1	SMD (2 MB/SEC)	--	2	--	PROGRAMABLE	56-BIT ECC	12 BIT BURST	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 615	DEC	NOW	1950	1	ST506	--	2	--	128-1000	32-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	1 DUAL WIDTH BOARD		
DILOG	DQ 130	DEC	NOW	1630	1	PERTEC	--	8	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 614	DEC	NOW	1885	1	ST506	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	1 DUAL WIDTH BOARD		
DILOG	DQ 656	DEC	85-30	1850	1	ESD1	--	2	--	128-1000	CRC	32-BIT ECC	TRK LEVEL	--	1	--	N/A	1 DUAL WIDTH BOARD		
DILOG	DQ 132	DEC	NOW	1350	1	PERTEC	--	4	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 215	DEC	NOW	2090	1	SMD	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 419	DEC	NOW	895	1	SA800/850	2	--	--	256-1000	N/A	N/A	--	N/A	--	N/A	1 DUAL WIDTH BOARD			
DILOG	DQ 634	DEC	NOW	1885	1	ST506/DMA SYSTEMS	--	2	--	128-1000	32-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	1 DUAL WIDTH BOARD		
DILOG	DQ 120	DEC	NOW	2425	1	PERTEC	--	4	N/A	--	LRC, CRC	NONE	N/A	--	FIFO	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 202A	DEC	NOW	2830	1	SMD	--	2	--	PROGRAMABLE	N/A	N/A	TRK LEVEL	--	N/A	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 413	DEC	NOW	2375	1	PRIAM I/O	--	2	--	PROGRAMABLE	IN THE DRIVE	IN THE DRIVE	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 132	DEC	NOW	1550	1	PERTEC	--	4	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	1.00	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 142	DEC	NOW	2150	1	PERTEC	--	4	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	4.00	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 216	DEC	NOW	4950	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	SEC/TRK	--	6 SECT.	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 218	DEC	NOW	2725	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1.50	--	N/A	SGL HEX WIDTH BRD		
DILOG	MV 210	DEC	NOW	2675	1	SMD (1.9 MB/SEC)	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	N/A	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 342	DEC	NOW	1350	1	CDC SENTINEL	--	2	N/A	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 130	DEC	NOW	1630	1	PERTEC	--	8	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 414	DEC	NOW	2375	1	PRIAM I/O	--	2	--	PROGRAMABLE	IN THE DRIVE	IN THE DRIVE	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 330	DEC	NOW	1670	1	KENNEDY 6455	--	1	N/A	N/A (FRMTR)	N/A (FRMTR)	IN FRMTR	--	N/A	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 619	DEC	NOW	895	1	SA450	2	--	--	256-1000	N/A	N/A	--	1 SECT.	--	N/A	1 DUAL WIDTH BOARD			
DILOG	DQ 214	DEC	NOW	1670	1	SMD	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DQ 226	DEC	85-30	2500	1	SMD (2.5 MB/SEC)	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	N/A	--	N/A	SGL QUAD WIDTH BRD		
DILOG	MV 342	DEC	NOW	1750	1	CDC SENTINEL	--	1	N/A	N/A (FRMTR)	N/A (FRMTR)	IN FRMTR	--	1.00	--	N/A	SGL QUAD WIDTH BRD			
DILOG	MV 132	DEC	NOW	2310	1	PERTEC	--	4	UP TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	1.00	--	N/A	SGL QUAD WIDTH BRD			
DILOG	DQ 215	DEC	NOW	1670	1	SMD	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	N/A	SGL QUAD WIDTH BRD		
DIST. PROC. TECH.	PH-30 10A/80	SCSI	85-40	1145	100	SA1000	--	4	--	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/85	SCSI	85-40	1185	100	SA1000, SA410/460	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/98	SCSI	85-40	1185	100	ST506/412, SA810/860	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/95	SCSI	85-40	1185	100	ST506/412, SA410/460	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/05	SCSI	85-40	1000	100	SA410/460	4	--	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/90	SCSI	85-40	1145	100	ST506/412	4	4	--	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/08	SCSI	85-40	1000	100	SA810/860	4	--	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
DIST. PROC. TECH.	PH-30 10A/88	SCSI	85-40	1185	100	SA1000, SA810/860	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50
EMULEX	SC21Y SERIES	DEC	NOW	3800	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	N/A	SGL HEX WIDTH BRD		
EMULEX	SC7002	DEC	NOW	8950	1	SMD (2.4 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	SECT.LVL	--	N/A	--	N/A	EXTENDED HEX BRD		
EMULEX	SC750/B2 SERIES	DEC	NOW	8950	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	N/A	EXTENDED HEX BRD		
EMULEX	UC13	H/A	NOW	2200	--	--	--	--	--	--	--	--	R/D	--	2	--	N/A	SGL.HX SZ, STD.UBUS		

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MANUFACTURER	MODEL	TYPE	POWER				TEMP. C	BIOS ROM	HOST CHARACTERISTICS		FUNCTION	CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE		
			+5	-5	+12	-12			HOST BUS TYPE	HOST FEATURES				DUAL	PLOC	OTHER
DATA TECHNOLOGY	MODEL 12	H/A	2.0A	---	---	---	---	---	UNIBUS	---	---	---	---	---	---	
DATA TECHNOLOGY	510CU	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 11-2	H/A	2.0A	---	---	---	---	---	QBUS	UP TO 8 SCSI TARGETS	---	---	---	---	---	
DATA TECHNOLOGY	700	SCSI	4.6A	.5A	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 11	H/A	2.0A	---	---	---	---	---	QBUS	2 DMA CHANNELS	---	---	---	---	---	
DATA TECHNOLOGY	540D/DB	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	3251	IBM PC	1.0A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	520D/DB	SCSI	1.5A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5051	IBM PC	2.0A	---	---	---	---	INC	MULTIBUS I	SUPP. VAR. SIZE BLOCKS	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 86	H/A	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5091	IBM PC	2.0A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 75-1	H/A	.5A	---	---	---	---	---	APPLE II/III/IIe	SUPP. DOS 3.3;ProDOS	---	---	---	---	---	
DATA TECHNOLOGY	5150BX	IBM PC	1.7A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	802C	SCSI	2.6A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5150BXE	IBM PC	1.7A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	510D/DB	SCSI	1.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5190	IBM PC	1.7A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	530D/DB	SCSI	1.5A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5250CX	IBM PC	2.0A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 75-2	H/A	.5A	---	---	---	---	---	APPLE II/III/IIe	SUPP. DOS 3.3;ProDOS	---	---	---	---	---	
DATA TECHNOLOGY	5290	IBM PC	1.75A	---	---	---	---	INC	---	---	---	---	---	---	---	
DATA TECHNOLOGY	515CD	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	5350	IBM PC	1.85A	---	---	---	---	INC	MULTIBUS I	UP TO 8 SCSI TARGETS	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 86-1	H/A	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	703	SCSI	4.6A	.5A	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	801C	SCSI	4.0A	.5A	---	---	---	---	---	---	---	---	---	---	---	
DATA TECHNOLOGY	MODEL 10-1	H/A	1.8A	---	---	---	---	---	S-100	PRGRMD. I/O; DMA MODES	---	---	---	---	---	
DILOG	DQ 342	DEC	3.5A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---	
DILOG	DQ 228	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RMD2/05/80	---	---	---	---	---	
DILOG	DQ 619	DEC	4.0A	.3A	---	---	---	---	Q-BUS	RK06/07	---	---	---	---	---	
DILOG	DQ 130	DEC	3.5A	---	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---	
DILOG	DQ 614	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RL01/02	---	---	---	---	---	
DILOG	DQ 696	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RK06/07	---	---	---	---	---	
DILOG	DQ 132	DEC	4.0A	---	---	---	---	---	Q-BUS	TS-11/TSV05	---	---	---	---	---	
DILOG	DQ 215	DEC	3.5A	.5A	---	---	---	---	UNIBUS	RK06/07	---	---	---	---	---	
DILOG	DQ 419	DEC	2.5A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---	
DILOG	DQ 634	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RL01	---	---	---	---	---	
DILOG	DQ 120	DEC	3.5A	---	---	---	---	---	Q-BUS	TM-11	---	---	---	---	---	
DILOG	DQ 202A	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RPO2/03	---	---	---	---	---	
DILOG	DQ 413	DEC	3.5A	---	---	---	---	---	Q-BUS	RPO2/03	---	---	---	---	---	
DILOG	DQ 132	DEC	4.0A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---	
DILOG	DQ 142	DEC	4.0A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---	
DILOG	DQ 216	DEC	3.5A	.5A	---	---	---	---	UNIBUS	RK06/07	---	---	---	---	---	
DILOG	DQ 218	DEC	7.5A	.6A	---	---	---	---	UNIBUS	RMD2/05	---	---	---	---	---	
DILOG	HV 210	DEC	3.5A	.3A	---	---	---	---	Q-BUS	DM* TYPE DEVICES	---	---	---	---	---	
DILOG	DQ 342	DEC	2.5A	---	---	---	---	---	Q-BUS	TS-11/TU80/TSV05	---	---	---	---	---	
DILOG	DQ 130	DEC	4.0A	---	---	---	---	---	Q-BUS	TM-11	---	---	---	---	---	
DILOG	DQ 414	DEC	3.5A	---	---	---	---	---	Q-BUS	RL01/02	---	---	---	---	---	
DILOG	DQ 330	DEC	3.5A	---	---	---	---	---	Q-BUS	TM-11/TS03	---	---	---	---	---	
DILOG	DQ 619	DEC	2.3A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---	
DILOG	DQ 214	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RL01/02	---	---	---	---	---	
DILOG	DQ 226	DEC	4.7A	.3A	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---	
DILOG	HV 342	DEC	4.0A	---	---	---	---	---	Q-BUS	TK25 FORMAT COMPAT.	---	---	---	---	---	
DILOG	HV 132	DEC	4.0A	---	---	---	---	---	Q-BUS	NONE	---	---	---	---	---	
DILOG	DQ 215	DEC	3.5A	.3A	---	---	---	---	Q-BUS	RK06/07	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/80	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/85	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/58	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/55	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/05	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/50	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/08	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
DIST.PROC. TECH.	PM-3010A/88	SCSI	4.0A	---	---	---	---	---	---	---	---	---	---	---	---	
EMULEX	SC21/V SERIES	DEC	8.0A	---	---	---	---	---	UNIBUS	RMD3/05	---	---	---	---	---	
EMULEX	SC7002	DEC	11.0A	---	---	---	---	---	CHI, SBI VIA V MASTER	RMD3/05, RM80	---	---	---	---	---	
EMULEX	SC750/B2 SERIES	DEC	10.0A	---	---	---	---	---	CHI BUS	RPO5/06	---	---	---	---	---	
EMULEX	UC13	H/A	4.8A	---	---	---	---	---	UNIBUS	EMUL. MSCP	---	---	---	---	---	

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1985 CONTROLLER COMPETITION

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MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE							HOST			DIMENSIONS		
				\$	Q	I/F	#	SECTOR SIZE	ERROR	FLAW	SCSI	BUFFER	XFR	MIN.	L	W	H	
																		DETECTION
EMULEX	SC750/B3 SERIES	DEC NOW	8950		1	SMD (1.8 MB/SEC)	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A	R/D	1	2	N/A	EXTENDED HEX BRD			
EMULEX	UC01/LX	H/A NOW	1500		1	SMD	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A	R/D	2		3:1	SGL HEX WIDTH BRD			
EMULEX	SC21/C SERIES	DEC NOW	3800		1	SMD	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		12	SECT	N/A	EXTENDED HEX BRD			
EMULEX	SC7000/B1 SERIES	DEC NOW	8950		1	SMD (2 MB/SEC)	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A	R/D	2		8.00	3.90	0.50		
EMULEX	IBMD1	H/A NOW	395		1	SMD	8	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		N/A	EXTENDED HEX BRD			
EMULEX	SC758/B1 SERIES	DEC NOW	9950		1	SMD (1.8 MB/SEC)	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC02/A SERIES	DEC NOW	1500		1	SMD	4	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A		4		N/A	SGL QUAD WIDTH BRD			
EMULEX	TC13	DEC NOW	2000		1	PERTEC	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		8		N/A	3 BRD SET +			
EMULEX	SC717/BX SERIES	DEC NOW	7950		1	SMD	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		42	SECT	1:1	SGL HEX WIDTH BRD			
EMULEX	SC41	DEC 85-3Q	4500		1	SMD	8	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A		1		N/A	EXTENDED HEX BRD			
EMULEX	TC7000	DEC NOW	4500		1	PERTEC/STC	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		8		1:1	SGL HEX WIDTH BRD			
EMULEX	SC31/BX SERIES	DEC NOW	4300		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC12/A SERIES	DEC NOW	2800		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC02/L SERIES	DEC NOW	1500		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A	R/D	2		1:1	SGL_QD_SZ.STD.QBUS			
EMULEX	UC03	H/A NOW	1800		1	SMD	2	512 BYTES 48-BIT ECC	11 BIT BURST	SECT.LVL		16		1:1	DUAL WIDTH BOARD			
EMULEX	Q001	DEC 85-3Q	1650		1	ST506	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		N/A	EXTENDED HEX BRD			
EMULEX	SC780/B2	DEC NOW	13500		1	SMD (1.8 MB/SEC)	4	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
EMULEX	T002	DEC NOW	1200		1	PERTEC	8	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		N/A	EXTENDED HEX BRD			
EMULEX	SC788	DEC NOW	14500		1	SMD (1.8 MB/SEC)	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		16		N/A	DUAL WIDTH BOARD			
EMULEX	Q112	DEC 85-3Q	1300		1	Q1C-02	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	SECT.LVL		8		1:1	SGL QUAD WIDTH BRD			
EMULEX	SC03/BX	DEC NOW	1800		1	SMD (1.8 MB/SEC)	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC12/B SERIES	DEC NOW	2800		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		4		N/A	SGL QUAD WIDTH BRD			
EMULEX	TC05	DEC NOW	1200		1	CDC SENTINEL	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		3:1	SGL HEX WIDTH BRD			
EMULEX	SC21/B SERIES	DEC NOW	3800		1	SMD	2	256 & 512 48-BIT ECC	S-B/11 BITS	R/D	14.00	1.5		1:1	8.00 5.75 0.50			
EMULEX	MEDALIST M001	SCSI NOW	395		100	ST506/412	1	N/A	N/A (FRMTR)	N/A		4		N/A	SGL QUAD WIDTH BRD			
EMULEX	TC15	DEC NOW	1400		1	CDC SENTINEL	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	SECT.LVL		12	SECT	1:1	SGL QUAD WIDTH BRD			
EMULEX	SC03/MS	DEC 85-3Q	2000		1	SMD (1.8 MB/SEC)	2	256 & 512 48-BIT ECC	S-B/11 BITS	R/D	14.00	1.5		1:1	8.00 5.75 0.50			
EMULEX	CHAMPION MD21	SCSI NOW	395		100	ESD110 (Mb/1+sec)	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		8		N/A	3 BRD SET +			
EMULEX	SC72/BX SERIES	DEC NOW	7650		1	SMD (1.8 MB/SEC)	4	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
EMULEX	TC03	DEC 85-3Q	1600		1	PERTEC	1	Q1C-36	R/W	BLK RE-W	R/D	14.00	1.5		N/A	8.00 5.75 0.50		
EMULEX	TITLEIST M702	SCSI NOW	435		100	Q1C-36	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC02/C SERIES	DEC NOW	1500		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC12/L SERIES	DEC NOW	2800		1	SMD	4	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
EMULEX	TC12	DEC NOW	1400		1	PERTEC	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		1		3:1	SGL QUAD WIDTH BRD			
EMULEX	SC12/Y SERIES	DEC NOW	2800		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A	R/D		2		9.20 6.30 0.80			
FORCE COMPUTERS	SY56BK/SAS1-1	H/A NOW	1380		1	SMD	4	256-1024 48-BIT ECC	S-B/11 BITS	S-L	R/D	1.00	1.5	1:1	15.00 7.70 0.80			
FUJITSU AMERICA	M1053A	SCSI NOW	895		100	SMD (2.4 Mb/sec)	2	256-1000 N/A	N/A	N/A		N/A		N/A	DUAL WIDTH BOARD			
GEN'L ROBOTICS	RXV21	DEC NOW	1000		1	SA800/430	2	128-1000 N/A	N/A	N/A		1	SECT	N/A	SGL QUAD WIDTH BRD			
GEN'L ROBOTICS	MNV11	DEC NOW	1500		1	ST506	2	PROGRAMABLE N/A	N/A	N/A		N/A		1:1	SGL QUAD WIDTH BRD			
GEN'L ROBOTICS	SMV22	DEC NOW	2000		1	SMD (2.5 MB/SEC)	2	PROGRAMABLE N/A	N/A	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
GEN'L ROBOTICS	SMV11	DEC NOW	1750		1	SMD	2	128-1000 N/A	N/A	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
GEN'L ROBOTICS	MNV22	DEC NOW	1750		1	STC506	2	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		N/A	DUAL WIDTH BOARD			
GEN'L ROBOTICS	STV11	DEC NOW	1000		1	Q1C-02	2	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		N/A	SGL QUAD WIDTH BRD			
HITACHI LTD.	63463	LSI NOW	63		1	SMD	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		9.20	6.30	0.80		
HITACHI LTD.	63463	LSI NOW	63		1	SMD	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		9.20	6.30	0.80		
HITACHI LTD.	63463	LSI NOW	63		1	SMD	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		9.20	6.30	0.80		
INTEG. SOLUTIONS	VME-SCSI	H/A NOW	1200		1	SMD	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		N/A		9.20	6.30	0.80		
INTEL	8272A	LSI NOW	32		100	SMD	1	32-BIT ECC	S-B/11 BITS	T-L				1:1	15.13 4.19 0.63			
INTEL	82662-05	LSI NOW	32		100	SMD	1	32-BIT ECC	S-B/11 BITS	T-L				1:1	5.75 4.00 0.50			
INTEL	82662-05	LSI NOW	32		100	SMD	1	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0		N/A	SGL QUAD WIDTH BRD		
INTERPHASE CORP.	MAV-SMD PC-80	IBM PC NOW	950		100	SMD (2.1 Mb/sec)	2	256 & 512 32-BIT ECC	S-B/11 BITS	T-L		2		N/A	SGL QUAD WIDTH BRD			
KONAN CORP.	DJ210	SCSI NOW	140		100	ST506/412	2	128-1000 32-BIT ECC	11 BIT BURST	N/A		16		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MLSI-DK11-RP	DEC 85-1Q	2330		1	SMD (2.4 MB/SEC)	4	UP TO 2K PARITY, CRC	SGL TRACK	N/A		0		N/A	SGL HEX WIDTH BRD			
MDB SYSTEMS	MLSI-TM11	DEC NOW	2600		1	PERTEC	4	UP TO 2K PARITY, CRC	SGL TRACK	N/A		16		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MDB-TM11	DEC NOW	2950		1	PERTEC	1	N/A	N/A (FRMTR)	IN FRMTR		16		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MDB-STS11	DEC NOW	1895		1	CDC SENTINEL	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MDB-RT11-Q	DEC NOW	3200		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MDB-RM11-Q	DEC NOW	2000		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MLSI-RM11	DEC NOW	2000		1	SMD	4	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A		16		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MDB-DK11-RM	DEC NOW	3900		1	SMD (1.8 MB/SEC)	8	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A		2		N/A	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MLSI-TS11	DEC NOW	1895		1	PERTEC	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		1:1	SGL QUAD WIDTH BRD			
MDB SYSTEMS	MLSI-RK11	DEC NOW	2000		1	SMD	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		N/A	SGL HEX WIDTH BRD			
MDB SYSTEMS	MLSI-DK11-RM	DEC 85-1Q	2330		1	SMD (2.4 MB/SEC)	4	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A		2		N/A	SGL QUAD WIDTH BOARD			
MDB SYSTEMS	MDB-DK11-RP	DEC NOW	3900		1	SMD (1.8 MB/SEC)	4	256-1000 N/A	N/A	N/A		1	SECT	N/A	DUAL WIDTH BOARD			
MDB SYSTEMS	MDB-DK11-RP	DEC NOW	965		1	SA460	4	128-1000 56-BIT ECC	11 BIT BURST	SECT.LVL		N/A		N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MXV90	DEC NOW	975		1	ST506	4	256-1000 N/A	N/A	N/A		1	SECT	N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MLV11M	DEC NOW	875		1	SA460	4	128-1000 N/A	N/A	N/A		1	SECT	N/A	SGL QUAD WIDTH BRD			
MICRO TECHNOLOGY	MXV22M	DEC NOW	875		1	SA460	4	128-1000 N/A	N/A	N/A		16		N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MX22	DEC NOW	1045		1	SA800/460	4	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A		1	SECT	N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MSV05	DEC NOW	1425		1	Q1C-02	4	128-1000 56-BIT ECC	11 BIT BURST	SECT.LVL		1	SECT	N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MLV11	DEC NOW	975		1	SA1000	4	256-1000 N/A	N/A	N/A		1	SECT	N/A	DUAL WIDTH BOARD			
MICRO TECHNOLOGY	MXV22	DEC NOW	875		1	SA 800	4	256-1000 N/A	N/A	N/A		1	SECT	N/A	DUAL WIDTH BOARD			

L.KURCHIN

1985 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	POWER				TEMP. C	BIOS ROM	HOST CHARACTERISTICS	HOST BUS TYPE	HOST FEATURES	FUNCTION	CLOCK/DATA RATE	TECHNOLOGY	PKG SIZE	
			+5	-5	+12	-12									DUAL	PLCC OTHER
EMULEX	SC750/B3 SERIES	DEC	10.0A	---	---	---	---	---	CM1 BUS	RMD3/05, RM80	---	---	---	---	---	
EMULEX	UC01/LX	H/A	5.7A	---	---	---	---	---	QBUS	EM.2 RLV11/12 CNTRLR	---	---	---	---	---	
EMULEX	SC21/C SERIES	DEC	8.0A	---	---	---	---	---	UNIBUS	RK611 W/ RKO6	---	---	---	---	---	
EMULEX	SC7000/B1 SERIES	DEC	11.0A	---	---	---	---	---	CM1, SBI VIA V MASTER	RMD3/05, RM80	---	---	---	---	---	
EMULEX	IBMD1	H/A	1.1A	---	---	---	---	---	PC, XT	2 microsc/b;DMA XFRS	---	---	---	---	---	
EMULEX	SC758/B1 SERIES	DEC	10.0A	---	---	---	---	---	CM1 BUS	RMD3/05, RM80	---	---	---	---	---	
EMULEX	SO02/A SERIES	DEC	5.7A	---	---	---	---	---	Q-BUS	RP11E W/ RPO2/RPO3	---	---	---	---	---	
EMULEX	TC13	DEC	5.2A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---	
EMULEX	SC71/BX SERIES	DEC	11.0A	---	---	---	---	---	CACHE BUS/UNIBUS	RM 03/05, RPO6	---	---	---	---	---	
EMULEX	SC41	DEC	7.5A	---	---	---	---	---	UNIBUS	MSCP	---	---	---	---	---	
EMULEX	TC7000	DEC	10.0A	---	---	---	---	---	CM1, SBI VIA V MASTER	TMD3 W/ TU77	---	---	---	---	---	
EMULEX	SC31/BX SERIES	DEC	8.0A	---	---	---	---	---	UNIBUS	RH11 W/ RMD2/03/05	---	---	---	---	---	
EMULEX	SC12/A SERIES	DEC	5.7A	---	---	---	---	---	UNIBUS	RP11E W/ RPO2/03	---	---	---	---	---	
EMULEX	SO02/L SERIES	DEC	5.7A	---	---	---	---	---	Q-BUS	RLV11/12 W/ RLD1/02	---	---	---	---	---	
EMULEX	UC03	H/A	4.8A	---	---	---	---	---	QBUS	EMUL. MSCP	---	---	---	---	---	
EMULEX	Q001	DEC	2.6A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---	
EMULEX	SC780/B2	DEC	10.0A	---	---	---	---	---	SBI BUS	RPO6	---	---	---	---	---	
EMULEX	TC02	DEC	5.0A	---	---	---	---	---	Q-BUS	TS-11	---	---	---	---	---	
EMULEX	SC788	DEC	10.0A	---	---	---	---	---	SBI BUS	RMD3/05/80	---	---	---	---	---	
EMULEX	QT12	DEC	3.0A	---	---	---	---	---	Q-BUS	TS-11/TSW05	---	---	---	---	---	
EMULEX	SO03/BX	DEC	6.5A	---	---	---	---	---	Q-BUS	RMD2/RMD3/RMD5, RM80	---	---	---	---	---	
EMULEX	SC12/C SERIES	DEC	5.7A	---	---	---	---	---	UNIBUS	RK611 W/ RKO6/07	---	---	---	---	---	
EMULEX	TC05	DEC	6.0A	---	---	---	---	---	Q-BUS	TS-11	---	---	---	---	---	
EMULEX	SC21/B SERIES	DEC	8.0A	---	---	---	---	---	UNIBUS	RH11 W/ RMD2/05, RPO6	---	---	---	---	---	
EMULEX	MEDALIST MD01	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
EMULEX	TC15	DEC	6.0A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---	
EMULEX	SO03/MS	DEC	6.5A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---	
EMULEX	CHAMPION MD21	SCSI	2.0A	---	---	---	---	---	---	---	---	---	---	---	---	
EMULEX	SC72/BX SERIES	DEC	11.0A	---	---	---	---	---	CACHE BUS/UNIBUS	RM 03/05, RPO6, RM80	---	---	---	---	---	
EMULEX	TC03	DEC	6.0A	---	---	---	---	---	Q-BUS	TS-11 (3.5K)	---	---	---	---	---	
EMULEX	TITLEIST MT02	SCSI	2.0A	.4A	---	---	---	---	---	---	---	---	---	---	---	
EMULEX	SO02/C SERIES	DEC	5.7A	---	---	---	---	---	Q-BUS	RK611 W/ RKO6/07	---	---	---	---	---	
EMULEX	SC12/L SERIES	DEC	5.7A	---	---	---	---	---	UNIBUS	RLV11/12 W/ R101/02	---	---	---	---	---	
EMULEX	TC12	DEC	5.2A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---	
EMULEX	SC12/V SERIES	DEC	5.7A	---	---	---	---	---	UNIBUS	RK711 W/ RKO6/07	---	---	---	---	---	
EMULEX	SYS68K/SASI-1	H/A	2.1A	---	.1A	.1A	---	---	VMEBUS	PROV. 4 DMA CHANNELS	---	---	---	---	---	
FORCE COMPUTERS	M1053A	SCSI	5.0A	---	---	1.0A	---	---	---	---	---	---	---	---	---	
FUJITSU AMERICA	RXV21	DEC	2.5A	---	---	---	---	---	Q-BUS	RMD1, RMD2	---	---	---	---	---	
GEN'L ROBOTICS	MWV11	DEC	4.3A	---	.6A	---	---	---	Q-BUS	RLD1/02	---	---	---	---	---	
GEN'L ROBOTICS	SHV22	DEC	3.5A	---	.3A	---	---	---	Q-BUS	RMD3/05	---	---	---	---	---	
GEN'L ROBOTICS	SHV11	DEC	3.5A	---	.3A	---	---	---	Q-BUS	RMD2/05, RPO2, RKO6/07	---	---	---	---	---	
GEN'L ROBOTICS	MWV22	DEC	4.3A	---	.6A	---	---	---	Q-BUS	RLD1/02, RMD2/03	---	---	---	---	---	
GEN'L ROBOTICS	STV11	DEC	2.5A	---	---	---	---	---	Q-BUS	TS-11	---	---	---	---	---	
HITACHI LTD.	63463	LSI	YES	YES	---	---	-20-75	---	---	---	WNCN. CNTRLR	4/6/8 Mhz VERS.	2-um CMOS	48	---	
INTEG. SOLUTIONS	VME-SCS1	H/A	3.1A	---	---	---	---	---	VMEBUS	8-BLK DATA BUFF.CAP.	---	---	---	---	---	
INTEL	8272A	LSI	YES	YES	---	---	0-70	---	---	---	FL. CNTRLR	500 Kbits/sec	SIL.GATE NMOS	40	---	
INTEL	82062-05	LSI	YES	YES	---	---	0-70	---	---	---	WNCN. CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	---	
INTERPHASE CORP.	MAY.SMD PC-80	IBM PC	1.2A	---	---	---	---	---	INC	---	---	---	---	---	---	
KONAN CORP.	DJ210	SCSI	0.9A	---	---	---	---	---	---	---	---	---	---	---	---	
MDB SYSTEMS	MLSI-DK11-RP	DEC	9.5A	---	.6A	---	---	---	Q-BUS	RPO6	---	---	---	---	---	
MDB SYSTEMS	MLSI-TM11	DEC	7.0A	---	---	---	---	---	Q-BUS	TM-11	---	---	---	---	---	
MDB SYSTEMS	MDB-TM11	DEC	7.0A	---	---	---	---	---	UNIBUS	TM-11/TU10	---	---	---	---	---	
MDB SYSTEMS	MLSI-ST511	DEC	6.5A	---	---	---	---	---	Q-BUS	TS-11/TSW05	---	---	---	---	---	
MDB SYSTEMS	MDB-RM11-Q	DEC	7.0A	---	.4A	---	---	---	UNIBUS	RMD2/03/05	---	---	---	---	---	
MDB SYSTEMS	MLSI-RM11	DEC	7.0A	---	.4A	---	---	---	Q-BUS	RMD2/03, RM80	---	---	---	---	---	
MDB SYSTEMS	MDB-DK11-RM	DEC	6.5A	---	.4A	---	---	---	UNIBUS	RMD2/03/05	---	---	---	---	---	
MDB SYSTEMS	MLSI-TS11	DEC	6.5A	---	---	---	---	---	Q-BUS	TS-11/TSW05	---	---	---	---	---	
MDB SYSTEMS	MLSI-RK11	DEC	7.0A	---	.4A	---	---	---	Q-BUS	RKO6/07	---	---	---	---	---	
MDB SYSTEMS	MLSI-DK11-RM	DEC	9.5A	---	.6A	---	---	---	Q-BUS	RMD3/05, RM80	---	---	---	---	---	
MDB SYSTEMS	MDB-DK11-RP	DEC	7.0A	---	.4A	---	---	---	UNIBUS	RPO6	---	---	---	---	---	
MICRO TECHNOLOGY	MXV50	DEC	2.5A	---	---	---	---	---	Q-BUS	RX50	---	---	---	---	---	
MICRO TECHNOLOGY	MLV11M	DEC	4.5A	---	---	---	---	---	Q-BUS	RLD1/02	---	---	---	---	---	
MICRO TECHNOLOGY	MXV22M	DEC	2.5A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---	
MICRO TECHNOLOGY	MX22	DEC	2.5A	---	---	---	---	---	UNIBUS	RMD1/02	---	---	---	---	---	
MICRO TECHNOLOGY	MSV05	DEC	3.5A	---	---	---	---	---	Q-BUS	TSW05	---	---	---	---	---	
MICRO TECHNOLOGY	MLV11	DEC	4.5A	---	---	---	---	---	Q-BUS	RLD1/02	---	---	---	---	---	
MICRO TECHNOLOGY	MXV22	DEC	2.5A	---	---	---	---	---	Q-BUS	RMD1/02	---	---	---	---	---	

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1985 CONTROLLER COMPETITION

Table with columns: MANUFACTURER, MODEL, TYPE, FCS, PRICE (\$ Q I/F), DRIVE (# SECTOR SIZE ERROR FLAN SCSI BUFFER XFR MIN. DIMENSIONS), and HOST. Rows include manufacturers like MINI COMPUTER TECH, NCR CORP., PLESSEY PERIPHERALS, and SCIENT.MICRO SYST. with various drive specifications.

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1986 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	POWER				HOST CHARACTERISTICS				FUNCTION	CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE		
			+5	-5	+12	-12	TEMP. C	BIOS ROM	HOST BUS TYPE	HOST FEATURES				DUAL	PLCC OTHER	
MINI COMPUTER TECH	MCT1300	DEC	6.5A	—	—	—	—	—	—	Q-BUS	RKD6/07	—	—	—	—	—
MINI COMPUTER TECH	EDC24	DEC	6.5A	—	—	—	—	—	—	Q-BUS	RKD6	—	—	—	—	—
MINI COMPUTER TECH	SMV15	DEC	6.5A	—	—	—	—	—	—	UNIBUS	RKD6	—	—	—	—	—
MIZAR, INC.	VME8500	H/A	.55A	—	—	—	—	—	—	VMEBUS	2 VECTD. INTERRUPTS	—	—	—	—	—
NAT'L SEMICOND.	8451/55	LSI	YES	YES	—	—	0-70	—	—	—	—	DATA SEP.	25 Mbits/sec	OX-ISOL BIPOL.	20	—
NAT'L SEMICOND.	DP8463	LSI	YES	YES	—	—	0-70	—	—	—	—	2,7 RLL ENDEC	25 Mbits/sec	2-m CMOS	18	—
NAT'L SEMICOND.	DP8461/65	LSI	YES	YES	—	—	0-70	—	—	—	—	DATA SEP.	25 Mbits/sec	OX-ISOL BIPOL.	—	24 DIP
NAT'L SEMICOND.	DP8462	LSI	YES	YES	—	—	0-70	—	—	—	—	2,7 CODE SYNCH.	25 Mbits/sec	OX-ISOL BIPOL.	—	24 DIP
NAT'L SEMICOND.	DP8466	LSI	YES	YES	—	—	0-70	—	—	—	—	WNCH DSK CNTRLR	25 Mbits/sec	2-m CMOS	48	—
NAT'L SEMICOND.	DP8464	LSI	YES	YES	—	—	0-70	—	—	—	—	PULSE DETECTOR	25 Mbits/sec	OX-ISOL BIPOL.	24	—
NCR CORP.	ADP-41-04	SCSI	2.6A	—	—	—	—	—	—	—	—	—	—	—	—	—
NCR CORP.	ADP-52-01	SCSI	5.0A	—	—	—	—	—	—	—	—	—	—	—	—	—
NCR CORP.	ADP-41-01	SCSI	2.6A	—	—	—	—	—	—	—	—	—	—	—	—	—
NCR CORP.	ADP-54-01	SCSI	1.5A	—	.2A	—	—	—	—	—	—	—	—	—	—	—
NCR CORP.	8310	LSI	YES	YES	—	—	0-70	—	—	—	—	BUS TRANS.	10 MHz	NMOS	40	—
NCR CORP.	ADP-32-02	H/A	3.0A	—	—	—	—	—	—	MULTIBUS I	TO 8 CONCUR. I/O OP.	—	—	—	—	—
NCR CORP.	5386	LSI	YES	YES	—	—	0-70	—	—	—	—	SCSI PRO.CNTRLR	10 MHz	NMOS	48	—
NCR CORP.	ADP-52-02	SCSI	5.0A	—	—	—	—	—	—	—	—	SCSI PRO.CNTRLR	10 MHz	NMOS	40	—
NCR CORP.	5381	LSI	YES	YES	—	—	0-70	—	—	—	—	—	—	—	—	—
NCR CORP.	ADP-31A-01	H/A	.6A	—	—	—	—	—	—	PC, XT	SUPP. DMA XFR MODE	—	—	—	—	—
NCR CORP.	ADP-32-01	H/A	3.0A	—	—	—	—	—	—	MULTIBUS I	TO 8 CONCUR. I/O OP.	—	—	—	—	—
NCR CORP.	ADP-41-03	SCSI	2.6A	—	—	—	—	—	—	—	—	—	—	—	—	—
NCR CORP.	5385E	LSI	YES	YES	—	—	0-70	—	—	—	—	SCSI PRO.CNTRLR	10 MHz	NMOS	48	68
NCR CORP.	5386S	LSI	YES	YES	—	—	0-70	—	—	—	—	SCSI PRO.CNTRLR	20 MHz	NMOS	48	—
NCR CORP.	5380	LSI	YES	YES	—	—	0-70	—	—	—	—	SCSI PRO.CNTRLR	10 MHz	NMOS	40	44
NCR CORP.	ADP-44-02	SCSI	5.0A	1.2A	—	—	—	—	—	—	—	—	—	—	—	—
NEC ELECTR. USA	uPD7261	LSI	YES	YES	—	—	0-70	—	—	—	—	WNCH DSK CNTRLR	12 Mbits/sec*	SIL.GATE NMOS	40	—
NEC ELECTR. USA	uPD765A	LSI	YES	YES	—	—	0-70	—	—	—	—	FLOPPY CNTRLR	500 Kbits/sec	SIL.GATE NMOS	40	—
PEP MODUL.COMPUTER	VD10	H/A	1.0A	—	—	—	—	—	—	VMEBUS	DMA/POLLING MODES	—	—	—	—	—
PLESSEY MICROSYST.	PME SASI-1	H/A	1.8A	—	.3A	.3A	—	—	—	VMEBUS	PROV. 4 DMA CHAN.	—	—	—	—	—
PLESSEY PERIPHERALS	KC21/31	DEC	4.0A	—	—	—	—	—	—	UNIBUS	RKD2	—	—	—	—	—
PLESSEY PERIPHERALS	DCV03	DEC	7.0A	—	—	—	—	—	—	Q-BUS	RKD2/03/05	—	—	—	—	—
PLESSEY PERIPHERALS	KCV21/31	DEC	4.0A	—	—	—	—	—	—	Q-BUS	RKD2	—	—	—	—	—
PLESSEY PERIPHERALS	DC50	DEC	6.0A	—	—	—	—	—	—	UNIBUS	MSCP	—	—	—	—	—
PLESSEY PERIPHERALS	DCV90	DEC	6.0A	—	—	—	—	—	—	Q-BUS	MSCP	—	—	—	—	—
PLESSEY PERIPHERALS	FCV21	DEC	6.0A	—	—	—	—	—	—	Q-BUS	RKD2	—	—	—	—	—
PLESSEY PERIPHERALS	DC02B	DEC	9.0A	—	—	—	—	—	—	UNIBUS	RKD2/05	—	—	—	—	—
PLESSEY PERIPHERALS	DCV12	DEC	7.0A	—	—	—	—	—	—	Q-BUS	RKD2	—	—	—	—	—
PLESSEY PERIPHERALS	CTCV11A	DEC	2.4A	—	—	—	—	—	—	Q-BUS	NONE	—	—	—	—	—
PLESSEY PERIPHERALS	DCV06B	DEC	7.0A	—	—	—	—	—	—	Q-BUS	RKD6	—	—	—	—	—
PLESSEY PERIPHERALS	DCV51	DEC	6.0A	—	—	—	—	—	—	Q-BUS	MSCP	—	—	—	—	—
QUALOGY	D 4140	DEC	3.7A	—	.09A	—	—	—	—	Q-BUS	RKD2	—	—	—	—	—
QUALOGY	D 8255	DEC	6.1A	—	.15A	—	—	—	—	Q-BUS	NONE	—	—	—	—	—
QUALOGY	D 8120	DEC	3.0A	—	—	—	—	—	—	Q-BUS	TS-11/TSV05	—	—	—	—	—
QUALOGY	D 8250	DEC	6.1A	—	.15A	—	—	—	—	Q-BUS	NONE	—	—	—	—	—
QUALOGY	D 4120	DEC	3.7A	—	.09A	—	—	—	—	Q-BUS	RKD2	—	—	—	—	—
QUALOGY	D 8260	DEC	6.1A	—	.15A	—	—	—	—	Q-BUS	NONE	—	—	—	—	—
SCIENT.MICRO SYST.	5060	LSI	YES	YES	—	—	0-70	—	—	—	—	MEM.BUF.CNTRLR	10 MHz	CMOS	—	68
SCIENT.MICRO SYST.	5710	IBM PC	.5A	—	—	—	—	—	—	INC	—	—	—	—	—	—
SCIENT.MICRO SYST.	7100	SCSI	1.5A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	5300	SCSI	1.8A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	7400	SCSI	2.0A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	7200	SCSI	1.8A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	5027	LSI	YES	YES	—	—	0-70	—	—	—	—	2,7 RLL ENC	5-10 MHz	CMOS	—	16
SCIENT.MICRO SYST.	5090	LSI	YES	YES	—	—	0-70	—	—	—	—	IBM-PC BUS CNTRLR	10 MHz	CMOS	—	68
SCIENT.MICRO SYST.	5070	LSI	YES	YES	—	—	0-70	—	—	—	—	DATA SEP.	5-7.5 Mbits/sec	CMOS	—	24
SCIENT.MICRO SYST.	7300	SCSI	1.8A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	FWD 1101	DEC	7.8A	—	—	—	—	—	—	UNIBUS	NONE	—	—	—	—	—
SCIENT.MICRO SYST.	5400	SCSI	2.0A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	FWD 1106	DEC	7.8A	—	—	—	—	—	—	UNIBUS	NONE	—	—	—	—	—
SCIENT.MICRO SYST.	3100	SCSI	.75A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	5200	SCSI	1.8A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	5110	SCSI	1.8A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	5090	LSI	YES	YES	—	—	0-70	—	—	—	—	DISK SEQ/SERDES	10 Mbits/sec	CMOS	—	68
SCIENT.MICRO SYST.	5100	SCSI	1.5A	—	—	—	—	—	—	—	—	—	—	—	—	—
SCIENT.MICRO SYST.	FWD 0101	DEC	7.6A	—	—	—	—	—	—	Q-BUS	NONE	—	—	—	—	—
SCIENT.MICRO SYST.	FWD5001	SCSI	5.0A	—	—	—	—	—	—	—	—	—	—	—	—	—

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1985 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	POWER				HOST CHARACTERISTICS				FUNCTION						
			+5	-5	+12	-12	TEMP. C	BIOS ROM	HOST BUS TYPE	HOST FEATURES	CLOCK/DATA RATE	TECHNOLOGY	PKG SIZE				
													DUAL	PLOC	OTHER		
SCIENT.MICRO SYST.	5011	LSI	YES	YES	---	---	0-70	---	---	---	---	---	DIFF. DRV/RCV	5 Mbits/sec	CMOS	16	---
SCIENT.MICRO SYST.	FMD 0106	DEC	7.6A	---	---	---	---	---	Q-BUS	---	NONE	---	SCSI PRO.CNTRLR	10 Mhz	CMOS	---	68
SCIENT.MICRO SYST.	5080	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	---	---	---	---
SCIENT.MICRO SYST.	510	H/A	.5A	---	---	---	---	---	PC, XT	---	---	---	---	---	---	---	---
SIGEN CORP.	T-44	IBM PC	.6A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SIGEN CORP.	T-36	IBM PC	.6A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SIGEN CORP.	T-36M	IBM PC	.6A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SIGEN CORP.	DC6	IBM PC	1.8A	---	.05A	.003A	---	---	---	---	---	---	---	---	---	---	---
SIGMA INFO SYST.	STC TSV11	DEC	3.75A	---	---	---	---	---	Q-BUS	---	TS-11/TSW05	---	---	---	---	---	---
SIGMA INFO SYST.	SDC RQ011-B	DEC	2.6A	---	---	---	---	---	Q-BUS	---	MSCP	---	---	---	---	---	---
SIGMA INFO SYST.	SDC RQ011-A	DEC	2.6A	---	---	---	---	---	Q-BUS	---	MSCP	---	---	---	---	---	---
SIGMA INFO SYST.	SDC RRV31	DEC	2.7A	---	---	---	---	---	Q-BUS	---	RXD1/02	---	---	---	---	---	---
SIGMA INFO SYST.	SDC-RLV112	H/A	3.75A	---	---	---	---	---	QBUS	---	RXD CAP,RL01/RL02	---	---	---	---	---	---
SIGNETICS CORP.	SCB68459	LSI	YES	YES	---	---	0-70	---	---	---	---	---	PHASE-LOCK LOOP	10 Mbits/sec	SIL.GATE NMOS	24	---
SIGNETICS CORP.	SCN68454	LSI	YES	YES	YES	---	0-70	---	---	---	---	---	WNCH/FL CNTRLR	10 Mbits/sec	SIL.GATE NMOS	48	---
SPECTRA LOGIC CORP.	SPECTRA 15 PLUS	DEC	7.0A	---	---	---	---	---	Q-BUS	---	RMD2/05/80, RPO6	---	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 121 PLUS	DEC	8.0A	---	---	---	---	---	UNIBUS	---	RMD2/05,RP4-7,TS-11	---	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 12	DEC	8.0A	---	---	---	---	---	UNIBUS	---	RKD6/07	---	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 111 PLUS	DEC	8.0A	---	---	---	---	---	UNIBUS	---	RMD2/05, RPO6	---	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 25 PLUS	DEC	7.0A	---	---	---	---	---	Q-BUS	---	RMD2/05, RMD0, TS-11	---	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 21	DEC	10.0A	---	---	---	---	---	UNIBUS	---	RKD6/07 EXT., TS-11	---	---	---	---	---	---
STANDARD MICROSYST.	FDC9266	LSI	YES	YES	---	---	0-70	---	---	---	---	---	FL DSK CNTRLR	500Kbits/sec	SIL.GATE NMOS	40	---
STANDARD MICROSYST.	HDC9224	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH/FL CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	---
STANDARD MICROSYST.	FDC9216	LSI	YES	YES	---	---	0-70	---	---	---	---	---	DATA SEP. CHIP	125-250 Kbits/sec	SIL.GATE NMOS	8	---
STANDARD MICROSYST.	FDC9226	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH DSK SEP.	5 Mhz	CMOS	24	---
STANDARD MICROSYST.	FDC765A	LSI	YES	YES	---	---	0-70	---	---	---	---	---	FL DSK CNTRLR	500 Kbits/sec	SIL.GATE NMOS	40	---
STANDARD MICROSYST.	HDC1100	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH CNTRLR CHIPSET	5 Mbits/sec,	SIL.GATE NMOS	20	---
STANDARD MICROSYST.	FDC9225	LSI	YES	YES	---	---	0-70	---	---	---	---	---	5 Mhz	CMOS	48	---	
STANDARD MICROSYST.	FDC9229	LSI	YES	YES	---	---	0-70	---	---	---	---	---	FL DATA SEP/PRECOM	500Kbits/sec	SIL.GATE NMOS	20	---
STANDARD MICROSYST.	FDC179X	LSI	YES	YES	---	---	0-70	---	---	---	---	---	FL DSK CNTRLR	125-300 Kbits/sec	SIL.GATE NMOS	40	---
SUNOL SYSTEMS	BLP-IBM2	IBM PC	1.5A	---	---	---	---	---	INC	---	---	---	---	---	---	---	---
SUNOL SYSTEMS	DC1001	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH/FL CNTRLR	15 Mbits/sec	CMOS	40	---
SUNOL SYSTEMS	BLP-IBM1	IBM PC	1.5A	---	---	---	---	---	INC	---	---	---	---	---	---	---	---
SUNOL SYSTEMS	RB1002	LSI	YES	YES	---	---	0-70	---	---	---	---	---	RAM BUFF. CNTRLR	10 Mhz	CMOS	40	---
SYSGEN CORP.	S1536	SCSI	2.5A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC3011	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC2101	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC2131	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC2111	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC2201	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC3000	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC3021	SCSI	6.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SYSGEN CORP.	SC4000XR	SCSI	1.5A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TD SYSTEMS	TDL-12	H/A	5.0A	---	---	---	---	---	QBUS	---	EM. DEC RLV	---	---	---	---	---	---
WANGTEK	SCS1-36	SCSI	2.0A	---	.3A	---	---	---	---	---	---	---	---	---	---	---	---
WANGTEK	PC-36	IBM PC	1.0A	---	.1A	---	---	---	INC	---	---	---	---	---	---	---	---
WEBSTER COMPUTER	SMDQ11-A	DEC	4.0A	---	---	---	---	---	Q-BUS	---	MSCP	---	---	---	---	---	---
WEBSTER COMPUTER	PCLV111-J	DEC	2.5A	---	.25A	---	---	---	Q-BUS	---	NONE	---	---	---	---	---	---
WEBSTER COMPUTER	SRQ011-B	DEC	2.6A	---	---	---	---	---	Q-BUS	---	MSCP	---	---	---	---	---	---
WESPERCORP	TDQ-1V	DEC	6.0A	---	---	---	---	---	Q-BUS	---	TSV05	---	---	---	---	---	---
WESPERCORP	TC-131	DEC	7.0A	---	---	---	---	---	UNIBUS	---	TM-11	---	---	---	---	---	---
WESPERCORP	DC-251	DEC	6.0A	---	---	---	---	---	Q-BUS	---	RMD2	---	---	---	---	---	---
WESPERCORP	TD-1V	DEC	7.0A	---	---	---	---	---	UNIBUS	---	TS-11	---	---	---	---	---	---
WESPERCORP	DC-231A	DEC	9.4A	---	---	---	---	---	UNIBUS	---	RMD2	---	---	---	---	---	---
WESPERCORP	TD-111	DEC	7.0A	---	---	---	---	---	UNIBUS	---	TS-11	---	---	---	---	---	---
WESPERCORP	TC-151	DEC	9.0A	---	---	---	---	---	Q-BUS	---	TM-11	---	---	---	---	---	---
WESPERCORP	TDQ-111	DEC	6.0A	---	---	---	---	---	Q-BUS	---	TSV05	---	---	---	---	---	---
WESTERN DIGITAL	WD1003A-WA2	IBM PC	2.5A	---	.15A	.01A	---	---	W/O	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1002-WA2	IBM PC	2.5A	---	.15A	.01A	---	---	W/O	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1002C-WX2	IBM PC	1.0A	---	.05A	---	---	---	INC	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1010A-05	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	---
WESTERN DIGITAL	WD9232	LSI	YES	YES	---	---	0-70	---	---	---	---	---	DATA SEP. CHIP	125-250 Kbits/sec	SIL.GATE NMOS	8	---
WESTERN DIGITAL	WD1050	LSI	YES	YES	---	---	0-70	---	---	---	---	---	WNCH CNTRLR	9.6 Mbits/sec	SIL.GATE NMOS	---	68
WESTERN DIGITAL	WD1036S-WX2	IBM PC	1.0A	---	.03A	---	---	---	W/O	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1100-19	LSI	YES	YES	---	---	0-70	---	---	---	---	---	SCSI PRO. CNTRLR	5 Mhz	SIL.GATE NMOS	---	40 DIP
WESTERN DIGITAL	WD9020	LSI	YES	YES	---	---	0-70	---	---	---	---	---	MFM ENC/DEC	5 Mbits/sec	CMOS	40	---
WESTERN DIGITAL	WD11000-22	LSI	YES	YES	---	---	0-70	---	---	---	---	---	BUFF. MEM. CNTRLR	5 Mhz	CMOS	---	84 JED

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1986 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE						HOST				DIMENSIONS				
				\$	Q	I/F	#			SECTOR SIZE BYTES	ERROR DETECTION	CORRECTION	FLAW SKIPPING	SCSI LEVEL	BUFFER KB	XFR MB/SEC	MIN. LEAV	L	W	H
							F	W	T											
WESTERN DIGITAL	WD5027	LSI	NOW	29	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD1770-00	LSI	NOW	15	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD10025-WX2	IBM PC	85-40	150	100	ST506/412	---	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	---	2:1	5.75	4.20	0.50		
WESTERN DIGITAL	WD2010A-05	LSI	NOW	50	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD5090	LSI	NOW	78	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD279X	LSI	NOW	15	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD1002-WAH	IBM PC	NOW	200	100	ST506/412	---	---	32-BIT ECC	S-B/5 BITS	T-L	---	---	---	2:1	8.10	4.20	0.50		
WESTERN DIGITAL	WD9216	LSI	NOW	6	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD1003A-WAH	IBM PC	NOW	190	100	ST506/412, REM.	---	---	32-BIT ECC	S-B/5 BITS	T-L	---	---	---	1:1	8.10	4.20	0.50		
WESTERN DIGITAL	WD3030	LSI	NOW	60	100	---	---	---	---	---	---	---	---	---	---	---	---	---		
WESTERN DIGITAL	WD1036R-SHD	SCSI	NOW	215	100	QIC-36	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	XSASI	8.00	1.0	N/A	8.00	5.50	0.75		
WESTERN DIGITAL	WD10025-SHD	SCSI	NOW	175	100	ST506/412	---	256 & 512	32-BIT ECC	S-B/5 BITS	T-L	XSASI	0.51	0.8	2:1	5.75	4.00	0.75		
WESTERN DIGITAL	WD1003-SCS	SCSI	NOW	185	100	ST506/412	---	128-1024	32-BIT ECC	S-B/5 BITS	S-L	R/D	1.00	1.0	1:1	8.00	5.75	0.75		
WESTERN DIGITAL	WD1002-SHD	SCSI	NOW	175	100	ST506/412	---	256 & 512	32-BIT ECC	S-B/5 BITS	T-L	XSASI	0.51	0.8	2:1	8.00	5.75	0.75		
WESTERN DIGITAL	WD1002-SHD	SCSI	NOW	295	100	ESD1 (5 Mbits/sec)	---	256-1024	48-BIT ECC	S-B/16 BITS	S-L	R/D	1.00	1.5	1:1	13.13	5.75	0.75		
XEBEC CORP.	S1210	SCSI	NOW	185	100	ST506/412, REM.	---	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	---	2:1	13.13	4.20	0.85		
XEBEC CORP.	S1210A	IBM PC	NOW	200	100	ST506/412, SA460	2	2	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	1:1	13.13	7.20	0.75		
XEBEC CORP.	S1420	SCSI	NOW	200	100	ST506/412 AND SA400/450	2	2	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.69	
XEBEC CORP.	S1240	IBM PC	NOW	250	100	ESD1 (10 Mbits/sec)	---	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	---	2:1	13.13	4.20	0.85		
XEBEC CORP.	S1410A	SCSI	NOW	200	100	ST506/412	---	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.75		
XEBEC CORP.	S1250	IBM PC	NOW	250	100	ST506/412, SA460	2	2	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	2:1	13.13	4.20	0.85		
XEBEC CORP.	S2410A	SCSI	NOW	295	100	ESD1 (10 Mbits/sec)	---	---	48-BIT ECC	S-B/16 BITS	S-L	R/D	1.00	1.5	1:1	8.00	5.75	0.75		
XEBEC CORP.	S1255	IBM PC	NOW	250	100	ST506/412	---	---	32-BIT ECC	S-B/11 BITS	T-L	---	---	---	2:1	13.13	4.20	0.85		
XEBEC CORP.	S1405	SCSI	NOW	185	100	ST506/412	---	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.75		
XEBEC CORP.	S1401	SCSI	NOW	190	100	SA400/450/800/850	4	---	128-1024	16-BIT CRC	NONE	T-L	XSASI	1.00	0.6	1:1	8.00	5.75	0.60	
XEBEC CORP.	S1490	SCSI	NOW	200	100	SHD	---	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	10.00	8.00	0.75		
XEBEC CORP.	APPLE ADAPTER	H/A	NOW	90	---	---	---	---	---	---	---	XSASI	---	1	---	6.50	3.10	0.75		
XEBEC CORP.	IBM-PC ADAPTER	H/A	NOW	90	---	---	---	---	---	---	---	XSASI	---	1	---	8.75	4.23	0.60		

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1986 CONTROLLER COMPETITION

MANUFACTURER	MODEL	TYPE	POWER				TEMP.		BIOS		HOST CHARACTERISTICS		FUNCTION		PACKG SIZE				
			+5	-5	+12	-12	C	ROM	HOST BUS TYPE	HOST FEATURES	CLOCK/ DATA RATE	TECHNOLOGY	DUAL	PLCC	OTHER				
WESTERN DIGITAL	WD5027	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	RL. ENC/DEC	7.5 Mbits/sec	CMOS	18	---	---
WESTERN DIGITAL	WD1770-00	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	FL. DSK. CNTRLR	290Kbits/sec	SIL.GATE NMOS	28	---	---
WESTERN DIGITAL	WD10025-WX2	IBM PC	1.0A	---	.05A	---	---	---	---	INC	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD2010A-05	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	WNCH CNTRLRLR	5 Mbits/sec	SIL.GATE NMOS	40	---	---
WESTERN DIGITAL	WD5050	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	WNCH CNTRLRLR	5 Mbits/sec	CMOS	---	68	---
WESTERN DIGITAL	WD279X	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	FL. DSK. CNTRLRLR	125-900 KBits/sec	SIL.GATE NMOS	40	---	---
WESTERN DIGITAL	WD1002-MAH	IBM PC	1.5A	---	.05A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD9216	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	DATA SEP. CHIP	125-250 KBits/sec	SIL.GATE NMOS	8	---	---
WESTERN DIGITAL	WD1003A-MAH	IBM PC	1.5A	---	.05A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD3030	LSI	YES	YES	---	---	0-70	---	---	---	---	---	---	WNCH CNTRLRLR	5 Mbits/sec	CMOS	40	---	---
WESTERN DIGITAL	WD1036R-SHD	SCSI	1.8A	---	.1A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD10025-SHD	SCSI	1.5A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1003-SCS	SCSI	1.5A	---	.25A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WESTERN DIGITAL	WD1002-SHD	SCSI	1.5A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S2410	SCSI	2.0A	---	.003A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1210A	IBM PC	1.25A	---	.015A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1220	IBM PC	3.0A	---	.066A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1420	SCSI	2.0A	---	.003A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1240	IBM PC	1.25A	---	.015A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1410A	SCSI	2.0A	---	.05A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1250	IBM PC	1.25A	---	.015A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S2410A	SCSI	2.0A	---	.003A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1255	IBM PC	1.25A	---	.015A	---	---	---	---	W/O	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1405	SCSI	2.0A	---	.05A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1401	SCSI	1.9A	---	.02A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	S1490	SCSI	2.5A	---	.11A	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	APPLE ADAPTER	H/A	.63A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
XEBEC CORP.	IBM-PC ADAPTER	H/A	1.0A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
										APPLE 11+/11e				DOS 3.3, ProDOS, CP/M					
										IBM-PC				DMA/PRGRND I/O MD					

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1985 CONTROLLER COMPETITION - BY SCSI

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE					HOST			DIMENSIONS			POWER							
				\$	Q	I/F	#	SECTOR SIZE	ERROR	FLAW	SCSI	BUFFER	XFR	MIN.	L	W	H	+5	-5	+12	-12			
							F	M	T	BYTES	DETECTION	CORRECTION	SKIPPING	LEVEL	KB	MB/SEC	LEAV							
ADAPTEC, INC.	ACB-3530	SCSI	NOW	425	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	8.00	1.5	N/A	8.75	5.50	0.50	1.7A	--	0.1A	--
ADAPTEC, INC.	ACB-4070	SCSI	NOW	280	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50	1.5A	--	0.3A	--
ADAPTEC, INC.	ACB-4000	SCSI	NOW	225	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50	1.5A	--	0.3A	--
ADAPTEC, INC.	ACB-5500	SCSI	NOW	560	100	ST506/412	--	4	--	256-2048	32-BIT ECC	S-B/8 BITS	S-L	R/D	2.00	1.5	1:1	7.75	5.75	0.50	1.5A	--	0.3A	--
ADAPTEC, INC.	ACB-5580	SCSI	NOW	800	100	SMD	--	8	--	256-2048	32-BIT ECC	S-B/8 BITS	S-L	R/D	2.00	1.5	1:1	14.00	7.00	0.50	3.0A	--	0.6A	--
ADAPTEC, INC.	ACB-4010	SCSI	NOW	225	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/8 BITS	S-L	S/I	1.00	1.5	1:1	7.75	5.75	0.50	1.5A	--	0.3A	--
ADAPTIVE DATA	COMBO-11	SCSI	86-1Q	525	100	ESD1,QIC-36	--	2	1	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.50	5.25	0.50	1.5A	--	0.1A	--
ADAPTIVE DATA	PYTHON-11	SCSI	85-4Q	305	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	16.00	2.0	N/A	7.75	5.60	0.50	1.5A	--	0.1A	--
ADAPTIVE DATA	SABER-11	SCSI	85-4Q	295	100	ST506/412	--	4	--	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.50	5.25	0.50	1.0A	--	--	--
ADAPTIVE DATA	COMBO-1	SCSI	86-1Q	480	100	ST506/412, QIC-36	--	2	1	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.50	5.25	0.50	1.5A	--	0.1A	--
ADAPTIVE DATA	RAPIER-11	SCSI	85-4Q	350	100	ESD1	--	4	--	128-4096	48-BIT ECC	D-B/12 BITS	S-L	R/D	64.00	2.0	1:1	7.50	5.25	0.50	1.0A	--	--	--
ADV. STORAGE	ASC-525	SCSI	NOW	992	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/5 BITS	S-L	R/D	320.00	1.5	1:1	8.00	5.75	0.75	3.0A	--	--	--
AMPRO COMPUTERS	LITTLE BRD/186	SCSI	NOW	424	100	SA450/460, SCSI	4	--	4	128-1024	16-BIT CRC	N/A	N/A	R/D	N/A	1.5	N/A	7.75	5.75	0.75	.95A	--	.05A	.05A
AMPRO COMPUTERS	LITTLE BRD/+	SCSI	NOW	297	100	SA450/460, SCSI	4	--	4	128-1024	16-BIT CRC	N/A	N/A	R/D	N/A	1.5	N/A	7.75	5.75	0.75	.95A	--	.05A	.05A
CENTAN CORP.	NDC-3011	SCSI	NOW	135	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/11 BITS	T-L	XSASI	1.00	1.0	1:1	5.75	4.02	0.50	1.0A	--	--	--
DATA TECHNOLOGY	703	SCSI	NOW	767	100	SA1000/Q2000, SAB800/850	4	4	--	256-1024	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	13.50	8.50	0.49	4.6A	.5A	--	--
DATA TECHNOLOGY	530D/DB	SCSI	NOW	360	100	ST506/412, QIC-02	--	2	1	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49	2.0A	--	--	--
DATA TECHNOLOGY	540D/DB	SCSI	NOW	440	100	ST5/4, SA4/45, KOD.3.3, QIC-02	2	2	1	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	1.00	2.0	1:1	10.00	5.75	0.49	2.6A	--	--	--
DATA TECHNOLOGY	803C	SCSI	NOW	500	100	ESD1	--	4	--	256-1024	32-BIT ECC	S-B/8 BITS	T-L	R/D	2.00	1.6	1:1	10.00	5.75	0.49	4.6A	.5A	--	--
DATA TECHNOLOGY	700	SCSI	NOW	793	100	SA1000/Q2000, QIC-02	--	4	1	256-1024	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	16.00	8.50	0.49	4.6A	.5A	--	--
DATA TECHNOLOGY	802C	SCSI	NOW	500	100	ANSI	--	4	--	256-1024	32-BIT ECC	S-B/8 BITS	T-L	S/I	1.00	2.0	1:1	8.25	8.00	0.49	2.0A	--	--	--
DATA TECHNOLOGY	510CU	SCSI	NOW	287	100	DMA SYSTEMS/OMEGA	--	2	--	256	24-BIT ECC	S-B/4 BITS	S-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49	1.5A	--	--	--
DATA TECHNOLOGY	520D/DB	SCSI	NOW	286	100	ST5/412, SA4/450, KOD.3.3	2	2	--	256-1024	32-BIT ECC	S-B/11 BITS	T-L	S/I	1.00	1.0	2:1	8.25	8.00	0.49	2.0A	--	--	--
DATA TECHNOLOGY	515CU	SCSI	NOW	287	100	DMA SYSTEMS/OMEGA	--	2	--	256	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	1.0	2:1	8.25	8.00	0.49	2.0A	--	--	--
DATA TECHNOLOGY	515CD	SCSI	NOW	287	100	HONEYWELL BULL 520	--	2	--	256	24-BIT ECC	S-B/4 BITS	T-L	S/I	1.00	2.0	1:1	8.00	5.75	0.49	1.0A	--	--	--
DATA TECHNOLOGY	510D/DB	SCSI	NOW	247	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	1.00	2.0	1:1	13.00	8.00	0.49	4.0A	.5A	--	--
DATA TECHNOLOGY	801C	SCSI	NOW	700	100	SMD(2.4 Mb/sec)	--	2	--	256-1024	32-BIT ECC	S-B/8 BITS	T-L	R/D	2.00	1.6	1:1	13.00	8.00	0.49	4.0A	.5A	--	--
DIST.PROC.TECH.	PH-3010A/80	SCSI	85-4Q	1145	100	SA1000	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/88	SCSI	85-4Q	1185	100	SA1000, SA810/860	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/50	SCSI	85-4Q	1145	100	ST506/412	4	4	--	256-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/08	SCSI	85-4Q	1000	100	SA810/860	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/05	SCSI	85-4Q	1000	100	SA410/460	4	4	--	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/38	SCSI	85-4Q	1185	100	ST506/412, SA810/860	4	4	4	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/55	SCSI	85-4Q	1185	100	ST506/412, SA410/460	4	4	4	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
DIST.PROC.TECH.	PH-3010A/85	SCSI	85-4Q	1185	100	SA1000, SA410/460	4	4	4	128-1024	32-BIT ECC	S-B/11 BITS	S-L	S/I	512.00	1.5	1:1	12.50	5.75	0.50	4.0A	--	--	--
EMULEX	TITLEIST MT02	SCSI	NOW	435	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	14.00	1.5	N/A	8.00	5.75	0.50	2.0A	.4A	--	--
EMULEX	MEDALIST MD01	SCSI	NOW	395	100	ST506/412	--	2	--	256 & 512	48-BIT ECC	S-B/11 BITS	S-L	R/D	14.00	1.5	1:1	8.00	5.75	0.50	2.0A	--	--	--
EMULEX	CHAMPION MD21	SCSI	NOW	395	100	ESD1(10 Mbit/sec)	--	2	--	256 & 512	48-BIT ECC	S-B/11 BITS	S-L	R/D	1.00	1.5	1:1	13.00	7.70	0.80	5.0A	--	1.0A	--
FUJITSU AMERICA	M1053A	SCSI	NOW	895	100	SMD(2.4 Mb/sec)	--	4	--	256-1024	48-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	1:1	5.75	4.00	0.50	0.9A	--	--	--
KONAN CORP.	DJ210	SCSI	NOW	140	100	ST506/412	--	2	--	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.5	1:1	14.00	8.00	0.60	5.0A	1.2A	--	--
NCR CORP.	ADP-44-02	SCSI	NOW	800	100	SMD(1.2 Mb/sec)	--	4	--	512	56-BIT ECC	S-B/11 BITS	S-L	R/D	0.51	1.5	1:1	14.00	9.00	0.60	5.0A	--	--	--
NCR CORP.	ADP-92-02	SCSI	NOW	930	100	PERTEC 9-TRACK PE	--	4	N/A	N/A	PARITY	S-T/1 BIT	BLK RE-W	R/D	64.00	1.1	N/A	12.00	9.00	0.60	5.0A	--	--	--
NCR CORP.	ADP-52-01	SCSI	NOW	930	100	PERTEC 9-TRACK PE	--	2	N/A	N/A	PARITY	S-T/1 BIT	BLK RE-W	R/D	64.00	1.1	N/A	12.00	9.00	0.60	5.0A	--	--	--
NCR CORP.	ADP-41-04	SCSI	NOW	407	100	ST506/412	--	2	--	256 & 512	56-BIT ECC	S-B/11 BITS	T-L	R/D	0.51	1.3	1:1	8.00	5.75	0.60	2.6A	--	.2A	--
NCR CORP.	ADP-54-01	SCSI	85-4Q	417	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	N/A	1.5	N/A	8.00	5.75	0.50	1.5A	--	--	--
NCR CORP.	ADP-41-01	SCSI	NOW	497	100	ST506/412, SA400/450	4	4	4	256 & 512	56-BIT ECC	S-B/11 BITS	T-L	R/D	0.51	1.3	1:1	10.20	5.75	0.60	2.6A	--	--	--
NCR CORP.	ADP-41-03	SCSI	NOW	460	100	ST506/412	--	4	--	256 & 512	56-BIT ECC	S-B/11 BITS	T-L	R/D	0.51	1.3	1:1	10.20	5.75	0.60	2.6A	--	--	--
SCIENT.MICRO	3100	SCSI	NOW	200	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	2.00	1.5	1:1	4.00	5.75	0.75	.75A	--	--	--
SCIENT.MICRO	7400	SCSI	85-4Q	385	100	ST5/412, ESD1, SA4/8, QIC-02	4	2	1	256-1024	32/48-BIT/ECC	S-B/5-11 BITS	T-L	S/I	8.00	1.5	1:1	8.00	5.75	0.75	2.0A	--	--	--
SCIENT.MICRO	5100	SCSI	NOW	200	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	2.00	1.5	1:1	8.00	5.75	0.75	1.8A	--	--	--
SCIENT.MICRO	5300	SCSI	NOW	262	100	ST506/412, QIC-02	--	2	1	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	8.00	1.5	1:1	8.00	5.75	0.75	1.8A	--	--	--
SCIENT.MICRO	7200	SCSI	85-4Q	312	100	ST5/412, ESD1, SA4/450/8/850	2	2	1	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	8.00	1.5	1:1	8.00	5.75	0.75	2.0A	--	--	--
SCIENT.MICRO	5400	SCSI	NOW	335	100	ST5/41, SA4/8, QIC-02	1	2	--	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	8.00	1.5	1:1	8.00	5.75	0.75	1.8A	--	--	--
SCIENT.MICRO	5110	SCSI	NOW	200	100	ST506/412	--	2	--	256-1024	32-BIT ECC	S-B/5 BITS	T-L	XSASI	2.00	1.5	1:1	8.00	5.75	0.75	1.5A	--	--	--
SCIENT.MICRO	7100	SCSI	85-4Q	250	100	ST506/412, ESD1	--	2	--	256-1024	32/48-BIT/ECC	S-B/5-11 BITS	S-L	R/D	2.00	1.5	1:1	8.00	5.75	0.75	1.8A	--	--	--
SCIENT.MICRO	5200	SCSI	NOW	262	100	ST5/412, SA4/450/800/850	2	2	2	256-1024	32-BIT ECC	S-B/5 BITS	T-L	S/I	2.00	1.5	1:1	13.70	8.25	0.75	5.0A	--	--	--
SCIENT.MICRO	FMD5001	SCSI	NOW	700	100	SA1000, SAB800/850	2	2	--	128-1024	32-BIT ECC	S-B/6 BITS	T-L	SASI	1.00	1.0	1:1	15.00	8.25	0.75				

1985 CONTROLLER COMPETITION - BY SCSI

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE						HOST			DIMENSIONS			POWER																		
				\$	Q	I/F	#	SECTOR	SIZE	DETECTION	ERROR	CORRECTION	FLAW	SCSI	BUFFER	XFR	MIN.	L	W	H	+5	-5	+12	-12												
							F	W	T	BYTES				LEVEL	KB	MB/SEC	LEAV																			
WANGTEK	SCSI-36	SCSI	NOW	500	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	R/D	10.00	1.5	N/A	8.00	5.75	0.50	2.0A	--	.3A	--												
WESTERN DIGITAL	WD1002-SHD	SCSI	NOW	175	100	ST506/412	--	2	--	256 & 512	32-BIT ECC	S-B/5 BITS	T-L	XSASI	0.51	0.8	2:1	8.00	5.75	0.75	1.5A	--	--	--												
WESTERN DIGITAL	WD1036R-SHD	SCSI	NOW	215	100	QIC-36	--	--	1	QIC-11/24	16-BIT CRC	R/W	BLK RE-W	XSASI	8.00	1.0	N/A	8.00	5.50	0.75	1.8A	--	.1A	--												
WESTERN DIGITAL	WD1002S-SHD	SCSI	NOW	175	100	ST506/412	--	2	--	256 & 512	32-BIT ECC	S-B/5 BITS	T-L	XSASI	0.51	0.8	2:1	5.75	4.00	0.75	1.5A	--	--	--												
WESTERN DIGITAL	WD1003-SCS	SCSI	NOW	185	100	ST506/412	--	2	--	128-1024	32-BIT ECC	S-B/5 BITS	S-L	R/D	1.00	1.0	1:1	8.00	5.75	0.75	1.5A	--	.25A	--												
XEBEC CORP.	S2410A	SCSI	NOW	295	100	ESD1 (10 Mbits/sec)	--	4	--	256-1024	48-BIT ECC	S-B/16 BITS	S-L	R/D	1.00	1.5	1:1	8.00	5.75	0.75	2.0A	.003A	--	--												
XEBEC CORP.	S1405	SCSI	NOW	185	100	ST506/412	--	2	--	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.75	2.0A	--	.05A	--												
XEBEC CORP.	S1490	SCSI	NOW	200	100	SHD	--	2	--	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	10.00	8.00	0.75	2.5A	.11A	--	--												
XEBEC CORP.	S1401	SCSI	NOW	150	100	SA400/450/800/850	4	--	--	128-1024	16-BIT CRC	NONE	T-L	XSASI	1.00	0.6	1:1	8.00	5.75	0.60	1.9A	--	.02A	--												
XEBEC CORP.	S1410A	SCSI	NOW	200	100	ST506/412	--	2	--	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.75	2.0A	--	.05A	--												
XEBEC CORP.	S1420	SCSI	NOW	200	100	ST506/412 AND SA400/450	2	2	--	256 & 512	32-BIT ECC	S-B/11 BITS	T-L	XSASI	0.51	1.0	3:1	8.00	5.75	0.69	2.0A	--	.003A	--												
XEBEC CORP.	S2410	SCSI	NOW	295	100	ESD1 (5 Mbits/sec)	--	4	--	256-1024	48-BIT ECC	S-B/16 BITS	S-L	R/D	1.00	1.5	1:1	8.00	5.75	0.75	2.0A	.003A	--	--												

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1985 CONTROLLER COMPETITION - BY LSI

MANUFACTURER	MODEL	TYPE	FCS	PRICE		POWER				FUNCTION	CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE			
				\$	Q	+5	-5	+12	-12				TEMP C	DUAL	PLCC	OTHER
ADAPTEC, INC.	AIC-300	LSI	NOW	21	100	YES	YES	--	--	0-70	BUFF.CNTRLR	10 Mhz	SIL.GATE NMOS	40	--	--
ADAPTEC, INC.	AIC-250	LSI	NOW	16	100	YES	YES	--	--	0-70	ENC/DEC	500 KHz-10MHz	SIL.GATE NMOS	24	--	--
ADAPTEC, INC.	AIC-100	LSI	NOW	65	100	YES	YES	--	--	0-70	WNCH.CNTRLR	10 Mhz	SIL.GATE NMOS	40	--	--
ADAPTEC, INC.	AIC-270	LSI	NOW	24	100	YES	YES	--	--	0-70	ENC/DEC	500 KHz-10MHz	SIL.GATE NMOS	24	--	--
ADAPTEC, INC.	AIC-010	LSI	86-1Q	115	2500	YES	YES	--	--	0-70	CNTRLR CHIP	24 Mhz	CMOS	40	44	--
ADAPTEC, INC.	AIC-010	LSI	NOW	90	2500	YES	YES	--	--	0-70	CNTRLR CHIP	5/10/15 Mhz	CMOS	40	44	--
ADAPTEC, INC.	AIC-010	LSI	NOW	--	--	YES	YES	--	--	0-70	SCSI BUS TRN	N/A	Bipolar	24	--	--
ADAPTIVE DATA SYS.	ADS-3050	LSI	--	--	--	YES	YES	--	--	0-70	Tape Serdes	6 Mhz	CMOS	--	68	--
ADAPTIVE DATA SYS.	ADS-4360	LSI	--	--	--	YES	YES	--	--	0-70	BUFF.MGR.+	15 Mhz	CMOS	--	68	--
ADAPTIVE DATA SYS.	ADS-3570	LSI	--	--	--	YES	YES	--	--	0-70	WNCH.CNTRLR	24 Mhz	CMOS	--	68	--
ADAPTIVE DATA SYS.	ADS-1000	LSI	--	--	--	YES	YES	--	--	0-70	WNCH DATA SEP.	16 Mbits/sec	Bipolar	48	--	--
ADV. MICRO DEVICES	Am9581	LSI	86-2Q	20	5	YES	YES	--	--	0-70	WNCH/FL CNTRLR	15 Mbits/sec	NMOS	--	68	--
ADV. MICRO DEVICES	Am9580	LSI	86-2Q	65	5	YES	YES	--	--	0-70	DATA SEP.	15 Mhz	CMOS	--	68	--
DATA TECH. CORP.	DTC1505	LSI	--	--	--	YES	YES	--	--	0-70	BUF.MEM.CNTRLR	10 Mhz	CMOS	--	68	--
DATA TECH. CORP.	DTC1506	LSI	--	--	--	YES	YES	--	--	0-70	DATA SEP.	10 Mhz	CMOS	24	--	--
DATA TECH. CORP.	DTC1507	LSI	--	--	--	YES	YES	--	--	0-70	DATA SEP.	10 Mhz	CMOS	24	--	--
HITACHI LTD.	63463	LSI	NOW	63	--	YES	YES	--	--	-20-75	WNCH. CNTRLR	4/6/8 Mhz VERS.	2-um CMOS	48	--	--
INTEL	8272A	LSI	NOW	7	100	YES	YES	--	--	0-70	FL. CNTRLR	500 Kbits/sec	SIL.GATE NMOS	40	--	--
INTEL	82062-05	LSI	NOW	32	100	YES	YES	--	--	0-70	WNCH. CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	--	--
NAT'L SEMICOND.	DP8463	LSI	NOW	30	100	YES	YES	--	--	0-70	2,7 RLL ENDEC	25 Mbits/sec	2-m CMOS	18	--	--
NAT'L SEMICOND.	DP8464	LSI	NOW	22	100	YES	YES	--	--	0-70	PULSE DETECTOR	25 Mbits/sec	OX-ISOL BIPOL.	24	--	--
NAT'L SEMICOND.	8451/35	LSI	NOW	26	100	YES	YES	--	--	0-70	DATA SEP.	25 Mbits/sec	OX-ISOL BIPOL.	20	--	--
NAT'L SEMICOND.	DP8466	LSI	NOW	350	25	YES	YES	--	--	0-70	WNCH DSK CNTRLR	25 Mbits/sec	2-m CMOS	48	--	--
NAT'L SEMICOND.	DP8462	LSI	NOW	26	100	YES	YES	--	--	0-70	2,7 OODE SYNCH.	25 Mbits/sec	OX-ISOL BIPOL.	--	--	24 DIP
NAT'L SEMICOND.	DP8461/65	LSI	NOW	26	100	YES	YES	--	--	0-70	DATA SEP.	25 Mbits/sec	OX-ISOL BIPOL.	--	--	24 DIP
NCR CORP.	5380	LSI	NOW	18	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	10 Mhz	NMOS	40	44	--
NCR CORP.	8310	LSI	85-4Q	11	100	YES	YES	--	--	0-70	BUS TRANS.	10 Mhz	NMOS	40	--	--
NCR CORP.	5386	LSI	85-4Q	24	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	10 Mhz	NMOS	48	--	--
NCR CORP.	5381	LSI	NOW	20	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	10 Mhz	NMOS	40	--	--
NCR CORP.	5386S	LSI	86-1Q	27	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	20 Mhz	NMOS	48	--	--
NCR CORP.	5385E	LSI	NOW	30	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	10 Mhz	NMOS	48	68	--
NEC ELECTR. USA	uPD7261	LSI	NOW	57	100	YES	YES	--	--	0-70	WNCH DSK CNTRLR	12 Mbits/sec	SIL.GATE NMOS	40	--	--
NEC ELECTR. USA	uPD765A	LSI	NOW	8	100	YES	YES	--	--	0-70	FLOPPY CNTRLR	900 Kbits/sec	SIL.GATE NMOS	40	--	--
SCIENT.MICRO SYST.	5050	LSI	--	--	--	YES	YES	--	--	0-70	DISK SEQ/SERDES	10 Mbits/sec	CMOS	--	68	--
SCIENT.MICRO SYST.	5027	LSI	--	--	--	YES	YES	--	--	0-70	2,7 RLL ENC	5-10 Mhz	CMOS	16	--	--
SCIENT.MICRO SYST.	5060	LSI	--	--	--	YES	YES	--	--	0-70	MEM. BUF. CNTRLR	10 Mhz	CMOS	--	68	--
SCIENT.MICRO SYST.	5090	LSI	--	--	--	YES	YES	--	--	0-70	IBM-PC BUS CNTRLR	10 Mhz	CMOS	--	68	--
SCIENT.MICRO SYST.	5011	LSI	--	--	--	YES	YES	--	--	0-70	DIFF. DRV/RCV	5 Mbits/sec	CMOS	16	--	--
SCIENT.MICRO SYST.	5080	LSI	--	--	--	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	10 Mhz	CMOS	--	68	--
SCIENT.MICRO SYST.	5070	LSI	--	--	--	YES	YES	--	--	0-70	DATA SEP.	5-7.5 Mbits/sec	CMOS	24	--	--
SIGNETICS CORP.	SCB68459	LSI	86-1Q	8	100	YES	YES	--	--	0-70	PHASE-LOCK LOOP	10 Mbits/sec	SIL.GATE NMOS	24	--	--
SIGNETICS CORP.	SCN68454	LSI	NOW	55	100	YES	YES	YES	--	0-70	WNCH/FL CNTRLR	10 Mbits/sec	SIL.GATE NMOS	48	--	--
STANDARD MICROSYST.	FDC765A	LSI	NOW	8	100	YES	YES	--	--	0-70	FL DSK CNTRLR	500 Kbits/sec	SIL.GATE NMOS	40	--	--
STANDARD MICROSYST.	HDC9224	LSI	NOW	65	100	YES	YES	--	--	0-70	WNCH/FL CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	--	--
STANDARD MICROSYST.	FDC9216	LSI	NOW	6	100	YES	YES	--	--	0-70	DATA SEP. CHIP	125-250 Kbits/sec	SIL.GATE NMOS	8	--	--
STANDARD MICROSYST.	FDC9226	LSI	NOW	12	100	YES	YES	--	--	0-70	WNCH DSK SEP.	5 Mhz	CMOS	24	--	--
STANDARD MICROSYST.	FDC9229	LSI	NOW	11	100	YES	YES	--	--	0-70	FL DATA SEP/PRECOM	500Kbits/sec	SIL.GATE NMOS	20	--	--
STANDARD MICROSYST.	FDC9225	LSI	NOW	21	100	YES	YES	--	--	0-70	BUFFER MGR	5 Mhz	CMOS	48	--	--
STANDARD MICROSYST.	HDC1100	LSI	NOW	14	100	YES	YES	--	--	0-70	WNCH CNTRLR CHIPSET	5 Mbits/sec	SIL.GATE NMOS	20	--	--
STANDARD MICROSYST.	FDC179X	LSI	NOW	39	100	YES	YES	--	--	0-70	FL DSK CNTRLR	125-500 Kbits/sec	SIL.GATE NMOS	40	--	--
STANDARD MICROSYST.	FDC9266	LSI	NOW	13	100	YES	YES	--	--	0-70	FL DSK CNTRLR	500Kbits/sec	SIL.GATE NMOS	40	--	--
SUNOL SYSTEMS	RB1002	LSI	NOW	60	100	YES	YES	--	--	0-70	RAM BUFF. CNTRLR	10 Mhz	CMOS	40	--	--
SUNOL SYSTEMS	DC1001	LSI	NOW	60	100	YES	YES	--	--	0-70	WNCH/FL CNTRLR	15 Mbits/sec	CMOS	40	--	--
WESTERN DIGITAL	WD279X	LSI	NOW	15	100	YES	YES	--	--	0-70	FL. DSK. CNTRLR	125-500 Kbits/sec	SIL.GATE NMOS	40	--	--
WESTERN DIGITAL	WD2010A-05	LSI	NOW	50	100	YES	YES	--	--	0-70	WNCH CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	--	--
WESTERN DIGITAL	WD1010A-05	LSI	NOW	33	100	YES	YES	--	--	0-70	WNCH CNTRLR	5 Mbits/sec	SIL.GATE NMOS	40	--	--
WESTERN DIGITAL	WD1050	LSI	NOW	68	100	YES	YES	--	--	0-70	WNCH CNTRLR	9.6 Mbits/sec	SIL.GATE NMOS	--	68	--
WESTERN DIGITAL	WD9027	LSI	NOW	29	100	YES	YES	--	--	0-70	RLL ENC/DEC	7.5 Mbits/sec	CMOS	18	--	--
WESTERN DIGITAL	WD9232	LSI	NOW	9	100	YES	YES	--	--	0-70	DATA SEP. CHIP	125-250 Kbits/sec	SIL.GATE NMOS	8	--	--
WESTERN DIGITAL	WD9020	LSI	NOW	48	100	YES	YES	--	--	0-70	HFM ENC/DEC	5 Mbits/sec	CMOS	40	--	--
WESTERN DIGITAL	WD9216	LSI	NOW	6	100	YES	YES	--	--	0-70	DATA SEP. CHIP	125-250 Kbits/sec	SIL.GATE NMOS	8	--	--
WESTERN DIGITAL	WD1100-19	LSI	NOW	24	100	YES	YES	--	--	0-70	SCSI PRO. CNTRLR	5 Mhz	SIL.GATE NMOS	--	40	DIP
WESTERN DIGITAL	WD11000-22	LSI	NOW	25	100	YES	YES	--	--	0-70	BUFF. MEM. CNTRLR	5 Mhz	CMOS	--	84	JED
WESTERN DIGITAL	WD9050	LSI	NOW	78	100	YES	YES	--	--	0-70	WNCH CNTRLR	5 Mbits/sec	CMOS	--	68	--
WESTERN DIGITAL	WD1770-00	LSI	NOW	15	100	YES	YES	--	--	0-70	FL. DSK. CNTRLR	250Kbits/sec	SIL.GATE NMOS	28	--	--
WESTERN DIGITAL	WD3030	LSI	NOW	60	100	YES	YES	--	--	0-70	WNCH CNTRLR	5 Mbits/sec	CMOS	40	--	--

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1985 CONTROLLER COMPETITION - HOST ADAPTORS (BY HOST BUS TYPE)

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DIMENSIONS			POWER				HOST CHARACTERISTICS			
				\$	Q	L	W	H	+5	-5	+12	-12	HOST BUS TYPE	HOST FEATURES		
XEBEC CORP.	APPLE ADAPTER	H/A	NOW	90	--	XSASI	1	6.50	3.10	0.75	.63A	--	--	--	APPLE II+/IIe	DOS 3.3, ProDOS, CP/M
DATA TECHNOLOGY	MODEL 75-1	H/A	NOW	158	--	S/I	1	7.00	3.05	0.50	.5A	--	--	--	APPLE II/II+/IIe	SUPP. DOS 3.3; ProDOS
DATA TECHNOLOGY	MODEL 75	H/A	NOW	140	--	S/I	1	7.00	3.05	0.50	.5A	--	--	--	APPLE II/II+/IIe	SUPP. DOS 3.3
DATA TECHNOLOGY	MODEL 75-2	H/A	NOW	195	--	S/I	1	7.00	3.05	0.50	.5A	--	--	--	APPLE II/II+/IIe	SUPP. DOS 3.3; ProDOS
DATA TECHNOLOGY	MODEL 68	H/A	NOW	350	--	S/I	1	9.75	5.50	0.50	1.0A	--	--	--	EXORcisor II	--
XEBEC CORP.	IBM-PC ADAPTER	H/A	NOW	90	--	XSASI	1	8.73	4.23	0.60	1.0A	--	--	--	IBM-PC	DMA/PRGRMD I/O MD
ADAPTEC, INC.	AHA-1530	H/A	NOW	460	--	R/D	2	12.00	6.75	0.50	2.0A	--	--	--	MULTIBUS I	8 TSK/8 LUN; CONCUR.
DATA TECHNOLOGY	MODEL 86-1	H/A	NOW	270	--	S/I	1	12.00	6.75	0.50	2.0A	--	--	--	MULTIBUS I	UP TO 8 SCSI TARGETS
DATA TECHNOLOGY	MODEL 86	H/A	NOW	270	--	S/I	1	12.00	6.75	0.50	2.0A	--	--	--	MULTIBUS I	SUPP. VAR. SIZE BLOCKS
NCR CORP.	ADP-32-01	H/A	NOW	620	--	R/D	2	12.00	6.75	0.60	3.0A	--	--	--	MULTIBUS I	TO 8 CONCUR. I/O OP.
NCR CORP.	ADP-32-02	H/A	NOW	685	--	S/I	2	12.00	6.75	0.60	3.0A	--	--	--	MULTIBUS I	TO 8 CONCUR. I/O OP.
ADAPTIVE DATA SYS.	PC MASTER LINK	H/A	NOW	250	--	R/D	2	10.00	4.20	0.80	2.5A	--	--	--	PC, XT	DMA; PRGRMD. I/O MODES
DATA TECHNOLOGY	MODEL 51	H/A	NOW	190	--	S/I	1	8.00	3.90	0.50	1.0A	--	--	--	PC, XT	--
EMULEX	IBMD1	H/A	NOW	395	--	R/D	2	8.00	3.90	0.50	1.1A	--	--	--	PC, XT	2 microsc/b; DMA XFERS
NCR CORP.	ADP-31A-01	H/A	NOW	280	--	R/D	1	7.08	4.20	0.60	.6A	--	--	--	PC, XT	SUPP. DMA XFR MODE
SCIENT. MICRO SYST.	510	H/A	NOW	90	--	S/I	2	5.50	4.15	0.75	.5A	--	--	--	PC, XT	--
DATA TECHNOLOGY	MODEL 11-2	H/A	NOW	395	--	S/I	1	8.40	5.20	0.50	2.0A	--	--	--	QBUS	UP TO 8 SCSI TARGETS
DATA TECHNOLOGY	MODEL 11	H/A	NOW	395	--	S/I	1	8.40	5.20	0.50	2.0A	--	--	--	QBUS	2 DMA CHANNELS
EMULEX	UC03	H/A	NOW	1800	--	R/D	2	SGL. QD SZ, STD. QBUS			4.8A	--	--	--	QBUS	EMUL. MSCP
EMULEX	UC01/LX	H/A	NOW	1500	--	R/D	2	STD. QBUS			5.7A	--	--	--	QBUS	EM. 2 RLV11/12 CNTRLR
SIGMA INFO. SYST.	SDC-RLV112	H/A	NOW	1025	--	S/I	1	SGL DUAL, STD QBUS			3.75A	--	--	--	QBUS	MXD CAP. RLD1/RLD2
TD SYSTEMS	TDL-12	H/A	NOW	695	--	R/D	2	DUAL, STD QBUS			5.0A	--	--	--	QBUS	EM. DEC RLV
DATA TECHNOLOGY	MODEL 10-1	H/A	NOW	225	--	S/I	1	10.00	5.25	0.50	1.8A	--	--	--	S-100	PRGRMD. I/O; DMA MODES
DATA TECHNOLOGY	MODEL 10	H/A	NOW	195	--	S/I	1	10.00	5.25	0.50	1.4A	--	--	--	S-100	PRGRMD I/O
DATA TECHNOLOGY	MODEL 12	H/A	NOW	828	--	S/I	1	16.00	9.00	0.50	2.0A	--	--	--	UNIBUS	--
EMULEX	UC13	H/A	NOW	2200	--	R/D	2	SGL. HX SZ, STD. UBUS			4.8A	--	--	--	UNIBUS	EMUL. MSCP
DATA TECHNOLOGY	MODEL 69	H/A	NOW	580	--	S/I	1	14.50	9.25	0.50	2.8A	--	--	--	VERSA. 68000, IBM SYST. 9000	--
FORCE COMPUTERS	SYS68K/SAS1-1	H/A	NOW	1380	--	R/D	2	9.20	6.30	0.80	2.1A	--	.1A	.1A	VMEBUS	PROV. 4 DMA CHANNELS
INTEG. SOLUTIONS	VME-SCSI	H/A	NOW	1200	--	S/I	1	9.20	6.30	0.80	3.1A	--	--	--	VMEBUS	8-BLK DATA BUFF. CAP.
HIZAR, INC.	VME8500	H/A	NOW	350	--	S/I	1	9.20	6.30	0.75	.55A	--	--	--	VMEBUS	2 VECTD. INTERRUPTS
PEP MODUL. COMPUTER	VD10	H/A	NOW	313	--	S/I	2	3.90	6.24	--	1.0A	--	--	--	VMEBUS	DMA/POLLING MODES
PLESSEY MICROSYST.	PME SASI-1	H/A	NOW	1077	--	S/I	1	9.20	6.30	0.75	1.8A	--	.3A	.3A	VMEBUS	PROV. 4 DMA CHAN.

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1985 CONTROLLER COMPETITION - BY IBM PC

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE				DIMENSIONS				POWER				BIOS ROM		
				\$	Q	I/F	#	DETECTION	ERROR CORRECTION	FLAW SKIPPING	MIN. LEAV	L	W	H	+5	-5	+12		-12	
ADAPTEC	ACB-200 2A	IBM PC NOW		245	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.00	4.40	0.75	1.5A	—	.1A	.04A	INC
ADAPTEC	ACB-200 2	IBM PC NOW		235	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.00	4.40	0.75	1.5A	—	.1A	.04A	W/O
ADAPTEC	ACB-20 10A	IBM PC NOW		265	100	ST506/412,HD/SECT.REM.	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.00	4.40	0.75	1.5A	—	.1A	.04A	INC
ARCHIVE CORP.	SC400	IBM PC	—	—	—	Q1C-36	—	1	16-BIT CRC	BLK RE-W	R/W	N/A	12.00	4.00	0.75	1.5A	—	.13A	—	INC
CENTAN CORP.	NDC-2027	IBM PC NOW		135	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	S-L	3:1	8.00	3.85	0.50	1.4A	—	—	—	INC
DATA TECHNOLOGY	5290	IBM PC NOW		264	100	ST5/412,SA4/450,KOD. 3.3	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.38	3.90	0.75	1.75A	—	—	—	INC
DATA TECHNOLOGY	5091	IBM PC 85-4Q		185	100	Q1C-02	—	1	16-BIT CRC	NONE	BLK RE-W	N/A	13.38	3.90	0.75	2.0A	—	—	—	INC
DATA TECHNOLOGY	5350	IBM PC NOW		428	100	ST506/412, Q1C-02	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.25	3.90	0.94	1.85A	—	—	—	INC
DATA TECHNOLOGY	5150BX	IBM PC NOW		155	100	ST506/412	2	2	24-BIT ECC	S-B/4 BITS	T-L	2:1	13.38	3.90	0.75	1.7A	—	—	—	INC
DATA TECHNOLOGY	3251	IBM PC NOW		209	100	SA400/450,KOD. 3.3	2	2	16-BIT CRC	NONE	N/A	N/A	8.00	3.85	0.50	1.0A	—	—	—	INC
DATA TECHNOLOGY	5250CX	IBM PC NOW		295	100	ST5/412,SA4/450,KOD. 3.3	2	2	24-BIT ECC	S-B/4 BITS	T-L	2:1	13.38	3.90	0.75	2.0A	—	—	—	INC
DATA TECHNOLOGY	5051	IBM PC 85-4Q		185	100	Q1C-02	—	1	16-BIT CRC	NONE	BLK RE-W	N/A	13.38	3.90	0.75	2.0A	—	—	—	INC
DATA TECHNOLOGY	5190	IBM PC NOW		238	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	S-L	2:1	13.38	3.90	0.75	1.7A	—	—	—	INC
DATA TECHNOLOGY	5150BXE	IBM PC NOW		195	100	ST506/412	2	2	24-BIT ECC	S-B/4 BITS	T-L	2:1	13.38	3.90	0.75	1.7A	—	—	—	INC
INTERPHASE CORP.	MAY.SMD PC-80	IBM PC NOW		950	100	SMD (2.1 Mb/sec)	2	2	32-BIT ECC	S-B/11 BITS	T-L	1:1	13.13	4.19	0.63	1.2A	—	—	—	INC
SCIENT.MICRO SYST.	5710	IBM PC 85-4Q		200	100	ST506/412, Q1C-02	2	2	32-BIT ECC	S-B/5 BITS	T-L	1:1	5.90	4.15	0.75	.5A	—	—	—	INC
SIGEN CORP.	T-36M	IBM PC NOW		175	100	MENTEC (CASSETTE)	—	1	16-BIT CRC	N/A	BLK RE-W	N/A	5.50	3.90	0.75	.6A	—	—	—	INC
SIGEN CORP.	DC6	IBM PC NOW		225	100	ST506/412	2	2	32-BIT ECC	S-B/5 BITS	S-L	1:1	13.00	4.00	0.75	1.8A	—	.05A	.003A	INC
SIGEN CORP.	T-44	IBM PC NOW		170	100	Q1C-44 (TANBERG)	—	1	16-BIT CRC	N/A	BLK RE-W	N/A	5.90	3.90	0.75	.6A	—	—	—	INC
SIGEN CORP.	T-36	IBM PC NOW		175	100	Q1C-36	—	1	16-BIT CRC	N/A	BLK RE-W	N/A	5.90	3.90	0.75	.6A	—	—	—	INC
SUNOL SYSTEMS	BLP-1BM2	IBM PC 86-1Q		395	100	ST5/412,ESD1,Q1C-36,SA45/46	2	4	32-BIT ECC	S-B/11 BITS	S-L	1:1	13.00	4.50	0.50	1.5A	—	—	—	INC
SUNOL SYSTEMS	BLP-1BM1	IBM PC 85-4Q		295	100	ST5/412,ESD1(10Mb1ts/sec)	2	4	32-BIT ECC	S-B/11 BITS	R/W	N/A	13.00	4.75	0.75	1.0A	—	.1A	—	INC
WANGTEK	PC-36	IBM PC NOW		947	100	Q1C-36	—	1	16-BIT CRC	BLK RE-W	R/W	N/A	13.00	4.75	0.75	1.0A	—	.1A	—	W/O
WESTERN DIGITAL	WD1002-WAH	IBM PC NOW		200	100	ST506/412	2	2	32-BIT ECC	S-B/5 BITS	T-L	2:1	8.10	4.20	0.50	1.5A	—	.05A	—	W/O
WESTERN DIGITAL	WD100 3A-WA2	IBM PC 86-1Q		240	100	ST506/412,REM., SA400/450	2	2	32-BIT ECC	S-B/5 BITS	T-L	1:1	13.10	4.80	0.75	2.5A	—	.15A	.01A	W/O
WESTERN DIGITAL	WD1036S-WX2	IBM PC NOW		215	100	Q1C-36	—	1	16-BIT CRC	BLK RE-W	R/W	N/A	8.10	4.20	0.75	1.0A	—	.03A	—	W/O
WESTERN DIGITAL	WD100 25-WX2	IBM PC 85-4Q		150	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	T-L	2:1	5.75	4.20	0.50	1.0A	—	.05A	—	INC
WESTERN DIGITAL	WD100 2C-WX2	IBM PC NOW		190	100	ST506/412	2	2	32-BIT ECC	S-B/11 BITS	T-L	2:1	8.10	4.20	0.50	1.0A	—	.05A	—	INC
WESTERN DIGITAL	WD100 3A-WAH	IBM PC NOW		190	100	ST506/412, REM.	2	2	32-BIT ECC	S-B/5 BITS	T-L	1:1	8.10	4.20	0.50	1.5A	—	.05A	—	W/O
WESTERN DIGITAL	WD100 2-WA2	IBM PC NOW		230	100	ST506/412, SA400/450	2	2	32-BIT ECC	S-B/5 BITS	T-L	2:1	13.10	4.80	0.75	2.5A	—	.15A	.01A	W/O
XEBEC CORP.	S1255	IBM PC NOW		250	100	ST506/412	2	4	32-BIT ECC	S-B/11 BITS	T-L	2:1	13.13	4.20	0.85	1.25A	—	.015A	—	W/O
XEBEC CORP.	S1220	IBM PC NOW		200	100	ST506/412, SA460	2	2	32-BIT ECC	S-B/11 BITS	T-L	1:1	13.13	7.20	0.75	3.0A	—	.066A	—	W/O
XEBEC CORP.	S1250	IBM PC NOW		250	100	ST506/412, SA460	2	2	32-BIT ECC	S-B/11 BITS	T-L	2:1	13.13	4.20	0.85	1.25A	—	.015A	—	W/O
XEBEC CORP.	S1240	IBM PC NOW		250	100	ESD1 (10 Mb1ts/sec)	2	4	32-BIT ECC	S-B/11 BITS	T-L	2:1	13.13	4.20	0.85	1.25A	—	.015A	—	W/O
XEBEC CORP.	S1210A	IBM PC NOW		185	100	ST506/412, REM.	2	2	32-BIT ECC	S-B/11 BITS	T-L	2:1	13.13	4.20	0.85	1.25A	—	.015A	—	W/O

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1985 CONTROLLER COMPETITION - BY DEC (By Host Bus Type)

MANUFACTURER	MODEL	TYPE	FCS	PRICE	I/F	DRIVE					HOST			DIMENSIONS					
						\$	Q	#	SECTOR SIZE	ERROR	FLAM	SCSI	BUFFER	XFR	MIN.	L	W	H	
						F	M	T	BYTES	DETECTION	CORRECTION	SKIPPING	LEVEL	KB	MB/SEC	LEAV			
EMULEX	SC71/BX SERIES	DEC	NOW	7990	1 SMD	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			8			N/A	3 BRD SET +	
EMULEX	SC72/BX SERIES	DEC	NOW	7650	1 SMD (1.8 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			8			N/A	3 BRD SET +	
AVIV	DFC 607B	DEC	NOW	8990	1 SMD (1.8 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11-BIT BURST	N/A			6.00			N/A	EXTENDED HEX BRD	
AVIV	DFC 607A	DEC	NOW	8990	1 SMD (1.8 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11-BIT BURST	N/A			6.00			N/A	EXTENDED HEX BRD	
EMULEX	SC750/B2 SERIES	DEC	NOW	8990	1 SMD (1.8 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	EXTENDED HEX BRD	
EMULEX	SC750/B3 SERIES	DEC	NOW	8990	1 SMD (1.8 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	EXTENDED HEX BRD	
EMULEX	SC758/B1 SERIES	DEC	NOW	9990	1 SMD (1.8 MB/SEC)	8	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	EXTENDED HEX BRD	
EMULEX	SC7000/B1 SERIES	DEC	NOW	8990	1 SMD (2 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			12 SECT			N/A	EXTENDED HEX BRD	
EMULEX	SC7002	DEC	NOW	8990	1 SMD (2.4 MB/SEC)	4	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			N/A			N/A	EXTENDED HEX BRD	
EMULEX	TC7000	DEC	NOW	4500	1 PERTEC/STC	8	4	4	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A			1			N/A	EXTENDED HEX BRD	
ADV.ELEC DESIGN	WINC 05/05	DEC	NOW	1575	1 ST506/SA460	2	2	2	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ADV.ELEC DESIGN	WINC 05/08	DEC	NOW	1575	1 ST506/SAB00	2	2	2	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ADV.ELEC DESIGN	FLEX-02	DEC	NOW	975	1 SAB00	2	2	2	256-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	UDC11	DEC	85-1Q	1795	1 ST506, SAB00/460	4	4	4	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	WDC11-D	DEC	NOW	1595	1 SA1/ST5(W), SAB/4(F)	2	4	4	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	RDC11	DEC	85-1Q	1695	1 ST506	4	4	4	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	WDC11-C	DEC	NOW	1595	1 SA1/ST5(W), SAB/4(F)	2	4	4	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	SDC11	DEC	NOW	1395	1 ST506	4	4	4	PROGRAMABLE N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
ANDROMEDA SYSTEMS	WDC11-B	DEC	NOW	1595	1 SA1/ST5(W), SAB/4(F)	2	4	4	128-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
AVIV	TFC 925	DEC	85-2Q	2800	1 PERTEC	4	4	4	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A			N/A			N/A	SGL HEX WIDTH BRD	
AVIV	DFC 907B	DEC	NOW	2850	1 SMD	4	2	2	PROGRAMABLE 32-BIT ECC	11-BIT BURST	N/A			2.00			N/A	SGL QUAD WIDTH BRD	
AVIV	DFC 907A	DEC	NOW	2850	1 SMD	4	2	2	PROGRAMABLE 32-BIT ECC	11-BIT BURST	N/A			2.00			N/A	SGL QUAD WIDTH BRD	
COMPUTER STOR. TECH	CC-300	DEC	NOW	1800	1 QIC-02	1	1	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A			0.51			N/A	1 DUAL WIDTH BOARD	
DIALOG	MV 132	DEC	NOW	2310	1 PERTEC	4	2	2	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A			1.00			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 614	DEC	NOW	1885	1 ST506	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	TRK LEVL			1			N/A	1 DUAL WIDTH BOARD	
DIALOG	DQ 120	DEC	NOW	2425	1 PERTEC	4	2	2	N/A LRC_CRC	NONE	N/A			FIFO			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 619	DEC	NOW	895	1 SA450	2	2	2	256-1000 N/A	N/A	N/A			1 SECT.			N/A	1 DUAL WIDTH BOARD	
DIALOG	DQ 214	DEC	NOW	1670	1 SMD	2	2	2	PROGRAMABLE 56-BIT ECC	11 BIT BURST	TRK LEVL			1			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 413	DEC	NOW	2375	1 PRIAM I/O	2	2	2	PROGRAMABLE IN THE DRIVE	IN THE DRIVE	TRK LEVL			1			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 130	DEC	NOW	1630	1 PERTEC	8	2	2	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 226	DEC	85-3Q	2500	1 SMD (2.5 MB/SEC)	2	2	2	PROGRAMABLE 56-BIT ECC	11 BIT BURST	TRK LEVL			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	MV 210	DEC	NOW	2675	1 SMD (1.9 MB/SEC)	2	2	2	PROGRAMABLE 56-BIT ECC	11 BIT BURST	TRK LEVL			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 615	DEC	NOW	1950	1 ST506	2	2	2	128-1000 32-BIT ECC	11 BIT BURST	TRK LEVL			1			N/A	1 DUAL WIDTH BOARD	
DIALOG	DQ 132	DEC	NOW	1390	1 PERTEC	4	2	2	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	MV 342	DEC	NOW	1790	1 CDC SENTINEL	1	1	1	N/A	N/A (FRMTR)	N/A (FRMTR)			1.00			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 215	DEC	NOW	1670	1 SMD	2	2	2	PROGRAMABLE 56-BIT ECC	11 BIT BURST	TRK LEVL			1			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 330	DEC	NOW	1670	1 KENNEDY 6455	1	1	1	N/A	N/A (FRMTR)	N/A (FRMTR)			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 202A	DEC	NOW	2830	1 SMD	2	2	2	PROGRAMABLE N/A	N/A	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 419	DEC	NOW	895	1 SAB00/850	2	2	2	256-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
DIALOG	DQ 342	DEC	NOW	1350	1 CDC SENTINEL	2	2	2	N/A	N/A (FRMTR)	N/A (FRMTR)			N/A			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 414	DEC	NOW	2375	1 PRIAM I/O	2	2	2	PROGRAMABLE IN THE DRIVE	IN THE DRIVE	TRK LEVL			1			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 228	DEC	NOW	2090	1 SMD (2 MB/SEC)	2	2	2	PROGRAMABLE 56-BIT ECC	12 BIT BURST	TRK LEVL			1			N/A	SGL QUAD WIDTH BRD	
DIALOG	DQ 634	DEC	NOW	1885	1 ST506/DMA SYSTEMS	2	2	2	128-1000 32-BIT ECC	11 BIT BURST	TRK LEVL			1			N/A	1 DUAL WIDTH BOARD	
DIALOG	DQ 656	DEC	85-3Q	1850	1 ESD1	2	2	2	128-1000 CRC	32-BIT ECC	TRK LEVL			12 SECT			N/A	1 DUAL WIDTH BOARD	
EMULEX	SC03/MS	DEC	85-3Q	2000	1 SMD (1.8 MB/SEC)	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	SECT.LVL			12 SECT			N/A	SGL QUAD WIDTH BRD	
EMULEX	QD01	DEC	85-3Q	1650	1 ST506	2	2	2	512 BYTES 48-BIT ECC	11 BIT BURST	SECT.LVL			16			N/A	1 DUAL WIDTH BOARD	
EMULEX	TQ03	DEC	85-3Q	1600	1 PERTEC	4	2	2	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
EMULEX	QT12	DEC	85-3Q	1300	1 QIC-02	1	1	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A			16			N/A	1 DUAL WIDTH BOARD	
EMULEX	SC02/A SERIES	DEC	NOW	1500	1 SMD	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	SGL QUAD WIDTH BRD	
EMULEX	SC02/C SERIES	DEC	NOW	1500	1 SMD	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	SGL QUAD WIDTH BRD	
EMULEX	SC03/BX	DEC	NOW	1800	1 SMD (1.8 MB/SEC)	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	SECT.LVL			8			N/A	SGL QUAD WIDTH BRD	
EMULEX	TQ02	DEC	NOW	1200	1 PERTEC	4	2	2	UP TO 2K N/A (FRMTR)	N/A (FRMTR)	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
EMULEX	TQ05	DEC	NOW	1200	1 CDC SENTINEL	1	1	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A (FRMTR)			4			N/A	SGL QUAD WIDTH BRD	
EMULEX	SC02/L SERIES	DEC	NOW	1500	1 SMD	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			1			N/A	SGL QUAD WIDTH BRD	
GEN'L ROBOTICS	SHV22	DEC	NOW	2000	1 SMD (2.5 MB/SEC)	2	2	2	PROGRAMABLE N/A	N/A	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
GEN'L ROBOTICS	MNV22	DEC	NOW	1750	1 STC506	2	2	2	128-1000 N/A	N/A	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
GEN'L ROBOTICS	MNV11	DEC	NOW	1500	1 ST506	2	2	2	128-1000 N/A	N/A	N/A			1 SECT			N/A	SGL QUAD WIDTH BRD	
GEN'L ROBOTICS	SHV11	DEC	NOW	1750	1 SMD	2	2	2	PROGRAMABLE N/A	N/A	N/A			N/A			N/A	SGL QUAD WIDTH BRD	
GEN'L ROBOTICS	STV11	DEC	NOW	1000	1 QIC-02	1	1	1	512 BYTES N/A (FRMTR)	N/A (FRMTR)	N/A (FRMTR)			N/A			N/A	1 DUAL WIDTH BOARD	
GEN'L ROBOTICS	RXV21	DEC	NOW	1000	1 SAB00/450	2	2	2	256-1000 N/A	N/A	N/A			N/A			N/A	1 DUAL WIDTH BOARD	
MD8 SYSTEMS	MLS1-RM11	DEC	NOW	2000	1 SMD	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			2			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-DK11-RM	DEC	85-1Q	2330	1 SMD (2.4 MB/SEC)	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			2			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-ST511	DEC	NOW	1895	1 CDC SENTINEL	1	1	1	N/A	N/A (FRMTR)	IN FRMTR			16			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-DK11-RP	DEC	85-1Q	2330	1 SMD (2.4 MB/SEC)	2	2	2	128-1000 32-BIT ECC	11 BIT BURST	N/A			2			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-TS11	DEC	NOW	1895	1 PERTEC	8	2	2	UP TO 64K N/A (FRMTR)	N/A (FRMTR)	N/A			16			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-TM11	DEC	NOW	2600	1 PERTEC	4	2	2	UP TO 2K PARITY_CRC	SGL TRACK	N/A			16			N/A	SGL QUAD WIDTH BRD	
MD8 SYSTEMS	MLS1-RK11	DEC	NOW	2000	1 SMD	2	2	2	PROGRAMABLE 32-BIT ECC	11 BIT BURST	N/A			2			N/A	SGL QUAD WIDTH BRD	

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1985 CONTROLLER COMPETITION - BY DEC

MANUFACTURER	MODEL	POWER				HOST CHARACTERISTICS			FUNCTION					
		+5	-5	+12	-12	TEMP C	BIOS ROM	HOST BUS TYPE	HOST FEATURES	CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE		
												DUAL	PLCC	OTHER
EMULEX	SC71/BX SERIES	11.0A	--	--	--	--	--	CACHE BUS/UNIBUS	RM 03/05, RPO6	--	--	--	--	--
EMULEX	SC72/BX SERIES	11.0A	--	--	--	--	--	CACHE BUS/UNIBUS	RM 03/05, RPO6, RM80	--	--	--	--	--
AVIV	DFC 607B	9.0A	--	.7A	--	--	--	CM1 BUS	RH750 W/ RPO6	--	--	--	--	--
AVIV	DFC 607A	9.0A	--	.7A	--	--	--	CM1 BUS	RH750 W/ RMD3/05	--	--	--	--	--
EMULEX	SC750/B2 SERIES	10.0A	--	--	--	--	--	CM1 BUS	RPO5/06	--	--	--	--	--
EMULEX	SC750/B3 SERIES	10.0A	--	--	--	--	--	CM1 BUS	RMD3/05, RM80	--	--	--	--	--
EMULEX	SC758/B1 SERIES	10.0A	--	--	--	--	--	CM1 BUS	RMD3/05, RM80	--	--	--	--	--
EMULEX	SC7000/B1 SERIES	11.0A	--	--	--	--	--	CM1, SBI VIA V MASTER	RMD3/05, RM80	--	--	--	--	--
EMULEX	SC7002	11.0A	--	--	--	--	--	CM1, SBI VIA V MASTER	RMD3/05, RM80	--	--	--	--	--
EMULEX	TC7000	10.0A	--	--	--	--	--	CM1, SBI VIA V MASTER	TH03 W/ TU77	--	--	--	--	--
ADV.ELEC DESIGN	WINC 05/05	4.5A	--	.1A	--	--	--	Q-BUS	RLD1/02,RXD2,RX50	--	--	--	--	--
ADV.ELEC DESIGN	WINC 05/08	4.5A	--	.1A	--	--	--	Q-BUS	RLD1/02,RXD2,RX50	--	--	--	--	--
ADV.ELEC DESIGN	FLEX-02	3.5A	--	.1A	--	--	--	Q-BUS	RXD1/02	--	--	--	--	--
ANDROMEDA SYSTEMS	UDC11	2.5A	--	--	--	--	--	Q-BUS	MSCP,RX50(F) & RD(W)	--	--	--	--	--
ANDROMEDA SYSTEMS	WDC11-D	2.7A	--	.1A	--	--	--	Q-BUS	RPO2(W),RMD2(F)	--	--	--	--	--
ANDROMEDA SYSTEMS	RDC11	2.5A	--	--	--	--	--	Q-BUS	MSCP,RD TYPE MNCH.	--	--	--	--	--
ANDROMEDA SYSTEMS	WDC11-C	2.7A	--	.1A	--	--	--	Q-BUS	RLD1/02(W),RMD2(F)	--	--	--	--	--
ANDROMEDA SYSTEMS	SDC11	2.5A	--	--	--	--	--	Q-BUS	RLD2	--	--	--	--	--
ANDROMEDA SYSTEMS	WDC11-B	2.7A	--	.1A	--	--	--	Q-BUS	RK05(W)/RMD2(F)	--	--	--	--	--
AVIV	TFC 925	5.0A	--	--	--	--	--	Q-BUS	TS-11	--	--	--	--	--
AVIV	DFC 907B	6.5A	--	.7A	--	--	--	Q-BUS	RK711 W/ RK07 DRIVES	--	--	--	--	--
AVIV	DFC 907A	6.5A	--	.7A	--	--	--	Q-BUS	RH11/70 W/ RMD2/05	--	--	--	--	--
COMPUTER STOR.TECH	CC-300	5.0A	--	--	--	--	--	Q-BUS	TM-11	--	--	--	--	--
DILOG	MV 132	4.0A	--	--	--	--	--	Q-BUS	NONE	--	--	--	--	--
DILOG	DQ 614	3.5A	--	.3A	--	--	--	Q-BUS	RLD1/02	--	--	--	--	--
DILOG	DQ 120	3.5A	--	--	--	--	--	Q-BUS	TM-11	--	--	--	--	--
DILOG	DQ 619	2.3A	--	--	--	--	--	Q-BUS	RXD2	--	--	--	--	--
DILOG	DQ 214	3.5A	--	.3A	--	--	--	Q-BUS	RLD1/02	--	--	--	--	--
DILOG	DQ 413	3.5A	--	--	--	--	--	Q-BUS	RPO2/03	--	--	--	--	--
DILOG	DQ 130	4.0A	--	--	--	--	--	Q-BUS	TM-11	--	--	--	--	--
DILOG	DQ 226	4.7A	--	.3A	--	--	--	Q-BUS	MSCP	--	--	--	--	--
DILOG	MV 210	3.5A	--	.3A	--	--	--	Q-BUS	DM* TYPE DEVICES	--	--	--	--	--
DILOG	DQ 615	4.0A	--	.3A	--	--	--	Q-BUS	RK06/07	--	--	--	--	--
DILOG	DQ 132	4.0A	--	--	--	--	--	Q-BUS	TS-11/TSV05	--	--	--	--	--
DILOG	MV 342	4.0A	--	--	--	--	--	Q-BUS	TK25 FORMAT COMPAT.	--	--	--	--	--
DILOG	DQ 215	3.5A	--	.3A	--	--	--	Q-BUS	RK06/07	--	--	--	--	--
DILOG	DQ 330	3.5A	--	--	--	--	--	Q-BUS	TM-11/TS03	--	--	--	--	--
DILOG	DQ 202A	3.5A	--	.3A	--	--	--	Q-BUS	RPO2/03	--	--	--	--	--
DILOG	DQ 419	2.5A	--	--	--	--	--	Q-BUS	RXD2	--	--	--	--	--
DILOG	DQ 342	2.5A	--	--	--	--	--	Q-BUS	TS-11/TU80/TSV03	--	--	--	--	--
DILOG	DQ 414	3.5A	--	--	--	--	--	Q-BUS	RLD1/02	--	--	--	--	--
DILOG	DQ 228	3.5A	--	.3A	--	--	--	Q-BUS	RMD2/05/80	--	--	--	--	--
DILOG	DQ 634	3.5A	--	.3A	--	--	--	Q-BUS	RLD1	--	--	--	--	--
DILOG	DQ 656	3.5A	--	.3A	--	--	--	Q-BUS	RK06/07	--	--	--	--	--
EMULEX	SC03/MS	6.5A	--	--	--	--	--	Q-BUS	MSCP	--	--	--	--	--
EMULEX	QD01	2.6A	--	--	--	--	--	Q-BUS	MSCP	--	--	--	--	--
EMULEX	TC03	6.0A	--	--	--	--	--	Q-BUS	TS-11 (3.5K)	--	--	--	--	--
EMULEX	QT12	3.0A	--	--	--	--	--	Q-BUS	TS-11/TSV05	--	--	--	--	--
EMULEX	SC02/A SERIES	5.7A	--	--	--	--	--	Q-BUS	RP11E W/ RPO2/RPO3	--	--	--	--	--
EMULEX	SC02/C SERIES	5.7A	--	--	--	--	--	Q-BUS	RK611 W/ RK06/07	--	--	--	--	--
EMULEX	SC03/BX	6.5A	--	--	--	--	--	Q-BUS	RMD2/RMD3/RMD5, RM80	--	--	--	--	--
EMULEX	TC02	5.0A	--	--	--	--	--	Q-BUS	TS-11	--	--	--	--	--
EMULEX	TC05	6.0A	--	--	--	--	--	Q-BUS	TS-11	--	--	--	--	--
EMULEX	SC02/L SERIES	5.7A	--	--	--	--	--	Q-BUS	RLV11/12 W/ RLD1/02	--	--	--	--	--
GEN'L ROBOTICS	SMV22	3.5A	--	.3A	--	--	--	Q-BUS	RMD3/05	--	--	--	--	--
GEN'L ROBOTICS	MWV22	4.3A	--	.6A	--	--	--	Q-BUS	RLD1/02, RMD2/03	--	--	--	--	--
GEN'L ROBOTICS	MWV11	4.3A	--	.6A	--	--	--	Q-BUS	RLD1/02	--	--	--	--	--
GEN'L ROBOTICS	SMV11	3.5A	--	.3A	--	--	--	Q-BUS	RMD2/05,RPO2,RK06/07	--	--	--	--	--
GEN'L ROBOTICS	STV11	2.5A	--	--	--	--	--	Q-BUS	TS-11	--	--	--	--	--
GEN'L ROBOTICS	RXV21	2.5A	--	--	--	--	--	Q-BUS	RXD1, RXD2	--	--	--	--	--
MDB SYSTEMS	MLS1-RM11	7.0A	--	.4A	--	--	--	Q-BUS	RMD2/03, RM80	--	--	--	--	--
MDB SYSTEMS	MLS1-DK11-RM	9.5A	--	.6A	--	--	--	Q-BUS	RMD3/05, RM80	--	--	--	--	--
MDB SYSTEMS	MLS1-TS11	6.5A	--	--	--	--	--	Q-BUS	TS-11/TSV05	--	--	--	--	--
MDB SYSTEMS	MLS1-DK11-RP	9.5A	--	.6A	--	--	--	Q-BUS	RPO6	--	--	--	--	--
MDB SYSTEMS	MLS1-TS11	6.5A	--	--	--	--	--	Q-BUS	TS-11/TSV05	--	--	--	--	--
MDB SYSTEMS	MLS1-TM11	7.0A	--	--	--	--	--	Q-BUS	TM-11	--	--	--	--	--
MDB SYSTEMS	MLS1-RK11	7.0A	--	.4A	--	--	--	Q-BUS	RK06/07	--	--	--	--	--

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1985 CONTROLLER COMPETITION - BY DEC (By Host Bus Type)

MANUFACTURER	MODEL	TYPE	FCS	PRICE		DRIVE				HOST			DIMENSIONS							
				\$	Q	I/F	#	SECTOR SIZE	ERROR	FLAM	SCSI	BUFFER	XFR	MIN.	L	W	H			
							F	W	T	BYTES	DETECTION	CORRECTION	SKIPPING	LEVEL	KB	MB/SEC	LEAV			
MICRO TECHNOLOGY	MXV22	DEC	NOW	875	1	SA 800	4	--	--	256-1000	N/A	N/A	N/A	--	1	SECT	--	N/A	1	DUAL WIDTH BOARD
MICRO TECHNOLOGY	MSV05	DEC	NOW	1425	1	Q1C-02	--	4	--	512 BYTES	N/A (FRMTR)	N/A (FRMTR)	N/A	--	16	--	--	N/A	1	DUAL WIDTH BOARD
MICRO TECHNOLOGY	MXV50	DEC	NOW	965	1	SA460	4	--	--	256-1000	N/A	N/A	N/A	--	1	SECT	--	N/A	1	DUAL WIDTH BOARD
MICRO TECHNOLOGY	MXV22M	DEC	NOW	875	1	SA460	4	--	--	256-1000	N/A	N/A	N/A	--	1	SECT	--	N/A	1	DUAL WIDTH BOARD
MICRO TECHNOLOGY	MLV11H	DEC	NOW	975	1	ST506	--	4	--	128-1000	56-BIT ECC	11 BIT BURST	SECT.LVL	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
MICRO TECHNOLOGY	MLV11	DEC	NOW	975	1	SA1000	--	4	--	128-1000	56-BIT ECC	11 BIT BURST	SECT.LVL	--	1	--	--	N/A	1	DUAL WIDTH BOARD
MINI COMPUTER TECH	EDC24	DEC	NOW	3600	1	SMD	--	2	--	PROGRAMABLE	32 B FIRECODE	11 BIT BURST	N/A	--	1	--	--	1:1	SGL QUAD WIDTH BRD	
MINI COMPUTER TECH	MCT1300	DEC	NOW	2900	1	SMD (2 MB/SEC)	--	2	--	PROGRAMABLE	32 B FIRECODE	11 BIT BURST	N/A	--	2	SECT	--	1:1	SGL QUAD WIDTH BRD	
PLESSEY PERIPHERALS	DCV12	DEC	NOW	1305	1	SMD	--	1	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	3	SECT	--	N/A	2	QUAD WIDTH BRDS
PLESSEY PERIPHERALS	DCV51	DEC	NOW	1690	1	ST 506	--	4	--	128-1000	32-BIT ECC	11 BIT BURST	N/A	--	8	--	--	N/A	SGL QUAD WIDTH BRD	
PLESSEY PERIPHERALS	XCV21/31	DEC	NOW	850	1	SA850/460	4	--	--	256-1000	N/A	N/A	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
PLESSEY PERIPHERALS	DCV03	DEC	NOW	1615	1	SMD (1.8 MB/SEC)	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	TRK. LVL	--	3	SECT	--	N/A	2	QUAD WIDTH BRDS
PLESSEY PERIPHERALS	FCV21	DEC	NOW	9000	1	ST506	--	4	--	256-1000	32-BIT ECC	11 BIT BURST	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
PLESSEY PERIPHERALS	CTCV11A	DEC	NOW	460	1	Q1C-02	--	1	--	512 BYTES	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
PLESSEY PERIPHERALS	DCV06B	DEC	NOW	1305	1	SMD	--	2	--	PROGRAMABLE	ECC	SYNDROME GEN.	N/A	--	3	SECT	--	N/A	2	QUAD WIDTH BRDS
PLESSEY PERIPHERALS	DCV50	DEC	85-3Q	1790	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	8	--	--	N/A	SGL QUAD WIDTH BRD	
QUALOGY	D 8260	DEC	NOW	2200	1	ST506(W),KENNEDY 6455(T)	--	2	1	128-1000	ECC	8 BIT BURST	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
QUALOGY	D 4140	DEC	NOW	1250	1	SA800	2	--	--	256-1000	ECC	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
QUALOGY	D 4120	DEC	NOW	1250	1	SA460	2	--	--	256-1000	N/A	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
QUALOGY	D 8255	DEC	NOW	2200	1	ST506(W),KENNEDY 6455(T)	--	1	1	128-1000	ECC	8 BIT BURST	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
QUALOGY	D 8250	DEC	NOW	2200	1	ST506(W),KENNEDY 6455(T)	--	1	1	128-1000	ECC	8 BIT BURST	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
QUALOGY	D 8120	DEC	NOW	1195	1	KENNEDY 6455	--	1	1	512 BYTES	N/A (FRMTR)	N/A (FRMTR)	IN FRMTR	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
SCIENT.MICRO SYST.	FMD 0106	DEC	NOW	1900	1	ST506(W),SA860/460 (F)	2	2	--	128-1000	ECC	6 BIT BURST	SECT LVL	--	N/A	--	--	N/A	1	DUAL/1 QUAD BRD
SCIENT.MICRO SYST.	FMD 0101	DEC	NOW	2100	1	SA1000(W),SA850(F)	2	2	--	128-1000	ECC	6 BIT BURST	SECT LVL	--	N/A	--	--	N/A	1	DUAL/1 QUAD BRD
SIGMA INFO SYST.	SDC RQ011-B	DEC	NOW	1695	1	ST506	--	2	--	128-1000	N/A	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
SIGMA INFO SYST.	SDC RXV31	DEC	NOW	1025	1	SA850/460	2	--	--	256-1000	N/A	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
SIGMA INFO SYST.	STC TSV11	DEC	NOW	1495	1	CDC SENTINEL	--	2	N/A	N/A (FRMTR)	N/A (FRMTR)	IN FRMTR	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
SIGMA INFO SYST.	SDC RQ011-A	DEC	NOW	1695	1	ST506	--	1	--	128-1000	N/A	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
SPECTRA LOGIC CORP.	SPECTRA 15 PLUS	DEC	NOW	2700	1	SMD (2.5 MB/SEC)	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	6	--	--	N/A	SGL QUAD WIDTH BRD	
SPECTRA LOGIC CORP.	SPECTRA 25 PLUS	DEC	NOW	3200	1	SMD(2.5 MB/S)PERTEC (T)	--	2	4	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	12	SECT	--	N/A	SGL QUAD WIDTH BRD	
WEBSTER COMPUTER	SMDQ11-A	DEC	NOW	2000	1	SMD (2.5 MB/SEC)	--	2	--	PROGRAMABLE	ECC	10 BIT BURST	SECT LVL	--	MULTISEC	--	--	1:1	DUAL WIDTH BOARD	
WEBSTER COMPUTER	PCLV11-J	DEC	NOW	872	1	Q1C-02	--	2	512	BYTES	N/A (FRMTR)	N/A (FRMTR)	N/A	--	8	--	--	N/A	1	DUAL WIDTH BOARD
WEBSTER COMPUTER	SRQ011-B	DEC	NOW	1443	1	ST506	--	2	--	PROGRAMABLE	N/A	N/A	N/A	--	N/A	--	--	N/A	1	DUAL WIDTH BOARD
WESPERCORP	TDQ-IV	DEC	NOW	1550	1	STC OR TELEX	--	1	UP	TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	64	--	--	N/A	SGL QUAD WIDTH BRD	
WESPERCORP	TDQ-III	DEC	NOW	1550	1	PERTEC	--	1	UP	TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	64	--	--	N/A	SGL QUAD WIDTH BRD	
WESPERCORP	DC-251	DEC	NOW	2095	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	N/A	SGL QUAD WIDTH BRD	
WESPERCORP	TC-151	DEC	NOW	3040	1	PERTEC	--	8	UP	TO 2K	ORC, PARITY	SGL TRACK	N/A	--	0	--	--	N/A	SGL Q(NRZ)+DUAL (PE)	
EMULEX	SC788	DEC	NOW	14900	1	SMD (1.8 MB/SEC)	--	8	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	--	N/A	EXTENDED HEX BRD	
EMULEX	SC780/B2	DEC	NOW	13500	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	--	N/A	EXTENDED HEX BRD	
AVIV	DFC 808B	DEC	NOW	4400	1	SMD (2.4 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11-BIT BURST	N/A	--	8.00	--	--	2:1	SGL HEX WIDTH BRD	
AVIV	TFC 805	DEC	NOW	9100	1	STC 1953	--	4	UP	TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	4.00	--	--	N/A	SGL HEX WIDTH BRD	
AVIV	TFC 825	DEC	NOW	2800	1	PERTEC	--	4	UP	TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	16.00	--	--	N/A	SGL HEX WIDTH BRD	
AVIV	DFC 807A	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11-BIT BURST	N/A	--	2.00	--	--	N/A	SGL HEX WIDTH BRD	
AVIV	DFC 808A	DEC	NOW	4400	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11-BIT BURST	N/A	--	2.00	--	--	N/A	SGL HEX WIDTH BRD	
AVIV	DFC 807C	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11-BIT BURST	N/A	--	2.00	--	--	N/A	SGL HEX WIDTH BRD	
AVIV	DFC 807B	DEC	NOW	3600	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11-BIT BURST	N/A	--	2.00	--	--	N/A	SGL HEX WIDTH BRD	
COMPUTER STOR.TECH	TC-200	DEC	NOW	3000	1	PERTEC	--	4	UP	TO 2K	ORC,PARITY	SGL TRK (PE)	N/A	--	0.06	--	--	N/A	SGL HEX WIDTH BRD	
DILOG	DU 218	DEC	NOW	2725	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1.90	--	--	N/A	SGL HEX WIDTH BRD	
DILOG	DU 216	DEC	NOW	4950	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	SEC/TRK	--	6	SECT.	--	N/A	SGL QUAD WIDTH BRD	
DILOG	DU 132	DEC	NOW	1550	1	PERTEC	--	4	UP	TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	1.00	--	--	N/A	SGL QUAD WIDTH BRD	
DILOG	DU 215	DEC	NOW	2090	1	SMD	--	2	--	PROGRAMABLE	56-BIT ECC	11 BIT BURST	TRK LEVEL	--	1	--	--	N/A	SGL QUAD WIDTH BRD	
DILOG	DU 342	DEC	NOW	1550	1	CDC SENTINEL	--	2	N/A	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD		
DILOG	DU 142	DEC	NOW	2150	1	PERTEC	--	4	UP	TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	4.00	--	--	N/A	SGL QUAD WIDTH BRD	
DILOG	DU 130	DEC	NOW	1630	1	PERTEC	--	8	UP	TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
EMULEX	SC41	DEC	85-3Q	4900	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	42	SECT	--	1:1	SGL HEX WIDTH BRD	
EMULEX	SC31/BX SERIES	DEC	NOW	4300	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	8	--	--	1:1	SGL HEX WIDTH BRD	
EMULEX	SC12/C SERIES	DEC	NOW	2800	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	--	3:1	SGL QUAD WIDTH BRD	
EMULEX	TC12	DEC	NOW	1400	1	PERTEC	--	4	UP	TO 2K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	N/A	--	--	N/A	SGL QUAD WIDTH BRD	
EMULEX	SC12/L SERIES	DEC	NOW	2800	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	3:1	SGL HEX WIDTH BRD	
EMULEX	SC21/B SERIES	DEC	NOW	3800	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	3:1	SGL HEX WIDTH BRD	
EMULEX	SC21/V SERIES	DEC	NOW	3800	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	3:1	SGL HEX WIDTH BRD	
EMULEX	TC13	DEC	NOW	2000	1	PERTEC	--	4	UP	TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	4	--	--	N/A	SGL QUAD WIDTH BRD	
EMULEX	SC21/C SERIES	DEC	NOW	3800	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	3:1	SGL HEX WIDTH BRD	
EMULEX	TC15	DEC	NOW	1400	1	CDC SENTINEL	--	1	N/A	N/A (FRMTR)	N/A (FRMTR)	N/A	--	4	--	--	N/A	SGL QUAD WIDTH BRD		
EMULEX	SC12/V SERIES	DEC	NOW	2800	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	--	3:1	SGL QUAD WIDTH BRD	
EMULEX	SC12/A SERIES	DEC	NOW	2800	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	1	--	--	3:1	SGL QUAD WIDTH BRD	
MOB SYSTEMS	MDB-DK11-RP	DEC	NOW	3900	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	--	N/A	SGL HEX WIDTH BRD	

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1985 CONTROLLER COMPETITION - BY DEC

MANUFACTURER	MODEL	POWER				HOST CHARACTERISTICS			FUNCTION					
		+5	-5	+12	-12	TEMP C	BIOS ROM	HOST BUS TYPE	HOST FEATURES	CLOCK/DATA RATE	TECHNOLOGY	PKG SIZE		
												DUAL	PLCC	OTHER
MICRO TECHNOLOGY	MXV22	2.5A	---	---	---	---	---	Q-BUS	RMD1/02	---	---	---	---	---
MICRO TECHNOLOGY	MSV05	3.5A	---	---	---	---	---	Q-BUS	TSV05	---	---	---	---	---
MICRO TECHNOLOGY	MXV90	2.5A	---	---	---	---	---	Q-BUS	RX50	---	---	---	---	---
MICRO TECHNOLOGY	MXV22M	2.5A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---
MICRO TECHNOLOGY	MLV11M	4.5A	---	---	---	---	---	Q-BUS	RL01/02	---	---	---	---	---
MICRO TECHNOLOGY	MLV11	4.5A	---	---	---	---	---	Q-BUS	RL01/02	---	---	---	---	---
MINI COMPUTER TECH	EDC24	6.5A	---	---	---	---	---	Q-BUS	RK06	---	---	---	---	---
MINI COMPUTER TECH	MCT1300	6.5A	---	---	---	---	---	Q-BUS	RK06/07	---	---	---	---	---
PLESSEY PERIPHERALS	DCY12	7.0A	---	---	---	---	---	Q-BUS	RL02	---	---	---	---	---
PLESSEY PERIPHERALS	DCV51	6.0A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
PLESSEY PERIPHERALS	XCV21/31	4.0A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---
PLESSEY PERIPHERALS	DCV03	7.0A	---	---	---	---	---	Q-BUS	RMD2/03/05	---	---	---	---	---
PLESSEY PERIPHERALS	FCV21	6.0A	---	---	---	---	---	Q-BUS	RL02	---	---	---	---	---
PLESSEY PERIPHERALS	CTCV11A	2.4A	---	---	---	---	---	Q-BUS	NONE	---	---	---	---	---
PLESSEY PERIPHERALS	DCV06B	7.0A	---	---	---	---	---	Q-BUS	RK06	---	---	---	---	---
PLESSEY PERIPHERALS	DCV50	6.0A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
QUALOGY	D 8260	6.1A	---	.15A	---	---	---	Q-BUS	NONE	---	---	---	---	---
QUALOGY	D 4140	3.7A	---	.09A	---	---	---	Q-BUS	RMD2	---	---	---	---	---
QUALOGY	D 4120	3.7A	---	.09A	---	---	---	Q-BUS	RMD2	---	---	---	---	---
QUALOGY	D 8255	6.1A	---	.15A	---	---	---	Q-BUS	NONE	---	---	---	---	---
QUALOGY	D 8250	6.1A	---	.15A	---	---	---	Q-BUS	NONE	---	---	---	---	---
QUALOGY	D 8120	3.0A	---	---	---	---	---	Q-BUS	TS-11/TSV05	---	---	---	---	---
SCIENT.MICRO SYST.	FMD 0106	7.6A	---	---	---	---	---	Q-BUS	NONE	---	---	---	---	---
SCIENT.MICRO SYST.	FMD 0101	7.6A	---	---	---	---	---	Q-BUS	NONE	---	---	---	---	---
SIGMA INFO SYST.	SDC R0011-B	2.6A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
SIGMA INFO SYST.	SDC RXV31	2.7A	---	---	---	---	---	Q-BUS	RMD1/02	---	---	---	---	---
SIGMA INFO SYST.	STC TSV11	3.75A	---	---	---	---	---	Q-BUS	TS-11/TSV05	---	---	---	---	---
SIGMA INFO SYST.	SDC R0011-A	2.6A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 15 PLUS	7.0A	---	---	---	---	---	Q-BUS	RMD2/05/80, RPO6	---	---	---	---	---
SPECTRA LOGIC CORP.	SPECTRA 25 PLUS	7.0A	---	---	---	---	---	Q-BUS	RMD2/05, RMD80, TS-11	---	---	---	---	---
WEBSTER COMPUTER	SMQ11-A	4.0A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
WEBSTER COMPUTER	PCLV11-J	2.5A	---	.25A	---	---	---	Q-BUS	NONE	---	---	---	---	---
WEBSTER COMPUTER	SRQ011-B	2.6A	---	---	---	---	---	Q-BUS	MSCP	---	---	---	---	---
WESPERCORP	TDQ-1V	6.0A	---	---	---	---	---	Q-BUS	TSV05	---	---	---	---	---
WESPERCORP	TDQ-111	6.0A	---	---	---	---	---	Q-BUS	TSV05	---	---	---	---	---
WESPERCORP	DC-251	6.0A	---	---	---	---	---	Q-BUS	RMD2	---	---	---	---	---
WESPERCORP	TC-151	9.0A	---	---	---	---	---	Q-BUS	TM-11	---	---	---	---	---
EMULEX	SC788	10.0A	---	---	---	---	---	SBI BUS	RMD3/05/80	---	---	---	---	---
EMULEX	SC780/B2	10.0A	---	---	---	---	---	SBI BUS	RPO6	---	---	---	---	---
AVIV	DFC 808B	7.0A	---	.7A	---	---	---	UNIBUS	RMD2/05	---	---	---	---	---
AVIV	TFC 805	5.0A	---	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---
AVIV	TFC 825	5.0A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---
AVIV	DFC 807A	7.0A	---	.7A	---	---	---	UNIBUS	RH11 W/ RMD2/05	---	---	---	---	---
AVIV	DFC 808A	7.0A	---	.7A	---	---	---	UNIBUS	RMD2/05	---	---	---	---	---
AVIV	DFC 807C	7.0A	---	.7A	---	---	---	UNIBUS	RMD3/05	---	---	---	---	---
AVIV	DFC 807B	7.0A	---	.7A	---	---	---	UNIBUS	RK711 W/ RK07 DRIVES	---	---	---	---	---
COMPUTER STOR.TECH	TC-200	8.5A	---	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---
DIALOG	DU 218	7.5A	---	.6A	---	---	---	UNIBUS	RMD2/05	---	---	---	---	---
DIALOG	DU 216	3.5A	---	.5A	---	---	---	UNIBUS	RK06/07	---	---	---	---	---
DIALOG	DU 132	4.0A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---
DIALOG	DU 215	3.5A	---	.5A	---	---	---	UNIBUS	RK06/07	---	---	---	---	---
DIALOG	DU 342	3.5A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---
DIALOG	DU 142	4.0A	---	---	---	---	---	UNIBUS	TS-11/TU80	---	---	---	---	---
DIALOG	DU 130	3.5A	---	---	---	---	---	UNIBUS	TM-11	---	---	---	---	---
EMULEX	SC41	7.5A	---	---	---	---	---	UNIBUS	MSCP	---	---	---	---	---
EMULEX	SC31/BX SERIES	8.0A	---	---	---	---	---	UNIBUS	RH11 W/ RMD2/03/05	---	---	---	---	---
EMULEX	SC12/C SERIES	5.7A	---	---	---	---	---	UNIBUS	RK611 W/ RK06/07	---	---	---	---	---
EMULEX	TC12	5.2A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---
EMULEX	SC12/L SERIES	5.7A	---	---	---	---	---	UNIBUS	RLV11/12 W/ R101/02	---	---	---	---	---
EMULEX	SC21/B SERIES	8.0A	---	---	---	---	---	UNIBUS	RH11 W/ RMD2/05, RPO6	---	---	---	---	---
EMULEX	SC21/V SERIES	8.0A	---	---	---	---	---	UNIBUS	RMD3/05	---	---	---	---	---
EMULEX	TC13	5.2A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---
EMULEX	SC21/C SERIES	8.0A	---	---	---	---	---	UNIBUS	RK611 W/ RK06	---	---	---	---	---
EMULEX	TC15	6.0A	---	---	---	---	---	UNIBUS	TS-11	---	---	---	---	---
EMULEX	SC12/V SERIES	5.7A	---	---	---	---	---	UNIBUS	RK711 W/ RK06/07	---	---	---	---	---
EMULEX	SC12/A SERIES	5.7A	---	---	---	---	---	UNIBUS	RP11E W/ RPO2/03	---	---	---	---	---
MDB SYSTEMS	MDB-DK11-RP	7.0A	---	.4A	---	---	---	UNIBUS	RPO6	---	---	---	---	---

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1985 CONTROLLER COMPETITION - BY DEC (By Host Bus Type)

MANUFACTURER	MODEL	TYPE	FCS	PRICE		I/F	DRIVE						HOST			DIMENSIONS						
				\$	Q		#	SECTOR SIZE	ERROR	FLAW	SCSI	BUFFER	XFR	MIN.	L	W	H					
							F	M	T	BYTES	DETECTION	CORRECTION	SKIPPING	LEVEL	KB	MB/SEC	LEAV					
MDB SYSTEMS	MDB-RM11-Q	DEC	NOW	3200	1	SMD	--	2	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	N/A	SGL	QUAD	WIDTH	BRD	
MDB SYSTEMS	MDB-TM11	DEC	NOW	2950	1	PERTEC	--	4	--	UP TO 2K	PARITY, CRC	SGL TRACK	N/A	--	0	--	N/A	SGL	HEX	WIDTH	BRD	
MDB SYSTEMS	MDB-OK11-RM	DEC	NOW	3900	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	N/A	SGL	HEX	WIDTH	BRD	
MICRO TECHNOLOGY	MX22	DEC	NOW	1045	1	SA800/460	4	--	--	128-1000	N/A	N/A	N/A	--	1	SECT	--	N/A	SGL	QUAD	WIDTH	BRD
MINI COMPUTER TECH	SMV15	DEC	NOW	3400	1	SMD	--	2	--	PROGRAMABLE	32 B FIRECODE	11 BIT BURST	N/A	--	1	--	1:1	SGL	HEX	WIDTH	BRD	
PLESSEY PERIPHERALS	XC21/31	DEC	NOW	840	1	SA850/460	4	--	--	256-1000	N/A	N/A	N/A	--	N/A	--	N/A	SGL	QUAD	WIDTH	BRD	
PLESSEY PERIPHERALS	DC02B	DEC	NOW	1925	1	SMD (1.8 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	TRK. LVL	--	3	SECT	--	N/A	SGL	HEX	WIDTH	BRD
PLESSEY PERIPHERALS	DC90	DEC	85-4Q	1995	1	SMD	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	8	--	N/A	SGL	QUAD	WIDTH	BRD	
SCIENT.MICRO SYST.	FWD 1106	DEC	NOW	1900	1	ST506(W), SA860/460 (F)	2	2	--	128-1000	ECC	6 BIT BURST	SECT LVL	--	N/A	--	N/A	1	DUAL/1	QUAD	BRD	
SCIENT.MICRO SYST.	FWD 1101	DEC	NOW	2100	1	SA1000(W), SA850 (F)	2	2	--	128-1000	ECC	6 BIT BURST	SECT LVL	--	N/A	--	N/A	1	DUAL/1	QUAD	BRD	
SPECTRA LOGIC CORP.	SPECTRA 111 PLUS	DEC	NOW	4000	1	SMD (2.5 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	14	SECT	--	N/A	SGL	HEX	WIDTH	BRD
SPECTRA LOGIC CORP.	SPECTRA 121 PLUS	DEC	NOW	5000	1	SMD(2.5 MB/S)PERTEC (T)	--	4	4	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	SECT	--	N/A	SGL	HEX	WIDTH	BRD	
SPECTRA LOGIC CORP.	SPECTRA 21	DEC	NOW	4200	1	SMD(2 MB/SEC)PERTEC (T)	--	4	8	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	N/A	SGL	HEX	WIDTH	BRD	
SPECTRA LOGIC CORP.	SPECTRA 12	DEC	NOW	4000	1	SMD (2 MB/SEC)	--	4	--	PROGRAMABLE	32-BIT ECC	11 BIT BURST	N/A	--	2	--	N/A	SGL	HEX	WIDTH	BRD	
WESPERCORP	TD-1V	DEC	NOW	1983	1	PERTEC	--	1	--	UP TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	64	--	N/A	SGL	HEX	WIDTH	BRD	
WESPERCORP	DC-231A	DEC	NOW	3190	1	SMD	--	4	--	PROGRAMABLE	ECC	8 BIT BURST	N/A	--	2	--	N/A	SGL	HEX	WIDTH	BRD	
WESPERCORP	TD-111	DEC	NOW	1983	1	PERTEC	--	4	--	UP TO 64K	N/A (FRMTR)	N/A (FRMTR)	N/A	--	64	--	N/A	SGL	HEX	WIDTH	BRD	
WESPERCORP	TC-131	DEC	NOW	3300	1	PERTEC	--	8	--	UP TO 2K	CRC, PARITY	SGL TRACK	N/A	--	33WORDS	--	N/A	SGL	HEX	WIDTH	BRD	

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1985 CONTROLLER COMPETITION - BY DEC

MANUFACTURER	MODEL	POWER				HOST CHARACTERISTICS			HOST FEATURES	FUNCTION				
		+5	-5	+12	-12	TEMP C	BIOS ROM	HOST BUS TYPE		CLOCK/ DATA RATE	TECHNOLOGY	PKG SIZE		
											DUAL	PLCC	OTHER	
MDB SYSTEMS	MDB-RM11-Q	7.0A	--	.4A	--	--	--	UNIBUS	RMD2/03/05	--	--	--	--	--
MDB SYSTEMS	MDB-TM11	7.0A	--	--	--	--	--	UNIBUS	TM-11/TU10	--	--	--	--	--
MDB SYSTEMS	MDB-DK11-RM	6.5A	--	.4A	--	--	--	UNIBUS	RMD2/03/05	--	--	--	--	--
MICRO TECHNOLOGY	MX22	2.5A	--	--	--	--	--	UNIBUS	RMD1/02	--	--	--	--	--
MINI COMPUTER TECH	SMV15	6.5A	--	--	--	--	--	UNIBUS	RK06	--	--	--	--	--
PLESSEY PERIPHERALS	XC21/31	4.0A	--	--	--	--	--	UNIBUS	RMD2	--	--	--	--	--
PLESSEY PERIPHERALS	DC02B	9.0A	--	--	--	--	--	UNIBUS	RMD2/05	--	--	--	--	--
PLESSEY PERIPHERALS	DC90	6.0A	--	--	--	--	--	UNIBUS	MSCP	--	--	--	--	--
SCIENT.MICRO SYST.	FWD 1106	7.8A	--	--	--	--	--	UNIBUS	NONE	--	--	--	--	--
SCIENT.MICRO SYST.	FWD 1101	7.8A	--	--	--	--	--	UNIBUS	NONE	--	--	--	--	--
SPECTRA LOGIC CORP.	SPECTRA 111 PLUS	8.0A	--	--	--	--	--	UNIBUS	RMD2/05, RP06	--	--	--	--	--
SPECTRA LOGIC CORP.	SPECTRA 121 PLUS	8.0A	--	--	--	--	--	UNIBUS	RMD2/05, RP4-7, TS-11	--	--	--	--	--
SPECTRA LOGIC CORP.	SPECTRA 21	10.0A	--	--	--	--	--	UNIBUS	RK06/07 EXT., TS-11	--	--	--	--	--
SPECTRA LOGIC CORP.	SPECTRA 12	8.0A	--	--	--	--	--	UNIBUS	RK06/07	--	--	--	--	--
WESPERCORP	TD-1V	7.0A	--	--	--	--	--	UNIBUS	TS-11	--	--	--	--	--
WESPERCORP	DC-231A	9.4A	--	--	--	--	--	UNIBUS	RMD2	--	--	--	--	--
WESPERCORP	TD-111	7.0A	--	--	--	--	--	UNIBUS	TS-11	--	--	--	--	--
WESPERCORP	TC-131	7.0A	--	--	--	--	--	UNIBUS	TM-11	--	--	--	--	--

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NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

DISK DRIVES

* - Look at notes.

Sorted by Company

COMPANY	TYPE	MODEL	EM	PM	PRICE (\$K)	Q	SIZE (")	STRG (MB)	HGHT (mm)	ACC TIME (ms)	XFER RATE (MB/s)	INTER-FACE	OPT IPS	CNTRL TYPE	SUBSYS/CNTRL TYPE	DATE	NOTES	
Alpha Data	Disk	Atlas 520	?	?	10.8	?	14	520	?	?	*	ANSI/ESMD	?	?	?	?	86/06	76 moving heads, 2.5MB instant transfer.
Alpha Data	Disk	Atlas	86/04	?	10.0	1	14	520	?	18	?	?	?	?	?	?	86/04	Claims to be world's fastest 520MB Winch DD. Has 76 heads.
Alps	Disk	?	86/06	86/12	?	?	3.5	20	?	?	?	?	?	?	?	?	86/04	Available in heights of 1.61" & 1.18".
Atasi	Disk	2000	?	86/08	2.7	?	5.25	170	?	?	?	SCSI	?	?	?	?	86/06	
C. Itoh	Disk	3540	86/11	87/02	1.0	1	3.5	40	?	40	?	?	?	?	?	?	86/06	Their 1st HD drive.
Century Data	Disk	C2800	?	?	8.9	OEM	8	830	?	?	2.4	ESMD	?	?	?	?	86/06	SCSI & IPI also available.
Core Int'l	Disk	?	?	?	9.0	1	5.25	260	?	15	?	ESDI	?	?	?	?	86/05	
Epson	Disk	HMD-720	?	?	0.4	?	3.5	20	HH	69	0.7	ST506/412	?	?	?	?	86/06	Counterbalanced rotary actuator, Carbon sputtered plated media.
Fujitsu	Disk	M2360A	?	?	19.0	OEM	10	689	?	18	12.3	?	?	?	?	?	86/05	Parallel xfer, up to 8 in daisy chain or star burst config.
Fujitsu	Disk	M233P	86/08	86/11	5.0	OEM	8	337	?	20	2.7	IPI-2(emb)	?	?	?	?	86/05	The embedded IPI-2 is an industry 1st.
IBM	Disk	9332	?	86/08	14.0	?	8	400	?	?	?	IPI-3	?	?	?	?	86/06	Attaches to System/36-38.
ICM	Disk	HD-3020	?	?	2.0	?	3.5	20	?	?	?	?	?	?	?	?	86/06	Plastic body.
Omega	Disk	Beta 20	?	86/09	0.5	OEM	5.25	21	HH	40	?	SCSI	?	?	?	?	86/04	
LaPine	Disk	?	Now	?	0.4	1000	3.5	20	?	?	?	SCSI	?	?	?	?	86/04	Imbedded SCSI.
Land	Disk	?	?	?	?	?	5.25	40	?	?	?	?	?	?	?	?	86/05	Cartridge, for NEC PC-9800.
Maxtor	Disk	4000 Series	?	Now	3.4	OEM	5.25	380	?	?	?	SCSI	?	?	?	?	86/06	
Micropolis	Disk	1558/78	86/09	86/11	2.0	OEM	5.25	382	?	18	1.25	ESDI/SCSI	?	?	?	?	86/06	
MiniScribe	Disk	8425S	86/07	86/10	0.4	OEM	3.5	25	?	?	?	SCSI	?	?	?	?	86/06	
MiniScribe	Disk	?	86/XX	?	?	?	5.25	170	?	?	?	?	?	?	?	?	86/04	Customers: Compaq, Convergent, Tallgrass & Mitsubishi/Sperry JV.
MiniScribe	Disk	6000E Series	86/07	86/10	1.3	OEM	5.25	170	?	?	?	ESDI	?	?	?	?	86/06	
National Memory	Disk	?	?	?	9.0	?	8	368	?	?	?	?	?	?	?	?	86/06	Used in IBM PC/XT/AT.
Priam	Disk	638/738	86/11	87/02	?	?	5.25	382	?	20	?	ESDI/SCSI	?	?	?	?	86/06	
Quantum	Disk	?	?	86/04	1.0	1000	5.25	80	HH	?	?	SCSI	?	?	?	?	86/04	Embedded SCSI.
Quantum	Disk	?	?	?	?	?	5.25	160	?	?	?	SCSI	?	?	?	?	86/06	
Toshiba	Disk	MK-288FC	?	?	4.3	OEM	8	510	?	?	?	?	?	?	?	?	86/05	
Toshiba	Disk	MK-288FC	?	86/09	4.3	OEM	8	510	?	18	2.4	SMD	?	?	?	?	86/04	
Tulin	Disk	TL 358	?	Now	?	?	5.25	48	HH	35	1	ST412(e1)	?	?	?	?	86/04	Currently shipping 8K drives/mo.

NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

FLOPPY DRIVES

* - Look at notes.

Sorted by Company

COMPANY	TYPE	MODEL	EM	PM	PRICE		SIZE (")	STRG (MB)	HGHT	ACC TIME (ms)	XFER RATE (MB/s)	INTER- FACE	OPT IPS	CNTRL TYPE	BUS	SUBSYS/ CNTRL TYPE	DATE	NOTES
					(\$K)	Q												
Hitachi Maxell	Flopy	?	86/10	?	?	?	2.5	1	?	?	?	?	?	?	?	?	86/06	
Kodak	Flopy	Breakthru Tech	?	?	?	?	5.25	12	?	75	0.3	SCSI	?	?	?	?	86/05	5" hard shell.
Matsushita	Flopy	EME-140	86/03	86/04	?	?	3	0.5	?	?	?	?	?	?	?	?	86/04	Light weight of only 250 grams. Single head.
Sankyo Seiki	Flopy	?	?	?	0.3	?	2.5	0.06	?	?	?	?	?	?	?	?	86/06	

NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

TAPE DRIVES

Sorted by Company

* - Look at notes.

COMPANY	TYPE	MODEL	EM	PM	PRICE		SIZE (")	STRG (MB)	HGHT (mm)	ACC TIME (ms)	XFER RATE (MB/s)	INTER- FACE	OPT IPS	CNTRL TYPE	BUS	SUBSYS/ CNTRL TYPE	DATE	NOTES	
					(\$K)	Q													
Advanced Digital	Tape	TD440	?	Now	1.5	1	.25	40	?	?	?	?	?	?	?	?	?	86/04	
Archive	Tape	?	?	?	?	?		120	?	?	?	?	?	?	?	?	?	86/04	5.25" format.
Archive	Tape	Super Scorpion	?	?	0.7	OEM	.25	125	?	?	?	QIC-120	?	?	?	?	?	86/05	Streaming cartridge, 5.25" form factor.
Archive	Tape	?	?	?	0.4	OEM	.25	40	?	?	?	?	?	?	?	?	?	86/05	Mini-cartridge, 3.5" form factor.
Archive	Tape	Scorpion 5125L-1	?	86/08	0.7	OEM	.25	125	?	?	0.1	?	?	72	?	?	?	86/04	5.25", Strmg crt.
Aspen	Tape	Mdl 1480	?	86/05	20.0	OEM	.5	?	?	?	?	?	?	?	?	?	?	86/04	3480-plug compatible. Customers: Miltop, Awelda.
Braemar	Tape	QicBac 350/525	?	?	?	?	.25	60	HH	?	?	PC/SCSI	?	?	?	?	?	86/06	3.5" or 5.25" form factor, mini-cartridge.
CDC	Tape	?	?	86/08	1.0	OEM	.5	240	?	?	0.25	HI/TC	?	?	?	?	?	86/04	3480
Irwin	Tape	Mdl 245	?	Now	0.9	?	.25	40	HH	?	?	?	?	?	?	?	?	86/04	5.25" form factor.
Irwin Magnetics	Tape	?	?	?	?	?	3.5	40	?	?	0.1	?	?	?	?	?	?	86/04	
Kennedy	Tape	?	?	87/02	1.0	?	.5	240	?	?	?	HI/TC	?	?	?	?	?	86/06	3480-compatible, 5.25" form factor.
Kennedy	Tape	6550 QIC-120	?	86/07	0.4	OEM	.25	120	HH	?	?	QIC-36	?	?	?	?	?	86/06	5.25" ff, strmg cartridge, (FH, QIC-02/SCSI also available).
North Atlantic	Tape	Roadrunner II	86/07	?	0.9	OEM	.25	125	HH	?	?	Q2/SCSI	?	?	?	?	?	86/04	
Wangtek	Tape	5125E	?	86/11	0.6	OEM	.25	125	HH	?	?	*	?	?	?	?	?	86/06	Streaming, (QIC-02/SCSI/IBM PC) also available.

NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

SUBSYSTEMS

* - Look at notes.

Sorted by Company

COMPANY	TYPE	MODEL	EM	PM	PRICE (\$K)	SIZE Q	STRG (MB)	HIGHT	ACC TIME (ms)	XFER RATE (MB/s)	INTER-FACE	OPT IPS	CNTRL TYPE	CNTRL TYPE	SUBSYS/ CNTRL	DATE	NOTES
Memorex	Subsys	3888-23	?	86/11	129.0	1 ?	8 ?	?	?	?	?	?	?	*	86/04	Disk cache.	
AST	Subsys	AST 2000	?	?	2.8	1 3.5	* ?	?	?	?	SCSI	?	?	D/T	86/04	20MB disk, 20MB tape.	
AST	Subsys	AST-2000	?	86/06	2.7	?	* ?	?	?	?	SCSI	?	?	D/T	86/05	*(Disk: 3.5", 20MB, Rodime, Tape: 20MB, Irwin)	
CMS	Subsys	Power Twin	?	?	2.0	?	* ?	HH	?	?	SCSI	?	?	D/T	86/05	*(Disk: 20MB, Tape: 1/4", 20MB), emb large sys Intgrtd cntrlr.	
Emulex	Subsys	EQ3	?	?	*	?	* ?	?	0.15	?	ESDI/ST506	?	?	D/T	86/05	*(Disk: 2-HD, 5.25", Tape: 1/4" crtg - 638MB ttl, \$6-21K.)	
MDB Systems	Subsys	RCS-P	?	?	19.0	?	?	?	?	?	ESDI	?	Q	D/T	86/05	Ruggedized, comb 2 fxd/2 rmvble, for DEC comp Qbus/MicroVax II.	
Mountain	Subsys	Filesafe 7000	?	?	4.2	1 ?	* ?	?	?	?	?	?	?	D/T	86/04	40MB disk, 60MB tape.	
Tallgrass	Subsys	TG-2025e	?	?	2.3	?	* ?	?	?	?	?	?	?	D/T	86/06	*(Disk: 25MB, Tape: 20MB).	
Ancodyne	Subsys	PHD	86/06	?	7.0	?	* ?	?	1.2	?	?	?	?	Disk	86/06	*(3-20MB fixed, 1-20MB rmvble), 1-1 interleaving, PC-AT comp.	
CMS	Subsys	Perfect 60	?	?	3.5	1 ?	60 ?	37	?	?	?	?	?	Disk	86/04	Internal/External.	
Century Data	Subsys	AMS 600PH	?	?	14.5	OEM 8	615 ?	?	?	?	IPI-3	?	?	Disk	86/06		
Express Systems	Subsys	Hard Diskcards	?	?	1.0	?	60 ?	60	1	?	?	?	?	Disk	86/06	HD card, IBM PC/XX comp, two slots.	
Extended Systems	Subsys	Sharedata	?	?	2.0	?	20 ?	?	0.08	?	RS422	?	?	Disk	86/05	Multi-tasking storage cntrlr for 4 PCs, allows DOS file sharing.	
General Computer	Subsys	Hyperdrive 2000	?	86/06	3.2	1 ?	20 ?	?	?	?	?	?	?	Disk	86/03	For Apple Macintosh.	
Haba/Arays	Subsys	Habadisk	?	?	0.7	1 ?	10 ?	?	0.8	?	?	?	?	Disk	86/03	For Atari ST.	
IBM	Subsys	9335	?	?	*	?	14 **	?	?	?	IPI-3	?	?	Disk	86/06	*(cntrlr-\$8.5K, \$21.2K/drive), **(4-855MB), connected to Sys/38.	
Innovative Devices	Subsys	Cardrive	?	86/08	2.0	?	63 ?	30	?	?	?	?	?	Disk	86/06	HD card, RLL encoding, 1 1/2 slots.	
Iomega	Subsys	Bernoulli Box +	?	?	6.0	1 ?	80 ?	30	?	?	?	?	?	Disk	86/05	Also, 2-20MB removable disks.	
Iomega	Subsys	Bernoulli Box +	?	86/06	6.0	?	5.25 80	?	?	?	SCSI	?	?	Disk	86/05	Also, 2-20MB removable HD. Fixed disk is CDC Wren II.	
Kamerlan Labs	Subsys	?	?	86/07	0.5	?	30 ?	?	?	?	?	?	?	Disk	86/05	2-7 RLL coding, cntrlrs by Adaptec/Scientific Mic Sys.	
Kamerlan Labs	Subsys	SioMachine	?	?	0.5	?	21 ?	75	5	?	?	?	?	Disk	86/05	HD card, PC compatible.	
NAS	Subsys	7380 Mdls AE/BE	?	Now	80.0	1 ?	2500 ?	?	?	?	?	?	?	Disk	86/04		
Plus Development	Subsys	Hardcard 20	?	Now	0.9	?	20 ?	?	?	?	?	?	?	Disk	86/06	HD card.	
Priam	Subsys	ID100-PC	?	?	2.7	?	100 ?	30	?	?	?	?	?	Disk	86/05	RLL, internal, IBM PC, Adaptec controller.	
Priam	Subsys	ID100-PC	?	Now	2.7	1 5.25	100 ?	?	?	?	?	?	?	Disk	86/04		
Priam	Subsys	ED	?	86/06	2.2	?	5.25 103	?	?	?	?	?	?	Disk	86/05		
Proapp Systems	Subsys	Proapp 20	?	?	1.0	?	20 ?	?	?	?	SCSI	?	?	Disk	86/06	Used with Apple II/Macintosh & others w/ SCSI.	
Qualogy	Subsys	Q5-4000	?	?	23.0	?	10 *	?	3	SMD	?	?	Q	Disk	86/05	*(689MB/drive). For DEC, up to 2 drives (Fujitsu), 1MB cache.	
Qualogy	Subsys	885/30	?	?	?	?	5.25 31	?	?	?	?	?	Q/Unl	Disk	86/04	Also, 1MB, 8" floppy disk.	
Qualogy	Subsys	Q6-2000	?	?	36.0	?	5.25 *	?	?	?	ESDI	?	?	Disk	86/05	*(330MB/drive). For DEC, up to 4 drives.	
SyQuest	Subsys	SQ1500	?	86/07	3.7	?	5.25 * HH	?	1	?	?	?	?	Disk	86/05	*(2-45MB, 2-15MB removable), IBM PC-XX compatible.	
SyQuest	Subsys	SQ319	?	?	1.4	?	5.25 15	HH	?	?	?	?	?	Disk	86/05	Removable, for IBM PC-XX, sold initially thru Hamilton/Avnet.	
System Industries	Subsys	9761H	?	?	16.0	?	10 503	?	?	?	?	?	?	Disk	86/05	Fujitsu drive for DEC.	
Tandem Japan	Subsys	XL8	?	?	169.0	?	?	4200 ?	15	?	?	?	?	Disk	86/05	VLSI controller, parallel architecture.	
Unbound	Subsys	MVED	?	?	?	?	5.25 165	?	30	?	?	?	?	Disk	86/04		
Univation	Subsys	Silimline	?	Now	2.8	1 ?	10 ?	?	?	?	?	?	?	Disk	86/04	Removable disk.	
Univation	Subsys	Macsilimline	?	?	3.3	?	* ?	?	?	?	SCSI	?	?	Disk	86/06	*(2-10MB/both rmvble or 1-10MB rmvble/1-30MB fixed), for Mact.	
Universal Periph	Subsys	Trumpcard	?	Now	0.8	1 ?	21 ?	?	?	?	?	?	?	Disk	86/04		
Universal Periph	Subsys	Trumpcard	?	86/07	0.8	?	5.25 21	?	80	0.7	?	?	?	Disk	86/05	Up to 2 drives.	
Verbatim	Subsys	DataLife DataBank	?	86/07	1.5	1 ?	30 ?	78	?	?	?	?	?	Disk	86/05	HD card, IBM PC-XX compatible, purchased from Mountain Cmpt.	
Western Digital	Subsys	Filecard20	?	?	0.9	?	3.5 20	?	80	0.7	?	?	?	Disk	86/05	HD card, IBM PC-XT compatible.	
Winchester Systems	Subsys	DataSafe	?	?	4.5	?	150 ?	?	?	?	?	?	Q	Disk	86/05	Also, 11MB rmvble 5.25" cartridge, MSCP compatible.	
Christlin	Subsys	CI-1220-TF	?	?	2.5	1 3.5	2 ?	?	?	?	?	?	?	Flyp	86/04		
Acknowledge	Subsys	AT40001/AFram40	?	?	0.8	?	40 ?	?	?	?	?	?	?	Tape	86/05	Crtg; 3.5" ff; Intrnl - PC-AT (\$600), Extrnl - PC-XT (\$850).	
Acknowledge	Subsys	AT-4000-1	?	?	?	?	40 ?	?	?	?	?	?	?	Tape	86/04	3.5" format. Supplied by Alloy.	
Aviv	Subsys	TFS-500	?	?	9.0	1 .5	500 ?	?	?	?	STC	?	Unl/Q	Tape	86/04	Strmg & GCR, 128KB each buffer.	
Background Backup	Subsys	?	?	Now	0.9	1 ?	150 ?	?	?	?	?	?	?	Tape	86/04	VCR tape, (Beta & VHS).	
Everex	Subsys	ExcelStream 60-8	?	?	1.0	?	.25 60	?	?	?	?	?	?	Tape	86/05	External; streaming; for IBM PC.	
Everex	Subsys	Excel-Stream 60-8	?	?	1.0	1 .25	60 ?	?	0.1	?	?	?	?	Tape	86/04	8" form-factor.	
First Class Periph	Subsys	B-Slider	?	?	0.7	?	20 ?	?	?	?	?	?	?	Tape	86/05	For Apple II, attaches to HD.	
Genoa Systems	Subsys	Galaxy Rel 2.2	?	86/07	2.0	1 ?	60 HH	?	0.1	?	?	90	?	Tape	86/04	Streaming cartridge.	
Memorex	Subsys	6520	?	Now	77.0	1 ?	?	?	?	?	?	?	?	Tape	86/04	Tape processor.	
NAS	Subsys	7440	?	?	?	?	.5 300	?	?	?	?	?	?	Tape	86/06	300MB/reef, 9-track.	
Peachtree Tech	Subsys	T33se	?	?	1.0	?	33 ?	?	?	?	?	?	?	Tape	86/05	External; plugs into flyp port, for PC-XX.	
Priam	Subsys	ET	?	86/06	1.9	?	.25 60	?	?	?	?	?	?	Tape	86/05	Streaming & rmvble cartridge.	
STC	Subsys	4700	?	?	*	?	.25 ?	?	?	?	?	200	?	Tape	86/06	*(47K/cntrl & drive, \$21K/addtl drive), for CDC Cyber.	
Sigma Designs	Subsys	FTK-0060	?	86/07	1.4	?	.25 60	?	?	?	?	?	?	Tape	86/05	5.25" ff, cartridge, external.	
Sysgen	Subsys	Smart Image	?	?	0.8	1 ?	20 ?	?	?	?	?	?	?	Tape	86/04	Strmg tape.	
Tallgrass	Subsys	TG-1020e	?	?	1.3	?	20 ?	?	?	?	?	?	?	Tape	86/06	Cartridge, external.	
Tandem Japan	Subsys	5130	?	?	109.0	?	?	?	?	?	?	200	?	Tape	86/05	High-end, high transfer rate, advanced error detection, ANSI.	
Telebyte	Subsys	TDX-45/5360	?	?	9.0	1 .5	?	?	?	?	BISync	?	?	Tape	86/04	For IBM Sys /34, /36 minis. Uses MLCA or ELCA comm lines.	
Tense Lectronix	Subsys	?	?	?	?	?	60 ?	?	0.08	?	?	?	?	Tape	86/06	For PC-XX & compatible.	

NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

OPTICAL DRIVES

* - Look at notes.

Sorted by Company

COMPANY	TYPE	MODEL	EM	PM	PRICE		SIZE	STRG	HGT	ACC	XFER	INTER-	OPT	CNTRL	SUBSYS/ CNTRL	DATE	NOTES		
					(\$K)	Q												(")	(MB)
Datext/Dow Jones	Opt	CD/Newsline	?	?	?	?	?	?	?	?	?	?	?	CD	?	?	86/05	On-line retrieval svc. Info on svcs, tech, mfg & consumer prods.	
Hitachi/Zenrin	Opt	P-MAP	?	?	29.0	1	?	?	?	?	?	?	?	CD	?	?	86/05	Electronic map system, 500 maps/disk.	
KOM	Opt	Optfile	?	?	60.0	1	?	1000	?	?	?	?	?	WO	?	?	86/04	Removable, 56 drive on-line capacity.	
Laser data	Opt	LaserView	?	86/11	39.0	?	?	?	?	?	?	?	?	WO	?	?	86/05	Store, retrieve & distribute electronic pages.	
Matsushita	Opt	Panofile 10	?	Now	25.0	1	8	*	?	?	?	?	?	WO	?	?	86/04	Optoelectronic filing, stores 25K pages.	
N/Hance	Opt	N/Hance 525	?	?	3.5	?	?	230	?	?	0.3	?	?	WO	?	?	86/05	Optical disk for CAD/CAM systems.	
Nichigai	Opt	?	?	86/06	*	1	?	?	?	?	?	?	?	CD	?	?	86/04	Database svc - dictionaries, encyclopedia. Leasing Hitachi CD.	
Optotech	Opt	?	86/07	86/09	2.0	OEM	5.25	?	?	?	?	?	SCSI*	?	WO	?	?	86/05	SCSI is 1st in U.S.
Optotech	Opt	?	86/07	86/09	2.5	OEM	5.25	*	?	195	2.2	?	SCSI	?	WO	?	?	86/04	Stores 200MB/side, Customers: Tallgrass, Lancore & Miltope.
Phillips	Opt	CM110	?	?	550.0	1000	?	600	?	?	?	?	SCSI	?	CD	?	?	86/04	7 CD drives per host adapter.
Pioneer	Opt	?	?	86/09	?	?	?	?	?	?	?	?	?	CD	?	?	?	86/04	CD software, custom press orders.
Reference/3M	Opt	?	?	?	?	?	?	?	?	?	?	?	?	CD	?	?	?	86/03	Fast production of CD-ROM.
Ricoh	Opt	?	?	86/12	3.2	?	5.25	800	?	?	?	?	?	WO	?	?	?	86/06	Double sided.
Sony	Opt	S10S File	?	86/11	58.4	?	?	?	?	?	?	?	?	WO	?	?	?	86/06	Optical disk-based filing system.
Sony	Opt	CDU-200	?	?	?	?	5.25	?	?	?	?	?	SASI	?	CD	?	?	86/04	w/ power supply.
Sperry	Opt	8562	?	?	127.0	1	?	?	?	?	?	?	?	WO	6071	?	?	86/04	Manual system, made by Hitachi. 4-drive.
Sperry	Opt	8564	?	?	135.0	1	?	82000	?	?	?	?	?	WO	5071	?	?	86/04	Library system, made by Hitachi, dual drive.
Toshiba	Opt	3200HT	?	86/07	10.0	?	?	130	?	?	?	?	RS-232C	?	WO	?	?	86/05	Optical disk filing system, also uses IEEE488 interface.

NEW PRODUCT ANNOUNCEMENTS
(3/86 - 6/86)

CONTROLLERS

* - Look at notes.

Sorted by Company

COMPANY	TYPE	MODEL	EM	PM	PRICE (\$K) Q	SIZE (")	STRG (MB)	HGH T	ACC TIME (ms)	XFER RATE (MB/s)	INTER- FACE	OPT IPS	CNTRL TYPE	BUS	SUBSYS/ CNTRL TYPE	DATE	NOTES	
Emulex	Cntrl	QD21	?	?	?	?	5.25	?	?	?	1	ESDI	?	?	Q	Disk	86/04	Digital Mass Storage Control Protocol.
Emulex	Cntrl	MD21	?	?	0.4	?	?	?	?	?	?	ESDI->SCSI	?	?	Q/Uni	Disk	86/05	32K data buffer, direct track addressing; also PC bus.
Emulex	Cntrl	SC7003	?	86/06	9.0	?	?	?	?	0.4	?	SMD(-E)	?	?	?	Disk	86/05	Mpu-based, 28-sector RAM buffer, 8 transparent ports.
Everex	Cntrl	EV-390	?	?	0.3	?	?	?	?	?	?	?	?	?	?	Disk	86/05	6 drives (2HD,4FD).
Fujitsu	Cntrl	M1053	?	86/07	0.9	OEM	?	?	?	?	?	SCSI/CCS	?	?	?	Disk	86/05	16KB buffer, differential drivers.
MDB Systems	Cntrl	MLS1/MV-ESDI-RM	?	86/06	1.7	?	?	?	?	2.4	?	ESDI	?	?	Q	Disk	86/05	Quad-size, RM03/05 emulation.
MDB Systems	Cntrl	MV-DK11-RM	?	Now	2.4	1	?	?	?	2.5	?	HSMD	?	?	?	Disk	86/04	Controls 4 drives (from 67MB to 6GB).
MDB Systems	Cntrl	MV-DK11-RM	?	?	2.4	?	?	*	?	0.6	?	?	?	?	?	Disk	86/05	*(67MB-6GB), quad-size, 4 logical drives.
Memorex	Cntrl	3888-23	?	86/11	129.0	?	?	?	?	?	?	?	?	?	?	Disk	86/04	Cache for 3380-comp drives. With 8MB cache, \$129K + \$575/mnth.
Sigma Info	Cntrl	SDC-RQD11-B	?	?	1.3	1	5.25	?	?	?	?	ST506	?	?	?	Disk	86/04	Controls 2 drives.
Sigma Info	Cntrl	SDC-RQD11-SC	?	?	1.9	1	?	?	QH	?	3	SMD	?	?	?	Disk	86/04	
Sysgen	Cntrl	SC6000 Turbo	?	?	0.3	?	?	70	?	?	?	?	?	?	?	Disk	86/05	1-1 interleaving, 2 drives, also HH 40MB config at \$1.8K.
Webster	Cntrl	WQESD	?	?	2.4	1	?	330	QH	?	3	ESDI	?	?	Q	Disk	86/04	Controls 4 drives, 1MB cache.
Zetaco	Cntrl	ARZ-1	?	86/07	?	?	?	?	?	?	?	SMD-E/HSMD	?	?	?	Disk	86/05	Attaches to Data General Ellipse/MV Series.
Computer Dynamics	Cntrl	FLP-380	?	?	?	?	*	?	?	?	?	?	?	?	STD	Fipy	86/04	Sizes are 8"/5.25"/3.5". Controls 4 drives.
Kodak	Cntrl	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Fipy	86/04	Supports combination density tpi, 4 drives, 1/2 card slot.
Aviv	Cntrl	TFC-919	?	?	?	?	?	?	?	?	?	?	200	?	Q	Tape	86/04	GCR.
Emulex	Cntrl	QT12	?	?	1.3	1	?	?	?	0.2	?	QIC-02	?	?	Q	Tape	86/04	
Micro Tech	Cntrl	MSV15	?	?	1.0	1	.5	?	?	0.4	?	?	125	?	Q	Tape	86/04	Tape coupler.
Sigma Info	Cntrl	STC-TSQ11	?	?	1.3	1	?	?	?	?	*	QIC-02	?	?	Q	Tape	86/04	Links 5.25" strng crt to Q-bus. Transfer rate is 60MB/12min.
Telebyte	Cntrl	TDX-1050	?	?	2.0	?	.5	?	?	?	?	R232C	?	?	?	Tape	86/05	1 or 2 density, Attaches TD to networks, PBXs & processors.
Wesper corp	Cntrl	TDQ-QIC	?	?	1.3	1	?	?	?	?	?	QIC-02	?	?	Q	Tape	86/03	Tape coupler. Emulates DEC TS11/TSV05.

CONTRACTS

Storage Products
(1/86 - 6/86)

Sorted by Supplier.

* - See notes.

SUPPLIER	CUSTOMER	DATE	TYPE	SIZE	MB	INTERFACE	MODEL	AMT (\$M)	LNPTH (MO)	SYSTEM USED WITH	NOTES
Alps	IBM	86/05	Flpy	3.5	1	?	?	?	?	PC Convertible	100K units.
Archive	Altos	86/06	Tape	.25	60	?	Scorpion	5.3	?	?	Also, \$16M of orders from 10 other companies.
Archive	American Mitac	85/12	Tape	.25	?	?	Scorpion,FasTape	3	2	MPC-160S	
Archive	Ashford Int'l	86/03	Tape	.25	?	?	Scorpion,FasTape	3.9	24	?	
Archive	Display Data	86/03	Tape	.25	?	?	Sidewinder,Scorpion	3.3	24	?	
Archive	Kammerman Labs	85/12	Tape	.25	?	?	Scorpion,FasTape	8.5	2	Master/Megaflight	
Archive	Lanier Business Sys	85/12	Tape	.25	?	?	Scorpion,FasTape	1	2	Concept 6000	
Archive	McDonnell Douglas Cmp	86/01	Tape	.25	10	?	1/4" Strmg Crtg	3.5	?	6000 Series	
Archive	Media Winchester Ltd.	86/03	Tape	.25	?	?	Scorpion,FasTape	1.6	24	?	
Archive	Philips Data Sys	86/03	Tape	.25	?	?	1/4" Crtdg	5.9	24	?	
Archive	Qualogy	86/03	Tape	.25	?	?	Sidewinder,Scorpion	1.9	24	Cyclone,Multi-Bus	
Archive	Sysgen	85/11	Tape	?	?	?	?	13	?	?	
Archive	Texas Instruments	86/02	Tape	.25	60	?	Scorpion	10	18	Business Pro	
Archive	Westek Comptr Grp	86/03	Tape	.25	?	?	Scorpion,FasTape	1.6	24	?	
CDC	Apollo	85/12	Tape	.50	?	?	Keystone 1/2"	?	?	Domain	
CDC	U.S. Navy	86/04	Disk	?	?	?	?	81	?	?	
Computer Mem (CMI)	Leading Edge Prod.	86/04	Disk	5.25	40	?	CM3000,CM6000	30	?	Mdl D	Also 20MB.
Fujitsu America	See Note	86/01	Disk	5.25	?	?	3.5/5.25" flpy/disk	20	24	?	Signed distribution agreements with Wyle Labs & Western Micro Tech.
Hitachi	Silicon Graphics	86/04	Disk	5.25	172	ESDI	DK512-17	4.5	?	Iris Series 3030	ESDI w/ 1.2MB per second data transfer rate.
Imega	Xerox	86/01	Disk	?	?	?	Bernoulli Box	?	?	6060 workstations	
Irwin Magnetic Sys	NCR	85/12	Tape	?	?	?	?	?	?	PC 6/8	
Irwin Magnetics	U.S. Air Force	86/04	Tape	?	?	?	?	?	?	Zenith Data PC	Accompanies Zenith Data's contract. Could involve up to 40,000 drives.
Kanto Denshi	ISI	86/01	Opt	?	?	?	Optical disk drive	?	?	?	
Kanto Denshi	Information Storage	86/04	Opt	5.25	?	?	Superstore2000	?	?	?	Drive sells for 1.25 million yen.
Kanto Denshi	PB Trade	86/01	Disk	3.5	?	?	Lapine Titan 20	?	?	?	3.5" drive, mfg by Kyocera.
Manzana MicroSys	M/A-Com	86/05	Subsys	3.5	?	?	?	?	?	IBM PC/AT	300 units, to be used by U.S. Postal Service.
Maxtor	Apollo	86/03	Disk	5.25	190	ST506/412	XT-2190	5	24	DN580/90	
Maxtor	Applied Digital Data	85/12	Disk	?	?	?	XT-1000,2000	3	?	Mentor	
Maxtor	Calma	85/12	Disk	?	?	?	XT-1000,2000	3	?	GDSII/32	
Maxtor	Convergent	86/04	Disk	5.25	140	ST506	XT-1140	10	?	Mega/MightyFrame	
Maxtor	DEC	86/05	Disk	5.25	190	ST506	XT-2000	75	?	?	Will account for 30% of revenue by 9/86.
Maxtor	DEC	86/04	Disk	5.25	190	ST506	?	75	24	MicroVAX 2	
Maxtor	Hewlett Packard	86/04	Disk	5.25	380	?	?	36	24	?	ESDI interface, also 170MB.
Maxtor	Lanier Business Sys	85/12	Disk	?	?	?	XT-1140	3	?	Concept 6000	
Maxtor	Northern Telecom	86/04	Disk	5.25	190	ST506	XT-1000/2000	15	?	Meridian/Vienna	Ranges from 85-190MB.
Maxtor	See Note	86/03	Disk	?	?	?	?	?	?	?	Signed contracts with 7 new distributors.
Maxtor	Toyoda Tsusho	86/05	Disk	5.25	190	ST506	XT-1000/2000	?	?	?	
Micropollis	Apollo	86/04	Disk	5.25	170	ESDI	?	?	?	?	2nd publicly revealed pact involving ESDI drive.
Micropollis	Hewlett Packard	86/04	Disk	5.25	380	ESDI	?	36	24	?	ESDI interface, also 170MB.
Micropollis	Memorex	86/05	Disk	5.25	85	?	?	?	36	XE520/550 & B27	For Burroughs mini/micro.
Micropollis	Prime	86/01	Disk	5.25	170	ESDI	1355	2.5	36	?	First major OEM agreement for disk drive with ESDI.
Micropollis	Prime	86/01	Disk	5.25	85	ST506/412	1325	2.5	36	?	
Microscience Int'l	GreatWest Tech	86/04	Disk	5.25	20	?	HH-725	?	?	?	Greatwest is procurement arm of ComputerLand, sold under Sysdyne label
Miniscribe	General Computer	85/12	Disk	3.5	25	?	Mdl 8425	7	12	Hyper Drive 20	Used in Apple McIntosh.
NAS	Avide	86/03	Disk	14	?	?	3380-class, plug	?	?	?	Remarketing agreement.
NEC	Tandem	86/04	Disk	9	?	?	D2352	?	?	XL8	
Optimem	Falcon Sys	86/02	Opt	12	1000	?	Optimem 1000	5	12	See Note	Will be used in Document Storage & Retrieval System.
Optimem	Landmark Graphics	86/04	Opt	?	1000	?	Optimem 1000	1	?	?	Will be used as on-line storage devices along w/ Winchester drives.
Optimem	Picdar	86/04	Opt	?	1000	?	Optimem 1000	1	?	?	Will be used as on-line storage devices along w/ Winchester drives.
Optotech	Franklin Telecom	86/06	Opt	5.25	?	?	5984	*	24	PC	*(multi-million dollar contract), w/o opt DD.
Optotech	Miltope	85/12	Opt	5.25	400	?	5984	3	24	Tempest	For use in tactical military applications. Will withstand electronic
Plasmon Data Sys	Cherokee Sys	86/01	Opt	?	?	?	ME Series	2	24	Pathfinder Opt DD	Designed for harsh environments & high data rates.
Prism	See Note	86/03	Disk	5.25	85	?	14",8",5 1/4" Winch	16	24	?	Includes 6 OEM contracts.(Altos, Thrd Coast Tech, Contel Comptr, etc)
Reference Tech	Capital Systems	86/05	Opt	?	?	?	?	?	?	?	CD-ROM
Ricoh	U.S. Army	86/05	Disk	5.25	10	?	?	0.7	?	?	1K units.
STC	Gould	85/12	Tape	.50	?	?	Mdl 2920 PE/GCR	10	60	Concept 32	
STC	Norsk Data	86/03	Tape	.50	?	?	1950/35,2920	3.5	24	?	
STC	Xerox	86/02	Tape	.50	?	?	Mdl 2925	?	24	Laser Printer	
Seagate	IBM	86/06	Disk	?	20	ST225	?	50	?	IBM PC/AT	Half-height.
Seagate	Xerox	86/02	Disk	5.25	?	?	See Note	15	18	?	Ranges from 10MB Hlf-Hght 5 1/4" to 80MB Full-Hght.
Tallgrass	GSA	86/05	Subsys	?	?	?	?	?	12	?	Internal/external, yearly renewal.
Tandberg Data	I2 Interface	86/01	Tape	?	?	?	?	0.8	?	?	
Tandberg Data	Premier Source Dist	86/01	Tape	?	?	?	?	3	15	Deputy subsys	
Tandberg Data	Scientific Micro Sys	86/01	Tape	.25	?	?	3319 Strmg Drv	3.3	24	?	
Tandberg Data	Space Coast Sys	86/01	Tape	.25	?	?	3319 Strmg Drv	3.3	18	Dsk/Tp add-on sys	
Tandberg Data	Symphony Sys	86/01	Tape	?	?	?	?	0.8	?	?	
Toshiba	Computerland	86/05	Disk	5.25	86	?	MK-56FB	?	?	?	Will sell as part of LANs & multiuser systems.
Toshiba	IBM	86/05	Flpy	3.5	1	?	?	?	?	PC Convertible	100K units.
Wangtek	Memorex	86/02	Tape	.25	?	?	Series 5000E	?	?	Burroughs B25	
Wangtek	NCR	86/03	Tape	.25	?	?	PC-36	12	36	PC-8, AT-compat	
Wangtek	SCOA Tek	86/05	Tape	.25	60	?	5000E	2	24	Storage King	Streaming, 5.25" ff, HH.

CONTRACTS

Storage Products
(1/86 - 6/86)

Sorted by Customer.

* - See notes.

CUSTOMER	SUPPLIER	DATE	TYPE	SIZE	MB	INTERFACE	MODEL	AMT (\$M)	LNTH (MO)	SYSTEM USED WITH	NOTES
Altos	Archive	86/06	Tape	.25	60	?	Scorplon	5.3	?	?	Also, \$16M of orders from 10 other companies.
American Mitac	Archive	85/12	Tape	.25	?	?	Scorplon,FasTape	3	2	MPC-160S	
Apollo	CDC	85/12	Tape	.50	?	?	Keystone 1/2"	?	?	Domain	
Apollo	Maxtor	86/03	Disk	5.25	190	ST506/412	XT-2190	5	24	DN580/90	
Apollo	Micropolis	86/04	Disk	5.25	170	ESDI	?	?	?	?	2nd publicly revealed pact involving ESDI drive.
Applied Digital Data	Maxtor	85/12	Disk	?	?	?	XT-1000,2000	3	?	Mentor	
Ashford Int'l	Archive	86/03	Tape	.25	?	?	Scorplon,FasTape	3.9	24	?	
Aweida	NAS	86/03	Disk	14	?	?	3380-class, plug	?	?	?	Remarketing agreement.
Calma	Maxtor	85/12	Disk	?	?	?	XT-1000,2000	3	?	GDS11/32	
Capital Systems	Reference Tech	86/05	Opt	?	?	?	?	?	?	?	CD-ROM
Cherokee Sys	Plasmon Data Sys	86/01	Opt	?	?	?	ME Series	2	24	Pathfinder Opt DD	Designed for harsh environments & high data rates.
Computerland	Toshiba	86/05	Disk	5.25	86	?	MK-56FB	?	?	?	Will sell as part of LANs & multiuser systems.
Convergent	Maxtor	86/04	Disk	5.25	140	ST506	XT-1140	10	?	Mega/MightyFrame	
DEC	Maxtor	86/05	Disk	5.25	190	ST506	XT-2000	75	?	?	Will account for 30% of revenue by 9/86.
DEC	Maxtor	86/04	Disk	5.25	190	ST506	?	75	24	MicroVAX 2	
Display Data	Archive	86/03	Tape	.25	?	?	Sidewinder,Scorplon	3.3	24	?	
Falcon Sys	Optimem	86/02	Opt	12	1000	?	Optimem 1000	5	12	See Note	Will be used in Document Storage & Retrieval System.
Franklin Telecom	Optotech	86/06	Opt	5.25	?	?	5984	*	24	PC	*(multi-million dollar contract), WO opt DD.
GSA	Tallgrass	86/05	Subsys	?	?	?	?	?	12	?	Internal/external, yearly renewel.
General Computer	MiniScribe	85/12	Disk	3.5	25	?	Mdl 8425	7	12	Hyper Drive 20	Used in Apple McIntosh.
Gould	STC	85/12	Tape	.50	?	?	Mdl 2920 PE/GCR	10	60	Concept 32	
GreatWest Tech	Microscience Int'l	86/04	Disk	5.25	20	?	HH-725	?	?	?	Greatwest is an arm of ComputerLand, sold under Sysdyne label.
Hewlett Packard	Maxtor	86/04	Disk	5.25	380	?	?	36	24	?	ESDI interface, also 170MB.
Hewlett Packard	Micropolis	86/04	Disk	5.25	380	ESDI	?	36	24	?	ESDI interface, also 170MB.
I2 Interface	Tandberg Data	86/01	Tape	?	?	?	?	0.8	?	?	
IBM	Alps	86/05	Flyp	3.5	1	?	?	?	?	PC Convertible	100K units.
IBM	Seagate	86/06	Disk	?	20	ST225	?	50	?	IBM PC/AT	Half-height.
IBM	Toshiba	86/05	Flyp	3.5	1	?	?	?	?	PC Convertible	100K units.
ISI	Kanto Denshi	86/01	Opt	?	?	?	Optical disk drive	?	?	?	
Information Storage	Kanto Denshi	86/04	Opt	5.25	?	?	Superstore2000	?	?	?	Drive sells for 1.25 million yen.
Kammerman Labs	Archive	85/12	Tape	.25	?	?	Scorplon,FasTape	8.5	2	Master/Megaflight	
Landmark Graphics	Optimem	86/04	Opt	?	1000	?	Optimem 1000	1	?	?	Will be used as on-line storage devices along w/ Winchester drives.
Lanier Business Sys	Archive	85/12	Tape	.25	?	?	Scorplon,FasTape	1	2	Concept 6000	
Lanier Business Sys	Maxtor	85/12	Disk	?	?	?	XT-1140	3	?	Concept 6000	
Leading Edge Prod.	Computer Mem (CMI)	86/04	Disk	5.25	40	?	CM3000,CM6000	30	?	Mdl D	Also 20MB.
M/A-Com	Manzana MicroSys	86/05	Subsys	3.5	?	?	?	?	?	IBM PC/AT	300 units, to be used by U.S. Postal Service.
McDonnell Douglas Cmp	Archive	86/01	Tape	.25	10	?	1/4" Strmg Crtg	3.5	?	6000 Series	
Media Winchester Ltd.	Archive	86/03	Tape	.25	?	?	Scorplon,FasTape	1.6	24	?	
Memorex	Micropolis	86/05	Disk	5.25	85	?	?	?	36	XE520/550 & B27	For Burroughs mini/micro.
Memorex	Wangtek	86/02	Tape	.25	?	?	Series 5000E	?	?	Burroughs B25	
Milltope	Optotech	85/12	Opt	5.25	400	?	5984	3	24	Tempest	For use in tactical military applications.
NCR	Irwin Magnetic Sys	85/12	Tape	?	?	?	?	?	?	PC 6/8	
NCR	Wangtek	86/03	Tape	.25	?	?	PC-36	12	36	PC-8, AT-compat	
Norsk Data	STC	86/03	Tape	.50	?	?	1950/35,2920	3.5	24	?	
Northern Telecom	Maxtor	86/04	Disk	5.25	190	ST506	XT-1000/2000	15	?	Meridian/Vienna	Ranges from 85-190MB.
PB Trade	Kanto Denshi	86/01	Disk	3.5	?	?	Lapine Titan 20	?	?	?	3.5" drive, mfg by Kyocera.
Phillips Data Sys	Archive	86/03	Tape	.25	?	?	1/4" Crtdg	5.9	24	?	
Picdar	Optimem	86/04	Opt	?	1000	?	Optimem 1000	1	?	?	Will be used as on-line storage devices along w/ Winchester drives.
Premier Source Dist	Tandberg Data	86/01	Tape	?	?	?	?	3	15	Deputy subsys	
Prime	Micropolis	86/01	Disk	5.25	85	ST506/412	1325	2.5	36	?	
Prime	Micropolis	86/01	Disk	5.25	170	ESDI	1355	2.5	36	?	First major OEM agreement for disk drive with ESDI.
Qualogy	Archive	86/03	Tape	.25	?	?	Sidewinder,Scorplon	1.9	24	Cyclone,Multi-Bus	
SCOA Tek	Wangtek	86/05	Tape	.25	60	?	5000E	2	24	Storage King	Streaming, 5.25" ff, HH.
Scientific Micro Sys	Tandberg Data	86/01	Tape	.25	?	?	3319 Strmg Drv	3.3	24	?	
See Note	Fujitsu America	86/01	Disk	5.25	?	?	3.5/5.25" flyp/disk	20	24	?	Signed distribution agreements with Wyle Labs & Western Micro Tech.
See Note	Maxtor	86/03	Disk	?	?	?	?	?	?	?	Signed contracts with 7 new distributors.
See Note	Pr iam	86/03	Disk	5.25	85	?	14",8",5 1/4" Winch	16	24	?	Includes 6 OEM contracts.(Altos, Third Coast Tech, Contel, etc.)
Silicon Graphics	Hitachi	86/04	Disk	5.25	172	ESDI	DK512-17	4.5	?	Iris Series 3030	ESDI w/ 1.2MB per second data transfer rate.
Space Coast Sys	Tandberg Data	86/01	Tape	.25	?	?	3319 Strmg Drv	3.3	18	Dsk/Tp add-on sys	
Symphony Sys	Tandberg Data	86/01	Tape	?	?	?	?	0.8	?	?	
Sysgen	Archive	85/11	Tape	?	?	?	?	?	13	?	
Tandem	NEC	86/04	Disk	9	?	?	D2352	?	?	XL8	
Texas Instruments	Archive	86/02	Tape	.25	60	?	Scorplon	10	18	Business Pro	
Toyoda Tsusho	Maxtor	86/05	Disk	5.25	190	ST506	XT-1000/2000	?	?	?	
U.S. Air Force	Irwin Magnetics	86/04	Tape	?	?	?	?	?	?	Zenith Data PC	Accompanies Zenith Data's contract. Could involve up to 40,000 drive
U.S. Army	Ricoh	86/05	Disk	5.25	10	?	?	0.7	?	?	1K units.
U.S. Navy	CDC	86/04	Disk	?	?	?	?	81	?	?	
Westek Comptr Grp	Archive	86/03	Tape	.25	?	?	Scorplon,FasTape	1.6	24	?	
Xerox	lomega	86/01	Disk	?	?	?	Bernoulli Box	?	?	6060 workstations	
Xerox	STC	86/03	Tape	.50	?	?	Mdl 2925	?	24	Laser Printer	
Xerox	?	?	?	?	?	?	See Note	15	18	?	Ranges from 10MB Hlf-Hght 5 1/4" to 80MB Full-Hght.

5 1/4 Inch -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
___	1	M2241AS Disk Drive	31.4 MByte, High Performance
___	2	M2242AS Disk Drive	54.9 MByte, High Performance
___	3	M2243AS Disk Drive	86.3 MByte, High Performance
___	4	M224X CE Manual	Extra charge option
___	5	M2230AS Disk Drive	6.6 MByte, Stepper
___	6	M2233AS Disk Drive	13.3 MByte, Stepper
___	7	M2234AS Disk Drive	20.0 MByte, Stepper
___	8	M2235AS Disk Drive	26.7 MByte, Stepper
___	9	M223XAS CE Manual	Extra charge option
___	10	M2230AT Disk Drive	6.6 MByte, Half Height
___	11	M2233AT Disk Drive	13 MByte, Half Height
___	12	M223XAT CE Manual	Extra charge option

* Denotes the most common configurations.

Comments: _____

Approvals: Account Rep: _____

Date: _____

Regional Administrator: _____

Date: _____

5 1/4 Inch Disk Drives
Detailed Part Number Listing

DRIVE CONFIGURATIONS

<u>Item</u>	<u>Part Number</u>	<u>Description</u>
1	B03B-4805-B011A	M2241AS Disk Drive
2	B03B-4805-B012A	M2242AS Disk Drive
3	B03B-4805-B013A	M2243AS Disk Drive
4	B03P-4805-0008A	M224XAS CE Manual
5	B03B-4695-B039A	M2230AS Disk Drive
6	B03B-4695-B020A	M2233AS Disk Drive
7	B03B-4695-B021A	M2234AS Disk Drive
8	B03B-4695-B042A	M2235AS Disk Drive
9	B03P-4695-0016A	M223XAS CE Manual
10	B03B-4695-B100A	M2230AT Disk Drive
11	B03B-4695-B101A	M2233AT Disk Drive
12	B03P-4695-0023A	M223XAT CE Manual

*From reverse side of form

M2312 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* _____	1	M2312K Disk Drive	Includes Terminator.
* _____	2	Power Supply	Select either item 11 or 12 at N/C. Includes AC line cord.
* _____	3	AC Fan	Recommended option. Required if item 6 selected.
* _____	4	Dual Port - P/S mount	Select if using rack mount kit. Includes P/S mount, D/P cable.
_____	5	Dual Port - Drive mount	Select if not ordering power supply. Includes drive mount, D/P cable.
_____	6	Rack Mount Kit	Select item 11 if item 2 selected.
_____	7	Control Panel	Includes control panel cable.
_____	8	A Cable, 60 in, single	For single unit installations.
_____	9	A cable, 60 in, dual	For daisy chaining 2 units.
_____	10	B cable, 60 in.	1 per disk drive.
_____	11	Power cables, short Fan and D.C. Power	Required for rack kit.
_____	12	Power cables, 1.5 M Fan and D.C. Power	Standard Length.
_____	13	M2311/12 CE Manual	
_____	14	Power Supply CE Manual	

Terminator included on the disk drive.

* Denotes the most common configurations.

Comments: _____

rev 1

Approval: Account Rep: _____

Date: _____

Regional Administrator: _____

Date: _____

M2312
Detailed Part Number Listing

DRIVE CONFIGURATIONS

	<u>2312K</u>	<u>Part Number</u>	<u>Description</u>
ITEM*	1 3	B03B-4595-B002A	M2312K Disk Drive
	x	M2312K XKA	M2312K with AC Fan
	x x		

OPTION PART NUMBERS

<u>ITEM*</u>	<u>PART NUMBERS</u>	<u>Description</u>
2	B14L-5105-0100A 17617	Power Supply AC Line Cord
4	B03B-4590-E401A B660-0625-T329A L1	Dual Port - P/S Mount Dual Port Power Cable
5	B03B-4590-E402A B660-0625-T329A L2	Dual Port - Drive Mount Dual Port Power Cable
6	B21L-1810-0002A (Also includes item 11)	Rack Mount Kit
7	B03B-4590-E501A B660-1995-T003A L2	Control Panel Control Panel Cable
8	B660-1065-T006A L1	A Cable, 60 Inch, Single
9	B660-1865-T020A L1	A Cable, 60 Inch, Dual
10	B660-1065-T008A L1	B Cable, 60 Inch
11	B660-0625-T327A L2 B660-0625-T328A L2	DC Power Cable, 15 CM Fan Power Cable, 12 CM
12	B660-0625-T327A L1 B660-0625-T328A L1	DC Power Cable, 1.5 Meter Fan Power Cable, 1.5 Meter
13	B03P-4590-0103A	M2312K CE Manual
14	FJ 0566-015-81	Power Supply CE Manual

*From reverse side of form.

M2322 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 DATE : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* _____	1	M2322K Disk Drive	Includes Terminator.
* _____	2	Power Supply	Select either item 12 or 13 at N/C. Includes AC line cord.
* _____	3	DC Fan	Recommended option. Required if 7 is selected.
_____	4	AC Fan	
* _____	5	Dual Port - P/S mount	Select if using rack mount kit. Includes D/P cable.
_____	6	Dual Port - Drive mount	Select if not ordering power supply. Includes D/P cable.
_____	7	Rack Mount Kit	Select item 12 if item 2 selected. Requires item 3.
_____	8	Control Panel	Includes control panel cable.
_____	9	A Cable, 60 in, single	For single unit installations.
_____	10	A cable, 60 in, dual	For daisy chaining 2 units.
_____	11	B cable, 60 in.	1 per disk drive.
_____	12	Power cables, short	Required for rack kit.
_____	13	Power cables, 1.5 M	Standard Length.
_____	14	M2322K CE Manual	
_____	15	Power Supply CE Manual	

Terminator included on the disk drive.

* Denotes the most common configurations.

Comments: _____

Approval: Account Rep: _____

Date: _____

Regional Administrator: _____

Date: _____

M2322
Detailed Part Number Listing

DRIVE CONFIGURATIONS

<u>ITEM*</u>	<u>1</u>	<u>5</u>	<u>6</u>	<u>Part Number</u>	<u>Description</u>
	x			B03B-4745-B002A	M2322K Disk Drive
	x	x		M2322K XKD	M2322K with DC Fan
	x		x	M2322K XKA	M2322K with AC Fan

OPTION PART NUMBERS

ITEM*

2	B14L-5105-0100A 17617	Power Supply AC Line Cord
5	B03B-4740-E401A B660-0625-T329A L1	Dual Port - P/S Mount Dual Port Power Cable
6	B03B-4740-E402A B660-0625-T329A L2	Dual Port - Drive Mount Dual Port Power Cable
7	B21L-1810-0002A B660-1995-T041A L2	Rack Mount Kit Pwr/DC Fan Cable, 15 CM
8	B03B-4590-E501A B660-1995-T006A L3	Control Panel Control Panel Cable
9	B660-1065-T006A L1	A Cable, 60 Inch, Single
10	B660-1865-T020A L1	A Cable, 60 Inch, Dual
11	B660-1065-T008A L1	B Cable, 60 Inch
12	B660-1995-T041A L2	Pwr/DC Fan Cable, 15CM
13	(DC Fan only) B660-1995-T041A L1	Pwr/DC Fan Cable, 1.5 Meter
	(AC Fan only) B660-0625-T327A L1	DC Power Cable, 1.5 Meter
	(AC Fan only) B660-0625-T328A L1	Fan Power Cable
14	B03P-4640-0111A	M2322K CE Manual
15	FJ 0566-015-81	Power Supply CE Manual

*From reverse side of form.

M2333 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 DATE : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* ___	1	M2333K Disk Drive	Includes Terminator.
* ___	2	Power Supply	Select either item 12 or 13 at N/C. Includes AC line cord.
* ___	3	DC Fan	Recommended option. Required if 7 is selected.
___	4	AC Fan	
* ___	5	Dual Port - P/S mount	Select if using rack mount kit. Includes D/P cable.
___	6	Dual Port - Drive mount	Select if not ordering power supply. Includes D/P cable.
___	7	Rack Mount Kit	Select item 12 if item 2 selected. Requires item 3.
___	8	Control Panel	Includes control panel cable.
___	9	A Cable, 6Ø in, single	For single unit installations.
___	10	A cable, 6Ø in, dual	For daisy chaining 2 units.
___	11	B cable, 6Ø in.	1 per disk drive.
___	12	Power cables, short	Required for rack kit.
___	13	Power cables, 1.5 M	Standard Length.
___	14	M2333K CE Manual	
___	15	Power Supply CE Manual	

Terminator included on the disk drive.

* Denotes the most common configurations.

Comments: _____

Approval: Account Rep: _____

Date: _____

Regional Administrator: _____

Date: _____

M2333
Detailed Part Number Listing

DRIVE CONFIGURATIONS

<u>ITEM*</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>Part Number</u>	<u>Description</u>
	x			B03B-4765-B003A	M2333K Disk Drive
	x	x		M2333K XKD	M2333K with DC Fan
	x		x	M2333K XKA	M2333K with AC Fan

OPTION PART NUMBERS

ITEM*

2	B14L-5105-0100A 17617	Power Supply AC Line Cord
5	B03B-4760-E401A B660-0625-T329A L1	Dual Port - P/S Mount Dual Port Power Cable
6	B03B-4760-E402A B660-0625-T329A L2	Dual Port - Drive Mount Dual Port Power Cable
7	B21L-1810-0002A B660-1995-T041A L2	Rack Mount Kit Pwr/DC Fan Cable, 15 CM
8	B03B-4590-E501A B660-1995-T006A L3	Control Panel Control Panel Cable
9	B660-1065-T006A L1	A Cable, 60 Inch, Single
10	B660-1865-T020A L1	A Cable, 60 Inch, Dual
11	B660-1065-T008A L1	B Cable, 60 Inch
12	B660-1995-T041A L2	Pwr/DC Fan Cable, 15CM
13	(DC Fan only) B660-1995-T041A L1 (AC Fan only) B660-0625-T327A L1 (AC Fan only) B660-0625-T328A L1	Pwr/DC Fan Cable, 1.5 Meter DC Power Cable, 1.5 Meter AC Fan Power Cable
14	B03P-4760-0111A	M2333K CE Manual
15	FJ 0566-015-81	Power Supply CE Manual

*From reverse side of form.

M2351 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
CUSTOMER #: _____

PO # : _____
Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* _____	1	M2351A Disk Drive	Includes slide rail option.
_____	2	Dual Port Option	
_____	3	A Cable, 60 inch	Interface cable.
_____	4	B cable, 60 inch	Interface cable.
_____	5	A Cable, 80 in.,Shielded	Recommended for FCC compliance.
_____	6	B Cable, 80 in.,Shielded	Recommended for FCC compliance.
_____	7	Terminator	Required for last drive in daisy chain. 1 W/O dual port, 2 with dual port.
_____	8	M2351 CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 1

Approval: Account Rep: _____
Regional Administrator: _____

Date: _____
Date: _____

M2351
Detailed Part Number Listing

DRIVE CONFIGURATIONS

	<u>1</u>	<u>2</u>	<u>Part Number</u>	<u>Description</u>
ITEM*	x		M2351A XS-	M2351A Disk Drive with Slides
	x	x	M2351A XSD	M2351A, with Slides, Dual Port

OPTION PART NUMBERS

ITEM			
3	B660-1065-T006A	L1	A Cable, 60 inch
4	B660-1065-T008A	L1	B Cable, 60 inch
5	B660-1954-T900A	L2	A Cable, 80 inch, Shielded
6	B660-1954-T901A	L2	B Cable, 80 inch, Shielded
7	B16B-4870-0010A		Terminator
8	B03P-4655-0001A		M2351 CE Manual

*From reverse side of form.

M2361 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____ PO # : _____
CUSTOMER # : _____ Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* _____	1	M2361A Disk Drive	Includes slide rail option.
_____	2	Dual Port Option	
_____	3	A Cable, 60 in.,Shielded	Required for FCC compliance.
_____	4	B Cable, 60 in.,Shielded	Required for FCC compliance.
_____	5	Terminator	Required for last drive in daisy chain. 1 W/O dual port, 2 with dual port.
_____	6	M2361 CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 2

Approval: Account Rep: _____ Date: _____
Regional Administrator: _____ Date: _____

M2361
Detailed Part Number Listing

DRIVE CONFIGURATIONS

	<u>1</u>	<u>2</u>	<u>Part Number</u>	<u>Description</u>
ITEM*	x		M2361A XS-	M2361A Disk Drive with Slides
	x	x	M2361A XSD	M2361A, with Slides, Dual Port

OPTION PART NUMBERS

ITEM

3	B660-1954-T904A L1	A Cable, 60 inch, Shielded
4	B660-1954-T903A L1	B Cable, 60 inch, Shielded
5	B03L-4790-0003A	Terminator
6	TBD	M2361 CE Manual

*From reverse side of form.

M2350 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
CUSTOMER #: _____

PO # : _____
Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* ___	1	M2350A Disk Drive	Includes slide rail.
___	2	Dual Port Option	
___	3	Deskew Option	
___	4	A/B cable, 60 inch	Interface Cable, 2 Required.
___	5	C Cable, 2.5 meter	Power "C" Cable.
___	6	E Cable, 3 meter	Power "E" Cable.
___	7	Terminator	
___	8	M2350 CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 2

(Approvals: Account Rep: _____
Regional Administrator: _____

Date: _____
Date: _____

M2350
Detailed Part Number Listing

DRIVE CONFIGURATIONS

<u>ITEM*</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>Part Number</u>	<u>Description</u>
	x			M2350A XS-	M2350A Disk Drive with Slides
	x	x		M2350A XSD	M2350A with Slides, Dual Port
	x		x	M2350A DS-	M2350A with Slides, Deskew
	x	x	x	M2350A DSD	M2350A with Slides, Deskew, Dual Port

OPTION PART NUMBERS

<u>ITEM</u>	<u>PART NUMBERS</u>	<u>Description</u>
4	B660-1954-T904A L1	A and B Interface Cable
5	B660-2000-T507A L1	C Cable
6	PW16B-6800-S040	Terminator
7	B03P-4795-0002A	M2350 CE Manual

*From reverse side of form.

M2284 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* ___	1	M2284K Disk Drive	110 Volt configuration. Select optional power supply item 3.
___	2	M2284N Disk Drive	220/240 Volt configuration. Select optional power supply item 4.
* ___	3	Power Supply, 110 V	Select if item 1 is selected. Includes AC line cord.
___	4	Power Supply, 220/240 V	Select if item 2 is selected.
* ___	5	Panel Slide Assembly	Includes slides, control panel, and painted front panel.
___	6	Dual Port Option	
___	7	Power Supply Mtg. Tray	Allows rack mounting of two power supplies.
___	8	A Cable, 60 inch	Interface cable.
___	9	B cable, 60 inch	Interface cable.
* ___	10	Terminator	Required for last drive in daisy chain. 1 W/O dual port, 2 with dual port.
___	11	M2284 CE Manual	
___	12	Power Supply CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 1

Approvals: Account Rep: _____ Date: _____
 Regional Administrator: _____ Date: _____

M2284
Detailed Part Number Listing

ALTERNATIVE CONFIGURATIONS

<u>2284K</u>			<u>Part Number</u>	<u>Description</u>
ITEM*	1	5 6		
	x		B03B-4585-B114A	M2284K Disk Drive, 120 Volt
	x	x	M2284K XP-	M2284K, 120 Volt, Panel Slide Assembly
	x	x	M2284K X-D	M2284K, 120 Volt, Dual Port
	x	x x	M2284K XPD	M2284K, 120 V., Panel Slide, Dual Port

<u>M2284N</u>				
ITEM*	2	5 6		
	x		B03B-4585-B504A	M2284N Disk Drive, 220 Volt
	x	x	M2284N XP-	M2284N, 220 Volt, Panel Slide Assembly
	x	x	M2284N X-D	M2284N, 220 Volt, Dual Port
	x	x x	M2284N XPD	M2284N, 220 V., Panel Slide, Dual Port

OPTION PART NUMBERS

ITEM

3	B14L-0300-0018A 17617	Power Supply, 120 Volt AC Line Cord
4	B14L-5100-0030A	Power Supply, 220 Volt
6	B03B-4540-E901A	Dual Port Option, SMD
7	B290-0570-V070A	Power Supply Mtg. Tray
8	B660-1065-T006A L1	A Cable, 60 Inch
9	B660-1065-T008A L1	B Cable, 60 Inch
10	B16B-4870-0010A	Terminator
11	B03P-4580-0100A	M2284 CE Manual
12	FJ 0566-011-81	Power Supply CE Manual, 120V
	FJ 0566-012-81	Power Supply CE Manual, 220V

*From reverse side of form

2294 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 Date : _____

<u>Select</u>	<u>Item</u>	<u>Description</u>	<u>Comments</u>
* _____	1	M2294K Disk Drive	110 Volt configuration. Select optional power supply item 3.
_____	2	M2294N Disk Drive	220/240 Volt configuration. Select optional power supply item 4.
* _____	3	Power Supply, 110 V	Select if item 1 is selected. Includes AC line cord.
_____	4	Power Supply, 220/240 V	Select if item 2 is selected.
* _____	5	Panel Slide Assembly	Includes slides, control panel, and painted front panel.
_____	6	Dual Port Option	
_____	7	Power Supply Mtg. Tray	Allows rack mounting of two power supplies.
_____	8	A Cable, 60 inch	Interface cable.
_____	9	B cable, 60 inch	Interface cable.
* _____	10	Terminator	Required for last drive in daisy chain. 1 W/O dual port, 2 with dual port.
_____	11	M2294 CE Manual	
_____	12	Power Supply CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 1

Approvals: Account Rep: _____ Date: _____
 Regional Administrator: _____ Date: _____

M2294
Detailed Part Number Listing

OPTIONAL CONFIGURATIONS

<u>2294K</u>				<u>Part Number</u>	<u>Description</u>
ITEM*	1	5	6	B03B-4585-B151A	M2294K Disk Drive, 120 Volt
	x			M2294K XP-	M2294K, 120 Volt, Panel Slide Assembly
	x	x		M2294K X-D	M2294K, 120 Volt, Dual Port
	x		x	M2294K XPD	M2294K, 120 V., Panel Slide, Dual Port
	x	x	x		

<u>M2284N</u>				<u>Part Number</u>	<u>Description</u>
ITEM*	2	5	6	B03B-4585-B153A	M2294N Disk Drive, 220 Volt
	x			M2294N XP-	M2294N, 220 Volt, Panel Slide Assembly
	x	x		M2294N X-D	M2294N, 220 Volt, Dual Port
	x		x	M2294N XPD	M2294N, 220 V., Panel Slide, Dual Port
	x	x	x		

OPTIONAL PART NUMBERS

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
3	B14L-0300-0018A 17617	Power Supply, 120 Volt AC Line Cord
4	B14L-5100-0030A	Power Supply, 220 Volt
6	B03B-4540-E901A	Dual Port Option, SMD
7	B290-0570-V070A	Power Supply Mtg. Tray
8	B660-1065-T006A L1	A Cable, 60 Inch
9	B660-1065-T008A L1	B Cable, 60 Inch
10	B16B-4870-0010A	Terminator
11	B03P-4580-0304A	M2294 CE Manual
12	FJ 0566-011-81 FJ 0566-012-81	Power Supply CE Manual, 120V Power Supply CE Manual, 220V

*From reverse side of form.

M2298 -- PRODUCT CONFIGURATOR

CUSTOMER NAME: _____
 CUSTOMER #: _____

PO # : _____
 Date : _____

Select	Item	Description	Comments
* ___	1	M2298K Disk Drive	110 Volt configuration. Select optional power supply item 3.
___	2	M2298N Disk Drive	220/240 Volt configuration. Select optional power supply item 4.
* ___	3	Power Supply, 110 V	Select if item 1 is selected. Includes AC line cord.
___	4	Power Supply, 220/240 V	Select if item 2 is selected.
* ___	5	Panel Slide Assembly	Includes slides, control panel, and painted front panel.
___	6	Dual Port Option	
___	7	Power Supply Mtg. Tray	Allows rack mounting of two power supplies.
___	8	A Cable, 60 inch	Interface cable.
___	9	B cable, 60 inch	Interface cable.
* ___	10	Terminator	Required for last drive in daisy chain. 1 W/O dual port, 2 with dual port.
___	11	M2298 CE Manual	
___	12	Power Supply CE Manual	

* Denotes the most common configurations.

Comments: _____

rev 1

Approvals: Account Rep: _____ Date: _____
 Regional Administrator: _____ Date: _____

M2298
Detailed Part Number Listing

VE CONFIGURATIONS

<u>2298K</u>			<u>Part Number</u>	<u>Description</u>
ITEM*	1	5 6	B03B-4585-B181A	M2298K Disk Drive, 120 Volt
	x		M2298K XP-	M2298K, 120 Volt, Panel Slide Assembly
	x	x	M2298K X-D	M2298K, 120 Volt, Dual Port
	x	x	M2298K XPD	M2298K, 120 V., Panel Slide, Dual Port
	x	x		

<u>M2284N</u>			<u>Part Number</u>	<u>Description</u>
ITEM*	2	5 6	B03B-4585-B183A	M2298N Disk Drive, 220 Volt
	x		M2298N XP-	M2298N, 220 Volt, Panel Slide Assembly
	x	x	M2298N X-D	M2298N, 220 Volt, Dual Port
	x	x	M2298N XPD	M2298N, 220 V., Panel Slide, Dual Port
	x	x		

OPTION PART NUMBERS

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
3	B14L-5105-0179A 17617	Power Supply, 120 Volt AC Line Cord
4	B14L-5105-0180A	Power Supply, 220 Volt
6	B03B-4540-E901A	Dual Port Option, SMD
7	B290-0570-V070A	Power Supply Mtg. Tray
8	B660-1065-T006A L1	A Cable, 60 Inch
9	B660-1065-T008A L1	B Cable, 60 Inch
10	B16B-4870-0010A	Terminator
11	TBD	M2298 CE Manual
12	TBD	Power Supply CE Manual, 120V
	TBD	Power Supply CE Manual, 220V

from reverse side of form

MEMO

CONFIDENTIAL

FUJITSU

DATE: October 22, 1984

TO: Distribution

LOCATION:

FROM: Mark Wilson

LOCATION:

-SUBJECT: NEW OEM PRICE SCHEDULES

New OEM quantity price schedules are attached with October 1, 1984 effectivity. Please note these prices are FAI confidential and will not be provided to the distributor and manufacturer representative organizations. They will receive separate prices, with any changes tentatively scheduled for delivery at Comdex in November.

The following products have new or revised pricing:

DISK

M224X	Q50 and up prices lowered.
M2312	Large quantities reduced 2% to 6%.
M2322	All prices lowered 5% to 15%.
M2333	New release.
M2351	All prices lowered 4% to 16%.
M2361	New release.

NOTE:

Eagle slides are now included in the drive price for all new quotations (see Options Table).

TAPE

M2442	New
M2444	New
M2436	New

Please contact Tim Eiland or myself for distributor tape pricing until formal prices are given to distributors.

Should you have any questions or comments regarding these prices, contact the respective product manager or myself.

GOOD SELLING!!

MDW/3584/lnh
Attachment

REGIONAL DELEGATION
OEM QUANTITY PRICING SUMMARY

Effective: October 1, 1984

Quantity	5 1/4"								8"	
	M2233AS 13.3MB	M2234AS 20.0MB	M2235AS 26.6MB	M2230AT 6.6MB	M2233AT 13.3MB	M2241AS 31MB	M2242AS 55MB	M2243AS 86MB	M2302B M2302BE 24MB	M2303BE 47MB
1 - 24	\$1,350	\$1,625	\$1,745	\$1,275	\$1,375	\$2,700	\$3,250	\$3,700	\$2,650	\$3,150
25 - 49	1,125	1,325	1,445	1,075	1,150	2,300	2,650	2,950	2,350	2,750
50 - 99	925	1,100	1,195	895	950	1,800	2,075	2,450	2,150	2,450
100 - 249	775	900	995	745	800	1,525	1,740	2,000	1,850	2,250
250 - 499	650	750	845	630	685	1,400	1,650	1,895	1,650	1,950
500 - 999	550	650	745	530	585	1,350	1,600	1,840	1,550	1,850
1000 - 1,999	435	600	695	430	475	1,250	1,525	1,750	1,450	1,750
2000 - 2,999	405	570	665	410	455	1,165	1,340	1,600	1,350	1,650
3000 - 4,999	395	550	645	395	415	1,020	1,175	1,470	---	---
5000 - 9,999	375	495	599	375	395	975	1,125	1,425	---	---

Submitted by: MDW. [Signature] 10/22/84
 Approval by: _____
 Approval by: _____

REGIONAL DELEGATION
OEM QUANTITY PRICING SUMMARY

Effective: October 1, 1984

Quantity	8"			10"			14"				
	M2312 84MB	M2312S 84MB	M2321 84MB	M2322 168MB	M2322S 168MB	M2333 337MB	M2351 474MB	M2361 689MB	M2284 169MB	M2294 336MB	M2298 671MB
1 - 24	\$7,250	\$8,050	N/A	\$8,300	\$9,100	\$9,950	\$13,500	\$15,500	\$9,600	\$11,100	\$12,600
25 - 49	5,750	6,500	N/A	6,600	7,350	8,000	11,500	13,225	7,600	9,050	10,600
50 - 99	4,250	5,000	N/A	4,850	5,600	5,900	9,250	10,500	5,600	6,680	8,100
100 - 249	2,995	3,495	N/A	3,800	4,300	4,700	8,500	9,800	4,775	5,800	7,045
250 - 499	2,600	3,050	N/A	3,400	3,850	4,200	8,265	9,465	4,350	5,295	6,435
500 - 999	2,500	2,900	N/A	3,200	3,600	3,900	7,865	9,015	4,200	5,115	6,215
1000 - 1,999	2,375	2,795	N/A	2,950	3,375	3,550	7,165	8,215	3,900	4,750	5,775
2000 - 2,999	2,250	2,650	N/A	2,700	3,100	---	6,665	7,665	3,650	4,450	5,415
3000 - up	2,125	2,525	N/A	2,550	2,950	---	6,165	7,065	3,450	4,230	5,150

Submitted by: MD Wilson 10-1-84
 Approval by: W. Powell 10-10-84
 Approval by: _____

OPTIONS TABLE

Effective: October 1, 1984

Drive	I/O Cable "A"	I/O Cable "B"	Terminator	Power Supply	Fan	Rack Mt. Kit	Front Panel & Slides	Slides	Power Supply Mount	Control Panel	Dual Port
M223X											
Qty: 1 - 99	---	---	---	---	---	---	---	---	---	---	---
100 - up	---	---	---	---	---	---	---	---	---	---	---
M230X											
Qty: 1 - 99	---	---	---	---	---	---	---	---	---	---	---
100 - up	---	---	---	---	---	---	---	---	---	---	---
M2312/22/33											
Qty: 1 - 99	\$112	\$61	Included	\$550	\$80	\$550	---	---	---	\$125	\$550
100 - up	78	41	Included	450	60	275	---	---	---	80	350
M228X/9X											
Qty: 1 - 99	112	61	82	400	Inc.	---	200	---	65	---	380
100 - up	78	41	62	385	Inc.	---	180	---	55	---	340
M2351/5X											
Qty: 1 - 99	112	61	82	Inc.	Inc.	---	---	Inc.	---	Inc.	280
100 - up	78	41	62	Inc.	Inc.	---	---	Inc.	---	Inc.	240

Submitted by: MD Wilson 10-1-84
 Approval by: [Signature] 10-10-84
 Approval by: _____

CONFIDENTIAL

REGIONAL DELEGATION
OEM QUANTITY PRICING SUMMARY

Effective: October 1, 1984

M2436 SERIES TAPE DRIVES

Quantity	M2436L1 MASTER	M2436L8 SLAVE
1 - 9	30,000	16,000
10 - 24	26,400	14,080
25 - 49	23,700	12,640
50 - 99	21,300	11,360
100 - 249	18,900	10,080
250 - UP	16,500	9,000

Submitted by: MD Wilson 10/22/84
Approval by: _____
Approval by: _____

0078L

CONFIDENTIAL

REGIONAL DELEGATION
OEM QUANTITY PRICING SUMMARY

Effective: October 1, 1984

M244X SERIES TAPE DRIVES

Quantity	M2442A 12.5/100ips	M2444A 25/75ips
1 - 9	9,800	9,300
10 - 24	8,820	8,400
25 - 49	8,050	7,650
50 - 99	7,150	6,800
100 - 249	6,370	6,050
250 - 499	5,880	5,580
500 - up	5,400	5,200

Submitted by: MD Wilson 10-1-84
Approval by: MJ Paul 10-10-84
Approval by: _____

0078L

CONFIDENTIAL

FUJITSU**FUJITSU AMERICA, INC.**CORPORATE HEADQUARTERS:
3055 Orchard Drive
San Jose, CA 95134-2017
(408) 946-8777

JULY 31, 1984

M228X SPARE PARTS PRICE LIST

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LIST PRICE</u>
109-024UL	FAN PWR SUPPLY	36.00
B030-4420-W006A	BRUSH, ANTISTATIC	22.00
B030-4420-W030A	TRANSDUCER, SPEED SENSE	38.00
B030-4420-W352A	COVER, GATE, TOP	8.00
B030-4420-X143A	SPRING, SPINDLE MOTOR	5.00
B030-4420-X319A	GROUND PLATE	1.50
B030-4540-T004A	DISK ENCLOSURE (169MB)	4400.00
B030-4540-T010A	DISK ENCLOSURE (84MB)	3900.00
B030-4585-Y104A	PULLEY, SPINDLE MOTOR	35.00
B03B-4540-E353A	PNL/SLD (RACK MT) ASSY	200.00
B03B-4540-E600A	CNVSN KIT, K TO N	966.00 *
B03B-4540-E601A	CNVSN KIT, N TO K	773.00 *
B03B-4540-F008A	BACK PNL, PCA (GBNM)	247.00
B03B-4540-V450A	SLD KIT, M228X	182.00
B03B-4585-X103A	PLATE, SPDL MTR PULLY COVER	10.50
B30L-1920-0002A	SHOCKMT, RUBBER	8.40
B03P-4580-0100A	MANUAL, C.E. M228X	45.00
B14L-0300-0018A	PWR SUPPLY 120V	400.00 *
B14L-5100-0030A	PWR SUPPLY 220V	440.00 *
B16B-3190-0010A	PCA EXTENDER, M228X	294.00
B16B-4870-0010A	TERMINATOR	82.00
B16B-6150-0010A	PCA, CNTLR I (CMIM)	330.00
BA6B-6160-0030A	PCA, CNTLR Q (CQFM)	358.00
	CMKM-B16B-6160-0020A	
B16B-6170-0020A	PCA, (RQWM) READ SWITCH	515.00
B16B-6240-0010A	PCA, SPEED CNTLR (SDIM)	725.00
B16B-6300-0010A	PCA, VARIABLE OSCILLATOR (VOFM)	545.00
B16B-7990-0020A	PCA, DUAL PORT, SMD, XCBM	405.00
B30L-1000-0006A	BELT	24.00
B42L-0110-0001A	CAPACITOR, 110V SPDL MOTOR	14.00
B42L-0110-0002A	CAPACITOR, 220V SPDL MOTOR	18.00
B57L-0040-0003A	FAN ALARM, M228X	50.00
B58L-0170-0001A	BRAKE RELAY	11.00
B300-2820-T010A	INTERNAL MTG KIT	50.00
B660-1055-T017A L1	CABLE A, AC PWR L2R003	52.00
B660-1055-T018A L1	CABLE B, DC PWR L2R003	57.00
B660-1060-T089A L1	CABLE, 10 COND, DUAL	15.00
B660-1065-T018A L1	CABLE, CNTL PNL	10.00
B660-1065-T037A L1	CABLE, 50 COND, DUAL	21.00
B660-1065-T061A L1	CABLE, 26 COND, DUAL	13.00
B90L-0980-0001A	MOTOR, 120V SPINDLE DRIVE	287.00
B90L-0980-0003A	MOTOR, 220V SPINDLE DRIVE	423.00
B90L-1190-0001A	BLOWER, M228X	67.00
C58L-0010-0001	RELAY, PWR SUPPLY LY2	20.00
C58L-0090-0001	HOLDER, BRAKE RELAY	1.00
C58L-0270-0004	RELAY, PWR SUPPLY LY4	20.00
C60L-0250-0011	FUSE, 1.3A (P413H)	4.00

CONTINUED

M228X SPARE PARTS PRICE LIST

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LIST PRICE</u>
C60L-C250-0023	HOLDER, BRAKE RELAY	1.00
C60L-0260-0010	FUSE, 15A (PL4150)	4.00
CT-AD-04	SPEED CLAMP A	.80
CT-AD-11	SPEED CLAMP B	.80
FJ 0566-011-81	C.E. MANUAL, PWR SUPPLY M228XK	10.00
FJ 0566-012-01	C.E. MANUAL, PWR SUPPLY M228XN	10.00
KS14-9948-H467	PCA, POWER SUPPLY REGULATOR	600.00
N42L-1911-0002	SPARK SUPPRESSOR	4.00
N860-3251-T002	OPERATOR SWITCH ASSEMBLY	75.00
P405H	FUSE, 0.5A	4.50
PL4100	FUSE, 10A	4.00

*Items which are not discountable.

Price is subject to change without notice. Please contact
Fujitsu America Technical Services for current pricing and availability.

FUJITSU**FUJITSU AMERICA INC.**CORPORATE HEADQUARTERS:
3055 Orchard Drive
San Jose, CA 95134-2017
(408) 946-8777

PAGE 1 OF 2

EFFECTIVE 6/14/84

M2294 SPARE PARTS PRICE LIST

PART NUMBER	DESCRIPTION	LIST PRICE
109-024UL	FAN PWR SUPPLY	36.00
B030-4420-W006A	BRUSH, ANTI-STATIC	22.00
B030-4420-W030A	TRANSDUCER, SPEED SENSE	38.00
B030-4420-W352A	COVER, GATE, TOP	8.00
B030-4420-X143A	SPRING, SPINDLE MOTOR	5.00
B030-4420-X319A	GROUND PLATE	1.50
B030-4540-T011A	DISK ENCLOSURE (335MB)	6550.00
B030-4585-x111A	PULLEY, SPINDLE MOTOR	35.00
B03B-4540-E353A	PNL/SLD (RACK MT) ASSY	200.00
B03B-4540-F010A	BACK PNL, PCA (GBpM)	420.00
B03B-4540-V450A	SLD KIT	182.00
B03B-4585-X103A	PLATE, SPDL MTR PULLY COVER	10.50
B03L-1920-0002A	SHOCK MT, RUBBER	8.40
B03P-4580-0304A	MANUAL, C.E. M2294	45.00
B14L-0300-0018A	PWR SUPPLY 120V	400.00*
B14L-5100-0030A	PWR SUPPLY 220V	440.00*
B16B-3190-0010A	PCA EXTENDER,	294.00
B16B-4870-0010A	TERMINATOR	82.00
B16B-6150-0050A	PCA, CNTLR I (CWM)	360.00
B16B-6160-0030A	PCA, CNTLR Q (CQFM)	358.00
B16B-9000-0500A	PCA, READ SWITCH (ROTM)	486.00
B16B-8990-0050A	PCA, SPEED CNTLR (SDQM)	723.00
B16B-6300-0020A	PCA, VARIABLE OSCILLATOR (VOHM)	650.00
B16B-7990-0020A	PCA, DUAL PORT, SMD, XCBM	405.00
B30L-1000-0006A	BELT	24.00
B57L-0040-0003A	FAN ALARM, M228X	50.00
B58L-0170-0001A	BRAKE RELAY	11.00
B300-2820-T010A	INTERNAL MTG KIT	50.00
B660-1055-T017A L1	CABLE A, AC PWR L2R003	52.00
B660-1055-T018A L1	CABLE B, DC PWR L2R003	57.00
B660-1060-T089A L1	CABLE, 10 COND, DUAL	15.00
B660-1065-T018A L1	CABLE, CNTL PNL	10.00
B660-1065-T037A L1	CABLE, 50 COND, DUAL	21.00
B660-1065-T061A L1	CABLE, 26 COND, DUAL	13.00
B90L-0980-0002A	MOTOR, 120V SPINDLE DRIVE	345.00
B90L-0980-0004A	MOTOR, 220V SPINDLE DRIVE	460.00
B90L-1190-0001A	BLOWER, M228X	67.00
C58L-0010-0001	RELAY, PWR SUPPLY LY2	20.00

* ITEMS WHICH ARE NOT DISCOUNTABLE

PRICES SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

M2294 SPARE PARTS PRICE LIST

C58L-0090-000L	HOLDER, BRAKE RELAY	1.00
C58L-0270-0004	RELAY, PWR SUPPLY LY4	20.00
C60L-0250-0011	FUSE, 1.3A (P413H)	4.00
C60L-0250-0023	FUSE SOCKET, PA-2R	4.00
C60L-0260-0010	FUSE, 15A (PL4150)	4.00
CT-AD-04	SPEED CLAMP A	.80
CT-AD-11	SPEED CLAMP B	.80
CT-EFL23M326U-U	CAPACITOR, 110V SPDL MOTOR	14.00
CT-EFL45M605U-U	CAPACITOR, 220V SPDL MOTOR	18.00
FJ 0566-011-81	C.E. MANUAL, PWR SUPPLY M228XK	10.00
FJ 0566-012-81	C.E. MANUAL, PWR SUPPLY M228XN	10.00
KS14-9948-H467	PCA, POWER SUPPLY REGULATOR	600.00
N42L-1911-0002	SPARK SUPPRESSOR	4.00
N860-3251-T002	OPERATOR SWITCH ASSEMBLY	75.00

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EFFECTIVE 5/01/83

M2312 SPARE PARTS PRICE LIST

PART NUMBER	DESCRIPTION	LIST PRICE
B03B-4590-E002A	FAN, 120VAC	80.00*
B03B-4590-E401A	SMD DUAL PORT	550.00*
B03B-4590-E501A	CONTROL PANEL UNIT	125.00*
B03P-4590-0103A	C.E. MANUAL, M231X	45.00
B030-4590-X038A	FAN COVER (TUZM)	9.00
B030-4590-X203A	FAN COVER/STRAIN RELIEF (OLD)	5.00
B030-4590-Y203A	FAN COVER/STRAIN RELIEF (NEW)	14.00
B030-4590-Y514A	FILLER PANEL, RACK MOUNT M231X	6.00
B030-4590-Y518A	VIBRATION STOPPER	1.00
B14L-5105-0100A	POWER SUPPLY UNIT	550.00*
B16B-6960-0010A	CMZM PCA	1572.00
B16B-6970-0010A	CNAM PCA	1198.00
B16B-7640-0010A	TUZM PCA	350.00
B30L-2670-0001A	SHOCK ABSORBER	3.00
B660-0625-T318A L1	SIGNAL CABLE	21.00
B660-0625-T319A L1	POWER CABLE	54.00
B660-0625-T327A L1	D.C. POWER CABLE 1.5M	24.30
B660-0625-T327A L2	D.C. POWER CABLE 15CM	20.00
B660-0625-T328A L1	FAN CABLE 1.5M (120V)	12.00
B660-0625-T328A L2	FAN CABLE 12CM (120V)	10.00
B660-0625-T329A L1	DUAL PORT POWER CABLE 30CM	10.00
B660-1060-T096 L1	INTERFACE CABLE, D/P P/S 26CM	10.00
B660-1060-T097 L1	INTERFACE CABLE, D/P 16CM	14.00
B660-1065-T006A L1	"A" CABLE 60 INCH	112.00*
B660-1065-T008A L1	"B" CABLE 60 INCH	61.00*
B660-1865-T020A L1	DUAL "A" CABLE 60 INCH	125.00*
B660-1865-T040A L2	QUAD "A" CABLE 80 INCH	150.00*
B660-1995-T003A L2	CONTROL PANEL CABLE (51CM)	54.00
CT-UN9301BW (UL)	POWER SUPPLY FAN	52.00
F6-SBD-4X16S-MN11A	STOPPER SCREW	0.25
F6-SPK-4X12S	STOPPER BUSHING	0.25
FJ-0566-015-81	C.E. MANUAL, P/S M231X	10.00

* ITEMS WHICH ARE NOT DISCOUNTABLE

PRICE IS SUBJECT TO CHANGE WITHOUT NOTICE. PLEASE CONTACT FUJITSU AMERICA TECHNICAL SERVICES FOR CURRENT PRICING AND AVAILABILITY.

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EFFECTIVE 6/14/84

M2351 SPARE PARTS PRICE LIST

PART NUMBER	DESCRIPTION	LIST PRICE
B030-4655-V100A	SLD RAILS, M2351A	185.00*
B03P-4655-0001A	MANUAL, C.E. M2351A	50.00
B030-4610-T007A	DE ASSEMBLY (NON FIXED HEAD)	7200.00
B14L-5105-0073A	PWR SUPPLY, M2351	2106.00
B16B-7830-0010A	PCA (HGAMU) INDICATOR UNIT	207.00
B16B-8140-0010A	PCA (DQEMU)	183.00
B16B-8150-0010A	PCA (DQFMU)	280.00*
B16B-8160-0010A	PCA (BQGMU)	222.00
B16B-8800-0010A	PCA, TVKMU, PWR AMPLIFIER	636.00
B210-1435-X024A	COVER, TOP	60.00
B250-2150-X163A	FRONT PANEL PLASTIC, M2351A	165.00
B660-1055-T027A L1	CABLE, POWER SUPPLY	63.00
B660-0620-T336A	CABLE DE DCMTR	15.00
B660-0620-T337A	CABLE DE VCM	8.00
B660-0620-T380A	CABLE ASSEMBLY, DE-SVIAU/RFJAU	97.00
B660-0620-T387A L1	CABLE, PWR SUPPLY	21.00
B660-1060-T072A L1	CABLE, 20 PIN EXTEN	19.00
B660-1060-T074A L1	CABLE, 50 PIN EXTEN	38.00
B90L-0400-0303A	FILTER, AIR	30.00
B90L-1200-0101A	BLOWER, LINE	96.00
C16B-5123-0980	PCA (512398)	663.00
C16B-5500-0990	PCA (RFJAU)	1125.00
C16B-5501-0010	PCA (SVIAU)	1095.00
C60L-0020-0001	MPO5 FUSE, .5 AMP DAITO	4.00
C63L-0790-0001	JUMPER PLUG, M2351A	1.00
C66L-3670-0001 L1	CABLE, INT, DUAL .1M	84.00
C66L-3670-0001 L2	CABLE, INT, DUAL, 1M	135.00
C960-0030-T029	EXTENDER UNIT	410.00
C960-0300-T001	EXTRACTOR TOOL	4.00
N860-3346-T001	PNL, OPERATOR	96.00

*ITEMS WHICH ARE NOT DISCOUNTABLE

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The Buyer's Guide to Quality Disk Drives From FUJITSU

A major OEM peripheral procurement involves a substantial commitment of your company's resources. You should choose a supplier who is able to make an equivalent commitment in return.

Fujitsu America is one of the few disk drive suppliers with both the experience and the resources to stand behind such a commitment.

Fujitsu offers a complete family of disk drives, from 5¼ to 14 inch, with capacities ranging from 7 to 671 megabytes. Fujitsu drives provide access speeds among the fastest available today.

Of even more importance to you is Fujitsu's absolute dedication to product quality and customer support.

For more information on Fujitsu's complete family of quality disk drives, contact Fujitsu America at 408-946-8777 or the **authorized regional distributor** nearest you.



	14"		10½"	8"			5¼"		
CAPACITY (M Bytes)	168/336	671	474	24/48	84	168	7/13*	7/13/20/27	31/55/86
AVERAGE POSITIONING TIME (ms)	27	27	18	70	20	20	95	83	35
TRANSFER RATE (K Bytes/s)	1012	1860	1860	1200	1229	1229	625	625	625
INTERFACE	SMD	SMD (MOD)	SMD (MOD)	SA4000	SMD	SMD	ST506/SA4000	ST506/SA4000	ST506/SA4000
POSITIONING METHOD	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil	Buffered Stepper	Rotary Voice Coil	Rotary Voice Coil	Buffered Stepper	Buffered Stepper	Rotary Voice Coil

*Half High

STORAGE PRODUCTS DIVISION

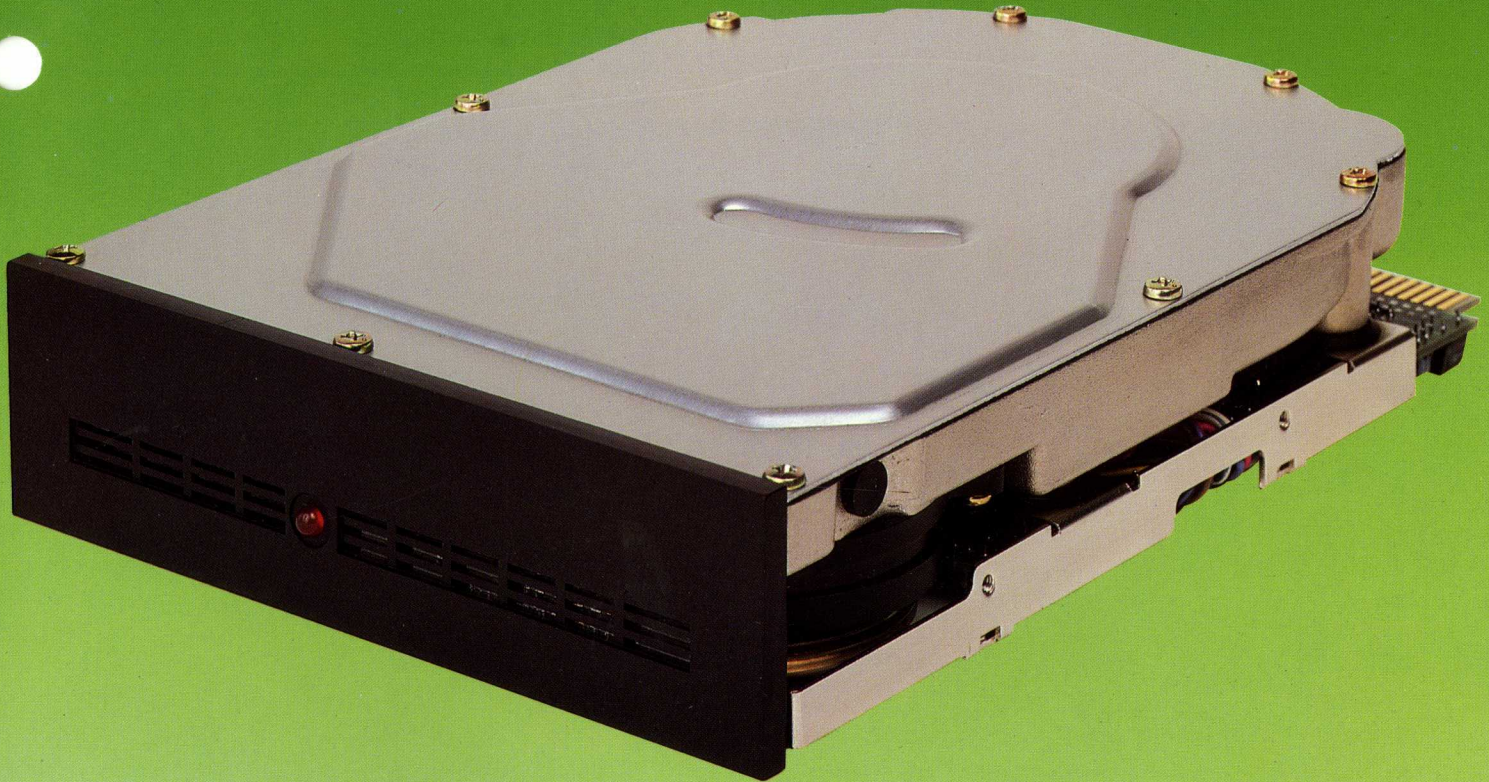
Quality Lives



OEM DISK DRIVES

M2230AT M2233AT

Half-high 5¹/₄-inch Winchester-type fixed disk drives with 6.6 and 13.33 megabyte storage capacities.



M2233AT



Fujitsu has made its 5¼-inch Winchester-type disk drives thinner and lightweight. The M2230AT and M2233AT each have only half the height of conventional models. Their unformatted capacities are 6.6 megabytes (M2230AT) and 13.33 megabytes (M2233AT) and they both use the Seagate ST506/412 interface. Each model's disk enclosure is completely sealed, integrating one or two disks, two or four Whitney-type contact start/stop heads, a rotary stepper actuator, and a DC spindle motor. These thinner and lighter disk drives fit into a wide variety of small office automation systems, such as personal computers, word processors, and terminal systems.

Compact, lightweight

The M2230AT and M2233AT each have the same physical size as the industry standard half-high minifloppy disk drive. They can be mounted horizontally or vertically. Each model weighs only 1.5 kg (3 lb), and consumes a mere 30 watts. Noise and vibration have also been greatly reduced. These features make the drives the ideal choice for small, desk-top office systems.

High performance

The M2230AT and M2233AT combine compactness and high performance. The average positioning time, including the settling time, is 95 milliseconds, and the data transfer rate is 625 kilobytes per sec-



M2233AT

ond. The start time is less than 20 seconds, and a dynamic brake reduces the stop time to less than 15 seconds.

Microprocessor controlled

With the M2230AT and M2233AT, the stepping motor is controlled by a microprocessor. As a result, the drives' seek control circuit is greatly simplified, further increasing the reliability.

Reliable, maintenance free

The completely sealed disk enclosure contains a breathing filter and recirculation filter to provide a contamination-free environment. Whitney-type contact start/stop heads eliminate moving parts for head loading and unloading. The Head IC prevents read errors caused by external electrical noise, and the LSI drive logic further enhances the drives' reliability. No wonder then that the mean-time-between-failure (MTBF) of these drives is more than 20,000 power-on hours. Also, no preventive maintenance is required, and mean-time-to-repair (MTTR) is less than 30 minutes.

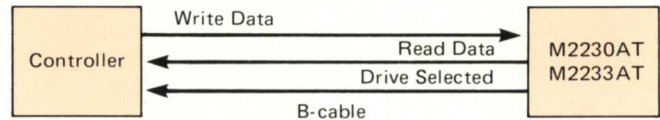
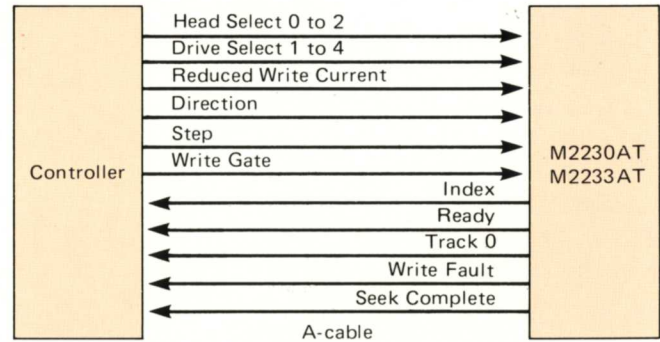
Seagate interface

The type AT models have the Seagate ST506/412 interface, an internationally used modified floppy interface for 5¼-inch disks.

Internationally compatible

These 5¼-inch disk drives use low-voltage DC power of +12V and +5V, permitting international applications and freedom from the effects of power line fluctuations.

Seagate ST506/412 interface



FUNCTIONAL SPECIFICATIONS

		M2230AT	M2233AT
Storage capacity	Unformatted	6.66 megabytes	13.33 megabytes
	Formatted	5.24 megabytes	10.48 megabytes
Disks (5¼-inch)		1	2
Heads (read/write)		2	4
Track capacity	Unformatted	10,416 bytes	
	Formatted	8,192 bytes (32 sectors)	
Tracks per cylinder		2	4
Cylinders		320	
Sectors		32	
Positioning time (including settling time)	Track-to-track	18 milliseconds	
	Average	95 milliseconds	
	Maximum	245 milliseconds (320 cylinders)	
Average latency time		8.3 milliseconds	
Rotational speed		3,600 rotations/minute	
Recording density		10,200 bits/inch	
Track density		300 tracks/inch	
Data transfer rate		625 kilobytes/second	
Recording code		MFM (Modified Frequency Modulation)	
Interface code		MFM (Modified Frequency Modulation)	
Interface		Modified Floppy (Seagate ST506/412 interface)	
Start time		Less than 20 seconds	
Stop time		Less than 15 seconds	

RELIABILITY SPECIFICATIONS

		M2230AT, M2233AT
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹³ bits read
	Seek errors	10 per 10 ⁷ seeks

Specifications are subject to change without notice.
For the latest information, contact your local
Fujitsu representative.

PHYSICAL SPECIFICATIONS

		M2230AT M2233AT
Power requirements		12 VDC±10%, 1.8 A (max. 4.0 A) 5 VDC±5%, 1 A
Dimensions	Height	41 mm (1.6 in)
	Width	146 mm (5.7 in)
	Depth	203 mm (8.0 in)
Weight		1.5 kg (3 lb)
Ambient temperature	Operating	5°C to 45°C (41°F to 113°F)
	Not operating	-40°C to 60°C (-40°F to 140°F)
	Gradient	Less than 15°C (27°F)/hour
Relative humidity	Operating	20% to 80% (non condensing)
	Not operating	5% to 95% (non condensing)
Vibration and shock resistance	Operating	Max. 0.2 G (3 Hz to 60 Hz) Shock: max. 2 G (max. 10 ms)
	Not operating	Max. 0.4 G (3 Hz to 60 Hz) Shock: max. 3 G (max. 10 ms)
	In storage or transport	Shock: max. 5 G (max. 30 ms)
Altitude	Operating	3,000 m (10,000 ft)
	Not operating	12,000 m (40,000 ft)

North American Regional Offices:

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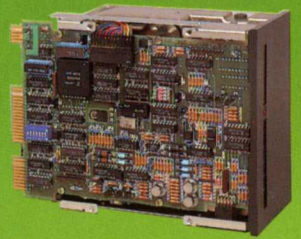
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OEM DISK DRIVES

M223XAS series

Fujitsu's 5¼-inch Winchester-type fixed disk drives provide up to 26.66-megabyte storage capacity.



M2234



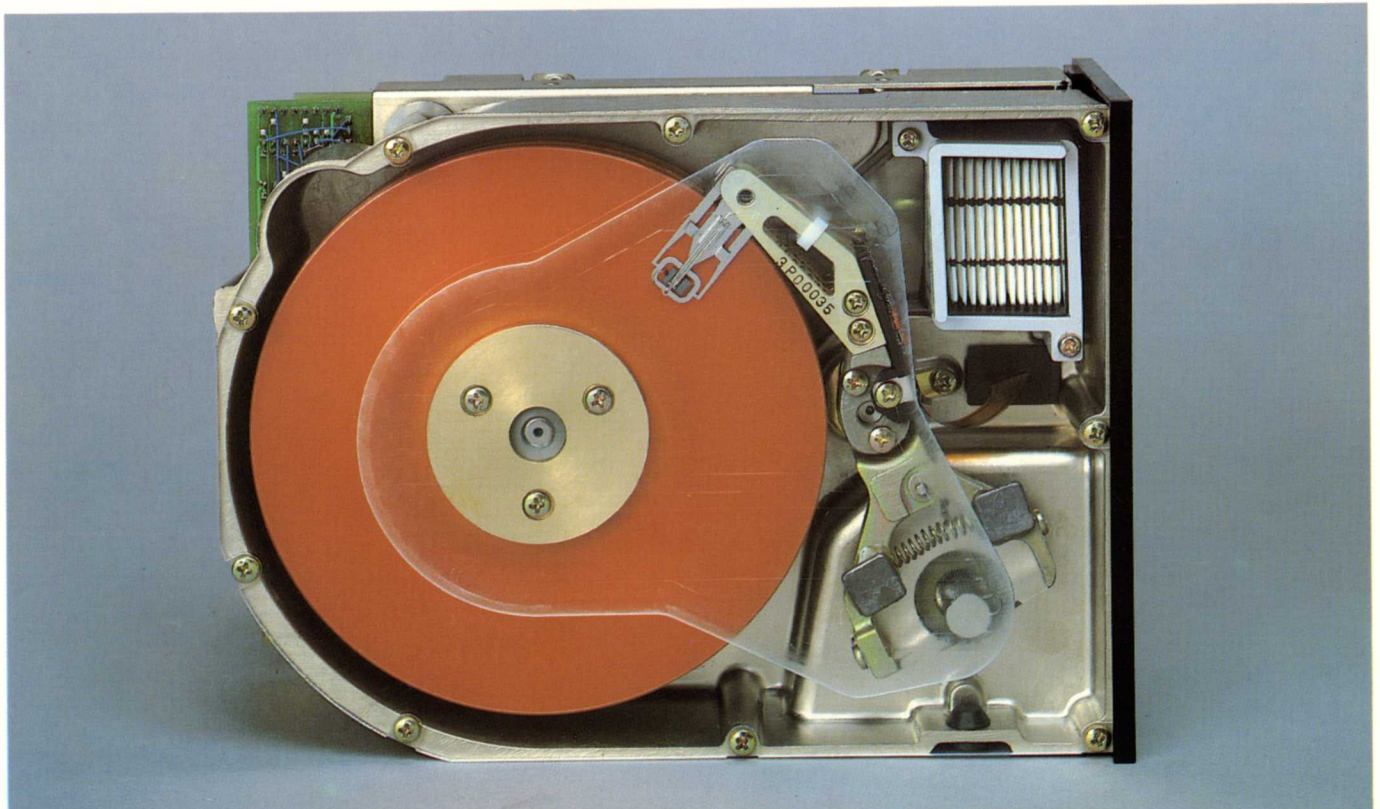
Fujitsu broadens its 5¼-inch Winchester-type disk drive line to include drives with 6.6 to 26.66 megabytes of unformatted storage capacity. The new drives are the M2230, M2233, M2234, and M2235. Each model has the Seagate ST506/412 interface. Each model's disk enclosure is completely sealed, integrating one to four disks, two to eight Winchester-type contact start/stop heads, a rotary actuator, and a DC spindle motor. These compact yet large-capacity disk drives are ideal for offices, particularly with small business computers, word processors, and terminal systems.

Up to 26.66 megabytes of storage

The M2230, M2233, M2234, and M2235 provide a variety of storage capacities in compact, inexpensive packages. Their capacities are 6.66 megabytes (M2230), 13.33 megabytes (M2233), 20 megabytes (M2234), and 26.66 megabytes (M2235) — all unformatted. These larger capacities were made possible by using 320 cylinders with 10,200-bit-per-inch recording density.

High performance

The M2230, M2233, M2234, and M2235 combine compactness and high performance. The average positioning time, including the settling time, is 83 milliseconds, and the data transfer rate is 625 kilobytes per second. The start time is less than 20 seconds, and a dynamic brake reduces the stop time to less than 15 seconds.



M2234AS

Reliable, maintenance free

The completely sealed disk enclosure contains a breather filter and an absolute recirculation filter to provide a contamination-free environment. Winchester-type contact start/stop heads eliminate moving parts for head loading and unloading. All models use LSI drive logic. No wonder then that the mean-time-between-failures (MTBF) of the M2230, M2233, M2234, and M2235 is more than 20,000 power-on hours. Also no preventive maintenance is required, and mean-time-to-repair (MTTR) is less than 30 minutes.

Compact, economical

The M2230, M2233, M2234, and M2235 use 5¼-inch (130 mm) disks and a direct DC spindle motor. Since their physical size is the same as that of a minifloppy disk drive, these disk drives can be installed in minifloppy disk drive cabinets to increase storage capacity. They can be mounted horizontally or vertically. Noise and vibration have been significantly reduced. Each disk drive consumes only 30 watts. A stepping motor simplifies the head positioning mechanism and enhances reliability and economy. These features make the drives ideal for office use.

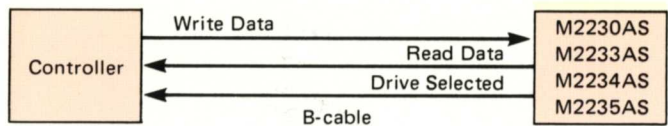
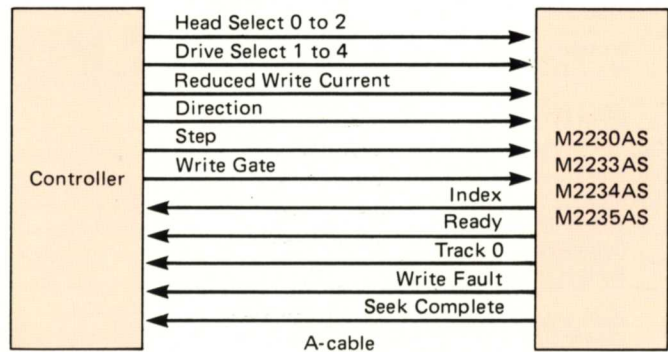
Maintenance free

With the completely sealed disk enclosure, the DC spindle motor, and highly reliable printed circuit boards, maintenance of these disk drives is reduced to the bare minimum.

Seagate interface

The type AS models have the Seagate interface, an internationally used modified floppy interface for 5¼-inch disks. See the block diagram on the right.

Seagate interface



Internationally compatible

These 5¼-inch disk drives use low-voltage DC power of +12V and +5V, permitting international application and freedom from the effects of power line fluctuations.

FUNCTIONAL SPECIFICATIONS

		M2230AS	M2233AS	M2234AS	M2235AS
Storage capacity	Unformatted	6.66 megabytes	13.33 megabytes	20 megabytes	26.66 megabytes
	Formatted	5.24 megabytes	10.48 megabytes	15.72 megabytes	20.97 megabytes
Disks (5¼-inch)		1	2	3	4
Heads (read/write)		2	4	6	8
Track capacity	Unformatted	10,416 bytes			
	Formatted	8,192 bytes (32 sectors)			
Tracks per cylinder		2	4	6	8
Cylinders		320			
Sectors		32			
Positioning time*	Track-to-track	18 milliseconds			
	Average	83 milliseconds			
	Maximum	185 milliseconds (306 cylinders), 192 milliseconds (320 cylinders)			
Average latency time		8.3 milliseconds			
Rotational speed		3,600 rotations/minute			
Recording density		10,200 bits/inch			
Track density		300 tracks/inch			
Data transfer rate		625 kilobytes/second			
Recording code		MFM (Modified Frequency Modulation)			
Interface code		MFM (Modified Frequency Modulation)			
Interface		Modified Floppy (Seagate interface)			
Start time		Less than 20 seconds			
Stop time		Less than 15 seconds			

* Including settling time

RELIABILITY SPECIFICATIONS

		M2230AS M2233AS M2234AS M2235AS
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹³ bits read
	Seek errors	10 per 10 ⁷ seeks

Specifications are subject to change without notice.
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WESTERN REGION: 18300 Von Karman Avenue, Suite 650, Irvine, CA 92715 (714) 553-1250

PHYSICAL SPECIFICATIONS

		M2230AS M2233AS M2234AS M2235AS
Power requirements		12VDC±10% 1.8A (max. 4.0A) 5VDC±5%, 1A
Dimensions	Height	83 mm (3.3 in)
	Width	146 mm (5.7 in)
	Depth	203 mm (8.0 in)
Weight		2.5 kg (5.5 lb)
Ambient temperature	Operating	5°C to 45°C (41°F to 113°F)
	Not operating	-40°C to 60°C (-40°F to 140°F)
	Gradient	Less than 15°C (27°F)/hour
Relative humidity	Operating	20% to 80% (non condensing)
	Not operating	5% to 95% (non condensing)
Vibration and shock resistance	Operating	Max. 0.2G (3Hz to 60Hz) Shock: max. 2G (max. 10 ms)
	Not operating	Max. 0.4G (3Hz to 60Hz) Shock: max. 3G (max. 10 ms)
	In storage or transport	Max. 3G Shock: max. 5G (max. 30 ms)
Altitude	Operating	3,000 m (10,000 ft)
	Not operating	12,000 m (40,000 ft)

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OEM DISK DRIVES

M224X Series

M2241AS/B

M2242AS/B

M2243AS/B

New Fujitsu 5¹/₄-inch Winchester-type fixed disk drives provide 31.4 to 86.3 megabytes and 35 ms average positioning time.



M2243B



Fujitsu expands its 5¼-inch Winchester-type disk drive line with new large capacity, high-performance models — M224X series. The series consists of the M2241, the M2242, and the M2243. They provide up to 86.3 megabyte capacities and a 35 millisecond average positioning time. Each model is available in two types. Type AS has the Seagate ST506/412 interface, and type B has the SA4000 interface. Each model's disk enclosure is completely sealed, integrating three to six disks, four to eleven Whitney-type contact start-stop heads, a rotary voice coil motor (VCM), and a DC spindle motor. With these large capacities and fast positioning time, the M224X series disk drives are ideal for intelligent office systems and can handle image, voice, and video data.

31.4 to 86.3 megabytes of storage

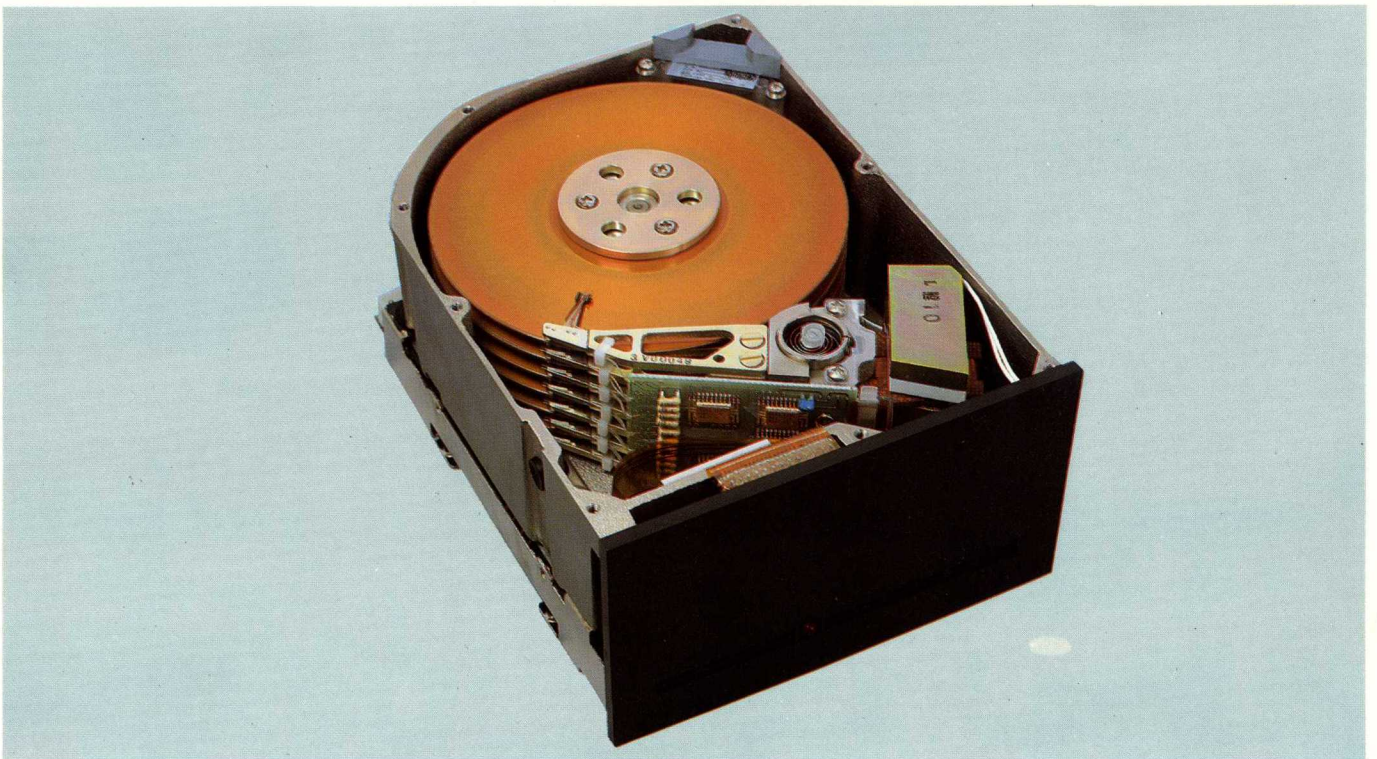
The M224X series disk drives have new large capacities which were available only with conventional 8-inch disk drives. The M2241 stores 31.4 megabytes, the M2242 54.9 megabytes, and the M2243 86.3 megabytes—all unformatted.

High performance

The M224X series has achieved fast positioning times—8 milliseconds track-to-track, 35 milliseconds average, and 60 milliseconds maximum, including the settling time. The data transfer rate is 625 kilobytes per second. Also the start time is less than 20 seconds, and a dynamic brake reduces the stop time to less than 15 seconds.

Microprocessor controlled

The M224X series' voice coil motor is controlled by a microprocessor. As a result, the seek control circuit is greatly simplified and reliability is further increased.



M2243B

Reliable, maintenance free

The completely sealed disk enclosure contains a breathing filter and a recirculation filter to provide a contamination-free environment. Whitney-type contact start-stop heads eliminate moving parts for head loading and unloading. All models use LSI drive logic, and the Head IC prevents read errors caused by external electrical noise. Also, the voice coil motor is provided with a unique safety measure against the head-disk crashing during shipments. With these features, the drives' mean-time-between-failure (MTBF) exceeds 10,000 power-on hours, and their mean-time-to-repair (MTTR) is less than 30 minutes.

Compact, economical

The M224X series' large capacities and high performances have not been achieved at the expense of their compactness. Their physical size is the same as that of a minifloppy disk drive, and can be installed in minifloppy disk drive cabinets to increase storage capacity. They can be mounted horizontally or vertically. Each disk drive consumes only 43 watts. Noise and vibration have also been minimized. These features make the drives the ideal choice for office applications.

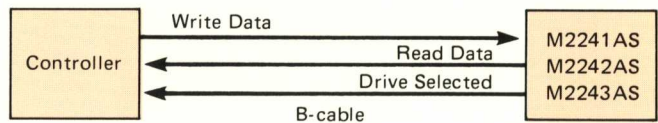
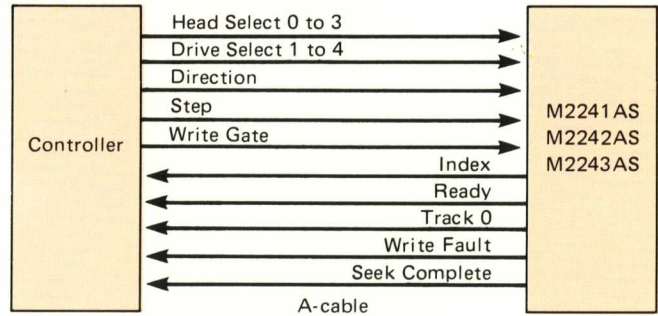
Seagate and SA4000 interfaces

The type AS models have the Seagate ST506/412 interface, an internationally used modified floppy interface for 5¼-inch disks. The type B models provide the SA4000 interface, a widely used modified floppy interface for 8- and 14-inch disks. The type B models include a data separator for improved data integrity.

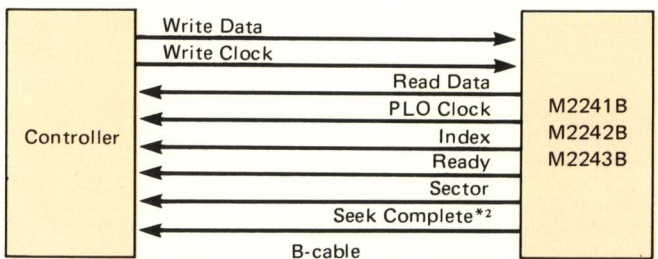
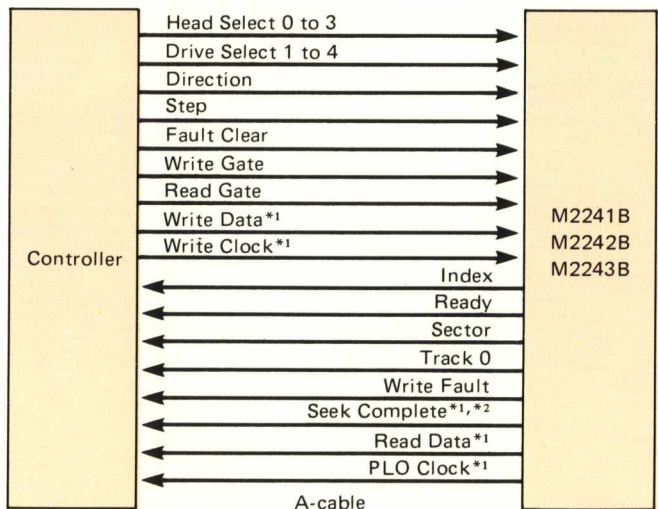
Internationally compatible

The M224X series disk drives use low-voltage DC power of +12V and +5V, permitting international applications and freedom from the effects of power line fluctuations.

Seagate ST506/412 interface



SA4000 interface



*1. Signal lines are connected by turning on the corresponding switches on the printed circuit boards.

*2. Settling time may be included or omitted by setting relevant switches on the printed circuit boards.

FUNCTIONAL SPECIFICATIONS

		M2241AS	M2242AS	M2243AS	M2241B	M2242B	M2243B
Storage capacity	Unformatted	31.4 megabytes	54.9 megabytes	86.3 megabytes	31.4 megabytes	54.9 megabytes	86.3 megabytes
	Formatted	24.7 megabytes	43.2 megabytes	67.8 megabytes	24.7 megabytes	43.2 megabytes	67.8 megabytes
Disks (5¼-inch)		3	4	6	3	4	6
Heads (read/write)		4	7	11	4	7	11
Track capacity	Unformatted	10,416 bytes					
	Formatted	8,192 bytes (32 sectors)					
Tracks per cylinder		4	7	11	4	7	11
Cylinders		754					
Sectors		32			16 or 32		
Positioning time (including settling time)	Track-to-track	8 milliseconds					
	Average	35 milliseconds					
	Maximum	60 milliseconds					
Average latency time		8.3 milliseconds					
Rotational speed		3,600 rotations/minute					
Recording density		10,200 bits/inch					
Track density		760 tracks/inch					
Data transfer rate		625 kilobytes/second					
Recording code		MFM (Modified Frequency Modulation)					
Interface code		MFM (Modified Frequency Modulation)			NRZ (Non-Return-to-Zero)		
Interface		Modified Floppy (Seagate ST506/412 interface)			Modified Floppy (SA4000 interface) Option: control board		
Start time		Less than 20 seconds					
Stop time		Less than 15 seconds					

RELIABILITY SPECIFICATIONS

		M2241AS/B M2242AS/B M2243AS/B
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹³ bits read
	Seek errors	10 per 10 ⁷ seeks

PHYSICAL SPECIFICATIONS

		M2241AS M2242AS M2243AS	M2241B M2242B M2243B
Power requirements		12 VDC ± 5%, 1.8 A (max. 4.8 A) 5 VDC ± 5%, 1.6 A	12 VDC ± 5%, 1.8 A (max. 4.8 A) 5 VDC ± 5%, 1.6 A
Dimensions	Height	83 mm (3.3 in)	
	Width	146 mm (5.7 in)	
	Depth	203 mm (8.0 in)	
Weight		3 kg (6 lb)	
Ambient temperature	Operating	5°C to 45°C (41°F to 113°F)	
	Not operating	-40°C to 60°C (-40°F to 140°F)	
	Gradient	Less than 15°C (27°F)/hour	
Relative humidity	Operating	20% to 80% (non condensing)	
	Not operating	5% to 95% (non condensing)	
Vibration and shock resistance	Operating	Max. 0.2 G (3 Hz to 100 Hz) Shock: max. 2 G (max. 10 ms)	
	Not operating	Max. 0.4 G (3 Hz to 100 Hz) Shock: max. 20 G (max. 10 ms)	
	In storage or transport	Shock: max. 20 G* (max. 30 ms)	
Altitude	Operating	3,000 m (10,000 ft)	
	Not operating	12,000 m (40,000 ft)	

Specifications are subject to change without notice.
For the latest information, contact your local
Fujitsu representative.

*Measured at drive while in package

European contact:

FUJITSU EUROPE LTD. Royal Trust House, 54 Jermyn St., London, S.W. 1, England Phone: (44-1)408-0043 Telex: 51-263871

FUJITSU ELEKTRONIK GmbH. Sonnenstrabe 29, D-8000, Munich 2, F.R. Germany Phone: (49-89)592891 Telex: 41-5213994

FUJITSU NORDIC AB Kungsgatan 44, 111 35, Stockholm, Sweden Phone: (46)08-231125 Telex: 54-13411

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FACOM AUSTRALIA LTD. 41 McLaren St., North Sydney, N.S.W. 2060, Australia Phone: (61-2)922-1822 Telex: 71-25233

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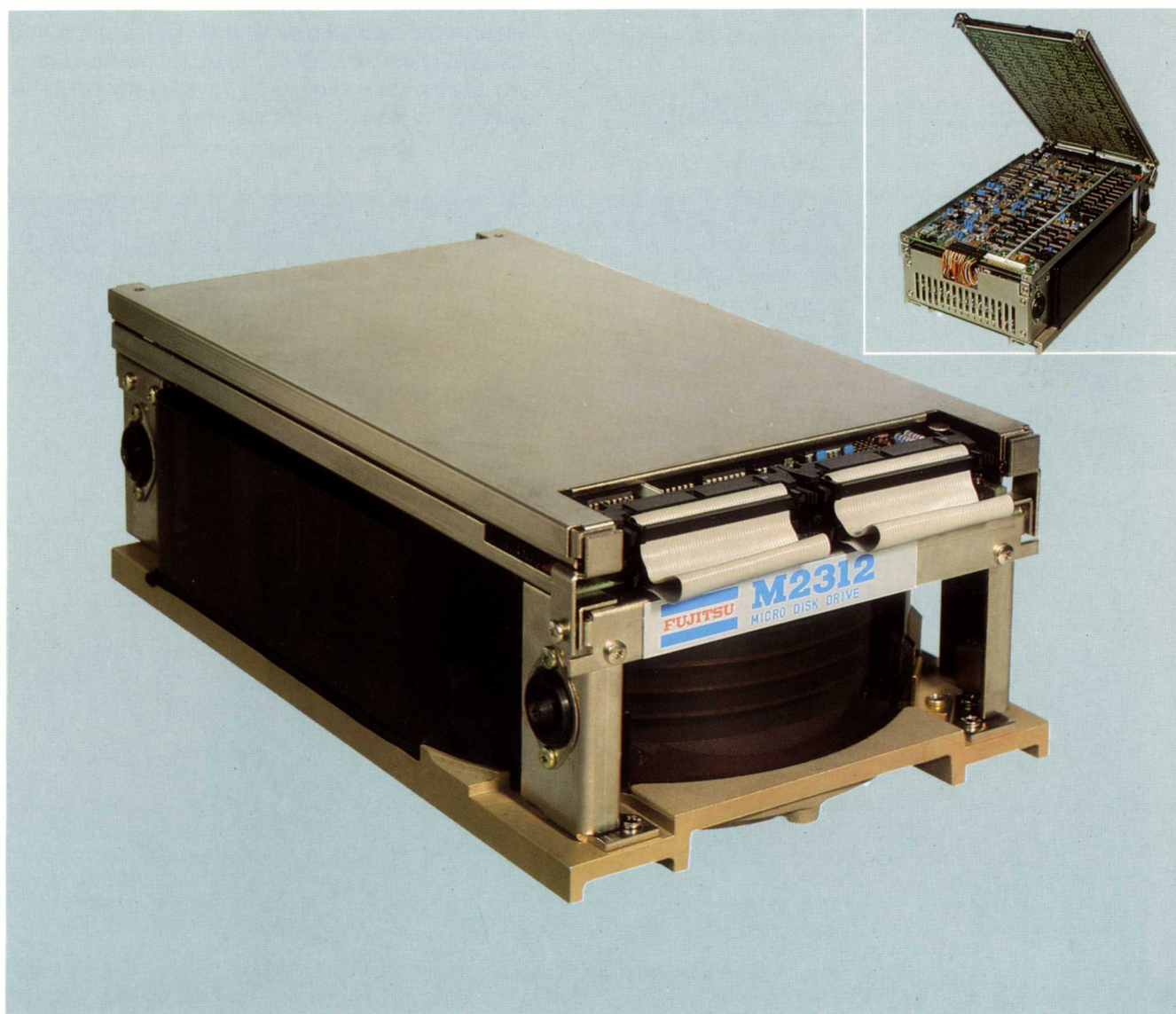
3055 Orchard Drive
San Jose, CA 95134 PHONE (408) 946-8777
Telex: 176207 TWX: 910-338-2193

OEM DISK DRIVES

M2312K

8-inch Winchester fixed disk drive with 84-megabyte capacity, and 20-milli-second average positioning time.

SCSI or SMD Interface Options



M2312K



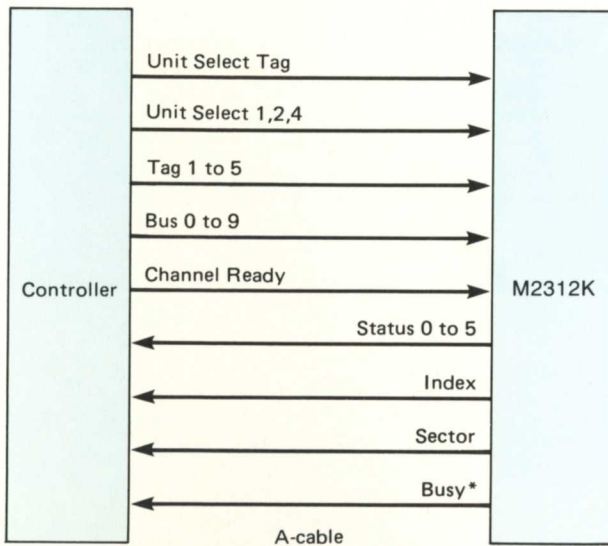
Compact, economical

The M2312K can be mounted horizontally (two, side by side) in a standard 19-inch rack and requires only 5¼ inches of vertical space. The drive can also be mounted vertically on its side. The M2312K consumes less than 130 watts.*

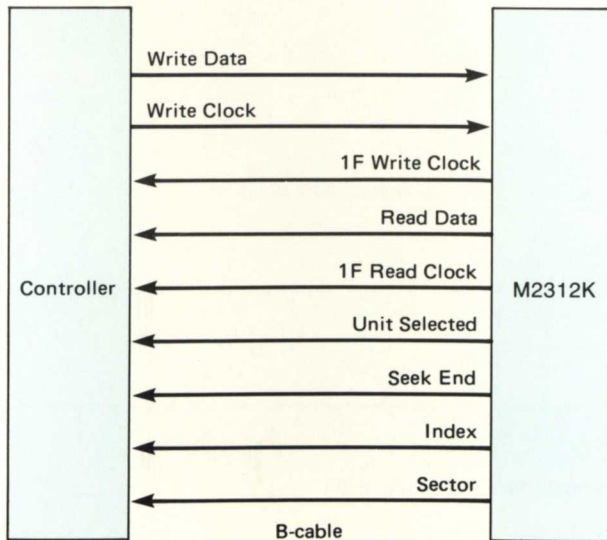
SMD interface

The industry standard SMD interface is provided as part of the on-board electronics.

SMD interface



*Busy signal is used with the dual-port option.



*SCSI Version consumes less than 144 watts.

Dual channel option

With the dual channel option, two controllers can access the M2312K. The option is provided on a separate printed circuit board which can be mounted on an optional DC power supply or on the drive. The dual channel option is applicable for the SMD interface only. SCSI contains this option as part of its integral design.

Optional DC power supply

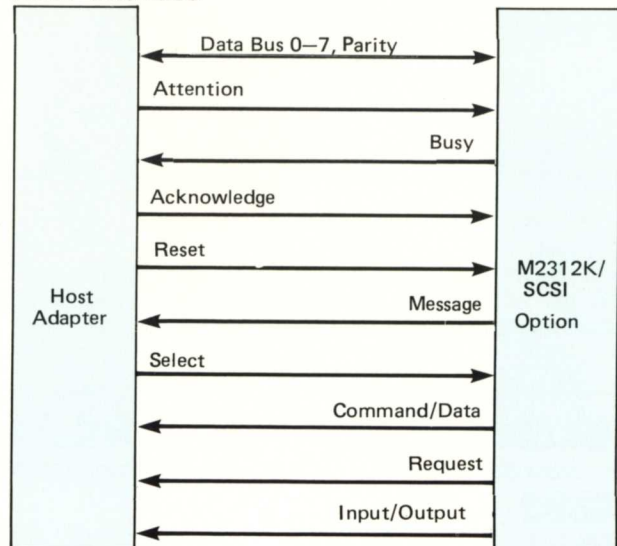
The M2312K operates on +24V, +5V, and -12V DC power, allowing flexibility for use anywhere in the world. An optional DC power supply which converts an input of 100, 115, 120, 220, or 240VAC is also available. The 100/115/120 voltage or the 220/240 voltage is selectable.

SCSI intelligent interface options

The SCSI Intelligent Interface Option is a single board, microprocessor-based controller/interface integrated with the M2312K disk drive. The full SCSI specification is supported, including Arbitration, Selection, Reselection, Data Phases, Status and Message Phases. When a M2312K is selected with the SCSI option, the cost of interfacing the drive and computer is significantly reduced as only a simple, low cost adapter is required instead of a more expensive SMD controller.

The SCSI option offers many features including dual sector buffer, off-line diagnostics, controller and drive-level fault detection, sector interleaving and automatic alternate sector assignment.

SCSI Interface



OEM DISK DRIVES

The M2312K is an 8-inch Winchester fixed disk drive featuring large storage capacity, fast access and superb reliability. It is designed to provide high performance, cost-effective storage for small computer systems and intelligent work stations for a broad spectrum of applications. In addition, the M2312K is available with an industry standard SMD interface or an SCSI controller/interface option.

Large capacity, high performance

The M2312K provides 84 megabytes of unformatted storage on four disks. The average positioning time is 20 milliseconds and the data transfer rate is 1.2 megabytes per second.

Reliable, maintenance free

Reliability is superb. A completely sealed disk enclosure, comprising a breathing filter and an absolute recirculation filter, provides a contamination-free environment. Winchester-type contact start/stop heads eliminate moving parts for head loading and unloading. The head IC prevents read errors caused by external electrical noises. With these features, the M2312K has a mean-time-between-failure (MTBF) exceeding 20,000 power-on hours. Also, no preventive maintenance is required and mean-time-to-repair (MTTR) is less than 30 minutes.



M2312K

OEM DISK DRIVES

FUNCTIONAL SPECIFICATIONS

		M2312K
Storage capacity (unformatted)		84,439,040 bytes
Disks		4
Heads		
Read/write		7
Servo		1
Bytes per track		20,480
Tracks per cylinder		7
Cylinders	SMD	589
	SCSI	589
Sectors	SMD	Fixed – 2 or more
		Variable – available
	SCSI	64 @ 256 bytes/sector
		32 @ 512 bytes/sector
Positioning time		
Track-to-track		5 ms
Average		20 ms
Maximum		40 ms
Average latency time		8.3 ms
Rotational speed		3,600 rotations/minute ± 2%
Recording density		9,550 bits/inch
Track density		720 tracks/inch
Data transfer rate		1,229 kilobytes/second
Recording code		MFM (Modified Frequency Modulation)
Interface code		NRZ (Non-Return-to-Zero)
Interface		SMD or SCSI option
Head positioning method		Servo-controlled track-following
Start time		Less than 20 seconds
Stop time		Less than 40 seconds
Options		A cable, B-cable, DC power supply with AC input, cooling fan, mounting tray for standard 19-inch rack, dual port for SMD model.

RELIABILITY SPECIFICATIONS

		M2312K
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates		
Recoverable errors		10 per 10 ¹¹ bits read
Unrecoverable errors		10 per 10 ¹⁴ bits read
Seek errors		1 per 10 ⁷ seeks

PHYSICAL SPECIFICATIONS

		M2312K
Power requirements		24VDC+10%, 3A (6A peak) 5VDC+5%, 3.5A* -12VDC ±5%, 3A
Dimensions and weight		
Height		130 mm (5.1 inches)
Width		216 mm (8.5 inches)
Depth		380 mm (15.0 inches)
Weight		11 kg (24.2 lbs)
Ambient temperature		
Operating		5 to 40°C (41 to 104°F)
Non-operating		-40 to 60°C (-40 to 140°F)
Gradient		Less than 15°C (27°F)/hour
Relative Humidity		
Operating		20 to 80% (non-condensation)
Non-operating		5 to 95%
Vibration		
Operating		Max. 0.2G (3 to 60Hz), shock: max. 2G (max. 10ms)
Non-operating		Max. 0.4G (3 to 60Hz), shock: max. 15G (max. 10ms)
Altitude		
Operating		3,000 m (10,000 feet)
Non-operating		12,000 m (40,000 feet)

*SCSI option requires 6A max. for +5V.

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.

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EASTERN REGION: 60 Mall Road, Suite 310, Burlington, MA 01803 (617) 229-6310

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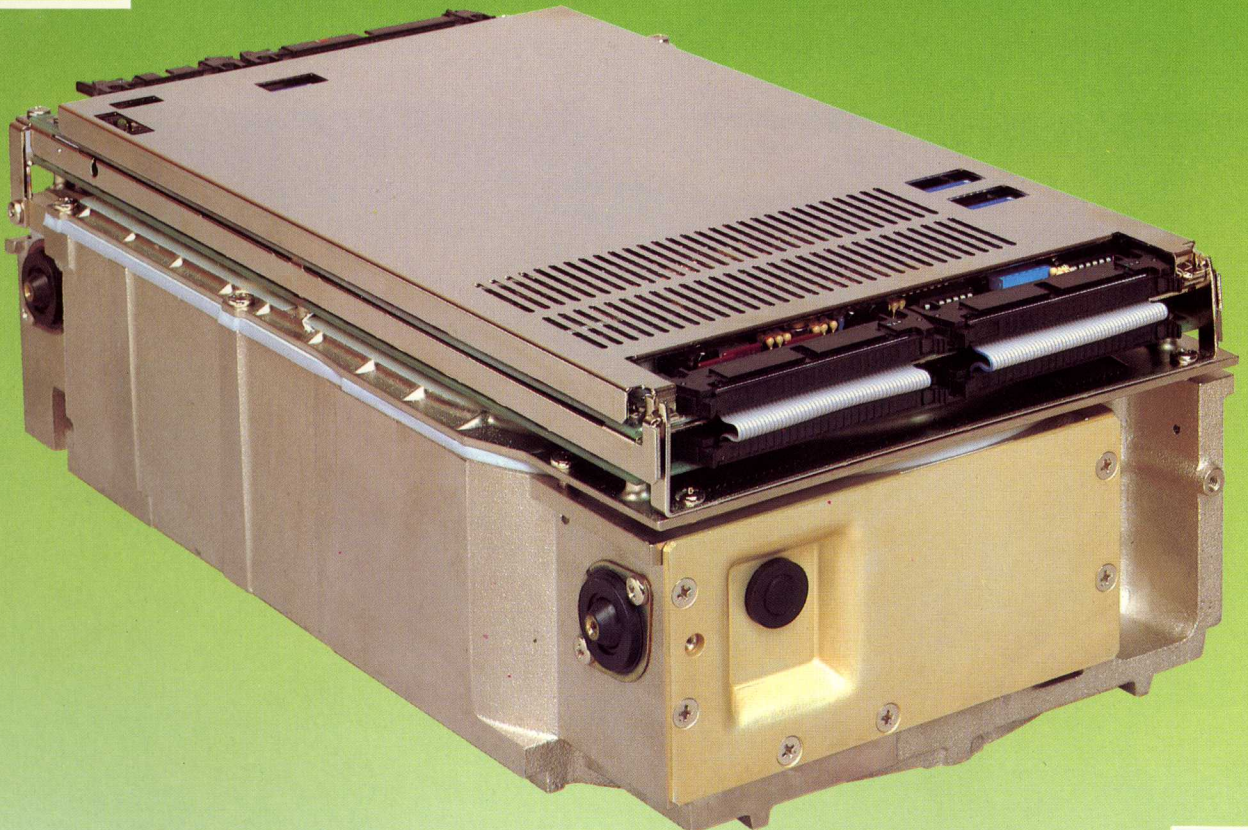
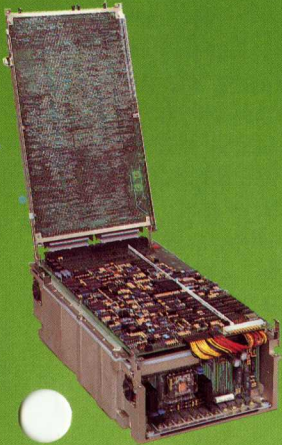
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OEM DISK DRIVE

M2321K M2322K

*8-inch Winchester-type fixed disk drives with
84- and 168-megabyte capacities and 20-milli-
second average positioning time.*



M2322K

FUJITSU

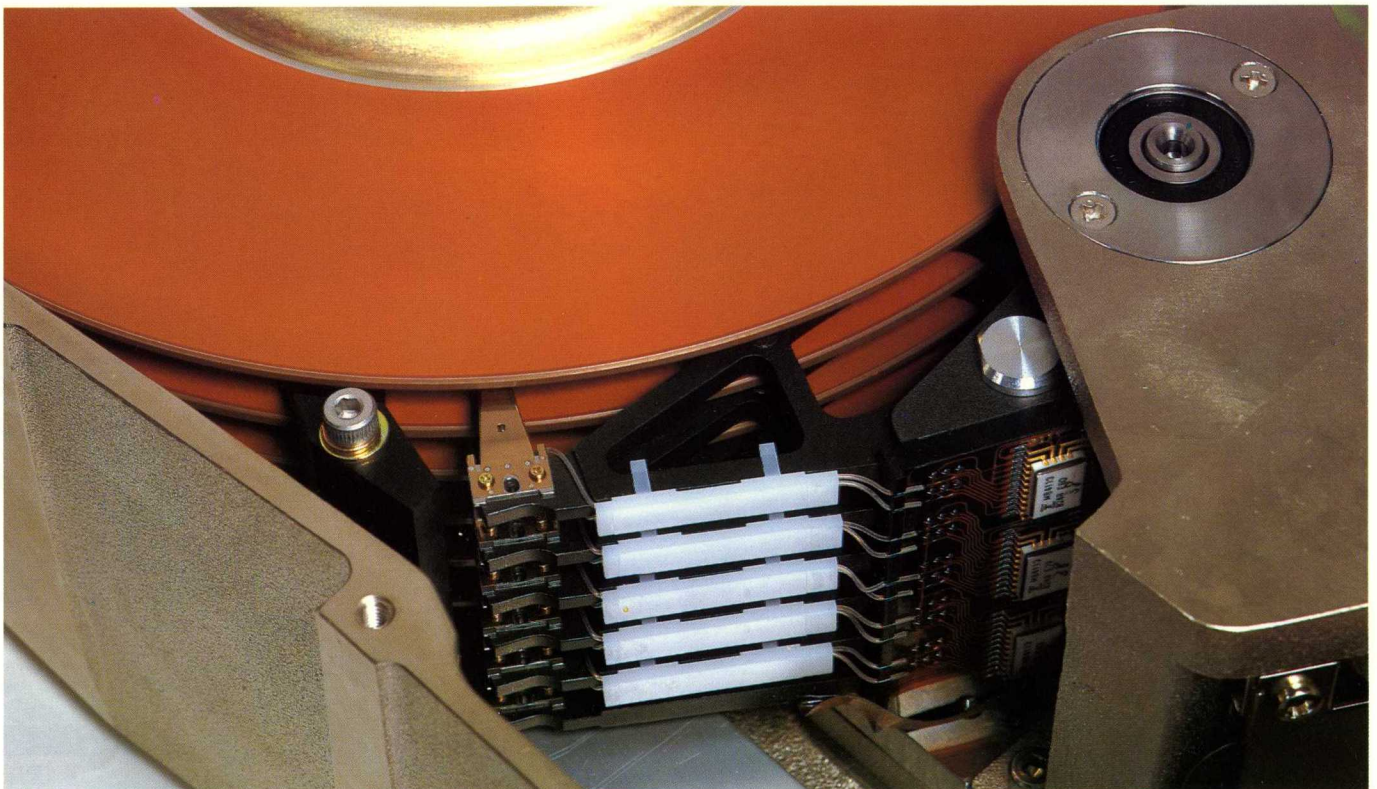
The M2321K and M2322K are Fujitsu's 8-inch Winchester-type fixed disk drives featuring new large storage capacities and a fast positioning time. The M2321K and M2322K each consists mainly of a disk enclosure and three printed circuit boards. The disk enclosure integrates three or six disks, six or eleven contact start/stop heads, a rotary actuator, a DC spindle motor, and IC read preamplifiers, all in a small completely sealed package. The M2321K and M2322K provide superior cost effectiveness, setting a new standard for small computer systems and intelligent terminals across a broad range of applications.

New large capacities and high performance

The M2321K provides 84 megabytes on three disks, and the M2322K provides 168 megabytes on six disks. Average positioning time is 20 milliseconds and the data transfer rate is 1.2 megabytes per second.

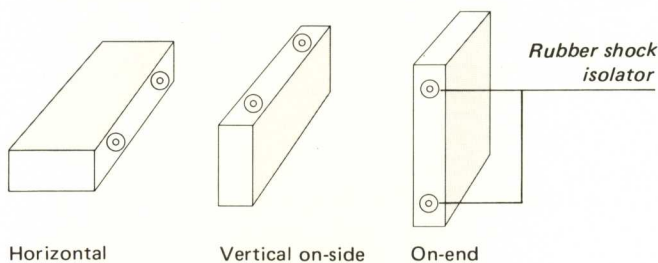
Reliable, maintenance free

High reliability is assured by providing a contamination-free environment through a completely sealed casting frame, a breathing filter, and an absolute recirculation filter. Advanced Winchester technology simplifies the disk mechanism, and the head IC prevents read errors caused by external electrical noise. With these features, the M2321K and M2322K assure a mean-time-between-failures (MTBF) exceeding 20,000 power-on hours. Also no preventive maintenance is required, and mean-time-to-repair (MTTR) is less than 30 minutes.



Compact, economical

The M2321K and M2322K provide large capacity storages in compact modules no larger than those of the M2311K and M2312K, Fujitsu's field-proven Winchester-type 8-inch disk drives with 48- and 84-megabyte capacities. The M2321K and M2322K each consume less than 130 watts. The drives can be mounted horizontally (two, side by side) in a standard 19-inch rack, or independently in any direction desired; horizontally, on-end, or vertically on-side.



SMD interface

The industry standard SMD interface is provided as part of the on-board electronics.

Dual channel option

With the dual channel option, two controllers can access the M2321K and M2322K.

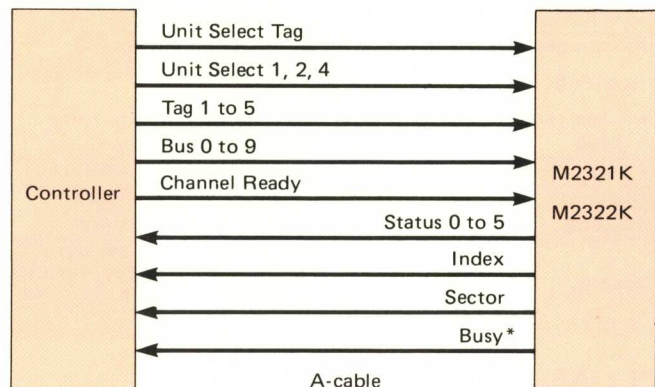
Standard and optional DC power supply

The M2321K and M2322K operate on +24V, +5V, and -12V low voltage DC power, providing flexibility for use anywhere in the world. An optional DC power supply, originally designed for the M2311K and M2312K, for converting input power of 100, 115, 120, 220, or 240 VAC, is also usable. The 100/115/120 voltage or the 220/240 voltage is switchable.

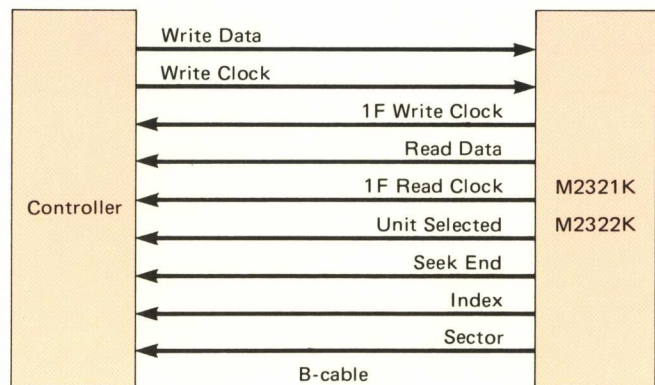
Enhanced serviceability

Each of the M2321K and M2322K has a unique rotary actuator lock with plunger magnet, which locks the rotary actuator when the power is not supplied to the drive, and automatically releases the lock when the power is turned on. With this feature, the customer engineer is freed from manually locking the rotary actuator for drive transportation and releasing the lock at the installation site.

SMD interface



*Busy signal is used with the dual channel option.



FUNCTIONAL SPECIFICATIONS

		M2321K	M2322K
Storage capacity (unformatted)		84.27 megabytes	168.55 megabytes
Disks (8-inch)		3	6
Heads	Read/write	5	10
	Servo	1	1
Track capacity (unformatted)		20,480 bytes	
Tracks per cylinder		5	10
Cylinders		823	
Sectors	Fixed	2 or more (Max. 128)	
	Variable	Available	
Positioning time	Track-to-track	5 milliseconds	
	Average	20 milliseconds	
	Maximum	40 milliseconds	
Average latency time		8.3 milliseconds	
Rotational speed		3,600 rotations/minute	
Recording density		9,867 bits/inch	
Track density		683 tracks/inch	
Data transfer rate		1.2 megabytes/second	
Recording code		MFM (Modified Frequency Modulation)	
Interface code		NRZ (Non-Return-to-Zero)	
Interface		SMD (Storage Module Drive)	
Head positioning method		Servo-controlled track-following	
Start time		40 seconds (nominal)	
Stop time		Less than 40 seconds	
Options		A-cable, B-cable, DC power supply with AC input, cooling fan, mounting tray for standard 19-inch rack, dual channel	

PHYSICAL SPECIFICATIONS

		M2321K/M2322K
Power requirements		24VDC±10%, 3.6A (7.2A peak) 5VDC±5%, 3.5A -12VDC±5%, 3A
Dimensions	Height	127mm (5.0in)
	Width	216mm (8.5in)
	Depth	380mm (15.0in)
Weight		14kg (31 lb)
Ambient temperature	Operating	5°C to 40°C (41°F to 104°F)
	Not operating	-40°C to 60°C (-40°F to 140°F)
	Gradient	Less than 15°C (27°F)/hour
Relative humidity	Operating	20% to 80% (non condensing)
	Not operating	5% to 95% (non condensing)
Vibration	Operating	Max. 0.2G (3Hz to 60Hz), shock: max. 2G (10ms)
	Not operating	Max. 0.4G (3Hz to 60Hz), shock: max. 3G (10ms)
	In storage or transport	Max. 3G, shock: 5G (30ms)
Altitude	Operating	3,000 m (10,000 ft)
	Not operating	12,000 m (40,000 ft)

RELIABILITY SPECIFICATIONS

		M2321K/M2322K
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹⁴ bits read
	Seek errors	10 per 10 ⁸ seeks

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.

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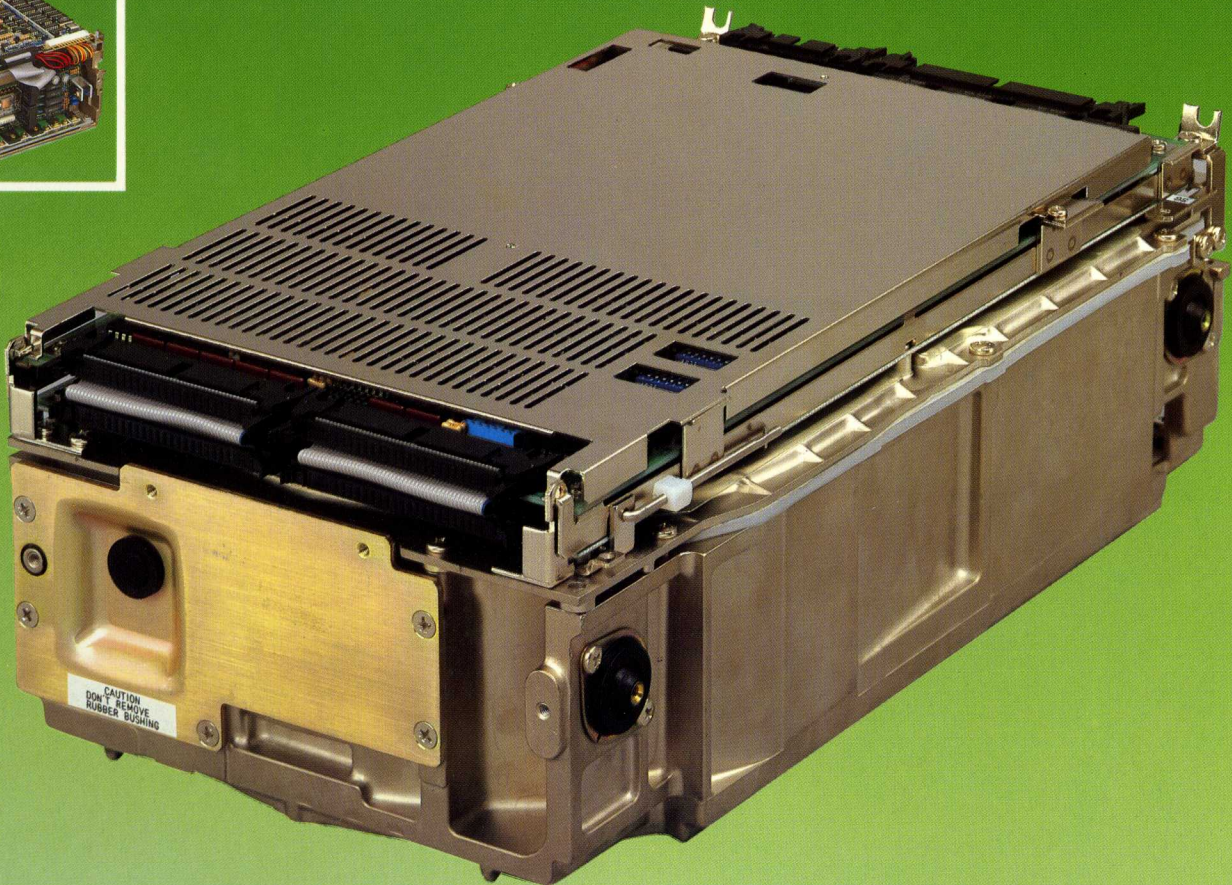
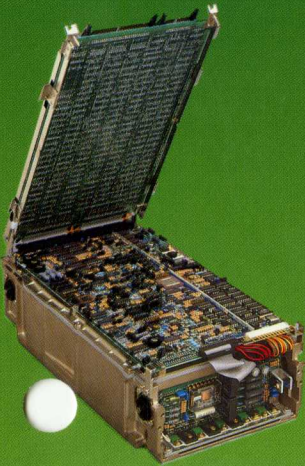
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3055 Orchard Drive, San Jose, CA 95134 Phone (408) 946-8777 Telex: 230-176207 TWX: (910) 338-2193

OEM DISK DRIVES

M2333K

8-inch Winchester-type fixed disk drive with a 337-megabyte capacity and 20-milli-second average positioning time.



M2333K



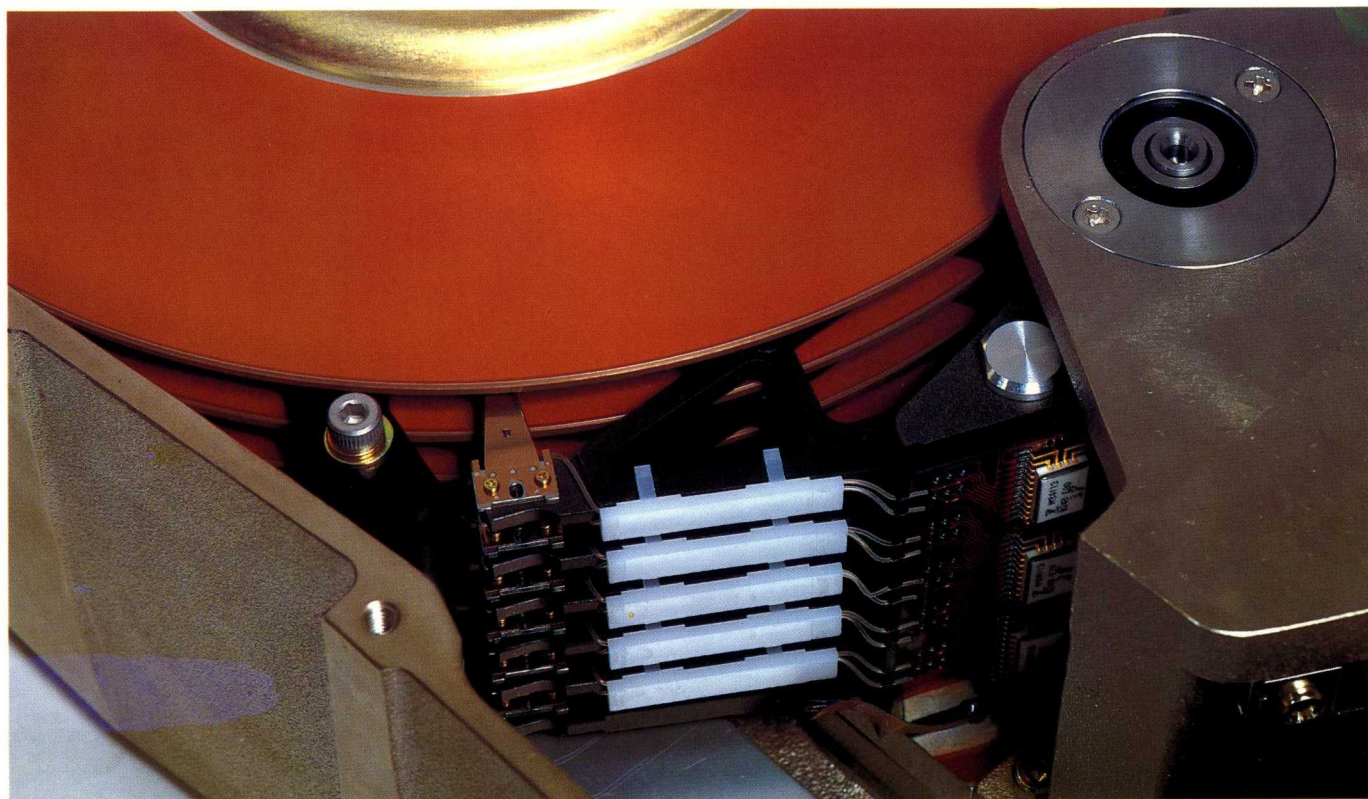
The M2333K is Fujitsu's 8-inch Winchester-type fixed disk drive featuring a new large storage capacity and a fast positioning time. The M2333K consists mainly of a disk enclosure and three printed circuit boards. The disk enclosure integrates six disks, eleven contact start/stop heads, (10 data; one servo), a rotary actuator, a DC spindle motor, and IC read preamplifiers, all in a small completely sealed package. The M2333K provides superior cost effectiveness, setting a new standard for small computer systems and intelligent terminals across a broad range of applications.

New large capacities and high performance

The M2333K provides 337 megabytes on six disks. The average positioning time of 20 milliseconds and the data transfer rate of 2.458 megabytes per second combine to maximize data throughput and system efficiency.

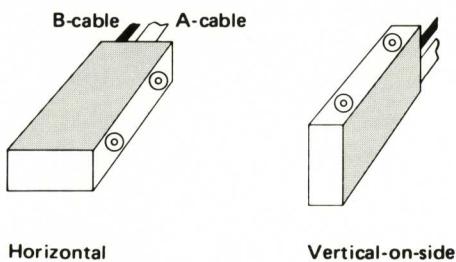
Reliable, maintenance free

High reliability is assured by providing a contamination-free environment through a completely sealed casting frame, a breathing filter, and an absolute recirculation filter. Advanced Winchester technology simplifies the disk mechanism, and the head IC prevents read errors caused by external electrical noise. With these features, the M2333K assures a mean-time-between-failures (MTBF) exceeding 20,000 power-on hours with no preventive maintenance required. Mean-time-to-repair (MTTR) is less than 30 minutes.



Compact, economical

The M2333K provides large capacity storage in the same form factor as the M2312K and M2322K, Fujitsu's field-proven Winchester-type 8-inch disk drives with 84- and 168- megabyte capacities. The drives can be mounted horizontally (two, side by side) in a standard 19-inch rack, or independently in either horizontal or vertical-on side-direction.



High-speed SMD interface — HSMD

The industry standard SMD interface supports the 2.458 MB transfer rate with no changes to existing interface hardware.

Dual channel option

With the dual channel option, two controllers can access the M2333K.

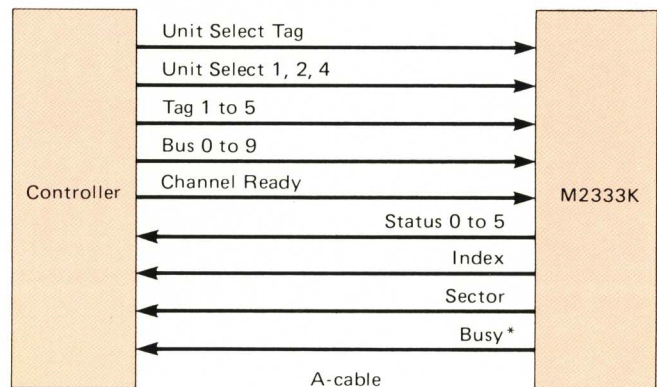
Standard and optional DC power supply

The M2333K operates on +24V, +5V, and -12V DC power, providing flexibility for use anywhere in the world. An optional DC power supply for converting input power of 100, 115, 120, 220, or 240 VAC, is also available. The 100/115/120 voltage or the 220/240 voltage is switchable.

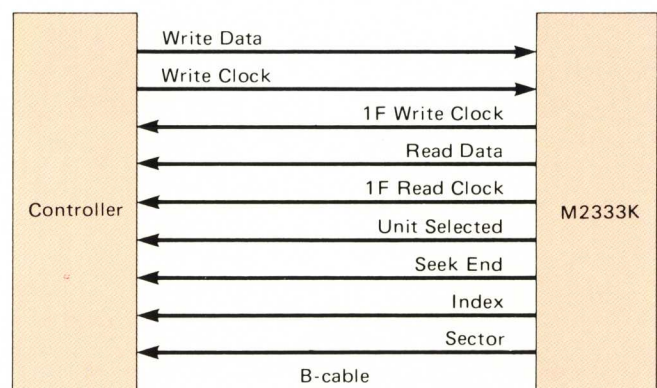
Enhanced serviceability

The M2333K has a unique rotary actuator lock with plunger magnet, which locks the rotary actuator when the power is not supplied to the drive, and automatically releases the lock when the power is turned on. With this feature, the customer engineer is freed from manually locking the rotary actuator for drive transportation and releasing the lock at the installation site — operations which were needed with conventional drives.

SMD interface



* Busy signal is used with the dual channel option.



FUNCTIONAL SPECIFICATIONS

		M2333K
Storage capacity (unformatted)		337.10 megabytes
Disks (8-inch)		6
Heads	Read/write	10
	Servo	1
Track capacity (unformatted)		40,960 bytes
Tracks per cylinder		10
Cylinders		823
Sectors (fixed)		2 or more (Max. 128)
Positioning time	Track-to-track	5 milliseconds
	Average	20 milliseconds
	Maximum	40 milliseconds
Average latency time		8.3 milliseconds
Rotational speed		3,600 rotations/minute
Recording density		19,734 bits/inch
Track density		683 tracks/inch
Data transfer rate		2,458 megabytes/second
Recording code		RLL(2/7)
Interface code		NRZ
Interface		HSMD
Head positioning method		Servo-controlled track-following
Start time		50 seconds (nominal)
Stop time		Less than 40 seconds
Options		Dual channel, A-cable, B-cable, DC power supply with AC input, cooling fan, mounting tray for standard 19-inch rack, operator panel

PHYSICAL SPECIFICATIONS

		M2333K
Power requirements		24VDC±10% 4.0A (effective, typical) 7.7A o-p (max. 270ms) 5.5A (power up, effective, typical) 5VDC±5%, 4.5A -12VDC±5%, 3.5A
Dimensions	Height	127mm (5.0in)
	Width	216mm (8.5in)
	Depth	380mm (15.0in)
Weight		14kg (31 lb)
Ambient temperature	Operating	5°C to 40°C (41°F to 104°F)
	Not operating	-40°C to 60°C (-40°F to 140°F)
	Gradient	Less than 15°C (27°F)/hour
Relative humidity	Operating	20% to 80% (non condensing)
	Not operating	5% to 95% (non condensing)
Vibration and shock resistance	Operating	Max. 0.2G (3Hz to 60Hz) Shock: max. 2G (10ms)
		Max. 0.4G (3Hz to 60Hz)
	Not operating	Shock: max. 15G (10ms)
Altitude	Operating	3,000 m (10,000 ft)
	Not operating	12,000 m (40,000 ft)

Regulatory Agency Approvals:
UL 478, CSA 22.2 - 154

RELIABILITY SPECIFICATIONS

		M2333K
Mean-time-between-failures (MTBF)		More than 20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹⁴ bits read
	Seek errors	10 per 10 ⁸ seeks

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu America representative.

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OEM MAGNETIC TAPE SUBSYSTEMS

M243X Series

Stand-alone Subsystems

Masters:

M2436L1
M2436L2

Slave:

M2436L8

*Unique GCR magnetic tape subsystems
that give the most for the money*



FUJITSU

OEM MAGNETIC TAPE SUBSYSTEMS

Fujitsu presents the M2436 Series high performance 200 ips start/stop tape subsystems that combine advanced technology with superior quality.

The M2436 Series subsystem provides IBM and ANSI compatibility at both 1600 bpi and 6250 bpi. Utilizing Group Coded Recording (GCR) the M2436 Series provides up to 180MB of storage capacity on a single 2400 foot reel of tape.

Sophisticated vacuum column technology in conjunction with a two phase photoelectric tachometer ensures precise positioning at 200 ips in the start/stop mode. The M2436 Series transfers data at 1.25MB/s offering ideal back-up for a variety of large system applications.

Compact design

The M2436 Series subsystems employ advanced LSI circuits reducing the number of electronic components dramatically. This widespread use of LSI enables the magnetic tape drive and formatter(s) to be housed in a compact cabinet when used as a master, or to be mounted individually in a 19 inch rack. A dual master unit is also available in an identical cabinet which contains two formatters in addition to a tape drive. Up to seven additional drives or slave units may be attached to a master unit providing a pool of up to eight drives in a subsystem. This design reduces floor space requirements which can be less than 60% of equivalent systems.

User friendly

The data protection feature enables the operator to disengage the write-enable function by simply pressing the PROTECT key on the operator panel without removing the write-enable ring from the supply reel. This feature allows the operator to protect data volumes created on the previous run without having to unload the tape drive.

Quality inside and out

A unique tape quality monitoring feature automatically stamps a red E warning mark on the back of the tape reel when the number of write-retry operations counted by the drive exceed a specified number. This feature allows the operator to take proper actions before the tape becomes unusable or valuable data is lost.

Enhanced reliability

GCR is a very powerful recording method which provides up to two track error correction. The error correction now performed in the drive electronics not only ensures data integrity but can provide substantial savings in system overhead by freeing the computer from time spent on retry and error recovery procedures.

Advanced diagnostics

A wide variety of microprogrammed self-diagnostic functions have greatly enhanced the M2436 Series' troubleshooting and preventive maintenance capabilities. Two-digit error codes on the operator panel identify the cause of tape and drive errors. With this information, the operator can decide whether the trouble is operator correctable or the customer engineer must be called.

In a multi-drive configuration, one unit may be tested offline while the formatter(s) and other drive(s) are operating.

Simplified operation

M2436 Series can mount tape cartridges. Even without a cartridge, tape loading is very simple. You merely position the tape end near the threading chute and press the LOAD/REWIND button on the operator panel. Everything else is automatic. The supply reel locks (powered hub), the window closes (powered window), then the tape threads (automatic threading) and loads (automatic loading). These subsystems will accept both half-size and full-size reels. The cartridge, however, may be used only with full-size reels.

A sophisticated auto-cleaner moves a cleaning ribbon between the tape and head during a rewind command. This feature not only improves data reliability by cleaning both the tape and head but also enhances head life by minimizing abrasion.

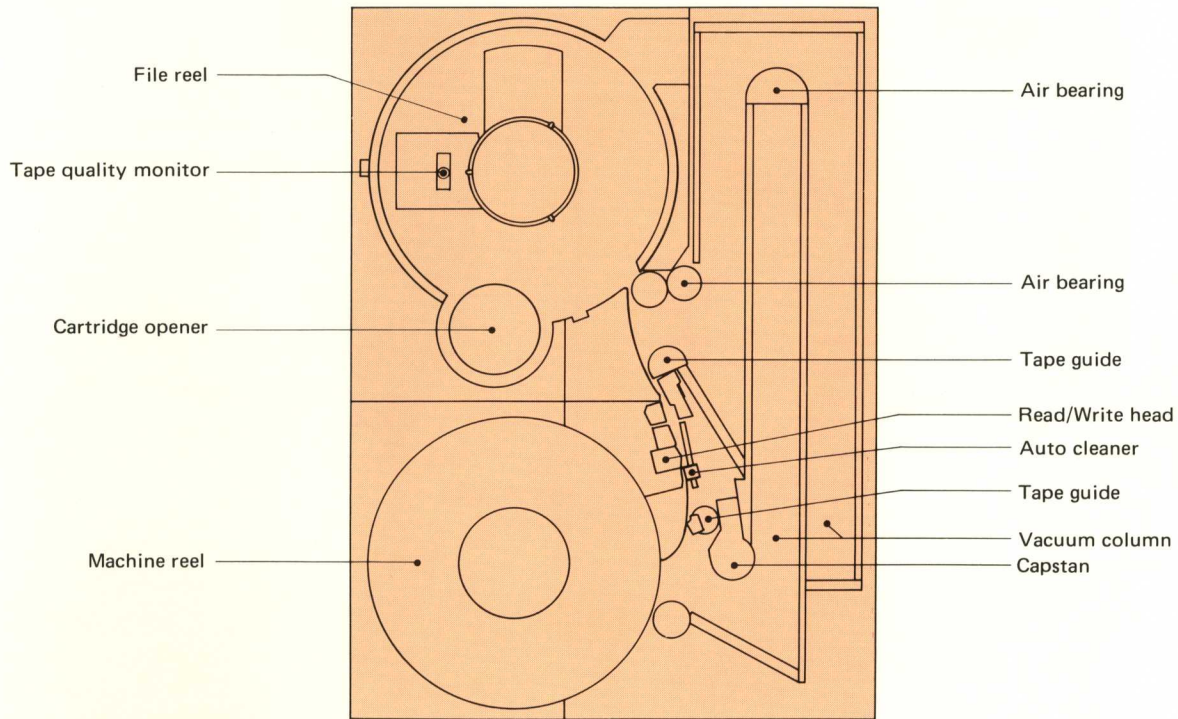
Tape transport mechanism

To reduce tape wear, the tape path has been designed so that the coated tape surface contacts only the read write head and tape cleaner. The tape is driven by a single capstan and supported with air guides so that tape friction and wear are minimized.

System configuration

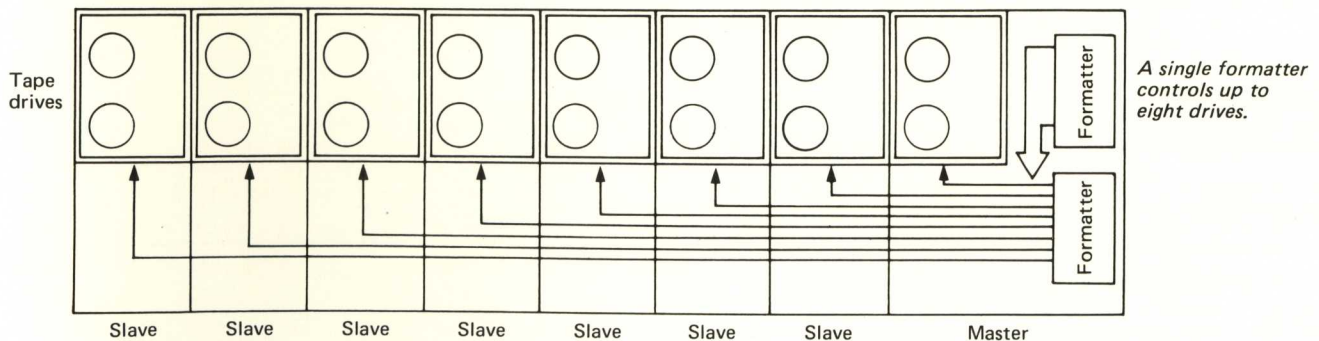
Designed on a Master/Slave concept, up to eight drives may be controlled by a single formatter saving the expense of duplicating formatting electronics for each drive. Two formatter systems provide individual tape drives with two control paths to enhance drive availability.

Tape transport mechanism



Subsystem configurations (Stand-alone types)

200 ips subsystem: Master (M2436L1/L2), Slaves (M2436L8)



OEM MAGNETIC TAPE SUBSYSTEMS

FUNCTIONAL SPECIFICATIONS

Recording Density	1600 bpi/6250 bpi	
Recording Method	Phase Encoded/Group-Coded Recording	
Data Transfer Rate	1250KB GCR 320KB PE	
Inter-Block Gap (IBG)	.3 GCR .6 PE	
Tape Speed	200 ips	
Access time	Read	1.7ms GCR 2.3ms PE
	Write	1.6ms GCR 1.9ms PE
Rewind Time	66s	
Loading Time	12s Auto Load	

PHYSICAL SPECIFICATIONS

Power Supply	200/208/220/230/240VAC 50-60HZ +2 -4% Single Phase	
Power Consumption	3.3kva	
Environment	Temperature	5°C to 40°C
	Relative Humidity	20%-80% Non Condensing
Heat Dissipation	2800 Kcal/hr	
Air Flow	11 m ³ /Min	
Dimensions	Master	Slave
Height	55.1 in.	55.1 in.
Width	39.4 in.	19.4 in.
Depth	29.9 in.	29.9 in.
Weight	948 lbs.	551 lbs.



M2436/L8



M2436L1/L2

*Specifications are subject to change without notice.
For the latest information, contact your local
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