digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET ☐☐☐☐

SEQUENCE	
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11/Ø5 SOFTWARE LIST	A-SL-11/Ø5-Ø-Ø5
*11/Ø5 ACCEPTANCE PROC.	A-SP-11/Ø5-Ø-6
*DECAL (10.5" BOX)	A-DC-7411305-0-0
*PKG. INST. CUSTOMER (5¼")	A-SP-3700061-0-0
AWT REVISION STATUS	A-WT-7008843-2
POWER SUPPLY	D-UA-7008731-0-0

SEQUENCE	
*PKG. INST. INPLANT (5¼")	A-SP-3700133-0-0
*PKG. INST. CUSTOMER (10½") BOX	A-SP-3700098-0-0
*PKG. INST. INPLANT (10½") BOX	A-SP-3700156-0-0

* ONLY INCLUDED IN MANUFACTURING PRINT SET.

UNIT VARIATIONS

VAR	TITLE	PRINT SET 11/Ø5-Ø
	CONFIGURATION #1	
11/Ø5-HA	KD11 B MM11 K 115V/6ØHZ	X
11/Ø5-HB	KD11-B MM11-K,23ØV/5ØHZ	X
11/Ø5-JA	KD11-B MM11 L 115V/6ØHZ	X
11/Ø5-JB	KD11-B MM11-L 23ØV/5ØHZ	X
	CONFIGURATION #2	
11/Ø5-KA	KD11-B MM11 K 115B/6ØHZ	X
11/Ø5-KB	KD11-B MM11 K 23ØV/5ØHZ	X
11/Ø5-LA	KD11-B MM11 L 115V/6ØHZ	X
11/Ø5-LB	KD11 B,MM11-L,23ØV/5ØHZ	X
	CONFIGURATION #3	
11/Ø5-MA	KD11-B MM11-K 115V/6ØHZ	X
11/Ø5-MB	KD11-B MM11-K 23ØV/5ØHZ	X
11/Ø5-PA	KD11-B MM11-L 115V/6ØHZ	X
11/Ø5-PB	KD11-B MM11-L 23ØV/5ØHZ	X
	CONFIGURATION #4	
11/Ø5-NC	KD11-B,MM11-L 115V/6ØHZ	X
11/Ø5-ND	KD11-B MM11-L 23ØV/5ØHZ	X
11/Ø5-FA	11Ø5-KA, UC15 FRONT PANEL (KY11-JF) 115V	
11/Ø5-FB	11Ø5-KB,UC15 FRONT PANEL (KY11-JF) 23ØV	
11/Ø5-FE	11Ø5-LA UC15 FRONT PANEL (KY11 JF) 115V	
11/Ø5-FF	11Ø5-LB UC15 FRONT PANEL (KY11-JF) 23ØV	

REVISIONS			
DATE	CHG. NO.	REV	
7-76	11/05-62	AH	REVISED&RETYPED

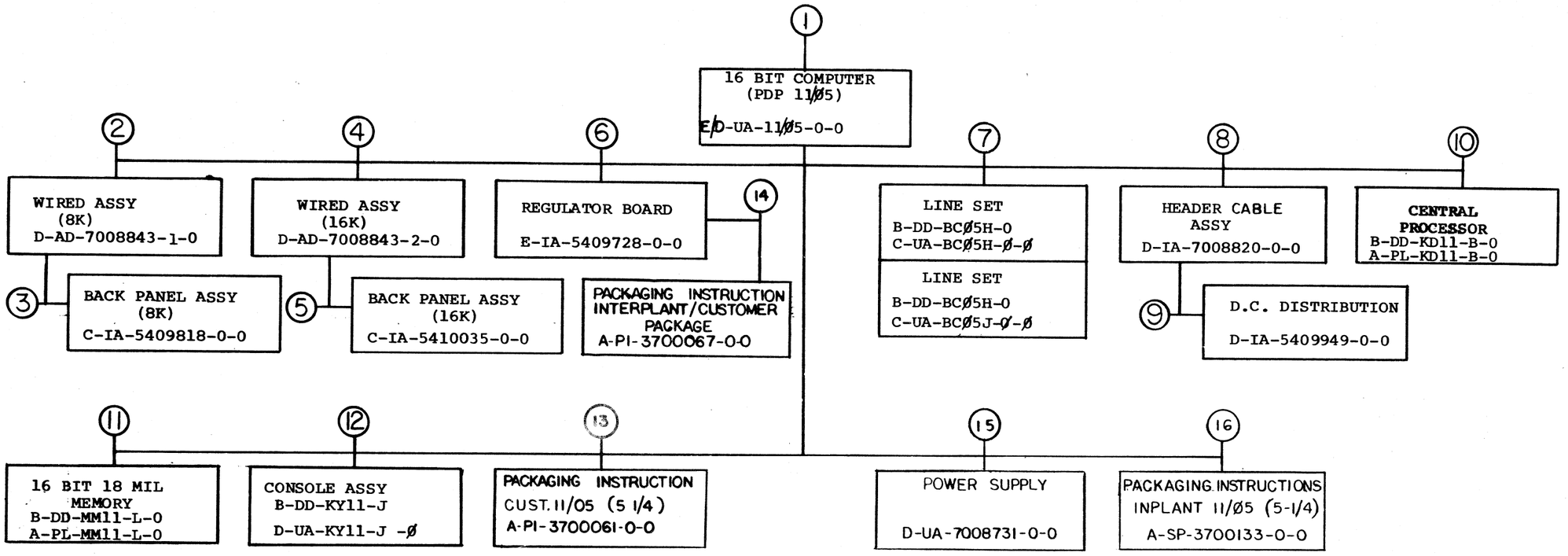
USED ON OPTION/MODEL

SHEET 1 OF 8

DRN. J. CAHILL	DATE	TITLE: 16 BIT COMPUTER (PDP 11Ø5)
CHK'D. C. TESCHNER	DATE	
PROJ ENG. B. WEEKS	DATE	
PROD. R. PETERSON	DATE	SIZE B · CODE DD · NUMBER 11Ø5-Ø · REV AH
FIELD SERV. D. DICKHUT	DATE	DIST

EN-01062-1A-16-R972(1325)

DRB 106



NOTE: This sheet for 5¼" only. See sheets 7 & 8 for 10½" chassis

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 2 OF 8	B	DD	11Ø5-Ø	A

DRB 107
DEC 16 (325) 1062-2-N871

CUSTOMER PRINT SET 11Ø5-Ø	SET MFG.	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	E-IA-7008713-Ø-Ø	#	1	AC INPUT HARNESS	
X	X		E-IA-7008856-Ø-Ø	#	1	HARNESS (D.C.)	
X	X		A-AL-11Ø5-Ø-Ø4	A	1	11Ø5 ACCESSORY LIST	
X	X		A-SL-11Ø5-Ø-Ø5	*	1	11Ø5 SOFTWARE LIST	
X	X		D-MU-11Ø5-Ø-Ø1	*	1	MODULE UTILIZATION (8K)	
X	X		D-MU-11Ø5-Ø-Ø2	*	1	MODULE UTILIZATION (16K)	
	X		A-SP-11Ø5-Ø-6		23	11Ø5 ACCEPTANCE PROCEDURE	
X	X		D-IA-7008360-0-0	#	1	CABLE ASSY (KL8E)	
X	X		D-BS-KM11-Ø-MB	#	3	MAINTENANCE BOARD	
X	X		A-SS-5509081-0-9	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM1)	
X	X		A-SS-5509081-0-10	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM2)	
X	X		D-CS-M930-0-1		1	BUS TERMINATOR	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	
	X		K-WL-7008843-1-1	#	1	ETCH/WIRE LIST (8K)	
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
X	X		C-CS-5409818-0-1	#	2	CIRCUIT SCHEMATIC (8K)	
X			A-WT-7008843-2	#	1	A.W.T. REVISION STATUS	
		4	D-AD-7008843-2-Ø	#	1	WIRED ASSY (16K)	
	X		K-WL-7008843-2-1	#	1	ETCH/WIRE LIST (16K)	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
X	X		C-CS-5410035-0-1	#	2	CIRCUIT SCHEMATIC (16K)	
		6	E-IA-5409728-Ø-Ø	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409728-0-6	#	1	MODULE E.C.O. HISTORY	

CUSTOMER PRINT SET 11Ø5-Ø	SET MFG	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
C	C	7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-0-0	#	1	LINE SET BCØ5H (115V)	
			C-UA-BCØ5J-0-0	#	1	LINE SET BCØ5J (230V)	
X	X	8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
X	X		C-CS-5409949-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409949-0-6	#	1	MODULE E.C.O. HISTORY	
C	C	10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
C	C	11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
		12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) PL.	
X	X	15	D-UA-7008731-0-0	#	1	POWER SUPPLY (5-1/4 INCHES)	

CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQ. ED

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	3 OF 8	B	DD	11Ø5-Ø	A

DRB 108
DEC 16-(325)-1062-2B-R972

CUSTOMER PRINT SET 11Ø5-Ø				MFG. SET	FIND NO.	MECHANICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X				X	1	E/D-UA-11Ø5-Ø-Ø	Z	5	16 BIT (PDP 11Ø5) ASSY	
X				X		C-PL-11Ø5-Ø-Ø	Z	3	16 BIT (PDP 11Ø5) ASSY (P.L.)	
						E-IA-7409458-0-0	#	4	CHASSIS	
						D-IA-7409453-0-0	#	1	FAN MOUNTING PLATE	
						A-DC-5309413-0-0	#	1	SPECIAL DECAL (UL)	
						C-IA-7411235-0-0	#	1	FILLER STRIP ASSY	
						B-IA-7411167-0-0	#	1	RET CONN BLOCK REAR	
						B-IA-7411168-0-0	#	1	RET CONN BLICK FRONT	
						D-IA-7409459-0-0	#	1	BRKT CHASSIS SLIDE (L.H.)	
						D-IA-7409533-0-0	#	1	COVER SIDE	
						C-JA-7409460-0-0	#	1	COVER TOP	
						C-IA-7409449-0-0	#	1	BRKT CHASSIS SLIDE (R.H.)	
						C-MD-7409591-0-0	#	1	CLAMP	
						C-PS-1210698-0-0	#	1	GUIDE CARD CENTER	
						D-PS-1210931-0-0	#	1	BLOCK CABLE RETAINER	
						D-MD-7409432-0-0	#	1	PLATE LOWER RETAINER	
						C-MD-7409430-0-0	#	1	NUT SWIVEL	
						C-MD-7409479-0-0	#	1	PLATE PRESSURE	
						D-IA-7008856-0-0	#	1	HARNESS DC	
						E-IA-7008713-0-0	#	1	AC INPUT HARNESS	
						A-AL-11Ø5-Ø-Ø4	#	1	11Ø5 ACCESSORY LIST	
						A-SL-11Ø5-Ø-Ø5	#	1	11Ø5 SOFTWARE LIST	
						B-MD-7409817-0-0	#	1	PLATE CABLE CLAMP	
						B-MD-7409816-0-0	#	1	SHIPPING BRACKET	
						C-MD-7409818-0-0	#	1	BRACKET CABLE CLAMP	
						B-IA-7409729-0-0	#	1	JUMPER POWER	
						D-PS-1210945-0-0	#	4	SLIDES	
						B-IA-7409903-0-0	#	1	JUMPER POWER	
						D-IA-7409533-1-0	#	1	COVER SIDE	
						E-IA-5309816-0-0	#	1	CHASSIS POWER SUPPLY	
						D-IA-7008726-0-0	#	1	TRANSFORMER ASSY	
						A-DC-5309414-0-0	#	1	SPECIAL DECAL (UL)	
						D-PS-1211381-0-0	#	1	AIR BAFFLE	
					2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	

CUSTOMER PRINT SET 11Ø5-Ø				MFG SET	FIND NO.	MECHANICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
					3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
						D-AH-5409818-0-5	#	1	ASSY/DRILLING HOLE	
						K-CO-5409818-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
						E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
						C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
						E-PS-1211439-0-0	#	1	11Ø5 LOGIC FRAME	
						E-PS-1211425-0-0	#	1	72 PIN CONN BLOCK	
					4	D-AD-7008843-2-0	#	1	WIRED ASSY (16K)	
						D-MD-5010051-0-0	#	1	SHEET PROTECTION	
					5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
						E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
						D-AH-5410035-0-5	#	1	ASSY/DRILLING HOLE	
						K-CO-5410035-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
						C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
						E-PS-1211439-0-0	#	1	11Ø5 LOGIC FRAME	
						E-PS-1211425-0-0	#	1	72 PIN CONN BLOCK	
					6	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
						K-CO-5409728-0-4	#	1	X-Y CO-ORDINATE HOLE LAYOUT	
						C-MD-5309779-0-0	#	1	CONTACT COMMON CAPACITOR	
						C-MD-5309781-0-0	#	1	CONTACT CAPACITOR	
						C-IA-5310126-0-0	#	1	HOLDER CAPACITOR	
						D-PS-1210596-0-0	#	1	HEAT SINK	
					7	B-DD-BCØ5H-0	#	3	LINE SET	
						C-UA-BCØ5H-Ø-Ø	#	1	LINE SET BCØ5H (115)	
						C-UA-BCØ5J-Ø-Ø	#	1	LINE SET BCØ5J (230)	

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TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 4 OF 8	B	DD	11Ø5-Ø	A H

DRB 108

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
		8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
			K-CO-5409949-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			D-AH-5409949-0-5	#	1	ASSY/DRILLING HOLE LAYOUT	
		10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
		11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
C	C	12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) P.L.	
	X	13	A-PI-3700061-0-0	#	4	11/05 PACKAGING INSTRUCTION CUSTOMER 5¼	
			A-PS-9905647-0-0			FULL TELESCOPE CAP	
			A-PS-9905648-0-0			FOAM PAD	
			A-PS-9905646-0-0			LAMINATED BUILDUP	
			A-PS-9905734-0-0			PLASTIC STRAPPING	

CUSTOMER PRINT SET 11Ø5-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
	X	14	A-PI-3700065-0-0	#	2	REGULATOR BOARD PKG. INST.	
			A-PS-9905201-0-0		1	REGULAR SLOTTED CARTON	
			A-PS-9905202-0-0		1	TAPED TUBE	
			A-PS-9905203-0-0		2	RAT TRAP	
			A-PS-9905374-0-0		3	TAPE TUBE	
			A-PS-9905375-0-0		3	DIECUT CARTON	
	X	16	A-SP-3700133-0-0		3	PKG. INST. INPLANT 11/Ø5 5¼	
			A-PS-9905271-0-0			LAMINATED BUILDUP	
			A-PS-9905184-0-0			LAMINATED BUILDUP	
			A-PS-9905418-0-0			REGULAR SLOTTED CARTON	
			A-PS-9905129-0-0			POLY BAG	
			A-PS-9905729-0-0			CARTON SEALING TAPE	

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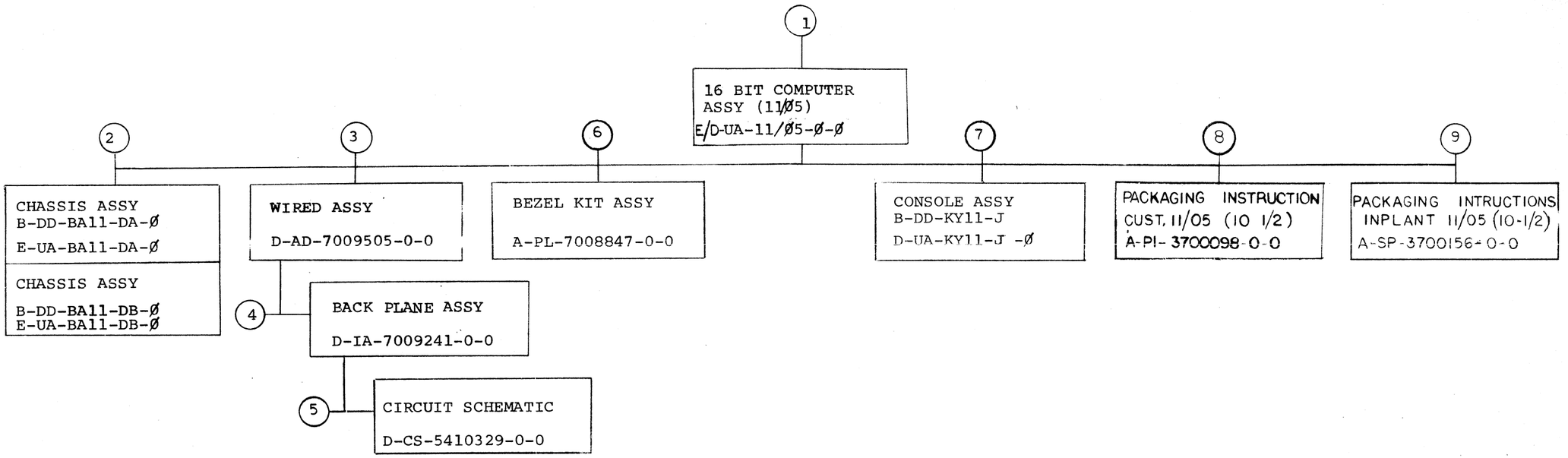
TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER	5 OF 8	B	DD	11Ø5-Ø	AH

DPB 108



NOTE: SHEETS 6 & 8 ARE FOR 10.5 BOX ONLY.

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11/Ø5)	SHEET 6 OF 8	B	DD	11/Ø5-Ø	A.H

DRB 107
DEC 16—(325)—1062—3—N871

ELECTRICAL

CUSTOMER PRINT SET 11/05-Ø	SET MFG.	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E/D-UA-11/Ø5-Ø-Ø		5	16 BIT COMPUTER ASSY (11/Ø5)	
X	X		D-IA-7009360-0-0		1	CPU POWER HARNESS	
X	X		D-MU-11/Ø5-Ø-Ø7		1	MODULE UTILIZATION (10.5)	
X	X		C-CS-M9970-0-1	#	1	BERG TO BACK PLANE	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		3	D-AD-7009505-0-0		1	WIRED ASSY	
			C-PS-1210698-0-0		1	CARD GUIDE	
	X		K-WL-11/05-0-8	B	1	ETCH/WIRE LIST (10½)	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
			E-PS-1211425-0-0		1	72 PIN CONN BLOCK	
			E-PS-1211439-0-0		1	11/05 LOGIC FRAME	
			E-PS-1210258-0-0		1	288 PIN CONN BLOCK	
X	X	5	D-CS-5410329-0-1	#	1	CIRCUIT SCHEMATIC (11/05 10.5)	
			K-CO-5410329-0-4		1	X-Y COORDINATE HOLE LOCATION	
			E-AH-5410329-0-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410329-0-6		1	MODULE ECO HISTORY	
			5010328		1	ETCH CIRCUIT BOARD	

MECHANICAL

CUSTOMER PRINT SET 11/05-Ø	SET MFG	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E/D-UA-11/Ø5-Ø-Ø		6	16 BIT COMPUTER ASSY (11/Ø5)	
			D-IA-7009360-0-0		1	CPU POWER HARNESS	
			D-MD-7410664-0-0		1	CONSOLE MTG BRKT (10.5)	
			B-IA-7409729-0-0		1	JUMPER POWER	
C	C		B-DD-H75Ø-Ø	#		H75Ø POWER SUPPLY	
C	C		B-DD-BC05T-0	#		LINE SET BC05-T	
C	C		B-DD-BC05U-0	#		LINE SET BC05-U	
X	X		E-IA-7009208-0-0	#	1	DISTRIBUTION BOARD HARNESS (BA11-D)	
	X		A-DC-7411305-0-0	#		DECAL (10.5" MODULE UTILIZATION)	
			A-DC-7409478-0-0		1	DECAL, PATENT	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
		5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (11/Ø5 10.5)	
		6	A-PL-7008847-0-0		1	BEZEL KIT ASSY	
			D-IA-7409683-0-0		1	BEZEL	
			A-PS-1211221-0-0		1	STRIP MTG	
		7	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP11/Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY, (PDP11/Ø5) PL	

CUSTOMER PRINT SET CODES

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TITLE: 16 BIT COMPUTER (PDP11/Ø5)

SHEET 7 OF 8

SIZE	CODE	NUMBER	REV
B	DD	11/Ø5-Ø	A H

DRB 108
DEC 16-(325)-1062-2B-R972

MECHANICAL

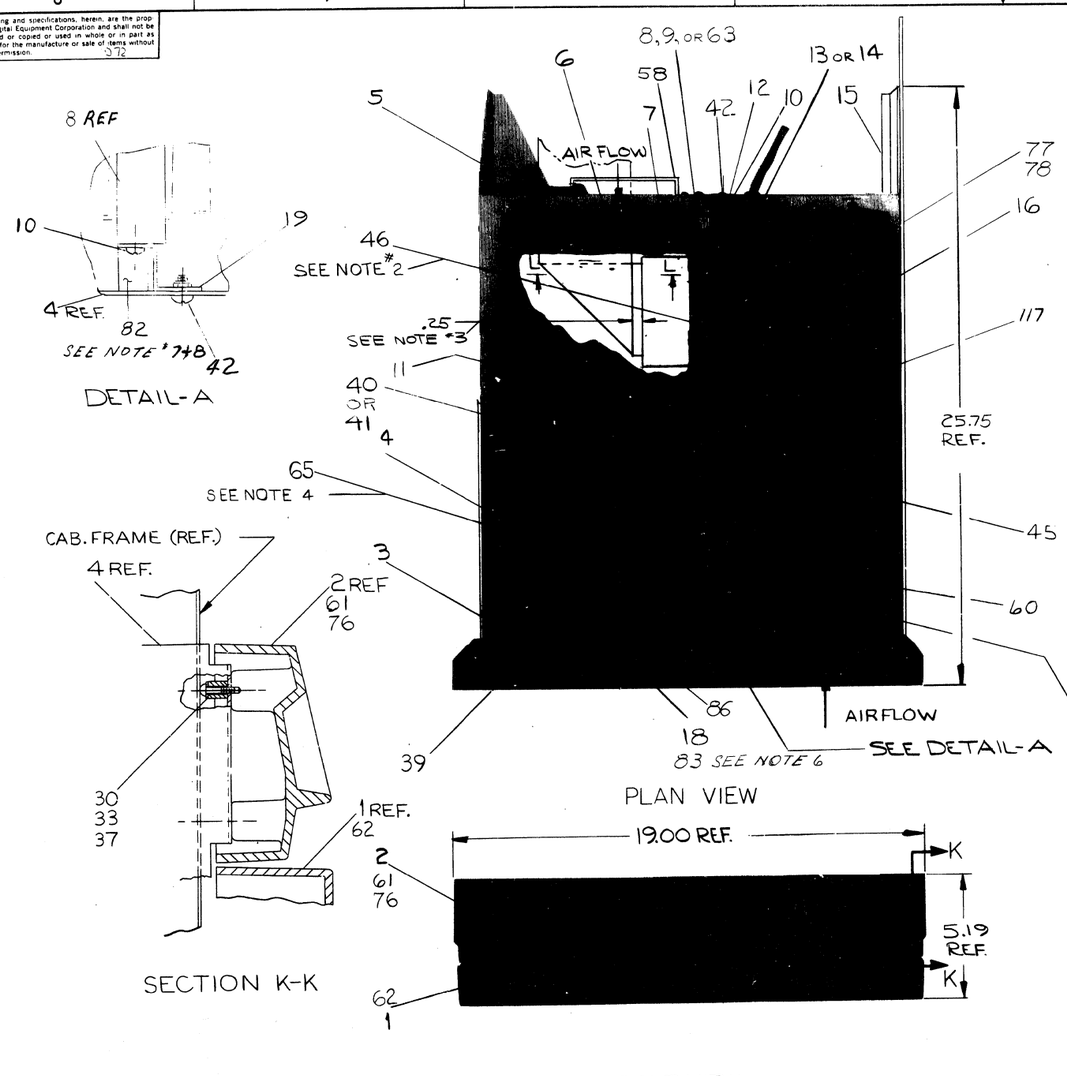
CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
	X	8	A-SP-3700098-0-0		4	PKG. INST. CUSTOMER 11/05 (10-1/2)	
			A-PS-9905647-0-0			FULL TELESCOPE CAP	
			A-PS-9905648-0-0			FOAM PAD	
			A-PS-9905641-0-0			LAMINATED BUILDUP	
			A-PS-9905734-0-0			PLASTIC STRAPPING	
	X	9	A-SP-3700156-0-0		3	PKG. INST. INPLANT 11/Ø5 (10⅓)	
			A-PS-9905417-0-0			REGULAR SLOTTED CARTON	
			A-PS-9905335-0-0			LAMINATED BUILDUP	
			A-PS-9905333-0-0			LAMINATED BUILDUP	
			A-PS-9905332-0-0			LAMINATED BUILDUP	
			A-PS-9905129-0-0			POLY BAG	
			A-PS-9905729-0-0			CARTON SEALING TAPE	

CUSTOMER PRINT SET	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE

CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11Ø5)	SHEET 8 OF 8	B	DD	11/Ø5-Ø	A H

DRB 108



WIRE TABLE

PART NO.	COLOR	FROM HARNESS LEAD NO.	TO SYSTEM LOCATION	REMARKS
7008713	RED	J1	51-2	VIEW E-E
	RED	J2	51-1	
	VIO	J3	51-6	
	BLK	J4	51-5	
	RED	J12	H780 P.S. J3	THERMAL INTERLOCK
	RED	J11	H780 FAN	P.S. FAN TAB
	WHT	J10	H780 FAN	P.S. FAN TAB
		J6	P9	BACK OF CHASSIS
		J5	P8	BACK OF CHASSIS
		J9	TRANSFORMER P5	VIEW H-H
		P1	A.C. INPUT BOX J13	A.C. INPUT BOX
	RED	J7	11/05 FAN	CHASSIS FAN
7008713	WHT	J8	11/05 FAN	CHASSIS FAN
7008856		P1	H780 P.S. J2	P.S. MATE-N-LOCK
	VIO	8	BP-1	VIEW F-F
	RED	9	BP-3	
	YEL	10	BP-2	
	BLK	11	BP-4	
	BLU	12	BP-5	
	ORN	13	LOGIC POINT C01 U1	+15
	BRN	14	LOGIC POINT C01 P1	C+C CO
	BLK	15	BP-6	VIEW F-F
7008856	RED	16	BP-7	
		TRANSFORMER P2	7009731 P/S J1	VIEW H-H & POWER CARD TO TRANSFORMER
7409729-2	RED	B.P.-7	CONSOLE-+5	CONSOLE TO BACK PLANE & VIEW D-D
7409729-1	BLK	B.P.-6	CONSOLE-GND	CONSOLE TO BACK PLANE & VIEW D-D
7409903	BLK	B.P.-6	BACK PLANE-GND	BACK PLANE TO CHASSIS - DETAIL-A

NOTES:

1. INSTALLATION OF I/Ø CABLE, WHICH IS ALREADY CONNECTED TO ITEM *(2), CONSOLE ASSY, IS AS FOLLOWS. RUN I/Ø CABLE DOWN INNER SIDE OF ITEM *(18) CARD GUIDE ASSY SLIDE CABLE THROUGH OPENING ON BOTTOM OF ITEM *(18) CARD GUIDE ASSY, TO ONE OF THE THREE EXIT LOCATIONS FOR THE CABLE, AFTER EXIT LOCATION IS DECIDED, FOLD CABLE 90° AND HOLD IN PLACE BY USING ITEM * 35 (CLAMP) AND ITEM *46 (TAPE) AS SHOWN IN VIEW C-C.
2. USE TAPE (ITEM *46) TO HOLD HEADER CABLE ASSY TO CHASSIS.
3. FOLD CABLE 90° AS SHOWN TO INSURE CORRECT LOCATION IN CABLE CLAMP.
4. ITEM *65 (ELECTROMAGNETIC SHIELD) GOES BETWEEN CENTRAL PROCESSOR BOARDS & MEMORY BOARDS.
5. ITEMS *79 & 80 (THREAD CUTTING SCREWS) MUST BE ASSEMBLED USING A TORQUE SCREW DRIVER. SCREWS WILL BE ATTACHED USING 8 INCH POUNDS OF TORQUE.
6. ADHERE FOAM (9009542) TO TOP OF CARD GUIDE (*1211099).
7. ADHERE FOAM (9009543) TO END OF LOGIC FRAME.
8. DO NOT ADD ITEM *82 TO VARIATIONS MA, MB, PA, OR PB.
9. INSTALL BAFFLE (1211381) IN UNUSED SLOTS ON RIGHT HAND CARD GUIDE (1211099)

REVISIONS			
ZONE	CHK	CHANGE NO	REV
	PM	11/05-03017	A
		LYONS	
	PM	11/05-00030	B
		M TITELBAUM	
	PM	11/05-00034	C
		GRAHAM	
	PM	11/05-00035	D
		G. GRAHAM	
	PM	11/05-00039	E
		R.L. GATES	
	PM	11/05-00040	F
		M. TITELBAUM	
	PM	11/05-00041	H
		G. GRAHAM	
	PM	11/05-00046	J
		G. GRAHAM	
	PM	11/05-00046A	K
		GRAHAM	
	PM	11/05-00047	L
		ADDED SHEETS 5&6	
	PM	11/05-00048	M
		G. GRAHAM	
	PM	11/50-00050	N
		G. GRAHAM	
	PM	11/05-00051	P
		G GRAHAM	
	PM	11/05-00052	R
		G. GRAHAM	
	PM	11/05-00053	S
		G. GRAHAM	
	PM	11/05-00055	T
		B. MINOR	
	PM	11/05-00056	U
		B. ARMSTRONG	
	PM	11/05-00059	W
		ARMSTRONG	
	PM	11/05-00060	Y
		B. MINOR	
	PM	11/05-00062	Z
		B. MINOR	

FIRST USED ON OPTION/MODEL: PDP 1105	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
XXX = .005	±0° 30'
XX = .02	
X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN: [illegible] DATE 2-24-72
CHK'D: J. Teschner DATE 4-19-72
ENG: Alan Lyons DATE 5-15-72
PROJ. ENG.: [illegible] DATE 5-16-72
PROD: R.K. Peterson DATE 5/31/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP 1105)

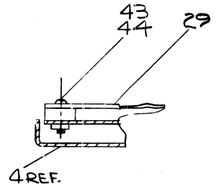
NEXT HIGHER ASSY.: B-DD-1105-Ø

SIZE: D | CODE: UA | NUMBER: 1105-Ø-Ø | REV.: Z

SCALE: NONE | SHEET 1 OF 5 | DIST.:

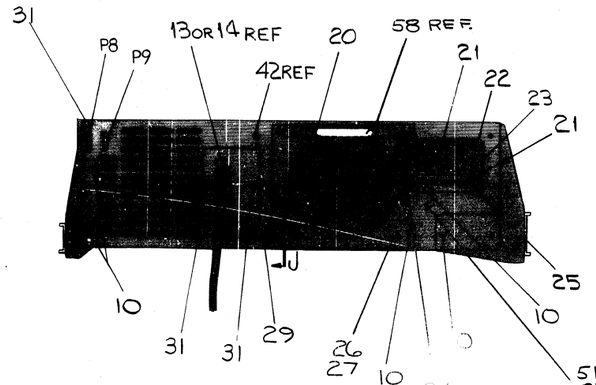
DEC FORM NO DRD 100-A

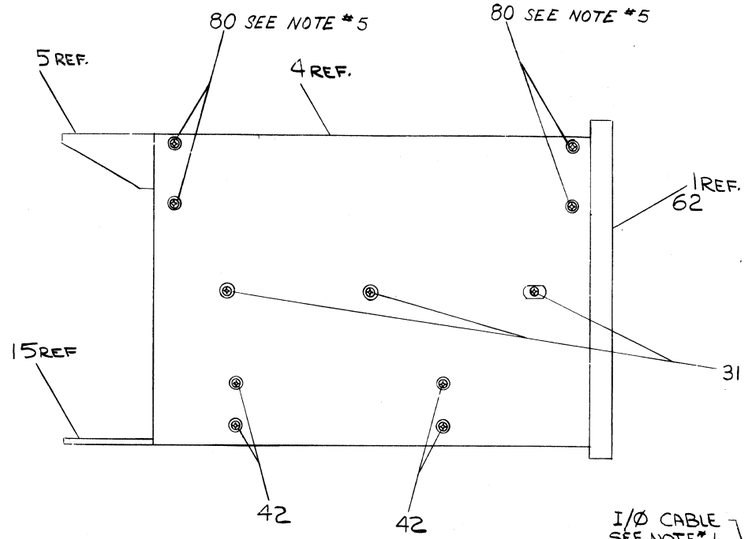
REV Z | NUMBER Ø-Ø-5Ø11 | CODE UA | SIZE D | 2



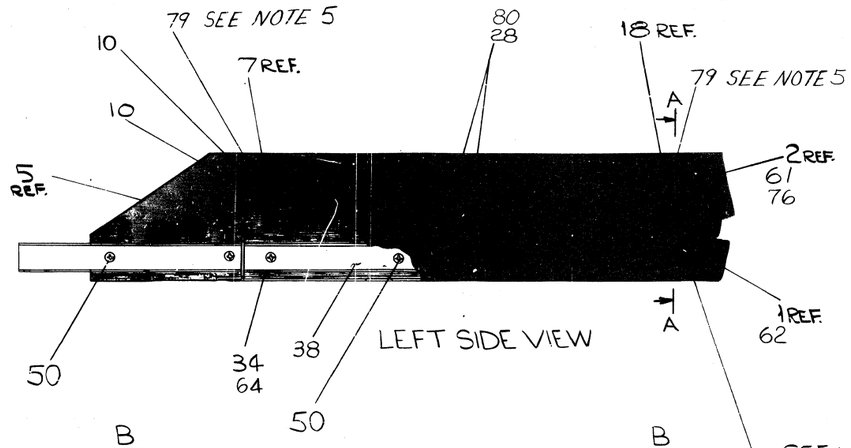
SECTION J-J

REAR VIEW

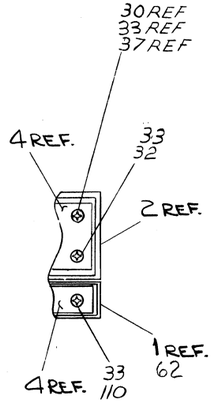




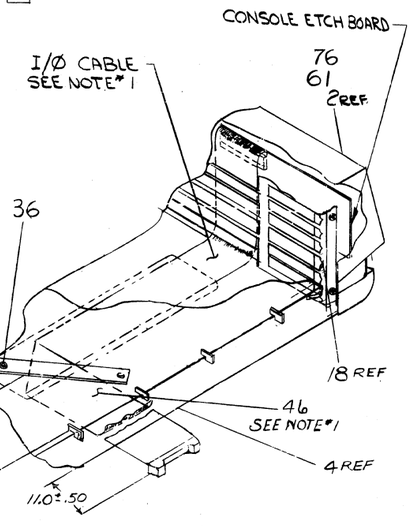
VIEW B-B



LEFT SIDE VIEW



VIEW A-A



VIEW C-C

FIRST USED ON OPTION/MODEL: PDP 1105	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS XXX ± .005, XX ± .02, X ± 1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓. MATERIAL —. FINISH —.

DRN [signature] DATE 8-24-72
CHKD C. Teschner DATE 8-24-72
ENG. Allan Lyons DATE 5-15-72
PROJ. ENG. [signature] DATE 5-16-72
PROD. [signature] DATE 5/19/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP1105)

NEXT HIGHER ASSY: B-DD-1105-Ø

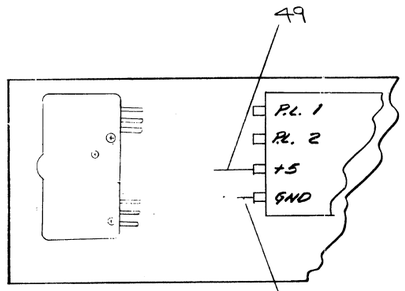
SIZE D | CODE UA | NUMBER 1105-Ø-Ø | REV. Z

SCALE NONE

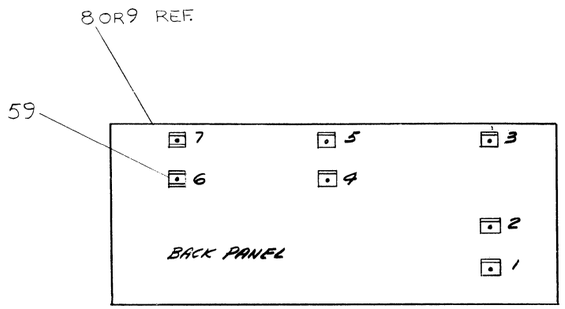
SHEET 2 OF 5 | DIST

REVISIONS	REV.	CHANGE NO.	CHK
	1		

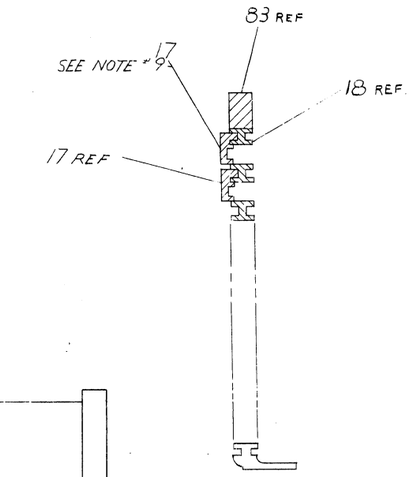
DEC FORM NO. DRD 100-A



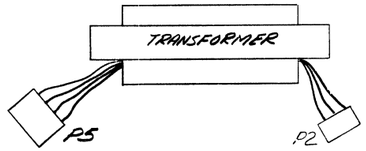
VIEW D-D
SCALE- NONE



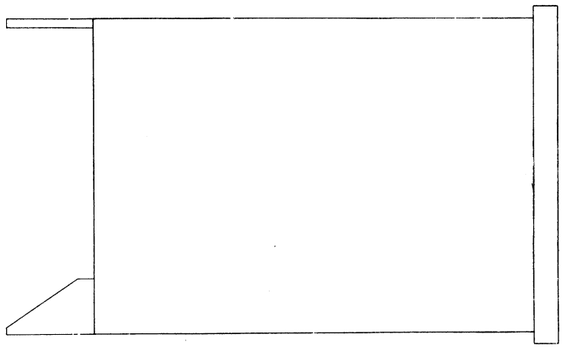
VIEW F-F
SCALE : NONE



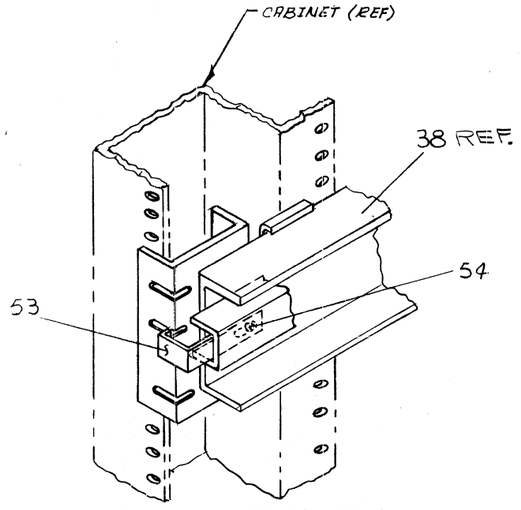
SECTION R-R



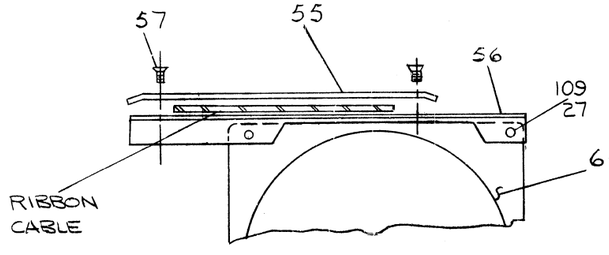
VIEW H-H
SCALE: NONE



TOP VIEW
(WITH TOP COVER)



LOCATION OF SHIPPING BRACKETS WHEN UNIT IS SUPPLIED IN CAB. (BOTH SIDES)



VIEW L-L
SCALE: NONE

REVISIONS		
REV	CHANGE NO	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP 11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX ± .005 .XX ± .02 .X ± .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN.	DATE	3-28-72
CHK'D. C. Teschner	DATE	4-14-72
ENG. Glenn Lewis	DATE	5-15-72
PROJ. ENG'D	DATE	5-16-72
PROD.	DATE	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
16 BIT COMPUTER ASSY (PDP 11Ø5)

NEXT HIGHER ASSY.
B-DD-1105-Ø

SCALE NONE
SHEET 3 OF 5

SIZE	CODE	NUMBER	REV.
D	UA	1Ø5-Ø-Ø	Z

DIST.

DEC FORM NO 1083 100-A

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	TO POINT	TO CONN.	SIGNAL NAME
85	—	—	—	P1	—	J1	
	22	ORN	9	—	—		LTC
	18	BLK	7	—	—	TB1-1	GND
	18	RED	8	—	—	TB1-2	+5V
	14	BLK	4	—	—	TB1-3	GND
	22	GRY	5	—	—	TB1-4	+15V
	18	BLU	6	—	—	TB1-5	-15V
	18	VIO	3	—	—	TB1-6	DCLO
	18	YEL	2	—	—	TB1-7	PCLO
85	18	RED	1	—	—	TB1-8	+5V

LEGEND

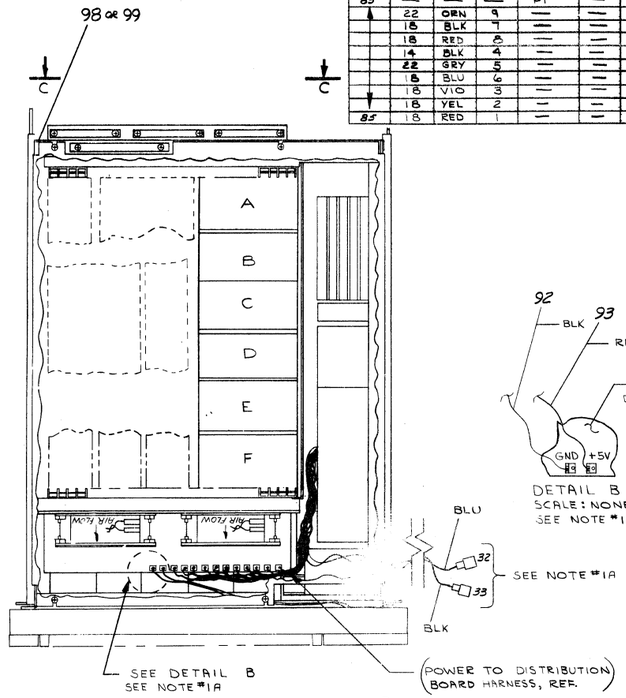
NUMBER	VARIATION
11/05-NC	115V 60 HZ
11/05-ND	230V 50 HZ

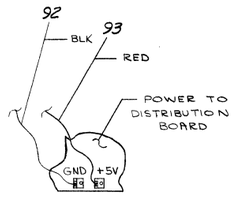
NOTES:

1A. POWER WIRING TO KY11-J CONSOLE (ITEM #3) IS AS FOLLOWS:
POINT NO'S. 32,33 (BLU/BLK TWP) OF POWER TO DISTRIBUTION BOARD HARNESS ARE TO BE CONNECTED TO KY11-J CONSOLE, AS SHOWN IN VIEW E-E.

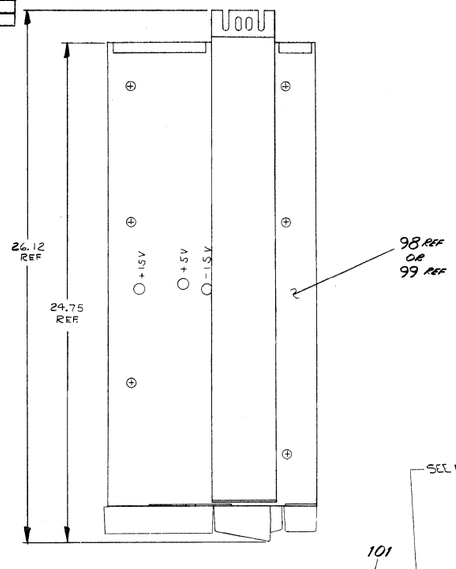
ITEM #92 (BLK WIRE) #93 (RED WIRE) TO BE CONNECTED AS SHOWN IN DETAIL-B
ITEM #93 (RED WIRE) GOING TO +5V AND ITEM #92 (BLK WIRE) GOING TO GND, THEN CONNECT LOOSE END OF ITEMS #92 & 93 TO KY11-J AS SHOWN IN VIEW D-D

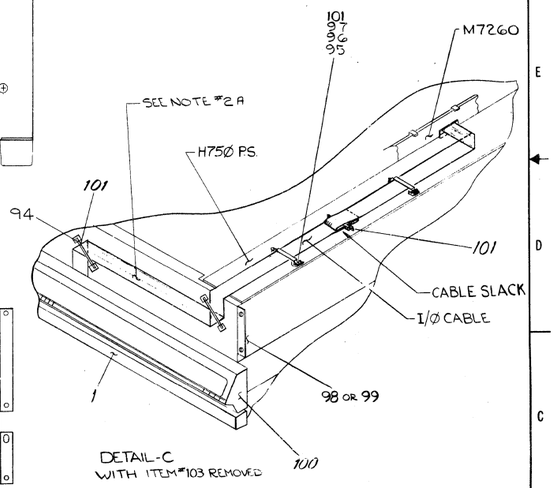
2A. INSTALLATION OF I/O CABLE, WHICH IS ALREADY CONNECTED TO CONSOLE ITEM NO 79, TO BE DRESSED TO FRONT PORTION OF CHASSIS AND ALONG POWER SUPPLY, THEN INTO CHASSIS WHERE CABLE IS CONNECTED TO M7260 BY USING 45° BENDS AND FASTENING WITH TIE WRAP HARDWARE. SEE DETAIL-C



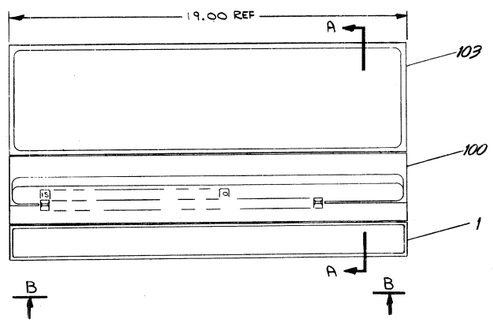


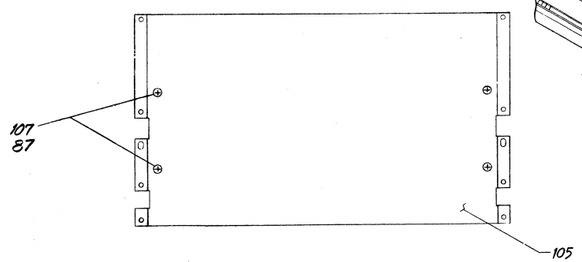
DETAIL B
SCALE: NONE
SEE NOTE #1A





DETAIL-C
WITH ITEM #103 REMOVED





VIEW A-A
ITEM #100, 1 & 107 REMOVED FOR CLARITY OF VIEW

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XX ± .005, .XXX ± .002, .X ± .1; ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN	J. CAHILL	DATE 2-24-72
CHK	T. ESCHNER	DATE 4-14-72
ENG	A. LYONS	DATE 5-12-72
PROJ. ENG	S. WEEKS	DATE 5-16-72
PM	R. PETERSON	DATE 5-16-72

NEXT HIGHER ASSY: B-DD-11Ø5-Ø-Ø
SCALE: NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

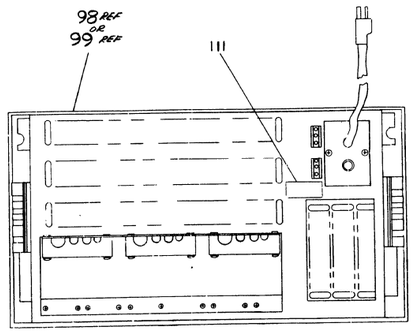
TITLE: 16 BIT COMPUTER (PDP 11Ø5)

SIZE E | CAGE CODE | NUMBER: UA11Ø5-Ø-Ø | REV. Z

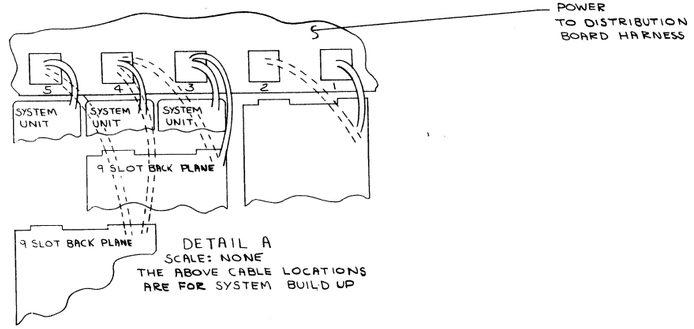
DIST.

CHANGE NO. | REVISIONS | CHK

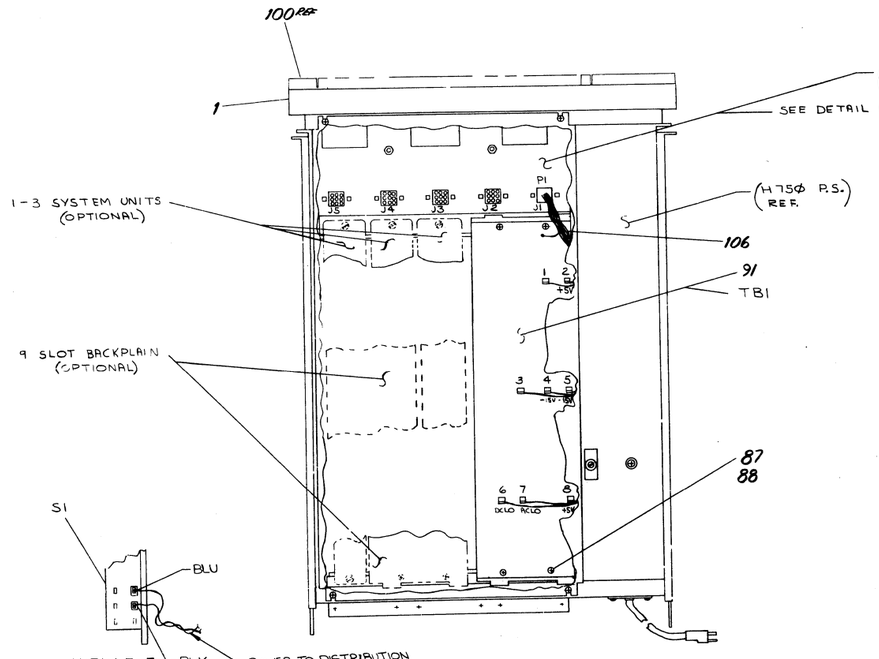
DEC FORM NO. DEC 500



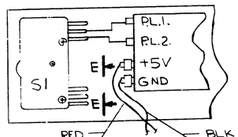
VIEW C-C



DETAIL A
SCALE: NONE
THE ABOVE CABLE LOCATIONS ARE FOR SYSTEM BUILD UP

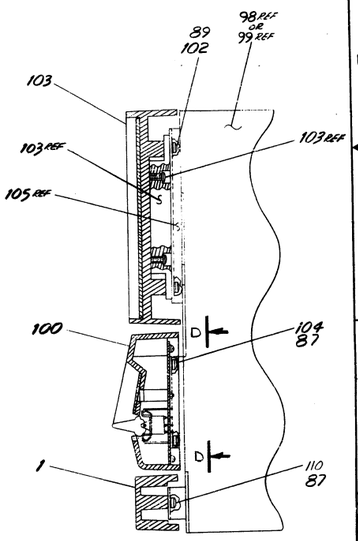


VIEW B-B



VIEW D-D
SCALE: NONE
SEE NOTE #1A

VIEW E-E
SCALE: NONE
SEE NOTE #1A



SECTION A-A
SCALE: NONE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, .XX ± .02, X ± .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN	J CAHILL	DATE 2-24-72
CHK	C.F.SCHNEIR	DATE 4-14-72
ENG	A LYONS	DATE 5-15-72
PROJ ENGR	B WEEKS	DATE 5-15-72
APVD	R PETERSON	DATE 5-15-72

NEXT HIGHER ASSY. B-DD-11/05-0-0
SCALE NONE
SHEET 3 OF 5

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 16 BIT COMPUTER (PDP 11/05)

SIZE E | CODE | NUMBER: UA 11/05-0-0 | REV. Z | DIST.

#UA11/05-0-0

CHANGE NO. | REV | CHK

QUANTITY / VARIATION

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
1	D-PS-1211474-0-0	1.75 FILLER STRIP	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	1	1
2	D-UA-KY11-JA-0	CONSOLE ASSY	X	X	X	X	1	1	1	1	1	1	1	1	X	X	X	X	X	X
3	C-IA-7409460-0-0	COVER, TOP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
4	E-IA-7409458-0-0	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
5	D-IA-7409459-0-0	BRACKET,CHASSIS SLIDE (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
6	1209403	FAN, SUPER BOXER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
7	E-PS-1211100-0-0	CARD GUIDE ASSY (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
8	D-AD-7008843-1-0	BACK PANEL ASSY (8K)	1	1	1	1	X	X	X	X	1	1	1	1	X	X	X	X	X	X
9	D-AD-7008843-2-0	BACK PANEL ASSY (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
10	9009191	SCR PHL HD PAN NYLOK *8-32 x 1/4 LG	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	X	X
~~11~~	~~D-IA-7008856-0-0~~	~~HARNESS (D.C.)~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
12	B-IA-7411167-0-0	RET. CONN. BLOCK (L.H.) ✓	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
13	C-UA-BC05H-0-0	LINE SET BC05H (115V/60HZ)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
14	C-UA-BC05J-0-0	LINE SET BC05J (230V/50HZ)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
15	C-IA-7409449-0-0	BRACKET,CHASSIS SLIDE (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~16~~	~~E-IA-7008713-0-0~~	~~AC INPUT HARNESS~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~X~~	~~X~~
17	D-PS-1211381-0-0	AIR BAFFLE	3	3	3	3	3	3	3	3	3	3	3	3						
18	E-PS-1211099-0-0	CARD GUIDE ASSY REAR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
19	B-IA-7411168-0-0	RET. CONN. BLOCK FRONT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
20	D-IA-7409463-0-0	FAN MTG PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
21	C-MD-7409479-0-0	PLATE, PRESSURE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
22	9006047-1	SCR PHL HD PAN *8-32 x 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
23	D-PS-1210931-0-0	BLOCK, CABLE RETAINING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
24	C-MD-7409480-0-0	SWIVEL NUT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
25	D-MD-7409482-0-0	PLATE LOWER RETAINER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
26	9006024-1	SCR PHL HD PAN *6-32 x 1/2 ~~(SEE NOTE #14 ON DWG D UA-1105-0-0)~~	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
27	9006560	KEP NUT 6-32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
28	C-PS-1210698-0-0	GUIDE CARD CENTER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
29	C-IA-7008820-0-0	HEADER CABLE ASSY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
30	9006074-3	SCR PHL HD TRUSS #10-32 x 5/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
31	9009186	SCR PHL HD PAN NYLOC #6-32 x 5/16	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
32	9006071-3	SCR PHL HD TRUSS #10-32 x 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
33	9007651	WASHER EXT TOOTH #10	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
34	D-IA-7409533-0-0	COVER SIDE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
35	C-MD-7409591-0-0	CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
36	9009173	SCR BINDER HD NYLON #8-32 x 1/4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
37	9008074	SPACER 1/2" AF x 5/16-#10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
38	1210945	CHASSIS SLIDE	X	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	X	X
39	9008196	CLIP-ON RECPT.-SOUTHCO #82-47-104-15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
40	D-MU-1105-01-0	MODULE UTILIZATION (8K)	1	1	1	1	X	X	X	X	1	1	1	1	1	1	1	1	X	X
41	D-MU-1105-02-0	MODULE UTILIZATION (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
42	9009192	SCR PHL HD PAN NYLOC #8-32 x 3/8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
43	9006005-1	SCR PHL HD PAN #2-56 x 1/2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X

REVISIONS

REV.	CHANGE NO.				CHK
F	11/05-00040 REVISED & REDRAWN	1-24-72 B. Blodgett	M. TITLEBAUM	D. Randall	
H	11/05-00041	Dennis McGahan 2-7-73	G. GRAHAM	G. Graham 2-8-73	
J	11/05-00044	S. Chartier 5-23-73	G GRAHAM	G. Graham 6-4-73	
K	11/05-00046	S Chartier 7-17-73	GRAHAM	G Graham 7-27-73	
L	11/05-00047	L Gilbert 8-17-73	D.RANDALL	8-30-73	
M	11/05-00048	S Chartier 9-6-73	GRAHAM	G Graham 9-18-73	
N	11/05-00050	R. Vowles 11/6/73	G. GRAHAM	G. Graham 11-7-73	
P	11/05-00051	S. Mankiewicz 11-26-73	G. GRAHAM	G. Graham 11-27-73	

FIRST USED ON OPTION/MODEL
11/05

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005
FRACTIONS ± 1/64
ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.	J. CAHILL	DATE 2/25/2
CHK'D.	C. TESCHNER	DATE 5/2/2
ENG.	A. LYONS	DATE 5/15/2
PROJ. ENG.	B. WEEKS	DATE 5/16/2
PROD.	R. PETERSON	DATE 5/16/2

NEXT HIGHER ASSY.
D-UA-1105-0-0

SCALE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER.
ASSY (PDP 1105)

SIZE	CODE	NUMBER	REV.
C	PL	1105-0-0	Z

DIST.

DEC FORM NO.
DRC 110

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
			QUANTITY / VARIATION																	
44	9006631	WASHER INT TOOTH #2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
45	9008442	CABLE CLAMP (1/4)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
46	9009210-6	SCOTCH BRAND ADHESIVE TRANSFER TAPE	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
47																				
48	7409729-01	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
49	7409729-02	JUMPER POWER (RED)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
50	9009224	SCR SLOT PAN HD #8-32 x 1/4 LG	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	X	X
51	A-DC-5309900-0-0	POWER CONTROL DECAL (230V)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
52	A-DC-5309899-0-0	POWER CONTROL DECAL (115V)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
53	B-MD-7409816-0-0 *	SHIPPING BRACKET	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
54	9008143-1	SCR PHL HD PAN #8-32 X 1/4 THD CUTTING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
55	B-MD-7409817-0-0	PLATE, CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
56	C-MD-7409818-0-0	BRACKET CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
57	9006011-2	SCR PHL HD FLAT #4-40 X 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
58	B-MD-7409828-0-0	BRACKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
59	9007694	QUIK DISCONNECT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
60	7409903	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
61	D-UA-KY11-JC-0	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
62	D-MD-7409978-0-0	BOTTOM TRIM	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
63	D-AD-7009119-0-0	BACK PANEL ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
	* USED ONLY WHEN INSTALLED IN CABINET																			
64	D-IA-7409533-1-0	COVER SIDE	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
65	1700021-0	ELECTROMAGNETIC SHIELD 1 OZ. CU	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	I	I
~~66~~	~~E-IA-5309816-0-0~~	~~CHASSIS~~	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~67~~	~~D-IA-7008726-0-0~~	~~TRANSFORMER MMC 415° -1~~	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~68~~	~~9006024-1~~	~~SCR PHL PAN HD #6-32 X.50 LG~~	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
~~69~~	~~9006021-1~~	~~SCR PHL PAN HD #6-32 X.31LG~~	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
~~70~~	~~9006031-1~~	~~SCR PHL PAN HD #6-32 X1.75 LG~~	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
~~71~~	~~9006563~~	~~NUT KEPS #8-32~~	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
~~72~~	~~9006560~~	~~NUT KEPS #6-32~~	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
~~73~~	~~9007649~~	~~WASHER EXT. LOCK #6-32~~	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
74	9007035	GROMMET CATERPILLAR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
~~75~~	~~E-IA-5409720-0-0~~	~~REGULATOR BOARD~~	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
76	D-UA-KY11-JF-0	CONSOLE ASSY	1	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X
77	A-DC-5309413-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
78	A-DC-5309414-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
79	9008181-1	SCR PHL PAN HD TYPE F 6-32 X .50LG	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
80	9009525-1	SCR, PHL PAN HD TYPE F 6-32 X .37LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
81	9009070	SCRPHL FLAT HD SPECIAL 8-32X.81LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
82	9009543	FOAM 3/8 X 1 X 3 3/4LG	1	1	1	1	1	1	1	1	1	1	–	–	–	–	–	–	X	X
83	9009542	FOAM ½ X 5/16 X 7 9/16LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~84~~	~~9009544~~	~~FOAM ½ x ¼ x 16 ½LG~~	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
~~85~~	~~9008848~~	~~FIBER WASHER 5/32ID X ½ OD X 3/32~~	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
86	A-DC-7411255-0-0	LABEL (REMOVE FOAM)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X

REVISIONS	CHANGE NO.	REV.	CHK
	11/05-00052	R	BM
R. Wynne 12-18-73 G. GRAHAM			
	11/05-00054	S	BM
J. Graham 1-2-74 A. Charter 2-22-74 GRAHAM			
	11/05-00055	T	BM
J. Graham 3-7-74 B. MINOR			
	11/05-00056	U	BM
R. Wynne 3-26-74 B. ARMSTRONG			
Jim Johns 4-24-74	11/05-000588	V	BM
A. Charter 8-16-74 MINOR			
N.E. Brown 8-22-74	11/05-00059	W	BM
B. Armstrong 12-4-74 B. ARMSTRONG			
R. Cain 12-9-74	11/05-00060	Y	BM
J. Charter 3-17-75 B. MINOR			
N.E. Brown 3/20/75	11/05-00062	Z	J.C.
B. Talbot 8-Jul-76 B. MINOR			
D.R. Bourg 26-Aug-76			

FIRST USED ON OPTION/MODEL
11/05

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN. J. CAHILL	DATE 2/25/2	
CHK'D. C. TESCHNER	DATE 5/2/2	
ENG. A. LYONS	DATE 5/15/2	
PROJ. ENG. B. WEEKS	DATE 5/16/2	
PROD. R. PETERSON	DATE 5/16/2	

NEXT HIGHER ASSY.
D-UA-1105-0-0

SCALE

SHEET 2 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP 11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	11Ø5-0-0	Z

DIST.

DEC FORM NO. DRC 110

REV. Z
NUMBER 11Ø5-0-0
SIZE C CODE PL

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
		QUANTITY / VARIATION																		
87	9006635	WASH INT TOOTH #10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10	10
88	9006043-1	SCR PHL HD PAN #8-32 x 1.0 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
89	9006035-1	SCR PHL HD PAN #8-32 x .25 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
90	D-MU-1105-0-07	MODULE UTILIZATION (16K)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
91	D-UA-7006505-0-0	WIRED ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
92	B-IA-7409729-03	JUMPER POWER (B1K)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
93	B-IA-7409729-04	JUMPER POWER (RED)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
94	9008264	CLAMP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
95	9007033	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
96	9007649	WASH EXT TOOTH #6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
97	9006020-1	SCR PHL HD PAN #6-32 x .1/4 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
98	E-UA-BA11-DA-0	CHASSIS ASSY (115V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X
99	E-UA-BA11-DB-0	CHASSIS ASSY (230V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
100	D-UA-KY11-JD-0	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
101	9008442	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
102	9006634	WASHER INT TOOTH #8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
103	A-PL-7008847-0-0	BEZEL KIT ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
104	9006071-1	SCR PHL HD PAN #10-32 x .38 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6	6
105	D-MD-7410664-0-0	CONSOLE MTG BRK'T (10.5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
106	D-IA-7009360-0-0	CPU POWER HARNESS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
107	9006070-1	SCR PHL HD PAN #10-32 x .31 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
108	A-DC-7411305-0-0	DECAL (10 1/2" MODULE UTILIZATION)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
109	9006025-1	PHL PAN HD SCREW 6-32 X .62 (SEE NOTE #14 ON D-IA-1105-0-0)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
110	9009573	SCR PHL HD PAN THREAD CUTTING #10-16X3/8 LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
111	A-DC-7409478-0-0	DECAL PATENT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
112	A-PI-3700061-0-0	PACKAGING INSTRUCTION (5-1/4) CUST.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
113	A-PI-3700098-0-0	PACKAGING INSTRUCTION (10-1/2) CUST.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
114	9006833	#6 INT TOOTH L WASHER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
115	9009165	CLIP MTG (SEE NOTE #14 ON DWG. D-UA-1105-0-0)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
116	9008202	CLIP MTG (SEE NOTE #14 ON DWG. D-UA-1105-0-0)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
117	D-UA-7008731-0-0	POWER SUPPLY 11/05 (5-1/4 INCHES)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
118	A-SP-3700133-0-0	PACK. INST. 11/05 INPLANT (5-1/4)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
119	A-SP-3700156-0-0	PACK. INST. 11/05 INPLANT (10-1/2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1

REVISIONS | REV. | CHANGE NO. | CHK

FIRST USED ON OPTION/MODEL: 1105

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 | FRACTIONS ± 1/64 | ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

		DATE
DRN.	J.CAHILL	2/25/2
CHK'D.	C.TESCHINER	6/2/72
ENG.	A.LYONS	5/15/2
PROJ. ENG.	B.WEEKS	5/16/2
PROD.	R.PETERSON	5/16/2

NEXT HIGHER ASSY.
B-DD-1105-0

SCALE

SHEET 3 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP1105)

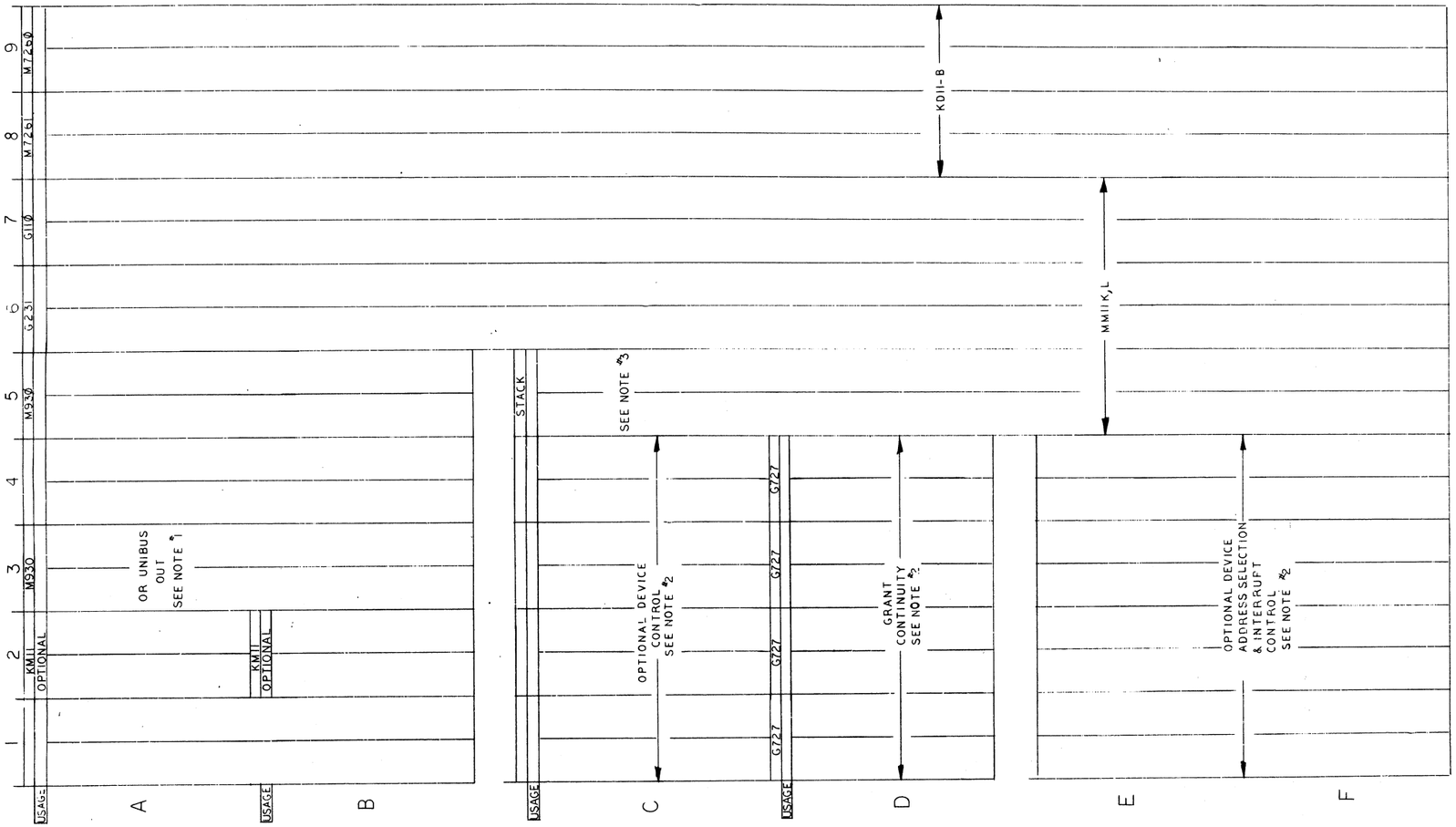
SIZE	CODE	NUMBER	REV.
C	PL	1105-0-0	Z

DIST.

REV. Z

SIZE C | CODE PL | NUMBER 1105-0-0

DEC FORM NO. DRC 110



NOTES:

1. BEFORE THE 11Ø5 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, BØ3. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION DØ1, DØ2, DØ3, DØ4. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11K, STACK IS H213
   IF MM11L, STACK IS H214

CONFIGURATION #2
(8 K)

ITEM NO.	QTY.	DESCRIPTION	PART NO.
5	1	CENTRAL PROCESSOR	B-DD-KD11-B-Ø
4	4	GRANT CONTINUITY	A-PL-G727-Ø-Ø
3	1	16BIT 18 MIL MEMORY	B-DD-MM11-L-Ø
2	2	BUS TERMINATOR	A-PL-M930-Ø-Ø
1	*	MAINTENCE BOARDS	A-PL-KM11-Ø-Ø

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-11Ø5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Teschner DATE 4-24-72
CHK'D DATE
ENG. DATE 5-4-72
PROJ. ENG. DATE 5-4-72
PROD. DATE 5/4/72
NEXT HIGHER ASSY. D-UA-11Ø5-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION (8K)

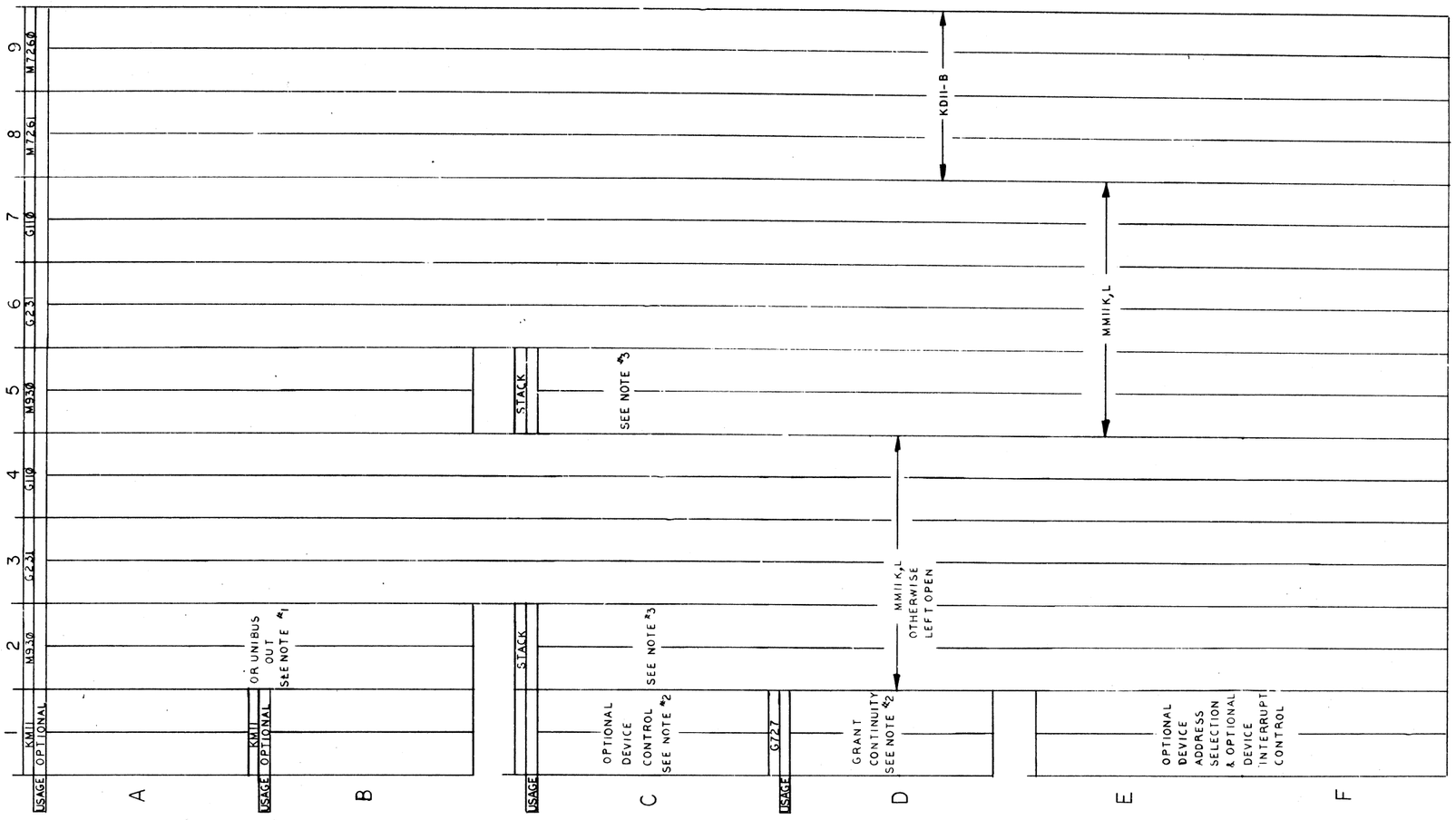
SIZE D | CODE MU | NUMBER 11Ø5-Ø-Ø2 | REV.
DIST.

REVISIONS	REV.
CHANGE NO.	
CHK	

REV.	NUMBER	SIZE	CODE
	11Ø5-Ø-Ø1	D	MU

SIZE	CODE	NUMBER	REV.
D	MU	11Ø5-Ø-Ø2	

UCC FORM NO DRD 100-A



CONFIGURATION #1
(16K)

NOTES:

1. BEFORE THE 1105 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, B02. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION D01. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11K, STACK 13 H213
   IF MM11L, STACK 15 H214

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	CENTRAL PROCESSOR	B-DD-KD11-B-0	5
1	GRANT CONTINUITY	A-PL-G727-0-0	4
1	16BIT 18 MIL MEMORY	B-DD-MM11-L-0	3
2	BUS TERMINATOR	A-PL-M930-0-0	2
*	MAINTENCE BOARDS	A-PL-KM11-0-0	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Tesphner DATE 4-24-72
CHK. [illegible] DATE 5-4-72
ENG. D. N. Clarke DATE 5-4-72
PROJ. ENG. B. N. Mark DATE 5-9-72
PROD. R. H. Peterson DATE 5/15/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION (16K)

NEXT HIGHER ASSY. D-UA-1105-0-0

SIZE D | CODE MU | NUMBER 1105-0-01 | REV.

SCALE

SHEET 1 OF 1

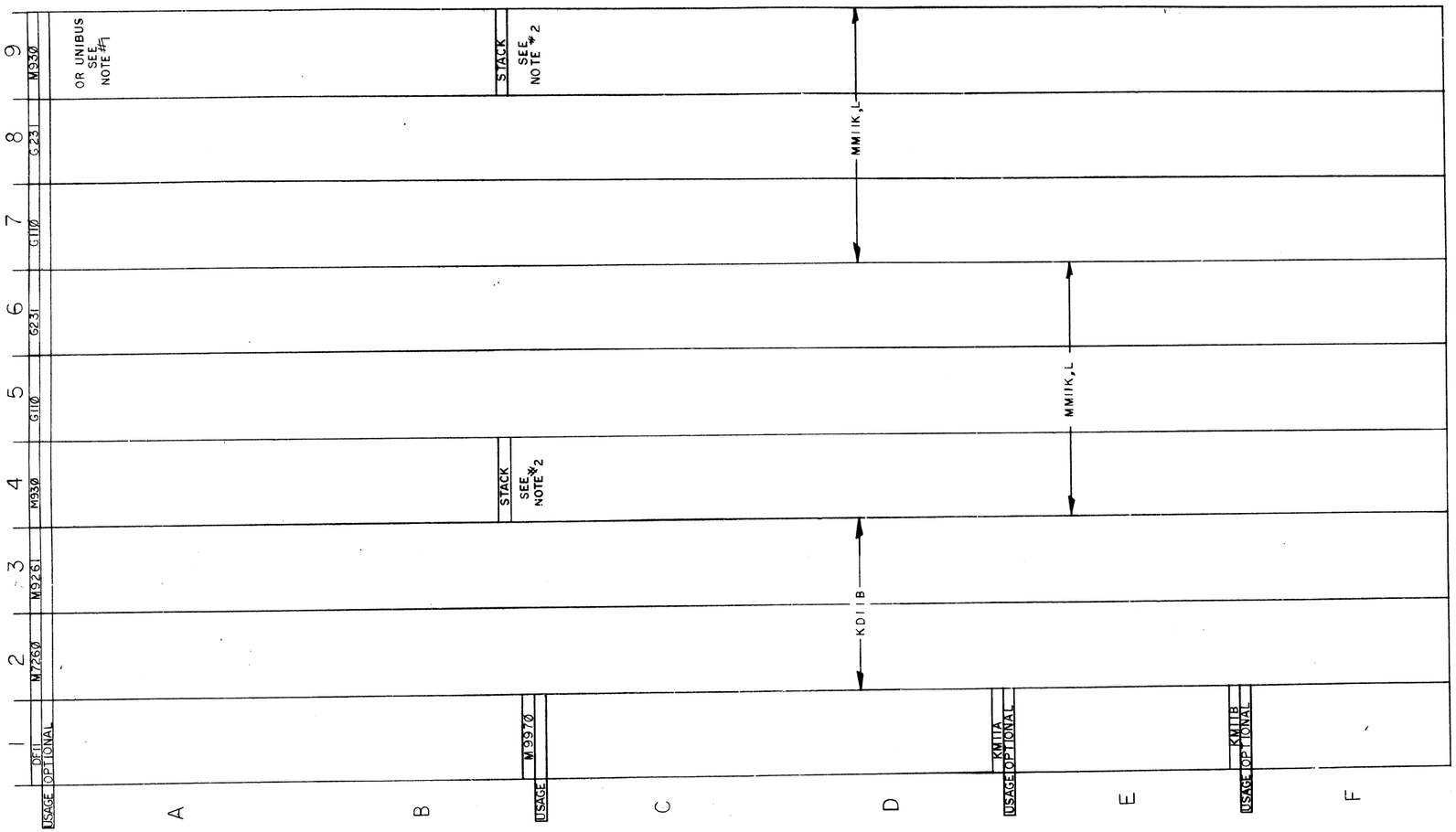
DIST.

REVISIONS	CHANGE NO.	CHK	REV.

DEC FORM NO DRD 100-A

FIRST USED ON	NEXT ASSY	NUMBER	REV
A39	3000 3215	10-0-5-0111	NW a

SIZE	CODE	NUMBER	REV
D	MU	1105-0-01	



NOTES:
1. BEFORE THE 11Ø5 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M93Ø BUS TERMINATOR IS IN LOCATION A,B Ø9. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION.
2. IF MM11-K, STACK IS HZ13; IF MM11-L, STACK IS HZ14.

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		
1	M9970	D-CS-M9970-Ø-1	5
1	CENTRAL PROCESSOR	B-DD-KD11-B-Ø	4
1	16BIT 18MIL MEMORY	B-DDMM11-L-Ø	3
2	BUS TERMINATOR	A-PL-M930-Ø0	2
*	MAINTENCE BOARDS	A-PL-KM11-Ø-Ø	1

FIRST USED ON OPTION/MODEL: PDP-11Ø5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	± Ø° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN. K. Davis	DATE 12-11-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 1-17-73	
ENG.	DATE 1-17-73	
PROJ. ENG.	DATE 1-17-73	TITLE: MODULE UTILIZATION (16K)
PROD	DATE 1-20-73	

NEXT HIGHER ASSY.: D-UA-11Ø5-Ø-Ø

SCALE

SHEET 1 OF 1

SIZE CODE: D MU | NUMBER: 11Ø5-Ø-Ø7 | REV.

DIST.

REVISIONS		
REV.	CHANGE NO.	CHK

BRUNING 40-107 15968

DEC FORM NO DRD 100-A

SIZE CODE: D MU | NUMBER: 11Ø5-Ø-Ø7 | REV.

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE		SEQUENCE	
16 BIT PROCESSOR KD11-B	B-DD-KD11-B		
MICROPROGRAM FLOW	K-MP-KD11-B-1		
MICROPROGRAM SYMBOLIC LISTING	K-MP-KD11-B-2		
MICROPROGRAM BINARY LISTING	K-MP-KD11-B-3		
MICROPROGRAM CROSS REF. LISTING	K-MP-KD11-B-4		
DATA PATHS	E-CS-M726Ø-Ø-1		
DATA PATH ROM PATTERNS	K-RL-M726Ø-Ø-8		
CONTROL LOGIC & MICROPROGRAMS	E-CS-M7261-Ø-1		
CONTROL LOGIC ROM PATTERNS	K-RL-M7261-Ø-8		

THIS IS PRINT SET [X]

UNIT VARIATIONS		PRINT SET TYPE
VARIATION	TITLE	KD11-B
KD11-B	16 BIT PROCESSOR	

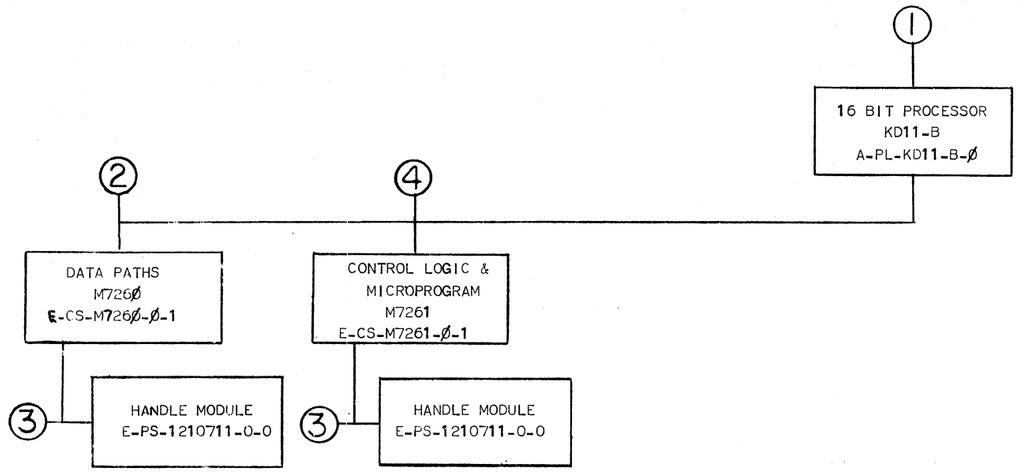
REVISIONS			
REV	CHG. NO.	DATE	
A	KD11B-00002		
B	KD11B-00003	MT	
C	KD11B-4	M.T.	
D	KD11B-5	D.R.	
E	KD11B-6	D.R.	

USED ON OPTION/MODEL

DRN. J.CAHILL	DATE 4/21/72	TITLE: 16 BIT PROCESSOR KD11-B
CHK'D. C.Teschner	DATE 5-15-72	
PROJ ENG. A. Taiba	DATE 5-16-72	
PROD.	DATE 5/16/72	SIZE B · CODE DD · NUMBER KD11-B · REV E
FIELD SERV. D. Deckert	DATE	
SHEET 1 OF 3		DIST

DRB 106

DEC 16—(325)—1062—1—N871



TITLE		SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	SHEET 2 OF 3	B	DD	KD11-B	E

DRB 107
DEC 16-(325)-1062-3-N871

ELECTRICAL

CUSTOMER PRINT SET KD11-B	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
C			K-MP-KD11-B-1	C	22	MICOPROGRAM FLOW	
C			K-MP-KD11-B-2	E	6	MICROPROGRAM SYMBOLIC LISTING	
C			K-MP-KD11-B-3	E	7	MICROPROGRAM BINARY LISTING	
C			K-MP-KD11-B-4		3	MICROGROGRAM CROSS REF. LISTING	
X		2.	E-CS-M726Ø-Ø-1	#	10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M726Ø-Ø-8	#	15	DATA PATH ROM PATTERNS	
X		4.	E-CS-M7261-Ø-1	#	13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M7261-Ø-8	#	57	CONTROL LOGIC ROM PATTERNS	

MECHANICAL

CUSTOMER PRINT SET KD11-B	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
		2.	E-CS-M726Ø-Ø-1		10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE HISTORY	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
		3.	E-PS-1210711-0-0		1	HANDLE MODULE	
		4.	E-CS-M7261-Ø-1		13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	

TITLE		SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	SHEET 3 OF 3	B	DD	KD11-B	E

DRB 108

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B C	
2	A A A	
3	A A A	
4	A A A	
5	A A A	
6	A A B	
7	A B B	
8	A A A	
9	A A B	
10	A A B	
11	A A A	
12	A A B	
13	A A B	
14	A A A	
15	A A A	
16	A A A	
17	A A A	
18	A A A	
19	A A A	
20	A A A	
21	A A A	
22	A A A	

DATE	ENG.	ETCH REV.	ECO NO.
8-28-72	BA		KD112-2
9-21-72	MT		KD112-3
6-14-74	D.R.		KD112-6

FIRST USED ON OPTION/MODEL

KD11-B

DRN. G. TOWNE	DATE 8-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. J McCallum	DATE 8-21-72	
ENG. Bob Armstrong	DATE 8-29-72	TITLE MICROPROGRAM FLOW
PROJ. ENG. Bob Armstrong	DATE 8-29-72	
PROD.	DATE	

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 22

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-1	C

DIST.

NOTES ON NOTATION:

1. MICROROUTINES BEGIN WITH A COMMENT THE FIRST CHARACTER OF WHICH IS '*'.

2. ALL OTHER COMMENTS BEGIN WITH '//'.

3. R[N] REFERRS SCRATCH PAD REGISTER N, R[7] IS ALSO REFERRED TO AS 'PC'.

4. R[S] REFERRS TO THAT REGISTER SPECIFIED IN THE SOURCE PORTION OF THE CURRENT INST, (IR<11|9>). LIKEWISE, R[D] REFERRS TO THAT REG SPECIFIED IN THE DESTINATION PORTION OF THE CURRENT INST, (IR<2|0>).

5. K[N] REFERRS TO THAT LOCATION OF THE CONSTANTS CHIP CONTAINING THE CONSTANT N.

6. 'BUT' STANDS FOR 'BRANCH ON MICRO TEST'.

```
LOC  NXT  * INSTRUCTION FETCH
062  053  F=1   BA=PC; DATI
053  365  F=2   B=PC+2
365  364  F=3   PC=B; CKOFF
364  061  F=4   B,IR=UNIBUS DATA
061  001  F=5   B=B SEX; BUT IR DECODE
          / IF DOUBLE OP INST GOTO S0=1 THRU S7=1 DEPENDING ON SOURCE MODE
          / IF SINGLE OP INST GOTO D0=1 THRU D7=1 DEPENDING ON DEST MODE (INCLUDING JSR)
          / IF BRANCH, CHANGE PC GOTO B=1
          / IF BRANCH, PC UNCHANGED GOTO B2=2
          / IF CLEAR OR SET COND CODE(S) GOTO CCM=1
          / IF INST=RTS GOTO R1=1
          / IF INST=RTI GOTO R2=1
          / IF INST=WAIT GOTO W=1
          / IF INST=HALT GOTO H=1
          / IF INST=RESET GOTO RST=1
          / IF INST=EMT GOTO ET=1
          / IF INST=BREAKPOINT TRAP GOTO BT=1
          / IF INST=IOT GOTO IT=1
          / IF INST=TRAP GOTO T=1
          / IF RESERVED INST (NONE OF THE ABOVE) GOTO RT=1
```

```
LOC  NXT  * SOURCE MODE 0 (REGISTER), GET SOURCE DATA
          / GET TO S0=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=0
201  007  S0=1  B←R[S]; BUT BYTE
          / IF BYTE INST GOTO SBE=1 (MUST BE EVEN BYTE)
007  001  S0=2  R[10]←B; BUT DESTINATION
          / IF IR<5:3>  =0 GOTO D0=1
          /             =1      D1=1
          /             =2      D2=1
          /             =3      D3=1
          /             =4      D4=1
          /             =5      D5=1
          /             =6      D6=1
          /             =7      D7=1
```

```
LOC  NXT  * SOURCE MODE 1 (REG, DEFERRED) GET SOURCE DATA
          / GET TO S1=1 FROM F=5 VIA BUT IR DECODE IR<11:9>
203  244  S1=1  BA←R[S]; DATI; CKOFF; ALBYT
          / GET TO S1=2 FROM S2=3 VIA GOTO
          /          "       S3=5    "
          /          "       S6=5    "
244  007  S1=2  B←UNIBUS DATA; BUT BYTE; GOTO S0=2
          / IF ODD BYTE GOTO SBO=1
          / IF EVEN BYTE GOTO SBE=1
          / IF NOT BYTE FALL THROUGH TO S0=2
```

```
LOC  NXT  * SOURCE MODE 2 (AUTO=INC,) GET SOURCE DATA
          / GET TO S2=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=2
205  301  S2=1  BA←R[S]; DATI; ALBYT
301  014  S2=2  B←R[S]+1←BYTE,BAR
          / GET TO S2=3 FROM S4=1 VIA GOTO
014  244  S2=3  R[S]←B; CKOFF; GOTO S1=2
```

```
LOC  NXT  *SOURCE MODE 3 (AUTO-INC DEFERRED) GET SOURCE DATA
          / GET TO S3=1 FROM F 5 VIA BUT IR DECODE IR<11:9>=3
207  016  S3=1  BA←R[S]; DATI (MUST BE AN EVEN ADDRESS HERE)
016  017  S3=2  B←R[S]+2
```

```
                / GET TO S3=3 FROM S5=1 VIA GOTO
017   134   S3=3  R[S]=B; CKOFF
                / GET TO S3=4 FROM S7=5 VIA GOTO
134   274   S3=4  B=UNIBUS DATA
274   244   S3=5  BA=B; DATI; CKOFF; GOTO S1=2; ALBYT



LOC   NXT   * SOURCE MODE 4 (AUTO=DEC) GET SOURCE DATA
                / GET TO S4=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=4
211   014   S4=1  B,BA=R[S]=1=BYTE,BAR; DATI; ENABOVER; GOTO S2=3; ALBYT



LOC   NXT   * SOURCE MODE 5 (AUTO=DEC DEFERRED) GET SOURCE DATA
                / GET TO S5=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=5
213   017   S5=1  B,BA=R[S]=2; DATI(MUST BE AN EVEN ADDRESS HERE); ENABOVER; GOTO S3=3
```

```
LOC   NXT   * SOURCE MODE 6 (INDEXED) GET SOURCE DATA
                / GET TO S6=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=6
215   025   S6=1  BA=PC; DATI(MUST BE EVEN ADDRESS HERE)
025   026   S6=2  B=PC+2
026   027   S6=3  PC=B; CKOFF
027   030   S6=4  B=UNIBUS DATA
030   244   S6=5  BA=B+R[S]; DATI; CKOFF; GOTO S1=2; ALBYT



LOC   NXT   * SOURCE MODE 7 (INDEXED DEFERRED) GET SOURCE DATA
                / GET TO S7=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=7
217   032   S7=1  BA=PC; DATI(MUST BE AN  EVEN ADDRESS HERE)
032   033   S7=2  B=PC+2
033   034   S7=3  PC=B; CKOFF
034   035   S7=4  B=UNIBUS DATA
035   134   S7=5  BA=B+R[S]; DATI(MUST BE AN EVEN ADDRES) ; CKOFF; GOTO S3=4
```

```
LOC  NXT  * SOURCE BYTE ODD
          / GETE TO SB0=1 FROM S1=2 VIA BUT BYTE (BYTE INST, AND SOURCE DATA ODD ADDR)
067  346  SB0=1 SHIFT B RIGHT; F SHIFT
346  324  SB0=2 SHIFT B RIGHT; F SHIFT
324  340  SB0=3 SHIFT B RIGHT; F SHIFT
340  361  SB0=4 SHIFT B RIGHT; F SHIFT
361  050  SB0=5 SHIFT B RIGHT; F SHIFT
050  020  SB0=6 SHFIT B RIGHT; F SHIFT
020  052  SB0=7 SHIFT B RIGHT; F SHIFT
052  047  SB0=8 SHIFT B RIGHT; GOTO SBE=1
```

```
LOC  NXT  * SOURCE EVEN BYTE
          / GET TO SBE=1 FROM SB0=8 VIA GOTO
          / GET TO SBE=1 FROM S1=2 VIA BUT BYTE, (BYTE INST AND SOURCE DATA EVEN ADDR)
          / GET TO SBE=1 FROM S0=1 VIA BUT BYTE, (BYTE INST,)
047  001  SBE=1 R[10]=B SEX; BUT DESTINATION
          / IF IF<5:3>  =0 GOTO D0=1
          /    "              =1  "   D1=1
          /    "              =2  "   D2=1
          /    "              =3  "   D3=1
          /    "              =4  "   D4=1
          /    "              =5  "   D5=1
          /    "              =6  "   D6=1
          /    "              =7  "   D7=1
```

```
LOC  NXT  * DEST, MODE 0 (REGISTER), GET DEST DATA, OP, AND REPLACE
          / GET TO D0=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=0)
          / GET TO D0=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=0)
101  154  D0=1  B=R[0]; BUT MOVE
          / IF INST=MOVE,BAR (OTHER THAN MOVE) AND BYTE GOTO DB0=1
          / IF INST=MOVE AND BYTE GOTO MB=0
          / IF INST=MOVE AND BYTE,BAR GOTO D0=3A
          / IF INST=MOVE,BAR AND BYTE,BAR FALL THROUGH TO D0=2
157  142  D0=2  R[11]=B; BUT UNARY
          / IF INST=JMP OR JSR GOTO ERT=1 (ILLEGAL INST, TRAP)
          / IF INST=SWAB GOTO SB1=1
          / IF INST=OTHER UNARY(CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U1=1
          / GET TO D0=3 FROM U1=1 VIA GOTO
          / GET TO D0=3 FROM D0=1 VIA BUT BYTE (INST=MOVE AND BYTE',BAR)
```

```
162  332  D0=3  B_R[10] OP B; BUT NONMOD
          / THERE EXISTS A D03=A WHICH IS IDENTICAL TO D0=3 EXCEPT LOC=155
          / GET TO D0=3A FROM SB1=8 VIA GOTO
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D0=4
          / GET TO D0=4 FROM R1=6 VIA GOTO
337  040  D0=4  R[D]_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERR1A
          / IF POWERFAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UATR RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

digital EQUIPMENT CORPORATION

```
LOC  NXT  * DEST, MODE 1 (REG,DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D1=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=1)
          / GET TO D1=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=1)
103  200  D1=1  B,BA_R[D]; DATIP; BUT JSRMP; ALBT; CKOFF
          / NOTE DATA IN PAUSE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
          / GET DO D1=2 FROM D2=3 VIA GOTO
          / GET TO D1=2 FROM D3=5 VIA GOTO
          / GET TO D1=2 FROM D6=5 VIA GOTO
200  210  D1=2  B_UNIBUS DATA; BUT BYTE
          / IF ODD BYTE GOTO DO=1
          / IF EVEN BYTE GO TO DE=1
          / IF NOT BYTE FALL THROUGH TO D1=3
210  143  D1=3  R[11]_B; BUT UNARY
          / IF INST=SWAB GOTO SB2=1
          / IF INST=OTHER UNARY (CLR, COM,INC,DEC,NEG,ADC, SBC,TST,ROR,ROL,ASR,ASL) GOTO U2=1
          / GET TO D1=4 FROM DE=1 VIA BUT UNARY (NON UNARY)
          / GET TO D1=4 FROM U2=1 VIA GOTO
          / GET TO D1=4 FROM SB2=8 VIA GOTO
163  334  D1=4  B_R[10] OP B; BUT NONMOD
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D1=5
334  065  D1=5  DATO; ALBYT; CKOFF
          / GET TO D1=6 FROM DO=18 VIA GOTO
```

```
                / IF NONMOD GOTO B2-2 (BUT SERVICE)
                / IF NOT NONMOD FALL THROUGH TO D1-5
334   065       D1-5  DATO; ALBYT; CKOFF
                / GET TO D1-6 FROM DD-18 VIA GOTO
065   305       D1-6  DRIVERS+8; GOTO B2-2 (BUT SERVICE)
```

```
LOC   NXT       * DEST MODE 2 (AUTO-INC) GET DEST DATA, OP AND REPLACE
                / GET TO D2-1 FROM S0-2 VIA BUT DESTINATION (IR<5:3>=2)
                / GET TO D2-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=2)
105   331       D2-1  BA+R[D]; DATIP; ALBYT
                / NOTE DATA IN PAUSE HERE
331   341       D2-2  B+R[D]+1+BYTE.BAR
                / GET TO D2-3 FROM D4-1 VIA GOTO
341   200       D2-3  R[D]+B; BUT JSRMP; GOTO D1-2; CKOFF
                / IF INST=JMP GOTO J1-1
                / IF INST=JSR GOTO J2-1
                / IF INST NOT JMP OR JSR FALL THROUGH TO D1-2
```

```
LOC   NXT       * DEST MODE 3 (AUTO-INC DEFERRED) GET DEST DATA, OP AND REPLACE
                / GET TO D3-1 FROM S0-2 VIA BUT DESDTINATION (IR<5:3>=3)
                / GET TO D3-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=3)
107   160       D3-1  BA+R[D]; DATI
160   070       D3-2  B+R[D]+2
                / GET TO D3-3 FROM D5-1 VIA GOTO
070   071       D3-3  R[D]+B; CKOFF
                / GET TO D3-4 FROM D7-5 VIA GOTO
071   072       D3-4  B+UNIBUS DATA
072   200       D3-5  BA+B; DATIP; BUT JSRMP; GOTO D1-2; ALBYT; CKOFF
                / NOTE DATA IN PAUSE HERE
                / IF INST=JMP GOTO J1-1
                / IF INST=JSR GOTO J2-1
                / IF INST NOT JMP OR JSR FALL THROUGH TO D1-2
```

```
LOC   NXT       * DEST MODE 4(AUTO-DEC) GET DEST DATA, OP AND REPLACE
                / GET TO S4-1 FROM S0-2 VIA BUT DESTINATRON (IR<5:3>=4)
                / GET TO S4-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=4)
111   341       D4-1  B,BA+R[D]-1-BYTE.BAR; DATIP; ENABOVER; GOTO D2-3; ALBYT
```

```
LOC  NXT  * DEST MODE 5 (AUTO-DEC DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D5=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=5)
          / GET TO D5=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=5)
113  070  D5=1  B,BA=RED]=2; DATI; ENABOVER; GOTO D3=3
```

```
LOC  NXT  * DEST MODE 6 (INDEXED) GET DTA,OP, AND REPLACE
          / GET TO D6=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=6)
          / GET TO D6=1 FROM SBE=1 VIA BUT DESTINAITON (IR<5:2>=6)
115  075  D6=1  BA=PC; DATI
075  077  D6=2  B=PC+2
077  057  D6=3  PC=B; CKOFF
057  300  D6=4  B=UNIBUS DATA
300  200  D6=5  B,BA=B+RED]; DATIP; BUT JSRMP; GOTO D1=2; ALBYT; CKOFF
          / NOTE DATA IN PUASE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
```

```
LOC  NXT  * DEST MODE 7 (INDEXED DEFERRED) GET DEST DATA,OP, AND REPLACE
          / GET TO D7=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=7)
          / GET TO D7=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=7)
117  310  D7=1  BA=PC; DATI
310  104  D7=2  B=PC+2
104  320  D7=3  PC=B; CKOFF
320  106  D7=4  B=UNIBUS DATA
106  071  D7=5  BA=B+RED]; DATI; CKOFF; GOTO D3=4
```

```
LOC  NXT  * DESTINATION MODE 0, BYTE
          / GET TO DB0=1 FROM D0=1 VIA BUT BYTE (BYTE INST AND MOVE,BAR)
156  144  DB0=1 R[11],B=8 SEX; BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SRC,TST,ROR,ROL,ASR,ASL) GOTO U3=1
```

```
304  040  DB0=3 R[D]<7:0>_B; BUT SERVICE; GOTO F=1
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

LOC NXT * DESTINATION ODD BYTE
/ GET TO DO=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND ODD ADDR)

```
270  123  DO=1  SHIFT B RIGHT; F SHIFT
123  124  DO=2  SHIFT B RIGHT; F SHIFT
124  125  DO=3  SHIFT B RIGHT; F SHIFT
125  126  DO=4  SHIFT B RIGHT; F SHIFT
126  127  DO=5  SHIFT B RIGHT; F SHIFT
127  130  DO=6  SHIFT B RIGHT; F SHIFT
130  131  DO=7  SHIFT B RIGHT; F SHIFT
131  132  DO=8  SHIFT B RIGHT
132  145  DO=9  R[111,B_B SEX; BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U4=1
          / IF NOT UNARY FALL THROUGH TO DO=10
165  342  DO=10 B_R[10] OP B; BUT NONMOD
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO DO=11
342  135  DO=11 SHIFT B LEFT; F SHIFT
135  136  DO=12 SHIFT B LEFT; F SHIFT
136  137  DO=13 SHIFT B LEFT; F SHIFT
137  140  DO=14 SHIFT B LEFT; F SHIFT
140  141  DO=15 SHIFT B LEFT; F SHIFT
141  142  DO=16 SHIFT B LEFT; F SHIFT
142  143  DO=17 SHIFT B LEFT; F SHIFT
143  065  DO=18 SHIFT B LEFT; DATO; CKOFF; GOTO D1=6; ALBYT
```

LOC NXT * DESTINATION EVEN BYTE
/ GET TO DE=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND EVEN ADDR)

```
250  163  DE=1  R[111_B SEX; GOTO D1=4; BUT UNARY
          / IF UNARY OTHER THAN JSR,JMP, OR SWAB (CLR,COM,INC,DEC,ADC,SBC,TST,ROR,ASR,ASL) GOTO U5=1
          / IF NOT UNARY FALL THROUGH TO D1=4


LOC  NXT  * UNARY OPERATORS GET SINGLE OPERAND IN B AND R[10]
          / GET TO U1=1 FROM D0=2 VIA BUT UNARY (INST=CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL)
352  162  U1=1  R[101_B; PRE AUX; GOTO D0=3
          / GET TO U2=1 FROM D1=3 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
353  163  U2=1  R[101_B; PRE AUX; GOTO D1=4
          / GET TO U3=1 FROM DB0=1 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
354  164  U3=1  R[101_B; PRE AUX; GOTO DB0=2
          / GET TO U4=1 FROM D0=9 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
355  165  U4=1  R[101_B; PRE AUX; GOTO D0=10
          / GET TO U5=1 FROM DE=1 VIA BUT UNARY (INST=CLR,COM,...ASL) SEE U1=1
373  163  U5=1  R[101_B; PRE AUX; GOTO D1=4


LOC  NXT  * MOVB INST
          / GET TO MB=0 FROM D0=1 VIA BUT MOVE (INST=MOVE AND BYTE)
154  240  MB=0  PRE AUX
240  152  MB=1  B_R[10] OP B
152  040  MB=2  R[D]_B SEX; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BG4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * BRANCH, CHANGE PC
015  147  B=1   SHIFT B LEFT
```

```
        / IF BR7 GOTO BG=1
        / IF BR6 GOTO BG=1
        / IF INTERNAL LINE CLOCK GOTO LC=1
        / IF BR5 GOTO BG=1
        / IF BG4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * BRANCH, CHANGE PC
015  147  B=1   SHIFT B LEFT
147  146  B=2   B=PC+B
146  040  B=3   PC=BI BUT SERVICE
        / PRIORITIES ARE LISTED HIGHEST TO LOWEST
        / IF T BIT TRAP GOTO BT=1
        / IF STACK OVERFLOW GOTO ERT1A
        / IF POWER FAIL GOTO  PF=1
        / IF BR7 GOTO BG=1
        / IF BR6  GOTO BG=1
        / IF INTERNAL LINE CLOCK GOT LC=1
        / IF BR5 GOTO BG=1
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * CONDITION CODE MASK (FOR BOTH SET AND CLEAR)
151  350  CCM=1 B=B AND K[17]
350  112  CCM=2 BUT DEST
        / IF INST= SET, GO TO SC=1
        / IF INST= CLEAR, GOTO CC=1


LOC  NXT  * CLEAR CONDITION CODES
112  040  CC=1  PSW=PSW AND (B',BAR), BUT SERVICE
        / THIS EFFECTIVELY CLEARS THOSE BITS OF THE PSW WHICH ARE SET
```

```
LOC  NXT  * SET CONDITION CODES
116  040  SC=1  PSW_PSW OR 8; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * SWAB, MODE 0
          / GET TO SB1=1 FROM D0=2 VIA BUT UNARY (INST=SWAB AND MODE=0)
          / ROTATE LEFT ACCOMPLISHED VIA ASR
146  172  SB1=1 ROTATE B LEFT; F SHIFT
172  173  SB1=2 ROTATE B LEFT; F SHIFT
173  174  SB1=3 ROTATE B LEFT; F SHIFT
174  144  SB1=4 ROTATE B LEFT; F SHIFT
144  176  SB1=5 ROTATE B LEFT; F SHIFT
176  177  SB1=6 ROTATE B LEFT; F SHIFT
177  006  SB1=7 ROTATE B LEFT; F SHIFT
006  155  SB1=8 ROTATE B LEFT; PRE AUX; GOTO D0-3A
```

```
LOC  NXT  * SWAB, NOT MODE 0
          / GET TO SB2=1 FROM D1=3 VIA BUT UNARY (INST=SWAB)
          / ROTATE LEFT ACCOMPLISHED VIA ASR
167  012  SB2=1 ROTATE B LEFT; F SHIFT
012  220  SB2=2 ROTATE B LEFT; F SHIFT
220  022  SB2=3 ROTATE B LEFT; F SHIFT
022  023  SB2=4 ROTATE B LEFT; F SHIFT
023  024  SB2=5 ROTATE B LEFT; F SHIFT
024  031  SB2=6 ROTATE B LEFT; F SHIFT
031  330  SB2=7 ROTATE B LEFT; F SHIFT
330  163  SB2=8 ROTATE B LEFT; PRE AUX; GOTO D1=4
```

```
LOC  NXT  * JMP
          / GET TO J1-1 FROM D1-1 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D2-3 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D3-5 VIA BUT JSRMP (INST=JMP)
          / GET TO J1-1 FROM D6-5 VIA BUT JSRMP (INST=JMP)
204  260  J1-1  NOP
          / J1-1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL
          / BE FORCED TO TAKE DATA FROM THE UNIBUS.
260  040  J1-2  PC_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT-1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF-1
          / IF BR7 GOTO BG-1
          / IF BR6 GOTO BG-1
          / IF INTERNAL LINE CLOCK GOTO LC-1
          / IF BR5 GOTO BG-1
          / IF BR4 GOTO BG-1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H-1
          / IF NONE OF THE ABOVE GOTO F-1
```

```
LOC  NXT  * JSR
          / GET TO J2-1 FROM D1-1 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D2-3 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D3-5 VIA BUT JSRMP (INST=JSR)
          / GET TO J2-1 FROM D6-5 VIA BUT JSRMP (INST=JSR)
212  261  J2-1  NOP
          / J2-1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL BE
          / FORCED TO TAKE DATA FROM THE UNIBUS.
261  262  J2-1A R[11]_B
262  214  J2-2  B,BA_R161-2; ENABOVER
214  206  J2-3  R[6]_B; CKOFF; DATO
206  216  J2-4  DRIVERS_R[S]
216  263  J2-5  B_PC
263  264  J2-6  R[S]_B
264  265  J2-7  B_R[11]
265  040  J2-8  PC_B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT-1
```

```
LOC  NXT  * JSR
          / GET TO J2=1 FROM D1=1 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D2=3 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D3=5 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D6=4 VIA BUT JSRMP (INST=JSR)
212  261  J2=1  NOP
          / J2=1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL BE
          / FORCED TO TAKE DATA FROM THE UNIBUS,
261  262  J2=1A R[11]←B
262  214  J2=2  B,BA←R[6]+2; ENABOVER
214  206  J2=3  R[6]←B; CKOFF; DATO
206  216  J2=4  DRIVERS←R[S]
216  263  J2=5  B←PC
263  264  J2=6  R[S]←B
264  265  J2=7  B←R[11]
265  040  J2=8  PC←B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOT ERT1A
          / IF POWER FALIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * RTS
          / GET TO R1=1 FROM F=5 VIA BUT IR DECODE (INST=RTS)
005  221  R1=1  BA←R[6]; DATI
221  222  R1=2  B←R[6]+2
222  223  R1=3  R[6]←B
223  224  R1=4  B←R[0]
224  225  R1=5  PC←B; CKOFF
225  332  R1=6  B←UNIBUS DATA; GOTO D0=4
```

```
LOC  NXT  * RTI
          / GET TO R2=2 FROM F=5 VIA BUT IR DECODE (INST=RTI)
227  230  R2=1  BA←R[6]; DATI
230  231  R2=2  B←R[6]+2
```

```
231  232  R2=3  R[6]=B; CKOFF
232  234  R2=4  PC=UNIBUS DATA
             / THERE IS NO R2=5 (ANY MORE)
234  235  R2=6  BA=R[6]; DATI
235  236  R2=7  B=R[6]+2
236  237  R2=8  R[6]=B; CKOFF
237  305  R2=9  PS=UNIBUS DATA; GOTO B2=2 (BUT SERVICE)
```

```
LOC  NXT  * WAIT
          / GET TO W=1 FROM F=5 VIA BUT IR DECODE (INST=WAIT)
          / GET TO W=1 FROM W=1 VIA GOTO IF BUT SERVICE IS FALSE
063  040  W=1   BUT SERVICE
          / THE MICRO PROGRAM WILL LOOP ON W=1 UNTIL SOME HIGHER
          / PRIORITY CONDITION IS RECOGNIZED BY THE 'BUT SERVICE' ROM SEE F101 ON
          / THE CONE PRINT,
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOT PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE URTR
          / IF UART TRANSMIT TOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE TOTO F=1
```

```
LOC  NXT  * HALT
          / GET TO H=1 FROM F=5 VIA BUT IR DECODE (INST=HALT)
          / GET TO H=1 FROM BUT SERVICE
041  302  H=1   B=PC
          / DISPLAY PC IN LIGHTS BY PUTTING IT INTO B
          / GET TO H=2 FROM CE1=3 VIA GOTO
          / GET TO H=2 FROM CD1=5 VIA GOTO
          / GET TO H=2 FROM CL=3 VIA GOTO
302  300  H=2   BA=R[17]; BUT SWITCH
          / THE BA IS LOADED HERE SO THAT THE ADDRESS WILL BE INCREMENTED BY +1 WHEN EXAMINING (DEPOSITING INT
          / AND BY +2 WHEN EXAMINING (DEPOSITING INTO) SUCCESSIVE CORE MEMORY,
          / IF START DEPRESSED GOTO CS=1
          / IF CONTINUE DEPRESSED GOTO CCS=1
```

```
            / IF EXAMINE (1 ST) GOTO CE1=1

            / IF EXAMINE (NOT 1 ST) GOTO CE2=1
            / IF DEPOSIT (1 ST) GOTO CD1=1
            / IF DEPOSIT (NOT 1 ST) GOT CD2=1
            / IF LOAD GOTO CL=1
            / IF NO SWITCHES ARE DEPRESSED LOOP ON H=2



LOC  NXT    * EMT TRAP (VECTOR LOC=30)
            / GET TO ET=1 FROM F=5 VIA BUT IR DECODE (INST=EMT)
P11  245    ET=1  B=K[30]
            / GET TO ET=2 FROM BT=1 VIA GOTO
            / GET TO ET=2 FROM IT=1 VIA GOTO
            / GET TO ET=2 FROM T=1 VIA GOTO
            / GET TO ET=1 FROM RT=1 VIA GOTO
            / GET TO ET=2 FROM ERT=1 VIA GOTO
            / GET TO ET=2 FROM PF=1 VIA GOTO
245  246    ET=2  R[12]=B
246  247    ET=3  B,BA=R[6]=2) ENABOVER
            / ET=4 HAS BEEN ELIMINATED
247  226    ET=5  R[6]=B) CKOFF) DATO
226  251    ET=6  DIRVERS=PS
251  252    ET=7  B,BA=R[6]=2) ENABOVER
252  253    ET=8  R[6]=B) CKOFF) DATO
253  254    ET=9  DIRVERS=PC
254  255    ET=10 BA=R[12]) DATI) CKOFF
255  256    ET=11 PC=UNIBUS DATA
256  257    ET=12 BA=R[12]+2) DATI) CKOFF
257  305    ET=13 PS=UNIBUS DATA)  GOTO B2=2 (SERVICE)



LOC  NXT    * BREAKPOINT TRAP (VECTOR LOC=14) AND T BIT TRACE TRAP
            / GET TO BT=1 FROM ALL BUT SERVICE
            / GET TO BT=1 FROM F=5 VIA BUT IR DECODE (INST=BREAKPOINT)
045  245    BT=1  B=K[14]) GOTO ET=2



LOC  NXT    * IOT (VECTOR LOC=20)
            / GET TO IT=1 FROM F=5 VIA BUT IR DECODE (INST=IOT
273  245    IT=1  B=K[20]) GOTO ET=2
```

```
LOC  NXT  * TRAP (VECTOR LOC=34)
          / GET TO T=1 FROM F=5 VIA BUT IR DECODE (INST=TRAP)
021  245  T=1   B=K[34]; GOTO ET=2


LOC  NXT  * RESERVED INST TRAP (VECTOR LOC=10)
          / GET TO RT=1 FROM F=5 VIA BUT IR DECODE (INST=NON VALID)
001  245  RT=1  B=K[10]; GOTO ET=2


LOC  NXT  * ERROR TRAP (BUS ERROR, STACK OVERFLOW, ILLEGAL INST) VECTOR LOC=4
          / THERE EXISTS ERT=1 (LOC=10) FOR BUS ERROR
          / THERE ALSO EXISTS ERT1A (LOC=46) FOR STACK OVERFLOW
          / ERT1A GOES TO ET2=2, A SEQUENCE WHICH DOESN'T HAVE THE
          / ENABOVER,  WE DON'T WANT TO LOOK FOR STACK OVERFLOW WHILE
          / DOING THE STACK OVERFLOW TRAP;  THE ET2=2 SEQUENCE REJOINS THE ET SEQUENCE AT ET=8
          / THERE ALSO EXISTS ERT1B (LOC=153) FOR ILLEGAL INST (JSR OR JMP, MODE 0)
010  245  ERT=1 B=K[4]; GOTO ET=2


LOC  NXT  * CONSOLE START SWITCH
          / GET TO CS=1 FOLLOWING RELEASE OF START SWITCH,
100  322  CS=1  IR=ZERO
          / CLOCKING THE IR TURNS ON THE RUN LIGHT
322  321  CS=2  BA,B=R[17]
321  040  CS=3  PC=B; BUT SERVICE
          / PRIOIRTIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT BRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
```

```
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * CONSOLE EXAMINE SWITCH= FIRST TIME IN SEQUENCE (DON'T INC R[17])
          / GET TO CE1=1 FROM H=2 VIA BUT SWITCH
          / GET TO CE1=1 FROM CE2=2 VIA GOTO
317  307  CE1=1 BA,B=R[17]; BUT SWITCH
          / DISPLAY ADDRESS BY PUTTING INTO THE B REGISTER WHILE EXAMINE IS DOWN
          / LOOP ON CE1=1 UNTIL SWITCH IS RELEASED
307  326  CE1=2 DATI; CKOFF
326  302  CE1=3 B=UNIBUS DATA; GOTO H=2
```

```
LOC  NXT  * CONSOLE EXAMINE SWITCH = OTHER THAN FIRST IN SEQUENCE (INC R[17])
          / GET TO CE2=1 FROM H=2 VIA BUT SWITCH
315  371  CE2=1 B=R[17]+2
          / R[17] IS IN BA FROM H=2, THIS WILL CAUSE +2 TO BECOME +1 WHEN EXAMINING REGISTERS,
371  317  CE2=2 R[17]=B; GOTO CE1=1
```

```
LOC  NXT  * CONSOLE DEPOSIT SWITCH = FIRST TIME IN SEQUENCE (DON'T INC R[17])
          / GET TO CD1=1 FROM H=2 VIA BUT SWITCH
          / GET TO CD1=1 FROM CD2=2 VIA GOTO
313  303  CD1=1 B=R[17]; BUT SWITCH
          / LOOP ON CD1=1 UNTIL DEPOSIT SWITCH IS RELEASED
303  374  CD1=2 BA=K[207],BAR; DATI; CKOFF
          / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRESS
374  314  CD1=3 B=UNIBUS DATA
314  372  CD1=4 BA=R[17]; DATO; CKOFF
372  302  CD1=5 DRIVERS=B; GOTO H=2
```

```
LOC  NXT  * CONSOLE DEPOSIT SWITCH = OTHER THAN FIRST IN SEQENCE (INC R[17])
          / GET TO CO2=1 FROM H=3) VIA BUT SWITCH
312  337  CO2=1 B←R[17]+2
          / R[17] IS IN BA, THIS WILL CAUSE +2 TO BECOME +1 WHEN DEPOSITING INTO REGISTERS
337  313  CO2=2 R[17]←B; GOTO CO1=1
```

```
LOC  NXT  * CONSOLE CONTINUE SWITCH
          / GET TO CCS=1 FROM H=2 VIA BUT SWITCH
316  276  CCS=1 B←PC
276  270  CCS=2 BUT SWITCH
272  062  CCS=3 IR←ZERO; GOTO F=1
          / CLOCKING THE IR TURNS ON THE RUN LIGHT
```

```
LOC  NXT  * CONSOLE LOAD SWITCH
          / GET TO CL=1 FROM H=2 VIA BUT SWITCH
311  375  CL=1  BA←K[207],BAR; DATI; CKOFF
          / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRSS
375  367  CL=2  B←UNIBUS DATA
367  302  CL=3  R[17]←B; GOTO H=2
          / CL=3 GOES TO H=2 VIA GOTO, IF LOAD IS STILL DEPRESSED, THE BUT
          / SWITCH IN H=2 WILL TAKE US BACK TO CL=1,  THUS, AS LONG AS LOAD IS
          / DEPPRESSED, CHANGES IN THE SWITCHES WILL SHOW UP IN THE B REG (LIGHTS) AND IN R[17].
```

```
LOC  NXT  * POWER FAIL (VECTOR LOC=24)
          / GET TO PF=1 FROM SERVICE
043  245  PF=1  B←K[24]; GOTO ET=2
```

```
LOC  NXT  * RESTART FROM POWER FAIL (VECTOR LOC=24)
          / GET TO RS=1 MYSTERIOUSLY AS POWER COMES UP ( NXT CHIPS, F092 AND F103 SHOWN ON THE CONF PRINT,
          / ARE DISABLED FORCING THE MICROPROGRAM TO RS=1 IN LOC 0',
000  241  RS=1  BA←K[24]; DATI
241  347  RS=1A CKOFF
```

```
                / MUST DO CKOFF IN RS=1A BECAUSE OF CONFLICT BETWEEN
                / CKOFF AND INIT CREATED BY CKOFF ASSOCIATED WITH AUX CONTROL
  347   074     RS=2  PC←UNIBUS DATA
  074   351     RS=3  BA←K[24]+2; DATI; CKOFF
  351   305     RS=4  PS←UNIBUS DATA; GOTO B2=2 (SERVICE)



LOC   NXT     * INTERRUPT SERVICING
                / GET TO INT=1 FROM BG=2 VIA BUT INT (TRUE)
  325   246     INT=1 R[12]←UNIBUS DATA; SET SLAVESYNC; GOTO ET=3



LOC   NXT     * BUS GRANT SERVICE
                / GET TO BG=1 FROM BUT SERVICE
  040   305     BG=1  BUT INTERRUPT; GOTO B2=2 (BUT SERVICE)
                / IF INTERRUPT GOTO INT=1
                / IF NO INTERRUPT FALL THROUGH TO B2=2



LOC   NXT     * NOP = BRANCH CONDITION NOT TRUE (PC UNCHANGED)
                / B2=1 HAS BEEN ELIMINATED BECAUSE NEWI IS NO LONGER
                / GET TO B2=2A FROM D0=3 VIA BUT NONMOD (TRUE)
                / GET TO B2=2B FROM D1=4 VIA BUT NONMOD (TRUE)
                / GET TO B2=2C FROM D0=10 VIA BUT NONMOD (TRUE)
                / GET TO B2=2D FROM F=5 VIA BUT IR DECODE, BRANCH INST, CONDITION NOT TRUE
                / GET TO B2=2 FROM RST=1 VIA GOTO
                / GET TO B2=2 FROM D0=4 VIA GOTO
                / GET TO B2=2 FROM DB0=2  VIA BUT NONMOD (TRUE)
                / GET TO B2=2 FROM MB=2 VIA GOTO
                / GET TO B2=2 FROM CC=1 VIA GOTO
                / GET TO B2=2 FROM SC=1 VIA GOTO
                / GET TO B2=2 FROM J2=8 VIA GOTO
                / GET TO B2=2 FROM RS=10 VIA GOTO
                / GET TO B2=2 FROM ET=13 VIA GOTO
  305   040     B2=2  BUT SERVICE
                / PRIORITIES ARE LISTED HIGHEST TO LOWEST
                / IF T BIT TRAP GOTO BT=1
                / IF STACK OVERFLOW GOTO ERT1A
                / IF POWER FAIL GOTO PF=1
                / IF BR7 GOTO BG=1
```

```
/ IF BR6 GOTO BG=1
/ IF INTERNAL LINE CLOCK GOTO LC=1
/ IF BR5 GOTO BG=1
/ IF BR4 GOTO BG=1
/ IF UART RECEIVE GOTO URTR
/ IF UART TRANSMIT GOTO URTX
/ IF CONSOLE STOP GOTO H=1
/ IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * RESET
          / GET TO RST=1 FROM F=5 VIA BUT IR DECODE (INST=RESET)
357  305  RST=1 BUT INIT; CKOFF; GOTO B2=2 (BUT SERVICE)
```

```
LOC  NXT  * DOUBLE BUS ERROR, GOTO HALT
110  041  DBE=1 NOP; GOTO H=1
```

```
LOC  NXT  * UART XMIT (VECTOR LOC 64)
760  245  URTX  B=K[64]; GOTO ET=2
```

```
LOC  NXT  * UART RECEIVE (VECTOR LOC 62)
064  245  URTR  B=K[60]; GOTO ET=2
```

```
LOC  NXT  * LINE CLOCK (VECTOR LOC 100)
042  245  LC=1  B=K[100]; GOTO ET=2
```

ERT1A NOT EXPLICITLY SHOWN IN FLOW
D0-3A NOT EXPLICITLY SHOWN IN FLOW
A145 NOT EXPLICITLY SHOWN IN FLOW
ET2-2 NOT EXPLICITLY SHOWN IN FLOW
ET2-3 NOT EXPLICITLY SHOWN IN FLOW
ET2-5 NOT EXPLICITLY SHOWN IN FLOW
ET2-6 NOT EXPLICITLY SHOWN IN FLOW
ET2-7 NOT EXPLICITLY SHOWN IN FLOW
ERT1B NOT EXPLICITLY SHOWN IN FLOW
B2-2A NOT EXPLICITLY SHOWN IN FLOW
B2-2B NOT EXPLICITLY SHOWN IN FLOW
B2-2C NOT EXPLICITLY SHOWN IN FLOW
B2-2D NOT EXPLICITLY SHOWN IN FLOW

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B C D E	
2	A A A A B	
3	A B B B C	
4	A A B C D	
5	A A A B B	
6	A A A A B	

SH NO.	ECO NO.	ETCH REV.	ENG.	DATE
1	00002		BA	8-21-72
2	KD11B 00003		MT	9-24-72
3	KD11B 00004		MT	10-30-72
4	KD11B-00005		DR	8-15-73
5	KD11B-00006		DR	6-14-74

FIRST USED ON OPTION/MODEL

KD11-B

DRN.	DATE	
CHK'D.	DATE	
ENG. B. ARMSTRONG	DATE 8-29-72	
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE

MICROPROGRAM SYMBOLIC LISTING

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 6

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-2	E

DIST.

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPE	TNS	NXT
A145	145	YES	PSW	AA	ON	L	+1	H	MOV	NON	ON	OFF	OFF	L	ROM	R0	WRI	ZRO	
B-1	015	NO	SP	ASL	OFF	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B-2
B-2	147	NO	SP	A+B	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	B-3
B-3	146	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG-1
B2-2	305	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2A	333	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2B	335	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2C	343	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
B2-2D	013	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG-1
BG-1	040	NO	SP	AL	OFF	H	BRG	H	INT	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B2-2
BT-1	045	NO	NUL	AL	OFF	H	BRG	L	CON	14	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET-2
CC-1	112	NO	PSW	ABBAR	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	BG-1
CCM-1	151	NO	NUL	AANDB	OFF	H	BRG	L	CON	360	OFF	OFF	OFF	H	ROM	R0	WRI	NON	CCM-2
CCM-2	350	NO	SP	AL	OFF	H	BRG	H	DST	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	CC-1
CCS-1	316	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	CCS-2
CCS-2	276	NO	SP	AL	OFF	H	BRG	H	SW	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D0-1
CCS-3	272	NO	SP	ZERO	OFF	H	BRG	H	IRC	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	F-1
CD1-1	313	NO	SP	AL	OFF	H	BRG	L	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CD1-2
CD1-2	303	NO	NUL	ABAR	OFF	L	BRG	H	CON	207	ON	OFF	OFF	H	ROM	R0	WRI	I	CD1-3
CD1-3	374	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	CD1-4
CD1-4	314	NO	SP	AL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R17	REA	0	CD1-5
CD1-5	372	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	H-2
CD2-1	312	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R17	REA	NON	CD2-2
CD2-2	337	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	CD1-1
CE1-1	317	NO	SP	AL	OFF	L	BRG	L	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CE1-2
CE1-2	307	NO	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	I	CE1-3
CE1-3	326	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	H-2
CE2-1	315	NO	SP	A+B	OFF	L	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R17	REA	NON	CE2-2
CE2-2	371	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	CE1-1
CL-1	311	NO	NUL	ABAR	OFF	L	BRG	H	CON	207	ON	OFF	OFF	H	ROM	R0	WRI	I	CL-2
CL-2	375	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	CL-3
CL-3	367	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R17	WRI	NON	H-2
CS-1	100	NO	SP	ZERO	OFF	H	BRG	H	IRC	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	CS-2
CS-2	322	NO	SP	AL	OFF	L	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	CS-3
CS-3	321	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG-1
D0-1	101	NO	SP	AL	OFF	H	BRG	L	MOV	NON	OFF	OFF	OFF	H	IRD	R0	REA	NON	MB-0
D0-2	157	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D0-17
D0-3	162	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D0-4
D0-3A	155	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D0-4
D0-4	332	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	IRD	R0	WRI	NON	BG-1
D1-1	103	YES	SP	AL	OFF	L	BRG	L	JOT	NON	ON	OFF	OFF	H	IRD	R0	REA	IP	D1-2
D1-2	200	NO	NUL	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D1-3
D1-3	210	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D0-18
D1-4	163	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	D1-5

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
D1=5	334	YES	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	0	D1=6
D1=6	065	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	B2=2
D2=1	105	YES	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	IP	D2=2
D2=2	331	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRD	R0	REA	NON	D2=3
D2=3	341	NO	SP	BL	OFF	H	BRG	H	JOJ	NON	ON	OFF	OFF	H	IRD	R0	WRI	NON	D1=2
D3=1	107	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	I	D3=2
D3=2	160	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRD	R0	REA	NON	D3=3
D3=3	070	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	IRD	R0	WRI	NON	D3=4
D3=4	071	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D3=5
D3=5	072	YES	SP	BL	OFF	L	BRG	H	JOJ	NON	ON	OFF	OFF	H	ROM	R0	REA	IP	D1=2
D4=1	111	YES	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRD	R0	REA	IP	D2=3
D5=1	113	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRD	R0	REA	I	D3=3
D6=1	115	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	D6=2
D6=2	075	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	D6=3
D6=3	077	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	D6=4
D6=4	057	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D6=5
D6=5	300	YES	SP	A+B	OFF	L	BRG	L	JOJ	NON	ON	OFF	OFF	H	IRD	R0	REA	IP	D1=2
D7=1	117	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	D7=2
D7=2	310	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	D7=3
D7=3	104	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	D7=4
D7=4	320	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D7=5
D7=5	106	NO	SP	A+B	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRD	R0	REA	I	D3=4
DB0=1	156	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	SB1=5
DB0=2	164	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	DB0=3
DB0=3	304	NO	SPR	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	IRD	R0	WRI	NON	BG=1
DBE=1	110	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	H=1
DE=1	250	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	D1=4
DO=1	270	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=2
DO=10	165	NO	SP	ABAR	OFF	H	BRG	L	NMD	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	DO=11
DO=11	342	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=12
DO=12	135	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=13
DO=13	136	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=14
DO=14	137	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=15
DO=15	140	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=16
DO=16	141	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=17
DO=17	142	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=18
DO=18	143	YES	SP	AL	OFF	H	BRG	SL	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	0	D1=6
DO=2	123	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=3
DO=3	124	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=4
DO=4	125	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=5
DO=5	126	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=6
DO=6	127	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=7
DO=7	130	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	DO=8
DO=8	131	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	DO=9

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
DO=9	132	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	A145
ERT=1	010	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ERT1A	046	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET2=2
ERT1B	153	NO	NUL	AL	OFF	H	BRG	L	CON	4	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ET=1	011	NO	NUL	AL	OFF	H	BRG	L	CON	30	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
ET=10	254	NO	SP	AL	OFF	L	BRG	H	TRC	NON	ON	OFF	OFF	H	ROM	R12	REA	T	ET=11
ET=11	255	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	ET=12
ET=12	256	NO	SP	A+B	OFF	L	+1	L	NON	NON	ON	ON	OFF	H	ROM	R12	REA	T	ET=13
ET=13	257	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	R2=2
ET=2	245	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET=3
ET=3	246	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=5
ET=5	247	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET=6
ET=6	226	NO	PSW	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	ET=7
ET=7	251	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=8
ET=8	252	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET=9
ET=9	253	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	ET=10
ET2=2	003	NO	SP	BL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET2=3
ET2=3	004	NO	SP	A=B=1	OFF	L	+1	L	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET2=5
ET2=5	036	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	ET2=6
ET2=6	037	NO	PSW	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	ET2=7
ET2=7	051	NO	SP	A=B=1	OFF	L	+1	L	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	ET=8
F=1	062	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	T	F=2
F=2	053	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	F=3
F=3	365	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	F=4
F=4	364	NO	NUL	AL	OFF	H	BRG	L	IRC	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	F=5
F=5	061	NO	SP	BL	OFF	H	SEX	L	IRD	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	RT=1
H=1	041	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	H=2
H=2	302	NO	SP	AL	OFF	L	BRG	H	SW	NON	OFF	OFF	OFF	H	ROM	R17	REA	NON	D6=5
INT=1	325	NO	SP	AL	OFF	H	BRG	H	SVS	NON	OFF	OFF	OFF	H	ROM	R12	WRI	NON	ET=3
IT=1	273	NO	NUL	AL	OFF	H	BRG	L	CON	20	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
J1=1	204	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	J1=2
J1=2	260	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG=1
J2=1	212	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	J2=1A
J2=1A	261	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R11	WRI	NON	J2=2
J2=2	262	NO	SP	A=B=1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	ROM	R6	REA	NON	J2=3
J2=3	214	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	0	J2=4
J2=4	206	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	REA	NON	J2=5
J2=5	216	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	NON	J2=6
J2=6	263	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	WRI	NON	J2=7
J2=7	264	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	ROM	R11	REA	NON	J2=8
J2=8	265	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	BG=1
LC=1	042	NO	NUL	AL	OFF	H	BRG	L	CON	100	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
MB=0	154	NO	SP	AL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	MB=1
MB=1	240	NO	SP	ABAR	OFF	H	BRG	L	NON	NON	OFF	ON	OFF	H	ROM	R10	REA	NON	MB=2

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CRD	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
MB=2	152	NO	SP	BL	OFF	H	SEX	H	SRV	NON	OFF	OFF	OFF	H	IRD	R0	WRI	NON	BG=1
PF=1	043	NO	NUL	AL	OFF	H	BRG	L	CON	24	OFF	OFF	OFF	H	ROM	R0	WRI	NON	E1=2
R1=1	005	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R1=2
R1=2	221	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R1=3
R1=3	222	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	WRI	NON	R1=4
R1=4	223	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	IRD	R0	REA	NON	R1=5
R1=5	224	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	R1=6
R1=6	225	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	D0=4
R2=1	227	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R2=2
R2=2	230	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R2=3
R2=3	231	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	NON	R2=4
R2=4	232	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	R2=6
R2=6	234	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R6	REA	I	R2=7
R2=7	235	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R6	REA	NON	R2=8
R2=8	236	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R6	WRI	NON	R2=9
R2=9	237	NO	NUL	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	B2=2
RS=1	000	NO	NUL	AL	OFF	L	BRG	H	CON	24	OFF	OFF	OFF	H	ROM	R0	WRI	I	RS=1A
RS=1A	241	NO	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	NON	RS=2
RS=2	347	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	WRI	NON	RS=3
RS=3	074	NO	NUL	A+B	OFF	L	+1	H	CON	24	ON	ON	OFF	H	ROM	R0	WRI	I	RS=4
RS=4	351	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	B2=2
RST=1	357	NO	SP	AL	OFF	H	BRG	H	INI	NON	ON	OFF	OFF	H	ROM	R0	REA	NON	B2=2
RT=1	001	NO	NUL	AL	OFF	H	BRG	L	CON	10	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
S0=1	201	NO	SP	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	IRS	R0	REA	NON	S0=2
S0=2	007	NO	SP	BL	OFF	H	BRG	H	DST	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	RT=1
S1=1	203	YES	SP	AL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	REA	I	S1=2
S1=2	244	NO	NUL	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S0=2
S2=1	205	YES	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S2=2
S2=2	301	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRS	R0	REA	NON	S2=3
S2=3	014	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	WRI	NON	S1=2
S3=1	207	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S3=2
S3=2	016	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	IRS	R0	REA	NON	S3=3
S3=3	017	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	WRI	NON	S3=4
S3=4	134	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S3=5
S3=5	274	YES	SP	BL	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R0	REA	I	S1=2
S4=1	211	YES	SP	A-B-1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S2=3
S5=1	213	NO	SP	A-B-1	OFF	L	+1	L	ENO	NON	OFF	OFF	OFF	H	IRS	R0	REA	I	S3=3
S6=1	215	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	S6=2
S6=2	025	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	S6=3
S6=3	026	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	S6=4
S6=4	027	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S6=5
S6=5	030	YES	SP	A+B	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	REA	I	S1=2
S7=1	217	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R7	REA	I	S7=2
S7=2	032	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	OFF	H	ROM	R7	REA	NON	S7=3

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW	SAM	SPA	SPF	TNS	NXT
S7=3	033	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	OFF	H	ROM	R7	WRI	NON	S7=4
S7=4	034	NO	NUL	AL	OFF	H	BRG	I	NON	NON	OFF	OFF	OFF	H	BAR	R0	REA	NON	S7=5
S7=5	035	NO	SP	A+B	OFF	L	BRG	H	NON	NON	ON	OFF	OFF	H	IRS	R0	REA	I	S3=4
SB1=1	166	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=2
SB1=2	172	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=3
SB1=3	173	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=4
SB1=4	174	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=5
SB1=5	144	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=6
SB1=6	176	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=7
SB1=7	177	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB1=8
SB1=8	006	NO	SP	ASR	ON	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D0=3A
SB2=1	167	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=2
SB2=2	012	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=3
SB2=3	220	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=4
SB2=4	022	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=5
SB2=5	023	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=6
SB2=6	024	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=7
SB2=7	031	NO	SP	ASR	OFF	H	BRG	SL	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB2=8
SB2=8	330	NO	SP	ASR	ON	H	BRG	SL	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	D1=4
SBE=1	047	NO	SP	BL	OFF	H	SEX	H	DST	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	RT=1
SB0=1	067	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=2
SB0=2	346	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=3
SB0=3	324	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=4
SB0=4	340	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=5
SB0=5	361	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=6
SB0=6	050	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=7
SB0=7	020	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	ON	H	ROM	R0	REA	NON	SB0=8
SB0=8	052	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	SBE=1
SC=1	116	NO	PSW	AORB	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	L	ROM	R0	REA	NON	BG=1
T=1	021	NO	NUL	AL	OFF	H	BRG	L	CON	34	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
U1=1	352	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D0=3
U2=1	353	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D1=4
U3=1	354	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	DB0=2
U4=1	355	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D0=10
U5=1	371	NO	SP	BL	ON	H	BRG	H	NON	NON	OFF	OFF	OFF	H	ROM	R10	WRI	NON	D1=4
URTR	064	NO	NUL	AL	OFF	H	BRG	L	CON	60	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
URTX	060	NO	NUL	AL	OFF	H	BRG	L	CON	64	OFF	OFF	OFF	H	ROM	R0	WRI	NON	ET=2
W=1	063	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	OFF	H	ROM	R0	REA	NON	BG=1

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B C D E	
2	A A A A B	
3	A B B B C	
4	A A B B B	
5	A A A B C	
6	A A A B C	
7	A A A A B	

	ECO NO.	ETCH REV.	ENG.	DATE
	00002		BA	8-21-72
	KD11B 00003		MT	9-24-72
	KD11B 00004		MT	10-30-72
	KD11B-00005		DR	8-15-73
R.	KD11B-00006		D.R.	5-30-74

FIRST USED ON OPTION/MODEL

KD11-B

DRN. M. Towne	DATE 8-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. J McCullough	DATE 8-21-72	
ENG. B. ARMSTRONG	DATE 8-29-72	TITLE MICROPROGRAM BINARY LISTING
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 7

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-3	E

DIST.

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	D1P	SMR	SP0	SM1	BBT	BAR	BPT	BP2	CKT	ATB	ANS	ALG	BRG	BUT
A145	145	0000	0000	0	0	1	0	0	0	0	0	1	0	1	0	1	0	0	00	00	00	00	0101
B=1	015	1001	1000	1	1	0	0	1	0	0	1	1	1	1	1	1	1	0	1	1	11	11	1111
B=2	147	1001	1001	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	1111
B=3	146	1101	1111	0	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	1100
B2=2	305	1101	1111	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	1100
B2=2A	333	1101	1111	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	1100
B2=2B	335	1101	1111	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	1100
B2=2C	343	1101	1111	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	1100
B2=2D	013	1101	1111	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	1100
BG=1	040	0011	1010	0	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	11	11	0001
BT=1	045	0101	1010	0	1	1	0	1	1	0	1	1	1	1	1	1	0	0	1	1	11	10	1101
CC=1	112	1101	1111	0	0	1	0	0	0	0	1	1	1	1	1	1	1	0	1	1	11	00	1100
CCM=1	151	0001	0111	0	0	0	1	1	0	0	0	1	1	1	1	1	1	0	0	1	1	10	1101
CCM=2	350	1011	0101	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0	1	1	11	1001
CCS=1	316	0100	0001	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	11	1111
CCS=2	276	0100	0111	0	0	0	0	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	0110
CCS=3	272	1100	1101	0	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	0000
CD1=1	313	0011	1100	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	0110
CD1=2	303	0000	0011	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	0	0	1	10	1101
CD1=3	374	0011	0011	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	1111
CD1=4	314	0000	0101	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	01	1111
CD1=5	372	0011	1101	0	1	0	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	1111
CD2=1	312	0010	0000	0	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	11	1111
CD2=2	337	0011	0100	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	11	1111
CE1=1	317	0011	1000	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	0110
CE1=2	307	0010	1001	0	0	0	0	1	0	0	1	1	0	1	1	1	1	1	0	1	1	10	1111
CE1=3	326	0011	1101	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	1111
CE2=1	315	0000	0110	0	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	11	1111
CE2=2	371	0011	0000	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	11	1111
CL=1	311	0000	0010	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	0	0	1	10	1101
CL=2	375	0000	1000	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	1111
CL=3	367	0011	1101	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	11	1111
CS=1	100	0010	1101	0	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	0000
CS=2	322	0010	1110	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	11	1111
CS=3	321	1101	1111	0	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	11	1100
D0=1	101	1001	0011	0	0	0	0	1	0	0	1	0	0	1	1	1	1	1	0	1	1	11	0101
D0=2	157	1001	1101	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	11	1010
D0=3	162	0010	0101	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	11	0010
D0=3A	155	0010	0101	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	11	0010
D0=4	332	1101	1111	0	1	0	1	1	0	0	1	0	0	1	1	1	1	0	0	1	1	11	1100

NAM	LOC	NXT	ALU	CRIH	FSHX	AUXP	PSWP	SP13	SPPP	DIP	SMOT	SPPB	SMBB	BBAR	BTPP	PPF2	CKOT	ATBS	NN	ALG	BRG	BUT
D1=1	103	0111 1111	0000	1011			1000				0011			0110			0010			1111		1011
D1=2	200	0111 0111	0000	1011			1001				0001			1110			1111			1011		0011
D1=3	210	1001 1100	0101	1011			1011				1111			1100			1111			1100		1010
D1=4	163	0010 0011	1111	1111			1011				1011			1110			1111			1111		0010
D1=5	334	1100 1010	0000	1011			1001				1011			1110			0001			1100		1111
D1=6	065	0011 1010	0101	1011			1001				1011			1110			1111			1100		1111
D2=1	105	0010 0110	0000	1011			1000				0011			0110			1010			1100		1111
D2=2	331	0001 1110	0110	0111			1001				0010			1110			1111			1111		1111
D2=3	341	0111 1111	0101	1011			1001				0011			1100			0111			1100		1011
D3=1	107	1000 1111	0000	1011			1001				0011			0110			1110			1100		1111
D3=2	160	1100 0111	0110	0111			1001				0010			1110			1111			1111		1111
D3=3	070	1100 0110	0101	1011			1001				0011			1100			0111			1100		1111
D3=4	071	1100 0101	0000	1011			1001				0001			1110			1111			1011		1111
D3=5	072	0111 1111	0101	1011			1000				1011			0110			0010			1100		1011
D4=1	111	0001 1110	1001	0011			1000				0010			0110			1010			1100		0100
D5=1	113	1100 0111	1001	0011			1001				0010			0110			1010			1100		0100
D6=1	115	1100 0010	0000	1011			1101				1111			0111			1110			1100		1111
D6=2	075	1100 0000	0110	0111			1101				1110			1111			1111			1111		1111
D6=3	077	1101 0000	0101	1011			1101				1111			1101			0111			1100		1111
D6=4	057	0011 1111	0000	1011			1001				0001			1110			1111			1011		1111
D6=5	300	0111 1111	0110	0011			1000				0011			0110			0010			1100		1011
D7=1	117	0011 0111	0000	1011			1101				1111			0111			1110			1100		1111
D7=2	310	1011 1011	0110	0111			1101				1110			1111			1111			1111		1111
D7=3	104	0010 1111	0101	1011			1101				1111			1101			0111			1100		1111
D7=4	320	1011 1001	0000	1011			1001				0001			1110			1111			1011		1111
D7=5	106	1100 0110	0110	0011			1001				0011			0110			0110			1100		1111
DB0=1	156	1001 1011	0101	1011			1011				1111			1000			1111			1111		1010
DB0=2	164	0011 1011	1111	1111			1011				1011			1110			1111			1111		0010
DB0=3	304	1101 1111	0101	1011			1001				0011			1100			1111			0100		1100
DBE=1	110	1101 1110	0000	1011			1001				1011			1110			1111			1100		1111
DE=1	250	1000 1100	0101	1011			1011				1111			1000			1111			1111		1010
DO=1	270	1010 1100	0000	1001			1001				1011			1110			1111			1110		1111
DO=10	165	0001 1101	1111	1111			1011				1011			1110			1111			1111		0010
DO=11	342	1010 0010	0000	1001			1001				1011			1110			1111			0111		1111
DO=12	135	1010 0001	0000	1001			1001				1011			1110			1111			0111		1111
DO=13	136	1010 0000	0000	1001			1001				1011			1110			1111			0111		1111
DO=14	137	1001 1111	0000	1001			1001				1011			1110			1111			0111		1111
DO=15	140	1001 1110	0000	1001			1001				1011			1110			1111			0111		1111
DO=16	141	1001 1101	0000	1001			1001				1011			1110			1111			0111		1111
DO=17	142	1001 1100	0000	1001			1001				1011			1110			1111			0111		1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SMØ	SP0	SM1	BBT	BAR	BTP	SPF	SP2	CKO	ABT	TNS	ALG	BRG	BUT
DO-18	143	1100	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	0	01	11	01	1111
DO-2	123	1010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-3	124	1010	1010	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-4	125	1010	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-5	126	1010	1000	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-6	127	1010	0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-7	130	1010	0110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-8	131	1010	0101	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
DO-9	132	1001	1010	0101	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	11	11	1010
ERT-1	010	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	10	11	1101
ERT1A	046	1111	1100	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	1	11	10	11	1101
ERT1B	153	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	1	11	10	11	1101
ET-1	011	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	10	11	1101
ET-10	254	0101	0010	0000	1	0	1	1	1	1	1	1	1	0	1	1	0	1	0	0	1	10	11	00	0000
ET-11	255	0101	0001	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	11	1111
ET-12	256	0101	0000	0110	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	0	1	10	11	11	1111
ET-13	257	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	11	11	11	1111
ET-2	245	0101	1001	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
ET-3	246	0101	1000	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	0100
ET-5	247	0110	1001	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	01	11	00	1111
ET-6	226	0101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1111
ET-7	251	0101	0101	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	0100
ET-8	252	0101	0100	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	01	11	00	1111
ET-9	253	0101	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	00	1111
ET2-2	003	1111	1011	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	11	11	11	1111
ET2-3	004	1110	0001	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	1111
ET2-5	036	1110	0000	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	01	11	00	1111
ET2-6	037	1101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1111
ET2-7	051	0101	0101	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	11	11	11	1111
F-1	062	1101	0100	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	11	11	10	1111
F-2	053	0000	1010	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	11	11	11	1111
F-3	365	0000	1011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	11	11	00	1111
F-4	364	1100	1110	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	11	0000
F-5	061	1111	1110	0101	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	0	1	1	11	11	0111
H-1	041	0011	1101	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	11	11	1111
H-2	302	0011	1111	0000	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	11	00	0110
INT-1	325	0101	1001	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	11	00	1000
IT-1	273	0101	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	11	10	1101
J1-1	204	0100	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1111
J1-2	260	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	00	1100

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SSP1	SSP3	DIP	SMO	SSP0	SSM1	BBT	BATR	BTPP	SSF2	SSP	CKO	ATBT	NS	ALG	BRG	BUT
J2=1	212	0100	1110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	00	1111
J2=1A	261	0100	1101	0101	1	0	1	1	1	0	1	1	1	1	1	1	0	0	1	1	11	11	00	1111
J2=2	262	0111	0011	1001	0	0	1	1	1	1	0	1	1	0	0	1	1	1	1	1	11	11	11	0100
J2=3	214	0111	1001	0101	1	0	1	1	1	1	0	1	1	0	1	1	0	1	0	1	01	11	00	1111
J2=4	206	0111	0001	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	0	1	1	11	11	00	1111
J2=5	216	0100	1100	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	11	11	11	1111
J2=6	263	0100	1011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	0	0	1	11	11	00	1111
J2=7	264	0100	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	11	11	1111
J2=8	265	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	11	11	00	1100
LC=1	042	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
MB=0	154	0101	1111	0000	1	0	1	0	1	0	0	1	1	0	1	1	1	0	1	1	11	11	00	1111
MB=1	240	1001	0101	1111	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	11	11	11	1111
MB=2	152	1101	1111	0101	1	0	1	1	1	0	0	1	1	0	0	0	1	1	1	1	11	11	00	1100
PF=1	043	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
RI=1	005	0110	1110	0000	1	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	10	11	00	1111
RI=2	221	0110	1101	0110	0	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
R1=3	222	0110	1100	0101	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	11	11	00	1111
R1=4	223	0110	1011	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	1	1	1	11	11	11	1111
R1=5	224	0110	1010	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	0	11	11	00	1111
R1=6	225	0010	0101	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	0	1	11	10	11	1111
R2=1	227	0110	0111	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	0	10	11	00	1111
R2=2	230	0110	0110	0110	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	11	11	11	1111
R2=3	231	0110	0101	0101	1	0	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	11	00	1111
R2=4	232	0110	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	11	11	00	1111
R2=6	234	0110	0010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	10	11	00	1111
R2=7	235	0110	0001	0110	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	11	11	11	1111
R2=8	236	0110	0000	0101	1	0	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	11	00	1111
R2=9	237	0011	1010	0000	1	0	1	0	0	0	1	1	0	1	1	1	0	1	1	1	11	10	00	1111
RS=1	000	0101	1110	0000	1	0	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	10	00	1101
RS=1A	241	0001	1000	0000	1	0	1	1	0	0	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
RS=2	347	1100	0011	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1111
RS=3	074	0001	0110	0110	0	1	1	1	0	1	1	1	0	1	0	0	1	1	0	1	10	10	00	1101
RS=4	351	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RST=1	357	0011	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	11	11	00	1110
RT=1	001	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	11	10	11	1101
S0=1	201	1111	1000	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	1	1	0	11	11	11	0011
S0=2	007	1111	1110	0101	1	0	1	1	1	0	1	1	1	0	1	1	0	0	1	1	11	11	00	1001
S1=1	203	0101	1011	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	10	11	00	1111
S1=2	244	1111	1000	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	11	10	11	0011
S2=1	205	0011	1110	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	10	11	00	1111

MAM	LOC	NXT	ALU	CRY	FSH	AUX	PSW	SP1	SP3	DIP	SMP	SP0	SM0	BT1	BAR	BT2	PF2	SS0	CKD	ATN TS	ALG	BRG	BUT
S2=2	301	1111	0011	0110	0	1	1	1	1	0	0	0	1	1	0	0	0	1	1	11	11	11	1111
S2=3	014	0101	1011	0101	1	0	1	1	1	0	0	0	1	1	0	0	0	1	1	11	11	00	1111
S3=1	207	1111	0001	0000	1	0	1	1	1	0	0	0	1	1	0	0	0	1	0	11	10	11	00	1111
S3=2	016	1111	0000	0110	0	1	1	1	1	0	0	0	1	1	0	0	0	0	1	11	11	11	11	1111
S3=3	017	1010	0011	0101	1	0	1	1	1	0	0	0	1	1	0	0	0	1	1	11	11	00	1111
S3=4	134	0100	0011	0000	1	0	1	1	1	0	0	0	0	1	1	1	1	0	1	11	10	11	1111
S3=5	274	0101	1011	0101	1	0	1	1	1	0	0	1	1	1	0	1	1	0	0	10	11	00	1111
S4=1	211	1111	0011	1001	0	0	1	1	1	0	0	0	1	1	0	0	0	0	1	10	11	11	0100
S5=1	213	1111	0000	1001	0	0	1	1	1	0	0	0	1	1	0	0	0	0	1	10	11	11	0100
S6=1	215	1110	1010	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	10	11	00	1111
S6=2	025	1110	1001	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	11	11	11	1111
S6=3	026	1110	1000	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	11	00	1111
S6=4	027	1110	0111	0000	1	0	1	1	1	0	0	1	1	0	0	0	1	1	1	11	10	11	1111
S6=5	030	0101	1011	0110	0	0	1	1	1	0	0	1	1	0	0	0	1	0	1	10	11	00	1111
S7=1	217	1110	0101	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	10	11	00	1111
S7=2	032	1110	0100	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	11	11	11	1111
S7=3	033	1110	0011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	11	00	1111
S7=4	034	1110	0010	0000	1	0	1	1	1	0	0	1	1	0	0	0	1	1	1	11	10	11	1111
S7=5	035	1010	0011	0110	0	0	1	1	1	0	0	1	1	0	0	0	1	0	1	10	11	00	1111
SB1=1	166	1000	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=2	172	1000	0100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=3	173	1000	0011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=4	174	1001	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=5	144	1000	0001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=6	176	1000	0000	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=7	177	1111	1001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB1=8	006	1001	0010	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=1	167	1111	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=2	012	0110	1111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=3	220	1110	1101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=4	022	1110	1100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=5	023	1110	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=6	024	1110	0110	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=7	031	0010	0111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	01	1111
SB2=8	330	1000	1100	1110	0	0	0	1	1	0	0	0	1	1	0	1	1	1	0	11	11	01	1111
SBE=1	047	1111	1110	0101	1	0	1	1	1	0	1	1	1	1	0	1	1	0	0	11	11	00	1001
SB0=1	067	0001	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	11	1111
SB0=2	346	0010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	11	1111
SB0=3	324	0001	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	11	1111
SB0=4	340	0000	1110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	11	11	11	1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	PP1	PP3	DIP	SMO	SP0	SM1	BBT	BAR	BPT	BPF	SP2	CKO	ATB	TNS	ALG	BRG	BUT
SBO=5	361	1101	0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SBO=6	050	1110	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SBO=7	020	1101	0101	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SBO=8	052	1101	1000	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SC=1	116	1101	1111	0100	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1100
T=1	021	0101	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	10	11	1101
U1=1	352	1000	1101	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
U2=1	353	1000	1100	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
U3=1	354	1000	1011	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
U4=1	355	1000	1010	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
U5=1	373	1000	1100	0101	1	0	1	0	1	0	1	1	1	0	1	1	1	0	0	1	1	11	11	00	1111
URTR	064	0101	1010	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	11	10	11	1101
URTX	060	0101	1010	0000	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	11	10	11	1101
W=1	063	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100

REV.	NUMBER	CODE	SIZE
	KD11-B-4	MP	K

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KD11-B		PARTS LIST		

DRN. J. Madden	DATE 4-21-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. R. L. Kusik	DATE 5-2-72	
ENG. R. L. Kusik	DATE 5-2-72	TITLE MICROPROGRAM CROSS REFFERENCE LISTING (KD11-B)
PROJ. ENG. R. L. Kusik	DATE 5-2-72	
PROD. R. H. Peterson	DATE 5/3/72	
NEXT HIGHER ASSEMBLY B-DD-KD11-B		SIZE K, CODE MP, NUMBER KD11-B-4, REV.
SCALE 11		DIST.
SHEET 1 OF 3		

REVISIONS	CHANGE NO.	CHK
REV.		

DEC FORM NO.
DRB 109

000 RS-1	001 RT-1	002 *****	003 ET2-2	004 ET2-3	005 R1-1	006 SB1-8	007 S0-2
010 ERT-1	011 ET-1	012 SB2-2	013 B2-2D	014 S2-3	015 B-1	016 S3-2	017 S3-3
020 SR0-7	021 T-1	022 SB2-4	023 SB2-5	024 SB2-6	025 S6-2	026 S6-3	027 S6-4
030 S6-5	031 SB2-7	032 S7-2	033 S7-3	034 S7-4	035 S7-5	036 ET2-5	037 ET2-6
040 BG-1	041 H-1	042 LC-1	043 PF-1	044 *****	045 BT-1	046 ERT1A	047 SBE-1
050 SB0-6	051 ET2-7	052 SB0-8	053 F-2	054 *****	055 *****	056 *****	057 D6-4
060 URTX	061 F-5	062 F-1	063 W-1	064 URTR	065 D1-6	066 *****	067 SB0-1
070 D3-3	071 D3-4	072 D3-5	073 *****	074 RS-3	075 D6-2	076 *****	077 D6-3
100 CS-1	101 D0-1	102 *****	103 D1-1	104 D7-3	105 D2-1	106 D7-5	107 D3-1
110 DBE-1	111 D4-1	112 CC-1	113 D5-1	114 *****	115 D6-1	116 SC-1	117 D7-1
120 *****	121 *****	122 *****	123 DO-2	124 DO-3	125 DO-4	126 DO-5	127 DO-6
130 DO-7	131 DO-8	132 DO-9	133 *****	134 S3-4	135 DO-12	136 DO-13	137 DO-14
140 DO-15	141 DO-16	142 DO-17	143 DO-18	144 SB1-5	145 A145	146 B-3	147 B-2
150 *****	151 CCM-1	152 MB-2	153 ERT1B	154 MB-0	155 D0-3A	156 DB0-1	157 D0-2
160 D3-2	161 *****	162 D0-3	163 D1-4	164 DB0-2	165 DO-10	166 SB1-1	167 SB2-1
170 *****	171 *****	172 SB1-2	173 SB1-3	174 SB1-4	175 *****	176 SB1-6	177 SB1-7
200 D1-2	201 S0-1	202 *****	203 S1-1	204 J1-1	205 S2-1	206 J2-4	207 S3-1
210 D1-3	211 S4-1	212 J2-1	213 S5-1	214 J2-3	215 S6-1	216 J2-5	217 S7-1
220 SB2-3	221 R1-2	222 R1-3	223 R1-4	224 R1-5	225 R1-6	226 ET-6	227 R2-1
230 R2-2	231 R2-3	232 R2-4	233 *****	234 R2-6	235 R2-7	236 R2-8	237 R2-9
240 MB-1	241 RS-1A	242 *****	243 *****	244 S1-2	245 ET-2	246 ET-3	247 ET-5
250 DE-1	251 ET-7	252 ET-8	253 ET-9	254 ET-10	255 ET-11	256 ET-12	257 ET-13
260 J1-2	261 J2-1A	262 J2-2	263 J2-6	264 J2-7	265 J2-8	266 *****	267 *****
270 DO-1	271 *****	272 CCS-3	273 IT-1	274 S3-5	275 *****	276 CCS-2	277 *****
300 D6-5	301 S2-2	302 H-2	303 CD1-2	304 DB0-3	305 B2-2	306 *****	307 CE1-2
310 D7-2	311 CL-1	312 CD2-1	313 CD1-1	314 CD1-4	315 CE2-1	316 CCS-1	317 CE1-1
320 D7-4	321 CS-3	322 CS-2	323 *****	324 SB0-3	325 INT-1	326 CE1-3	327 *****
330 SB2-8	331 D2-2	332 D0-4	333 B2-2A	334 D1-5	335 B2-2B	336 *****	337 CD2-2
340 SB0-4	341 D2-3	342 DO-11	343 B2-2C	344 *****	345 *****	346 SB0-2	347 RS-2
350 CCM-2	351 RS-4	352 U1-1	353 U2-1	354 U3-1	355 U4-1	356 *****	357 RST-1
360 *****	361 SB0-5	362 *****	363 *****	364 F-4	365 F-3	366 *****	367 CL-3
370 *****	371 CE2-2	372 CD1-5	373 U5-1	374 CD1-3	375 CL-2	376 *****	377 *****

A145 145	D6-1 115	F-4 364	S5-1 213				
B-1 015	D6-2 075	F-5 061	S6-1 215				
B-2 147	D6-3 077	H-1 041	S6-2 025				
B-3 146	D6-4 057	H-2 302	S6-3 026				
B2-2 305	D6-5 300	INT-1 325	S6-4 027				
B2-2A 333	D7-1 117	IT-1 273	S6-5 030				
B2-2B 335	D7-2 310	J1-1 204	S7-1 217				
B2-2C 343	D7-3 104	J1-2 260	S7-2 032				
B2-2D 013	D7-4 320	J2-1 212	S7-3 033				
BG-1 040	D7-5 106	J2-1A 261	S7-4 034				
BT-1 045	DB0-1 156	J2-2 262	S7-5 035				
CC-1 112	DB0-2 164	J2-3 214	SB1-1 166				
CCM-1 151	DB0-3 304	J2-4 206	SB1-2 172				
CCM-2 350	DBE-1 110	J2-5 216	SB1-3 173				
CCS-1 316	DE-1 250	J2-6 263	SB1-4 174				
CCS-2 276	DO-1 270	J2-7 264	SB1-5 144				
CCS-3 272	DO-10 165	J2-8 265	SB1-6 176				
CD1-1 313	DO-11 342	LC-1 042	SB1-7 177				
CD1-2 303	DO-12 135	MB-0 154	SB1-8 006				
CD1-3 374	DO-13 136	MB-1 240	SB2-1 167				
CD1-4 314	DO-14 137	MB-2 152	SB2-2 012				
CD1-5 372	DO-15 140	PF-1 043	SB2-3 220				
CD2-1 312	DO-16 141	R1-1 005	SB2-4 022				
CD2-2 337	DO-17 142	R1-2 221	SB2-5 023				
CE1-1 317	DO-18 143	R1-3 222	SB2-6 024				
CE1-2 307	DO-2 123	R1-4 223	SB2-7 031				
CE1-3 326	DO-3 124	R1-5 224	SB2-8 330				
CE2-1 315	DO-4 125	R1-6 225	SBE-1 047				
CE2-2 371	DO-5 126	R2-1 227	SB0-1 067				
CL-1 311	DO-6 127	R2-2 230	SB0-2 346				
CL-2 375	DO-7 130	R2-3 231	SB0-3 324				
CL-3 367	DO-8 131	R2-4 232	SB0-4 340				
CS-1 100	DO-9 132	R2-6 234	SB0-5 361				
CS-2 322	ERT-1 010	R2-7 235	SB0-6 050				
CS-3 321	ERT1A 046	R2-8 236	SB0-7 020				
D0-1 101	ERT1B 153	R2-9 237	SB0-8 052				
D0-2 157	ET-1 011	RS-1 000	SC-1 116				
D0-3 162	ET-10 254	RS-1A 241	T-1 021				
D0-3A 155	ET-11 255	RS-2 347	U1-1 352				
D0-4 332	ET-12 256	RS-3 074	U2-1 353				
D1-1 103	ET-13 257	RS-4 351	U3-1 354				
D1-2 200	ET-2 245	RST-1 357	U4-1 355				
D1-3 210	ET-3 246	RT-1 001	U5-1 373				
D1-4 163	ET-5 247	S0-1 201	URTR 064				
D1-5 334	ET-6 226	S0-2 007	URTX 060				
D1-6 065	ET-7 251	S1-1 203	W-1 063				
D2-1 105	ET-8 252	S1-2 244	000				
D2-2 331	ET-9 253	S2-1 205	000				
D2-3 341	ET2-2 003	S2-2 301	000				
D3-1 107	ET2-3 004	S2-3 014	000				
D3-2 160	ET2-5 036	S3-1 207	000				
D3-3 070	ET2-6 037	S3-2 016	000				
D3-4 071	ET2-7 051	S3-3 017	000				
D3-5 072	F-1 062	S3-4 134	000				
D4-1 111	F-2 053	S3-5 274	000				
D5-1 113	F-3 365	S4-1 211	000				

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS							REMARKS
1	J	K	L	M	N	P	R	
2	J	K	L	M	N	N	N	
3	J	J	J	M	N	N	P	
4	J	J	J	M	N	N	P	
5	J	J	J	M	M	M	N	
6	J	J	J	M	M	M	M	
7	J	J	J	M	M	N	N	
8	J	J	J	M	N	N	N	
9	J	J	J	M	M	N	P	
10	J	K	L	M	M	N	P	
11	J	J	J	M	M	M	N	
12	-	-	-	M	M	N	N	

DATE	ENG.	ETCH REV.	ECO NO.
10-11-72	M.T.	B	00007
10-30-72	B.A.	B	00008
11-27-72	M.T.	B	00009
2-23-73	B A	C	00010 & 10A
6-19-73	M.T.	C	00012
8-20-75	R.K	C	00014
12-NOV-76	R.G.	C	00015

FIRST USED ON OPTION/MODEL

KD11-B

DRN. B. J. Davis	DATE 10-16-72	
CHK'D. M. T. Tellam	DATE 10/26/72	
ENG. M. T. Tellam	DATE 10/26/72	
PROJ. ENG. M. T. Tellam	DATE	
PROD.	DATE	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE

DATA PATHS

NEXT HIGHER ASSY.

B-DD-KD11-B

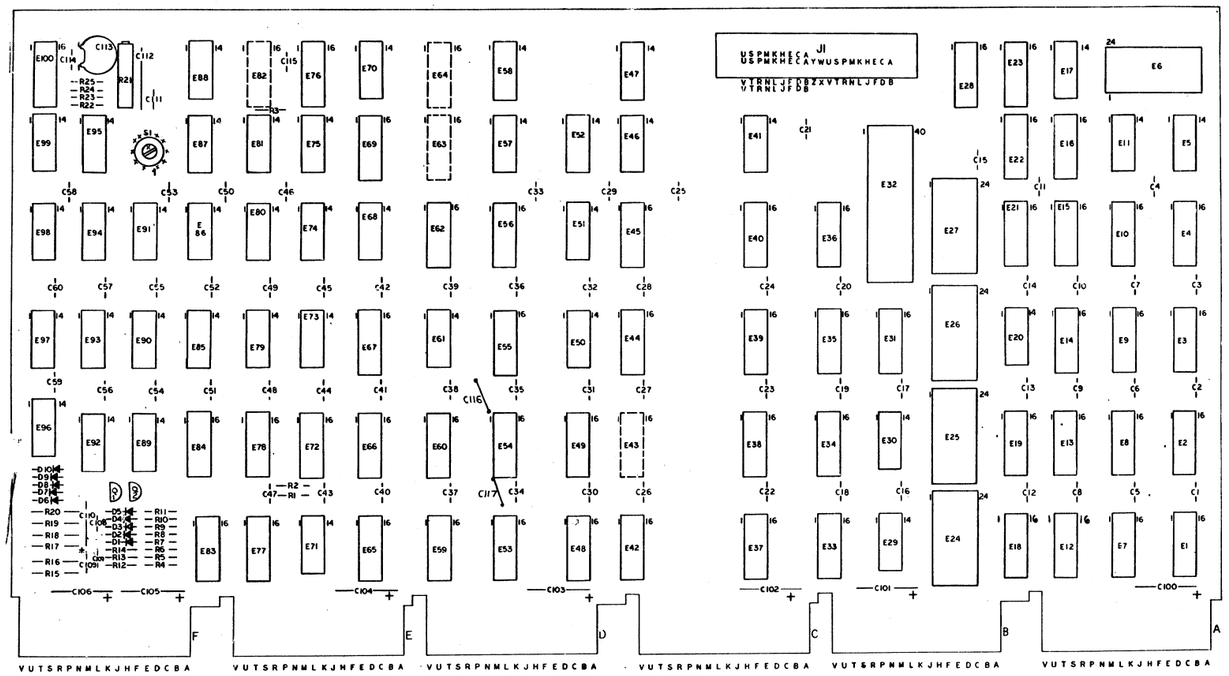
SCALE ++

SHEET 1 OF 12

SIZE	CODE	NUMBER	REV.
B	CS	M7260-0-1	R

DIST.

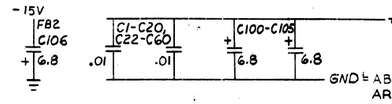
NOTES:



DEC 74174	8	16
DEC 74175	8	16
DEC 7489	8	16
DEC 1808	3	1
DEC 74182	8	16
DEC 74181	12	24
DEC 74157	8	16
DEC 74S158	8	16
DEC 74153	8	16
DEC 74194	8	16
DEC 74150	12	24
DEC 8838	8	16
IC TYPE	GND	+ 5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL

ETCH BOARD REV C

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.
CHK	REVISIONS				

SEMICONDUCTOR CONVERSION CHART

DRW. [signature] DATE 1/22/73
CHKD. DATE 2/23/73
ENG. DATE 2/23/73
PROJ. ENGR. DATE 2/23/73
MGR. DATE 2/23/73

NEXT HIGHER ASSY B-DD-KD11-B

SCALE

SHEET 2 OF 12

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS

SIZE D CODE CS NUMBER M7260-0-1 REV. N

DIST.

PRINTING 40-522 16699

DEC FORM NO. DRD-135A

NOTES:

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF		ETCH CIRCUIT BOARD		1
REF		X-Y COORDINATE HOLE/LAYOUT	M7260-0-4	2
REF		DATA PATH ASSY HOLE/LAYOUT	M7260-0-5	3
REF		MODULE ECO HISTORY	M7260-0-6	4
63	C1-60,108,109,111	CAP .01 MFD,100V, 20% DISC	1001610	5
1	C110	CAP .47 MFD, 35V, 10%	1005965	6
3	C107,114,116	CAP 1000.0 MMF, 100V 5%	1000042	7
1	C113	CAP 4700 MMF, 100V, 5%	1002895	8
1	C112	CAP 39 MFD, 10V 10%	1000076	9
7	C100-106	CAP 6.8 MFD, 35V, 10%	1005306	10
1	C115	CAP 120.0 MMF, 100V, 5%	1000018	11
10	D1-10	DIODE D664	1100114	12
4	E1-4	IC DEC 8838	1911117	13
2	E5,11	IC DEC 7430	1905578	14
1	E6	IC DEC 74150	1910153	15
8	E7-10,33-36	IC DEC 8266	1909934	16
4	E12-15	IC DEC 74194	1910623	17
3	E16,22,28	IC DEC 74153	1909937	18
5	E17,75,79,85,91	IC DEC 7402	1909004	19
3	E18,19,21	IC DEC 74S158	1910549	20
7	E20,29,57,74,96,98,99	IC DEC 7400	1905575	21
2	E23,62	IC DEC 74157	1910655	22
4	E24-27	IC DEC 74181	1909982	23
2	E30,89	IC DEC 7437	1910091	24
1	E31	IC DEC 74182	1910019	25
1	E32	IC DEC 1808 UART	1910459	26
4	E37-40	IC DEC 7489	1910396	27
9	E41,46,50,51,70,71,73,80,81	IC DEC 7438	1911219-01	28
4	E42,45,60,84	IC RES NETWORK	1311003-02	29
1	E47	IC DEC 7408	1910155	30
3	E48,55,56	IC DEC 74175	1910651	31
2	E49,67	IC DEC 74174	1910652	32
1	E44	IC ROM (CONSTANTS)	23A01A1	33
5	E52,86,90,93,97	IC DEC 7474	1905547	34
1	E53	IC ROM (DOP AUX)	23A02A1	35
1	E54	IC ROM (SOP AUX #1)	23A03A1	36
2	E58,87	IC DEC 7404	1909686	37
1	E59	IC ROM (DOP 1R)	23A05A1	38
1	E61	IC DEC 7410	1905576	39
1	E65	IC ROM (CC OR OP)	23A04A1	40
1	E66	IC ROM (SOP AUX #2)	23A06A1	41
1	E68	IC DEC 7486	1910011	42
1	E69	IC ROM (C + V - BIT)	23A12A1	43
1	E72	IC ROM (BRANCH)	23A03A2	44
2	E76,100	IC DEC 9602	1910951	45
1	E77	IC ROM (ENB UNARY)	23A10A1	46
1	E78	IC ROM (NOT DOP)	23A08A1	47
1	E83	IC ROM (ODD BYTE EQ 0)	23A11A1	48
2	E88,95	IC DEC 74197	1910035	49
1	E92	IC DEC 7413	1909989	50
1	E94	IC DEC 7473	1905587	51
1	J1	CONNECTOR, BERG	1209941	52
1	R5	RES 1.5K 1/4W 5%	1300391	53
2	R13,14	RES 470 1/4W 5%	1300316	54
2	R19,20	RES 12K 1/2W 5%	1300487	55
2	R15,16	RES 1.5K 1/2W 5%	1300394	56
1	R22	RES 10 1/4W 5%	1301317	57
2	R3,25	RES 30K 1/4W 5%	1302394	58
1	R10	RES 150 1/4W 5%	1300250	59
1	R17	RES 68 1/2W 10%	1300220	60
1	R2	RES 2K 1/4W 5%	1302388	61
1	R21	RES 20K 3/4W 10% POT	1309143-11	62
6	R1,6-9,23	RES 1K 1/4W 5%	1300365	63
1	R4	RES 750 1/4W 5%	1301401	64
1	R12	RES 82 1/4W 5%	1301477	65
1	R18	RES 560 1/2W 5%	1300338	66
2	R11,24	RES 10K 1/4W 5%	1300479	67
2	Q1,2	TRANS DEC 6534D PNP	1503409	68
12		EYELETS	9006732	69
1		MODULE HANDLE	1210711-2	70
1	S1	SWITCH,ROT 1 POLE 10 POSITION DRY	1210042-1	71
1		HEX NUT NYLON	9007992	72
1	C117	CAP 120MMF 100V 5%	1000021	73

DEC 9602	8	16
ROM 23AXXA1	8	6
ROM 23AXXA2	8	16
DEC 7473	4	11
DEC9602	8	16
IC TYPE	GND	+ 5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

FIRST USED ON OPTION MODEL: 11/05

PARTS LIST

ETCH BOARD REV: C

SEMICONDUCTOR CONVERSION CHART

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

DRN		DATE 11/20/73
CHK'D		DATE 12/3/73
ENG		DATE 12/3/73
PROJ. ENG.		DATE 12/24/73
PROD.		DATE 12/24/73

NEXT HIGHER ASSY: B-DD-KD11-B

SCALE: NONE

SHEET 3 OF 12

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. D

DIST.

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. D

BRUNING 40-522 16699

DEC FORM NO. DRD 135A

CONG SP WRITE H FCI
CONE ALLOW CONST ANTS L
CONE ENAB SWITCH REG L FVI
CONV PROC CLOCK H
DPA ENAB SWITCH REG H
DPA SP WRITE H
DPA SP WRITE L
EXTA SWITCH REG Ø3 H BERG CC
EXTA SWITCH REG Ø2 H BERG BB
EXTA SWITCH REG Ø1 H BERG V
EXTA SWITCH REG Ø0 H BERG W
BUS DØ3 L AEI
BUS DØ2 L BDI
BUS DØ1 L BD2
BUS DØØ L BCI
DPA ALU CIN Ø1 H
DPA ALU CIN ØØ H
DPA Ø-7=Ø H
CONC DAT ENAB L EV2
DPE NEG (1) H
DPE ZERO (1) H
DPE VBIT (1) H
CONG ENAB PSN H CE2
DPE COUT (1) H
CONG ENAB SPR L CE2
DPA SP WRITE L
CONF CIN H ET2
DPF COP L
DPE COUT (1) L
DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG ØØ L
DPA AMUX Ø3 H CRI
DPA AMUX Ø2 H CP2
DPA AMUX Ø1 H CPI
DPA AMUX ØØ H CN2
CONB SPA Ø3 H CAI
CONB SPA Ø2 H CBI
CONB SPA Ø1 H CCI
CONB SPA ØØ H CDI
DPB BREG Ø7(1) H
CONG BMODE ØØ H CVI
CONG BMODE Ø1 H DBI
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H
+3V E42 15
DPA PROC CLOCK L
DPE SERIAL SHIFT H
CONB INH +1 L EKI
CONG BBOT H FAI
DPA BREG Ø3(1) H
DPA BREG ØØ(1) H
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
DPA BLEG ØØ L
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
CONC ALU MODE H DBI
DPA ALU CIN ØØ H
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H
CONA ENAB ALU H EØ2
CONF ALU S3 L DVI
CONF ALU S2 L DØ2
CONF ALU S1 L DØ1
CONF ALU SØ L DR2
CONV PROC CLOCK H DLI
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
DPA PROC CLOCK L
C117 220 MMF

745158

E	S	Fn
H	–	Fn = Ø
L	L	Fn = An
L	H	Fn = Bn

74194

S1	SØ	fn
L	L	HOLD
L	H	SR
H	L	SL
H	H	LOAD

8266

S1	SØ	fn
L	L	Bn
L	H	An
H	L	Bn
H	H	Ø

DATA PATH <03:007>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. M. Price DATE 12/27/72
APVD DATE 2/23/73
ENG DATE 2/23/73
PROJ. ENG DATE 2/23/73
PROD. DATE 12/13/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPA)

NEXT HIGHER ASSY B-DD-KD11-B
SIZE D CODE CS NUMBER M7260-Ø-1 REV P
SCALE —
SHEET 4 OF 12
DIST.

REVISIONS | REV | CHANGE NO | CHK

BRUNING 40-522 15M0
DEC FORM NO DRD 102-B

EXTA SWITCH REG Ø7 H BERG MM
EXTA SWITCH REG Ø6 H BERG KK
EXTA SWITCH REG Ø5 H BERG HH
EXTA SWITCH REG Ø4 H BERG EE

DPE TBIT (1) H
CONS ENAB PSW H
DPE PSN Ø5 (1) H
DPE PSN Ø6 (1) H
DPE PSN Ø7 (1) H
7438 EØ57Ø
EØ45
+5V

DPB AREG Ø4 L
DPB AREG Ø5 L
DPB AREG Ø6 L
DPB AREG Ø7 L

CONS ENAB SPA L
DPA SP WRITE L
7489 EØ39 SPAM
M3(1) M2(1) M1(1) MØ(1)
CONB SPA Ø3 H
CONB SPA Ø2 H
CONB SPA Ø1 H
CONB SPA ØØ H
A3 A2 A1 AØ

8266 EØ35 A SWITCH REG MUX
DPA SP WRITE H
DPA ENAB SWITCH REG H

LPE RIGHT SHIFT Ø7 H
CONS BMODE ØØ H
CONS EMODE Ø1 H
SI SØ SR
74194 EØ14 BREG
CLR CLK SL
DPE AMUX Ø7 H OK1
DPB AMUX Ø6 H DV1
DPB AMUX Ø5 H OK2
DPB AMUX Ø4 H DV2
+3V E42 15
DPA PROC CLOCK L
DPA BREG Ø3 (1) H
CONS BBOT H

DPB BREG Ø4 (1) H
DPB BREG Ø6 (1) H
DPB BREG Ø7 (1) H
7400 EØ2Ø
DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L

DPB ALU CIN Ø2 H
CARRY 74182 EØ31
DPA Ø-7=Ø H
74181 EØ26 ALU
A=B COUT G P
S3 S2 S1 SØ M CIN
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
CONF ALU MODE H
DPA ALU CIN Ø1 H

BUS DØ7 L AE2
BUS DØ6 L AE1
BUS DØ5 L AE2
BUS DØ4 L AE1
8838 EØØ3

CONC DAT ENAB L
8266 EØØ9
DPB AMUX Ø7 H
DPB AMUX Ø6 H
DPB AMUX Ø5 H
DPB AMUX Ø4 H
CONA ENAB ALU H

23-ADR1 EØ22
MØ(1) M1(1) M3(1) M2(1) MG(1) M7(1) M4(1) M5(1)
DPB ALEG Ø7 L
DPB ALEG Ø6 L
DPB ALEG Ø5 L
DPB ALEG Ø4 L
DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG ØØ L
CONB SPA ØØ H
CONB SPA Ø1 H
CONB SPA Ø2 H
CONB SPA Ø3 H
CONS SP WRITE H
CONSTANTS
ENB
CONE ALLOW CONSTANTS L CE1

DATA PATH (Ø7:Ø4)

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = 1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN M. Perry DATE 12/5/72
CHK'D DATE 2/2/73
ENG. DATE 2/2/73
PROJ. ENG. DATE 2/2/73
PROD. DATE 2/23/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPB)

NEXT HIGHER ASSY B-DD-KDII-B
SIZE D CODE CS NUMBER M726Ø-Ø-1 REV N
SCALE —
SHEET 5 OF 12
DIST

REVISIONS	REV	CHANGE NO	CHK

BRUNING 40-522 1540
DEC FORM NO DRD 102-B

EXTA SWITCH REG 11 H — BERG K
EXTA SWITCH REG 10 H — BERG H
EXTA SWITCH REG 09 H — BERG E
EXTA SWITCH REG 08 H — BERG C

E042 +5V
DPC ALEG 11 L
DPC ALEG 10 L
DPC ALEG 09 L
DPC ALEG 08 L

8266 E037 SWITCH REG MUX

CONG ENAB SPL L — CF2
DPA SP WRITE L

7489 E038 SPM
M3(1) M2(1) M1(1) M0(1)

DPA SP WRITE H
DPA ENAB SWITCH REG H

CONB SPA 03 H
CONB SPA 02 H
CONE SPA 01 H
CONE SPA 00 H

DPD BREG 12 (1) H
CONG BMODE 00 H
CONG BMODE 01 H

DPC AMUX 11 H — CLI
DPC AMUX 10 H — CK2
DPC AMUX 09 H — CK1
DPC AMUX 08 H — CK2

+3V E42 15
DPA PROC CLOCK L
DPB BREG 07 (1) H
DPA +1 H
CONG BTOP H — CL2

74194 E013 BREG
SI SO SR
R3(1) R2(1) R1(1) R0(1)
CLR CLK SL

DPC BREG 08(1) H
DPC BREG 11 (1) H

79S158 E019 BLEG MUX
DPC BLEG 11 L
DPC BLEG 10 L
DPC BLEG 09 L
DPC BLEG 08 L

E042 +5V

CARRY 74182 E031
DPC ALU CIN 03 H
QB1 — DPC 8-15=0 H

74181 E025 ALU
A=B COUT G P
S3 S2 S1 S0 M CIN
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DPB ALU CIN 02 H

BUS D11 L — AK2 — 8838 E002
BUS D10 L — AH1 — 8838 E002
BUS D09 L — AK2 — 8838 E002
BUS D08 L — AH1 — 8838 E002

8838 E002 ×5

CONC DAT ENAB L

8266 E028
DPC FMUX 11 H
DPC FMUX 10 H
DPC FMUX 09 H
DPC FMUX 08 H

CONA ENAB ALU H

E043 CONSTANTS
CONB SPA 00 H
CONB SPA 01 H
CONE SPA 02 H
CONB SPA 03 H
CONG SP WRITE H
DPD ALEG 15 L
DPD ALEG 14 L
DPD ALEG 13 L
DPD ALEG 12 L
DPC ALEG 11 L
DPC ALEG 10 L
DPC ALEG 09 L
DPC ALEG 08 L
ENB
CONE ALLOW CONSTANTS L

DATA PATH <11:00>

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± 1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. [illegible] DATE 12/20/72
CHK'D. [illegible] DATE 2/23/73
ENG. [illegible] DATE 2/23/73
PROJ. ENG. [illegible] DATE 2/23/73
PROD. [illegible] DATE 2/23/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPC)

NEXT HIGHER ASSY: B-00-KD11-B
SCALE
SHEET 6 OF 12

SIZE D | CODE CS | NUMBER M7260-0-1 | REV M | DIST.

REV	REVISIONS	CHK
	CHANGE NO	

BRUNING 40-522 1840
DEC FORM NO DRD 102-B

BUS DIJ L
BUS DI4 L
BUS DI3 L
BUS DI2 L
EXTA SWITCH REG 15 H BERG U
EXTA SWITCH REG 14 H BERG S
EXTA SWITCH REG 13 H BERG P
EXTA SWITCH REG 12 H BERG M
CONG ENAB SPL L
DPA SP WRITE L
DPD ALEG 15 L
DPD ALEG 14 L
DPD ALEG 13 L
DPD ALEG 12 L
DPD AI5 L
DRC B-15=0 H
COMC DAT ENABL
DPD AMUX 15 H
DPD AMUX 14 H
DPD AMUX 13 H
DPD AMUX 12 H
CONA ENAB ALU H
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DRC ALU CIN Ø3 H
COMB SPA Ø3 H
COMB SPA Ø2 H
COMB SPA Ø1 H
COMB SPA Ø0 H
DPE SERIAL SHIFT H
CONG BMODE Ø0 H
CONG BMODE Ø1 H
DPD AMUX 15 H CH1
DPD AMUX 14 H CH2
DPD AMUX 13 H CH1
DPD AMUX 12 H CF1
DPA ENAB SWITCH REG H
DPD BREG 15 (1) H
DPD BREG 14 (1) H
DPD BREG 12 (1) H
DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 H
DPD BLEG 12 H
+3V E42 15
DPA PROC CLOCK L
DPA BREG 11 (1) H
DPB BREG Ø7 (1) H
DPA +1 H
CONG BBOT H

DATA PATH <15:12>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, .XX = .02, X = .1 | ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. M. Pepe DATE 11/20/73
CHK'D. DATE 12/23/73
ENG. DATE 12/23/73
PROJ. ENG. DATE 12/23/73
PROD. DATE 12/27/73
NEXT HIGHER ASSY. B-DD-KDII-B
SCALE —
SHEET 7 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPD)

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. N | DIST

REVISIONS: REV | CHANGE NO | CHK
PRINTING 40522 15840
DEC FORM NO DRD 102-B

DPE NEG H
DPA AMUX Φ3 H
DPE SET Z H
DPA AMUX Φ2 H
DPF SET V H
DPA AMUX Φ1 H
DPF SET COUT H
DPA AMUX ΦΦ H
74157 EØ62 CC MUX
74175 EØ56
DPE NEG (1) H
DPE ZERO (1) H
DPE VBIT (1) H
CONF AUX CONTROL L
E S fn
H L fn = Φ
L H fn = A
L L fn = B
CONG LOAD PSW L
CONJ PROC CLOCK H
DM2
74ØØ EØ57
+3V E45 Φ1
DPF C CLK L
CONH PROC INIT L
DL2
DPE COUT (1) H
DPE COUT (Φ) H
74174 COUT EØ52
DPE L SHIFT SIGN H
STB1 STBΦ
74153 ROT MUX 2 EØ22
DPE ROT NEG H
DPE SERIAL SHIFT H
DPE ROT COUT H
DPA BLEG ΦΦ L
DPA BREG ΦΦ (1) H
DPD BLEG 15 L
DPD BREG 15 (1) H
74Ø2 EØ17
DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Ø L
DPC BLEG Ø9 L
DPC BLEG ΦΦ L
DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
74Ø3Ø EØ11
74Ø3Ø EØ25
74Ø4 EØ39
DPG BYTE H
DPF ROTATE H
DPB AMUX Ø7 H
DPD AMUX 15 H
DPA Φ-7=Φ H
DPE Φ-15=Φ H
74153 ROT CC MUX EØ28
DPE NEG H
DPE SET Z H
S1 S0 FUNCTION
L L ROR
L H ASR
H L ROL
H H ASL
74175 EØ59 PSW 7:4
DPB AMUX Ø7 H
DPB AMUX Ø6 H
DPB AMUX Ø5 H
DPB AMUX Ø4 H
DPE PSW Ø7 (1) H
DPE PSW Ø7 (Φ) H
DPE PSW Ø6 (1) H
DPE PSW Ø6 (Φ) H
DPE PSW Ø5 (1) H
DPE PSW Ø5 (Φ) H
DPE TBIT (1) H
DD1
DC1
DD2
CLR CLK
CONH PROC INIT L
DPA PROC CLOCK L
CONG LOAD PSW L
CONA ENAB ALU H
CON H PROC INIT H
DM1
C116 1000 MMF
74Ø2 EØ75
74Ø8 EØ75
74Ø4 EØ75
7437 EØ89
DPE PUP L
DPF LOAD IR L
74174 DEL EØ52
FS2
DPE T DEL (1) L
DPC BREG ØB H
DPE SERIAL SHIFT H
DPD BREG 14 (1) H
DPB BREG Ø6 (1) H
74157 EØ23 BYTE MUX
DPE RIGHT SHFT Ø7 H
DPE L SHIFT SIGN H
CONF AUX BYTE H
DN2
DPA ALUS1 H
DPA ALUSΦ H
DPA Φ-7=Φ H
DPC 8-15:Φ H
74ØØ EØ74
DPE Φ-15=Φ H
74150 EØØ6 CONSOLE MUX
DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Ø L
DPC BLEG Ø9 L
DPC BLEG ØB L
DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
DPA BLEG ΦΦ L
BERG F
DPE DAK H
EXTA SCAN ADDRS Φ1 (1) H BERG N
EXTA SCAN ADDRS Φ2 (1) H BERG L
EXTA SCAN ADDRS Φ4 (1) H BERG J
EXTA SCAN ADDRS Φ8 (1) H BERG D
PSW

REVISIONS | REV | CHANGE NO | CHK

FIRST USED ON OPTION/MODEL: 11/Ø5	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 | ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Rivera DATE 11/3/72
DES. DATE
CKD. DATE
ENGR. DATE
PROJ. ENG. DATE
PROD. DATE 12/23/72

NEXT HIGHER ASSY: B-DD-KD11-B
SCALE
SHEET 8 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPE)

SIZE D | CODE CS | NUMBER M7260-Ø-1 | REV. N
DIST.

DEC FORM NO DRD 102-B

8 7 6 5 4 3 2 1

DPF ROTATE H
DPF ROT COUT H
74H01 EØ7Ø
DPF IR 15 (1)H
DPF IR 14 (1)H
DPF IR 13 (1)H
74100 EØ61
DPF SET COUT L
74B86 EØ69
DPF SET COUT H

23-AØ2A1 EØ53 DOP AUX CTL
CONF ALU S3 L
CONF ALU S2 L
CONF ALU S1 L
CONF ALU S0 L
CONF ALU MODE H
CONF CIN H
DPF C CLK L
DPF DISAB VBIT ROM H
DPF IR 15 (1)H
DPF IR 14 (1)H
DPF IR 13 (1)H
DPF IR 12 (1)H
ENB
CONF AUX CONTROL L
74Ø04 EØ58
DPF AUX CONTROL H

23-A12A1 EØ69 C+V BIT
DPF CODE 1 L
DPF CODE Ø L
DPE NEG H
DPD BLEG 15 L
DPD A15 L
DPF DISAB VBIT ROM H
DPE ROT COUT H
DPE NEG H
DPF ROTATE H
74B86 EØ68
7438 EØ7Ø
74Ø4 EØ58
DPF SET V H

74175 EØ98 IR
DPD AMUX 15 H
DPD AMUX 14 H
DPD AMUX 13 H
DPD AMUX 12 H
DPF IR 15 (1) H
DPF IR 14 (1),H
DPF IR 14 (Ø) H
DPF IR 13 (1) H
DPF IR 13 (Ø) H
DPF IR 12 (1) H
DPF IR 12 (Ø) H
CLR CLK

23-AØ3A1 EØ54 SOP AUX CTL
CONF ALU S3 L
CONF ALU S2 L
CONF ALU S1 L
CONF ALU S0 L
CONF ALU MODE H
CONF CIN H
DPF C CLK L
DPF COP L
DPF IR 1Ø (1)H
DPF IR Ø9 (1)H
DPF IR Ø8 (1)H
DPF IR Ø7 (1)H
DPF IR Ø6 (1)H
ENB

74174 EØ97 IR
DPC AMUX Ø9 H
DPC AMUX Ø8 H
DPB AMUX Ø7 H
DPB AMUX Ø6 H
DPC AMUX 11 H
DPC AMUX 1Ø H
DPF IR Ø9 (1)H
DPF IR Ø8 (1)H
DPF IR Ø7 (1)H
DPF IR Ø6 (1)H
DPF IR 11 (1)H
DPF IR 1Ø (1)H
EF1
DS2
DS1
CLR CLK
DPF LOAD IR L

DPG CAL SOURCE L
DPF AUX CONTROL H
7400 EØ74
DPF SOP L

74174 EØ67 IR
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPB AMUX Ø5 H
DPA AMUX ØØ H
DPA AMUX Ø1 H
DPB AMUX Ø4 H
DPF IR Ø3 (1)H
DPF IR Ø2 (1)H
DPF IR Ø5 (1)H
DPF IR ØØ (1)H
DPF IR Ø1 (1)H
DPF IR Ø4 (1)H
DU1
DU2
DT2
CLR CLK
CONH PROC INIT L
CONE IR CLOCK H
CONE IK CLOCK H
7437 EØ89
DPF LOAD IR L

23-AØ6A1 EØ66 SOP AUX CTL
DPF CODE Ø L
DPF SET COUT L
DPG BYTE L
CONG B MODE ØØ H
DPF DISAB VBIT ROM H
DPF ROTATE L
CONG ROM ALEG Ø L
DPF CODE 1 L
DPF IR 1Ø (1)H
DPF IR Ø9 (1)H
DPF IR Ø8 (1)H
DPF IR Ø7 (1)H
DPF IR Ø6 (1)H
ENB
74Ø4 EØ58
FS1
DPF ROTATE H

AUX ALU CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 .X ± .1 ANGLES ±Ø° 3Ø'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. m Pierce DATE 11/7/7Ø
CHK'D DATE 2/23/73
ENG DATE 2/23/73
PROJ ENG DATE 2/21/73
PROD. DATE 2/23/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPF)

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 9 OF 12
SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV P
DIST

REVISIONS | REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

23-AØ5A1 EØ59

CONE BUT DESTINATION L — DH1 — 14 — A4
DPF IR 12 (1)H — 13 — A3
DPF IR 13 (1)H — 12 — A2
DPF IR 14 (1)H — 11 — A1
DPF IR 15 (1)H — 10 — AØ

EØ64 +5V

M2(1) — Ø3 — 18 — DPG CAL SOURCE L
M6(1) — Ø7 — 12 — EH1 — DPG MOVE L
M3(1) — Ø4 — EK1 — DPG BYTE L
M4(1) — Ø5 — 5 — DPG CMP+BIT L
M7(1) — Ø9 — DPF CODE Ø L
M1(1) — Ø2 — CONF ALU SØ L
MØ(1) — Ø1 — CONF ALU S2 L
M5(1) — Ø6 — 6 — EJ1 — DPG DIS ALU S BITS H

ENB — 15

23-AØ3A2 EØ72

DPF IR 15 (1)H — 15 — A7
DPF IR 1Ø (1)H — Ø3 — A6
DPF IR Ø8 (1)H — Ø1 — A5
DPF IR Ø9 (1)H — Ø2 — A2
DPE NEG (1)H — Ø7 — AØ
DPE ZERO (1)H — Ø5 — A3
DPE VBIT (1)H — Ø4 — A1
DPE COUT (1)H — Ø6 — ENB1 ENBØ — 14 13

MØ(1) — 12 — CONF MPC Ø4 L
M3(1) — Ø9 — CONF MPC Ø3 L
M2(1) — 1Ø — CONF MPC Ø2 L
M1(1) — 11 — CONF MPC Ø1 L

CONE BUT IR DECODE L
DPG CAL BRANCH L

23-A1ØA1 EØ77

CONE JMP OR JSR L — EM2 — 14 — A6
DPG SWAB L — 13 — A3
DPG JMP L — 12 — A2
DPG JMP OR JSR L — 11 — A1
DPG CAL DEST L — 1Ø — AØ

M7(1) — Ø9 — EL1 — CONF MPC ØØ L
MØ(1) — Ø1 — ES1 — CONF MPC Ø7 L
M1(1) — Ø2 — FJ1 — CONF PRE AUX L
M2(1) — Ø3 — EB1 — CONF MPC Ø5 L
M3(1) — Ø4 — EC1 — CONF MPC Ø4 L
M4(1) — Ø5 — ED1 — CONF MPC Ø3 L
M5(1) — Ø6 — ER1 — CONF MPC Ø2 L
M6(1) — Ø7 — EP1 — CONF MPC Ø1 L

ENB — 15

CONE ENAB UNARY L — EN1

23-AØ9A1 EØ65

DPF IR Ø2 (1)H — 11 — A1
DPF IR Ø1 (1)H — 12 — A2
DPF IR ØØ (1)H — 1Ø — AØ
CONE BUT IR DECODE L — DV2 — 13 — A3
DPG CC L — 14 — A4

EØ60 +5V

M7(1) — Ø9 — 11 — DV1 — DPG WAIT L
M6(1) — Ø7 — CONF MPC Ø7 L
M5(1) — Ø6 — CONF MPC Ø6 L
M4(1) — Ø5 — CONF MPC Ø5 L
M3(1) — Ø4 — CONF MPC Ø4 L
M2(1) — Ø3 — CONF MPC Ø3 L
M1(1) — Ø2 — CONF MPC Ø2 L
MØ(1) — Ø1 — CONF MPC Ø1 L

ENB — 15

23-AØ8A1 EØ78

DPF IR 15 (1)H — 1Ø — AØ
DPF IR Ø8 (1)H — 13 — A3
DPF IR Ø9 (1)H — 12 — A2
DPF IR 1Ø (1)H — 11 — A1
DPF IR 11 (1)H — 14 — AØ

EØ84 +5V

M4(1) — Ø5 — 5 — FU2 — DPG EMT L
M3(1) — Ø4 — 4 — FU1 — DPG TRAP L
MØ(1) — Ø1 — 1 — EM1 — DPG CAL DEST L
M1(1) — Ø2 — 2 — DPG JMP OR JSR L
M5(1) — Ø6 — 5K 1K +5V — R2 R1 — DPG BYTE L
M2(1) — Ø3 — 3 — DPG CAL BRANCH L
M7(1) — Ø9 — 9 — DPG ODD BYTE=Ø L
M6(1) — Ø7 — 7 +5V — DPG S4 L

ENB — 15

EØ84

CONE BUT DESTINATION H — EE1

74Ø8 EØ73: Ø1, Ø2 → Ø3 EA1 — CONF MPC Ø6 L
74Ø8 EØ73: 13, 12 → 11 — CONF MPC Ø1 L
74Ø8 EØ73: Ø5, Ø4 → Ø6 — CONF MPC Ø2 L
74Ø8 EØ73: 1Ø, Ø9 → Ø8 — CONF MPC Ø3 L
74Ø8 EØ73: 1Ø, Ø9 → Ø8 — FT2 — DPG ENAB NON MOD H

DPF IR Ø3 (1)H
DPF IR Ø4 (1)H
DPF IR Ø5 (1)H
DPG CMP+BIT L
DPG JMP OR JSR L

DPF IR Ø7 (1) H — 74ØØ EØ74 — Ø8, Ø9 → 1Ø
DPF IR Ø6 (1) H

7402 EØ85: 1Ø, 12 → 13

DPG BYTE L — 74Ø4 EØ55 — Ø5 → Ø6 — DPG BYTE H

23-A11A1 EØ89

DPF IR Ø3 (1)H — 12 — A2
DPF IR Ø4 (1)H — 11 — A1
DPF IR Ø5 (1)H — 1Ø — AØ
DPF IR Ø6 (1)H — 13 — A3
DPF IR Ø7 (1)H — 14 — A4

EØ84 +5V

M1(1) — Ø2 — 15 — DPG JMP L
M3(1) — Ø4 — 14 — DPG SWAB L
M7(1) — Ø9 — 13 — DPG CC L
M4(1) — Ø5 — 1Ø — DPG CC OR OPERATE L
M2(1) — Ø3 — DPG JMP OR JSR L
M6(1) — Ø7 — 11 — ES2 — DPG RTS L
M5(1) — Ø6 — DPG CAL DEST L

ENB — 15

DPG ODD BYTE=Ø L

DPF IR 14(Ø) H — Ø7
DPF IR 13(Ø) H — Ø3
DPF IR 12(Ø) H — Ø5
7410 EØ61 — Ø6

DPG CAL SOURCE L — Ø2
CONE BUT IR DECODE L — Ø3
7402 EØ85 — Ø1

74Ø8 EØ71: Ø1, Ø2 → Ø3 — CONF MPC Ø7 L
74Ø8 EØ71: 13, 12 → 11 — CONF MPC Ø1 L
74Ø8 EØ71: Ø5, Ø4 → Ø6 — CONF MPC Ø2 L
74Ø8 EØ71: 1Ø, Ø9 → Ø8 — CONF MPC Ø3 L

DPF IR Ø9 (1)H
DPF IR 1Ø (1)H
DPF IR 11 (1)H

IR DECODE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±Ø° 3Ø'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL — FINISH

DRN. M. Rivera — DATE 11/72
CHK'D — DATE 2/2/73
ENG. — DATE 2/23/73
ENGR. ENG. — DATE 2/23/73
PROD. — DATE 2/23/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPG)

NEXT HIGHER ASSY: B-DD-KD11-B
SCALE
SHEET 10 OF 12
SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV. P
DIST.

REVISIONS: REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

DPH RCR ENB (1) L
CONA ENAB DATA H
CONA CLR MSYN H FF2
DPH CLEAR BUFF L
+3V E84 12
R330K C115 120PF
DPH START H
DPH B INIT L
DPH TTY CLK (1) H
FS CLK DISAB L FH2
FS CLK L FH1
R8 1K
R7 1K
ED2 DPH TTY CLK H
DPH SER IN H FN1
DPH SI-15 L FP1
FS SER IN H FM1
DPH MAINT (0) H
DPH MAINT (1) H
R4 75Ø R12 82 C109 .01MF C110 .47MF D5 D4 R18 56Ø -15V R9 1K
DPH SER Ø H ER2 DPH TTL SERO L
DPB AMUX Ø7 H
DPB AMUX Ø6 H
DPB AMUX Ø5 H
DPB AMUX Ø4 H
DPB AMUX Ø3 H
DPB AMUX Ø2 H
DPB AMUX Ø1 H
DPB AMUX ØØ H
CONA DATA STROBE L DE2
D6 D7 D8 D9 DØ R11 10K C21 .01
-15V DC FB2
COND INIT H
+3V E42 15
UART EØ32
DPH BUSY (1) H
CONA ENAB RCD PSN H FE1
DPH TBMT H
CONA ENAB XMIT PSN H FD1
DPH RCD INT ENAB (1) H
DPH XMIT INT ENAB (1) H
DPH MAINT (1) H
DPH DATA AVAIL H
DPH TBMT H
CONA ENAB DATA H CN1
DPC ALEG 11 L
DPA ALEG Ø7 L
DPB ALEG Ø6 L
DPB ALEG Ø5 L
DPB ALEG Ø4 L
DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG ØØ L
DF1 DPH SER Ø H
FE2 DPH SER Ø L
FN2 DPH SER Ø -15 L
R5 1.5K R13 47Ø Q1 D2 D1 R19 12K R15 1.5K R16 1.5K R20 12K C107 1ØØØPF -15V
R24 10K R21 20K C113 4700PF R22 10 C112 3.3MF C111 .01 MF R27 1K R23 30K C114 1000PF
FILTERED + 5 POWERS E1ØØ

SWITCH POSITION	BAUD RANGE 1	BAUD RANGE 2
1	2400 B	1760 B
2	1200 B	880 B
3	600 B	440 B
4	300 B	220 B
5	150 B	110 B
TTY CCK (1) H	26 µs	35.5 µs

SCL CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. Rivera DATE 1/3/72
CHK'D DATE 2/23/73
ENG DATE 2/23/73
PROJ. ENG. DATE 2/23/73
PROD DATE 2/23/73
NEXT HIGHER ASSY B-DD-KD11-8
SCALE
SHEET 11 OF 12

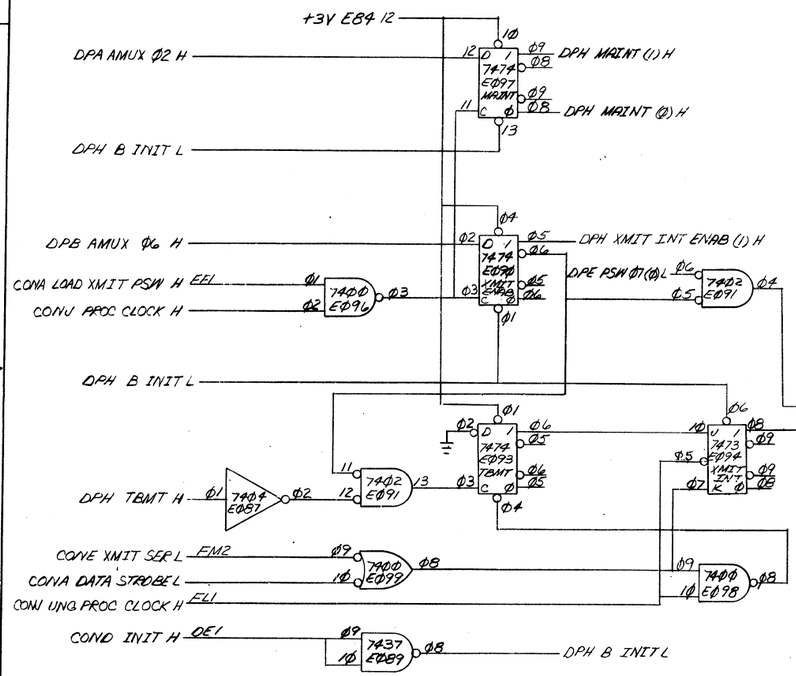
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE DATA PATH (DPH)

SIZE D CODE CS NUMBER M726Ø-Ø-1 REV. N
DIST

REVISIONS	REV.
CHANGE NO	
CHK	

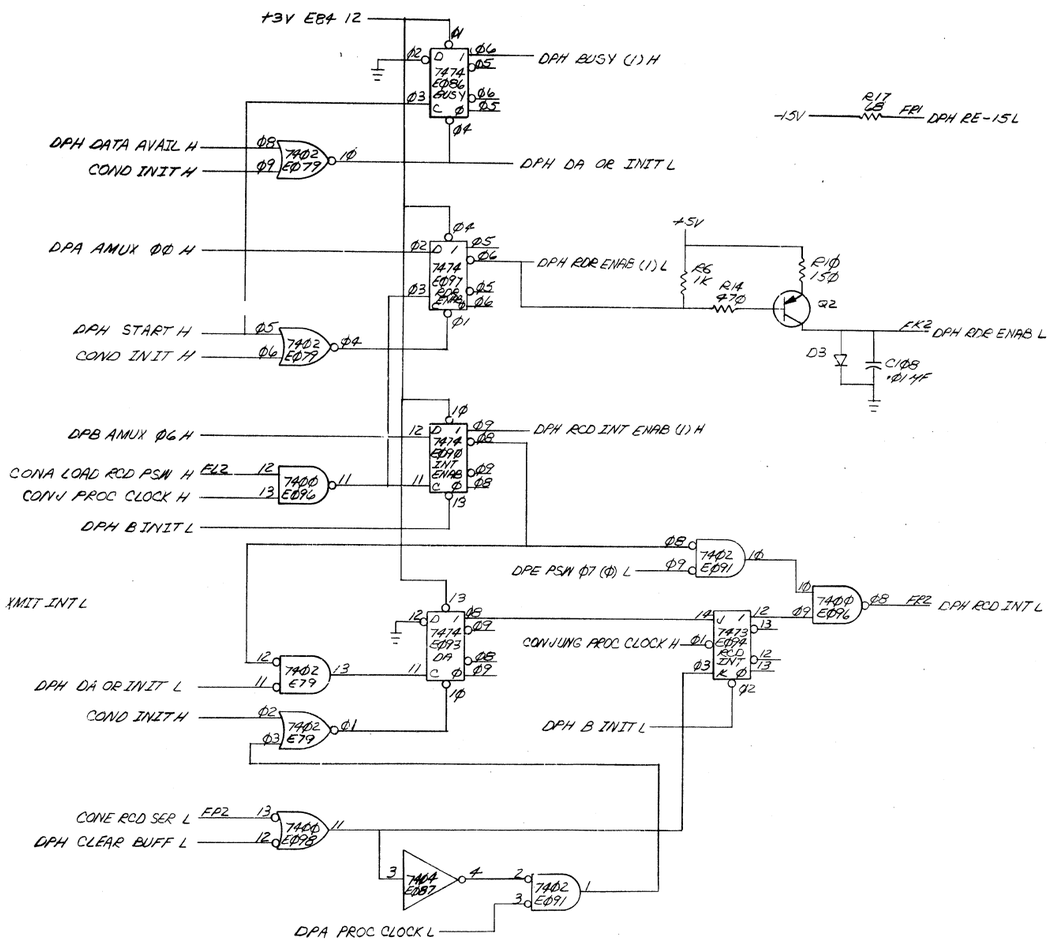
BRUNING 40.522 15840
DEC FORM NO DRD 102-B



BERG PIN	SIGNAL NAME	BACKPLANE PIN
DD	CONSOLE DEP L	CM1 FD2
FF	CONSOLE START L	CM2 FE2
JJ	CONSOLE STOP L	CS1 FH1
LL	CONSOLE CONT L	CS2 FH2
NN	CONSOLE EXAM L	CT2 FF2
RR	CONSOLE LOAD L	CU2 FD1
TT	CONS RUN LAMP L	CU1 (ET2)

PACE CONE

↑ console cont



SCL CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, X = .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. TM Reiss DATE 11/20/72
CHK'D. DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE

NEXT HIGHER ASSY. B-DC-KE11-B
SCALE —
SHEET 12 OF 12

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPH1)

SIZE D | CODE CS | NUMBER MT26Ø-Ø-1 | REV. N | DIST

REV	REVISIONS	CHK
N	CHANGE NO.	

BRUNING 40-522 15840
DEC FORM NO DRD 102-B

THIS FACE SHEET CONTAINS THE FOLLOWING CHIP PART NUMBERS

PART NUMBER
23-A01A1
23-A02A1
23-A03A1
23-A04A1
23-A05A1
23-A06A1
23-A08A1
23-A10A1
23-A11A1
23-A12A1
23-A03A2

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KD11-B		PARTS LIST		

DRN. C. Teschner	DATE 5-8-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D. M T	DATE	TITLE: DATA PATH ROM PATTERNS	
ENG.	DATE		
PROJ. ENG.	DATE		
PROD.	DATE		
NEXT HIGHER ASSEMBLY: B-DD-KD11-B		SIZE K / CODE RL / NUMBER M726Ø-Ø-8	REV.
SCALE			
SHEET 1 OF 15		DIST.	

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. DRB 109

```
                        /( *Y8 (PIN #9) DPA ALEG 02 L
                        */( *Y7 (PIN #7) DPA ALEG 03 L
                        **/( *Y6 (PIN #6) DPA ALEG 00 L
                        ***/( *Y5 (PIN #5) DPA ALEG 01 L
                        ****/( *Y4 (PIN #4) DPB ALEG 05 L
                        *****/( *Y3 (PIN #3) DBP ALEG 04 L
                        ******/( *Y2 (PIN #2) DPB ALEG 06 L
                        *******/( *Y1 (PIN #1) DPB ALEG 07 L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
    000       0 00000   11111111        377
    001       1 00001   01001110        116     K=207 SWR ADDRESS I.E, 177570=000207,BAR
    002       2 00010   01110011        163     K=64 RECVR, VECTOR
    003       3 00011   00001111        017     K=360 CONDITION CODE MASK (CCM=1)
    004       4 00100   10111011        273     K=30 EMT VECTOR
    005       5 00101   00111111        077     K=14 T BIT VECTOR
    006       6 00110   11111111        377
    007       7 00111   11111111        377
    010       8 01000   11111011        373     K=20 IOT VECTOR
    011       9 01001   00111011        073     K=34 TRAP VECTOR
    012      10 01010   11111111        377
    013      11 01011   11111111        377
    014      12 01100   10111111        277     K=10 RESERVED (ILLEGAL) INSTRUCTION VECTOR
    015      13 01101   01111111        177     K=4 BUS ERROR OR STACK OVERFLOW ERROR
    016      14 01110   11111111        377
    017      15 01111   11111111        377
    020      16 10000   01111011        173     K=24 PWR FAIL VECTOR
    021      17 10001   11111111        377
    022      18 10010   11111101        375     K=100 LCLK INT VECTOR
    023      19 10011   11111111        377
    024      20 10100   11111111        377
    025      21 10101   11111111        377
    026      22 10110   11111111        377
    027      23 10111   11111111        377
    030      24 11000   11111111        377
    031      25 11001   11111111        377
    032      26 11010   11111111        377
    033      27 11011   11111111        377
    034      28 11100   11111111        377
    035      29 11101   11110011        363     K=80 TRANSMIT VECTOR
    036      30 11110   11111111        377
    037      31 11111   11111111        377
                *****
                ****/( A(PIN #10) IS  CONG SP WRITE H
                ***/( B(PIN #11) IS  CONG ROM SPA 00 H
                **/( C(PIN #12) IS  CONG ROM SPA 01 H
                */( D(PIN #13) IS  CONG ROM SPA 02 H
                /( E(PIN #14) IS  CONG ROM SPA 03 H
```



```
                        /( *Y8 (PIN #9) DPF DISAB V BIT ROM H
                        */( *Y7 (PIN #7) CONF ALU S3 L
                        **/( *Y6 (PIN #6) CONF ALU S2 L
                        ***/( *Y5 (PIN #5) CONF ALU S1 L
                        ****/( *Y4 (PIN #4) CONF ALU S0 L
                        *****/( *Y3 (PIN #3) CONF ALU MODE H
                        ******/( *Y2 (PIN #2) CONF CIN H
                        *******/( *Y1 (PIN #1) DPF C CLK L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
    000       0 00000   11111111        377
    001       1 00001   10000101        205     MOV F=A
    002       2 00010   01001010        112     CMP F=A MINUS B MINUS 1
    003       3 00011   10001101        215     BIT F=AB
    004       4 00100   10111101        275     BIC F=A,BARB
    005       5 00101   10100101        245     BIS F=A+B
    006       6 00110   00110000        060     ADD F=A PLUS B
    007       7 00111   11111111        377     RI (RESERVED INSTRUCTION)
    010       8 01000   11111111        377     RI
    011       9 01001   10000101        205     MOV(B)
    012      10 01010   01001010        112     CMP(B)
    013      11 01011   10001101        215     BIT(B)
    014      12 01100   10111101        275     BIC(B)
    015      13 01101   10100101        245     BIS(B)
    016      14 01110   00110010        062     SUB F=A PLUS B
    017      15 01111   11111111        377     RI
    020      16 10000   00000000        000     NOT ACCESSED
    021      17 10001   00000000        000     MOV - NOT ACCESSED
    022      18 10010   00000000        000     CMP - NOT ACCESSED
    023      19 10011   00000000        000     BIT - NOT ACCESSED
    024      20 10100   00000000        000     BIC - NOT ACCESSED
    025      21 10101   00000000        000     BIS - NOT ACCESSED
    026      22 10110   00000000        000     ADD - NOT ACCESSED
    027      23 10111   00000000        000     RI - NOT ACCESSED
    030      24 11000   00000000        000     RI - NOT ACCESSED
    031      25 11001   00000000        000     MOV(B) - NOT ACCESSED
    032      26 11010   00000000        000     CMP(B) - NOT ACCESSED
    033      27 11011   00000000        000     BIT(B) - NOT ACCESSED
    034      28 11100   00000000        000     BIC(B) - NOT ACCESSED
    035      29 11101   00000000        000     BIS(B) - NOT ACCESSED
    036      30 11110   00000000        000     SUB - NOT ACCESSED
    037      31 11111   00000000        000     RI - NOT ACCESSED
                *****
                ****/( A(PIN #10) IS  DPF IR 12 (1)H
                ***/( B(PIN #11) IS  DPF IR 13 (1)H
                **/( C(PIN #12) IS  DPF IR 14 (1)H
                */( D(PIN #13) IS  DPF IR 15 (1)H
                /( E(PIN #14) IS  DPA RUN GND L
```

```
                        /( =Y8 (PIN #9) DPF COP L
                        */( =Y7 (PIN #7) DPF C CLK L
                        **/( =Y6 (PIN #6) CONF CIN H
                        ***/( =Y5 (PIN #5) CONF ALU MODE H
                        ****/( =Y4 (PIN #4) CONF ALU S0 L
                        *****/( =Y3 (PIN #3) CONF ALU S1 L
                        ******/( =Y2 (PIN #2) CONF ALU S2 L
                        *******/( =Y1 (PIN #1) CONF ALU S3 L
                        ********          OCTAL
 OCTAL DECIMAL                            DATA
ADDRESS ADDRESS  EDCBA  ********
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  10011100          234     CLR ALUF=ZERO
   003      3    00011  10101001          251     NEG CIN ALUF=A MINUS B MINUS 1
   004      4    00100  10111111          277     ROR
   005      5    00101  11111111          377
   006      6    00110  11111111          377
   007      7    00111  11111111          377
   010      8    01000  11111111          377
   011      9    01001  11111111          377
   012     10    01010  11100000          340     INC CIN ALUF=A ARITH
   013     11    01011  00101111          057     SBC CIN ALUF=A MINUS 1
   014     12    01100  10110111          267     ASR
   015     13    01101  11111111          377
   016     14    01110  11111111          377
   017     15    01111  11111111          377
   020     16    10000  11111111          377
   021     17    10001  11111111          377
   022     18    10010  10010101          225     COM ALUF=NOT B
   023     19    10011  00000000          000     ADC CIN ALUF=A ARITH
   024     20    10100  10111011          273     ROL
   025     21    10101  11111111          377
   026     22    10110  11111111          377
   027     23    10111  11111111          377
   030     24    11000  10011010          232     SWAB NOT B CLOCK LOW
   031     25    11001  11111111          377
   032     26    11010  11001111          317     DEC CIN ALUF=A MINUS 1
   033     27    11011  10010000          220     TST ALUF=AL
   034     28    11100  10110011          263     ASL
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        *****
                        ****/( A(PIN #10) IS  DPF IR 08 (1)H
                        ***/( B(PIN #11) IS  DPR IR 09 (1)H
                        **/( C(PIN #12) IS  DPF IR 10 (1)H
                        */( D(PIN #13) IS  DPF IR 07 (1)H
                        /( E(PIN #14) IS  DPF IR 06 (1)H
```



```
                        /( =Y8 (PIN #9) DPG WAIT L
                        */( =Y7 (PIN #7) CONF MPC 07 L
                        **/( =Y6 (PIN #6) CONF MPC 06 L
                        ***/( =Y5 (PIN #5) CONF MPC 05 L
                        ****/( =Y4 (PIN #4) CONF MPC 04 L
                        *****/( =Y3 (PIN #3) CONF MPC 03 L
                        ******/( =Y2 (PIN #2) CONF MPC 02 L
                        *******/( =Y1 (PIN #1) CONF MPC 01 L
                        ********          OCTAL
 OCTAL DECIMAL                            DATA
ADDRESS ADDRESS  EDCBA  ********
   000      0    00000  11001011          313     CC OPR
   001      1    00001  11001011          313     CC OPR
   002      2    00010  11001011          313     CC OPR
   003      3    00011  11001011          313     CC OPR
   004      4    00100  11001011          313     CC OPR
   005      5    00101  11001011          313     CC OPR
   006      6    00110  11001011          313     CC OPR
   007      7    00111  11001011          313     CC OPR
   010      8    01000  11111111          377     RI (RESERVED INSTRUCTION)
   011      9    01001  11111111          377     NOT ACCESSED FOR NOT IR DECODE
   012     10    01010  11111111          377     RI
   013     11    01011  11111111          377     RI
   014     12    01100  11111111          377     RI
   015     13    01101  11111111          377     RI
   016     14    01110  11111111          377     RI
   017     15    01111  11111111          377     RI
   020     16    10000  11101111          357     HALT,BUT IR DEC
   021     17    10001  01100110          146     WAIT,BUT IR DEC
   022     18    10010  10100010          242     IOT
   023     19    10011  10001000          210     RESET
   024     20    10100  10110100          264     RTI
   025     21    10101  11101101          355     BREAKPOINT TRAP DECODE
   026     22    10110  11111111          377     RI
   027     23    10111  11111111          377     RI
   030     24    11000  11111111          377     RI
   031     25    11001  01111111          177     WAIT,BUT IR DEC,BAR
   032     26    11010  11111111          377     RI
   033     27    11011  11111111          377     RI
   034     28    11100  11111111          377     RI
   035     29    11101  11111111          377     RI
   036     30    11110  11111111          377     RI
   037     31    11111  11111111          377     RI
                        *****
                        ****/( A(PIN #10) IS  DPF IR 00 (1)H
                        ***/( B(PIN #11) IS  DPF IR 02 (1)H
                        **/( C(PIN #12) IS  DPF IR 01 (1)H
                        */( D(PIN #13) IS  CONE BUT IR DECODE L
                        /( E(PIN #14) IS  DPG CC L
```

```
                        /( *Y8 (PIN #9) DPF CODE Ø L
                        */( *Y7 (PIN #7) DPG MOVE L
                        **/( *Y6 (PIN #6) DPG DIS ALU S BITS H
                        ***/( *Y5 (PIN #5) DPG CMP OR BIT L
                        ****/( *Y4 (PIN #4) DPG BYTE L
                        *****/( *Y3 (PIN #3) DPG CAL SOURCE L
                        ******/( *Y2 (PIN #2) CONF ALU S0 L
                        *******/( *Y1 (PIN #1) CONF ALU S2 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000   11011111        337     BR/CC (BRANCH OR CC OPERATOR)
   001      1     00001   11011111        337     BR/CC
   002      2     00010   11011011        333     BIC
   003      3     00011   11010011        323     BIC(B)
   004      4     00100   11001011        313     CMP
   005      5     00101   11000011        303     CMP(B)
   006      6     00110   01011011        133     ADD
   007      7     00111   01111000        170     SUB DIS ALU BITS H
   010      8     01000   10011011        233     MOV
   011      9     01001   10010011        223     MOV(B)
   012     10     01010   11011011        333     BIS
   013     11     01011   11010011        323     BIS(B)
   014     12     01100   11001011        313     BIT
   015     13     01101   11000011        303     BIT(B)
   016     14     01110   11011111        337     RI TRAP
   017     15     01111   11011111        337     RI TRAP
   020     16     10000   11011111        337     BR/CC
   021     17     10001   11011111        337     BR/CC
   022     18     10010   11011011        333     BIC
   023     19     10011   11010011        323     BIC(B)
   024     20     10100   11001011        313     CMP
   025     21     10101   11000011        303     CMP(B)
   026     22     10110   01011011        133     ADD
   027     23     10111   01011011        133     ADD
   030     24     11000   10011011        233     MOV
   031     25     11001   10010011        223     MOV(B)
   032     26     11010   11011011        333     BIS
   033     27     11011   11010011        323     BIS(B)
   034     28     11100   11001011        313     BIT
   035     29     11101   11000011        303     BIT(B)
   036     30     11110   11011111        337     RI TRAP
   037     31     11111   11011111        337     RI TRAP
                  *****
                  ****/( A(PIN #10) IS  DPF IR 15 (1)H
                  ***/( B(PIN #11) IS  DPF IR 14 (1)H
                  **/( C(PIN #12) IS  DPF IR 13 (1)H
                  */( D(PIN #13) IS  DPF IR 12 (1)H
                  /( E(PIN #14) IS  CONF BUT DESTINATION L
```



```
                        /( *Y8 (PIN #9) DPF DISAB V BIT ROM H
                        */( *Y7 (PIN #7) DPF CODE 1 L
                        **/( *Y6 (PIN #6) CONG ROM ALEG Ø L
                        ***/( *Y5 (PIN #5) CONG B MODE ØØ H
                        ****/( *Y4 (PIN #4) DPF CODE Ø L
                        *****/( *Y3 (PIN #3) DPF SET CARRY L
                        ******/( *Y2 (PIN #2) DPF ROTATE L
                        *******/( *Y1 (PIN #1) DPG BYTE L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000   11111111        377
   001      1     00001   11111111        377
   002      2     00010   11111111        377
   003      3     00011   10110110        266     SWAB DISAB V BIT ROM
   004      4     00100   11110101        365     ROR
   005      5     00101   11110101        365     ASR
   006      6     00110   11100101        345     ROL
   007      7     00111   11100101        345     ASL
   010      8     01000   10110111        267     CLR
   011      9     01001   00110111        067     INC
   012     10     01010   11110011        363     COM
   013     11     01011   00111111        077     DEC
   014     12     01100   00000001        001     BCC
   015     13     01101   11111111        377
   016     14     01110   11111111        377
   017     15     01111   11111111        377
   020     16     10000   00000001        001     BMI
   021     17     10001   11111111        377
   022     18     10010   11111111        377
   023     19     10011   11111111        377
   024     20     10100   00000001        001     BVS
   025     21     10101   11111111        377
   026     22     10110   11111111        377
   027     23     10111   11111111        377
   030     24     11000   01011111        137     NEG
   031     25     11001   00111111        077     SBC
   032     26     11010   00110111        067     ADC
   033     27     11011   11110111        367     TST
   034     28     11100   11111111        377
   035     29     11101   11111111        377
   036     30     11110   11111111        377
   037     31     11111   11111111        377
                  *****
                  ****/( A(PIN #10) IS  DPF IR Ø7 (1)H
                  ***/( B(PIN #11) IS  DPF IR Ø6 (1)H
                  **/( C(PIN #12) IS  DPF IR 10 (1)H
                  */( D(PIN #13) IS  DPF IR Ø9 (1)H
                  /( E(PIN #14) IS  DPF IR Ø8 (1)H
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                        /( *Y8 (PIN #9) DPG ODD BYTE *  0L
                        +/( *Y7 (PIN #7) DPG 54 L
                        ++/( *Y6 (PIN #6) DPG BYTE L
                        +++/( *Y5 (PIN #5) DPG EMT L
                        ++++/( *Y4 (PIN #4) DPG TRAP L
                        +++++/( *Y3 (PIN #3) DPG CAL BRANCH L
                        ++++++/( *Y2 (PIN #2) DPG JSR L
                        +++++++/( *Y1 (PIN #1) DPG CAL DEST L
  OCTAL  DECIMAL        ++++++++        OCTAL
 ADDRESS ADDRESS EDCBA  ++++++++        DATA
    000      0   00000  01111111        177
    001      1   00001  11111011        373     BPL
    002      2   00010  11111011        373     BGE
    003      3   00011  11111011        373     BVC
    004      4   00100  11111011        373     BNE
    005      5   00101  11111011        373     BHI
    006      6   00110  11111011        373     BGT
    007      7   00111  11111011        373     BCC
    010      8   01000  11111011        373     BR
    011      9   01001  11111011        373     BMI
    012     10   01010  11111011        373     BLT
    013     11   01011  11111011        373     BVS
    014     12   01100  11111011        373     BEQ
    015     13   01101  11111011        373     BLOS
    016     14   01110  11111011        373     BLE
    017     15   01111  11111011        373     BCS
    020     16   10000  11111100        374     JSR
    021     17   10001  11101111        357     EMT
    022     18   10010  11111110        376     SOP (CC) ROR/ROL/ASR/ASL
    023     19   10011  11011110        336     OPR (DST) ROR(B)/ROL(B)/ASR(B)/ASL(B)
    024     20   10100  11111110        376     SOP (CC) CLR/COM/INC/DEC
    025     21   10101  11011110        336     OPR(DST) CLR(B)/COM(B)/INC(B)/DEC(B)
    026     22   10110  11111111        377     RI RESERVED INST
    027     23   10111  11111111        377     RI RESERVED INST
    030     24   11000  11111100        374     JSR
    031     25   11001  11110111        367     TRAP
    032     26   11010  11111111        377     RI RESERVED INST
    033     27   11011  11111111        377     RI RESERVED INST
    034     28   11100  10111110        276     SOP NEG/ADC/SBC/TST
    035     29   11101  10011110        236     OPR(DST) NEG(B)/ADC(B)/SBC(B)/TST(B)
    036     30   11110  11111111        377     RI RESERVED INST
    037     31   11111  11111111        377     RI RESERVED INST
                        *****
                        ++++/( A(PIN #10) IS  DPF IR 15 (1)H
                        +++/( B(PIN #11) IS  DPF IR 10 (1)H
                        ++/( C(PIN #12) IS  DPF IR 09 (1)H
                        +/( D(PIN #13) IS  DPF IR 08 (1)H
                        /( E(PIN #14) IS  DPF IR 11 (1)H
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```
                        /( *Y8 (PIN #9) CONF MPC 00 L
                        +/( *Y7 (PIN #7) CONF MPC 01 L
                        ++/( *Y6 (PIN #6) CONF MPC 02 L
                        +++/( *Y5 (PIN #5) CONF MPC 03 L
                        ++++/( *Y4 (PIN #4) CONF MPC 04 L
                        +++++/( *Y3 (PIN #3) CONF MPC 05 L
                        ++++++/( *Y2 (PIN #2) CONG CKOFF L
                        +++++++/( *Y1 (PIN #1) CONF MPC 07 L
  OCTAL  DECIMAL        ++++++++        OCTAL
 ADDRESS ADDRESS EDCBA  ++++++++        DATA
    000      0   00000  11111111        377
    001      1   00001  11111111        377
    002      2   00010  11111111        377
    003      3   00011  11111111        377
    004      4   00100  11111111        377
    005      5   00101  11111111        377
    006      6   00110  11111111        377
    007      7   00111  11111111        377
    010      8   01000  11011111        337     JMP BADR TO J=1 @204
    011      9   01001  11111111        377
    012     10   01010  11011111        337     JMP BADR TO J=1 @204
    013     11   01011  11111111        377
    014     12   01100  10101111        257     JSR BADR TO J2=1 @ 212
    015     13   01101  11111111        377
    016     14   01110  11111111        377     NOT JMP OR JSR FALL THRU TO D1=2 @ 200
    017     15   01111  11111111        377
    020     16   10000  11111111        377
    021     17   10001  11111111        377
    022     18   10010  11111111        377
    023     19   10011  11111111        377
    024     20   10100  11111111        377
    025     21   10101  11111111        377
    026     22   10110  11010111        327     SWAB BADR 024 INOR NEXT
    027     23   10111  11111111        377
    030     24   11000  01101111        157     JMP BADR 011 INOR NEXT
    031     25   11001  11111111        377
    032     26   11010  01101111        157     JMP BADR 011 INOR NEXT
    033     27   11011  11111111        377
    034     28   11100  01101111        157     JSR BADR 011 INOR NEXT
    035     29   11101  11111111        377
    036     30   11110  11101110        356     SOP BADR 210 INOR NXT
    037     31   11111  11110101        365     UNARY AND NOT JMP,JSR,SWAB
                        *****
                        ++++/( A(PIN #10) IS  DPG CAL DEST L
                        +++/( B(PIN #11) IS  DPG JMP L OR JSR L
                        ++/( C(PIN #12) IS  DPG JMP L
                        +/( D(PIN #13) IS  DPG SWAB L
                        /( E(PIN #14) IS  CONG JMP OR JSR L
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                        /( *Y8 (PIN #9) DPG CC OR OPERATE L
                        */( *Y7 (PIN #7) DPG RTS L
                        **/( *Y6 (PIN #6) DPG CAL DEST L
                        ***/( *Y5 (PIN #5)
                        ****/( *Y4 (PIN #4) DPG CC L
                        *****/( *Y3 (PIN #3) DPG JMP L OR JSR L
                        ******/( *Y2 (PIN #2) DPG SWAB L
                        *******/( *Y1 (PIN #1) DPG JMP L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
    000       0   00000   01111111        177       OPR(HALT/WAIT/RTI/BK/IOT/TR)
    001       1   00001   11111111        377       RI
    002       2   00010   11111111        377       RI
    003       3   00011   11111111        377       RI
    004       4   00100   11111111        377       RI
    005       5   00101   11111111        377       RI
    006       6   00110   11111111        377       RI
    007       7   00111   11111111        377       RI
    010       8   01000   11011010        332       JMP MODE 0
    011       9   01001   11011010        332       JMP MODE 4
    012      10   01010   11011010        332       JMP MODE 2
    013      11   01011   11011010        332       JMP MODE 6
    014      12   01100   11011010        332       JMP MODE 1
    015      13   01101   11011010        332       JMP MODE 5
    016      14   01110   11011010        332       JMP MODE 3
    017      15   01111   11011010        332       JMP MODE 7
    020      16   10000   10111111        277       RTS NOT DPG CC OR OPR L
    021      17   10001   01110111        167       CC OPR 240
    022      18   10010   11111111        377       RI
    023      19   10011   01110111        167       CC OPR 260
    024      20   10100   11111111        377       RI
    025      21   10101   01110111        167       CC OPR 240
    026      22   10110   11111111        377       RI
    027      23   10111   01110111        167       CC OPR 260
    030      24   11000   11011101        335       SWAB MODE 0
    031      25   11001   11011101        335       SWAB MODE 4
    032      26   11010   11011101        335       SWAB MODE 2
    033      27   11011   11011101        335       SWAB MODE 6
    034      28   11100   11011101        335       SWAB MODE 1
    035      29   11101   11011101        335       SWAB MODE 5
    036      30   11110   11011101        335       SWAB MODE 3
    037      31   11111   11011101        335       SWAB MODE 7
                        *****
                        ****/( A(PIN #10) IS  DPF IR 05 (1)H
                        ***/( B(PIN #11) IS  DPF IR 04 (1)H
                        **/( C(PIN #12) IS  DPF IR 03 (1)H
                        */( D(PIN #13) IS  DPF IR 06 (1)H
                        /( E(PIN #14) IS  DPF IR 07 (1)H
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```
                        /( *Y8 (PIN #9)
                        */( *Y7 (PIN #7) DPF SET V L
                        **/( *Y6 (PIN #6) DPF SET COUT L
                        ***/( *Y5 (PIN #5)
                        ****/( *Y4 (PIN #4)
                        *****/( *Y3 (PIN #3)
                        ******/( *Y2 (PIN #2)
                        *******/( *Y1 (PIN #1)
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
    000       0   00000   11011111        337       INC OR ADC
    001       1   00001   10011111        237       ADD OR SUB
    002       2   00010   10111111        277       DEC OR SBC
    003       3   00011   11111111        377       CMP OR NEG
    004       4   00100   11111111        377       INC OR ADC
    005       5   00101   11011111        337       ADD OR SUB
    006       6   00110   11111111        377       DEC OR SBC
    007       7   00111   11011111        337       CMP OR NEG
    010       8   01000   11111111        377       INC OR ADC
    011       9   01001   11011111        337       ADD OR SUB
    012      10   01010   11111111        377       DEC OR SBC
    013      11   01011   11011111        337       CMP OR NEG
    014      12   01100   10111111        277       INC OR ADC
    015      13   01101   11111111        377       ADD OR SUB
    016      14   01110   11011111        337       DEC OR SBC
    017      15   01111   10011111        237       CMP OR NEG
    020      16   10000   11011111        337       INC OR ADC
    021      17   10001   11011111        337       ADD OR SUB
    022      18   10010   10111111        277       DEC OR SBC
    023      19   10011   10111111        277       CMP OR NEG
    024      20   10100   11111111        377       INC OR ADC
    025      21   10101   11111111        377       ADD OR SUB
    026      22   10110   11111111        377       DEC OR SBC
    027      23   10111   11111111        377       CMP OR NEG
    030      24   11000   11111111        377       INC OR ADC
    031      25   11001   11111111        377       ADD OR SUB
    032      26   11010   11111111        377       DEC OR SBC
    033      27   11011   11111111        377       CMP OR NEG
    034      28   11100   10111111        277       INC OR ADC
    035      29   11101   10111111        277       ADD OR SUB
    036      30   11110   11011111        337       DEC OR SBC
    037      31   11111   11011111        337       CMP OR NEG
                        *****
                        ****/( A(PIN #10) IS  DPF CODE 1 DEL (1)L
                        ***/( B(PIN #11) IS  DPF CODE 0 DEL (1)L
                        **/( C(PIN #12) IS  DPE NEG DEL (1)H
                        */( D(PIN #13) IS  DPD ALEG 15 DEL (1)L
                        /( E(PIN #14) IS  DPD BLEG 15 DEL (1)L
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```
                                    /( #Y4 (PIN # 9) CONF MPC 03 L
                                    +/( #Y3 (PIN #10) CONF MPC 02 L
                                    ++/( #Y2 (PIN #11) CONF MPC 01 L
                                    +++/( #Y1 (PIN #12) CONF MPC 04 L
  OCTAL  DECIMAL                    ++++      OCTAL
ADDRESS ADDRESS   HGFEDCBA          ++++      DATA
    000       0   00000000          1111      017
    001       1   00000001          1111      017
    002       2   00000010          1111      017
    003       3   00000011          1111      017
    004       4   00000100          1111      017
    005       5   00000101          1111      017
    006       6   00000110          1111      017
    007       7   00000111          1111      017
    010       8   00001000          1111      017
    011       9   00001001          1111      017
    012      10   00001010          1111      017
    013      11   00001011          1111      017
    014      12   00001100          1111      017
    015      13   00001101          1111      017      NOT ACCESSED
    016      14   00001110          1111      017      ************
    017      15   00001111          1111      017
    020      16   00010000          0011      003
    021      17   00010001          0011      003
    022      18   00010010          0011      003
    023      19   00010011          0011      003
    024      20   00010100          0101      005
    025      21   00010101          0101      005
    026      22   00010110          0101      005
    027      23   00010111          0101      005
    030      24   00011000          0101      005
    031      25   00011001          0101      005
    032      26   00011010          0101      005
    033      27   00011011          0101      005
    034      28   00011100          0011      003
    035      29   00011101          0011      003      BGE
    036      30   00011110          0011      003
    037      31   00011111          0011      003      ************

    040      32   00100000          0011      003
    041      33   00100001          0101      005
    042      34   00100010          0011      003
    043      35   00100011          0101      005
    044      36   00100100          0011      003
    045      37   00100101          0101      005
    046      38   00100110          0011      003
    047      39   00100111          0101      005
    050      40   00101000          0011      003
    051      41   00101001          0101      005
    052      42   00101010          0011      003
    053      43   00101011          0101      005
    054      44   00101100          0011      003
    055      45   00101101          0101      005      BNE
    056      46   00101110          0011      003
    057      47   00101111          0101      005      ************
    060      48   00110000          0011      003
    061      49   00110001          0101      005
    062      50   00110010          0011      003
    063      51   00110011          0101      005
    064      52   00110100          0101      005
    065      53   00110101          0101      005
    066      54   00110110          0101      005
    067      55   00110111          0101      005
    070      56   00111000          0101      005
    071      57   00111001          0101      005
    072      58   00111010          0101      005
    073      59   00111011          0101      005
    074      60   00111100          0011      003
    075      61   00111101          0101      005      BGT
    076      62   00111110          0011      003
    077      63   00111111          0101      005      ************
                  ++++++++
                  +++++++/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ++++++/( B(PIN #06) IS  DPE CC COUT (1)H
                  +++++/( C(PIN #07) IS  DPE CC NEG (1)H
                  ++++/( D(PIN #04) IS  DPE CC VBIT (1)H
                  +++/( E(PIN #03) IS  DPF IR 10 (1)H
                  ++/( F(PIN #02) IS  DPF IR 09 (1)H
                  +/( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
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```
                                /( =Y4 (PIN # 9) CONF MPC 03 L
                                +/( =Y3 (PIN #10) CONF MPC 02 L
                                ++/( =Y2 (PIN #11) CONF MPC 01 L
                                +++/( =Y1 (PIN #12) CONF MPC 04 L
  OCTAL DECIMAL                 ++++          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ++++          DATA
    100      64   01000000      0011          003
    101      65   01000001      0011          003
    102      66   01000010      0011          003
    103      67   01000011      0011          003
    104      68   01000100      0011          003
    105      69   01000101      0011          003
    106      70   01000110      0011          003
    107      71   01000111      0011          003
    110      72   01001000      0011          003
    111      73   01001001      0011          003
    112      74   01001010      0011          003
    113      75   01001011      0011          003
    114      76   01001100      0011          003
    115      77   01001101      0011          003       BR (ALWAYS)
    116      78   01001110      0011          003
    117      79   01001111      0011          003       ***********
    120      80   01010000      0101          005
    121      81   01010001      0101          005
    122      82   01010010      0101          005
    123      83   01010011      0101          005
    124      84   01010100      0011          003
    125      85   01010101      0011          003
    126      86   01010110      0011          003
    127      87   01010111      0011          003
    130      88   01011000      0011          003
    131      89   01011001      0011          003
    132      90   01011010      0011          003
    133      91   01011011      0011          003
    134      92   01011100      0101          005
    135      93   01011101      0101          005       BLT
    136      94   01011110      0101          005
    137      95   01011111      0101          005       ***********

    140      96   01100000      0101          005
    141      97   01100001      0011          003
    142      98   01100010      0101          005
    143      99   01100011      0011          003
    144     100   01100100      0101          005
    145     101   01100101      0011          003
    146     102   01100110      0101          005
    147     103   01100111      0011          003
    150     104   01101000      0101          005
    151     105   01101001      0011          003
    152     106   01101010      0101          005
    153     107   01101011      0011          003
    154     108   01101100      0101          005
    155     109   01101101      0011          003       BEQ
    156     110   01101110      0101          005
    157     111   01101111      0011          003       ***********
    160     112   01110000      0101          005
    161     113   01110001      0011          003
    162     114   01110010      0101          005
    163     115   01110011      0011          003
    164     116   01110100      0011          003
    165     117   01110101      0011          003
    166     118   01110110      0011          003
    167     119   01110111      0011          003
    170     120   01111000      0011          003
    171     121   01111001      0011          003
    172     122   01111010      0011          003
    173     123   01111011      0011          003
    174     124   01111100      0101          005
    175     125   01111101      0011          003       BLE
    176     126   01111110      0101          005
    177     127   01111111      0011          003       ***********
                  ++++++++
                  +++++++/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ++++++/( B(PIN #06) IS  DPE CC COUT (1)H
                  +++++/( C(PIN #07) IS  DPE CC NEG (1)H
                  ++++/( D(PIN #04) IS  DPE CC VBIT (1)H
                  +++/( E(PIN #03) IS  DPF IR 10 (1)H
                  ++/( F(PIN #02) IS  DPF IR 09 (1)H
                  +/( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                /( *Y4 (PIN # 9) CONF MPC 03 L
                                +/( *Y3 (PIN #10) CONF MPC 02 L
                                ++/( *Y2 (PIN #11) CONF MPC 01 L
                                +++/( *Y1 (PIN #12) CONF MPC 04 L
  OCTAL DECIMAL                 ++++          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ++++          DATA
    200     128   10000000      0011          003
    201     129   10000001      0011          003
    202     130   10000010      0011          003
    203     131   10000011      0011          003
    204     132   10000100      0101          005
    205     133   10000101      0101          005
    206     134   10000110      0101          005
    207     135   10000111      0101          005
    210     136   10001000      0011          003
    211     137   10001001      0011          003
    212     138   10001010      0011          003
    213     139   10001011      0011          003
    214     140   10001100      0101          005
    215     141   10001101      0101          005       BPL
    216     142   10001110      0101          005
    217     143   10001111      0101          005       ************
    220     144   10010000      0011          003
    221     145   10010001      0011          003
    222     146   10010010      0011          003
    223     147   10010011      0011          003
    224     148   10010100      0011          003
    225     149   10010101      0011          003
    226     150   10010110      0011          003
    227     151   10010111      0011          003
    230     152   10011000      0101          005
    231     153   10011001      0101          005
    232     154   10011010      0101          005
    233     155   10011011      0101          005
    234     156   10011100      0101          005
    235     157   10011101      0101          005       BVC
    236     158   10011110      0101          005
    237     159   10011111      0101          005       ************
    240     160   10100000      0011          003
    241     161   10100001      0101          005
    242     162   10100010      0101          005
    243     163   10100011      0101          005
    244     164   10100100      0011          003
    245     165   10100101      0101          005
    246     166   10100110      0101          005
    247     167   10100111      0101          005
    250     168   10101000      0011          003
    251     169   10101001      0101          005
    252     170   10101010      0101          005
    253     171   10101011      0101          005
    254     172   10101100      0011          003
    255     173   10101101      0101          005       BHI
    256     174   10101110      0101          005
    257     175   10101111      0101          005       ************
    260     176   10110000      0011          003
    261     177   10110001      0011          003
    262     178   10110010      0101          005
    263     179   10110011      0101          005
    264     180   10110100      0011          003
    265     181   10110101      0011          003
    266     182   10110110      0101          005
    267     183   10110111      0101          005
    270     184   10111000      0011          003
    271     185   10111001      0011          003
    272     186   10111010      0101          005
    273     187   10111011      0101          005
    274     188   10111100      0011          003
    275     189   10111101      0011          003       BCC
    276     190   10111110      0101          005
    277     191   10111111      0101          005       ************
                  ++++++++
                  +++++++/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ++++++/( B(PIN #06) IS  DPE CC COUT (1)H
                  +++++/( C(PIN #07) IS  DPE CC NEG (1)H
                  ++++/( D(PIN #04) IS  DPE CC VBIT (1)H
                  +++/( E(PIN #03) IS  DPF IR 10 (1)H
                  ++/( F(PIN #02) IS  DPF IR 09 (1)H
                  +/( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
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```
                                    /( *Y4 (PIN # 9) CONF MPC 03 L
                                    +/( *Y3 (PIN #10) CONF MPC 02 L
                                    ++/( *Y2 (PIN #11) CONF MPC 01 L
                                    +++/( *Y1 (PIN #12) CONF MPC 04 L
  OCTAL  DECIMAL                    ++++              OCTAL
 ADDRESS ADDRESS    HGFEDCBA        ++++              DATA
    300     192     11000000        0101              005
    301     193     11000001        0101              005
    302     194     11000010        0101              005
    303     195     11000011        0101              005
    304     196     11000100        0011              003
    305     197     11000101        0011              003
    306     198     11000110        0011              003
    307     199     11000111        0011              003
    310     200     11001000        0101              005
    311     201     11001001        0101              005
    312     202     11001010        0101              005
    313     203     11001011        0101              005
    314     204     11001100        0011              003
    315     205     11001101        0011              003       BMI
    316     206     11001110        0011              003
    317     207     11001111        0011              003       ++++++++++++
    320     208     11010000        0101              005
    321     209     11010001        0101              005
    322     210     11010010        0101              005
    323     211     11010011        0101              005
    324     212     11010100        0101              005
    325     213     11010101        0101              005
    326     214     11010110        0101              005
    327     215     11010111        0101              005
    330     216     11011000        0011              003
    331     217     11011001        0011              003
    332     218     11011010        0011              003
    333     219     11011011        0011              003
    334     220     11011100        0011              003
    335     221     11011101        0011              003       BVS
    336     222     11011110        0011              003
    337     223     11011111        0011              003       ++++++++++++

    340     224     11100000        0101              005
    341     225     11100001        0011              003
    342     226     11100010        0011              003
    343     227     11100011        0011              003
    344     228     11100100        0101              005
    345     229     11100101        0011              003
    346     230     11100110        0011              003
    347     231     11100111        0011              003
    350     232     11101000        0101              005
    351     233     11101001        0011              003
    352     234     11101010        0011              003
    353     235     11101011        0011              003
    354     236     11101100        0101              005
    355     237     11101101        0011              003       BLOS
    356     238     11101110        0011              003
    357     239     11101111        0011              003       ++++++++++++
    360     240     11110000        0101              005
    361     241     11110001        0101              005
    362     242     11110010        0011              003
    363     243     11110011        0011              003
    364     244     11110100        0101              005
    365     245     11110101        0101              005
    366     246     11110110        0011              003
    367     247     11110111        0011              003
    370     248     11111000        0101              005
    371     249     11111001        0101              005
    372     250     11111010        0011              003
    373     251     11111011        0011              003
    374     252     11111100        0101              005
    375     253     11111101        0101              005       BCS
    376     254     11111110        0011              003
    377     255     11111111        0011              003       ++++++++++++
                    ++++++++
                    +++++++/( A(PIN #05) IS  DPE CC ZERO (1)H
                    ++++++/( B(PIN #06) IS  DPE CC COUT (1)H
                    +++++/( C(PIN #07) IS  DPE CC NEG (1)H
                    ++++/( D(PIN #04) IS  DPE CC VBIT (1)H
                    +++/( E(PIN #03) IS  DPF IR 10 (1)H
                    ++/( F(PIN #02) IS  DPF IR 09 (1)H
                    +/( G(PIN #01) IS  DPF IR 08 (1)H
                    /( H(PIN #15) IS  DPF IR 15 (1)H
```

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS													
1	H	J	K	L	M	N	P	R	S	T	U	V	W	
2	H	J	K	L	M	M	N	R	S	T	U	U	U	
3	H	H	H	H	H	H	H	R	R	R	R	R	R	
4	H	H	H	H	H	H	H	R	R	S	S	S	S	
5	H	H	J	J	J	J	J	R	R	R	R	S	S	
6	H	H	J	J	J	K	K	R	R	R	R	R	R	
7	H	H	J	J	J	J	J	R	R	S	S	S	S	
8	H	H	H	H	H	H	H	R	R	R	R	R	R	
9	H	H	J	J	J	J	J	R	R	R	R	R	R	
10	H	J	J	K	L	L	M	R	R	R	R	R	R	
11	H	H	J	K	K	K	K	R	R	R	S	T	T	
12	H	H	J	J	K	K	K	R	R	R	R	S	S	
13	H	H	J	J	K	K	K	R	S	S	S	S	S	
14	H	H	H	H	H	H	H	R	R	R	R	R	R	

ETCH REV	C	C	E*	E	E	E	E	F	F	F	F	F	**					
ECO NO.	5	6	7	8	9	10	11	12	13	15	16	17	**					
ECO NO.						KCO	BRB	BRB	KTK	KTK	REP	DLR	MAR	AC				

REMARKS

~~*ETCH REV D NOT TO BE USED PER ORDER D.E.~~

~~** ECO #14 APPLIED TO ETCH REV E AND E BOARDS ONLY~~

** ECO #14 & 18 APPLIED TO ETCH REV C AND E BOARDS ONLY. SEE SPECIAL PAGE REV. CONTROL SHEET APPLICABLE TO ETCH REV.

FIRST USED ON OPTION/MODEL

DRN.		DATE 8/16/72
CHK'D.	M T Tellier	DATE 8/21/72
ENG.		DATE
PROJ. ENG.		DATE
PROD.	M T Tellier	DATE 8/21/72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE CONTROL LOGIC AND MICROPROGRAM

NEXT HIGHER ASSY.

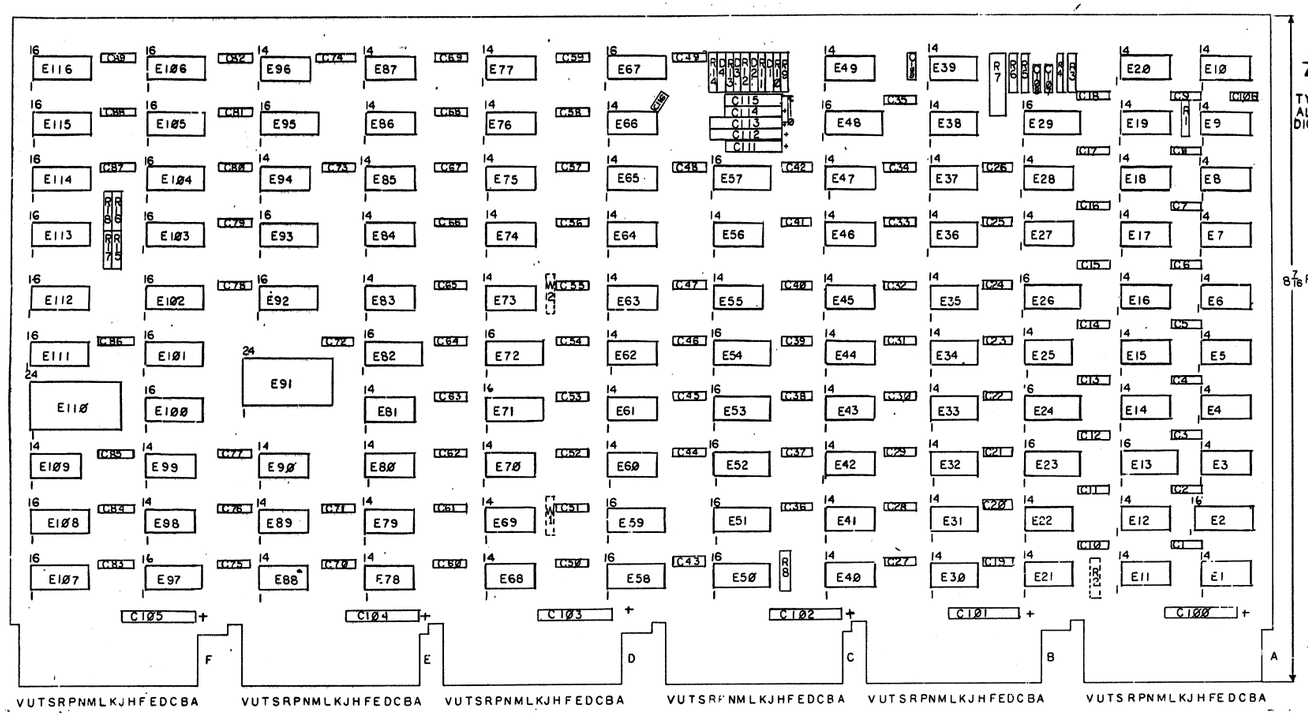
SCALE

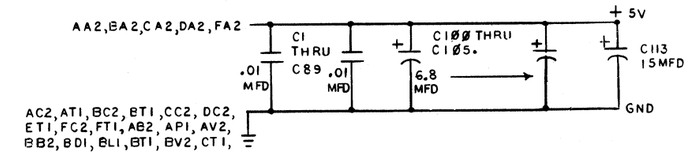
SHEET 1 OF 14

SIZE	CODE	NUMBER	REV.
B	CS	M7261-0-1	W

DIST.

NOTE: UNLESS OTHERWISE NOTED, RESISTANCE IS IN OHMS.
CAPACITANCE IS IN PICOFARADS.
* DEC 8640'S WERE PHASED IN AS 380 REPLACEMENTS.
ANY 380 FAILURES SHOULD BE REPLACED BY 8640'S.





QTY.	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
6	C100 THRU C105	CAPACITOR, 6.8 MFD, 35V, 10%, S.TA	1005306	69
89	C1 THRU C89	CAPACITOR, .01 MFD, 100V, 20% DISC	1001610	68
2	C114,115	CAPACITOR, .68 MFD, 35V, 10%, S.TA.	1009964	67
1	C113	CAPACITOR, 15MFD, 20V, 10%, S.TA	1004812	66
1	C112	CAPACITOR, 10MFD, 20V, 10%, S.TA.	1004813	65
1	C111	CAPACITOR, 2.2MFD, 20V, 10%, S.TA.	1002627	64
1	C110	CAPACITOR, 220 PF, 100V, 5%, DM	1000021	63
1	C109	CAPACITOR, 120 PF, 100V, 5%, DM.	1000018	62
2	C108, C106	CAPACITOR, 1000 PF 100V, 5%, DM	1000042	61
1	C107	CAPACITOR, 2200 PF, 250V, 20%, DISC	1000055	60
1	C104	CAPACITOR, 470 PF, 100V, D.M.	1000024	59
4	D1,2,3,4,	DIODE DG64	1100114	58
2	R6, R8	RESISTOR, 390, 1/4W, 5%.	1300309	57
1	R14	RESISTOR, 5.6K, 1/4W, 5%	1301874	56
1	R11	RESISTOR, 10K, 1/4 W, 5%.	1300479	55
1	R7	RESISTOR, 1K, 3/4 W, 10%, POT.	1309143-07	54
6	R4,5,9,10,12,13	RESISTOR, 30K, 1/4W, 5%	1302394	53
3	R3,16,18.	RESISTOR, 1K, 1/4W, 5%	1300365	52
6	E54,82,92,93,95,100.	RESISTOR NETWORK	1311003-02	51
1	R1	RESISTOR, 150, 1/4W, 5%	1300250	50
				49
2	R15,17	RESISTOR, 2K, 1/4W, 5%	1302388	48
				47
				46
1	E24	IC A01A2	23A01A2	45
1	E116	IC A19A2	23A19A2	44
1	E115	IC A13A2	23A13A2	43
1	E114	IC A11A2	23A11A2	42
1	E113	IC A18A2	23A18A2	41
1	E112	IC A10A2	23A10A2	40
1	E108	IC A14A1	23A14A1	39
1	E107	IC A09A2	23A09A2	38
1	E106	IC A17A2	23A17A2	37
1	E105	IC A16A2	23A16A2	36
1	E104	IC A05A2	23A05A2	35
1	E103	IC A20A2	23A20A2	34
1	E102	IC A04A2	23A04A2	33
1	E72	IC A09A1	23A09A1	32
1	E71	IC A07A1	23A07A1	31
1	E53	IC A02A2	23A02A2	30
2	E91,110.	IC DEC 74154	1909701	29
1	E89	IC DEC 7405	1909930	28
1	E61	IC DEC 7410	1905576	27
1	E60	IC DEC 7430	1905578	26
2	E58,59.	IC DEC 74153	1909937	25
3	E50,51,97.	IC DEC 74174	1910652	24
3	E49,78,109	IC DEC 74H01-1	1909849	23
2	E46,62.	IC DEC 7427	1910878	22
2	E45,69.	IC DEC 8815	1909713	21
1	E39	IC DEC 7413	1909989	20
2	E34,75.	IC DEC 7420	1905577	19
4	E29,48,57,67	IC DEC 9602	1910951	18
4	E25,63,83,90.	IC DEC 7404	1909686	17
7	E20,28,36,73,76,87,98.	IC DEC 7474	1905547	16
1	E17	IC DEC 7437	1910091	15
3	E12,22,32.	IC DEC 6640	1911469	14
4	E10,64,81,84.	IC DEC 74H40	1905586	13
10	E9,27,37,47,55,66,80,85,96,99	IC DEC 7400	1905575	12
13	E6,14,18,19,33,35,38,68,70,74,77,88,94.	IC DEC 7402	1909004	11
9	E4,7,8,15,16,44,56,65,86.	IC DEC 7473	1905587	10
3	E3,5,79.	IC DEC 7408	1910155	9
7	E2,13,23,26,52,101,111.	IC DEC 74175	1910651	8
9	E1,11,21,30,31,40 THRU 43.	IC DEC 8881	1909705	7
12		EYELET	9006732	6
1		HANDLE, MODULE	E-PS-1210711-02	5
1		ETCHED CIRCUIT BOARD	5009745	4
REF		MODULE ECO HISTORY	B-MH-M7261-0-6	3
REF		ASSY/DRILL HOLE LAYOUT	D-AH-M7261-0-5	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M7261-0-4	1

PARTS LIST

TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA
D664	1N3606		

REVISIONS			
CHG NO.	CHG NO.	CHG NO.	REV

DATE 9-25-70 DATE 10-30-70 DATE 10-30-70 DATE 10-30-70

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE CONTROL LOGIC & MICROPROGRAM

NUMBER M7261-0-1 REV U

SIZE D CODE CS M7261-0-1 REV U

PRINTED CIRCUIT REV. F

SHEET 2 OF 14

DEC FORM NO. 869 116

CONA ENAB ALU L

CONA TRAN IN L

CONC DATI (1) H

CONC ADV ENAB (1) H

CONE SET SSYN H

DEI CONA ENAB ALU H

CONG ENAB PSW L

CONG ENAB SPR L

CONG ENAB SPL L

DEL CONA ENAB SWITCH REG L

CONA ENIAB MODEM PSW L

CONA ENAB L CLK PSW L

CONA ENAB ALU L

CONA INT TRAN SYNC L

DPD AMUX 15 H CN2

DPD AMUX 14 H CE2

DPD AMUX 13 H CV2

DPD AMUX 12 H CE2

DPC AMUX 11 H CA1

DPC AMUX 10 H CM2

CONA BA 15 (1) H

CONA BA 14 (1) H

CONA BA 13 (1) H

CONA BA 12 (1) H

CONA BA 11 (1) H

CONA BA 10 (1) H

DPC AMUX Ø9 H CR2

DPC AMUX Ø8 H CL2

DPB AMUX Ø7 H CE1

DPB AMUX Ø6 H CE1

DPA AMUX Ø3 H CH2

DPA AMUX Ø0 H CK2

CONA BAØ9 (1) H

CONA BAØ8 (1) H

CONA BAØ7 (1) H

CONA BAØ6 (1) H

CONA BAØ3 (1) H

CONA BAØØ (1) H

DPA AMUX Ø2 H CC1

DPA AMUX Ø1 H CB1

DFA AMUX Ø5 H CO2

DPA AMUX Ø4 H CO1

CONA BAØ2 N

CONA BAØ1 (1) H

CONA BAØ5 (1) H

CONA BA Ø4 (1) H

CONH PROC INIT L

CONG BA CLOCK L

W1

NOTE: JUMPER W1 IS INSTALLED TO DISABLE THE INTERNAL SERIAL INTERFACE. WITH W1 INSTALLED THE CPU DOES NOT RESPOND INTERNALLY TO ADDRESSES 177560 THRU 177566 AND ANOTHER INTERFACE RESPONDING TO THESE STANDARD CONSOLE DEVICE ADDRESSES CAN BE CONFIGURED WITH THE KDII-B.

CONA TRAN OUT L

CONC DATO (1) H

CONC ADV ENAB (1) H

CONA TRAN IN L

CONA LOAD MODEM PSW L

CONA XMIT L

CONA ENAB MODEM PSW L

CONA RECEIVE L

CONC CLR MSYN H

DAI CONA DATA STROBE L

DAL CONA ENAB DATA H

DPI CONA LOAD XMIT PSW H

DAI CONA ENAB XMIT PSW H

DRL CONA LOAD RCD PSW H

DNI CONA ENAB RCD PSW H

DMZ CONG LOAD PSW L

CONG SP WRITE L

CONA LOAD MODEM PSW L

CONA LOAD L CLK PSW L

CONA RECEIVE L

CONA XMIT L

CONA REG ADDR L

CONA INT TRAN SYNC L

INT ADDR DETECT

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS .xxx ± .005, .xx ± .02, x ± .1
ANGLES 0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

DRN. M. Price DATE 11/7/73
CHK'D. DATE 10-30-73
ENG. DATE 10/30/73
PROJ. LEAD DATE 10/30/73
PROD. DATE 11/7/73

digital EQUIPMENT CORPORATION

TITLE: CONTROL LOGIC & MICROPROGRAM (CONA)

MATERIAL
FINISH
NEXT HIGHER ASSY. B-DD-KDII-B
SCALE
SHEET 3 OF 14

SIZE D | CODE CS | NUMBER M7261-0-1 | REV. R

DIST

CONH INIT SYNC (1) L
CONE IR CLOCK H
CONV AROC CLOCK H
CONB RUN (1) H
CONB RUN LAMP L
CONB RUN (Ø) H
CONC OKAY BYTE L
CONA REG ADDR L
CONB BYTE CR REG H
CONE ENAB OVERFLOW L
CONE BUT SWITCHES L
CONB INH +1 L
CONB BUT SWITCHES H
CONE START (1) L
CONB STACK FLOW (1) L
CONE STACK FLOW SER L
CONH AROC INIT L
CONG ROM SPA Ø3 H
CONA BA Ø3 (1) H
CONG ROM SPA Ø2 H
DPF IR Ø2 (1) H
DPF IR Ø8 (1) H
CONA BA Ø2 (1) H
CR2 CONB SPA Ø3 H
CS2 CONB SPA Ø2 H
DPC B-15= Ø H
CONB MASTER L
CONB MASTER H
CONC DATIP BBSY (Ø) H
CONC D REQ L
CONC MSYN (1) H
PROC INIT H
*NOTE: THIS JUMPER IS INSTALLED TO CREATE A "SLAVE" PROCESSOR.
+3VR3
AS2 BUS NPR L
CONG ROM SPA Ø1 H
DPF IR Ø1 (1) H
DPF IR Ø7 (1) H
CONA BA Ø1 (1) H
CONG ROM SPA ØØ H
DPF IR ØØ (1) H
DPF IR Ø6 (1) H
CONA BA ØØ (1) H
CONG SPA MUX Ø1 H
CONG SPA MUX ØØ H
CT2 CONB SPA Ø1 H
CU2 CONB SPA ØØ H
BUS NPG IN H
AR2 BUS SACK L
CONB TAKE BUS H
CONB PASS GRANT L
R8 390
R1 150
75 NS
C1Ø6 470

STACKFLOW & SPM

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES: DECIMALS .xxx = .005, .xx = .02, .x = .1; ANGLES ±0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY

DRN. Jim Pierce	DATE 9/13/73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D.	DATE 10/30/73	
ENG.	DATE 10/30/73	TITLE: CONTROL LOGIC & MICROPROGRAM (CONB)
PROJ. ENGR.	DATE 10/30/73	
PROD.	DATE 10/30/73	

MATERIAL
FINISH
NEXT HIGHER ASSY. B-DD-KDII-B
SCALE
SHEET 4 OF 14

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	S

DIST.

REVISIONS	REV
CHANGE -10	
CHK	

DEC FORM NO DRD 102-C

DCS M7261-Ø-1 S

CONV DIV (1) L
CONG ENAB IN PAUSE L
DPG ENAB NON MOD H
7427 E9C
CONG DATI L
7402 E18
CONG DATO L
7402 E18
7473 E16 DATIP
7473 E8 DATI
7473 E8 DATO
CONC DATIP (1) L
CONC BBSY (1) L
7402 E6
CONJ BC CLOCK H
CONC DATO (1) H
CONC BBSY (1) H
7408 E5
7473 E6 DATIP BBSY
CONC DATIP BBSY (1) H
CONC DATIP BBSY (1) L
CONC DATI (1) H
CONC D REQ L
CONB MASTER L
CONC NPG OR SACK H
CONB TAKE BUS H
COND BBSY H
7427 E46
7402 E35
7402 E35
CONC DATO (1) H
CONC BR GRANT H
CONE BUT SERVICE H
74H01-1 E49
CONG CKOFF L
CONJ PROC CLOCK L
CONH PROC INIT L
+3VE93-4
7474 E76 ADV ENAB
CONC ADV ENAB (1) H
CONC ADV ENAB (1) L
+3VR3
7474 E36
CONC SSYN (1) H
COND SSYN H
CONC BBSY (1) H
COND SSYN H
CONJ BC CLOCK H
CONC EOT H
COND INIT H
7473 E15 BBSY
CONJ UNG PROC CLOCK H
7473 E13 MSYN
CONC MSYN (1) H
CONC MSYN (1) L
7437 E17
CONC BUS INIT L
CONC CLR MSYN H
CONC BUS ERROR (1) H
CONC ADV ENAB (1) L
CONC SSYN (1) H
7402 E77
CONC TOTAL SSYN L
CONC DATO (1) H
7408 E5
7402 E14
CONC MSYN OUT H
CONA INT TRAN SYNC L
7404 E93
CONC BBSY (1) H
7400 E47
CONC DAT ENAB L
CONC DATIP (1) L
7400 E47
CONC C0 H
CONC BUS ERROR H
CONC SET DBE H
7408 E5
7473 E7 DBE
CONJ UNG PROC CLOCK H
CONC CLR MSYN H
74H01-1 E78
CONF MPC 03 L
7400 E47
CONC DB ERROR L
DPG BYTE L
CONG ACCON BYTE L
CONJ BC CLOCK H
CONC EOT H
CONC BUS INIT L
7427 E46
7473 E16 ALCOM BYTE
CONC OKAY BYTE L
CONC D REQ L
CONB BYTE OR REQ H
7402 E6
CONA BA00 (1) H
CONC DAT TO (1) L
7400 E37
CONC BUS ERROR (1) H
COND INIT H
CONB RUN (0) H
7402 E6
CONC CKOFF (1) L
CONC MSYN (1) L
7402 E36
+3V
+3VR3
RP 30K
C107 2200
7402 E29 2245
CONC EOT H
COND INIT H
7402 E6
CONC TOTAL SSYN L
7474 E28 DAT TO
CONC DAT TO (1) L
CONC EOT CLR L
+3VE93-4
7474 E76 CKOFF
CONG CKOFF L
CONJ PROC CLOCK L
DHI CONC CKOFF (1) H
CONC CKOFF (0) H
CONC BG RESTART H
CONC CLR MSYN H
CONH CLR CKOFF L
7427 E62
7400 E27

REVISIONS	REV	CHANGE T.O	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: 0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL
FINISH

DRN. M. Peirce DATE 4/18/73
CHK'D. DATE 10-23-73
ENG. DATE 10/23/73
PROJ. ENG. DATE 10/23/73
PROD. DATE 10/23/73
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 5 OF 14

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONC)
UNIBUS CONTROL

SIZE	CODE	NUMBER	REV.
D	CS	M7261-0-1	S

DIST.

DEC FORM NO DRD 102-C

CONC DATIP BBSY (Φ) L
CONC BG H
CONB RUN (1) L
BB15 E45
CONJ BC CLOCK H
CONC SET NPG H
7473 E44 NPG
CONC NPG (1) H
CONC NPG (1) L
CONC CLR GRANT L
COND NPR H
CONJ UNG PROC CLOCK L
74175 E13

CONE SET SSYN H
CONJ PROC CLOCK H
COND INIT H
7473 E56 SSYN OUT
CONC SSYN OUT (1) H

+5V
C108 10Φ0PF
R5 3ΦK
CONC BG H
CONC NPG (1) L
9602 E29 10Φ5
+3V R3
7474 E29
CONC TO (1) H
CONC CLR GRANT L

74175 E2
COND INTR H
CONC MSYN (1) H
COND SACK H
CONC TO (1) H
7404 E25
7402 E14
CONC BUS INIT L
CONJ BC CLOCK L
CONC INTR SYNC (1) L
CONC MSYN (Φ) L
CONC EOT H
7408 E3
7473 E4
CONJ UNG PROC CLOCK L
CONC SACK OR TO DEL (1) H
CONC SACK OR TO DEL ΦH
CONC SACK OR TO DEL (Φ) H
CONC BG RESTART H

74175 E23 BR
COND BR Φ7 H
COND BR Φ6 H
COND BR Φ5 H
COND BR Φ4 H
CONC BUS INIT L
CONJ UNG PROC CLOCK L
A0A1A2 E24 PRIORITY
DPE PSW Φ7(Φ) H CB1
DPE PSW Φ6(Φ) H CS1
DPE PSW Φ5(Φ) H CV1
CONJ L CLK INT L
E54
74175 E26 BG
CONC BG Φ7 (1) L
CONC BG Φ6 (1) L
CONC BG Φ5 (1) L
CONC BG Φ4 (1) L
DPE T DEL (1) L
CONB STACK FLOW (1) L
CONH PDWN SYNC (1) L
7410 E61
CONC SET NPG H
CONC NPG (1) H
7402 E33
CONC SACK OR TO DEL (1) L
7400 E27
CONC NPG OR SACK H
COND BUT SERVICE H
CONJ PROC CLOCK H
7420 E34
CONC BR GRANT H
COND INIT H
CONC SACK OR TO DEL (1) H
CONC BG H
CONC CLR GRANT L

PRIORITY ARBITRATION

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 .X ± .1 ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

	NAME	DATE
DRN	M. Petrie	5/24/73
CHK'D	Costa	10/24/73
ENG		12/24/73
PROJ ENG		12/30/73
PROD		12/30/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONC1)
NEXT HIGHER ASSY: B-DD-KD11-B
SIZE D | CODE CS | NUMBER M7261-0-1 | REV. R
SCALE
SHEET 6 OF 14
DIST.

REVISIONS | REV. | CHANGE NO | CHK

DEC FORM NO DRD 102-B

M7261-0-1 REV R SIZE D CODE CS

BUS NPR L — AS2 — 8640 E12 — COND NPR H
CONB MASTER L
BUS BR7 L — AT2 — 8640 E22 — COND BR Φ7 H
BUS BR6 L — AU2 — 8640 E22 — COND BR Φ6 H
BUS BR5 L — BC1 — 8640 E22 — COND BR Φ5 H
BUS BR4 L — BD2 — 8640 E22 — COND BR Φ4 H
BUS INTR L — AB1 — 8640 E12 — COND INTR H
BUS SACK L — AR2 — 8640 E12 — COND SACK H
COND ASRT BBSY H — 8881 E11 — AP2 — BUS BBSY L
8640 E12 — COND BBSY H
CONC SSYN OUT (1)H — 8881 E40 — BU1 — BUS SSYN L
CONH PROC INIT L — 7437 E17
CONH RESET L
8640 E32 — COND SSYN H
CONB MASTER H — 8881 E1 — AA1 — BUS INIT L
DU1 — COND INIT H
CONC NPG (1)L — 8881 E11 — AU1 — BUS NPG H
R2,180 +5
CONB PASS GRANT L
CONC BG Φ7 (1)L — 8881 E21 — AV1 — BUS BG7 H
CONC BG Φ6 (1)L — 8881 E21 — BA1 — BUS BG6 H
CONC BG Φ5 (1)L — 8881 E21 — BB1 — BUS BG5 H
CONC BG Φ4 (1)L — 8881 E21 — BE2 — BUS BG4 H
CONC BUS ERROR (Φ) H — 8881 E40 — BV1 — BUS MSYN L
CONC MSYN OUT H
CONC DATO (1)H — 8881 E42 — BT2 — BUS C1 L
COND ASRT BBSY H — 8881 E42 — BU2 — BUS CΦ L
CONC CΦ H
BUS AC LO L — BF1 — 8640 E32 — COND AC LO H
BUS DC LO L — BF2 — 8640 E32 — COND DC LO H

NOTE: R2 INSTALLED ONLY WHEN W2 IS INSTALLED TO CREATE A SLAVE PROCESSOR.

CONA BA 15 (1)H
CONA BA 14 (1)H
CONA BA 13 (1)H
7410 E61 — 7404 E63 — 8881 E42 — BS1 — BUS A17 L
8881 E42 — BS2 — BUS A16 L
8881 E41 — BR1 — BUS A15 L
8881 E41 — BR2 — BUS A14 L
8881 E41 — BP1 — BUS A13 L
CONA BA 12 (1)H — 8881 E41 — BP2 — BUS A12 L
CONA BA 11 (1)H — 8881 E43 — BN1 — BUS A11 L
CONA BA 10 (1)H — 8881 E43 — BN2 — BUS A10 L
CONA BA Φ9 (1)H — 8881 E43 — BM1 — BUS AΦ9 L
CONA BA Φ8 (1)H — 8881 E43 — BM2 — BUS AΦ8 L
CONA BA Φ7 (1)H — 8881 E30 — BL1 — BUS AΦ7 L
CONA BA Φ6 (1)H — 8881 E30 — BL2 — BUS AΦ6 L
CONA BA Φ5 (1)H — 8881 E30 — BK1 — BUS AΦ5 L
CONA BA Φ4 (1)H — 8881 E30 — BK2 — BUS AΦ4 L
CONA BA Φ3 (1)H — 8881 E31 — BJ1 — BUS AΦ3 L
CONA BA Φ2 (1)H — 8881 E31 — BJ2 — BUS AΦ2 L
CONA BA Φ1 (1)H — 8881 E31 — BH1 — BUS AΦ1 L
CONA BA ΦΦ (1)H — 8881 E31 — BH2 — BUS AΦΦ L
CONC DATIP BBSY (1) L
CONC BBSY (1) L
7437 E17
COND ASRT BBSY H

DRIVERS & RECEIVERS

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05	PARTS LIST			

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. M. Pierce — DATE 4/20/73
CHK'DR — DATE 10-30-73
ENG. — DATE 10/30/73
PROJ. ENG. — DATE 10/30/73
APPD. — DATE 10/30/73
NEXT HIGHER ASSY: B-DD-KD11-B
SCALE —
SHEET 7 OF 14

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (COND)

SIZE	CODE	NUMBER	REV
D	CS	M7261-Ø-1	S

DIST.

REVISIONS — REV. — CHANGE NO. — CHK

DEC FORM NO DRD 102-B

CONE SET SSYN H

CONC DB ERROR L

CONF MPC Φ6 L

74154 E91 BUT DECODE

CONG BUT Φ3 L
CONG BUT Φ2 L
CONG BUT Φ1 L
CONG BUT ΦΦ L
CONC BUS ERROR (1)H

EK2 CONE JMP OR JSR L
EV2 CONE BUT IR DECODE L
CONE BUT BYTE L
EH1 CONE ALLOW CONSTANTS L
EU1 CONE BUT DESTINATION L
CONE BUT MOVE L
CONE BUT INTERRUPT L
CONE BUT UNARY L
CONE BUT SWITCHES L
CONE BUT NON MOD L
CONE BUT SERVICE L
CONE ENAB OVERFLOW L

EC1 CONE IR CLOCK H
CONE EXAM SW L
CONE BUT INIT H
EB2 CONE ENAB UNARY L
CONE DEP SW L
CONB BUT SWITCHES H
CONJ PROC CLOCK H
CONH PROC INIT L

74174 E97 SWITCHES

CONSOLE START L FE2
CONSOLE LOAD L FJ1
CONSOLE DEP L FD2
CONSOLE EXAM L FF2
CONSOLE CONT L FH2
CONSOLE STOP L FH1

CONE START (1)L
CONE LOAD (1)L
CONE DEP (1)L
CONE EXAM (1)L
CONE CONT (1)L
CONE STOP (1)L

CONJ UNG PROC CLOCK L
+3V E1ΦΦ4Φ

CONE IST EXAM (1)H
CONE IST DEP (1)H

A1A1 E1Φ8 SWITCH

CONE LOAD (1)L
CONE EXAM (1)L
CONE CONT (1)L
CONE DEP (1)L

E1ΦΦ T5V

CONE EXAM SW L
CONF MPC Φ5 L
CONF MPC ΦΦ L
CONF MPC Φ4 L
CONF MPC Φ2 L
CONF MPC Φ3 L
CONE DEP SW L
CONF MPC Φ1 L

CONE BUT SWITCHES L
DPG CAL DEST L EU1
CONE BUT IR DECODE L
CONE BUT DESTINATION L
DPG BYTE L DL1
CONE BUT BYTE L
CONA BA ΦΦ (1)H
CONE BUT INTERRUPT L
CONC INTR SYNC (1) L
DPG TRAP L FD1
CONE BUT IR DECODE L EV2
DPG EMT L FE1
DPG RTS L FF1
DPG MOVE L FK2
CONE BUT MOVE L
DPG BYTE L
DPG ENAB NON MOD H
CONE BUT NON MOD L

FC1 CONE BUT DESTINATION H
FN1 CONF MPC Φ5 L
FJ2 CONF MPC Φ4 L
FK1 CONF MPC Φ3 L
FM1 CONF MPC Φ2 L
FN2 CONF MPC Φ1 L
FP2 CONF MPC ΦΦ L
CONE BUT MOVE H

A09A2 E107 BUT SERVICE

DPE T DEL (1)L FS2
DPG WAIT L FR1
DPH XMIT INT L FP1
DPH REQ INT L FR2
CONE STOP (1)L
CONI L CLK INT L
CONH PDWN SYNC (1)L
CONB STACKFLOW (1)L
CONC BR GRANT H

CONF MPC Φ4 L
CONF MPC Φ2 L
CONF MPC Φ1 L
CONF MPC ΦΦ L

74154 E110

CONE L CLK SER L
CONE PWR FAIL SER L
CONE STACK FLOW SER L
FB1 CONE XMIT SER L
FA1 CONE RCD SER L

CONE BUT SERVICE H
CONE BUT SERVICE L

MICRO BRANCH LOGIC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 .X ± .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. JM Pirtle DATE 5JUL73
CHK'D DATE 10-30-73
ENG DATE 11/26/73
PROJ. ENG. DATE 12/3/73
PROD. DATE 12/10/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
CONTROL LOGIC & MICROPROGRAM (CONE)

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 8 OF 14

SIZE D CODE CS NUMBER M7261-0-1 REV R
DIST.

REVISIONS | REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

A0ØA2 E1Ø2
A7 A6 A5 A4 A3 A2 A1 AØ
M3(1) M2(1) M1(1) MØ(1)
ENB1 ENBØ
E1ØØ +5V
FM2 CONF MPC Ø7 L
FL1 CONF MPC Ø6 L
FN1 CONF MPC Ø5 L
FJ2 CONF MPC Ø4 L

A1ØA2 E112
E1ØØ +5V
FK1 CONF MPC Ø3 L
FM1 CONF MPC Ø2 L
FN2 CONF MPC Ø1 L
FP2 CONF MPC ØØ L

74175 E1Ø1 MPC
CONF MPC 7 L
CONF MPC Ø6 L
CONF MPC Ø5 L
CONF MPC Ø4 L
CONF ROM ADRS Ø7 (1)L
CONF ROM ADRS Ø7 (1)H
CONF ROM ADRS Ø6 (1)L
CONF ROM ADRS Ø6 (1)H
CONF ROM ADRS Ø5 (1)L
CONF ROM ADRS Ø5 (1)H
CONF ROM ADRS Ø4 (1)L
CONF ROM ADRS Ø4 (1)H
+3V E1ØØ-1Ø
CLR CLK

CONC BUS ERROR (1)H

A2ØA2 E1Ø3
E93 +5V
ED2 CONF ALU MODE H
EB1 CONF CIN H
EA1 CONF F SHIFT L
ER1 CONF PRE AUX L * SEE NOTE

A11A2 E114
E93 +5V
EE1 CONF ALU S3 L
EF2 CONF ALU S2 L
EE2 CONF ALU S1 L
ED1 CONF ALU S0 L

74175 E111 MPC
CONF MPC Ø3 L
CONF MPC Ø2 L
CONF MPC Ø1 L
CONF MPC ØØ L
CONF ROM ADRS Ø3 (1)L
CONF ROM ADRS Ø3 (1)H
CONF ROM ADRS Ø2 (1)L
CONF ROM ADRS Ø2 (1)H
CONF ROM ADRS Ø1 (1)L
CONF ROM ADRS Ø1 (1)H
CONF ROM ADRS ØØ (1)L
CONF ROM ADRS ØØ (1)H
CLR CLK
CONJ PROC CLOCK L

DPG DIS ALU S BITS H EJ2

CONH PROC INIT H
CONF ROM ADRS Ø7 (1)H
CONF ROM ADRS Ø6 (1)H
CONF ROM ADRS Ø5 (1)H
CONF ROM ADRS Ø4 (1)H
CONF ROM ADRS Ø3 (1)H
CONF ROM ADRS Ø2 (1)H
CONF ROM ADRS Ø1 (1)H
CONF ROM ADRS ØØ (1)H

CONF ROM ADRS Ø7 (1)L
CONF ROM ADRS Ø6 (1)L
CONF ROM ADRS Ø5 (1)L
CONF ROM ADRS Ø4 (1)L
CONF ROM ADRS Ø3 (1)L
CONF ROM ADRS Ø2 (1)L
CONF ROM ADRS Ø1 (1)L
CONF ROM ADRS ØØ (1)L

NOTE: AUX CONTROL IS ASSERTED ONE MICRO STEP EARLIER THAN IN ETCH REV C AND E. THIS PIN (E103 PIN 12) CONNECTS TO ROM 23-A10A1 ON THE M7260 MODULE WHICH PREVIOUSLY CONNECTED TO CONG CKOFF L. THIS ETCH REV DOES NOT EVER SHUT ITS CLOCK OFF TO PERFORM AN AUX CONTROL.

CONV UNG PROC CLOCK L
74175 E13
ES2 CONF AUX CONTROL L
DPG BYTE L
7402 E7Ø
EU2 CONF AUX BYTE H
DPG BYTE L
7400 E8Ø
7400 E8Ø
CONC BUS INIT L
DPG MOVE L
7404 E9Ø
7408 E79
CONE BUT MOVE H

REVISIONS | REV | CHANGE NO | CHK

MICRO PC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05	PARTS LIST			

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M Pierce DATE 5/24/73
CHK'D DATE 10-3-73
ENG. DATE 10/3/73
PROJ. ENG. DATE 10/3/73
PROD. DATE 10/3/73

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 3 OF 4

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE CONTROL LOGIC & MICROPROGRAM (CONF)

SIZE D | CODE CS | NUMBER M7261-0-1 | REV. R
DIST.

DEC FORM NO DRD 102-B

A19A2 E116 — E95 +5V

- M3(1) → CONG CKOFF L
- M2(1) → CONG ALLOW BYTE L
- M1(1) → CONG DATO L
- M0(1) → CONG DATI L

CONC BUS ERROR (1)H

A13A2 E115 — E95 +5V

- M3(1) → CONG SPA MUX ØØ H
- M2(1) → CONG ROM SPA ØØ H
- M1(1) → CONG SPA MUX Ø1 H

7408 E79 → 6 05/ CONG BBOT H

A18A2 E113 — E92 +5V

- M3(1) → CONG BUT Ø1 L
- M2(1) → CONG BUT ØØ L
- M1(1) → CONG BUT Ø2 L
- M0(1) → CONG BUT Ø3 L

CONH PROC INIT H

CONF ROM ADRS Ø7 (1)L
CONF ROM ADRS Ø6 (1)L
CONF ROM ADRS Ø5 (1)L
CONF ROM ADRS Ø4 (1)L
CONF ROM ADRS Ø3 (1)L
CONF ROM ADRS Ø2 (1)L
CONF ROM ADRS Ø1 (1)L
CONF ROM ADRS ØØ (1)L

A17A2 E106 — E95 +5V

- M3(1) → CONJ PROC CLOCK L (7402 E94 → 7402 E94)
- M2(1) → EH2 CONG BTOP H
- M1(1) → CONG SP WRITE L (7402 E94) → EF1 CONG SP WRITE H
- M0(1) → CONG ROM SPA Ø2 H

A04A2 E104 — E93 +5V

- M3(1) → CONG ROM ALEG 1 L (EP2)
- M2(1) → CONG ROM ALEG Ø L (EM2) CONG BMODE ØØ H
- M1(1) → R15 2K, R16 1K
- M0(1) → R17 2K, R8 1K

7402 E94 → 74H01-1 E48 → E82 +5V → CONG ENAB PSW L
E82 → 7404 E83 → E1 CONG ENAB PSW H
E82 → EN2 CONG ENAB SPL L
74H01-1 E78 → E61 CONG ENAB SPR L
74H01-1 E78 → EM1 CONG BMODE Ø1 H
DPF ROTATE H → EN1

A16A2 E105 — E92 +5V

- M3(1) → CONG LOAD PSW L
- M2(1) → CONG ROM SPA Ø1 H
- M1(1) → CONG ROM SPA Ø3 H

E95 +5V → CONG ENAB IN PAUSE L

CONF ROM ADRS Ø7 (1)H
CONF ROM ADRS Ø6 (1)H
CONF ROM ADRS Ø5 (1)H
CONF ROM ADRS Ø4 (1)H
CONF ROM ADRS Ø3 (1)H
CONF ROM ADRS Ø2 (1)H
CONF ROM ADRS Ø1 (1)H
CONF ROM ADRS ØØ (1)H

CONTROL STORE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1 — ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN.		DATE 5/2/73
CHK'D		DATE 10-26-73
ENG		DATE 10/30/73
PROJ. ENG.		DATE 11/2/73
PROD.		DATE 10/30/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONG)

NEXT HIGHER ASSY: B-DD-KD11-B
SIZE D | CODE CS | NUMBER M7261-Ø-1 | REV R
SCALE
SHEET 10 OF 19
DIST.

REVISIONS | REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

COND DC LO H
CONH PDWN (Φ) H
CONH INIT SYNC (Φ) L
CONC NPG OR SACK H
COND BBSY H
CONJ UNG PROC CLOCK L
CONC BUS INIT L
CONE BUT INIT H
CONJ PROC CLOCK H
CONH CLR CKOFF L
CONE START (1) L
CONH INIT (Φ) H
CONJ PROC CLOCK H
CONH PDWN (1) H
CONJ PROC CLOCK H
CONE PWR FAIL SER L
CONH PROC INIT L
CONJ PROC CLOCK H
CONH PROC INIT H
FT2 CONH PROC INIT H
FS1 CONH PROC INIT L
CONH INIT SYNC (1) H
CONH INIT SYNC (1) L
CONH INIT SYNC (Φ) L
CONH PDWN SYNC (1) L
CONH OSC INH L
CONH RESET L
CONH CLR CKOFF L
+3V E93-4
+3V R3
+5V

FIRST USED ON OPTION/MODEL	11/05
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	
TOLERANCES	
DECIMALS	.xxx = .005, .xx = .02, .x = .1
ANGLES	0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	
MATERIAL	
FINISH	
DRN.	M. Poirier
CHK'D.	
ENG.	10/30/73
PROJ. ENG.	10/30/73
PROD.	11/3/73
NEXT HIGHER ASSY.	B-DD-KD11-B
SCALE	
SHEET	11 OF 14
SIZE	D
CODE	CS
NUMBER	M7261-0-1
REV.	T
DIST	

POWER FAIL

PARTS LIST

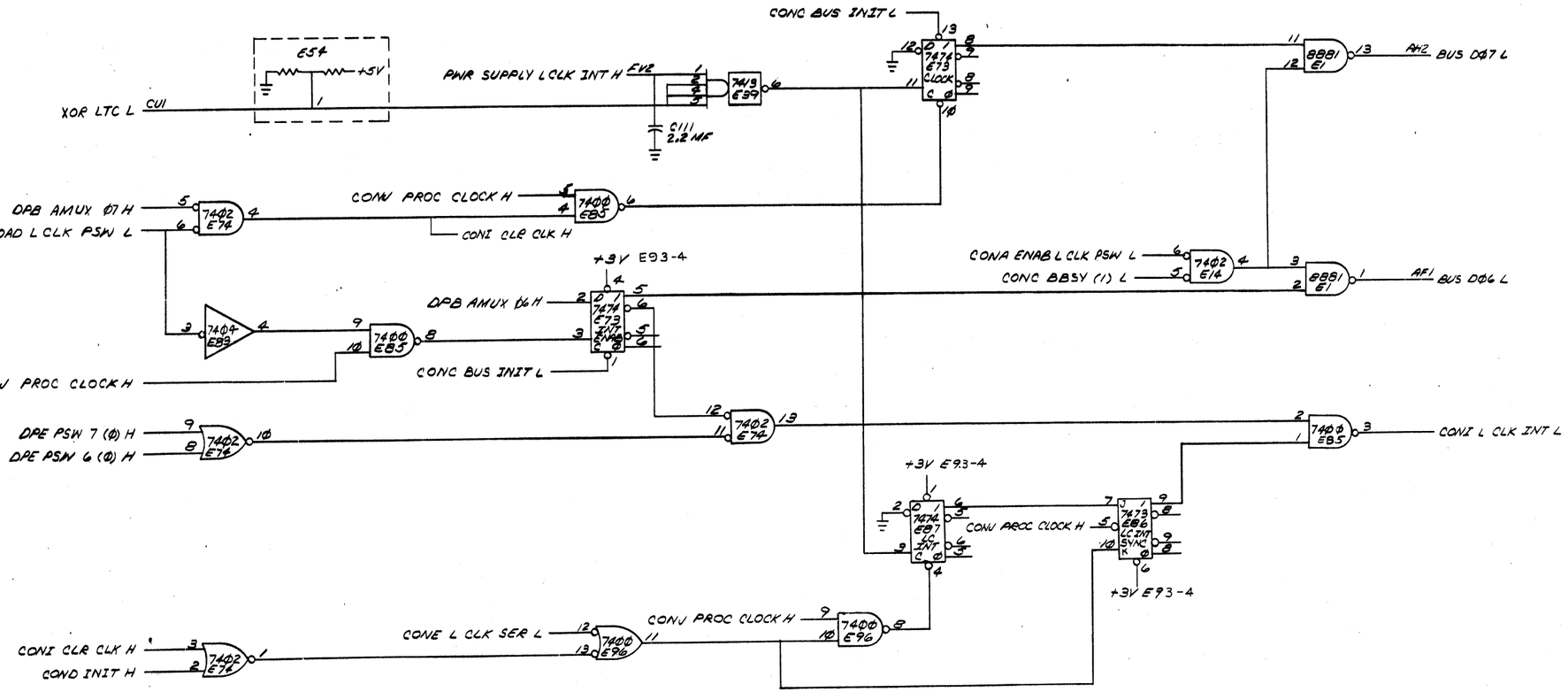
QTY.	DESCRIPTION	PART NO.	ITEM NO.

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONH)

REVISIONS: REV. | CHANGE NO | CHK

DEC FORM NO D3D 1972-C



LINE CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL —
FINISH —

DRN. Jim Pierce 4/6/73 DATE
CHK'D. DATE 10-30-73
ENG. DATE 10/30/73
PROJ. ENG. DATE 10/30/73
APPD. DATE 10/30/73
NEXT HIGHER ASSY. B-DD-KDII-B
SCALE —
SHEET 12 OF 14

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONI)

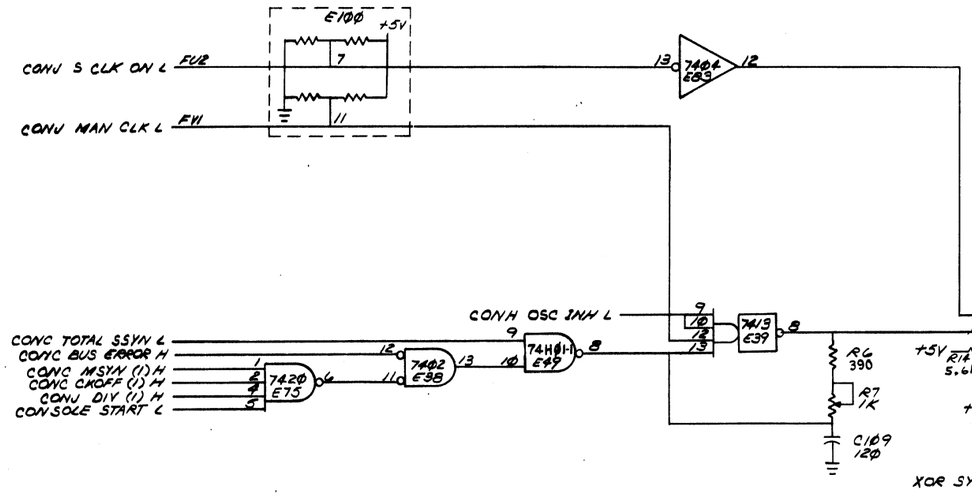
SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	S

DIST.

REVISIONS: REV. | CHANGE NO | CHK

DEC FORM NO ORD 107-C

D CS M7261-Ø-1 S



CPU CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ·0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ∀

DRN. M. Aiuca	DATE 9/5/73	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D.	DATE 10-30-73	
ENG.	DATE 10/31/73	
PROJ. ENG.	DATE 10/31/73	TITLE CONTROL LOGIC & MICROPROGRAM (CONJ)
PROD.	DATE 10/31/73	
MATERIAL	NEXT HIGHER ASSY. B-DD-KD11-B	SIZE D, CODE CS, NUMBER M7261-0-1, REV. S
FINISH	SCALE 1/1	
	SHEET 13 OF 14	DIST.

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO DRD 102-C

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
CONF MPC Ø7 L	CONF MPC Ø6 L	CONF MPC Ø5 L	CONF MPC Ø4 L	CONF MPC Ø3 L	CONF MPC Ø2 L	CONF MPC Ø1 L	CONF MPC ØØ L	CONF ALU S3 L	CONF ALU S2 L	CONF ALU S1 L	CONF ALU SØ L	CONF ALU MODE H	CONF CIN H	CONF F SHIFT L	CONF AUX CONTROL L	CONG LOAD PSW L	CONG ROM SPA Ø1 H	CONG ROM SPA Ø3 H	CONG ENAB IN PAUSE L	CONG SPA MUX ØØ H	CONG ROM SPA ØØ H	CONG SPA MUX Ø1 H	CONG BBOT H	CONG BA CLOCK L	CONG BTOP H	CONG SP WRITE L	CONG ROM SPA Ø2 H	CONG CKOFF L	CONG ALLOW BYTE L	CONG DATO L	CONG DATI L	CONG ROM ALEG 1 L	CONG ROM ALEG Ø L	CONG BMODE ØØ H	CONG BMODE Ø1 H	CONG BUT Ø1 L	CONG BUT ØØ L	CONG BUT Ø2 L	CONG BUT Ø3 L
NXT								ALU					CRI	FSH	AUX	PSW	SPI	SP3	DIP	SMØ	SPØ	SMI	BBT	BAR	BTP	SPF	SP2	CKO	ABT	TNS		ALG		BRG		BUT			
A Ø 4 A 2			A 1 Ø A 2			A 11 A 2			A 2 Ø A 2			A 6 A 2			A 13 A 2			A 17 A 2			A 19 A 2			A Ø 5 A 2			A 18 A 2											

31	30	29	28	27
ALU				
AL	L	L	L	L	H
AA	L	L	L	H	H
AB	L	L	H	L	H
AB̄	L	L	H	H	H
Ø	L	H	L	L	H
A OR B	L	H	L	H	H
BL	L	H	H	L	H
A PLUS B	L	H	H	H	L
A XOR B	H	L	L	L	H
A-B-1	H	L	L	H	L
B̄	H	L	H	L	L
-1	H	L	H	H	L
A-1	H	H	L	L	H
Ā	H	H	L	H	L
ASL	H	H	H	L	L
ROL	H	H	H	H	L
ASR	H	H	L	L	L
ROR	H	H	L	H	L

26 CRI	
OFF	L
ON	H

23 PSW	
HOLD	H
LOAD	L

14 BTP	
BREG	H
SEX	L
+1	L

10 ABT	
NO	H
YES	L

05	04 BRG	
LOAD	H	H
SLEFT	L	L
SRIGHT	H	L
HOLD	L	L

03	02	01	00 BUT	
NON	H	H	H	H
JMP/USR	H	L	H	H
IR DECODE	L	H	H	H
BYTE	L	L	H	L
CONST	H	H	L	H
DEST	H	L	L	H
MOV	L	H	L	H
INTR	L	L	L	H
INIT	H	H	H	L
UNARY	H	L	H	L
SWITCHES	L	H	H	L
NON MOD	L	L	H	L
SERVICE	H	H	L	L
SSYNC	H	L	L	L
ENOVFLO	L	H	L	L
IR CLK	L	L	L	L

25 FSH	
OFF H	
ON L	

20 DIP	
OFF	H
ON	L

16 BBT	
BRG	H
SEX	H
+1	L

13 SPF	
READ	H
WRITE	L

09	08 TNS	
NONE	H	H
DATI	H	L
DATO	L	H

24 AUX	
OFF	H
ON	L

19	17 SMØ	SM1
ROM	H	H
IRS	H	L
IRD	L	H
BA	L	L

15 BAR	
HOLD	H
LOAD	L

11 CKO	
OFF	H
ON	L

07	06 ALG	
SP	H	H
NULL	H	L
SPR	L	H
PSW	L	L

CONTROL STORE WORD FORMAT

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. M. Peirce	DATE 5/23/73	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 10-30-73	
ENG	DATE 10/30/73	
PROJ ENG	DATE 10/30/73	
PROD	DATE 10/30/73	

TITLE: CONTROL LOGIC & MICROPROGRAM

NEXT HIGHER ASSY: B-DD-KD11-B

SCALE —

SHEET 14 OF 14

SIZE	CODE	NUMBER	REV
D	CS	M7261-Ø-1	R

DIST

REV	REVISIONS	CHANGE NO	CHK

BRUNING 40-522 15840

DEC FORM NO DRD 102-B

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS	REMARKS
1	A	
2	A	
3	A	
4	A	
5	A	
6	A	
7	A	
8	A	
9	A	
10	A	
11	A	
12	A	
13	A	
14	A	
15	A	
16	A	
17	A	

ETCH REV C

ECO NO. 5

FIRST USED ON OPTION/MODEL

DRN.	DATE	
CHK'D.	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSY.		
SCALE		
SHEET 1 OF 17		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

CONTROL LOGIC ROM PATTERNS

SIZE	CODE	NUMBER	REV.
B	RL	M7261-0-8	A

DIST.

```
                    /( =Y8 (PIN #9) CONA INT TRAN SYNC L
                    */( =Y7 (PIN #7) CONA REG ADDR L
                    **/( =Y6 (PIN #6) CONA RECEIVE L
                    ***/( =Y5 (PIN #5) CONA TRANSMIT L
                    ****/( =Y4 (PIN #4) CONA LOAD MODEM PSW L
                    *****/( =Y3 (PIN #3) CONA LOAD L CLK PSW L
                    ******/( =Y2 (PIN #2) CONG SP WRITE L
                    *******/( =Y1 (PIN #1) CONG LOAD PSW L
 OCTAL DECIMAL      ********   OCTAL
ADDRESS ADDRESS EDCBA ********  DATA
   000      0    00000 11111111  377
   001      1    00001 11111111  377
   002      2    00010 11111111  377
   003      3    00011 11111111  377
   004      4    00100 01111110  176      PSW ,TRAN OUT BA=177776
   005      5    00101 11111111  377      PSW ,TRAN OUT,BAR
   006      6    00110 01111211  173      LCLK ,TRANOUT
   007      7    00111 11111111  377      LCLK ,TRANOUT,BAR
   010      8    01000 00111171  075      GR<R0|R17> ,TRANOUT BA=1777XX
   011      9    01001 10111111  277      GR<R0|R17> ,TRANOUT,BAR
   012     10    01010 01111111  177      ODD BYTE (LCLK/TK/TP)
   013     11    01011 11111111  377
   014     12    01100 11111111  377
   015     13    01101 11111111  377
   016     14    01110 01111111  177      SWR ,TRANOUT BA=177570
   017     15    01111 11111111  377      SWR ,TRANOUT,BAR
   020     16    10000 01710111  127      TKS ,TRANOUT BA=177560
   021     17    10001 11011111  337      TKS ,TRANOUT,BAR
   022     18    10010 01100111  147      TPS ,TRANOUT BA=177564
   023     19    10011 11101111  357      TPS ,TRANOUT,BAR
   024     20    10100 01011111  137      TKB ,TRANOUT BA=177562
   025     21    10101 11011111  337      TKB ,TRANOUT,BAR
   026     22    10110 01101111  157      TPB ,TRANOUT BA=177566
   027     23    10111 11101111  357      TPB ,TRANOUT,BAR
   030     24    11000 11111111  377
   031     25    11001 11111111  377
   032     26    11010 11111111  377
   033     27    11011 11111111  377
   034     28    11100 11111111  377
   035     29    11101 11111111  377
   036     30    11110 11111111  377
   037     31    11111 11111111  377
                    *****
                    ****/( A(PIN #10) IS  CONA TRAN OUT L
                    ***/( B(PIN #11) IS  Y3 OF F025
                    **/( C(PIN #12) IS  Y2 OF F025
                    */( D(PIN #13) IS  Y1 OF F025
                    /( E(PIN #14) IS  Y4 OF F025
```

```
                        /( =Y8 (PI  #9) CONA ENAB L CLK PSW L
                        +/( =Y7 (PIN #7) CONA INT TRAN SYNC L
                        ++/( =Y6 (PIN #6) CONA ENAB ALU L
                        +++/( =Y5 (PIN #5) CONA ENAB MODEM PSW L
                        ++++/( =Y4 (PIN #4) CONA ENAB SWITCH REG L
                        +++++/( =Y3 (PIN #3) CONG ENAB SPL L
                        ++++++/( =Y2 (PIN #2) CONG ENAB SPR L
                        +++++++/( =Y1 (PIN #1) CONG ENAB PSW L
  OCTAL DECIMAL         ++++++++          OCTAL
ADDRESS ADDRESS  EDCBA  ++++++++          DATA
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  11111111          377
   003      3    00011  11111111          377
   004      4    00100  10011110          236       PSW ,TRANIN BA=177776
   005      5    00101  11111111          377       PSW ,TRANIN,BAR
   006      6    00110  00111111          277       LCLK ,TRANIN BA=177546
   007      7    00111  11111111          377       LCLK ,TRANIN,BAR
   010      8    01000  10011001          231       GEN REG, ,TRANIN BA=1777XX
   011      9    01001  11111111          377       GEN REG ,TRANIN,BAR
   012     10    01010  10111111          277       ODD BYTE ADDRESS (LCLK/TK/TP)
   013     11    01011  11111111          377
   014     12    01100  11111111          377
   015     13    01101  11111111          377
   016     14    01110  10010111          227       SWR ,TRANIN BA=177570
   017     15    01111  11111111          377       SWR ,TRANIN,BAR
   020     16    10000  10001111          217       TKS ,TRANIN BA=177560
   021     17    10001  11111111          377       TKS ,TRANIN,BAR
   022     18    10010  10001111          217       TPS ,TRANIN BA=177564
   023     19    10011  11111111          377       TPS ,TRANIN,BAR
   024     20    10100  10011111          237       TKB ,TRANIN BA=177562
   025     21    10101  11111111          377       TKB ,TRANIN,BAR
   026     22    10110  10011111          237       TPB ,TRANIN BA=177566
   027     23    10111  11111111          377       TPB ,TRANIN,BAR
   030     24    11000  11111111          377
   031     25    11001  11111111          377
   032     26    11010  11111111          377
   033     27    11011  11111111          377
   034     28    11100  11111111          377
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        +++++
                        ++++/( A(PIN #10) IS  CONA TRAN IN L
                        +++/( B(PIN #11) IS  Y3 OF F025
                        ++/( C(PIN #12) IS  Y2 OF F025
                        +/( D(PIN #13) IS  Y1 OF F025
                        /( E(PIN #14) IS  Y4 OF F025
```

```
                        /( =Y8 (PIN #9)
                        +/( =Y7 (PIN #7) CONE LINE CLOCK SER L
                        ++/( =Y6 (PIN #6) CONE STACK FLOW L
                        +++/( =Y5 (PIN #5) CONE PWR FAIL SER L
                        ++++/( =Y4 (PIN #4) CONE RCD SER L
                        +++++/( =Y3 (PIN #3) CONE XMIT SER L
                        ++++++/( =Y2 (PIN #2)
                        +++++++/( =Y1 (PIN #1)
  OCTAL DECIMAL         ++++++++        OCTAL
ADDRESS ADDRESS  EDCBA  ++++++++        DATA
   000      0    00000  11111111        377
   001      1    00001  11111111        377
   002      2    00010  11111111        377
   003      3    00011  11111111        377
   004      4    00100  11111111        377
   005      5    00101  11111111        377
   006      6    00110  11111111        377
   007      7    00111  11111111        377
   010      8    01000  11111111        377
   011      9    01001  11111111        377
   012     10    01010  11110111        367     UART RCD INT MPC=64
   013     11    01011  11111111        377
   014     12    01100  11111111        377
   015     13    01101  11111111        377
   016     14    01110  11111011        373     UART XMIT INT MPC=60
   017     15    01111  11111111        377
   020     16    10000  11111111        377
   021     17    10001  11111111        377
   022     18    10010  11011111        337     ERT=1A STACK FLOW MPC=46
   023     19    10011  11111111        377
   024     20    10100  11101111        357     PWR FAIL MPC=43
   025     21    10101  11111111        377
   026     22    10110  10111111        277     LINE CLK INT MPC=42
   027     23    10111  11111111        377
   030     24    11000  11111111        377
   031     25    11001  11111111        377
   032     26    11010  11111111        377
   033     27    11011  11111111        377
   034     28    11100  11111111        377
   035     29    11101  11111111        377
   036     30    11110  11111111        377
   037     31    11111  11111111        377
                 +++++
                 ++++/( A(PIN #10) IS  CONN RUN GND L
                 +++/( B(PIN #11) IS  CONF MPC 00 L
                 ++/( C(PIN #12) IS  CONF MPC 02 L
                 +/( D(PIN #13) IS  CONF MPC 01 L
                 /; E(PIN #14) IS  CONF MPC 04 L
```

```
                                /( =Y8 (PIN #9) CONF MPC 05 L
                                */( =Y7 (PIN #7) CONE EXAM SW L
                                **/( =Y6 (PIN #6) CONE DEP SW L
                                ***/( =Y5 (PIN #5) CONF MPC 00 L
                                ****/( =Y4 (PIN #4) CONF MPC 04 L
                                *****/( =Y3 (PIN #3) CONF MPC 01 L
                                ******/( =Y2 (PIN #2) CONF MPC 02 L
                                *******/( =Y1 (PIN #1) CONF MPC 03 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000        11111000        370       CONTINUE
   001      1     00001        11111011        373       TWO SW =CONT,DEP
   002      2     00010        11111011        373       TWO SW EXAM,CONT
   003      3     00011        11111011        373       TWO SW LOAD,CONT
   004      4     00100        11111011        373       NO SW
   005      5     00101        11001010        312       DEP SW1 GOTO 313
   006      6     00110        10101000        250       EXAM GOTO TO 317
   007      7     00111        11101110        356       LOAD  GOTO TO 311
   010      8     01000        11111000        370       CONT=CLR EXAM
   011      9     01001        11111011        373       TWO SW =CONT,DEP
   012     10     01010        11101011        353       TWO SW EXAM,CONT
   013     11     01011        11101011        353       TWO SW LOAD,CONT
   014     12     01100        10111011        273       NO SW 1ST EXAM
   015     13     01101        11001010        312       DEP SW1
   016     14     01110        10101000        254       EXAM AND 1ST EXAM 320
   017     15     01111        11101110        356       LOAD GOTO 311
   020     16     10000        11111000        370       CONT=CLR DEP
   021     17     10001        11111011        373       TWO SW =CONT,DEP
   022     18     10010        11111011        373       TWO SW EXAM,CONT
   023     19     10011        11011011        333       TWO SW LOAD,CONT
   024     20     10100        11011011        333       NO SW 1ST DEP
   025     21     10101        11011010        332       DEP SW2 GOTO 312
   026     22     10110        10101000        250       EXAM,1ST DEP 317
   027     23     10111        11101110        356       LOAD GOTO 311
   030     24     11000        00000100        004
   031     25     11001        00000000        000
   032     26     11010        00000000        000
   033     27     11011        00000000        000
   034     28     11100        00000000        000
   035     29     11101        00000000        000
   036     30     11110        00000000        000
   037     31     11111        00000000        000
                  *****
                  ****/( A(PIN #10) IS  CONE LOAD (1)L ,AND, DEP (1)L ;BAR
                  ***/( B(PIN #11) IS  CONE LOAD (1)L ;AND, EXAM (1)L ;BAR
                  **/( C(PIN #12) IS  CONE CONT (1)L
                  */( D(PIN #13) IS  CONE 1ST EXAM (1)H
                  /( E(PIN #14) IS  CONE 1ST DEP (1)H
```

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```
                                    /( =Y4 (PIN # 9) CONC SET BG 07 L
                                    */( =Y3 (PIN #10) CONC SET BG 06 L
                                    **/( =Y2 (PIN #11) CONC SET BG 05 L
                                    ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                     ****          OCTAL
 ADDRESS ADDRESS   HGFEDCBA         ****          DATA
    000       0   00000000         1111          017
    001       1   00000001         1111          017
    002       2   00000010         1111          017
    003       3   00000011         1111          017
    004       4   00000100         1111          017
    005       5   00000101         1111          017
    006       6   00000110         1111          017
    007       7   00000111         1111          017
    010       8   00001000         1111          017
    011       9   00001001         1111          017
    012      10   00001010         1111          017
    013      11   00001011         1111          017
    014      12   00001100         1111          017
    015      13   00001101         1111          017
    016      14   00001110         1111          017
    017      15   00001111         1111          017
    020      16   00010000         1111          017
    021      17   00010001         1111          017
    022      18   00010010         1111          017
    023      19   00010011         1111          017
    024      20   00010100         1111          017
    025      21   00010101         1111          017
    026      22   00010110         1111          017
    027      23   00010111         1111          017
    030      24   00011000         1111          017
    031      25   00011001         1111          017
    032      26   00011010         1111          017
    033      27   00011011         1111          017
    034      28   00011100         1111          017
    035      29   00011101         1111          017
    036      30   00011110         1111          017
    037      31   00011111         1111          017
```


6 Cont

```
    040      32   00100000         0111          007
    041      33   00100001         1011          013
    042      34   00100010         0111          007
    043      35   00100011         1111          017      LCLK
    044      36   00100100         0111          007
    045      37   00100101         1011          013
    046      38   00100110         0111          007
    047      39   00100111         1101          015
    050      40   00101000         0111          007
    051      41   00101001         1011          013
    052      42   00101010         0111          007
    053      43   00101011         1111          017
    054      44   00101100         0111          007
    055      45   00101101         1011          013
    056      46   00101110         0111          007
    057      47   00101111         1110          016
    060      48   00110000         0111          007
    061      49   00110001         1011          013
    062      50   00110010         0111          007
    063      51   00110011         1111          017      LCLK
    064      52   00110100         0111          007
    065      53   00110101         1011          013
    066      54   00110110         0111          007
    067      55   00110111         1101          015
    070      56   00111000         0111          007
    071      57   00111001         1011          013
    072      58   00111010         0111          007
    073      59   00111011         1111          017
    074      60   00111100         0111          007
    075      61   00111101         1011          013
    076      62   00111110         0111          007
    077      63   00111111         1111          017
                  ********
                  ********/( A(PIN #05) IS  CONC BR 07 (1)L
                  *******/( B(PIN #06) IS  CONC BR 06 (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT L
                  *****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ****/( E(PIN #03) IS  CONC BR 04 (1)L
                  ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                  **/( G(PIN #01) IS  DPE PSW 06 (0)H
                  */( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                    /( #Y4 (PIN # 9) CONC SET BG 07 L
                                    +/( #Y3 (PIN #10) CONC SET BG 06 L
                                    ++/( #Y2 (PIN #11) CONC SET BG 05 L
                                    +++/( #Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                     ++++          OCTAL
ADDRESS ADDRESS   HGFEDCBA          ++++          DATA
    100      64   01000000          0111          007
    101      65   01000001          1011          013
    102      66   01000010          0111          007
    103      67   01000011          1111          017
    104      68   01000100          0111          007
    105      69   01000101          1011          013
    106      70   01000110          0111          007
    107      71   01000111          1111          017
    110      72   01001000          0111          007
    111      73   01001001          1011          013
    112      74   01001010          0111          007
    113      75   01001011          1111          017
    114      76   01001100          0111          007
    115      77   01001101          1011          013
    116      78   01001110          0111          007
    117      79   01001111          1111          017
    120      80   01010000          0111          007
    121      81   01010001          1011          013
    122      82   01010010          0111          007
    123      83   01010011          1111          017
    124      84   01010100          0111          007
    125      85   01010101          1011          013
    126      86   01010110          0111          007
    127      87   01010111          1111          017
    130      88   01011000          0111          007
    131      89   01011001          1011          013
    132      90   01011010          0111          007
    133      91   01011011          1111          017
    134      92   01011100          0111          007
    135      93   01011101          1011          013
    136      94   01011110          0111          007
    137      95   01011111          1111          017
```

M7261-8 REV A

7 CONT

```
    140      96   01100000          0111          007
    141      97   01100001          1011          013
    142      98   01100010          0111          007
    143      99   01100011          1111          017     LCLK
    144     100   01100100          0111          007
    145     101   01100101          1011          013
    146     102   01100110          0111          007
    147     103   01100111          1101          015
    150     104   01101000          0111          007
    151     105   01101001          1111          017
    152     106   01101010          0111          007
    153     107   01101011          1111          017     LCLK
    154     108   01101100          0111          007
    155     109   01101101          1011          013
    156     110   01101110          0111          007
    157     111   01101111          1110          016
    160     112   01110000          0111          007
    161     113   01110001          1011          013
    162     114   01110010          0111          007
    163     115   01110011          1111          017     LCLK
    164     116   01110100          0111          007
    165     117   01110101          1011          013
    166     118   01110110          0111          007
    167     119   01110111          1101          015
    170     120   01111000          0111          007
    171     121   01111001          1011          013
    172     122   01111010          0111          007
    173     123   01111011          1111          017
    174     124   01111100          0111          007
    175     125   01111101          1011          013
    176     126   01111110          0111          007
    177     127   01111111          1111          017
                  ++++++++
                  ++++++++/( A(PIN #05) IS  CONC BR 07 (1)L
                  +++++++/( B(PIN #06) IS  CONC BR 06 (1)L
                  ++++++/( C(PIN #07) IS  CONI LCLK INT L
                  +++++/( D(PIN #04) IS  CONC BR 05 (1)L
                  ++++/( E(PIN #03) IS  CONC BR 04 (1)L
                  +++/( F(PIN #02) IS  DPE PSW 07 (0)H
                  ++/( G(PIN #01) IS  DPE PSW 06 (0)H
                  +/( H(PIN #15) IS  DPE PSW 05 (0)H
```

8

```
                                    /( =Y4 (PIN # 9) CONC SET BG 07 L
                                    +/( =Y3 (PIN #10) CONC SET BG 06 L
                                    ++/( =Y2 (PIN #11) CONC SET BG 05 L
                                    +++/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                     ++++          OCTAL
ADDRESS ADDRESS   HGFEDCBA          ++++          DATA
    200     128   10000000          0111          007
    201     129   10000001          1111          017
    202     130   10000010          0111          007
    203     131   10000011          1111          017
    204     132   10000100          0111          007
    205     133   10000101          1111          017
    206     134   10000110          0111          007
    207     135   10000111          1111          017
    210     136   10001000          0111          007
    211     137   10001001          1111          017
    212     138   10001010          0111          007
    213     139   10001011          1111          017
    214     140   10001100          0111          007
    215     141   10001101          1111          017
    216     142   10001110          0111          007
    217     143   10001111          1111          017
    220     144   10010000          0111          007
    221     145   10010001          1111          017
    222     146   10010010          0111          007
    223     147   10010011          1111          017
    224     148   10010100          0111          007
    225     149   10010101          1111          017
    226     150   10010110          0111          007
    227     151   10010111          1111          017
    230     152   10011000          0111          007
    231     153   10011001          1111          017
    232     154   10011010          0111          007
    233     155   10011011          1111          017
    234     156   10011100          0111          007
    235     157   10011101          1111          017
    236     158   10011110          0111          007
    237     159   10011111          1111          017
```

M7261-8 REV A

8" COD

```
    240     160   10100000          0111          007
    241     161   10100001          1011          013
    242     162   10100010          0111          007
    243     163   10100011          1111          017     LCLK
    244     164   10100100          0111          007
    245     165   10100101          1011          013
    246     166   10100110          0111          007
    247     167   10100111          1101          015
    250     168   10101000          0111          007
    251     169   10101001          1011          013
    252     170   10101010          0111          007
    253     171   10101011          1111          017     LCLK
    254     172   10101100          0111          007
    255     173   10101101          1011          013
    256     174   10101110          0111          007
    257     175   10101111          1110          016
    260     176   10110000          0111          007
    261     177   10110001          1011          013
    262     178   10110010          0111          007
    263     179   10110011          1111          017     LCLK
    264     180   10110100          0111          007
    265     181   10110101          1011          013
    266     182   10110110          0111          007
    267     183   10110111          1101          015
    270     184   10111000          0111          007
    271     185   10111001          1011          013
    272     186   10111010          0111          007
    273     187   10111011          1111          017
    274     188   10111100          0111          007
    275     189   10111101          1011          013
    276     190   10111110          0111          007
    277     191   10111111          1111          017
                  ++++++++
                  +++++++/( A(PIN #05) IS  CONC BR 07 (1)L
                  +++++++/( B(PIN #06) IS  CONC BR 06 (1)L
                  +++++/( C(PIN #07) IS  CONI LCLK INT L
                  ++++/( D(PIN #04) IS  CONC BR 05 (1)L
                  +++/( E(PIN #03) IS  CONC BR 04 (1)L
                  ++/( F(PIN #02) IS  DPE PSW 07 (0)H
                  +/( G(PIN #01) IS  DPE PSW 06 (0)H
                  /( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                /( =Y4 (PIN # 9) CONC SET BG 07 L
                                */( =Y3 (PIN #10) CONC SET BG 06 L
                                **/( =Y2 (PIN #11) CONC SET BG 05 L
                                ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                 ****          OCTAL
 ADDRESS ADDRESS   HGFEDCBA     ****          DATA
     300     192   11000000     0111          007
     301     193   11000001     1011          013
     302     194   11000010     0111          007
     303     195   11000011     1111          017       LCLK
     304     196   11000100     0111          007
     305     197   11000101     1011          013
     306     198   11000110     0111          007
     307     199   11000111     1101          015
     310     200   11001000     0111          007
     311     201   11001001     1011          013
     312     202   11001010     0111          007
     313     203   11001011     1111          017       LCLK
     314     204   11001100     0111          007
     315     205   11001101     1011          013
     316     206   11001110     0111          007
     317     207   11001111     1111          017
     320     208   11010000     0111          007
     321     209   11010001     1011          013
     322     210   11010010     0111          007
     323     211   11010011     1111          017       LCLK
     324     212   11010100     0111          007
     325     213   11010101     1011          013
     326     214   11010110     0111          007
     327     215   11010111     1101          015
     330     216   11011000     0111          007
     331     217   11011001     1011          013
     332     218   11011010     0111          007
     333     219   11011011     1111          017
     334     220   11011100     0111          007
     335     221   11011101     1011          013
     336     222   11011110     0111          007
     337     223   11011111     1111          017
```

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```
     340     224   11100000     0111          007
     341     225   11100001     1011          013
     342     226   11100010     0111          007
     343     227   11100011     1111          017       LCLK
     344     228   11100100     0111          007
     345     229   11100101     1011          013
     346     230   11100110     0111          007
     347     231   11100111     1101          015
     350     232   11101000     0111          007
     351     233   11101001     1011          013
     352     234   11101010     0111          007
     353     235   11101011     1111          017       LCLK
     354     236   11101100     0111          007
     355     237   11101101     1011          013
     356     238   11101110     0111          007
     357     239   11101111     1110          016
     360     240   11110000     0111          007
     361     241   11110001     1011          013
     362     242   11110010     0111          007
     363     243   11110011     1111          017       LCLK
     364     244   11110100     0111          007
     365     245   11110101     1011          013
     366     246   11110110     0111          007
     367     247   11110111     1101          015
     370     248   11111000     0111          007
     371     249   11111001     1011          013
     372     250   11111010     0111          007
     373     251   11111011     1111          017
     374     252   11111100     0111          007
     375     253   11111101     1011          013
     376     254   11111110     0111          007
     377     255   11111111     1111          017
                 ********
                 ********/( A(PIN #05) IS  CONC BR 07 (1)L
                 *******/( B(PIN #06) IS  CONC BR 06 (1)L
                 ******/( C(PIN #07) IS  CONI LCLK INT L
                 *****/( D(PIN #04) IS  CONC BR 05 (1)L
                 ****/( E(PIN #03) IS  CONC BR 04 (1)L
                 ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                 **/( G(PIN #01) IS  DPE PSW 06 (0)H
                 */( H(PIN #15) IS  DPE PSW 05 (*)H
```

```
                                    /( =Y4 (PIN # 9) Y4
                                    +/( =Y3 (PIN #10) Y3
                                    ++/( =Y2 (PIN #11) Y2
                                    +++/( =Y1 (PIN #12) Y1
                                    ++++          OCTAL
  OCTAL DECIMAL                     ++++          DATA
 ADDRESS ADDRESS    HGFEDCBA        ++++
    000       0    00000000        0000          000
    001       1    00000001        0000          000
    002       2    00000010        0000          000
    003       3    00000011        0000          000
    004       4    00000100        0000          000
    005       5    00000101        0000          000
    006       6    00000110        0000          000
    007       7    00000111        0000          000
    010       8    00001000        0000          000
    011       9    00001001        0000          000
    012      10    00001010        0000          000
    013      11    00001011        0000          000
    014      12    00001100        0000          000
    015      13    00001101        0000          000
    016      14    00001110        0000          000
    017      15    00001111        0000          000
    020      16    00010000        0000          000
    021      17    00010001        0000          000
    022      18    00010010        0000          000
    023      19    00010011        0000          000
    024      20    00010100        0000          000
    025      21    00010101        0000          000
    026      22    00010110        0000          000
    027      23    00010111        0000          000
    030      24    00011000        0000          000
    031      25    00011001        0000          000
    032      26    00011010        0000          000
    033      27    00011011        0000          000
    034      28    00011100        0000          000
    035      29    00011101        0000          000
    036      30    00011110        0000          000
    037      31    00011111        0000          000
```

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```
    040      32    00100000        0000          000
    041      33    00100001        0000          000
    042      34    00100010        0000          000
    043      35    00100011        0000          000
    044      36    00100100        0000          000
    045      37    00100101        0000          000
    046      38    00100110        0000          000
    047      39    00100111        0000          000
    050      40    00101000        0000          000
    051      41    00101001        0000          000
    052      42    00101010        0000          000
    053      43    00101011        0000          000
    054      44    00101100        0000          000
    055      45    00101101        0000          000
    056      46    00101110        0000          000
    057      47    00101111        0000          000
    060      48    00110000        0000          000
    061      49    00110001        0000          000
    062      50    00110010        0000          000
    063      51    00110011        0000          000
    064      52    00110100        0000          000
    065      53    00110101        0000          000
    066      54    00110110        0000          000
    067      55    00110111        0000          000
    070      56    00111000        0000          000
    071      57    00111001        0000          000
    072      58    00111010        0000          000
    073      59    00111011        0000          000
    074      60    00111100        0000          000
    075      61    00111101        0000          000
    076      62    00111110        0000          000
    077      63    00111111        0000          000
                   ++++++++
                   ++++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                   ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                   +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                   ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                   +++/( E(PIN #03) IS  CONA BA 04 (1)H
                   ++/( F(PIN #02) IS  CONA BA 05 (1)H
                   +/( G(PIN #01) IS  CONA BA 07 (1)H
                   /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                    /( =Y4 (PIN # 9) Y4
                                    •/( =Y3 (PIN #10) Y3
                                    ••/( =Y2 (PIN #11) Y2
                                    •••/( =Y1 (PIN #12) Y1
                                    ••••          OCTAL
  OCTAL DECIMAL                     ••••          DATA
ADDRESS ADDRESS   HGFEDCBA          ••••
    100      64   01000000          0000          000
    101      65   01000001          0000          000
    102      66   01000010          0000          000
    103      67   01000011          0000          000
    104      68   01000100          0000          000
    105      69   01000101          0000          000
    106      70   01000110          0000          000
    107      71   01000111          0000          000
    110      72   01001000          0000          000
    111      73   01001001          0000          000
    112      74   01001010          0000          000
    113      75   01001011          0000          000
    114      76   01001100          0000          000
    115      77   01001101          0000          000
    116      78   01001110          0000          000
    117      79   01001111          0000          000
    120      80   01010000          0000          000
    121      81   01010001          0000          000
    122      82   01010010          0000          000
    123      83   01010011          0000          000
    124      84   01010100          0000          000
    125      85   01010101          0000          000
    126      86   01010110          0000          000
    127      87   01010111          0000          000
    130      88   01011000          0000          000
    131      89   01011001          0000          000
    132      90   01011010          0000          000
    133      91   01011011          0000          000
    134      92   01011100          0000          000
    135      93   01011101          0000          000
    136      94   01011110          0000          000
    137      95   01011111          0000          000
```

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```
    140      96   01100000          0000          000
    141      97   01100001          0000          000
    142      98   01100010          0000          000
    143      99   01100011          0000          000
    144     100   01100100          0000          000
    145     101   01100101          0000          000
    146     102   01100110          0000          000
    147     103   01100111          0000          000
    150     104   01101000          0000          000
    151     105   01101001          0000          000
    152     106   01101010          0000          000
    153     107   01101011          0000          000
    154     108   01101100          0000          000
    155     109   01101101          0000          000
    156     110   01101110          0000          000
    157     111   01101111          0000          000
    160     112   01110000          0000          000
    161     113   01110001          0000          000
    162     114   01110010          0000          000
    163     115   01110011          0000          000
    164     116   01110100          0000          000
    165     117   01110101          0000          000
    166     118   01110110          0000          000
    167     119   01110111          0000          000
    170     120   01111000          0000          000
    171     121   01111001          0000          000
    172     122   01111010          0000          000
    173     123   01111011          0000          000
    174     124   01111100          0000          000
    175     125   01111101          0000          000
    176     126   01111110          0000          000
    177     127   01111111          0000          000
                  ••••••••
                  ••••••••/( A(PIN #05) IS  CONA BA 02 (1)H
                  •••••••/( B(PIN #06) IS  CONA BA 01 (1)H
                  ••••••/( C(PIN #07) IS  CONA BA 00 (1)H
                  •••••/( D(PIN #04) IS  CONA BA 03 (1)H
                  ••••/( E(PIN #03) IS  CONA BA 04 (1)H
                  •••/( F(PIN #02) IS  CONA BA 05 (1)H
                  ••/( G(PIN #01) IS  CONA BA 07 (1)H
                  •/( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                    /( #Y4 (PIN # 9) Y4
                                    +/( #Y3 (PIN #10) Y3
                                    ++/( #Y2 (PIN #11) Y2
                                    +++/( #Y1 (PIN #12) Y1
  OCTAL DECIMAL                     ++++          OCTAL
ADDRESS ADDRESS    HGFEDCBA         ++++          DATA
    200     128    10000000         0000          000
    201     129    10000001         0000          000
    202     130    10000010         0000          000
    203     131    10000011         0000          000
    204     132    10000100         0000          000
    205     133    10000101         0000          000
    206     134    10000110         0000          000
    207     135    10000111         0000          000
    210     136    10001000         0000          000
    211     137    10001001         0000          000
    212     138    10001010         0000          000
    213     139    10001011         0000          000
    214     140    10001100         0000          000
    215     141    10001101         0000          000
    216     142    10001110         0000          000
    217     143    10001111         0000          000
    220     144    10010000         0000          000
    221     145    10010001         0000          000
    222     146    10010010         0000          000
    223     147    10010011         0000          000
    224     148    10010100         0000          000
    225     149    10010101         0000          000
    226     150    10010110         0000          000
    227     151    10010111         0000          000
    230     152    10011000         0000          000
    231     153    10011001         0000          000
    232     154    10011010         0000          000
    233     155    10011011         0000          000
    234     156    10011100         0000          000
    235     157    10011101         0000          000
    236     158    10011110         0000          000
    237     159    10011111         0000          000
```

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```
    240     160    10100000         0000          000
    241     161    10100001         0000          000
    242     162    10100010         0000          000
    243     163    10100011         0110          006      KW11-L LINE CLK CSR
    244     164    10100100         0000          000
    245     165    10100101         0000          000
    246     166    10100110         0000          000
    247     167    10100111         0101          005      KW11-L (ODD BYTE)
    250     168    10101000         0000          000
    251     169    10101001         0000          000
    252     170    10101010         0000          000
    253     171    10101011         0000          000
    254     172    10101100         0000          000
    255     173    10101101         0000          000
    256     174    10101110         0000          000
    257     175    10101111         0000          000
    260     176    10110000         1000          010      TKS TTY KEYBOARD CSR
    261     177    10110001         1100          014      TPS PRINTER CSR
    262     178    10110010         1010          012      TKB TTY KEYBOARD  DBR
    263     179    10110011         1110          016      TPB TTY PRINTER DBR
    264     180    10110100         0101          005      TKS (ODD BYTE)
    265     181    10110101         0101          005      TPS (ODD BYTE)
    266     182    10110110         0101          005      TKB (ODD BYTE)
    267     183    10110111         0101          005      TPB (ODD BYTE)
    270     184    10111000         0111          007      SWITCH REGISTER
    271     185    10111001         0000          000
    272     186    10111010         0000          000
    273     187    10111011         0000          000
    274     188    10111100         0111          007      CONSOLE SW REG, (ODD BYTE)
    275     189    10111101         0000          000
    276     190    10111110         0000          000
    277     191    10111111         0000          000
                   ++++++++
                   +++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                   ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                   +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                   ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                   +++/( E(PIN #03) IS  CONA BA 04 (1)H
                   ++/( F(PIN #02) IS  CONA BA 05 (1)H
                   +/( G(PIN #01) IS  CONA BA 07 (1)H
                   /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                /( =Y4 (PIN # 9) Y4
                                */( =Y3 (PIN #10) Y3
                                **/( =Y2 (PIN #11) Y2
                                ***/( =Y1 (PIN #12) Y1
                                ****          OCTAL
  OCTAL DECIMAL                 ****          DATA
  ADDRESS ADDRESS   HGFEDCBA    ****
     300     192   11000000     0001          001       REG R0
     301     193   11000001     0001          001       REG R4
     302     194   11000010     0001          001       REG R2
     303     195   11000011     0001          001       REG R6
     304     196   11000100     0001          001       REG R1
     305     197   11000101     0001          001       REG R5
     306     198   11000110     0001          001       REG R3
     307     199   11000111     0001          001       REG R7
     310     200   11001000     0001          001       REG R10
     311     201   11001001     0001          001       REG R14
     312     202   11001010     0001          001       REG R12
     313     203   11001011     0001          001       REG R16
     314     204   11001100     0001          001       REG R11
     315     205   11001101     0001          001       REG R15
     316     206   11001110     0001          001       REG R13
     317     207   11001111     0001          001       REG R17
     320     208   11010000     0000          000
     321     209   11010001     0000          000
     322     210   11010010     0000          000
     323     211   11010011     0000          000
     324     212   11010100     0000          000
     325     213   11010101     0000          000
     326     214   11010110     0000          000
     327     215   11010111     0000          000
     330     216   11011000     0000          000
     331     217   11011001     0000          000
     332     218   11011010     0000          000
     333     219   11011011     0000          000
     334     220   11011100     0000          000
     335     221   11011101     0000          000
     336     222   11011110     0000          000
     337     223   11011111     0000          000
```

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```
     340     224   11100000     0000          000
     341     225   11100001     0000          000
     342     226   11100010     0000          000
     343     227   11100011     0000          000
     344     228   11100100     0000          000
     345     229   11100101     0000          000
     346     230   11100110     0000          000
     347     231   11100111     0000          000
     350     232   11101000     0000          000
     351     233   11101001     0000          000
     352     234   11101010     0000          000
     353     235   11101011     0000          000
     354     236   11101100     0000          000
     355     237   11101101     0000          000
     356     238   11101110     0000          000
     357     239   11101111     0000          000
     360     240   11110000     0000          000
     361     241   11110001     0000          000
     362     242   11110010     0000          000
     363     243   11110011     0000          000
     364     244   11110100     0000          000
     365     245   11110101     0000          000
     366     246   11110110     0000          000
     367     247   11110111     0000          000
     370     248   11111000     0000          000
     371     249   11111001     0000          000
     372     250   11111010     0000          000
     373     251   11111011     0010          002       PSW
     374     252   11111100     0000          000
     375     253   11111101     0000          000
     376     254   11111110     0000          000
     377     255   11111111     0010          002       PSW (ODD BYTE)
                   ********
                   *******/( A(PIN #05) IS  CONA BA 02 (1)H
                   ******/( B(PIN #06) IS  CONA BA 01 (1)H
                   *****/( C(PIN #07) IS  CONA BA 00 (1)H
                   ****/( D(PIN #04) IS  CONA BA 03 (1)H
                   ***/( E(PIN #03) IS  CONA BA 04 (1)H
                   **/( F(PIN #02) IS  CONA BA 05 (1)H
                   */( G(PIN #01) IS  CONA BA 07 (1)H
                   /( H(PIN #15) IS  CONA BA 06 (1)H
```

13

13 CONT

```
                                /( =Y4 (PIN # 9) CONF MPC 04 L
                                +/( =Y3 (PIN #10) CONF MPC 01 L
                                ++/( =Y2 (PIN #11) CONF MPC 02 L
                                +++/( =Y1 (PIN #12) CONF MPC 00 L
                                ++++          OCTAL
  OCTAL DECIMAL                 ++++          DATA
  ADDRESS ADDRESS   HGFEDCBA    1100          014
     000       0    00000000    1100          014          T
     001       1    00000001    1100          014          T
     002       2    00000010    1100          014          T
     003       3    00000011    1100          014          T
     004       4    00000100    1100          014          T
     005       5    00000101    1100          014          T
     006       6    00000110    1100          014          T
     007       7    00000111    1100          014          T
     010       8    00001000    1100          014          T
     011       9    00001001    1100          014          T
     012      10    00001010    1100          014          T
     013      11    00001011    1100          014          T
     014      12    00001100    1100          014          T
     015      13    00001101    1100          014          T
     016      14    00001110    1100          014          T
     017      15    00001111    1100          014          T
     020      16    00010000    1100          014          T
     021      17    00010001    1100          014          T
     022      18    00010010    1100          014          T
     023      19    00010011    1100          014          T
     024      20    00010100    1100          014          T
     025      21    00010101    1100          014          T
     026      22    00010110    1100          014          T
     027      23    00010111    1100          014          T
     030      24    00011000    1100          014          T
     031      25    00011001    1100          014          T
     032      26    00011010    1100          014          T
     033      27    00011011    1100          014          T
     034      28    00011100    1100          014          T
     035      29    00011101    1100          014          T
     036      30    00011110    1100          014          T
     037      31    00011111    1100          014          T
```

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```
     040      32    00100000    1100          014          T
     041      33    00100001    1100          014          T
     042      34    00100010    1100          014          T
     043      35    00100011    1100          014          T
     044      36    00100100    1100          014          T
     045      37    00100101    1100          014          T
     046      38    00100110    1100          014          T
     047      39    00100111    1100          014          T
     050      40    00101000    1100          014          T
     051      41    00101001    1100          014          T
     052      42    00101010    1100          014          T
     053      43    00101011    1100          014          T
     054      44    00101100    1100          014          T
     055      45    00101101    1100          014          T
     056      46    00101110    1100          014          T
     057      47    00101111    1100          014          T
     060      48    00110000    1100          014          T
     061      49    00110001    1100          014          T
     062      50    00110010    1100          014          T
     063      51    00110011    1100          014          T
     064      52    00110100    1100          014          T
     065      53    00110101    1100          014          T
     066      54    00110110    1100          014          T
     067      55    00110111    1100          014          T
     070      56    00111000    1100          014          T
     071      57    00111001    1100          014          T
     072      58    00111010    1100          014          T
     073      59    00111011    1100          014          T
     074      60    00111100    1100          014          T
     075      61    00111101    1100          014          T
     076      62    00111110    1100          014          T
     077      63    00111111    1100          014          T
                    ++++++++
                    ++++++++/( A(PIN #05) IS  CONB STACKFLOW (1)L
                    +++++++/( B(PIN #06) IS  CONH PDWN SYNC (1)L
                    ++++++/( C(PIN #07) IS  CONI LCLK INT (1)L
                    +++++/( D(PIN #04) IS  CONE STOP (1)L
                    ++++/( E(PIN #03) IS  DPH RCD INT (1)L
                    +++/( F(PIN #02) IS  DPH XMIT INT (1)L
                    ++/( G(PIN #01) IS  DPG WAIT L
                    +/( H(PIN #15) IS  DPF T DEL (1)L
```

```
                                /( BY4 (PIN # 9) CONF MPC 04 L
                                +/( BY3 (PIN #10) CONF MPC 01 L
                                ++/( BY2 (PIN #11) CONF MPC 02 L
                                +++/( BY1 (PIN #12) CONF MPC 00 L
  OCTAL DECIMAL                 ++++          OCTAL
 ADDRESS ADDRESS   HGFEDCBA     ++++          DATA
     100      64   01000000     1100          014       T
     101      65   01000001     1100          014       T
     102      66   01000010     1100          014       T
     103      67   01000011     1100          014       T
     104      68   01000100     1100          014       T
     105      69   01000101     1100          014       T
     106      70   01000110     1100          014       T
     107      71   01000111     1100          014       T
     110      72   01001000     1100          014       T
     111      73   01001001     1100          014       T
     112      74   01001010     1100          014       T
     113      75   01001011     1100          014       T
     114      76   01001100     1100          014       T
     115      77   01001101     1100          014       T
     116      78   01001110     1100          014       T
     117      79   01001111     1100          014       T
     120      80   01010000     1100          014       T
     121      81   01010001     1100          014       T
     122      82   01010010     1100          014       T
     123      83   01010011     1100          014       T
     124      84   01010100     1100          014       T
     125      85   01010101     1100          014       T
     126      86   01010110     1100          014       T
     127      87   01010111     1100          014       T
     130      88   01011000     1100          014       T
     131      89   01011001     1100          014       T
     132      90   01011010     1100          014       T
     133      91   01011011     1100          014       T
     134      92   01011100     1100          014       T
     135      93   01011101     1100          014       T
     136      94   01011110     1100          014       T
     137      95   01011111     1100          014       T
```

M7261-F REV A

```
     140      96   01100000     1100          014       T
     141      97   01100001     1100          014       T
     142      98   01100010     1100          014       T
     143      99   01100011     1100          014       T
     144     100   01100100     1100          014       T
     145     101   01100101     1100          014       T
     146     102   01100110     1100          014       T
     147     103   01100111     1100          014       T
     150     104   01101000     1100          014       T
     151     105   01101001     1100          014       T
     152     106   01101010     1100          014       T
     153     107   01101011     1100          014       T
     154     108   01101100     1100          014       T
     155     109   01101101     1100          014       T
     156     110   01101110     1100          014       T
     157     111   01101111     1100          014       T
     160     112   01110000     1100          014       T
     161     113   01110001     1100          014       T
     162     114   01110010     1100          014       T
     163     115   01110011     1100          014       T
     164     116   01110100     1100          014       T
     165     117   01110101     1100          014       T
     166     118   01110110     1100          014       T
     167     119   01110111     1100          014       T
     170     120   01111000     1100          014       T
     171     121   01111001     1100          014       T
     172     122   01111010     1100          014       T
     173     123   01111011     1100          014       T
     174     124   01111100     1100          014       T
     175     125   01111101     1100          014       T
     176     126   01111110     1100          014       T
     177     127   01111111     1100          014       T
                   ++++++++
                   ++++++++/( A(PIN #05) IS  CONB STACKFLOW (1)L
                   +++++++/( B(PIN #06) IS  CONH PDWN SYNC (1)L
                   ++++++/( C(PIN #07) IS  CONI LCLK INT (1)L
                   +++++/( D(PIN #04) IS  CONE STOP (1)L
                   ++++/( E(PIN #03) IS  DPH RCD INT (1)L
                   +++/( F(PIN #02) IS  DPH XMIT INT (1)L
                   ++/( G(PIN #01) IS  DPG WAIT L
                   +/( H(PIN #15) IS  DPE T DEL (1)L
```

```
                                /( #Y4 (PIN # 9) CONF MPC 04 L
                                +/( #Y3 (PIN #10) CONF MPC 01 L
                                ++/( #Y2 (PIN #11) CONF MPC 02 L
                                +++/( #Y1 (PIN #12) CONF MPC 00 L
                                ++++        OCTAL
  OCTAL DECIMAL                 ++++        DATA
 ADDRESS ADDRESS    HGFEDCBA    1001        011       STKFL
    200     128     10000000    1010        012       PWRF
    201     129     10000001    1001        011       STKFL
    202     130     10000010    1011        013       LCLK
    203     131     10000011    1001        011       STKFL
    204     132     10000100    1010        012       PWRF
    205     133     10000101    1001        011       STKFL
    206     134     10000110    0101        005       RCD
    207     135     10000111    1001        011       STKFL
    210     136     10001000    1010        012       PWRF
    211     137     10001001    1001        011       STKFL
    212     138     10001010    1011        013       LCLK
    213     139     10001011    1001        011       STKFL
    214     140     10001100    1010        012       PWRF
    215     141     10001101    1001        011       STKFL
    216     142     10001110    0101        005       RCD
    217     143     10001111    1001        011       STKFL
    220     144     10010000    1010        012       PWRF
    221     145     10010001    1001        011       STKFL
    222     146     10010010    1011        013       LCLK
    223     147     10010011    1001        011       STKFL
    224     148     10010100    1010        012       PWRF
    225     149     10010101    1001        011       STKFL
    226     150     10010110    0111        007       XMIT
    227     151     10010111    1001        011       STKFL
    230     152     10011000    1010        012       PWRF
    231     153     10011001    1001        011       STKFL
    232     154     10011010    1011        013       LCLK
    233     155     10011011    1001        011       STKFL
    234     156     10011100    1010        012       PWRF
    235     157     10011101    1001        011       STKFL
    236     158     10011110    0111        007       XMIT
    237     159     10011111

    240     160     10100000    1001        011       STKFL
    241     161     10100001    1010        012       PWRF
    242     162     10100010    1001        011       STKFL
    243     163     10100011    1011        013       LCLK
    244     164     10100100    1001        011       STKFL
    245     165     10100101    1010        012       PWRF
    246     166     10100110    1001        011       STKFL
    247     167     10100111    0101        005       RCD
    250     168     10101000    1001        011       STKFL
    251     169     10101001    1010        012       PWRF
    252     170     10101010    1001        011       STKFL
    253     171     10101011    1011        013       LCLK
    254     172     10101100    1001        011       STKFL
    255     173     10101101    1010        012       PWRF
    256     174     10101110    1001        011       STKFL
    257     175     10101111    0101        005       RCD
    260     176     10110000    1001        011       STKFL
    261     177     10110001    1010        012       PWRF
    262     178     10110010    1001        011       STKFL
    263     179     10110011    1011        013       LCLK
    264     180     10110100    1001        011       STKFL
    265     181     10110101    1010        012       PWRF
    266     182     10110110    1001        011       STKFL
    267     183     10110111    1110        016       STOP
    270     184     10111000    1001        011       STKFL
    271     185     10111001    1010        012       PWRF
    272     186     10111010    1001        011       STKFL
    273     187     10111011    1011        013       LCLK
    274     188     10111100    1001        011       STKFL
    275     189     10111101    1010        012       PWRF
    276     190     10111110    1001        011       STKFL
    277     191     10111111    0010        002       WAIT
                                ++++++++
                                +++++++/( A(PIN #05) IS  CONB STACKFLOW (1)L
                                ++++++/( B(PIN #06) IS  CONH PDWN SYNC (1)L
                                +++++/( C(PIN #07) IS  CONI LCLK INT (1)L
                                ++++/( D(PIN #04) IS  CONE STOP (1)L
                                +++/( E(PIN #03) IS  DPH RCD INT (1)L
                                ++/( F(PIN #02) IS  DPH XMIT INT (1)L
                                +/( G(PIN #01) IS  DPG WAIT L
                                /( H(PIN #15) IS  DPE T DEL (1)L
```

16

M7261-8 REV A

16

/(=Y4 (PIN # 9) CONF MPC 04 L
*/(=Y3 (PIN #10) CONF MPC 01 L
**/(=Y2 (PIN #11) CONF MPC 02 L
***/(=Y1 (PIN #12) CONF MPC 00 L

OCTAL ADDRESS	DECIMAL ADDRESS	HGFEDCBA	****	OCTAL DATA	
300	192	11000000	1001	011	STKFL
301	193	11000001	1010	012	PWRF
302	194	11000010	1001	011	STKFL
303	195	11000011	1011	013	LCLK
304	196	11000100	1001	011	STKFL
305	197	11000101	1010	012	PWRF
306	198	11000110	1001	011	STKFL
307	199	11000111	0101	005	RCD
310	200	11001000	1001	011	STKFL
311	201	11001001	1010	012	PWRF
312	202	11001010	1001	011	STKFL
313	203	11001011	1011	013	LCLK
314	204	11001100	1001	011	STKFL
315	205	11001101	1010	012	PWRF
316	206	11001110	1001	011	STKFL
317	207	11001111	0101	005	RCD
320	208	11010000	1001	011	STKFL
321	209	11010001	1010	012	PWRF
322	210	11010010	1001	011	STKFL
323	211	11010011	1011	013	LCLK
324	212	11010100	1001	011	STKFL
325	213	11010101	1010	012	PWRF
326	214	11010110	1001	011	STKFL
327	215	11010111	0111	007	XMIT
330	216	11011000	1001	011	STKFL
331	217	11011001	1010	012	PWRF
332	218	11011010	1001	011	STKFL
333	219	11011011	1011	013	LCLK
334	220	11011100	1001	011	STKFL
335	221	11011101	1010	012	PWRF
336	222	11011110	1001	011	STKFL
337	223	11011111	0111	007	XMIT

340	224	11100000	1001	011	STKFL
341	225	11100001	1010	012	PWRF
342	226	11100010	1001	011	STKFL
343	227	11100011	1011	013	LCLK
344	228	11100100	1001	011	STKFL
345	229	11100101	1010	012	PWRF
346	230	11100110	1001	011	STKFL
347	231	11100111	0101	005	RCD
350	232	11101000	1001	011	STKFL
351	233	11101001	1010	012	PWRF
352	234	11101010	1001	011	STKFL
353	235	11101011	1011	013	LCLK
354	236	11101100	1001	011	STKFL
355	237	11101101	1010	012	PWRF
356	238	11101110	1001	011	STKFL
357	239	11101111	0101	005	RCD
360	240	11110000	1001	011	STKFL
361	241	11110001	1010	012	PWRF
362	242	11110010	1001	011	STKFL
363	243	11110011	1011	013	LCLK
364	244	11110100	1001	011	STKFL
365	245	11110101	1010	012	PWRF
366	246	11110110	1001	011	STKFL
367	247	11110111	1110	016	STOP
370	248	11111000	1001	011	STKFL
371	249	11111001			

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE	
MODULE UTILIZATION	D_MU_MM11_L_1
BLOCK DIAGRAM	D_BD_MM11_L 2
TIMING DIAGRAM	D_TD_MM11_L_3
* MEMORY DRIVERS	E_SC_G231_0_1
* CONTROL & DATA LOOPS	E_CS_G110_0_1
STACK SCHEMATIC	E_CS_H213_0_1
STACK SCHEMATIC	E_CS_H214_0_1
BLCCK DIAGRAM	D-BD-MM11-S-2
8K MEMORY	A-PL-MM11-L-0

SEQUENCE

MFG. PRINT SET
MFG. TEST PRO. FOR MM11/K,L,M,S&SP
A-SP-MM11-L-5

THIS IS PRINT SET

UNIT VARIATIONS		PRINT SET TYPE
VARIATION	TITLE	MM11_L
MM11_K	4K 16 BIT 18 MIL MEMORY	X
MM11_L	8K 16 BIT 18 MIL MEMORY	X

* SPECIAL REVISION PRINTS ARE AVAILABLE ON "C" ETCH REV. MODULES.
CARE SHOULD BE TAKEN TO INSURE THAT PROPER PRINTS ARE ORDERED.

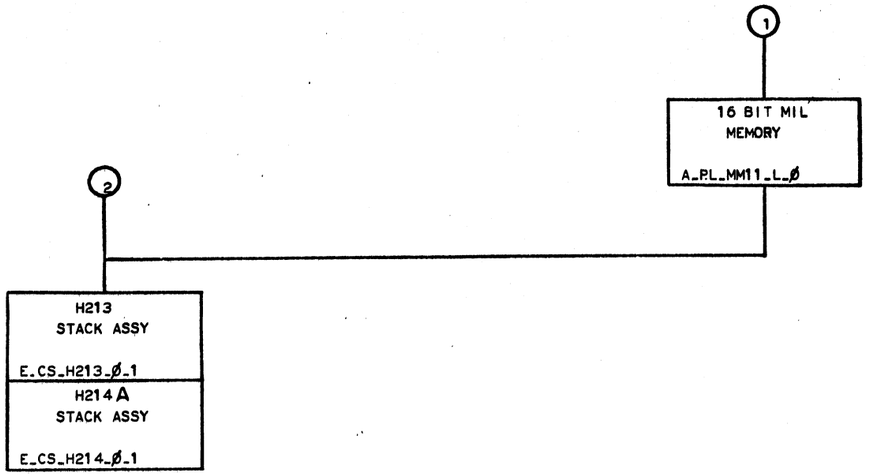
REVISIONS		
REV	CHG. NO.	DATE
A	MM11L-00001	9/72
B	MM11L-00002	11-72
C	MISC-00107	1-73
D	MISC-00111	2-73
E	MISC-00112	2-73
F	MISC-00113	2-73
H	MM11L-3	1-74
J	MM11L-5	6-75

USED ON OPTION/MODEL	
MM11_K	
MM11_L	

DRN. K. Balaghi	DATE 1-25-72	TITLE 16 BIT 18 MIL MEMORY
CHK'D. K. Balaghi	DATE 1-25-72	
PROJ ENG. P.D. Dowd	DATE 1-25-72	
PROD. R.K. Pistey	DATE 1-26-72	SIZE B / CODE DD / NUMBER MM11_L / REV J
FIELD SERV. W.A. Hunsley	DATE 1-26-72	DIST
SHEET 1 OF 3		

DRB 106

DEC 16-(325)-1002-1-N871



TITLE		SIZE	CODE	NUMBER	REV
16 BIT 16 MIL MEMORY	SHEET 2 OF 3	B	DD	MM11_L	J

ELECTRICAL

CUSTOMER PRINT SET MM11_L	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
X		1	D_MU_MM11_L_1	A	1	MODULE UTILIZATION	
X			D_BD_MM11_L_2	A	1	BLOCK DIAGRAM	
X			D_TD_MM11_L_3	*	1	TIMING DIAGRAM	
X			E_CS_G231_Ø_1	#	5	MEMORY DRIVER	
X			E_CS_G11Ø_Ø_1	#	5	CONTROL & DATA LOOPS	
X			D-BD-MM11-S-2	#	2	BLOCK DIAGRAM	
X			- . •		1		
X			A-PL-MM11-L-0		1	8K MEMORY	
			A-SP-MM11-1-7	A	4	PRELIM. ENG. SPEC. FOR MM11-K,L	
X		2	E_CS_H213_Ø_1	#	2	STACK SCHEMATIC	
X			E_CS_H214_Ø_1	#	2	STACK SCHEMATIC	
			A-SP-G109-0-8		1	G109,G110 CONT & DATA LOOP MFG. SPEC.	
			A-SP-G231-0-8		1	MEMORY DRIVER MFG. SPEC.	
			A-SP-MM11-L-4		1	MM11-K,-L,-S &-SP MFG. TEST SPEC.	
	X		A-SP-MM11-L-5		29	MFG. TEST PRO. MM11/K,L,M,S & SP	

MECHANICAL

CUSTOMER PRINT SET MM11_L	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1	A_PL_MM11_L_Ø	A	1	MEMORY	
			A_PS_3010654_0_0			PURCHASE SPEC	
		2	B_DD_H214_Ø_/	#	2	STACK SCHEMATIC	
			B_DD_H213_Ø	#	2	STACK SCHEMATIC	
			A-PL_G645_Ø_-Ø		1	STACK BOARD	

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT 18 MIL MEMORY	SHEET 3 OF 3	B	DD	MM11_L	J

DRB 108

DEC 16 '(325)' 1062-2-N871

PIN SIDE VIEW OF BACKPLANE

THESE 2 SLOTS ARE UNIBUS WIRED ON ALL 3 CONNECTORS

H213, H214 OR H215 STACK (F,E,D,C) (QUAD 8 1/2) UNIBUS CONN OR TERM (A,B)

DRIVE (F,E,D,C,B,A)(HEX 8 1/2) G231

SENSE-CONTROL (F,E,D,B,C,A)(HEX 8 1/2) G110

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS: .XXX = .005, .XX = .02, X = .1 — ANGLES: ±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —//—

FINISH —//—

DBN Maberry DATE 1/19/72
CHK'D J Ralph DATE 1-24-72
ENG. P Durant DATE 1-24-72
PROJ ENG. P Durant DATE 1-25-72
PROD. RK Peterson DATE 1-27-72

NEXT HIGHER ASSY. B-DD-MM11-L

SCALE —

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION

SIZE D | CODE MU | NUMBER MM11-L-1 | REV. A

DIST.

REVISIONS	CHK	CHANGE NO	REV.
	JR	MM11L-00005	A
	JR Ralph 6 Oct 75		
	P DURANT		
	P Durant 10-15-75		

BRUNING 40-532 15840

DEC FORM NO DRD 102-B

NOTES:
*1. ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
**2. MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
***3. ACTUAL MATRIX HAS { Y AXIS 8 PRD, 8 NRD, 8SS / X AXIS 4K 8 PRD, 8 NRD, 8SS / X AXIS 8K 8 PRD, 8 NRD, 16SS
****4. H214A IS A DESIGNATOR FOR EITHER AN H214 OR H215 MEMORY STACK, SEE E-CS-H214-Ø-1

UNIBUS

BUS AØL

BUS INITL
BUS DCLO L
BUS DATA(Ø-15) L
BUS C0L, C1L
BUS MSYNL
BUS SSYNL
BUS A1L, A14L
BUS A15L, 16L, 17L

BUS A2,3,4,5,6,7, 8,9,10,11,12,13

BUS DCLOL

G11Ø CONTROL & DATA LOOPS MODULE

BYTE MASKING

16 DATA LOOPS

STROBE Ø f 1 H
RESET Ø f 1 L
LOAD Ø f 1 H

DATA FF
INHIBIT DRIVER
SENSE AMP
BUS DRIVER

TIMING CHAIN
MODE CONTROLS
BUS RECEIVERS
DEVICE SELECTOR
INTERLEAVE CONTROL

TINH H
DATAOUT H
DATA H

IØH, CLK H, TINH H, TWID H, READ H

BUS RECEIVERS
ADDRESS LATCHES
FIRST LEVEL DECODE

ADDRESS BITS USED	CKTS
AØ2, Ø3 IØH	YPRD Ø-7 / YNWD Ø-7
AØ4,5,6	YSS Ø-7
A Ø7,8,9	XPRD Ø-7 / XNWD Ø-7
A1Ø,11,12,13	XSS Ø-15 Ø-7 FOR 4K

ADDRESS
TDR
TSS
READ-WRITE

STACK DISCHARGE CKT READ=GND WRITE=-15

X f Y CURRENT GENERATOR (XIG, YIG)

DC LO CKT (-15 V SERIES TRANSISTOR)

V REF CKT

CURRENT CONTROL & TEMPERATURE COMPENSATION

G231 DRIVER MODULE

YDRØ-7
YSSØ-7
XDRØ-7
XSSØ-15

H213, 214A MEMORY STACK**** 4 OR 8K X 16 BIT

I
SA
SB

16 CKTS

4096 CORES FOR 4K
8192 CORES FOR 8K
} PER BIT

X-Y DIODE MATRICES * *
X DRIVE LINES
Y DRIVE LINES

PRDØ
NWDØ
PRD1
NWD1

SSØ
SS1
SS2
SS3
***

R1
THERMISTER RESISTOR
RT1

REVISIONS			
CHK	CHANGE NO.	REV	
P.D.	MM11L-00005	A	
P.D.	6 Oct 75		
P.DURANT			
August 10-15-75			

DEC FORM NO DRD 102-B

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL
FINISH

DRN. R. Pacheco — DATE 11/19/71
CHK'D. E. Hebert — DATE 1-25-72
ENG. P.Durant — DATE 1-25-71
PROJ. ENG. P.Durant — DATE 1-25-71
PROD. R.K. Peterson — DATE 1-26-72

NEXT HIGHER ASSY. B-DD MM11-L
SCALE
SHEET 1 OF 1

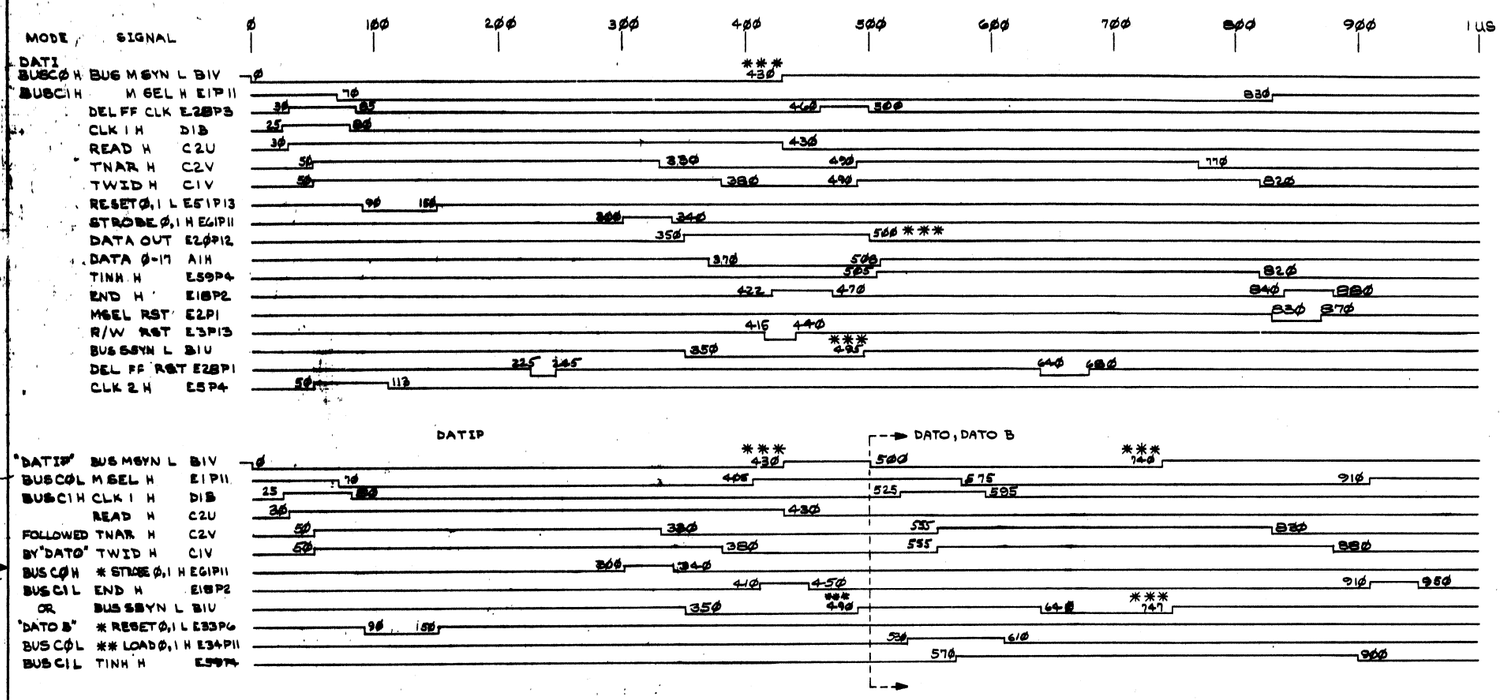
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: BLOCK DIAGRAM (MM11-L)

SIZE D | CODE BD | NUMBER MM11-L-2 | REV. A
DIST.

SIZE D CODE BD MM11-L-2 REV A

NOTES:
1. ANY SIGNALS NOT SHOWN ON DATIP, DATO OR DATO B ARE AS SHOWN ON DATI TIMING.
* 2. RESET L AND STROBE H DO NOT OCCUR IN DATO MODE. THEY ONLY OCCUR FOR THE BYTE NOT BEING ADDRESSED IN DATO B MODE.
** 3. LOAD H OCCURS FOR BOTH BITS IN DATO MODE AND ONLY FOR THE ADDRESSED BYTE IN THE DATO B MODE.
*** 4. ACTUAL TIME DEPENDS ON BUS AND PROCESSOR DELAYS.
5. ALL SIGNALS ON G109 OR G110 MODULE



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

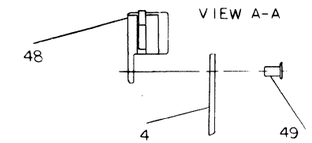
DRN. F Cadieux	DATE 12/3/71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. F Kalyk	DATE 1-27-72	
ENG. P.Durant	DATE 1-25-72	TITLE: TIMING DIAGRAM (MM11-L, MM11-K)
PROJ. ENG. P.D urant	DATE 1-25-72	
PROD. K.R Peterson	DATE 1-27-72	
NEXT HIGHER ASSY. B-DD-MM11-L		SIZE D CODE TD NUMBER MM11-L-3 REV.
SCALE —		
SHEET 1 OF 1		DIST.

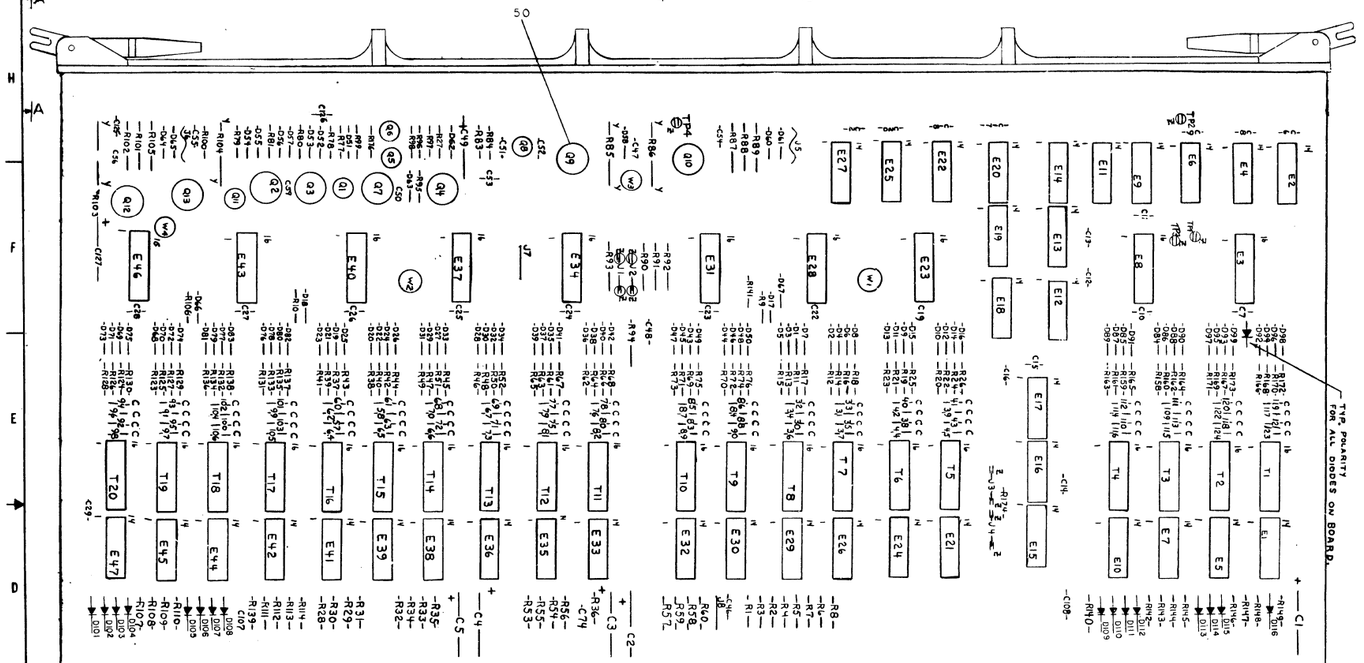
REVISIONS: REV. | CHANGE NO. | CHK
BRUNING 40-522 15M40
DEC FORM NO. DRD 102-B

SIZE CODE TD NUMBER MM11-L-3 REV.

NOTE:
1. IC ~008 TO BE MARKED ~008X OR ~008°←WHITE DOT

VIEW A-A





QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
4		SCREW, NYLON, #6 - 32	9008212	55
1	C127	CAP., 39 UF, 10V	1000076	56
1	C56	CAP., 680 PF, 100V, 5%	1000026	57
1	C52	CAP., 470 PF, 100V, 5%	1000024	58
2	J7, J8	JUMPER MACH. INSERTED	9009185	59
1	R176	RES., 4.7K, ¼W, 5%	1300447	60
2	J5, J6	#22 AWG., STRANDED TEFLON INSULATED	1700035-00	61

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF		X-Y COORDINATE HOLE LOCATION	K-CO-G231-B4	1
REF		ASSY/DRILLING HOLE LAYOUT	E-AH-G231-05	2
REF		MODULE ECO HISTORY	B-AH-G231-06	3
1		ETCHED CIRCUIT BOARD	5009708	4
2	C51 C55	CAP., 39PF, 100V, 5% DM	1009010	5
A/R		WIRE JUMPER AWG. #22 SOLID	9107560-01	6
80	C30-C45, C57, C58, C60-C73, C75-C106, C109-C124	CAP. 1000PF, 100, 5% DM	1000042	7
36	C6-C29, C46, C47, C48, C50, C53, C54, C74, C107, C108, C125, C126, C59	CAP., 22UF, 50V, -20%, 80%	1010274	8
6	C1-C5, C49	CAP., 6.8 MFD, 35V, 20%	1000067	9
88	D1-D16, D19-D54, D56, D57, D62, D63, D68-D99	DIODE, D664	1100114	10
25	D17, D18, D55, D60, D61, D64-D67, D101-D116	DIODE, D672	1105275	11
1	D58	DIODE, 1N823, ZENOR	1105508	12
				13
41	R1-R8, R28-R35, R53-R60, R96, R107-R114, R142-R149	RES., 150, ¼W, 5%	1300250	14
3	R78, R80, R98	RES., 330, ¼W, 5%	1300295	15
1	Q6	TRANS, 6534C	1503409-2	16
1	R93	RES., 470, ¼W, 5%	1300315	17
3	R84, R99, R100	RES., 1.5K, ¼W, 5%	1300391	18
1	R79	RES., 470, ¼W, 10%	1300317	19
4	R87, R88, R101, R102	RES., 1.5K, ½W, 5%	1300394	20
1	R95	RES., 2.2K, ¼W, 5%	1300417	21
1	R174	RES., 10K, ¼W, 5%	1300479	22
1	R97	RES., 15K, ¼W, 5%	1300496	23
3	R36, R139, R140	RES., 5.1, ½W, 5%	1309422	24
1	R83	RES., 750, ¼W, 5%	1301401	25
4	R9, R10, R105, R141	RES., 680, ¼W, 5%	1301424	26
2	R89, R105	RES., 2K, ½W 5%	1302387	27
2	R90, R94	RES., 147, 1/8W, 1%	1302874	28
1	R91	RES., 909, 1/8W, 1%	1302685	29
1	R92	RES., 1.78K, 1/8W, 1%	1302612	30
4	R85, R86, R 104 R103	RES., 16.9, 6W, 1%	1310032	31
1	Q4	TRANSISTOR, 2219	1501881	32
3	Q2, Q3, Q7	TRANSISTOR, 1008	1502155	33
1	Q5	TRANSISTOR, 3009 B	1503100	34
1	Q1	TRANSISTOR, 6534 D	1503409	35
2	Q8, Q11	TRANSISTOR, 2N4258	1505321	36
4	Q9, Q10, Q12, Q13	TRANSISTOR, 2N3762	1509649	37
20	E1, E5, E7, E10, E21, E24, E26, E29, E30, E32, E33, E35, E36, E38, E39, E41, E42, E44, E45, E47	IC, 4011 QUAD TRANSISTOR	1511102 *	38
4	E9, E15, E16, E17	IC, DEC, 8640	1911469	39
20	T1-T20	TRANSFORMER	1609996	40
2	E22, E25	IC, 74H10	1909057	41
3	E2, E4, E27	IC, 1074H00	1910462 *	42
10	E3, E8, E23, E28, E31, E34, E37, E40, E43, E46	IC, 8251-1	1909854	43
1	L6	IC, 1074H04	1910463 *	44
7	E11-E14, E18, E19, E20	IC, 74H74	1909667	45
4		HEAT SINK	1210001	46
12		SPLIT LUGS	9006735	47
1		HANDLE	1210711-02	48
12		EYELET, #GS4-7, E B. STIMPSON	9006732	49
4		TRANSIPAD	9007200	50
				51
				52
83	R11-R26, R37-R52, R61-R76, R123-R138, R158-R173, R77, R81, R27	RES. 100, ¼W, 5%	1300229	53
4	W1-W4	STANDOFF THREADED, INSULATED ¼ X 3/8 LG.	9008213	54

REVISIONS		
CHK	CHANGE NO.	REV.

MASSPACE P-1699

TITLE	PDP-11 MEMORY DRIVER			
SIZE	CODE	NUMBER	REV.	
D	CS	G231-0-1	R	
SCALE		SHEET 2 OF 5	DIST.	

DEC FORM NO. ORG 137

BUS A1Ø L BN2 — E16 8640 — BUS A11 L BN1 — E16 8640 — BUS A09 L BM1 — E15 8640 — A08 L BM2 — E15 8640 — BUS A07 L BL1 — E15 8640 — BUS A03 L BJ1 — E17 8640 — BUS A02 L BJ2 — E17 8640

CDL2 AØ1 H DA1

E9 8640 ×2

10K R174 ** +5V BP1 J3 J4 BUS A13 L

MD2 A1Ø H — E18 74H74 — MD2 A11 H — E18 74H74 — MD2 A09 H — E19 74H74 — MD2 A09 L — E19 74H74 — MD2 A08 H — E20 74H74 — MD2 A07 H — E13 74H74 — MD2 A03 H — E13 74H74 — MD2 A03 L — E14 74H74 — MD2 A02 H — E14 74H74 — MD2 A01 H — E11 74H74

DB1 CDL2 CLK 1 H

BUS A06 L BL2 — E15 8640 — BUS A12 L BP2 — E17 8640 — BUS A05 L BK1 — E16 8640 — BUS A04 L BK2 — E16 8640

8640 E9 — SPARE — 8640 E9 — SPARE

E14 74H74 — MD2 A05 H — E19 74H74 — E20 74H74 — E12 74H74 — MD2 A04H — E12 74H74

74H74 SPARE E11

+5V

750Ω R83 — 1.5K R84 — Q8 — 4258 — C51 39 PF — T.P.

47Ø PF C52 — R85 16.9Ω — R86 16.9Ω — Q9 — Q10 — 3762 — T.P.4 — J5 — MD2IY Y AXIS TO WRITE SWITCHES AND READ DRIVERS

R87 1.5K — R88 1.5K — DG0 — R89 1K — D61 — −15V

WRITE H — E4 — TWIDH

CDL2 READ H CV2 — E6 — 1Ø74HØ4 — E4 — TSSH

CDL2 TNAR H CV2 — E6 — 1Ø74HØ4 — E4 — TNAR H

1Ø74HØØ (4 CKTS)

TP3 ⊗

E22 74H1Ø — MD2YS1L

E22 74H1Ø — MD2YSØL

E22 74H1Ø — MD2XS3L

E25 74H1Ø — MD2XS2L

E25 74H1Ø — MD2XS1L

E25 74H1Ø — MD2XSØL

**

	J3	J4
4K	IN	OUT
8K	OUT	IN

*** ALL INPUTS ARE FROM UNIBUS (BUS xxxL) OR G1Ø9 OR G11Ø (CDL2XXXL)

*** CDL2 TWID H CV1 — E2 — T.P.2 — MD2 TDR H
CDL2 READ H CV2 — E2
CDL2 TNAR H CV2 — E2
WRITE H
1Ø74HØØ (3 CKTS.)

+5V — 1Ø8Ω R77 — 33Ø R78 — 47Ø Ω R79 — DS1 — Q1 — G534 — DS2 — 1ØØ8 — Q2 — STACK DISCHARGE MD2SD — 33Ø R80 — DS3 — DS4 — DS5 — DS6 — DS7 — 1Ø8 RB1 — Q3 — 1ØØ8 — C59 .22UF — 196 — 3ØØ — EC1 — EA1 — REF

E6 1Ø74HØ4 — CDL2 TWID H CV1 — E6 — 1Ø74HØ4 — TWID H

BF2L R96 150 — Q5 — 3ØØ9B — R97 15K — R98 33Ø — Q6 — 6534C

6.2V — .22UF C48 — DS8 — R96 — C47 .22UF — R91 9Ø9 — R92 1.78K — J1 J2 — R94 147Ø — C49 6.8 — 22Ø — Q4 — 2219 — R95 2.2K — R99 47Ø — R27 18Ø — R176 4.7K — Q7 — 1ØØB — C58 .22UF — −15V — X-Y REFFERENCE SUPPLY

DG3 — C56 68ØPF — 1.5K R1Ø3 — Q11 — 4258 — C55 39PF — R1Ø1 1.5K — R1Ø2 1.5K

R1Ø3 16.9Ω — R1Ø4 16.9Ω — Q12 — Q13 — 3762 — MD2IX X AXIS TO WRITE SWITCHES AND READ DRIVERS — DG4 — R1Ø5 1K — DG5 — J6 — −15V

.22 UF C54 — DG2 — .22 UF C53

T.P.1 — CDL2 READ H CV2 — E6 — 1ØH74Ø4 — MD2 READ L — E6 — 1Ø74HØ4

J7

* THIS CIRCUIT IS ON STACK BOARD

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .006, .XX ± .02, .X ± .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL — FINISH

DRN. E Carberry	DATE 9-24-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. P D Lippert	DATE 1-21-72	
ENG. P D Lippert	DATE 1-25-72	TITLE PDP-11 MEMORY DRIVER
PROJ. ENG. A Dumont	DATE 1-25-72	
PROD. R K Peterson	DATE 1-25-72	
NEXT HIGHER ASSY.		SIZE D CODE CS NUMBER G231-Ø-1 REV. R
SCALE NONE		
SHEET 5 OF 5		DIST.

REVISIONS: REV | CHANGE NO | BY

DEC FORM NO DRD 103-B

FROM CURRENT LOOP MD2IX — DI8 — R180 680Ω — +5V READ SWITCHES — WRITE SWITCHES

MD2 XS3L — E40 8251-1 D1 — MD2 A11H — MD2A10H — D3 D0 D2

MD2 XS2L — E37 8251-1 D1 — MD2 A11H — MD2A10H — D3 D0 D2

MD2 XS1L — E34 8251-1 D1 — MD2 A11H — MD2A10H — D3 D0 D2

MD2 XS0L — E31 8251-1 D1 — MD2 A11H — MD2A10H — D3 D0 D2

5.1Ω R36 — -15V — C74 .22 UF

FROM CURRENT LOOP MD2IX — DG6 — R186 680Ω — +5V — WRITE DRIVER — READ DRIVER

E27 — MD2A09H — MD2TDRH — 1074H00 — MD2A08H — MD2A07H — D3 D0 D2 — E46 8251-1 D1

E27 — MD2A09L — MD2TDRH — 1074H00 — MD2A08H — MD2A07H — D3 D0 D2 — E43 8251-1 D1

-15V — R187 — FV2 XPRD7 — FT2 XNWD7

R124 R125 R126 R127 R128 R129 R130 R131 R132 R133 R134 R135 R136 R137 R138

D101 D102 D103 D104 D105 D106 D107 D108

R188 R189 R190 R191 R192 R193 R194 R195

FU2 XPRD6 — FS2 XNWD6

FS1 XPRD5 — FR2 XNWD5

FR1 XPRD4 — FP2 XNWD4

+5V — 5.1Ω R139 — DB2 -15 — C107 .22 UF

FP1 XPRD3 — FN2 XNWD3

FN1 XPRD2 — FM2 XNWD2

FM1 XPRD1 — FL2 XNWD1

FL1 XPRD0 — FK2 XNWD0

FK1 XS15 — FJ2 XS14 — FJ1 XS13 — FH2 XS12 — FH1 XS11 — FF2 XS10 — FF1 XS09 — FE2 XS08

FE1 XS07 — FD2 XS06 — FD1 XS05 — FC1 XS04 — CT2 XS03 — CS2 XS02 — CS1 XS01 — CR2 XS00

R87 R88 R89 R90 R91 R92 R93 R94 R95 R96 R97 R98 R99 R100 R101 R102

C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73

C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C88 C89 C90

C91 C92 C93 C94 C95 C96 C97 C98 C99 C100 C101 C102 C103 C104 C105 C106

R41 R42 R43 R44 R45 R46 R47 R48 R49 R50 R51 R52

R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76

R103 R104 R105 R106 R107 R108 R109 R110 R111 R112 R113 R114 R115 R116 R117 R118

100Ω TYP — D664 TYP — 1000PF TYP — 150Ω TYP R35 — 150Ω TYP R60 — 130Ω TYP — D672 TYP

MD2SD STACK DISCHARGE

MD2 READ L

ALL INPUTS FROM G231 SHEET2 (MD2)
ALL OUTPUTS GO TO MEMORY STACK

REVISIONS	REV	CHANGE NO.	CHK

DEC FORM NO DRD 102-B

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

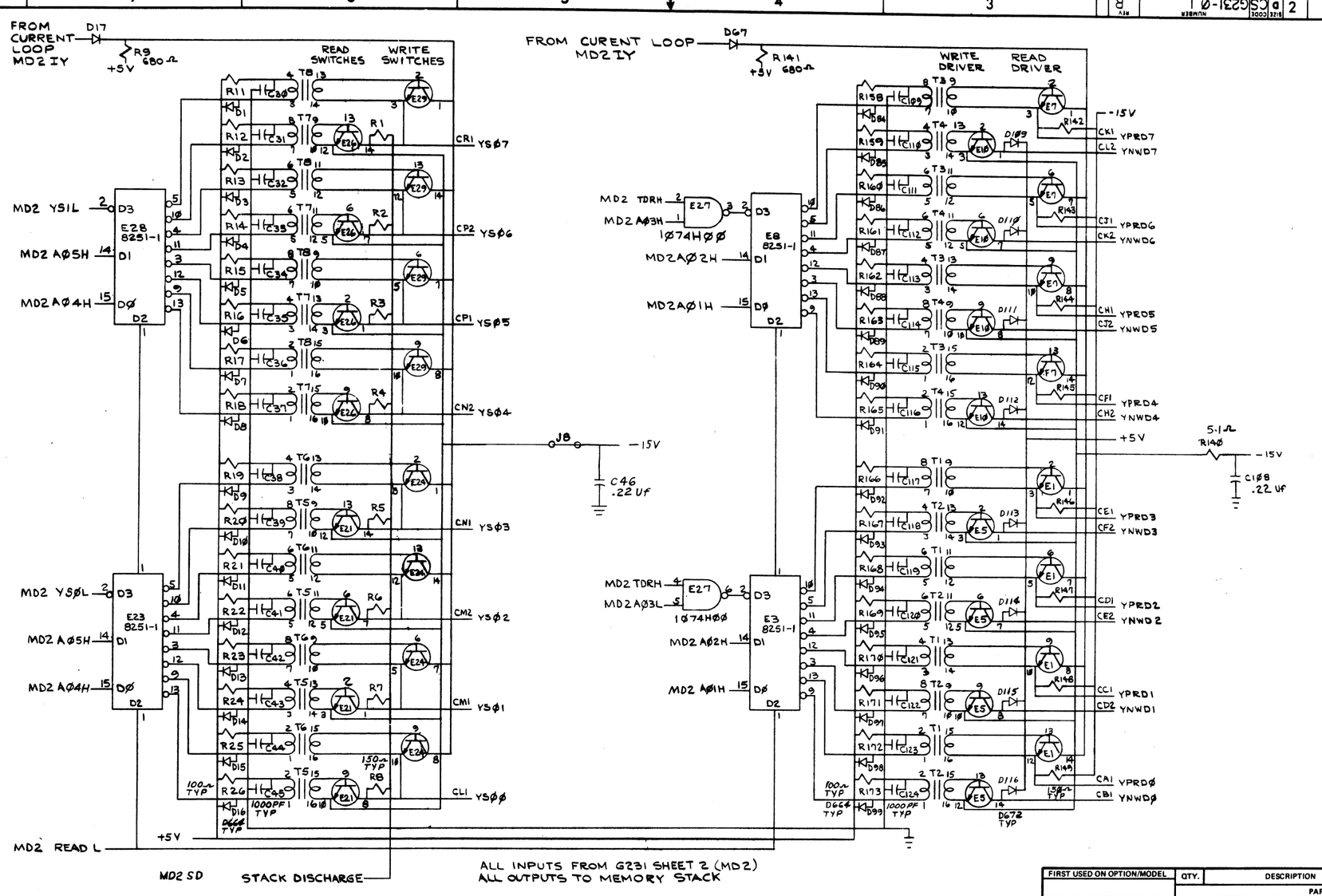
FINISH —

DRN. F Carberry	DATE 10-1-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. E Delagio	DATE 1-21-72	
ENG. P Durant	DATE 1-25-72	
PROJ. ENG. P Durant	DATE 1-25-72	
PROD. R K Peterson	DATE 1-26-72	
NEXT HIGHER ASSY.		
SCALE —		
SHEET 4 OF 5		

TITLE: PDP-11 MEMORY DRIVER

SIZE CODE D CS | NUMBER G231-0-1 | REV. R

DIST.



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 X ± .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —"—
FINISH —"—

		DATE
DRN. F Carberry		10/5/71
CHK'D J Hagan		1-21-72
ENG. P Durant		1-25-72
PROJ. ENG. P.D Durant		1-25-72
PROD. Rick Peterson		1-26-72

NEXT HIGHER ASSY.
SCALE —"—
SHEET 5 OF 5

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

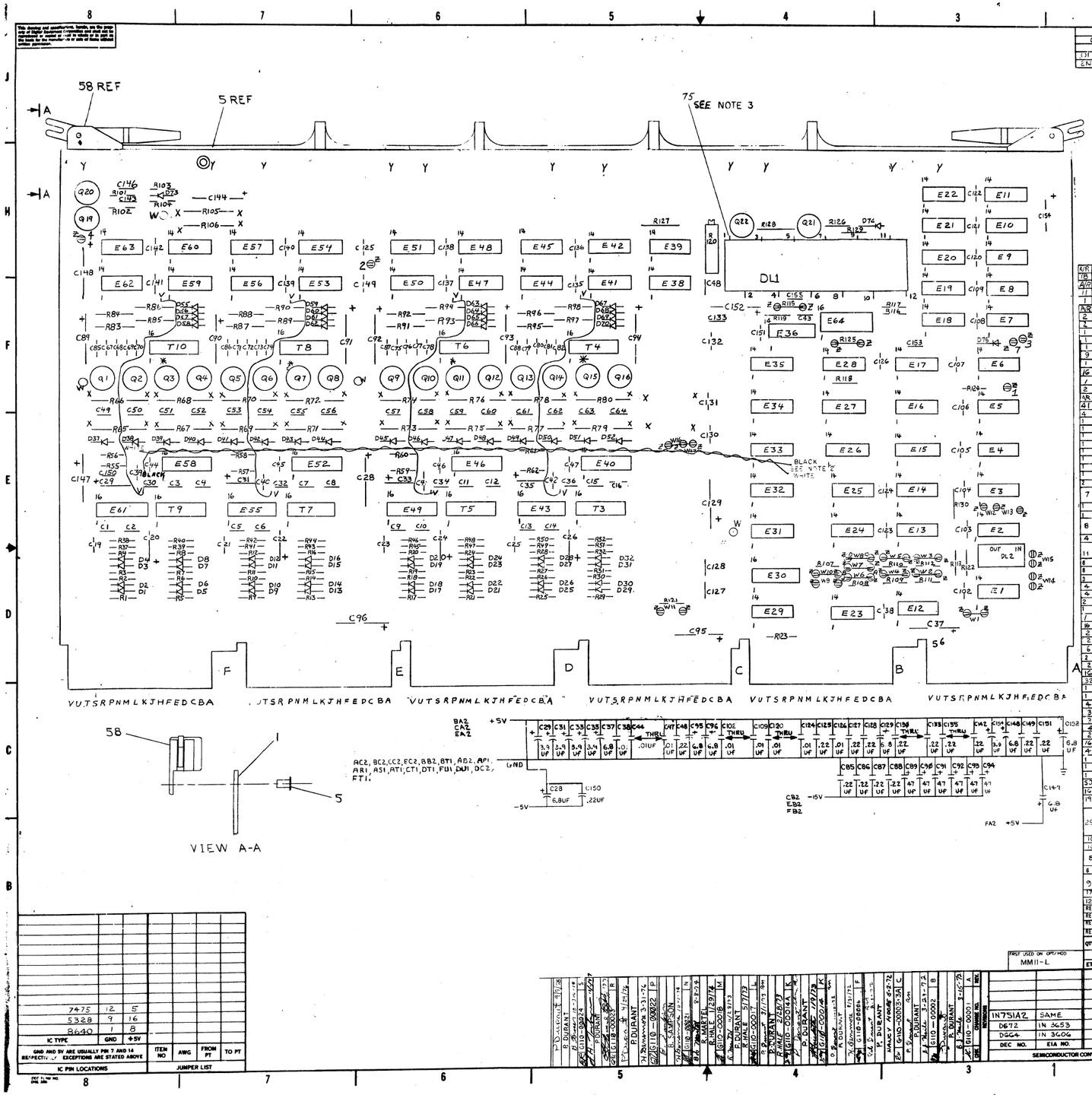
TITLE: PDP-11 MEMORY DRIVER

SIZE CODE DCS | NUMBER G231-0-1 | REV. R | DIST.

REVISIONS | REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

REV R | NUMBER DCS G231-0-1 | SIZE CODE B



COMPONENT SUBSTITUTION LIST

ORIGINAL PART DESCRIPTION	PART NO	SUBSTITUTE PART DESCRIPTION	PART NO	REV
CAP 47PF 100V CER	1000410-001	.01 UF 100V DISC	1000410-01	12
EN3708	1540649-01	DEC 3708	1540649-0035	

NOTES:
1. R115 AND R125 MAY BE CHANGED AT FINAL TEST. RESISTANCE RANGE WILL BE FROM 5.11K TO 14.7K.
2. 30 TWISTED WIRE PAIR WILL RUN UNDER THE PAPER BLK. WHT. JUMPER WIRES THE RUN SHOULD BE LAYED BETWEEN THE LINE OF D67 TO D89 THROUGH D52, AND THE LINE OF 4.99K RESISTORS R86, R89, R60 AND R61.
3. USE SLEEVING 9107278-00 OVER PIN 1 OF DL1
4. DEC 7438 L (1911219-01) ACCEPTABLE SUBSTITUTE FOR 7436 L. WARNING: DO NOT USE 7438 S IN PLACE OF DEC 7438 L
5. TRANSIPADS USED UNDER Q1 THRU Q16, Q19, Q22.

A/R		#30 AWG GREEN	9159140-55	77
TB		TRANSIPAD	9057224	76
A/R		SLEEVING .215 DIA.	9107279-00	75
11	W1-W8, W10, W11, W17	WIRE #22 AWG INSULATED	9009185	74
1	R126	RES 820 1/4 W 5%	1301775	73
AR	SEE NOTE 4	#30 AWG BLACK WHITE TWP	9107280-00	72
2	E15, E36	IC DEC 7404	1913931	71
2	R115, R125	RES 9.09K 1/8W 1% SEE NOTE 1	1309955	70
1	R128	RES 1.6K 1/8 W 5%	1308394	69
1	R127	RES 150 1/2 W 5%	1302249	68
1	C153	CAP 27PF 100V	1001739	67
9	C2,3,22,24,26,28,31,33,35,154	CAP 3.4UF, 10V, 10% S.TANT	1000064	66
1	C135	CAP 18PF 100V	1001808	65
16	R37-R52	RES.2K 1/8W 5%	1302388	64
1	E64	IC DEC 7413	1910436	63
2	R116, R118	RES 220 1/8W 5%	1302417	62
AR		WIRE, JUMPER #18 AWG STD ALK(WHT)	1700069	61
41		SPLIT LUGS	9009435	60
4		SCREW NYLON #4-40X 3/8	9009401-04	59
		HANDLE ASSY	1210711-2	58
1	E33	IC DEC 74H40	1909588	57
1	E27	IC DEC 74H18	1909057	56
1	E30	IC DEC 7415	1909350	55
1	E9	IC DEC 8001-P	1909514	54
1	E1	IC DEC 74H55	1909083	53
1	E28	IC DEC 7402	1909804	52
1	E38	IC DEC 74121	1913200	51
2	E13, E24	IC DEC 8242	1908712	50
7	E41, E47, E53, E59, E14 E34, E38	IC DEC 7437	1910091	49
1	E32	IC DEC 74H11	1909287	48
1	E18	IC DEC 74H53	1909882	47
8	E48, E43, E46, E49, E52, E55, E58, E61	IC DEC 7528	1910687	46
4	E44, E58 E58, E62	IC DEC 7405	1909486	45
11	E39, E42, E45, E51, E54, E57 E60, E63, E3, E4, E48	IC DEC 74H74	1909887	44
6	E18-E22, E5	IC DEC 7436	1911219-01	43
8	E8 THRU 12, E23, E7, E29	IC DEC 8040	1911463	42
3	E17, E25, E31	IC DEC 7400	1905215	41
4	T4, T6, T8, T10	X FMR 5 22 DUAL LINE	1609896	40
4	T3, T5, T7, T9	XFMR C17283	1609878-1	39
2	E2, E26	IC DEC 7474	1905547	38
1	DL1	DELAY LINE DL5183	1605529	37
1	DL2	DELAY LINE DD130	1609427	36
16	Q1 THRU Q16	XSTR 2N3734	1510062	34
2	Q18, Q21	XSTR DEC 30098	1908100	34
2	Q19, Q22	XSTR 2N3767	1909849-01	33
6	R101 THRU R112	RES 4.7K 1/8 5%	1305487	32
2	R105, R106	RES 100 1/8 5%	1302232	31
2	R103, R113	RES 330 1/8 5%	1302293	30
16	R65 THRU R80	RES 13.0 1/8 1%	1310032-0-1	29
32	R1 THRU R32	RES 75 1/8W 1% MF	1303064	28
1	R101	RES 210 1/8 5%	1301812	27
1	R102	RES 560 1/8 5%	1301890	26
4	R58, R59, R60, R61	RES 4.99K 1/8W 1% MF	1305424	25
3	R121, R122, R124	RES 1K 1/8 5%	1300305	24
5	R104, R123, R120	RES 390 1/8 5%	1300309	23
4		STANDOFF NYLON	9006960	22
2	R117, R129	RES 100 1/4W 5%	1300229	21
16	R83 THRU R98	RES 82 1/4W 5%	1301781	20
4	R55, R57, R59, R62	RES 13.6 1/8W 1% MF	1303310	19
1	R119	RES 3.16K 1/8W 1% MF	1303045	18
1	R120	RES 5K, 1/2 W, 10% POT	1309143-03	17
1	D73	DIODE 4005 121	1105873	15
53	D1 THRU D52, D57-65, 74, 75	DIODE D872	1109215	15
16	D55 THRU D70	DIODE D884	1100114	14
19	C38, C102 THRU C109 C120 THRU C124 C126, C144-47	CAP .01 UF 100V 20% CER	10-01610-00	13
29	C39 THRU C42, C143 C48, C50 THRU C58, C125, C127, C129, C130 THRU C133, C136, C138, C139, C150, C151, C152, C153, C142	CAP .22 UF 50V ±10% CERAMIC	1010274	12
16	C49 THRU C64	CAP 33000PF 50V ±8% CERAMIC	1031172-0-0	11
10	C87 THRU C82	CAP 1000PF 100V 5% MICA	10-00042	10
8	C21 C23 C25 C30 C32 C34 C36, C19	CAP 120 PF 100V 5% DM	10-00018	9
5	C89 THRU C94	CAP 47UF 20V 10% TANT.	10-04814	8
9	C144 C129 C147 C148 C95 C37 C28, C96, C152	CAP 6.8UF 35V 10% TANT	10-05308	7
17	C43, C71-C76	CAP 39PF 100V 5% DM	1000113	6
12		EYELET GS-4-7	9006732	5
REF		MODULE ECO HISTORY	B-MM-G110-0-6	4
REF		ASSY-DRILLING HOLE LAYOUT	D-MM-G110-0-5	3
REF		X-Y COORDINATE HOLE/LAYOUT	X-CO-G110-0-4	2
REF		ETCHED CIRCUIT BOARD	5009709	1
QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV 14

IC TYPE	GND	+5V
7475	12	5
5328	9	16
8640	1	8

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

DEC	EIA
1N751A2.	SAME
D672	1N 3653
DGG4	1N 3606
DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

FIRST USED ON CPT-1400 MMII-L

REV	DESCRIPTION	DATE	APPROVED
A	ECO-00001	3-16-72	P. DURANT
B	ECO-00002	3-24-72	P. DURANT
C	ECO-00013-SAL	6-6-72	P. DURANT
D	ECO-00044	6-26-72	P. DURANT
E	ECO-00045	7-11-72	P. DURANT
F	ECO-00046	7-19-72	P. DURANT
G	ECO-00047	8-2-72	P. DURANT
H	ECO-00048	8-28-72	R. MARTEL
J	ECO-00049	9-7-72	R. HALE
K	ECO-00050	9-11-72	P. DURANT
L	ECO-00051	9-18-72	P. DURANT
M	ECO-00052	9-21-72	P. DURANT
N	ECO-00053	10-3-72	P. DURANT
P	ECO-00022	3-31-72	B. SAMPSON

	NAME	DATE
DRAWN	P. DURANT	3-16-72
CHKD	R. MARTEL	3-16-72
APPD	R. MARTEL	3-16-72
PROJ. ENGR.	R. HALE	3-16-72
MFG. ENGR.		
QUAL. ENGR.		
PROD. ENGR.	R. Peters	3-21-72

UNIT HIGHER ASSY B-DD-MMII-L

SCALE 2/1

SHEET 1 OF 4

DEC

EQUIPMENT CORPORATION

TITLE: CONTROL & DATA LOOPS CDL 1

SIZE CODE A | NUMBER E CS G110-0-1 | REV.

DIST.

	W9	W10
4K	IN	OUT
8K	OUT	IN

MEMORY BANK SIZE

W'S 2,3,4,5,6 PROGRAM MEMORY BANK LOCATION. CUT JUMPER FOR BUS A LINE LOW (ASSERTED) WHEN BANK SELECTED. W5 MUST BE IN WHEN USED AS 8K BANK

BUS A13 L
BUS A16 L
BUS A15 L
BUS A17 L
BUS A01 L
BUS A14 L

* USE INSULATED JUMPERS IN POSITIONS SHOWN BY DOTTED LINES WHEN INTERLEAVING

HIGH WHEN MEMORY BANK IS SELECTED

DEVICE SELECT CIRCUIT (DSELH)

-5V SUPPLY

CDL2 TO SENSE AMPS

SPLIT LUG T.P.4

1 W

-15V

TP2 TP7

AV1 TP5

AU1 TP6

BYTE MASKING LOGIC

PROTECT LOW

250 NS TOTAL DELAY
25NS/TAP

DELAY FF RESET

READ H

MSEL RESET

TO IN DRIVERS SSYN RESET
TINHØH BUS INIT L
TINH1H

WRITE RESTART ONE SHOT CKT

WRITE RESTART L

SSYN RESET

CLK1H

CDL2 CLK1H

TNAR 11 CV2 CDL2

CDL2 TWID 8 CV1

READ H CU2

INIT L

STROBE SPLIT LUC T.P.1

BUS SSYN L

CDL2 DATA OUT H TO BUS DRIVERS

RESET 1L CDL2 TO DATA 74H74 FF

RESET ØL CDL2

STROBE 1H CDL2 TO SENSE AMPS (NS2ES)

STROBE ØH CDL2 (#30 TWP)

LOAD ØH TO DATA 74H74 F.F.

LOAD 1H

AØH LATCH

CØH LATCH

C1 LATCH

	W12	W13	W14	W15	W16	W17
G110	OUT	OUT	OUT	OUT	IN	IN

REVISIONS	REV.	CHANGE NO.	CHK.

DEC FORM NO

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN. F Carberry	DATE 11/20/72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. Balaghi	DATE 1-25-72	
ENG. F Durant	DATE 1/25/72	TITLE CONTROL & DATA LOOPS CDL 2
PROJ. ENG. F Durant	DATE 1/25/72	
PROD. R.R. Peterson	DATE 1-31-72	

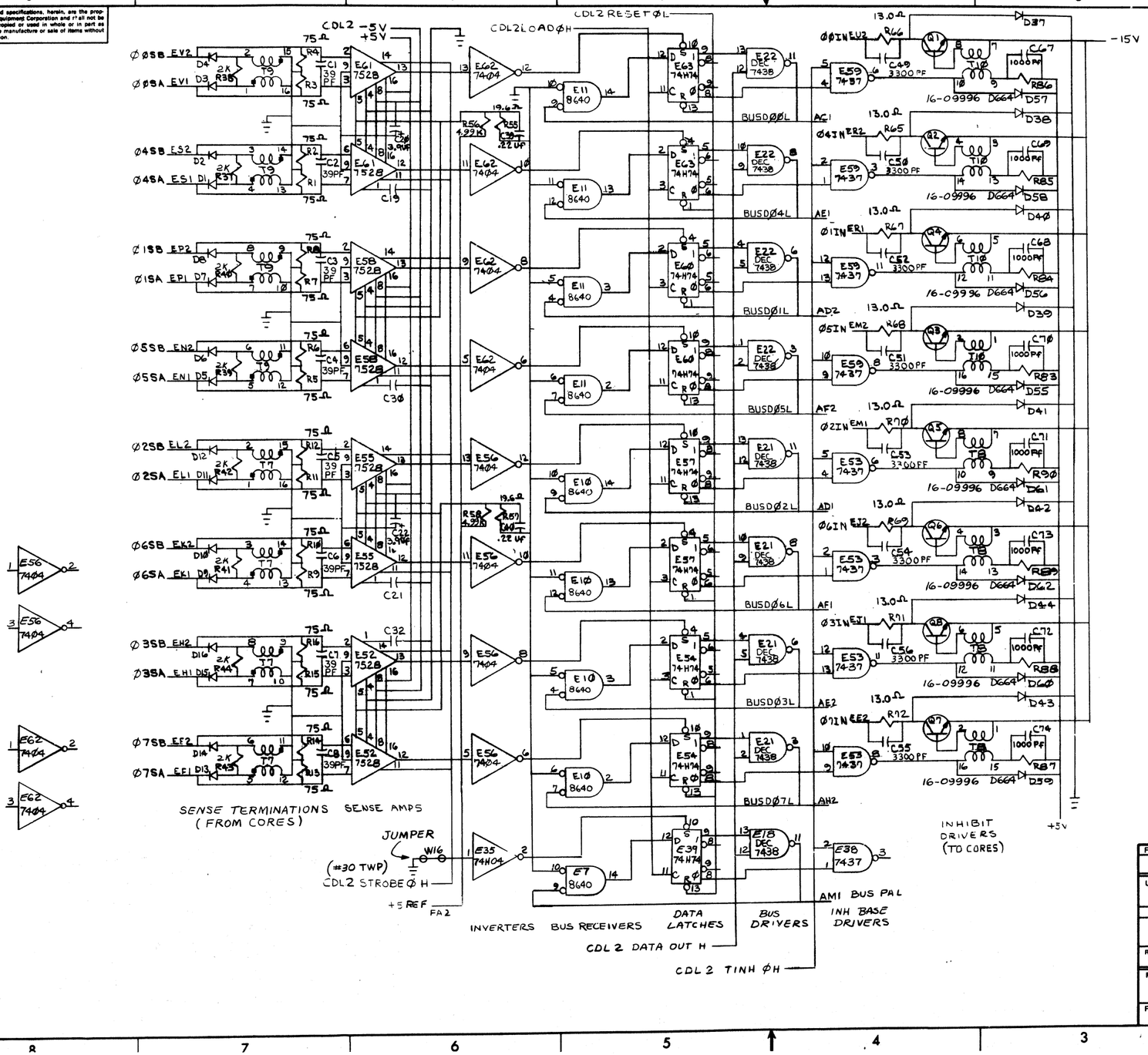
NEXT HIGHER ASSY. B-DD-MMII-L

SCALE

SHEET 2 OF 4

SIZE	CODE	NUMBER	REV.
D	CS	G110-0-1	S

DIST.



NOTE

1 ALL SIGNALS FROM UNIBUS (BUS DØØL TO BUS DØ7L), G110 SHEET 2 (CDL2) OR STACK (00SA,E TO 07SA,B AND ØØIN TO Ø7IN)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. L Cadorin DATE 11/18/72
CHK'D. J Silagi DATE 1-25-72
ENG. F Durant DATE 1/27/72
PROJ. ENG. F Durant DATE 1/27/72
PROD. R W Peterson DATE 1/31/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL & DATA LOOPS CDL3

NEXT HIGHER ASSY. B-DD-MMII-L
SCALE
SHEET 3 OF 4

SIZE D | CODE CS | NUMBER G110-Ø-1 | REV. S | DIST.

REVISIONS | REV. | CHANGE NO | CHK

DEC FORM NO

NOTE

1 ALL SIGNALS FROM UNIBUS (BUS UCB6-DISL) G110 SHEET 2 (CDL2) OR STACK (Ø8SA,B TO 15SA B AND ØBIN TO 15IN)

CDL2 -5V +5V

CDL2RESET1L

CDL2LOAD1H

-15V

+5V

ØBIN DD1 R74 13.0Ω Q9 D45

9IN DD2 R73 13.0Ω Q10 D46

13IN DR2 R75 13.0Ω Q12 D47

1ØIN DR1 R76 13.0Ω Q11 D49

14IN DM2 R78 13.0Ω Q13 D5Ø

11IN DM1 R77 13.0Ω Q14 D52

15IN DS2 R79 13.0Ω Q16 D51

12IN DS1 R80 13.0Ω Q15 D67

Ø8SB ED2 D28 R40 2K T5 R18 R19 75Ω C9 39PF E49 7528 C22

Ø8SA ED1 D19

Ø9SB DV2 D18 R45 2K T5 R17 C10 39PF E49 7528 C23

Ø9SA DV1 D17

13SB DS2 D24 R48 2K T5 R24 R23 C11 39PF E46 7528 C34

13SA DS1 D23

1ØSB DD2 D22 R47 2K T5 R22 R21 C12 39PF E46 7528

1ØSA DD1 D21

14SB DN2 D28 R50 2K T3 R26 R27 C13 39PF E43 7528 C25

14SA DN1 D27

11SB DL2 D26 R49 2K T3 R28 R29 C14 39PF E43 7528

11SA DL1 D25

15SB DK2 D32 R52 2K T3 R30 R31 C15 39PF E40 7528 C36

15SA DK1 D31

12SB DH2 D30 R51 2K T3 R32 R29 C16 39PF E40 7528

12SA DH1 D29

R60 4.99K R59 261 .22 UF

R61 4.99K R62 261 .22 UF

196Ω

E44 7404

E50 7404

E35 74H04

E8 8640

E7 8640

E9 8640

E51 74H74

E48 74H74

E42 74H74

E45 74H74

E39 74H74

E20 DEC 7438

E19 DEC 7438

E18 DEC 7438

E47 7437

E41 7437

E38 7437

C57 3300PF C58 3300PF C59 3300PF C60 3300PF C61 3300PF C62 3300PF C63 3300PF C64 3300PF

T6 T4 16-09996 DG64

C75 1000PF C76 1000PF C78 1000PF C79 1000PF C80 1000PF C81 1000PF C82 1000PF C83 1000PF

R94 R93 R92 R91 R98 R97 R96 R95

D48 D65 D66 D64 D47 D63 D49 D69 D70 D68 D71 D67

BUSDØ8L BUSDØ9L BUSD13L BUSDIØL BUSD14L BUSD11L BUSD15L BUSD12L

AH1 AJ2 AL2 AJ1 AL1 AK2 AM2 AK1

SENSE TERMINATIONS (FROM CORES)

SENSE AMPS

JUMPER

CDL 2 STROBE 1 H

+5REF FA2

INVERTERS BUS RECEIVERS DATA LATCHES BUS DRIVERS INH BASE DRIVERS

CDL 2 DATA OUT H

CDL 2 TINH 1H

INHIBIT DRIVERS (TO CORES)

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. +TOLERANCES

DECIMALS: .XXX = ±.005, .XX = .02, .X = .1 ANGLES: ±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —"—

FINISH —"—

DRN. P Cadorny DATE 11/17/72

CHK'D L Pelagh DATE 1-20-72

ENG. P Dewan DATE 1/25/72

PROJ. ENG. J Durant DATE 1/25/72

PROD. R K Peters DATE 1-31-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE CONTROL & DATA LOOPS CDL 4

NEXT HIGHER ASSY. B-DD-MMII-L

SCALE —"—

SIZE D CODE CS NUMBER G110-0-1 REV. S

SHEET 4 OF 4 DIST.

DEC FORM NO DRD 109-B

NOTES:

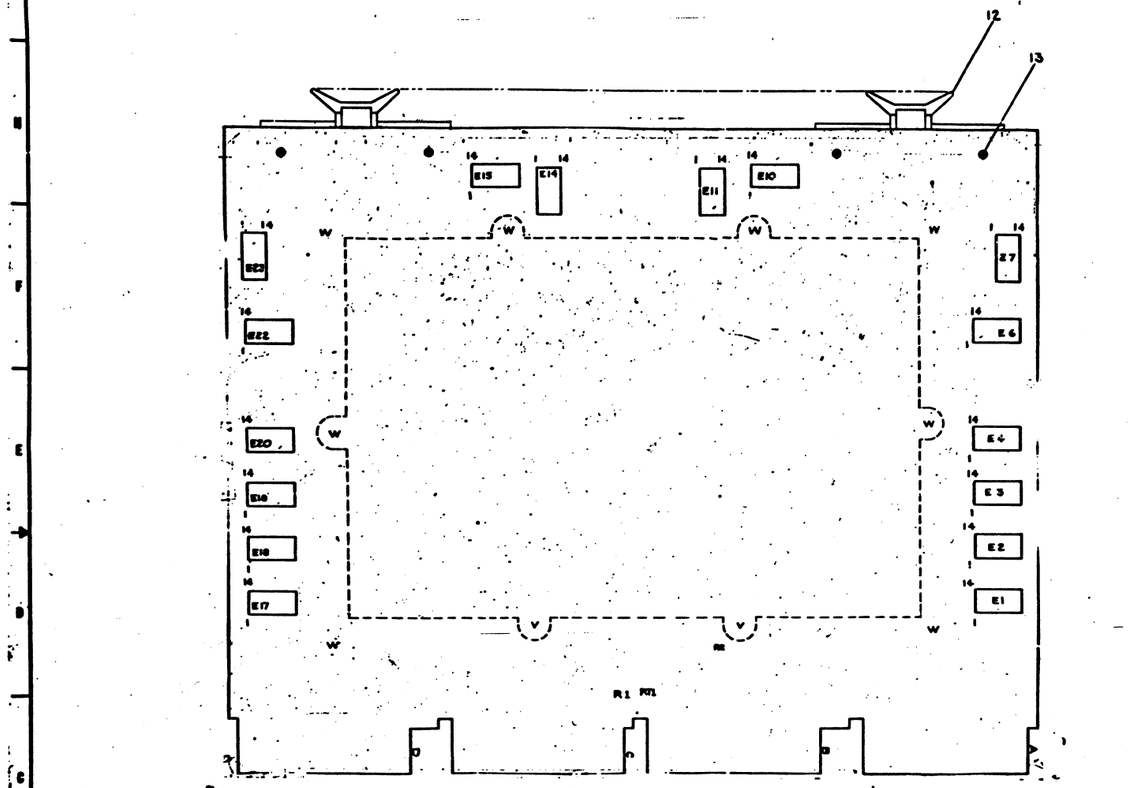
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE
2. ON REPAIR MODULES IF CORE TYPE USED IS 175 REPLACEMENT MUST BE 175 CORE. IF 375 CORE TYPE IS USED REPLACEMENT MUST BE 375 CORE.

COMPONENT SUBSTITUTION LIST

MODULE	ORIGINAL PART		SUBSTITUTE PART		REV
	DESCRIPTION	PART NO	DESCRIPTION	PART NO	
H213	2501-00 I.C. DIODE	1910010-00	2501-01 I.C. DIODE	1910010-01	
H213	2501-00 I.C. DIODE	1910010-00	2501-03 I.C. DIODE	1910010-03	
H213	2501-00 I.C. DIODE	1910010-00	2501-25 I.C. DIODE	1910010-05	

LEGEND

MODULE CONN.	BACK PANEL LOCATION
A	C
B	D
C	E
D	F



1	RT1	THERMISTOR 300 5%	1309188	16
1	R2	RESISTOR 82.1 1/4W 5%	1309422	15
1	R1	RESISTOR 196 1/8W 1%	1308956	14
8		EYELET	5006732	13
4		HANDLE, GREEN	9008337-04	12
1		NAME PLATE	9009238	11
2		JUMPER	9009239	10
16		4036-CORE MATS (STRUNG)	DRMO-75	9
				8
10		SCREW NYLON PHILLIPS HD 4-40 X .191 LG	9009283	7
10		SCREW, F.H. NYLON 4-40 X .191 LG	9009284	6
10		STANDOFF, THREADED 4-40 X .094 LONG	9009287	5
1		SUBSTRATE	50-10296	4
1		COVER PLATE	55-1020-02	3
16	E1,E13,E17-E20,E22,E23 / E1-E4,E6,E7,E10,E11	I.C. DIODE 2501	1910010	2
1		PLANER MEMORY BOARD	5309713	1
QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	ANSI	FROM PT	TO PT

JUMPER LIST

MMH-L

LTCH BOARD REV

DEC NO. ECA NO. DEC NO. ECA NO.

SEMICONDUCTOR CONFIGURATION CHART

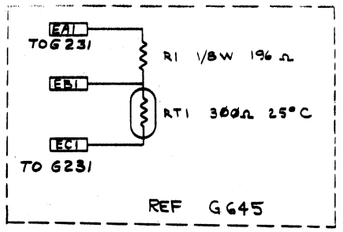
SCD-MMH-B

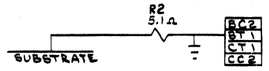
EQUIPMENT CORPORATION

TITLE: STACK SCHEMATIC (4K 16 BIT)

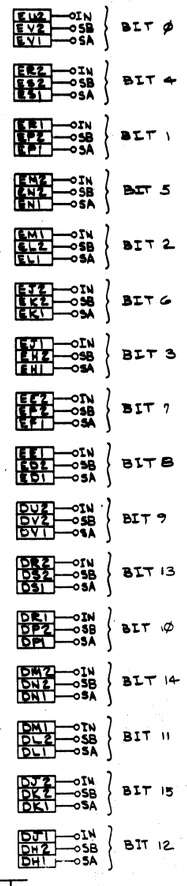
SIZE: C | DRAWING NO: H213-0-1 | REV: J

SHEET 1 OF 2

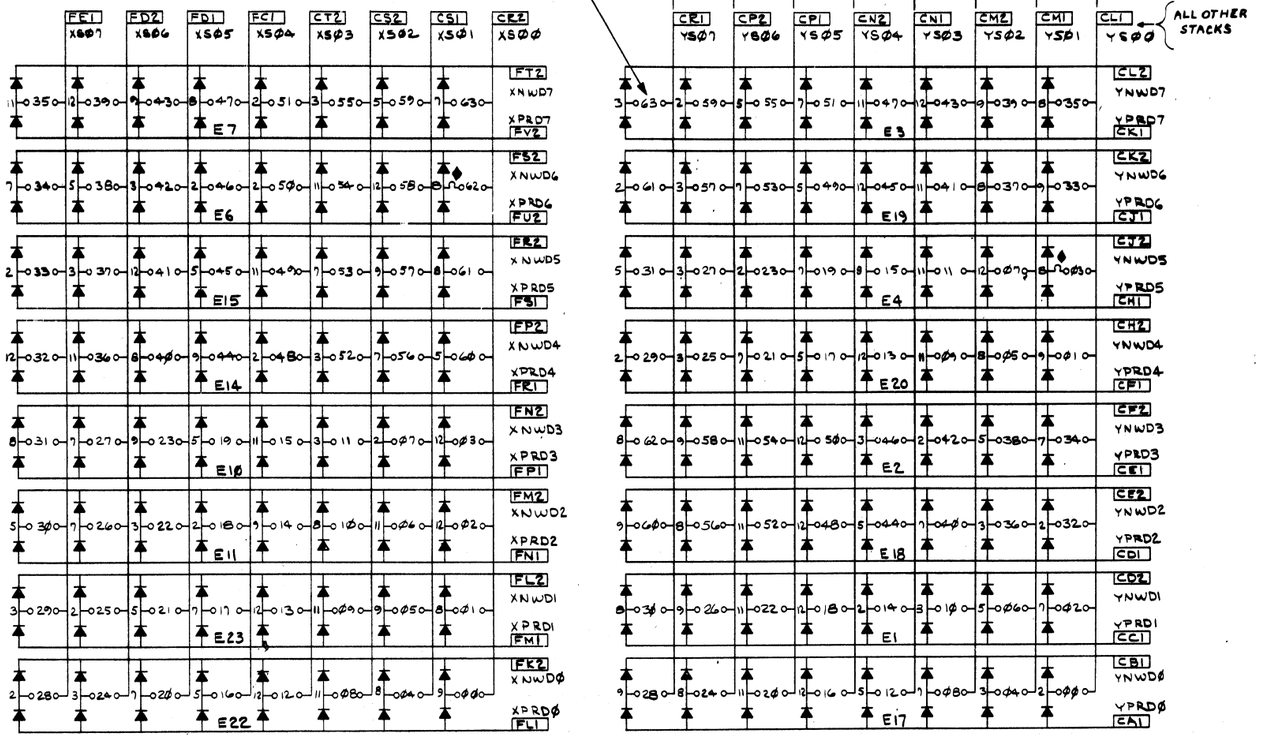




NOTES
1. UNLESS OTHERWISE SPECIFIED: IC'S ARE TO BE DEC PART # 19100/0
2. INDICATES STACK LINE NUMBER. (TYP)
3. ♦ INDICATES CURRENT LOOP.
4. ○— INDICATES MAGNET WIRE TERMINATION (SOLDERED TO P.C. PAD).



SEE NOTE 4



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1; ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DBN P Roberge DATE 12/1/71
CHK'D E Balogh DATE 1-25-72
ENG. P Burnett DATE 1-25-72
PROJ. ENG. P Burnett DATE 1-25-72
PROD. A K Peterson DATE 1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: STACK SCHEMATIC 4K X 16 BIT

NEXT HIGHER ASSY. B-DD-MM11-L-Ø
SCALE —
SHEET 2 OF 2
SIZE D | CODE CS | NUMBER H213-Ø-1 | REV. J
DIST.

REV.	REVISIONS	CHANGE NO.	CHK

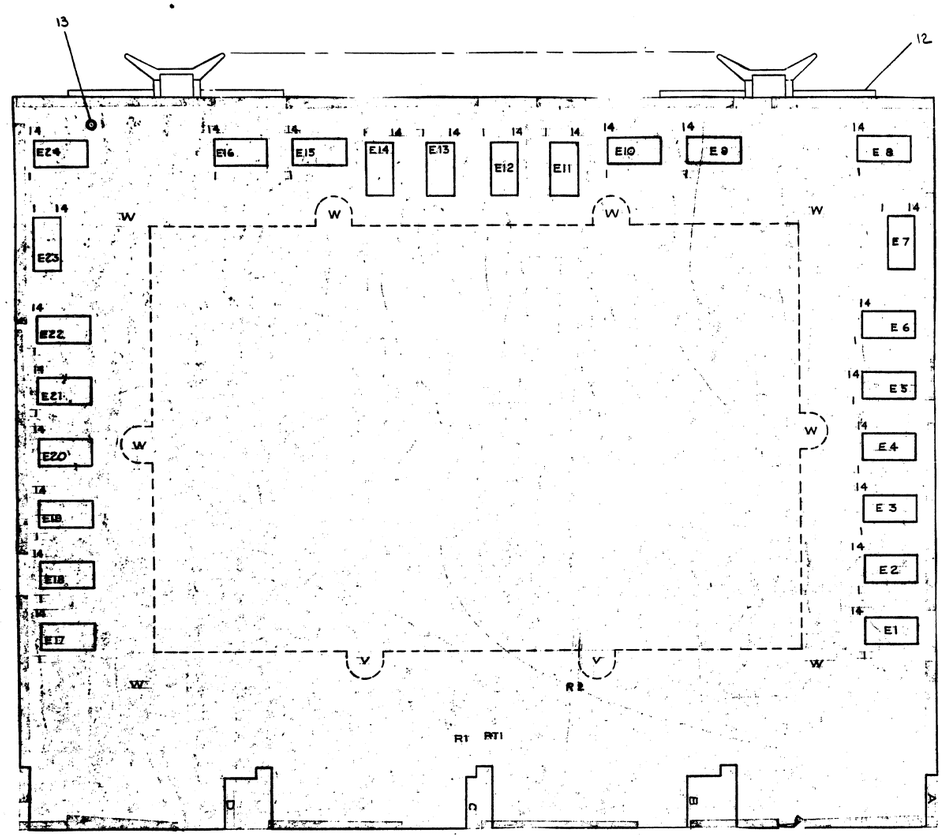
BROWNING 40-522 19940
DEC FORM NO DRD 102-B

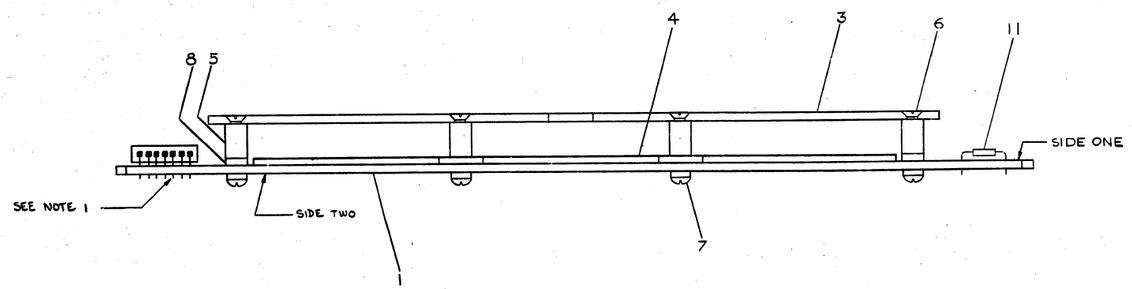
SIZE D | CODE CS | NUMBER H213-Ø-1 | REV. J

NOTES:
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE

MODULES	COMPONENT SUBSTITUTION LIST				
	ORIGINAL PART		SUBSTITUTE PART		
	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	USE NO.
H214, H215, H216	2501-00 - DIODE	19 10010-00	2501-01 DIODE	19 10010-01	2
H214, H215, H216	2501-00 - DIODE	19 10010-00	2501-02 DIODE	19 10010-02	2
H214	2501-00 - DIODE	19 10010-00	2501-03 DIODE	19 10010-03	2

2: FOR AMPEX STACKS H214, H215, AND H216 WITH CORE TYPE 324-1899, R1 SHOULD BE 121 OHMS.
3 ON REPAIR MODULES, IF 175 CORE TYPE IS USED - REPLACEMENT CORE MUST BE 175 TYPE. IF 375 CORE TYPE IS USED. - REPLACEMENT CORE MUST BE 375 TYPE.





LEGEND	
MODULE CONN.	BACK PANEL LOCATION
A	C
B	D
C	E
D	F

H216	H215	H214 (SEE NOTE *3)	SHEET *2			
-	-	-	RT1	THERMISTOR 300 2%	1309785	16
1	1	1	R2	RESISTOR 5.1 1/4W 5%	1305422	15
1	1	1	R1 (SEE NOTE 2)	RESISTOR 196 1/8W 1%	1302956	14
8	8	8		EYELET	9006732	13
+	+	+		HANDLE, GREEN	9008337-01	12
2	2	2		JUMPER,	9009239	11
1	1	1		NAME PLATE	9009238	10
15	16	16		8132-CORE MATS (STRUNG)	DIBM3-75	9
						8
10	10	10		SCREW, NYLON PILISTER 4-40 X .187 LG	20009233	7
10	10	10		SCREW, FLAT HEAD NYLON 4-40 X .187 LG	20009236	6
10	10	10		STANDOFF, THREADED 4-40 X .437 LG	9009237	5
1	1	1		SUBSTRATE	50-10296	4
1	1	1		COVER PLATE	55-10201-02	3
24	24	24	E1 THRU E24	I.C. DIODE 2501	19-10010	2
1	1	1		PLANER MEMORY BOARD	5009713	1
QTY	QTY	QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

DEC NO.	EIA NO.	DEC NO.	EIA NO.

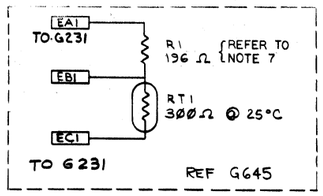
SEMICONDUCTOR CONVERSION CHART

FIRST USED ON DEV 1000
MM11-L
ETCH BOARD REV
B-DD-MM11-L-0

REV	DESCRIPTION	ENGR	DATE
A	ORIGINATED	D. Durant	12-29-72
B	H214-00001	P. Durant	1-12-73
C	H214-00002	P. Durant	1-15-73
D	H214-00003	P. Durant	1-15-73
E	H214-00004	W. Coates	1-16-73
F	H214-00005	P. Durant	1-31-73
G	H214-00006	W. Coates	2-6-73
H	H214-6	Pete Durant	2-8-73
J	H214-00007A	P. Durant	2-8-73
K	MM11-00005	P. Durant	1-31-73
L	H214-00008	Bill Coates	3-5-73

DRAWN 12-29-72 D. Durant
CHECKED 1-15-73 P. Durant
ENGR APPROVED 1-15-73 P. Durant
MFG APPROVED 1-15-73 P. Durant
QUALITY APPROVED 1-15-73 P. Durant
RELEASED 1-15-73 P. Durant
LATEST MACHINE ASSY. B-DD-MM11-L-0
SCALE NONE
SHEET 1 OF 2

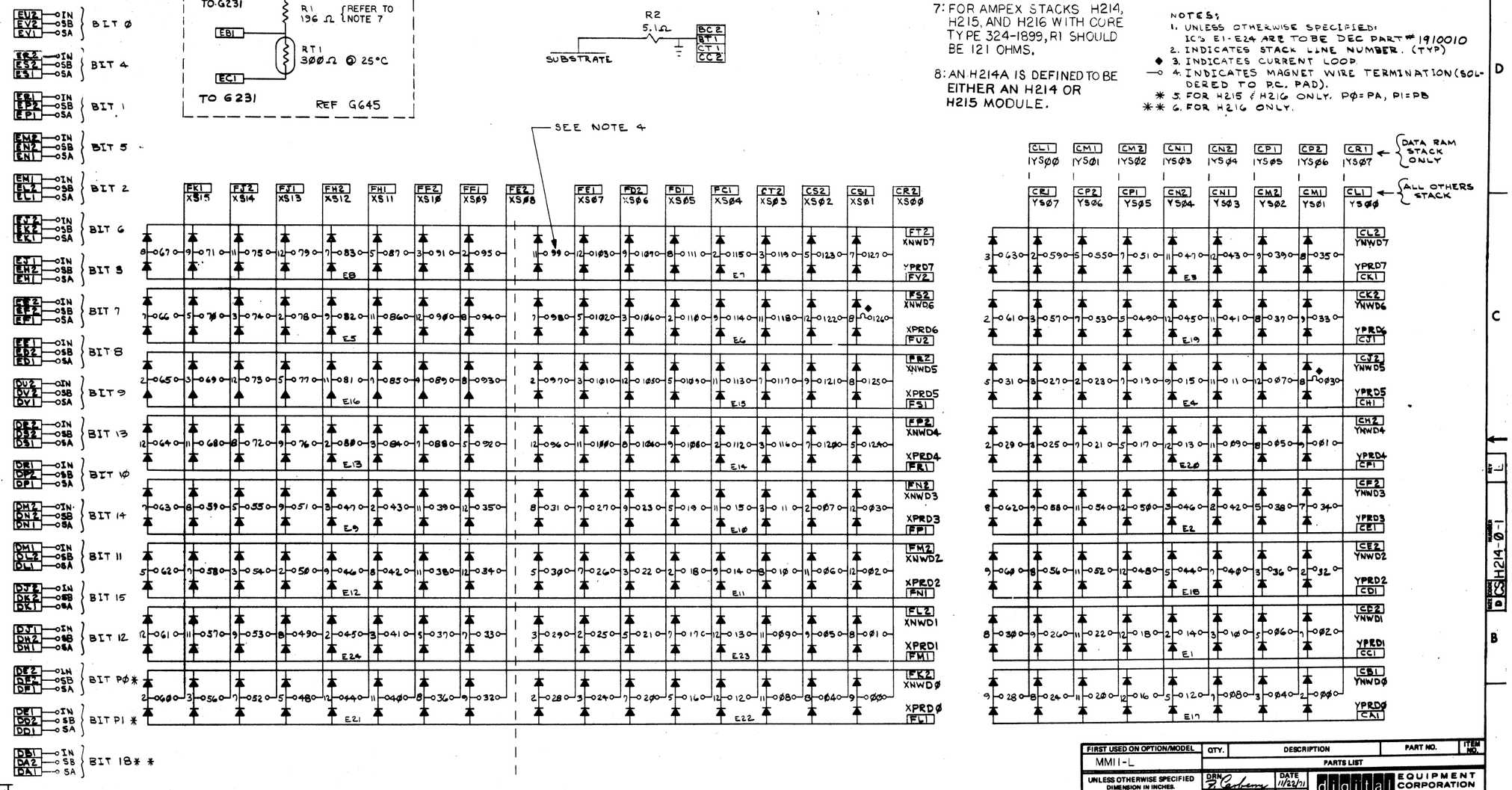
AMPEX EQUIPMENT CORPORATION.
TITLE STACK SCHEMATIC
H214-8K X 16BIT
H214A-8K X 16BIT
H215-8K X 18BIT
H216-8K X 18BIT
SIZE E CS H214-6-1 REV L



7: FOR AMPEX STACKS H214, H215, AND H216 WITH CORE TYPE 324-1899, R1 SHOULD BE 121 OHMS.

8: AN H214A IS DEFINED TO BE EITHER AN H214 OR H215 MODULE.

NOTES:
1. UNLESS OTHERWISE SPECIFIED: IC's E1-E24 ARE TO BE DEC PART # 19100 10
2. INDICATES STACK LINE NUMBER. (TYP)
◆ 3. INDICATES CURRENT LOOP.
—o 4. INDICATES MAGNET WIRE TERMINATION (SOLDERED TO P.C. PAD).
✱ 5. FOR H215 & H216 ONLY. PØ=PA, P1=PB
✱✱ 6. FOR H216 ONLY.



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —— FINISH ——

DRN. B Carberry	DATE	11/22/71
CHK'D. J. Hebert	DATE	1-25-72
ENG. P Dumont	DATE	1/25/72
PROJ. ENG. P Dumont	DATE	1/25/72
PROD. R K Peterson	DATE	1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

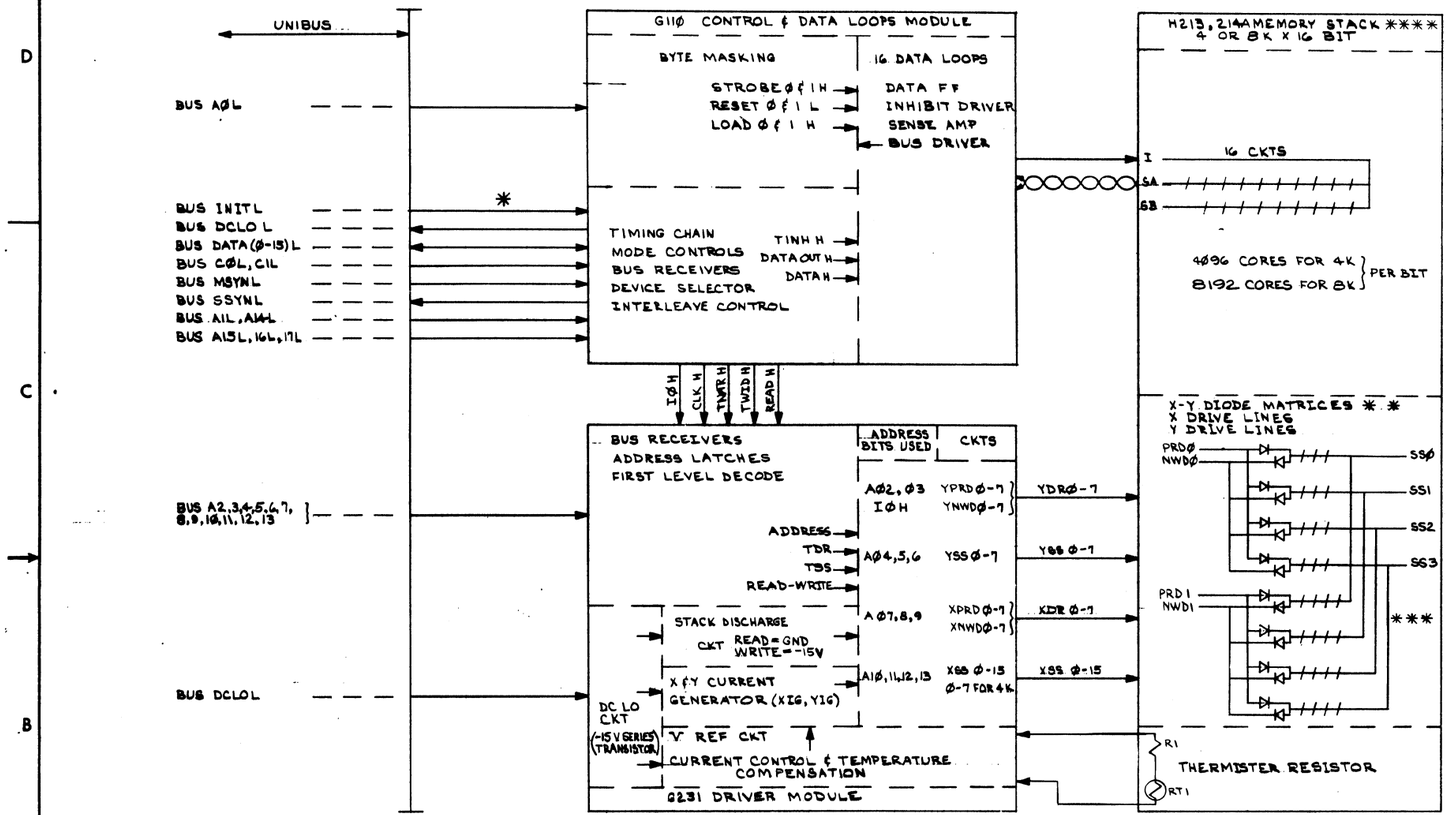
TITLE: STACK SCHEMTIC (H214-8K X 16 BIT) (H214A-8K X 16 BIT) (H215-8K X 18 BIT) (H216-8K X 19 BIT)

NEXT HIGHER ASSY.: B-DD-MM11-L-Ø
SCALE
SHEET 2 OF 2
SIZE D CODE CS NUMBER H214-Ø-1 REV. -
DIST.

REVISIONS	REV	CHANGE NO	CHK

DRAWING 40-523 15840
DEC FORM NO DRD 103-B

NOTES:
*1. ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
**2. MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
***3. ACTUAL MATRIX HAS { Y AXIS 8PRD,8NRD,8SS / X AXIS 4K 8PRD,8NRD,8SS / X AXIS 8K 8PRD,8NRD,16SS
****4. H214A IS A DESIGNATOR FOR EITHER AN H214 OR H215 MEMORY STACK, SEE E-CS-H214-Ø-1.



REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	MMII-00005	A	
[illegible]			
P DURANT			

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-S		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

DRN. [illegible] DATE 11/4/72
CHK'D. [illegible] DATE 12-14-72
ENG. [illegible] DATE 12-20-72
PROJ. ENG. [illegible] DATE 12-20-72
PROD. [illegible] DATE 12-27-72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: BLOCK DIAGRAM

MATERIAL
FINISH
NEXT HIGHER ASSY. B-DD-MMII-S
SCALE
SHEET OF 2

SIZE D | CODE BD | NUMBER MMII-S-2 | REV. A
DIST.

DEC FORM NO
DRD 169-B

MEMORY BANK	MACHINE ADDRESS	W1 ✳	W5 A13 △	W6 □ A14 OR A01	W4 A15	W3 A16	W2 A17L	△ W9 4K-8K	W10	W7-8 INTER LEAVE □	W11 PROTECT
0-4K	000000-017776	IN	IN	IN	IN	IN	IN			WHEN USED AS A 4K OR A NON INTER-LEAVED 8K JUMPERS ARE W8 W7	WHEN W11 IS INSTALLED IT MAKES THE MEMORY DO A DATI RE-GARDLESS OF THE STATE OF THE C0B AND C01 LINES
4-8K	020000-037776		OUT	IN	IN	IN	IN				
8-12K	040000-057776		IN	OUT	IN	IN	IN				
12-16K	060000-077776		OUT	OUT	IN	IN	IN				
16-20K	100000-117776		IN	IN	OUT	IN	IN				
20-24K	120000-137776		OUT	IN	OUT	IN	IN				
24-28K	140000-157776		IN	OUT	OUT	IN	IN				
28-32K	160000-177776		OUT	OUT	OUT	IN	IN				
32-36K	200000-217776		IN	IN	IN	OUT	IN				
36-40K	220000-237776		OUT	IN	IN	OUT	IN				
40-44K	240000-257776		IN	OUT	IN	OUT	IN				
44-48K	260000-277776		OUT	OUT	IN	OUT	IN				
48-52K	300000-317776		IN	IN	OUT	OUT	IN				
52-56K	320000-337776		OUT	IN	OUT	OUT	IN				
56-60K	340000-357776	IN	IN	OUT	OUT	OUT	IN			WHEN USED AS AN 8K INTERLEAVED (2-8K BANKS REQUIRED) JUMPERS ARE W8 W7	
60-64K	360000-377776		OUT	OUT	OUT	OUT	IN				
64-68K	400000-417776		IN	IN	IN	IN	OUT				
68-72K	420000-437776		OUT	IN	IN	IN	OUT				
72-76K	440000-457776		IN	OUT	IN	IN	OUT				
76-80K	460000-477776		OUT	OUT	IN	IN	OUT				
80-84K	500000-517776		IN	IN	OUT	IN	OUT				
84-88K	520000-537776		OUT	IN	OUT	IN	OUT				
88-92K	540000-557776		IN	OUT	OUT	IN	OUT				
92-96K	560000-577776		OUT	OUT	OUT	IN	OUT				
96-100K	600000-617776		IN	IN	IN	OUT	OUT				
100-104K	620000-637776		OUT	IN	IN	OUT	OUT				
104-108K	640000-657776		IN	OUT	IN	OUT	OUT				
108-112K	660000-677776		OUT	OUT	IN	OUT	OUT				
112-116K	700000-717776		IN	IN	OUT	OUT	OUT				
116-120K	720000-737776		OUT	IN	OUT	OUT	OUT				
120-124K	740000-757776		IN	OUT	OUT	OUT	OUT				
DEVICE USED AS 4K MEMORY △		IN	X	X	X	X	X	IN	OUT		

NOTES:

✳1. W1 IS FOR TEST PURPOSES ONLY

△2. WHEN USED AS AN 8K BANK, W5 AND W10 MUST BE INSTALLED AND W9 MUST BE OUT. WHEN USED AS A 4K BANK W10 MUST BE OUT, W9 MUST BE IN AND W5 DETERMINES THE BANKS LOCATION ON THE BUS.

□3. THIS MEMORY CAN ONLY BE INTERLEAVED AS 16K (TWO ADJACENT, CONTIGUOUS ADDRESS 8K BANKS). WHEN NOT INTER-LEAVED (SOLID JUMPERS ON W7 AND W8) THE DEVICE SELECT IS AS SHOWN IN TABLE 1 USING A14. WHEN TWO 8K BANKS ARE INTER-LEAVED W7 AND W8 MUST BE AS SHOWN IN DOTTED LINES IN TABLE 1. ALSO IN TABLE 1, A01 NOW GOES TO THE DEVICE SELECTOR GATE CONTROLLED BY W8. THE TWO BANKS MUST HAVE W6 IN ON ONE BANK AND OUT ON THE OTHER.

4. FIGURE 1 SHOWS THE PHYSICAL LOCATION OF THE JUMPERS ON THE G118 IF THE MODULE WERE LYING ON THE PRINT WITH COMPONENTS UP AND CONNECTORS TOWARD BOTTOM OF PRINT. W7 & W8 ARE AS SHOWN SCHEMATICALLY ON D-CS-G118-0-1

FIGURE 1
G118 JUMPER PHYSICAL LOCATION
SEE NOTE 4

FIRST USED ON OPTION/MODEL: MM11-S	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	DRN. E. Carberry	DATE 5/15/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK'D. K. Balagh	DATE 5-22-72	
	ENG.	DATE	TITLE: BLOCK DIAGRAM (DEVICE DECODING)
	PROJ. ENG.	DATE 5-72	
	PROD.	DATE	
MATERIAL	NEXT HIGHER ASSY. MM11-S		SIZE D CODE BD NUMBER MM11-S-2 REV. A
FINISH	SCALE		
	SHEET 2 OF 2		DIST.

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. 10D-10B-A

SIZE D CODE BD NUMBER MM11-S-2 REV A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

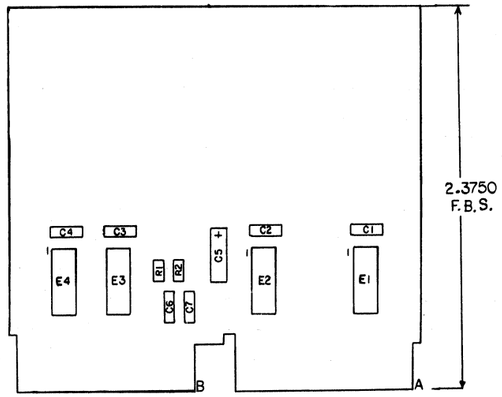
MADE BY F. CARBERRY	CHECKED J. Fahey	SECTION
DATE 1/5/72	DATE 1-25-72	
ENG P. Duvant	PROD R.K. Pettis	ISSUED SECT.
DATE 1/25/72	DATE 1-26-72	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION MM11-L	MM11-K
1	~~B-DD~~-H213-Ø	H213 MEMORY STACK (4K X 16)		1
2	E-CS-G231-Ø-1	MEMORY DRIVER	1	1
3	E-CS-G110-Ø-1	CONTROL & DATA LOOPS	1	1
4	E-CS-H214-Ø-1	H214A MEMORY STACK (8K X16)	1	

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
MEMORY, MM11		A	PL	MM11-L-Ø	A	MM11-00005
	SHEET 1 OF 1	DIST.				

DEC FORM DRA 110 DEC 16-(325)-1031-N870

NOTES:



REF				
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M93Ø-Ø-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M93Ø-Ø-5	2
REF		MODULE ECO HISTORY	B-MH-M93Ø-Ø-6	3
1		ETCHED CIRCUIT BOARD	5ØØ8696	4
4	C1 THRU C4	CAP .22 µF 5ØV CER	1Ø1Ø274-Ø1	5
2	C6,C7	CAP 1ØØØpF 25ØV 2Ø% DISC	1ØØØØ43	6
1	C5	CAP 39µF 1ØV 1Ø% TANT	1ØØØØ76	7
2	R1,R2	RES 383Ω 1/4W 1%	13Ø5125	8
2	E1,E4	28 RES DIVIDER NETWORK	1312628-ØØ	9
2	E2,E3	25 RES DIVIDER NETWORK	1312628-Ø1	10

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC TYPE	GND	+5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

REV.	REVISIONS	CHANGE NO.	ORIGINATED	CHK
E			7.11.75 K. SARGENT	10-3-75

FIRST USED ON OPTION MODEL: M930

ETCH BOARD REV. E-P3

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

		DATE
DRN.	J. CARTER	7-9-75
CHK'D	L. Maybee	7-16-75
ENG.		10-3-75
PROJ. ENG.		10-3-75
PROD.		DATE

NEXT HIGHER ASSY

SCALE —

SHEET 1 OF 2

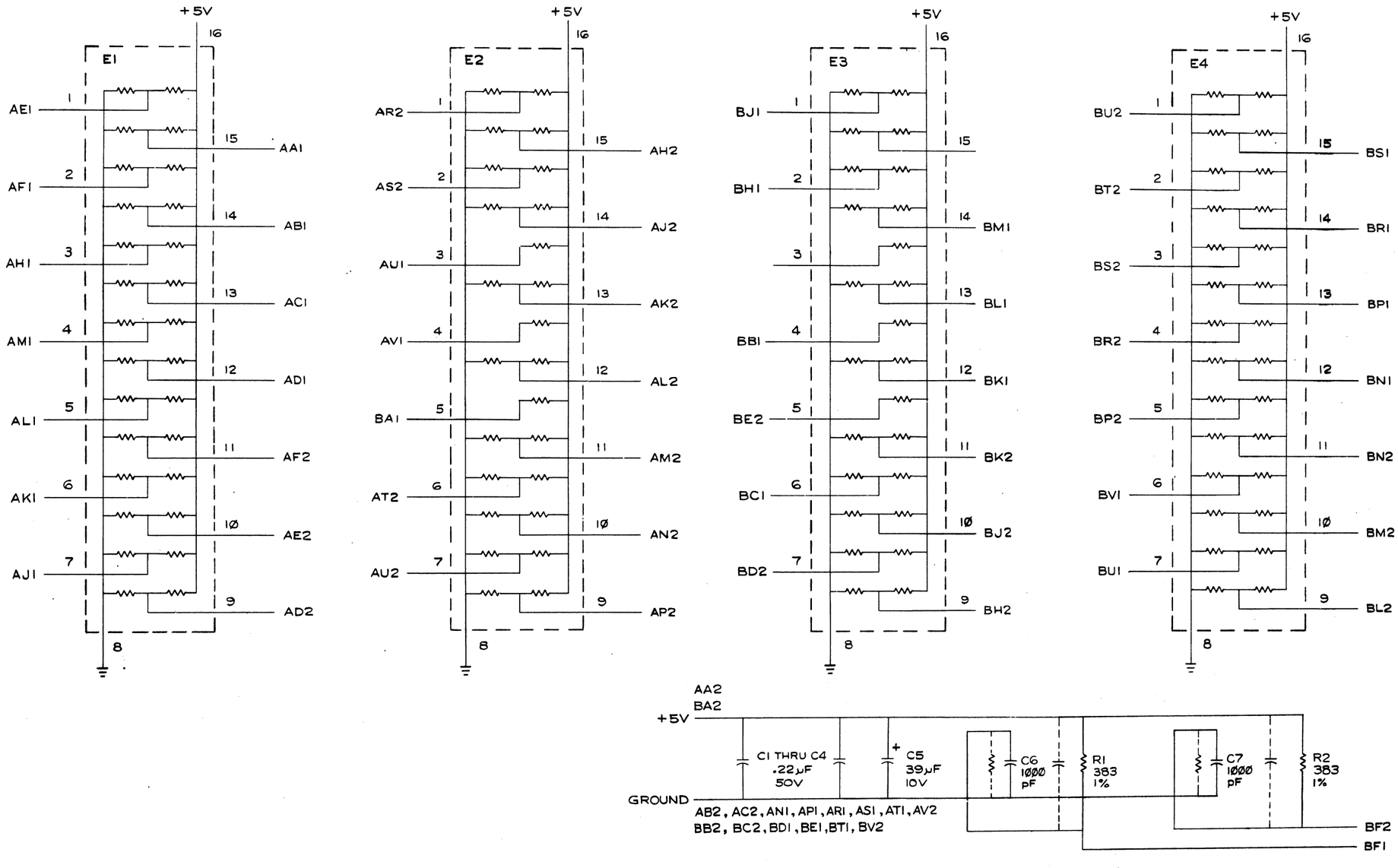
digital

TITLE: BUS TERMINATOR

SIZE	CODE	NUMBER	REV.
D	CS	M93Ø-Ø-1	E

DIST.

DEC FORM NO. DDD 139.0



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
BUS TERMINATØR	D	CS	M93Ø-Ø-1	E
SCALE	SHEET 2 OF 2	DIST.		

DEC FORM NO. 060 138

M93Ø-Ø-1 REV E

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

	SEQUENCE
CONSOLE ASSY	D-UA-KY11-J-Ø
CONSOLE ASSY (PL)	A-PL-KY11-J-Ø
JUMPER POWER	B-IA-7409730-0-0
I/O CABLE	C-UA-BCØ8R-Ø3-Ø
CIRCUIT SCHEMATIC	D-CS-5409766-Ø-1
ETCH BOARD ASSY	E-IA-5409766-0-0

UNIT VARIATIONS

VAR	TITLE	PRINT SET KY11-J
KY11-JA	CONSOLE ASSY 11/Ø5	X
KY11-JB	CONSOLE ASSY 11/1Ø	X
KY11-JC	CONSOLE ASSY GT4Ø	X
KY11-JF	CONSOLE ASSY UNICHANNEL 15	X
KY11-JD	CONSOLE ASSY 11/Ø5 (10.5)	X
KY11-JE	CONSOLE ASSY 11/1Ø (10.5)	X

REVISIONS	REV	CHG. NO.	DATE
	A	KY11J-00004	2/74
	B	KY11J-00005	3/74
	C	KY11J-00006	3/74
	D	KY11J-00007	3/74

USED ON OPTION/MODEL	
11/Ø5	

SHEET 1 OF 3

DRN.	J.CAHILL	DATE 4-23-3
CHK'D.	J.CAHILL	DATE 4-23-3
PROJ ENG.		DATE 8-29-73
PROD.		DATE 8-29-73
FIELD SERV.		DATE 9-26-73

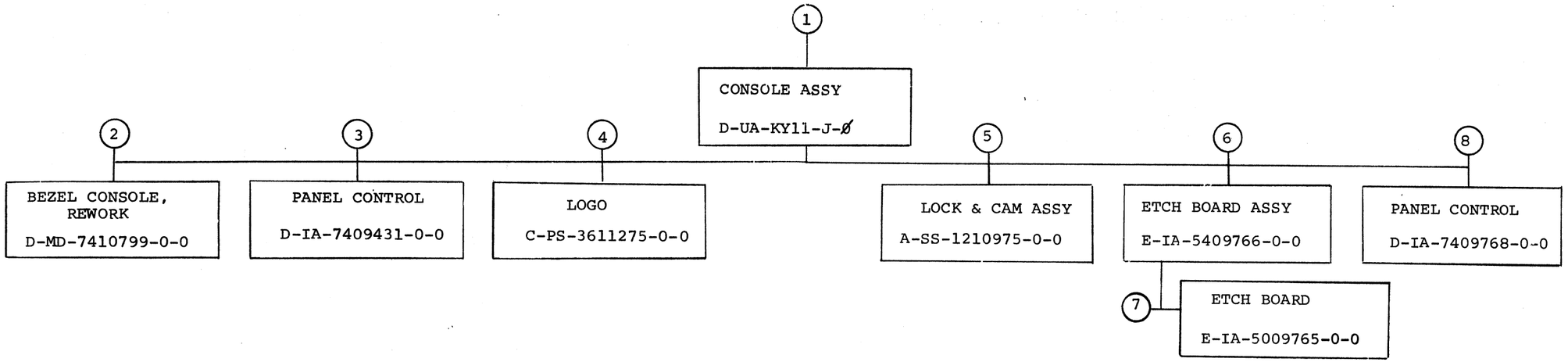
TITLE: CONSOLE ASSY

SIZE	CODE	NUMBER	REV
B	DD	KY11--J	D

DIST

DRB 106

DEC 16-(325)-1062-1A-R972



TITLE		SIZE	CODE	NUMBER	REV
CONSOLE ASSY	SHEET 2 OF 3	B	DD	KY11-J	D

DRB 107
DEC 16—(325)—1062—3—N871

ELECTRICAL

CUSTOMER PRINT SET KY11-J	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X		1	D-UA-KY11-J-Ø	N	1	CONSOLE ASSY	
X			A-PL-KY11-J-Ø	N	2	CONSOLE ASSY (PL)	
X			B-IA-7409730-0-0	#	1	JUMPER POWER	
X			C-UA-BCØ8R-Ø3-Ø	#	1	I/O CABLE	
X		6	E-IA-5409766-0-0	#	1	ETCH BOARD ASSY	
X			D-CS-5409766-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409766-Ø-6		1	MODULE ECO HISTORY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	

MECHANICAL

CUSTOMER PRINT SET KY11-J	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-KY11-J-Ø	N	1	CONSOLE ASSY	
			A-PL-KY11-J-Ø	N	2	CONSOLE ASSY (PL)	
			C-MD-7409534-0-0		1	ACTUATOR (REWORK)	
			B-IA-7409444-0-0		1	DETENT	
			C-UA-BCØ8R-Ø3-Ø		1	I/O CABLE	
			B-MD-7409867-0-0		1	EXTENDED LEAF REWORK (ACTUATOR)	
			B-MD-7409868-0-0		1	SWITCH ADAPTER PLATE	
			C-MD-7411728-0-0		1	KEY LOCK SWITCH, REWORK	
		2	D-MD-7410799-0-0		1	BEZEL CONSOLE REWORK	
			J-PS-1210922-0-0		1	BEZEL CONSOLE CASTING	
		3	D-IA-7409431-0-0		1	PANEL CONTROL	
			C-SS-7409431-0-1		1	SILK SCREEN (MAGENTA)	
			C-SS-7409431-0-2		1	SILK SCREEN (BLK) REAR	
			C-SS-7409431-0-3		1	SILK SCREEN (11Ø5) VERMILLION	
		4	C-PS-3611275-0-0		1	LOGO	
			A-SS-3611275-0-1		1	SILK SCREEN	
			A-SS-3611275-0-2		1	SILK SCREEN	
			A-SS-3611275-0-3		1	SILK SCREEN	
			A-SS-3611275-0-4		1	SILK SCREEN	
			A-SS-3611275-0-5		1	SILK SCREEN	
		5	A-PS-1210975-0-0		1	LOCK & CAM ASSY	
		6	E-IA-5409766-0-0		1	ETCH BOARD ASSY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	
		8	D-IA-7409768-0-0		1	PANEL CONTROL	
			C-SS-7409768-0-1		1	SILK SCREEN	
			C-SS-7409768-0-2		1	SILK SCREEN	
			C-SS-7409768-0-3		1	SILK SCREEN	

CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

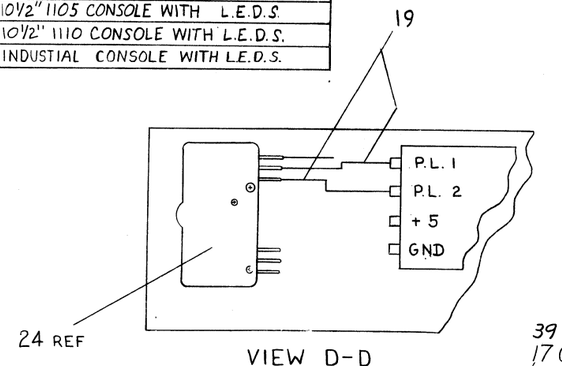
TITLE	SHEET	SIZE	CODE	NUMBER	REV
CONSOLE ASSY	3 OF 3	B	DD	KY11-J	D

DRB 108

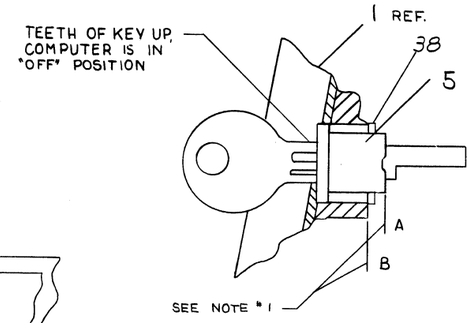
DEC 16-(325)-1062-2B-R972

LEGEND

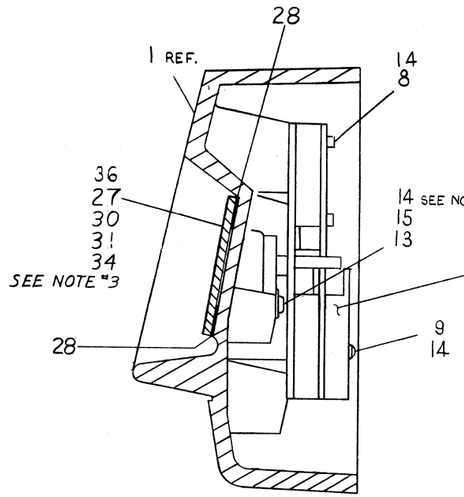
PART NO.	VARIATION
KY11-JA	1105 CONSOLE WITH L.E.D.S.
KY11-JB	1110 CONSOLE WITH L.E.D.S.
KY11-JC	VT40 CONSOLE WITH L.E.D.S.
KY11-JF	UC15 CONSOLE WITH L.E.D.S.
KY11-JD	10½" 1105 CONSOLE WITH L.E.D.S.
KY11-JE	10½" 1110 CONSOLE WITH L.E.D.S.
KY11-JJ	INDUSTIAL CONSOLE WITH L.E.D.S.



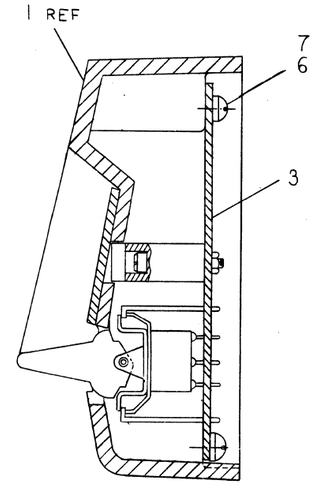
VIEW D-D
SCALE: NONE



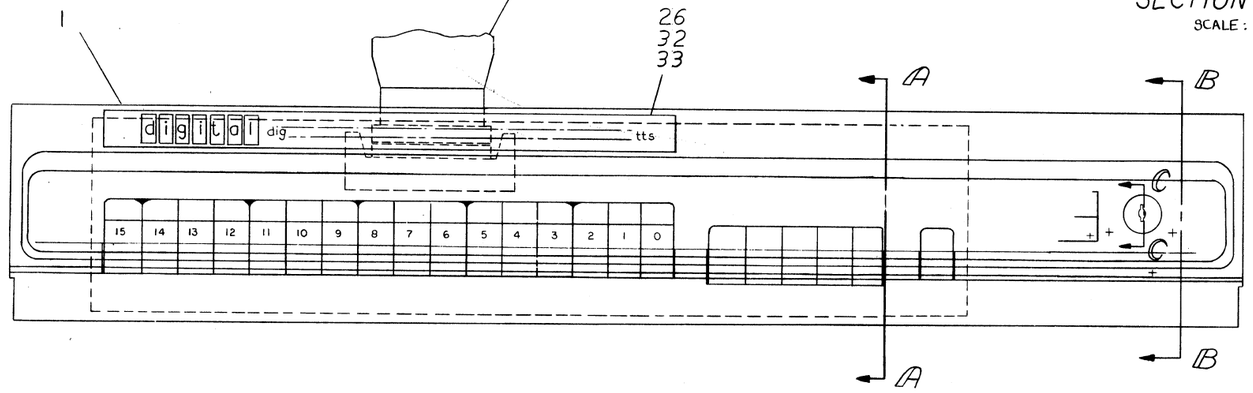
SECTION C-C
SCALE: 2/1



SECTION B-B
SCALE: 2/1



SECTION A-A
SCALE: 2/1



NOTES:

1. CASTING KEY HOLE, SURFACES A & B TO BE COATED WITH LUBE (ITEM # 18)
2. LOCK WASHER IS NOT USED ON SCREW UNDER SWITCH.
3. INSERT CONTROL PANEL (ITEM #27,30,31 OR 34) USING ADHESIVE TRANSFER TAPE (ITEM #28) ON REAR SURFACE & PRESS FIRMLY IN PLACE.
4. INSTALL 18 INCHES OF TAPE (ITEM #39) ON UNSHIELDED SIDE OF I/O CABLE BEGINNING AT FAR END OF CABLE FROM CONSOLE. ALL VARIATIONS EXCEPT JD AND JE.

REVISIONS				
CHK	CHANGE NO.	REV.		
GG	KY11-00000	D	REVISED & REDRAWN	G. GRAHAM 11-23-71
GG	KY11-00040	E	per ECO# 11-19-73	M. TITELBAUM
	DWG NO. WAS KY11-0-0			
GG	KY11J-00001	F	per ECO#	G. GRAHAM 2-9-73
GG	KY11J-00002	H	per ECO#	G. GRAHAM 2-12-73
				J. Chesbro 2-12-73
				RANDALL
GG	KY11J-00003	J	per ECO#	G. GRAHAM 2-16-73
GG	KY11J-00004	K	per ECO#	F. ELIA 11-20-73
GG	KY11J-00005	L	per ECO#	B. MINOR 2-25-74
GG	KY11J-00006	M	per ECO#	J. Chesbro 4-3-74
GG	KY11J-00007	N	per ECO#	G. GRAHAM 4-12-74
				J. Chesbro 5-7-74
				RANDALL

DEC FORM NO. DRD 100

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP 1105

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 | FRACTIONS ± 1/64 | ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN. CAHILL	DATE 11-16-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. TESCHNER	DATE 4-14-72	
ENG. GRAHAM	DATE 4-5-72	
PROJ. ENG. WEEKS	DATE 5-5-72	
PROD. PETERSON	DATE 5-10-72	
NEXT HIGHER ASSY D-UA-1105-0-0		
SCALE 1/1		
SHEET 1 OF 1		

TITLE: CONSOLE ASSY (PDP 1105)

SIZE D | CODE UA | NUMBER KY11-J-0 | REV N | DIST.

SIZE D | CODE UA | NUMBER KY11-J-0 | REV N

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	1
DATE	12-8-71	DATE	5-1-72		
ENG	G. Graham	PROD	R. K. PETERSON	ISSUED SECT.	1
DATE	4-5-72	DATE	5-10-72		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION											
			KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE	KY11-JJ					
1	D-MD-7410799-0-0	CONSOLE BEZEL REWORK	1	1	1	1	1	1	—					
~~2~~	~~E-IA-7409374-3-0~~	~~BEZEL CONSOLE (11/10)~~	~~X~~	~~1~~	~~X~~	~~X~~			—					
3	E-IA-5409766-0-0	CONSOLE ETCH BOARD ASSY	1	1	1	1	1	1	—					
~~4~~	~~E-IA-5409766-2-0~~	~~CONSOLE ETCH BOARD ASSY (OPOCA)~~	~~X~~	~~X~~	~~1~~				—					
5	A-PS-1210975-0-0	LOCK & CAM ASS'Y	1	1	1	1	1	1	—					
6	9006020-1	SCR, PHL PAN HD. #6-32 X 1/4 LG	6	6	6	6	6	6	6					
7	9006633	WASH INT TOOTH LOCK #6	6	6	6	6	6	6	6					
8	9006003-1	SCR PHL PAN HD # 2-56 X 3/8 LG	2	2	2	2	2	2	2					
9	9008025-1	SCR PHL PAN HD #2-56 X 5/8 LG	2	2	2	2	2	2	2					
10	~~1210790-0-0~~	~~SWITCH DPST N.O.~~	~~1~~	~~1~~	~~1~~				—					
11	~~C-MD-7409534-0-0~~	~~ACTUATOR RE-WORK~~	~~1~~	~~1~~	~~1~~				—					
12	~~121~~0905-1	~~INSULATOR~~	~~2~~	~~2~~	~~2~~				—					
13	B-IA-7409444-0-0	DETENT	1	1	1	1	1	1	1					
14	9006686	WASH #2 SPLIT LOCK	5	5	5	6	5	5	5					
15	9006000-4	SCR BINDER HD #2-56 X3/16 LG	2	2	2	2	2	2	2					
16	~~1210904-1~~	~~SWITCH TMD-5201 (COLD CONTACT-291-5201-00)~~	~~1~~	~~1~~	~~1~~				—					
17	C-UA-BC08R-03	I/O CABLE (3'-0" LG)	1	1	1	1	X	X	1					
18	4901077	LUBE (FOR CAM LOCK)	A/R	A/R	A/R	A/R			A/R					
19	B-IA-7409730-0-0	JUMPER, POWER	2	2	2	2	2	2	2					
20	~~B-MD-7409868-0-0~~	~~SWITCH ADAPTER PLATE~~	~~1~~	~~1~~	~~1~~				—					
21	~~B-MD-7409867-0-0~~	~~EXTENDER LEAF REWORK (ACTUATOR)~~	~~1~~	~~1~~	~~1~~				—					
22	~~9008449-2~~	~~SCR PHB FLAT HD #2-56 X 1/4 LG.~~	~~2~~	~~2~~	~~2~~				—					

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-0	A	PL	KY11-J-0	N	KY11J-00007
	SHEET 1 OF 2	DIST	G			

DEC FORM DEC 16 (325)-1031 N870
DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	1
DATE	12-8-71	DATE	5-1-72		
ENG	G. GRAHAM	PROD	R. K. PETERSON	ISSUED SECT.	1
DATE	4-5-72	DATE	5-10-72		

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION											
			KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE	KY11-JJ					
~~23~~	~~E-IA-7409374-4-0~~	~~BEZEL CONSOLE (VT40)~~	~~X~~	~~X~~	~~1~~	~~X~~			—					
24	A-PS-1210982-0-0	KEY LOCK SWITCH	1	1	1	1		1	1					
~~25~~	~~E-IA-7409374-5-0~~	~~BEZEL CONSOLE (UC15)~~	~~X~~	~~X~~	~~X~~	~~1~~			—					
26	C-PS-3611275-0-0	LOGO (PDP-1105) NOTE VARIATIONS	1	1	X	X	1	1	1					
27	D-IA-7409431-1-0	PANEL CONTROL (1105)	1	X	X	X	1	X	X					
28	9009210-1	ADHESIVE TRANSFER TAPE ¼ WIDE	A/R	A/R	A/R	A/R	A/R	A/R	A/R					
~~29~~	~~1211052~~	~~CONSOLE PROTECTIVE COVER~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~					
30	D-IA-7409431-3-0	PANEL CONTROL (1110)	X	1	X	X	X	1	X					
31	D-IA-7409768-0-0	PANEL CONTROL (GT40)	X	X	1	X	X	X	X					
32	C-PS-3611275-4-0	LOGO (DEC GRAPHIC)	X	X	1	X	X	X	X					
33	C-PS-3611275-5-0	LOGO (UC15)	X	X	X	1	X	X	X					
34	D-IA-7409431-4-0	PANEL CONTROL (UC15)	X	X	X	1	X	X	X					
35	C-UA-BC08R-64	I0 CABLE (4'-0"LG)	X	X	X	X	1	1	X					
36	D-IA-7411393-0-0	INDICATOR PANEL (INDUSTRIAL)	X	X	X	X	X	X	1					
37	C-MD-7411728-0-0	KEY LOCK SWITCH, REWORK	X	X	X	X	1	X	X					
38	9009589	RETAINING RING .025 THK	1	1	1	1	1	1	1					
39	9009339	TAPE CLOTH WATERPROOF 2" WIDE GRAY	A/R	A/R	A/R	A/R	X	X	A/R					

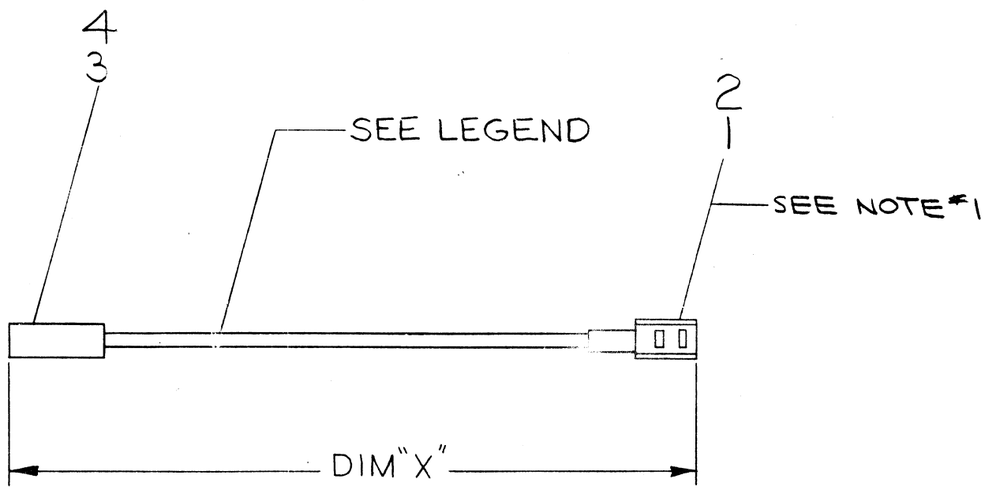
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-0	A	PL	KY11-J-0	N	
	SHEET 2 OF 2	DIST	G			

DEC FORM DEC 16 (325) 1031 N870
DRA 110

REV.	NUMBER	SIZE	CODE
	7409730-0-0	B	IA

LEGEND

NUMBER	DIM"X"	COLOR	ITEM
7409730-01	5 1/2"	BLACK	5



NOTES:

1. ITEM #2 (SHRINK TUBING) TO COVER CONTACT AREA OF ITEM #1 (SOLDERLESS CONN.)

QTY.	DESCRIPTION	PART NO.	ITEM NO.
A/R	WIRE, #18 AWG, BLK	9107278-00	5
1	MINI FASTAB #60291-1	1210820-2	4
1	HOUSING, 1-480417-C	1210820-1	3
1	TUBING, SHRINK (WHITE)	9107252	2
1	SOLDERLESS CONN.-50902	9007917	1

PARTS LIST

FIRST USED ON OPTION MODEL
PDP-1105

REVISIONS	REV.	CHANGE NO.	CHK

DRN. CBMcCoy	DATE 4-11-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C.Teschner	DATE 4-19-72	
ENG. G. Graham	DATE 4-19-72	
PROJ. ENG. D. Dierks	DATE 4-26-72	
PROD. R.K. Peterson	DATE 4/27/72	
NEXT HIGHER ASSEMBLY —		
SCALE NONE		
SHEET 1 OF 1		

TITLE

JUMPER, POWER

SIZE	CODE	NUMBER	REV.
B	IA	7409730-0-0	

DIST. G

DEC FORM NO. DRB 109

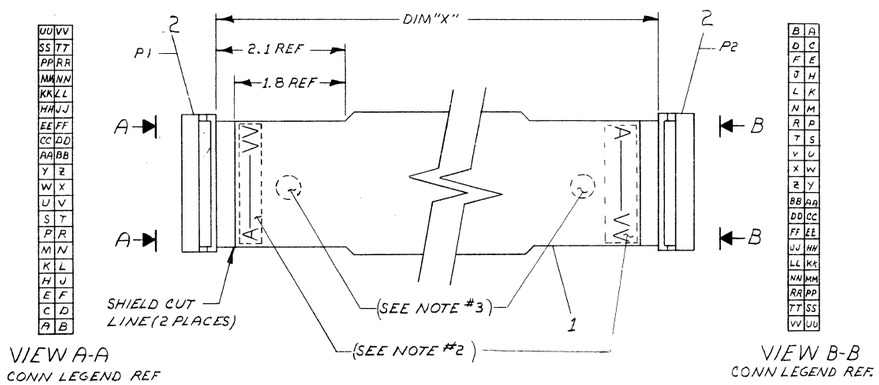
WIRE TABLE

FROM	TO	FROM	TO
P1-A	P2-VV	P1-Y	P2-X
P1-B	P2-UU	P1-Z	P2-W
P1-C	P2-TT	P1-AA	P2-V
P1-D	P2-SS	P1-BB	P2-U
P1-E	P2-RR	P1-CC	P2-T
P1-F	P2-PP	P1-DD	P2-S
P1-H	P2-NN	P1-EE	P2-R
P1-J	P2-MM	P1-FF	P2-P
P1-K	P2-LL	P1-HH	P2-N
P1-L	P2-KK	P1-JJ	P2-M
P1-M	P2-JJ	P1-KK	P2-L
P1-N	P2-HH	P1-LL	P2-K
P1-P	P2-FF	P1-MM	P2-J
P1-R	P2-EE	P1-NN	P2-H
P1-S	P2-DD	P1-PP	P2-F
P1-T	P2-CC	P1-RR	P2-E
P1-U	P2-BB	P1-SS	P2-D
P1-V	P2-AA	P1-TT	P2-C
P1-W	P2-Z	P1-UU	P2-B
P1-X	P2-Y	P1-VV	P2-A

LEGEND

NUMBER	DIM "X"	PRECUT LENGTH
BCØ8R-Ø1	1.00 FT.	1.00FT 1.5 IN ±1.00 IN
BCØ8R-Ø2	2.00 FT.	2.00FT 1.5 IN ±1.00 IN
BCØ8R-Ø3	3.00 FT.	3.00FT 1.5 IN ±1.00 IN
BCØ8R-Ø4	4.00 FT.	4.00FT 1.5 IN ±1.00 IN
BCØ8R-Ø5	5.00 FT.	5.00FT 1.5 IN ±1.00 IN
BCØ8R-Ø6	6.00 FT.	6.00FT 1.5 IN ±2.00 IN
BCØ8R-Ø7	7.00 FT.	7.00FT 1.5 IN ±2.00 IN
BCØ8R-Ø8	8.00 FT.	8.00FT 1.5 IN ±2.00 IN
BCØ8R-Ø9	9.00 FT.	9.00FT 1.5 IN ±2.00 IN
BCØ8R-10	10.00 FT.	10.00FT 1.5 IN ±2.00 IN
BCØ8R-11	11.00 FT.	11.00FT 1.5 IN ±3.00 IN
BCØ8R-12	12.00 FT.	12.00FT 1.5 IN ±3.00 IN
BCØ8R-13	13.00 FT	13.00FT 1.5 IN ±3.00 IN
BCØ8R-14	14.00 FT	14.00FT 1.5 IN ±3.00 IN
BCØ8R-15	15.00 FT	15.00FT 1.5 IN ±3.00 IN
BCØ8R-16	16.00 FT	16.00FT 1.5 IN ±3.00 IN
BCØ8R-17	17.00 FT	17.00FT 1.5 IN ± 3.00 IN
BCØ8R-18	18.00 FT	18.00FT 1.5 IN ± 3.00 IN
BCØ8R-19	19.00 FT	19.00FT 1.5 IN ± 3.00 IN
BCØ8R-20	20.00 FT	20.00FT 1.5 IN ± 3.00 IN
BCØ8R-25	25.00 FT	25.00FT 1.5 IN ±3.00 IN
BCØ8R-30	30.00 FT	30.00FT 1.5 IN ±0.60 FT
BCØ8R-35	35.00 FT	35.00FT 1.5 IN ± 0.70 FT
BCØ8R-50	50.00 FT	50.00FT 1.5 IN ± 1.00 FT
BCØ8R-60	60.00 FT	60.00FT 1.5 IN ± 1.20 FT
BCØ8R-75	75.00 FT	75.00FT 1.5 IN ± 1.50 FT
BCØ8R-A0	100.00 FT	100.00FT 1.5 IN ± 2.00 FT
BCØ8R-A3	130.00 FT	130.00FT 1.5 IN ± 2.00 FT
BCØ8R-A6	160.00 FT	160.00FT 1.5 IN ± 2.00 FT

1. ASSEMBLE THIS CABLE PER PROCESS SPEC #7606485-Ø-Ø.
2. CONNECTOR LEGEND IDENTIFICATION TO BE PLACED ON SHIELD SIDE OF CABLE IN THIS AREA AS SHOWN.
3. INSPECTION & TEST STAMPS TO BE PLACED AT EACH END OF THE CABLE ASSY.
4. STRIP LENGTH SHOULD BE .62 ± 4/32.



2	CONNECTOR, 40 SOCKET	12112Ø6	2
AR	CABLE, 40 COND. FLAT W/SHIELD	17ØØØØ4	1
	DESCRIPTION	DWG./PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE INCHES: OVER 0 TO 0.2	OVER 0.2 TO 1.2	OVER 1.2 TO 4.0	OVER 4.0 TO 12.0	OVER 12.0 TO 40.0	OVER 40.0 TO 80.0
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±.004	±.008	±.012	±.016	±.024	±.04
	PREFERRED ☐	±.012	±.016	±.025	±.04	±.063	±0.1

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL

FINISH

DRN D. FONTAINE 9-28-76
CHK'D J. FLEMING 9-30-76
ENG P. GARDNER 6-3-77
PROJ. ENG GARDNER 9-2-77
PROD. DEVALL 9-4-77
NEXT HIGHER ASSY.
SCALE
SHEET 1 OF 1

FIRST USED ON

digital

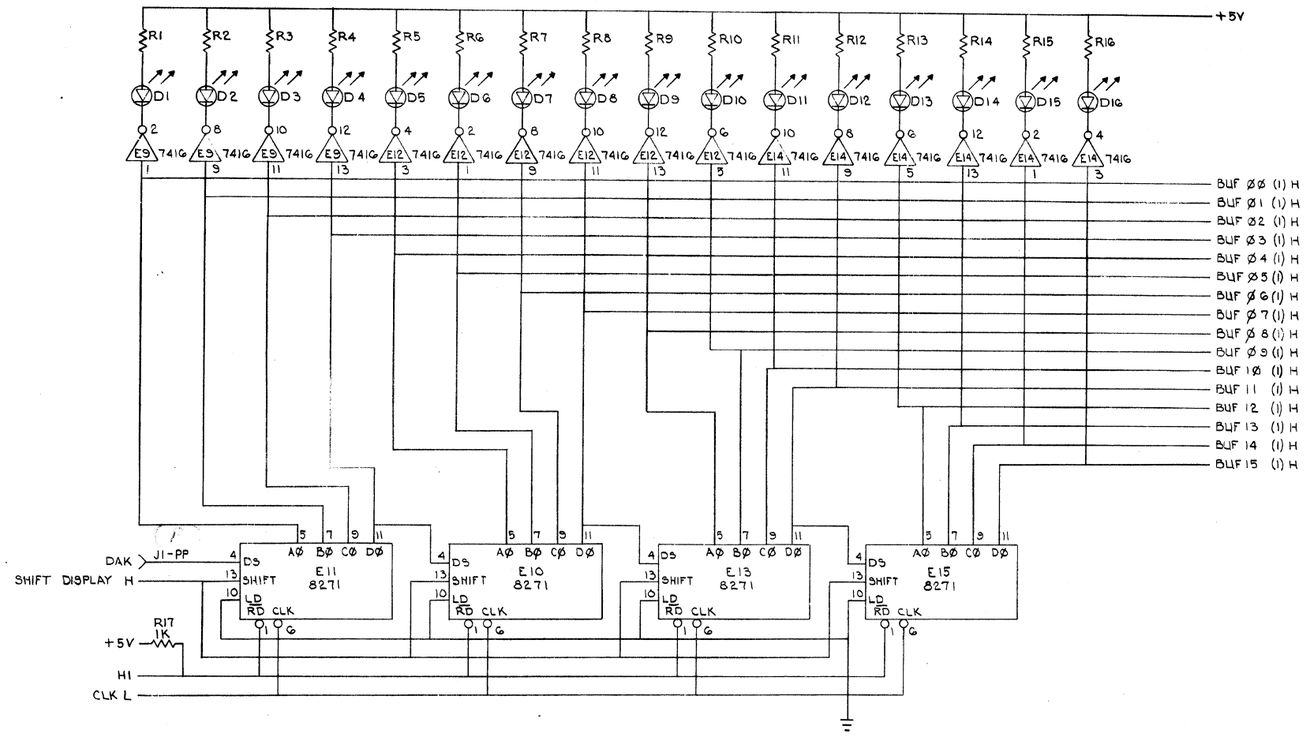
TITLE BCØ8R I/O CABLE

SIZE D | CODE UA | NUMBER BCØ8R-ØØ | REV. M

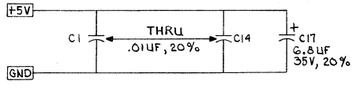
DIST.

REVISIONS			
CHK	CHANGE NO.		REV.
PJG	BCØ8R-00008		L
	REVISED & REDRAWN		
J. Jacks	10-Jan-76		
S. HOLMES			
S. Holmes	23-MAR-76		
E BCØ8R-00007			M
A. Myers	26 JULY 77		
P. GARDNER			

DEC FORM NO. DRD 100-C



UNLESS OTHERWISE INDICATED:
RESISTORS= 1/4W, 5%
CAPACITORS= 100V, 5%
DIODES ARE LIGHT EMITTING
PIN 14 = +5V, PIN 7 = GND ON DEC 7404, 7416, 7417
PIN 16 = +5V, PIN 8 = GND ON DEC 8271, 74123, 74193



REV	CHK	CHANGE NO.	REVISIONS
J	B. ARMSTRONG	5409766-00001	
H	R.D. Hale	5409766-00006	
F	B. ARMSTRONG	5409766-00005	
E	G. GRAHAM	5409766-00004	
D	R. KRISHNA	5409766-00003	
C	R. KRISHNA	5409766-00002	
B	R. KRISHNA	5409766-00001	

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Roger J. Doucette DATE 18 JAN 72
CHK'D. DATE 20 JAN 72
ENG. R Krishna DATE 2-10-72
PROJ. ENG. DATE 2-10-72
PROD. DATE 2-10-72
NEXT HIGHER ASSY E-IAS409766-0-0
SCALE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D CODE CS NUMBER 5409766-0-1 REV. J
DIST.

DEC FORM NO. DRD-135

J1
E KEY LOAD ADRS (1) L
H KEY EXAM (1) L
K KEY CONT (1) L
M KEY HLT ENB (1) L
P KEY START (1) L
S KEY DEP (1) L

R27 47 · R28 47 · R29 47 · R30 47 · R31 47 · R32 47 · +5V

R33 1K · R34 1K · R35 1K · R36 1K · R37 1K · R38 1K · R39 1K · R40 1K · R41 1K · R22 1K · R23 1K · R25 1K

LOAD ADDRESS S6 (UP / DOWN) → E3 7417 (12) → R42 1K → +5V

EXAMINE S5 (UP / DOWN) → E3 7417 (10)

CONTINUE S4 (UP / DOWN) → E3 7417 (8)

HALT S3 (UP / DOWN) → E3 7417 (2); E9 7416 (4)

START S2 (UP / DOWN) → E3 7417 (4)

DEPOSIT S1 (UP / DOWN) → E3 7417 (6)

PANEL LOCK → E7 7416 (6) → E5 7404 (6) → PUP L

RUN J1-C → E5 7404 (3→4) → E9 7416 (5→6) → DIT → R24 → +5V

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

CHK	REV	CHANGE NO. REVISIONS	DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Roger J Doucette DATE 10 JAN 72
CHK'D. Andrews DATE 20 JAN 72
ENG. Krishna DATE 2-10-72
PROJ. ENG. Krishna DATE 2-10-72
PROD. R.K. Peterson DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409666-0-0
SCALE
SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

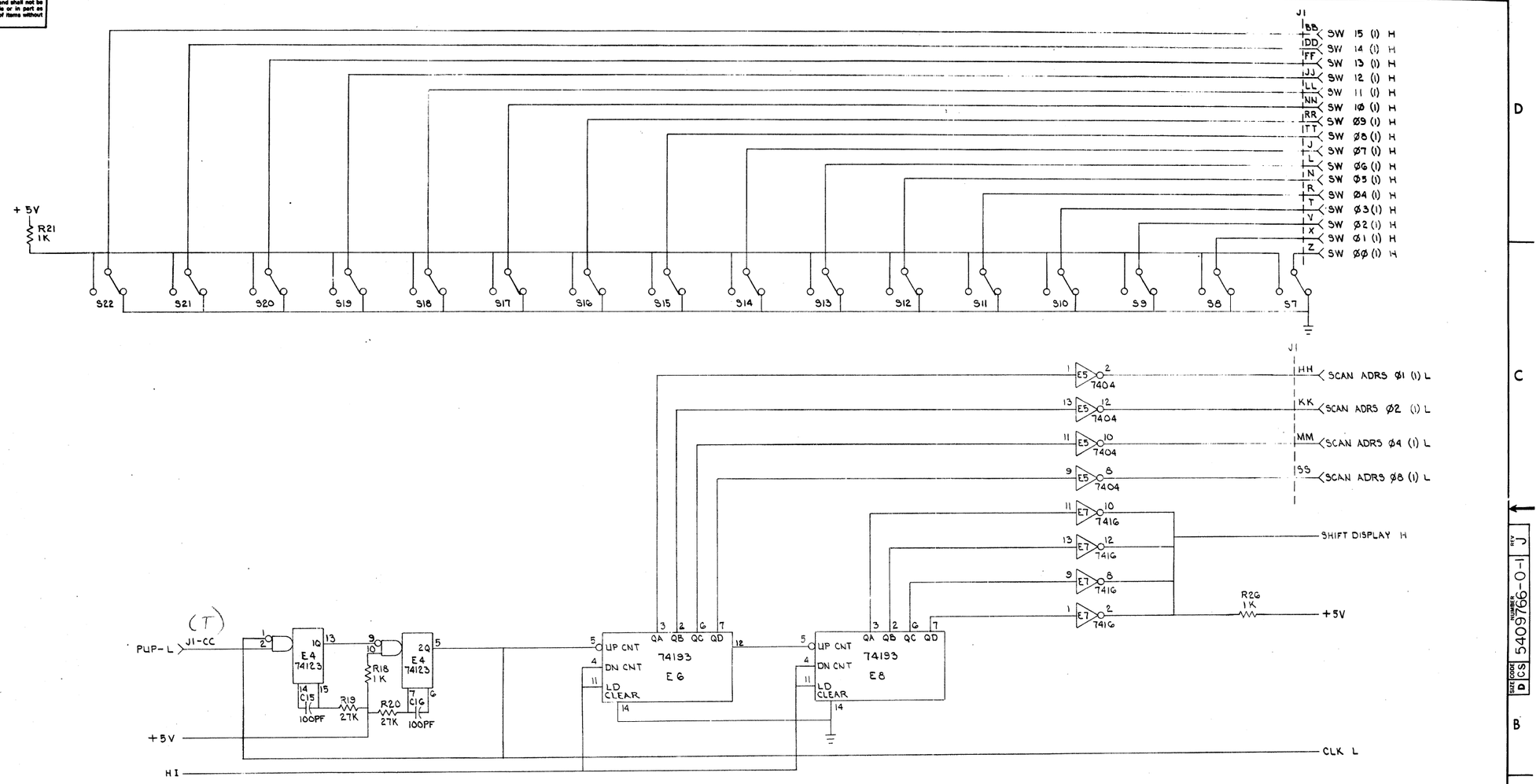
TITLE 11/05 CONSOLE

SIZE D · CODE CS · NUMBER 5409766-0-1 · REV J

DIST.

DEC FORM NO. DRD-135

5409766-0-1 J CS D



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

REV	CHANGE NO.	CHK	DEC NO.	EIA NO.	DEC NO.	EIA NO.
	REVISIONS		SEMICONDUCTOR CONVERSION CHART			

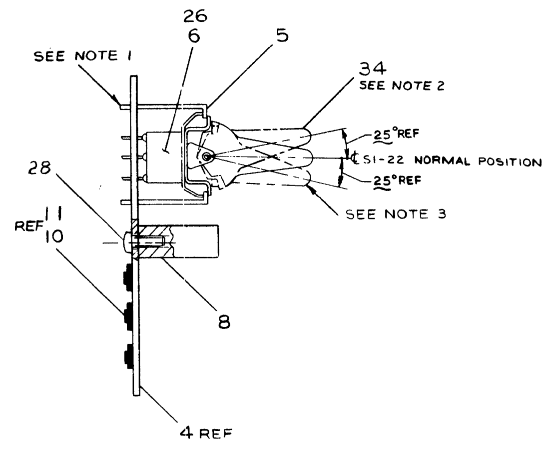
DRN. Roger J. Doucette DATE 20-JAN-72
CHKD. Rooney DATE 26-Jan-72
ENG. UK Sinha DATE 2-10-72
PROJ. ENG. UK Sinha DATE 2-10-72
PROD. R.W. Peters DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409766-0-0
SCALE
SHEET 3 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D CODE CS NUMBER 5409766-0-1 REV J
DIST.

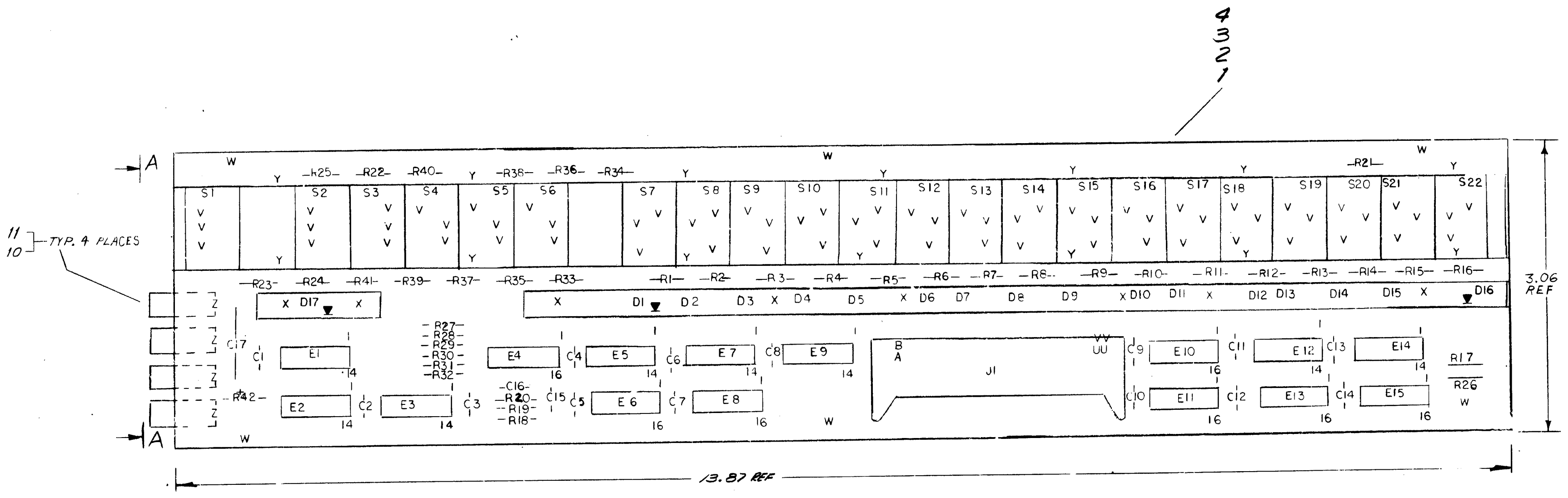
DEC FORM NO. DRD-135



VIEW A-A

NOTES:

1. ATTACH SWITCH BRACKET (ITEM #5) TO ETCH BOARD (ITEM #4) BY TURNING TABS 1/4 TURN ON SWITCH BRACKET USING TWISTING TOOL # B-MD-7606203 (14 PLACES)
2. ASSEMBLE S2, 3, 4, 5 & 6 AS SHOWN.
3. ASSEMBLE S1 & S7 THRU S22 AS SHOWN.



REF		PACKAGING INSTRUCTIONS	A-PI-3700116-0-0	37
				36
☒				35
22		KNOB	D-PS-1210786-0-0	34
				33
				32
☒				31
				30
				29
8		POZI-DRIVE TYPE F 4-40-5/16	9009236	28
☒				27
5	S1, S2, S4, S5, S6	SWITCHES, MOMENTARY	1210841	26
1	E3	I.C. DEC 7417	1909929	25
1	E4	I.C. DEC 74123	1910436	24
2	E6, E8	I.C. DEC 74193	1910018	23
6	E9, E12, E14, E7, E1, E2	I.C. DEC 7416	1909928	22
1	E5,	I.C. DEC 7404	1907686	21
4	E10, E11, E13, E15	I.C. DEC 8271	1909615	20
2	R19-R20	RES. 27K 1/4W 5%	1305346	19
17	R1-R16 R29	RES. 180 OHM 5%	1301322	18
17	R17-18, 21-23, 25, 26, 33-42	RES. 1K 1/4W 5%	1300365	17
6	R27-R32	RES. 47 1/4W 5%	1300202	16
14	C1-C14	CAP. .01 MF 100V 20%	1001610	15
1	C17	CAP 6.8 MF 35V 20%	1000067	14
2	C15, C16	CAP, 100 PF 100V 5%	1000016	13
17	D1 - D17	DIODE, LIGHT EMITTING (GE)	1110864	12
4		EYELET # GS4-4 STIMPSON	9007837	11
4		FASTON TAB	9007112	10
3		LED HOLDER (G.E.)	1210795-2	9
1		SINGLE L.E.D. HOLDER (G.E.)	1210848-2	8
1	J1	CONNECTOR	1209941	7
17	S7 - S22, S3	SWITCHES TOGGLE	1210840	6
1		SUPPORT SWITCHES	D-MD-7409270-2-0	5
1		ETCH CIRCUIT BOARD	E-IA-5009765-0-0	4
REF		MODULE ECO HISTORY	B-MN-5409766-0-6	3
REF		CIRCUIT SCHEMATIC	D-CS-5409766-0-1	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-5409766-0-4	1
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

IC TYPE	GND	+5V
DEC 74123	8	16
DEC 74193	8	16
DEC 8271	8	16

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

ITEM NO.	AWG	FROM PT	TO PT

JUMPER LIST

DEC FORM NO. DRE 104

REV	CHANGE NO.				CHK
J	5409766-00007	Ray Vargas 5/22/74	B ARMSTRONG		
H	5409766-00006	R.D. Haile 8/21/73	G.GRAHAM	G. Graham 4-4-74	
F	5409766-00005	B J Haile 4-23-73	B.ARMSTRONG	5-1-73	
E	5409766-00004	B. J. Haile 10-25-72	G.GRAHAM	G. Graham 11-6-72	
D	5409766-00003	B J Haile 6-28-72	R.KRISHNA	G. Graham 7-5-72	
C	5409766-00002+2A	BJ Haile 4-5-72	R.KRISHNA	R Krishna	
B	5409766-00001	B J Haile 3-?-72	R. KRISHNA	R Krishna	
A	ORIGINATED				☒

REVISIONS

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN		DATE 12-15-71
CHK'D.	C. Teschner	DATE 2-10-72
ENG.	R Krishna	DATE 2-10-72
PROJ. ENG.	R Krishna	DATE 2-10-72
PROD.	R K. Petterson	DATE 2-10-72

NEXT HIGHER ASSY D-UA-KY11-0-0

SCALE 2/1

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE ETCH BOARD ASSY. (11Ø5 CONSOLE)

SIZE	CODE	NUMBER	REV.
E	IA	5409766-0-0	J

DIST.

E IA 5409766-0-0

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET ☐☐☐☐

	SEQUENCE
DRAWING DIRECTORY	B-DD-H75Ø-Ø
UNIT ASSEMBLY	E-UA-H75Ø-Ø-Ø
CIRCUIT SCHEMATIC	D-CS-H75Ø-Ø-1
DIODE BOARD, P.S.	
CIRCUIT SCHEMATIC	B-CS-5411253
REGULATOR BOARD	E-IA-5409728-Ø-Ø
CIRCUIT SCHEMATIC	D-CS-5409728-Ø-1
5V REGULATOR BOARD	E-UA-H744-Ø-Ø
5V REGULATOR	D-CS-H744-Ø-1
H75Ø POWER SUPPLY HARNESS	E-IA-7009207-Ø-Ø

MFG PRINT SET	SEQUENCE
PACKAGING INSTRUCTION	A-PI-3700086-0-0

UNIT VARIATIONS

VAR	TITLE	PRINT SET H75Ø-Ø
H75Ø-Ø	H75Ø POWER SUPPLY	X

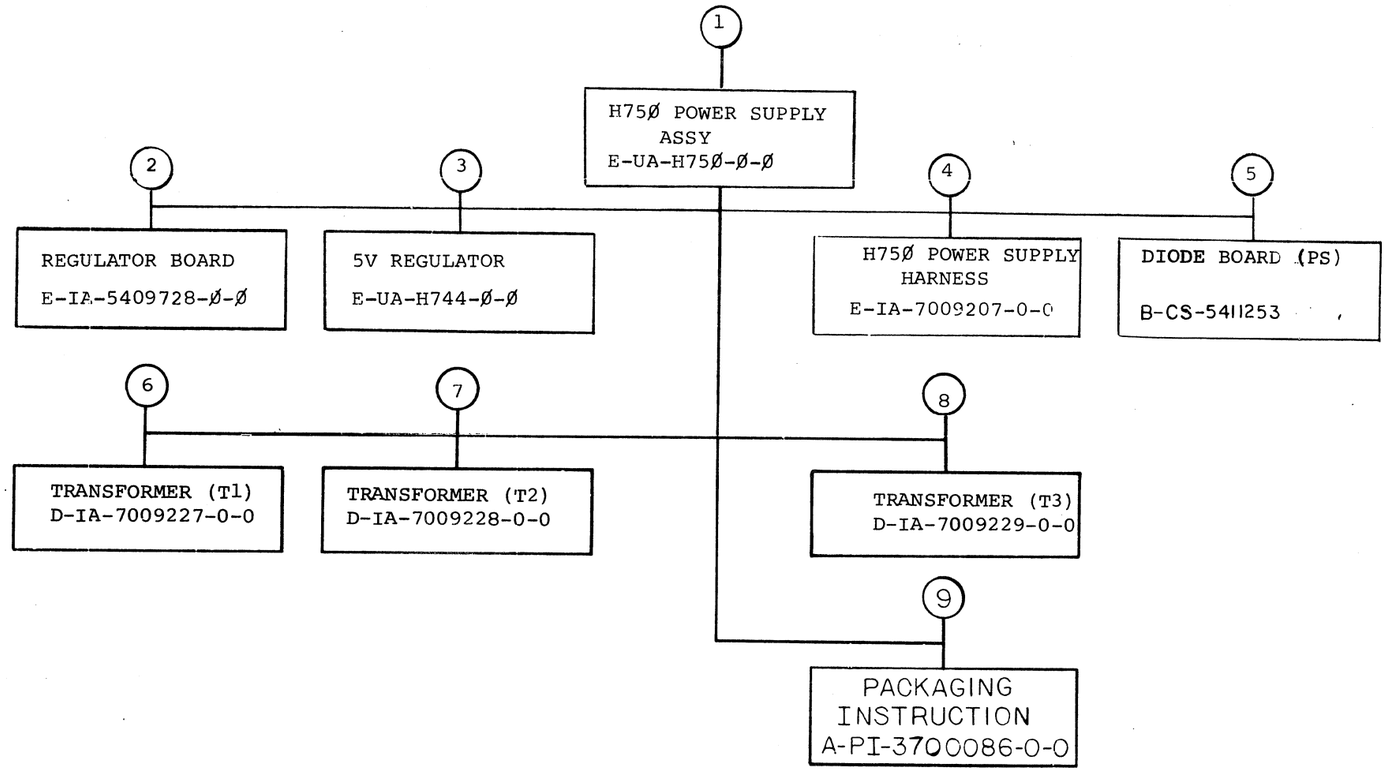
REVISIONS		
DATE	CHG. NO.	REV
3-73	H75Ø-00001	A
5-73	H75Ø-2	B
6-73	H75Ø-3	C
7-73	H75Ø-4	D
8-73	H75Ø-5	E
11-73	H75Ø-6	F
11-73	H75Ø-7	H
2 74	H75Ø-8	J
5-74	H75Ø-9	K
9-74	H75Ø-11	L
1-75	H75Ø-13	M

USED ON OPTION/MODEL	
11/35	

SHEET 1 OF 3

DRN. Jack Cahill	DATE 1-15-72	TITLE POWER SUPPLY H75Ø
CHK'D. Jack Cahill	DATE 1-16-72	
PROJ ENG. R. J. Wolf	DATE 2/12/73	
PROD. H. Stuiver	DATE 2-21-73	SIZE B / CODE DD / NUMBER H75Ø-Ø / REV M
FIELD SERV. W Dunbar	DATE 2/13/73	DIST

DRB 106



TITLE		SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	SHEET 2 OF 3	B	DD	H75Ø-Ø	M

ELECTRICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	E-UA-H75Ø-Ø-Ø	L	2	H75Ø POWER SUPPLY ASSY	
X	X		D-CS-H75Ø-Ø-1	B	1	CIRCUIT SCHEMATIC (H75Ø PS.)	
	X		A-SP-H75Ø-Ø-3	A	1	TEST PROCEDURE	
			1211222		1	RELAY	
X	X	2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
X	X		D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			K-CO-5409728-0-4		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5409728-0-6		1	MODULE ECO HISTORY	
			5009727		1	ETCH BOARD	
X	X	3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
X	X		D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-H744-Ø-4		1	X-Y COORDINATE HOLE LOCATION	
			K-CO-H744-Ø-5		1	ASSY/DRILLING HOLE LOCATION	
			D-AH-H744-Ø-6		1	MODULE ECO HISTORY	
			5009725		1	ETCH BOARD	
X	X	4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
X	X	5	B-CS-5411253	#	1	DIODE BOARD PS.CIRCUIT SCHEMATIC	
			K-CO-5411253		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5411253		1	MODULE ECO HISTORY	
			E-IA- 5011252		1	ETCH CIRCUIT BOARD	
	X	6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
	X	7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
	X	8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	

MECHANICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E-UA-H75Ø-Ø-Ø	J	2	H75Ø POWER SUPPLY ASSY	
	X		E-IA-7409723-0-0	#	2	CHASSIS POWER SUPPLY	
			1209403		1	FAN SUPER BOXER	
	X		C-MD-7409722-0-0	#	1	COVER, POWER SUPPLY	
			A-DC-7411006-0-0		1	DECAL	
		2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			C-IA-5310126-0-0		1	HOLDER CAPACITOR	
			C-MD-5309779-0-0		1	CONTACT,COMMON CAPACITOR	
			C-MD-5309781-0-0		1	CONTACT, CAPACITOR	
		3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
			D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
		4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
		5	B CS-5411253	#	1	DIODE BOARD P.S.CIRCUIT SCHEMATIC	
		6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
		7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
		8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	
	X	9	A-PI-3700089-0-0	#	2	PACKAGING INSTRUCTION	
			A PS 9905237-0-0		2	HALF SLOTTED CARTON INNER	
			A PS 9905238-0-0		2	HALF SLOTTED CARTON OUTER	
			A PS 9905239-0-0		2	LAMINATED PIECE	

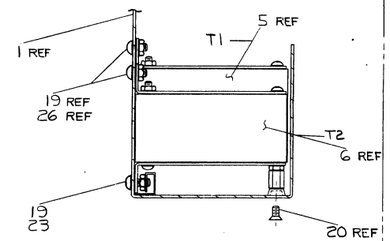
CUSTOMER PRINT SET CODES

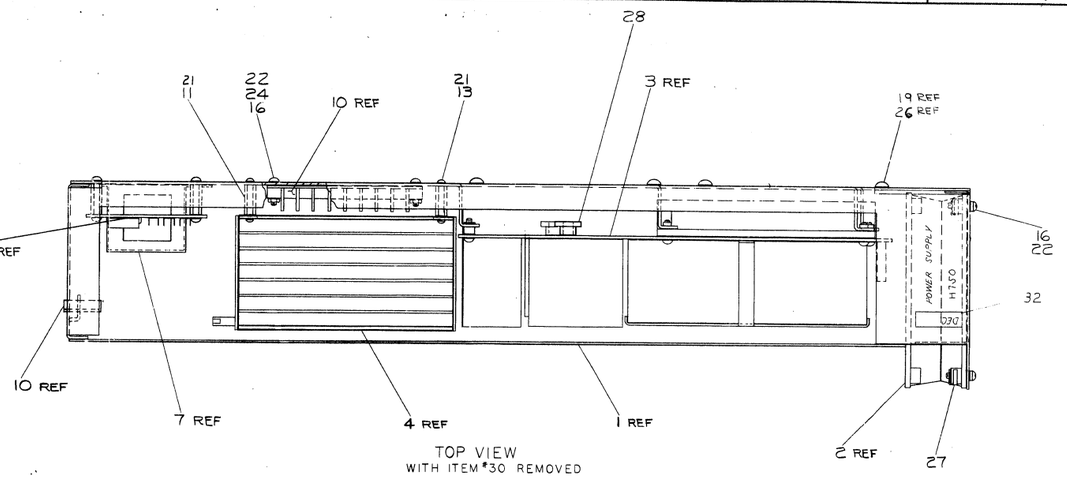
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

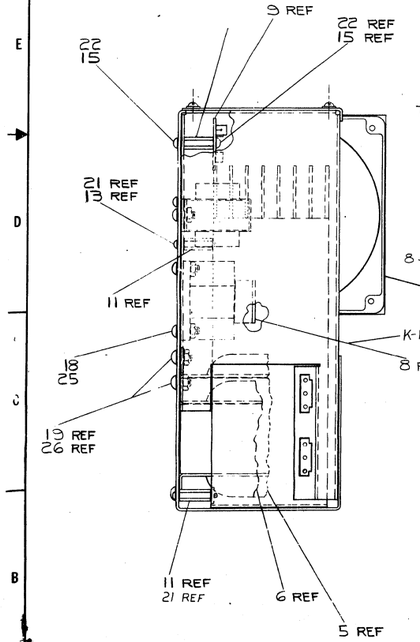
TITLE	SHEET	SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	3 OF 3	B	DD	H75Ø-Ø	M

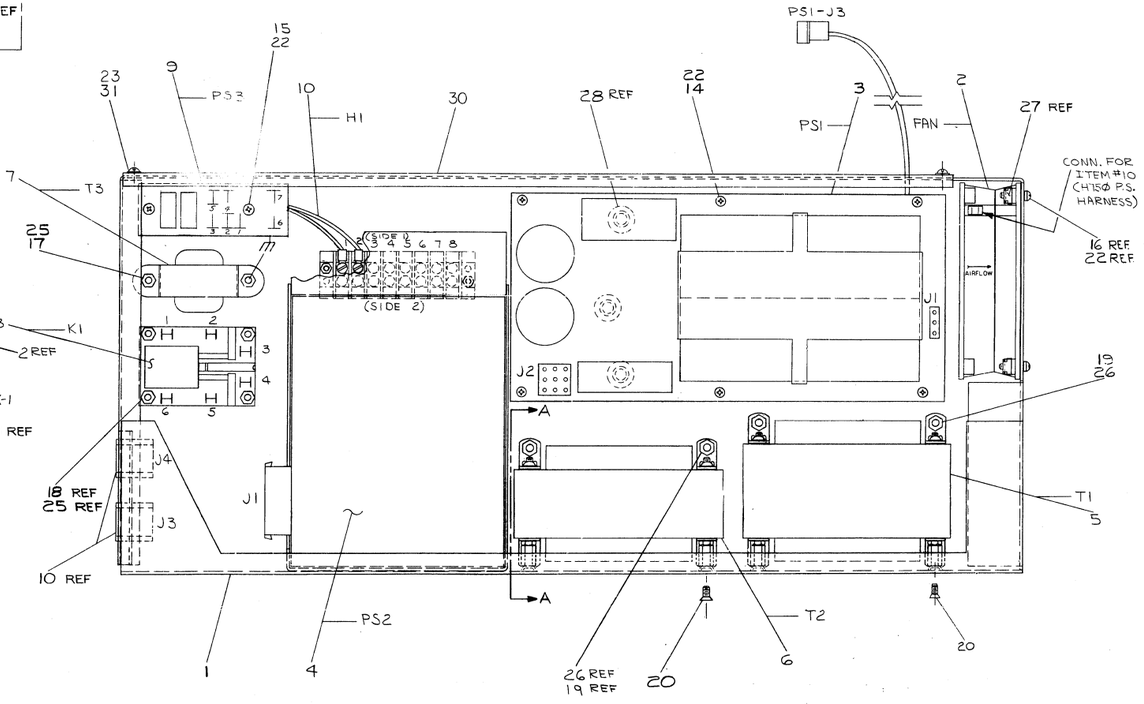
DRB 108

DEC 16-(325)-1062-2B-R972









NOTES:

1. FOR EASE IN HANDLING AND MANUFACTURING, ITEMS IN THE H750 POWER SUPPLY SHOULD BE ASSEMBLED AND INSTALLED IN THE CHASSIS (ITEM *1) IN THE FOLLOWING ORDER:
   - A) THE RELAY (ITEM *8), TRANSFORMER REWORK (ITEM *7), DIODE BOARD (ITEM *9), HARNESS (ITEM * 10), AND FAN (ITEM *2) SHOULD BE INSTALLED IN CHASSIS (ITEM *1) FIRST.
   - B) TRANSFORMER (ITEM *5) AND TRANSFORMER (ITEM *6) TO CHASSIS.
   - C) REGULATOR BOARD (ITEM *3) TO CHASSIS.
   - (D) REMOVE PLASTIC SHIELD AND SCR FROM ITEM #4 (H744) AND REPLACE WITH 4 ITEM #11, & ITEM #21, THEN INSTALL TO CHASSIS.

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	PACKAGING INSTRUCTION	A-PI-37000PG00	33
1	DECAL	A-DC7411006	32
4	SCREW PHIL TRUS HD 10-32×31	9006070-3	31
1	COVER POWER SUPPLY	E-MD-7409722	30
REF	TEST PROCEDURE	A-SP-H750-0-1	29
3	BUSHING, NYLON FLANGE	9008426	28
4	CLIP, FAN MTG. #6	9009165	27
4	NUT, KEPS #10-32	9006565	26
6	NUT, KEPS #8-32	9006563	25
4	NUT, KEPS #6-32	9006560	24
8	WASHER, INT. TOOTHLOCK #10	9006635	23
18	WASHER, INT. TOOTHLOCK #6	9006633	22
8	WASHER, INT. TOOTHLOCK #4	9006632	21
4	SCREW, PHLFLAT HD #8-32 X .25 L	9006035-2	20
8	SCREW PHLTRUSS HD #10-32 X .44 L	9006072-3	19
4	SCREW PHL TRUSS HD #8-32 X .62 L	9006040-3	18
2	SCREW PHL TRUSS HD #8-32 X .38 L	9006037-3	17
8	SCREW, PHL PAN HD #6-32 X .62 L	9006025-1	16
4	SCREW, PHL TRUSS HD #6-32 X .38 L	9006022-3	15
6	SCREW, PHL PAN HD #8-32 x .5UL	9006024-1	14
4	SCREW, PHL PAN HD #4-40 X .31 L	9006010-1	13
2	SPACER #6-32 X .75 L	9006859	12
4	STANDOFF #4-40 X .75 THD. MALE & FEMALE	9009284	11
1	H750 POWER SUPPLY HARNESS (H1)	E-IA-7009207-0-0	10
1	DIODE BOARD P.S. (PS3)	B-CS-5411253 -1	9
1	RELAY (K1)	1211222	8
1	TRANSFORMER REWORK (T3)	D-IA-7009229-0-0	7
1	TRANSFORMER REWORK (T2)	D-IA-7009228-0-0	6
1	TRANSFORMER REWORK (T1)	D-IA-7009227-0-0	5
1	5V REGULATOR (PS2)	E-UA-H744-0-0	4
1	REGULATOR BOARD (PS1)	E-IA-5409728-0-0	3
1	FAN, SUPER BOXER (110)	1209403-01	2
1	CHASSIS POWER SUPPLY	E-IA-7409723-0-0	1

PARTS LIST

REV.	CHANGE NO.	
L	H750-00013	BARON 1-29-75 1/30/75
K	H750-00011	LOYA 9-19-74 10/1/74
J	H750-00009	G. POTTER 5-22-74
H	H750-00008	R.WOLF 4-21-74 9-12-74
F	H750-00007	R. WOLF 4-2-74 3-14-74
E	H750-00006	R. WOLF E. ALLain 11-7-73 11-13-73
D	H750-00005	B. WOLF B. Blodgett 8-27-73 7-1-73
C	H750-00004	MINOR 8-1-73 7-27-73
B	H750-00003	C. BLASI 7-6-73 B. Blodgett 6-26-73
A	H750-00001	C. BLASI 3-27-73 Beasley 3-26-73

REVISIONS

FIRST USED ON OPTION/MODEL
H750

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES.
TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL
SEE PARTS LIST

FINISH

		DATE
DRN.	McCarthy	10/18/72
CHK'D	C. Little	1/4/72
ENG.	CRBlasi	1-16-73
PROJ. ENG.	R. J. Wolf	2/12/73
PROD.		2-21-73

NEXT HIGHER ASSY.
D-UA-1135-0-0

SCALE NONE
SHEET 1 OF 2

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
H750
POWER SUPPLY
ASSY

SIZE	CODE	NUMBER	REV.
E	UA	H750 - 0 - 0	L

DIST.

E UA H750-0-0 L

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM CONNECTION	TO CONNECTION	REMARKS
	—	—	H1-P1	———	
	———	———	H1-J1	PS1-J3	
	———	———	H1-J2	———	
	———	———	H1-J3	TO CHASSIS	
	———	———	H1-J4	ITEM #1	
	18	RED	H1-J5	TO FAN	
		WHT	H1-J6	ITEM # 2	
10 (H1)	22	WHT	H1-7	K1-6	
		RED	H1-8	K1-3	
		WHT	H1-9	K1-4	
		ORN	H1-10	K1-5	
		VIO	H1-11	K1-2	
		RED	H1-12	K1-1	
		RED	H1-13	K1-1	
		VIO	H1-14	PS3-2	
		ORN	H1-15	PS3-3	
	16	BLK	H1-16	PS3-5	
	18	BLK	H1-17	PS3-2	
	14	BLK	H1-49	PS3-5	
	14	BLK	H1-50	T3 - /77	
5 (T1)	—	———	T1-J1	PS1-J1	
	14	BLK	T1-1	H1-TB1-5	ALL CONNECTIONS TO H1-TB1 ARE ON SIDE #2.
		RED	T1-2	H1-TB1-6	
		RED/WHT	T1-3	H1-TB1-7	
	14	BLK/WHT	T1-4	H1-TB1-8	
6 (T2)	—	———	T2-P1		
	—	———		———	
	14	BLK	T2-7	H1-TB1-5	ALL CONNECTIONS TO H1-TB1 ARE ON SIDE #2
		RED	T2-8	H1-TB1-6	
		RED/YEL	T2-9	H1-TB1-7	
	14	WHT	T2-10	H1-TB1-8	
7 (T3)	20	BRN	T3-1	H1-TB1-2	SIDE #1
		RED	T3-2	H1-TB1-5	SIDE #1
		ORN	T3-3	H1-TB1-7	SIDE #1
		YEL	T3-4	K1-6	
		GRN	T3-5	PS3-4	
		GRN	T3-6	PS3-1	
	20	BLU	T3-7	H1-TB1-1	SIDE #2
8 (R1)	18	BLK	K1-3	PS2-6	
	18	BLK	K1-4	PS3-7	

FIRST USED ON OPTION/MODEL: H750	QTY.	DESCRIPTION: PARTS LIST	PART NO	ITEM NO.	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .01, X ± .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓					
MATERIAL: SEE PARTS LIST		NEXT HIGHER ASSY.: D-UA-1135-0-0			
FINISH: —		SCALE: NONE SHEET 2 OF 2			

DRW. K. [illegible] DATE 10/72
CHK'D [illegible] DATE 10/72
MFG APPR. [illegible] DATE 10/72
QUAL APPR. [illegible] DATE 10/72
ENGR. [illegible] DATE 10/72

digital EQUIPMENT CORPORATION

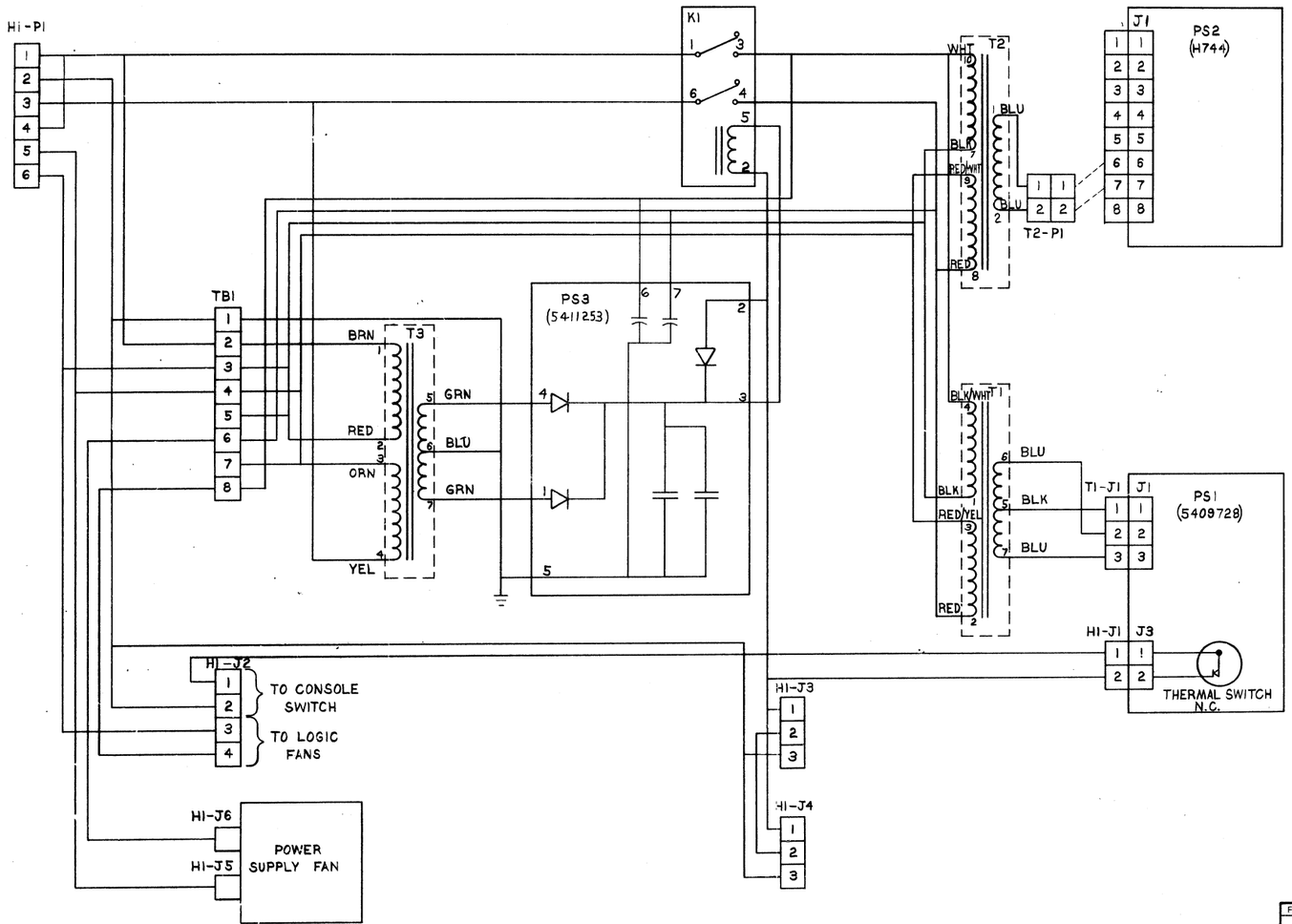
TITLE: H750 POWER SUPPLY ASSY.

SIZE/CODE: E UA | NUMBER: H750-0-0 | REV.: L | DIST.

UA H750-0-0 L

DEC FORM NO. DRE 380

NOTES:
1. HI INDICATES CONNECTORS IN POWER SUPPLY HARNESS. (E-IA-7009207-0-0)
2. DOTTED LINES INDICATE CONNECTIONS VIA 7009208 HARNESS (NOT PART OF H750)



REV	DESCRIPTION	DATE	APPROVED
D	H750-00006 REVISED AND REDRAWN	11-9-73	R. WOLF
C	H750-00011	11-13-73	R. WOLF
B	H750-00013	11-19-73	LOYA
A			BARON

FIRST USED ON OPTION MODEL	PDP 11/35
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	TOLERANCES: DECIMALS .xxx = .005, .xx = .02, .x = .1; ANGLES ±0 30'; REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽
MATERIAL	
FINISH	

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

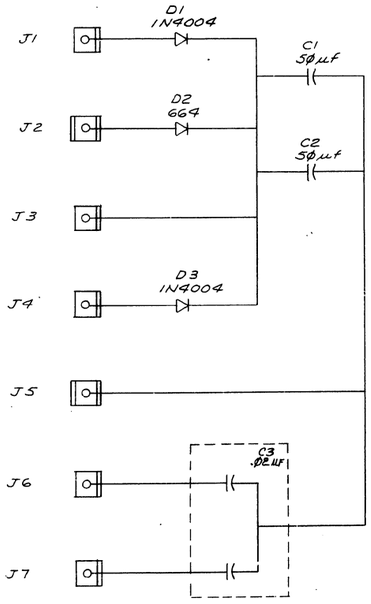
DRN. K. DAVIS	DATE 1-17-73	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. J. CAHILL	DATE 2-13-73	
ENG. C. BLASI	DATE 2-13-73	
PROJ. ENG. R. WOLF	DATE 2-14-73	
PROD. G. STRINGER	DATE 2-21-73	
NEXT HIGHER ASSY.		
SCALE		
SHEET 1 OF 1		

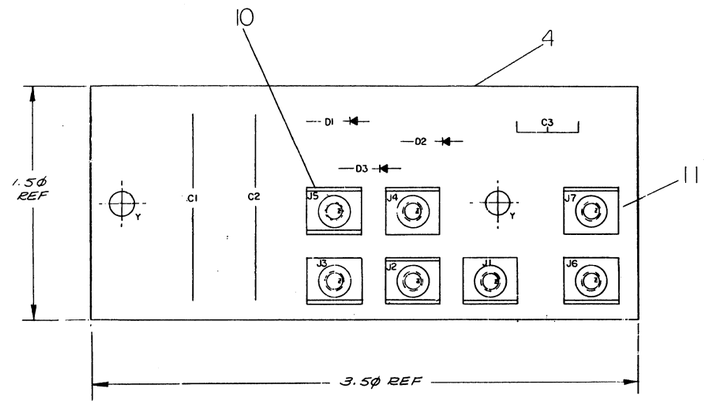
TITLE: H750 POWER SUPPLY

SIZE	CODE	NUMBER	REV.
D	CS	H750-0-1	D

DIST.

NOTES:





REF		X-Y COORDINATE HOLE LOCATION	X-CO-5411253-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-5411253-0-5	2
REF		MODULE ECO HISTORY	B-MH-5411253-0-6	3
1		ETCHED CIRCUIT BOARD	5011252-00	4
2	C1, C2	CAP 50µf 50V TANT	1000080-00	5
1	C3	CAP 2X .02µf DISC	1010767-00	6
1	D2	DIODE 664	1100114-00	7
2	D1, D3	DIODE IN4004	1105796-00	8
7		EYELET	9009000-00	9
2	J2, J5	FASTON TAB	9007113-00	10
5	J1, J3, J4, J6, J7	FASTON TAB	9008219-0	11

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV. A

IC TYPE	GND	+5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

FIRST USED ON OPTION MODEL: H750

REVISIONS			
REV.	CHANGE NO.		
A	5411253-00001		
CHK			

DRN. Ezra Metzger 9/10/74
CHK'D. M. Perrin 9/11/74
ENG. A. Baron 10/31/74
PROJ. ENG. A. Baron 10/31/74
PROD. Don DeRame 10-29-74
NEXT HIGHER ASSY
SCALE
SHEET 1 OF 1

digital

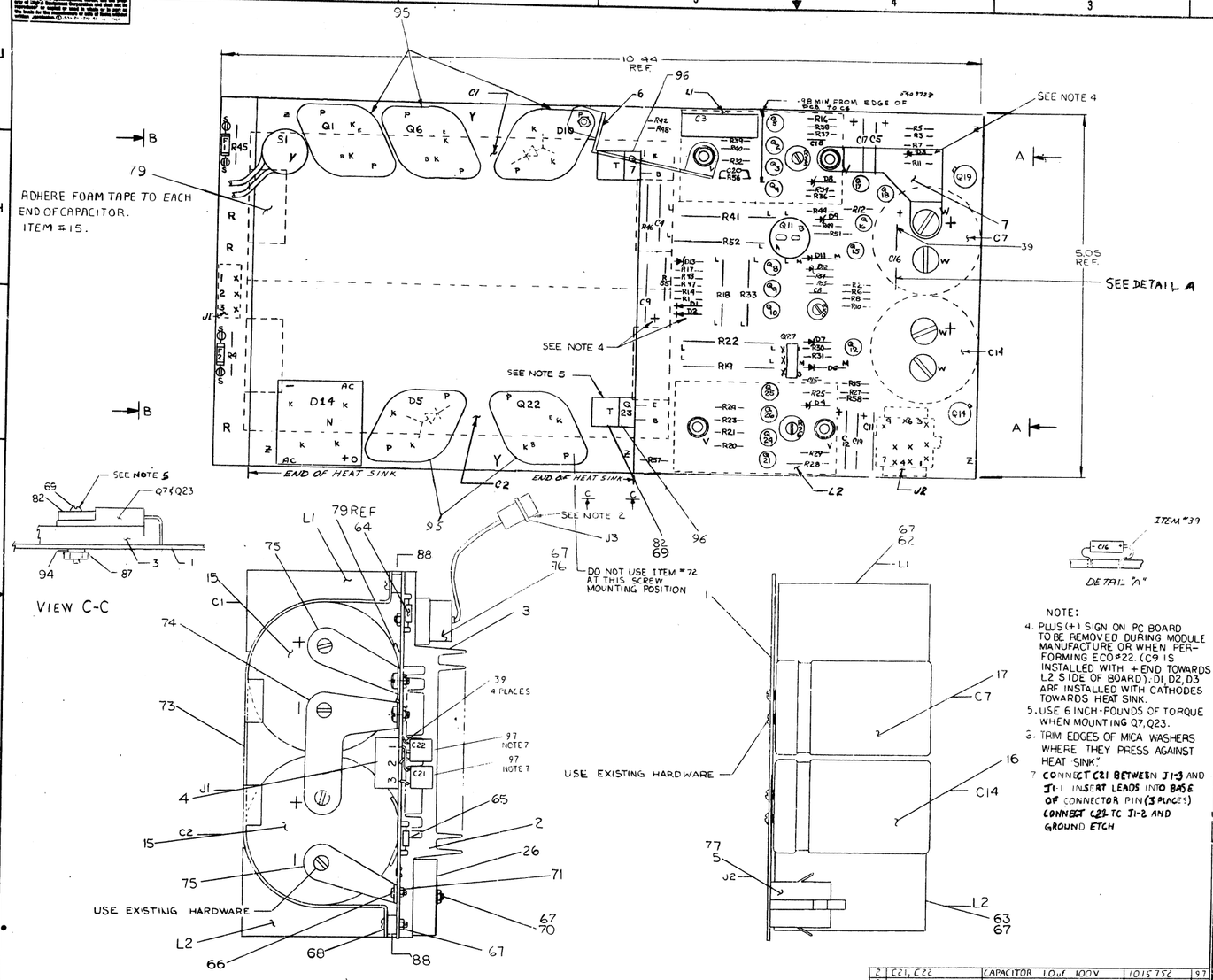
TITLE: DIODE BOARD

SIZE	CODE	NUMBER	REV.
D	CS	5411253-0-1	A

DIST.

SIZE D CODE CS NUMBER 5411253-0-1 REV. A

DEC FORM NO. 880 139.0



VIEW C-C

VIEW B-B

VIEW A-A

NOTES:

1. APPLY ITEM #8 (THERMAL COMPOUND) BETWEEN S1 AND HEATSINK.
2. TRIM LEADS ON ITEM #76 (THERMOSTAT) TO (5) INCHES AND ATTACH ITEM #84 (PINS) AND ITEM #83 (HOUSING) AS SHOWN.
3. APPLY FLAT WASHER ITEM #72 BETWEEN SCR. HD. AND ETCHED BOARD WHEN MOUNTING COMPONENTS Q1,Q6, Q22, D5 & D10.
4. PLUS (+) SIGN ON PC BOARD TO BE REMOVED DURING MODULE MANUFACTURE OR WHEN PERFORMING ECO #22. (C9 IS INSTALLED WITH + END TOWARDS L2 SIDE OF BOARD). D1, D2, D3 ARE INSTALLED WITH CATHODES TOWARDS HEAT SINK.
5. USE 6 INCH-POUNDS OF TORQUE WHEN MOUNTING Q7, Q23.
6. TRIM EDGES OF MICA WASHERS WHERE THEY PRESS AGAINST HEAT SINK.
7. CONNECT C21 BETWEEN J1-3 AND J1-1. INSERT LEADS INTO BASE OF CONNECTOR PIN (3 PLACES). CONNECT C22 TO J1-2 AND GROUND ETCH

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2	C21, C22	CAPACITOR .10 uf 100V	1015752	97
2		WASHER, THERMAFILM	9009993-01	96
5		WASHER, MICA	9009993-00	95
2		WASHER, #6 SPLIT	9007801	94
1		5409728 INTERPLANT/CUSTOMER PKG	A-PI-3700065-0-0	93
		MANUFACTURING SPECIFICATION	A-SP-5409728-0-8	92
		ASSEMBLY PROCEDURE	A-SP-5409728-0-3	91
		INSPECTION PROCEDURE	A-SP-5409728-0-10	90
		MANUFACTURING TEST PROCEDURE	A-SP-5409728-0-3	89

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2		SPACER, ALUM #6, 1/4 AF X 1/8" LG	9009283	86
1	Q11	NUT 6-32	9008957	87
1	Q21	XSTR C32AX135	1202928	86
2		XSTR B85	1510705-01	85
1	J3	PINS MALE CRIMP	1209378-01	84
2		MATE-N-LOCK CONNECTOR	1210822-02	83
1	D12	WASHER RECT	9009769	82
1	C12, C19	DIODE, ZENER, 5.7V, 2%	1111209	81
4		CAP 2.2 uf 35V 10% S.TANT	1002431	80
2	R39, R40	1" LG FOAM TAPE	9009087-1	79
9		RES 5.1 1/4 W 5%	1309422	78
1	S1	PIN FEMALE	1209456	77
2		THERMOSTAT SPST	1210824	76
1		CONTACT, CAPACITOR	C-MD-5309731-0-0	75
1		CONTACT, COMMON CAPACITOR	C-MD-5309779-0-0	74
1		HOLDER, CAPACITOR	C-IA-5310126-0-0	73
10		WASHER, #6 INT. TOOTH	9006633	72
1		NUT KEPS 4-40	9006557	71
1		SCR PHL PAN HD 6-32-3/16 LG.	9006028-1	70
2		SCR PHL PAN HD 6-32 X 5/16 LG.	9007793-01	69
12		SCR PH HD 6-32 X 5/8 LG	9006625 1	68
18		NUT KEPS #6-32 X 1/4	9008185	67
3		SCR PHL PAN HD 4-40 X 5/16 LG	9006030-4	66
1	F2	FUSE 1.5 AMP. PICO	1210929-01	65
1	F1	FUSE 15 AMP. PICO	1210929	64
1	L2	CHOKE 100 MH 10A MMC 4445	1511031	63
1	L1	CHOKE 100 MH 20A MMC 4289	1610717	62
1	Q27	XSTR MAC 11-3	1510765	61
1	Q1	XSTR MJ2500	1511282	60
2	Q7 Q23	XSTR D9S H8/8	1510708-2	59
4	Q3 Q8 Q9, Q14	XSTR XA55	1510706	58
3	Q15, Q16, Q17, Q18, Q20 Q26	XSTR XA05	1510705	57
2	Q4 Q22	XSTR 2N5302	1510196	56
2	Q10 Q19	XSTR 2N5433	1311686	55
2	Q2, Q5	XSTR B55	1510706-01	54
1	RA1	RES .022, 7W, 3%	1310709-03	53
1	R36	RES 630, 1/8W, 5%	1301425	52
1	R22	RES .2 5W 5%	1309884	51
3	R26, R35, R50	POT 100, 1/2W 20% 62 PR	1309150-05	50
1	R52	RES .1 5W 5% WW	1305872	49
1	R33	RES .39 2W 5% WW	1310868	48
1	R10	RES 7.5K 1/5W 1% MF	1305332	47
2	R25, R34	RES 383 1/8W 1% MF	1305125	46
6	R2, R5 R6, R11 R12, R3	RES 10K, 1/8W 1% MF	1305312	45
4	R8, R1, R7, R14	RES 1K, 1/8W, 1% MF	1303114	44
2	R27 R30	RES 464 1/8 W, 1% MF	1303047	43
1	R51	RES 100, 3%, PTC	1310927-1	42
1	R49	RES 147, 1/8W, 1% MF	1302874	41
2		SCREW 6-32 X 5/8 LG	9006626	40
A/R		TFE TUBING 3/16" LG MF	9107256-11	39
2	R24 R47	RES 68K 1/4W 5%	1301327	38
5	R20, R21, R30, R48, R54	RES 10 1/4 W 5%	1301317	37
3	R38, R43, R57	RES. 10K 1/4 W 5%	1300979	36
4	R28, R46, R4, R45	RES 47K 1/2 W 5%	1300945	35
1	R55	RES 27K, 1/2 W 5%	1300928	34
1	R19	RES .05 5W 3% WW	1310876-02	33
2	R29 R37	RES 1K 1/4 W 5%	1300305	32
3	R44 R16 R58	RES 330 1/4 W 5%	1300295	31
1	R18	RES 400 2W 5%	1302380	30
7	R15, R17, R23 R31, R32, R42, R53	RES 100 1/4 W 5%	1300229	29
1	D7	DIODE IN3248B, 18V ZENER	1110766	28
2	D9, D10	DIODE 20 AMP FAST RECOVERY RECT	1110715	27
1	D14	DIODE, BRIDGE RECTIFIER	1110714	26
1	D3	DIODE 9.1 V ZENER	1110925	25
2	D6 D11	DIODE IN5624	1110420	24
2	D1 D2	DIODE IN4004	1105796	23
2	D4 D5	DIODE IN753A 6.2 V ZENER	1102421	22
1	D9	DIODE AZ5 2.4 V ZENER	1101938	21
1	D13	DIODE IN748A 3.9 V ZENER	1100122	20
1	C18	CAP 1000 PF, 100 V, DM	1000042	19
1	C9	CAP 20 uf 50 V 5% S.TANT	1000002-01	18
1	C7	CAP 6000 uf 10V -10+75% AL EL	1010704	17
1	C14	CAP 4500 uf 25V -10+75% AL EL	1010703	16
2	C1, C2	CAP 24000 uf 50V -10% +75%	1010702	15
1	C16	CAP 100 uf, 25V 10% AL EL	1002781	14
1	C3	CAP 1 uf 100 V 10%	1011032	13
2	C8, C15	CAP .22 uf 50V	1010274	12
2	C5, C17	CAP 6.8 uf 35V 10% S.TANT	1005306	11
2	C4, C11	CAPACITOR .033 uf, 100V 10% MYLAR	1000050	10
1	C20	CAP 2200 PF, 250V CER.	1000055	9
A/R		THERMAL COMPOUND	9009268	8
1		#2 THERMAL STRAP	C-MD-5311091-1	7
1		#1 THERMAL STRAP	C-MD-5311105-1	6
1	J2	MATE-N-LOCK CONNECTOR	1209350-09	5
1	J1	MATE-N-LOCK CONNECTOR	1211342-03	4
1		HEAT SINK	1210596	3
4		SPLIT LUG	9006735	2
1		ETCHED BOARD	5009727	1
		MODULE ECO HISTORY	TB-MM-5409728-0-06	REF
		X-Y COORDINATE HOLE LOC.	X-CO-5409728-0-01	REF
		CIRCUIT SCHEMATIC	D-CS-5409728-0-01	REF

PARTS LIST

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

FIRST USED ON PART/MODEL 11/05

ETCH BOARD REV E

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

	NAME	DATE
DRAWN	G. Smith	12-8-71
TRACED		
DESIGNED	R. Frost	12-14-71
ENGINEER		
APPROVED	M. Lemmerman	12-14-71
MFG APPROVED		

HEAT HIGHER ASSY D-AD-7008731-0-0

EQUIPMENT CORPORATION

TITLE: REGULATOR BOARD

SIZE: E/A | NUMBER: EIA 5409728-0-0 | REV: AB

SCALE: 2/1 | SHEET 1 OF 1

EIA 5409728-0-0 AB

(THERMOSTAT NORMALLY CLOSED)

S1, J3-1, J3-2

INPUT 28-0-28V AC 47-63HZ
AC J1-3, CENTER TAP J1-1, AC J1-2
C21 1uf, C22 1uf
NSS-3514
D14
F1, 15A
R45 4.7K 1/2W
R55 2.7K 1/2W
J2-4 LTC L OUTPUT
C2 24KUF 50V, C1 24KUF 50V
D13 IN748A 3.9V

R33 .39 2W
Q1 MJ2500
R32 100, Q2 855
R34 383 1%
R35 100, CW
R37 1K
R36 464 1%
D6 IN753A, 6.2V
J2-5 +15V OUTPUT
C16 100 UF 25V
R38 10K, R56 680, C20 2200PF 50V, +39V
Q3
C18 1000PF
Q4 XA05

R41 .022 7W, 3%
Q6 2N 5302
L1 100 UH 20A
D10, 20A FAST RECOVERY
J2-3 +5V OUTPUT
C7 6000 UF, 10V
D11 IN5624
D12 5.7V 2%
R39 5.1, R40 5.1
Q5 855
R42 100
Q7 D45H8
Q8
R48 10
C4 .033UF
R52 1 5W
R54 10
Q11 C32AX135
R53 100
C8 .22UF
C3 1uF
Q9
R43 10K
R46 4.7K 1/2W
R47 68K
R49 147 1%
C5 6.8UF 35V 10%
R50 100
D9 2.4V AZ5
Q10 XA05
R16 330
C17 6.8UF 35V 10%
R44 330
R51 100 3% P.T.C.

D2 IN4004, D1 IN4004
R14 1K 1%, R1 1K 1%
-26V
C9 20UF 5%
R3 10K 1%, R5 10K 1%, R6 10K 1%
-8.3V, Q17 A05, Q18 A05, -11.4V
J2-6 BUS DC LO L OUTPUT
J2-8 PWR OK L
J2-7 PWR OK ENABLE
J2-1 BUS AC LO L
OUTPUT
R2 10K 1%
-10V
R18 100 2W, R17 100
Q15 A05, Q16 A05, D3 5.1V
Q12 GPS A05, Q14
R15 100
R12 10K 1%
R11 10K 1%
R10 7.5K 1%
Q19
R8 1K 1%
R7 1K 1%
R4 4.7K 1/2W
F2, 10A
-39V

C19 2.2UF 35V 10%
R29 1K
R28 4.7K 1/2W
R27 464 1%
R58 330
D4, 6.2V IN753A
Q26
CW
R26 100 1/2W
C12 2.2UF 35V
R57 10K
XA05 Q25
R24 68K
R25 383 1%
D5, 20A FAST RECOVERY
C14 3000UF 25V
Q27 MAC11-3
R31 100
C15 .22 UF
J2-2 GROUND OUTPUT
R30 10
C11 .033UF 100V
Q24 XA05
R23 100
Q21 BØ5
R22 .2 5W
R21 10
Q23 D45H8
R20 10
R19 .06 5W 3%WW
Q22 2N 5302
L2 100UH 10A
D8 IN5624
D7, 18V IN5248B
J2-9 -15V OUTPUT

UNLESS OTHERWISE INDICATED:
1% RESISTORS ARE 1/8W
VOLTAGES ARE TAKEN AT NO LOAD WITH 115 VAC LINE
VOLTAGES ARE ± 10% TAKEN BY A ≥ 10K/V METER
TRANSISTORS = XA55

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

REVISIONS	CHANGE NO.	CHK	DATE
REV			
AB	MLO27	A. BARON	5-10-74
AA	9028	A. BARON	29-MAY-74
Z	00025	A. BARON	29-JAN-74

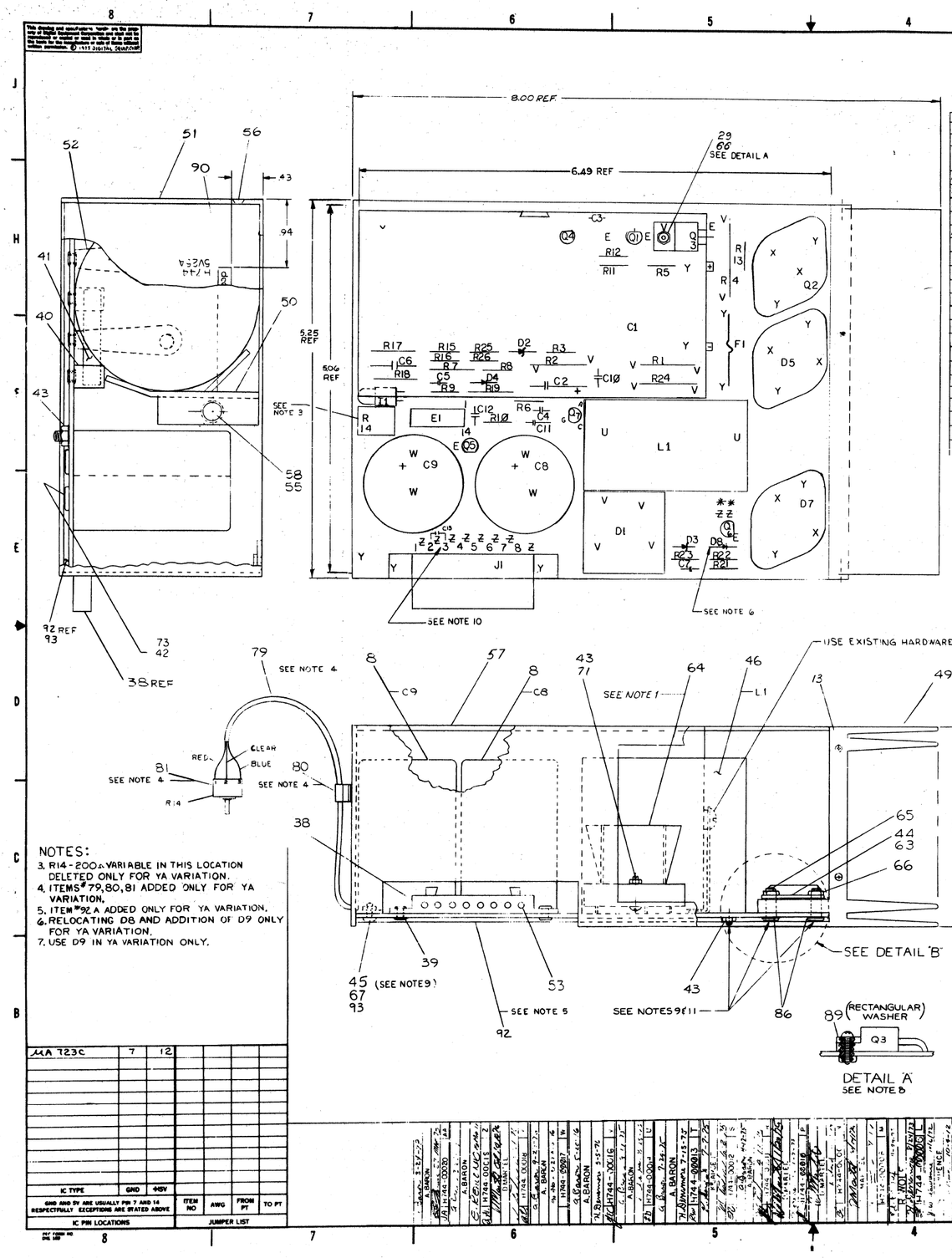
DRN. Fisher / Doucette DATE 12-20-71
CHK'D. MARCY MOORE DATE 12-21-71
ENG. P. HO DATE 12-26-71
PROJ. ENG. M. A. Hawkins DATE 12-26-71
PROD. R.V. Peterson DATE 12/30/71
NEXT HIGHER ASSY
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE REGULATOR BOARD FOR H740

SIZE D CODE DCS NUMBER 5409728-0-1 REV. AB
DIST.

DEC FORM NO. FORD-135



NOTES:

3. R14 - 200Ω VARIABLE IN THIS LOCATION DELETED ONLY FOR YA VARIATION.
4. ITEMS #79, 80, 81 ADDED ONLY FOR YA VARIATION.
5. ITEM #92 A ADDED ONLY FOR YA VARIATION.
6. RELOCATING D8 AND ADDITION OF D9 ONLY FOR YA VARIATION.
7. USE D9 IN YA VARIATION ONLY.

NOTES:

1. APPLY ITEM #63 (COMPOUND) BETWEEN TRANSISTOR (Q2), DIODES (D5, D7) AND ITEM #44 (WASHER) ALSO BETWEEN ITEM #44 (WASHER) AND HEAT SINK (ITEM #49) ALSO APPLY ITEM #63 (COMPOUND) BETWEEN ITEM #9 (DIODE BRIDGE) AND ITEM #64 (HEAT SINK BRIDGE).

NOTES CONT:

NOTE 8:
(1) Q3 SCREW HEAD SHOULD BE ON TOP OF FLAT RECTANGULAR WASHER AS SHOWN. APPLY 6 INCH LBS. OF TORQUE WHEN SECURING Q3 TO CKT. BOARD BEFORE SOLDERING.

NOTE 9: TORQUE APPLICATION
(1) APPLY 12 INCH LBS. OF TORQUE TO THE SCREWHEAD OF #4 HARDWARE EXCEPT Q3.
(2) APPLY 12 INCH LBS. OF TORQUE TO #6 HARDWARE ON L1.
(3) APPLY 16 INCH LBS. OF TORQUE TO ALL #6 AND #10 HARDWARE EXCEPT ON L1.
(4) ALL HARDWARE TO BE TORQUED BEFORE SOLDERING.

NOTE 10
INSERT C13 INTO ETCH PAD HOLES CONNECTED TO J1 TERMINALS, 2-3.

NOTE 11:
MIN TORQUE REQUIRED FOR QC INSPECTION:
8 INCH LBS. FOR #4 HARDWARE;
12 INCH LBS. FOR #6 AND #10 HARDWARE

* SEE NOTE 7

QTY	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	1	R22	RES 680 1/4W 5%	1301424	69
1	1		PACKING INSTRUCTIONS	API 3700074-0-0	70
1	1		SCR, PHL PAN HD 6-32 x 5/8 LG	9006025-1	71
1	Ø	I1	15 VOLT LAMP	1209169	72
4	4		LOCKWASHER #10 INT	9006635	73
AR	AR		~~PERMAPOINT JOINT COMPOUND~~	~~9000857~~	74
AR	AR		~~TFE TUBING~~	~~9117302-11~~	75
AR	AR		~~TFE TUBING~~	~~9107278-11~~	76
1	1	Q4	~~TRANSISTOR 2N4234~~	~~1505556~~	77
AR	AR		~~SHRINK SLEEVING~~	~~9107952-09~~	78
1	Ø	(2 IN)	WIRE, MICRODOT	1700014	79
1	Ø		CLAMP, CABLE	9007079	80
1	Ø	R14	POT, 10 TURN, 1KΩ	1309532-04	81
1	Ø	R17	RES, 300Ω 1/4W 5%	1301425	82
1	Ø	R18	RES, 150Ω 1/4W 5%	1300250	83
1	Ø	R4	RES, .06Ω 5W 3%	1310876-02	84
1	Ø	D3	DIODE ZENER 1N754	1109991	85
6	6	-	WASHER, INT TOOTH #4	9006632	86
1	1	C7	CAP .22 μf 50V	1010274	87
1	1	R13	RES 10 1/4W 5% FUSIBLE	1312496	88
1	1	-	WASHER, RECTANGULAR	9009769	89
1	1	-	DECAL (H744)	ADC7416945-1-0	90
1	1	-	JUMPER	1214074	91
1	Ø	-	COVER, BOTTOM	7419952	92
2	Ø	-	WASHER, FIBER	9008848	93

744-YA	744-98	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	1	I1	5 VOLT LAMP	12-09219-1	68
2	2		LOCKWASHER #4	9006632	67
7	7		NUT KEPS #4-40	9006537	66
6	6		SCR PHL PAN HD #4-40 x 3/16 LG	9008033-165	65
1	1		HEAT SINK BRIDGE	1210907	64
AR	NR		COMPOUND THERMAL JOINT	9008268	63
1	1	R26	RESISTOR 1.5K 1/4W 5%	1300381	62
1	1	R19	RESISTOR 7.5K 1/8W 1%	1305322	61
1	1	R3	RESISTOR 1EK 1/4W 5%	1300488	60
1	1	Q7	TRANSISTOR, UNIJUNCTION 2N6028	1510877	59
1	1		SCR, PHL PAN HD #6-32 x 1/4 LG	9006020-1	58
1	1		COVER	Z-MD-5309720-0-0	57
1	1		SCR, PHL FLT HD #6-32 x 3/16 LG	9008020-2	56
1	1		WASHER, LOCK #6	9006633	55
~~1~~	~~1~~		~~SCR, PHL FLT HD #6-40 x 1/4 LG~~	~~9006039-2~~	~~54~~
8	8		CONTACT FEMALE	1209456	53
1	1		STRAP, CAPACITOR	C-MD-5309759-0-0	52
1	1		BRACKET, REGULATOR	D-IA-5309756-0-0	51
1	1		HOLDER, CAPACITOR 2.5	C-IA-12388-0-0	50
1	1		HEAT SINK REGULATOR	D-PS-1210737-0-0	49
2	2	C5, C12	CAP 56 PF	1000012	48
1	1	R24	RESISTOR 10 1W	1300171	47
1	1	L1	REACTOR 60 μH Y MMC 4347	1610850	46
2	2		SCR, PHL PAN HD #4-40 1/4 LG	9008301-1	45
3	3		WASHER, INSULATOR	9006721	44
3	3		NUT, KEPS #6-32	9008185	43
4	4		SCR #10-32 x .31 SLOTTED PAN HD	9009669-01	42
1	1	F1	FUSE 15 AMP	1213237-01	41
2	2		FUSE CLIP	9007203	40
6	6		EYELET GS-4-5	9009000	39
1	1	J1	MATE-N-LOK CONN, 8 PIN	1209340	38
1	1	E1	INTEGRATED CIRCUIT DEC 723C	1910415	37
1	1	Q5	TRANSISTOR A05	1510705	36
1	1	Q3	TRANSISTOR D45H8	1510708-1	35
3	3	Q1, Q6, Q4	TRANSISTOR MPSA55 MOT	1510706	34
1	1	Q2	TRANSISTOR 2N5302	1510196	33
Ø	1	R14	RES VARIABLE 200	1310852	32
1	1	R21	RES 5.1 1/4W 5%	1309422	31
1	1	R23	RES 100 1/4W 5%	1300229	30
1	1		SCR, PPH #4-40 x 3/8	9006011-1	29
1	1	R11	RES 27 1/4W 10%	1301420	28
Ø	1	R17	RES 750 1/8W, 1%	1302955	27
1	1	R9	RES 27 1/4W 5%	1301522	26
1	1	P7	RES 18.2K 1/8W, 1%	1309412	25
2	2	R8, R16	RES 1K 1/4W 5%	1300365	24
Ø	1	R18	RES 511 1/8W 1%	1302411	23
1	1	R25	RES 18 K 1/4W 5%	1302465	22
2	2	R6, R15	RES 10 K 1/4W 5%	1300479	21
Ø	1	R4	RES .02 5W 3%	1310876	20
1	1	R2	RES 820 1W 10%	1300358	19
1	1	R1	RES 3.9K 1W 10%	1302927	18
1	1	R5	RES 10 1/4W 5%	1301317	17
2	2	R12, R10	RES 150 1/4W 5%	1300250	16
Ø	1	D3	DIODE ZENER 1 MA. 5.1V	1110925	15
1	1	D7	SCR MCR 6499P-2	1109463	14
4	4		SCR, PFH #8 x 5/16 LG SELF TAP	9009162	13
1	1	D5	DIODE PWR NSP 8117	1110715	12
3	2	D4, D8 D9*	DIODE PWR D66G	1100114	11
1	1	D2	DIODE ZENER IN4744	1105648	10
1	1	D1	DIODE BRIDGE	1110714	9
2	2	C8, C9	CAP 6K μf 10V	1010704	8
1	1	C1	CAP 31 K μf 50V	1010858	7
2	2	C4, C3	CAP .05 μf 25 V	1001774	6
1	1	C2	CAP .033 μf 100V 10%	1000050	5
1	1	C11	CAP 2700PF 100V 5% DM	1001G37	4
2	2	C10, C13	CAP .01 μF 100V 20% DISC	1001G10	3
1	1	C6	CAP 2.2 μF, 20V, 10%	1002627	2
1	1		ETCHED CIRCUIT BOARD	5009725	1
			ASSY/DRILLING HOLE LAYOUT	D-AH-H744-B-S	
			X-Y COORDINATE HOLE LOCATION	X-CO-H744-0-0-4	REF
			MODULE ECO HISTORY	D-MH-H744-0-0-G	REF
			CIRCUIT SCHEMATIC	D-CS-H744-0-1	REF

PARTS LIST

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTFULLY EXCEPTIONS ARE STATED ABOVE		
IC PIN LOCATIONS		
μA 723C	7	12

ITEM NO	AWG	FROM PT	TO PT
JUMPER LIST			

FIRST USED ON OPTIMOD	D-UA-H742A-0-0
ETCH BOARD REV	H

D669	IN3606
IN4749	

DEC NO. | EIA NO. | DEC NO. | EIA NO.

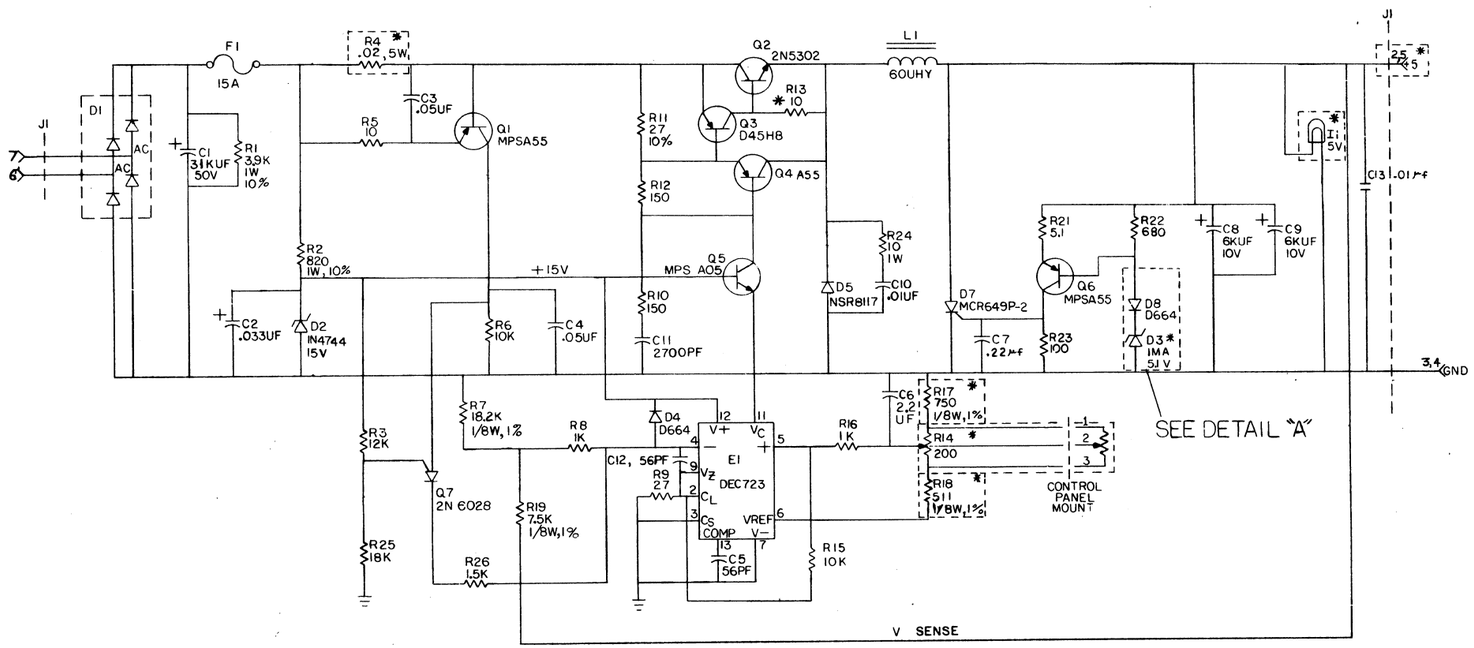
SEMICONDUCTOR CONVERSION CHART

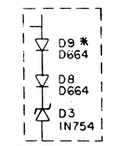
DRAWN	5-31-72
CHECKED	6-2-72
ENGR	6-2-72
MFG	6-2-72
QUAL	6-2-72
APPROVED	6-2-72
SCALE	2/1
SHEET	1 OF 1

[redacted] EQUIPMENT CORPORATION
NEWTON, MASSACHUSETTS

TITLE: 5V REGULATOR

SIZE E | CODE IDENT NO. [redacted] | NUMBER UA H744-0-0 | REV. AA | DIST.





DETAIL A
FOR YA VARIATION ONLY

*FUSIBLE RESISTOR

* FOR YA VARIATION COMPONENT VALUES ARE AS FOLLOWS:
R4 - .06 5W
R14 - 1K 10 TURN
R17 - 300 1/8W 1%
R18 - 150 1/4W 5%
D3 - IN754
I1 - 15V
J1-2,5 - +2.0-8.0V

* D9 - D664 ADDED FOR YA VARIATION ONLY

UNLESS OTHERWISE INDICATED:

RESISTORS ARE 1/4W, 5%

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

ETCH BOARD REV F H

DEC NO.	EIA NO.	DEC NO.	EIA NO.
IN964A	SAME	MPSA55	
D664	IN3606	2N5302	
MCR649P-2		D45H8	
IN751A	SAME	MPSA05	
IN4744	SAME		
NSR8117			
2N6028			

SEMICONDUCTOR CONVERSION CHART

REVISIONS	CHANGE NO.	REV
CHK	H744-00001	LE
	H744-00002	F
	H744-00004	J
	H744-00003	H
	H744-00005	K
	H744-00006	L
	H744-00009	N
	H744-00010	P
	H744-00011	R
	H744-00012	S
	H744-00013	T
	H744-00014	U
	H744-00015	V
	H744-00016	W
	H744-00018	Y

DRN. Robert V. Doherty DATE 8-2-71
CH'D Warren Moore DATE 8-3-71
ENG. [illegible] DATE 8/7/72
PROJ. [illegible] DATE 8/7/72
PROD. [illegible] DATE 8/8/72
NEXT HIGHER ASSY

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 5V REGULATOR

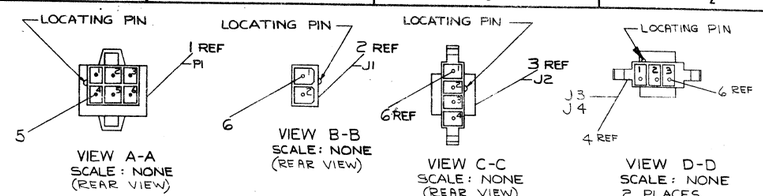
SIZE D | CODE 03 | NUMBER H744-0-1 | REV Y

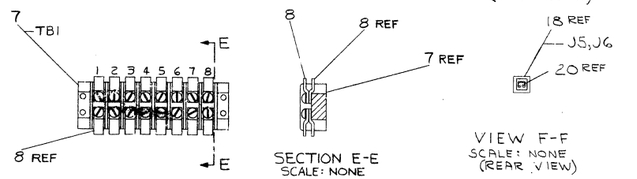
SCALE | SHEET 1 OF 1 | DIST.

H744-0-1 REV Y

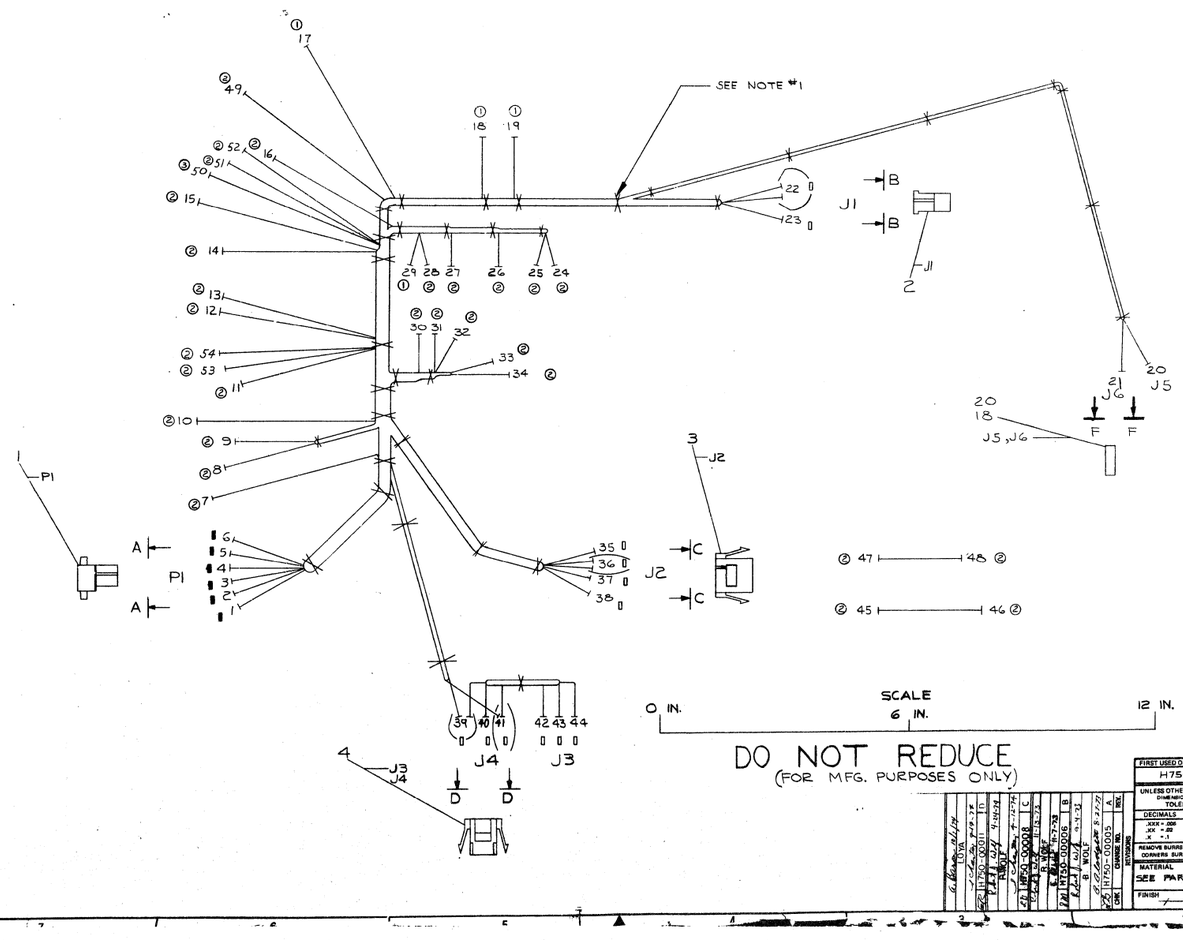
WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	FROM TERM	TO POINT	TO CONN	TO TERM	WIRE LENGTH	SIGNAL
12	14	RED	1	PI-1	5	12	——	10	12	
11		BLK	2	PI-2		30	TBI-1		9	
14		WHT	3	PI-3		7	——		10	
12		RED	4	PI-4		32	TBI-2		9.5	
12		RED	5	PI-5		34	TBI-4		10.5	
14		WHT	6	PI-6	5	33	TBI-3		9.7	
12		RED	8	——	10	24	TBI-8		13.5	
14		WHT	9	——	10	26	TBI-6		12	
21		ORN	10	——	10	15	——		13.5	
13		VIO	11	——	10	14	——		9.2	
12		RED	13	——	10	31	TBI-2		7	
11	14	BLK	16	——	10	28	TBI-1	10	5.2	
15	18	BLK	17	——	9	22	J1-1	6	14	
15	18	BLK	39	J4-1	6			6	22.2	
15	18	BLK				42	J3-1	6	3.5	
17	18 TWP	RED	18	TBI-4	9	20	J5	18&20	23.5	
		WHT	19	TBI-6	9	21	J6	18&20	22	
19	18	BLU	23	J1-2	6	35	J2-1	6	22	
12	14	RED	25	TBI-8	10	38	J2-4	6	16	
14	14	WHT	27	TBI-3	10	37	J2-3	6	13	
15	18	BLK	29	TBI-1	9	36	J2-2	6	13	
15	18	BLK			6				17	
15	18	BLK	41	J4-3		44	J3-3	6	3.5	
12	14	RED	45	TBI-4	10	46	TBI-7	10	2.5	
14	14	WHT	47	TBI-3	10	48	TBI-5	10	2.0	
15	18	BLK	40	J4-2	6	43	J3-2	6	3.5	
11	14	BLK	49	——	10	50	——	22	6	
15	18	BLK	53	K1-3	10	51	PS3-6	10	6	
15	18	BLK	54	K1-4	10	52	PS3-7	10	6	





NOTES:
1. USE TIE WRAPS (X) (ITEM #16) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY AND AT BREAKOUT POINTS.



DO NOT REDUCE
(FOR MFG. PURPOSES ONLY)

ITEM NO	QTY.	DESCRIPTION	PART NO.
③	1	TERM. SOLDERLESS #50364	9007928
	A/R	WIRE, #14 STRD, ORN	9107370-33
	2	MINI-FASTABS, #60291-1	1210826-2
	A/R	WIRE #18AWG STRD, BLU	9107360-66
	2	HOUSING, 1-480917-0	1210820-1
	A/R	WIRE, #18AWG STRD TWP RED WHT	9107430-29
X	A/R	TIE WRAP, PANDUIT, #SSTIM	9007031
	12"	WIRE, #18 STRD, BLK	9107360-00
	A/R	WIRE, #14 STRD, WHT	9107370-99
	A/R	WIRE, #14 STRD, VIO	9107370-77
	A/R	WIRE, #14 STRD, RED	9107370-22
	A/R	WIRE, #14 STRD, BLK	9107370-00
②	29	CONN. SOLDERLESS, ARKLESS #50396	9007919
①	4	CONN. SOLDERLESS, ARKLESS #50962	9007917
	32	TERM. I.D. OFFSET, AMP #60145-1	9007112
	1	TERM. BLOCK, CINCH #8-560	9006909
▯	12	SOCKET TERM. CONTACT (FEMALE)	1209379-01
▮	6	PIN CONTACT (MALE)	1209378-01
	2	CONN., MATE-N-LOCK, 3 PIN	1209350-03
	1	CONN., MATE-N-LOCK, 4 PIN	1209350-04
	1	CONN., MATE-N-LOCK, 2 PIN	1210821-02
SYM	1	CONN., MATE-N-LOCK, 6 PIN	1209351-06

PARTS LIST

FIRST USED ON OPTION/MODEL: H750

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, .X ± .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓. MATERIAL: SEE PARTS LIST. FINISH.

DRN: M.C. Cote 4-16-74
CHK'D: [illegible] 4-16-74
ENGR: [illegible] 4-16-74
PROJ LDR: [illegible] 4-16-74
QUAL: [illegible] 4-16-74
MFG: [illegible] 4-16-74

NEXT HIGHER ASSY. H750-00008 C 4-16-74
H750-00006 B 4-16-74
H750-00005 A 4-16-74

digital EQUIPMENT CORPORATION
MAYNARD, MASS.

TITLE: H750 POWER SUPPLY HARNESS

E-UA-H750-0-0

SIZE E | CODE IA | NUMBER 7009207-0-0 | REV. D

SCALE 1/1 | SHEET 1 OF 1 | DIST.

7009207-0-0 D

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

	SEQUENCE
DWG. DIRECTORY	B-DD-BCØ5H-Ø
LINE SET 115V	C-UA-BCØ5H-Ø-Ø
LINE SET 230V	C-UA-BCØ5J-Ø-Ø
A.C INPUT BOX	D-UA-H4ØØ-Ø-Ø
A.C INPUT BOX (P.L)	A-PL-H4ØØ-Ø-Ø
PWR CONTROL BD. 115V	C-IA-5409824-Ø-Ø
PWR CONTROL BD. 230V	C-IA-5409825-Ø-Ø

SEQUENCE

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE BCØ5H-1
BCØ5H	LINE SET 115VAC 7 AMP	X
BCØ5J	LINE SET 230VAC 5 AMP	X

REVISIONS	REV	CHG. NO.	DATE

USED ON OPTION/MODEL
11/Ø7

DRN. D.FONTAINE	DATE 4/5/72	TITLE LINE SET
CHK'D	DATE 4-18-72	
PROJ ENG.	DATE 4-18-72	
PROD.	DATE 5/1/72	
FIELD SERV.	DATE 5/5/72	
SHEET 1 OF 3		

SIZE	CODE	NUMBER	REV
B	DD	BCØ5H-Ø	

DIST

DRB 106

DEC 16-(325)-1062-1-N871

TITLE		SIZE	CODE	NUMBER	REV
LINE SET	SHEET 2 OF 3	B	DD	BCØ5H-Ø	

DRB 107
DEC 16—(325)—1062—3—N871

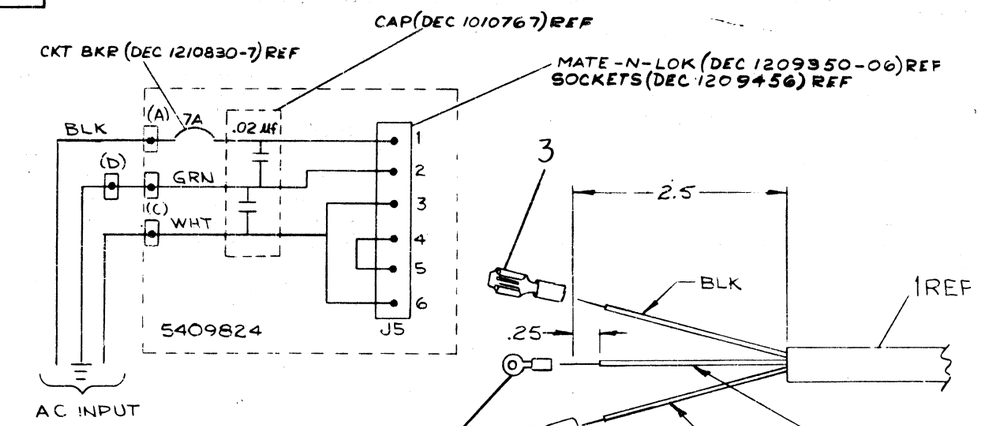
ELECTRICAL

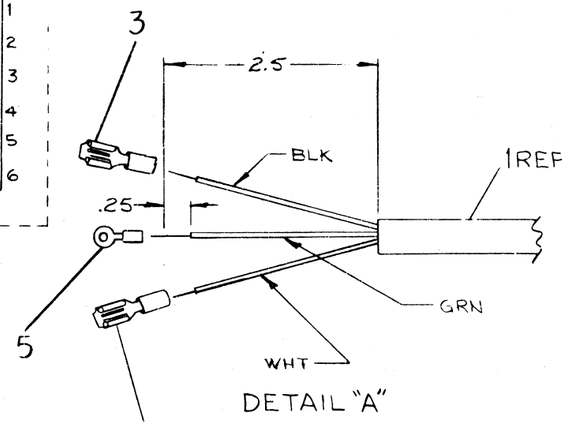
CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
BCØ-H-1							
X		2.	C-IA-5409824-0-0		1	POWER CONTROL BD 115V	H400
X			C-IA-5409825-0-0		1	POWER CONTROL BD 230V	H400

MECHANICAL

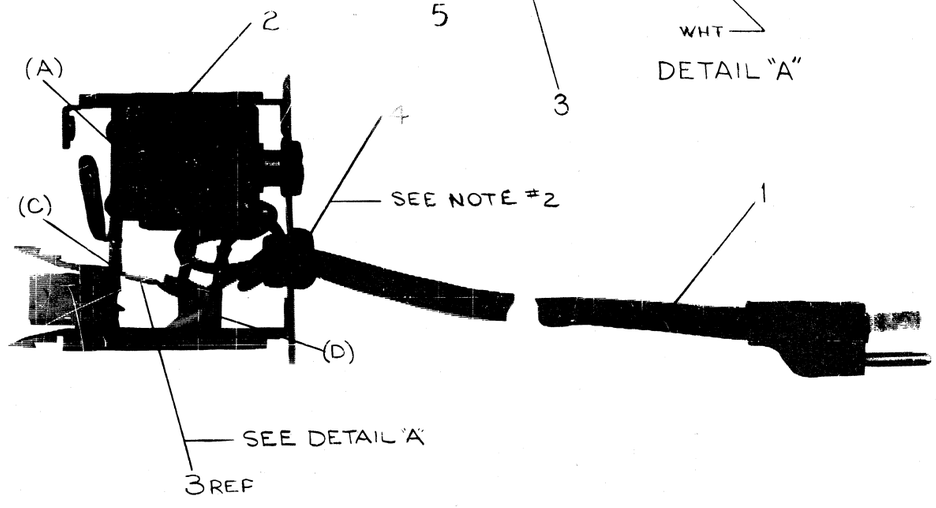
CUSTOMER PRINT SET	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
BCØ5-H-1							
X		1.	C-UA-BCØ5H-Ø-Ø		1	LINE SET 115V 7 AMP	BCØ5H
X			C-UA-BCØ5J-Ø-Ø		1	LINE SET 230V 5 AMP	BCØ5J
X		2.	D-UA-H4ØØ-Ø-Ø		1	AC INPUT BOX	H4ØØ
X			A-PL-H4ØØ-Ø-ØB		1	A.C INPUT BOX PARTS LIST	H4ØØ
			D-IA-5309845-0-0		1	BOX	H4ØØ
			C-MD-5309849-0-0		1	COVER	H4ØØ
			A-DC-5309899-0-0		1	PWR CONTROL DECAL 115V	H4ØØ
			A-DC-5309900-0-0		1	PWR CONTROL DECAL 230V	H4ØØ

TITLE		SIZE	CODE	NUMBER	REV
LINE SET	SHEET 3 OF 3	B	DD	BCØ5H-Ø	





DETAIL "A"



SHOWN WITHOUT COVER

NOTES:

1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS

ITEM NO.	QTY.	DESCRIPTION	PART NO.
5	1	TERMINAL, RING, RED	9007929-0
4	1	STRAIN RELIEF SR-6N3-4	9008492-2
3	2	CONNECTOR, FASTON, RED	9007970
2	1	AC INPUT BOX H400A	D-UA-H400-0-0
1	1	POWER CORD 120V	1700015-6

PARTS LIST

REVISIONS	CHANGE NO.	REV.
CHK	BC05H-00001	A
	BC05H-00002	B
	H400-00002	C
	BC05H-00003	D
	BC05H-00005	E

FIRST USED ON OPTION/MODEL	11/05	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DECIMALS: XXX = .005, XX = .02, X = .1	ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓		
MATERIAL		
FINISH		

DRN. T. Guillin	DATE 12-27-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 1-5-72	
ENG.	DATE 1-4-72	TITLE: LINE SET 115VAC 7AMP
PROJ. ENG.	DATE 1-7-72	
PROD.	DATE 1/12/72	
NEXT HIGHER ASSY.		SIZE C, CODE UA, NUMBER BC05H-0-0, REV. E
SCALE		
SHEET 1 OF 1		DIST.

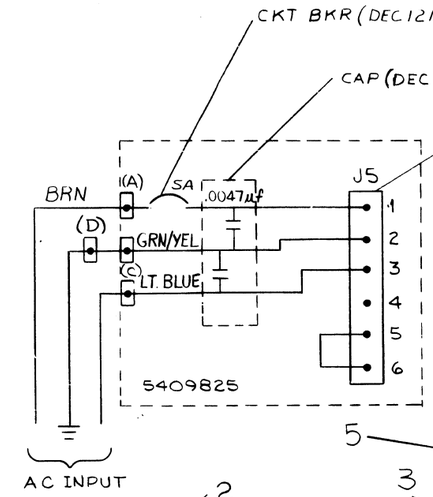
SIZE C, CODE UA, NUMBER BC05H-0-0, REV. E

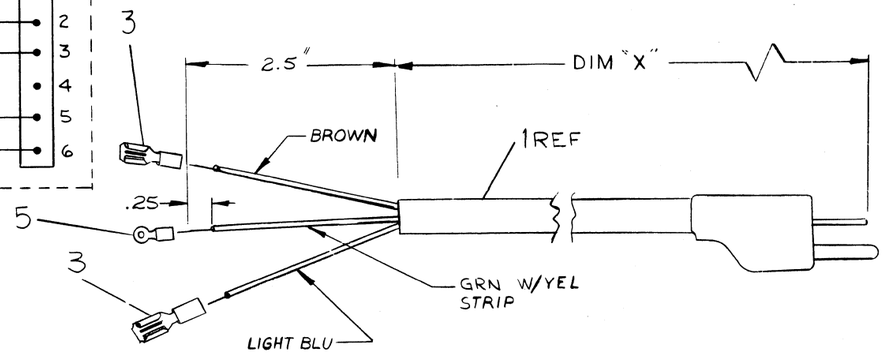
DEC FORM NO. DRC 100-A

LEGEND	
VARIATION	DIM "X"
BC05J	3 FT
BC05J-06	6 FT

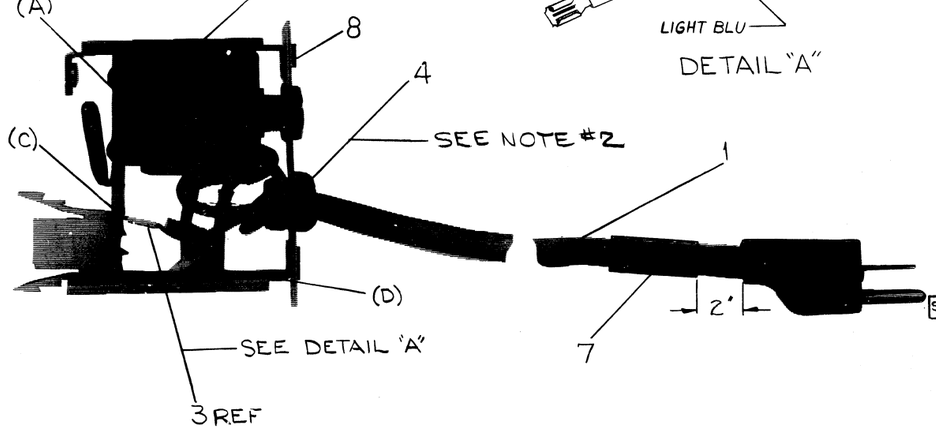
NOTES:

1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HAYCO #29 STRAIN RELIEF PLIERS.
3. APPLY ID CABEL (ITEM #6) TO BACK COVER ON SIDE OF UNIT.





DETAIL "A"



SHOWN WITHOUT COVER

QTY.	DESCRIPTION	PART NO.	ITEM NO.
~~2~~	~~TIE WRAP~~	~~3007031~~	~~9~~
1	U DECAL	3612063	8
1	AC LINE CORD WARNING LABEL	3611448	7
1	POWER SUPPLY LABEL	9009255-01	6
1	TERMINAL, RING, RED	9007929-0	5
1	GROMMET HEYCO SR-6N3-4	9008492-2	4
2	CONNECTOR, FASTON, RED	9007970	3
1	AC INPUT BOX H400B	D-UA-H400-0-0	2
1	POWER CORD 240V	1700043	1

SEE NOTE 3

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/05

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRN	T. Guillon	12-27-71
CHKD	[illegible]	1-4-72
ENG.	David D. Mercadante	1-4-72
PROJ ENG.	Richard Hunter	1-7-72
PROD	R.K. Peterson	1/7/72

NEXT HIGHER ASSY. —

SCALE —

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: LINE SET 230VAC 4 AMP

SIZE	CODE	NUMBER	REV.
C	UA	BC05J-0-0	H

DIST. —

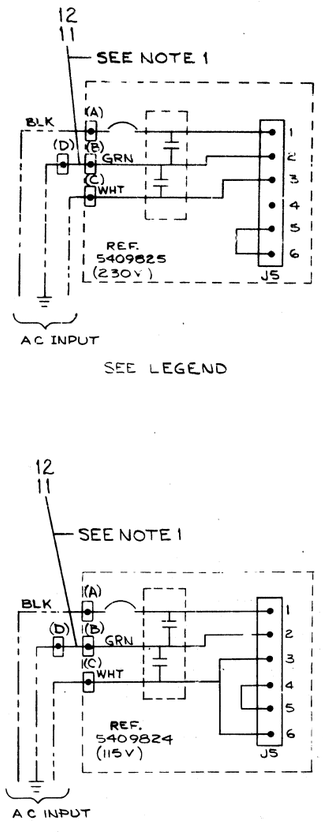
REVISIONS					
CHK	CHANGE NO.	REV.			
	BC05J-00001	A	Released 12-27-71	R. Guillon	12-27-71
	H400-00002	B	Released	R. Guillon	5-25-72
	BC05J-00002	C	Released	R. BURTON	11-2-72
	BC05J-00003	D	Released	R. BURTON	12-20-72
	BC05J-00005	E	Released	R. KENNEDY	1-23-73
	BC05J-00006	F	Released	R. KENNEDY	9DEC73
	BC05J-00007	H	Released	A. BARON	3-24-78

DEC FORM NO. DRC 100-A

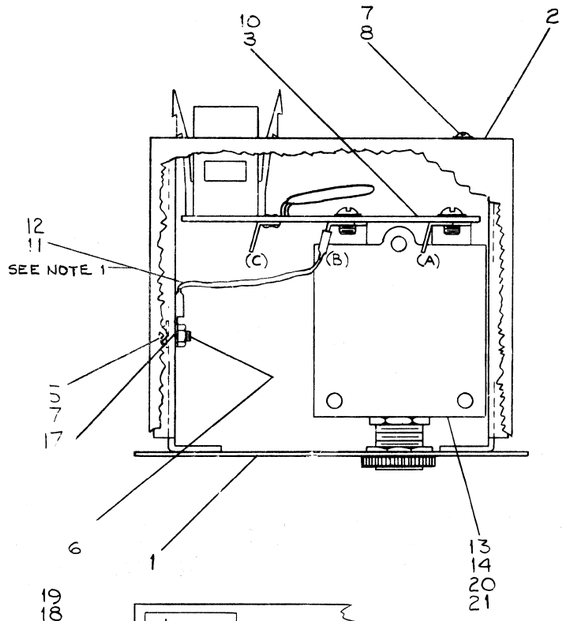
LEGEND		
NUMBER	VARIATION	USED ON
H400-A	115 VAC 7AMP	BC05H
H400-B	230 VAC 4AMP	BC05J
H400-C	115 VAC 10AMP	BC05T
H400-D	230VAC 5AMP	BC05U

NOTES:

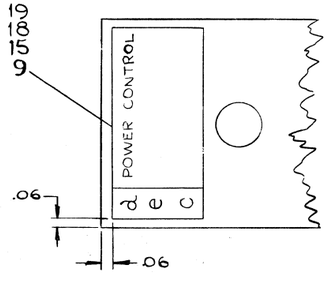
1. ITEM #11 (WIRE) AND TWO OF ITEM #12 (FASTON TABS) ARE TO BE CONNECTED FROM POINT D TO POINT B.



SEE LEGEND



SEE LEGEND



REVISIONS				CHK
CHANGE NO.	REV.			
H400-00002	A	5-25-72	R. BURTON	
H400-00003	B	5-31-72	R. BURTON	
H400-00004	C	11-9-72	R. BURTON	
H400-00005	D	1-18-73	R. BURTON	
H400-00007	E	6-19-73	R. BURTON	
H400-00008	F	6-21-73	R. BURTON	

DEC FORM NO DRD 100-A

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO
D-UA-BC05H-0-0		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX ± .005	±0° 30'
.XX ± .01	
.X ± .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN. T. Quilty	DATE 12-23-71	
CHKD. [illegible]	DATE 12-7-72	
ENG. [illegible]	DATE 1-4-72	
PROJ. ENG. [illegible]	DATE 1-7-72	
PRODN. R. K. Peterson	DATE 1/9/72	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: AC INPUT BOX ASS'Y

NEXT HIGHER ASSY. D-UA-BC05H-0-0

SCALE

SHEET 1 OF 1

SIZE	CODE	NUMBER	REV
D	UA	H400-0-0	F

DIST.

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY TYRONE QUILLIN	CHECKED [illegible]	SECTION 1
DATE 12-1-71	DATE 1-4-72	
ENG David Le Mo[illegible]	PROD R.K. Peterson	ISSUED SECT. 1
DATE 1-4-72	DATE 1/2/72	

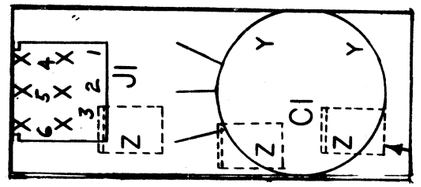
ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION H400-A (115V)	H400-B (230V)	H400 C (115V)	H400 D (230V)
1	D-IA-5309845-0-0	BOX	1	1	1	1
2	C-MD-5309849-0-0	COVER	1	1	1	1
3	C-IA-5409825-0-0	POWER CONTROL BOARD (230V)	–	1	–	1
4	~~9007113~~	~~DOUBLE FASTAB~~	~~1~~ –	–	–	–
5	9006022-1	SCR PHL PAN HD #6-32 x 3/8 LG	1	1	1	1
6	9008185	KEP NUT HEX HD #6-32	1	1	1	1
7	9006633	WASHER INT. #6	2	2	2	2
8	9006020-1	SCR PHL PAN HD #6-32 x ¼ LG	1	1	1	1
9	A-DC-5309899-0-0	PWR CONTROL DECAL 115V	1	–	–	–
10	C-IA-5409824-0-0	POWER CONTROL BOARD (115V)	1	–	1	–
11	9107360-55	#18 AWG STRD ~~TEF INS~~ (GRN 3 IN.LG)	1	1	1	1
12	9007917	FASTON TABS	1	1	1	1
13	1210830-4	CRK BREAKER (WOOD 4 AMP)	–	1	–	–
14	1210830-7	CRK BREAKER (WOOD 7 AMP)	1	–	–	–
15	A-DC-5309900-0-0	PWR CONTROL DECAL (230V)	–	1	–	–
~~16~~	~~9006632~~	~~WASHER 4 INTERNAL TOOTH~~	~~1~~	~~1~~	~~1~~	~~1~~
17	9007929-01	CRIMP-ON EYELET	1	1	1	1
18	A-DC-7410727-0-0	PWR CONT DECAL	–	–	1	–
19	A-DC-7410726-0-0	PWR CONT DECAL	–	–	–	1
20	1210830-5	CKT BREAKER (WOOD 5 AMP)	–	–	–	1
21	1210830-10	CKT BREAKER (WOOD 10 AMP)	–	–	1	–

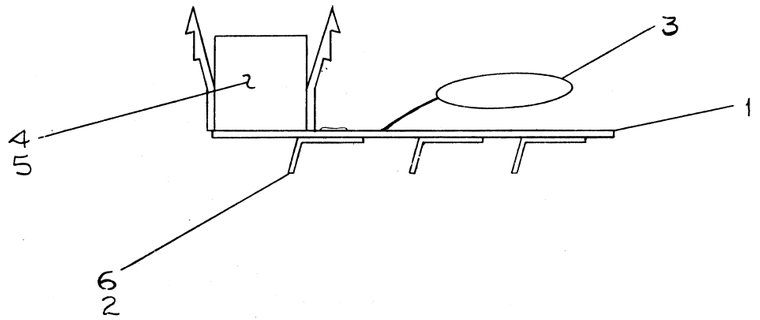
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
AC INPUT BOX ASS'Y	D-UA-H4ØØ-Ø-Ø	A	PL	H4ØØ-Ø-Ø	F	H400-00008
	SHEET 1 OF 1	DIST.	G			

DEC FORM DEC 16 (325) 1031 N870
DRA 110

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H4ØØ-Ø-Ø
2. ETCHED BOARD #5009821 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409824-05	REF
3		FASTON TAB	9008219	6
6		P.C. SOCKETS FEMALE	1209456	5
1	J1	MATE-N-LOCK 6-PIN	1209350-06	4
1	C1	CAP INPUT .02 MF	1010767	3
3		EYELET # G54-5	9009000	2
		ETCHED CIRCUIT B D	5009821	1
		MODULE ECO HISTORY	B-MH-5409824-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-CO-5409824-0-0	REF

PARTS LIST

FIRST USED ON OPTION/MODEL: H4ØØ A

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

		DATE
DRN.	T. Guillo	12-8-71
CHK'D	Santucci	1-6-72
ENG.	David DeMoss	1-6-72
PROJ. ENG.	Robert Hurst	1-6-72
PROD.	R.W. Peterson	1/7/72

NEXT HIGHER ASSY.: C-UA-H4ØØ-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER CONTROL BOARD (115V)

SIZE	CODE	NUMBER	REV.
C	IA	5409824-0-0	C

DIST. 6

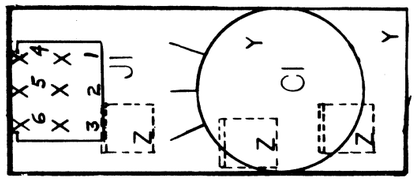
REVISIONS	CHANGE NO.	REV.	CHK
5409824-00001		A	
8 I Rank 2-1-72			
R.WOLF			
Russell Hurst 2-2-72			
5409824-00002		B	
Robert Hurst 5/22/72			
R. BURTON			
R. Burton			
5409824-00003		C	
John R. Patterson 10-24-73			
R. WOLF			
R. A. Wolf 12-3-73			

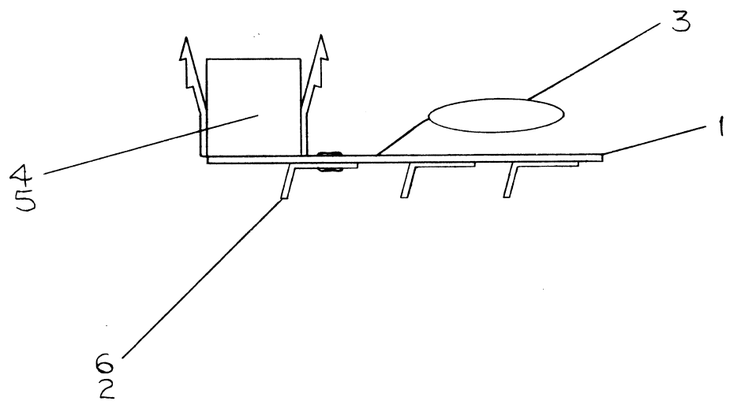
DEC FORM NO.

REV. C
NUMBER 5409824-0-0
SIZE C CODE IA

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H400-0-0.
2. ETCHED BOARD # 5009822 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409825-0-5	REF
3		FASTON TAB	9008219	6
6		P.C. SOCKETS MALE	1209956	5
1	J1	6-PIN MATE-N-LOCK	1209350-06	4
1	C1	CAP. INPUT .0047 μF	1014912	3
3		EYELET #G54-5	9009000	2
1		ETCHED CIRCUIT BOARD	5009822	1
		MODULE ECO HISTORY	B-MH-5409825-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-CO-5409825-0-4	REF

FIRST USED ON OPTION/MODEL: H400 B

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —/—

FINISH —/—

		DATE
DRN. T. Guillin		12-9-71
CHK'D. P. Lintaro		1-4-72
ENG. Andrew Mennella		1-4-72
PROJ. ENG. Russell Hunter		1-7-72
PROD. R. K. Peterson		1/7/72

NEXT HIGHER ASSY. C-UA-H400-0-0

SCALE —/—

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

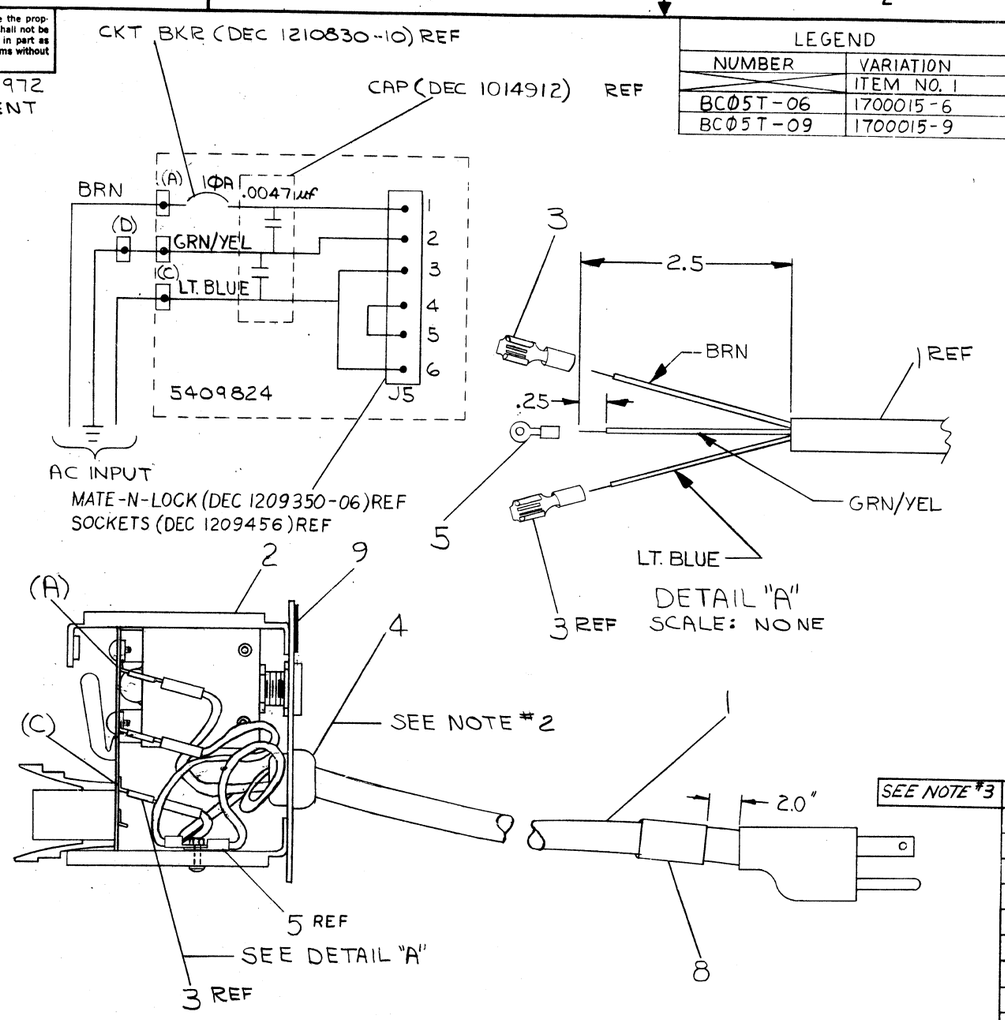
TITLE: POWER CONTROL BOARD (230V)

SIZE	CODE	NUMBER	REV.
C	IA	5409825-0-0	E

DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	5409825-00001	A	R. WOLF 12-2-72
	5409825-00002	B	R WOLF 12-3-72
	5409825-00003	C	A BARON 5-2-77
	5409825-00004	D	A. BARON 9 DEC 77
	5409825-00005	E	A. BARON 5-23-78

DEC FORM NO. DRC 100-A



SHOWN WITHOUT COVER

LEGEND

NUMBER	VARIATION
	ITEM NO. 1
BCØ5T-06	1700015-6
BCØ5T-09	1700015-9

NOTES:
1. CONNECT ITEM#1 (POWER CORD) AND ITEM#2 (A.C. INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO#20 STRAIN RELIEF PLIERS.
3. APPLY ID LABEL (ITEM#10) TO BACK COVER.

ITEM NO.	QTY.	DESCRIPTION	PART NO.
10	1	LABEL, POWER SUPPLY	9009255-01
9	1	U DECAL	3612063
8	1	AC LINE CORD WARNING LABEL	3611448
~~7~~	~~1~~	~~CABLE LABEL~~	~~9009532~~
~~6~~	~~2~~	~~TIE WRAP (SM)~~	~~9007031~~
5	1	RING TERMINAL RED	9007929-0
4	1	STRAIN RELIEF GN3-4	9008492-2
3	2	FAST ON RED	9007970
2	1	A.C. INPUT BOX H4ØØC	H4ØØ-C
1	1	POWER CORD 120V	SEE LEGEND

SEE NOTE #3

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/35

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±Ø° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

		DATE
DRN.	K. Davis	11-21-72
CHK'D.	Jack Hill	12-5-72
ENG.	C.K. Blasi	1-16-73
PROJ. ENG.	C.K. Blasi	1-16-73
PROD.	Tim Sturgis	2-21-73

NEXT HIGHER ASSY.: E-AD-BA11-D-Ø

SCALE: NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE: LINE SET
115V A.C. 10AMP.

SIZE	CODE	NUMBER	REV.
C	UA	BCØ5T-Ø-Ø	E

DIST.

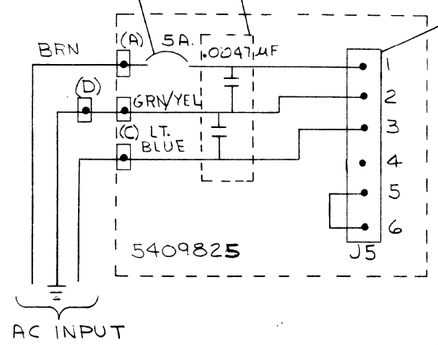
REVISIONS				
CHK	CHANGE NO.	REV.		
GM	BCØ5T-00001	A	C. Blasi	9-6-73
PM	BC05T-00002	B	Ernie A.	6-11-73
C. BLASI			C. Blasi	6-13-73
PM	BC05T-00003	C	J. Chester	11-2-73
R. KENNEDY			R. Kennedy	10 DEC 75
P.M.	BCØ5T-00004	D	D. Quinn	30 DEC 77
A. BARON			A. Baron	6-5-78
P.M.	BCØ5T-00005	E	J. Chester	27 MAR 78
A.BARON			A. Baron	4-4-78

DEC FORM NO. DRC 100-A

CKT BKR (DEC 1210830-5) REF

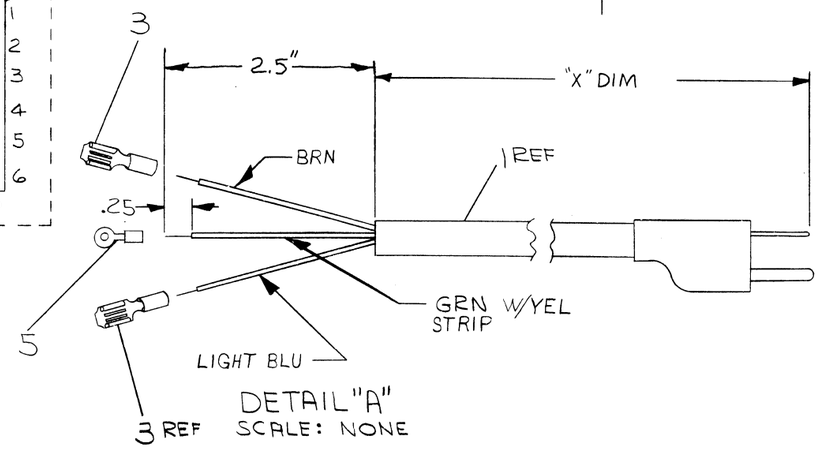
CAP (DEC 1014912) REF

MATE-N-LOCK (DEC 1209350-06) REF
SOCKETS (DEC 1209456) REF

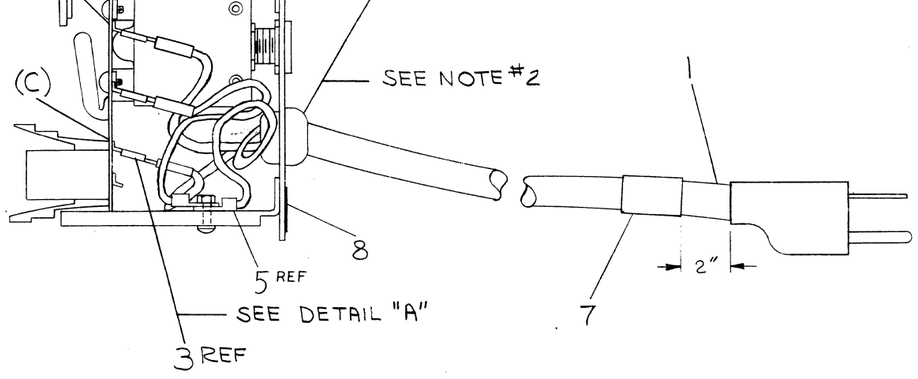


LEGEND	
NUMBER	DIM. "X" VARIATION
BC05U-06	6 FEET
BC05U-09	9 FEET

NOTES:
1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC. INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS.



DETAIL "A"
SCALE: NONE



SHOWN WITHOUT COVER

ITEM NO.	QTY.	DESCRIPTION	PART NO.
8	1	U DECAL	3612063
7	1	AC LINE CORD WARNING LABEL	3611498
6	1	POWER SUPPLY LABEL	9009255-01
5	1	TERMINAL, RING, RED	9007929-0
4	1	STRAIN RELIEF 6N3-4	9008492-2
3	2	CONNECTOR, FASTON, RED	9007970
2	1	A.C. INPUT BOX H4ØØD	H4ØØ-D
1	1	POWER CORD 240V	1700043

PARTS LIST

FIRST USED ON OPTION/MODEL: 11/35

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRN.	K. Davis	11-21-72
CHK'D	[illegible]	12-[illegible]-72
ENG.	K Blasi	1-16-73
PROJ. ENG.	K Blasi	1-16-73
PROD.	[illegible]	2-21-73

NEXT HIGHER ASSY. E-AD-BA11-D-Ø

SCALE NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: LINE SET 230V AC. 5 AMP

SIZE	CODE	NUMBER	REV.
C	UA	BCØ5U-Ø-Ø	D

DIST.

REVISIONS			
CHK	CHANGE NO.		REV.
[illegible]	BC05U-00001	C. BLASI 4-13-72	A
[illegible]	BCØ5U-00002	Ernie A. 6-11-73	B
[illegible]	BCØ5U-00003	C. BLASI 6-15-73	C
[illegible]	BCØ5U-00004	R. KENNEDY 9 OCT 73	D
[illegible]		A. BARON 6 JAN 78	
[illegible]		A. Baron 1-9-78	

BRUNING 40-107-15968

DEC FORM NO. DRC 100-A

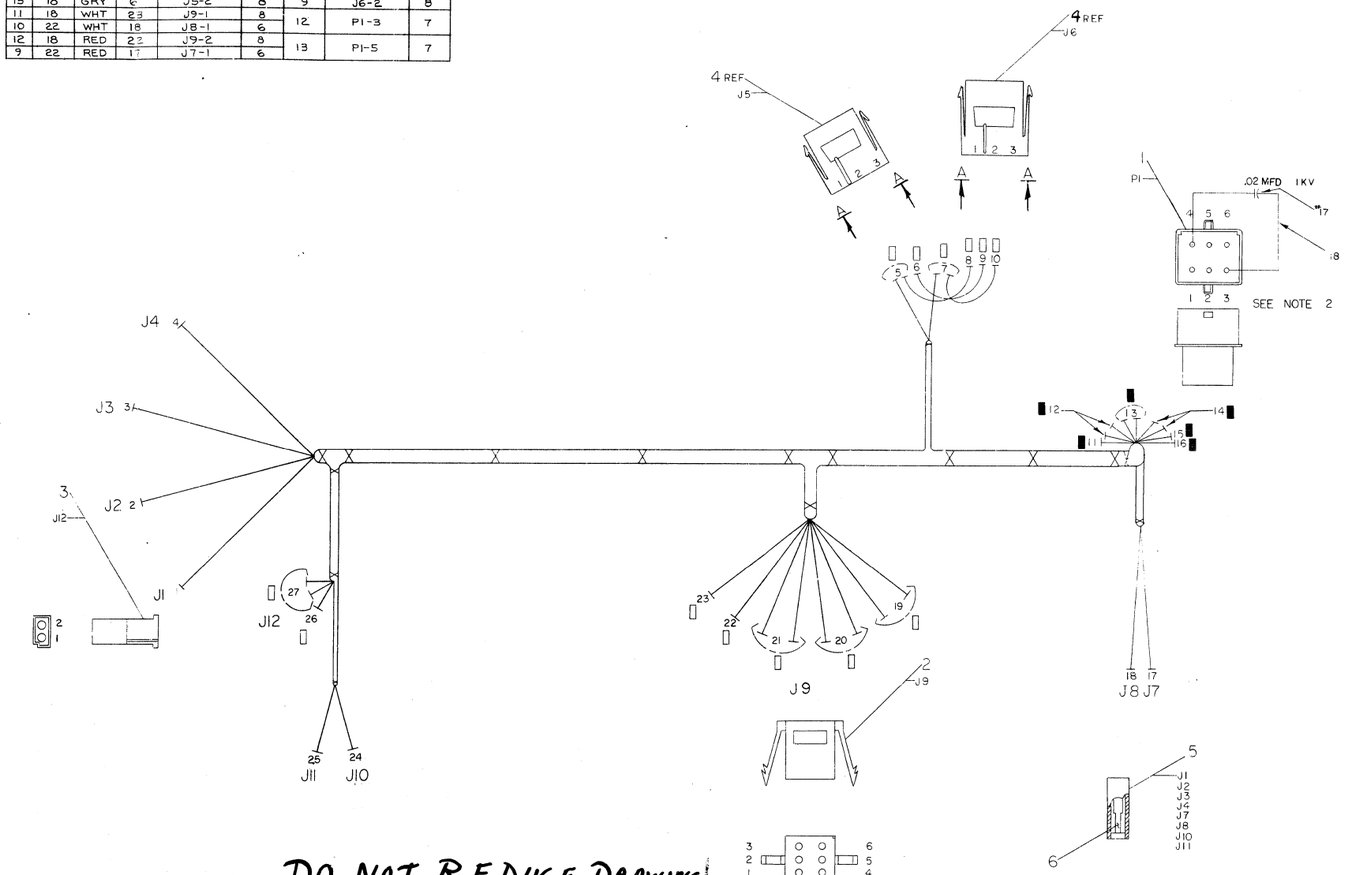
SIZE C | CODE UA | NUMBER BCØ5U-Ø-Ø | REV. D

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM
9	22	RED	24	J10-1	6	19	J9-3	8
12	18	RED	11	P1-6	7			
9	22	RED	25	J11-1	6	27	J12-2	8
12	18	RED	20	J9-4	8			
12	18	RED	26	J12-1	8	16	P1-4	7
12	18	RED	2	J2-1	6	1	J1-1	6
13	18	VIO	3	J3-1	6	15	P1-1	7
13	18	VIO	8	J6-1	8	5	J5-1	8
14	18	BLK	4	J4-1	6			
14	18	BLK	14	P1-2	7	21	J9-5	8
14	18	BLK	10	J6-3	8	7	J5-3	8
15	18	GRY	6	J5-2	8	9	J6-2	8
11	18	WHT	23	J9-1	8	12	P1-3	7
10	22	WHT	18	J8-1	6			
12	18	RED	22	J9-2	8	13	P1-5	7
9	22	RED	17	J7-1	6			

NOTES:
1. USE TIE WRAPS (ITEM #16) APPROXIMATELY EVERY THREE INCHES WHEN NECESSARY AND AT EVERY BREAKOUT POINT.
2. CAPACITOR SHOULD BE CRIMPED TOGETHER WITH PART 12 & 16. LEADS SHOULD BE INSULATED AND NOT LONGER THAN 1 INCH.

VIEW A-A
SCALE: NONE



	QTY.	DESCRIPTION	PART NO.	ITEM NO.
	A/R	TEFLON TUBING	9107278-01	18
	1	CAP .02 μF 1000V 20%	10-10767	17
X	A/R	TIE WRAP, SSTM, PANDUIT	9007031	16
	A/R	WIRE, #18 AWG GRY	9107360-88	15
	A/R	WIRE, #18 AWG BLK	9107360-00	14
	A/R	WIRE, #18 AWG VIO	9107360-77	13
	A/R	WIRE, #18 AWG RED	9107360-22	12
	A/R	WIRE, #18 AWG WHT	9107360-99	11
	A/R	WIRE, #22 AWG WHT	9107350-99	10
	A/R	WIRE, #22 AWG RED	9107350-22	9
	13	SOCKET, TERM. CONTACT	1209379-01	8
	6	PIN, TERM. CONTACT	1209378-01	7
	8	MINI-FASTABS #60291-1	1210820-2	6
	8	HOUSING, 1-480417-0	1210820-1	5
	2	CONN, MATE-N-LOK, 3 PIN	1209350-03	4
	1	CONN, MATE-N-LOK, 2 PIN	1210821-2	3
	1	CONN, MATE-N-LOK, 6 PIN	1209350-06	2
	1	CONN., MATE-N-LOK, 5 PIN	1209351-05	1

PARTS LIST

FIRST USED ON OPTION/MODEL	PDP-1105
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DECIMALS XXX ± .005, XX ± .02, X ± .1; ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	✓
MATERIAL	SEE PARTS LIST
FINISH	—
DRN.	C Bailey 4-4-72
CHK'D	C Strachan 4-12-72
ENG.	R Ames 4-12-72
APPROVED	M Wall 4-12-72
PROJ.	R Peters 4-12-72
NEXT HIGHER ASSY.	D-UA-1105-0-0
SCALE	1/1
SHEET	1 OF 1

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: AC INPUT HARNESS (PDP1105)

SIZE	CODE	NUMBER	REV.
E	IA	7008713-0-0	D

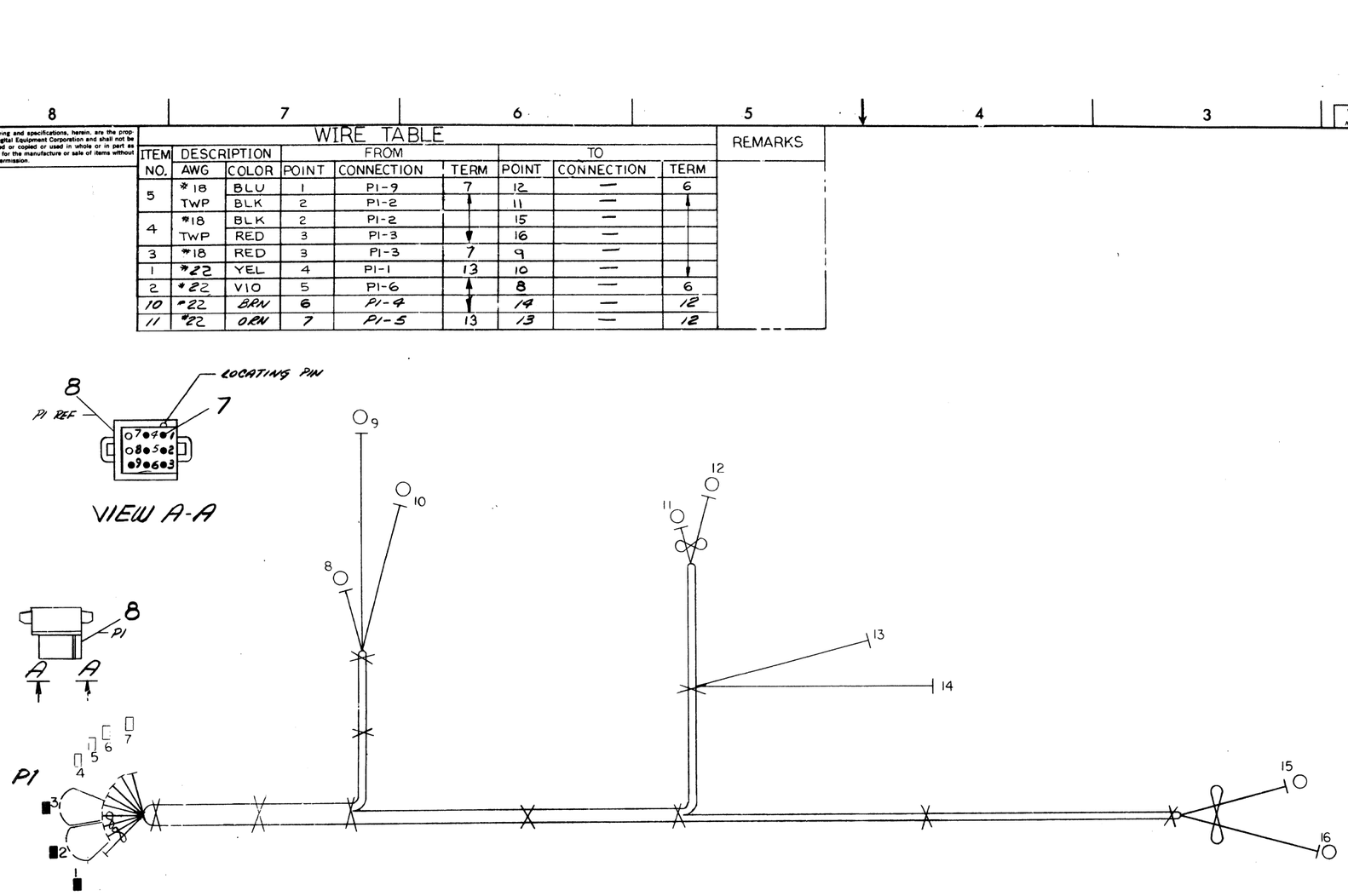
DIST.

REV	DESCRIPTION	DATE	APPROVED
A	ECO 11105-00042	11-9-72	
B	ECO 11105-00036	4-12-72	
C	ECO 11105-00023	2-24-72	
D	ECO 7008713-00001	4-3-72	

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM	REMARKS
5	*18	BLU	1	P1-9	7	12	—	6	
	TWP	BLK	2	P1-2		11	—		
4	*18	BLK	2	P1-2		15	—		
	TWP	RED	3	P1-3		16	—		
3	*18	RED	3	P1-3	7	9	—		
1	*22	YEL	4	P1-1	13	10	—		
2	*22	VIO	5	P1-6		8	—	6	
10	*22	BRN	6	P1-4		14	—	12	
11	*22	ORN	7	P1-5	13	13	—	12	

NOTES:
1. USE CABLE TIES (X) ITEM *9 AS SHOWN AND AT BREAK OUT POINTS WHERE NECESSARY.



DO NOT REDUCE

SCALE

0 IN. 6 IN. 12 IN.

	QTY.	DESCRIPTION	PART NO.	ITEM NO.
	4	PIN MATE-N-LOCK MALE	1209378-03	13
	2	TERMINAL AMP *85952-3	9007655	12
	A/R	WIRE *22 AWG STRD (ORN)	9107350-33	11
	A/R	WIRE *22 AWG STRD (BRN)	9107350-11	10
X	A/R	TIE, CABLE PANDUIT SST 1.5M	9007880	9
P1	1	CONN., MATE-N-LOCK 9 PIN MALE	1209351-09	8
■	3	PIN, MATE-N-LOCK MALE	1209378-09	7
○	7	TERM., AMP TAB .RED	9007917	6
	A/R	WIRE, *18 AWG STRD TWP BLU/BLK	9107430-06	5
	A/R	WIRE, *18 AWG STRD TWP RED/BLK	9107430-02	4
	A/R	WIRE, *18 AWG STRD RED	9107360-22	3
	A/R	WIRE, *22 AWG STRD VIO	9107350-77	2
	A/R	WIRE, *22 AWG STRD YEL	9107350-44	1

PARTS LIST

REVISIONS			
CHK	CHANGE NO	REV	
JM	7008856 C0001	A	Drawing Released 6/6/72
			Per Change Notice 1 (C1)

ARMSTRONG

FIRST USED ON OPTION/MODEL: PDP 1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST

FINISH: —

		DATE
DRN	D. Robichaud	2-28-72
CHK'D	C. Fischer	3-7-72
ENG.	R. Pinto	5-3-72
PROJ. ENG.	G.R. Wells	5-31-72
PROD.	R.K. Peterson	6/4/72

NEXT HIGHER ASSY.: D-UA-1105-0-0

SCALE 1/1

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: HARNESS DC (PDP 1105)

SIZE	CODE	NUMBER	REV.
D	IA	7008856-0-0	A

DIST.

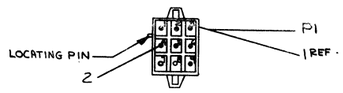
DEC FORM NO DRD 100-A

D IA 7008856-0-0 A

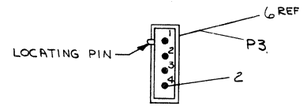
WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	ITEM	TO POINT	TO CONN	ITEM	LENGTH	SIGNAL NAME
17	14	BLU	1	P1-9	2	20	TB1-14	SOLDER	21.50	-15V
16	16	VIO	2	P1-6	31	27	TB1-8		29.00	DCLO
21	12	BLK	3	P1-7	2*	25	TB1-7		25.50	GND (1)
18	18	YEL	7	P1-1	31	21	TB1-13		28.25	ACLO
13	18	RED	3	P1-3	2*	22	TB1-12		27.25	+5V (1)
20	14	GRY	4	P1-5	2	23	TB1-11		27.00	+15V
15	14	ORN	6	P1-4	2	24	TB1-10		26.75	LTC
30	14	RED	8	P2-2	2	17	TB1-17		42.75	+5V
30	14	RED	11	P2-3	2	16	TB1-16		42.50	
14	14	BLK	9	P2-3	2	19	TB1-18		43.25	GND2
14	14	BLK	10	P2-4	2	18	TB1-15	SOLDER	42.25	
23	20 TWP	BLK	21	P3	28	12	P3-4	2	31.50	
		WHT	24	P4	29	13	P3-3	2	31.50	
9	18	RED	22	P3	31	10	P3	3	50.25	
2	TWP	WHT	25	P4	31	31	P6	3	50.25	
10	18	BLK	14	P3-2	31	33	/ /	3	50.25	
	TWP	BLU	15	P3-1	31	32	/ /	3	50.25	
17	14	BLU	34	P2-8	2	36	J1-1	26	6.00	
17	14	BLU	35	P2-7	2	37	J1-2	26	6.00	
27	18	BLK	30	P5	23		P6		2.50	
		BLK	31	P4	29					
27	18	BLK	30	P5	23		P7		9.00	
		BLK	31	P4	29					

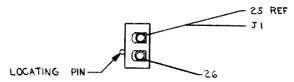
SEE NOTE #2



VIEW A-A
SCALE: NONE
(REAR VIEW)

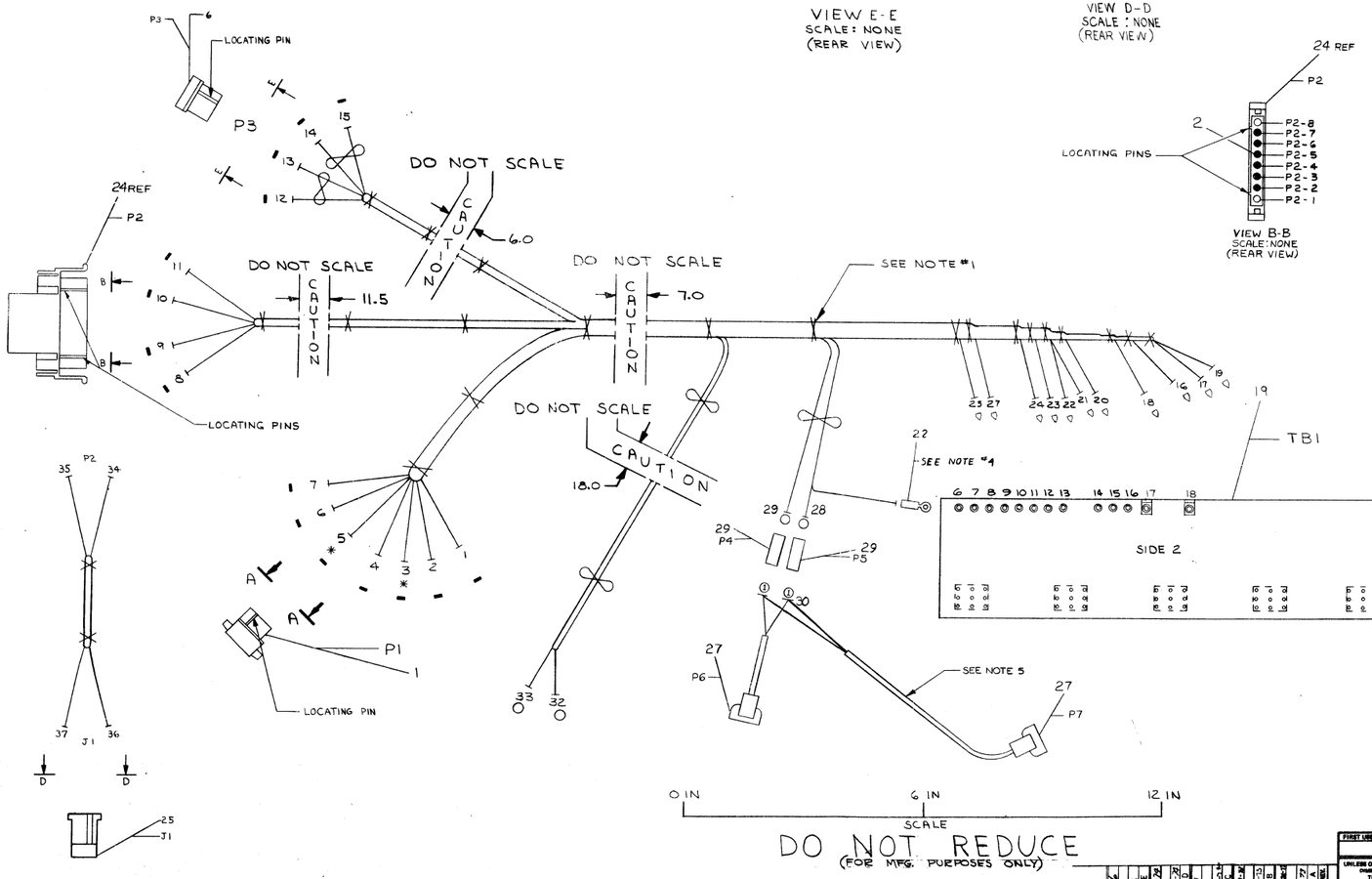


VIEW E-E
SCALE: NONE
(REAR VIEW)



VIEW D-D
SCALE: NONE
(REAR VIEW)

VIEW B-B
SCALE: NONE
(REAR VIEW)



DO NOT REDUCE
(FOR MFG. PUEPOSES ONLY)

NOTES:
1. USE TIE WRAPS (X) (ITEM #7 OR 8) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY, AND AT EVERY BREAKOUT POINT.
2. ITEM #21 (12 GA BLK) AND ITEM #16 (18GA VIO) ARE SEPERATE WIRES BUT A TWISTED PAIR SHALL BE MADE OF THEM BEFORE PLACING THEM IN THE HARNESS.
3. SHIELDED GND FOR WIRE TO FANS TO BE CONNECTED ON P4, P5 END ONLY.
4. SOLDER ITEM 22 TO SHIELD WIRE. MAKE SHIELD WIRE AT LEAST 2" LONG.
5. ITEMS 3, 27, 28 AND 29 CAN BE ORDERED AS A SEPERATE SUB-ASSEMBLY ITEM. DRAWING AND PART NUMBER C-IA-7010494-0-0.
*6. SOLDER AFTER TERMINATE.

ITEM	QTY	DESCRIPTION	PART NO.	ITEM NO.
	4	MATE-N-LOCK PIN	1209378-08	31
	A/R	WIRE, #14 AWG STRD, RED	9107370-22	30
	2	TERMINAL, ADAPTOR, DOUBLE MALE, INS	9009110	29
①	2	CONN, SOLDERLESS #30 SOC	9007969	28
	2	PLUG-CORD ASSEMBLY	1210283	27
	2	SOCKET, TERMINAL CONTACT FEMALE	1209379-00	26
	1	CONN, MATE-N-LOCK, 2 PIN	1418831-02	25
	1	CONN, MATE-N-LOCK, 8 PIN	12.88338-21	24
	A/R	WIRE, #20 SHIELDED TWP BLK/WHT	9107701	23
	1	TERMINAL, SHAKEPROOF	9008150	22
	A/R	WIRE #12 STRD. BLK	9107380-00	21
	A/R	WIRE, #14 STRD, GRY	9107370-88	20
	1	POWER DIST. BOARD	D-DS-9107101-0-0	19
	A/R	WIRE #18 STRD, YEL	9107360-44	18
	A/R	WIRE #14 STRD, BLU	9107370-66	17
	A/R	WIRE #18 STRD, VIO	9107360-77	16
	A/R	WIRE #14 STRD, ORN	9107370-33	15
	A/R	WIRE #14 STRD, BLK	9107370-00	14
	A/R	WIRE #12 STRD, RED	9107380-22	13
~~	A/R~~	~~WIRE #18 STRD, RED~~	~~9107360-00~~	~~12~~
~~	A/R~~	~~WIRE #18 STRD, BLK~~	~~9107360-00~~	~~11~~
	A/R	WIRE #18 STRD TWP, BLK/BLU	9107430-06	10
~~	A/R~~	~~WIRE #18 STRD TWP, RED/WHT~~	~~9107430-22~~	~~9~~
X	7	TIE WRAP, PANDUIT #SST-2M	9007032	8
X	20	TIE WRAP, PANDUIT #SST-1M	9007031	7
	1	CONN, MATE-N-LOCK 4 PIN	1209351-04	6
~~	4~~	~~HOUSING, 1-480270-0~~	~~1210822-1~~	~~5~~
~~	4~~	~~MULTI-PIN PINS #60261-1~~	~~1210820-5~~	~~4~~
	4	CONN, SOLDERLESS #30902	9007970-00	3
	13	PIN, CONTACT (MALE)	1209378-00	2
SYM	1	CONN, MATE-N-LOCK 9 PIN	1209351-09	1

FIRST USED ON OPTION/MODEL	11/35		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DECIMALS .XXX ± .005, .XX ± .02, .X ± .1	ANGLES ± 30'	
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓			
MATERIAL	SEE PARTS LIST		
FINISH			
DRAWN		DATE 11-14-72	
TRACED		DATE 11-14-72	
DESIGNED		DATE 11-14-72	
ENGR		DATE	
PROJ ENGR		DATE	
MFG ENGR		DATE	
NEXT HIGHER ASSY	BAIID-D		
USED ON			
SCALE 1/1	SHEET	OF	

DIGITAL EQUIPMENT CORPORATION

TITLE: PDP 11/35 POWER TO DISTRIBUTION BOARD HARNESS

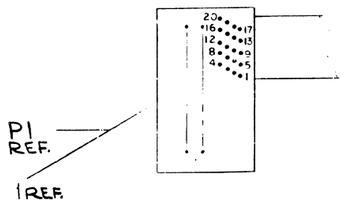
SIZE	CODE	NUMBER	REV.
B		IA 7009208-0-0	E

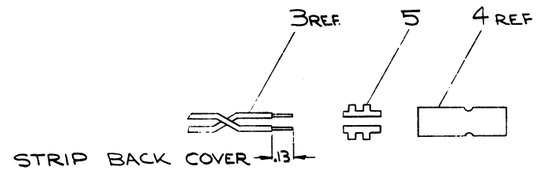
DIST

11-14-72	10-3-72	8-24-72	7-20-72
7009208-00001 C	BAIID-00003 A	BAIID-00002 A	BAIID-00008

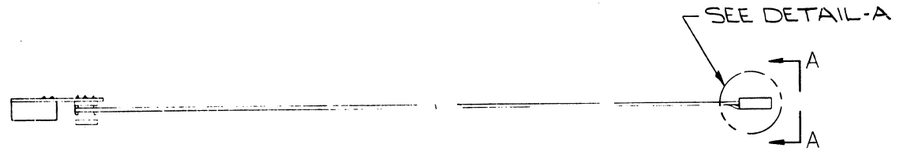
DEC FORM NO. DRE 360

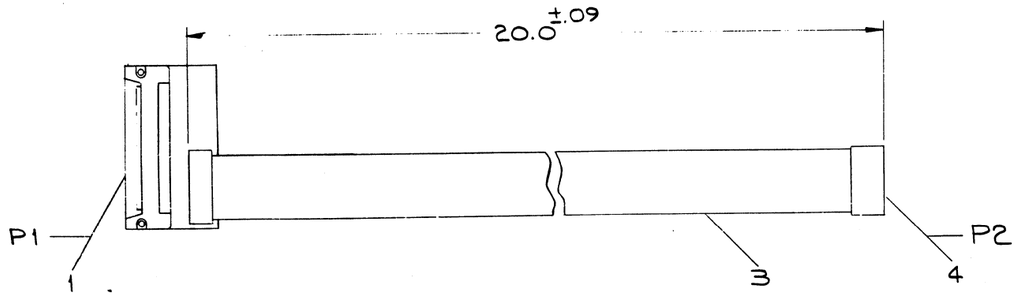
NOTES:
1. CONNECTORS P1 AND P2 ARE TO BE WIRED POINT TO POINT (P1-1 TO P2-1 P1-2 TO P2-2 ECT.)

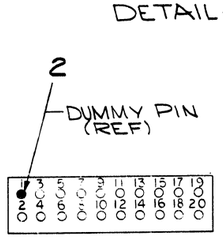




DETAIL-A







VIEW A-A
(FRONT VIEW)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
5	12110089-0	MINI-TERMINAL #47783 BERG	19
4	12109180-027	RECEPTACLE 20 PIN #65043-027 BERG	1
3	9107747	CABLE SCOTCHFLEX #3350 3M	A/R
2	9009/90	DUMMY PIN #47300 BERG	1
1	5409949-00	DC. DISTRIBUTION MODULE	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1
ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST
FINISH

DRN. DATE 2-14-72
CHK'D C. Fischer DATE 3-1-72
ENG. DATE 3-24-72
PROJ. ENG. DATE 3-24-72
PROD. DATE 3-24-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: HEADER CABLE ASSY

NEXT HIGHER ASSY. D-UA-1105-0-0

SIZE D | CODE IA | NUMBER 7008820-0-0 | REV. A

SCALE NONE
SHEET OF 1
DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
DEMORANVILLE	7008820-0000	A	

DEC FORM NO. DRD 100-A

SIZE D | CODE IA | 7008820-0-0 | REV.

J1 BERG HEADER ON P.C. CARD	J2 20 PIN 3M CONNECTOR	SIGNAL	OUTPUT CABLE (REFERENCE)
VV	9-12	GROUND	GROUND (A)
UU	9-12	GROUND	GROUND (B)
B	9-12	GROUND	GROUND (UU)
A	9-12	GROUND	GROUND (VV)
RR	16	SERIAL IN (TTL)	E
NN	15	20 MA INTERLOCK	H
LL	14	SERIAL IN (+20MA)	K
DD	5	SERIAL IN (-20MA)	S
V	7	SERIAL OUT (+20 MA)	AA
T	6	CLOCK IN (TTL)	CC
R	4	READER RUN (-20 MA)	EE
N	3	CLOCK DISABLE (TTL)	HH
L	2	SERIAL OUT (-20MA)	KK
F	18	READER RUN (+20MA)	PP
D	19	SERIAL OUT (TTL)	SS
C	20	+5 VOLTS	TT
BB	8	+15 VOLTS	U

REVISIONS			
REV.	CHANGE NO.	CHK	

BRUNING 40-107 15968

DEC FORM NO. DRC 100-A

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. —	DATE 4-6-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. C.Tescher	DATE 4-6-72	
ENG. [illegible]	DATE [illegible]	
PROJ. ENG. [illegible]	DATE 4-13-72	
PROD. ✓	DATE 4-13-72	

NEXT HIGHER ASSY. D-IA-5409949-Ø-Ø

SCALE —

SHEET 1 OF 1

TITLE

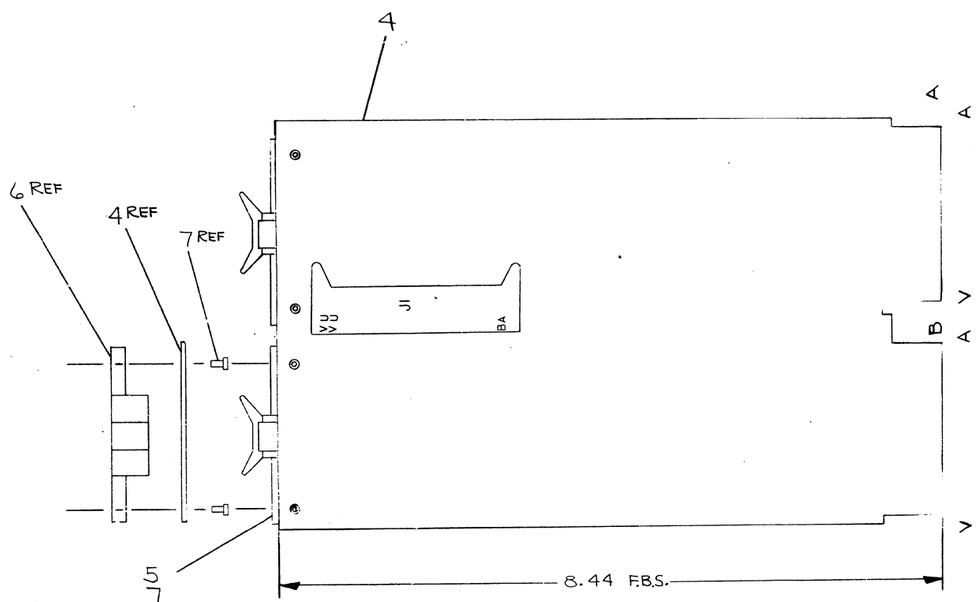
CIRCUIT SCHEMATIC

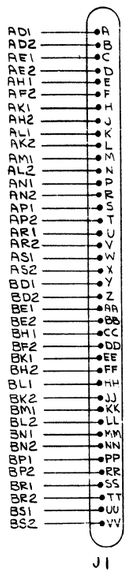
SIZE	CODE	NUMBER	REV.
C	CS	5409949-0-1	A

DIST.

SIZE	CODE	NUMBER	REV.
C	CS	5409949-0-1	

NOTES:





REF		X-Y CO-ORDINATE HOLE LOCATION	K-CO-M9970-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M9970-0-5	2
REF		MODULE ECO HISTORY	B-MH-M9970-0-6	3
1		ETCHED CIRCUIT BOARD	5010347	4
1		BERG CONN, 40 PIN	1209941	5
2		HANDLE, FLIP-CHIP-MAGNETA	9008337-6	6
4		EYELET, HANDLE	9006732	7

IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

BRUNING 40-522 16699
DEC FORM NO. DRD-135A

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL //

ETCH BOARD REV A

REV	CHANGE NO.	DEC NO.	EIA NO.

REVISIONS

CHK

SEMICONDUCTOR CONVERSION CHART

DRN. T. Sands DATE 11-30-72
CHK'D. L. Maddox DATE 12-1-72
ENG. DATE 5-14-73
PROJ. ENG. DATE 5-14-73
PROD. DATE 5-14-73
NEXT HIGHER ASSY //
SCALE NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
BERG BACKPLANE
CONNECTOR

SIZE D | CODE DCS | NUMBER M9970-0-1 | REV. *
DIST.

1-0-0976W SCD a 3005 3218

WIRE TABLE

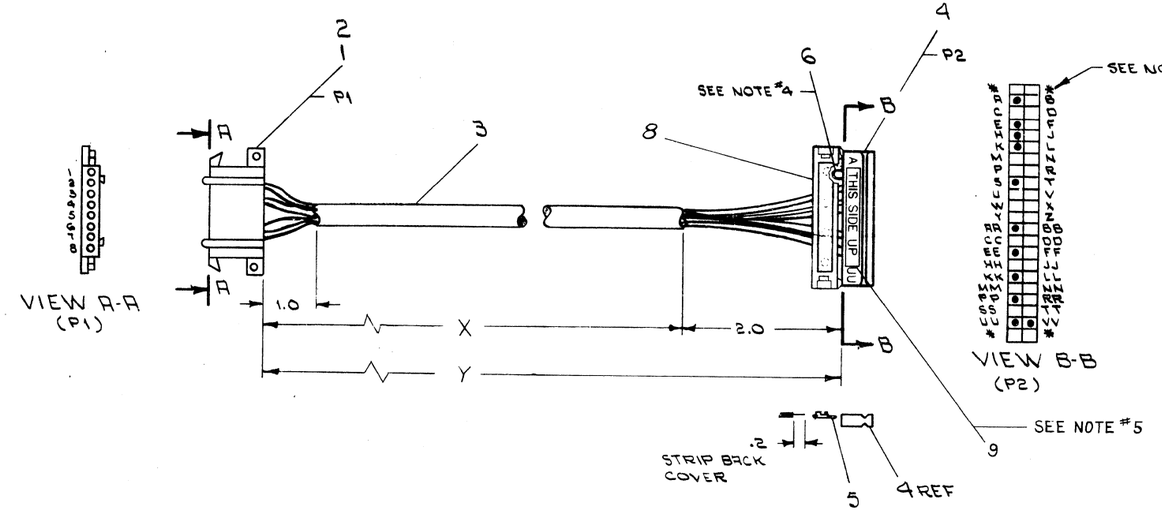
ITEM NO.	DESCRIPTION AWG	COLOR	PAIR NO.	FROM CONNECTION	FROM WITH	TO CONNECTION	TO WITH
3	22	BLK	1	P1-2	2	P2-KK	5
3		RED		P1-3	2	P2-S	
3,7		SHIELD		SEE NOTE #2	—	P2-A(NOTE #3)	
3		BLK	2	P1-4	2	P2-EE	
3		WHT		P1-5	2	P2-RR	
3,7		SHIELD		SEE NOTE #2	—	P2-JJ(NOTE #3)	
3		BLK	3	P1-6	2	P2-PP	
3		GRN		P1-7	2	P2-K	
3,7		SHIELD		SEE NOTE #2	—	P2-VV(NOTE #3)	
6	22	BLK	—	P2-E	5	P2-H	5

LEGEND

VARIATION	LENGTH X	LENGTH Y
7008360-0	25IN±1.0	27IN±1.0
7008360-1	46IN±1.0	48IN±1.0
7008360-9	9FT±2IN	9FT2IN±2IN

NOTES:

1. * ASTERISKS INDICATE CAVITIES NOT USED OR DESIGNATED BY LETTERS.
2. DRAIN WIRES TO BE CUT BACK TO OUTER INSULATION ON P1 END OF CABLE ONLY. SHIELDS TO BE CUT BACK TO OUTER INSULATION ON BOTH ENDS OF CABLES.
3. DRAIN WIRES ON P2 END OF CABLE TO BE EACH ENCLOSED WITH ITEM#7 (TUBING) FROM END OF CABLE JACKET TO POINT WHERE THEY ENTER P2 CONNECTOR.
4. ITEM#6(WIRE) TO BE APPROXIMATELY ONE(1) INCH LONG.
5. PLACE ITEM#9("THIS SIDE UP" STICKER) ON LETTERED SIDE OF ITEM#4 (BERG HOUSING) AS SHOWN.



ITEM NO.	QTY.	DESCRIPTION	PART NO.
9	1	LABEL, THIS SIDE UP	3611567
8	1	STRAIN RELIEF	1211166
7	A/R	TUB. #18 TEF. THINWALL WHT	9107278-11
6	A/R	WIRE, #22 AWG STRD TEF BLK	9107350-00
5	11	SOCKET, CRIMP# 47216	1210089-07
4	1	HOUSING, BERG #65043-015	1210918-15
3	A/R	CABLE, BELDEN #8777-3PR SHLD	9107725-0
2	6	CONTACT MATE-N-LOCK(FEMALE)	1209379-03
1	1	CONN. MATE-N-LOCK(FEMALE)	1209340-00

PARTS LIST

REVISIONS CHK	CHANGE NO	REV
	K. BE-0000	A
	KL8E-00006	B
		C
	E.COSM-00001	F
		G
		H

DWN T.J. Leonard 3APR 71
CHK'D. [illegible] 4-6-71
ENG. [illegible] 4-6-71
PROJ. ENG. [illegible] 4-7-71
PROD. [illegible] 4/9/71

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CABLE ASSEMBLY (KL8E)

SIZE D | CODE IA | NUMBER 7008360-0-0 | REV H

NEXT HIGHER ASSY: A ML-KL8-E-0

SCALE: NONE

SHEET 1 OF 1

DIST.

FIRST USED ON OPTION/MODEL: PDP-8E

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES FRACTIONS ± 1/32 ANGLES ± 0°30' FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: SEE PARTS LIST

FINISH

M.E. LEWANDOWSKI 7008360-0000 21 H

J. MCNAMARA

W13C PARTS REFERENCE

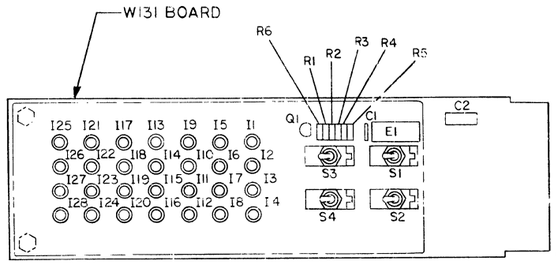
ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	R1,R3,R5,R7,R9,R11,R13,R15,R17,R19,R21,R23, R25,R27,R29,R31,R33,R35,R37,R39,R41,R43, R45,R47,R49,R51,R53,R55	15K, 1/4W, 5% RES.	130Ø496	28
2	R2,R4,R6,R8,R10,R12,R14,R16,R18,R20,R22, R24,R26,R28,R30,R32,R34,R36,R38,R40, R42,R44,R46,R48,R50,R52,R54,R56	470, 1/4W, 5% RES.	130Ø316	28
3	Q1-Q56	DEC 3ØØ9S TRANSISTOR	1503100	56
4	P1	H827 BLOCK, CONNECTOR	1209123	1

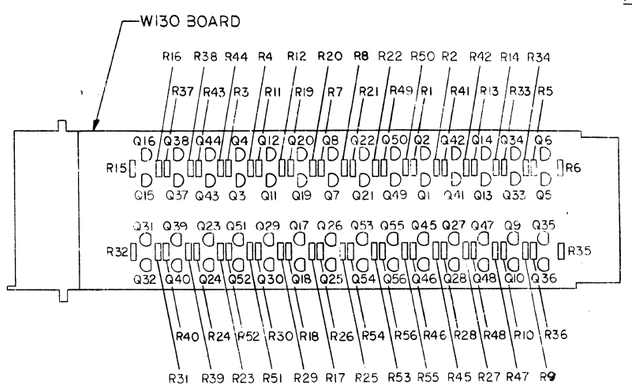
W131 PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	E1	DEC 7420N LC.	1905575	1
2	C1	.01 MFD, 100V, 20% DC CAP.	1031610	1
3	C2	6.8 MFD, 35V, 20% ST CAP.	1030067	1
4	R1,R2,R3,R4,R5	3K, 1/4W, 5% RES.	1300432	5
5	R6	330, 1/4W, 5% RES.	1300295	1
6	Q1	DEC 3009B TRANSISTOR	1503100	1
7	I1-I28	LAMP, HUDSON, BLUE #2309G	1209219	28
8	S1-S4	SWITCH, TOGGLE, SPST, GATI-T2	1201168	4

NOTES:
1. THE KM11 IS A TWO MODULE (W13Ø, W131) OPTION TO THE KA11 TO AID MAINTENANCE. THIS PREWIRED OPTION IS INSTALLED BY INSERTING THE W13Ø MODULE INTO LOCATION Ø82 AND INSERTING THE W131 MODULE INTO THE W13Ø. NOTE THAT THE SWITCHES AND LIGHTS FACE TOWARD AND EXTEND BELOW THE CONSOLE. THE BOTTON COVER MUST BE REMOVED WITH THE CHASSIS EXTERNAL TO THE CABINET.
2. LABELS FOR THE INTERNAL MACHINE STATES LAMPS ARE NOTED ON THE W131 ETCH BOARD. SWITCHES PROVIDE A MANUAL CLOCK AND BUS RESPONSE AND ARE ACTIVE WHEN THE TOGGLE IS TOWARD THE NAME. NORMAL MACHINE OPERATION REQUIRES THAT ALL SWITCHES BE IN THE OFF POSITION.
3. "M CLK ENABLE" AND "M CLK" PROVIDE A MANUAL CLOCK FOR THE KA11. "M CLK ENABLE" IS ACTIVATED WHILE THE PROCESSOR IS HALTED. EACH TOGGLE OF "M CLK" THEN STEPS THE PROCESSOR THROUGH THE SMALLEST PROCESSOR CLOCK INTERVALS, THE R/W STATES, THE NEXT HIGHEST CLOCK INTERVAL (S CLK) IS PROVIDED BY FOUR TOGGLES (2 COMPLETE SWITCH CYCLES) AND INDICATED BY THE R/W2 LAMP. R/W2 IS THE LAST (OR REST) R/W STATE IN A "S CLK" INTERVAL. NORMAL OPERATION IS RESUMED WHEN "M CLK" AND THEN "M CLK ENABLE" ARE RETURNED TO OFF.
4. "NO TIME OUT" AND "SSYN" PROVIDE A MANUAL BUS RESPONSE TO THE PROCESSOR. IT IS USED WHEN OTHER DEVICES ARE NOT AVAILABLE. "NO TIME OUT" IS ACTIVATED, WHILE THE PROCESSOR IS HALTED, TO ELIMINATE AN ERROR TRAP ON MANUAL "SSYN". AT THE APPROPRIATE TIMES IN A BUS TRANSFER "SSYN" IS ACTIVATED AND DEACTIVATED.

COMPONENT PLACEMENT





PIN NOMENCLATURE

MODULE	PROCESSOR
A	B

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL	PDP11
DO NOT SCALE DRAWING	UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY ✓ REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL	—
FINISH	—
DRN.	DATE 4-15-70
CHK'D.	DATE 4-24-70
ENG.	DATE 5/4/70
PROJ. ENG.	DATE 5/4/70
PROD.	DATE 5/5/70
NEXT HIGHER ASSY	A-ML-KM11-Ø
SCALE	1/1
SHEET	1 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: MAINTENANCE BOARD (1&2) KM-1

SIZE	CODE	NUMBER	REV.
D	BS	KM11-Ø-MB	

DIST.

REVISIONS	REV	CHANGE NO.	CH'K

DEC FORM NO. DRD 100

CONNECTOR AT REAR OF MODULE TO EXTEND MAINTENANCE BOARD 2, W131 (KM-3).

+5V	BØ2A2	A2	+5V
~+8V	BØ2B1	B1	+8V
KM-3 M CLK ENABLE L		V2	BØ2V2 KM-2 M CLK ENABLE L
KM-3 M CLK L		V1	BØ2V1 KM-2 M CLK L
KI3-2 TIME OUT (1) L	BØ2B2	B2	KM-2 TIME OUT (1)H
BUS SSYN L		A1	BØ2A1 BUS SSYN L
		U1	KM-2 LAMP BSRØ L
		T1	KM-2 LAMP BSR 1 L
		S1	KM-2 LAMP BSR 3 L
		R1	KM-2 LAMP BSR 7 L
GND	C2,T1	K2	GND
		R1	KM-2 LAMP BSR 15 L
		S1	KM-2 LAMP BSR 14 L
		T1	KM-2 LAMP BSR 12 L
		U1	KM-2 LAMP BSR 8 L
		P1	KM-2 LAMP ISR Ø L
		R1	KM-2 LAMP ISR 1 L
		S1	KM-2 LAMP ISR 3 L
		T1	KM-2 LAMP ISR 7 L
		N1	KM-2 LAMP ISR 15 L
		P1	KM-2 LAMP ISR 14 L
		R1	KM-2 LAMP ISR 12 L
		S1	KM-2 LAMP ISR 8 L
		M1	KM-2 LAMP N (1) L
		P1	KM-2 LAMP N (1) L
		R1	KM-2 LAMP V (1) L
		S1	KM-2 LAMP C (1) L
		E1	KM-2 LAMP T (1) L
		K1	KM-2 LAMP TRAPS L
		N1	KM-2 LAMP B MSYN L
		P1	KM-2 LAMP B SSYN L
		D1	KM-2 LAMP R/W2 L
		L1	KM-2 LAMP TST1 L
		R1	KM-2 LAMP TST2 L
		S1	KM-2 LAMP ISR 2 L

KI-3 BSR Ø H BØ2R2 R29 15K Q29 Q3Ø R3Ø 47Ø KI-3 BSR 1 H BØ2E2 R21 15K Q21 Q22 R22 47Ø KI-3 BSR 3 H BØ2H1 R1 15K Q1 Q2 R2 47Ø KI-3 BSR 7 H BØ2L2 R43 15K Q43 Q44 R44 47Ø

KI-3 BSR 15 H BØ2N2 R39 15K Q39 Q4Ø R4Ø 47Ø KI-3 BSR 14 H BØ2D2 R49 15K Q49 Q5Ø R5Ø 47Ø KI-3 BSR 12 H BØ2H2 R19 15K Q19 Q2Ø R2Ø 47Ø KI-3 BSR 8 H BØ2J2 R11 15K Q11 Q12 R12 47Ø

KI-3 ISR Ø H BØ2S1 R55 15K Q55 Q56 R56 47Ø KI-3 ISR 1 H BØ2M2 R37 15K Q37 Q38 R38 47Ø KI-3 ISR 3 H BØ2F2 R7 15K Q7 Q8 R8 47Ø KI-3 ISR 7 H BØ2E1 R33 15K Q33 Q34 R34 47Ø

KI-3 ISR 15 H BØ2R1 R45 15K Q45 Q46 R46 47Ø KI-3 ISR 14 H BØ2K1 R31 15K Q31 Q32 R32 47Ø KI-3 ISR 12 H BØ2S2 R17 15K Q17 Q18 R18 47Ø KI-2 ISR 8 H BØ2M1 R9 15K Q9 Q1Ø R1Ø 47Ø

K9-5 N (1)H BØ2P1 R27 15K Q27 Q28 R28 47Ø K9-5 Z (1)H BØ2L1 R51 15K Q51 Q52 R52 47Ø K9-5 V (1)H BØ2F1 R5 15K Q5 Q6 R6 47Ø K9-5 C (1)H BØ2D1 R13 15K Q13 Q14 R14 47Ø

K9-4 T (1)H BØ2J1 R15 15K Q15 Q16 R16 47Ø KI2-3 TRAPS H BØ2C1 R41 15K Q41 Q42 R42 47Ø KI3-3 B MSYN H BØ2T2 R35 15K Q35 Q36 R36 47Ø KI3-3 B SSYN H BØ2U2 R53 15K Q53 Q54 R54 47Ø

KI-2 R/W2 H BØ2K2 R3 15K Q3 Q4 R4 47Ø KM-2 TST1 H BØ2N1 R47 15K Q47 Q48 R48 47Ø KM-2 TST2 H BØ2V1 R25 15K Q25 Q26 R26 47Ø KI-3 ISR 2 H BØ2P2 R23 15K Q23 Q24 R24 47Ø

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN	K Phillips	DATE 12-18-69
CHK'D	[illegible]	DATE 9/21/70
ENG	[illegible]	DATE 3-6-70
PROJ. ENG'R	[illegible]	DATE 3-6-70
PROD	[illegible]	DATE 5/5/70

NEXT HIGHER ASSY: A-ML-KM11-Ø

SCALE: NONE

SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MAINTENANCE BOARD (1)

W130 KM-2

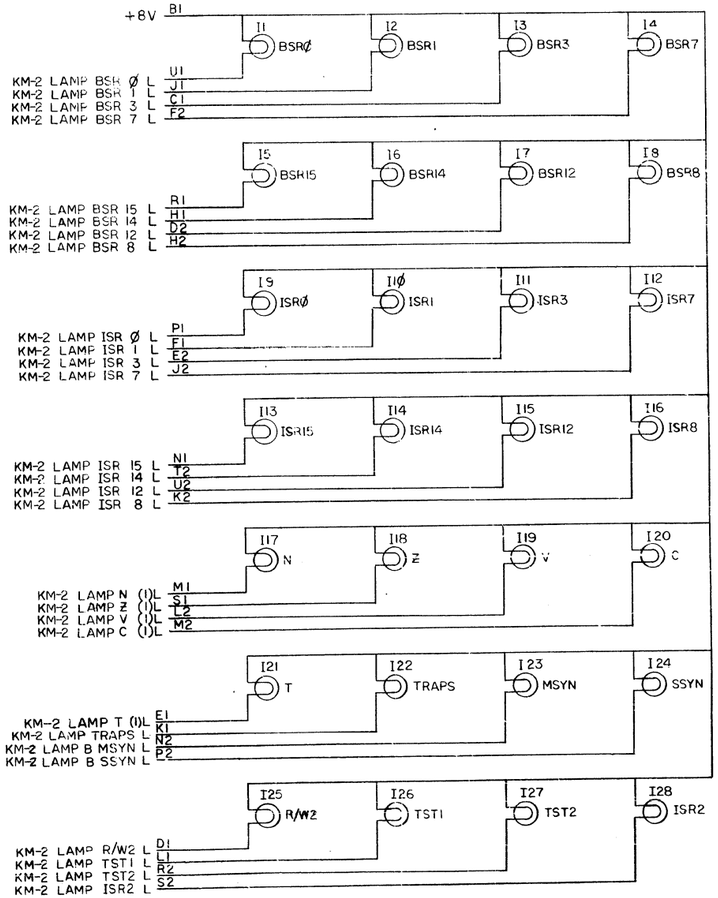
SIZE	CODE	NUMBER	REV.
D	BS	KM11-Ø-MB	

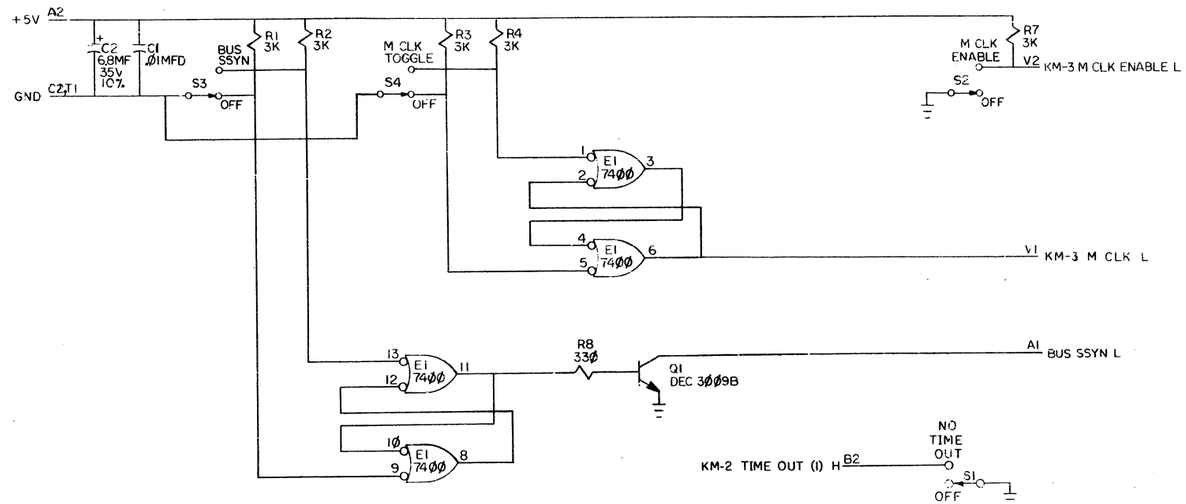
DIST.

REVISIONS		
CHK	CHANGE NO.	REV.

DEC FORM NO [illegible]

SIZE	CODE	NUMBER	REV.
D	BS	KM11-Ø-MB	





FIRST USED ON OPTION/MODEL: PDP 11	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —

FINISH —

DRN. J. Giudice	DATE 12-17-69	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D.	DATE 4/29/70	
ENG.	DATE 3-6-70	
PROJ. ENG.	DATE 3-6-70	
PROD.	DATE 5/5/70	

NEXT HIGHER ASSEMBLY: A-ML-KM11-Ø

SCALE NONE

SHEET 3 OF 3

TITLE: MAINTENANCE BOARD(2)

W131 KM-3

SIZE	CODE	NUMBER	REV
D	BS	KM11-Ø-MB	

DIST.

REVISIONS	REV
CHANGE NO.	
CHK	

DEC FORM NO DRD 102A

M		LM				
3 D	7 D	3 B	7 B	11 B	15 B	BUT IR D
2 D	6 D	2 B	6 B	10 B	14 B	BBUSY D
1 D	5 D	1 B	5 B	9 B	13 B	SSYN D
0 D	4 D	0 B	4 B	8 B	12 B	MSYN D

BUS SSYN →	AC LO →
M CLK PULSE →	M CLK EN →

KD11-B KM1

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

5509081-0-9

FIRST USED ON DAT /MIOD
11/05

REVISIONS

REV.	CHANGE NO.	CHK

SPEC* 9200100-94 (BLACK)

DRN. D Mattson	DATE 5-11-72
CHK'D. [illegible]	DATE
ENG.	DATE
PROJ. ENG. J Perihs	DATE 5-22-72
PROD. RK Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM1)

SIZE	CODE	NUMBER	REV.
A	55	5509081-0-9	

DIST. G

3 D	7 D	03 B	S3 D	ALU M B	AUXC D	MSYN D
2 D	6 D	02 B	S2 D	CIN B	BUT JJ D	SSYN D
1 D	5 D	01 B	S1 D	EALU B	BUT UN D	C1 D
0 D	4 D	00 B	S0 D	SPWR B	CNST D	C0 D

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

BUS SSYN →	AC LO →
M CLK PULSE →	M CLK EN →

KD11-B KM2

5509081-0-10

FIRST USED ON 03T/M10D
11/05

REVISIONS | REV. | CHANGE NO. | CHK

SPEC# 9200160-94 (BLACK)

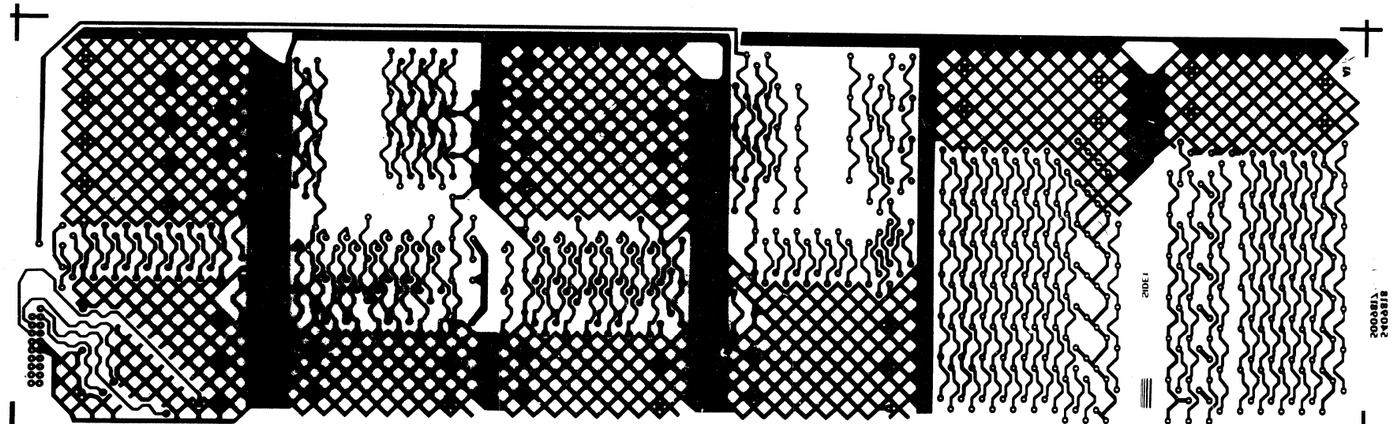
DRN. D. Matthew	DATE
CHK'D. G. Wilson	DATE
ENG.	DATE
PROJ. ENG. A. Teich	DATE 5-23-72
PROD. R.V. Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM2)

SIZE	CODE	NUMBER	REV.
A	SS	5509081-0-10	

DIST. G



BLOCK SIDE – SIDE #1

(AS SEEN THROUGH SIDE #2)

REVISIONS			
CHK	CHANGE NO.	REV.	
	5409818-00001	D	B. Thule 5-7-72 B. MINOR 5-7-72
	5409818-00002	E	B. Thule 5-29-72 B. Grace 5-24-72 2/5/73
	5409818-00003	F	G. GRAHAM 2-13-73 G. Graham 2-13-73
	5409818-00004	H	D. RANDALL 3/27/73 D. Randall 3/27/73
	5409818-00005	J	G. GRAHAM 6-1-73 G. Graham 6-1-73
	5409818-00006	K	B. MINOR 11-15-73 B. Minor 11-15-73
			B. MINOR 4-19-74 B. MINOR 4-19-74
			B. MINOR 7-12-74 B. MINOR 7-12-74

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-1105		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

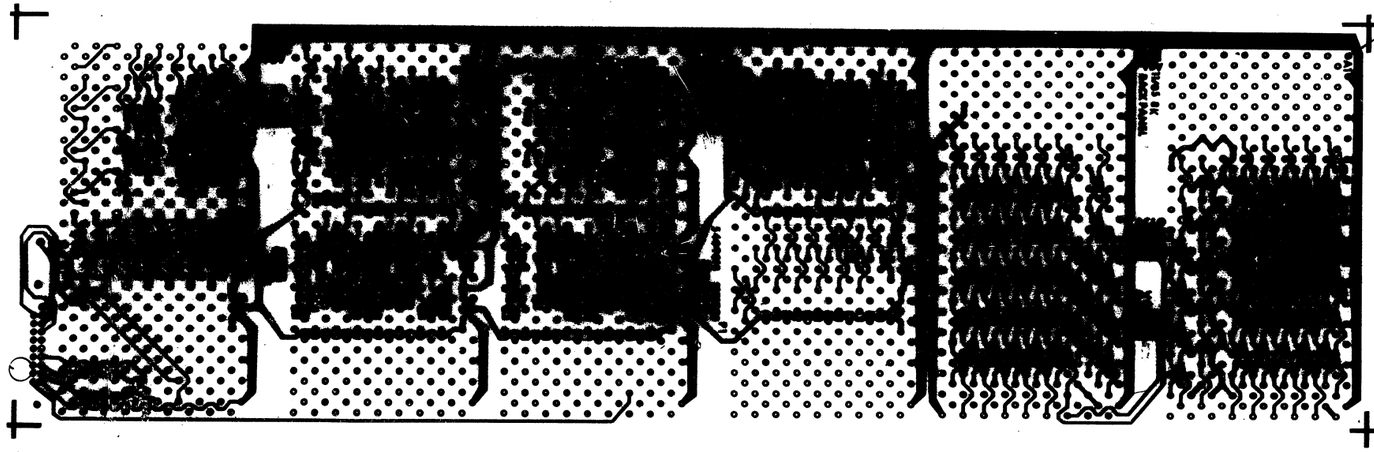
MATERIAL —/—/—

FINISH —/—/—

DRN. ROBICHAUD	DATE 8-20-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C. TESCHNER	DATE 3-21-72	TITLE CIRCUIT SCHEMATIC (8K)
ENG. W. MINOR	DATE 3-21-72	
PROJ. ENG. B.D. WEEKS	DATE 3-21-72	
PROD. R.K. PETERSON	DATE 3-21-72	
FIRST USED ON NEXT HIGHER ASSY.		
C-IA-5409818-0-0		SIZE C CODE CS NUMBER 5409818-0-1 REV. K
SCALE 1/1		
SHEET 1 OF 2		DIST.

DEC FORM NO. DRC

F E D C B A



SOLDER SIDE - SIDE #2

REVISIONS	REV.
CHANGE NO.	
CHK	

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-1105		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —/—/—

FINISH —/—/—

DRN. ROBICHAUD	DATE 3-20-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C. TESCHNER	DATE 3-21-72	
ENG. W. MINOR	DATE 3-21-72	
PROJ. ENG. B.D. WEEKS	DATE 3-21-72	
PROD. R.K. PETERSON	DATE 3-21-72	
FIRST USED ON NEXT HIGHER ASSY.		
C-1A-5409818-0-0		
SCALE 1/1		
SHEET 2 OF 2		

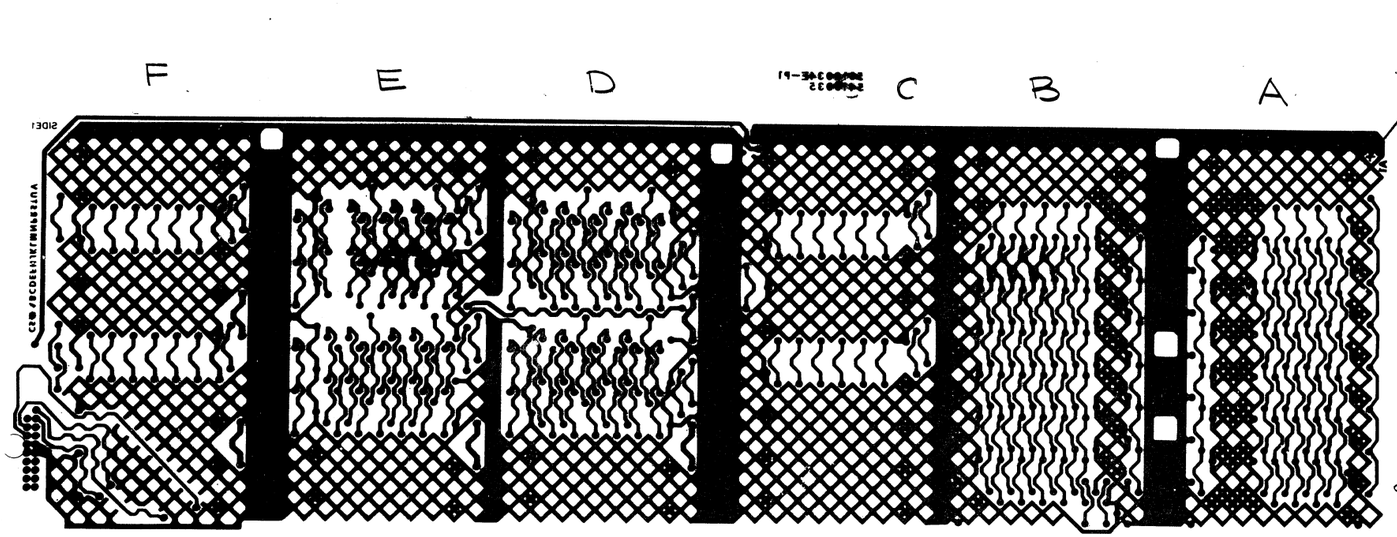
TITLE
CIRCUIT
SCHEMATIC (8K)

SIZE	CODE	NUMBER	REV.
C	CS	5409818-0-1	K

DIST.

DEC FORM NO. DRC

SIZE C CODE CS NUMBER 5409818-0-1 REV. K



BLOCK SIDE
(SIDE #1)
— AS SEEN THRU SIDE #2 —

REVISIONS									
CHK	CHANGE NO.	REV.							
	5410035-00001	B							
	2/11/73								
G. GRAHAM									
G. Graham 2-13-73									
	5410035-00002	C							
	3/9/73								
D. RANDALL									
Dan Randall 3/13/73									
	5410035-00003	D							
	5-25-73								
G. GRAHAM									
G. Graham 6-11-73									
	5410035-00004	E							
	7/11/73								
D. RANDALL									
Dan Randall 7/24/73									
	5410035-00005	F							
B. MINOR									
11-15-73									
	5410035-00006	H							
B. MINOR									
4-23-74									
B. MINOR									
7-17-74									

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES
TOLERANCES
DECIMALS ± .00% FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.	Keeper	DATE 5-11-72
CHKD.	C. Teschner	DATE 5-11-72
ENG.	[illegible]	DATE 5-11-72
FINAL ENG.	[illegible]	DATE 5-18-72
PROD.	[illegible]	DATE 5/15/72

NEXT HIGHER ASSY.
C-IA-5410035-0

SCALE 1/1
SHEET 1 OF 2

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

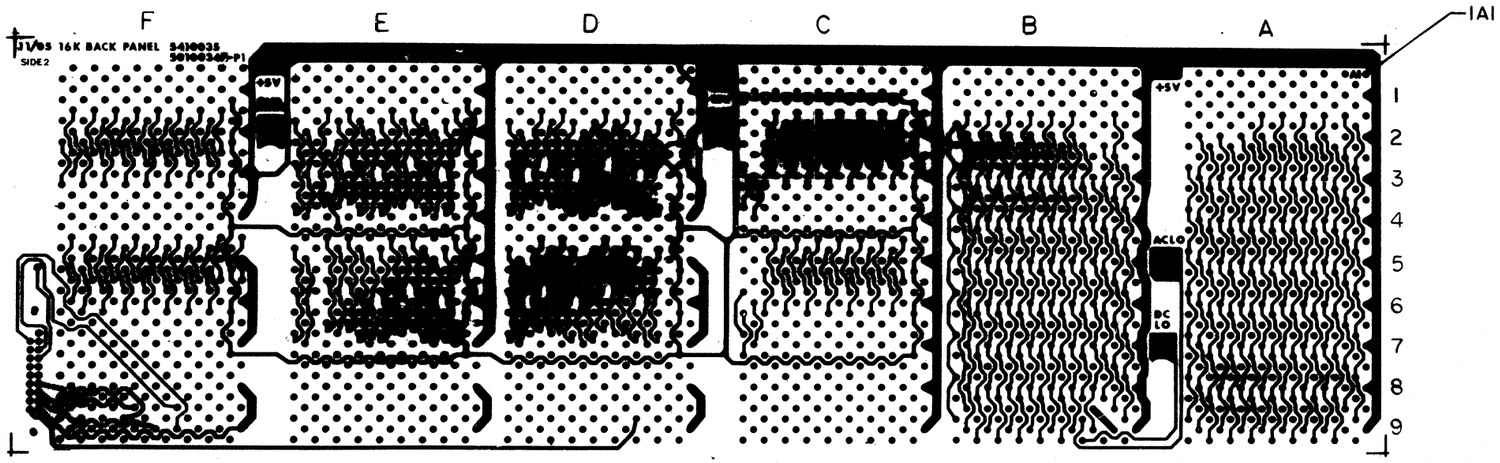
TITLE
CIRCUIT
SCHEMATIC (16K)

SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	H

DIST.

DEC FORM NO. DRC

SIZE C CODE CS NUMBER 5410035-0-1 REV. H



SOLDER SIDE
(SIDE 2)

REVISIONS	REV.
CHANGE NO.	
CHK	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —

FINISH —

DRN. R Cook	DATE	5/11/72
CHK'D. C. Teschner	DATE	5-11-72
ENG. W. Bruno	DATE	5-11-72
PROJ. ENG. B. D. Wenko	DATE	5-11-72
PROD. R.K. Peterson	DATE	5/15/72

NEXT ASSY E-IA-5410035-0-0

SCALE —

SHEET 2 OF 2

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
CIRCUIT SCHEMATIC (16 K)

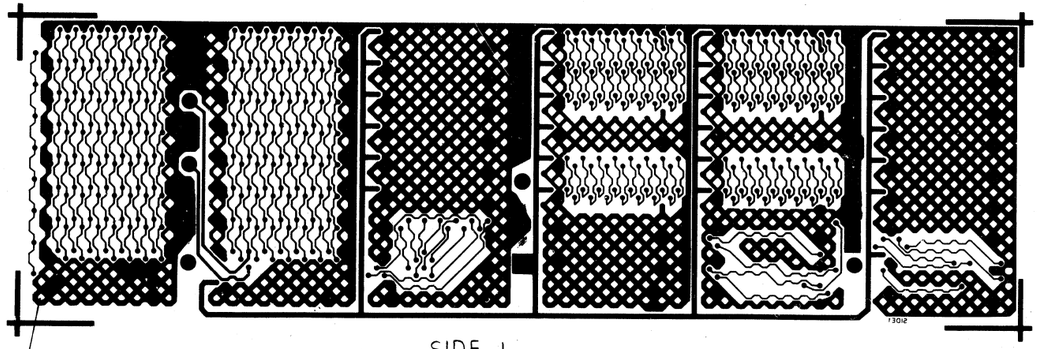
SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	H

DIST.

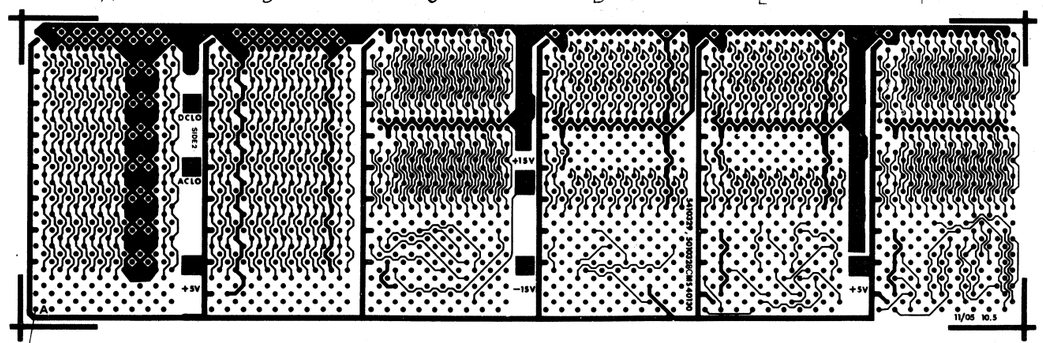
SIZE C CODE CS NUMBER 5410035-0-1 REV. H

DEC FORM NO. DRC

NOTES:



SIDE 1



SIDE 2

REF		ETCH WIRE LIST	K-WL-1105-0-B	5
1		ETCHED CIRCUIT BOARD	5010328	4
REF		MODULE ECO HISTORY	B-MH-5410328-0-0	3
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-5410328-0-0	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-5410328-0-0	1
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL: 1105

ETCH BOARD REV: C

IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

DRUMMG 40-522 16699

DEC FORM NO. DRD-135A

B. ARMSTRONG 4-22-74

REV	CHANGE NO.	CHK
B	5410329-00001	

REVISIONS

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN.	E. Wilson	DATE 3/5/73
CHK'D		DATE 7-20-73
ENG.		DATE 7-23-73
PROJ. ENG.		DATE 7-23-73
PROD.		DATE 7-23-73

NEXT HIGHER ASSY: D-IA-7009241-0-0

SCALE: NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CIRCUIT SCHEMATIC (1105 10.5)

SIZE	CODE	NUMBER	REV.
D	CS	5410329-0-1	B

DIST.

SIZE D CS NUMBER 5410329-0-0 REV B