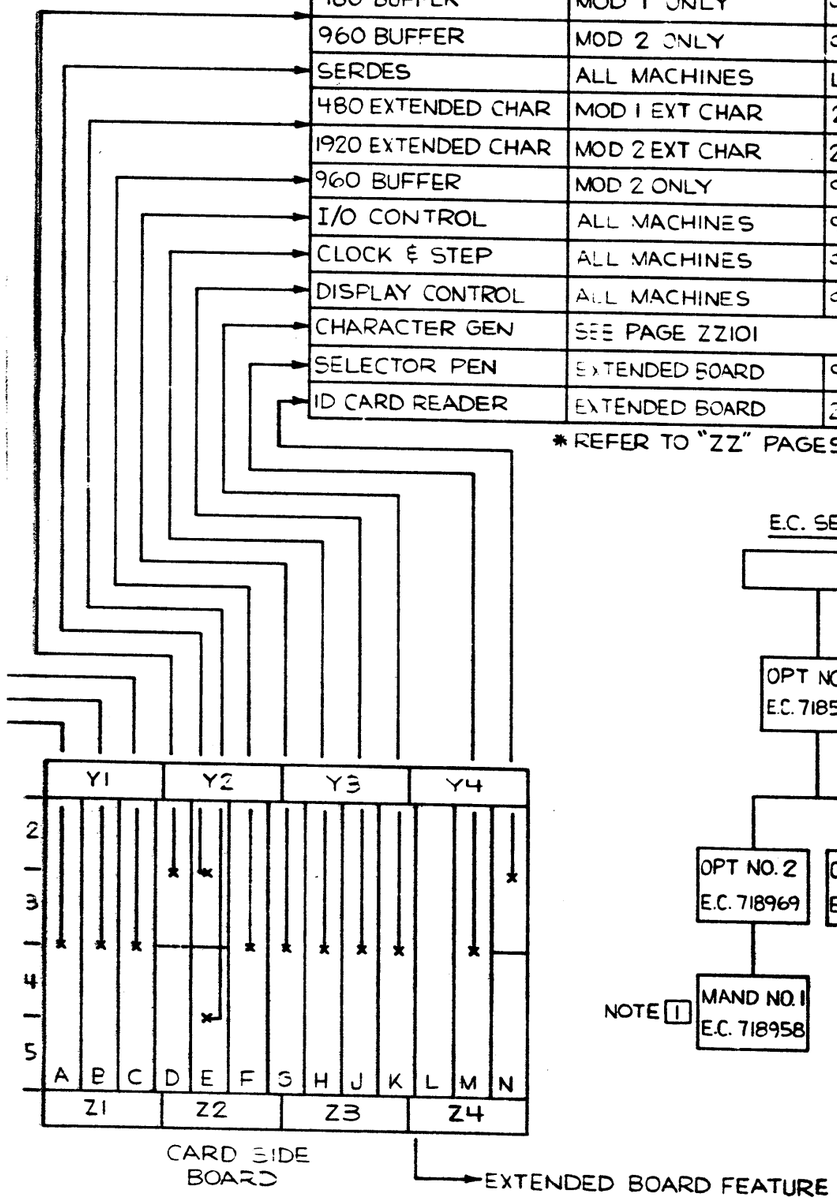
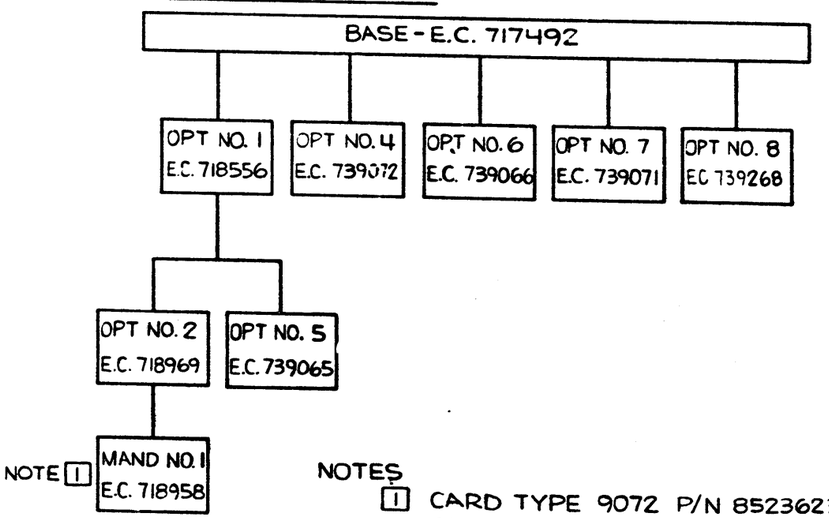
CARD DESCRIPTION	WHERE USED	CARD TYPE	LOGIC PAGE GROUP	CARD LOC	CARD PART NUMBERS: BASE E.C. 717492	OPT #1 E.C. 718556	MAND NO. 1 (CARD READER FEATURE ONLY) E.C. 718958	OPT NO. 2 E.C. 718969	OPT NO. 4 E.C. 739072	OPT NO. 5 E.C. 739065	OPT NO. 6 E.C. 739066	OPT NO. 7 E.C. 739071	OPT NO. 8 E.C. 739268	OPT NO.	PRODUCTION PRACTICE
KEYBOARD CONTROL #2	KEYBOARD ADAPTER	9072	KMIXX	A2 *	8522128	8522001	NOTE [1]	8523616	—	—	—	—	—		8527296
KEYBOARD CONTROL #1	KEYBOARD ADAPTER	9069	KMOXX	B2 *	8521178	8522852	—	—	—	8524282	—	—	—		8524282
I/O GATING & PARITY	ALL MACHINES	9066	MGOXX	C2	8521992	←	—	—	—	—	—	8523648	—		8523648
480 BUFFER	MOD 1 ONLY	9057	MBXXX	D2	8521862	←	—	—	—	—	—	—	—		8521862
960 BUFFER	MOD 2 ONLY	9065			8521863	←	—	—	—	—	—	—	—		8521863
SERDES	ALL MACHINES	L514	KAIXX	E2 *	8522013	←	—	—	—	—	—	—	—		8527302
480 EXTENDED CHAR	MOD 1 EXT CHAR	2231	MCXXX	E4	8521437	←	—	—	—	—	—	—	8524314		8524314
1920 EXTENDED CHAR	MOD 2 EXT CHAR	2227			8521436	←	—	—	—	—	—	—	8524301		8524301
960 BUFFER	MOD 2 ONLY	9065	MBXXX	F2	8521863	←	—	—	—	—	—	—	—		8521863
I/O CONTROL	ALL MACHINES	9068	KAOXX	G2 *	8522109	8522151	←	—	8523664	—	—	—	—		8523664
CLOCK & STEP	ALL MACHINES	9071	KFOXX	H2 *	8521981	8522825	←	—	—	—	8523649	—	—		8524604
DISPLAY CONTROL	ALL MACHINES	9067	KFIXX	J2 *	8522014	8522836	←	—	—	—	—	—	—		8522836
CHARACTER GEN	SEE PAGE ZZ101		MCXXX	K2 *		—	—	—	—	—	—	—	*		*
SELECTOR PEN	EXTENDED BOARD	9088	KTOXX	M2	8521505	←	—	—	—	—	—	—	—		8521505
ID CARD READER	EXTENDED BOARD	2229	KROXX	N2	8522108	←	8523257	←	—	—	—	—	—		8523257

* REFER TO "ZZ" PAGES FOR INTERCHANGEABLE CARDS FOR FEATURES AND RPQ'S



E.C. SEQUENCE STRUCTURE



EXPLANATION OF LOGIC USE

THIS SYSTEMS DIAGRAMS VOLUME CONTAINS ALL THE LOGIC REQUIRED FOR ANY FEATURE COMBINATION OF 3277 DISPLAYS. THE VOLUME IS BROKEN DOWN INTO THE LOGIC GROUPS SHOWN ABOVE. THE WHITE PAGES ARE BASE MOD 2. IF A CARD READER OR SELECTOR PEN IS IN THE MACHINE, THE BLUE KR & KT PAGES SHOULD BE CONSIDERED PART OF THE LOGIC. IF THE MACHINE IS A MOD 1, THE YELLOW MB PAGES SHOULD BE CONSIDERED A REPLACEMENT FOR THE WHITE MB PAGES. IF THE MACHINE HAS AN EXTENDED CHARACTER SET, THE GREEN MC PAGES SHOULD BE CONSIDERED A REPLACEMENT FOR THE WHITE MC PAGES.

BOARD PART NO.	BOARD DESCRIPTION
2625204	BASE W/O FEAT EXT
2625206	BASE WITH FEAT EXT
2625208	EXT CHAR SET W/O FEAT
2625210	EXT CHAR SET WITH FEAT

NOTES

[1] CARD TYPE 9072 P/N 8523623 (FOR W.T. ONLY) OR EC 718969 INSTALLED

SEE EC HISTORY		DRAWING TITLE
JUL74	740382	3277 SOCKET LIST
JAN75	741246	MACH 3277
MAR75	741258	PART NO 1832870
D		CLASSIFICATION

IBM CORP

AA115

COMPONENT & CONNECTOR LOCATIONS

TITLE	MOD 1	MOD 2
ANALOG CARD	01B/A2	01C/A1
AUDIBLE ALARM	01C/DS1	01C/DS1
LVPS	01B/PS1	01D/PS1
HVPS	01B/PS2	01C/PS1
-12V REG CARD	01B/VR1	01D/VR1
VOLTAGE DIST CARD	01C/Z1	01C/TB1
SECURITY KEY LOCK	01C/S1	01C/S1
CONTROL UNIT I/O CONN	01S/J4	01S/J4
KEYBOARD CONN	01S/J1	01S/J1
CARD READER CONN	01S/J2	01S/J2

POWER DISTRIBUTION

SIGNAL	TERMINAL MOD 1 01A/TB1	TERMINAL MOD 2 01C/TB1	I/O CONN 01S/J1	KYBD PIN - KB1 MICRO	KYBD PIN - KB1 CALICO
+8V	2	23	24	W,V	D03
			25	AUDIBLE FDBK	
-12V	4	19	13	Z	D02
DC RTN	6	22	11	X,Y	D08
			12	AUDIBLE FDBK	

ANALOG CARD

SIGNAL		BD CONN 01A-A1(Z3)	I/O CONN MOD 1	I/O CONN MOD 2	PIN
+VIDEO DATA OUT		H6C04	01B/A2	01C/A1	P4-12
+HI INTENSITY		J6E02			P4-15
+HORIZ SYNC		J6D04			P4-14
-BUMP DISPLAY		H6E04			P4-8
+VERTICAL RETRACE		J6B04			P4-10
-SOUND ALARM	TO ANAL CD	K6A04			P4-16
	TO ALARM				P4-19
+SWITCHED 5V	IN	H6B02			P4-11
	OUT				P4-20
-POR		K6B02			P4-21
-12V		J6C04			P3-5
+34V		K6B04			P3-6
+8V		J6A04			P3-4
+RELAY COIL		J6E04	01C/ZP1	01C/TB1	3
-SECURITY KEY		H6A02	01C/S1		—
-SECURITY KEY GND		J6B02			—
		H6C02			—

KEYBOARD
WITH & WITHOUT CARD READER

SIGNAL	BD CONN - 01A - A1 KYBD (Z1)	BD CONN - 01A - A1 CD RDR (Z4)	I/O CONN 01S/J1	KYBD PIN - KB1 MICRO	KYBD PIN - KB1 CALICO
+KYBD BIT 0	A6D04	L6B04	1	D	B05
+KYBD BIT 1	A6E04	L6C04	2	E	B06
+KYBD BIT 2	B6A04	L6D04	3	F	D13
+KYBD BIT 3	B6B04	L6E04	4	H	B08
+KYBD BIT 4	B6C04	M6A04	5	J	B09
+KYBD BIT 5	B6D04	M6B04	18	K	B10
+KYBD BIT 6	B6E04	M6C04	6	L	B13
+KYBD BIT 7	C6A04	M6D04	7	M	B12
+KYBD PARITY BIT	C6B04	M6E04	8	N	B04
+ALPHA SHIFT	A6D02	L6B02	14	T	D05
-KYBD STROBE	C6B02	M6E02	9	R	B02
	C6C04	N6A04			
+NUMERIC SHIFT	B6B02	L6E02	16	S	D06
-KYBD RESET	C6D04	N6B04	22	C	D12
-POR CALICO KYBD	C6A02	M6D02	19	SPARE	SPARE
+DE UP SHIFT	B6A02	L6D02	15	U	D04
+FF ENABLE	B6C02	M6A02	17	P	D11
+KYBD TUNE	C6E02	———	10	AUD FDBK SIGNAL	
+CHAR RDY DEC	———	N6C02		———	D10

COAX

SIGNAL	BD CONN PIN
DATA	01A-A1E2D07
GND	01A-A1E2D08

LIGHT PEN CONNECTOR

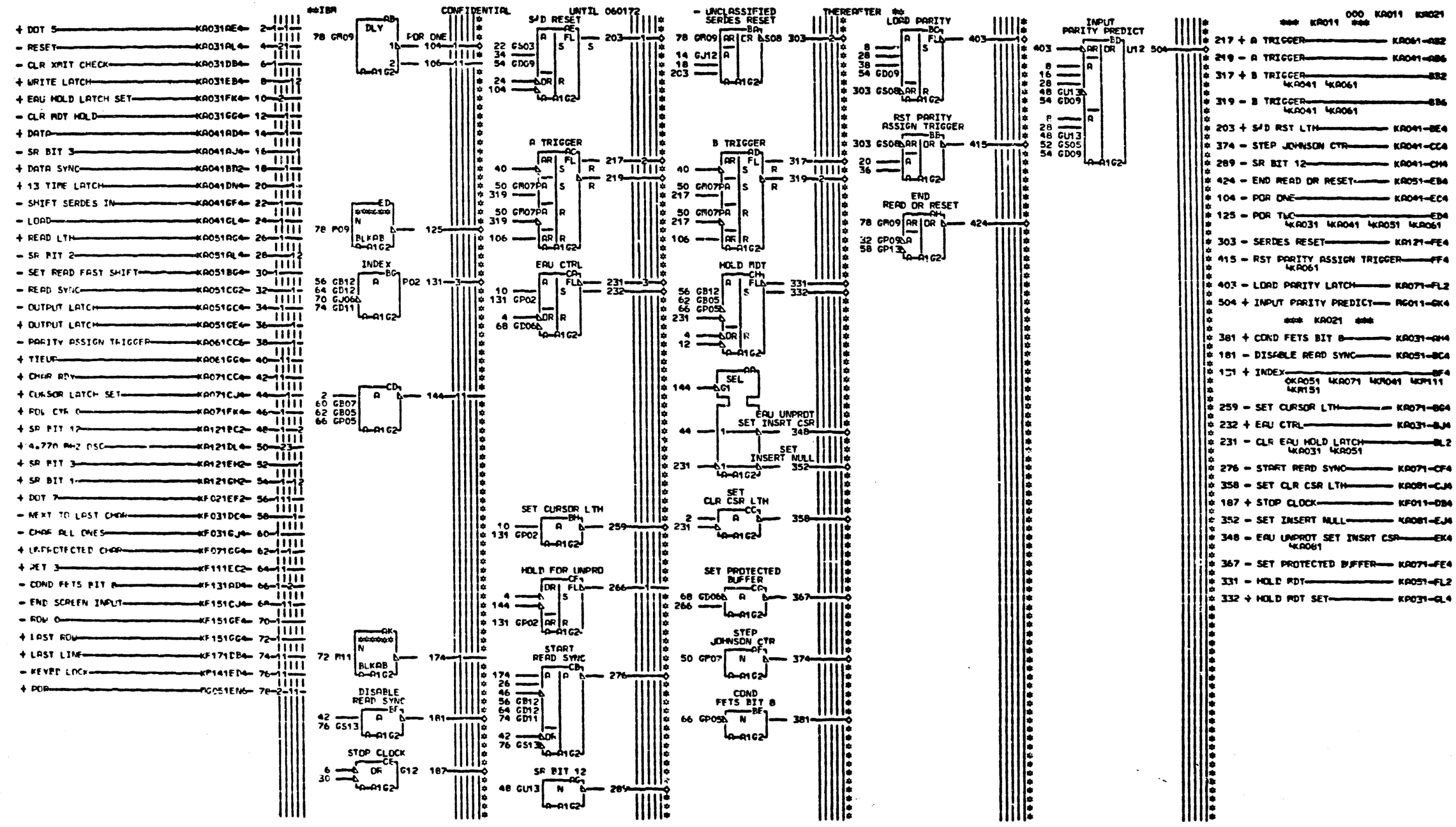
SIGNAL	BD SIDE 01A-A1	LIGHT PEN SIDE
-LP SW OPEN	M1C13	B05
	N1B11	
-LP SW CLOSED	L1B11	B08
	L1E13	
-LP STRIKE (SIGNAL)	L1B13	B03
+12V LP	L1C13	B02
-6V LP	M1D13	B09
GND	M1B13	B07
	M1A11	

SEE EC HISTORY		DRAWING TITLE
JUL 74	740382	3277-MOD 1 & 2 CONN & CABLE REF GUIDE
JAN 75	74124e	MACH 3277
MAR 75	741258	PART NO 1832870
		CLASSIFICATION

D

IBM CORP

A A1 1 5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+ DOT 5 KA031AE4
- RESET KA031AL4
- CLR XMIT CHECK KA031DB4
+ WRITE LATCH KA031EB4
+ EAU HOLD LATCH SET KA031FK4
- CLR MDT HOLD KA031GG4
+ DATA KA041AD4
- SR BIT 3 KA041AJ4
+ DATA SYNC KA041BH2
+ 13 TIME LATCH KA041DN4
- SHIFT SERDES IN KA041GF4
- LOAD KA041GL4
+ READ LTH KA051AG4
- SR BIT 2 KA051AL4
- SET READ FAST SHIFT KA051BG4
- READ SYNC KA051CG2
- OUTPUT LATCH KA051GC4
+ OUTPUT LATCH KA051GE4
- PARITY ASSIGN TRIGGER KA061CC4
+ TIEUP KA061GG4
+ CHAR RDY KA071CC4
+ CURSOR LATCH SET KA071CJ4
+ POL CYK O KA071FK4
+ SR BIT 12 KA121BC2
+ 4.770 MHZ OSC KA121DL4
+ SR BIT 3 KA121EH2
+ SR BIT 1 KA121GH2
+ DOT 7 KF021EF2
- NEXT TO LAST CHAR KF031DC4
- CHAR ALL ONES KF031GJ4
+ UNPROTECTED CHAR KF071GG4
+ SET 3 KF111EC2
- COND FETS BIT 8 KF131AD4
- END SCREEN INPUT KF151CJ4
- ROW 0 KF151GF4
+ LAST ROW KF151GG4
+ LAST LINE KF171DB4
- KEYED LOCK KP141ED4
+ POR PG051EN4
DLY 78 GR09 FOR ONE 104 106
ED N BLKAB 78 P09 125
INDEX BC A 56 GB12 64 GD12 70 GJ06 74 GD11 P02 131
CD A 2 60 GB07 62 GB05 66 GP05 144
AK N BLKAB 72 M11 174
DISABLE READ SYNC BF A 42 76 GS13 181
STOP CLOCK CE OR 6 30 G12 187
S/D RESET AE A FL S 22 GS03 34 GD09 24 104 OR R 203
A TRIGGER AC AR FL S R 40 50 GR07PA 319 50 GR07PA 319 106 AR R 217 219
EAU CTRL CA A FL S 10 131 GP02 4 68 GD06 OR R 231 232
SET CURSOR LTH BH A 10 131 GP02 259
HOLD FOR UNPRO CF DR FL S 4 144 131 GP02 AR R 266
START READ SYNC CB A P 174 26 46 56 GB12 64 GD12 74 GD11 42 76 GS13 276
SR BIT 12 AG N 48 GU13 285
- UNCLASSIFIED SERDES RESET
AR CR A 78 GR09 14 GJ12 18 203 303 GS08
B TRIGGER AD AR FL S R 40 50 GR07PA 217 50 GR07PA 217 106 AR R 317 319
HOLD MDT CH A FL S 56 GB12 62 GB05 66 GP05 231 4 12 OR R 331 332
SEL AA G1 144
EAU UNPROT SET INSRT CSR 44 1 348
SET INSERT NULL 231 1 352
SET CLR CSR LTH CC A 2 231 358
SET PROTECTED BUFFER CG A 68 GD06 266 367
STEP JOHNSON CTR CF N 50 GP07 374
COND FETS BIT 8 BE N 66 GP05 381
LOAD PARITY BC A FL S 8 28 38 54 GD09 303 GS08 303 403
RST PARITY ASSIGN TRIGGER BB AR OR A 303 GS08 20 36 415
END READ OR RESET CH AR OR A 78 GR09 32 GP09 58 GP13 424
INPUT PARITY PREDICT ED AR OR A 403 8 16 28 GU13 54 GD09 R 28 48 GU13 52 GS05 54 GD09 U12 504
000 KA011 KA021
*** KA011 ***
217 + A TRIGGER KA061-BB2
219 - A TRIGGER KA041-BB6
317 + B TRIGGER 4KA041 4KA061 BB2
319 - B TRIGGER 4KA041 4KA061 BB6
203 + S/D RST LTH KA041-BE4
374 - STEP JOHNSON CTR KA041-CC4
289 - SR BIT 12 KA041-CH4
424 - END READ OR RESET KA051-EB4
104 - POR DNE KA041-EC4
125 - POR TMO 4KA031 4KA041 4KA051 4KA061 ED4
303 - SERDES RESET KA121-FE4
415 - RST PARITY ASSIGN TRIGGER 4KA061 FF4
403 - LOAD PARITY LATCH KA071-FL2
504 + INPUT PARITY PREDICT RG011-GK4
*** KA021 ***
381 + COND FETS BIT 8 KA031-GH4
181 - DISABLE READ SYNC KA051-BC4
171 + INDEX 0KA051 4KA071 4KA041 4KA111 4KA151 BF4
259 - SET CURSOR LTH KA071-BG4
232 + EAU CTRL KA031-BJ4
231 - CLR EAU HOLD LATCH 4KA031 4KA051 BL2
276 - START READ SYNC KA071-CF4
358 - SET CLR CSR LTH KA081-CJ4
187 + STOP CLOCK KF011-DB4
352 - SET INSERT NULL KA081-EJ4
348 - EAU UNPROT SET INSRT CSR 4KA081 EK4
367 - SET PROTECTED BUFFER KA071-FE4
331 - HOLD MDT KA051-FL2
332 + HOLD MDT SET KA031-GL4
LOC. TYPE
A-A1G2 9068
PAGE VER EC LEV
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KA021 000 717946
I/O CONTROL
E.C.-HISTORY
717473
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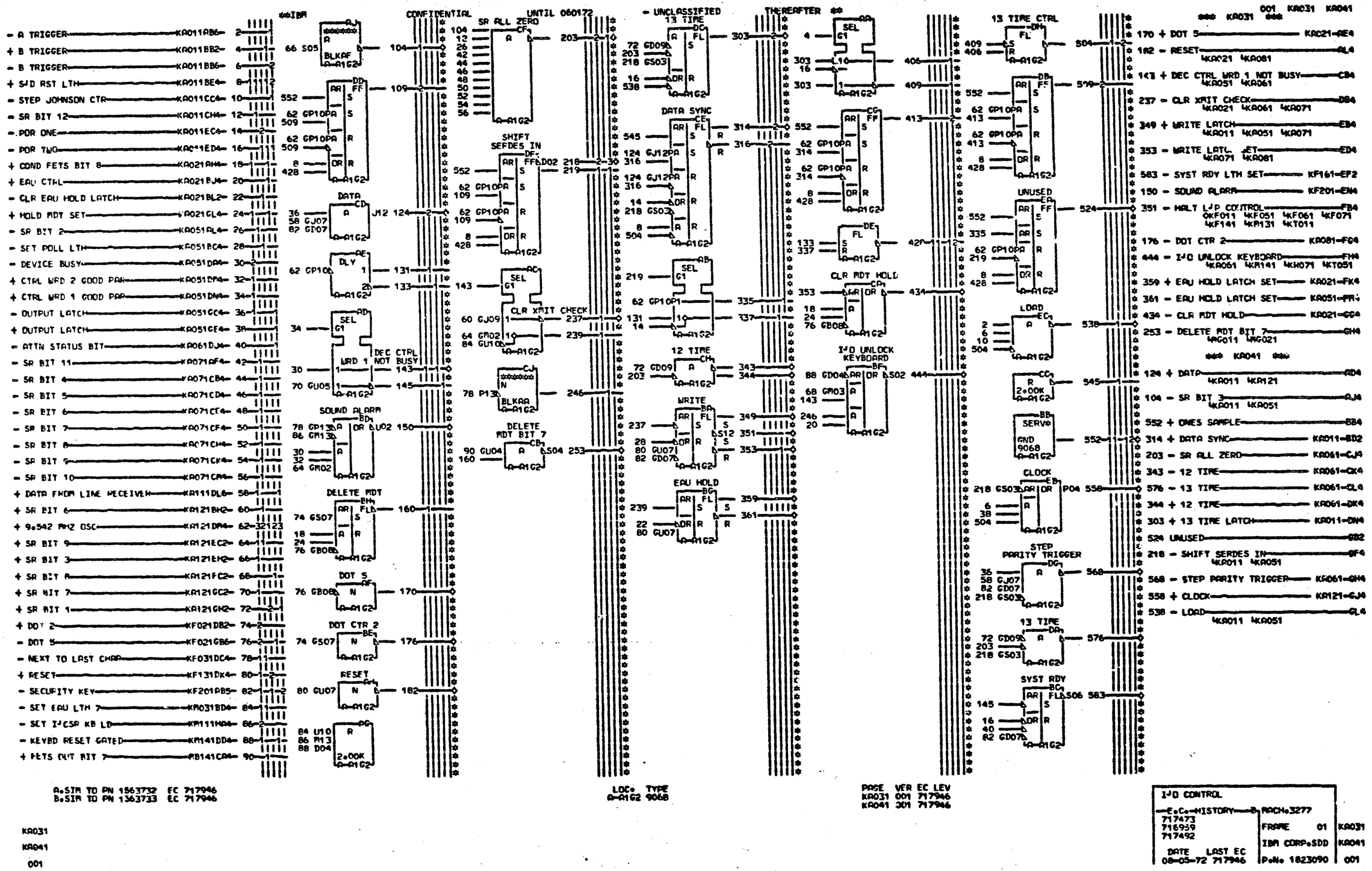
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CONFIDENTIAL
- UNCLASSIFIED
THEREAFTER **
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*** KA041 ***
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+ B TRIGGER KA011BB2 4
- B TRIGGER KA011BB6 6
+ SYD RST LTH KA011BE4 8
- STEP JOHNSON CTR KA011CC4 10
- SR BIT 12 KA011CH4 12
- PDR ONE KA011EC6 14
- PDR TWO KA011ED4 16
+ COND FETS BIT 8 KA021AH4 18
+ EAU CTRL KA021BJ4 20
- CLR EAU HOLD LATCH KA021BL2 22
+ HOLD MDT SET KA021GL4 24
- SR BIT 2 KA051AL4 26
- SET POLL LTH KA051BC4 28
- DEVICE BUSY KA051DA4 30
+ CTRL WRD 2 GOOD PAR KA051DP4 32
+ CTRL WRD 1 GOOD PAR KA051DN4 34
- OUTPUT LATCH KA051GC4 36
+ OUTPUT LATCH KA051GE4 38
- ATTN STATUS BIT KA061DJ4 40
- SR BIT 11 KA071AF4 42
- SR BIT 4 KA071CB4 44
- SR BIT 5 KA071CD4 46
- SR BIT 6 KA071CE4 48
- SR BIT 7 KA071CF4 50
- SR BIT 8 KA071CH4 52
- SR BIT 9 KA071CK4 54
- SR BIT 10 KA071CM4 56
+ DATA FROM LINE RECEIVER KA111DL6 58
+ SR BIT 6 KA121BH2 60
+ 9.542 MHZ OSC KA121DM4 62
+ SR BIT 9 KA121EC2 64
+ SR BIT 3 KA121EH2 66
+ SR BIT 8 KA121FC2 68
+ SR BIT 7 KA121GC2 70
+ SR BIT 1 KA121GH2 72
+ DOT 2 KF021DB2 74
- DOT 5 KF021GB6 76
- NEXT TO LAST CHAR KF031DC4 78
+ RESET KF131DK4 80
- SECURITY KEY KF201AB5 82
- SET EAU LTH 7 KM031BD4 84
- SET I/O CSR KB LD KM111MA4 86
- KEYBD RESET GATED KM141DD4 88
+ FETS OUT BIT 7 PB141CA4 90
SR ALL ZERO
UNTIL 060172
SHIFT SERDES IN
CLR XMIT CHECK
DEC CTRL WRD 1 NOT BUSY
SOUND ALARM
DELETE MDT
DOT 5
DOT CTR 2
RESET
DATA
DELAY
SEL
BLKAF
BLKAA
DELETE MDT BIT 7
13 TIME
DATA SYNC
12 TIME
WRITE
EAU HOLD
CLR MDT HOLD
I/O UNLOCK KEYBOARD
13 TIME CTRL
UNUSED
LOAD
CLOCK
STEP PARITY TRIGGER
SYST RDY
170 + DOT 5 KA021-BE4
182 - RESET 4KA021 4KA081 KL4
143 + DEC CTRL WRD 1 NOT BUSY 4KA051 4KA061 CB4
237 - CLR XMIT CHECK 4KA021 4KA061 4KA071 DB4
349 + WRITE LATCH 4KA011 4KA051 4KA071 EB4
353 - WRITE LATCH SET 4KA071 4KA081 ED4
583 - SYST RDY LTH SET KF161-EF2
150 - SOUND ALARM KF201-EM4
351 - HALT I/P CONTROL 0KF011 4KF051 4KF061 4KF071 4KF141 4KM131 4KT011 FB4
176 - DOT CTR 2 KA081-FC4
444 - I/O UNLOCK KEYBOARD 4KA051 4KA141 4KH071 4KT051 FH4
359 + EAU HOLD LATCH SET KA021-FK4
361 - EAU HOLD LATCH SET KA051-FP4
434 - CLR MDT HOLD KA021-GC4
253 - DELETE MDT BIT 7 4MA011 4MA021 GH4
124 + DATA 4KA011 4KA121 AD4
104 - SR BIT 3 4KA011 4KA051 AJ4
552 + ONES SAMPLE BB4
314 + DATA SYNC KA011-BD2
203 - SR ALL ZERO KA061-CJ4
343 - 12 TIME KA061-CK4
576 - 13 TIME KA061-CL4
344 + 12 TIME KA061-DK4
303 + 13 TIME LATCH KA011-DN4
524 UNUSED BB2
218 - SHIFT SERDES IN 4KA011 4KA051 BF4
568 - STEP PARITY TRIGGER KA061-GH4
558 + CLOCK KA121-GJ4
538 - LOAD 4KA011 4KA051 GL4
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B. SIM TO PN 1563733 EC 717946
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A-A1G2 9068
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KA041 001 717946
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717473
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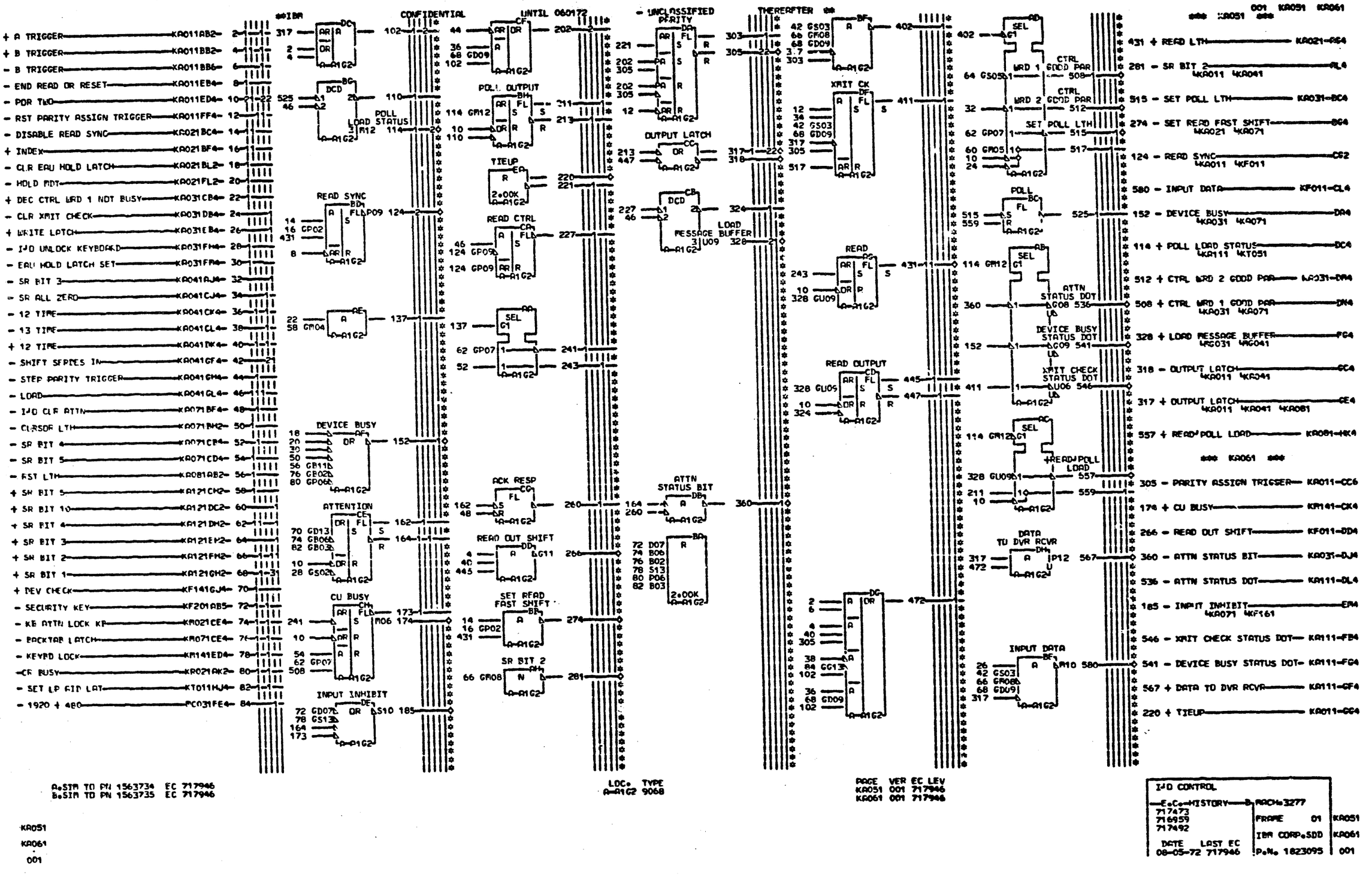
+ A TRIGGER — KA011AB2
+ B TRIGGER — KA011BB2
- B TRIGGER — KA011BB6
- END READ OR RESET — KA011EB4
- POR TMO — KA011ED4
- RST PARITY ASSIGN TRIGGER — KA011FF4
- DISABLE READ SYNC — KA021BC4
+ INDEX — KA021BF4
- CLR EAU HOLD LATCH — KA021BL2
- HOLD MDT — KA021FL2
+ DEC CTRL WRD 1 NOT BUSY — KA031CB4
- CLR XMIT CHECK — KA031DB4
+ WRITE LATCH — KA031EB4
- I/O UNLOCK KEYBOARD — KA031FH4
- EAU HOLD LATCH SET — KA031FP4
- SR BIT 3 — KA041AJ4
- SR ALL ZERO — KA041CJ4
- 12 TIME — KA041CK4
- 13 TIME — KA041CL4
+ 12 TIME — KA041DK4
- SHIFT SERIES IN — KA041GF4
- STEP PARITY TRIGGER — KA041GM4
- LOAD — KA041GL4
- I/O CLR ATTN — KA071BF4
- CURSOR LTH — KA071BM2
- SR BIT 4 — KA071CP4
- SR BIT 5 — KA071CD4
- RST LTH — KA081AB2
+ SR BIT 5 — KA121CM2
+ SR BIT 10 — KA121DC2
+ SR BIT 4 — KA121DM2
+ SR BIT 3 — KA121EM2
+ SR BIT 2 — KA121FM2
+ SR BIT 1 — KA121GH2
+ DEV CHECK — KF141GJ4
- SECURITY KEY — KF201AB5
- KB ATTN LOCK KP — KA021CE4
- BACKTAB LATCH — KA071CE4
- KEYPD LOCK — KA141ED4
- CR BUSY — KA021AK2
- SET LP ATT LAT — KT011HJ4
- 1920 + 480 — PC031FE4
IBM
CONFIDENTIAL
UNTIL 060172
UNCLASSIFIED
THEREAFTER
PARITY
OUTPUT LATCH
MESSAGE BUFFER
LOAD
POLL OUTPUT
TIEUP
READ CTRL
READ SYNC
POLL
LOAD STATUS
DEVICE BUSY
ATTENTION
CU BUSY
INPUT INHIBIT
ACK RESP
READ OUT SHIFT
SET READ FAST SHIFT
SR BIT 2
ATTN STATUS BIT
XMIT CK
READ
READ OUTPUT
SEL
CTRL WRD 1 GOOD PAR
CTRL WRD 2 GOOD PAR
SET POLL LTH
ATTN STATUS DOT
DEVICE BUSY STATUS DOT
XMIT CHECK STATUS DOT
READ/POLL LOAD
DATA TO DVR RCVR
INPUT DATA
001 KA051 KA061
431 + READ LTH — KA021-BB4
281 - SR BIT 2 — 4KA011 4KA041 — RL4
515 - SET POLL LTH — KA031-BC4
274 - SET READ FAST SHIFT — 4KA021 4KA071 — BB4
124 - READ SYNC — 4KA011 4KF011 — CB2
580 - INPUT DATA — KF011-CL4
152 - DEVICE BUSY — 4KA031 4KA071 — DA4
114 + POLL LOAD STATUS — 4KA111 4KT051 — DC4
512 + CTRL WRD 2 GOOD PAR — KA031-DB4
508 + CTRL WRD 1 GOOD PAR — 4KA031 4KA071 — DN4
328 + LOAD MESSAGE BUFFER — 4KA031 4KA041 — FC4
318 - OUTPUT LATCH — 4KA011 4KA041 — CC4
317 + OUTPUT LATCH — 4KA011 4KA041 4KA081 — CE4
557 + READ/POLL LOAD — KA081-HK4
*** KA061 ***
305 - PARITY ASSIGN TRIGGER — KA011-CC6
176 + CU BUSY — KA141-CK4
266 - READ OUT SHIFT — KF011-DD4
360 - ATTN STATUS BIT — KA031-DJ4
536 - ATTN STATUS DOT — KA111-DL4
185 - INPUT INHIBIT — 4KA071 4KF161 — EM4
546 - XMIT CHECK STATUS DOT — KA111-FB4
541 - DEVICE BUSY STATUS DOT — KA111-FG4
567 + DATA TO DVR RCVR — KA111-GF4
220 + TIEUP — KA011-CC4
A-SIM TO PN 1563734 EC 717946
B-SIM TO PN 1563735 EC 717946
LOC. TYPE
A-A1G2 9068
PAGE VER EC LEV
KA051 001 717946
KA061 001 717946
I/O CONTROL
E.C.-HISTORY
717473
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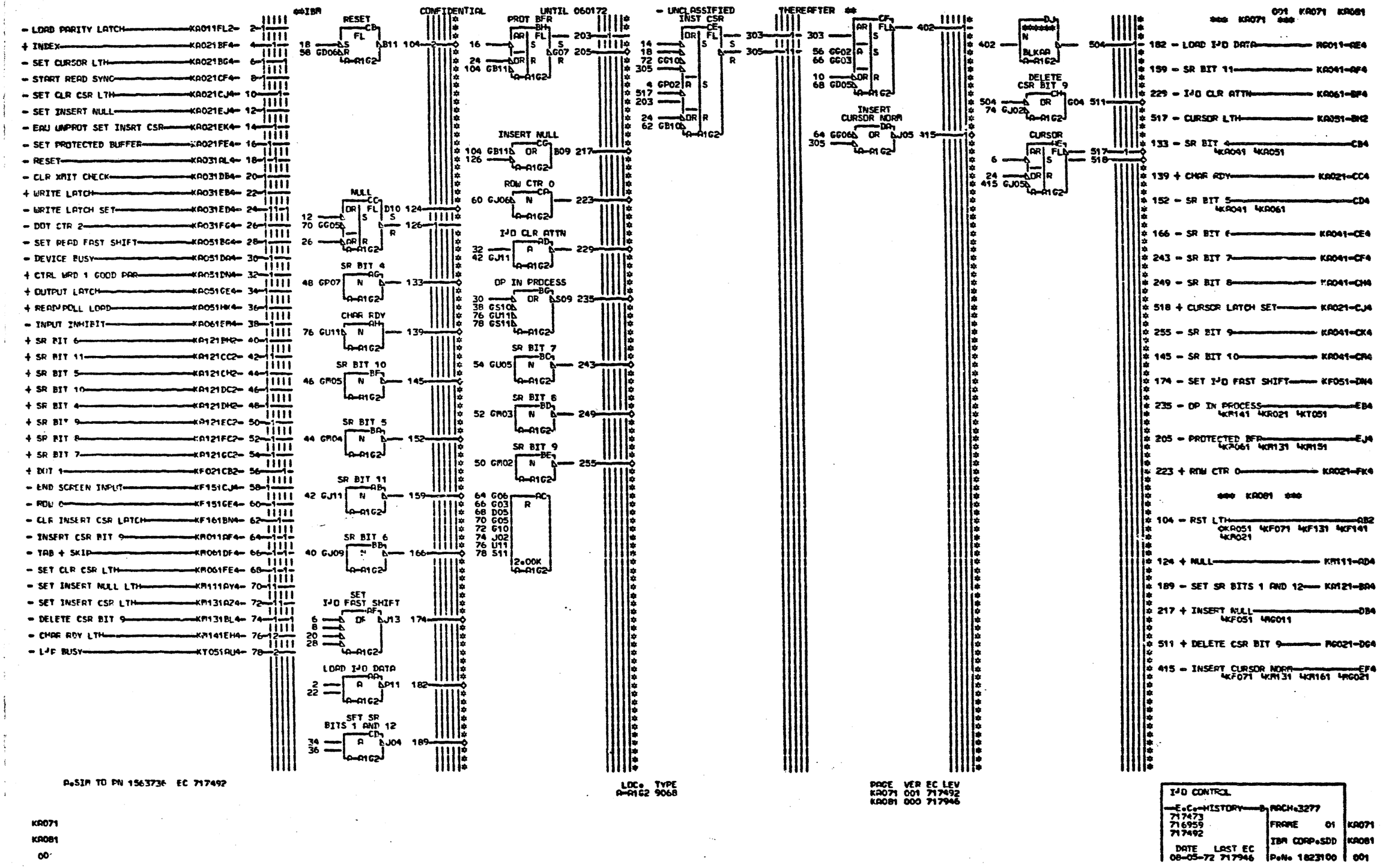

A.SIM TO PN 1563736 EC 717492

LOC. TYPE
A-A1G2 9068

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KA081	000	717946

I/O CONTROL

E.C.-HISTORY — B. MACH.=3277

717473
716959
717492

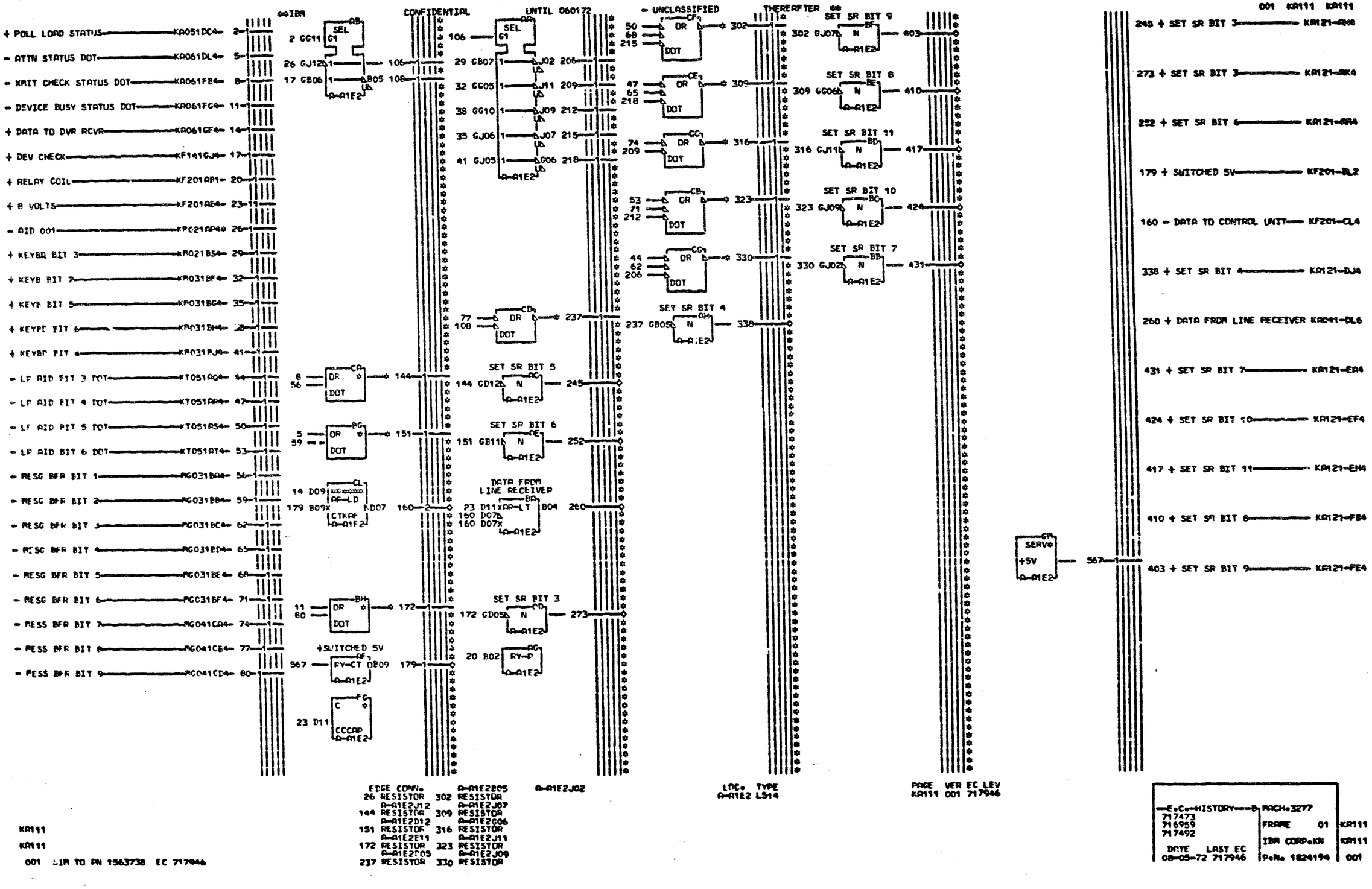
FRAME 01 KA071

IBA CORP.SDD KA081

DATE LAST EC
08-05-72 717946

P.No 1823100 001

KA071
KA081
00



KA111
KA111
001 LIR TO PN 1563738 EC 717946

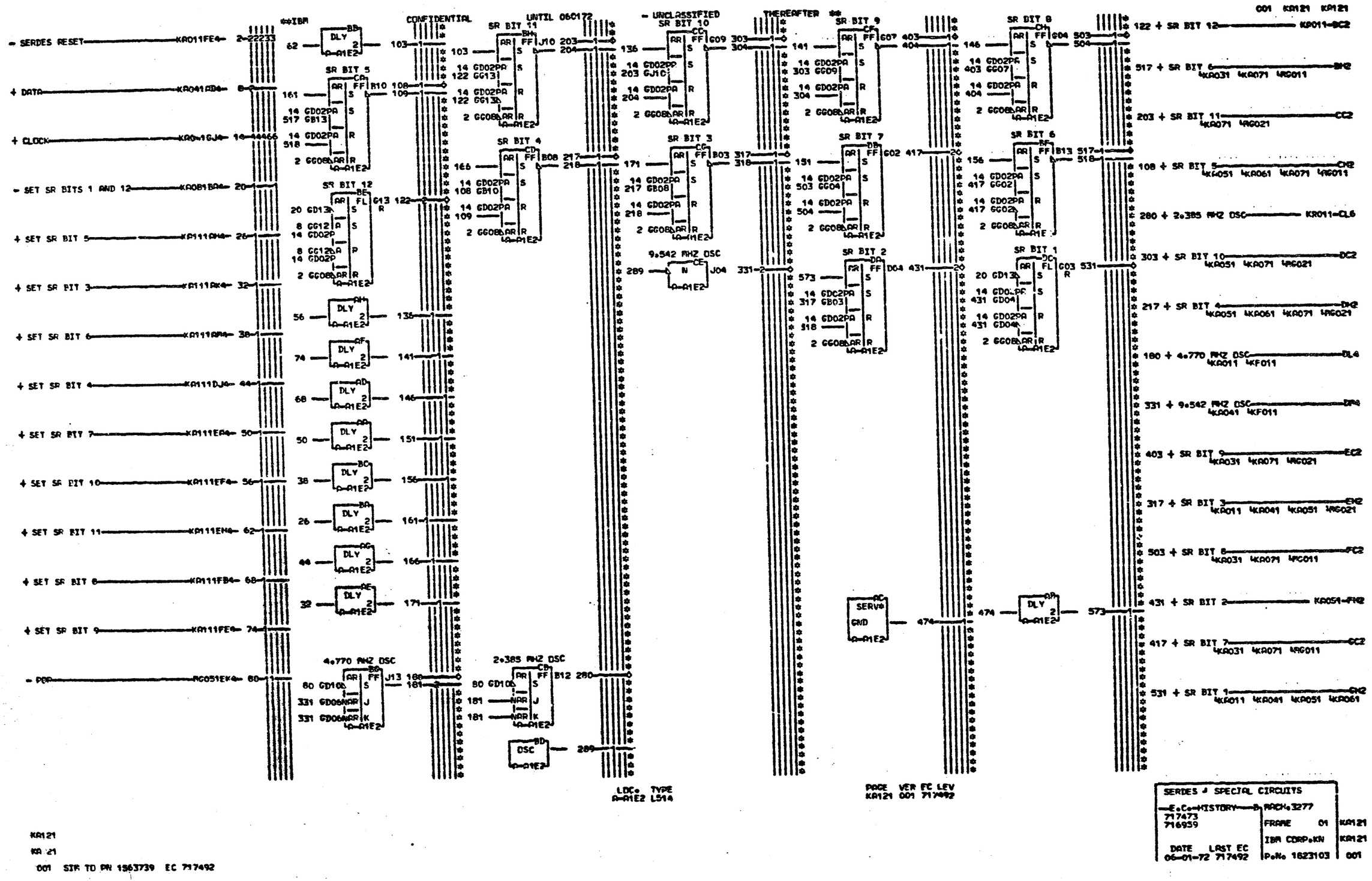
EDGE CONN. A-A1E2B05
26 RESISTOR 302 RESISTOR
A-A1E2J12 A-A1E2J07
144 RESISTOR 309 RESISTOR
A-A1E2D12 A-A1E2G06
151 RESISTOR 316 RESISTOR
A-A1E2E11 A-A1E2J11
172 RESISTOR 323 RESISTOR
A-A1E2D05 A-A1E2J09
237 RESISTOR 330 RESISTOR

A-A1E2J02

LOC. TYPE
A-A1E2 LS14

PAGE VER EC LEV
KA111 001 717946

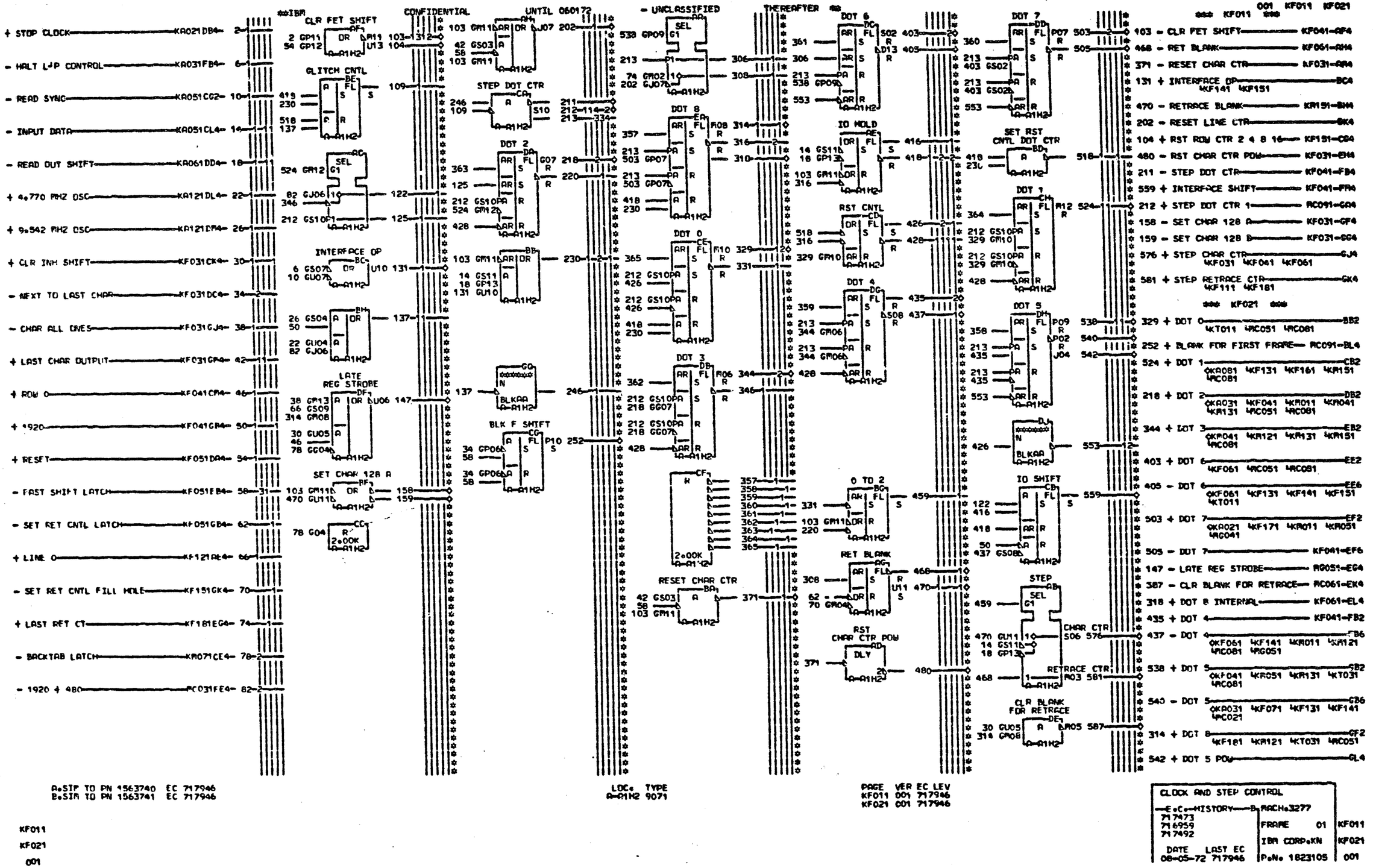
ECO-HISTORY		PACH.3277	
717473			
716959		FRAME 01	KA111
717492		IBM CORP.KN	KA111
DATE	LAST EC	P.N. 1824194	001
08-05-72	717946		



KA121

KA 21

001 SIR TD PN 1963739 EC 717492



A.SIP TO PN 1563740 EC 717946
B.SIM TO PN 1563741 EC 717946

LOC. TYPE
A-A1H2 9071

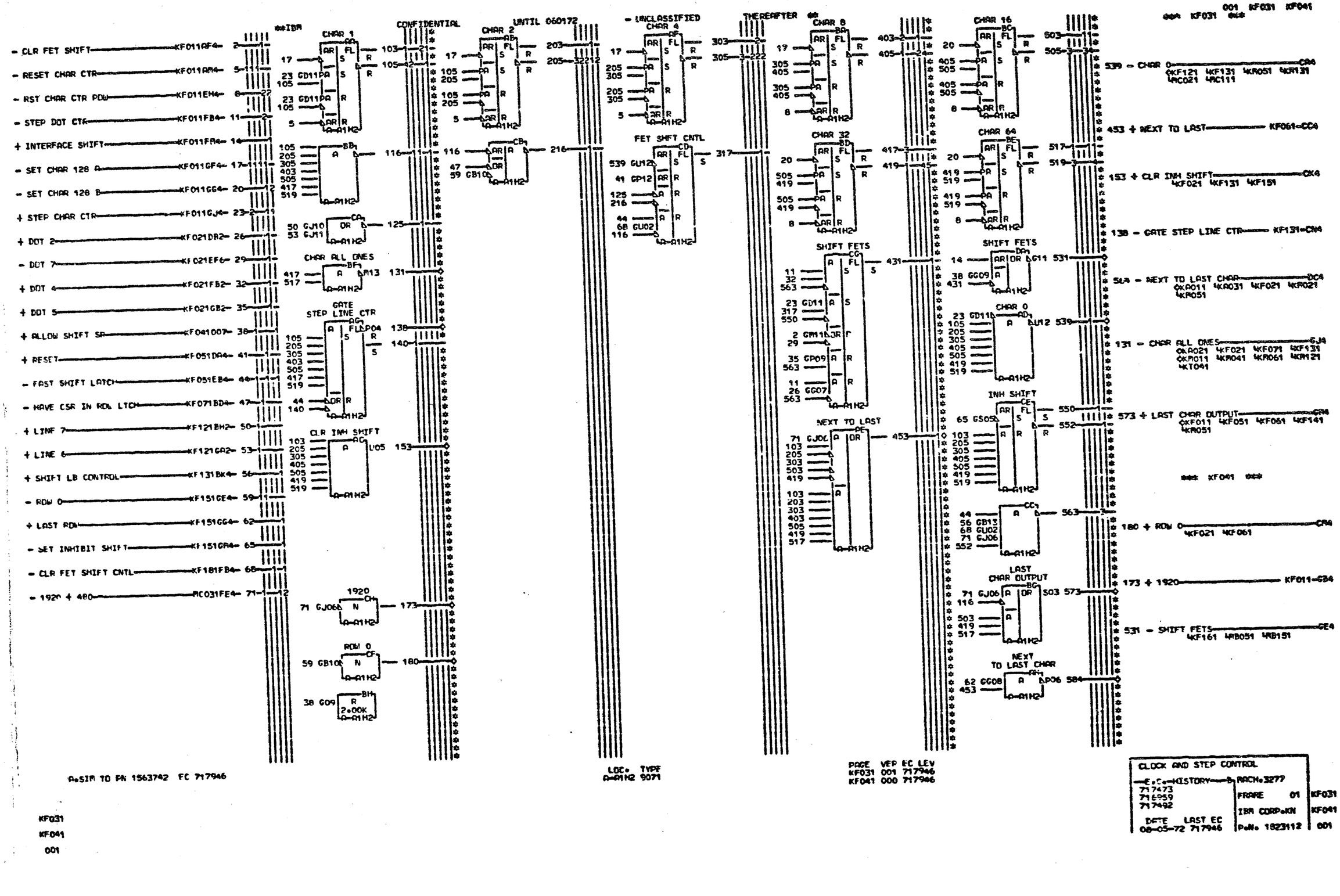
PAGE	VER	EC LEV
KF011	001	717946
KF021	001	717946

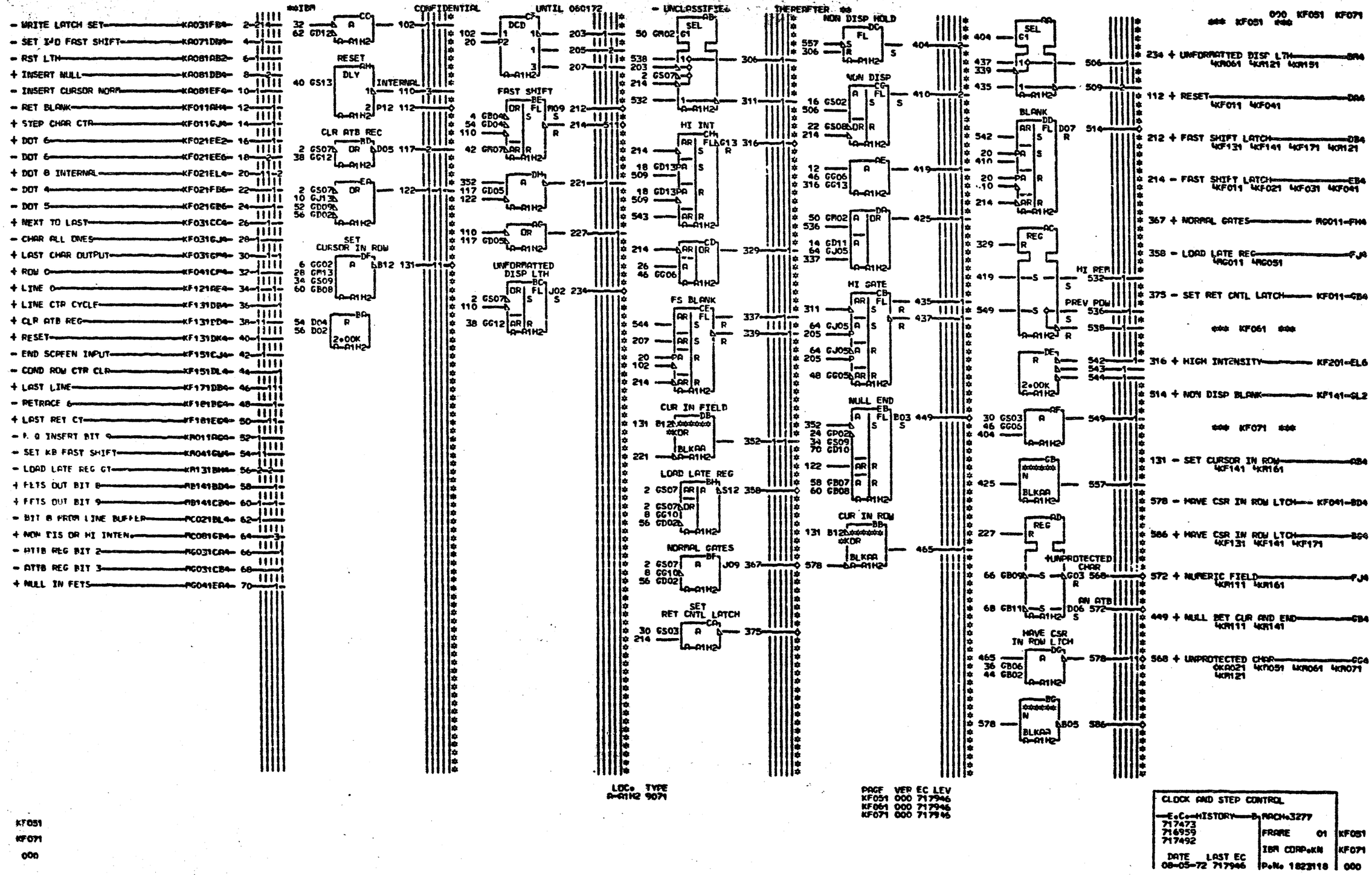
CLOCK AND STEP CONTROL

E.C. HISTORY — B. RACH.3277

717473	FRAME 01	KF011
716959	IBM CORP.KN	KF021
717492		
DATE LAST EC	P.No. 1823105	001
08-05-72 717946		

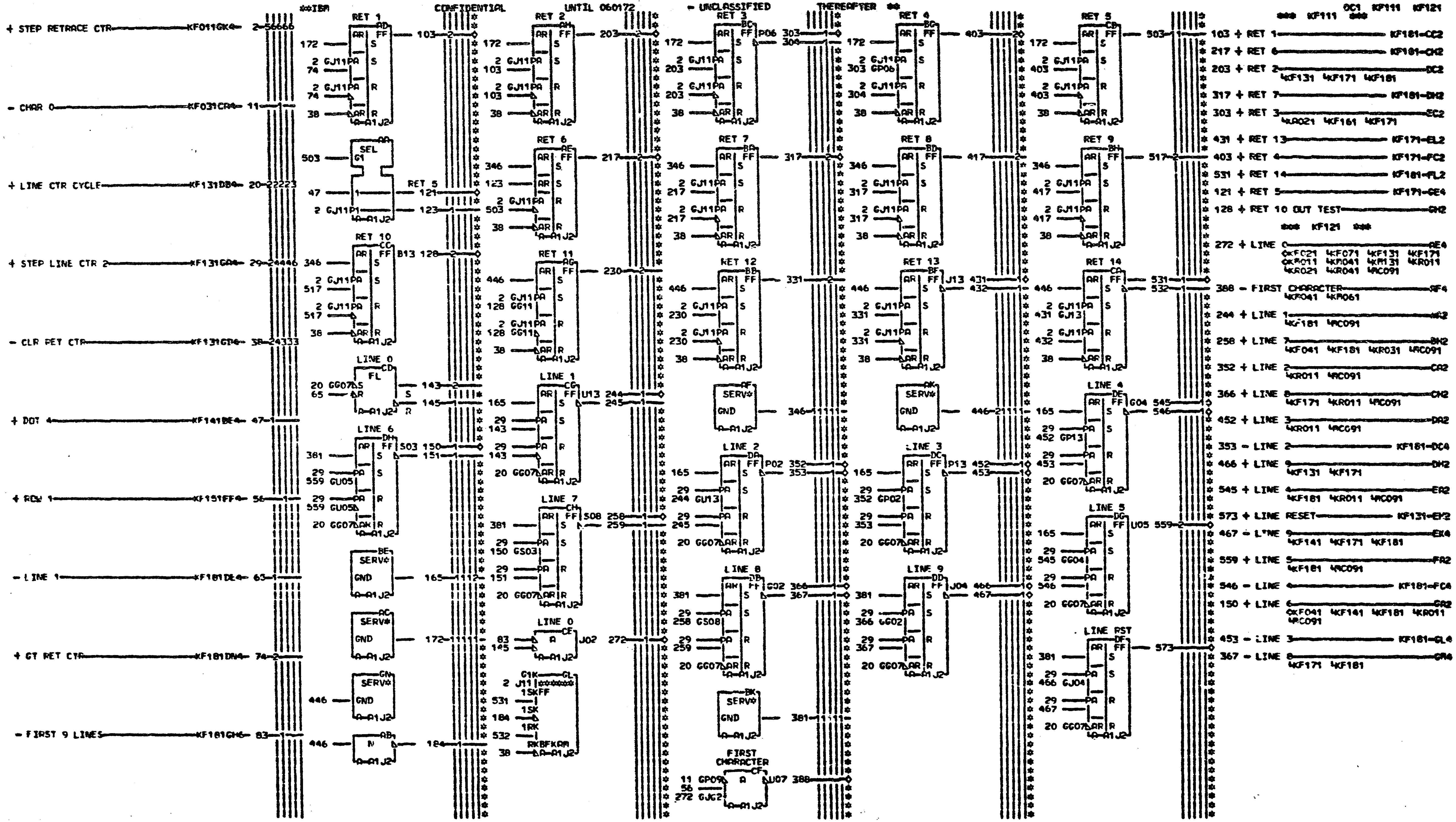
KF011
KF021
001


**IBM
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
- CLR FET SHIFT KF011AF4- 2
- RESET CHAR CTR KF011AH4- 5
- RST CHAR CTR PDW KF011EH4- 8
- STEP DOT CTR KF011FB4- 11
+ INTERFACE SHIFT KF011FH4- 14
- SET CHAR 128 A KF011GF4- 17
- SET CHAR 128 B KF011GG4- 20
+ STEP CHAR CTR KF011GJ4- 23
+ DOT 2 KF021DB2- 26
- DOT 7 KF021EF4- 29
+ DOT 4 KF021FB2- 32
+ DOT 5 KF021GB2- 35
+ ALLOW SHIFT SR KF041DD7- 38
+ RESET KF051DA4- 41
- FAST SHIFT LATCH KF051EB4- 44
- HAVE CSR IN RDB LTCH KF071BD4- 47
+ LINE 7 KF121BH2- 50
+ LINE 6 KF121GA2- 53
+ SHIFT LB CONTROL KF131BK4- 56
- RDW 0 KF151GE4- 59
+ LAST RDW KF151GG4- 62
- SET INHIBIT SHIFT KF151GP4- 65
- CLR FET SHIFT CNTL KF181FB4- 68
- 1920 + 480 MC031FE4- 71
CHAR 1
CHAR 2
CHAR 4
CHAR 8
CHAR 16
CHAR 32
CHAR 64
CHAR ALL ONES
CHAR 0
FET SHFT CNTL
SHIFT FETS
INH SHIFT
NEXT TO LAST
LAST CHAR OUTPUT
NEXT TO LAST CHAR
GATE STEP LINE CTR
CLR INH SHIFT
1920
ROW 0
A=SIM TO PN 1563742 EC 717946
KF031
KF041
001
LOC= TYPE
A=A1H2 9071
001 KF031 KF041
*** KF031 ***
539 - CHAR 0 CR4
4KF121 4KF131 4KR051 4KR131
4RC021 4RC111
453 + NEXT TO LAST KF061-CC4
153 + CLR INH SHIFT CX4
4KF021 4KF131 4KF151
138 - GATE STEP LINE CTR KF131-CN4
5?? - NEXT TO LAST CHAR DC4
4KA011 4KA031 4KF021 4KR021
4KR051
131 - CHAR ALL ONES GJ4
4KA021 4KF021 4KF071 4KF131
4KR011 4KR041 4KR061 4KR121
4KT041
550 573 + LAST CHAR OUTPUT CR4
4KF011 4KF051 4KF061 4KF141
4KR051
*** KF041 ***
180 + ROW 0 CR4
4KF021 4KF061
173 + 1920 KF011-CB4
531 - SHIFT FETS GE4
4KF161 4RB051 4RB151
PAGE VER EC LEV
KF031 001 717946
KF041 000 717946
CLOCK AND STEP CONTROL
E.C.-HISTORY-
717473
716959
717492
DATE LAST EC
08-05-72 717946
RACH=3277
FRAME 01 KF031
IBM CORP.KN KF041
P.N. 1823112 001


**IBM
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
- WRITE LATCH SET
- SET I*O FAST SHIFT
- RST LTH
+ INSERT NULL
- INSERT CURSOR NORM
- RET BLANK
+ STEP CHAR CTR
+ DOT 6
- DOT 6
+ DOT 8 INTERNAL
- DOT 4
- DOT 5
+ NEXT TO LAST
- CHAR ALL ONES
+ LAST CHAR OUTPUT
+ ROW 0
+ LINE 0
+ LINE CTR CYCLE
+ CLR ATB REG
+ RESET
- END SCREEN INPUT
- COND ROW CTR CLR
+ LAST LINE
- RETRACE 6
+ LAST RET CT
- P. O INSERT BIT 9
- SET KB FAST SHIFT
- LOAD LATE REG CT
+ FETS OUT BIT 8
+ FETS OUT BIT 9
- BIT 8 FROM LINE BUFFER
+ NON DIS OR HI INTEN
- ATTB REG BIT 2
- ATTB REG BIT 3
+ NULL IN FETS
RESET
DLY
INTERNAL
CLR ATB REC
SET
CURSOR IN ROW
FAST SHIFT
UNFORMATTED
DISP LTH
HI INT
FS BLANK
CUR IN FIELD
LOAD LATE REG
NORMAL GATES
SET
RET CNTL LATCH
NON DISP HOLD
NON DISP
NULL END
HI GATE
CUR IN ROW
BLANK
REG
UNPROTECTED
CHAR
AN ATB
HAVE CSR
IN ROW LTCH
HI RES
PREV POW
*** KF051 ***
234 + UNFORMATTED DISP LTH
112 + RESET
212 + FAST SHIFT LATCH
214 - FAST SHIFT LATCH
367 + NORMAL GATES
358 - LOAD LATE REG
375 - SET RET CNTL LATCH
*** KF061 ***
316 + HIGH INTENSITY
514 + NON DISP BLANK
*** KF071 ***
131 - SET CURSOR IN ROW
578 - HAVE CSR IN ROW LTCH
586 + HAVE CSR IN ROW LTCH
572 + NUMERIC FIELD
449 + NULL BET CUR AND END
568 + UNPROTECTED CHAR
LOC. TYPE
A-A1H2 9071
PAGE VER EC LEV
KF051 000 717946
KF061 000 717946
KF071 000 717946
CLOCK AND STEP CONTROL
E.C.-HISTORY
717473
716959
717492
DATE LAST EC
08-05-72 717946
MACH.3277
FRAME 01
IBM CORP.-KN
P.N. 1823118
KF051
KF071
000

**IBM CONFIDENTIAL UNTIL 060172 - UNCLASSIFIED THEREAFTER **

*** KF111 ***   OC1 KF111 KF121



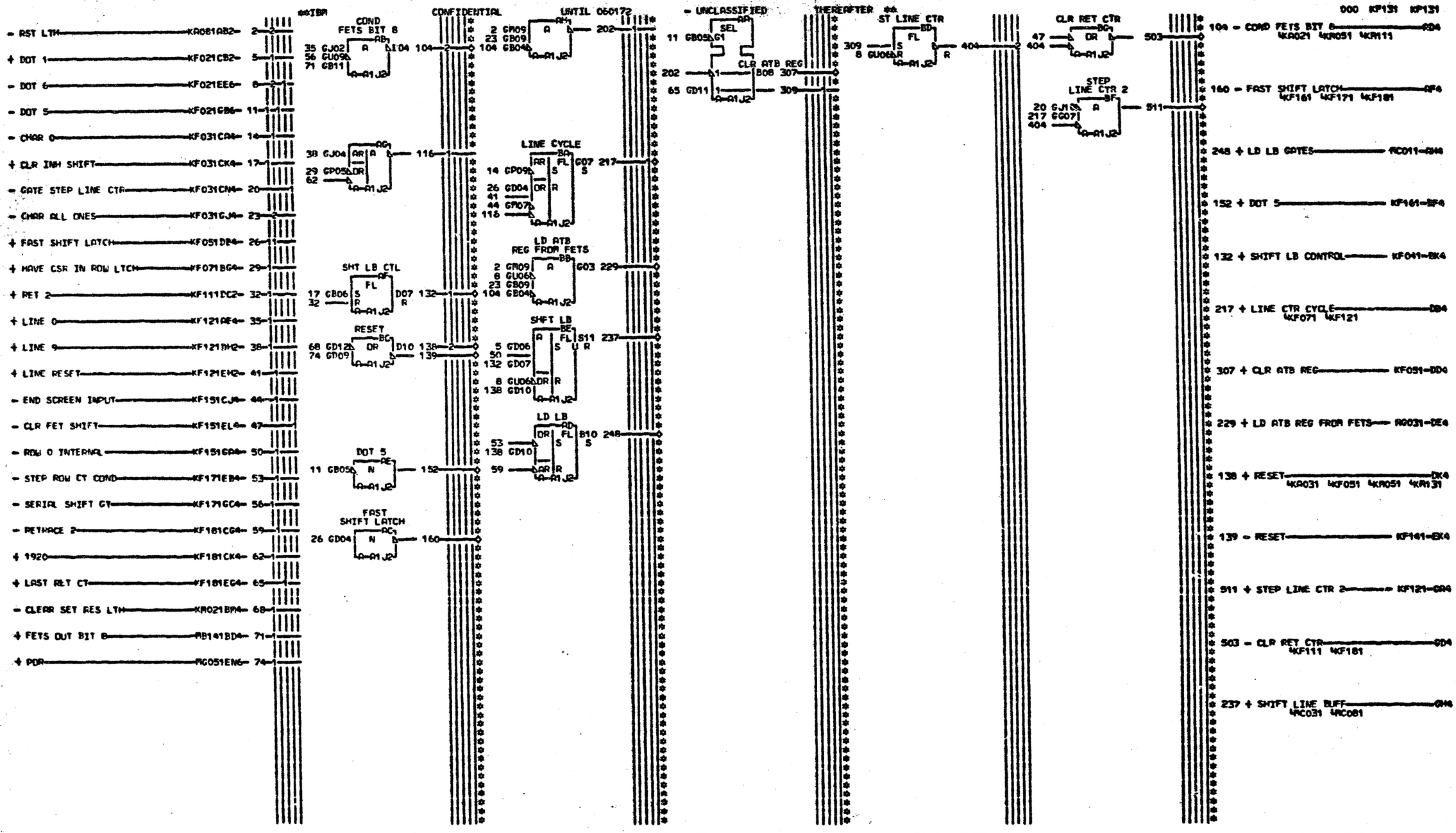
B.SIM TO PN 1563748 EC 717946

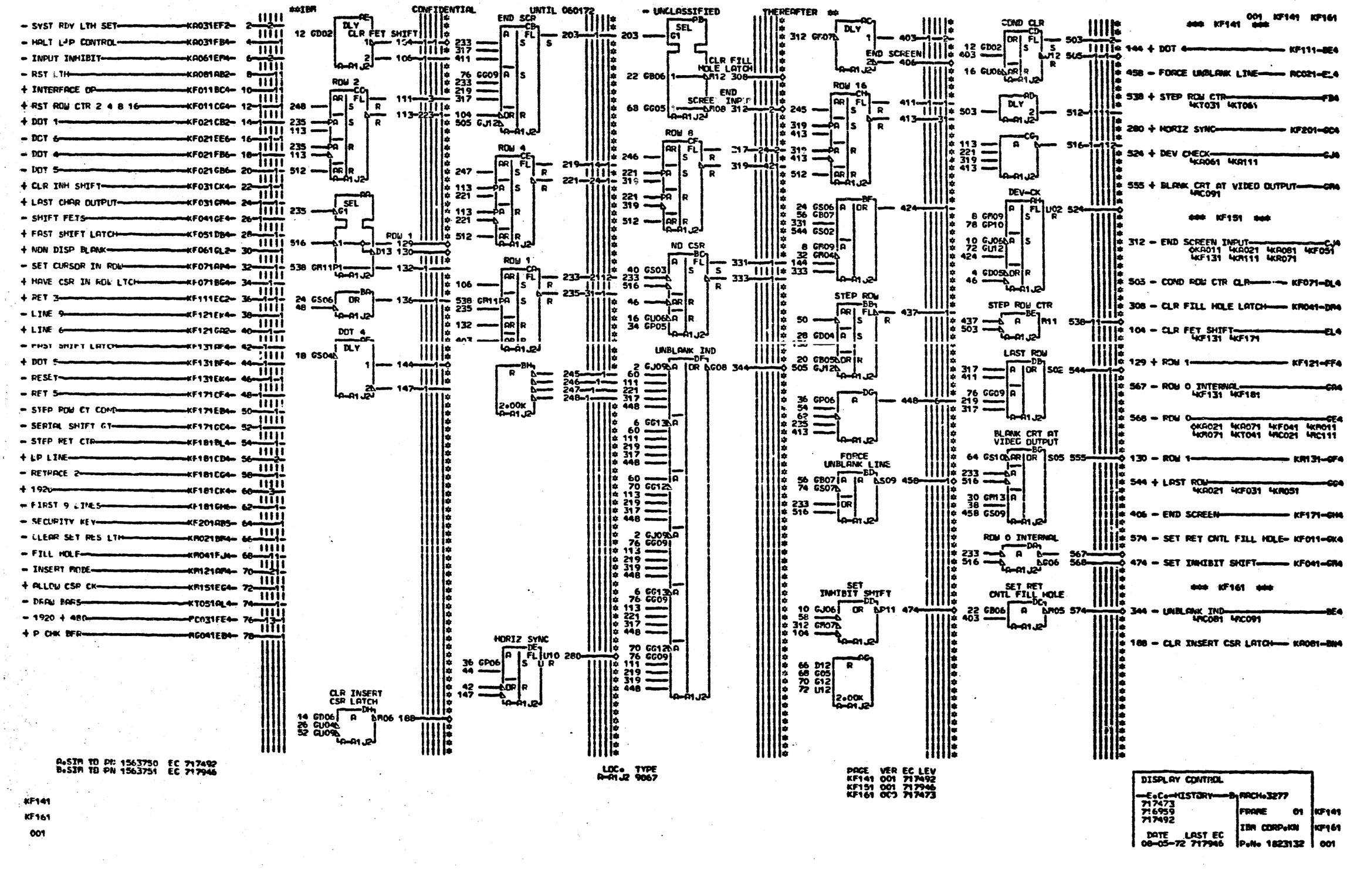
LOC. TYPE
A-A1J2 9067

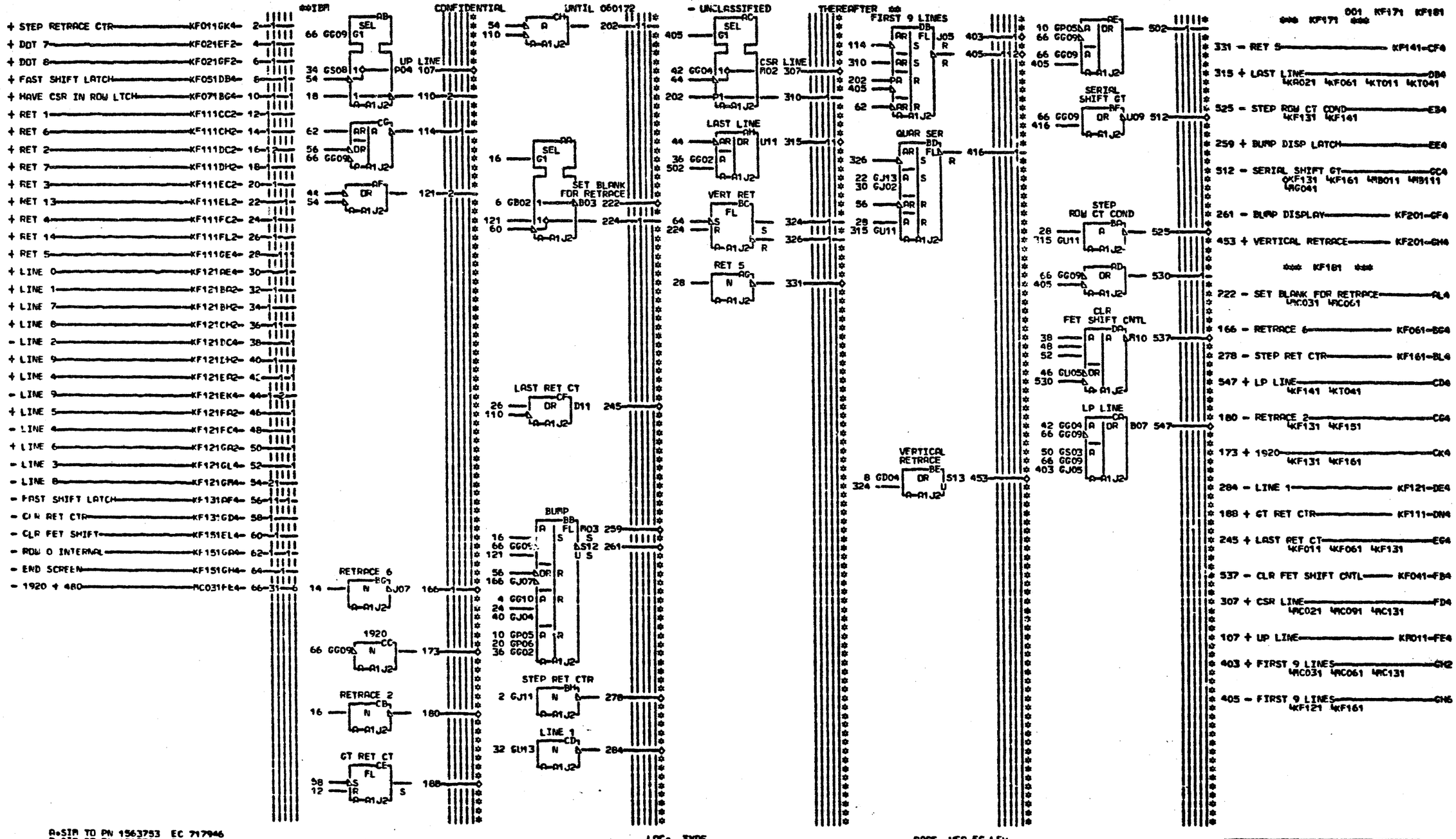
PAGE VER EC LEV
KF111 000 717492
KF121 001 717946

KF111
KF121
001

DISPLAY CONTROL		
--E.C.-HISTORY-- B	MACH.3277	
717473 717492	FRAME 01	KF111
	IBM CORP.KN	KF121
DATE LAST EC 08-05-72 717946	P.N. 1823123	001


**IBR
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
000 KF131 KF131
COND FETS BIT 8
ST LINE CTR
CLR RET CTR
STEP LINE CTR 2
LINE CYCLE
CLR ATB REG
SHFT LB CTL
LD ATB REG FROM FETS
RESET
SHFT LB
LD LB
DOT 5
FAST SHIFT LATCH
- RST LTH KA081AB2- 2
+ DOT 1 KF021CB2- 5
- DOT 6 KF021EE6- 8
- DOT 5 KF021GB6- 11
- CHAR 0 KF031CA4- 14
+ CLR INH SHIFT KF031CK4- 17
- GATE STEP LINE CTR KF031CN4- 20
- CHAR ALL ONES KF031GJ4- 23
+ FAST SHIFT LATCH KF051DB4- 26
+ HAVE CSR IN ROW LTCH KF071BG4- 29
+ RET 2 KF111DC2- 32
+ LINE 0 KF121AE4- 35
+ LINE 9 KF121HH2- 38
+ LINE RESET KF121EH2- 41
- END SCREEN INPUT KF151CJ4- 44
- CLR FET SHIFT KF151EL4- 47
- ROW 0 INTERNAL KF151GA4- 50
- STEP ROW CT COND KF171EB4- 53
- SERIAL SHIFT CT KF171GC4- 56
- RETRACE 2 KF181CG4- 59
+ 1920 KF181CK4- 62
+ LAST RLT CT KF181EG4- 65
- CLEAR SET RES LTH KA021BA4- 68
+ FETS OUT BIT 8 RB141BD4- 71
+ POR MC051EN6- 74
104 - COND FETS BIT 8 4KA021 4KA051 4KA111 -BD4
160 - FAST SHIFT LATCH 4KF161 4KF171 4KF181 -BF4
248 + LD LB GATES RC011-AM4
152 + DOT 5 KF161-BF4
132 + SHIFT LB CONTROL KF041-BK4
217 + LINE CTR CYCLE 4KF071 4KF121 -BB4
307 + CLR ATB REG KF051-BD4
229 + LD ATB REG FROM FETS RA031-DE4
138 + RESET 4KA031 4KF051 4KA051 4KA131 -DK4
139 - RESET KF141-EK4
511 + STEP LINE CTR 2 KF121-GA4
503 - CLR RET CTR 4KF111 4KF181 -GD4
237 + SHIFT LINE BUFF 4RC031 4RC081 -GM4
LOC. TYPE
A-A1J2 9067
PAGE VER EC LEV
KF131 000 717946
DISPLAY CONTROL
E.C.-HISTORY- B.RACK.3277
717473
717492
FRAME 01
IBR CORP.KN
DATE LAST EC
08-05-72 717946
P.No 1823127
000
KF131
KF131
KF131
KF131


**IBM CONFIDENTIAL -- UNCLASSIFIED UNTIL 060172 THEREAFTER **
- SYST RDY LTH SET KA031EF2 2
- HALT L/P CONTROL KA031FB4 4
- INPUT INHIBIT KA061EP4 6
- RST LTH KA081AB2 8
+ INTERFACE OP KF011BC4 10
+ RST ROW CTR 2 4 8 16 KF011CG4 12
+ DOT 1 KF021CB2 14
- DOT 6 KF021EE6 16
- DOT 4 KF021FB6 18
- DOT 5 KF021GB6 20
+ CLR INH SHIFT KF031CK4 22
+ LAST CHAR OUTPUT KF031GP4 24
- SHIFT FETS KF041GF4 26
+ FAST SHIFT LATCH KF051DB4 28
+ NON DISP BLANK KF061GL2 30
- SET CURSOR IN ROW KF071AP4 32
+ HAVE CSR IN ROW LTCH KF071BG4 34
+ RET 3 KF111EC2 36
- LINE 9 KF121EP4 38
+ LINE 6 KF121GA2 40
- FAST SHIFT LATCH KF131AF4 42
+ DOT 5 KF131BF4 44
- RESET KF131EK4 46
+ RET 5 KF171CF4 48
- STEP ROW CT CONT KF171EB4 50
- SERIAL SHIFT CT KF171GC4 52
- STEP RET CTR KF181BL4 54
+ LP LINE KF181CD4 56
- RETRACE 2 KF181CG4 58
+ 192V KF181CK4 60
- FIRST 9 LINES KF181GM6 62
- SECURITY KEY KF201AB5 64
- CLEAR SET RES LTH KA021BP4 66
- FILL HOLE KA041FJ4 68
- INSERT MODE KA121AP4 70
+ ALLOW CSR CK KA151EG4 72
- DRAW BARS KT051AL4 74
- 1920 + 480 PC031FE4 76
+ P CHK BFR AG041EB4 78
DLY CLR FET SHIFT
ROW 2
SEL
ROW 1
DOT 4
ROW 4
ROW 1
END SCR
2.00K
HORIZ SYNC
CLR INSERT CSR LATCH
ROW 8
ND CSR
UNBLANK IND
SEL
CLR FILL HOLE LATCH
END SCREEN INPUT
DLY
END SCREEN
ROW 16
STEP ROW CTR
LAST ROW
FORCE UNBLANK LINE
SET INHIBIT SHIFT
SET RET CNTL FILL HOLE
COND CLR
DEV=CK
BLANK CRT AT VIDEO OUTPUT
ROW 0 INTERNAL
A=SIM TO PN 1563750 EC 717492
B=SIM TO PN 1563751 EC 717946
LOC= TYPE
A-A1J2 9067
PAGE VER EC LEV
KF141 001 717492
KF151 001 717946
KF161 001 717473
001 KF141 KF161
*** KF141 ***
144 + DOT 4 KF111-BE4
458 - FORCE UNBLANK LINE RC021-EL4
538 + STEP ROW CTR FB4
4KT031 4KT061
280 + HORIZ SYNC KF201-GC4
524 + DEV CHECK GJ4
4KA061 4KA111
555 + BLANK CRT AT VIDEO OUTPUT GR4
4RC091
*** KF151 ***
312 - END SCREEN INPUT CJ4
4KA011 4KA021 4KA081 4KF051
4KF131 4KR111 4KR071
503 - COND ROW CTR CLR KF071-DL4
308 - CLR FILL HOLE LATCH KA041-DR4
104 - CLR FET SHIFT EL4
4KF131 4KF171
129 + ROW 1 KF121-FF4
567 - ROW 0 INTERNAL GR4
4KF131 4KF181
568 - ROW 0 GE4
4KA021 4KA071 4KF041 4KA011
4KR071 4KT041 4RC021 4RC111
130 - ROW 1 KR131-GF4
544 + LAST ROW GG4
4KA021 4KF031 4KR051
406 - END SCREEN KF171-GH4
574 - SET RET CNTL FILL HOLE KF011-GK4
474 - SET INHIBIT SHIFT KF041-GR4
*** KF161 ***
344 - UNBLANK IND BE4
4RC081 4RC091
188 - CLR INSERT CSR LATCH KA081-BN4
DISPLAY CONTROL
E.C.= HISTORY B. ARCH.=3277
717473
716959
717492
FRAME 01 KF141
IBM CORP.=KN KF161
DATE LAST EC
08-03-72 717946
P.N.= 1823132 001
#KF141
KF161
001



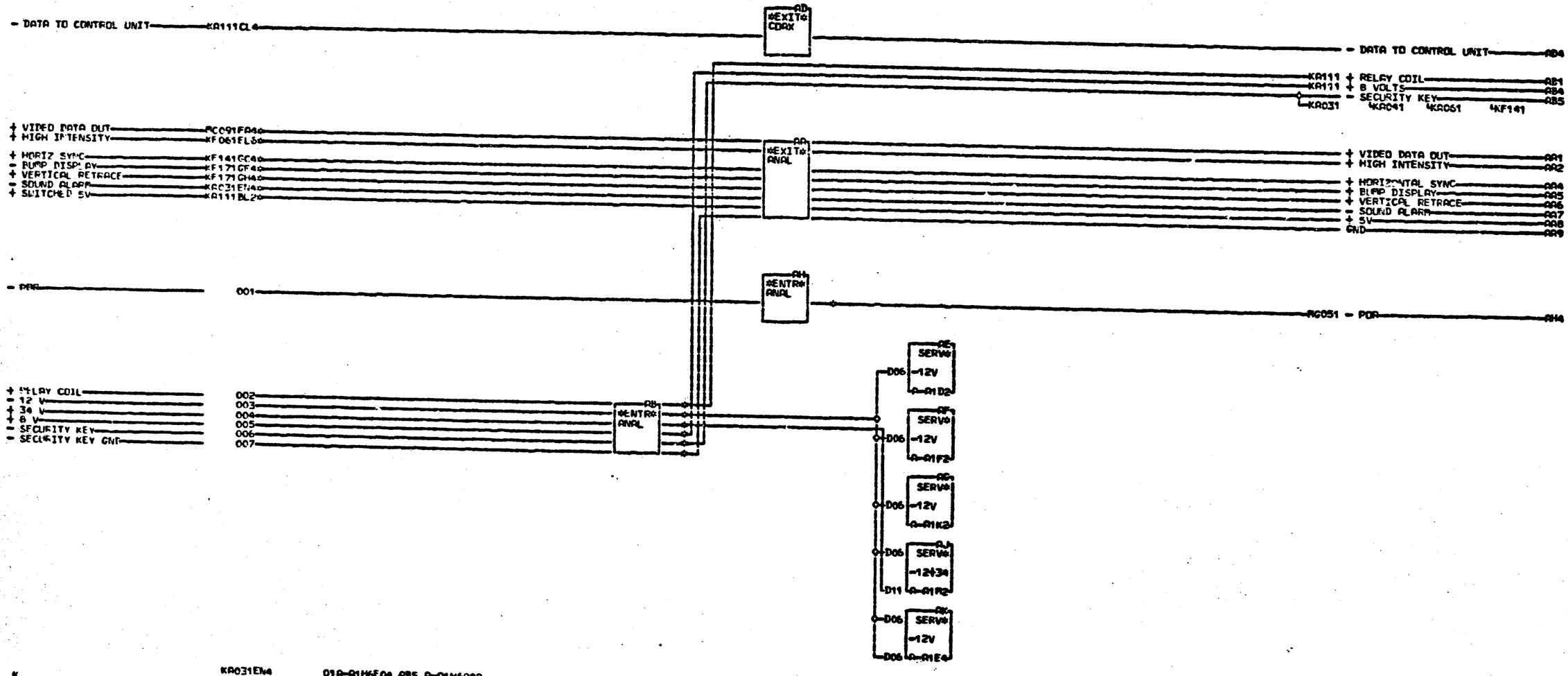
A=SIM TO PN 1563753 EC 717946
B=SIM TO PN 1563754 EC 717473

LOC= TYPE
A-A1J2 9067

PAGE VER EC LEV
KF171 001 717946
KF181 001 717473

DISPLAY CONTROL
E=C=HISTORY B=ARCH=3277
717473
717492
FRAME 01 KF171
IBM CORP=KN KF181
DATE LAST EC
08-05-72 717946
P=N= 1823139 001

KF171
KF18*
001



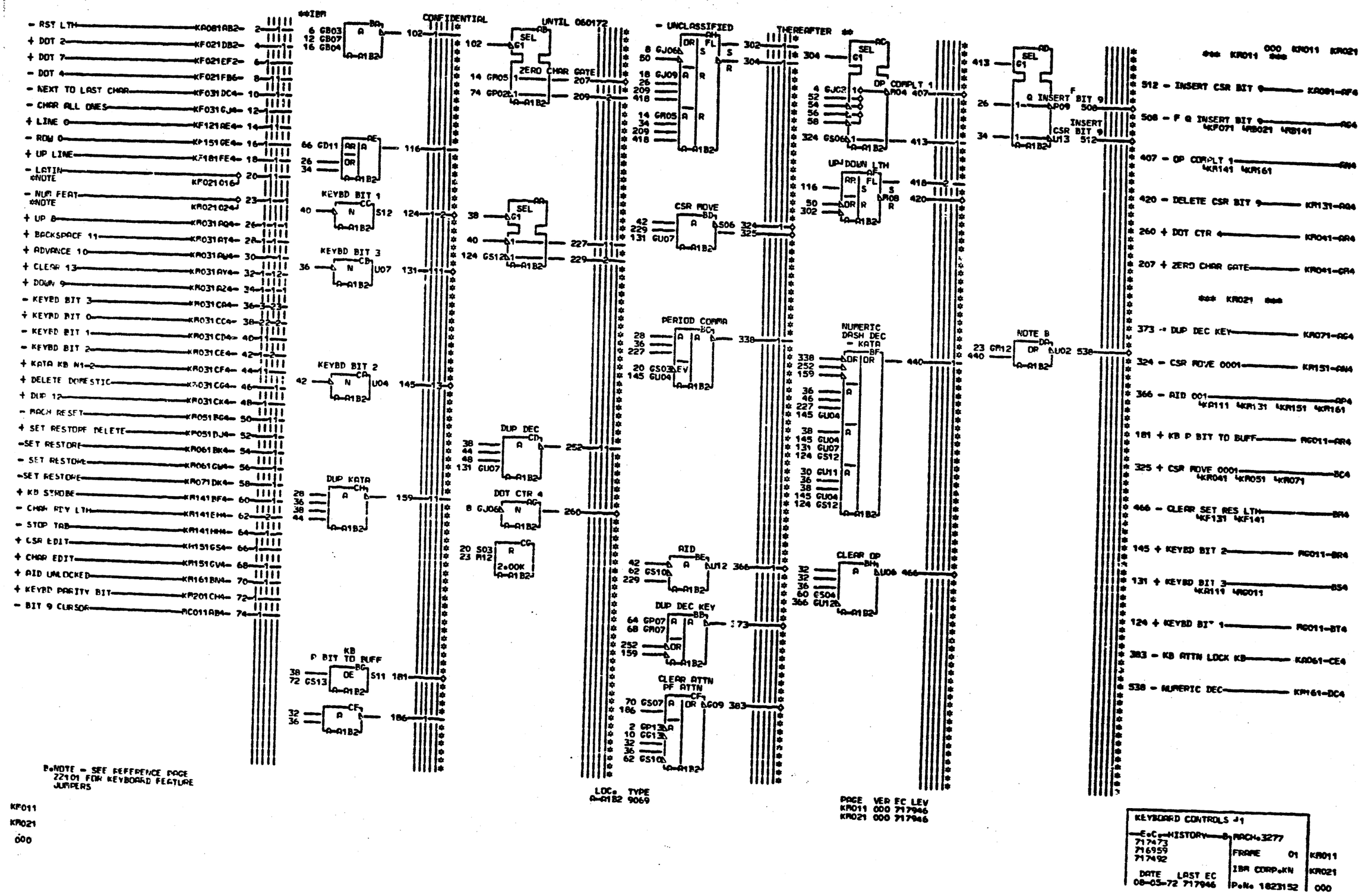
KA031EW4 01A-A1H6E04
01A-A1K6A04 KF171GH4 01A-A1J6B04
KA111PL2 01A-A1H6B02 RC091FA4 01A-A1H6C04
KF061EL6 01A-A1J6E02 AB1 A-A1J6E04
KF141GC4 AB2 A-A1J6C04
01A-A1J6D04 AB3 A-A1K6B04
KF171GF4 AB4 A-A1J6A04
AB5 A-A1H6A02
AB6 A-A1J6B02
01A-A1H6C02
AH4 A-A1K6B02

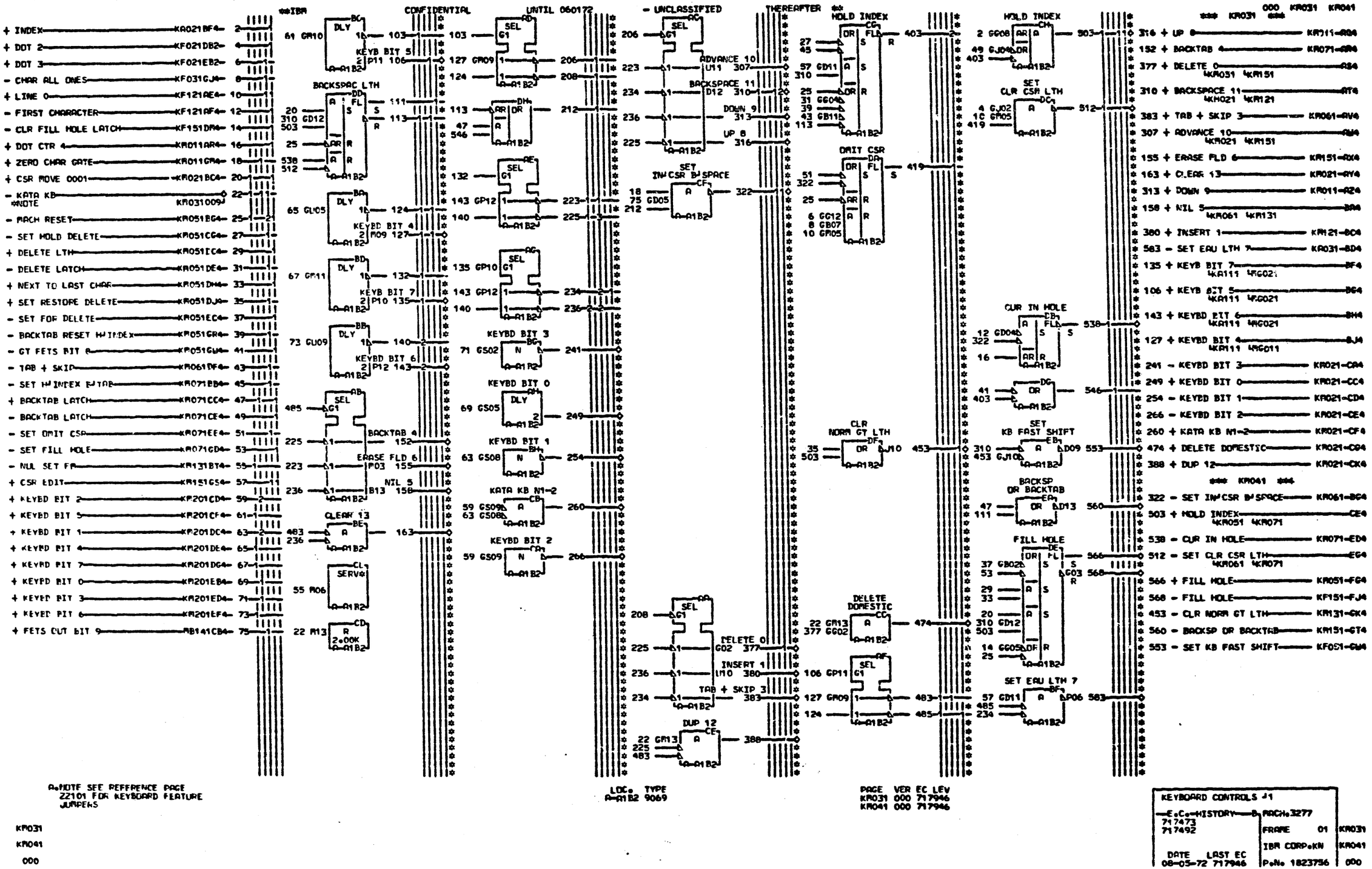
001
STR TO PN 1963755 EC 717946

LOC. TYPE

CONNECTOR PAGE
—E.C.—HISTORY—By— RACH.3277
717473
716959
717492
FRAME 01
IBM CORP. SDD
P.N. 1823146
DATE LAST EC
08-05-72 717946

KF201 001


**IBM
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
- RST LTH KA081AB2- 2
+ DOT 2 KF021DB2- 4
+ DOT 7 KF021EF2- 6
- DOT 4 KF021FB6- 8
- NEXT TO LAST CHAR KF031DC4- 10
- CHAR ALL ONES KF031GJ4- 12
+ LINE 0 KF121AE4- 14
- ROW 0 KP151GE4- 16
+ UP LINE KF181FE4- 18
- LATIN *NOTE KF021016 20
- NUM FEAT *NOTE KR021024 23
+ UP 8 KR031AQ4- 26
+ BACKSPACE 11 KR031AT4- 28
+ ADVANCE 10 KR031AW4- 30
+ CLEAR 13 KR031AY4- 32
+ DOWN 9 KR031A24- 34
- KEYBD BIT 3 KR031CA4- 36
+ KEYBD BIT 0 KR031CC4- 38
- KEYBD BIT 1 KR031CD4- 40
- KEYBD BIT 2 KR031CE4- 42
+ KATA KB N1-2 KR031CF4- 44
+ DELETE DOMESTIC KR031CG4- 46
+ DUP 12 KR031CK4- 48
- MACH RESET KR051BG4- 50
+ SET RESTORE DELETE KR051DJ4- 52
-SET RESTORE KR061BK4- 54
- SET RESTORE KR061GW4- 56
-SET RESTORE KR071DK4- 58
+ KB STROBE KR141BF4- 60
- CHAR RTY LTH KR141EH4- 62
- STOP TAB KR141HN4- 64
+ CSR EDIT KR151GS4- 66
+ CHAR EDIT KR151GV4- 68
+ AID UNLOCKED KR161BN4- 70
+ KEYBD PARITY BIT KP201CH4- 72
- BIT 9 CURSOR RC011AB4- 74
KEYBD BIT 1
KEYBD BIT 3
KEYBD BIT 2
DUP KATA
KB P BIT TO BUFF
ZERO CHAR GATE
DUP DEC
DOT CTR 4
CSR MOVE
PERIOD COMMA
AID
DUP DEC KEY
CLEAR ATTN PF ATTN
UP/DOWN LTH
NUMERIC DASH DEC - KATA
CLEAR DP
OP COMPLT 1
Q INSERT BIT 9
INSERT CSR BIT 9
NOTE B
*** KR011 000 KR011 KR021
512 - INSERT CSR BIT 9 KA081-AF4
508 - F Q INSERT BIT 9 KP071 KR8021 KR8141 KR-AG4
407 - OP COMPLT 1 KR141 KR161 KR-AN4
420 - DELETE CSR BIT 9 KR131-AQ4
260 + DOT CTR KR041-AR4
207 + ZERO CHAR GATE KR041-AR4
*** KR021 ***
373 - DUP DEC KEY KR071-AG4
324 - CSR MOVE 0001 KR151-AN4
366 - AID 001 KA111 KR131 KR151 KR161 AP4
181 + KB P BIT TO BUFF RC011-AR4
325 + CSR MOVE 0001 KR041 KR051 KR071 BC4
466 - CLEAR SET RES LTH KF131 KF141 BR4
145 + KEYBD BIT 2 RC011-BR4
131 + KEYBD BIT 3 KA111 KR011 BS4
124 + KEYBD BIT 1 RC011-BT4
383 - KB ATTN LOCK KB KA061-CE4
538 - NUMERIC DEC KP161-DC4
*NOTE - SEE REFERENCE PAGE 22101 FOR KEYBOARD FEATURE JUMPERS
LOC. TYPE
A-A1B2 9069
PAGE VER EC LEV
KR011 000 717946
KR021 000 717946
KEYBOARD CONTROLS J1
-E.C.-HISTORY- MACH.3277
717473
716959
717492
FRAME 01
IBM CORP.-KN
DATE LAST EC
08-05-72 717946
P.N. 1823152
KR011
KR021
000



A=NOTE SEE REFERENCE PAGE ZZ101 FOR KEYBOARD FEATURE JUMPERS

LOC= TYPE
A=A1B2 9069

PAGE	VER	EC LEV
KR031	000	717946
KR041	000	717946

KEYBOARD CONTROLS J1

E.C.=HISTORY — ARCH=3277

717473
717492

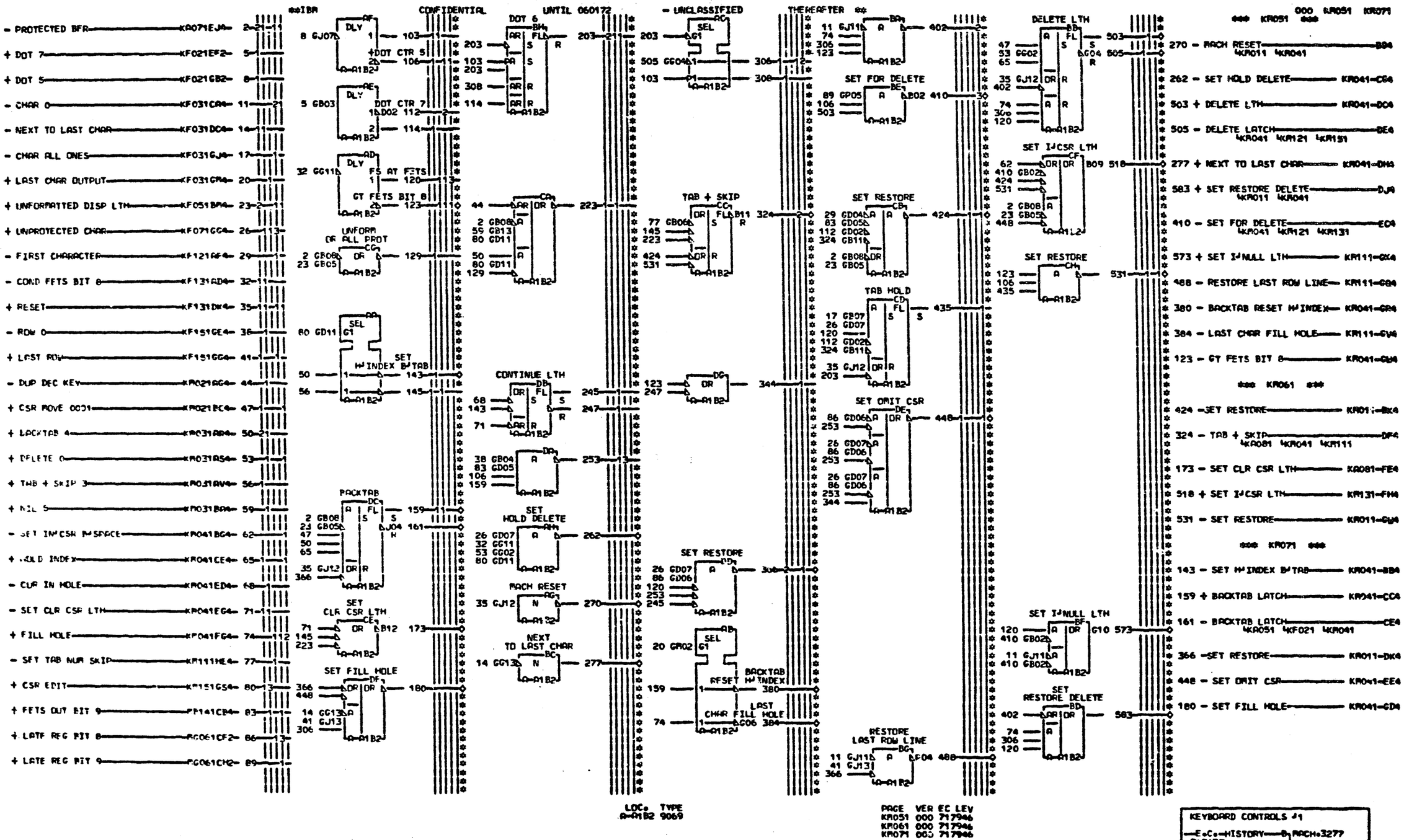
FRAME 01

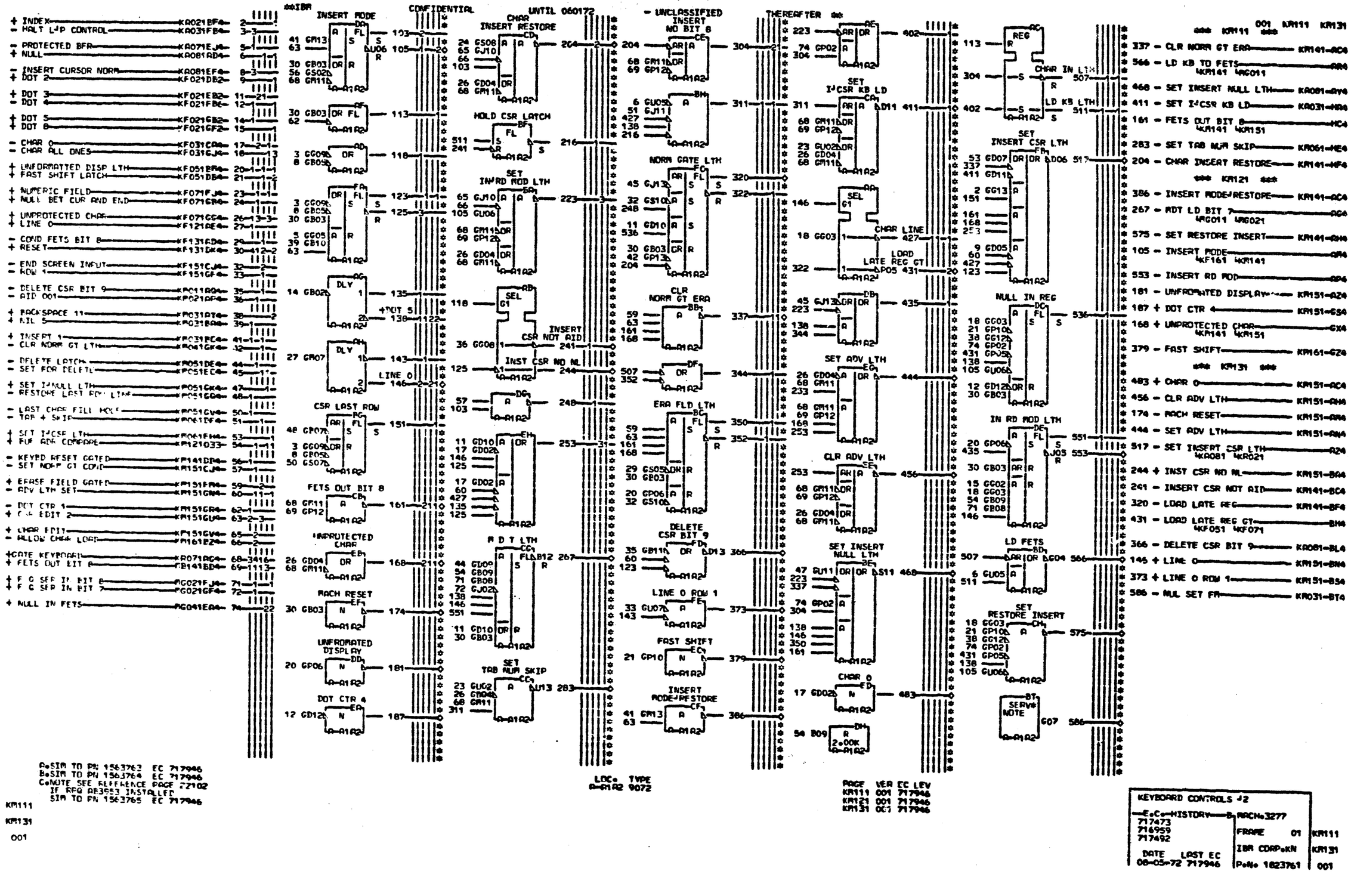
IBR CORP.KN

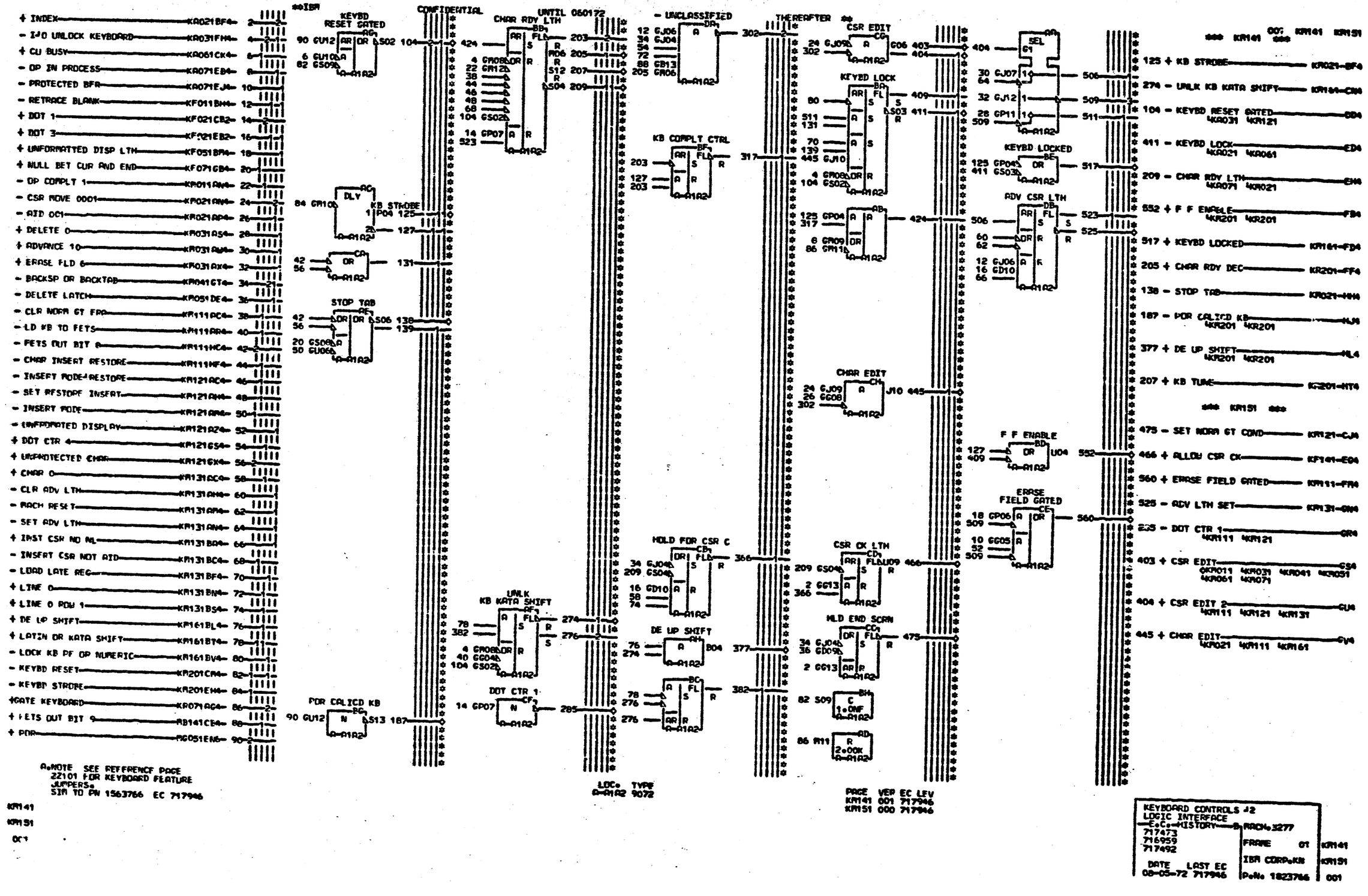
DATE LAST EC
08-05-72 717946

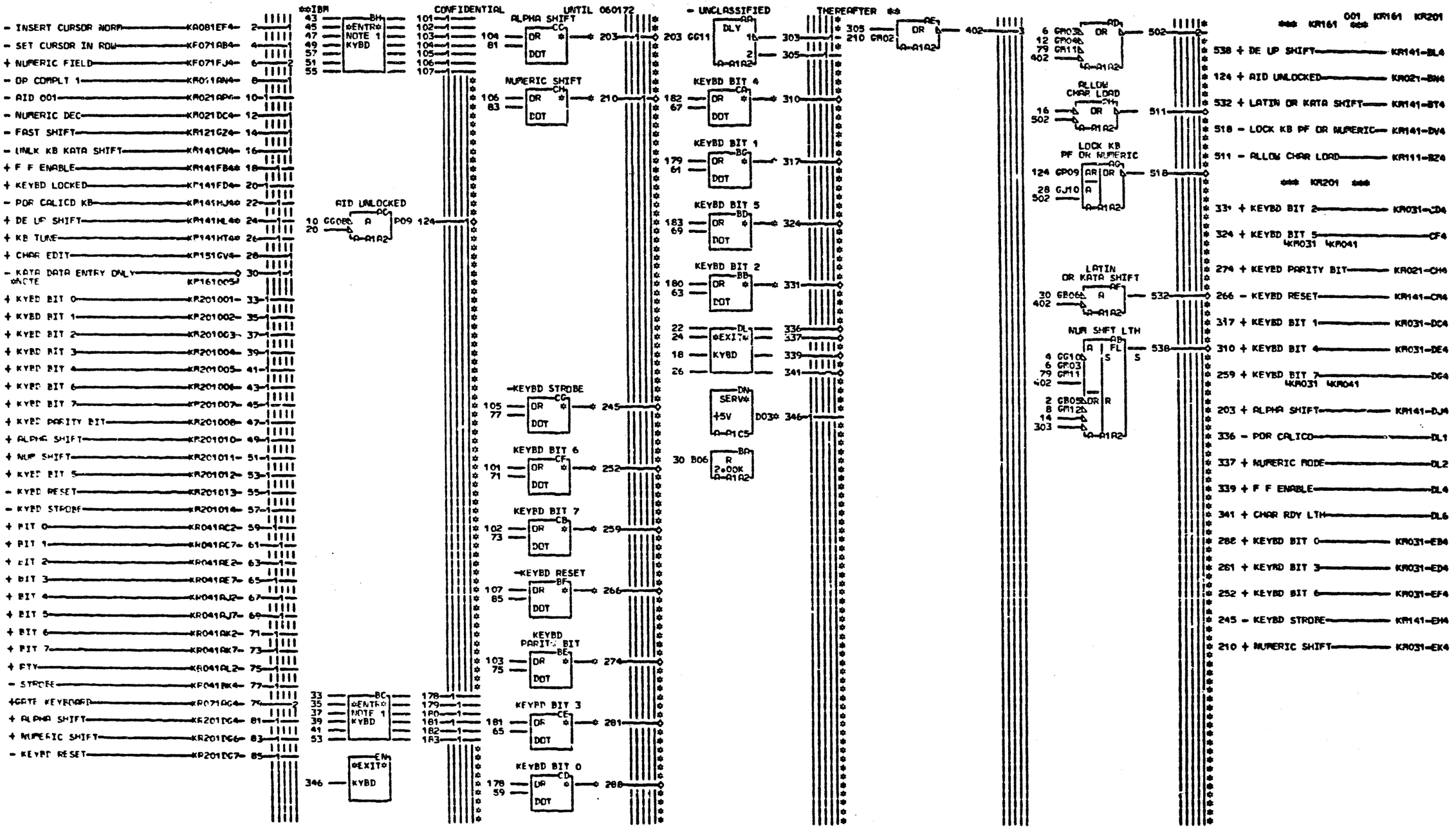
P.N= 1823756

KR031 000
KR041 000


**IBM CONFIDENTIAL UNTIL 060172 - UNCLASSIFIED THEREAFTER **
- PROTECTED BFR
+ DOT 7
+ DOT 5
- CHAR 0
- NEXT TO LAST CHAR
- CHAR ALL ONES
+ LAST CHAR OUTPUT
+ UNFORMATTED DISP LTH
+ UNPROTECTED CHAR
- FIRST CHARACTER
- COND FFTS BIT 8
+ RESET
- ROW 0
+ LAST ROW
- DUP DEC KEY
+ CSR MOVE 0001
+ BACKTAB 4
+ DELETE 0
+ TAB + SKIP 3
+ NIL 5
- SET IN*CSR M*SPACE
+ *OLD INDEX
- CUR IN MDLE
- SET CLR CSR LTH
+ FILL MDLE
- SET TAB NUM SKIP
+ CSR EDIT
+ FFTS OUT BIT 9
+ LATF REG BIT 8
+ LATE REG BIT 9
DOT 6
DOT CTR 5
DOT CTR 7
FS AT FFTS
GT FFTS BIT 8
UNFORM OR ALL PROT
SET M*INDEX B*TAB
PACKTAB
SET HOLD DELETE
SET CLR CSR LTH
SET FILL MDLE
CONTINUE LTH
MACH RESET
NEXT TO LAST CHAR
TAB + SKIP
SET RESTORE
TAB HOLD
SET OMIT CSR
RESTORE LAST ROW LINE
SET FOR DELETE
DELETE LTH
SET I*CSR LTH
SET I*NULL LTH
SET RESTORE DELETE
000 KR051 KR071
*** KR051 ***
270 - MACH RESET
262 - SET HOLD DELETE
503 + DELETE LTH
505 - DELETE LATCH
277 + NEXT TO LAST CHAR
583 + SET RESTORE DELETE
410 - SET FOR DELETE
573 + SET I*NULL LTH
488 - RESTORE LAST ROW LINE
380 - BACKTAB RESET M*INDEX
384 - LAST CHAR FILL MDLE
123 - GT FFTS BIT 8
*** KR061 ***
424 - SET RESTORE
324 - TAB + SKIP
173 - SET CLR CSR LTH
518 + SET I*CSR LTH
531 - SET RESTORE
*** KR071 ***
143 - SET M*INDEX B*TAB
159 + BACKTAB LATCH
161 - BACKTAB LATCH
366 - SET RESTORE
448 - SET OMIT CSR
180 - SET FILL MDLE
LOC. TYPE
A-A1B2 9069
PAGE VER EC LEV
KR051 000 717946
KR061 000 717946
KR071 000 717946
KEYBOARD CONTROLS *1
-E.C.-HISTORY-
717473
716959
717492
DATE LAST EC
08-05-72 717946
MACH.3277
FRAME 01 KR051
IBM CORP.KN KR071
P.N. 1823758 000
KR051
KR071
000


**IBR
CONFIDENTIAL
- UNCLASSIFIED
THEREAFTER **
UNTIL 060172
INSERT MODE
CHAR INSERT RESTORE
HOLD CSR LATCH
SET IN^RD MOD LTH
INSERT CSR NOT AID
INST CSR NO NL
CSR LAST ROW
FETS OUT BIT 8
^NPROTECTED CHAR
MACH RESET
UNFORMATED DISPLAY
DOT CTR 4
NORM GT ERA
ERA FLD LTH
DELETE CSR BIT 9
LINE 0 ROW 1
FAST SHIFT
INSERT MODE/RESTORE
SET TAB NUM SKIP
LOAD LATE REG GT
SET INSERT NULL LTH
SET I^CSR KB LD
CLR ADV LTH
SET INSERT CSR LTH
SET RESTORE INSERT
NULL IN REG
LD FETS
IN RD MOD LTH
CHAR IN LTH
LD KB LTH
+ INDEX KA021BF4 2
- HALT L^P CONTROL KA031FB4 3-3
- PROTECTED BFR KA071EJ4 5-1
+ NULL KA081AD4 6-1
- INSERT CURSOR NORM KA081EF4 8-3
+ DOT 2 KF021DB2 9-1
+ DOT 3 KF021EB2 11-21
- DOT 4 KF021FB2 12-1
+ DOT 5 KF021GB2 14-1
+ DOT 8 KF021GF2 15-1
- CHAR 0 KF031CA4 17-2-1
- CHAR ALL ONES KF031GJ4 18-1-3
+ UNFORMATTED DISP LTH KF051BA4 20-1-1-1
+ FAST SHIFT LATCH KF051DB4 21-1-2
+ NUMERIC FIELD KF071FJ4 23-1-1-1
+ NULL BET CUR AND END KF071GB4 24-1
+ UNPROTECTED CHAR KF071GE4 26-1-3-3
+ LINE 0 KF121AE4 27-1
- COND FETS BIT 8 KF131BD4 29-1
+ RESET KF131DK4 30-412-2
- END SCREEN INPUT KF151CJ4 32-2
- ROW 1 KF151GF4 33-1
- DELETE CSR BIT 9 KF011BD4 35-1-1
- AID 001 KF021AP4 36-1
+ BACKSPACE 11 KF031AT4 38-2
+ NIL 5 KF031BA4 39-1
+ INSERT 1 KF031EC4 41-1-1
- CLR NORM GT LTH KF041GK4 42-1-1
- DELETE LATCH KF051DE4 44-1
- SET FOR DELETE KF051EC4 45-11
+ SET I^NULL LTH KF051GK4 47-1
- RESTORE LAST ROW LTH KF051GQ4 48-1
- LAST CHAR FILL HOLD KF051GV4 50-1-1
- TAB + SKIP KF061DF4 51-1-1
+ SET I^CSR LTH KF061EH4 53-1
+ FUF ADR COMPARE KF121033 54-1-11
- KEYPD RESET GATED KF141BD4 56-1
- SET NORM GT COMP KF151CJ4 57-1
+ ERASE FIELD GATED KF151FA4 59-2
- ADV LTH SET KF151GN4 60-11-1
- DOT CTR 1 KF151GR4 62-1-1
+ CHAR EDIT 2 KF151GV4 63-2-3
+ CHAR EDIT KF151GV4 65-2
- ALLOW CHAR LOAD KF161BZ4 66-2
+GATE KEYBOARD KF071AC4 68-3416
+ FETS OUT BIT 8 KF141BD4 69-1113
+ F C SER IP BIT 8 KG021EJ4 71-1-1
+ F C SER IN BIT 7 KG021GF4 72-1-1
+ NULL IN FETS KG041EA4 74-22
A=SIM TO PN 1563762 EC 717946
B=SIM TO PN 1563764 EC 717946
C=NOTE SEE REFERENCE PAGE 22102
IF RPQ AB3553 INSTALLED
SIM TO PN 1563765 EC 717946
KM111
KM131
001
LOC= TYPE
A=A1A2 9072
PAGE VER EC LEV
KM111 001 717946
KM121 001 717946
KM131 001 717946
KEYBOARD CONTROLS J2
E=C=HISTORY=B
717473
716959
717492
DATE LAST EC
08-05-72 717946
MACH=3277
FRAME 01
IBR CORP=KN
P=N= 1823761
KM111
KM131
001
*** KM111 *** 001 KM111 KM131
337 - CLR NORM GT ERR KM141-AC8
566 - LD KB TO FETS 4KM141 4KG011 AR4
468 - SET INSERT NULL LTH KA081-AY4
411 - SET I^CSR KB LD KA031-AR4
181 - FETS OUT BIT 8 4KM141 4KM151 HC4
283 - SET TAB NUM SKIP KM061-HE4
204 - CHAR INSERT RESTORE KM141-HF4
*** KM121 ***
386 - INSERT MODE/RESTORE KM141-AC4
267 - MDT LD BIT 7 4KG011 4KG021 AC4
575 - SET RESTORE INSERT KM141-GH4
105 - INSERT MODE 4KF161 4KM141 GF4
553 - INSERT RD MOD GP4
181 - UNFORMATED DISPLAY KM151-AZ4
187 + DOT CTR 4 KM151-GS4
168 + UNPROTECTED CHAR 4KM141 4KM151 GX4
379 - FAST SHIFT KM161-GZ4
*** KM131 ***
483 + CHAR 0 KM151-AC4
456 - CLR ADV LTH KM151-AH4
176 - MACH RESET KM151-AR4
444 - SET ADV LTH KM151-AN4
517 - SET INSERT CSR LTH 4KA081 4KR021 A24
244 + INST CSR NO NL KM151-BG4
241 - INSERT CSR NOT AID KM141-BC4
320 - LOAD LATE REG KM141-BF4
431 - LOAD LATE REG GT 4KF051 4KF071 BM4
366 - DELETE CSR BIT 9 KA081-BL4
145 + LINE 0 KM151-BN4
373 + LINE 0 ROW 1 KM151-BS4
586 - NUL SET FR KA031-BT4


IBM
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER
KEYBD RESET GATED
CHAR RDY LTH
CSR EDIT
KEYED LOCK
KEYBD LOCKED
ADV CSR LTH
F F ENABLE
ERASE FIELD GATED
CHAR EDIT
KB COMPLT CTRL
HOLD FOR CSR C
CSR CK LTH
HLD END SCRN
UNLK KB KATA SHIFT
DE UP SHIFT
DOT CTR 1
DLY
KB STROBE
STOP TAB
PDR CALICD KB
+ INDEX KA021BF4
- I/O UNLOCK KEYBOARD KA031FM4
+ CU BUSY KA061CK4
- DP IN PROCESS KA071EB4
- PROTECTED BFR KA071EJ4
- RETRACE BLANK KF011BH4
+ DOT 1 KF021CB2
+ DOT 3 KF021EB2
+ UNFORMATTED DISP LTH KF051BF4
+ NULL BFT CUR AND END KF071GB4
- DP COMPLT 1 KP011AN4
- CSR MOVE 0001 KP021AN4
- AID 001 KP021AP4
+ DELETE 0 KP031AS4
+ ADVANCE 10 KP031AU4
+ ERASE FLD 6 KP031AX4
- BACKSP OR BACKTAB KP041GT4
- DELETE LATCH KP051DE4
- CLR NORM GT FRM KP111AC4
- LD KB TO FETS KP111AR4
- FETS OUT BIT 8 KP111HC4
- CHAR INSERT RESTORE KP111HF4
- INSERT MODE RESTORE KP121AC4
- SET RESTORE INSERT KP121AN4
- INSERT MODE KP121AR4
- UNPROTECTED DISPLAY KP121AZ4
+ DOT CTR 4 KP121GS4
+ UNPROTECTED CHAR KP121GX4
+ CHAR 0 KP131CC4
- CLR ADV LTH KP131AN4
- RACH RESET KP131AR4
- SET ADV LTH KP131AV4
+ INST CSR NO ML KP131BA4
- INSERT CSR NOT AID KP131BC4
- LOAD LATE REC KP131BF4
+ LINE 0 KP131BN4
+ LINE 0 POW 1 KP131BS4
+ DE UP SHIFT KP161BL4
+ LATIN OR KATA SHIFT KP161BT4
- LOCK KB PF OR NUMERIC KP161BV4
- KEYBD RESET KP201CR4
- KEYBD STROBE KP201EH4
+ GATE KEYBOARD KP071AC4
+ FETS OUT BIT 9 RB141CB4
+ PDR PG051EN4
125 + KB STROBE KR021-BF4
274 - UNLK KB KATA SHIFT KR181-CM4
104 - KEYBD RESET GATED 4KA031 4KR121 BD4
411 - KEYBD LOCK 4KA021 4KA061 ED4
209 - CHAR RDY LTH 4KA071 4KR021 EM4
552 + F F ENABLE 4KR201 4KR201 FB4
517 + KEYBD LOCKED KR161-FD4
205 + CHAR RDY DEC KR201-FF4
138 - STOP TAB KR021-HH4
187 - PDR CALICD KB 4KR201 4KR201 HJ4
377 + DE UP SHIFT 4KR201 4KR201 HL4
207 + KB TONE KR201-HT4
475 - SET NORM GT COND KR121-CJ4
466 + ALLOW CSR CK KF141-E04
560 + ERASE FIELD GATED KR111-FR4
525 - ADV LTH SET KR131-GN4
225 - DOT CTR 1 4KR111 4KR121 GR4
403 + CSR EDIT 4KR011 4KR031 4KR041 4KR051 4KR061 4KR071 GS4
404 + CSR EDIT 2 4KR111 4KR121 4KR131 GU4
445 + CHAR EDIT 4KR021 4KR111 4KR161 GV4
A-NOTE SEE REFERENCE PAGE 22101 FOR KEYBOARD FEATURE JUMPERS. SIM TO PN 1563766 EC 717946
LOC. TYPE A-A1A2 9072
PAGE VER EC LEV KR141 001 717946 KR151 000 717946
KEYBOARD CONTROLS J2 LOGIC INTERFACE
E.C.-HISTORY 717473 716959 717492
DATE LAST EC 08-05-72 717946
RACK 3277
FRAME 01
IBM CORP. KR
P.N. 1823766
KR141 001
KR151



A-SIM TO PN 1563768 EC 717946
B-NOTE 1 Z1 SOCKET FOR KYBD W/D CART READER
SIM TO PN 1563769 EC 717946

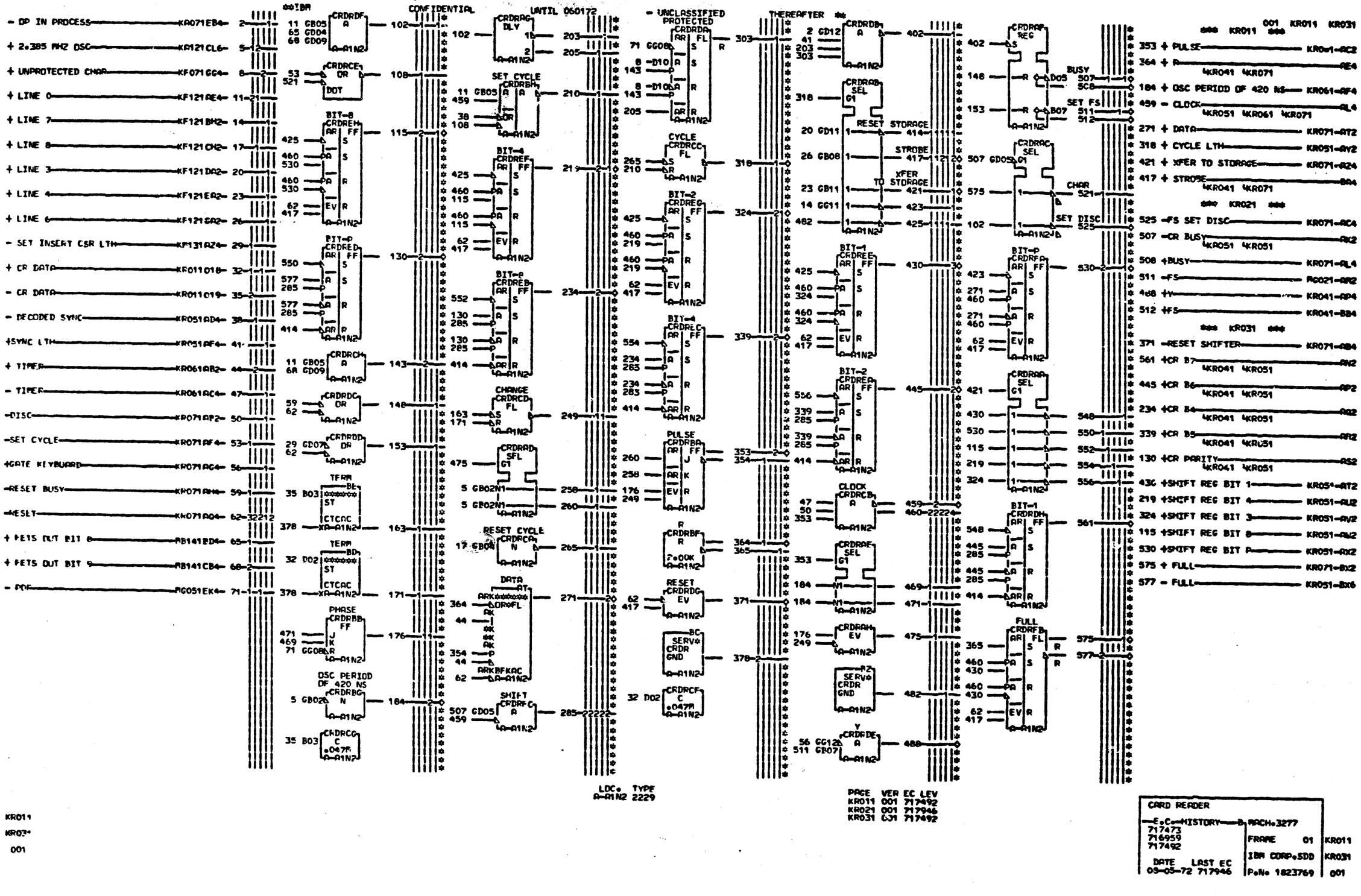
KR161
KR201
001

EDGE CONN. 01A-A1C6B02 324 A-A1B6D04
18 A-A1E6C02 252 A-A1B6E04 331 A-A1B6A04
22 A-A1C6A02 259 A-A1C6A04 346 A-A1C6C02
24 A-A1B6A02 266 A-A1C6D04
26 A-A1C6E02 01A-A1A6B04
203 A-A1A6D02 274 A-A1C6B04
01A-A1L6B02 281 A-A1B6B04
210 A-A1B6B02 288 A-A1A6D04
01A-A1L6E02 310 A-A1B6C04
245 A-A1C6C04 317 A-A1A6E04

LOC. TYPE
A-A1A2 9072

PAGE VER EC LEV
KR161 001 717946
KR201 001 717946

KEYBOARD CONTROLS J2
LOGIC INTERFACE
E.C.-HISTORY- B. ARCH.3277
717473
716959
717492
DATE LAST EC
08-05-72 717946
FRAME 01 KR161
IBM CORP.-KN KR201
P.No. 1824193 001

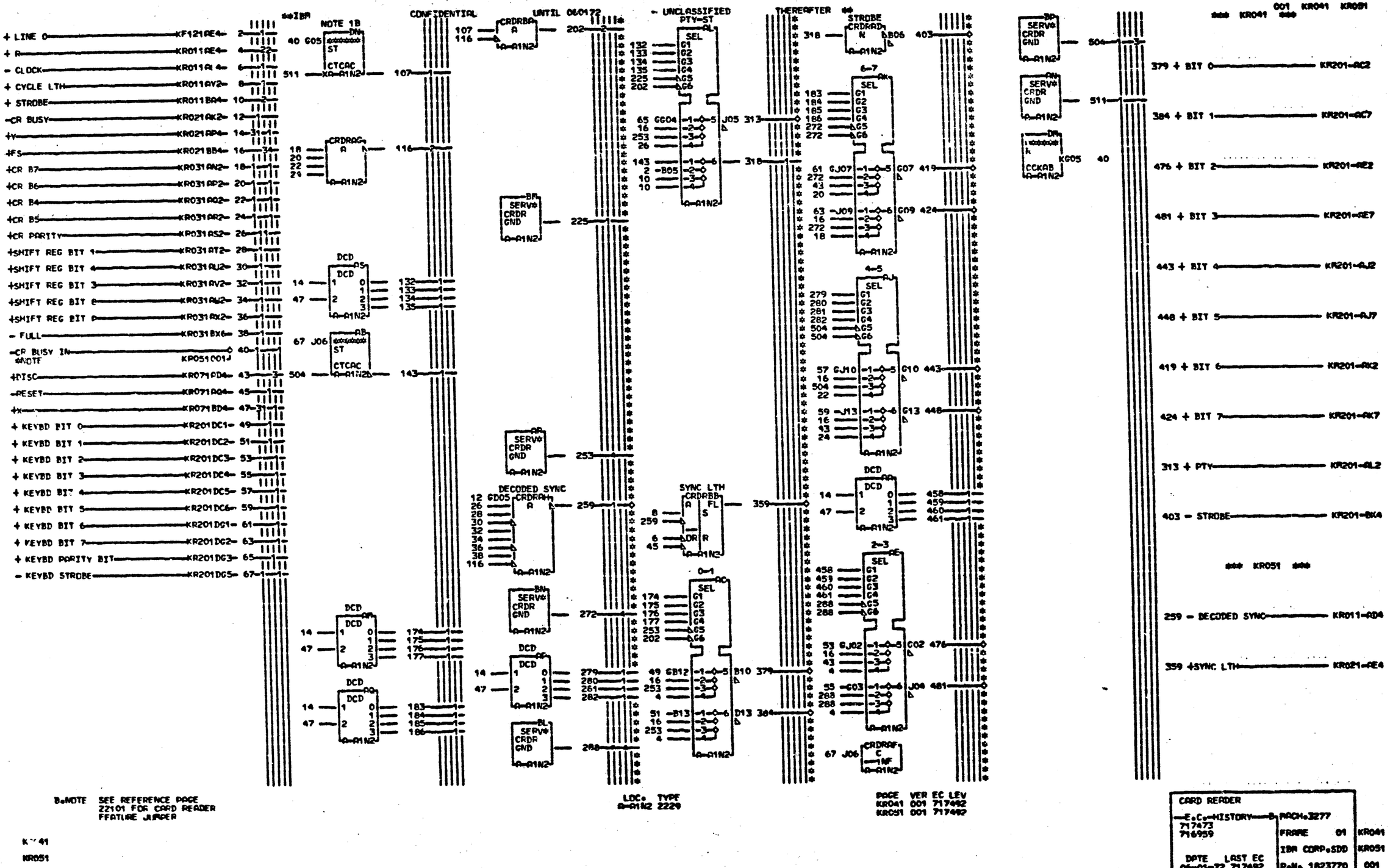


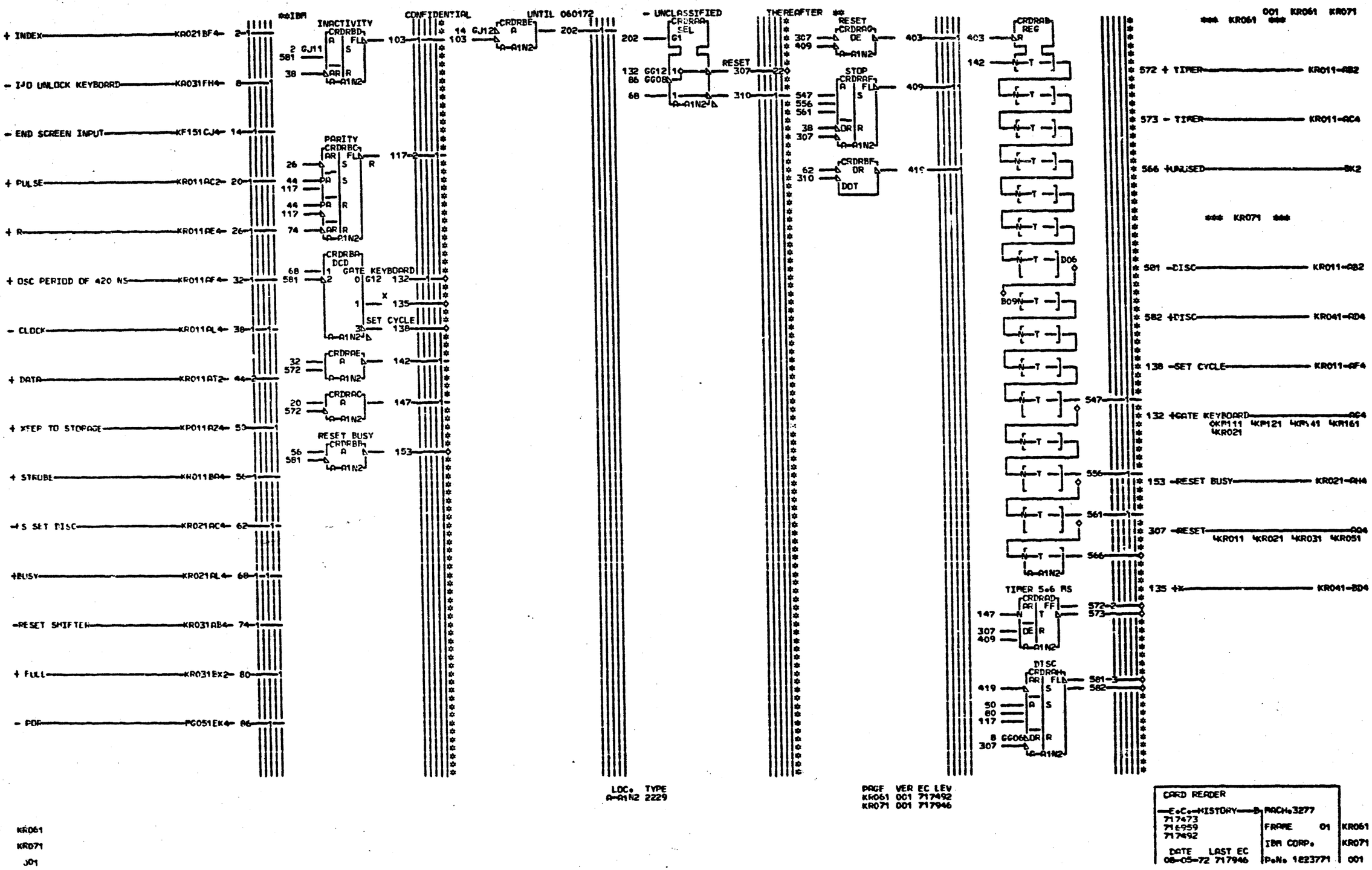
LOC. TYPE
A-A1N2 2229

PAGE VER EC LEV
KR011 001 717492
KR021 001 717946
KR031 001 717492

CARD READER
E.C. HISTORY
717473
716959
717492
DATE LAST EC
09-05-72 717946
MACH. 3277
FRAME 01
IBM CORP. SDD
P.N. 1823769

KR011
KR02*
001


**IBM
NOTE 1B
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER
STROBE
001 KR041 KR051
*** KR041 ***
+ LINE 0
+ R
- CLOCK
+ CYCLE LTH
+ STROBE
-CR BUSY
+Y
+FS
+CR B7
+CR B6
+CR B4
+CR B5
+CR PARITY
+SHIFT REG BIT 1
+SHIFT REG BIT 4
+SHIFT REG BIT 3
+SHIFT REG BIT 2
+SHIFT REG BIT 0
- FULL
-CR BUSY IN *NOTF
+DISC
-RESET
+X
+ KEYBD BIT 0
+ KEYBD BIT 1
+ KEYBD BIT 2
+ KEYBD BIT 3
+ KEYBD BIT 4
+ KEYBD BIT 5
+ KEYBD BIT 6
+ KEYBD BIT 7
+ KEYBD PARITY BIT
- KEYBD STROBE
CRDRBA
SERV* CRDR GND
CRDRAC
DCD
DECODED SYNC
CRDRAH
SYNC LTH
CRDRBB
STROBE
CRDRAD
SERV* CRDR GND
CRDRAF
CCKAB
379 + BIT 0
384 + BIT 1
476 + BIT 2
481 + BIT 3
443 + BIT 4
448 + BIT 5
419 + BIT 6
424 + BIT 7
313 + PTY
403 - STROBE
*** KR051 ***
259 - DECODED SYNC
359 +SYNC LTH
B. NOTE SEE REFERENCE PAGE 22101 FOR CARD READER FEATURE JUMPER
LDC. TYPE
A-A1N2 2220
PAGE VER EC LEV
KR041 001 717492
KR051 001 717492
CARD READER
E.C.-HISTORY
717473
716959
DATE LAST EC
06-01-72 717492
PARCH.3277
FRAME 01
IBM CORP.SDD
P.N. 1823770
KR041
KR051
001



LOC. TYPE
A-A1N2 2229

PAGE	VER	EC LEV
KR061	001	717492
KR071	001	717946

CARD READER

E.C.-HISTORY: 717473, 716959, 717492

DATE LAST EC: 08-05-72 717946

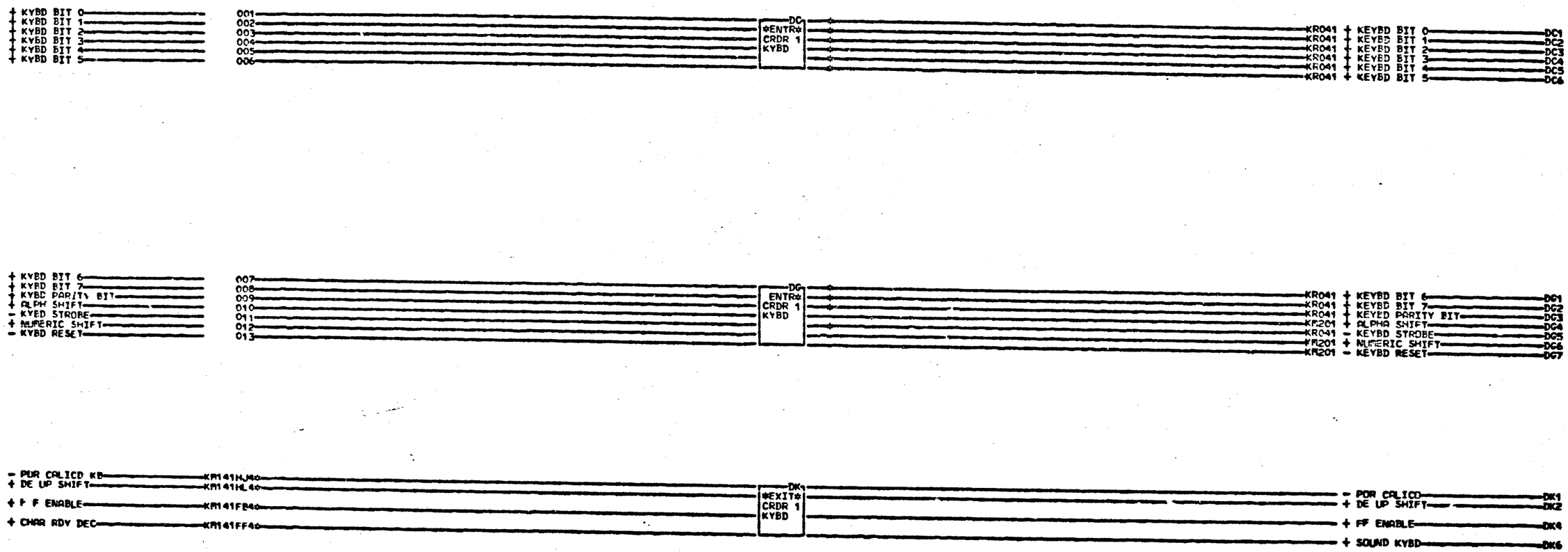
PACH. 3277

FRAME 01

IBM CORP.

P.No. 1823771

KR061 KR071 001



NOTE 1 Z4 SOCKET FOR KYBD WITH CARD READER

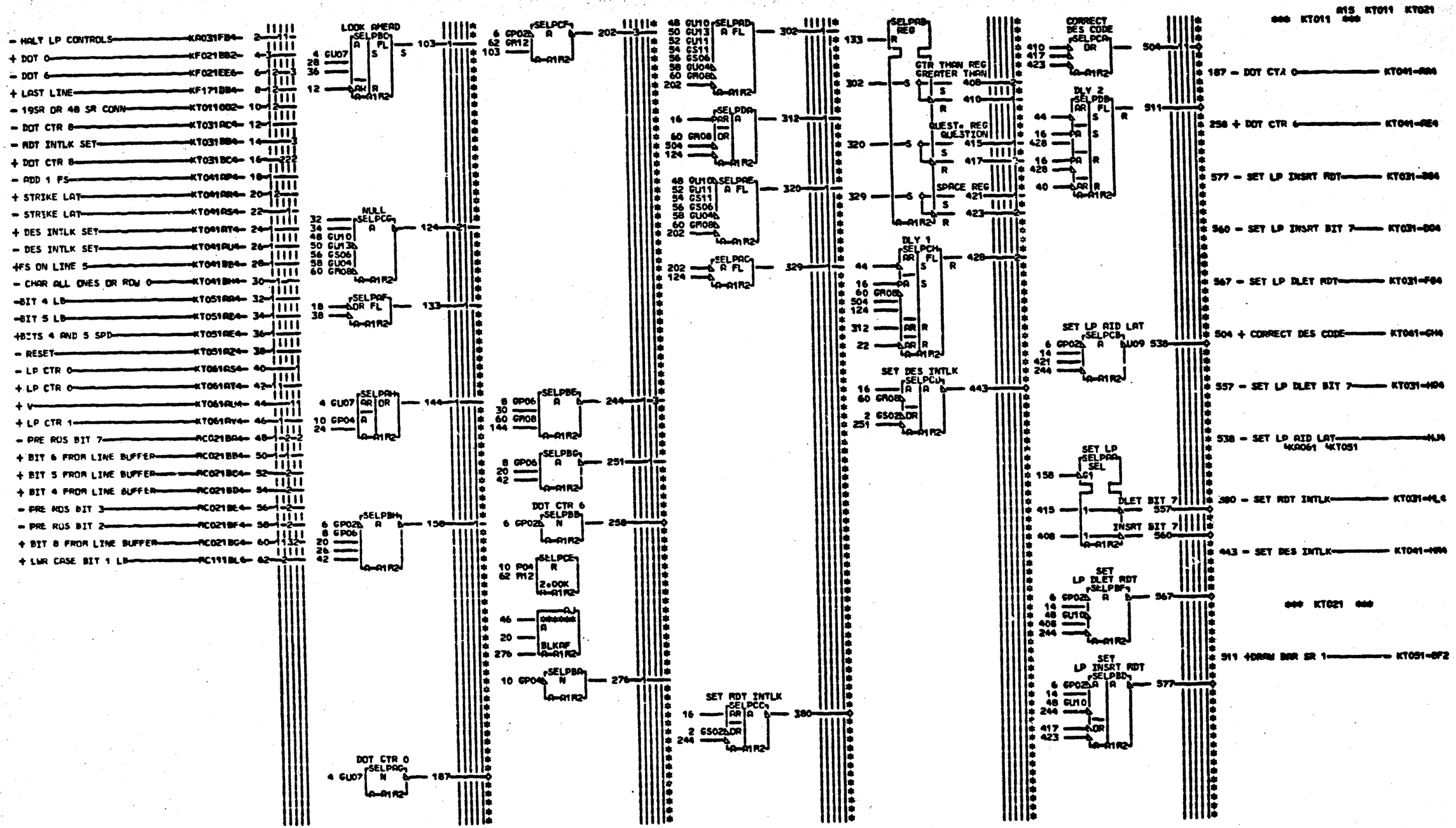
KR141FB4	DC2	A-A1L6C04	01A-A1R6E02		
01A-A1R6A02	DC3	A-A1L6D04	DN4 A-A1N6A02		
KR141FF4	DC4	A-A1L6E04			
01A-A1N6C02	DC5	A-A1R6A04			
KR141HJ4	DC6	A-A1R6B04			
01A-A1R6D02	DG1	A-A1R6C04			
KR141HL4	DG2	A-A1R6D04			
01A-A1L6D02	DG3	A-A1R6E04			
DC1 A-A1L6B04	DG5	A-A1N6A04			

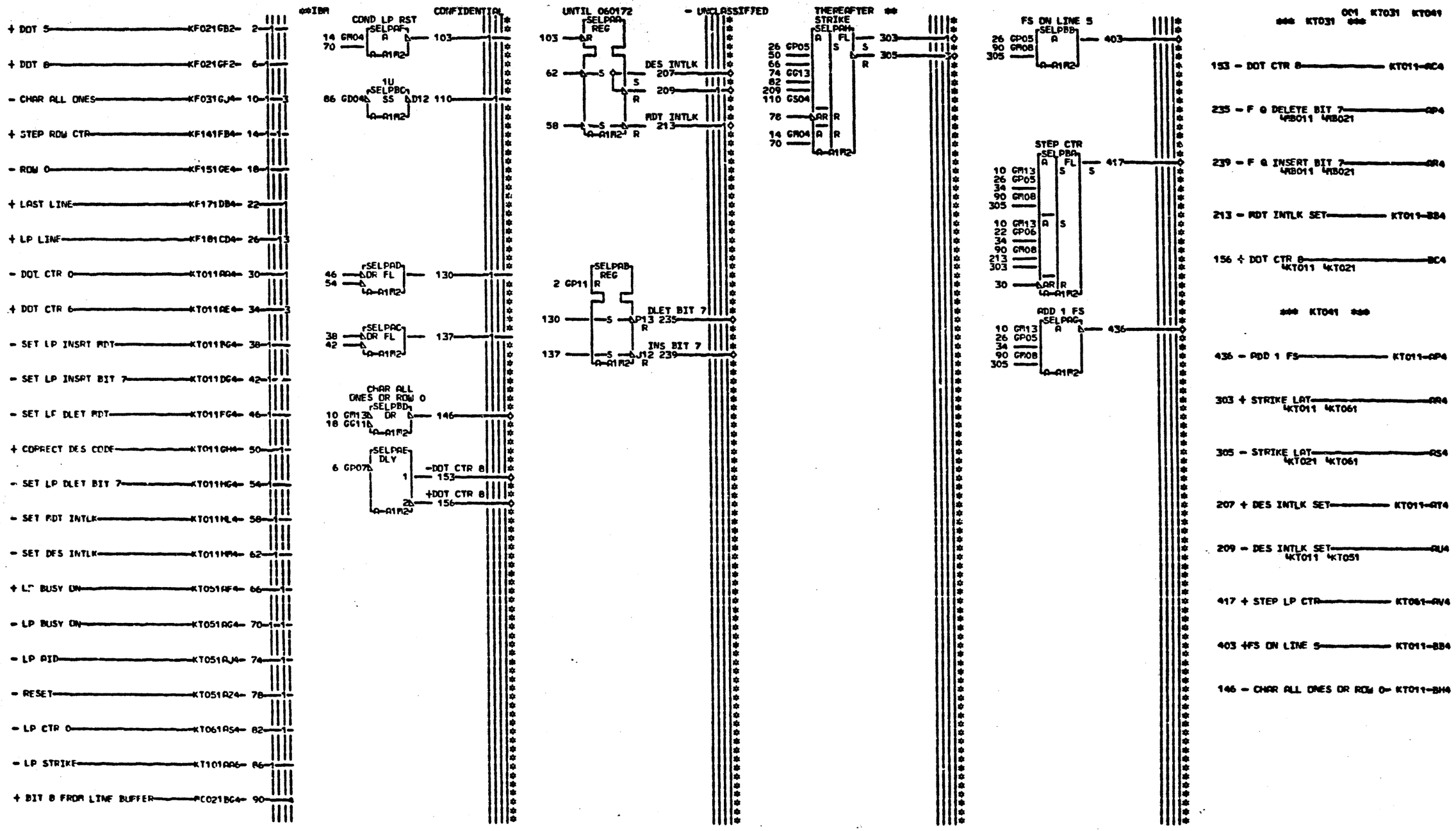
LOC. TYPE

KEYBOARD INTERFACE FOR CR

E.C.-HISTORY- A MACH. 3277
717473
FRAME 01
IBM CORP. KN
DCTE LAST EC
02-18-72 716059
P.N. 1823772

KR201 001


A15 KT011 KT021
KT011
KT021
A15
LOC. TYPE
A-A1R2 9068
PAGE VER EC LEV
KT011 A15 717946
KT021 A15 717946
RNR 19148 LP CTRL
E.C.-HISTORY
717473
716959
DATE LAST EC
08-03-72 717946
ARCH. 3277
FRAME 01
IBM CORP. KN
P.N. 1823774
LOOK AHEAD
NULL
DOT CTR 0
DOT CTR 6
SET RDT INTLK
CORRECT DES CODE
DLY 2
DLY 1
SET DES INTLK
SET LP AID LAT
SET LP DLET BIT 7
SET LP INSRT BIT 7
SET RDT INTLK
SET DES INTLK
SET LP DLET RDT
SET LP INSRT RDT
GTR THAN REG
GREATER THAN
QUEST. REG
QUESTION
SPACE REG
- HALT LP CONTROLS
+ DOT 0
- DOT 6
+ LAST LINE
- 19SR OR 48 SR CONN
- DOT CTR 8
- RDT INTLK SET
+ DOT CTR 8
- ADD 1 FS
+ STRIKE LAT
- STRIKE LAT
+ DES INTLK SET
- DES INTLK SET
+FS ON LINE 5
- CHAR ALL ONES OR ROW 0
-BIT 4 LB
-BIT 5 LB
+BITS 4 AND 5 SPD
- RESET
- LP CTR 0
+ LP CTR 0
+ V
+ LP CTR 1
- PRE ROS BIT 7
+ BIT 6 FROM LINE BUFFER
+ BIT 5 FROM LINE BUFFER
+ BIT 4 FROM LINE BUFFER
- PRE ROS BIT 3
- PRE ROS BIT 2
+ BIT 8 FROM LINE BUFFER
+ LWR CASE BIT 1 LB
187 - DOT CTR 0
258 + DOT CTR 6
577 - SET LP INSRT RDT
560 - SET LP INSRT BIT 7
567 - SET LP DLET RDT
504 + CORRECT DES CODE
557 - SET LP DLET BIT 7
538 - SET LP AID LAT
380 - SET RDT INTLK
443 - SET DES INTLK
511 +DRAW BRR SR 1


**IBM CONFIDENTIAL
- UNCLASSIFIED
001 KT031 KT041
*** KT031 ***
*** KT041 ***
+ DOT 5 KF021GB2 2
+ DOT 8 KF021GF2 6
- CHAR ALL ONES KF031GJ4 10
+ STEP ROW CTR KF141FB4 14
- ROW 0 KF151GE4 18
+ LAST LINE KF171DB4 22
+ LP LINE KF181CD4 26
- DOT CTR 0 KT011AA4 30
+ DOT CTR 6 KT011AE4 34
- SET LP INSRT RDT KT011AG4 38
- SET LP INSRT BIT 7 KT011DG4 42
- SET LP DLET RDT KT011FG4 46
+ CORRECT DES CODE KT011GH4 50
- SET LP DLET BIT 7 KT011HG4 54
- SET RDT INTLK KT011HL4 58
- SET DES INTLK KT011HR4 62
+ LP BUSY ON KT051AF4 66
- LP BUSY ON KT051AG4 70
- LP AID KT051AJ4 74
- RESET KT051A24 78
- LP CTR 0 KT061AS4 82
- LP STRIKE KT101AA6 86
+ BIT 8 FROM LINE BUFFER PC021BG4 90
COND LP RST
SELPAF
14 GR04
70
A-A1A2
103
1U
SELPBC
86 GD04 SS D12 110
46 SELPAD DR FL 130
54
38 SELPAC DR FL 137
42
CHAR ALL ONES OR ROW 0
SELPBD
10 GM13 DR 146
18 GG11
SELPAE DLY
6 GP07
1 -DOT CTR 8 153
2 +DOT CTR 8 156
UNTIL 060172
SELPAA REG
103 R
62 S DES INTLK 207
209
R
58 S RDT INTLK 213
SELPAB REG
2 GP11 R
130 S P13 235 DLET BIT 7
R
137 S J12 239 INS BIT 7
THEREAFTER STRIKE
SELPAH
26 GP05 A FL 303
50 S
66 S 305
74 GG13 R
82
209
110 GS04
78 AR R
14 GR04 A R
70
FS ON LINE 5
SELPBB
26 GP05 A 403
90 GR08
305
STEP CTR
SELPBA
10 GM13 A FL 417
26 GP05 S S
34
90 GR08
305
10 GM13 A S
22 GP06
34
90 GR08
213
303
30 AR R
ADD 1 FS
SELPAG
10 GM13 A 436
26 GP05
34
90 GR08
305
153 - DOT CTR 8 KT011-BC4
235 - F 0 DELETE BIT 7 GP4
4RB011 4RB021
239 - F 0 INSERT BIT 7 GR4
4RB011 4RB021
213 - RDT INTLK SET KT011-BB4
156 + DOT CTR 8 BC4
4KT011 4KT021
436 - RDD 1 FS KT011-GP4
303 + STRIKE LAT AR4
4KT011 4KT061
305 - STRIKE LAT AS4
4KT021 4KT061
207 + DES INTLK SET KT011-GT4
209 - DES INTLK SET AU4
4KT011 4KT051
417 + STEP LP CTR KT061-AV4
403 +FS ON LINE 5 KT011-BB4
146 - CHAR ALL ONES OR ROW 0 KT011-BH4
LOC. TYPE
A-A1A2 9088
PAGE VER EC LEV
KT031 001 717473
KT041 001 717946
ANR 1948 LP CTRL
-E.C.-HISTORY- RAC.3277
717473
FRAME 01 KT031
IBM CORP.KN KT041
DATE LAST EC
08-05-72 717946 P.N. 1823776 001
KT031
KT041

**IBM CONFIDENTIAL — UNTIL 060172 — UNCLASSIFIED — THEREAFTER **

*** KT051 001 KT061 KT061 ***

- I/O UNLOCK KEYBOARD — KA031FH4 — 2
+ POLL LOAD STATUS — KA051DC4 — 8
- OP IN PROCESS — KA071EB4 — 14
+ STEP ROW CTR — KF141FB4 — 20
- SET LP AID LAT — KT011HJ4 — 26
+DRAW BAR SR 1 — KT021BF2 — 32
+ STRIKE LAT — KT041AR4 — 38
- STRIKE LAT — KT041AS4 — 44
-- DES INTLK SET — KT041AU4 — 50
+ STEP LP CTR — KT041AV4 — 56 — 22
- LP SW OPEN — KT101AA2 — 62
- LP SW CLOSED — KT101AA4 — 68
+ BIT 5 FROM LINE BUFFER — AC021BC4 — 74 — 11
+ BIT 4 FROM LINE BUFFER — AC021BD4 — 80 — 2
+ PDR — AC051EN4 — 86 — 3

20 GP04 — SELPAC DLY 2 A-A1A2 — 103
408, 410, 103 — SELPBH FF J K R A-A1A2 — 204
44, 56, 204 — SELPCD A DR — 302 — 22
38, 56, 204 — A
332 — SELPAB SEL G1

533 — N1 — 406
56 — N1 — 408
56 — N1 — 410
302 — N1 — 412
302 — N1 — 414
523 — N1 — 416
523 — N1 — 418
533 — N1 — 420
A-A1A2

412, 414, 103 — CT2 SELPCA FF J K R A-A1A2 — 504

LP CTR SELPCG DCD
204 — 1
504 — 2
545 — 4
553 — 8
0 — 513
0 — 516
1 — 519
A-A1A2

44, 504, 302 — SELPCE A DR — 523 — 22
38, 504, 302 — A
A-A1A2

44, 545, 523 — SELPCF A DR — 533 — 2
38, 545, 523 — A
A-A1A2

416, 418, 103 — CT4 SELPCB FF J K R A-A1A2 — 545

420, 406, 103 — CT8 SELPCC FF J K R A-A1A2 — 553

V SELPCH N
332 — 560
A-A1A2

+12V BA PWR * CVKAC A-A1A2 — D07 — 568

-6V AV PWR * CVKAD A-A1A2 — B02 — 576

180 — BIT 4 LB — KT021-GB4
279 — BIT 5 LB — KT021-GB4
188 — BITS 4 AND 5 SPD — KT011-GE4
145 — LP BUSY ON — KT041-GF4
147 — LP BUSY ON — KT031-GG4
157 — LP AID — KT041-AJ4
272 — DRAW BARS — KF141-GL4
260 — LP AID BIT 3 DOT — KA111-AQ4
262 — LP AID BIT 4 DOT — KA111-AR4
264 — LP AID BIT 5 DOT — KA111-AS4
266 — LP AID BIT 6 DOT — KA111-AT4
245 — LP BUSY — KA071-AJ4
576 — 6V LP — KT101-AV4
173 — RESET — GF24 (4KT011 4KT041)
560 — 12V LP — KT101-BA4

*** KT061 ***

513 — LP CTR 0 — AS4 (4KT021 4KT041)
516 — LP CTR 0 — KT011-AT4
560 — V — KT021-AU4
519 — LP CTR 1 — KT011-AY4

14 GJ07, 68 GU06 — LP BUSY SELPAG A FL S S R — 145
62 GG09, 86 GU05 — DR R — 147

LP BUSY SELPBD DR — 147, 157 GG13 — LG10 — 245

LP AID SELPAH AR FL S S R
26 GU09, 2 GP10, 86 GU05 — DR R — 155, 157 GG13

LP AID BIT 3 OUT SELPBC A
8 GG08, 155 — LA
LA — GJ07 — 260
LA — GJ09 — 262
LA — GJ11 — 264
LA — GJ10 — 266

RESET SELPBE N
86 GU05 — 173

DRAW BARS SELPBB A
32, 50, 145 — GP09 — 272

BIT 5 LB SELPBE N
74 GU11 — 279

BIT 4 LB SELPAD N
80 GS11 — 180

BITS 4 AND 5 SPD SELPAF OE
74 GU11, 80 GS11 — 188

SERVO SELP GND
AA — 332
BG — 332

62 GG09, 68 GU06 — SELPBF R 2.00K

LOC. TYPE
A-A1A2 9088

PAGE VER EC LEV
KT051 001 717946
KT061 001 717473

KT051		
KT061		
001		

AMR 19/48 LP CTRL

E.C. HISTORY	B	MACH. 3277	
717473			
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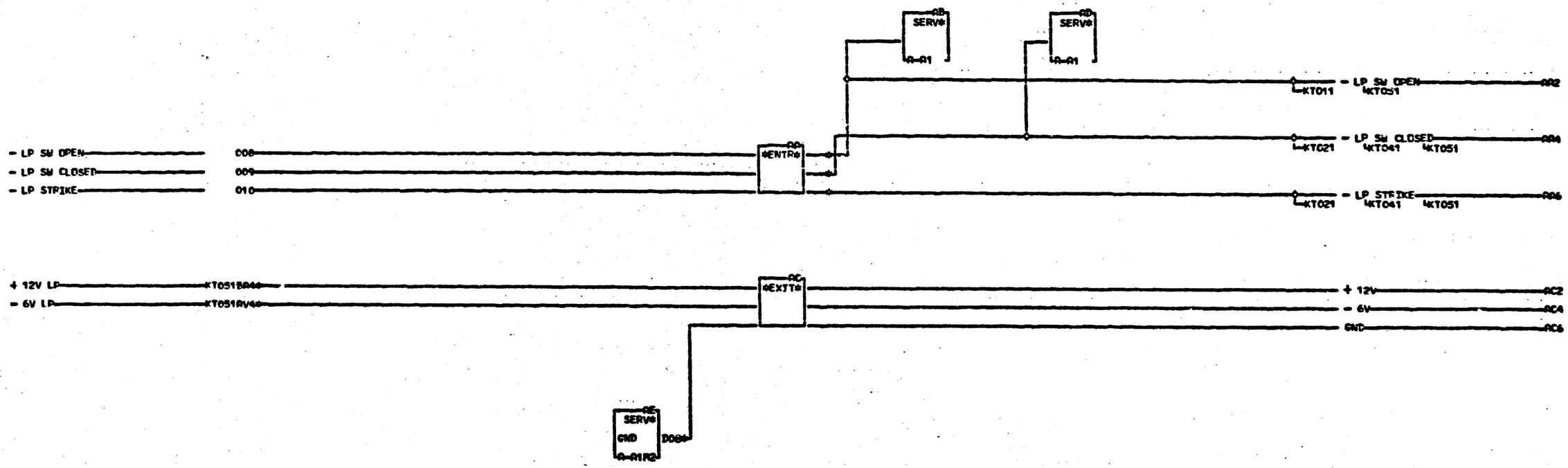
717492		IBM CORP. KN	KT061
DATE LAST EC		P.N. 1823780	001
08-05-72 717946			



KT051AV4 AE4 A-A1A1B13
01A-A1A1D13 01B-A1A1A11
KT051BA4
01A-A1L1C13
AA2 A-A1A1C13
01A-A1A1B11
AA4 A-A1L1E13
01A-A1L1B11
AA6 A-A1L1B13

LOC. TYPE

SELECTOR PEN INTERFACE LINES

E.C. *HISTORY* PAGE 3277

717473

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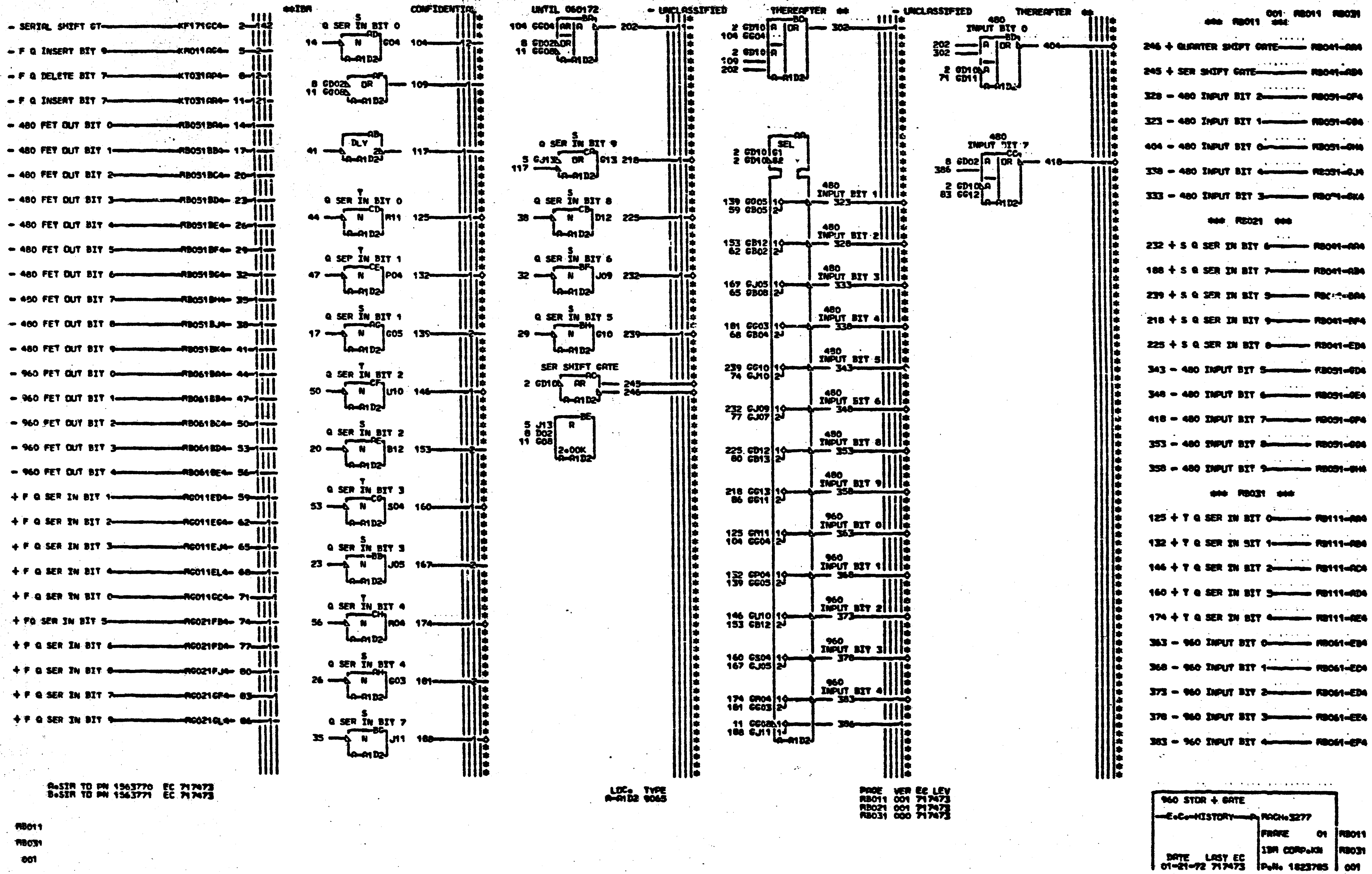
IBM CORP. SDD

DATE LAST EC

06-01-72 717492

P.N. 1823783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- SERIAL SHIFT GT KF171GC4 2
- F Q INSERT BIT 9 KM011AG4 5
- F Q DELETE BIT 7 KT031AP4 8
- F Q INSERT BIT 7 KT031AR4 11
- 480 FET OUT BIT 0 RB051BA4 14
- 480 FET OUT BIT 1 RB051BB4 17
- 480 FET OUT BIT 2 RB051BC4 20
- 480 FET OUT BIT 3 RB051BD4 23
- 480 FET OUT BIT 4 RB051BE4 26
- 480 FET OUT BIT 5 RB051BF4 29
- 480 FET OUT BIT 6 RB051BG4 32
- 480 FET OUT BIT 7 RB051BH4 35
- 480 FET OUT BIT 8 RB051BJ4 38
- 480 FET OUT BIT 9 RB051BK4 41
- 960 FET OUT BIT 0 RB061BA4 44
- 960 FET OUT BIT 1 RB061BB4 47
- 960 FET OUT BIT 2 RB061BC4 50
- 960 FET OUT BIT 3 RB061BD4 53
- 960 FET OUT BIT 4 RB061BE4 56
+ F Q SER IN BIT 1 RG011ED4 59
+ F Q SER IN BIT 2 RG011EG4 62
+ F Q SER IN BIT 3 RG011EJ4 65
+ F Q SER IN BIT 4 RG011EL4 68
+ F Q SER IN BIT 0 RG011GC4 71
+ FQ SER IN BIT 5 RG021FB4 74
+ F Q SER IN BIT 6 RG021FD4 77
+ F Q SER IN BIT 8 RG021FJ4 80
+ F Q SER IN BIT 7 RG021GF4 83
+ F Q SER IN BIT 9 RG021GL4 86
S Q SER IN BIT 0
T Q SER IN BIT 0
T Q SEP IN BIT 1
S Q SER IN BIT 1
T Q SER IN BIT 2
S Q SER IN BIT 2
T Q SER IN BIT 3
S Q SER IN BIT 3
T Q SER IN BIT 4
S Q SER IN BIT 4
S Q SER IN BIT 7
S Q SER IN BIT 9
S Q SER IN BIT 8
S Q SER IN BIT 6
S Q SER IN BIT 5
SER SHIFT GATE
DLY
SEL
2.00K
480 INPUT BIT 0
480 INPUT BIT 7
480 INPUT BIT 1
480 INPUT BIT 2
480 INPUT BIT 3
480 INPUT BIT 4
480 INPUT BIT 5
480 INPUT BIT 6
480 INPUT BIT 8
480 INPUT BIT 9
960 INPUT BIT 0
960 INPUT BIT 1
960 INPUT BIT 2
960 INPUT BIT 3
960 INPUT BIT 4
001 RB011 RB031
*** RB011 ***
246 + QUARTER SHIFT GATE RB041-AB4
245 + SER SHIFT GATE RB041-AB4
328 - 480 INPUT BIT 2 RB051-CF4
323 - 480 INPUT BIT 1 RB051-CB4
404 - 480 INPUT BIT 0 RB051-CA4
338 - 480 INPUT BIT 4 RB051-CJ4
333 - 480 INPUT BIT 3 RB051-CK4
*** RB021 ***
232 + S Q SER IN BIT 6 RB041-AA4
188 + S Q SER IN BIT 7 RB041-AB4
239 + S Q SER IN BIT 5 RB041-BA4
218 + S Q SER IN BIT 9 RB041-AF4
225 + S Q SER IN BIT 8 RB041-ED4
343 - 480 INPUT BIT 5 RB051-GD4
348 - 480 INPUT BIT 6 RB051-GE4
418 - 480 INPUT BIT 7 RB051-GF4
353 - 480 INPUT BIT 8 RB051-GG4
358 - 480 INPUT BIT 9 RB051-GH4
*** RB031 ***
125 + T Q SER IN BIT 0 RB111-AA4
132 + T Q SER IN BIT 1 RB111-AB4
146 + T Q SER IN BIT 2 RB111-AC4
160 + T Q SER IN BIT 3 RB111-AD4
174 + T Q SER IN BIT 4 RB111-AE4
363 - 960 INPUT BIT 0 RB061-EB4
368 - 960 INPUT BIT 1 RB061-EC4
373 - 960 INPUT BIT 2 RB061-ED4
378 - 960 INPUT BIT 3 RB061-EE4
383 - 960 INPUT BIT 4 RB061-EF4
A.SIR TO PN 1563770 EC 717473
B.SIR TO PN 1563771 EC 717473
LOC. TYPE
A-A1D2 9065
PAGE VER EC LEV
RB011 001 717473
RB021 001 717473
RB031 000 717473
RB011
RB031
001
960 STOR + GATE
E.C.-HISTORY
MACH.3277
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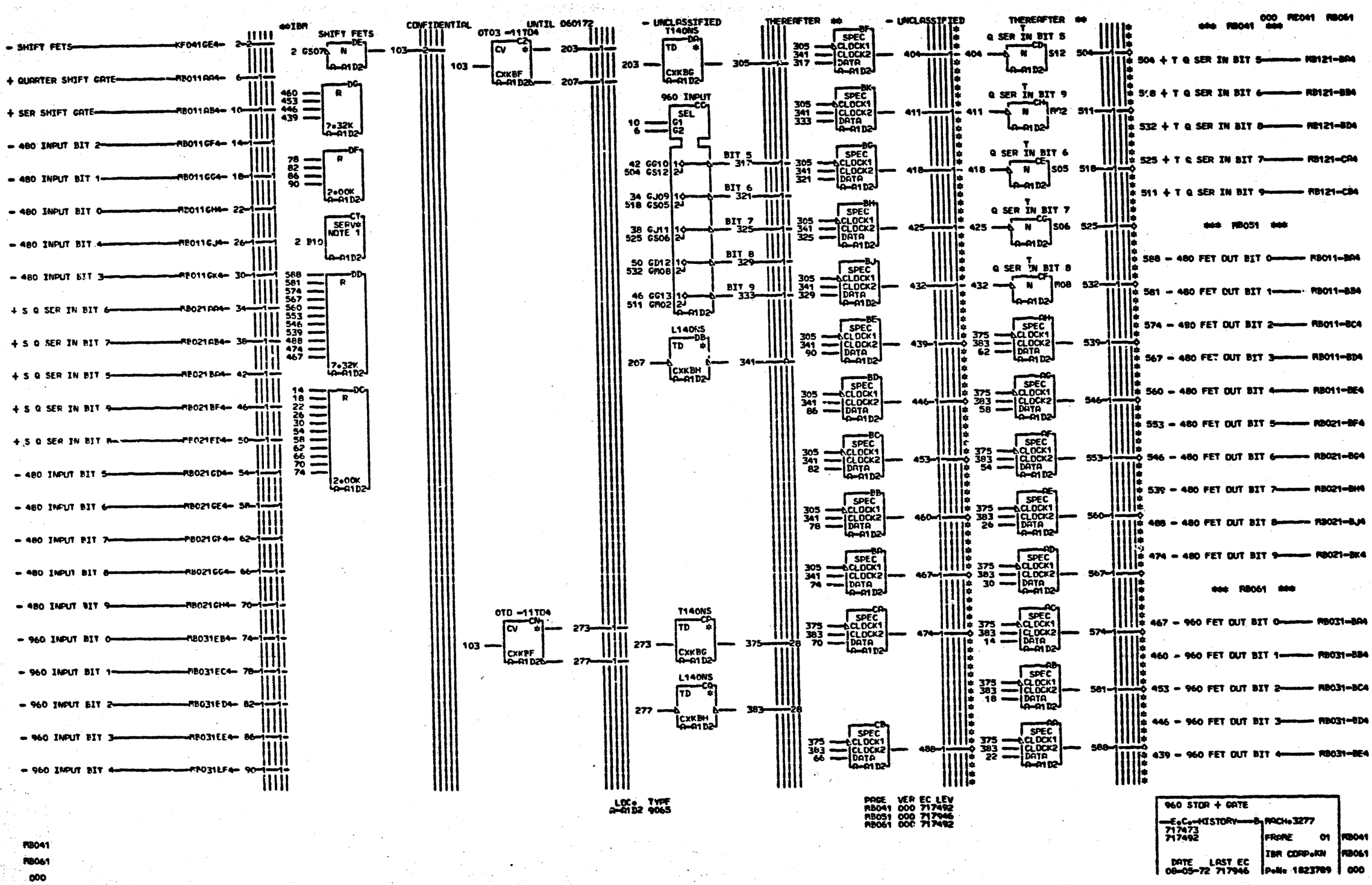
P.N. 1823785
DATE LAST EC
01-21-72 717473
RB011
RB031
001


**IBR
SHIFT FETS
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
- SHIFT FETS
+ QUARTER SHIFT GATE
+ SER SHIFT GATE
- 480 INPUT BIT 2
- 480 INPUT BIT 1
- 480 INPUT BIT 0
- 480 INPUT BIT 4
- 480 INPUT BIT 3
+ S Q SER IN BIT 6
+ S Q SER IN BIT 7
+ S Q SER IN BIT 5
+ S Q SER IN BIT 9
+ S Q SER IN BIT 8
- 480 INPUT BIT 5
- 480 INPUT BIT 6
- 480 INPUT BIT 7
- 480 INPUT BIT 8
- 480 INPUT BIT 9
- 960 INPUT BIT 0
- 960 INPUT BIT 1
- 960 INPUT BIT 2
- 960 INPUT BIT 3
- 960 INPUT BIT 4
T140NS
960 INPUT
L140NS
BIT 5
BIT 6
BIT 7
BIT 8
BIT 9
SPEC
CLOCK1
CLOCK2
DATA
Q SER IN BIT 5
Q SER IN BIT 9
Q SER IN BIT 6
Q SER IN BIT 7
Q SER IN BIT 8
*** RB041 ***
*** RB051 ***
*** RB061 ***
504 + T Q SER IN BIT 5
518 + T Q SER IN BIT 6
532 + T Q SER IN BIT 8
525 + T Q SER IN BIT 7
511 + T Q SER IN BIT 9
588 - 480 FET OUT BIT 0
581 - 480 FET OUT BIT 1
574 - 480 FET OUT BIT 2
567 - 480 FET OUT BIT 3
560 - 480 FET OUT BIT 4
553 - 480 FET OUT BIT 5
546 - 480 FET OUT BIT 6
539 - 480 FET OUT BIT 7
488 - 480 FET OUT BIT 8
474 - 480 FET OUT BIT 9
467 - 960 FET OUT BIT 0
460 - 960 FET OUT BIT 1
453 - 960 FET OUT BIT 2
446 - 960 FET OUT BIT 3
439 - 960 FET OUT BIT 4
7.32K
2.00K
SERV* NOTE 1
LOC. TYPE
A-A1D2 9065
PAGE VER EC LEV
RB041 000 717492
RB051 000 717946
RB061 000 717492
960 STOR + GATE
E.C.=HISTORY
717473
717492
DATE LAST EC
08-05-72 717946
MACH.3277
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P.N. 1823789
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RB061
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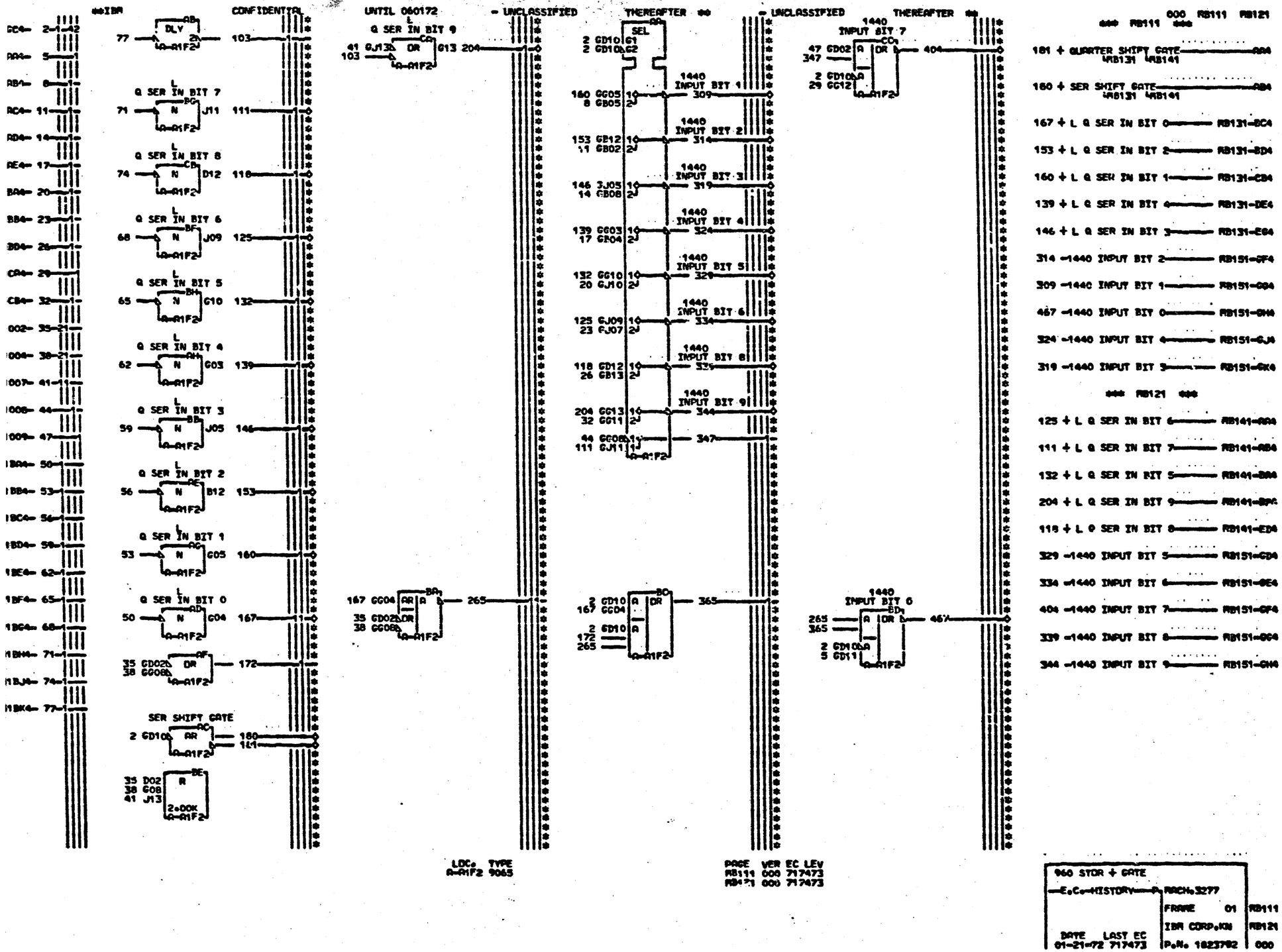
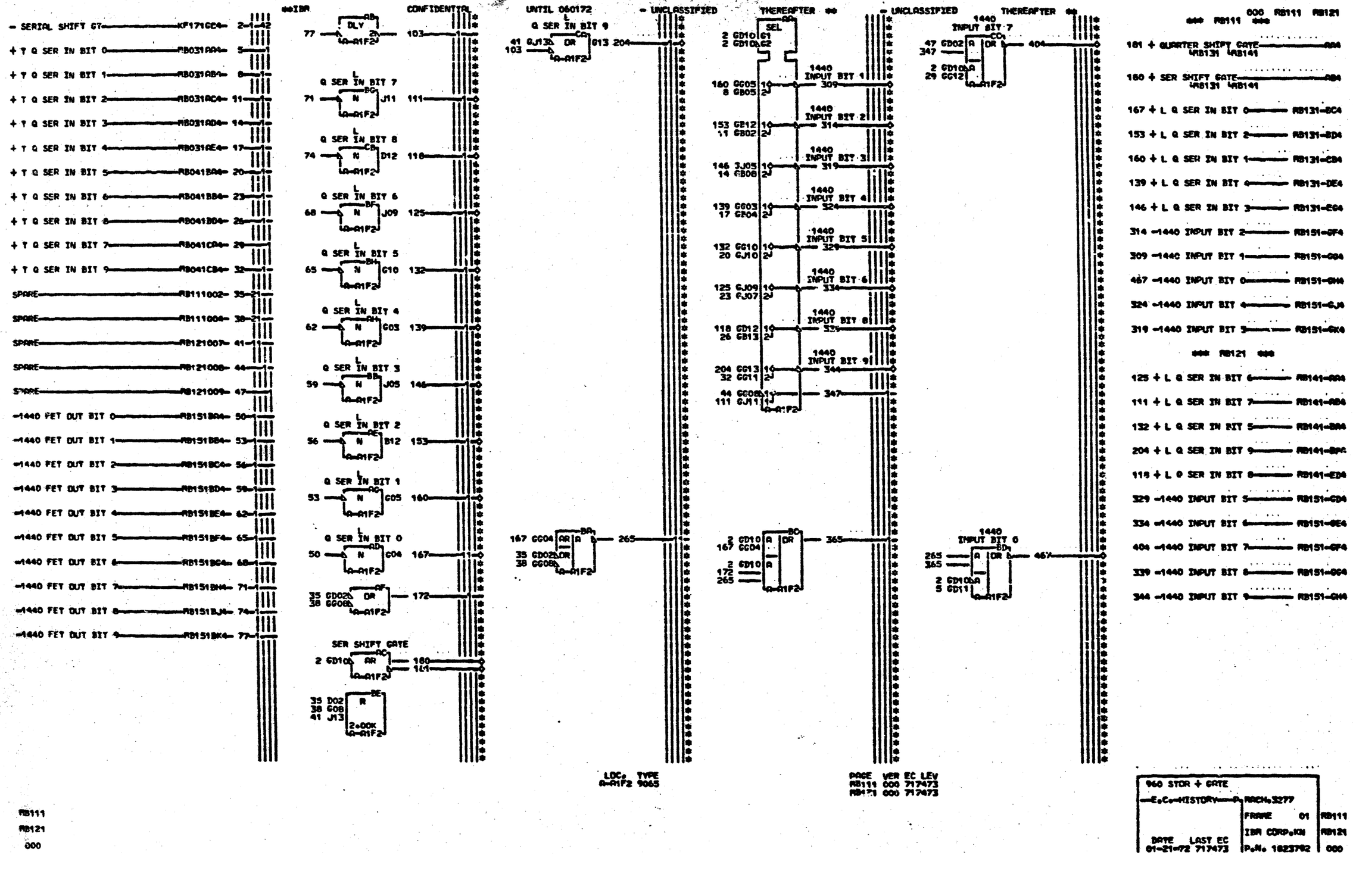

**IBR
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
- UNCLASSIFIED
THEREAFTER **
000 RB111 RB121
*** RB111 ***
181 + QUARTER SHIFT GATE
167 + L Q SER IN BIT 0
153 + L Q SER IN BIT 2
160 + L Q SER IN BIT 1
139 + L Q SER IN BIT 4
146 + L Q SER IN BIT 3
314 -1440 INPUT BIT 2
309 -1440 INPUT BIT 1
467 -1440 INPUT BIT 0
324 -1440 INPUT BIT 4
319 -1440 INPUT BIT 3
*** RB121 ***
125 + L Q SER IN BIT 6
111 + L Q SER IN BIT 7
132 + L Q SER IN BIT 5
204 + L Q SER IN BIT 9
118 + L Q SER IN BIT 8
329 -1440 INPUT BIT 5
334 -1440 INPUT BIT 6
404 -1440 INPUT BIT 7
339 -1440 INPUT BIT 8
344 -1440 INPUT BIT 9
Q SER IN BIT 7
Q SER IN BIT 8
Q SER IN BIT 6
Q SER IN BIT 5
Q SER IN BIT 4
Q SER IN BIT 3
Q SER IN BIT 2
Q SER IN BIT 1
Q SER IN BIT 0
SER SHIFT GATE
Q SER IN BIT 9
1440 INPUT BIT 1
1440 INPUT BIT 2
1440 INPUT BIT 3
1440 INPUT BIT 4
1440 INPUT BIT 5
1440 INPUT BIT 6
1440 INPUT BIT 8
1440 INPUT BIT 9
1440 INPUT BIT 7
1440 INPUT BIT 0
960 STOR + GATE
E.C. HISTORY
MACH. 3277
FRAME 01
IBM CORP. KN
P.N. 1823782
DATE LAST EC
01-21-72 717473
LOC. TYPE
A-A1F2 9065
PAGE VER EC LEV
RB111 000 717473
RB121 000 717473


IBM
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER
- SERIAL SHIFT CT
+ T Q SER IN BIT 0
+ T Q SER IN BIT 1
+ T Q SER IN BIT 2
+ T Q SER IN BIT 3
+ T Q SER IN BIT 4
+ T Q SER IN BIT 5
+ T Q SER IN BIT 6
+ T Q SER IN BIT 8
+ T Q SER IN BIT 7
+ T Q SER IN BIT 9
SPARE
SPARE
SPARE
SPARE
SPARE
-1440 FET OUT BIT 0
-1440 FET OUT BIT 1
-1440 FET OUT BIT 2
-1440 FET OUT BIT 3
-1440 FET OUT BIT 4
-1440 FET OUT BIT 5
-1440 FET OUT BIT 6
-1440 FET OUT BIT 7
-1440 FET OUT BIT 8
-1440 FET OUT BIT 9
Q SER IN BIT 9
Q SER IN BIT 7
Q SER IN BIT 8
Q SER IN BIT 6
Q SER IN BIT 5
Q SER IN BIT 4
Q SER IN BIT 3
Q SER IN BIT 2
Q SER IN BIT 1
Q SER IN BIT 0
SER SHIFT GATE
1440 INPUT BIT 1
1440 INPUT BIT 2
1440 INPUT BIT 3
1440 INPUT BIT 4
1440 INPUT BIT 5
1440 INPUT BIT 6
1440 INPUT BIT 8
1440 INPUT BIT 9
1440 INPUT BIT 7
1440 INPUT BIT 0
LOC. TYPE
A-A1F2 9065
PAGE VER EC LEV
RB111 000 717473
RB121 000 717473

000 RB111 RB121
RB111 RB121
+ QUARTER SHIFT GATE
+ SER SHIFT GATE
+ L Q SER IN BIT 0
+ L Q SER IN BIT 2
+ L Q SER IN BIT 1
+ L Q SER IN BIT 4
+ L Q SER IN BIT 3
-1440 INPUT BIT 2
-1440 INPUT BIT 1
-1440 INPUT BIT 0
-1440 INPUT BIT 4
-1440 INPUT BIT 5
RB121
+ L Q SER IN BIT 6
+ L Q SER IN BIT 7
+ L Q SER IN BIT 5
+ L Q SER IN BIT 9
+ L Q SER IN BIT 8
-1440 INPUT BIT 5
-1440 INPUT BIT 6
-1440 INPUT BIT 7
-1440 INPUT BIT 8
-1440 INPUT BIT 9
960 STOR + GATE
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ARCH. 3277
FRAME 01
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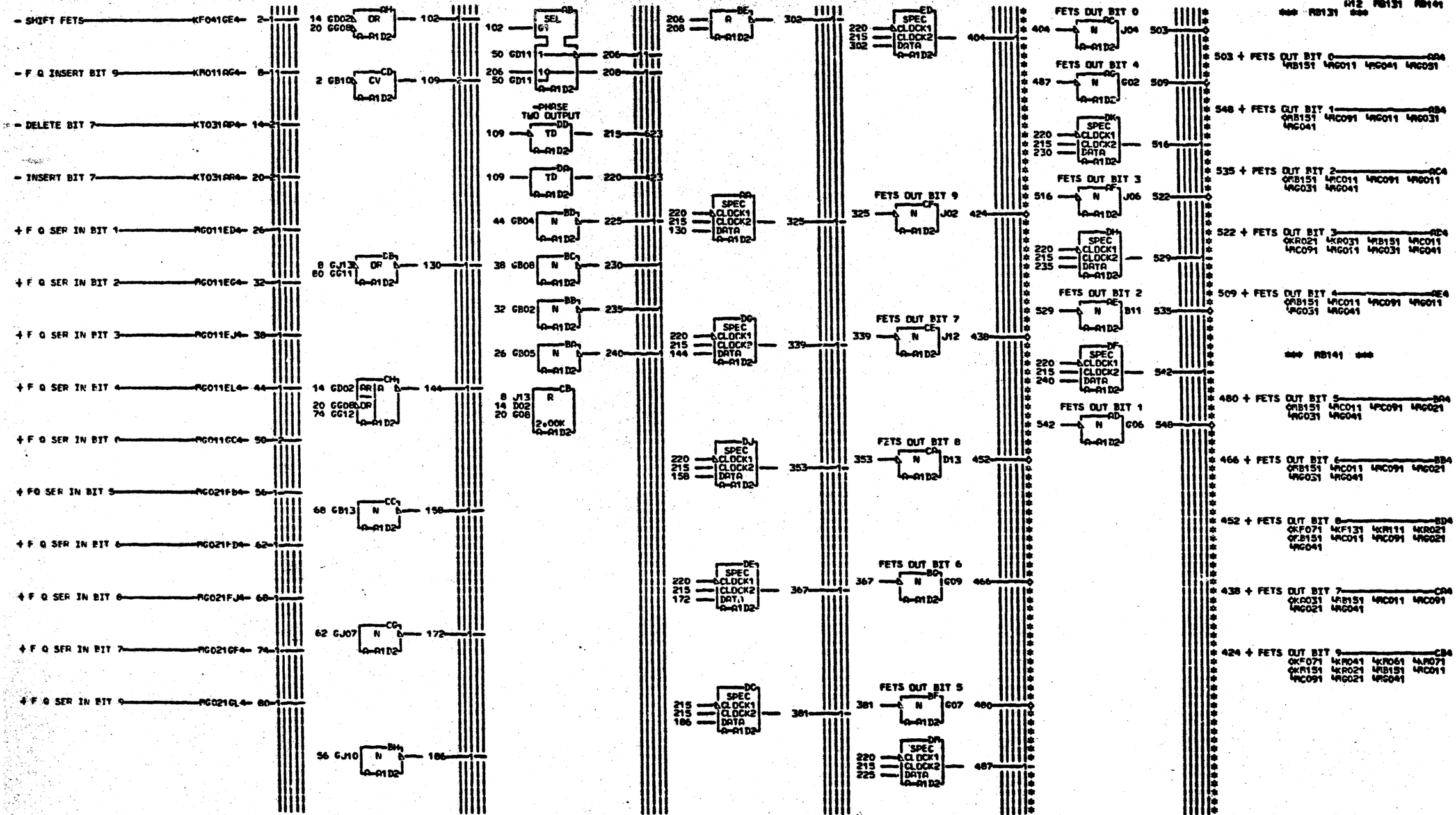
P.N. 1823782
DATE LAST EC
01-21-72 717473


- SHIFT FETS KF041GE4 2
- F Q INSERT BIT 9 KR011AG4 8
- DELETE BIT 7 KT031AP4 14
- INSERT BIT 7 KT031AR4 20
+ F Q SER IN BIT 1 RG011ED4 26
+ F Q SER IN BIT 2 RG011EG4 32
+ F Q SER IN BIT 3 RG011EJ4 38
+ F Q SER IN BIT 4 RG011EL4 44
+ F Q SER IN BIT 5 RG011GC4 50
+ FQ SER IN BIT 5 RG021FB4 56
+ F Q SER IN BIT 6 RG021FD4 62
+ F Q SER IN BIT 8 RG021FJ4 68
+ F Q SER IN BIT 7 RG021GF4 74
+ F Q SER IN BIT 9 RG021GL4 80
A=SIM TO PN 1563778 EC 717473
B=SIM TO PN 1563779 EC 717946
RB131
RB141
A12
LOC= TYPE
A-A1D2 9057
PAGE VER EC LEV
RB131 A12 717946
RB141 A12 717946
FETS OUT BIT 0
FETS OUT BIT 4
FETS OUT BIT 9
FETS OUT BIT 3
FETS OUT BIT 7
FETS OUT BIT 2
FETS OUT BIT 1
FETS OUT BIT 8
FETS OUT BIT 6
FETS OUT BIT 5
503 + FETS OUT BIT 0 RB151 RA011 RA041 RA091
548 + FETS OUT BIT 1 RB151 RA091 RA011 RA031 RA041
535 + FETS OUT BIT 2 RB151 RA011 RA091 RA011 RA031 RA041
522 + FETS OUT BIT 3 RA021 RA031 RB151 RA011 RA091 RA011 RA031 RA041
509 + FETS OUT BIT 4 RB151 RA011 RA091 RA011 RA031 RA041
480 + FETS OUT BIT 5 RB151 RA011 RA091 RA021 RA031 RA041
466 + FETS OUT BIT 6 RB151 RA011 RA091 RA021 RA031 RA041
452 + FETS OUT BIT 8 KF071 KF131 KR111 KR021 RB151 RA011 RA091 RA021 RA041
438 + FETS OUT BIT 7 KA031 RB151 RA011 RA091 RA021 RA041
424 + FETS OUT BIT 9 KF071 KR041 KR061 KA071 KR151 KR021 RB151 RA011 RA091 RA021 RA041
480 STORAGE BITS 0-4
E.C.=HISTORY
717473
717492
DATE LAST EC
08-05-72 717946
ARCH.3277
FRAME 01
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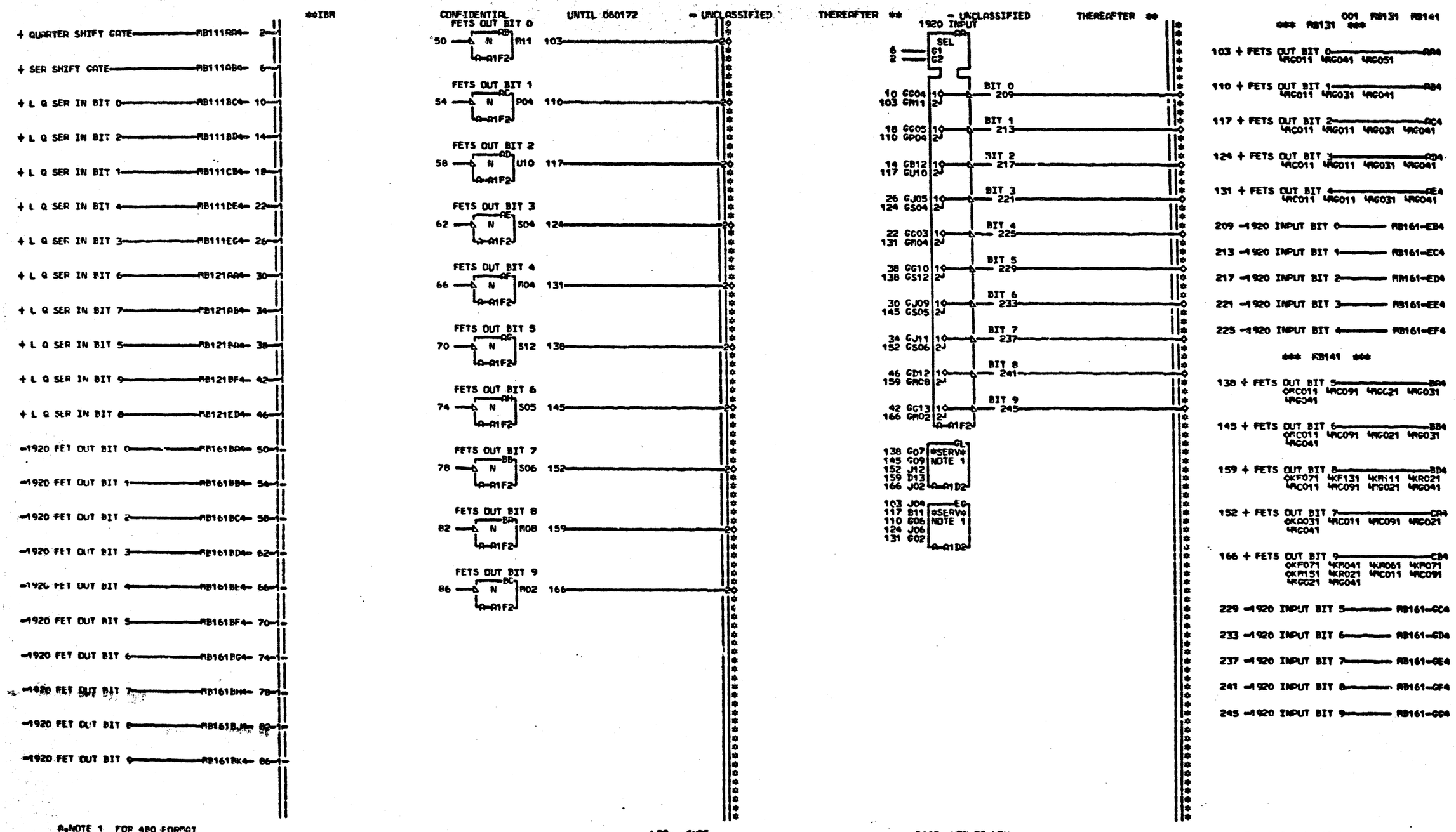
P.N. 1823709
RB131
RB141
A12



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RB141 000 717946

960 STORE + GATE
EC HISTORY PAGE No 3277
717473
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IBM CORP. PD RB141
DATE LAST EC
08-05-72 717946
P. No. 1823795 001

- SHIFT FETS ——— KF041GE4 — 2
- SERIAL SHIFT GT ——— KF171GC4 — 9
+ FETS OUT BIT 0 ——— RB131AA4 — 16
+ FETS OUT BIT 1 ——— RB131AB4 — 23
+ FETS OUT BIT 2 ——— RB131AC4 — 30
+ FETS OUT BIT 3 ——— RB131AD4 — 37
+ FETS OUT BIT 4 ——— RB131AE4 — 44
+ FETS OUT BIT 5 ——— RB141BA4 — 51
+ FETS OUT BIT 6 ——— RB141BB4 — 58
+ FETS OUT BIT 7 ——— RB141BD4 — 65
+ FETS OUT BIT 8 ——— RB141CA4 — 72
+ FETS OUT BIT 9 ——— RB141CB4 — 79

108 D11
109 B05
110 B04
111 B13
112 G11
AH *SERV* NOTE 1 A-A1F2

AC *SERV* NOTE 1 A-A1D4
B11 108
D04 109
B04 110
B08 111
B02 112

AF *SERV* NOTE 1 A-A1D5
2 B07

16 M11
23 P04
30 U10
37 S04
44 R04
51 S12
58 S05
72 S06
65 R08
79 R02
AE *SERV* NOTE 1 A-A1F2

9 D10
2 S07
AD *SERV* NOTE 1 A-A1F2

9 D10
2 B10
AC *SERV* NOTE 1 A-A1D2

158 B02
159 B08
161 J10
162 J07
163 G12
AB *SERV* NOTE 1 A-A1F2

AA *SERV* NOTE 1 A-A1D5
D10 158
B04 159
B12 161
B05 162
B06 163

A. NOTE 1 FOR 1920 FORMAT
SIM TO PN 1563760 EC 717946
B. SIM TO PN 1563781 EC 717473

RB151
RB161
002

LOC. TYPE

PAGE VER EC LEV
RB151 002 717946
RB161 002 717473

REF 1920 BOARD WIRING
E.C. HISTORY — MACH. 3277
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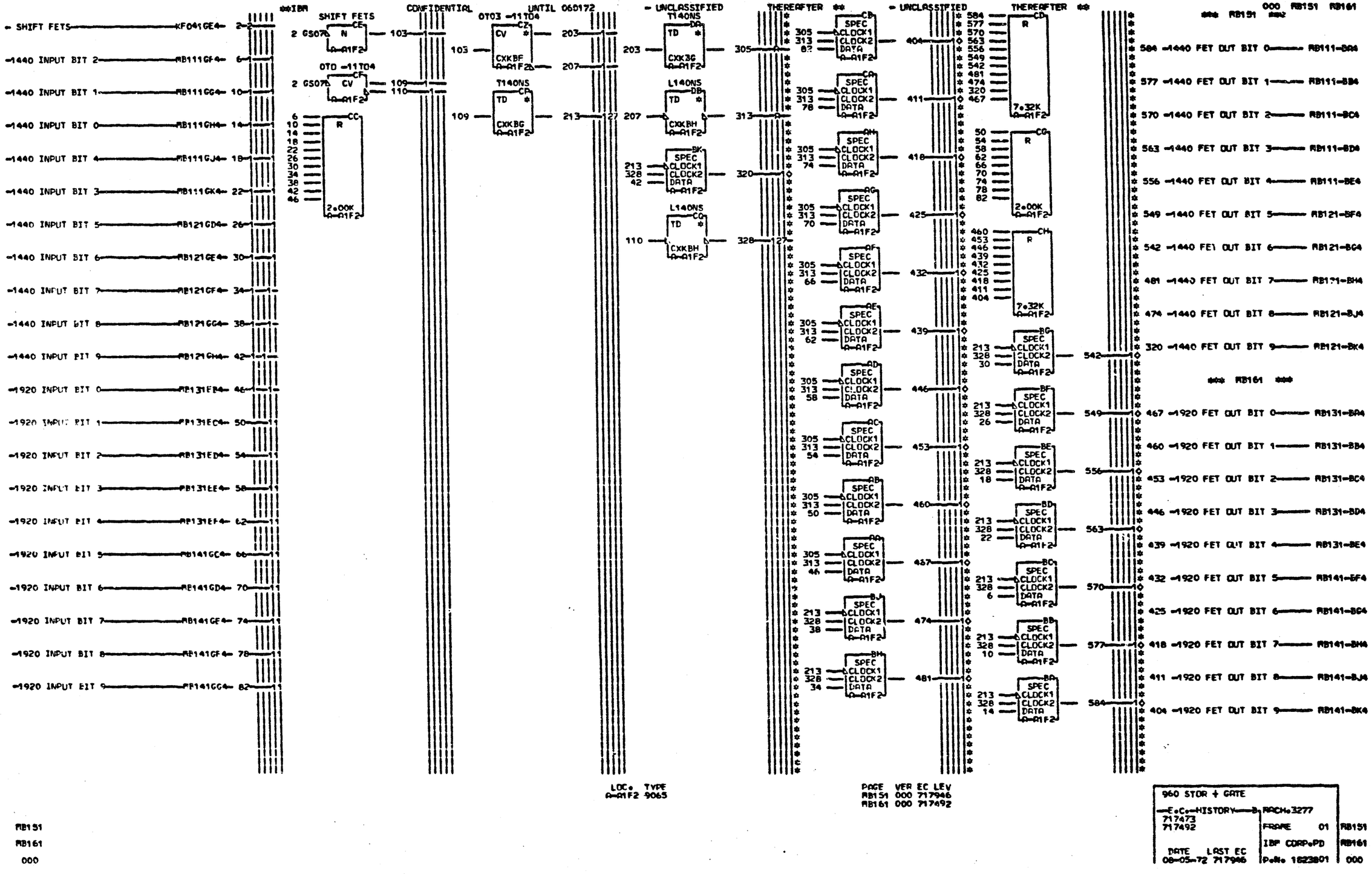
DATE LAST EC
08-11-72 717946
P.No. 1823802 002



LOC. TYPE
A-A1F2 9065

PAGE VER EC LEV
RB151 000 717946
RB161 000 717492

960 STOR + GATE

ECO-HISTORY	RACM.3277	
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DATE LAST EC	P.No 1823801	000
08-05-72 717946		

RB151
RB161
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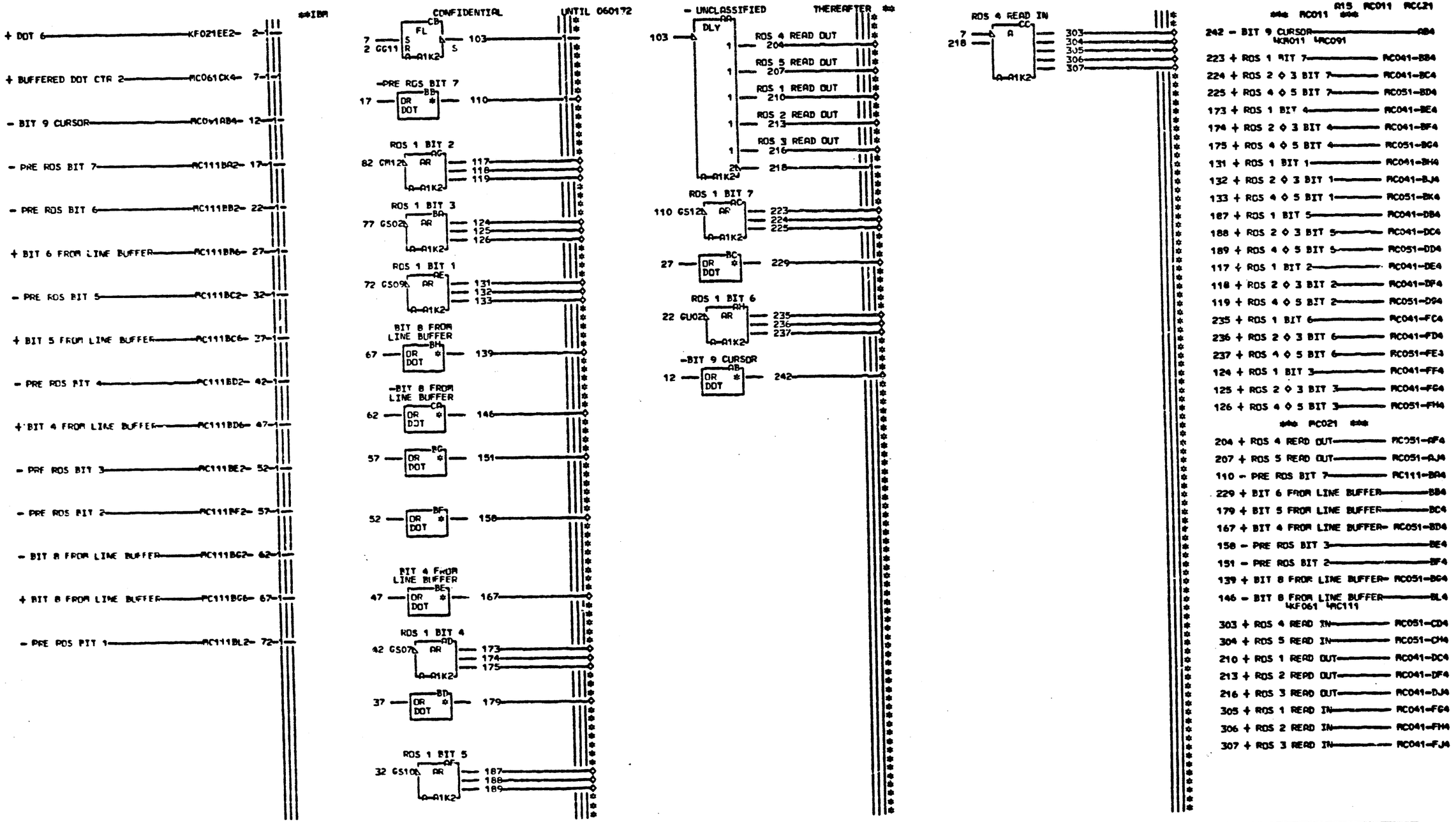

A.NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS.
SIM TO P/N 1563782 EC 717492
B. SEE REFERENCE PAGE 22109 FOR CHARACTER GENERATOR CARDS.
SIM TO P/N 1563783 EC 717946

LOC. TYPE
A-A1K2 9123

PAGE	VER	EC	LEV
RC011	005	718541	
RC021	A15	718541	

480 + 1920 CHAR. GEN.
KATAKANA OR EXTENDED CHAR SET
E.C.#-HISTORY- D. MACH.3277

717473		
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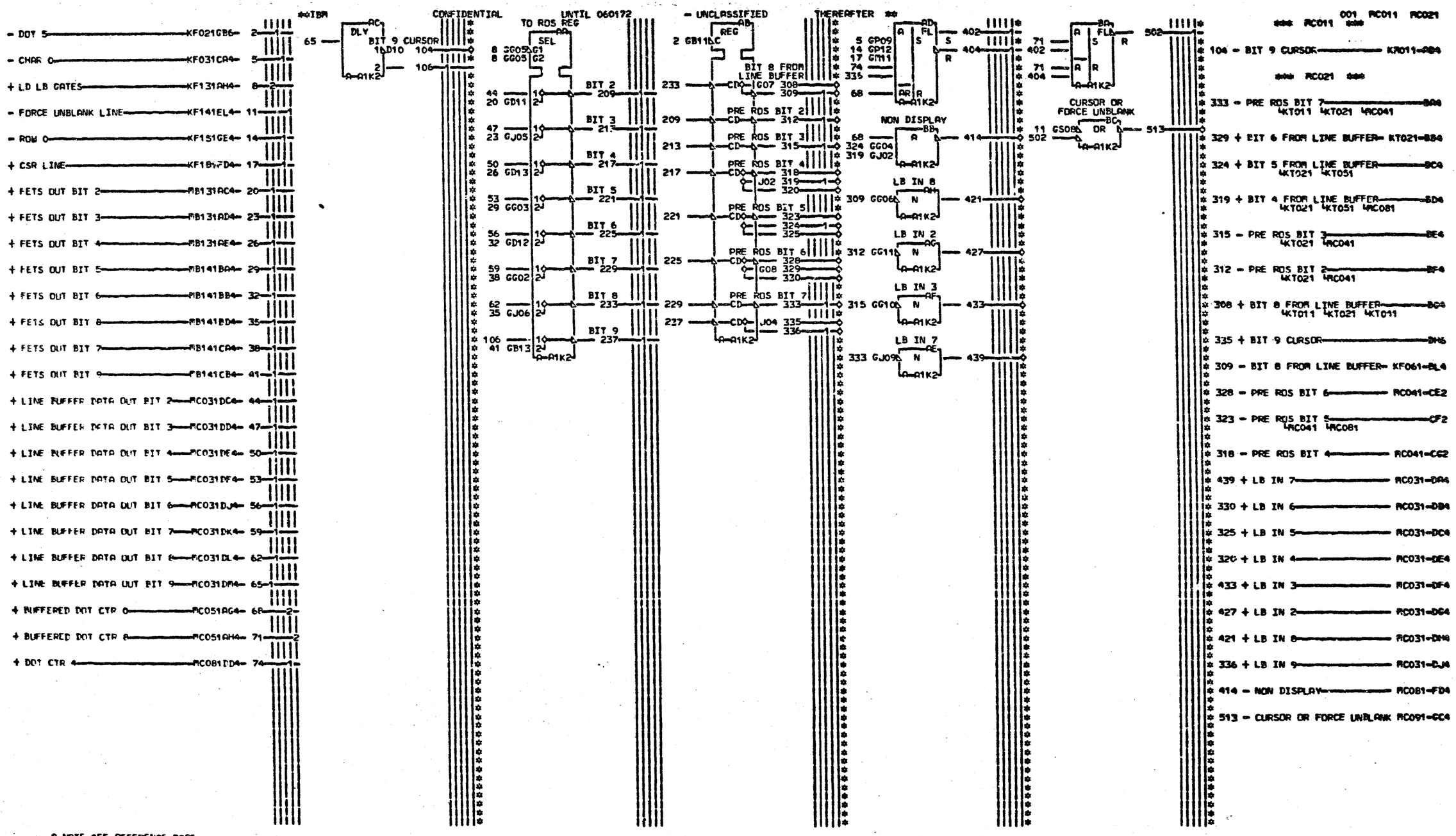
717946	IBM CORP.SDD	RC021
DATE LAST EC	P.N. 1823810	A15
10-02-72 718541		



A. NOTE SEE REFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS
B. NOTE SEE REFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS SIM TO PN 1563783 EC 717946

RC011
RC021
001

LOC. TYPE
A-A1K2 9070

PAGE	VER	EC LEV
RC011	000	717492
RC021	001	717946

LINE BUFFER + CHAR. GEN.

E.C.-HISTORY	B.	RACM-3277	
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		IBM CORP.-KN	RC021
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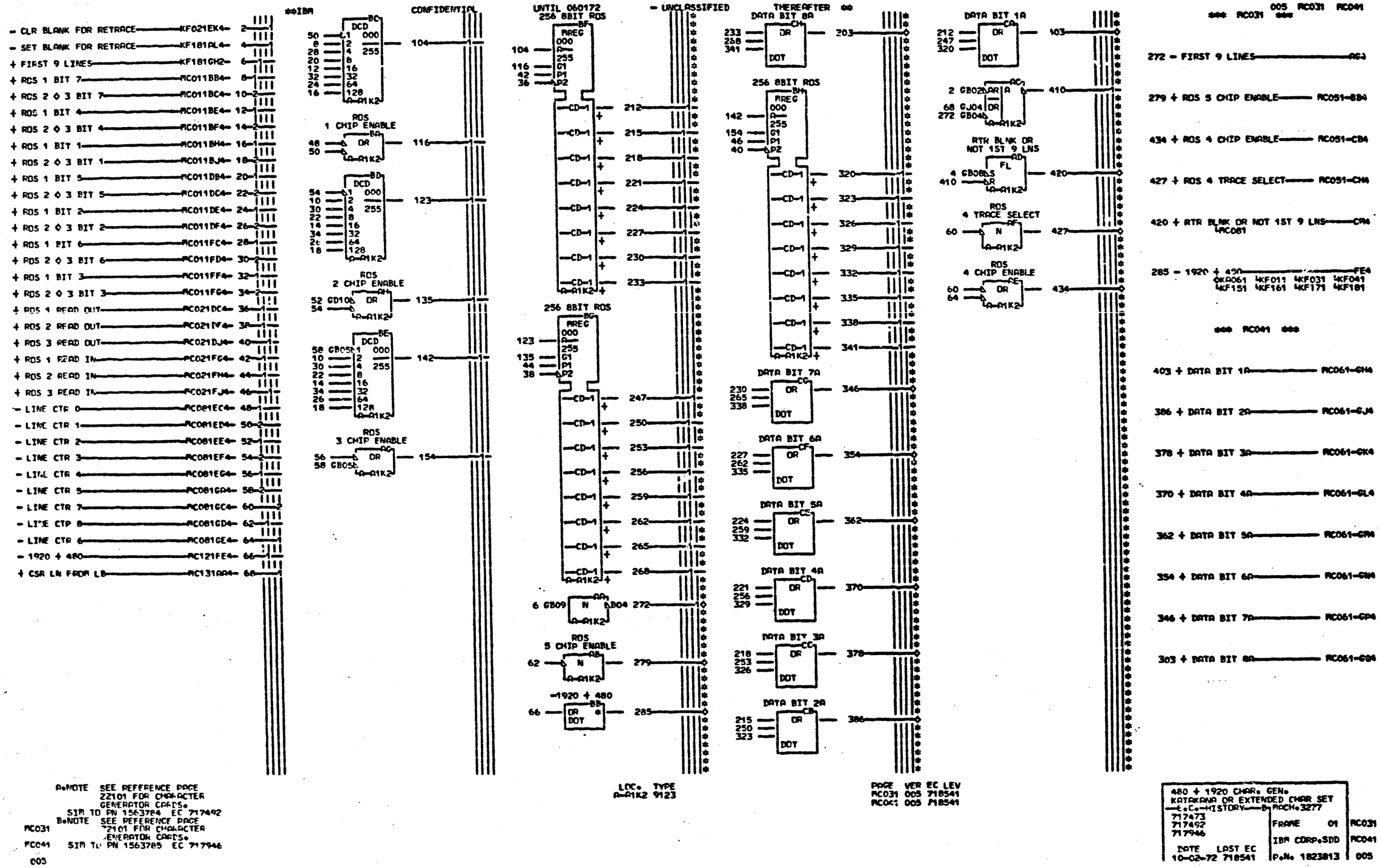
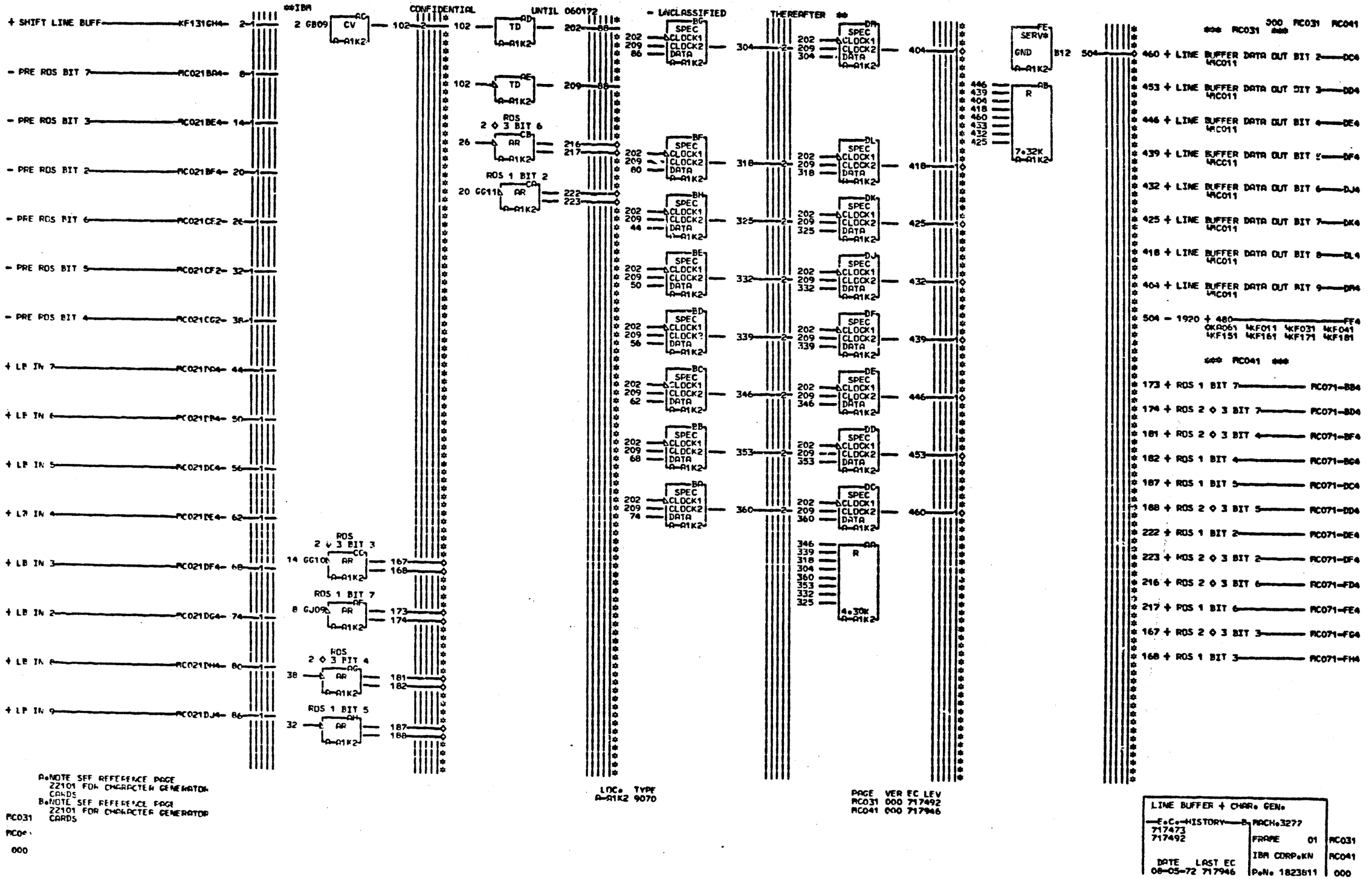
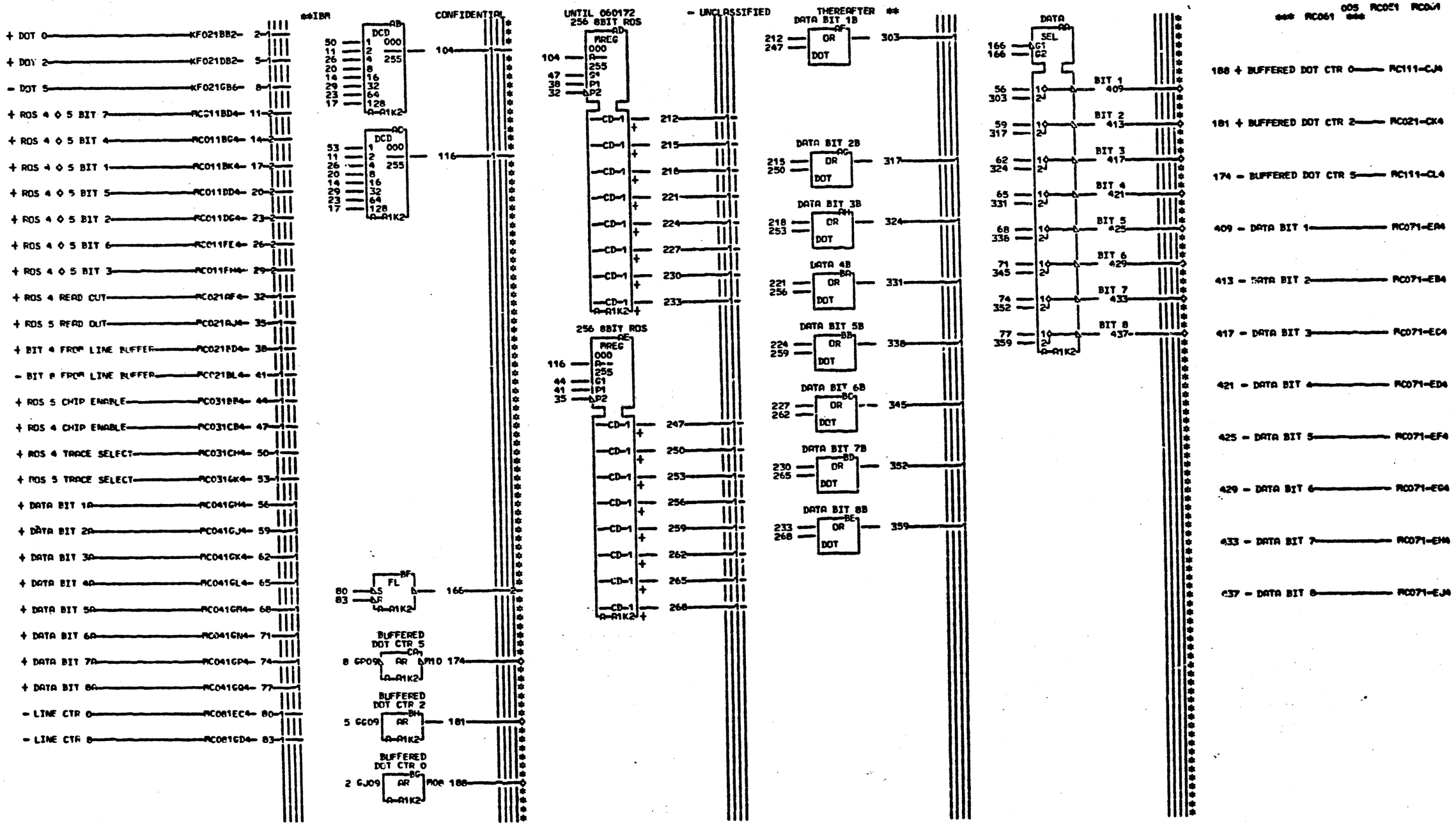
08-05-72 717946			


**IBM
CONFIDENTIAL
- UNCLASSIFIED
- CLR BLANK FOR RETRACE KF021EK4- 2
- SET BLANK FOR RETRACE KF181AL4- 4
+ FIRST 9 LINES KF181GH2- 6
+ ROS 1 BIT 7 RC011BB4- 8
+ ROS 2 ◇ 3 BIT 7 RC011BC4- 10
+ ROS 1 BIT 4 RC011BE4- 12
+ ROS 2 ◇ 3 BIT 4 RC011BF4- 14
+ ROS 1 BIT 1 RC011BH4- 16
+ ROS 2 ◇ 3 BIT 1 RC011BJ4- 18
+ ROS 1 BIT 5 RC011DB4- 20
+ ROS 2 ◇ 3 BIT 5 RC011DC4- 22
+ ROS 1 BIT 2 RC011DE4- 24
+ ROS 2 ◇ 3 BIT 2 RC011DF4- 26
+ ROS 1 BIT 6 RC011FC4- 28
+ ROS 2 ◇ 3 BIT 6 RC011FD4- 30
+ ROS 1 BIT 3 RC011FF4- 32
+ ROS 2 ◇ 3 BIT 3 RC011FG4- 34
+ ROS 1 READ OUT RC021DC4- 36
+ ROS 2 READ OUT RC021DF4- 38
+ ROS 3 READ OUT RC021DJ4- 40
+ ROS 1 READ IN RC021FG4- 42
+ ROS 2 READ IN RC021FH4- 44
+ ROS 3 READ IN RC021FJ4- 46
- LINE CTR 0 RC081EC4- 48
- LINE CTR 1 RC081ED4- 50
- LINE CTR 2 RC081EE4- 52
- LINE CTR 3 RC081EF4- 54
- LINE CTR 4 RC081EG4- 56
- LINE CTR 5 RC081GA4- 58
- LINE CTR 7 RC081GC4- 60
- LINE CTR 8 RC081GD4- 62
- LINE CTR 6 RC081GE4- 64
- 1920 + 480 RC121FE4- 66
+ CSR LN FROM LB RC131AA4- 68
DCD
ROS 1 CHIP ENABLE
ROS 2 CHIP ENABLE
ROS 3 CHIP ENABLE
OR
DOT
104
116
123
135
142
154
UNTIL 060172
256 8BIT ROS
PREG
212
215
218
221
224
227
230
233
247
250
253
256
259
262
265
268
272
ROS 5 CHIP ENABLE
279
-1920 + 480
285
THEREAFTER **
DATA BIT 8A
203
256 8BIT ROS
320
323
326
329
332
335
338
341
DATA BIT 7A
346
DATA BIT 6A
354
DATA BIT 5A
362
DATA BIT 4A
370
DATA BIT 3A
378
DATA BIT 2A
386
DATA BIT 1A
403
RTR BLNK OR NOT 1ST 9 LNS
420
ROS 4 TRACE SELECT
427
ROS 4 CHIP ENABLE
434
410
005 RC031 RC041
*** RC031 ***
272 - FIRST 9 LINES RC1
279 + ROS 5 CHIP ENABLE RC051-BB4
434 + ROS 4 CHIP ENABLE RC051-CB4
427 + ROS 4 TRACE SELECT RC051-CM4
420 + RTR BLNK OR NOT 1ST 9 LNS CM4
RC081
285 - 1920 + 480 FE4
KRA061 KF011 KF031 KF041
KF151 KF161 KF171 KF181
*** RC041 ***
403 + DATA BIT 1A RC061-GH4
386 + DATA BIT 2A RC061-GJ4
378 + DATA BIT 3A RC061-GK4
370 + DATA BIT 4A RC061-GL4
362 + DATA BIT 5A RC061-GM4
354 + DATA BIT 6A RC061-GN4
346 + DATA BIT 7A RC061-GP4
303 + DATA BIT 8A RC061-GR4
A.NOTE SEE REFERENCE PAGE
Z2101 FOR CHARACTER
GENERATOR CARDS.
SIM TO PN 1563784 EC 717492
B.NOTE SEE REFERENCE PAGE
Z2101 FOR CHARACTER
GENERATOR CARDS.
SIM TO PN 1563785 EC 717946
RC031
RC041
005
LOC. TYPE
A-A1K2 9123
PAGE VER EC LEV
RC031 005 718541
RC041 005 718541
480 + 1920 CHAR. GEN.
KATAKANA OR EXTENDED CHAR SET
E.C. HISTORY
717473
717492
717946
DATE LAST EC
10-02-72 718541
BY
MACH. 3277
FRAME 01
IBM CORP. SDD
P.N. 1823813
RC031
RC041
005


**IBA
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
+ SHIFT LINE BUFF
- PRE ROS BIT 7
- PRE ROS BIT 3
- PRE ROS BIT 2
- PRE ROS BIT 6
- PRE ROS BIT 5
- PRE ROS BIT 4
+ LP IN 7
+ LP IN 6
+ LP IN 5
+ LP IN 4
+ LP IN 3
+ LP IN 2
+ LP IN 8
+ LP IN 9
2 GB09 CV
ROS 2 ◇ 3 BIT 6
20 GG11 AR
ROS 1 BIT 2
ROS 2 ◇ 3 BIT 3
14 GG10 AR
ROS 1 BIT 7
8 GJ09 AR
ROS 2 ◇ 3 BIT 4
38 AR
ROS 1 BIT 5
32 AR
SPEC
CLOCK1
CLOCK2
DATA
A-A1K2
SERV*
GND
R
7•32K
4•30K
*** RC031 ***
*** RC041 ***
+ LINE BUFFER DATA OUT BIT 2
+ LINE BUFFER DATA OUT BIT 3
+ LINE BUFFER DATA OUT BIT 4
+ LINE BUFFER DATA OUT BIT 5
+ LINE BUFFER DATA OUT BIT 6
+ LINE BUFFER DATA OUT BIT 7
+ LINE BUFFER DATA OUT BIT 8
+ LINE BUFFER DATA OUT BIT 9
+ 480
+ ROS 1 BIT 7
+ ROS 2 ◇ 3 BIT 7
+ ROS 2 ◇ 3 BIT 4
+ ROS 1 BIT 4
+ ROS 1 BIT 5
+ ROS 2 ◇ 3 BIT 5
+ ROS 1 BIT 2
+ ROS 2 ◇ 3 BIT 2
+ ROS 2 ◇ 3 BIT 6
+ ROS 1 BIT 6
+ ROS 2 ◇ 3 BIT 3
+ ROS 1 BIT 3
A•NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS
B•NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS
LOC• TYPE
A-A1K2 9070
PAGE VER EC LEV
RC031 000 717492
RC041 000 717946
LINE BUFFER + CHAR• GEN•
E•C•-HISTORY
717473
717492
DATE LAST EC
08-05-72 717946
MACH•3277
FRAME 01
IBM CORP•KN
P•N• 1823611
RC031
RC041
000



A-NOTE SEE REFERENCE PAGE
Z2101 FOR CHARACTER
GENERATOR CODES.
IM TO PN 1563786 EC 717492

B NOTE SEE REFERENCE PAGE
Z2101 FOR CHARACTER
GENERATOR CODES.
SIM TO PN 1563787 EC 717492

RC051
RC061
005

LOC. TYPE
A-A1K2 9123

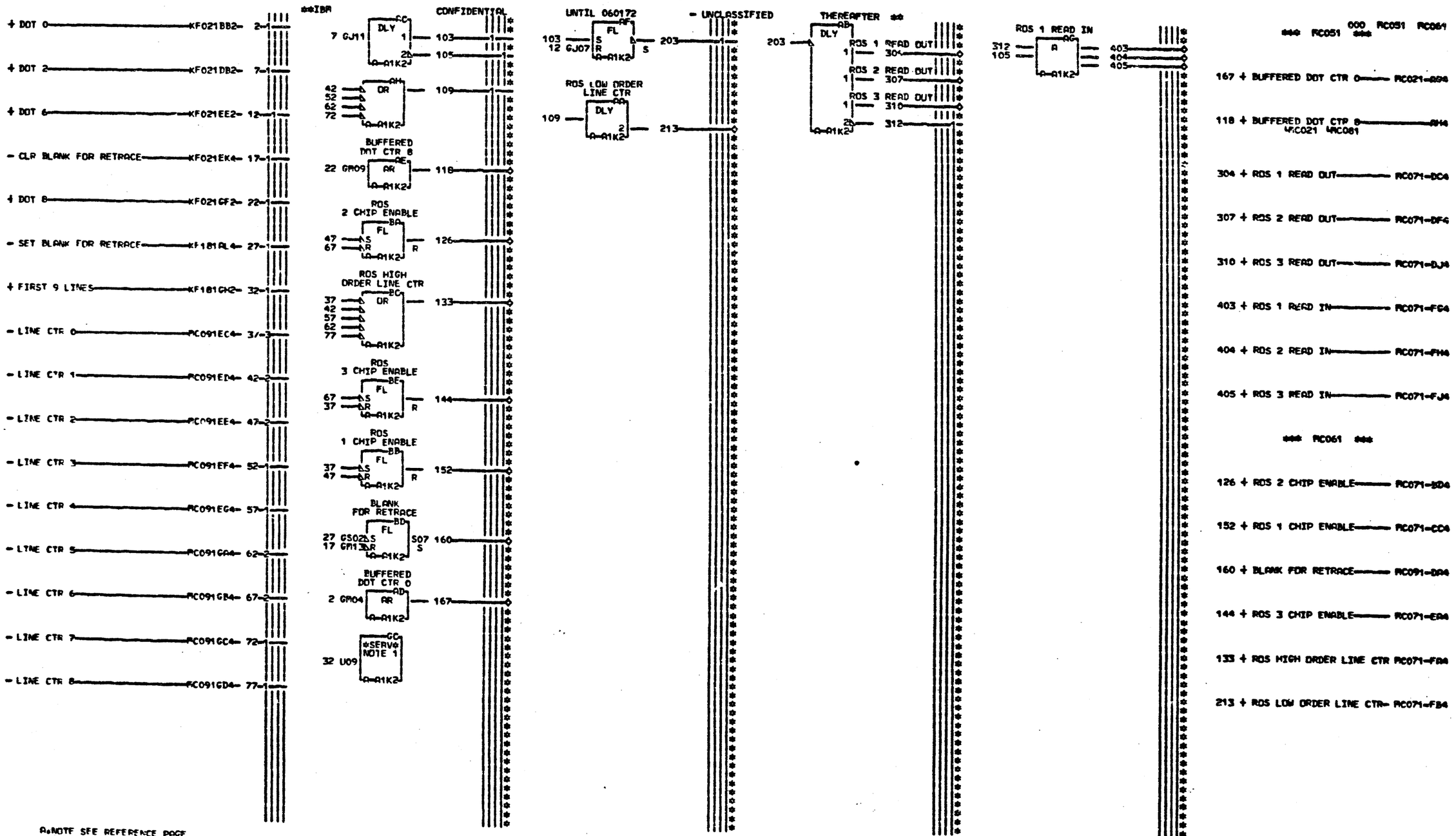
PAGE VER EC LEV
RC051 005 718541
RC061 005 718541

420 + 1920 CHAR. GEN.
KATAKANA OR EXTENDED CHAR SET

E.C. HISTORY — BY PACH.3277
717473
717492
717946

DATE LAST EC
10-02-72 718541

FRAME 01 RC051
IBM CORP.SDD RC061
P.No 1823818 005



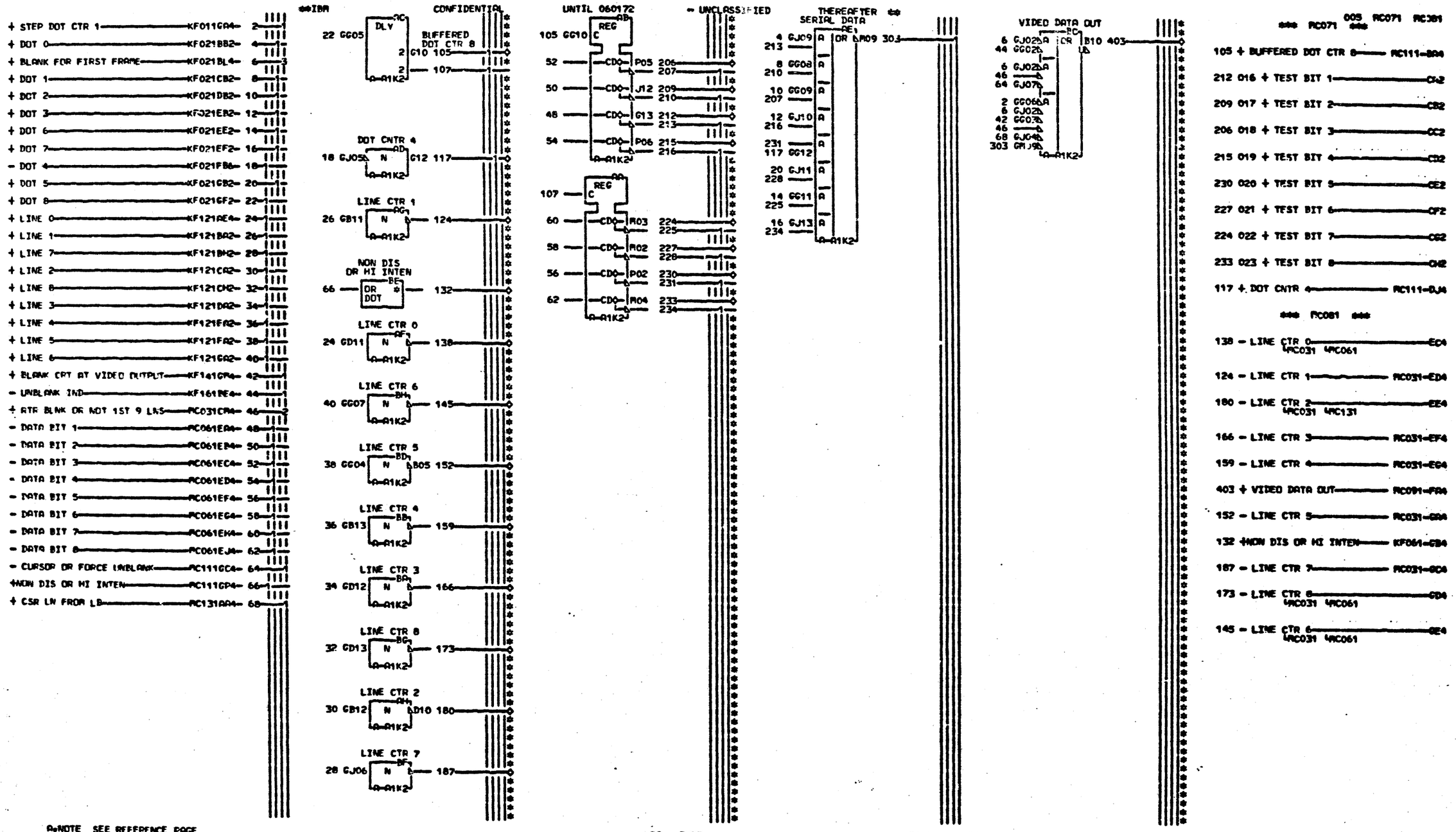
A. NOTE SEE REFERENCE PAGE Z7101 FOR CHARACTER GENERATOR CARDS
B. NOTE 2 SEE REFERENCE PAGE Z7101 FOR CHARACTER GENERATOR CARDS

PC 1
RC061
00C

LOC. TYPE
A-A1K2 9070

PAGE	VER	EC LEV
RC051	000	717492
RC061	000	717492

LINE BUFFER + CHAR. GEN.
E.C.-HISTORY-B. RACH.3277
717473
FRAME 01 RC091
IBM CORP.-KN RC061
DATE LAST EC P.N. 1823816 000
06-01-72 717492



A. NOTE SEE REFFRENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS.
SIM TO PN 1563788 EC 717492

B. NOTE SEE REFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS.
SIM TO PN 1563789 EC 717946

RC071
RC081
005

LOC. TYPE
A-A1K2 9123

PAGE	VER	EC LEV
RC071	005	718541
RC081	005	718541

480 + 1920 CHAR. GEN.
KATAKANA OR EXTENDED CHAR SET

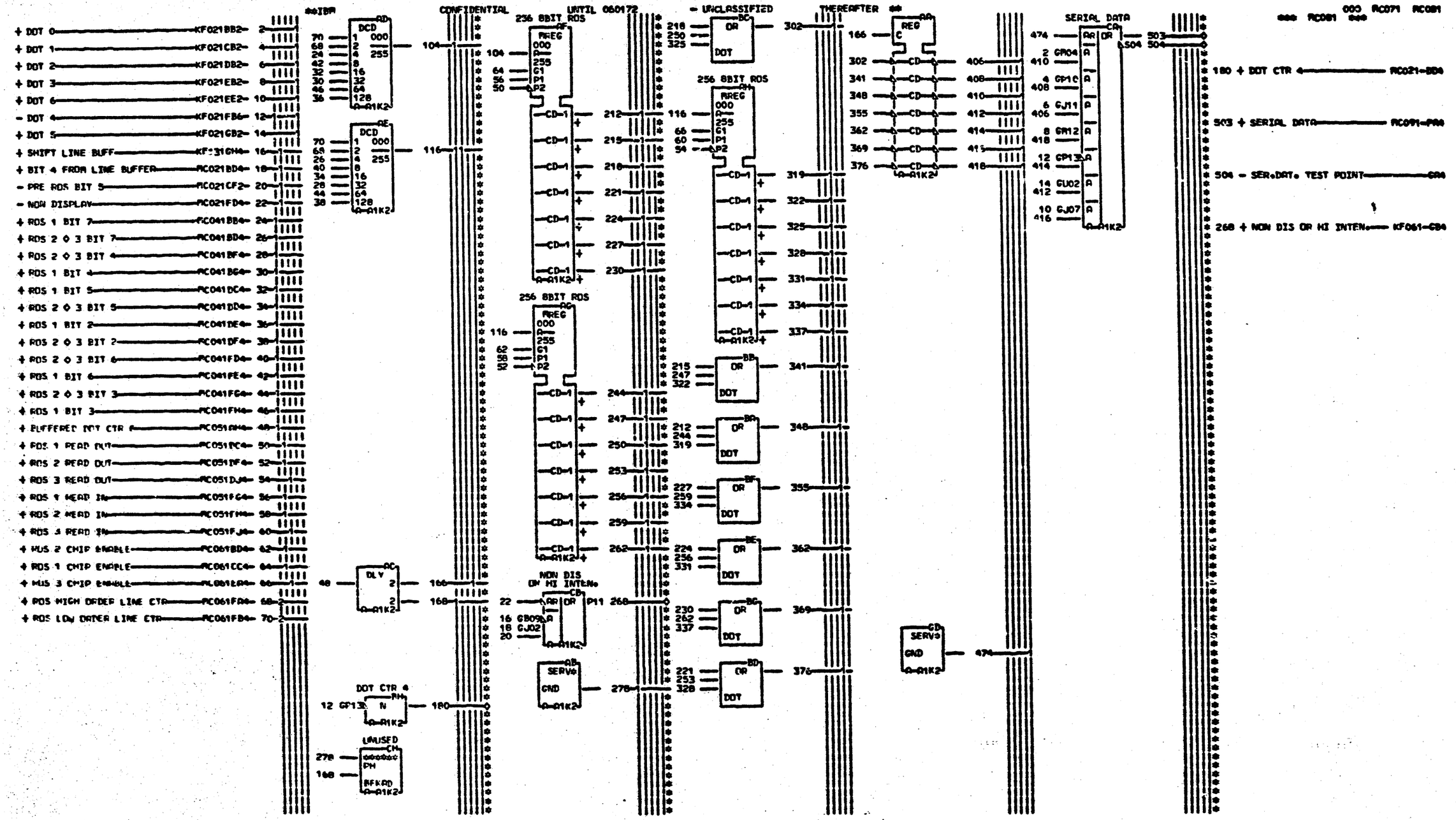
E.C. HISTORY

DATE	LAST EC
	717473
	716959
	717492
	717946
10-02-72	718541

RACH.3277

FRAME	01
IBM CORP. KN	
P.N. 1823823	

RC071
RC081
005



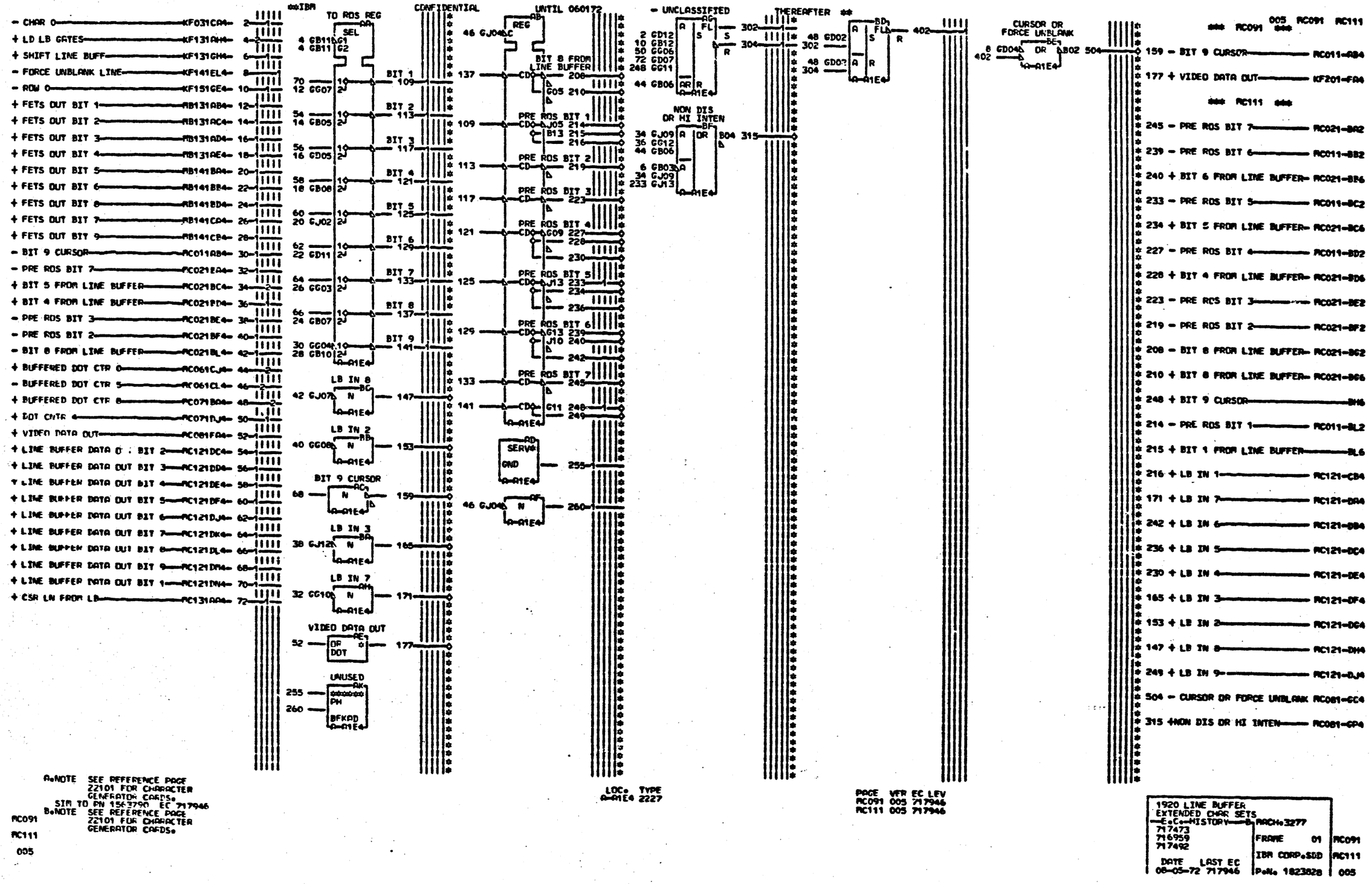
A. NOTE SEE REFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS
B. NOTE SEE REFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS

RC071
RC081
000

LOC. TYPE
A-A1K2 9070

PAGE VER EC LEV
RC071 000 717492
RC081 000 717946

LINE BUFFER + CHAR. GEN.
E.C.-HISTORY- B. RACH.3277
717473
717492
FRAME 01 RC071
IBM CORP.-RN RC081
DATE LAST EC
08-05-72 717946
P.N. 1823821 000


**IBR
TO ROS REG
CONFIDENTIAL
UNTIL 060172
- UNCLASSIFIED
THEREAFTER **
CURSOR OR FORCE UNBLANK
*** RC091 005 RC091 RC111 ***
- CHAR 0 KF031CA4 2
+ LD LB GATES KF131AH4 4
+ SHIFT LINE BUFF KF131GH4 6
- FORCE UNBLANK LINE KF141EL4 8
- ROW 0 KF151GE4 10
+ FETS OUT BIT 1 RB131AB4 12
+ FETS OUT BIT 2 RB131AC4 14
+ FETS OUT BIT 3 RB131AD4 16
+ FETS OUT BIT 4 RB131AE4 18
+ FETS OUT BIT 5 RB141BA4 20
+ FETS OUT BIT 6 RB141BB4 22
+ FETS OUT BIT 8 RB141BD4 24
+ FETS OUT BIT 7 RB141CD4 26
+ FETS OUT BIT 9 RB141CB4 28
- BIT 9 CURSOR RC011AB4 30
- PRE ROS BIT 7 RC021EA4 32
+ BIT 5 FROM LINE BUFFER RC021BC4 34
+ BIT 4 FROM LINE BUFFER RC021BD4 36
- PRE ROS BIT 3 RC021BE4 38
- PRE ROS BIT 2 RC021BF4 40
- BIT 8 FROM LINE BUFFER RC021BL4 42
+ BUFFERED DOT CTR 0 RC061CJ4 44
- BUFFERED DOT CTR 5 RC061CL4 46
+ BUFFERED DOT CTR 8 RC071BA4 48
+ DOT CNTR 4 RC071DJ4 50
+ VIDEO DATA OUT RC081FA4 52
+ LINE BUFFER DATA OUT BIT 2 RC121DC4 54
+ LINE BUFFER DATA OUT BIT 3 RC121DD4 56
+ LINE BUFFER DATA OUT BIT 4 RC121DE4 58
+ LINE BUFFER DATA OUT BIT 5 RC121DF4 60
+ LINE BUFFER DATA OUT BIT 6 RC121DJ4 62
+ LINE BUFFER DATA OUT BIT 7 RC121DK4 64
+ LINE BUFFER DATA OUT BIT 8 RC121DL4 66
+ LINE BUFFER DATA OUT BIT 9 RC121DM4 68
+ LINE BUFFER DATA OUT BIT 1 RC121DN4 70
+ CSR LN FROM LB RC131AA4 72
SEL
BIT 1 109
BIT 2 113
BIT 3 117
BIT 4 121
BIT 5 125
BIT 6 129
BIT 7 133
BIT 8 137
BIT 9 141
LB IN 8 147
LB IN 2 153
BIT 9 CURSOR 159
LB IN 3 165
LB IN 7 171
VIDEO DATA OUT 177
UNUSED
BIT 8 FROM LINE BUFFER 208
PRE ROS BIT 1 214
PRE ROS BIT 2 219
PRE ROS BIT 3 223
PRE ROS BIT 4 227
PRE ROS BIT 5 233
PRE ROS BIT 6 239
PRE ROS BIT 7 245
SERVO GND 255
260
NON DIS OR HI INTEN 315
402
504
159 - BIT 9 CURSOR RC011-AB4
177 + VIDEO DATA OUT KF201-FA4
*** RC111 ***
245 - PRE ROS BIT 7 RC021-BA2
239 - PRE ROS BIT 6 RC011-BB2
240 + BIT 6 FROM LINE BUFFER RC021-BB6
233 - PRE ROS BIT 5 RC011-BC2
234 + BIT 5 FROM LINE BUFFER RC021-BC6
227 - PRE ROS BIT 4 RC011-BD2
228 + BIT 4 FROM LINE BUFFER RC021-BD6
223 - PRE ROS BIT 3 RC021-BE2
219 - PRE ROS BIT 2 RC021-BF2
208 - BIT 8 FROM LINE BUFFER RC021-BG2
210 + BIT 8 FROM LINE BUFFER RC021-BG6
248 + BIT 9 CURSOR BH6
214 - PRE ROS BIT 1 RC011-BL2
215 + BIT 1 FROM LINE BUFFER BL6
216 + LB IN 1 RC121-CB4
171 + LB IN 7 RC121-DA4
242 + LB IN 6 RC121-DB4
236 + LB IN 5 RC121-DC4
230 + LB IN 4 RC121-DE4
165 + LB IN 3 RC121-DF4
153 + LB IN 2 RC121-DG4
147 + LB IN 8 RC121-DH4
249 + LB IN 9 RC121-DJ4
504 - CURSOR OR FORCE UNBLANK RC081-GC4
315 +NON DIS OR HI INTEN RC081-GP4
A-NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS. SIM TO PN 1563790 EC 717946
B-NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS.
RC091
RC111
005
LOC. TYPE
A-A1E6 2227
PAGE VER EC LEV
RC091 005 717946
RC111 005 717946
1920 LINE BUFFER
EXTENDED CHAR SETS
E.C. HISTORY
717473
716959
717492
DATE LAST EC
08-05-72 717946
B-ARCH. 3277
FRAME 01
IBM CORP. SDD
P.N. 1823828
RC091
RC111
005

+ STEP DOT CTR 1 ——— KF011GA4 — 2
+ BLANK FOR FIRST FRAME ——— KF021BL4 — 7
+ LINE 0 ——— KF121AE4 — 12
+ LINE 1 ——— KF121BA2 — 17
+ LINE 7 ——— KF121BH2 — 22
+ LINE 2 ——— KF121CA2 — 27
+ LINE 8 ——— KF121CH2 — 32
+ LINE 3 ——— KF121DG2 — 37
+ LINE 4 ——— KF121EA2 — 42
+ LINE 5 ——— KF121FA2 — 47
+ LINE 6 ——— KF121GA2 — 52
+ BLANK CRT AT VIDEO OUTPUT ——— KF141GP4 — 57
- UNBLANK IND ——— KF161BE4 — 62
+ CSR LINE ——— KF181FD4 — 67
- CURSOR OR FORCE UNBLANK ——— RC021GC4 — 72
+ BLANK FOR RETRACE ——— RC061DA4 — 77
+ SERIAL DATA ——— RC081FA4 — 82

LINE CTR 8: 32 GU13 N → 103 (A-A1K2)
LINE CTR 2: 27 GS03 N → 110 (A-A1K2)
LINE CTR 7: 22 GS13 N → 117 (A-A1K2)
LINE CTR 1: 17 GU07 N → 124 (A-A1K2)
LINE CTR 0: 12 GU05 N → 131 (A-A1K2)
VIDEO DATA OUT: 7 GU06 A OR 09 → 138 (A-A1K2)
LINE CTR 6: 52 GU12 N → 155 (A-A1K2)
LINE CTR 5: 47 GS11 N → 161 (A-A1K2)
LINE CTR 4: 42 GU10 N → 167 (A-A1K2)
LINE CTR 3: 37 GS10 N → 173 (A-A1K2)

000 RC091 RC091

131 ← LINE CTR 0 ——— RC061-EC4
124 ← LINE CTR 1 ——— RC061-ED4
110 ← LINE CTR 2 ——— RC061-EE4
173 ← LINE CTR 3 ——— RC061-EF4
167 ← LINE CTR 4 ——— RC061-EG4
138 + VIDEO DATA OUT ——— KF201-FA4
161 ← LINE CTR 5 ——— RC061-GA4
155 ← LINE CTR 6 ——— RC061-GB4
117 ← LINE CTR 7 ——— RC061-GC4
103 ← LINE CTR 8 ——— RC061-GD4

A. REFER TO PREFERENCE PAGE ZZ101 FOR CHARACTER GENERATOR CARDS

RC091
RC091
000

LOC. TYPE
A-A1K2 9070

PAGE VER EC LEV
RC091 000 717946

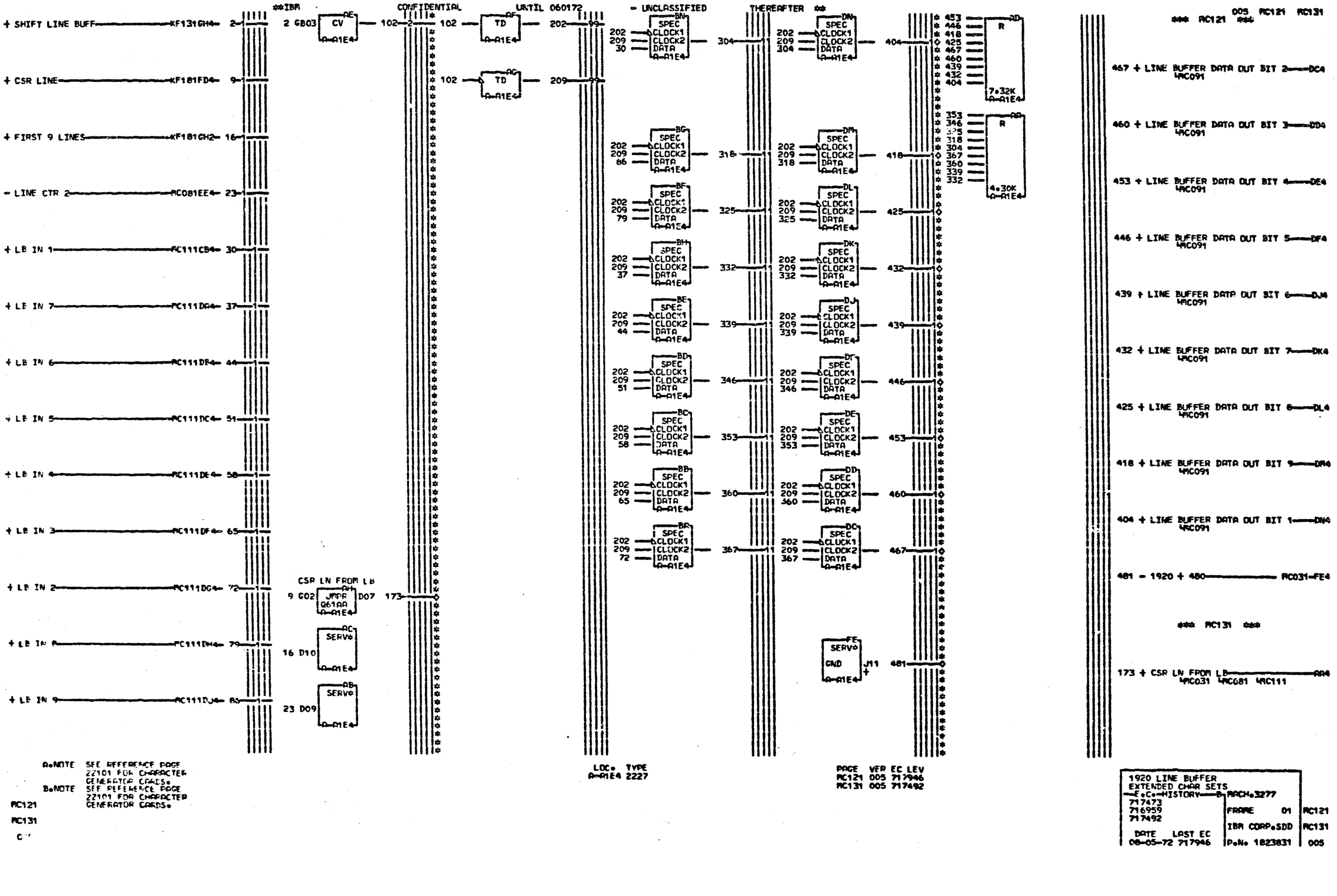
LINE BUFFER + CHAR. GEN.

E.C. HISTORY — B. MACH. 3277

717473
717492

DATE LAST EC
08-05-72 717946

FRAME 01 RC091
IBM CORP. KN RC091
P.N. 1823826 000



A. NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS.

B. NOTE SEE REFERENCE PAGE 22101 FOR CHARACTER GENERATOR CARDS.

RC121
RC131

LOC. TYPE
A-A1E4 2227

PAGE	VER	EC LEV
RC121	005	717946
RC131	005	717492

1920 LINE BUFFER
EXTENDED CHAR SETS

E.C.-HISTORY-	B-MACH.3277	
717473		
716959	FRAME 01	RC121
717492	IBM CORP.SDD	RC131
DATE LAST EC	P.No 1823831	005
08-05-72 717946		

+ INPUT PARITY PREDICT — KA011GK4 2-1
- DELETE PDT BIT 7 — KA031GH4 3-1
+ LOAD MESSAGE BUFFER — KA051FG4 5-1
- LOAD I-O DATA — KA071AE4 6-1
+ INSERT NULL — KA081DB4 8-3
+ DELETE CSR BIT 9 — KA081DG4 9-1
- INSERT CURSOR NORM — KA081EF4 11-1
+ SR BIT 6 — KA121BH2 12-1
+ SR BIT 11 — KA121CC2 14-1
+ SR BIT 5 — KA121CH2 15-1
+ SR BIT 10 — KA121DC2 17-1
+ SR BIT 4 — KA121DH2 18-1
+ SR BIT 9 — KA121FC2 20-1
+ SR BIT 3 — KA121EH2 21-1
+ SR BIT 8 — KA121FC2 23-1
+ SR BIT 7 — KA121GC2 24-1
+ NORMAL GATES — KF051FH4 26-1
- LOAD LATE REG — KF051FJ4 27-1
+ LD ATB REG FROM FETS — KF131DE4 29-1
+ KB P BIT TO BUFF — KP021AR4 30-1
+ KEYBD BIT 2 — KP021BR4 32-1
+ KEYBD BIT 3 — KP021BS4 33-1
+ KEYBD BIT 1 — KP021BT4 35-1
+ KEYB BIT 7 — KP031BF4 36-1
+ KEYB BIT 5 — KP031BG4 38-1
+ KEYBD BIT 6 — KP031BH4 39-1
+ KEYBD BIT 4 — KP031BJ4 41-1
- LD KB TO FETS — KP111AR4 42-22
- PDT LD BIT 7 — KP121AG4 44-12
-FS — KP021AP2 45-2
+ FETS OUT BIT 0 — PB131AA4 47-1
+ FETS OUT BIT 1 — PB131AB4 48-111
+ FETS OUT BIT 2 — PB131AC4 50-211
+ FETS OUT BIT 3 — PB131AD4 51-211
+ FETS OUT BIT 4 — PB131AE4 53-211
+ FETS OUT BIT 5 — PB141BA4 54-121
+ FETS OUT BIT 6 — PB141BB4 56-211
+ FETS OUT BIT 8 — PB141BD4 57-1
+ FETS OUT BIT 7 — PB141CA4 59-1
+ FETS OUT BIT 9 — PB141CB4 60-1
-FS — PG021032 62-2
+ LATE REG BIT 0 — PG051EA2 63-1
+ LATE REG BIT 1 — PG051EB2 65-1
+ LATE REG BIT 2 — PG051EC2 66-1
+ LATE REG BIT 3 — PG051ED2 68-1
+ LATE REG BIT 4 — PG061CA2 69-1
+ LATE REG BIT 5 — PG061CB2 71-1
+ LATE REG BIT 6 — PG061CD2 72-1
+ LATE REG BIT 7 — PG061CE2 74-1
+ LATE REG BIT 8 — PG061CF2 75-1
+ LATE REG BIT 9 — PG061CH2 77-1

LD NORMAL GATES (AF)
8 GG04 A
26 GG05
A-A1C2 — 104

GATE LT REG (AE)
8 GG04 A
27 GS05
42 GD05
A-A1C2 — 110

(AG)
3 GG12 OR
44 GJ12
8 GG04 A
42 GD05
A-A1C2 — 130

FETS OUT BIT 4 (BF)
53 GR08 N — 139
A-A1C2

FETS OUT BIT 3 (BE)
51 GR07 N — 145
A-A1C2

FETS OUT BIT 2 (BD)
50 GP02 N — 152
A-A1C2

FETS OUT BIT 1 (BC)
48 GR02 N — 159
A-A1C2

(AB)
SEL
29 GR05 G1

ATTB REG BIT 2
50 GP02 1 — A06 170

ATTB REG BIT 3
51 GR07 1 — A13 173

56 GG09 1 — J09 175
54 GG13 1 — P05 177
53 GR08 1 — P12 179
A-A1C2

FETS OUT BIT 6 (BH)
56 GG09 N — 184
A-A1C2

(AC)
SEL
104 G1
110 G2
42 GD05 G3
6 GB06 G4

FQ SER IN BIT 5
54 GG13 10 — D13 211
71 20
38 GG08 30
20 GJ06 4J

F Q SER IN BIT 1
48 GR02 10 — D11 218
85 20
35 GB04 30
15 GB02 4J

F Q SER IN BIT 2
50 GP02 10 — B12 225
66 20
32 GD07 30
12 GB05 4J

F Q SER IN BIT 3
51 GR07 10 — D12 232
68 20
33 GB10 30
24 GD09 4J

F Q SER IN BIT 4
53 GR08 10 — B13 239
69 20
41 GJ05 30
23 GG02 4J

F Q SER IN BIT 6
56 GG09 10 — J02 246
72 20
39 GJ11 30
17 GJ10 4J

F Q SER IN BIT 8
57 GG03 10 — D06 253
75 GU13 20
45 GB08 30
18 GJ04 4J

60 GB09 10 — 258
77 GU12 20
62 GB07 30
21 GD10 40
11 GG06 4J

59 GG10 10 — 264
74 20
36 GG11 30
14 GJ13 40
44 GJ12 4J

47 GD02 10 — 270
63 20
30 GD04 30
2 GB03 4J
A-A1C2

FETS OUT BIT 5 (BG)
54 GG13 N — 278
A-A1C2

(AD)
42 B05 R
44 J12
45 B08
62 B07
2.00K
A-A1C2

F Q SER IN BIT 9
9 GG07 A — P13 304
256
A-A1C2

F Q SER IN BIT 7 (BA)
3 GG12 A — S10 318
264
A-A1C2

F Q SER IN BIT 0 (AA)
270 DE — B11 325
130
A-A1C2

RESG BFR (AA)
SEL
5 GR03 G1

BIT 1
48 GR02 1 — A10 336

BIT 2
50 GP02 1 — S06 340

BIT 3
51 GR07 1 — S09 344

BIT 4
53 GR08 1 — U06 348

BIT 5
54 GG13 1 — S08 352

BIT 6
56 GG09 1 — U07 356
A-A1C2

G01 RG011 RD131

*** RG011 ***
218 + F Q SER IN BIT 1 — RB011-ED4
225 + F Q SER IN BIT 2 — RB011-EG4
232 + F Q SER IN BIT 3 — RB011-EJ4
239 + F Q SER IN BIT 4 — RB011-EL4
325 + F Q SER IN BIT 0 — RB011-GC4

*** RG021 ***
211 + FQ SER IN BIT 5 — RB021-FB4
246 + F Q SER IN BIT 6 — RB021-FD4
253 + F Q SER IN BIT 8 — FJ4 (4KA121 4RB021)
318 + F Q SER IN BIT 7 — GF4 (4KA121 4RB021)
304 + F Q SER IN BIT 9 — RB021-GL4

*** RG031 ***
159 - FETS OUT BIT 1 — AA4 (4RG041 4RG051)
152 - FETS OUT BIT 2 — AB4 (4RG041 4RG051)
145 - FETS OUT BIT 3 — AC4 (4RG041 4RG051)
139 - FETS OUT BIT 4 — AD4 (4RG041 4RG061)
278 - FETS OUT BIT 5 — AE4 (4RG041 4RG061)
184 - FETS OUT BIT 6 — AF4 (4RG041 4RG061)
336 - RESG BFR BIT 1 — KA111-BA4
340 - RESG BFR BIT 2 — KA111-BB4
344 - RESG BFR BIT 3 — KA111-BC4
348 - RESG BFR BIT 4 — KA111-BD4
352 - RESG BFR BIT 5 — KA111-BE4
356 - RESG BFR BIT 6 — KP111-BF4
170 - ATTB REG BIT 2 — KF071-CA4
173 - ATTB REG BIT 3 — KF071-CB4
179 - ATTB REG BIT 4 — CD4
177 - ATTB REG BIT 5 — CE4
175 - ATTB REG BIT 6 — CF4

B-SIM TO PN 1563792 EC 717473

RG011
RG031
001

LOC- TYPE
A-A1C2 9086

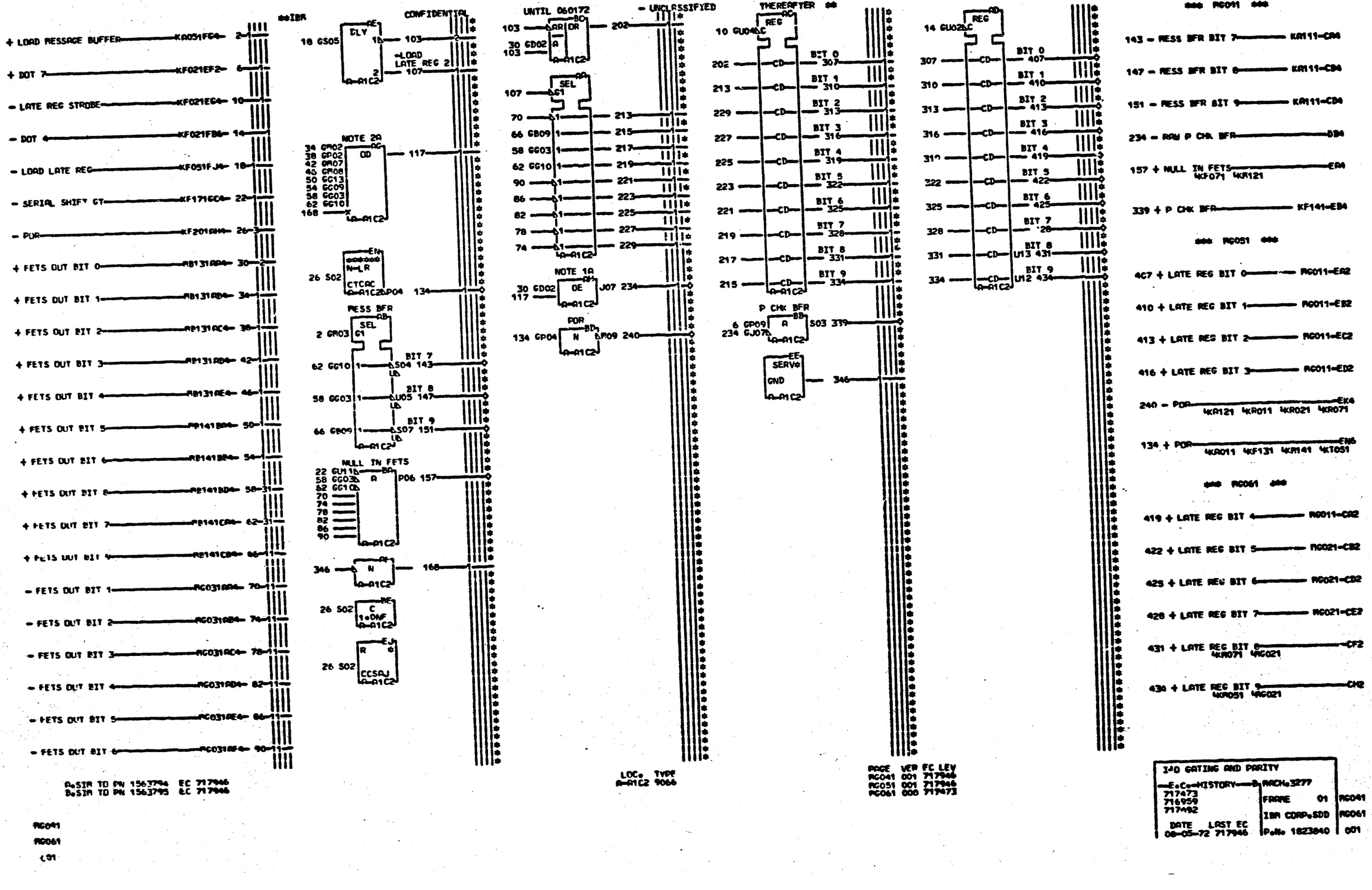
PAGE	VER	EC	LEV
RG011	000	717492	
RG021	001	717492	
RG031	000	717473	

I-O GATING AND PARITY

E-C- HISTORY — B- 717473

MACH- 3277
FRAME 01 RG011
IBM CORP-KN RG031
P-N- 1823835 001

DATE	LAST EC
06-01-72	717492


**IBR
CONFIDENTIAL
- UNCLASSIFIED
THEREAFTER **
*** RG091 ***
001 RG041 RG061
+ LOAD MESSAGE BUFFER
+ DOT 7
- LATE REG STROBE
- DOT 4
- LOAD LATE REG
- SERIAL SHIFT CT
- POR
+ FETS OUT BIT 0
+ FETS OUT BIT 1
+ FETS OUT BIT 2
+ FETS OUT BIT 3
+ FETS OUT BIT 4
+ FETS OUT BIT 5
+ FETS OUT BIT 6
+ FETS OUT BIT 8
+ FETS OUT BIT 7
+ FETS OUT BIT 9
- FETS OUT BIT 1
- FETS OUT BIT 2
- FETS OUT BIT 3
- FETS OUT BIT 4
- FETS OUT BIT 5
- FETS OUT BIT 6
DLY
LOAD LATE REG 2
NOTE 2A
NOTE 1A
UNTIL 060172
SEL
REG
RESS BFR
P CHK BFR
NULL IN FFTS
SERV*
GND
N-LR
CTCAC
CCSAJ
OE
POR
BIT 0
BIT 1
BIT 2
BIT 3
BIT 4
BIT 5
BIT 6
BIT 7
BIT 8
BIT 9
143 - RESS BFR BIT 7
147 - RESS BFR BIT 8
151 - RESS BFR BIT 9
234 - RAW P CHK BFR
157 + NULL IN FFTS
339 + P CHK BFR
*** RG051 ***
407 + LATE REG BIT 0
410 + LATE REG BIT 1
413 + LATE REG BIT 2
416 + LATE REG BIT 3
240 - POR
134 + POR
*** RG061 ***
419 + LATE REG BIT 4
422 + LATE REG BIT 5
425 + LATE REG BIT 6
428 + LATE REG BIT 7
431 + LATE REG BIT 8
430 + LATE REG BIT 9
A=SIR TO PN 1563794 EC 717946
B=SIR TO PN 1563795 EC 717946
LOC= TYPE
A-A1C2 9066
PAGE VER EC LEV
RG041 001 717946
RG051 001 717946
RG061 000 717973
I/O GATING AND PARITY
-E=C=HISTORY-
717473
716959
717492
DATE LAST EC
08-05-72 717946
-B-MACH=3277
FRAME 01
IBM CORP=SDD
P=N= 1823840
RG041
RG061
001

2577870

CODE	DESCRIPTION	PART NO	QTY
A1-C1	CAPACITOR	2565223	1
A1-C2	CAPACITOR	2577862	1
A1-C3	CAPACITOR	2565039	1
B/PS2-C1	CAPACITOR	2396761	1
A/F1	8 AMB FUSE	433557	1
A/F2	15/10 ASB FUSE	1176668	1

01B/A3 YA 011

CODE	DESCRIPTION	PART NO.	QTY.
C1, C2	CAPACITOR .05uF	2396761	2
L1, L2	INDUCTOR 22uH	1582907	2

50 HZ FERRO
01B/T1/TBI
1 2 3 4 5 6 7

P3 1 2 3 4 5 6

B R2 C A
B R1 A C
C2 C1 E1
PRIMARY POWER B/A1
F1 2A S/B
P4-2 P2-3 P4-3 P4-1 P2-1

P2
LOW VOLTAGE PWR SUPPLY
01B/PS1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
-12VR -12V +8V +34V +8VR +34VR +5VR +5V1R +5V1R 63VAC 63VAC

A/F1 8 AMB
B A
01B/PS1/C2+ (SEE YA012, YA013)

A/F2 15/10 ASB
B A

01B/A3
L1 C1 C2 L2

(BRN)
(BRN)
B/A2 P4-6 (VEL) CATHODE 240Ω ½W
B/A2 P4-4 (WH/GN) GRID 470Ω ½W
(RED) G2 1MΩ ½W
(BL) G4
1MΩ ½W
BK

CRT ARC PROT CKT
C/Z1
4 3 8 7 10 9 13 14
D/C RET

-2577677 C/A
A1C3 — A2JD8 — Z3B13
(YEL) A1Z3D02
(BLK) A1Z3D04 — Z3B07
A1/C2 — Y2D8 — Z3B02
Y1D8 — +5V BUS — A1W1
SECURITY KEY LK
A1/C1
Y2D3 — RET BUS — A1W2
N2D2
N2D8
N2B3 — Z3B11
LOGIC BOARD A1

A/TB-1
1 +34V
2 +8V
3 +5V
4 -12V
5 GND
6

-12V 13
D/C GND 11 12
+8V 24 25
20 21
01S-J1 I/O CONN (KYBD)
P.O.R

FOCUS
G2
-883AM
DC RET
+34V
H/V PS B/PS2
C1
16KV

15 16 10 20 7
3(6)(7) (14) (A1) (9) (1)
24(A2) (11)19
(2)5
NOTE [2]
01S-J2 I/O CONN
60 HZ CARD READER

P3 1 2 3 4 5 6 7 8 9
ANALOG CARD B/A2
P4 1 2 3 5 7 10 15 17 18 19 20 21
GND (BLK)
OUT (YEL)
+5V (RED)
AUD ALARM C/DS 1

P1
1 (YEL) DOWN
2 (WH/YEL) DOWN COM
3 (WH/RED) UP COM
4 (RED) UP
5 (ORN) HORIZ SIG
6 (WH/ORN) HORIZ SIG

NOTES:

1 WHEN KEYB'D FEAT IS NOT ATTACHED TO DISPLAY LOAD RESIS 2577676 REF MOUNTS TO B/TBI-2 & 6; AND 2577679 REF MOUNTS TO B/TBI-3 & 6

[2] THE 50 HZ CARD READER RECEIVES IT'S POWER FROM FERRO 01B/T1/TBI-1 & 4 NOT THRU PRIME POWER 01B/A1/P4 CONN POS 1 & 9 TIE DIRECTLY TO FR GND ON GUSSET. NUMBERS IN PARENTHESIS REPRESENT THE 50 HZ CONNECTOR POSITIONS

[3] ARC SUPPRESSION CARD ASM IS ONLY USED ON UNITS WITH 2565236 ANALOG CARD ASM.

R1 — P4-6
R2 — P4-4
01B/A2
ARC SUPPRESSION CARD ASM 2568807 NOTE [3]

SEE EC HISTORY		DRAWING TITLE
AUG73	733401	POWER DIST
MAR74	739992	MACH
3FEB75	741722	PART NO 2577870
MAY75	741690	CLASSIFICATION
		IBM CORP

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YA011

YA011

OIC/TB1			
CODE	DESCRIPTION	PART NO.	QTY
R1,R2	RESISTOR 1M 2W	5252640	2
R3	RESISTOR 22M 1/2W	505370	1
R4	RESISTOR 20K 1/2W	300723	1
C1,C2	CAPACITOR 9000pF	5252644	2
C3	CAPACITOR 56-15DC	222091	1
D1	NEON NE 2H	602653	1
CR1,2,3	DIODE GY	2414891	3
C4	CAPACITOR .05μF	2396761	1
OIA-A1			
A1/C1	CAPACITOR	2565223	1
C2,C3	CAPACITOR .05μF	2565039	2
OIC/A4			
L1, L2	INDUCTOR 22 μH	1582907	2
C1,C2	CAPACITOR .05 μF	2396761	2
OIC/A3			
R1,R2	RESISTOR 100Ω 1W	2396969	2
OIC/			
F1	FUSE 8AMB	433557	1
F2	FUSE 1 5/10 ASB	1176668	1
OIS-J4			
C1	CAPACITOR .1μF	5213736	1
V1	VARISTOR 33V	4406517	1

NOTES

1. RESISTOR ASM 2565195 (25Ω, 5W) TO BE USED WHEN KEYBOARD IS NOT CONNECTED
2. 100 VAC 60HZ, 115 VAC 60HZ OR 123.5 50 HZ
3. ARC SUPPRESSION CARD ASM IS ONLY USED ON UNITS WITH 2565236 ANALOG CARD ASM
4. NUMBERS IN PARENTHESIS ARE CONNECTOR PINS USED IN 50HZ APPLICATIONS
5. TERMINATES AT K3D8 WITH 1/2 BD & N3D8 WITH 2/3 BD

SEE EC HISTORY		DRAWING TITLE
APR 75	739999	POWER DIST & ANALOG
JAN 78	745414	MACH 3277-002
		PART NO 2564997
		CLASSIFICATION

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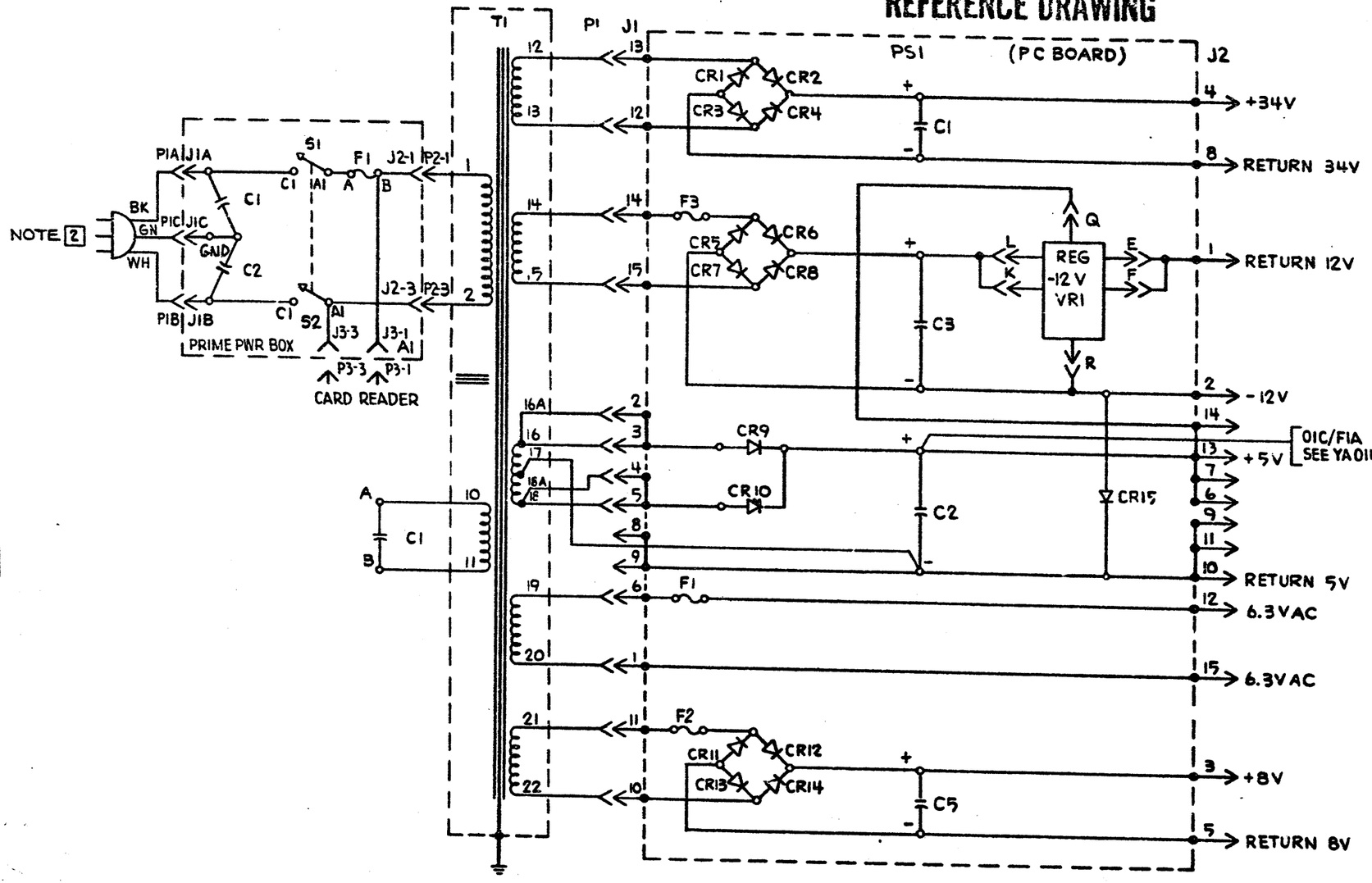
IBM CORP

YA011

REFERENCE DRAWING



CODE	DESCRIPTION	PART NO	
PS1	PRINTED CIRCUIT BOARD ASM	2481185	
VR1	REGULATOR CARD-12V	2481207	
PS1C1	CAPACITOR, 7.2K µF 40V	5712125	
PS1C2	CAPACITOR, 240K µF 7.5V	5252526	
PS1C3	CAPACITOR, 3.1K µF 25V	483107	
PS1C5	CAPACITOR, 60K µF 10V	5252514	
A1C1 & A1C2	CAPACITOR, FILTER .01 µF	737805	
C1	CAPACITOR, 4 µF 660VAC	2582939	
CR1-CR8 CR15	DIODE, 1AMP 180V	5214324	
CR9 & CR10	DIODE, 10AMP 150V	598479	
CR11-CR14	DIODE, 3AMP 100V	1149212	
A1F1, PS1F1	FUSE, 2AMP SB 125 V	332009	
PS1F2	FUSE, 5AMP SB 125 V	512137	
PS1F3	FUSE, 2AMP SB 125 V	332009	
S1 & S2	SWITCH, 10AMP 125/250V	5252566	
T1	FERRO, 60HZ	NOTE 2	

NOTES

1. ALL POWER UNITS IN 01D/ ZONE
2. THIS WIRING DIAGRAM PERTAINS TO 115 VAC 1Φ 60HZ UNITS (FERRO P/N 2582999), OR 100 VAC 1Φ 60HZ JAPAN UNITS (FERRO P/N 4119307).

EC HISTORY		DRAWING TITLE
SEE EC HISTORY		CKT. DIAG. 19C DISPL. UNIT 60HZ
16 JUL 73	739021	MACH
3 FEB 75	741722	PART NO 2481235
		CLASSIFICATION
		10 16 70 Adam OCT 74

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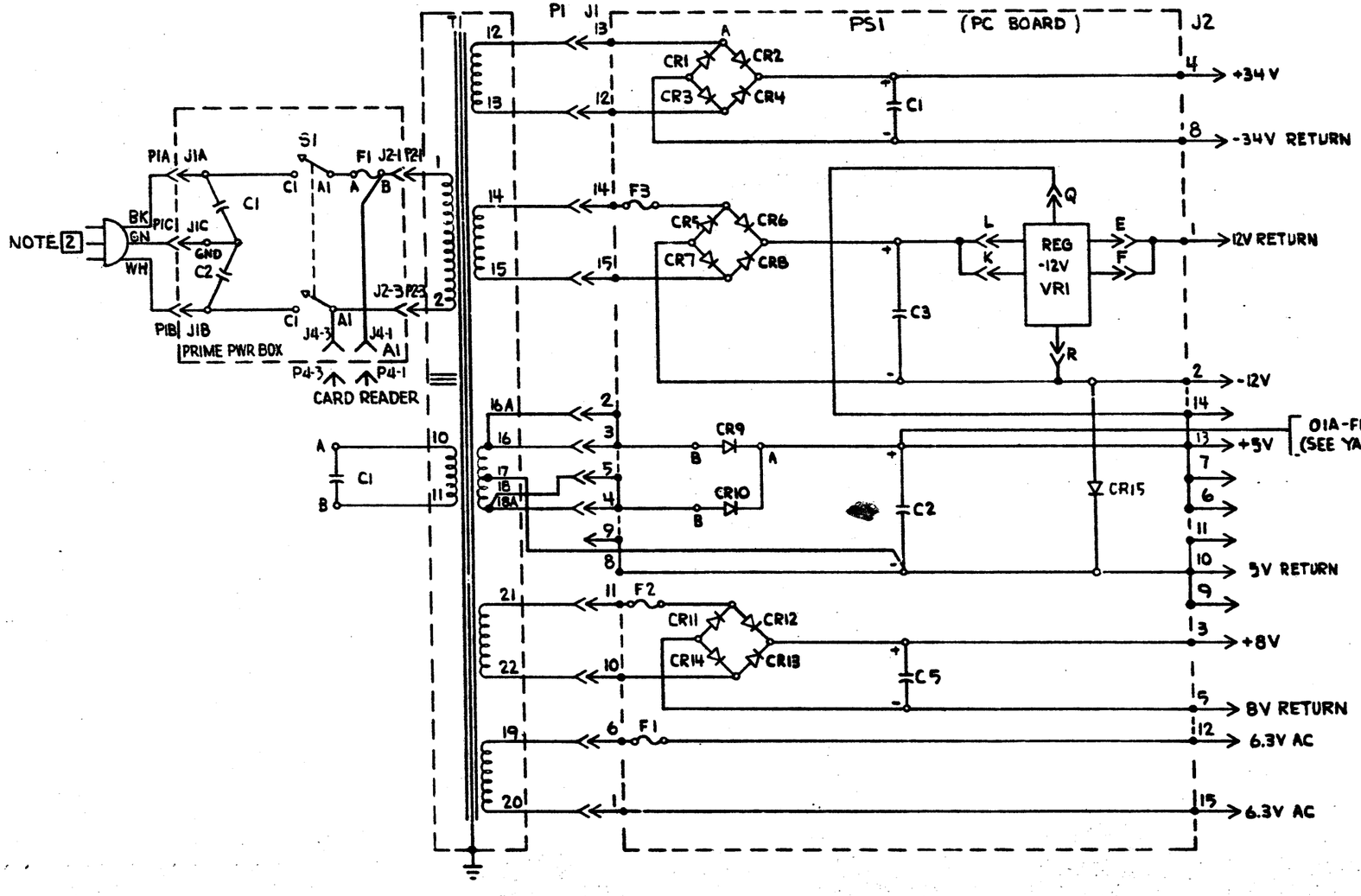
IBM CORP

YA012

YA0-2

REFERENCE DRAWING



CODE	DESCRIPTION	PART NO	
PS1	PRINTED CIRCUIT BOARD ASM	2481185	
VR1	REGULATOR CARD -12V	2481207	
PS1C1	CAPACITOR 7.2K MF 40V	5712125	
PS1C2	CAPACITOR 240K MF 75V	5252526	
PS1C3	CAPACITOR 3.1K MF 25V	483107	
PS1C5	CAPACITOR 60K MF 16V	5252514	
A1C1 & A1C2	CAPACITOR, FILTER .01MF	737805	
C1	CAPACITOR AC 4MF 660VAC	2582939	
CR1-CR8, CR15	DIODE 1AMP 180V	5214324	
CR9 & CR10	DIODE 10AMP 150V	598479	
CR11-CR14	DIODE 3AMP 100V	1149212	
A1F1, PS1F1	FUSE 2AMP SB 125V	332009	
PS1F2	FUSE 5AMP SB 125V	512137	
PS1F3	FUSE 2AMP SB 125V	332009	
S1	SWITCH	5252626	
T1	FERRO, 60HZ	NOTE 2	

YA012

NOTES

1. ALL POWER UNITS IN 01D/ ZONE
2. THIS WIRING DIAGRAM PERTAINS TO 115 VAC 1Φ 60HZ UNITS (FERRO P/N 2582999), OR 100 VAC 1Φ 60HZ JAPAN UNITS (FERRO P/N 4119307).

EC HISTORY		DRAWING TITLE
SEE EC	HISTORY	SYS DIAG 48C DISPL UNIT 60HZ
16 JUL 73	739021	MACH
3 FEB 75	741722	PART NO 2481234
		CLASSIFICATION
		MFL 10 JUL 70 Keller OCT 70

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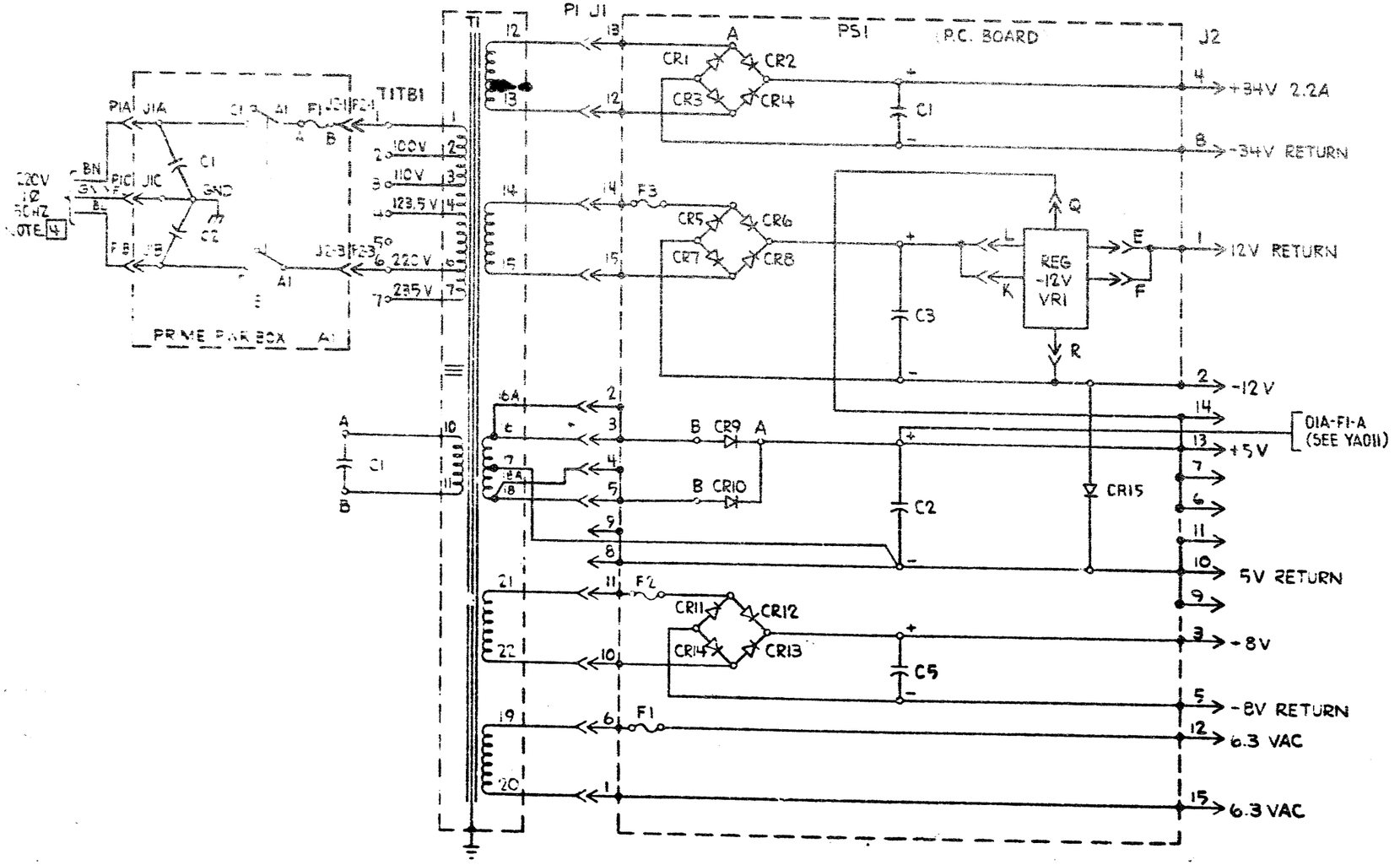
IBM CORP

YA012

REFERENCE DRAWING



CODE	DESCRIPTION	PART NO	
PS1	PRINTED CIRCUIT BOARD 15W	2481238	
VR1	REGULATOR CARD -12V	2481207	
PS1C1	CAPACITOR 7.2K UF 40V	5712125	
PS1C2	CAPACITOR 240K UF 7.5V	5252526	
PS1C3	CAPACITOR 3.1K UF 25V	4831107	
PS1C5	CAPACITOR 60K UF 10V	5252514	
A1C1 &A1C2	CAPACITOR FILTER .01 UF	537805	
C1	CAPACITOR 40 - UF 660 VAC	2582939	
CR1-CR8, CR15	DIODE 1 AMP 180V	5214324	
CR9&CR10	DIODE 3AMP 150V	598479	
CR11-CR14	DIODE 3AMP 400V	1149212	
PS1F1	FUSE 2AMP SB125 V	332009	
PS1F2	FUSE 5AMP SB 125 V	512137	
PS1F3	FUSE 2AMP SB125 V	332009	
A1F1	FUSE 1AMP SB 250 V	NOTE [2]	
	FUSE 2AMP SB 125 V	NOTE [3]	
S1	SWITCH	5252626	
T1	FERRO, 50HZ	4119272	

NOTES

1. ALL POWER UNITS IN OID/ZONE
2. FUSE 303549 IS REQUIRED WHEN THE UNIT IS WIRED FOR 220 V OR 235 V
3. FUSE 332009 IS REQUIRED WHEN THE UNIT IS WIRED FOR 200V, 110 V OR 123.5 V
4. THE INPUT COLOR CODING FOR 100 VAC 1Ø 50HZ JAPAN UNITS IS BK, WH, GN/YEL

EC HISTORY		DRAWING TITLE
10CT 71	716727	SYS DIAG 486 DSPL UNIT 50 HZ
5 MAY 72	717675	MACH
9 FEB 73	738312	PART NO 2481238
16 JUL 73	739021	CLASSIFICATION
3 FEB 75	741722	DWL WK/A FORMAT IBM CORP

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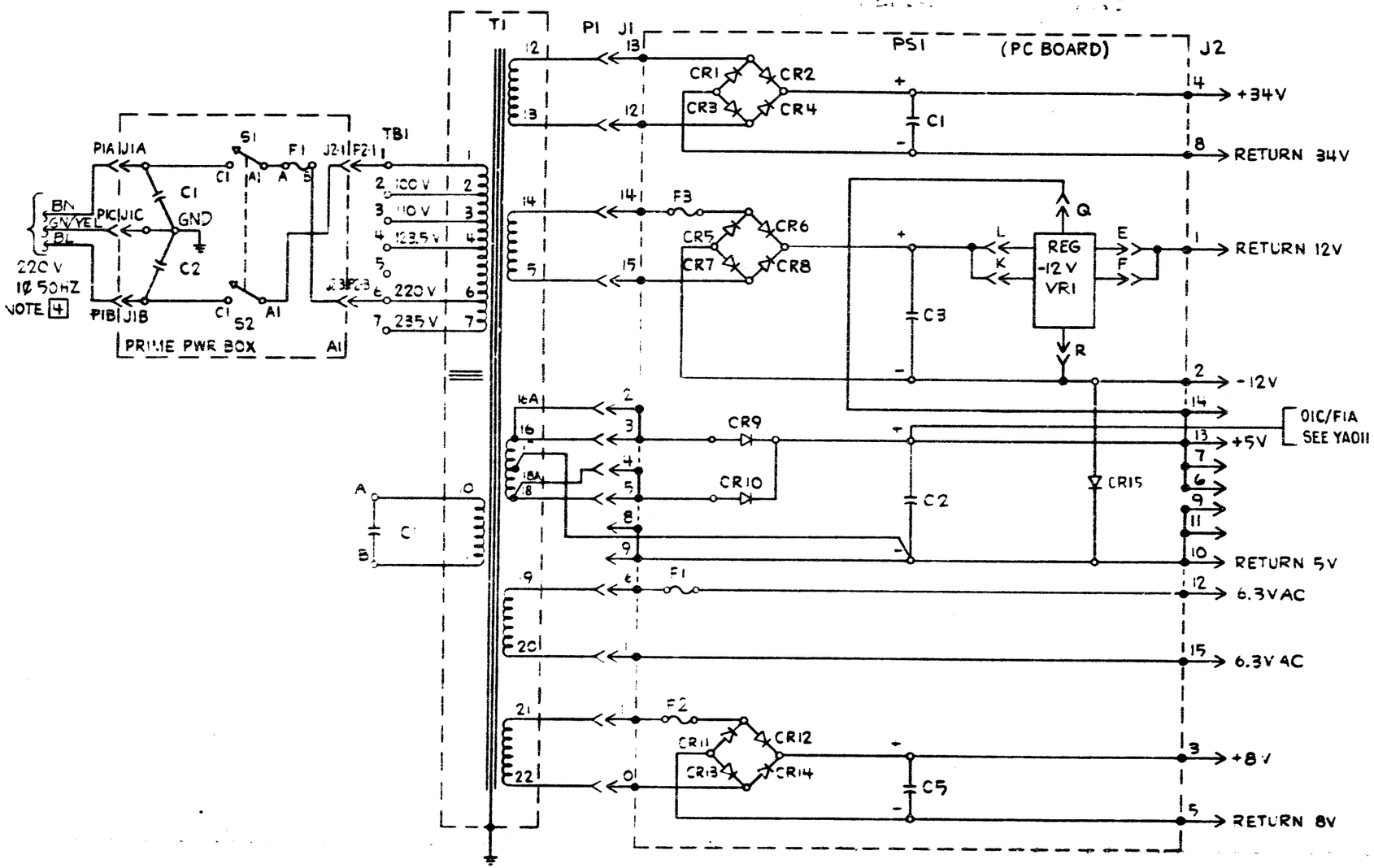
YA013

YA013



CODE	DESCRIPTION	PART NO	
PS1	PRINTED CIRCUIT BOARD ASM	2481185	
VR1	REGULATOR CARD -12V	2481207	
PSIC1	CAPACITOR, 7.2K UF 40V	5712125	
PSIC2	CAPACITOR, 240K UF 7.5V	5252526	
PSIC3	CAPACITOR, 3.1K UF 25V	483107	
PSIC5	CAPACITOR, 60K UF 10V	5252514	
AIC1 & AIC2	CAPACITOR FILTER .01UF	737805	
C1	CAPACITOR, 4 UF 660VAC	2582939	
CR1-CR8, CP15	DIODE, 1AMP 180V	5214324	
CR9 & CR10	DIODE, 10AMP 150V	598479	
CR11-CR14	DIODE, 3AMP 100V	[illegible]+9212	
PSIF1	FUSE, 2AMP SB 125 V	332009	
PSIF2	FUSE, 5AMP SB 125 V	512137	
PSIF3	FUSE, 2AMP SB 125 V	332009	
AIF1	FUSE, 1AMP SB 250 V	NOTE 2	
	FUSE, 2AMP SB 125 V	NOTE 3	
S1 & S2	SWITCH, 10AMP 125/250V	5252566	
T1	FERRO, 50 HZ	4119272	

NOTES

1. ALL POWER UNITS IN OID/ZONE
2. FUSE 303549 IS REQUIRED WHEN THE UNIT IS WIRED FOR 220 V OR 235 V
3. FUSE 332009 IS REQUIRED WHEN THE UNIT IS WIRED FOR 100V, 110 V, OR 123.5 V
4. THE INPUT CABLE COLOR CODING FOR 100VAC 1Ø 50HZ JAPAN UNITS IS BK, WH, GN/YEL

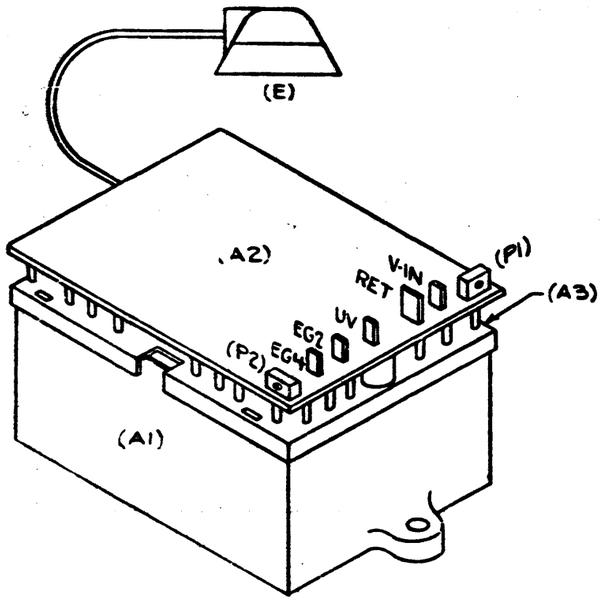
EC HISTORY		DRAWING TITLE
SEE EC	HISTORY	CKT DIAG 19C DISPL UNIT 50HZ
16 JUL 79	739021	MACH
3 FEB 75	741722	PART NO 2481236
		CLASSIFICATION
D		IBM CORP

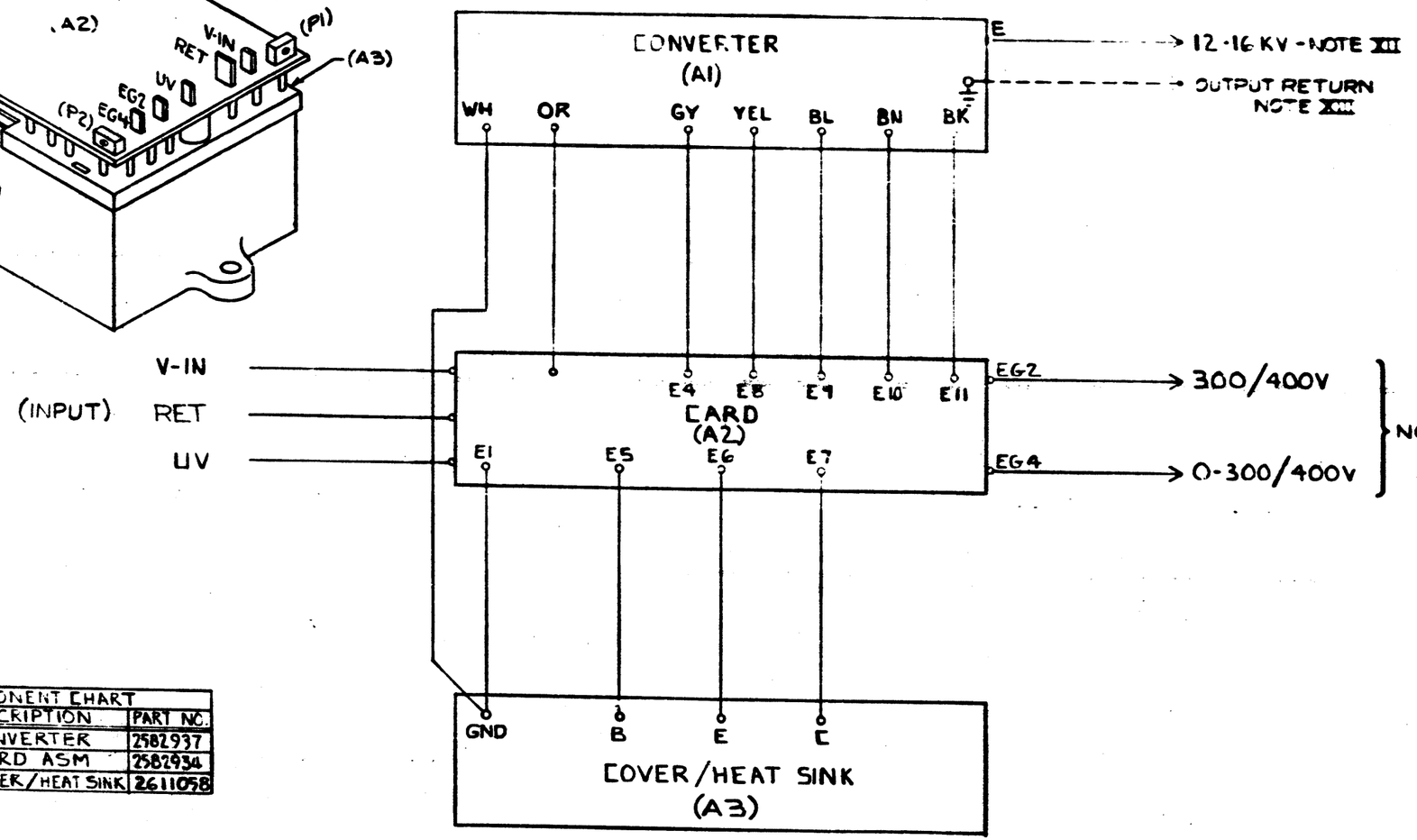
YA013

YFG72
ML-J

12-16 KV/300-400 VOLT POWER SUPPLY

REFERENCE DWG





COMPONENT CHART		
CODE	DESCRIPTION	PART NO.
A1	CONVERTER	2582937
A2	CARD ASM	2582934
A3	COVER/HEAT SINK	2611058

NOTE:

X THIS SUPPLY IS NOT TO BE REPAIRED IN THE FIELD

XI EXTERNAL SUPPRESSION NETWORKS MUST BE PROVIDED BY USER TO PREVENT SUPPLY DAMAGE IN CASE OF THE LOAD (CRT) ARCING BETWEEN THE HIGH & LOW VOLTAGE LEVELS

XII P1-HIGH VOLTAGE ADJUSTMENT (12-16KV)
- DO NOT FIELD AJUST.
P2-EG4 VOLTAGE ADJUSTMENT (0-300/400V)
- FOCUS ADJUSTMENT.

XIII OUTPUT RETURN PATH IS THRU CHASSIS OF SUPPLY. CONVERTER CASE MUST BE GROUNDED

RELEASED FOR ASM 2611025 (REF.)

SEE EC HISTORY		DRAWING TITLE
3 OCT 72	718306	SYSTEMS DIAGRAM
29 OCT 72	718307	MACH
11 JAN 73	738051	PART NO 2611043
		CLASSIFICATION 0-1045

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IBM CORP

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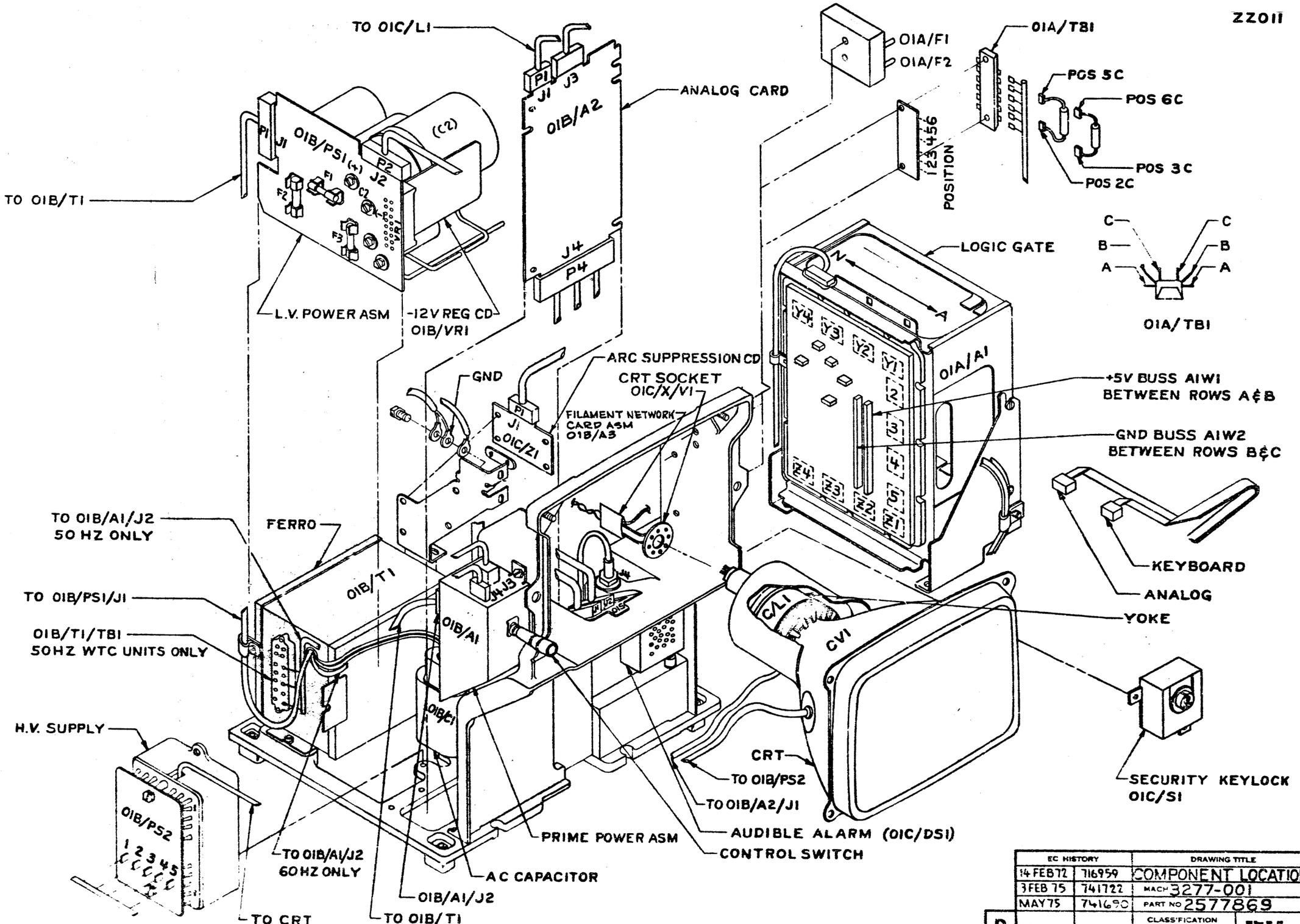

EC HISTORY		DRAWING TITLE
14 FEB 72	716959	COMPONENT LOCATION
3 FEB 75	741722	MACH 3277-001
MAY 75	741690	PART NO 2577869
		CLASSIFICATION

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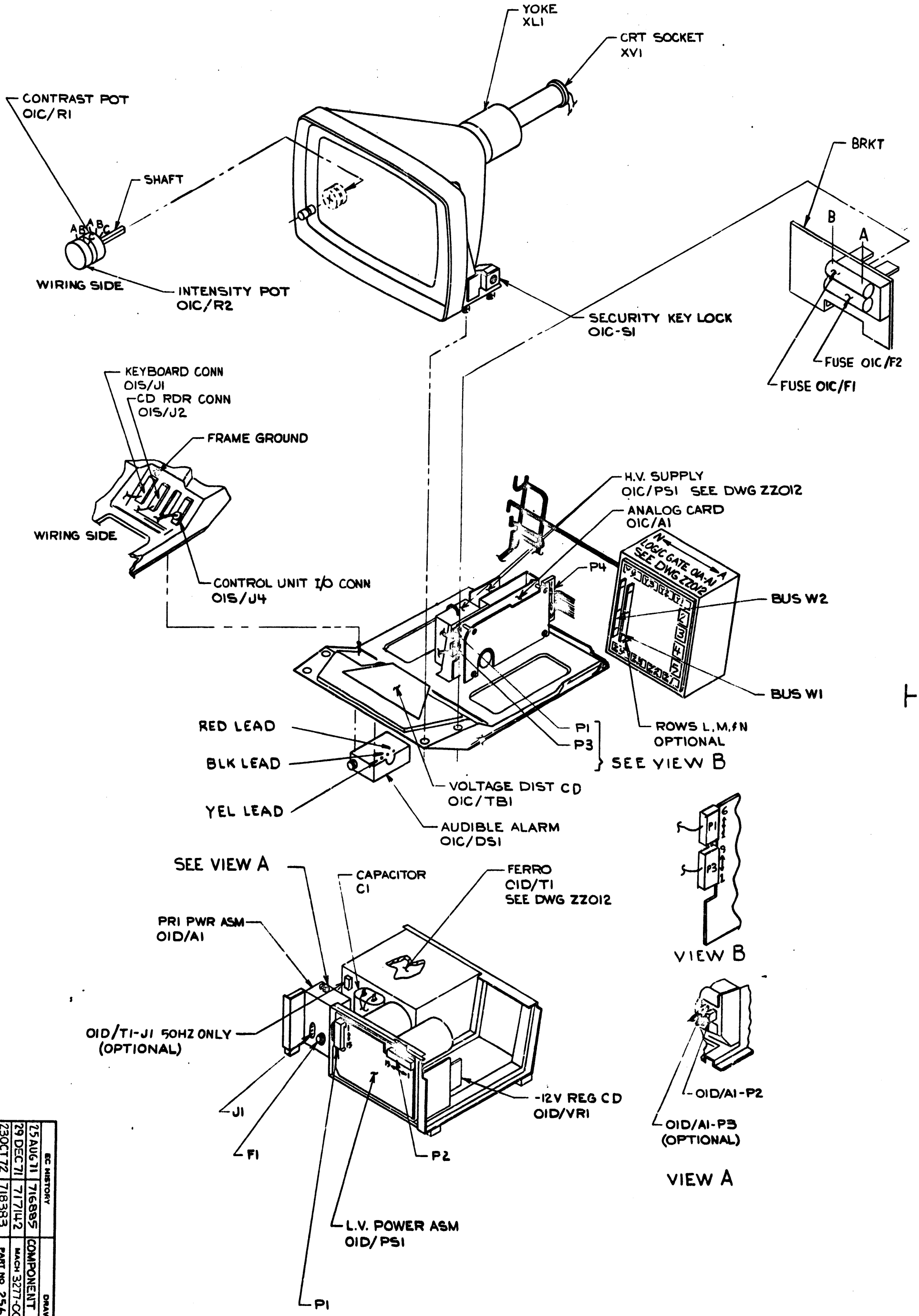
IBM CORP

ZZ01-1



FOR 3277-002 ONLY

EC HISTORY		DRAWING TITLE
25 AUG 71	716885	COMPONENT LOCATION
29 DEC 71	717142	MACH 3277-C02
23 OCT 72	718383	PART NO 2564995
3 FEB 75	741722	CLASSIFICATION

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IBM CORP

ZZ011

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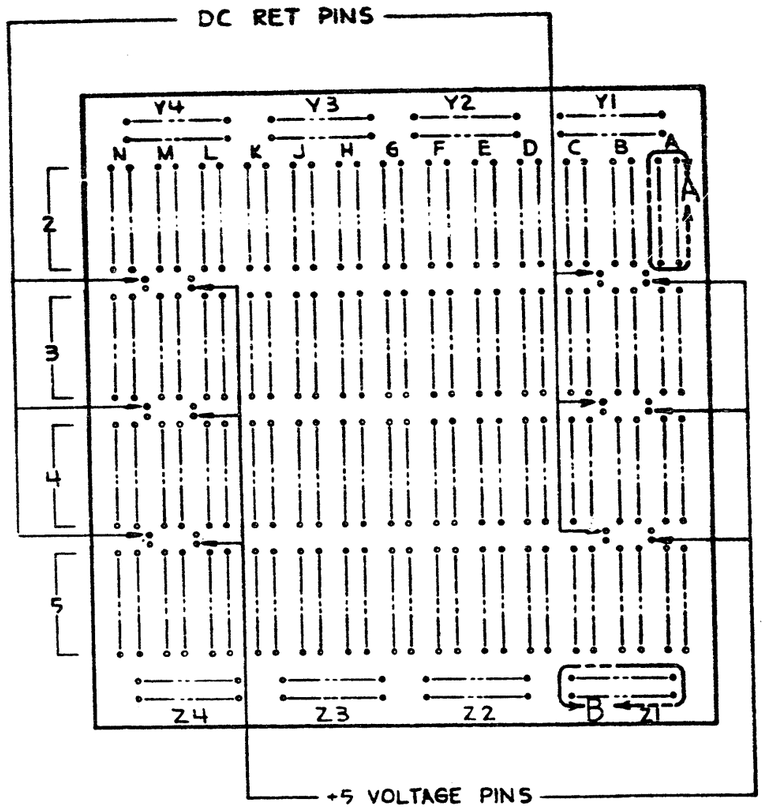
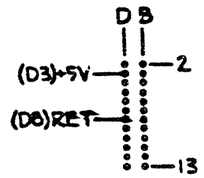
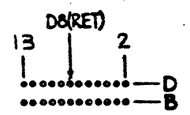


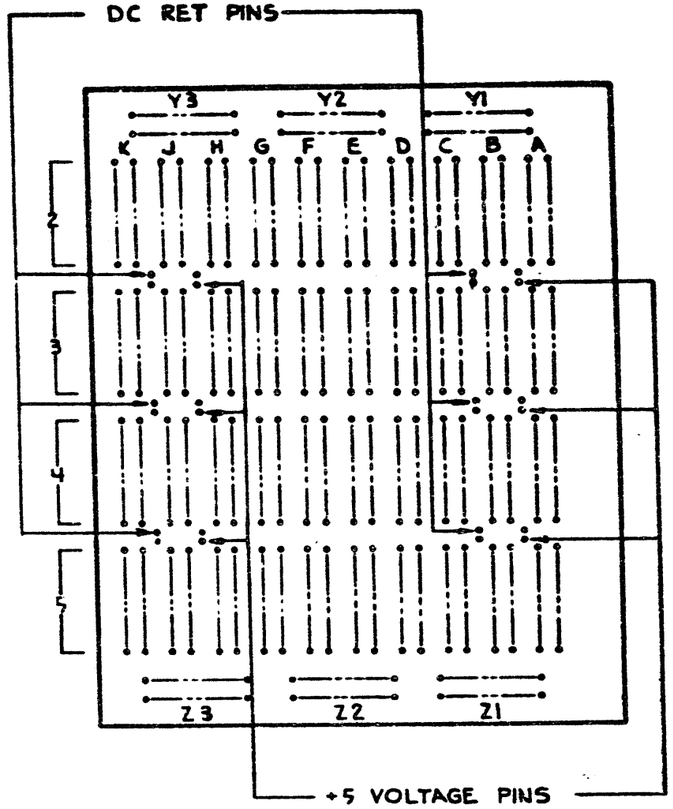
2/3 BD PIN SIDE LAYOUT



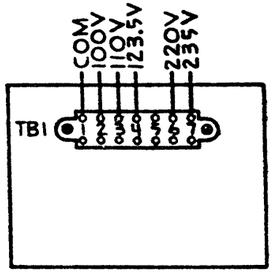
DETAIL A
VERTICAL SOCKET
TYP PIN LAYOUT



DETAIL B
HORZONAL SOCKET
TYP PIN LAYOUT

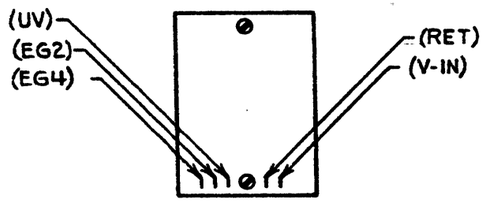


1/2 BD PIN SIDE LAYOUT



50 HZ FERRO

SEE ZZ 011



H V SUPPLY
(CABLE SIDE)
SEE ZZ011

EC HISTORY		DRAWING TITLE
25AUG71	716885	COMPONENT LOCATION
29 DEC 71	717142	MACH 3275 #3277
7 AUG 72	718098	PART NO 2564993
		CLASSIFICATION

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IBM CORP

ZZ012

ZZ012

TABLE 1
CHARACTER GENERATOR CARD

THE FOLLOWING LIST DESCRIBES THE PART NUMBER CARD TO BE IN THE A-A1 K2 CARD SOCKET DEPENDING ON THE FEATURE OR RPQ REQUIRED:

MACHINE TYPE	LANGUAGE	CARD TYPE	LATEST P/N (852)	EQUIVALENT P/N (852)
MOD I MONO CASE	US ENGLISH	9058	4302	0576
	USAC II A	9103	4305	0584
	USAC II B	9104	4306	0585
	U.K. ENGLISH	9102	4304	0583
	GERMAN	9101	4303	0582
	SWD/FIN	W068	4307	1455
	NOR/DEN	W069	4308	1456
	SPANISH	W070	4309	1457
	PORT/BRAZIL	W072	4311	1459
MOD II MONO CASE	US ENGLISH	9070	4289	0577
	USAC II A	9098	4292	0580
	USAC II B	9099	4293	0581
	U.K. ENGLISH	9097	4291	0579
	GERMAN	9096	4290	0578
	SWD/FIN	W075	4294	1462
	NOR/DEN	W076	4295	1463
	SPANISH	W077	4296	1464
	PORT/BRAZIL	W079	4298	1466
MOD I & II DUAL CASE	U.S. ENGLISH	4710	1708	———
	U.K. ENGLISH	4711	1709	———
	KATA KANA	9123	1707	———
	AUS/GER	4712	1710	———
	BEL/FRANCE	4713	1711	———
	DEN/NOR	X415	1854	———
	FIN/SWD	X416	1855	———
	ITALY	X417	1858	———
	SPANISH	X418	1859	———
	PORT/BRAZIL	X419	1857	———

TABLE 2
INTERCHANGEABLE CARDS

THE FOLLOWING CARDS CAN BE USED INTERCHANGEABLY ONLY THE LATEST P/N IS SHOWN IN THE LOGIC. THESE CARDS ARE IDENTICAL IN LOGIC

TYPE NO.	LATEST P/N	EQUIVALENT P/N	EQUIVALENT P/N	
9067	8522836	8522014	———	NOTE [1]
9068	8523664	8522151	8522109	NOTES [1] & [2]
L514	8527302	8522013		NOTE [1]
9069	8524282	8522852	———	NOTE [1]
9069	———	8524282	8523647	NOTE [2]
9072	8527296	8522001	———	NOTE [1]
9072	8527296	8523633	8523616	NOTE [2]
9066	8523648	8521992	———	NOTE [1]
9071	8524604	8523649	———	NOTE [1]
9071	8524604	8523617	———	NOTE [1]
9071	8524604	8522825	8521981	NOTES [1] & [2]

TABLE 3
KEYBOARD FEATURE JUMPER

THE FOLLOWING LIST DESCRIBES THE JUMPERS REQUIRED ON THE A-A1 BOARD DEPENDING ON THE PARTICULAR KEYBOARD CONFIGURATION. THESE JUMPERS ARE NO. 30 BLACK WIRE (P/N 811695)

FEATURE NAME	FEATURE B/M	JUMPER REQUIRED
KATAKANA LANG	2568804	ADD A2B06 TO A2D08 B4B13 TO B3D08
NUMERIC LOCK FOR: U.S. ENGLISH U.K. ENGLISH KATAKANA	2568694	ADD B4B12 TO B4D08 REMOVE (IF IN)- B5B03 TO B5D08
NUMERIC LOCK FOR: GERMAN FRENCH ITALIAN	2568696	ADD B4B12 TO B4D08 B5B03 TO B5D08

CARD READER FEATURE JUMPERS

[FEATURE NO. 4600 WITH 2706]
IF A CARD READER IS INSTALLED IN A MACHINE WITH THE KATAKANA LANGUAGE FEATURE, A JUMPER IS REQUIRED ON THE A-A1 BOARD BETWEEN N2D05 AND N3B05 USING NO. 30 BLACK WIRE (P/N 811695)

[FEATURE NO. 4600 IN ANY 3277 MACHINE]
IF A CARD READER IS INSTALLED IN ANY 3277 MACHINE, A RESISTOR ASM. P/N 2568741 IS REQUIRED ON THE A-A1 BOARD BETWEEN N2D03 AND N2J06

NOTES
- [1] THE "LATEST" P/N IS INTERCHANGEABLE FOR THE "EQUIVALENT" P/N, BUT THE "EQUIVALENT" IS NOT INTERCHANGEABLE FOR THE "LATEST"
- [2] EQUIVALENT PART NO. ARE INTERCHANGEABLE

EC HISTORY		DRAWING TITLE
JUL74	740382	3277 MOD I & 2 FEATURE
JAN75	741246	MACH 3270
MAR75	741258	PART NO 1570941
		CLASSIFICATION
D		IBM CORP

ZN101

ZN101