

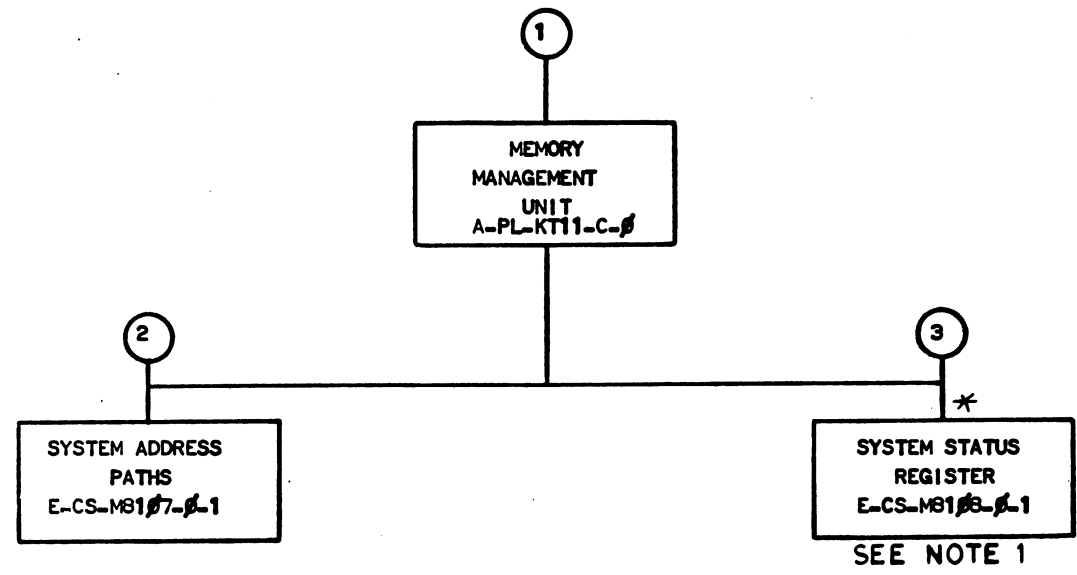
**KT11-C  
memory  
management unit  
engineering drawings**

digital equipment corporation • maynard, massachusetts

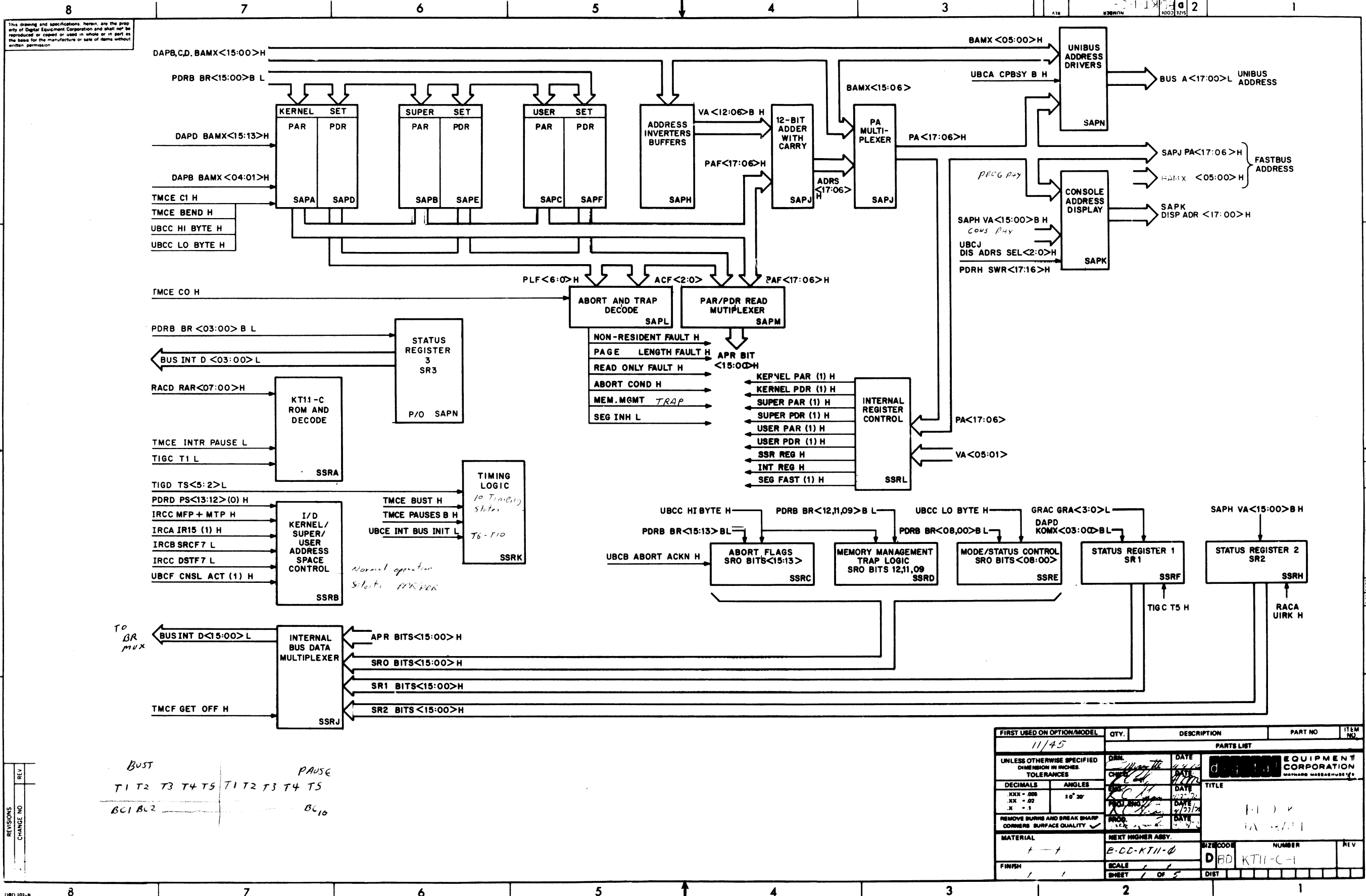




NOTE: 1. DOCUMENTATION FOR M8108-YA  
IS IN THE M8108 CIRCUIT  
SCHEMATIC.



TITLE	SHEET 2 OF 2	SIZE CODE	NUMBER	REV
MEMORY MANAGEMENT UNIT		B DD	KT11-0	B



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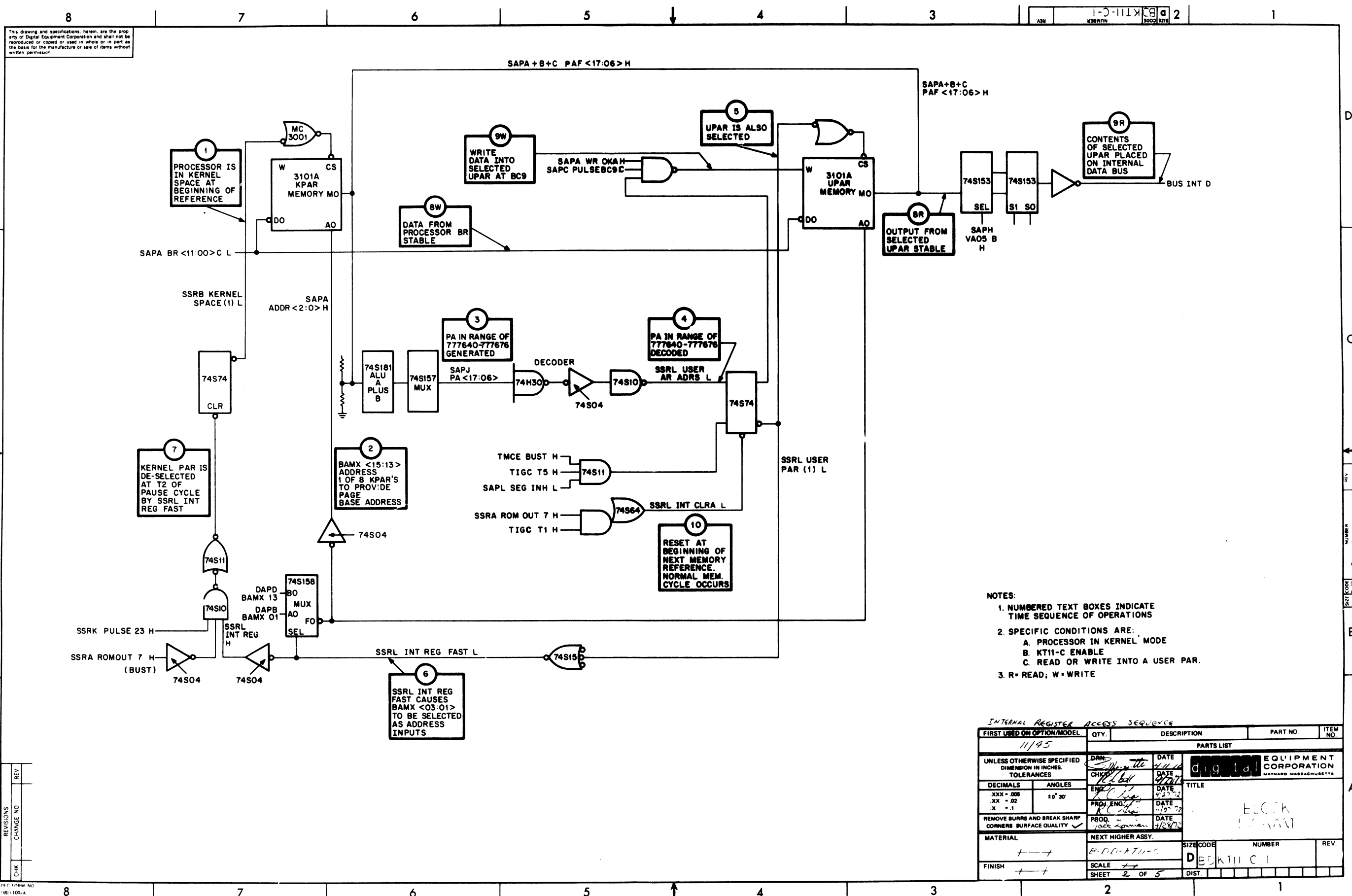
REV 100 375

REVISIONS	NO	REV
CHANGE NO		

BUST PAUSE  
 T1 T2 T3 T4 T5 T1 T2 T3 T4 T5  
 BC1 BC2 BC10

FIRST USED ON OPTION/MODEL 11/45	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DATE 4/4/74	DATE 4/4/74	EQUIPMENT CORPORATION	
DECIMALS ANGLES	DATE 4/27/74	DATE 4/27/74	TITLE	
XXX - .006 XX - .012 X - .024	PROJ. ENG. DATE 4/27/74	DATE 4/27/74	1110	
REMOVE BURNS AND BREAK SHARP CORNERS SURFACE QUALITY	PROC. DATE 4/27/74	DATE 4/27/74	1110-1	
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV
FINISH	SCALE	DIST		

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- NOTES:
1. NUMBERED TEXT BOXES INDICATE TIME SEQUENCE OF OPERATIONS
  2. SPECIFIC CONDITIONS ARE:
    - A. PROCESSOR IN KERNEL MODE
    - B. KT11-C ENABLE
    - C. READ OR WRITE INTO A USER PAR.
  3. R = READ; W = WRITE

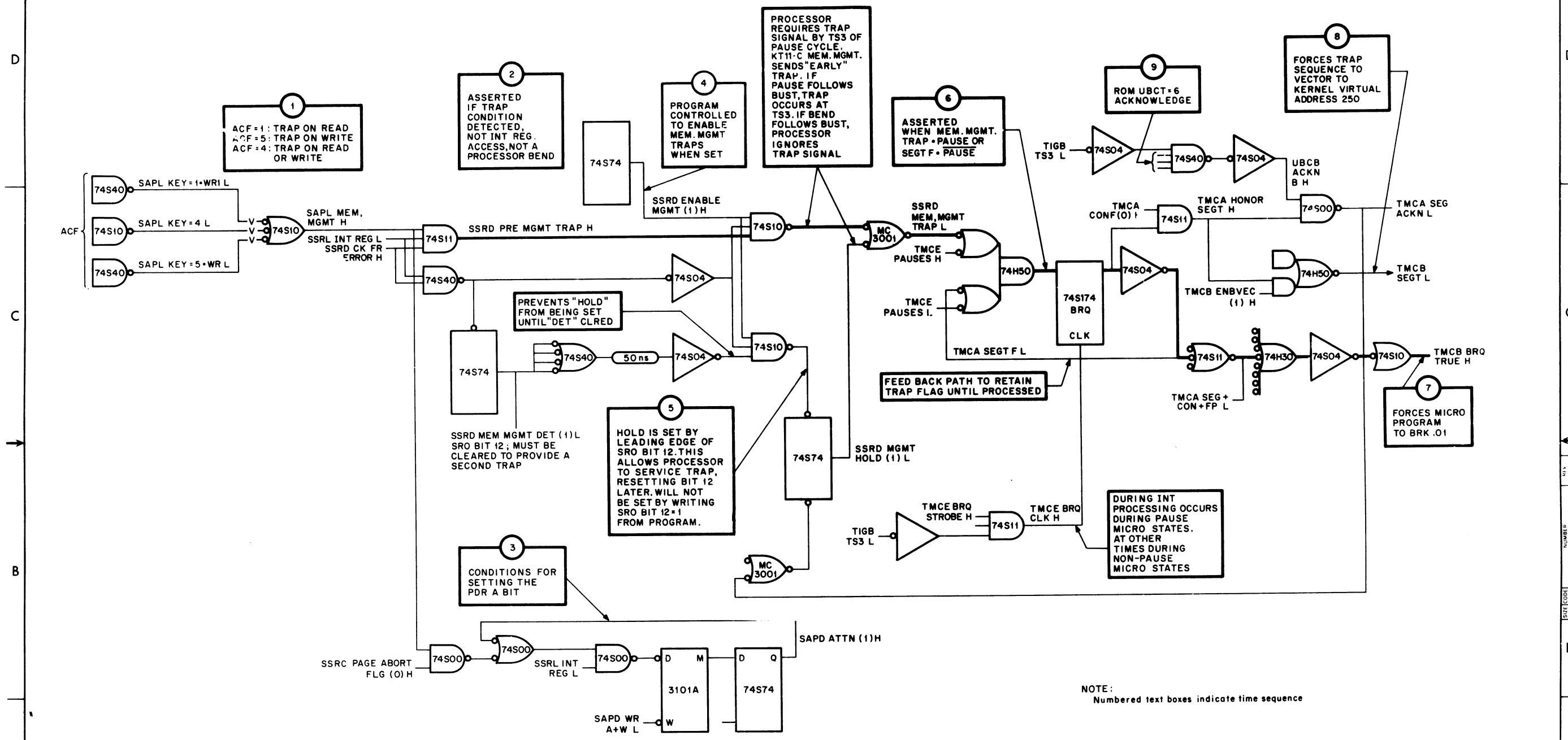
INTERNAL REGISTER ACCESS SEQUENCE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN: <i>[Signature]</i> DATE: <i>[Date]</i>	DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	ANGLES	CHK: <i>[Signature]</i> DATE: <i>[Date]</i>		
.XX - .006	± 0° 30'	ENG: <i>[Signature]</i> DATE: <i>[Date]</i>	TITLE BLOCK KT11-C-1	
.X - .1		PROJ. ENGR: <i>[Signature]</i> DATE: <i>[Date]</i>		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROQ. <i>[Signature]</i> DATE: <i>[Date]</i>		
MATERIAL	NEXT HIGHER ASSY.	SCALE	SIZE CODE	NUMBER
+	B-D-D-KT11-C	+	D	1
FINISH		SHEET	DIST.	REV.
+		2 OF 5		

REV	NO	CHANGE

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1-0-1111 2



NOTE:  
Numbered text boxes indicate time sequence

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED	DRN	DATE	digital CORPORATION MAYNARD MASSACHUSETTS		
DIMENSION IN INCHES	CHKD	DATE			
TOLERANCES	WPK	DATE	TITLE		
DECIMALS	ENG	DATE			
ANGLES	PRD	DATE	BLOCK DIAGRAM		
.XXX - .006	END	DATE			
.XX - .02	PROG	DATE	MATERIAL		
.X - .1	DATE	DATE			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	DATE	NEXT HIGHER ASSY.		
	DATE	DATE			
			B-DD-KT11-C		
			FINISH		
			SCALE		
			SHEET 3 OF 5		

REV	CHANGE NO	REVISIONS

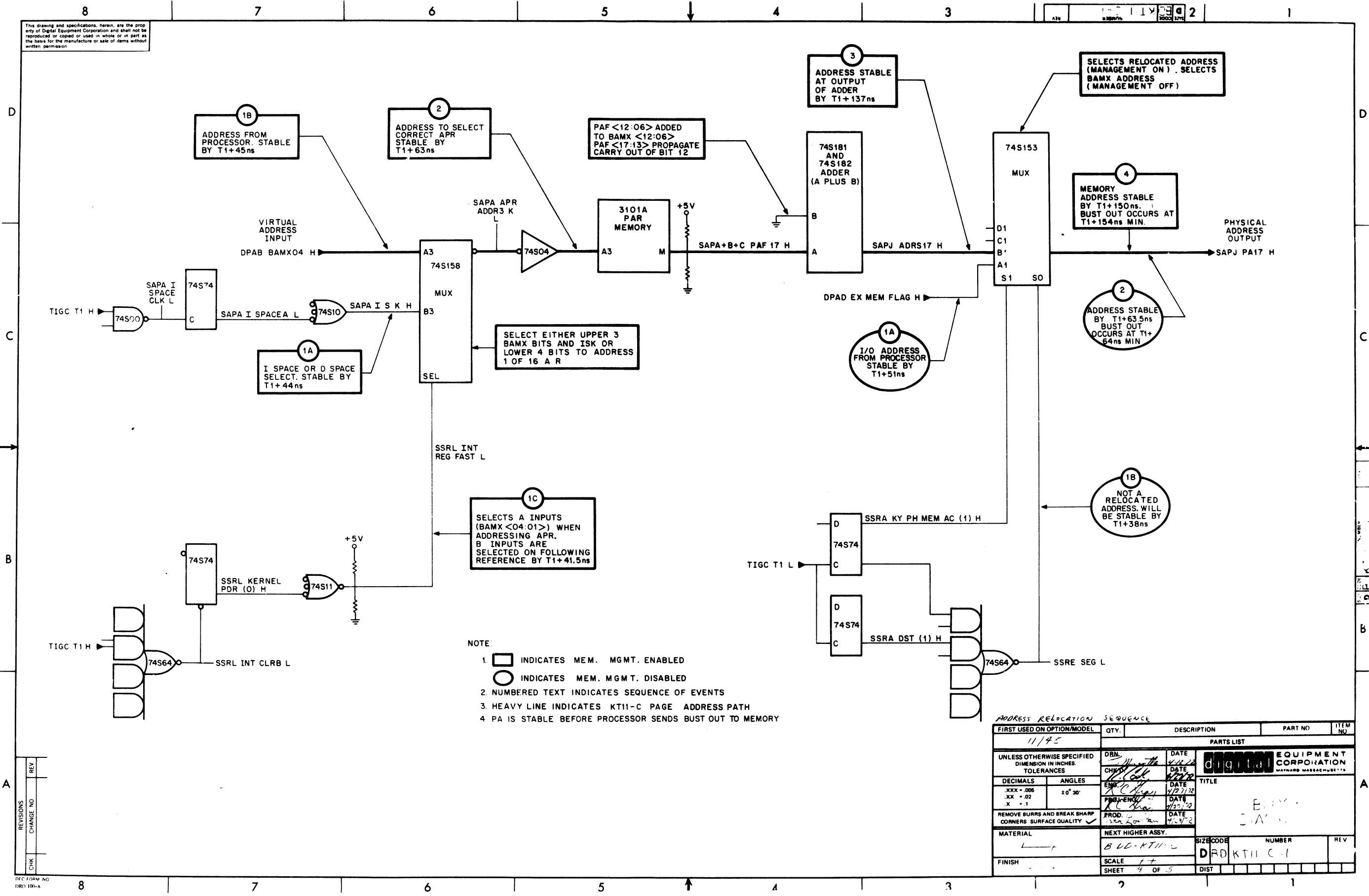
DEC FORM NO 100-1

REVISED NUMBER

B

A

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- NOTE
- 1.  INDICATES MEM. MGMT. ENABLED
  - 2.  INDICATES MEM. MGMT. DISABLED
  - 3. NUMBERED TEXT INDICATES SEQUENCE OF EVENTS
  - 4. HEAVY LINE INDICATES KT11-C PAGE ADDRESS PATH
  - 5. PA IS STABLE BEFORE PROCESSOR SENDS BUST OUT TO MEMORY

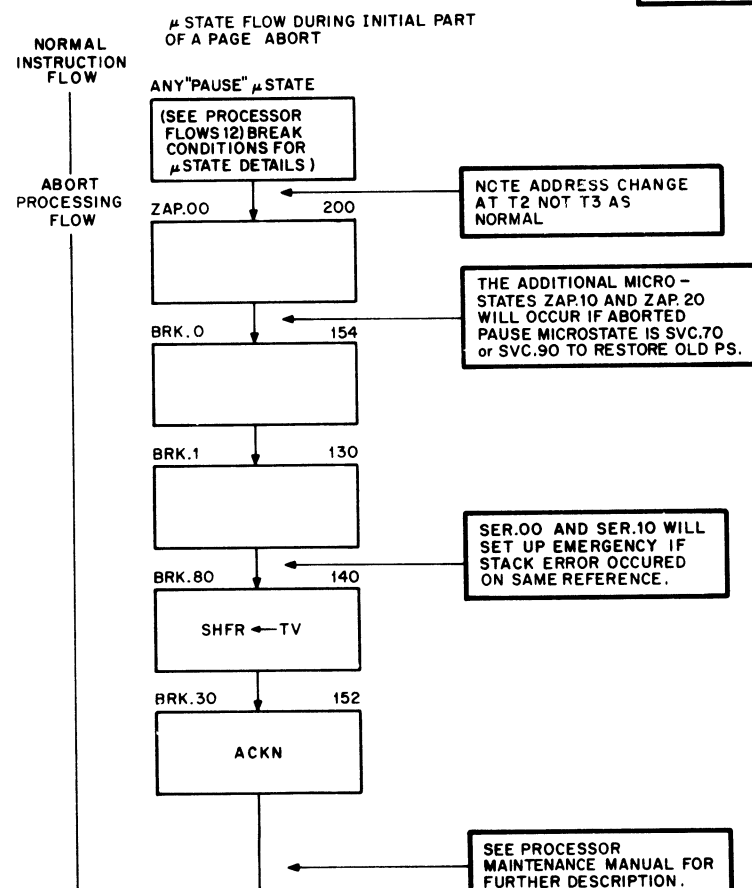
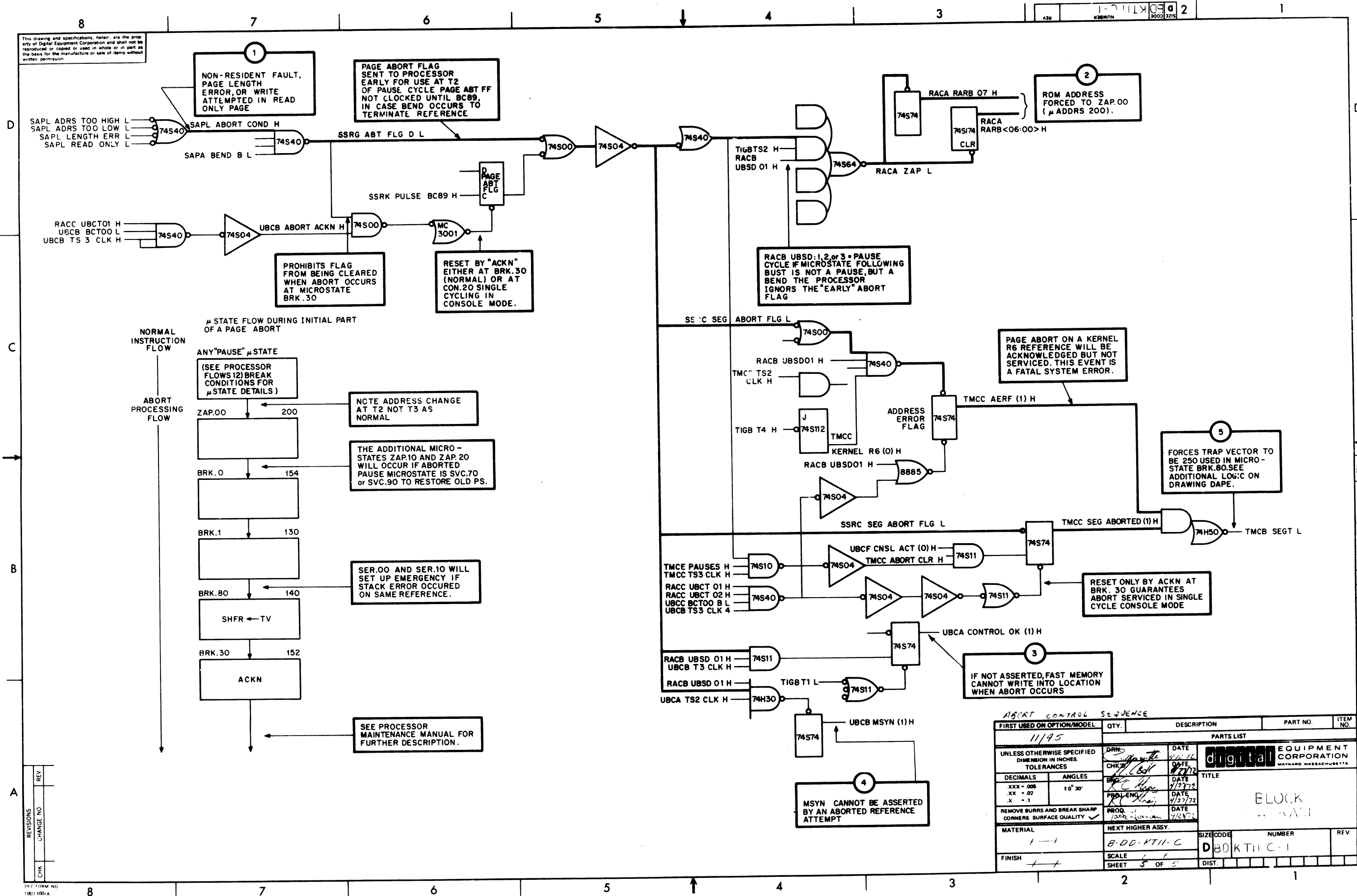
FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DBM	DATE	 <b>DIGITAL EQUIPMENT CORPORATION</b> <small>MAYNARD MASSACHUSETTS</small>	
DECIMALS .XXX - .005		CHKD	DATE		
ANGLES ±0° 30'		ENG	DATE		
.XX - .02		PROJ-ENG	DATE		
.X - .1		PROD.	DATE	TITLE BUD-KT11-C-1	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL		NEXT HIGHER ASSY.			
FINISH		SCALE	SHEET	SIZE CODE	NUMBER
		4	OF 5	DRD	KT11-C-1

REV	NO
CHK	NO

DEC FORM NO. DRD 100-A



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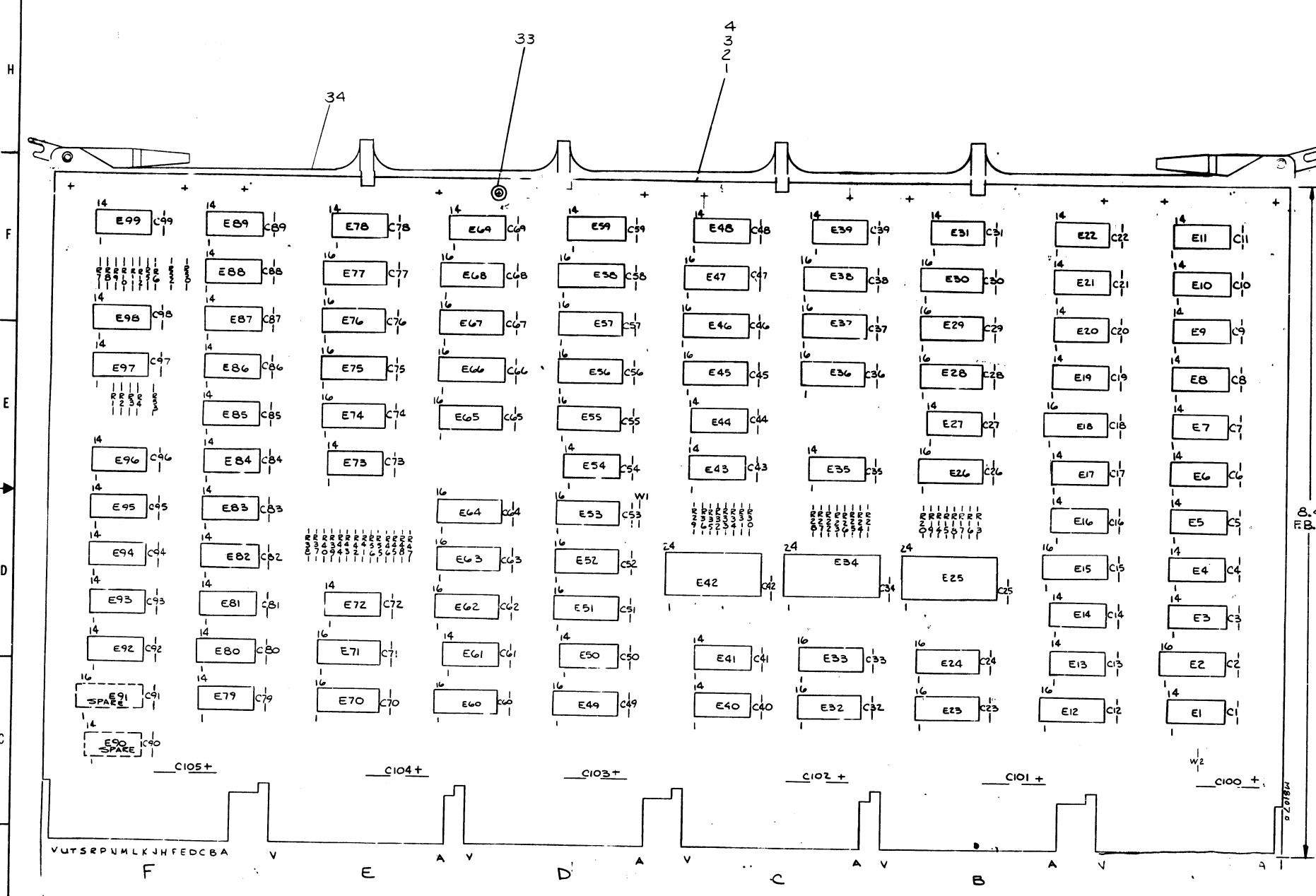
FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/95					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.		DRN: <i>[Signature]</i>	DATE: 4/11/72	PARTS LIST	
TOLERANCES		CHK: <i>[Signature]</i>	DATE: 7/27/72		
DECIMALS	ANGLES	ENG: <i>[Signature]</i>	DATE: 7/27/72	TITLE	
.XXX - .006	± 0° 30'	PROL-ENG: <i>[Signature]</i>	DATE: 7/27/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROL: <i>[Signature]</i>	DATE: 7/27/72	BLOCK	
MATERIAL					
FINISH		NEXT HIGHER ASSY.		SIZE CODE	NUMBER
		B-DD-KTII-C		D	BDKTII-C-1
		SCALE		REV.	
		SHEET 5 OF 5		DIST.	

REV	CHANGE NO

DEC FORM NO 1381 100-A

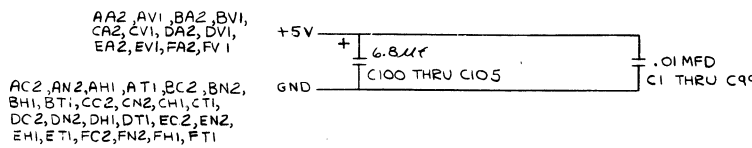
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NOTES:  
 1. UNLESS OTHERWISE NOTED RESISTANCE IS IN  $\Omega$  AND CAPACITANCE IS IN PICOFARADS. CAPS. WITHOUT VALUE NOTED ARE .01MFD.



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	HANDLE, MODULE	F-25-1210711-2	34	
12	EYELET	9006732	33	
1	E5	IC DEC 74H04	1909931	32
1	E2	IC DEC 74S174	1910550	31
1	E1	IC DEC 74S03	1910533	30
2	E9, E99	IC DEC 74S64	1910542	29
6	E4, E79, E86, E87, E93, E94	IC DEC 74S00	1910532	28
10	E3, E6, E11, E14, E27, E44, E54, E73, E92, E98	IC DEC 74S04	1910534	27
2	E81, E88	IC DEC 74S10	1910536	26
5	E7, E35, E43, E64, E89	IC DEC 74S11	1910537	25
1	E95	IC DEC 74S37	1910091	24
1	E80	IC DEC 74H30	1909059	23
5	E10, E31, E39, E48, E59, E69, E78, E82, E83	IC DEC 74S40	1910541	22
1	E51	IC DEC 74S153	1910547	21
4	E8, E96, E97, E72	IC DEC 74S74	1910544	20
2	E70, E71	IC DEC 74B5	1910224	19
8	E23, E24, E32, E33, E52, E53, E63, E64	IC DEC 74S157	1910548	18
1	E62	IC DEC 74153	1909937	17
2	E18, E26	IC DEC 74S158	1910549	16
3	E25, E34, E42	IC DEC 74S181	1910531	15
1	E15	IC DEC 74182-1	1910551	14
5	E13, E16, E17, E40, E41	IC DEC 3981	1909705	13
3	E12, E49, E60	IC DEC 74157	1910655	12
21	E28, E29, E30, E36, E37, E38, E43, E46, E47, E55, E56, E57, E58, E65, E66, E67, E68, E74, E75, E76, E77	IC DEC 3101A	1910653	11
7	E19, E20, E21, E22, E50, E61, E85	IC DEC 3001	1909514	10
25	R2, R4, R6, R8, R10, R12, R14, R16, R18, R20, R22, R24, R26, R28, R30, R32, R34, R36, R38, R40, R42, R44, R46, R48, R50	RESISTOR 620 $\Omega$ , 1/4W, 5%	1303178	9
25	R1, R3, R5, R7, R9, R11, R13, R15, R17, R19, R21, R23, R25, R27, R29, R31, R33, R35, R37, R39, R41, R43, R45, R47, R55	RESISTOR 330 $\Omega$ , 1/4W, 5%	1300295	8
3	R53, R50, R52	RESISTOR 150 $\Omega$ , 1/4W, 5%	1300250	7
6	C100 THRU C105	CAPACITOR 6.8M $\mu$ F, 35V, 20%	1000067	6
99	C1 THRU C99	CAPACITOR .01M $\mu$ F, 100V, 20% DISC	1001610	5
1		ETCHED CIRCUIT BOARD	5009301	4
REF		MODULE ECO HISTORY	8-14H-18107-0	3
REF		ASSY/DRILLING HOLE LAYOUT	8-14H-18107-0-2	2
REF		X-Y COORDINATE HOLE LOCATIONS	8-14H-18107-0-4	1

IC TYPE	GND	+5V	W1	30
DEC 74S174	8	16		
DEC 74S153	8	16		
DEC 74B5	8	16		
DEC 74S157	8	16		
DEC 74153	8	16		
DEC 74S158	8	16		
DEC 74S181	12	24		
DEC 74182-1	8	16		
DEC 74157	8	16		
DEC 3101A	8	16		



A A2, A V1, B A2, B V1, C A2, C V1, D A2, D V1, E A2, E V1, F A2, F V1

A A2, A N2, A H1, A T1, B C2, B N2, B H1, B T1, C C2, C N2, C H1, C T1, D C2, D N2, D H1, D T1, E C2, E N2, E H1, E T1, F C2, F N2, F H1, F T1

ETCH BOARD REV B

DATE: 11-17-77

BY: R.C. GRAY

REVISION: 1

DESCRIPTION: SYS. ADDRESS PATH

SCALE: 1/1

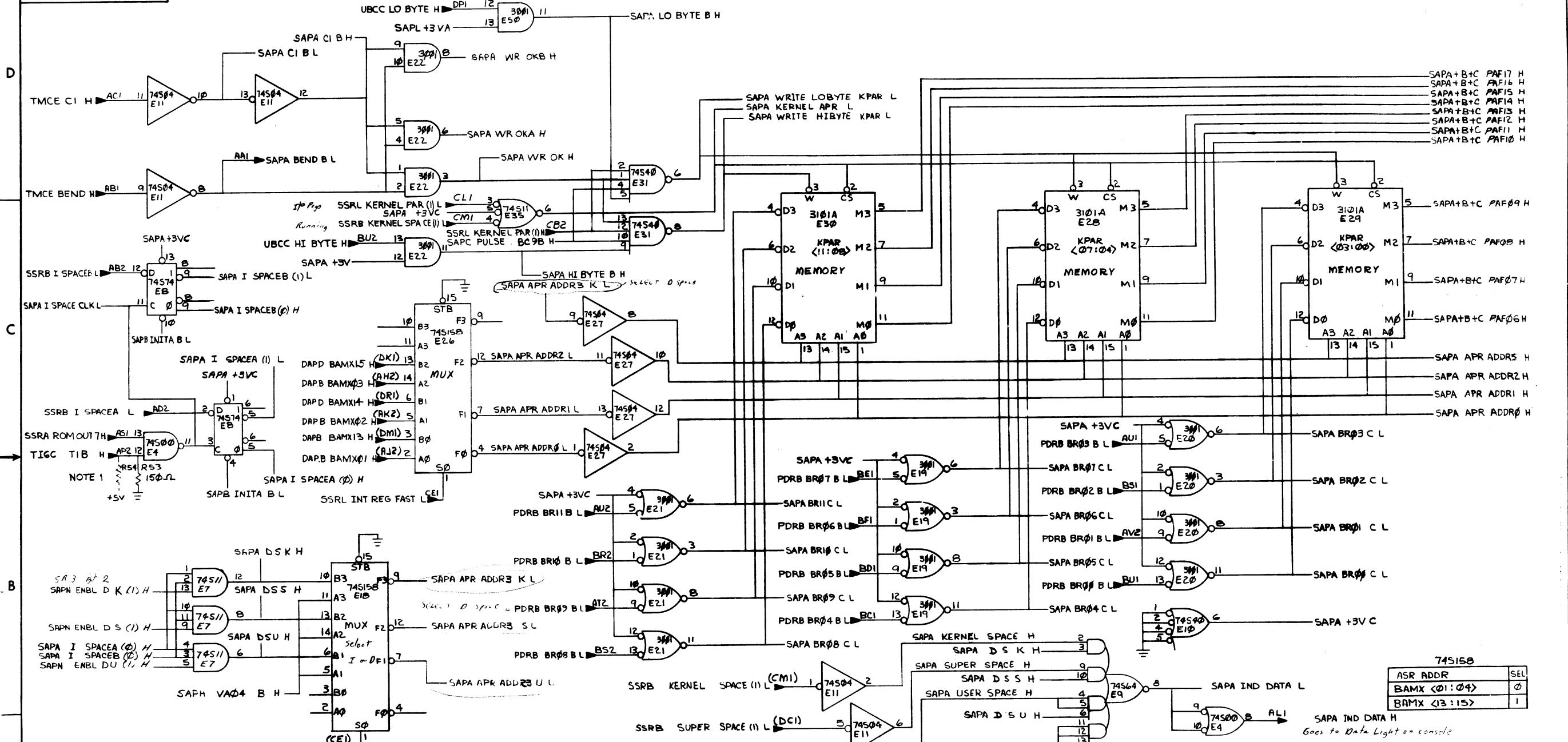
SHEET: 1 OF 13

SEMICONDUCTOR CONVERSION CHART

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.	ITEM NO.	AWG	FROM PT	TO PT
IC PIN LOCATIONS				
JUMPER LIST				

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NOTES:  
1. TERMINATION RESISTOR R54 NOT USED.



74515B	
ASR ADDR	SEL
BAMX <01:09>	0
BAMX <13:15>	1

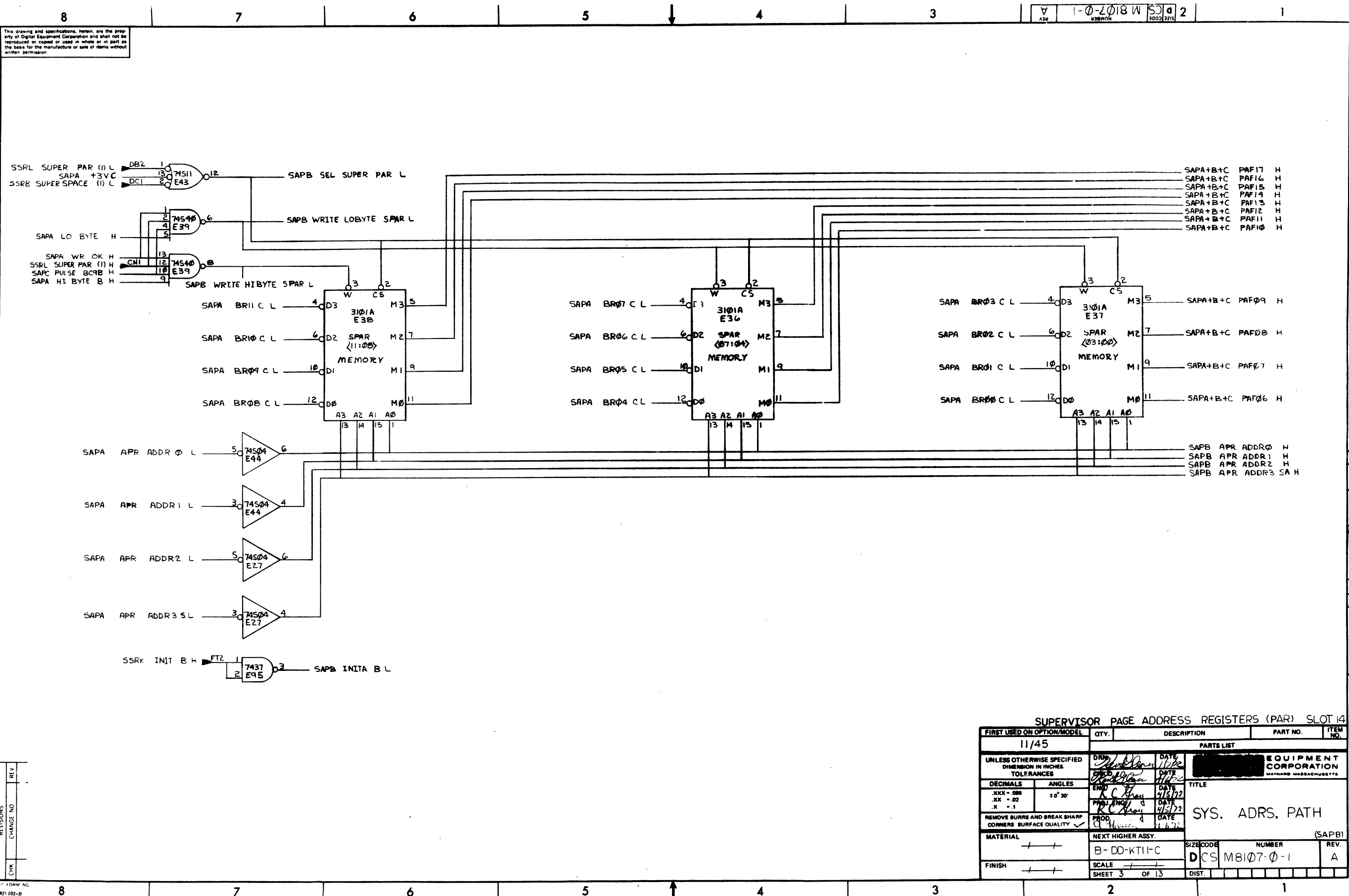
KERNEL PAGE ADDRESS REGISTERS (PAR) SLOT 14

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		PARTS LIST		
DECIMALS	ANGLES	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
.XXX - .005	±0° 30'	TITLE		
.XX - .02		SYS. ADRS. PATH		
.X - .1		(SAPA)		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		NEXT HIGHER ASSY.		
MATERIAL		B-DD-KT11-C		
FINISH		SCALE		
		SHEET 2 OF 13		
		DIST.		

REV	NO	DATE
CHK		

DRAWING NO. M8107-0-1

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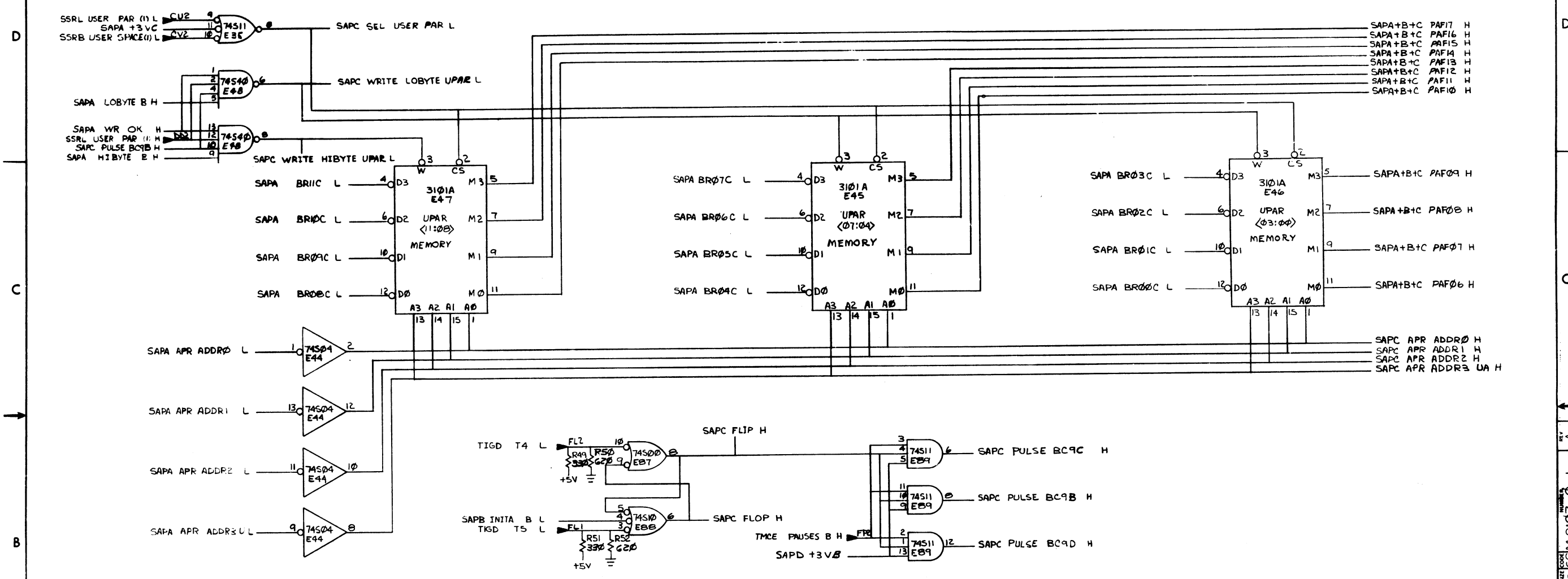
REV	CHG	NO

SUPERVISOR PAGE ADDRESS REGISTERS (PAR) SLOT 14				
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES				
TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XXX - .000	± 0° 30'	SYS. ADRS. PATH		
.XX - .02		MATERIAL		
.X - .1		FINISH		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
NEXT HIGHER ASSY.		SIZE CODE	NUMBER	REV.
B-DD-KT11-C		D	CS M8107-0-1	A
SCALE		DIST.		
SHEET 3 OF 13				

REV A  
M8107-0-1  
D CS

DRP 100W NC  
DRP 102-B

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REV	CHANGE NO
CHK	

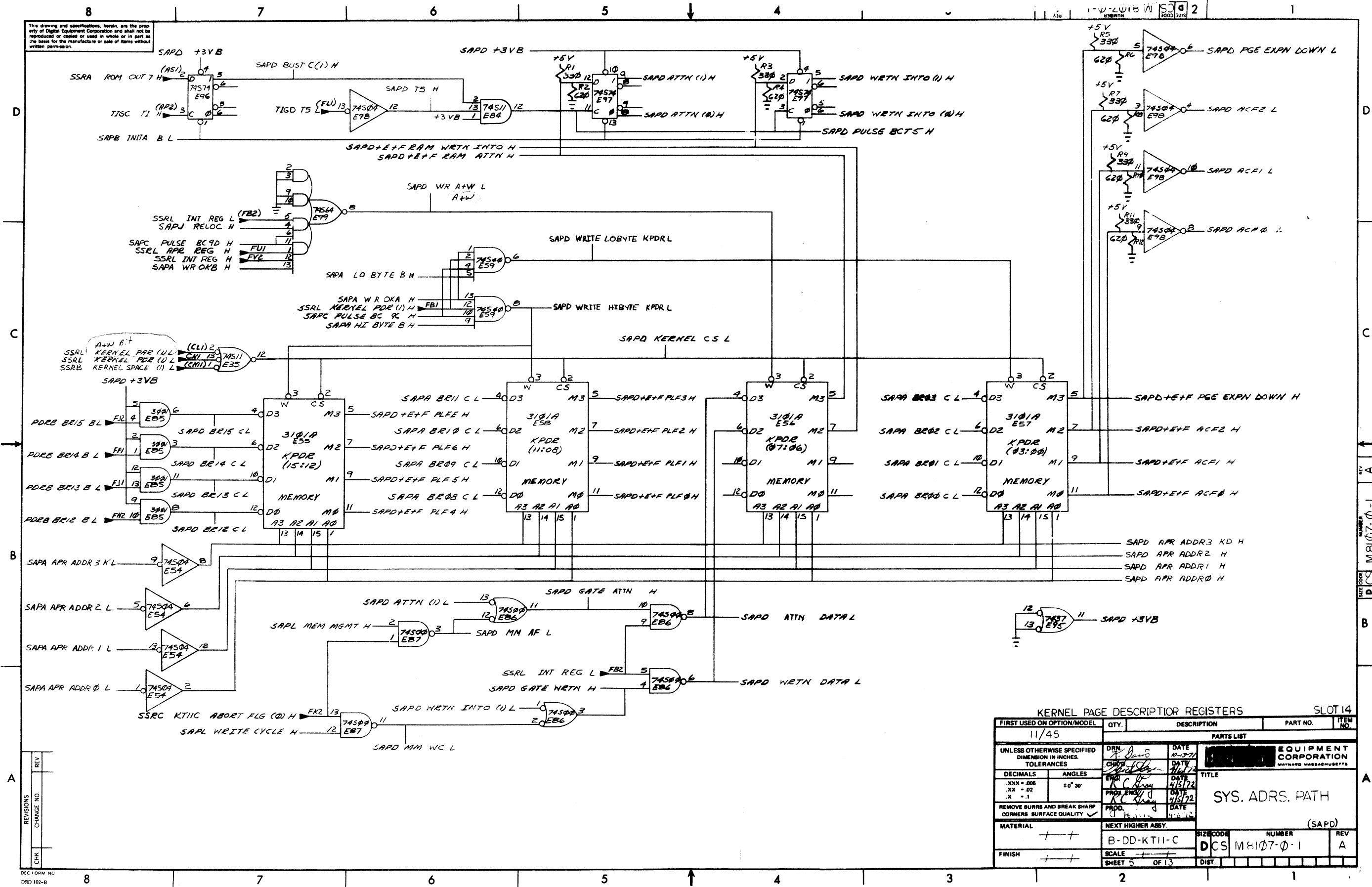
FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	ANGLES	CHKD	DATE	TITLE	
.XXX - .005	±0° 30'	ENG	DATE	SYS. ADRS. PATH	
.XX - .02		PROJ. ENGR	DATE		
.X - .1		PROD. ENGR	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD.	DATE		
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE		NUMBER	REV.
FINISH	B-DD-KT11-C	D	CS	M 8107-0-1	A
SCALE		SHEET 4 OF 13		DIST.	

BRUNING 40-522 15840

DEC FORM NO  
DRD 1-2-B

REV A  
D CSM 8107-0-1

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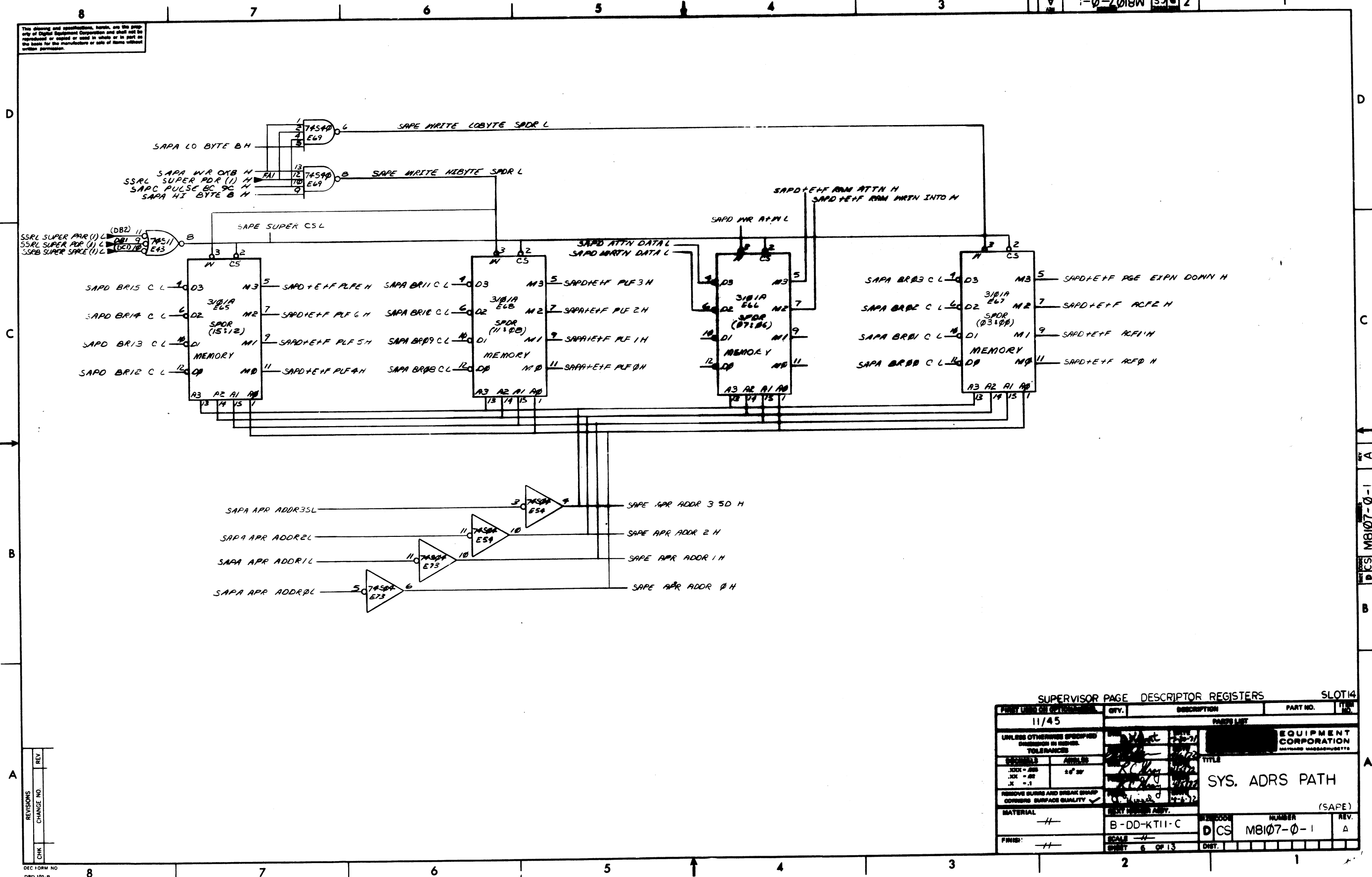


KERNEL PAGE DESCRIPTOR REGISTERS				SLOT 14	
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
11/45					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES					
DECIMALS	ANGLES	TITLE			
.XXX = .005	±0°30'	SYS. ADRS. PATH			
.XX = .02					
.X = .1					
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV	
FINISH	B-DD-KT11-C	DCS	M8107-0-1	A	
SHEET 5 OF 13		DIST.			

REVISIONS  
 CHANGE NO.  
 CHK

REV A  
 NUMBER M8107-0-1  
 SIZE CODE DCS

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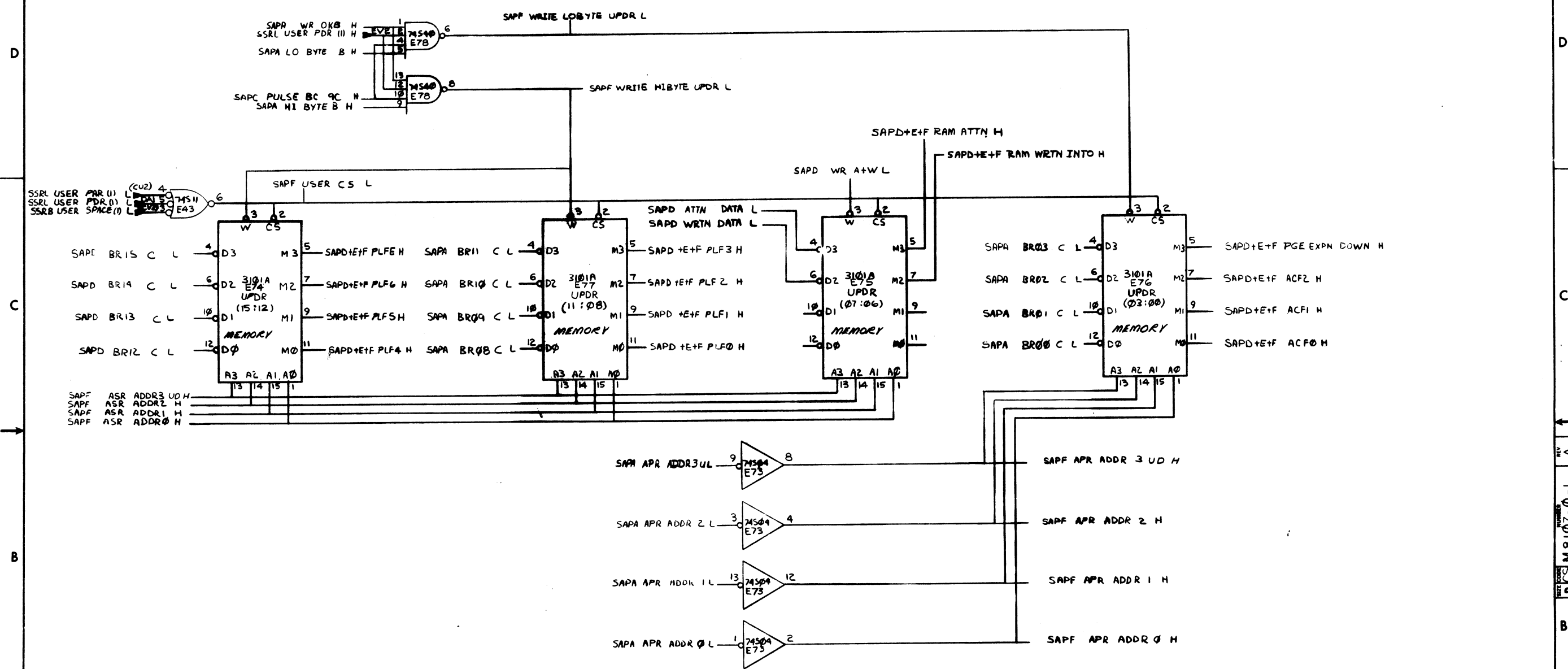


SUPERVISOR PAGE DESCRIPTOR REGISTERS SLOT 14

PART NUMBER	QTY.	DESCRIPTION	PART NO.	REV.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
FINISH			EQUIPMENT CORPORATION MILWAUKEE, WISCONSIN	
MATERIAL			TITLE SYS. ADRS PATH (SAPD)	
FINISH			NUMBER D CS M8107-0-1	REV. A
SCALE			SHEET 6 OF 13	

REVISIONS  
CHANGE NO.  
CHK

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USER PAGE DESCRIPTOR REGISTERS SLOT 14

FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES.		DATE 7-20-71		
TOLERANCES		DATE 7/27/72		
DECIMALS	ANGLES	TITLE		
.XXX - .005	±0° 30'	SYS. ADRS. PATH		
.XX - .02		DATE 7/27/72		
.X - .1		DATE 4-6-72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV
+	B-DD-KT11-C	DCS	M8107-0-1	A
FINISH	SCALE	SHEET	OF	
+		7	13	

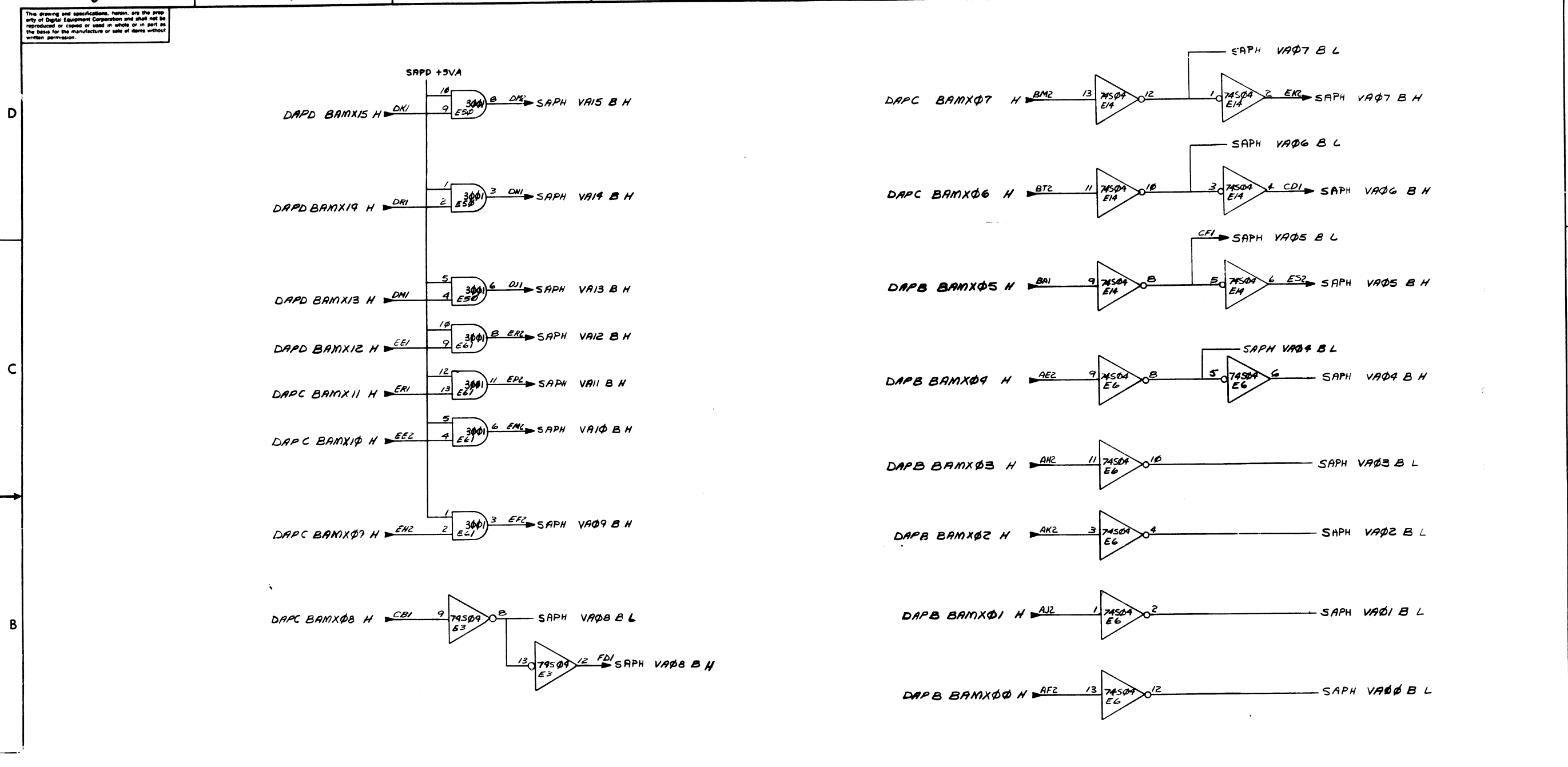
REVISIONS	REV
CHANGE NO.	
CHK	

REV A  
M8107-0-1  
DCS



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1-0-2018 W 501 a 2

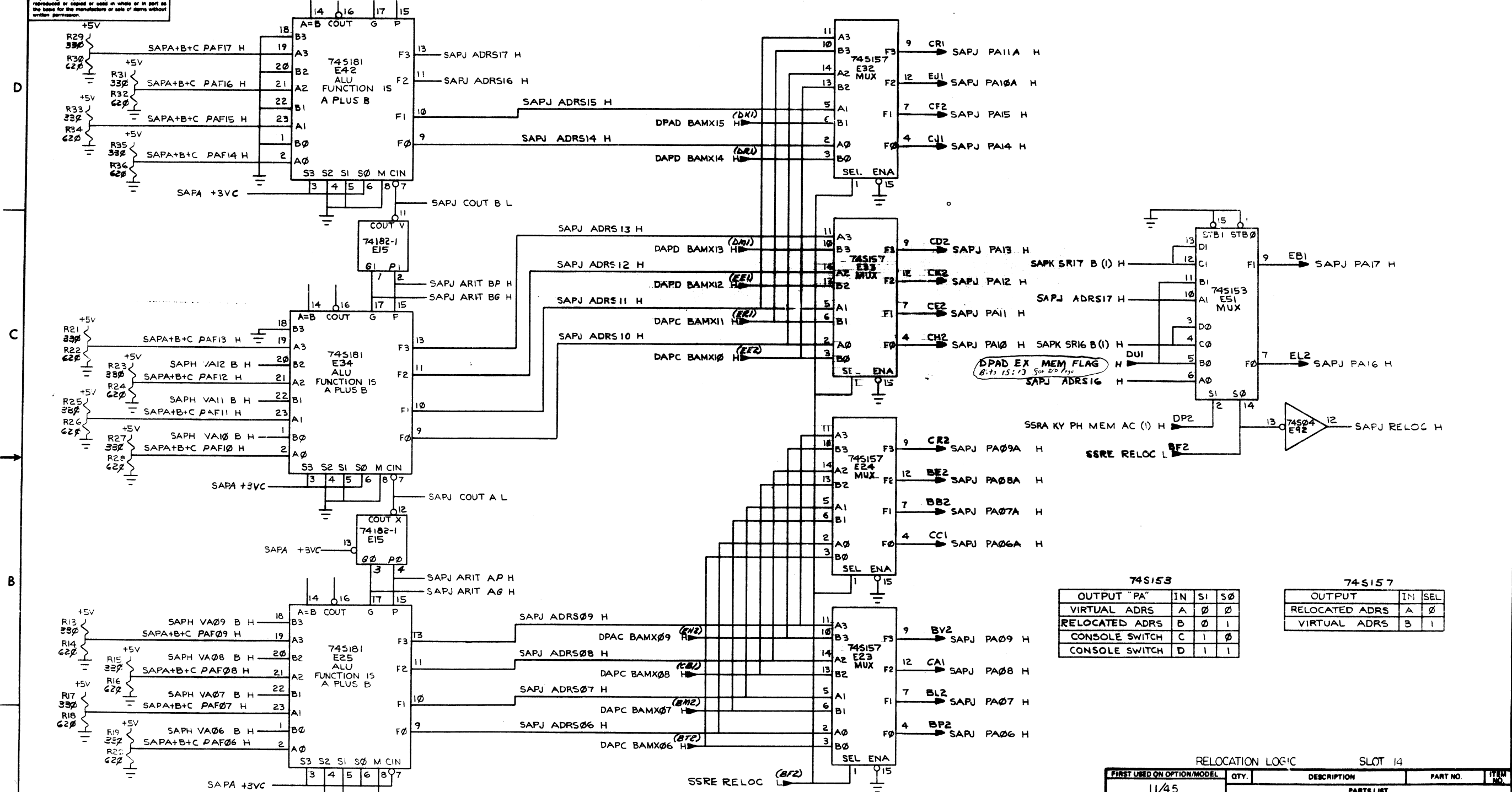


REVISIONS	REV.
CHANGE NO.	
CHK	

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN	DATE	EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS	ANGLES	CHKD	DATE	TITLE	
.XXX - .006	±0° 30'	ENG	DATE	SYS. ADRS. PATH	
.XX - .02		PROJ. ENGR	DATE	(SAPH)	
.X - .1		PROD.	DATE	B-DD-KT11-C	
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY				SIZE CODE	NUMBER
MATERIAL	NEXT HIGHER ASSY.			DCS	M8107-0-1
FINISH	SCALE				REV. A
	SHEET 8 OF 13			DIST.	

REV. A  
M8107-0-1

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74S153

OUTPUT "PA"	IN	S1	S0
VIRTUAL ADRS	A	0	0
RELOCATED ADRS	B	0	1
CONSOLE SWITCH	C	1	0
CONSOLE SWITCH	D	1	1

74S157

OUTPUT	IN	SEL
RELOCATED ADRS	A	0
VIRTUAL ADRS	B	1

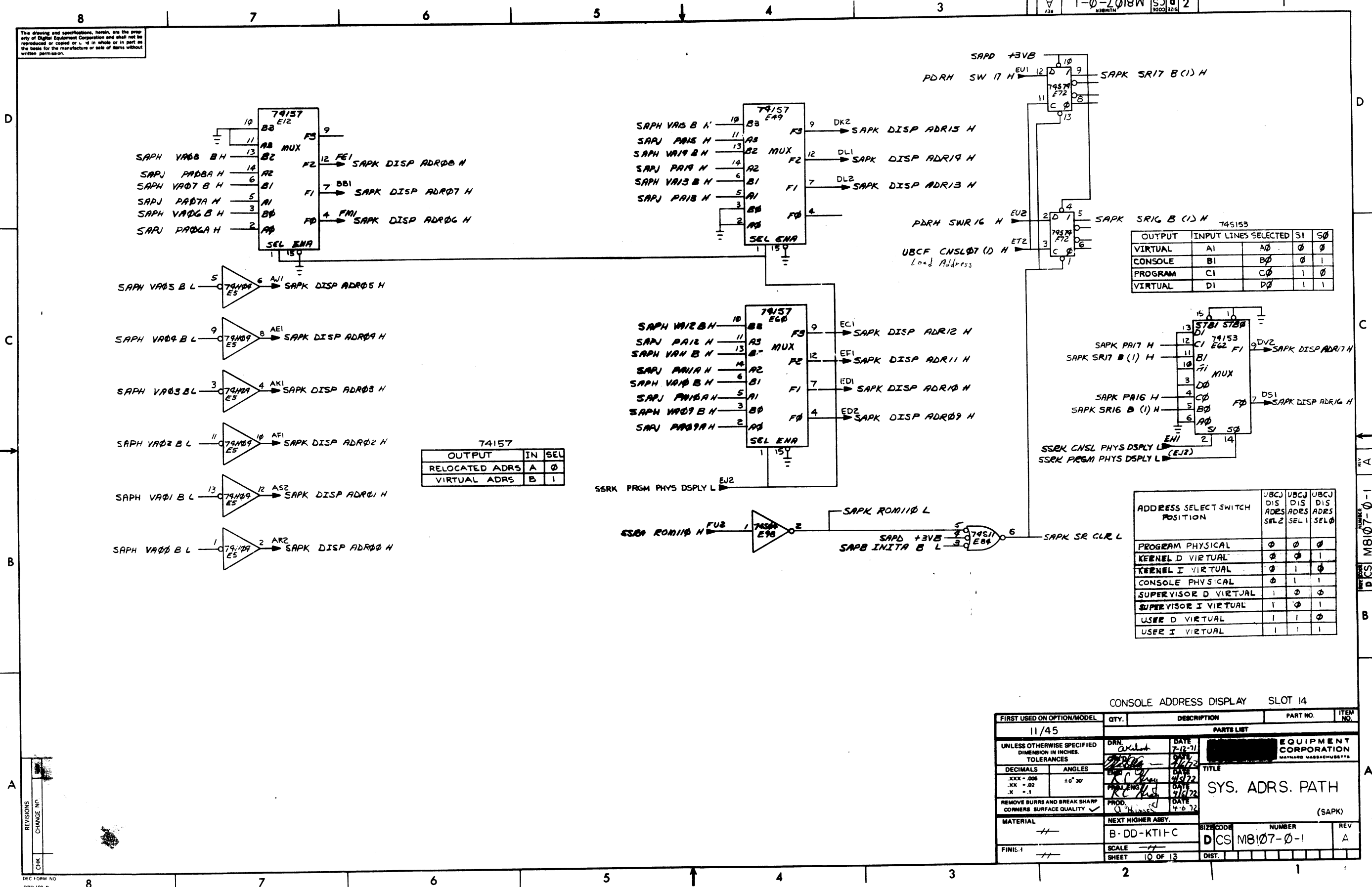
RELOCATION LOGIC SLOT 14

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS .XXX - .000	ANGLES ±0° 30'	TITLE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		SYS. ADRS. PATH (SAPJ)		
MATERIAL	NEXT HIGHER ASSY.	REV. CODE	NUMBER	REV
FINISH	SCALE	DCS	M8107-0-1	A
SHEET 5 OF 13		DIST		

REVISIONS  
 CHANGE NO.  
 DEC 1974  
 DRD 102-B

REV. 7  
 M8107-0-1  
 DCS

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74157		
OUTPUT	IN	SEL
RELOCATED ADRS	A	0
VIRTUAL ADRS	B	1

74153				
OUTPUT	INPUT LINES SELECTED	S1	S0	
VIRTUAL	A1	A0	0	0
CONSOLE	B1	B0	0	1
PROGRAM	C1	C0	1	0
VIRTUAL	D1	D0	1	1

ADDRESS SELECT SWITCH POSITION	UBCJ DIS ADES SEL2	UBCJ DIS ADES SEL1	UBCJ DIS ADES SEL0
	PROGRAM PHYSICAL	0	0
KERNEL D VIRTUAL	0	0	1
KERNEL I VIRTUAL	0	1	0
CONSOLE PHYSICAL	0	1	1
SUPERVISOR D VIRTUAL	1	0	0
SUPERVISOR I VIRTUAL	1	0	1
USER D VIRTUAL	1	1	0
USER I VIRTUAL	1	1	1

CONSOLE ADDRESS DISPLAY SLOT 14

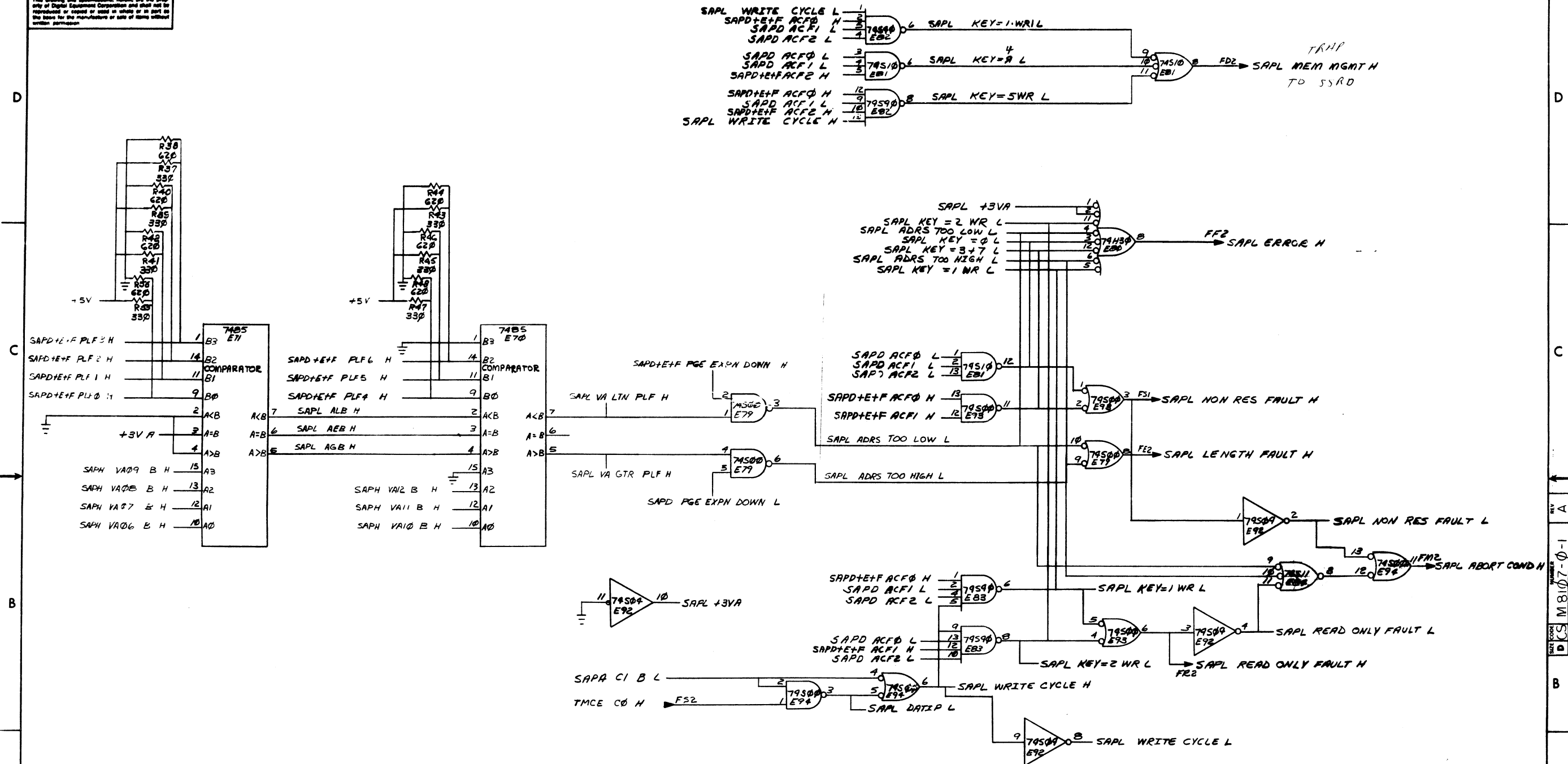
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XXX - .008	±0° 30'	SYS. ADRS. PATH		
.XX - .02		(SAPK)		
.X - .1		MATERIAL		
		NEXT HIGHER ASSY.		
		B-DD-KT11-C		
		FINIS: 1		
		SCALE: 1/8"		
		SHEET: 10 OF 13		
		DISTRIBUTION		

REV	DATE	DESCRIPTION
1		

DEC FORM NO. DRD 102-B

REV. A  
DCS MB107-0-1

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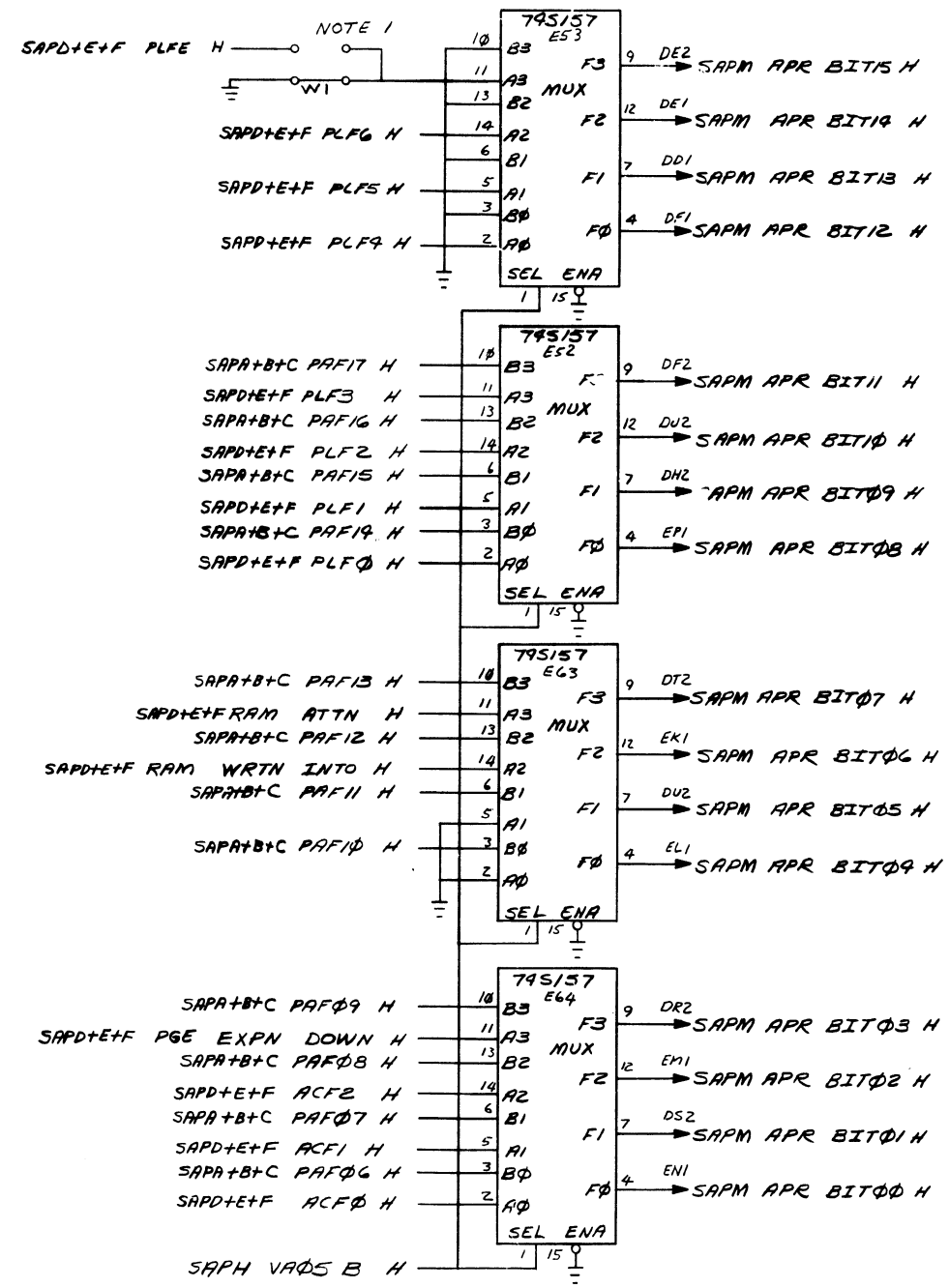


REV	CHG	INT

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS			
DECIMALS	ANGLES	TITLE			
.XXX - .006	±0° 30'	SYS. ADRS. PATH (SAPL)			
.XX - .02		MATERIAL			
.X - .1		NEXT HIGHER ASSY.			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		B-DD-KTII-C			
MATERIAL		SCALE		SIZE CODE	
FINISH		SHEET 11 OF 13		NUMBER	
				DCS M8107-0-1	
				REV	
				4	

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1-0-2018 W SC 2



74S157

OUTPUT	INPUT LINES SELECTED				SEL
PDR'S	A3	A2	A1	A0	0
PAR'S	B3	B2	B1	B0	1

NOTES:  
 1. PROVISIONS FOR WIRE JUMPER. JUMPER IS NORMALLY INSERTED TO CONNECT "A3" TO GROUND.

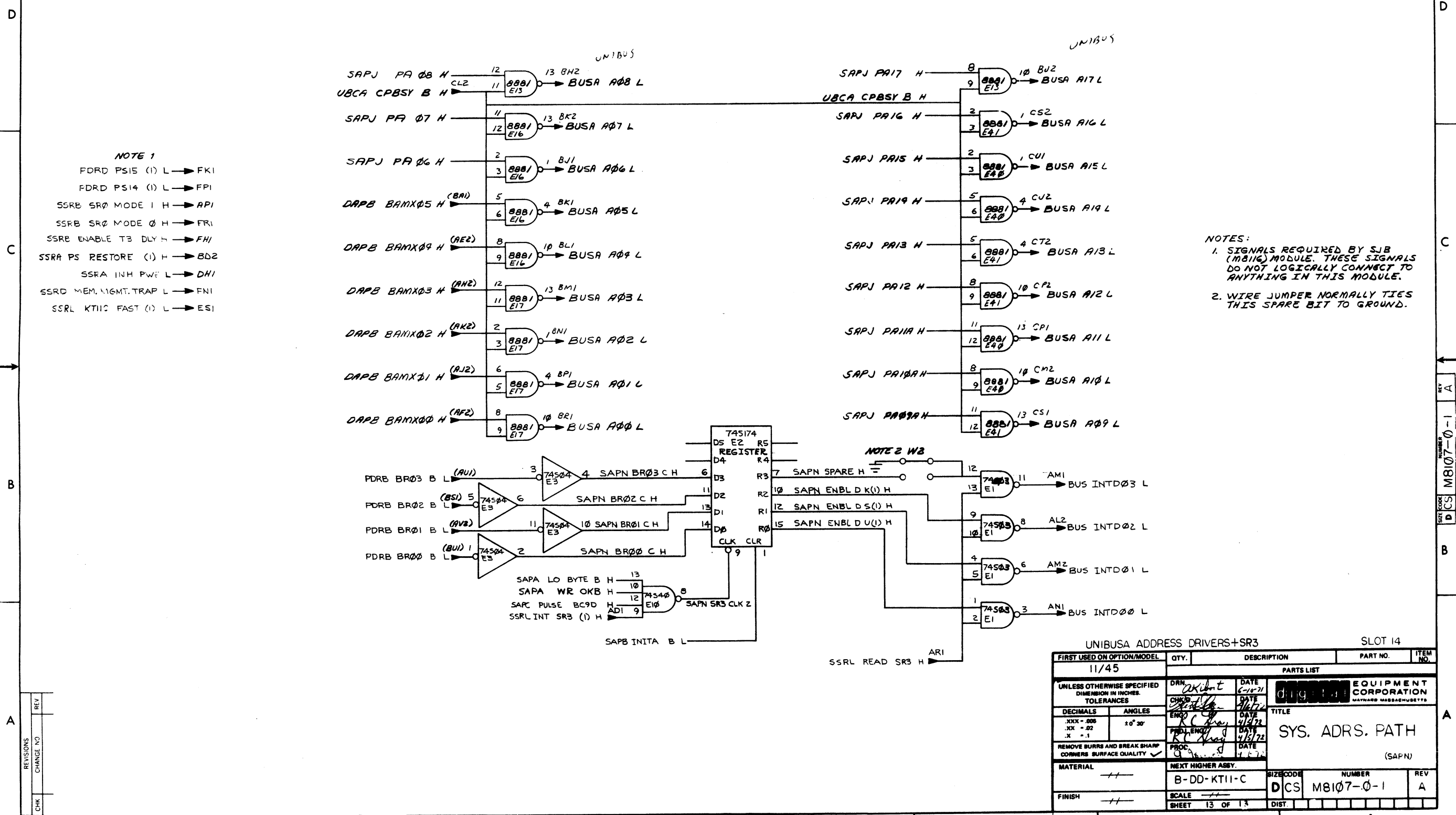
REV	
CHANGE NO	
CHK	

PAR/PDR READ MULTIPLEXORS SLOT 14

FIRST USED ON OPTION/MODEL 11/45	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRAWN DATE 7-23-71	DATE 7/23/71	DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX = .006 .XX = .02 .X = .1	ANGLES ±0° 30'	DATE 4/15/72	TITLE SYS. ADRS. PATH	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD. DATE 4-6-72	SIZE CODE NUMBER (SAF-M) REV. A		
MATERIAL ++	NEXT HIGHER ASSY. B-DD-KT11-C	SIZE CODE DCS	NUMBER M8107-0-1	REV. A
FINISH ++	SCALE SHEET 12 OF 13	DIST.		

REV. A  
 NUMBER M8107-0-1  
 SIZE CODE DCS

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**NOTE 1**  
 FDRD PS15 (1) L → FKI  
 FDRD PS14 (1) L → FPI  
 SSRB SR0 MODE 1 H → API  
 SSRB SR0 MODE 0 H → FRI  
 SSRB ENABLE T3 DLY H → FHI  
 SSRA PS RESTORE (1) H → BD2  
 SSRA INH PWR L → DHI  
 SSRD MEM. MGMT. TRAP L → FNI  
 SSRL KT10 FAST (1) L → ESI

**NOTES:**  
 1. SIGNALS REQUIRED BY S1B (MB16) MODULE. THESE SIGNALS DO NOT LOGICALLY CONNECT TO ANYTHING IN THIS MODULE.  
 2. WIRE JUMPER NORMALLY TIES THIS SPARE BIT TO GROUND.

**NOTE 2 W3**

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN <i>AKint</i>	DATE 6-10-71	EQUIPMENT CORPORATION BAYBURN MASSACHUSETTS TITLE SYS. ADRS. PATH (SAPN)	
DECIMALS	ANGLES	CHKD <i>AKint</i>	DATE 4/1/72		
.XXX - .008	± 0° 30'	ENG <i>AKint</i>	DATE 7/15/72		
.XX - .02		PRD <i>AKint</i>	DATE 7-1-72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROC <i>AKint</i>	DATE 7-1-72		
MATERIAL	FINISH	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
---	---	B-DD-KT11-C		DCS	M8107-0-1
		SCALE			REV
		SHEET 13 OF 13			A

REV	
CHANGE NO	
CHK	



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ROM ENCODING (1-4)	1	2	3	4
FUNCTION	M0	M1	M2	M3
NO OPERATION	0	0	0	X
RESTORE PROCESSOR STATUS	1	0	0	X
AUTO INCREMENT	0	1	0	X
AUTO DECREMENT	1	1	0	X
BRK.30	0	0	1	X
INHIBIT PADWRITE ENABLE	1	0	1	X
CLR ADRS 16,17	0	1	1	X
CLR PS RESTORE	1	1	1	X
DESTINATION MODE	X	X	X	1
NOT DESTINATION MODE	X	X	X	0

CLK PREV. MODE (MT/FP)

ROM ENCODING (5-8)	5	6	7	8
FUNCTION	M0	M1	M2	M3
KEYN DATA (TRAP OR ABORT)	X	1	X	X
KEYN DATA 1 (TRAP OR ABORT)	1	X	X	X
BUST	X	X	1	X
I SPACE IF MT/F PI	X	X	X	1

Clock PREV mode (MT/FP)

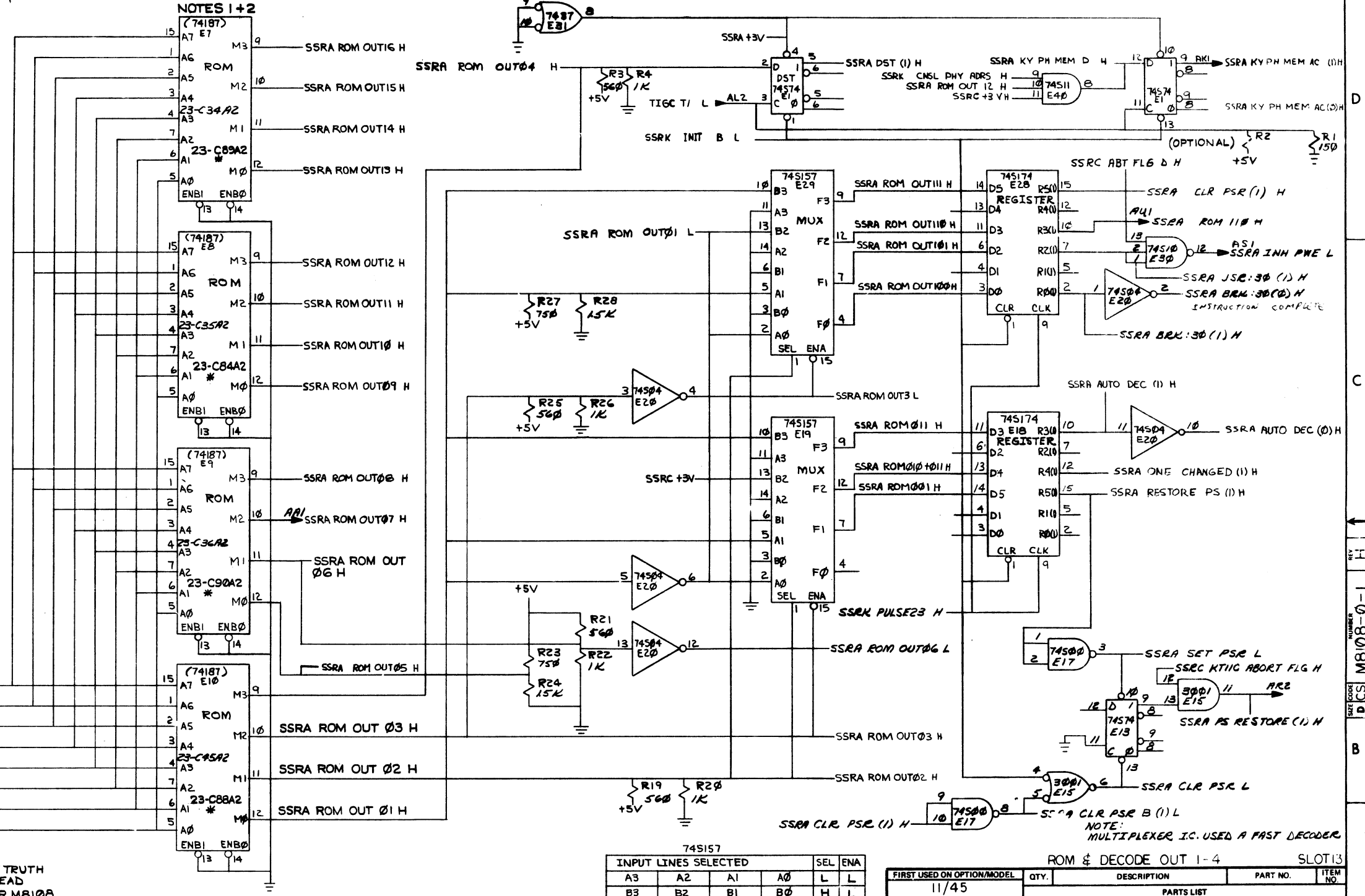
ROM ENCODING (9-12)	9	10	11	12
FUNCTION	M0	M1	M2	M3
I SPACE ON IND. WORD FET	1	X	X	X
I IF INST START IN I	X	X	1	X
I IF CNSL DEP. + EXAM.	X	X	X	1

ROM ENCODING (13-16)	13	14	15	16
FUNCTION	M0	M1	M2	M3
SRCM = 1+2+3+4+5	1	X	X	X
DSTM = 1+2	X	1	X	X
DSTM = 3	X	X	1	X
FLOATING POINT INST.	X	X	X	1

RACD RAR07 H → AD1  
 RACD RAR06 H → AE2  
 RACD RAR05 H → AD2  
 RACD RAR04 H → AC1  
 RACD RAR03 H → AF2  
 RACD RAR02 H → AF1  
 RACD RAR01 H → AH2  
 RACD RAR00 H → AE1

NOTE 1:  
 SEE SHEET SSRM FOR A "TRUTH TABLE" OF THE 74187 READ ONLY MEMORY (ROM) FOR M8108  
 SEE SHEET SSRN FOR M8108-YA "ROM TRUTH TABLE"  
 2: (\*) USED IN M8108-YA

NOTES 1+2



74517					
INPUT LINES SELECTED				SEL ENA	
A3	A2	A1	A0	L	L
B3	B2	B1	B0	H	L

ROM & DECODE OUT 1-4 SLOT13

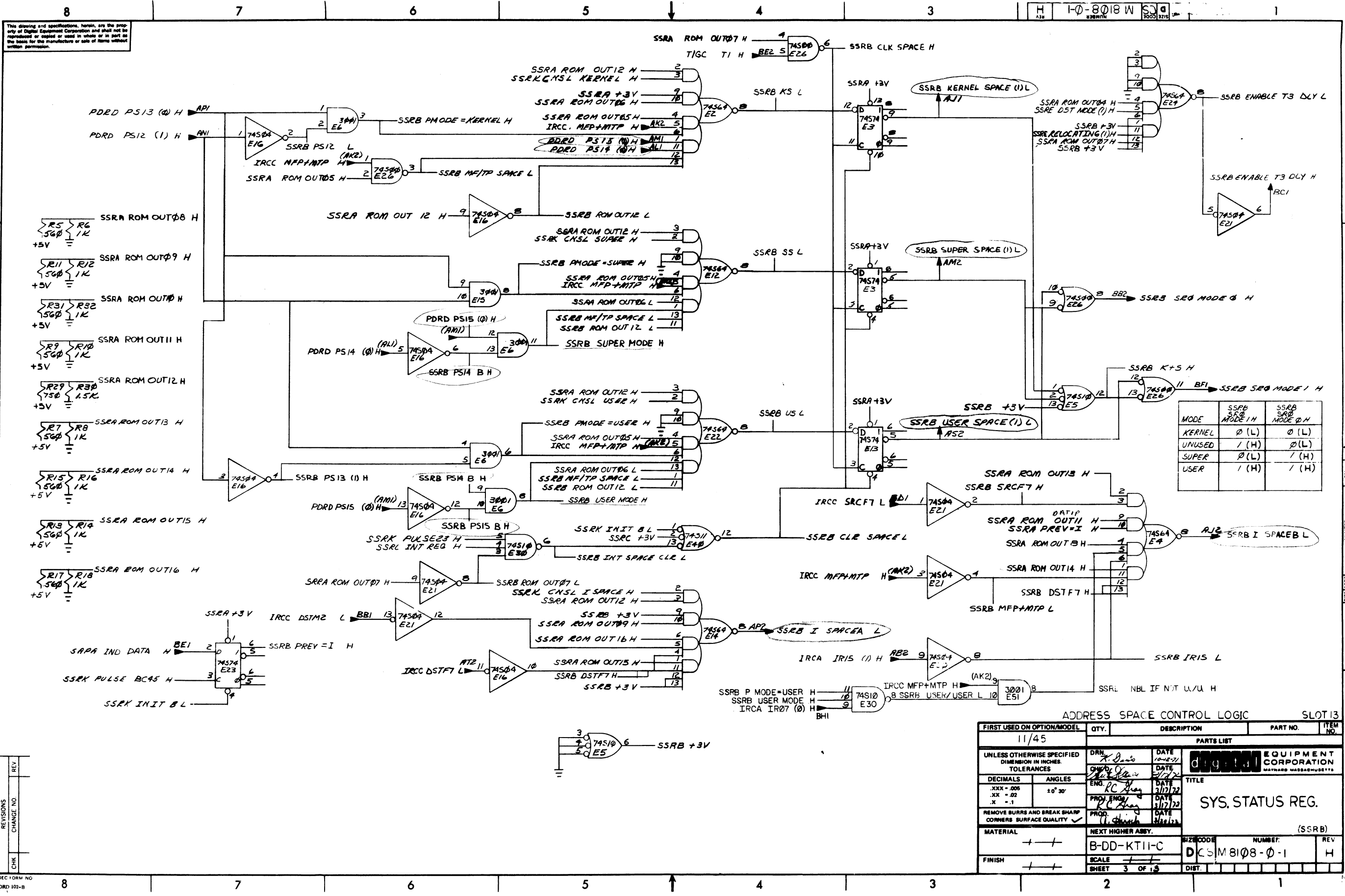
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XXX - .005	±0°30'	SYS. STATUS REG.		
.XX - .02		(SSRA)		
.X - .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH				
SCALE		SIZE CODE		REV.
SHEET 2 OF 13		DCS M8108-0-1		H
		DIST.		

REVISIONS  
 CHANGE NO.  
 CHK

11/45  
 M8108-0-1  
 DCS  
 11/45



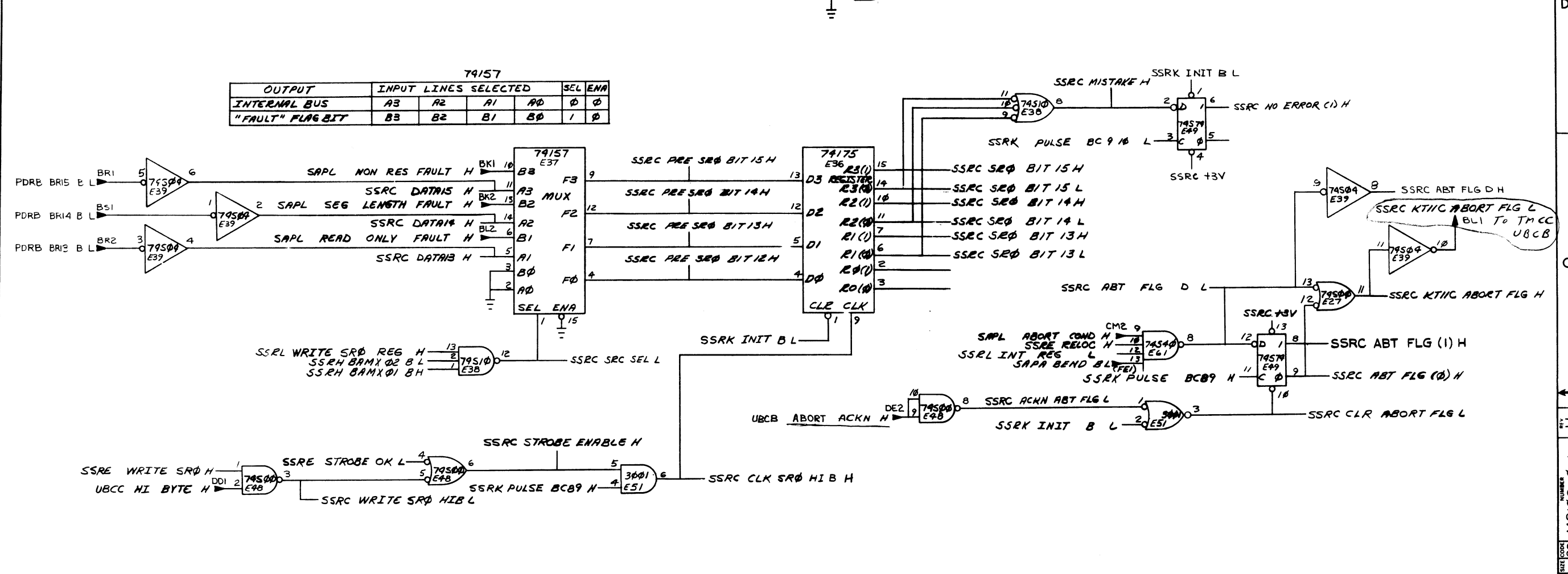
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REV	
CHK	
CHG	
REV	
CHK	
CHG	
REV	
CHK	
CHG	

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES					
DECIMALS	ANGLES	PARTS LIST			
.XXX - .005	±0° 30'	DRN	X. Davis	DATE	10-12-71
.XX - .01		CHKD	O. Davis	DATE	3/17/72
.X - .1		ENG	R.C. Chang	DATE	3/17/72
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ. ENGR	R.C. Chang	DATE	3/17/72
MATERIAL		PROB.	(U. Chandra)	DATE	3/17/72
NEXT HIGHER ASSY.		TITLE			
B-DD-KT11-C		SYS. STATUS REG.			
FINISH		MATERIAL		NUMBER: (SSRB)	
		B-DD-KT11-C		REV H	
SCALE		SIZE CODE		D C S M 8108-0-1	
SHEET 3 OF 13		DIST			

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74157

OUTPUT	INPUT LINES SELECTED				SEL	ENA
INTERNAL BUS	A3	A2	A1	A0	0	0
"FAULT" FLAG BIT	B3	B2	B1	B0	1	0

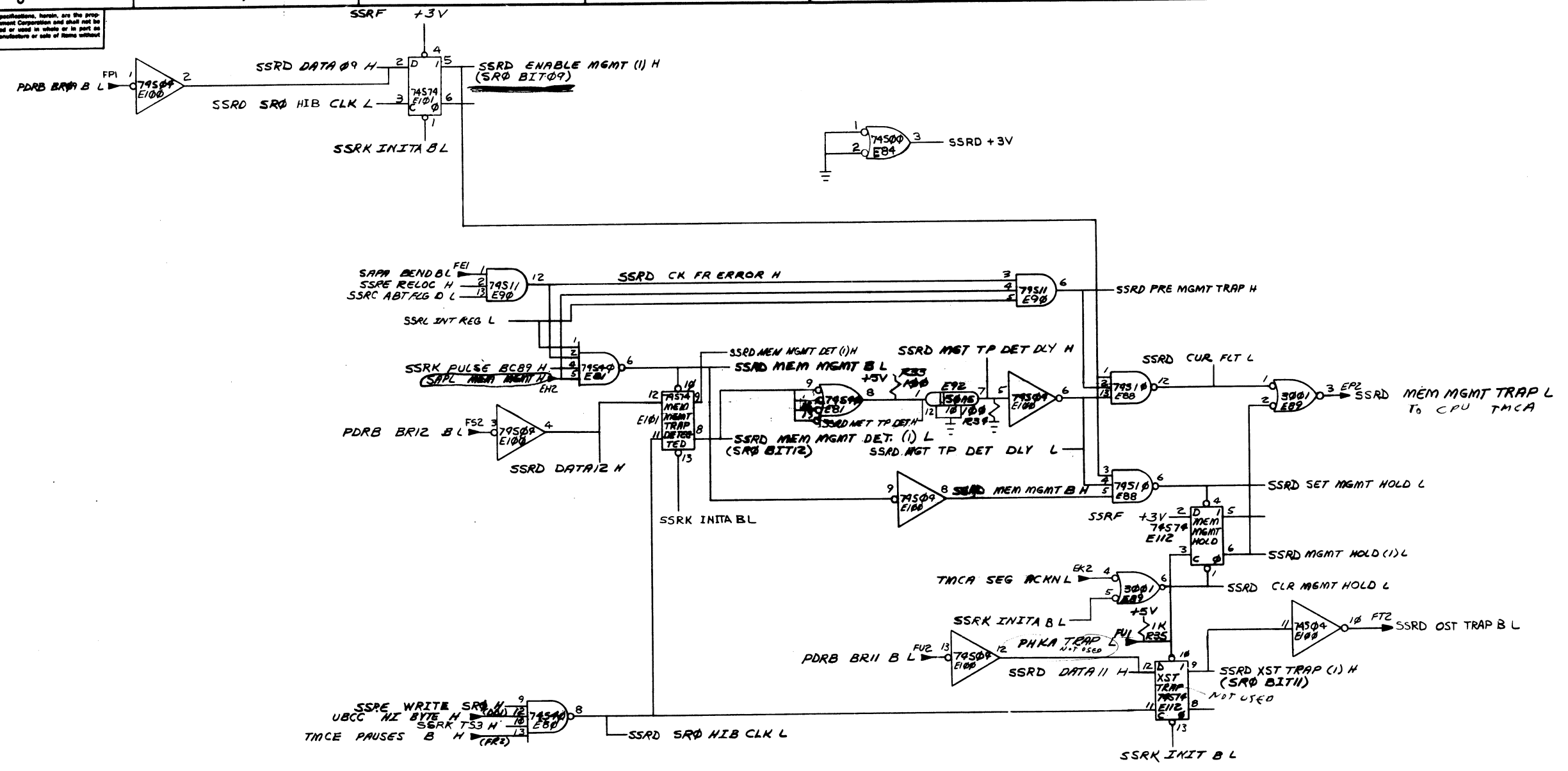
SEG. R0 (SR0) BIT LOCATIONS

BIT	PRINT SHEET
15	SSRC
14	SSRC
13	SSRC
12	SSRD
11	NOT USED
10	NOT USED
9	SSRD
8	SSRE
7	
6	
5	
4	
3	
2	
1	
0	SSRE

STATUS REGISTER \*O-ABORT FLAGS SLOT 13

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES				
DECIMALS	ANGLES		TITLE	
.XXX - .005	± 0° 30'		SYS. STATUS REG.	
.XX - .02			(SSRC)	
.X - .1			MATERIAL	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		NEXT HIGHER ASSY.		
FINISH		SCALE		REV
H		B-DD-KT11-C		H
SHEET 4 OF 13		D CS M8108-0-1		

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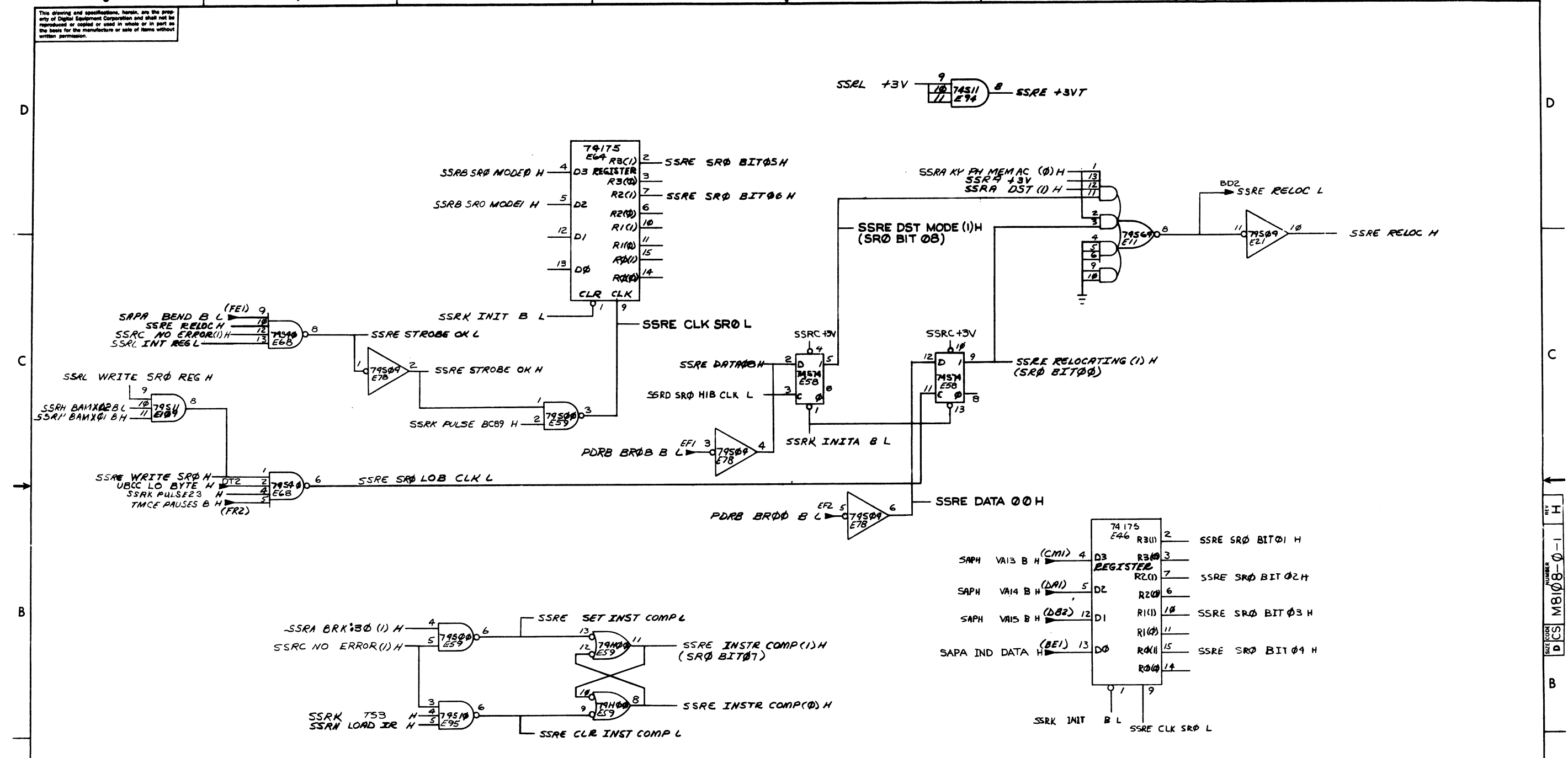


STATUS REGISTER \*0-MEMORY MANAGEMENT TRAP SLOT 13

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN <i>Wint</i> DATE 5-27-71	 <b>DIGITAL EQUIPMENT CORPORATION</b> <small>MAYNARD MASSACHUSETTS</small>	
DECIMALS	ANGLES	DATE 5/1/72		
.XXX - .005	±0° 30'	DATE 11/17/72		
.XX - .02		DATE 11/17/72		
.X - .1		DATE 5/2/72	<b>TITLE</b> SYS. STATUS REG. (SSRD)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.	SCALE	REV	
--	B-DD-KT11-C	5 OF 13	DCS	H
FINISH			NUMBER	
--			M8108-0-1	
			DIST.	

REV	
CHANGE NO	
CHK	

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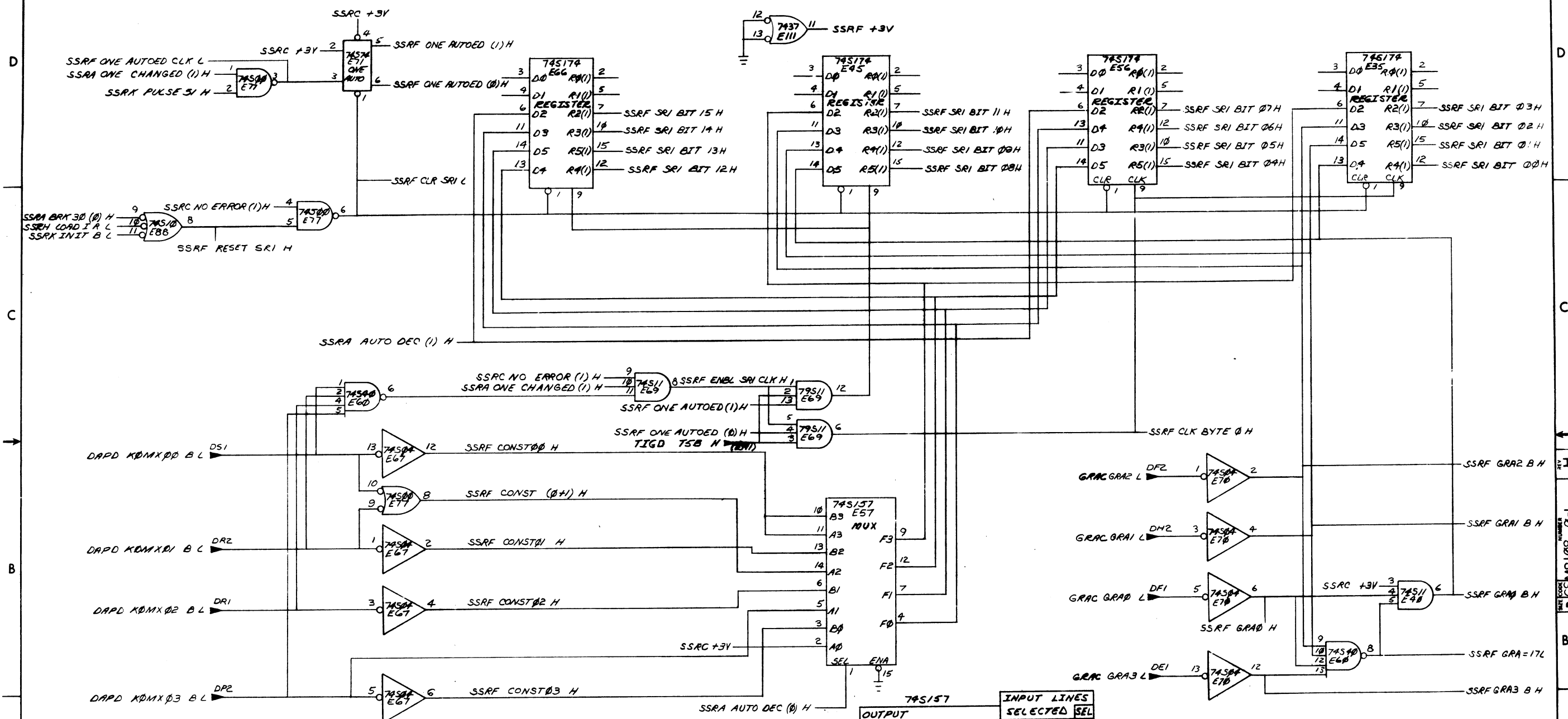


STATUS REGISTER #0-MODE, OPERATE CONTROL SLOT 13

FIRST USED ON OPTION/MODEL 11/45	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN <i>Adiant</i>	DATE 6-10-71	<b>digital</b> EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE SYS. STATUS REG. (SSRE)	
DECIMALS	ENG <i>RC Shan</i>	DATE 3/17/72		
.XX = .02	PROB ENG <i>RC Shan</i>	DATE 3/17/72		
.X = .1	PROD <i>O. Shan</i>	DATE 3/17/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY. B-DD-KT11-C			SIZE CODE DCS
MATERIAL --	SCALE --			NUMBER MB108-0-1
FINISH --	SHEET 6 OF 13			REV H

REV	
CHANGE NO	
CHK	

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74S157		INPUT LINES			
OUTPUT	SELECTED	SEL			
NEGATIVE CONSTANT	A3 A2 A1 A0	L			
POSITIVE CONSTANT	B3 B2 B1 B0	H			

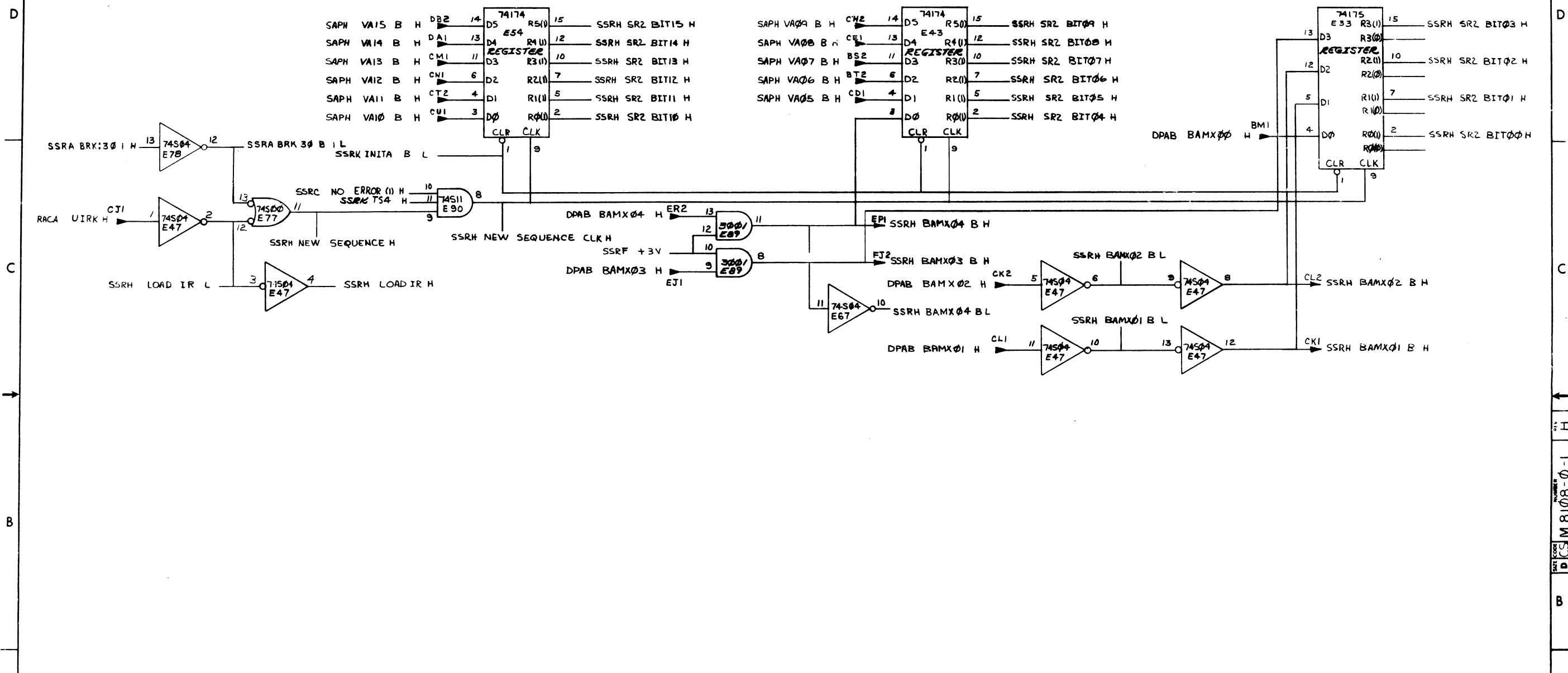
STATUS REGISTER\*1-AUTO INC/DEC INFO. SLOT 13

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN: <i>Rince</i>	DATE: <i>1/1/72</i>	<b>DIGITAL EQUIPMENT CORPORATION</b> MAYLAND MASSACHUSETTS
DECIMALS	ANGLES	ENG: <i>RC Hay</i>	DATE: <i>1/1/72</i>	
.XXX - .005	±0° 30'	PROJ. ENG: <i>RC Hay</i>	DATE: <i>1/1/72</i>	TITLE: <b>SSRF</b>
.XX - .02		PRD: <i>Ch. Smith</i>	DATE: <i>1/1/72</i>	<b>SYS. STATUS REG.</b>
.X - .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.			
FINISH	B-DD-KT11-C	SIZE CODE	NUMBER	REV.
	SCALE	DCS M8108-0-1		H
	SHEET 7 OF 13	DIST.		

REV	CHG	NO

DEC 10 AM NO  
URD 107-B

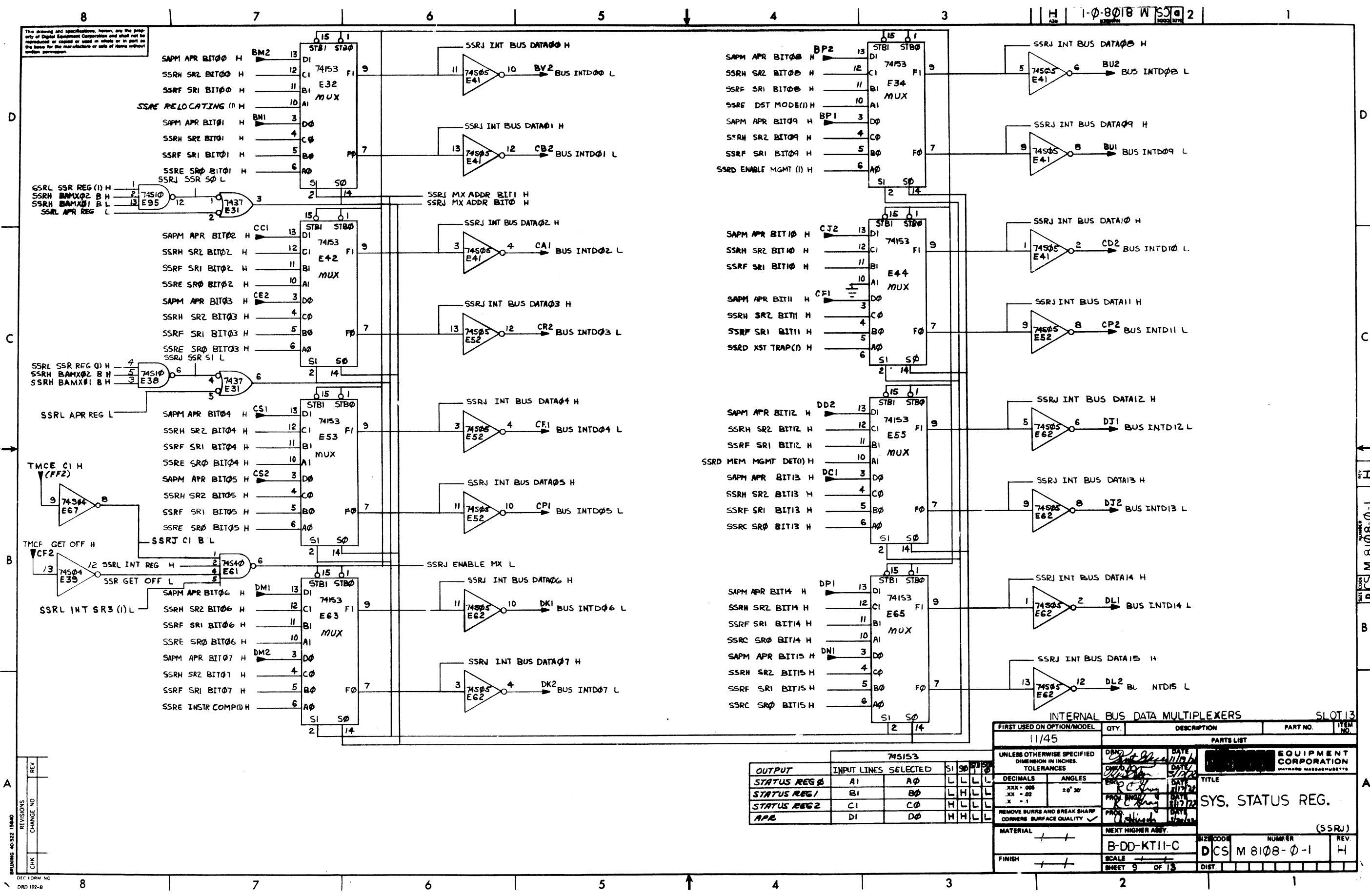
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STATUS REGISTER #2 INST OR TRAP VECTOR ADDRESS CLOT14

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DATE	EQUIPMENT CORPORATION	
DECIMALS	ANGLES	DATE	MATHARD MASSABUSETTS	
.XXX - .000	± 0° 30'	DATE		
.XX - .02		DATE		
.X - .1		DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE		
MATERIAL	NEXT HIGHER ASSY.	DATE		
FINISH	B-DD-KT11-C	DATE		
		SCALE	NUMBER	REV
		SHEET 6 OF 13	DCS M 8108-0-1	H

BRUNING 40-522 15840	REV
REVISIONS	CHANGE NO.
CHK	



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FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				

OUTPUT	INPUT LINES	SELECTED	SI	SP	STBI	STB0
STATUS REG 0	A1	A0	L	L	L	L
STATUS REG 1	B1	B0	L	H	L	L
STATUS REG 2	C1	C0	H	L	L	L
APR	D1	D0	H	H	L	L

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DATE	BY
DECIMALS	ANGLES	3/17/72	Wah
.XX - .006	± 0° 30'	3/17/72	Wah
.X - .1		3/17/72	Wah

MATERIAL	NEXT HIGHER ASBY.	INSTR CODE	NUMBER	REV
---	---	DCS	M 8108-0-1	H

FINISH	SCALE	SHEET	OF	TOTAL SHEETS
---	---	9	OF	13

REV  
CHANGE NO  
CHK  
DEC FORM NO  
DRD 102-B

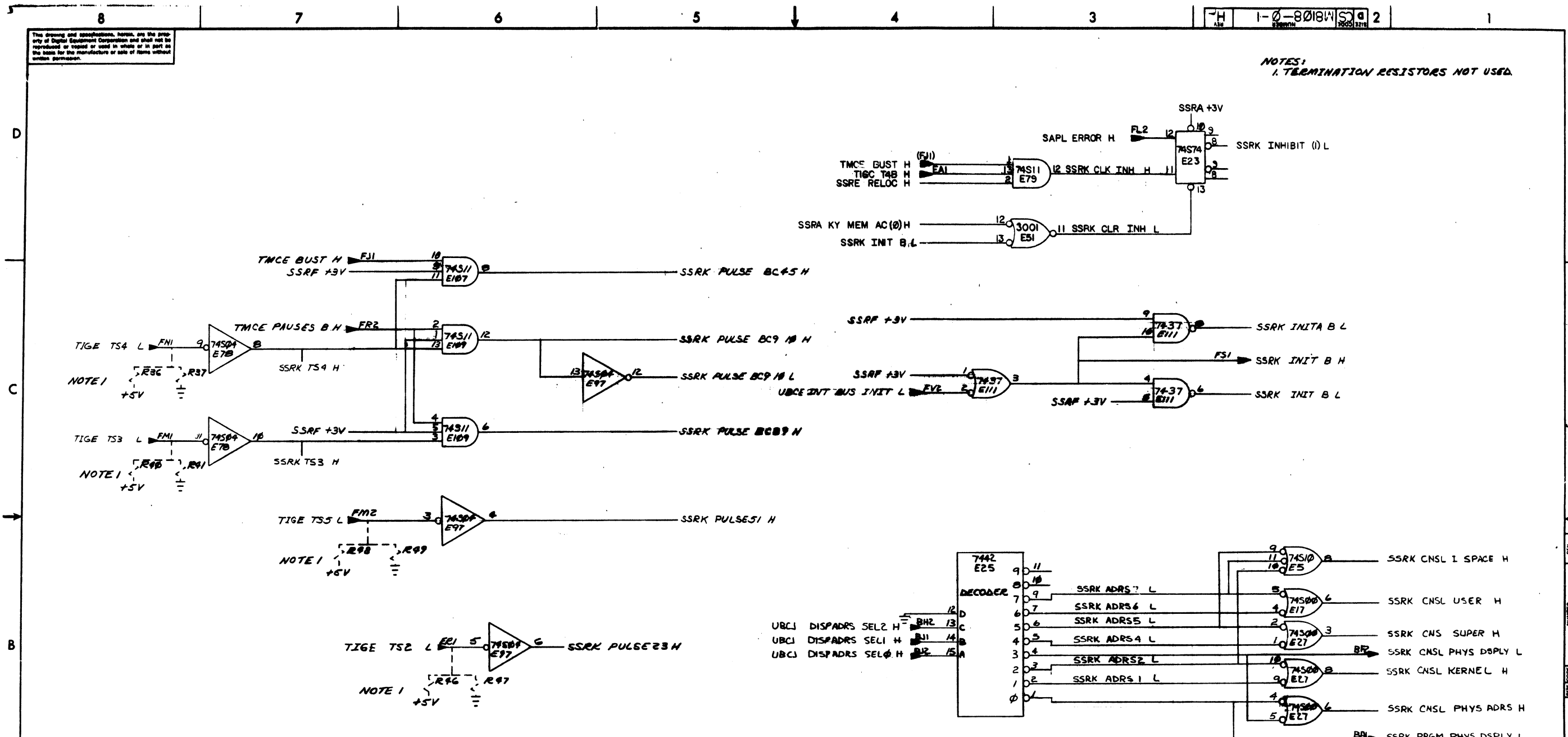
1-0-8018 W S J 2  
M 8108-0-1  
DCS

SYS. STATUS REG.

INTERNAL BUS DATA MULTIPLEXERS

SLOT 13

NOTES:  
1. TERMINATION RESISTORS NOT USED.



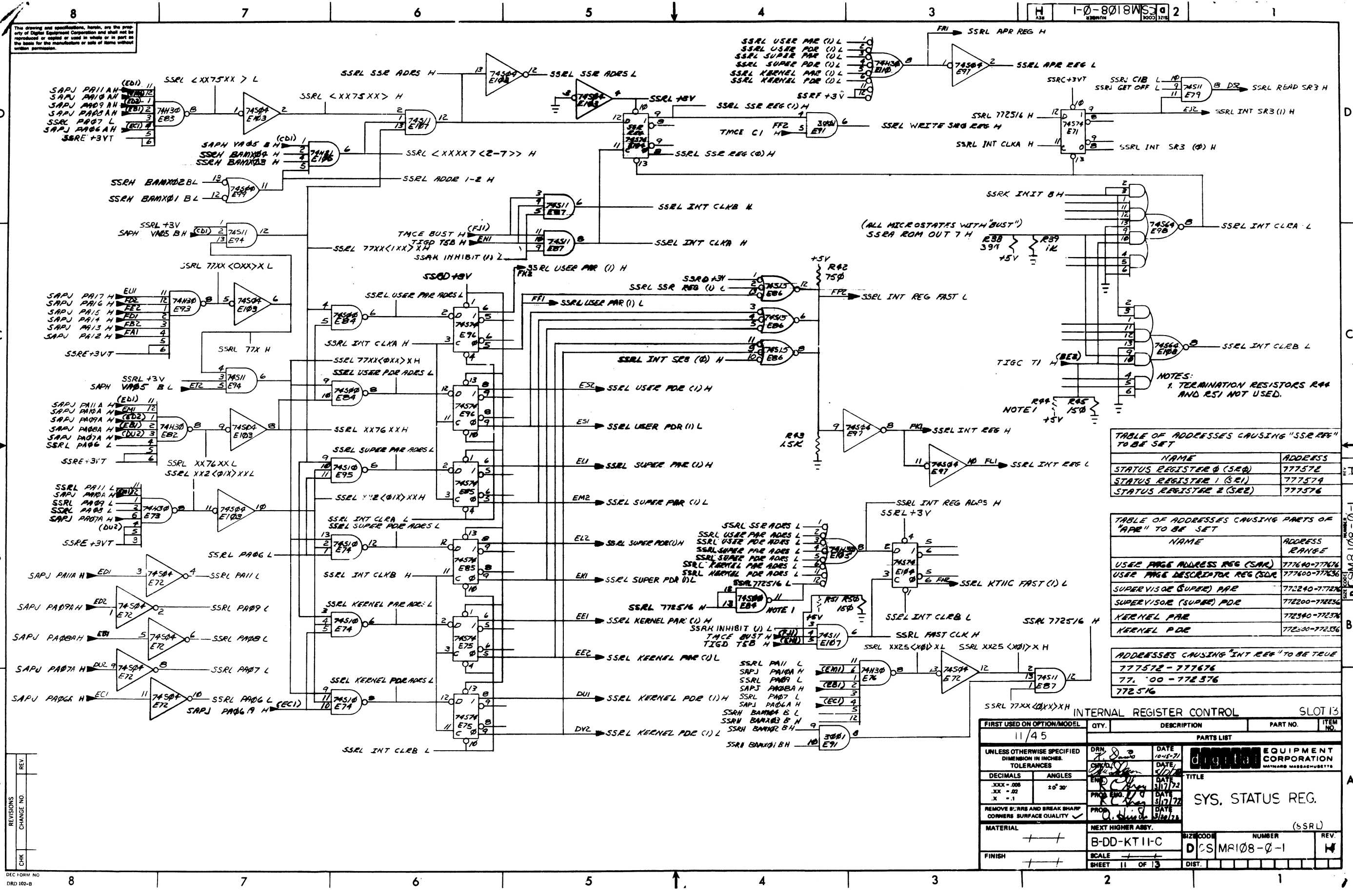
ADDRESS SELECT SWITCH POSITION	UBCJ DIS ADRS SEL 2	UBCJ DIS ADRS SEL 1	UBCJ DIS ADRS SEL 0
PROGRAM PHYSICAL	L	L	L
KERNEL D VIRTUAL	L	L	H
KERNEL I VIRTUAL	L	H	H
CONSOLE PHYSICAL	H	H	H
SUPERVISOR D VIRTUAL	H	L	L
SUPERVISOR I VIRTUAL	H	L	H
USER D VIRTUAL	H	H	L
USER I VIRTUAL	H	H	H

CNSL.ADRS.SEL.SWITCH, TIMING LOGIC, INIT SLO13

FIRST USED ON OPTION/MODEL 11/45	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 11/77	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX - .000 .XX - .02 .X - .1	ANGLES 20° 30'	DATE 11/77	TITLE SYS.STATUS.REG.	
MATERIAL + +		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	(SSRK)	
NEXT HIGHER ASSY. B-DD-KT11-C		SCALE SHEET 10 OF 13	SIZE CODE DCS MS108-0-1	REV. H

REVISIONS  
NO. CHANGE NO. REV.  
CHK





NOTES:  
1. TERMINATION RESISTORS R44 AND R51 NOT USED.

TABLE OF ADDRESSES CAUSING "SSR REG" TO BE SET

NAME	ADDRESS
STATUS REGISTER 0 (SR0)	777572
STATUS REGISTER 1 (SR1)	777574
STATUS REGISTER 2 (SR2)	777576

TABLE OF ADDRESSES CAUSING PARTS OF "APR" TO BE SET

NAME	ADDRESS RANGE
USER PAGE ADDRESS REG (SAR)	777640-777676
USER PAGE DESCRIPTOR REG (SDR)	777600-777636
SUPERVISOR (SUPER) PDR	772240-772276
SUPERVISOR (SUPER) PDR	772200-772236
KERNEL PDR	772340-772376
KERNEL PDR	772300-772336

ADDRESSES CAUSING "INT REG" TO BE TRUE

777572 - 777676
777600 - 772376
772516

INTERNAL REGISTER CONTROL SLOT 13

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/45				

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DATE	EQUIPMENT CORPORATION
DECIMALS ANGLES	10-15-71	MATHEW MASSACHUSETTS
.XXX - .000 ±0° 30'	DATE 3/17/72	TITLE
.XX - .00 ±0° 30'	DATE 3/17/72	SYS. STATUS REG.
.X - .1 ±0° 30'	DATE 3/17/72	(SSRL)
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE
FINISH	B-DD-KT11-C	NUMBER
	SCALE	D/C S M108-0-1
	SHEET 11 OF 13	DIST.

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REVISIONS

REV.	CHANGE NO.





**DIGITAL EQUIPMENT CORPORATION**  
MAYNARD, MASSACHUSETTS

**ACCESSORY LIST**

**LEGEND**

D DOCUMENT  
DN DOCUMENT CHANGE NOTICE  
PA PAPER TAPE ASCII  
PB PAPER TAPE BINARY  
PM PAPER TAPE READ-IN-MODE

**QUANTITY/VARIATION**

MADE BY: Howman CHECKED: 2 Bpcc SECTION  
DATE: 6-15-72 DATE: 6-15-72  
ENG: R.C. Gray PROD: Jack Howman ISSUED SECT.  
DATE: 6/19/72 DATE: 6-20-72

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	KT11-C	KT11-CD	QUANTITY/VARIATION						KIT CHECK	BY	DATE	INSTALLATION CHECK	BY	DATE
	KT11-C	Print Set	1	1												
	Lib Kit 11-KT11C-A-K	Software Kit	1	1												
	Dec 11-HKTA-D	Maint. Manual (KT-11C)	1	1												

TITLE Memory management unit	ASSY. NO.	SIZE CODE	NUMBER	REV.	ECO NO.
	SHEET 1 OF 1	A AL	KT11-C-2	A	KT11-C-00002
	DIST.				



