

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

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	AWT REV STATUS		A-WT-7010329-0

FOR KB11-CM PRINT SET REFER TO 11/74 ELECTRICAL PRINT SET B-TC-11/74 ORDER NUMBER MP00921

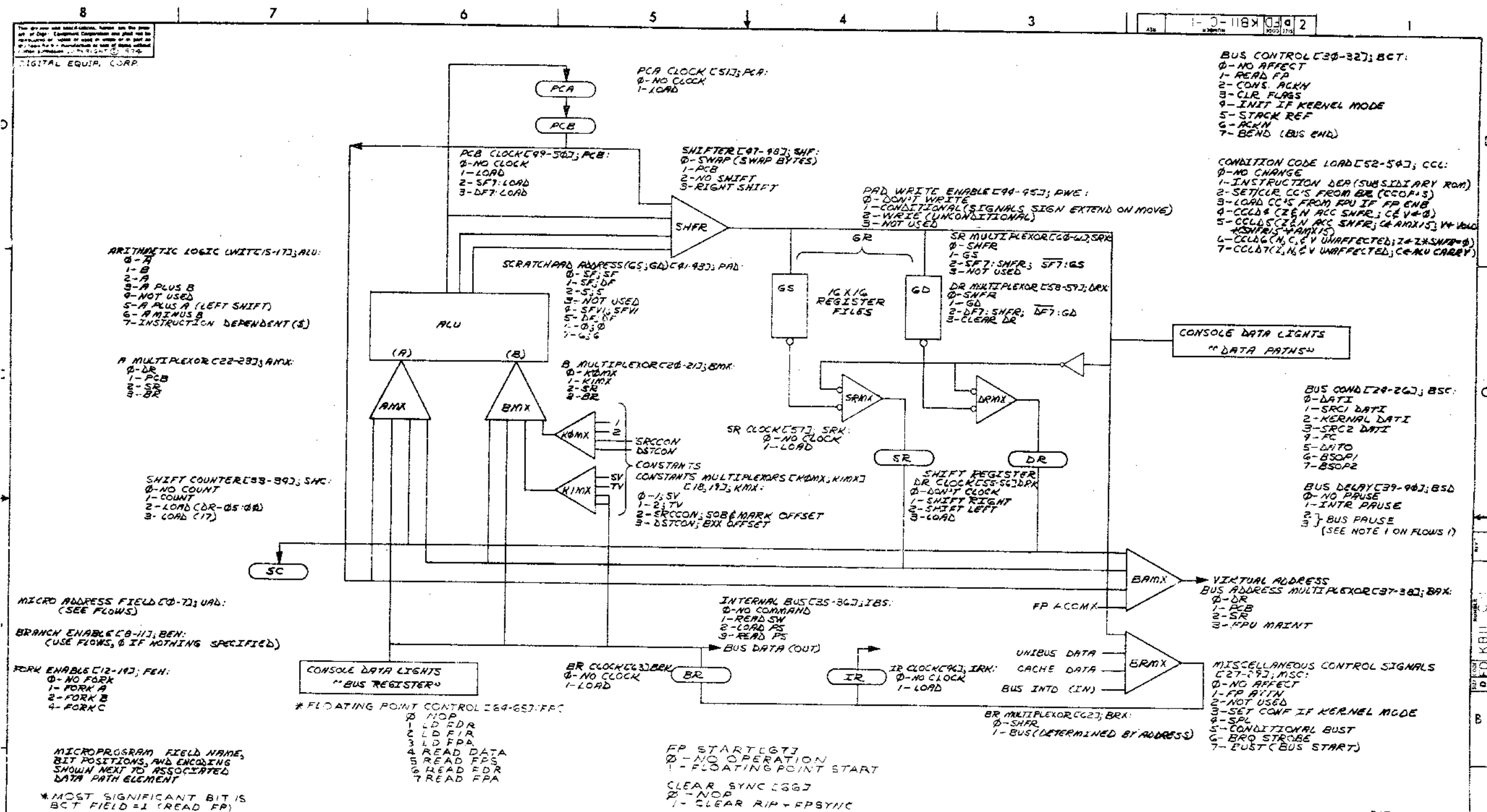
UNIT VARIATIONS		PRINT SET	
VAR	TITLE	1	
KB11-C	16 BIT PROCESSOR	X	
KB11-CM	16 BIT PROCESSOR WITH MP CAPABILITY		
PAGE	TITLE		
5	FLOW		
19	BLOCK		
23	DATA PATHS		
31	GEN. REG. + ALU.		
41	IR DECODE		

REV	CHG. NO.	DATE
A	1170 00007	7/11/75
B	KB11C-TWØØ2	7/27/75

USED ON OPTION/MODEL	DRN. TOM NOTHRUP	DATE	TITLE
	CHK'D.	9/11/75	DRAWING DIRECTORY 16 BIT PROCESSOR
	D. HEALY	9/18/75	
	PROJ ENG.	11/25/75	
	PROD.	11/26/75	
	FIELD SERV.		
SHEET 1 OF 7	R.K. Clom		SIZE CODE NUMBER REV B DD KB11-C B
			DIST

EN-11002-1A-10-R972-1325

DRB 106



ARITHMETIC LOGIC UNIT (15-17); ALU:
 0 - A
 1 - B
 2 - A
 3 - A PLUS B
 4 - NOT USED
 5 - A PLUS A (LEFT SHIFT)
 6 - A MINUS B
 7 - INSTRUCTION DEPENDENT (S)

A MULTIPLEXOR (22-23); AMX:
 0 - DR
 1 - PCB
 2 - SR
 3 - BR

B MULTIPLEXOR (24-25); BMX:
 0 - KDMX
 1 - KIMX
 2 - SR
 3 - BR

SHIFT COUNTER (18-19); SHC:
 0 - NO COUNT
 1 - COUNT
 2 - LOAD (DR-05-08)
 3 - LOAD (17)

MICRO ADDRESS FIELD (10-11); UAD:
 (SEE FLOWS)

BRANCH ENABLE (18-19); BEN:
 (USE FLOWS, 0 IF NOTHING SPECIFIED)

FORK ENABLER (12-13); FEH:
 0 - NO FORK
 1 - FORK A
 2 - FORK B
 4 - FORK C

MICROPROGRAM FIELD NAME, BIT POSITIONS, AND ENCODING SHOWN NEXT TO ASSOCIATED DATA PATH ELEMENT

*** MOST SIGNIFICANT BIT IS BCT FIELD = 1 (READ FP)**

CONSOLE DATA LIGHTS "BUS REGISTER"

*** FLOATING POINT CONTROL (14-15); FPC:**
 0 - NOP
 1 - LD FDR
 2 - LD FIR
 3 - LD FPA
 4 - READ DATA
 5 - READ FPS
 6 - HEAD FDR
 7 - READ FPA

FP START (16); FST:
 0 - NO OPERATION
 1 - FLOATING POINT START

CLEAR SYNC (16); CS:
 0 - NOP
 1 - CLEAR RIP + FPSYNC

BUS CONTROL (30-32); BCT:
 0 - NO AFFECT
 1 - READ FP
 2 - COND. ACKN
 3 - CLR. FLAGS
 4 - INIT IF KERNEL MODE
 5 - STACK REF
 6 - ACKN
 7 - BEND (BUS END)

CONDITION CODE LOADS (2-5); CCL:
 0 - NO CHANGE
 1 - INSTRUCTION DER (SUBSIDIARY ROM)
 2 - SET CLR. CC'S FROM BR (CCOP-3)
 3 - LOAD CC'S FROM CPU IF FP ENB
 4 - CCLD (ZEN ACC SHFR; CC V+0)
 5 - CCLD (ZEN ACC SHFR; CC AMXIS; V+V+0)
 6 - CCLD (N, C, V UNAFFECTED; Z+Z+SHFR=0)
 7 - CCLD (Z, N, C, V UNAFFECTED; CC-ACU CARRY)

BUS COND (28-29); BSC:
 0 - DATA
 1 - SRC1 DATA
 2 - KERNEL DATA
 3 - SRC2 DATA
 4 - FC
 5 - DATA
 6 - BSOP1
 7 - BSOP2

BUS DELAY (39-40); BSD:
 0 - NO PAUSE
 1 - INTR. PAUSE
 2 - BUS PAUSE
 3 - (SEE NOTE 1 ON FLOWS 1)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	GR4	DATE	EQUIPMENT CORPORATION	
DECIMALS	ANGLES	DATE	TITLE	
.XXX - .006	10° 30'	DATE	KBI-C	
.XX - .02		DATE	FLOW DIAGRAMS	
.X - .1		DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE		
MATERIAL	NEXT HIGHER ASSY.	DATE		
FINISH	B-D0-KBI-B	DATE	SCALE	NUMBER
		DATE	D/FD	KBI-C-1
		DATE	SHEET	OF 15
		DATE	DIST	

REV.	CHANGE NO.

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NOTE:
 1. BUS PAUSE =
 2. FOR UNIBUS CYCLES
 3. FOR CACHE CYCLES

constant
 source console

* \emptyset = none
 1 = 2 or 4 with byte instruction
 2 = 2, 4, 3 or 5

FET.00 (217)
 FET.01 (331)
 FET.02 (332)
 FET.03 (334)
 FET.04 (164)
 FET.05 (126)
 FET.06 (373)

load address

START FETCH NEXT INSTR.
 CLEAR INSTR. REG
 1. BA+PCB; BC+DATI
 2. SHFR←SR-SR
 3. BUST; CLEAR FLAGS
 4. IR←SHFR

BENZ(240)
 BRQ
 -BRQ
 BRK.90
 12 (240)

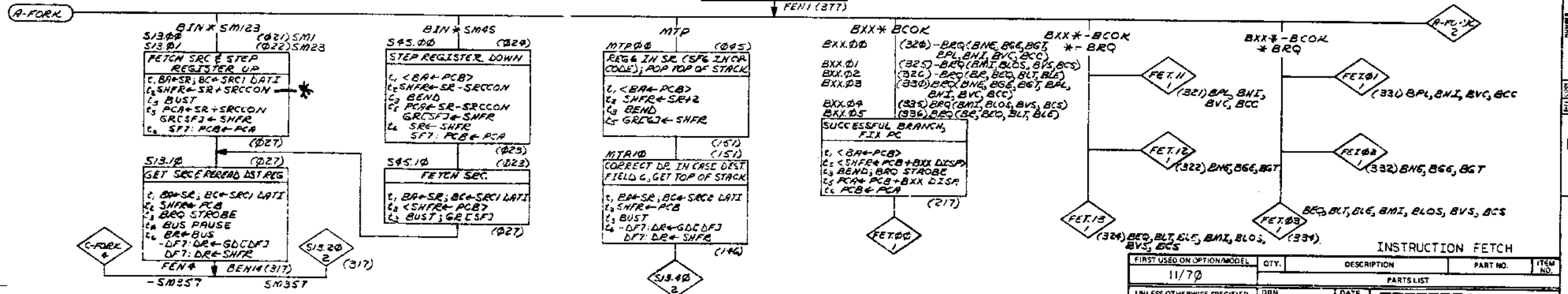
FET.10 (260)
 FET.11 (321)
 FET.12 (322)
 FET.13 (320)

GET INSTR. STEP PC
 BEYOND
 1. BA+PCB; BC+DATI
 2. SHFR←PCB+2
 3. BRQ STROBE
 4. BUS PAUSE
 5. PCA←PCB+2
 6. IR←BUS; BR←BUS
 7. PCB←PCA
 8. FPA←BA (343)

IRD.00 (393)

IRD.00 (393)
 DECODE THIS INSTR. STEP
 PCA BEYOND READ SRC
 DST FIELD; GEN REGS
 1. BA+PCB; BC+DATI
 2. SHFR←PCB
 3. CONDITIONAL BUST
 4. FIRA←BR
 5. PCA←PCB+2
 6. -SFT: SR←GSEFJ
 7. SFT: SR←SHFR
 8. -DFT: DR←GDCDFJ
 9. DFT: DR←SHFR

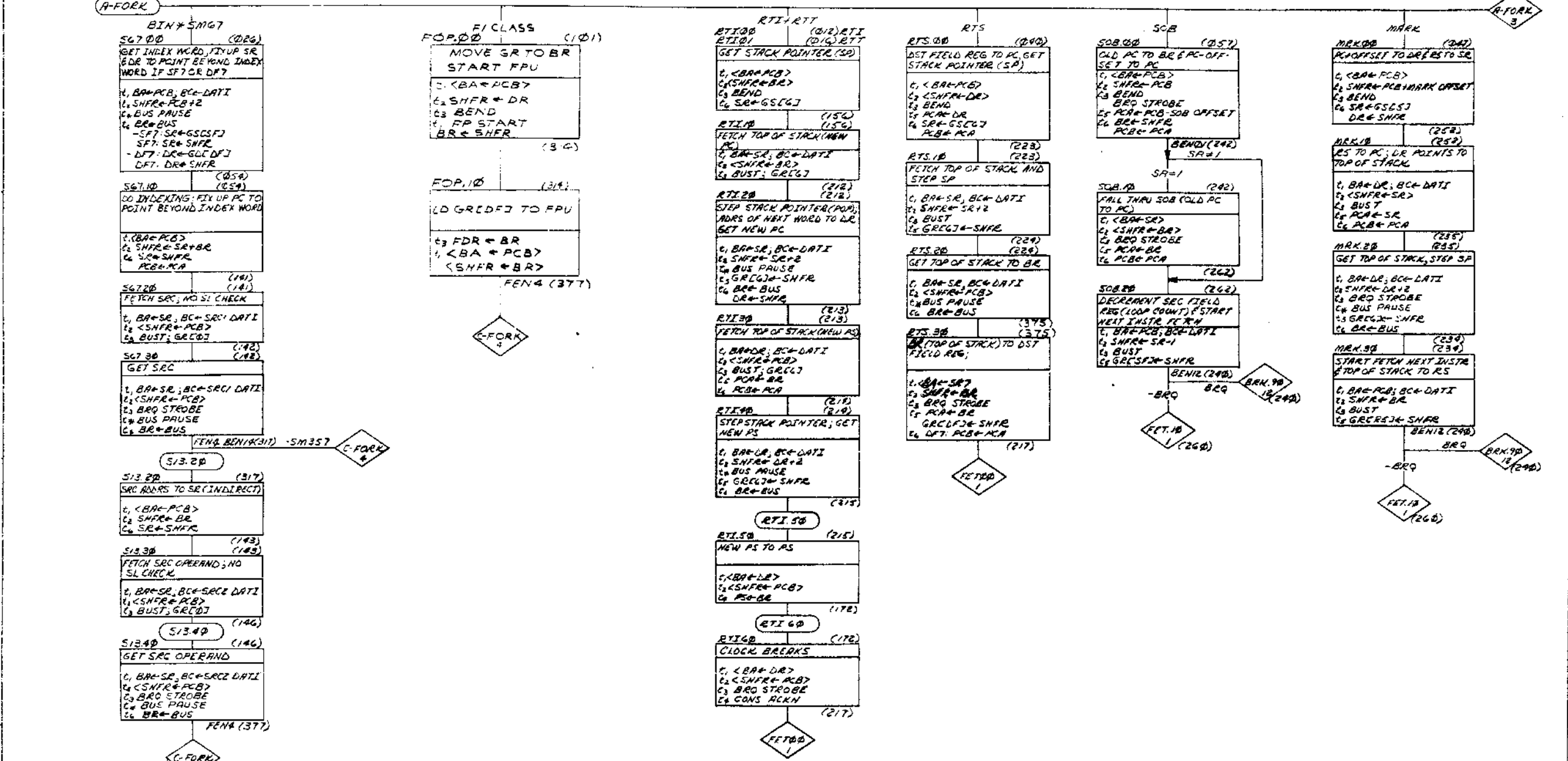
FEN1 (377)



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN THOUS. TOLERANCES				
DECIMALS	ANGLES	DATE	PARTS LIST	
XXX - 000	XX - 00	10° 30'	EQUIPMENT CORPORATION	
REMOVE BURRS AND BREAK SHARP EDGES. SURFACE QUALITY		DATE	TITLE	
MATERIAL		DATE	KBII-C	
FINISH		DATE	FLOW DIAGRAMS (FLOWS 1)	
NEXT HIGHER ASSY		DATE	SIZE CODE	
B-00-KBII-B		DATE	NUMBER	
SCALE		DATE	REV	
SHEET 2 OF 15		DATE	DIST	

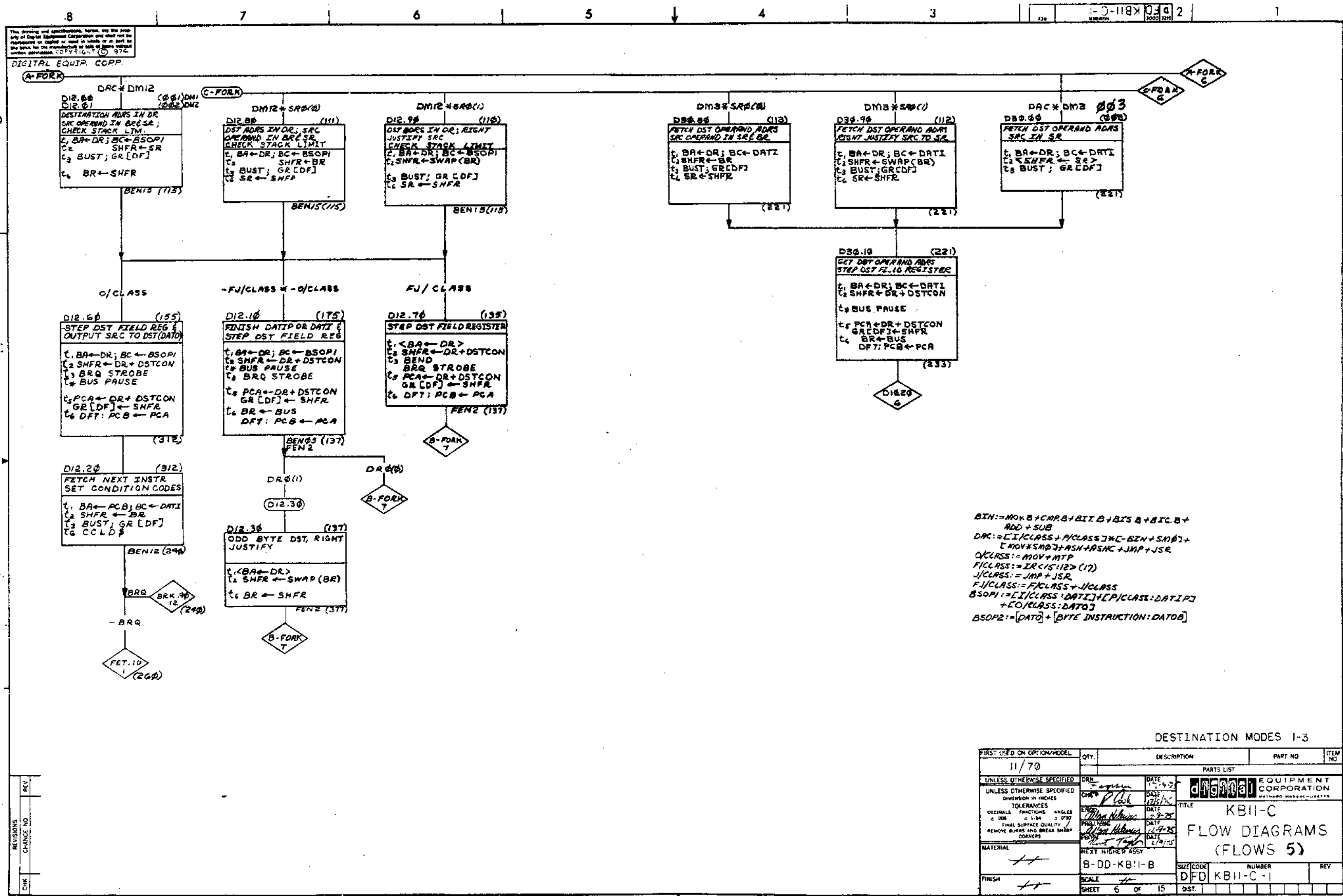
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CONTROL, FLOATING, INDEXED SOURCE				
FIRST USED ON OPTION-MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX-005	±0'30"	DATE	DATE	DATE
X-1		12-9-75	12-9-75	12-9-75
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY		
B-DD-KBII-E		SIZE CODE		
FINISH		SCALE		
		SHEET 3 OF 15		
		DIST		

EQUIPMENT CORPORATION	
TITLE	KBII-C FLOW DIAGRAMS (FLOWS 2)
NUMBFR	DFD KBII-C-1
REV	



BIN := MOV B + CMB + BIT B + BZ B + BIC B + ADD + SUB
 DAC := L I/CLASS + P/CLASS + C - BIN + SMO + I MOV + SMO + ASH + ASK + JMP + JSR
 O/CLASS := MOV + ATP
 F/CLASS := IR < 15/12 > (17)
 J/CLASS := JMP + JSR
 F/J/CLASS := F/CLASS + J/CLASS
 BSOP1 := L I/CLASS + DATI + I/P/CLASS + DATI P + O/CLASS + DATO
 BSOP2 := [DATO] + [BYTE INSTRUCTION: DATO B]

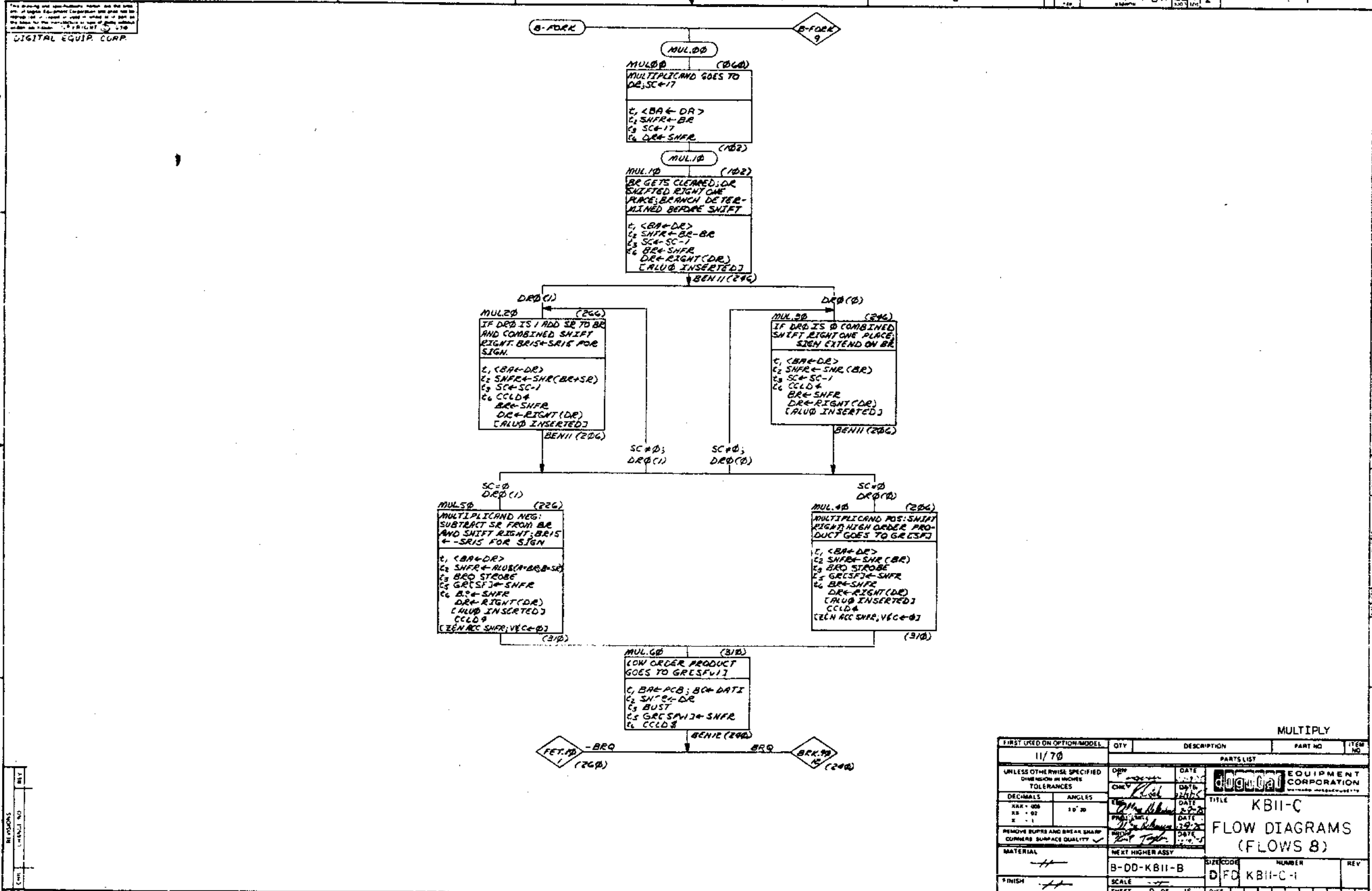
DESTINATION MODES I-3

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED				
DRN	DATE	PARTS LIST		
CHK	DATE	DIGITAL EQUIPMENT CORPORATION		
TOLERANCES				
DECIMALS	FRACTIONS	ANGLES	TITLE	
± .004	± 1/32	± .001	KBII-C	
REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	FINISH	SCALE	SIZE CODE	NUMBER
++	++	B-DD-KB:1-B	DFD	KBII-C-1
REVISIONS	CHANGE NO.	DATE	BY	REV
SHEET 6 OF 15				

101

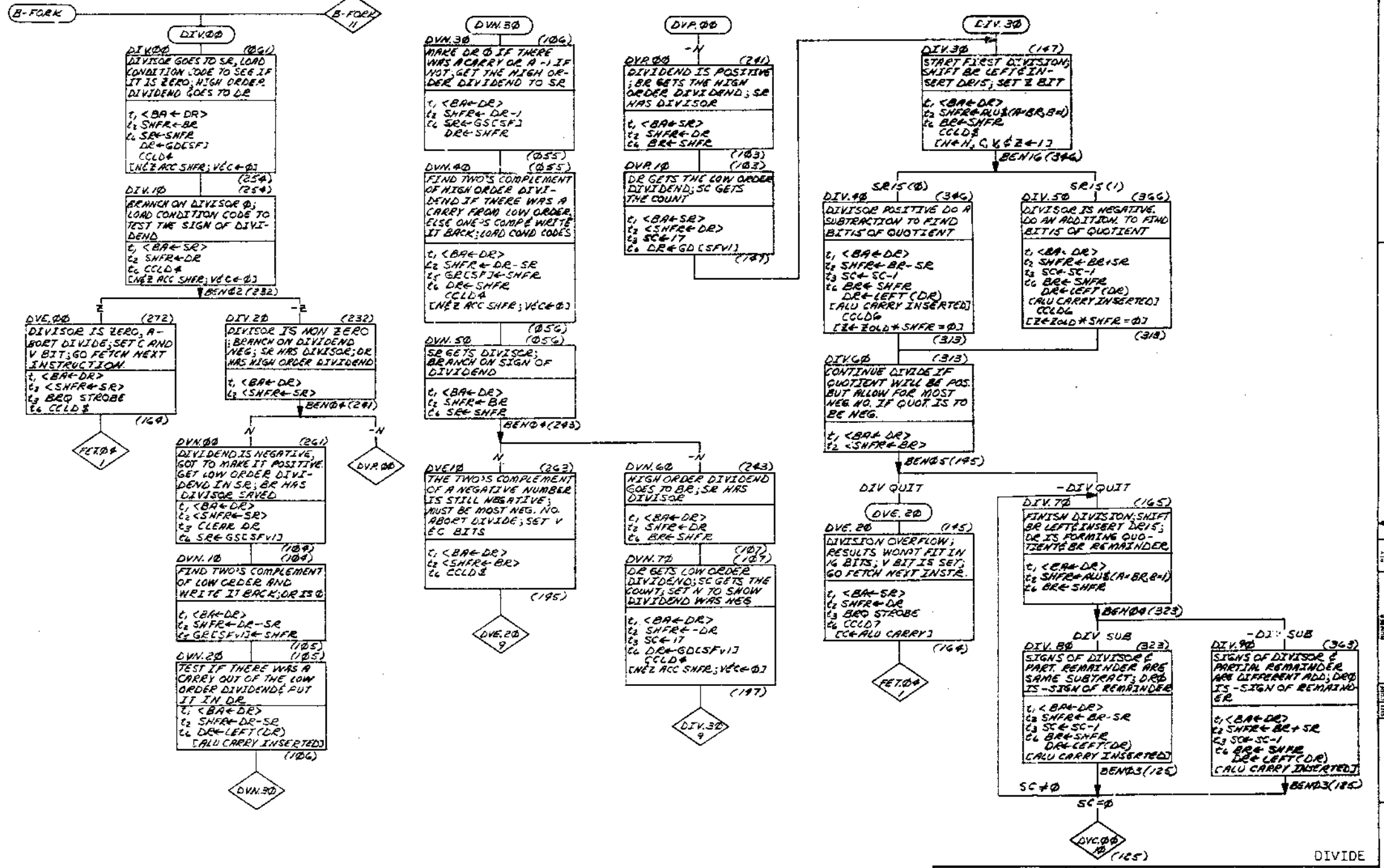
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DRAWING NO. 11/70
REVISIONS
DATE
BY



FIRST USED ON OPTION/MODEL		QTY	DESCRIPTION	PART NO	ITEM NO
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED	DATE	DIGITAL EQUIPMENT CORPORATION			
DIMENSION IN INCHES	DATE	MULTIPLY			
TOLERANCES	DATE	TITLE KBII-C			
DECIMALS ANGLES	DATE	FLOW DIAGRAMS			
XXX + 000	DATE	(FLOWS 8)			
XX + 02	DATE	MATERIAL			
X - 1	DATE	NEXT HIGHER ASSY			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	FINISH			
	DATE	SCALE			
	DATE	SHEET 9 OF 15			
	DATE	D.F.C. KBII-C-1			

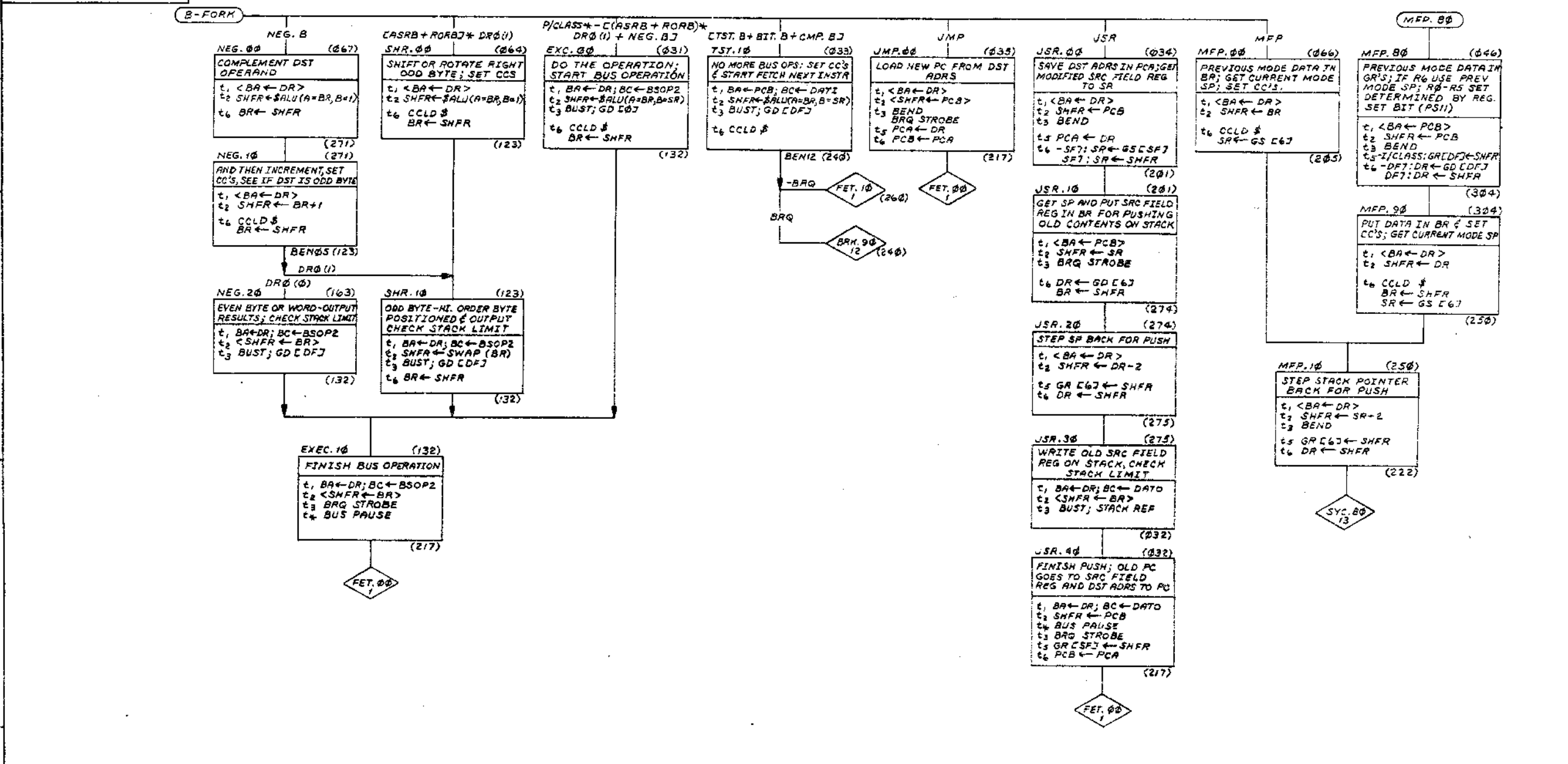
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CHANGE NO. REV.
CIV

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	PARTS LIST	
XXX - 008	XX - 02	11/70	DIGITAL EQUIPMENT CORPORATION	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	TITLE: KBII-C FLOW DIAGRAMS (FLOWS 9)	
MATERIAL		DATE	NEXT HIGHER ASSY.	
FINISH		DATE	B-DD-KBII-B	
		DATE	SCALE	
		DATE	SHEET 10 OF 15	

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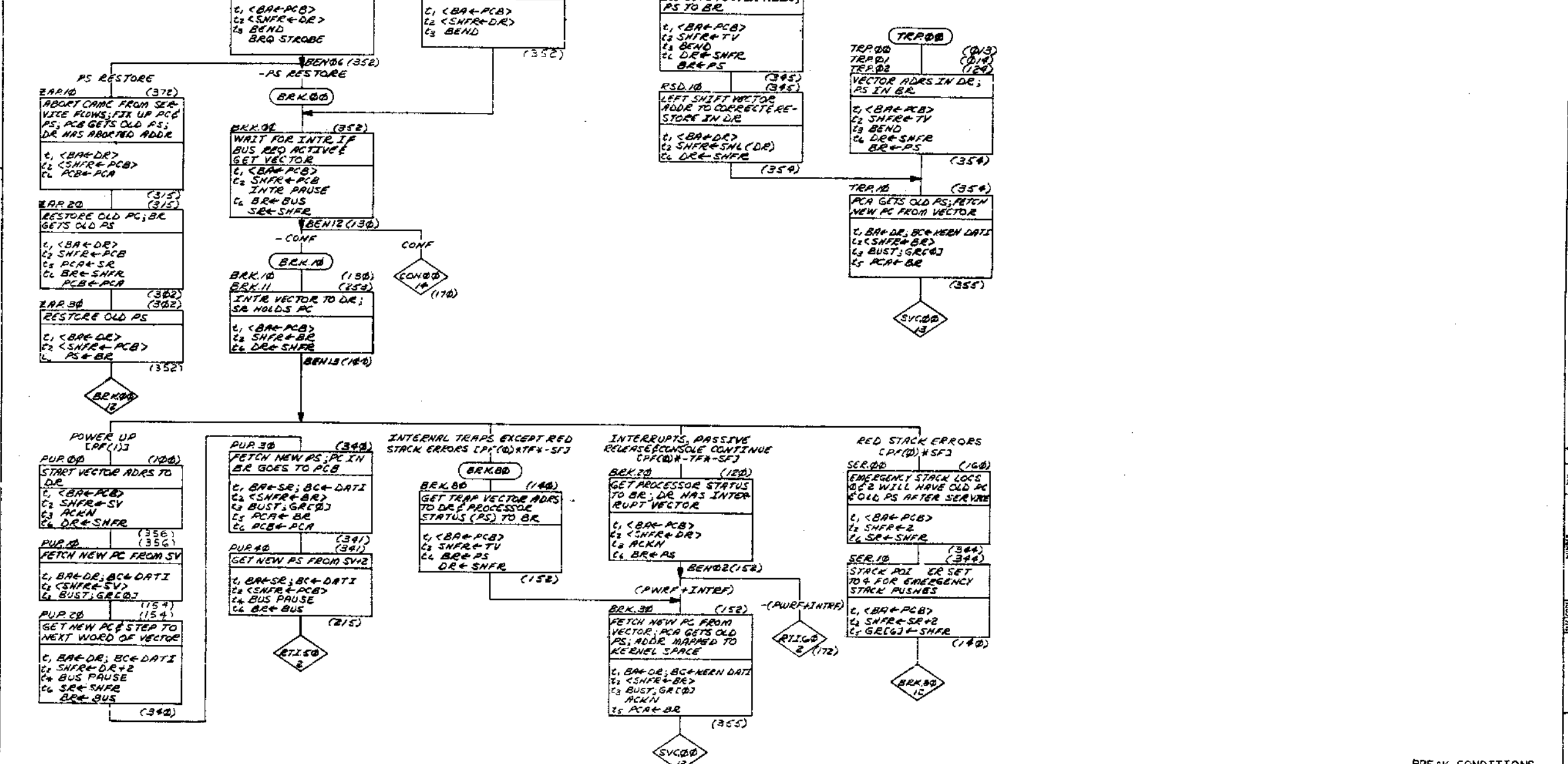
EXECUTE - MEM REF

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
DIMENSIONAL TOLERANCE		DRAL.	DATE	
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		CHKD	DATE	
MILLIMETERS	INCHES	ANGLES	DATE	
X.XX ±0.10	X.X ±0.05	90° 30'	DATE	
X.X ±0.25	X.X ±0.02		DATE	
X ±0.2	X ±0.1		DATE	
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	
MATERIAL		B-DD-KBII-B	SIZE CODE	NUMBER
FINISH		SCALE NONE	DFD KBII-C-1	REV.
		SHEET 12 OF 15	DIST	

REV.	CHNG NO	REVISIONS

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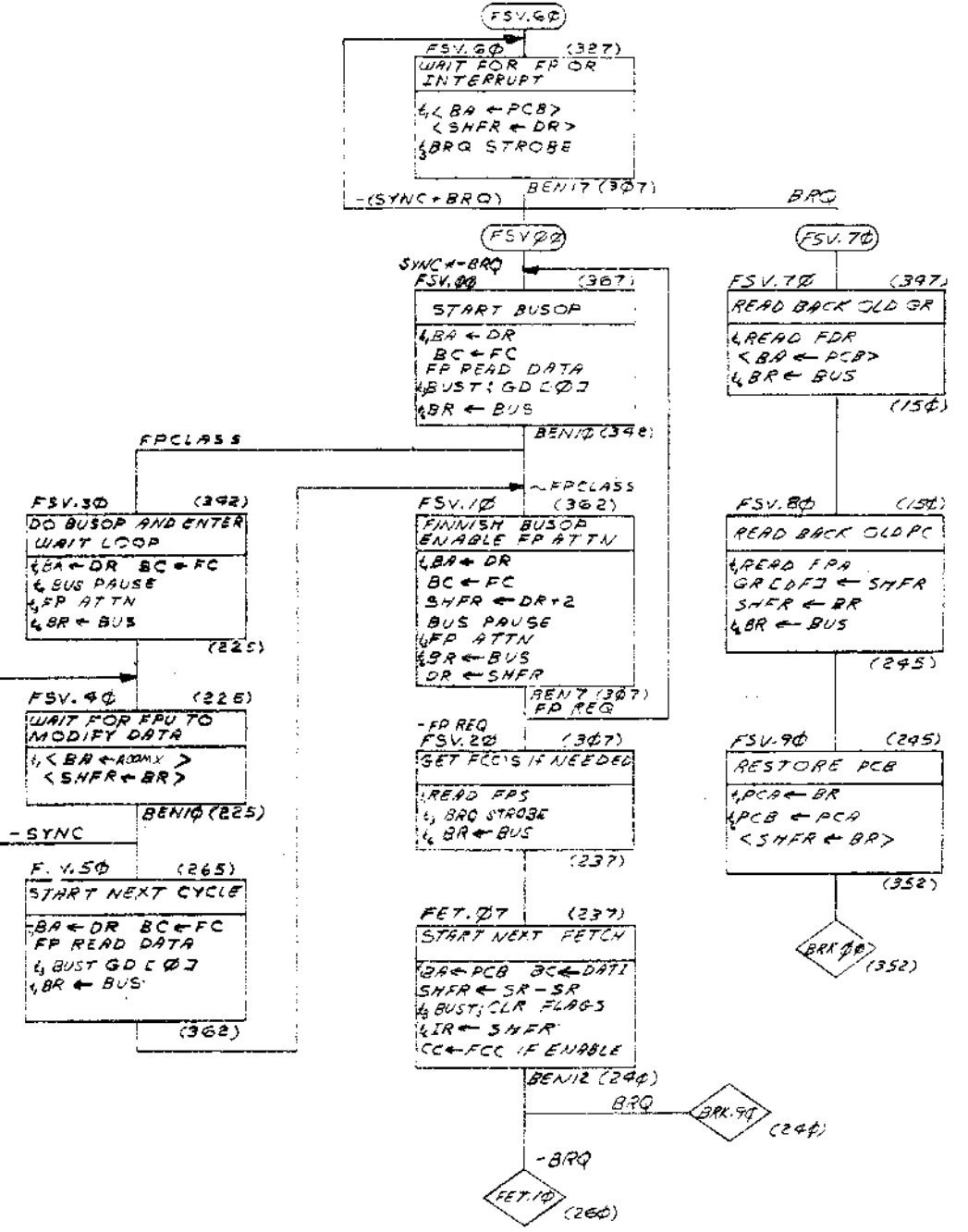
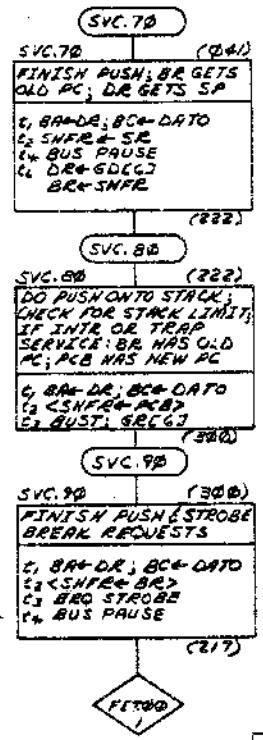
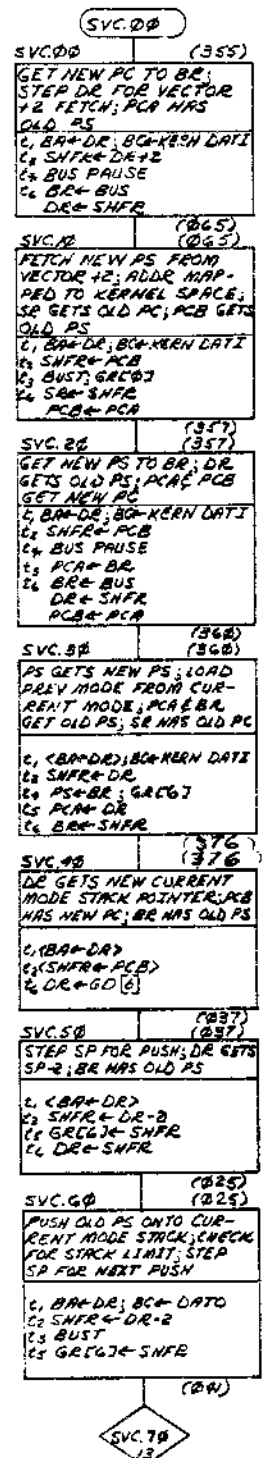
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BREAK CONDITIONS			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO. ITEM NO.
11/70			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN: [Signature]	DATE: [Date]	digital EQUIPMENT CORPORATION
DECIMALS ANGLES	CHK: [Signature]	DATE: [Date]	
XXX .005 ±0.30	END: [Signature]	DATE: [Date]	TITLE: KBII-C
.XX .02 X .1	PROJ. ENCL: [Signature]	DATE: [Date]	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ. [Signature]	DATE: [Date]	FLOW DIAGRAMS (FLOWS 12)
MATERIAL	NEXT HIGHER ASSY.		
FINISH	B-DD-KBII-B	SIZE CODE	NUMBER
	SCALE	DFO KBII-C-1	REV.
	SHEET 13 OF 15	DIST	

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109
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 CHANGE NO.
 CHK
 DEC FORM NO.



SERVICE SEQUENCE

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED	DATE	EQUIPMENT CORPORATION		
DIMENSION IN INCHES	3-90	DATE 12-80		
TOLERANCES	DATE 12-80	DATE 12-80		
DECIMALS	ANGLES	DATE 12-80		
XEN - 008	10° 30'	DATE 12-80		
XEN - 002		DATE 12-80		
X - 1		DATE 12-80		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 12-80		
MATERIAL	NEXT HIGHER ASSY	DATE 12-80		
FINISH	SCALE	DATE 12-80		
	SCALE	DATE 12-80		
	SHEET 14 OF 15	DATE 12-80		

TITLE: KBII-C FLOW DIAGRAMS (FLOWS 13)

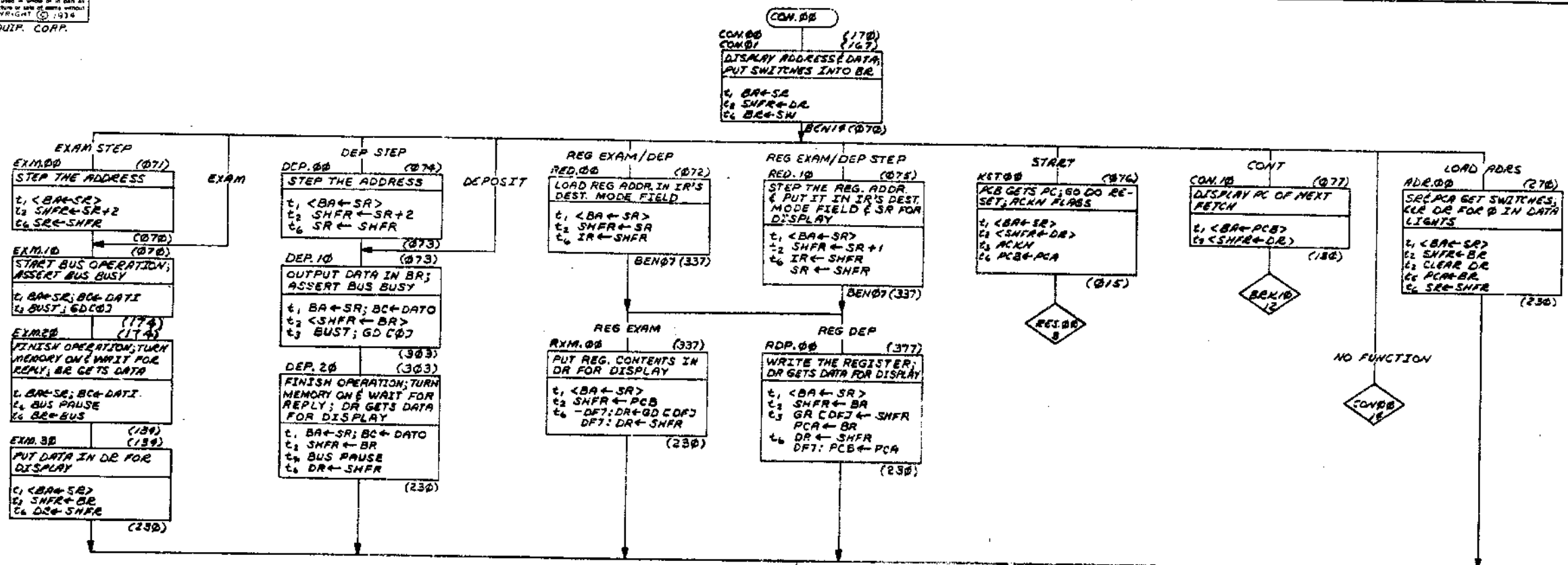
SIZE CODE: B-DD-KBII-B

NUMBER: DFD KBII-C-7

REV.:

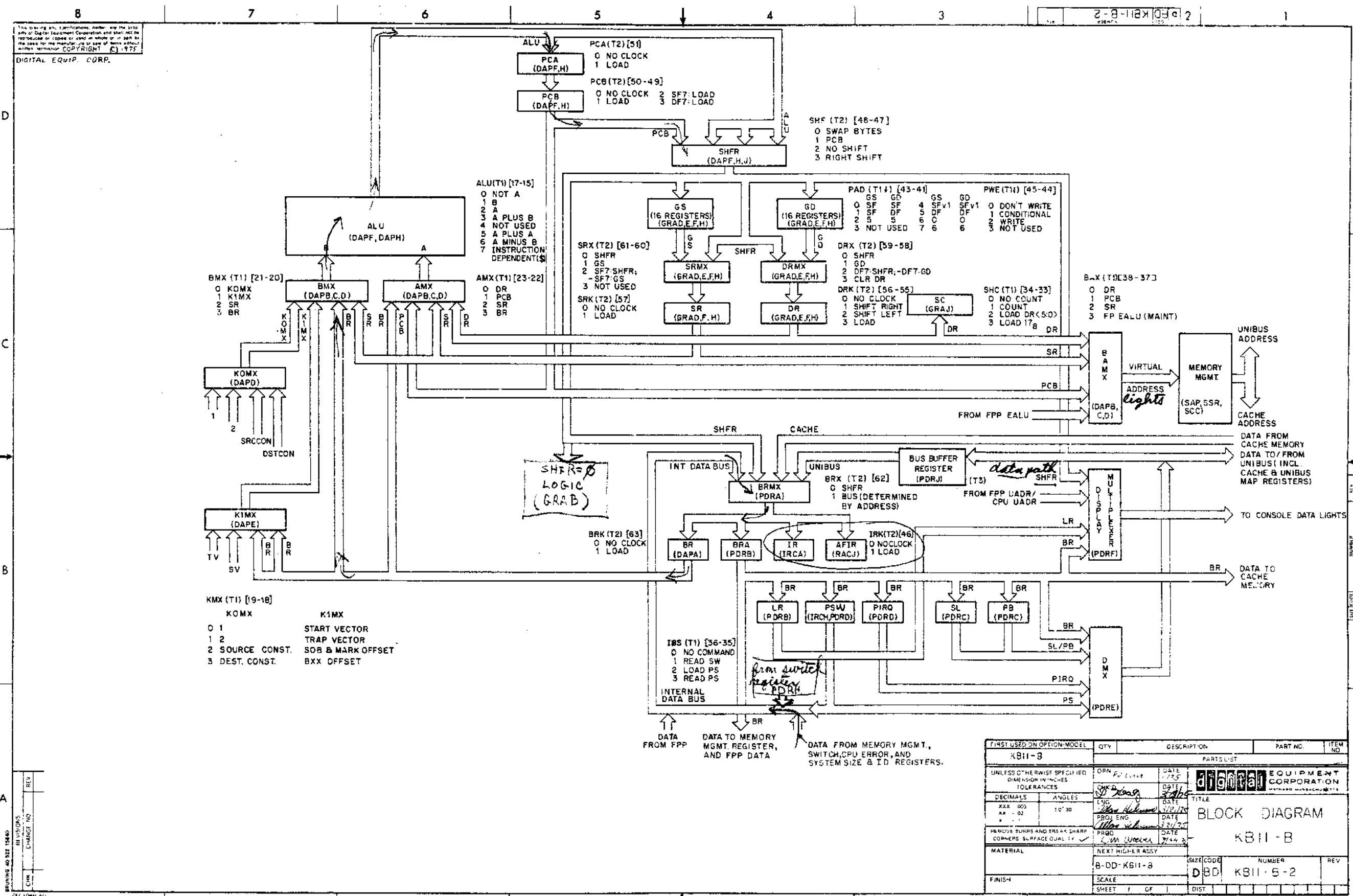
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11/70 2



CONSOLE				
FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DRN	DATE	DIGITAL EQUIPMENT CORPORATION	
TOLERANCES	CHK	DATE	KBI-C	
DECIMALS ANGLES	ENG	DATE	FLOW DIAGRAMS	
.XX - .02 10° 30'	PROJ	DATE	(FLOWS 14)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD	DATE		
MATERIAL	NEXT HIGHER ASSY	DATE		
FINISH	SCALE	DATE		
	SHEET 15 OF 15	DIST		

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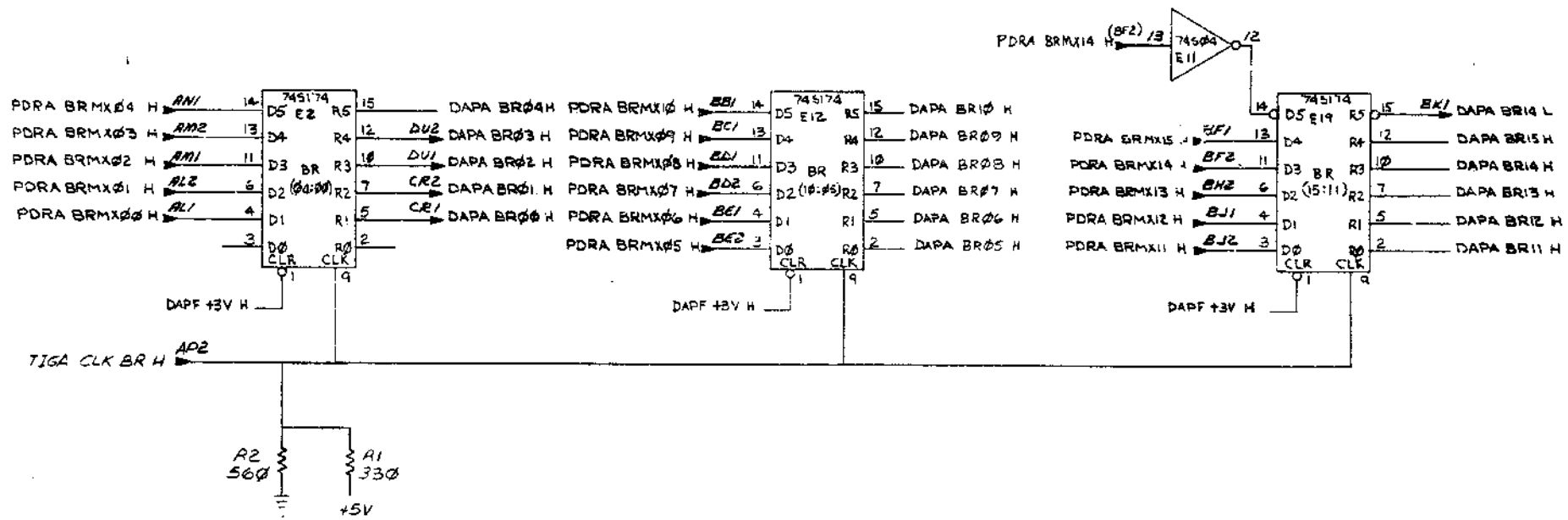


REV	CHG	DATE

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
KB11-B				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	PARTS LIST	
XXX .005	10' 30	DATE	DIGITAL EQUIPMENT CORPORATION	
PROJ ENG	DATE	TITLE		
PRG	DATE	BLOCK DIAGRAM		
NEXT HIGHER ASSY				
MATERIAL		SIZE CODE	NUMBER	REV
FINISH		SCALE	DBD	KB11-B-2
SHEET 1 OF 1		DIST		

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1-0-0218W 2

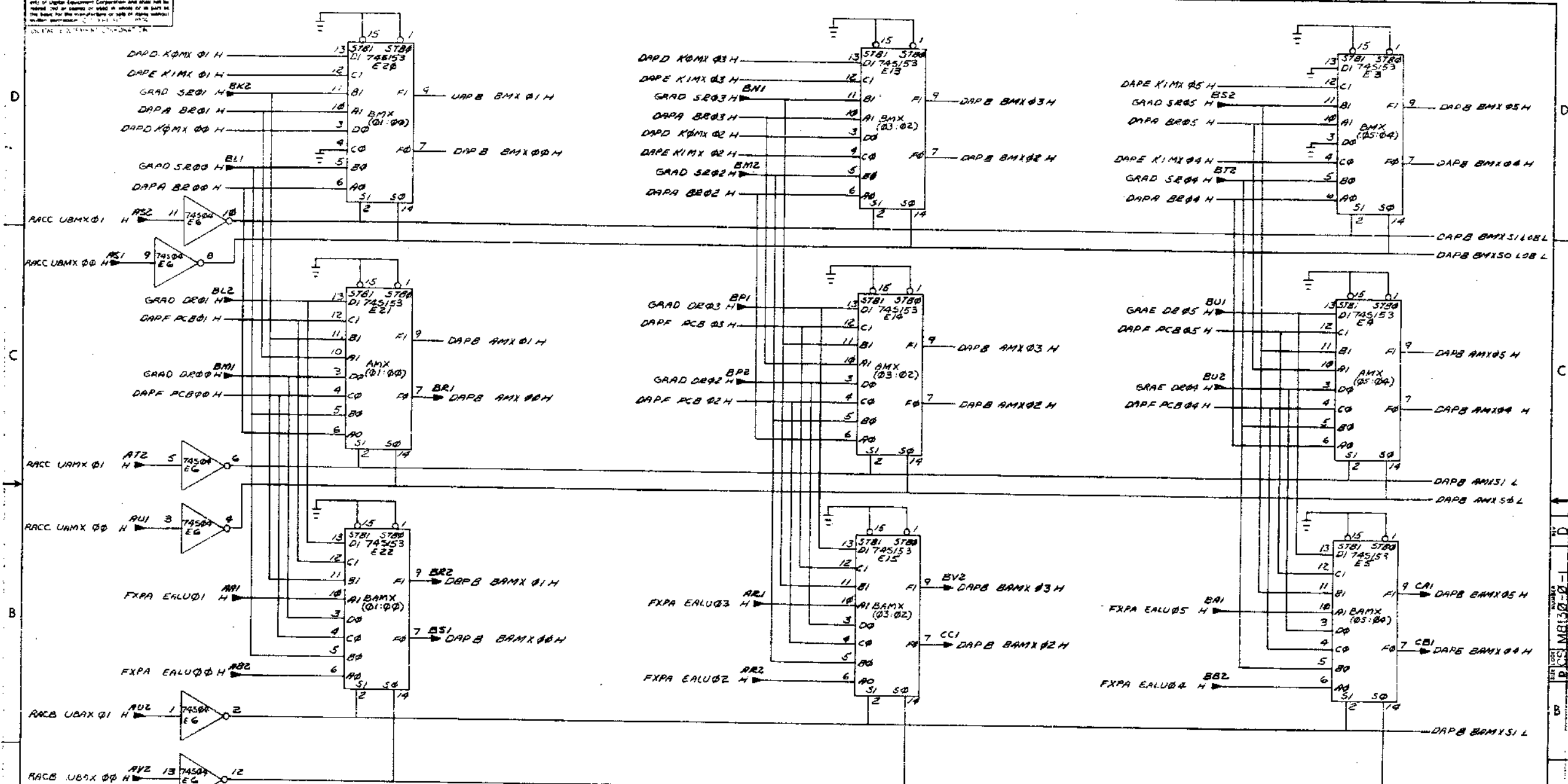


BUS REGISTER		SLOTS	
FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.
11/70			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DAN	DATE	EQUIPMENT CORPORATION
DECIMALS	Ferguson	DATE	MILWAUKEE
ANGLES		DATE	
XXX - .006		DATE	
XX - .02		DATE	
X - .1		DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER
FINISH	B-00-K811-B	DCS	M8130-0-1
	SCALE	DIST	REV. D
	SHEET 2 OF 9		

PART NO. M8130-0-1
 QTY 1
 DIST

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1-0-0518W 2



UBAX 01	00	UAMX 01	00	UBMX 01	00
L	L DR	L	L DR	L	L K0MX
L	H PCB	L	H PCB	L	H K1MX
H	L SE	H	L SR	H	L SE
H	H FP MAINT	H	H BE	H	H BE

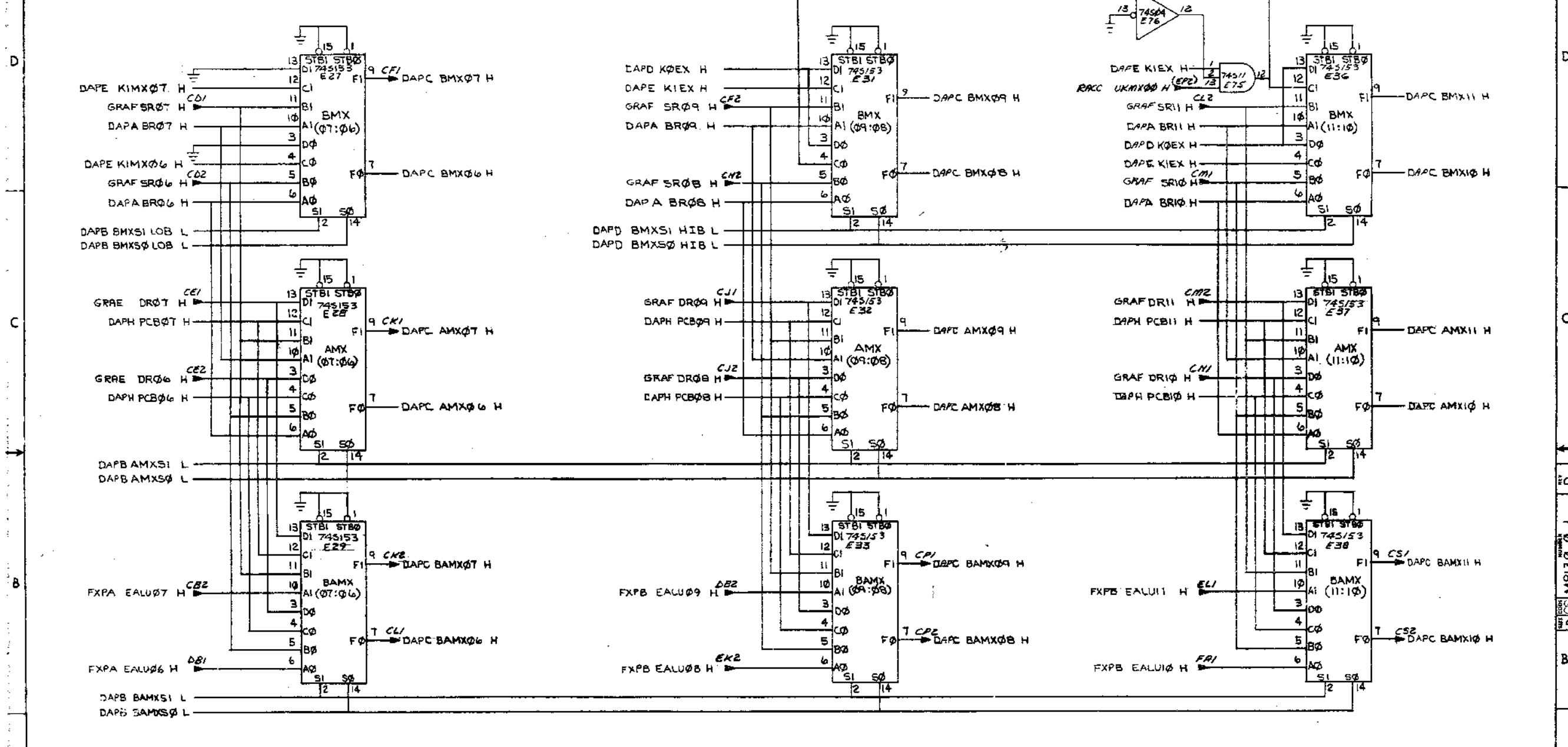
B.A.&BUS ADDR. MULTIPLEXERS (05:00)		SLOT 6	
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
1170			
UNLESS OTHERWISE SPECIFIED			
DIMENSION IN INCHES		DATE	
TOLERANCES		DATE	
DECIMALS	ANGLES	TITLE	
XXX - 000	±0° 30'	DATA PATHS	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL		NEXT HIGHER ASSY.	
FINISH		SCALE	
SHEET 3 OF 9		DIST	

DATA PATHS

10DAPB
B-00-KBI-H
DCS M8'30-Q-1
REV. D

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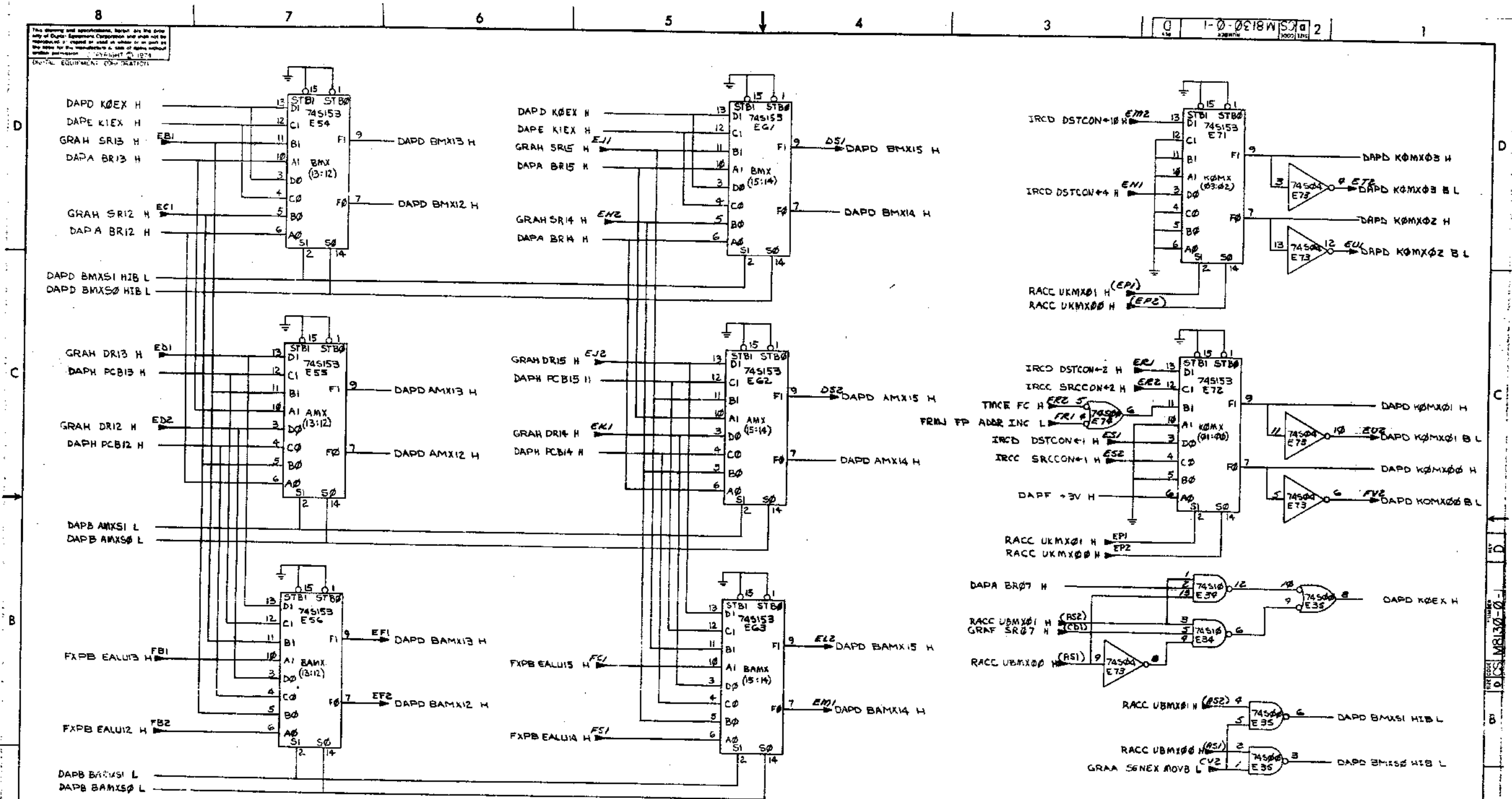


REV	NO	DATE

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/78					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES		DRM	DATE	EQUIPMENT CORPORATION	
TOLERANCES		DATE	DATE	CORPORATION	
DECIMALS	ANGLES	DATE	DATE	TITLE	
XXX - .005	± 0° 30'	DATE	DATE	DATA PATHS	
XX - .002		DATE	DATE		
X - .001		DATE	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY		DATE	DATE		
MATERIAL		NEXT HIGHER ASSY.		IDAPC	
FINISH		SCALE	SCALE	SIZE CODE	NUMBER
		SHEET	SHEET	DCS M8130-0-1	REV. D

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1-0-0018WIS01 2

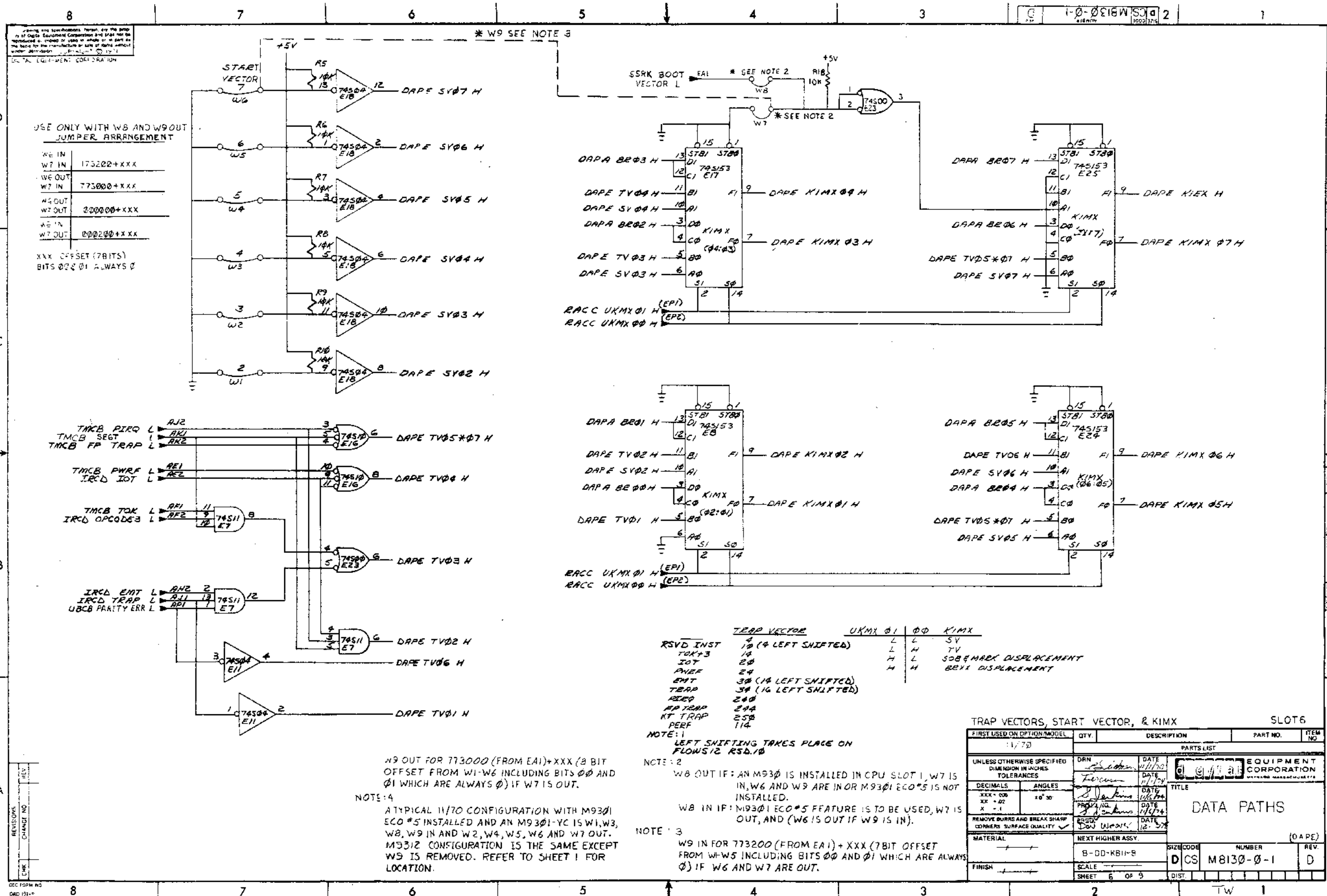


DAPD BAMX15 H
DAPD BAMX14 H
DAPD BAMX13 H

UKMX 01/000 KOMX
L L 1
L H 2
H L 3
H H 4
H H 5
H H 6
H H 7
H H 8
H H 9
H H 10
H H 11
H H 12
H H 13
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H H 98
H H 99
H H 100

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/78				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	EQUIPMENT CORPORATION	
XXX - .006		DATE	TITLE	
XX - .002	± 30'	DATE	DATA PATHS	
X - .001		DATE	MATERIAL	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
NEXT HIGHER ASSY.				
FINISH				
SCALE				
SHEET 5 OF 9				
DIST.				

REV.	CHANGE NO.



USE ONLY WITH W8 AND W9 OUT JUMPER ARRANGEMENT

W6 IN	173200+XXX
W7 IN	773000+XXX
W6 OUT	773000+XXX
W7 OUT	000000+XXX
W8 IN	000000+XXX
W9 IN	000000+XXX

XXX OFFSET (7BITS)
BITS 00201 ALWAYS 0

W9 OUT FOR 773000 (FROM EAI)+XXX (8 BIT OFFSET FROM W1-W6 INCLUDING BITS 00 AND 01 WHICH ARE ALWAYS 0) IF W7 IS OUT.

NOTE:4
ATYPICAL 11/70 CONFIGURATION WITH M9301 ECO*5 INSTALLED AND AN M9301-YC IS W1,W3,W8,W9 IN AND W2,W4,W5,W6 AND W7 OUT. M9312 CONFIGURATION IS THE SAME EXCEPT W9 IS REMOVED. REFER TO SHEET 1 FOR LOCATION.

	TRAP VECTOR	UKMX 01	00	KIMX
RSVD INST	10 (4 LEFT SHIFTED)	L	L	SV
TOK*3	14	L	H	TV
IOT	20	H	L	SOB MARK DISPLACEMENT
PIREF	24	H	H	BEIX DISPLACEMENT
ENT	30 (14 LEFT SHIFTED)			
TRAP	34 (16 LEFT SHIFTED)			
REOP	240			
HP TRAP	244			
KT TRAP	250			
PERF	114			

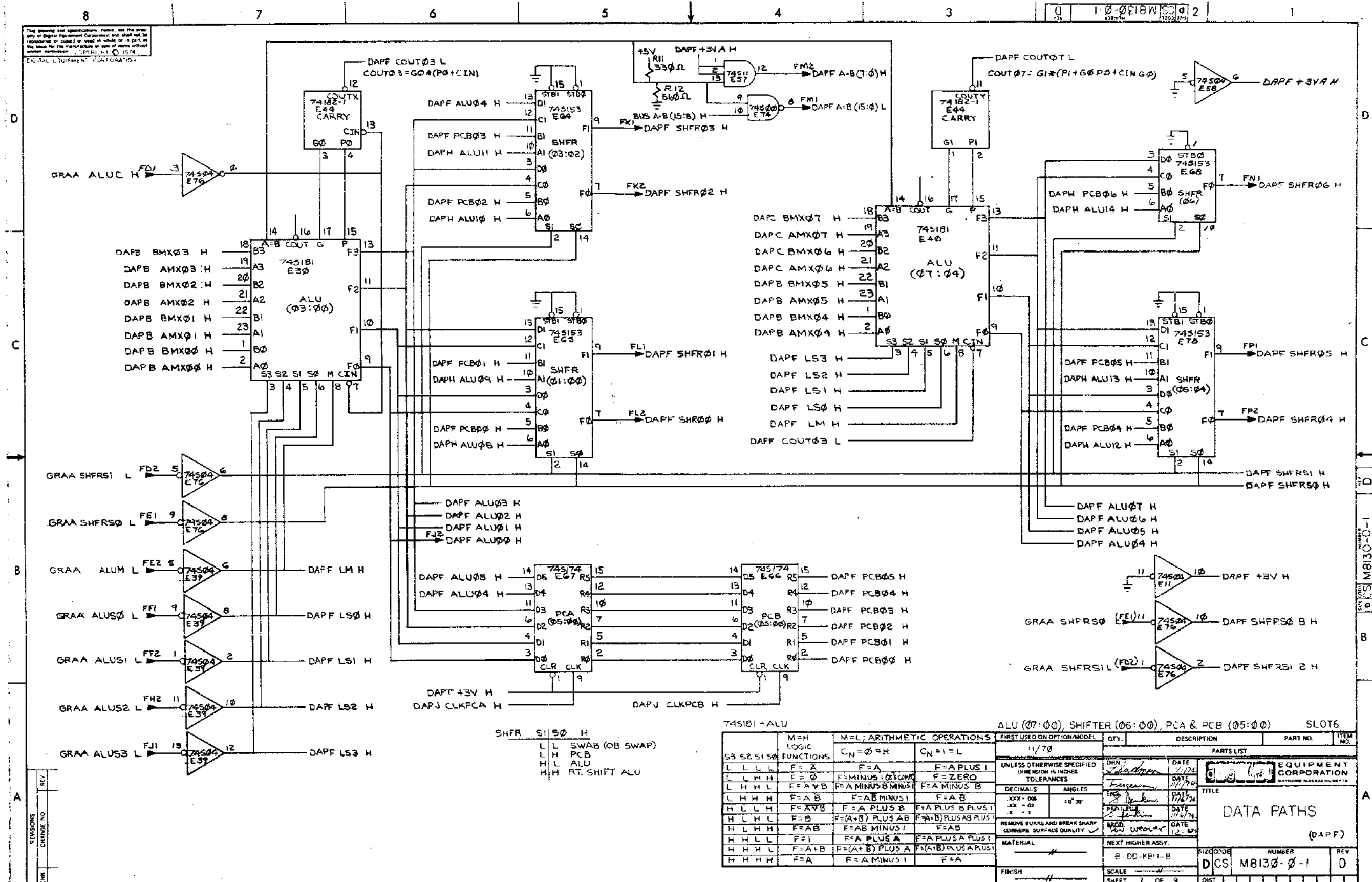
NOTE:1
LEFT SHIFTING TAKES PLACE ON FLOWS12 RS010

NOTE:2
W8 OUT IF: AN M9301 IS INSTALLED IN CPU SLOT 1, W7 IS IN, W6 AND W9 ARE IN OR M9301 ECO*5 IS NOT INSTALLED.

NOTE:3
W9 IN IF: M9301 ECO*5 FEATURE IS TO BE USED, W7 IS OUT, AND (W6 IS OUT IF W9 IS IN).

FIRST USED ON OPTION/MODEL		QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN	DATE	EQUIPMENT CORPORATION		
DECIMALS	ANGLES	DATE	TITLE		
XXX * 00	X * 30	DATE	DATA PATHS		
XX * 02	X * 1	DATE			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	DATE			
MATERIAL	NEXT HIGHER ASSY.	DATE			
FINISH	SCALE	DATE			
	SHEET 6 OF 9	DIST			

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SHFR S1/S0 H
 L L SWAB (OB SWAP)
 L H PCB
 H L ALU
 H H RT. SHIFT ALU

745181 - ALU				ALU (07:00), SHIFTER (06:00), PCA & PCB (05:00)				SLOT 6	
M=H LOGIC FUNCTIONS	M=L; ARITHMETIC OPERATIONS	CN=0=H	CN=1=L	FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
L L L L F=A	F=A	F=A	F=A PLUS 1	11/70					
L L L H F=0	F=MINUS 1 (2'S COMP)	F=0	F=ZERO	UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES					
L L H H F=A+B	F=A MINUS B	F=A MINUS B	F=A MINUS B	DECIMALS ANGLES					
L H H H F=A+B	F=A MINUS 1	F=A B	F=A B	XXX - 006 .XX - .02 .X - .1					
H L L H F=A+B	F=A PLUS B	F=A PLUS B PLUS 1	F=A PLUS B PLUS 1	REMOVE BURNS AND BREAK SHARP CORNERS SURFACE QUALITY					
H L H L F=B	F=(A+B) PLUS AB	F=(A+B) PLUS AB	F=(A+B) PLUS AB	MATERIAL					
H L H H F=A+B	F=A B MINUS 1	F=A B	F=A B	FINISH					
H H L L F=1	F=A PLUS A	F=A PLUS A PLUS 1	F=A PLUS A PLUS 1						
H H H L F=A+B	F=(A+B) PLUS A	F=(A+B) PLUS A PLUS 1	F=(A+B) PLUS A PLUS 1						
H H H H F=A	F=A MINUS 1	F=A	F=A						

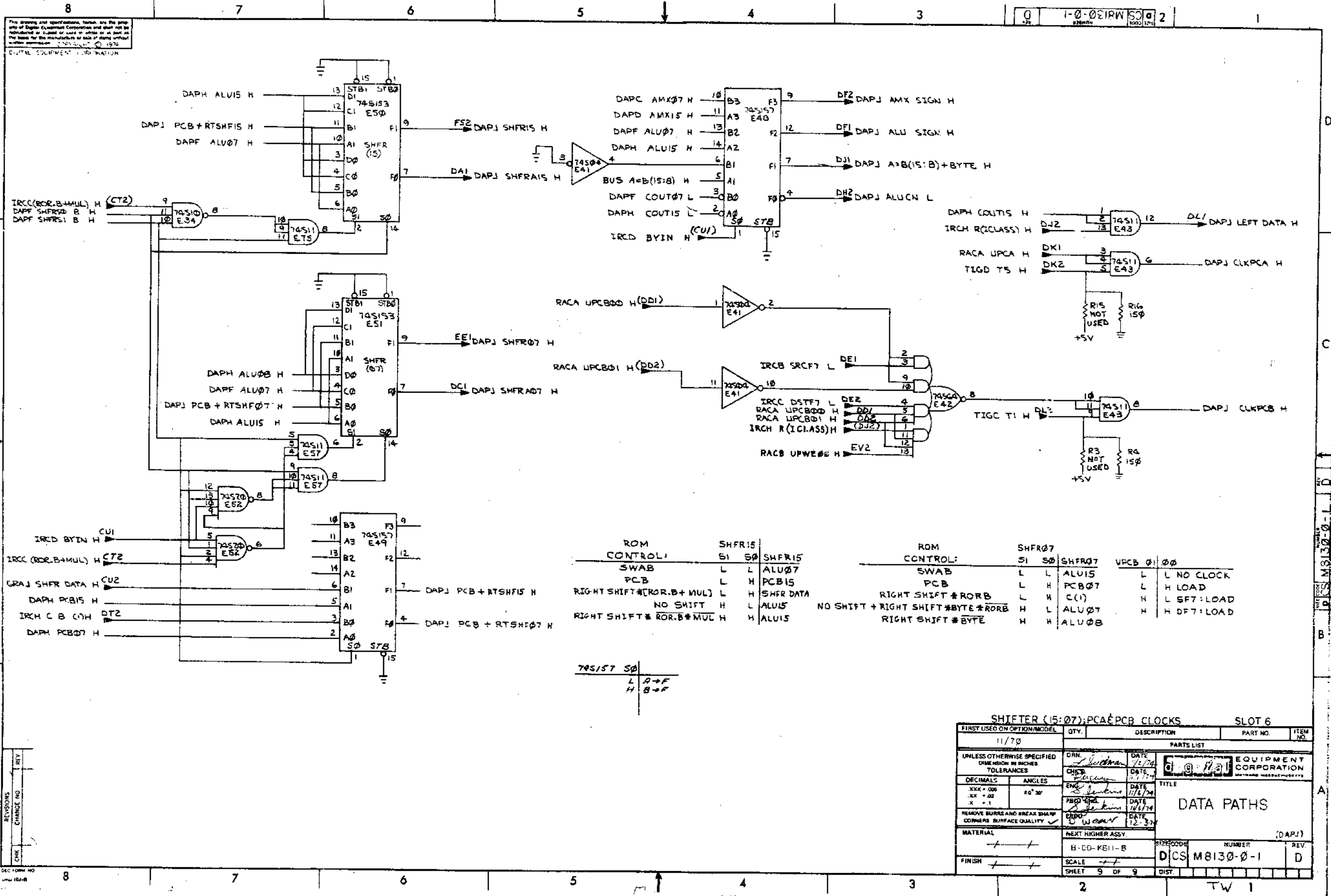
DATE 11/70
 DATE 11/70
 DATE 11/70
 DATE 11/70
 DATE 11/70

EQUIPMENT CORPORATION

TITLE DATA PATHS (DAPF)

SCALE B-DD-KB1-B
 SHEET 7 OF 9

SIZE CODE DCS
 NUMBER M8130-0-1
 REV D



ROM CONTROL	SHFR15	SHFR07	SHFR07	VPCB 0	00
SWAB	L L	ALU07	L L	L	L NO CLOCK
PCB	L H	PCB15	L H	L	H LOAD
RIGHT SHIFT * [ROR.B + MUL]	L H	SHFR DATA	L H	H	L SF7:LOAD
NO SHIFT	H L	ALU15	H L	H	H DF7:LOAD
RIGHT SHIFT * ROR.B * MUL	H H	ALU15	H H	H	H ALU0B

74S157 S0	
L	A+F
H	B+F

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED		DRN.	DATE	EQUIPMENT CORPORATION	
DIMENSION IN INCHES		CHKD.	DATE	MILITARY MARKET DIVISION	
TOLERANCES		ENG.	DATE	TITLE	
DECIMALS	ANGLES	PRD.	DATE	DATA PATHS	
.XX - .00	± 0° 30'	CHKD.	DATE	SIZE CODE	
X = .1		DATE	DATE	NUMBER	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	DATE	REV.	
MATERIAL		DATE	DATE	(DAPJ)	
FINISH		DATE	DATE	B-DD-K511-B	
		SCALE	SCALE	DCS M8130-0-1	
		SHEET	SHEET	9 OF 9	

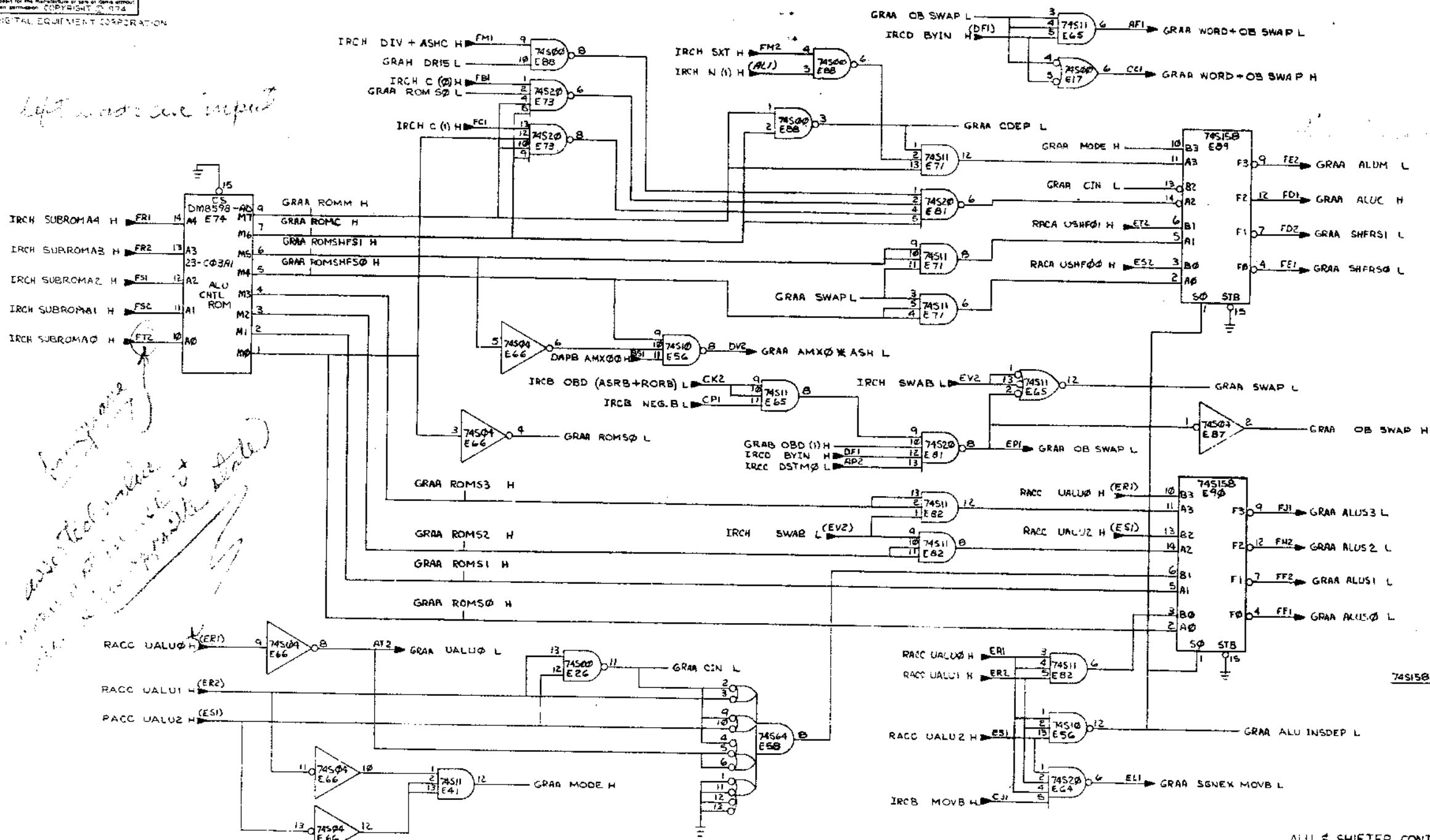
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1-0-1E18 W 50 2

Left side are inputs

*long gone
also to be made +
mainly to be made +
mainly to be made +*



74515B S0!
L A-F
H B-F

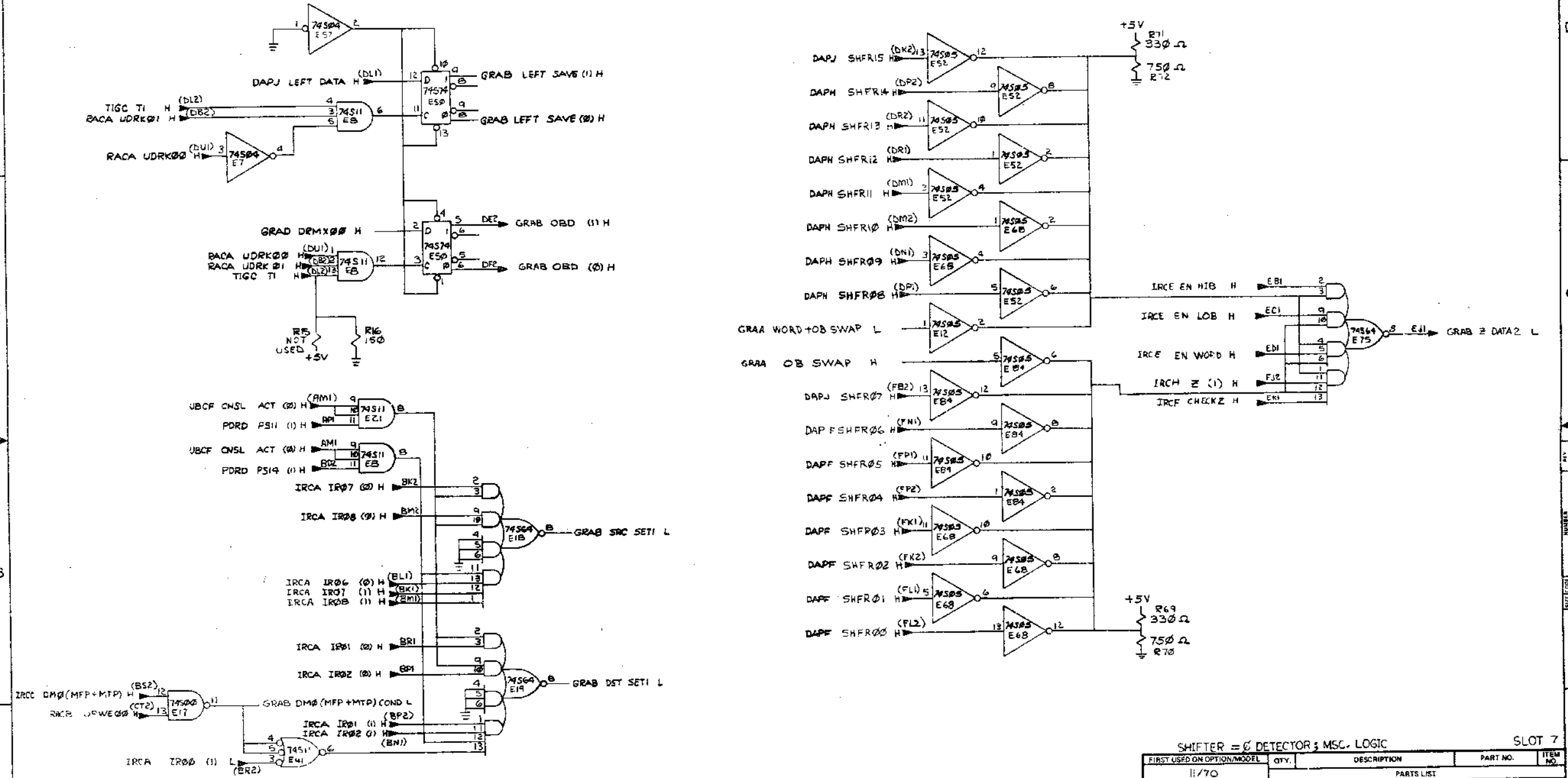
ALU & SHIFTER CONTROL LOGIC SLOT 7

FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
1170				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX - 008	± 0° 30'	DRAWN	DATE	EQUIPMENT CORPORATION
XX - 002		CHECKED	DATE	
X - 1		DESIGNED	DATE	
		APPROVED	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE	SHEET 2 OF 10	
		DIST.		

TITLE
GENERAL REGS
& ALU CNTL (GRAA)

SIZE: 0008 NUMBER: DCS M8131-0-1 REV: D

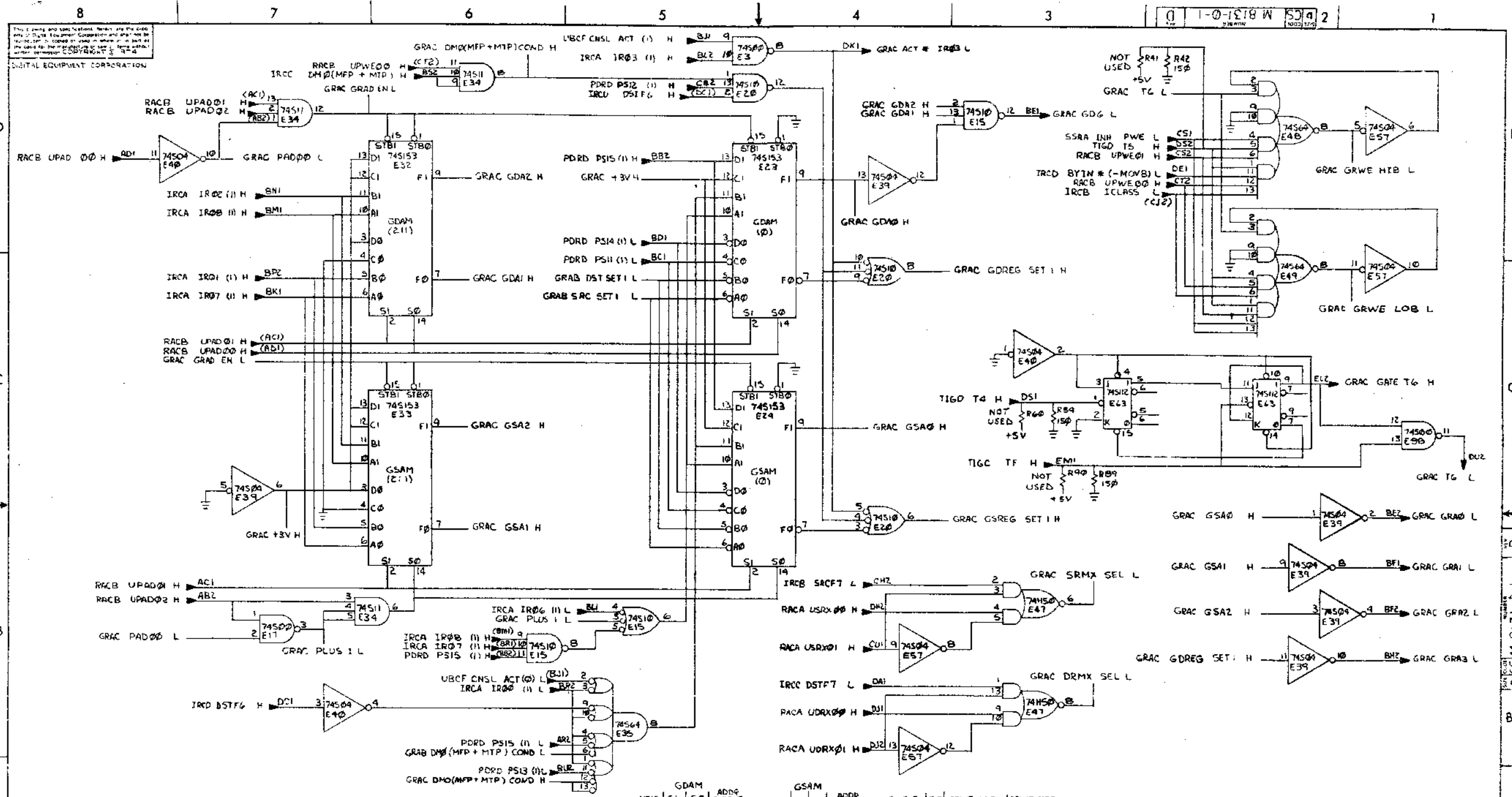
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SHIFTER = 0 DETECTOR; MSC. LOGIC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 11/27/74	EQUIPMENT CORPORATION	
DECIMALS	ANGLES	DATE 11-27-74	TITLE	
XXX + 006	10° 30'	DATE 11-27-74	GENERAL REGS.	
XX + 02		DATE 11-27-74	#ALU CNTL	
X - 1		DATE 11-27-74		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 11-27-74		
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV.
		DCS	M8131-0-1	D
FINISH	SCALE	SHEET	DIST.	
		3 OF 12		

DCS M8131-0-1



GDAM				GSAM				UPWE 01 00				GRWE LOB				GRWE HIE			
UPAD	S1	S0	ADDR OUTPUT	UPAD	S1	S0	ADDR OUTPUT	UPWE 01	00	GRWE LOB	GRWE HIE	UPWE 01	00	GRWE LOB	GRWE HIE				
0	L	L	SF	0	L	L	SF	L	L	DONT WRITE	DONT WRITE	L	L	DONT WRITE	DONT WRITE				
4	L	L	SFV1	1	L	L	SFV1	L	L	WRITE COND	WRITE COND	L	L	WRITE COND	WRITE COND				
1	L	H	DF	5	L	H	DF	L	L	I CLASS	I CLASS + BYTE INST	L	L	I CLASS	I CLASS + BYTE INST				
3	H	H	G	2	H	H	G	L	L	WRITE	WRITE	L	L	WRITE	WRITE				
				7	H	H	G	H	H	NOT USED	NOT USED	L	L	NOT USED	NOT USED				

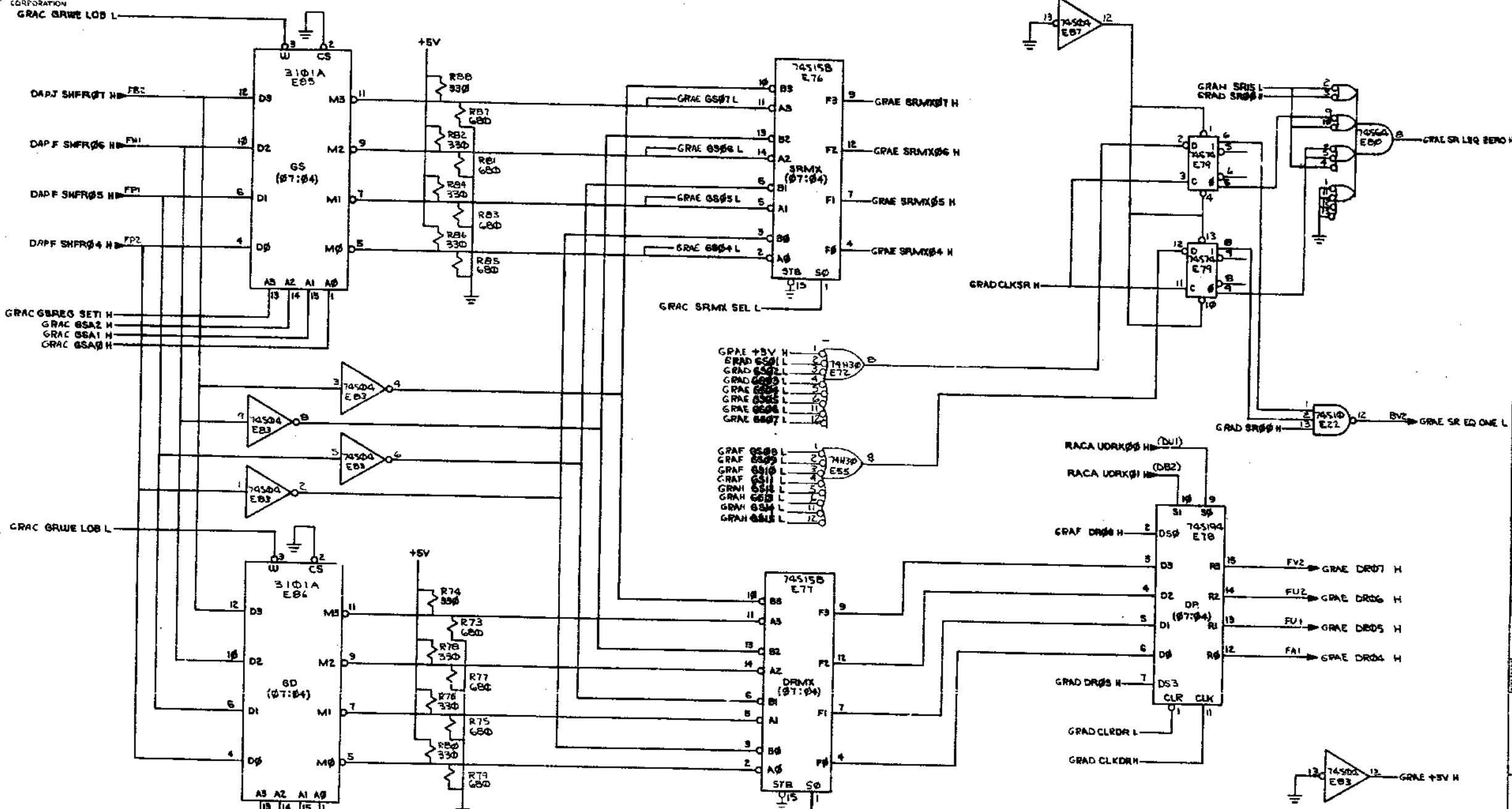
USRX 01 00 OUTPUT (SRMX)				UDRX 01 00 OUTPUT (DRMX)			
USRX	01	00	OUTPUT (SRMX)	UDRX	01	00	OUTPUT (DRMX)
L	L	L	SFR	L	L	L	SFR
L	H	L	GS	L	H	L	C.D
H	L	L	SF7:SNFR; SF7:GS	H	L	L	DF1:SNFR; DF7:GD
H	H	L	NOT USED	H	H	L	CLEAR DR

GENERAL REGS ADDR & WRITE PULSE CNTL				SLOT 7	
FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO	ITEM NO	
11/70					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES					
DECIMALS	ANGLES	PARTS LIST			
XX - .000	± 0° 30'	DCS M8131-0-1			
XX - .02		EQUIPMENT CORPORATION			
XX - .1		TITLE			
GENERAL REGS & ALU CNTL (GRAC)					
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL					
FINISH					
NEXT HIGHER ASSY					
SCALE					
SHEET 4 OF 10					
REV					
DCS M8131-0-1					
REV 0					

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B 7 6 5 4 3 2 1

1-0-1018W 2



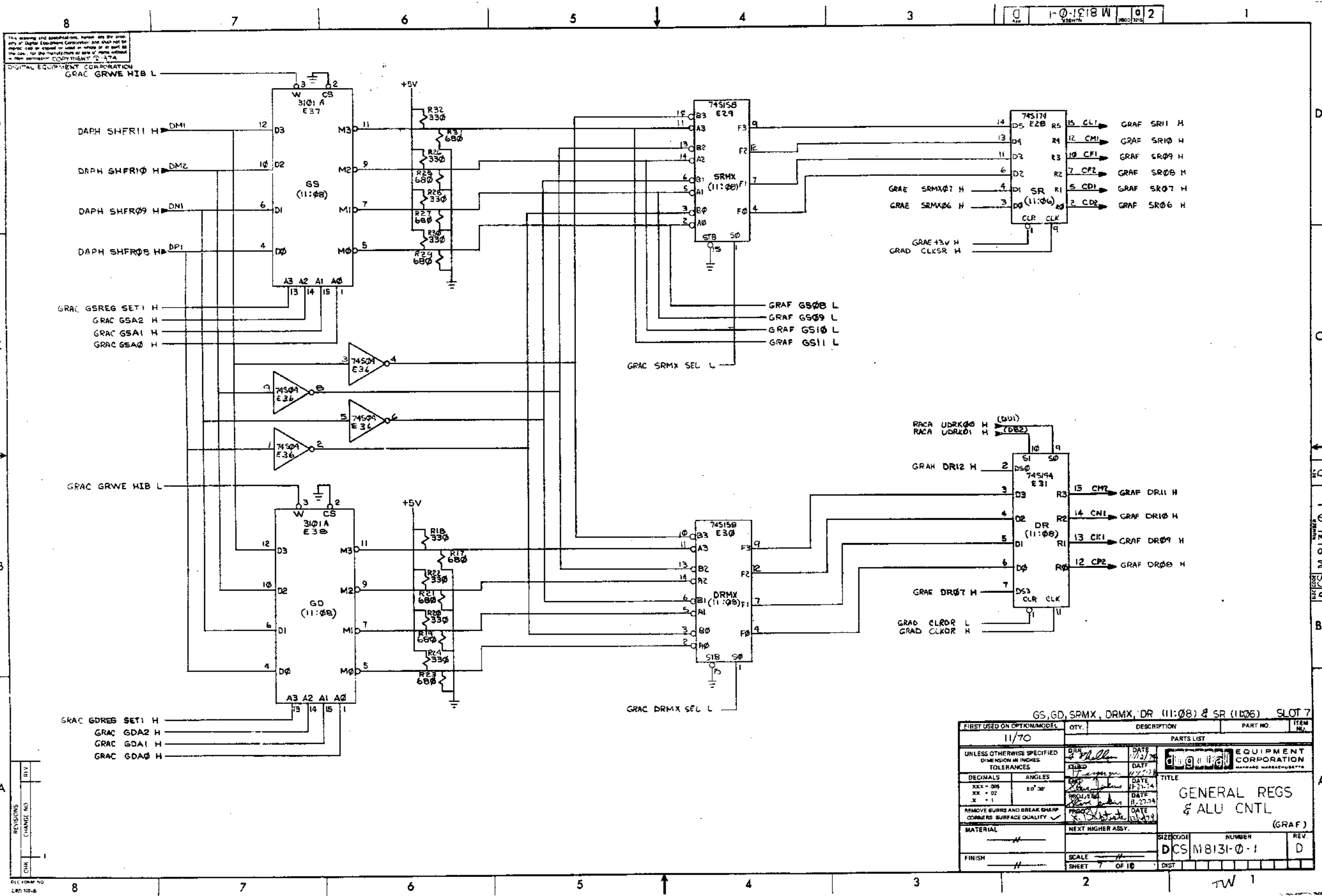
GS, GD, SRMX, DRMX, DR (07:04) & SR LEQ ZERO DET. SLOT 7

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED				
DIMENSION IN INCHES		DATE	DIGITAL EQUIPMENT CORPORATION	
TOLERANCES		DATE	CORPORATION	
DECIMALS	ANGLES	DATE	TITLE	
.XXX - .000	±0° 30'	DATE	GENERAL REGS & ALU CNTL	
.XX - .02		DATE	(GRAE)	
.X - .1		DATE	SIZE CODE NUMBER REV	
REMOVE BURRS AND BREAK SHARP CORNERS TO SURFACE QUALITY		DATE	DCS M8131-0-1 D	
MATERIAL		DATE	SCALE	
NEXT HIGHER ASSY.		DATE	SHEET 6 OF 10	
FINISH		DATE	DIST	

REVISIONS
 CHANGE NO. REV.
 CHK. DATE

DEC FORM NO. 108-9

8 7 6 5 4 3 2 1



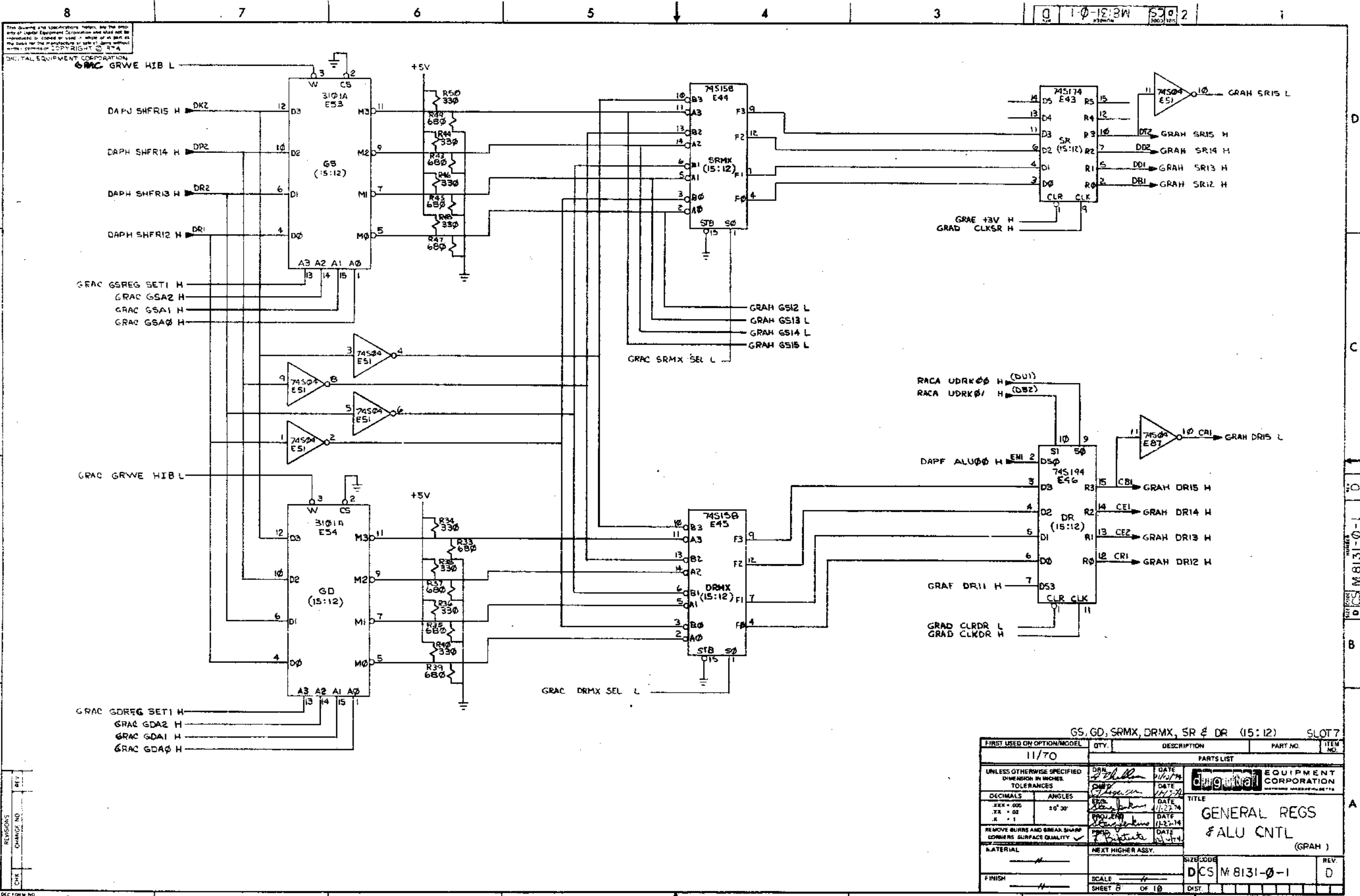
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DIGITAL EQUIPMENT CORPORATION
GRAC GRWE HIB L

REV	NO	DATE
1		

129

FIRST USED ON OPTION/MODEL		QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE	DATE	EQUIPMENT CORPORATION	
DECIMALS	ANGLES	11/70	11/70	MAYFIELD MASSACHUSETTS	
XXX - 005	60° 30'	DATE	DATE	TITLE	
.X + 1		11-20-74	11-27-74	GENERAL REGS & ALU CNTL (GRAF)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROCD	DATE	MATERIAL	
		11/70	11/70	NEXT HIGHER ASSY.	
FINISH		SCALE		SIZE CODE	NUMBER
		7 OF 10		DCS M8131-0-1	REV D



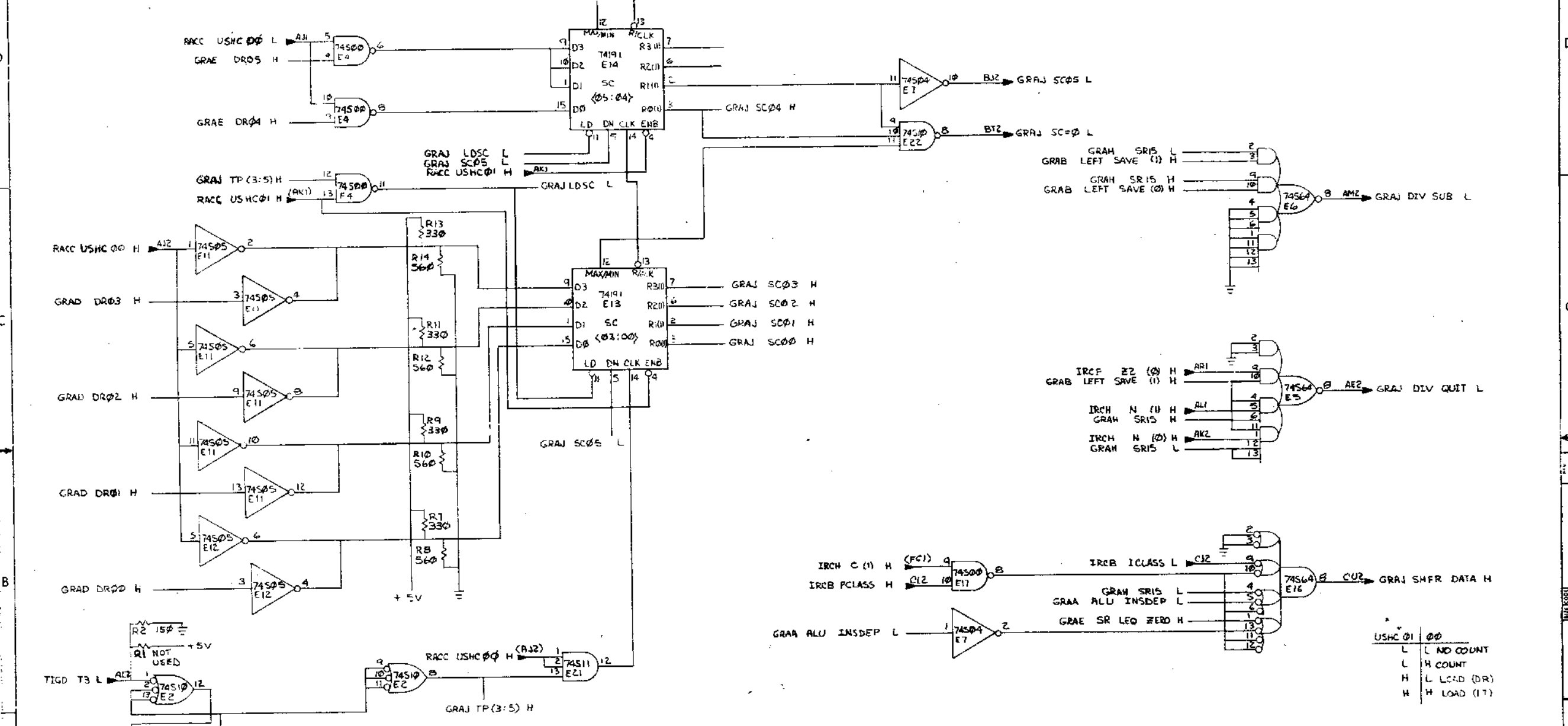
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10-12:3W 50 2

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XX + .005	± 0° 30'	GENERAL REGS & ALU CNTL (GRAH)		
REMOVE BURRS AND BREAK SHARP EDGES TO SURFACE QUALITY				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH			SCALE	REV
			SHEET 6 OF 10	D

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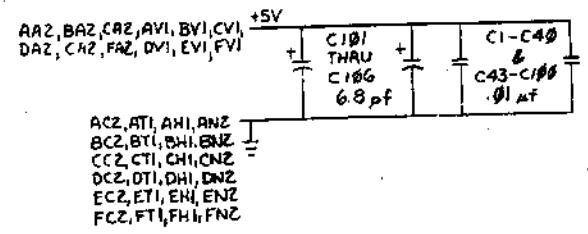
SHIFT COUNT REG (SC) SLOT 7

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX - 006	±0°30'	DIGITAL EQUIPMENT CORPORATION		
XX - 02		MAYNARD, MASSACHUSETTS		
X - 1		TITLE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SIZE CODE	NUMBER	REV.
		DCS M8131-0-1		D
		SCALE	SHEET 9 OF 10	
		DIST.		

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NOTES:

1. RESISTORS R1, R2 AND R14 ARE NOT USED.
2. INSTALL JUMPER W1 FOR USE WITH FPII-B
3. MUST BE M8132-YA FOR USE IN KBI-CM (1/74)



0 1-0-2218W 2

D
C
B
A

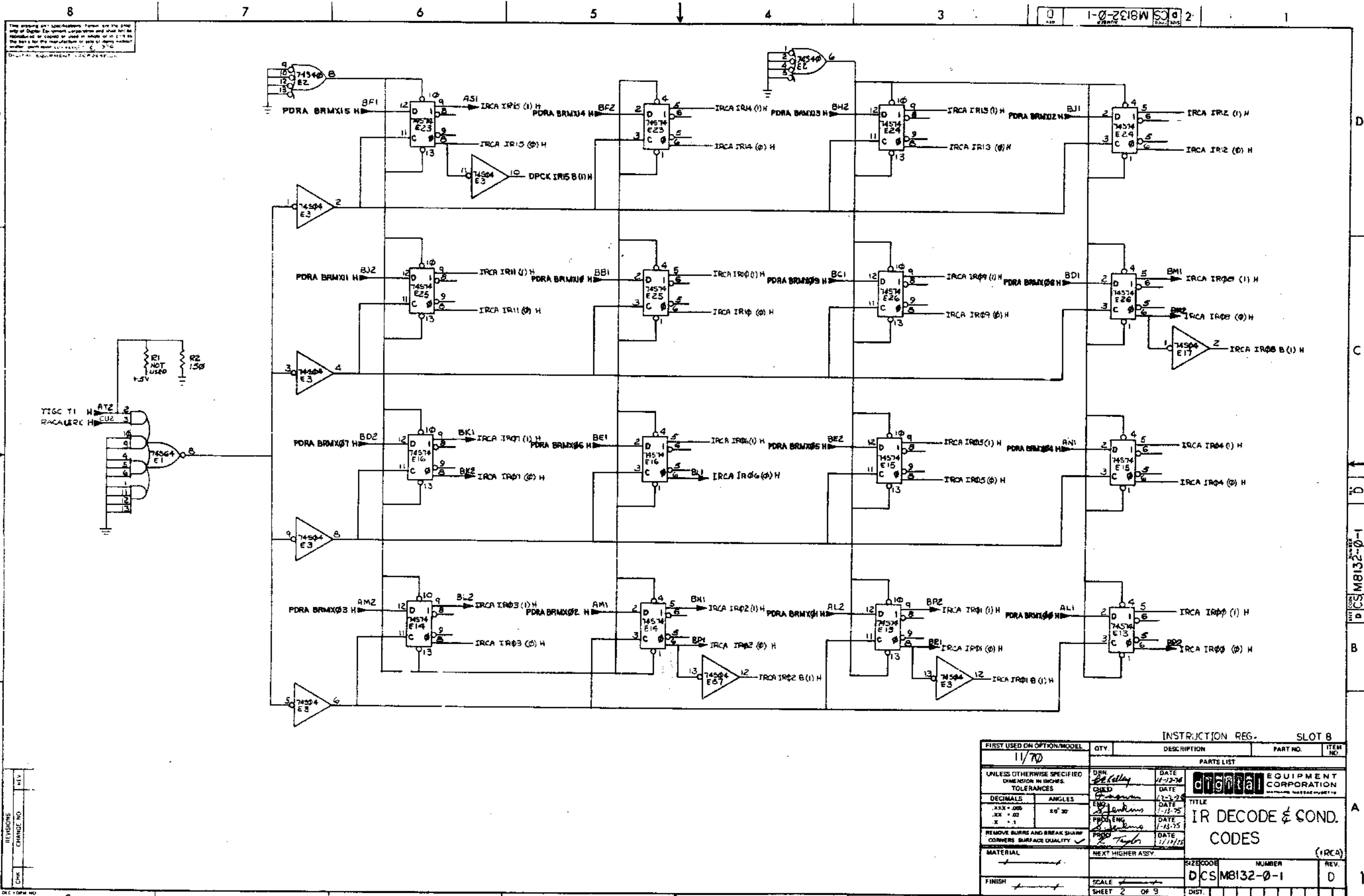
D
C
B
A

REVISED & RE-DRAWN	D
CHANGE NO.	1
DATE	12-2-74
BY	ENG. JENKINS

DRN: R. CONSTANTINEAU	FIRST USED ON	11/70	digital
CHK: DFERGLISON	2-2-74	TITLE	
ENG: S. JENKINS	1-13-75	IR DECODE & COND CODES (IRC)	
PROJ: ENG. JENKINS	1-13-75	REV. D	
PROD: R. TAYLOR	1-14-75	NUMBER	
NEXT HIGHER ASSY.		M8132-0-1	
B-BD-KB71-B	SIZE	CODE	REV.
SCALE	+ +	D CS	D
SHEET	OF 9	DIST.	

133

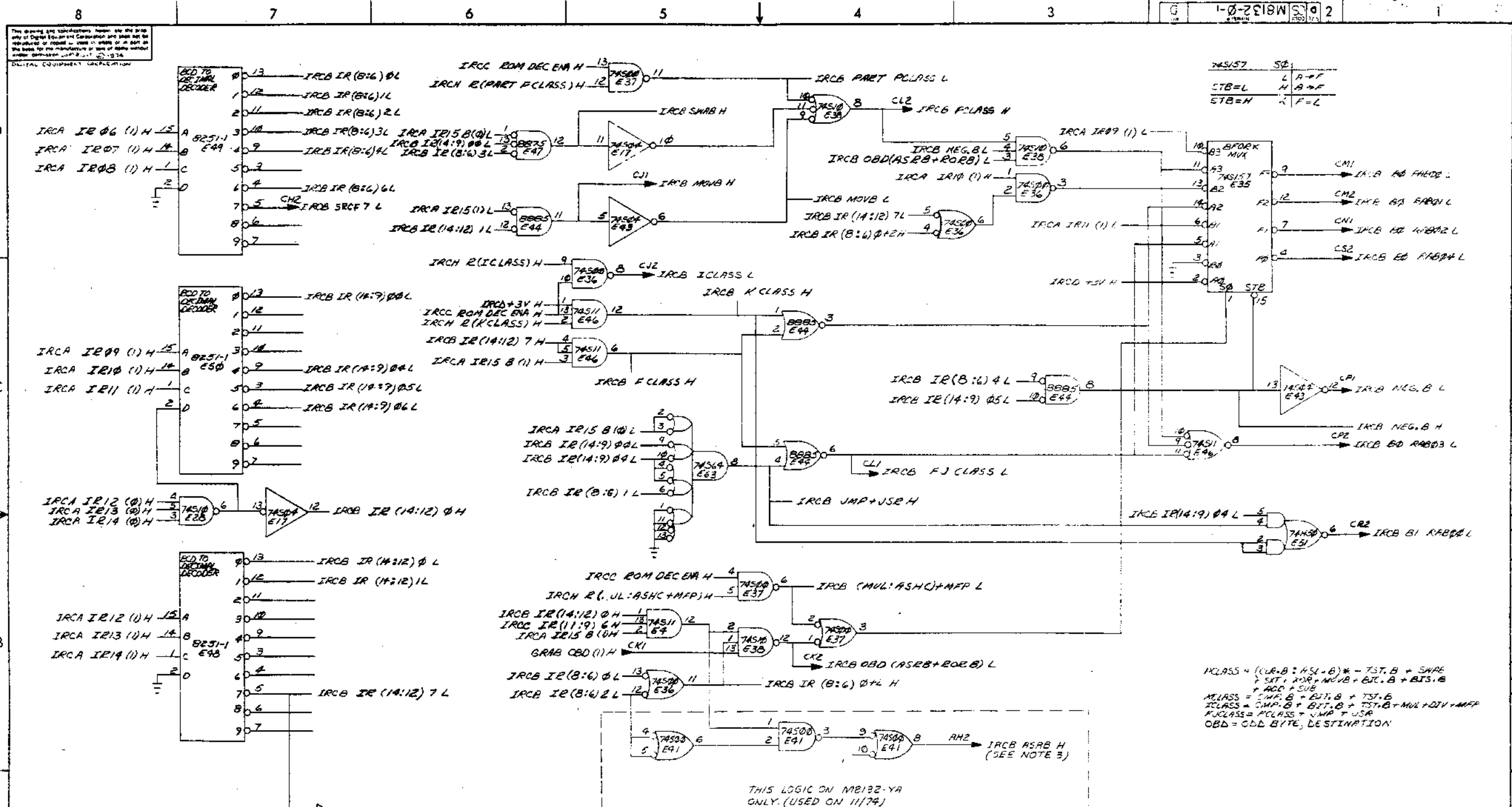
8 7 6 5 4 3 2 1



FIRST USED ON OPTION/MODEL		QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES.		DRN	DATE	DIGITAL EQUIPMENT CORPORATION	
TOLERANCES		CHKD	DATE	IR DECODE & COND. CODES	
DECIMALS	ANGLES	EMG	DATE	TITLE	
.XX ± .000	± 30'	PROJ ENG	DATE	IR DECODE & COND. CODES	
.XX ± .00		PROJ ENG	DATE	TITLE	
X ± .1		PROJ ENG	DATE	IR DECODE & COND. CODES	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROJ ENG	DATE	TITLE	
		PROJ ENG	DATE	IR DECODE & COND. CODES	
MATERIAL		NEXT HIGHER ASSY.		SIZE CODE	NUMBER
				DCS M8132-0-1	REV. D
FINISH		SCALE		SHEET 2 OF 9	
				DIST.	

DCS M8132-0-1

134



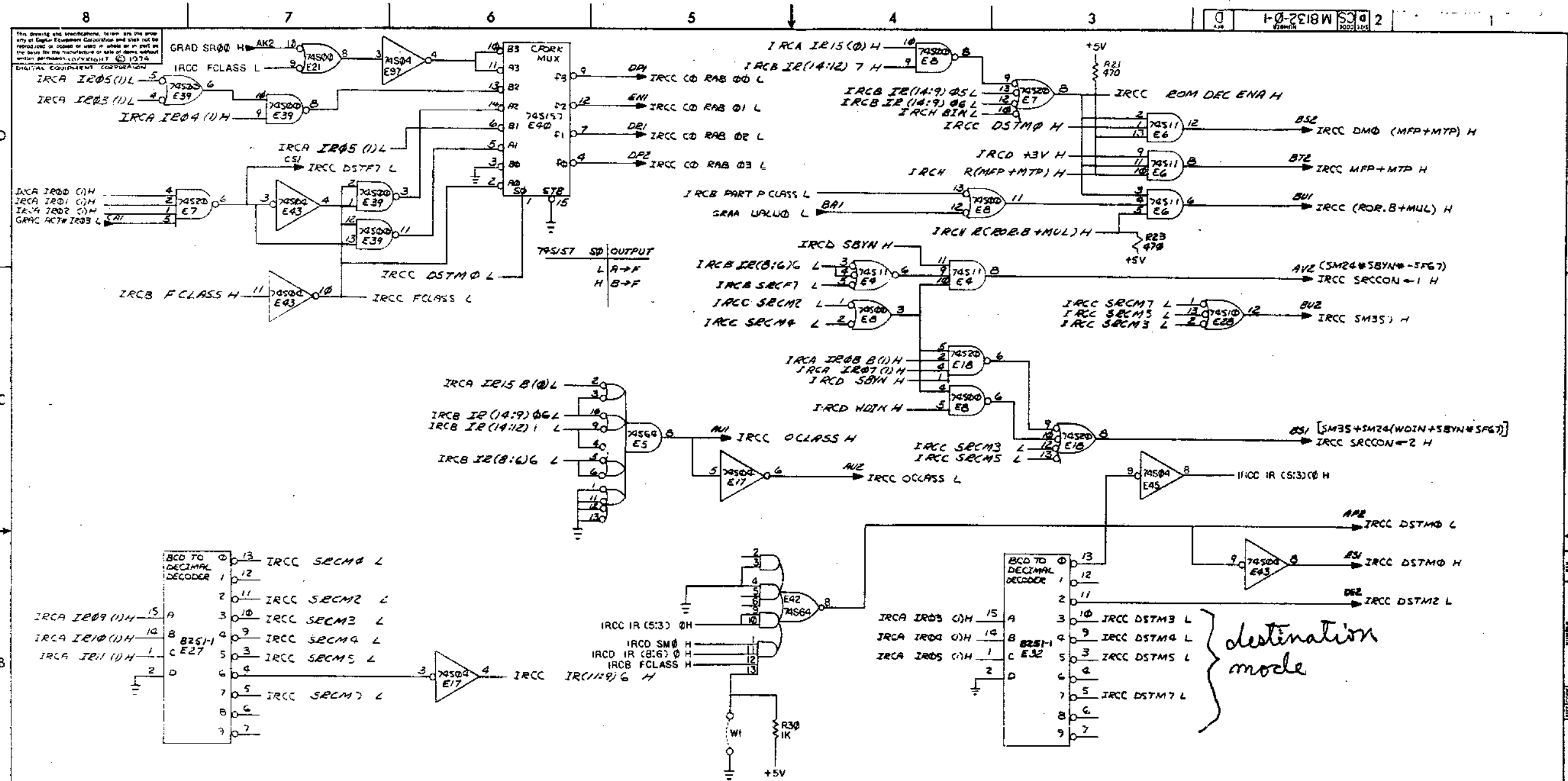
KCLASS = (CLR.B + HSL.B) * TST.B + SHAR
 + SAT + MOV + MOV.B + BIL.B + BIS.B
 + ACC + SUB
 MCLASS = CMP.B + BIT.B + TST.B
 ICLASS = CMP.B + BIT.B + TST.B + MUL + DIV + MFP
 FCLASS = FCLASS + JMP + JSR
 OBD = OBD BYTE, DESTINATION

THIS LOGIC ON MB132-YA
 ONLY. (USED ON 11/74)

BFORK; IR DECODERS SLOT 8

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES				
DECIMALS	ANGLES	ENGR.	DATE	
XXX.XXX	10' 30"		1-10-74	
REMOVE BURRS AND BREAK SHARP EDGES. SLIP ACT QUALITY.				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH				
SCALE				
SHEET 3 OF 9				
DIGITAL EQUIPMENT CORPORATION			TITLE	
IR DECODE & COND. CODES			(IRCB)	
SIZE CODE			NUMBER	REV.
DCS MB132-0-1				D

135
 REV. CHANGE NO.
 CHK.



INSTALL JUMPER W1 FOR USE WITH FPII-B

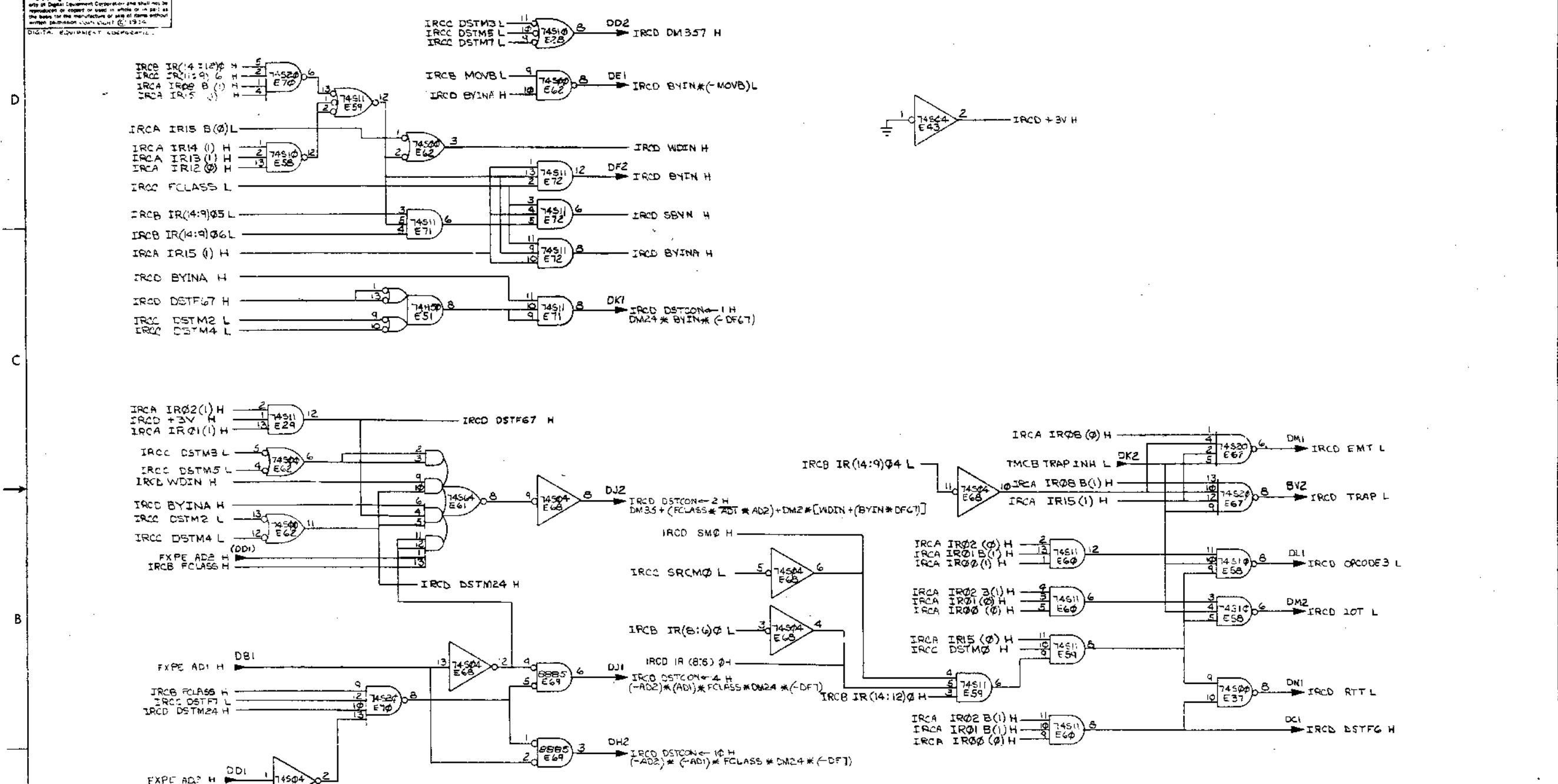
NOTE: OCLASS = MOV + MTP
 SBYN = MOV + CMP + BIT + BIC + BIS
 SRCM = OBS (ODD BYTE, SOURCE)
 FCLASS = FPU OPCODES

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11170					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DBL	DATE	DIGITAL EQUIPMENT CORPORATION	
DECIMALS		ANGLES	DATE	TITLE	
XXX - DIM		XX - 30	DATE	IR DECODE & COND. CODES	
X - 1		PROF. FIN.	DATE	(IRCC)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		FIN.	DATE	SIZE CODE	
MATERIAL		NEXT HIGHER ASSY.	NUMBER		
FINISH		SCALE	REV.		
		SHEET 4 OF 9	DCS M8132-0-1		
		DIST.	D		

destination mode

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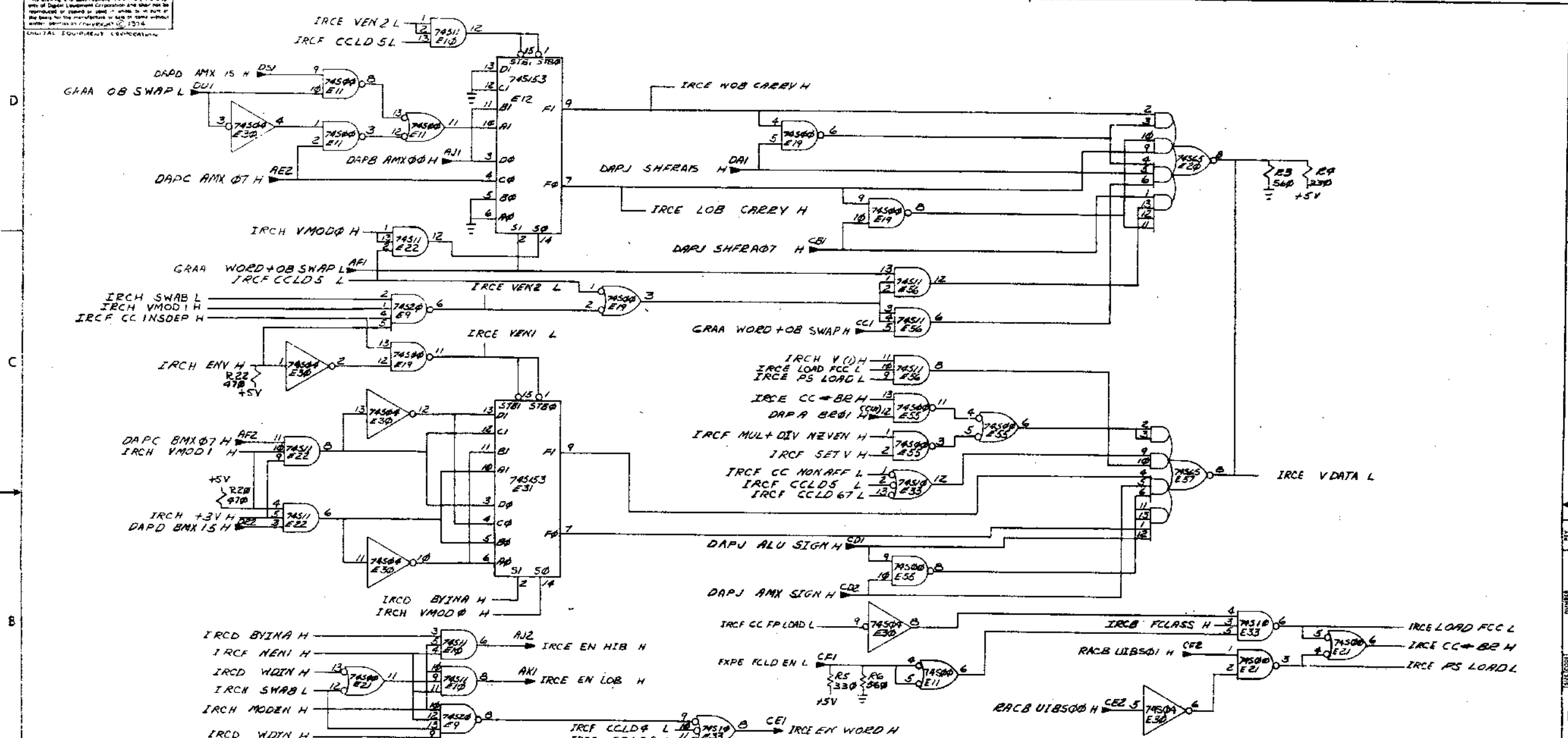
DIGITAL EQUIPMENT CORPORATION



INSTRUCTION TRAPS & DESTINATION CONSTANTS				SLOT 8	
FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 1-12-76	 DIGITAL EQUIPMENT CORPORATION TITLE IR DECODE & COND. CODES (IRCD)		
DECIMALS	ANGLES	DATE			
XXX - 005	10' 30"	DATE			
XX - 00		DATE			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE			
MATERIAL		DATE			
NEXT HIGHER ASSY					
FINISH		SCALE	SIZE CODE	NUMBER	REV.
		SHEET 5 OF 9	DCS M8132-0-1		D

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1-0-2018W 2



74S13	5 50
	L L A → F
74S15	L H B → F
	H L C → F
	H H D → F
74S19	X X F = L

CONDITION CODE V LOGIC SLOT 8

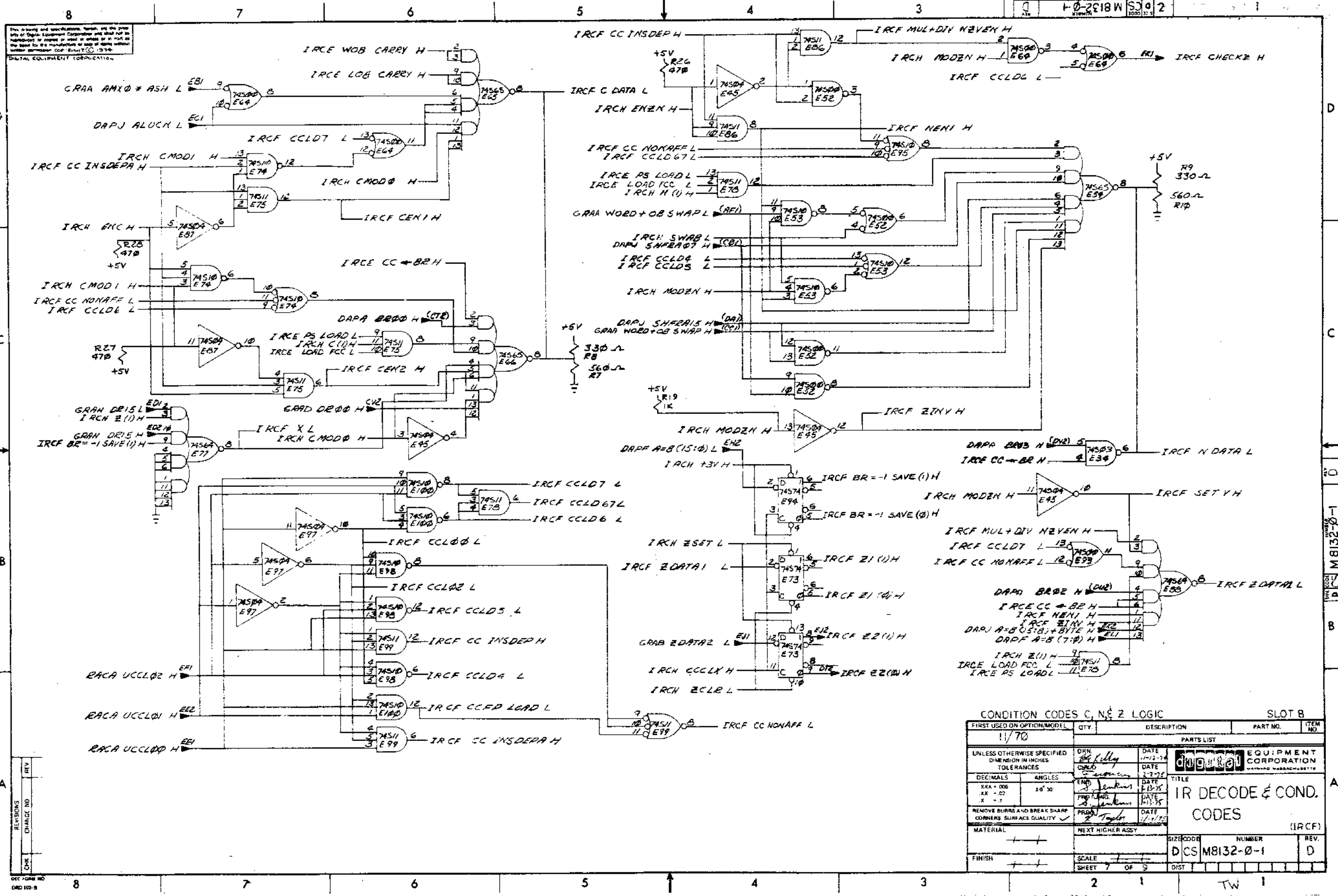
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	DIGITAL EQUIPMENT CORPORATION	
XXX - 000	10° 30'	11-12-70	TITLE	
XX - 00		1-2-71	IR DECODE & COND	
X - 0		1-23-71	CODES	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
FINISH				
SCALE			SIZE CODE	NUMBER
SHEET 6 OF 9			DCS M8132-0-1	REV D

REVISIONS	NO.	REV.
CHG		

TW 1

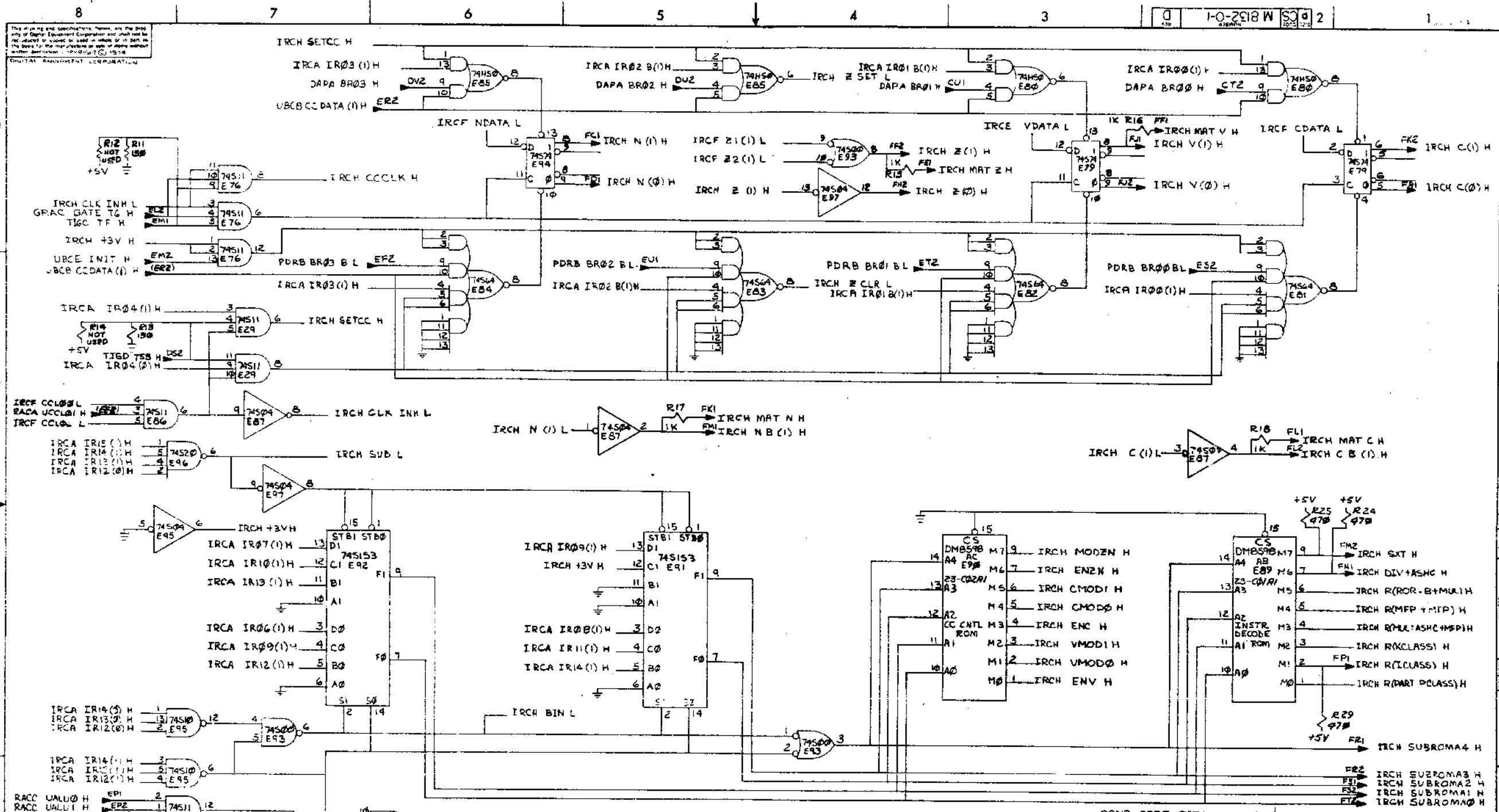
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DIGITAL EQUIPMENT CORPORATION



FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
1/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	DIGITAL EQUIPMENT CORPORATION	
DECIMALS ANGLES		CHKD	DATE	CORPORATION	
XXX + .006		END	DATE	TITLE	
XX - .02		PREP	DATE	IR DECODE & COND. CODES	
X - .1		PRD	DATE	CODES (IRCF)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV.	
FINISH	SCALE	DCS M8132-0-1	D		
	SHEET 7 OF 9	DIST			

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74S153	S1	S0
L	L	A → F
STB=L	L	H B → F
	H	L C → F
	H	H D → F
STB=H	X	X F = L

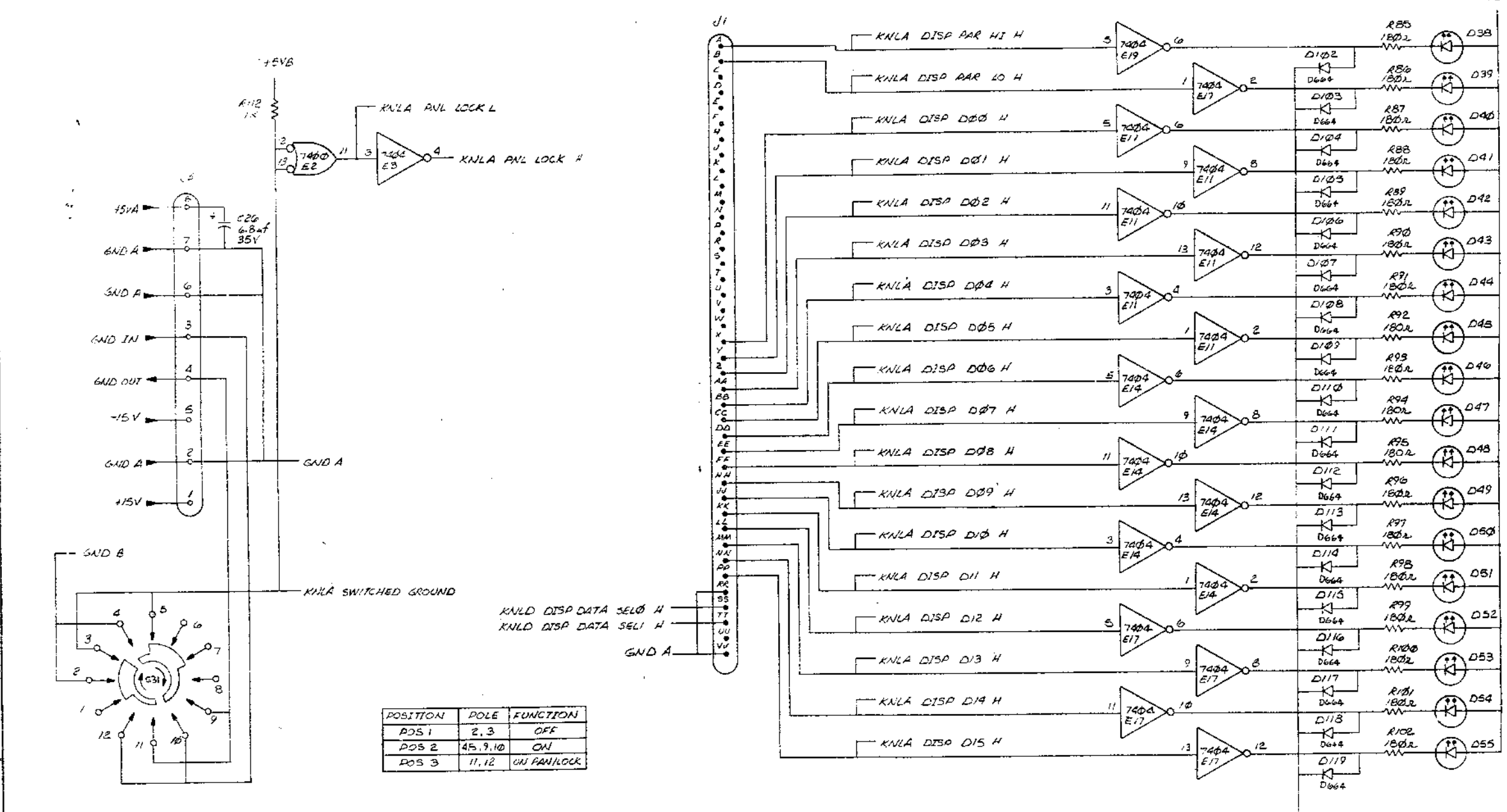
COND. CODE BITS		CC CNTL	INSTR DECODE	ROMS	SLOT	8
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.	PARTS LIST	
11/70						
UNLESS OTHERWISE SPECIFIED: DIMENSION IN INCHES TOLERANCES	DRM C.H.K.B.	DATE 11-27-74	ORIGINAL EQUIPMENT CORPORATION			
DECIMALS	ANGLES	DATE 1-10-75	TITLE IR DECODE & COND CODES (IRCH)			
XXX - .000 XX - .00 X - .00	10° 30'	DATE 1-15-75	MATERIAL			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 1/11/75	FINISH			
			SCALE			
			SHEET B OF 9			

REV	NO	DATE	BY

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KNLA/PDR INTERFACE

+5VA



POSITION	POLE	FUNCTION
POS 1	2, 3	OFF
POS 2	4, 5, 9, 10	ON
POS 3	11, 12	ON PAN/LOCK

- NOTES:
1. BC06R CABLES USED TO CONNECT CONSOLE TO PDR AND SCC BOARDS.
 2. CASE OF S31 = GND A

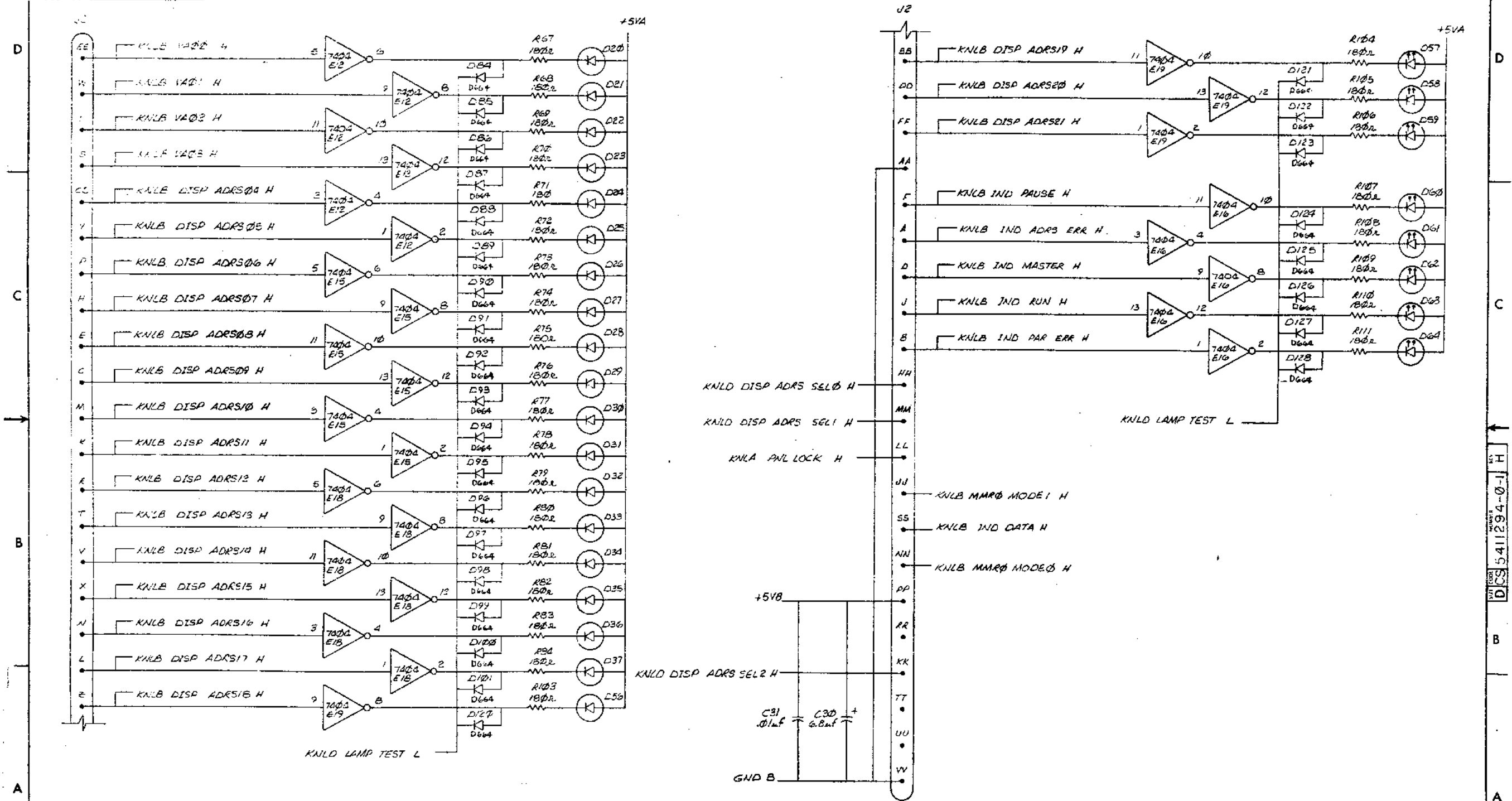
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
CONSOLE BOARD (KNLA)	D CS	5411294-0-1	H
SCALE	SHEET	OF	DIST.
	2	5	

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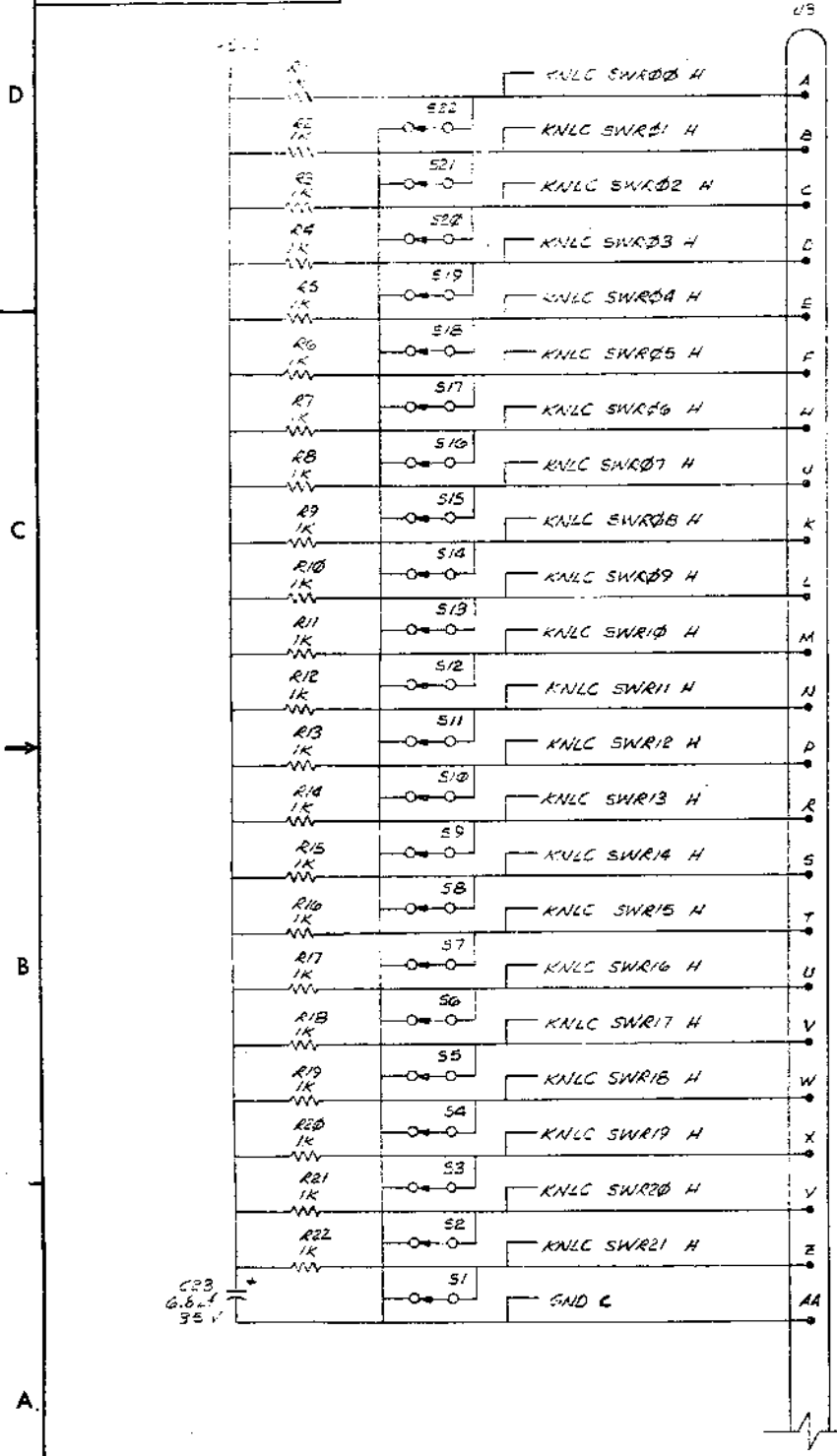
KNL/SCC INTERFACE



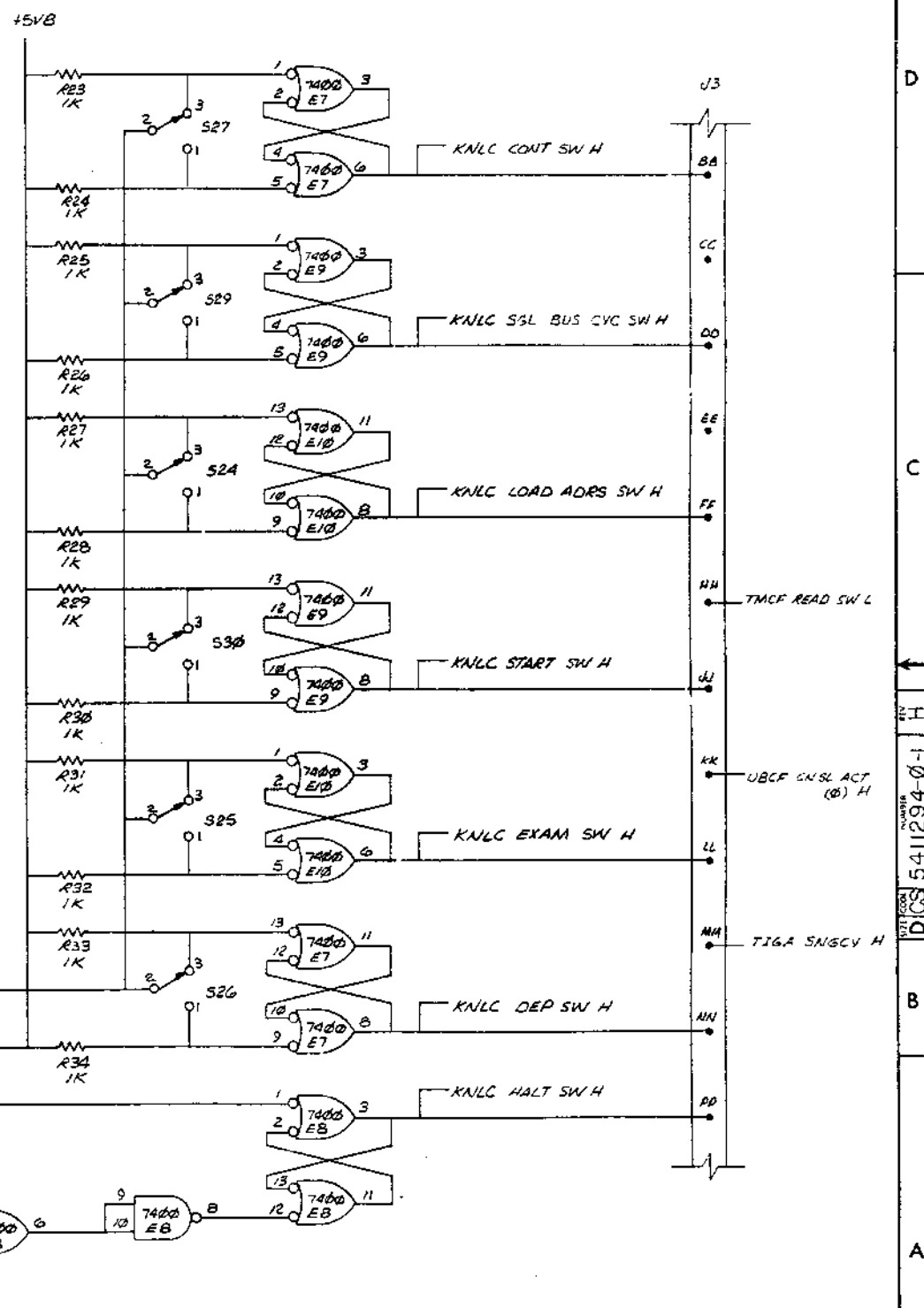
REVISIONS		
CHK	CHANGE NO	REV

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KNLC SSC INTERFACE



NOTE:
SWITCHES S1 THRU S22 ARE SHOWN IN THEIR NORMAL OR NON OPERATING POSITION.



CONSOLE SWITCHES

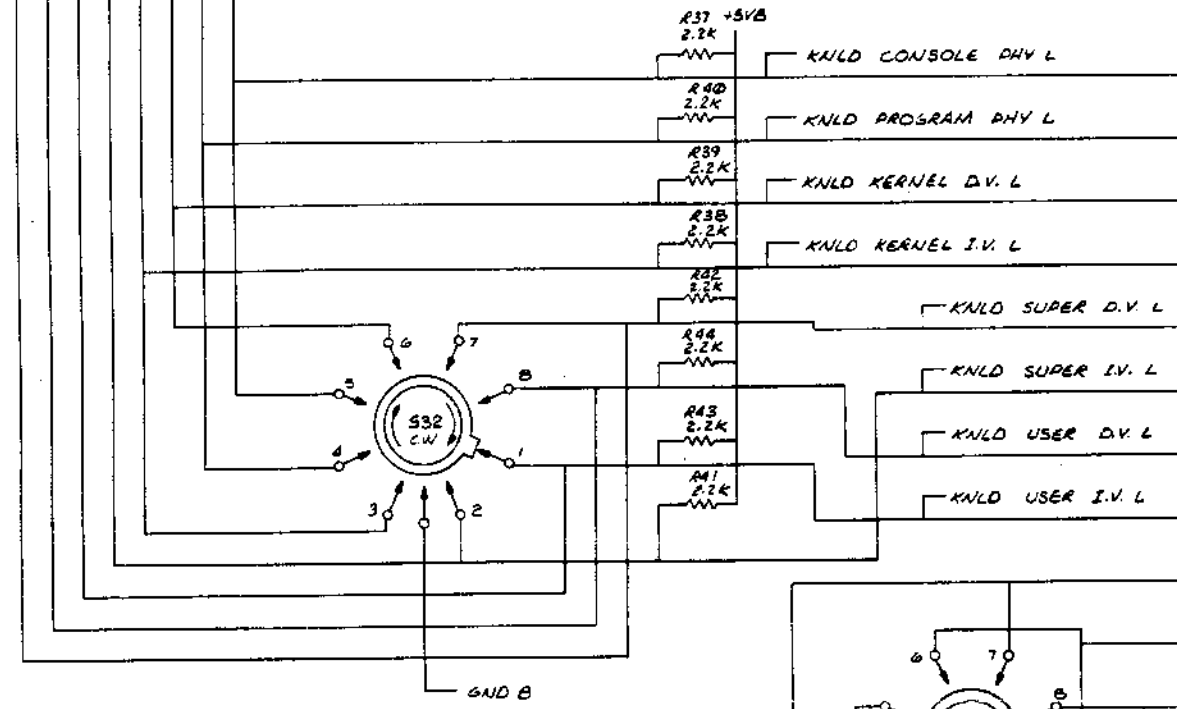
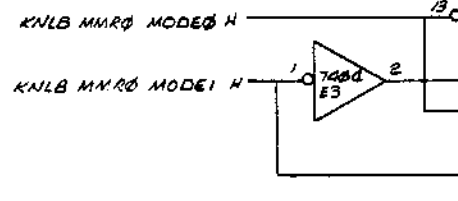
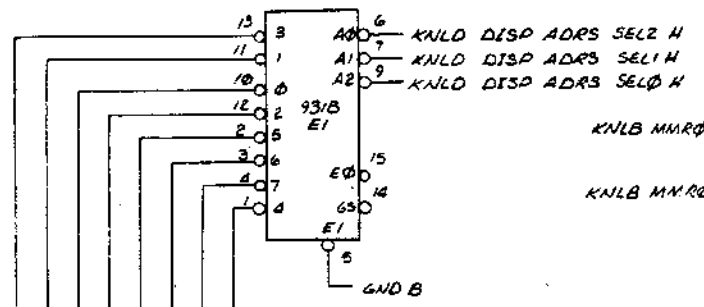
REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE CODE	NUMBER	REV.
CONSOLE BOARD (KNLC)	D CS	5411294-0-1	H
SCALE	SHEET	OF	DIST.
	4	5	

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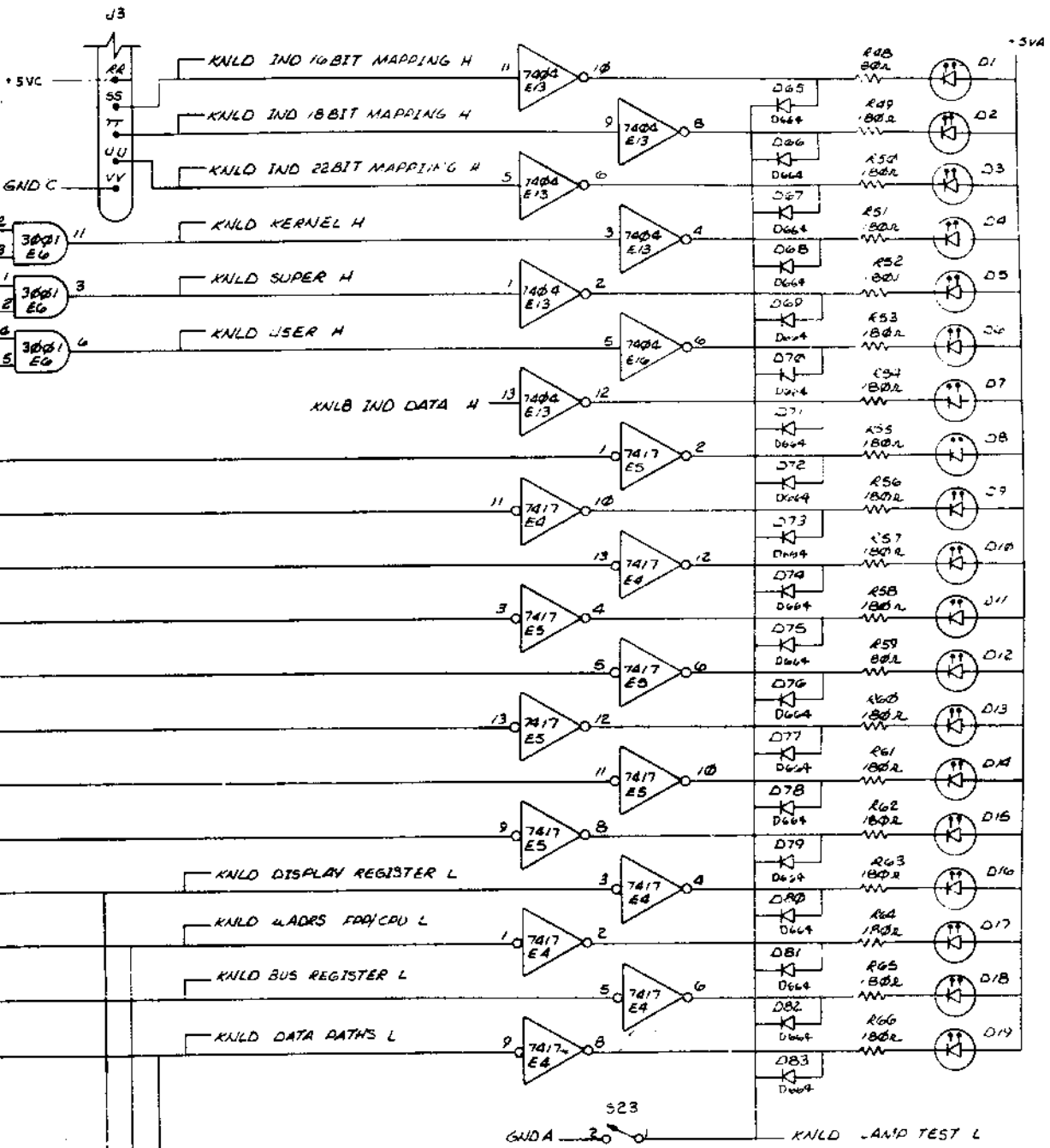
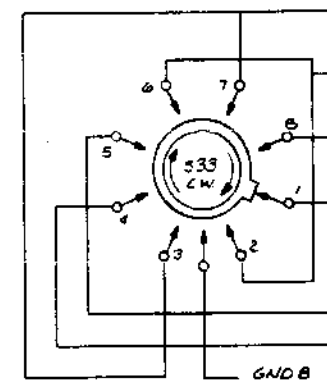
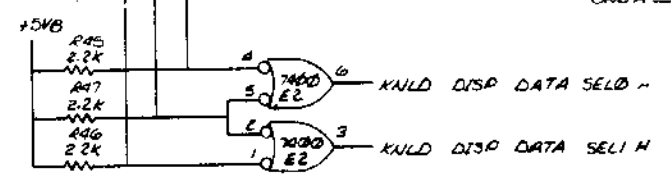
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DCS 5411294-2



CODE SELECT LINES	A2	A1	A0
USER I.V.	H	H	H
USER D.V.	H	H	L
SUPER I.V.	H	L	L
SUPER D.V.	H	L	L
KERNEL I.V.	L	H	L
KERNEL D.V.	L	L	H
PROGRAM PHY	L	L	L
CONSOLE PHY	L	H	H

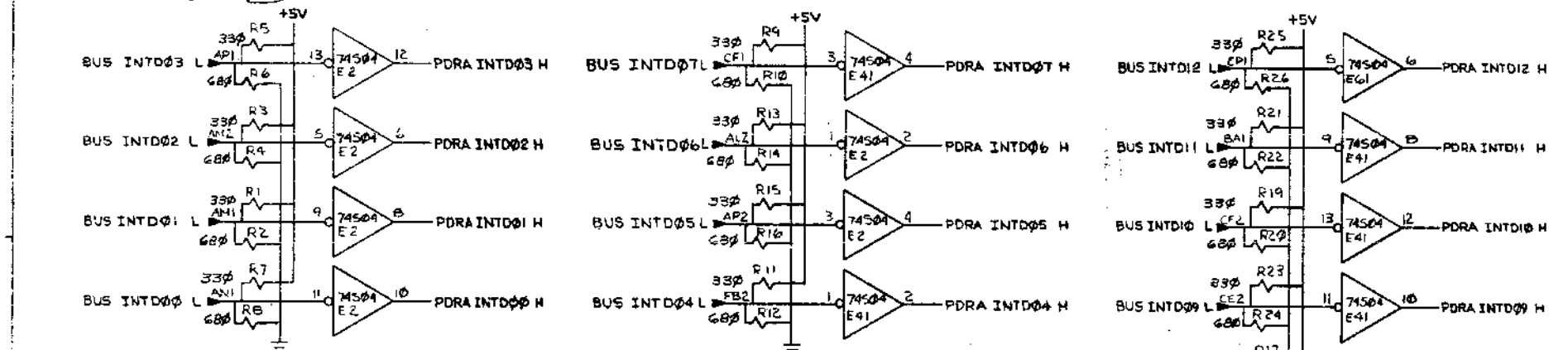
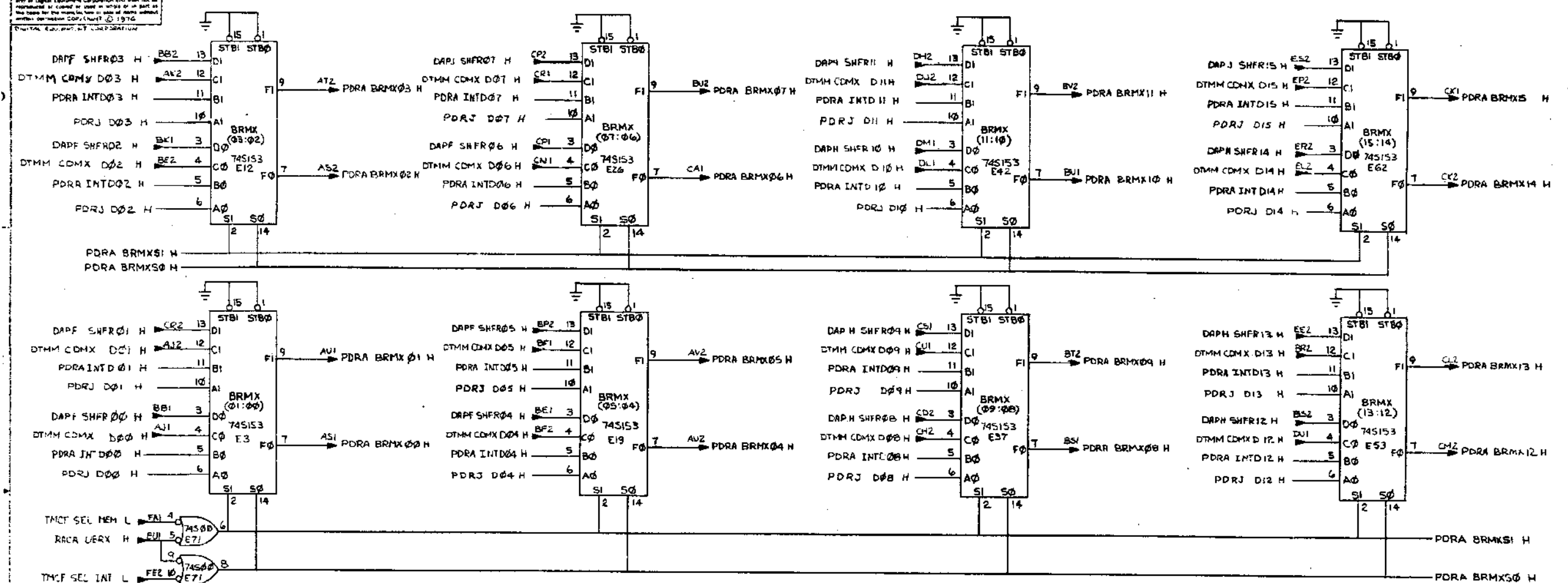
CODE SELECT LINES	DISP DATA SEL1	DISP DATA SEL0
BUS REGISTER	L	L
DATA PATHS	L	H
DISPLAY REGISTER	H	L
ADDRESS FAP/CPU	H	H



REVISIONS		
CHK	CHANGE NO	REV

TITLE: CONSOLE BOARD (KNLD) SIZE CODE: DCS 5411294-2 NUMBER: 146
 SCALE: 1:1 SHEET: 5 OF 5 DIST:

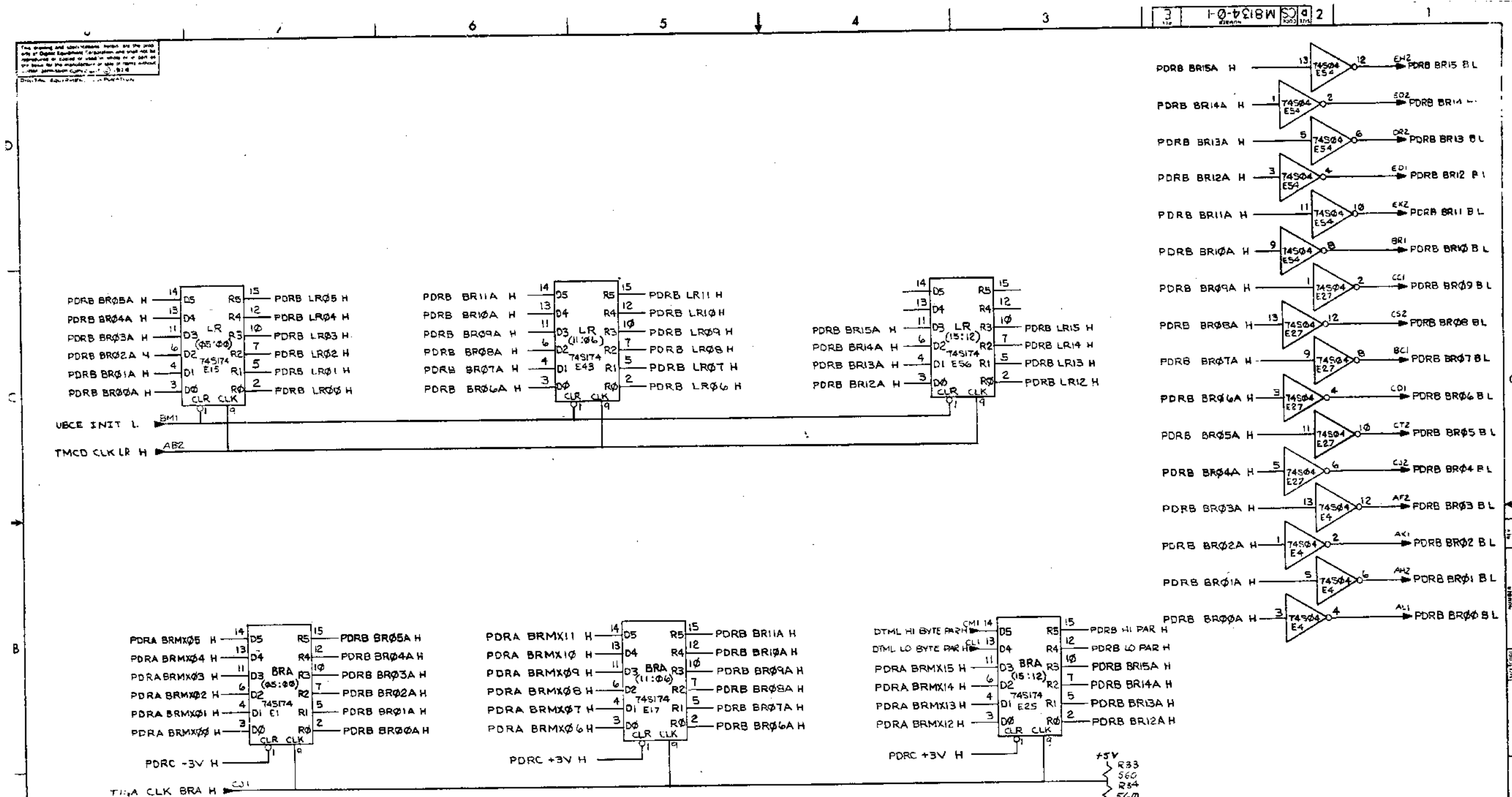
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BUS REGISTER MULTIPLEXER SLOT 10

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES		DATE 11-12-74	digital EQUIPMENT CORPORATION MAYFIELD MASSACHUSETTS	
DECIMALS	ANGLES	DATE 7/8/78		
XXX - 000	10' 30"	DATE 4-75	PROCESSOR DATA & UNIBUS REGS (PDR)	
.X - 02		DATE 4-78		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 1/8/75		
MATERIAL	NEXT HIGHER ASSY.	SIZE/CODE	NUMBER	REV.
		DCS M8134-0-1		E
FINISH	SCALE	SHEET 2 OF 9	DIST	

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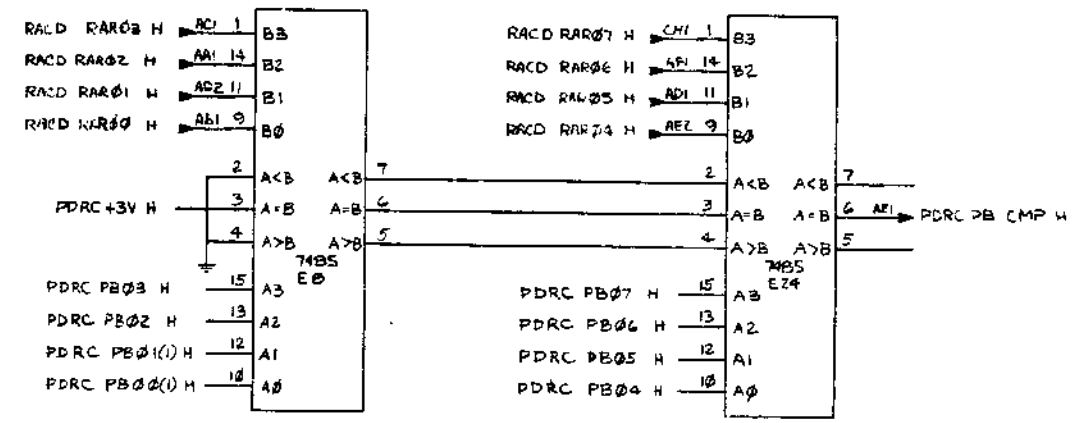
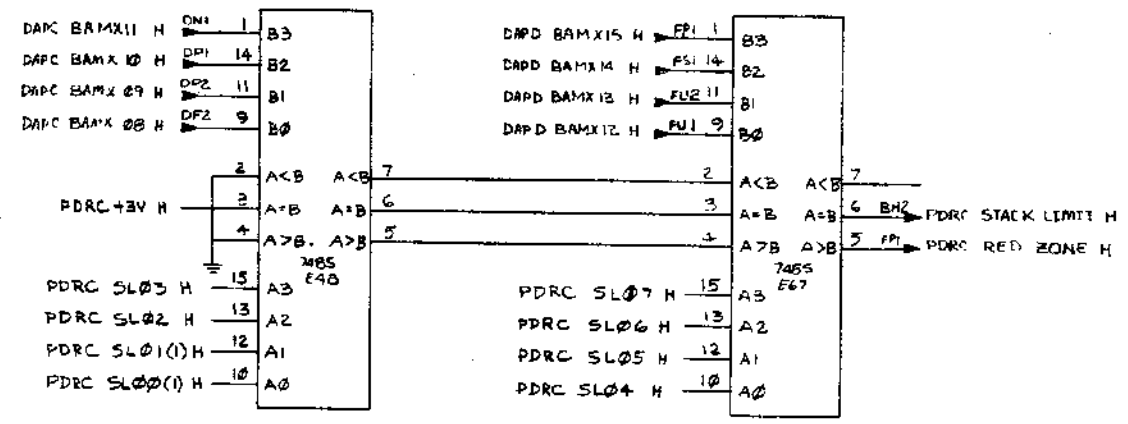
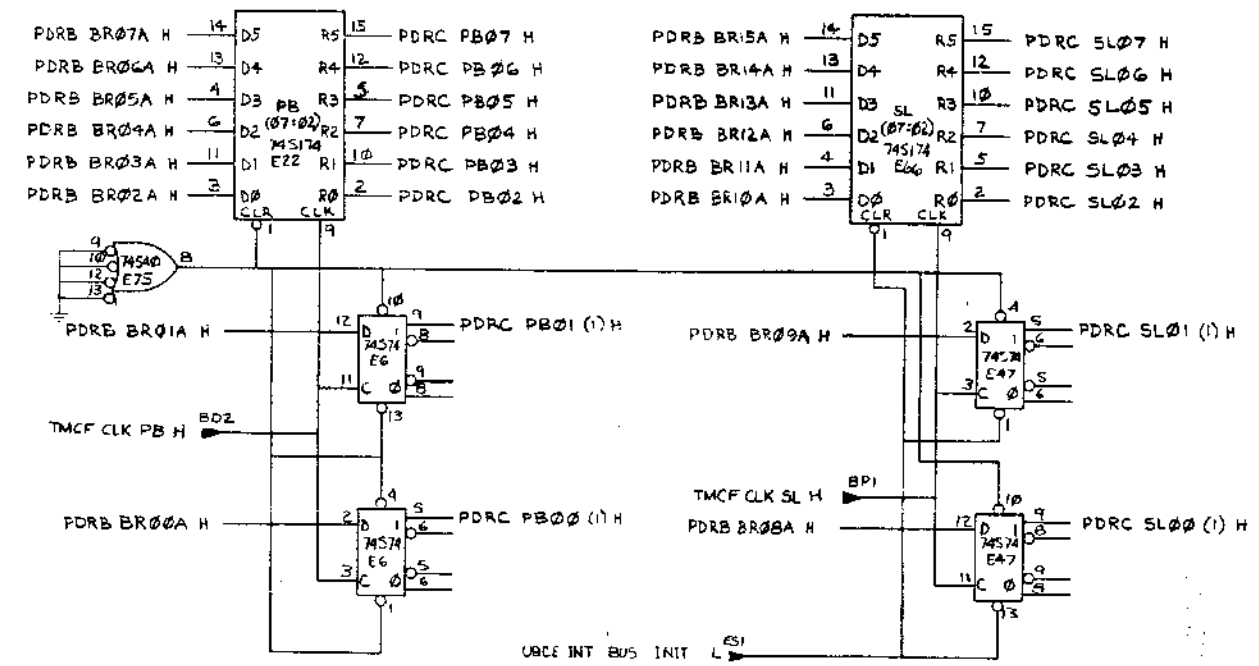
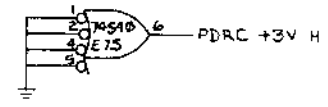


BUS REGISTER A; LIGHT REGISTER SLOT 10

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XX - .005	±0°30'	PROCESSOR DATA & UNIBUS REGS (PDRB)		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY.	SIZE CODE	NUMBER
FINISH		SCALE	DCS M8134-0-1	REV E
		SHEET 3 OF 9	DIST	

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REV	NO
CHG	NO
REV	NO
CHG	NO

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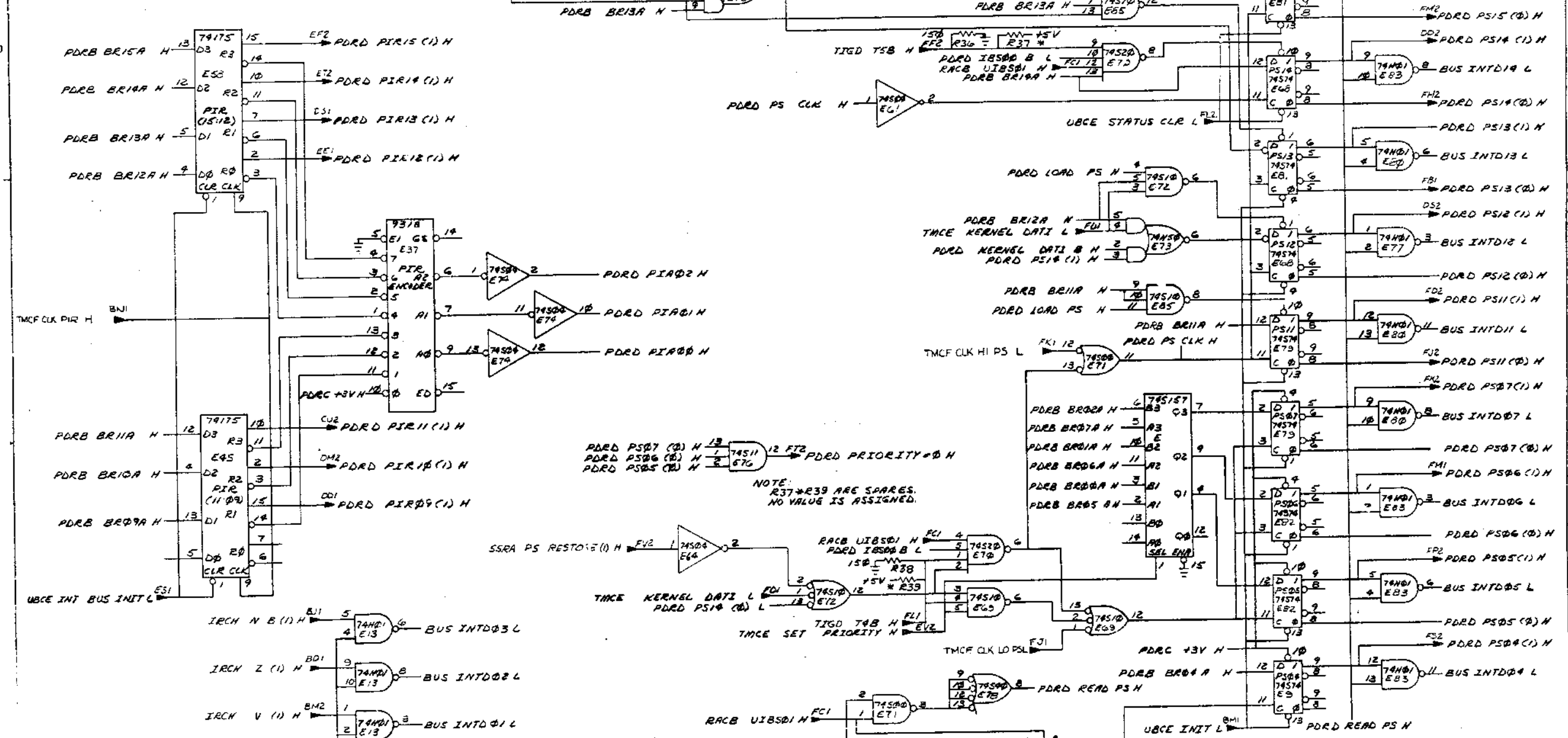
PROGRAM BREAK & STACK LIMIT REGISTERS SLOT 10

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DATE	DATE	digital EQUIPMENT CORPORATION	
TOLERANCES	11-72	7-75	MAYFIELD, MASSACHUSETTS	
DECIMALS	DATE	DATE	TITLE	
ANGLES	11-72	7-75	PROCESSOR DATA & UNIBUS REGS	
XXX - .005	DATE	DATE	TITLE	
XX - .02	11-72	7-75	PROCESSOR DATA & UNIBUS REGS	
X - .1	DATE	DATE	TITLE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	11-72	7-75	PROCESSOR DATA & UNIBUS REGS	
MATERIAL	NEXT HIGHER ASSY.			
FINISH	SCALE			
	SHEET 4 OF 9			
	DIST			
	SIZE CODE NUMBER (PDRC) REV			
	DCS M8134-01 E			

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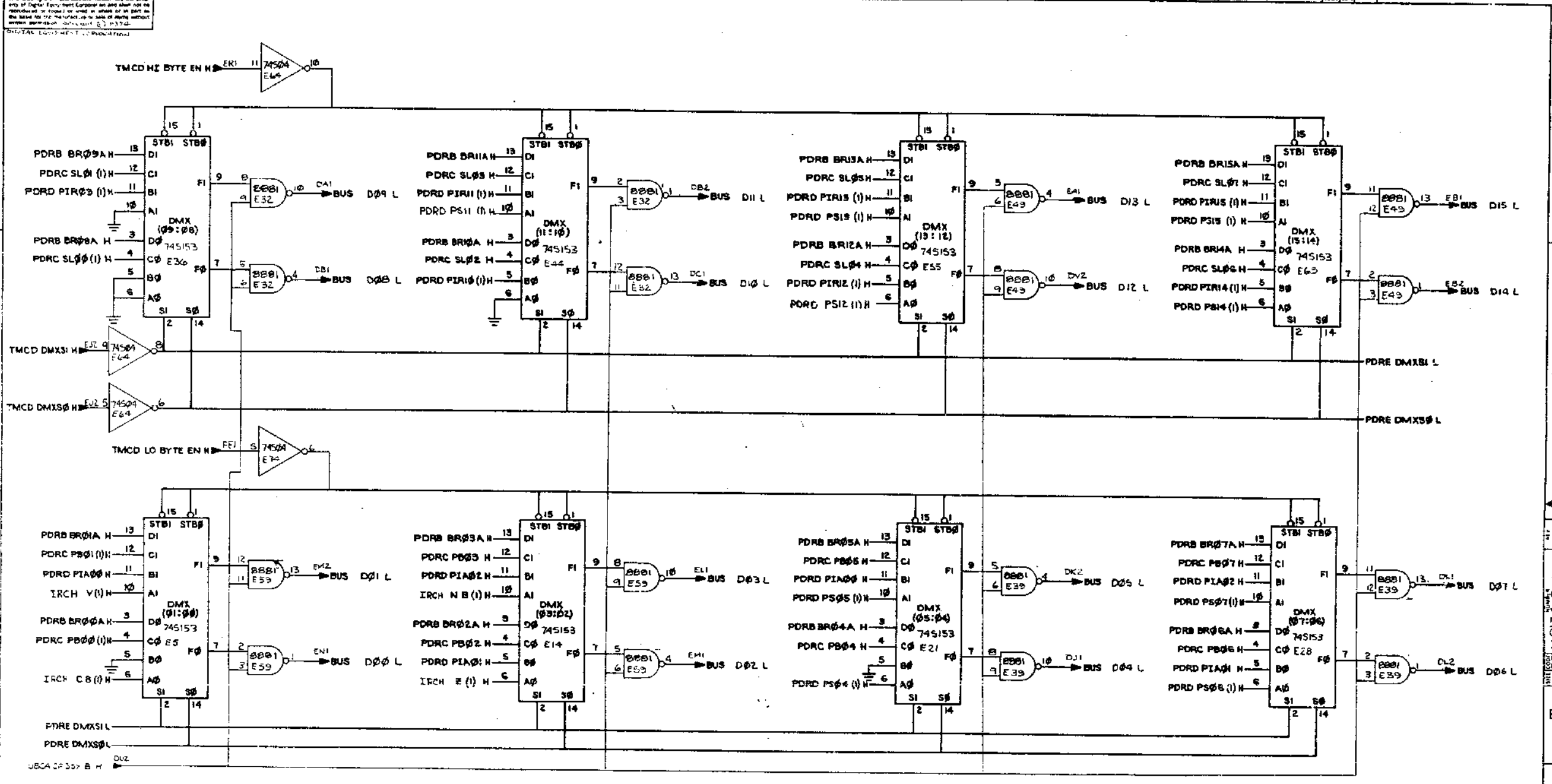
DIGITAL EQUIPMENT CORPORATION



NOTE:
R37-R39 ARE SPARES.
NO VALUE IS ASSIGNED.

FIRST USED ON OPTION MODEL:		QTY	DESCRIPTION	PART NO	ITEM NO
11/70					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		PARTS LIST			
DECIMALS	ANGLES	DATE	DIGITAL EQUIPMENT CORPORATION MILITARY DIVISION ROSLINDALE, MASSACHUSETTS 01926		
XXX - 006	10' 30"	DATE	TITLE		
A - 1		DATE	PROCESSOR DATA & UNIBUS REGS		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	MATERIAL		
		DATE	NEXT HIGHER ASSY		
FINISH		DATE	SIZE CODE		
		DATE	NUMBER		
		DATE	REV		
		DATE	SCALE		
		DATE	SHEET		
		DATE	DIST		

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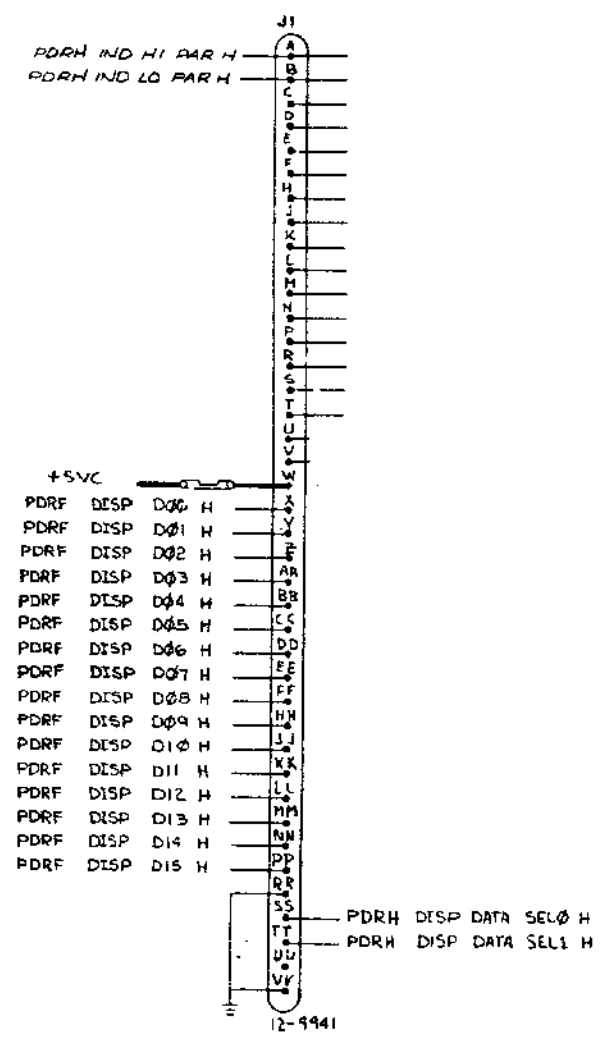
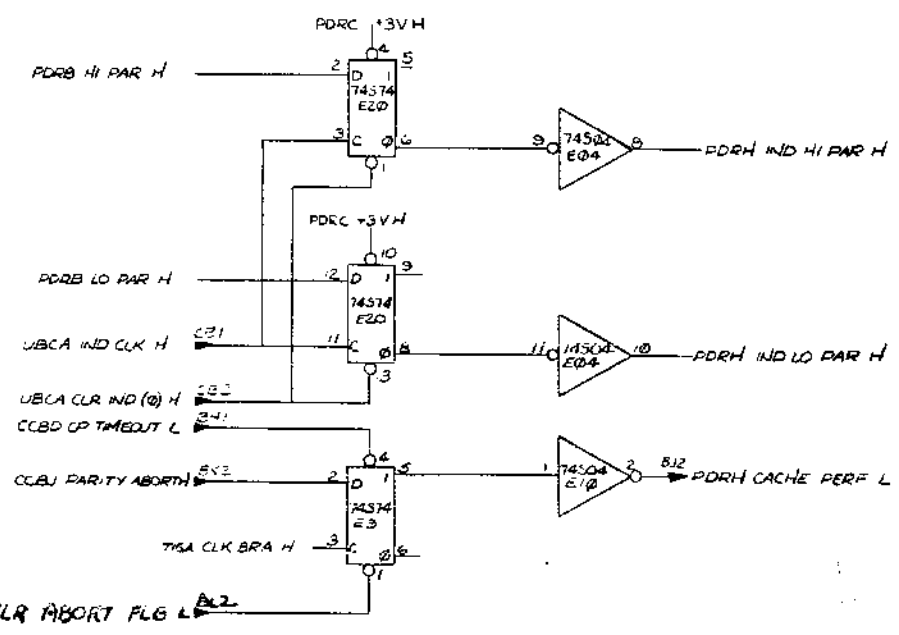
DMX	SI	S0	OUTPUT
L	L		STATUS
N	L		PIR; PIA
N	L		SL; PB
H	H		BR

UNIBUS DATA MULTIPLEXER SLOT10

FIRST USED ON OPTION/MODEL 11/70	QTY	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DATE <i>11-2-70</i>	digital EQUIPMENT CORPORATION		
DECIMALS	DATE <i>7-9-70</i>			
ANGLES	DATE <i>7-9-70</i>	TITLE PROCESSOR DATA & UNIBUS REGS		
XXX + 00 XX + 02 X - 1	DATE <i>7-9-70</i>			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE <i>7-9-70</i>	(PORE) SIZE CODE NUMBER REV DCSM8134-0-1 E		
MATERIAL ++	NEXT HIGHER ASSY			
FINISH ++	SCALE 1:1	SHEET 6 OF 9		

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DCS M8134-0-1



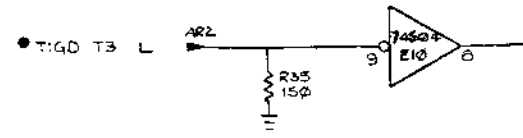
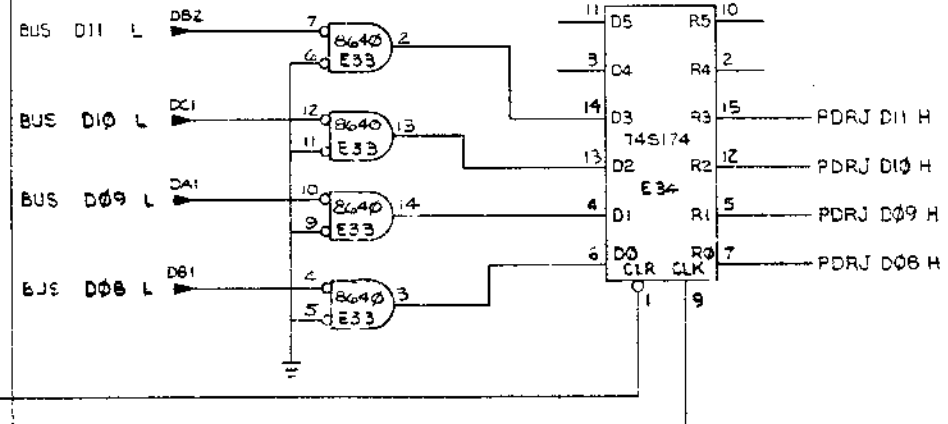
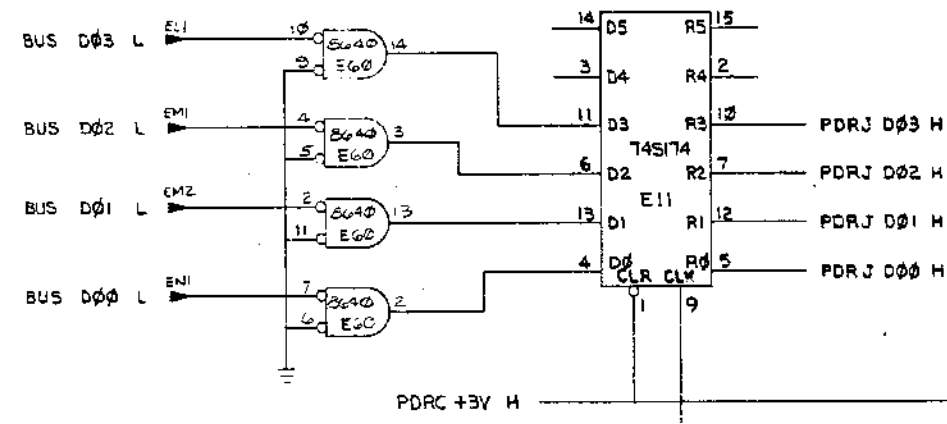
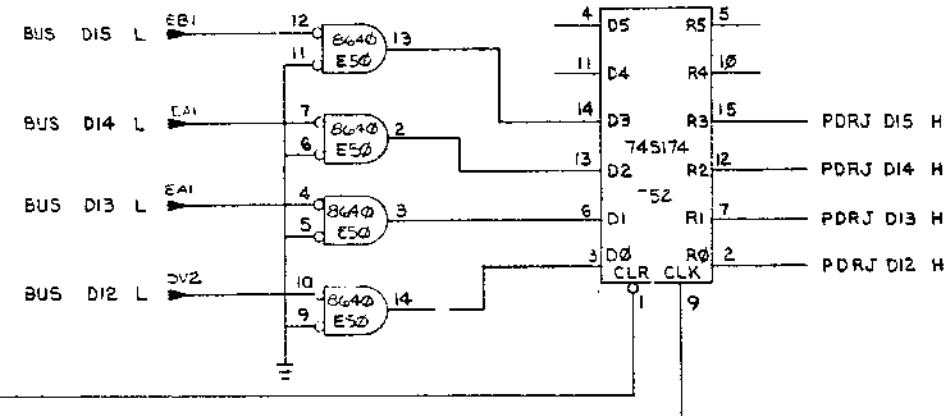
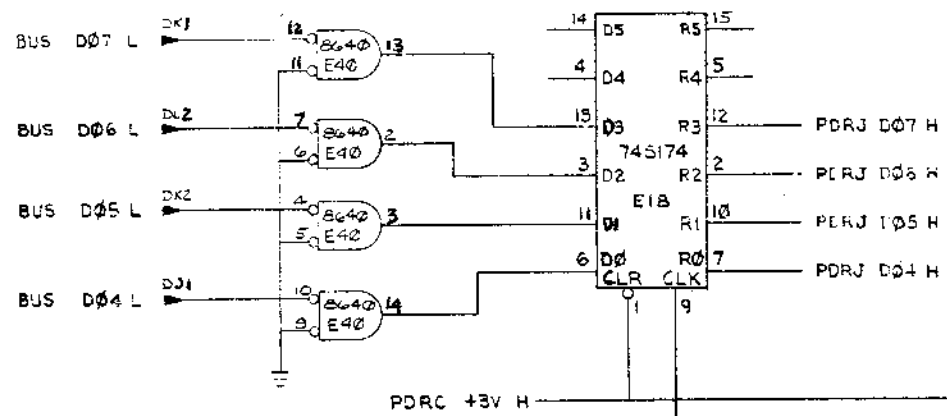
PDR/KNL INTERFACE
 SIGNALS TO CONSOLE SIGNALS FROM CONSOLE

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES		DATE 11/77		PARTS LIST	
TOLERANCES		DATE		DIGITAL EQUIPMENT CORPORATION	
DECIMALS	ANGLES	DATE	TITLE		
.XXX ± .005	10° 30'	DATE	PROCESSOR DATA		
.X ± .01		DATE	& UNIBUS REGS		
X ± .1		DATE			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE			
MATERIAL		NEXT HIGHER ASSY.		(PDRH)	
FINISH		SCALE	SIZE CODE	NUMBER	REV.
		SHEET 8 OF 9	DCS M8134-0-1		E
			DIST		

DCS M8134-0-1

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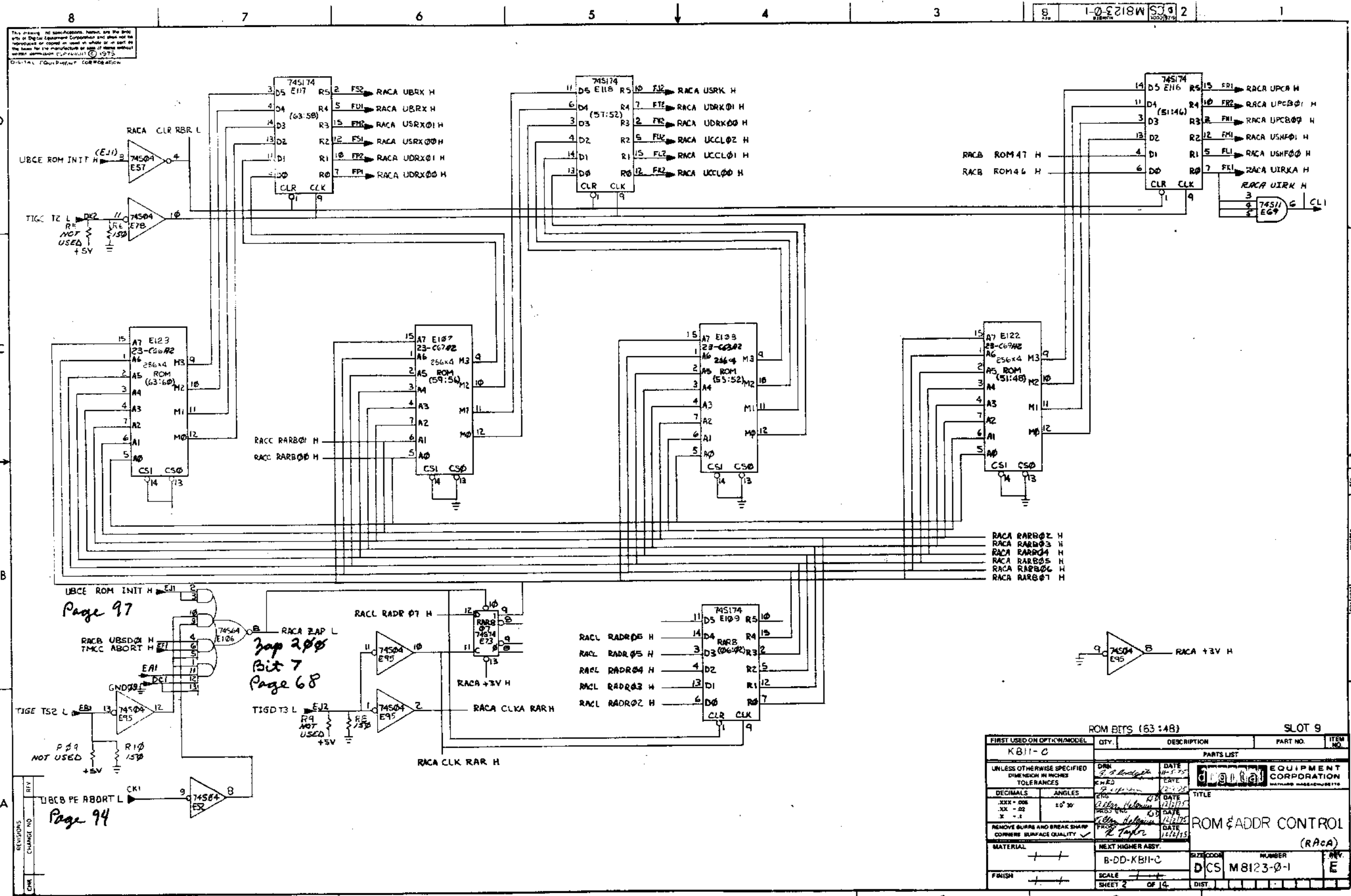
DCS M8134-0-1 2



BUS BUFFER REG SLOT 10

FIRST USED OR OPTION MOD.	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES	DATE	DATE	digital EQUIPMENT CORPORATION	
TOLERANCES	DATE	DATE		
DECIMALS ANGLES	DATE	DATE		
xxx - .006 .030	DATE	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS, REFACE DUAL TV	DATE	DATE		
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	SCALE	SHEET 9 OF 9	DCS M8134-0-1	REV. E

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DIGITAL EQUIPMENT CORPORATION

D
C
B
A

REV. NO. CHANGE NO. DATE

Page 97

RACB UBSD01 H
TMCB ABORT H

EAI
DCI

TIGC T2 L
E57

R10
150

UBCB PE ABORT L
CK1

Page 94

RACA ZAP L

Page 68

TIGD T3 L
E95

R9
150

RACL RADR07 H

RACL RADR05 H
RACL RADR05 H
RACL RADR04 H
RACL RADR03 H
RACL RADR02 H

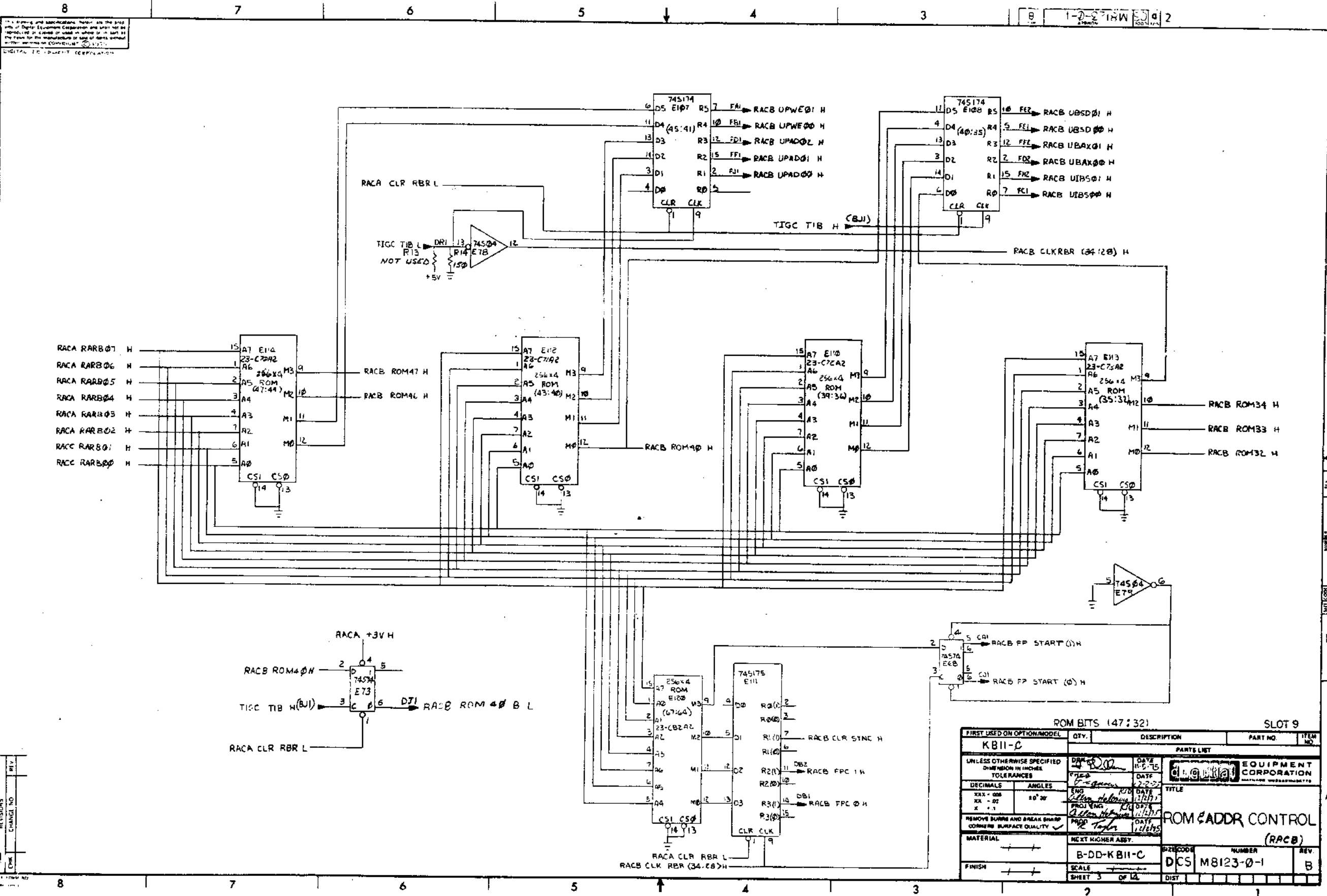
RACA +3V H

RACA CLKA RAR H

RACA CLK RAR H

FIRST USED ON OPT./M/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-C			ROM BITS (63:48)	SLOT 9	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE	EQUIPMENT CORPORATION		
DECIMALS	ANGLES	DATE	TITLE		
.XXX - .008	10° 30'	DATE	ROM & ADDR CONTROL (RACA)		
.XX - .02		DATE	MATERIAL		
.X - .1		DATE	NEXT HIGHER ASBY.		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	B-DD-KB11-C		
MATERIAL		DATE	FINISH		
++		DATE	SCALE		
++		DATE	SHEET 2 OF 14		
PARTS LIST		SIZE CODE	NUMBER	REV.	
DCS M8123-0-1		E			

DCS M8123-0-1



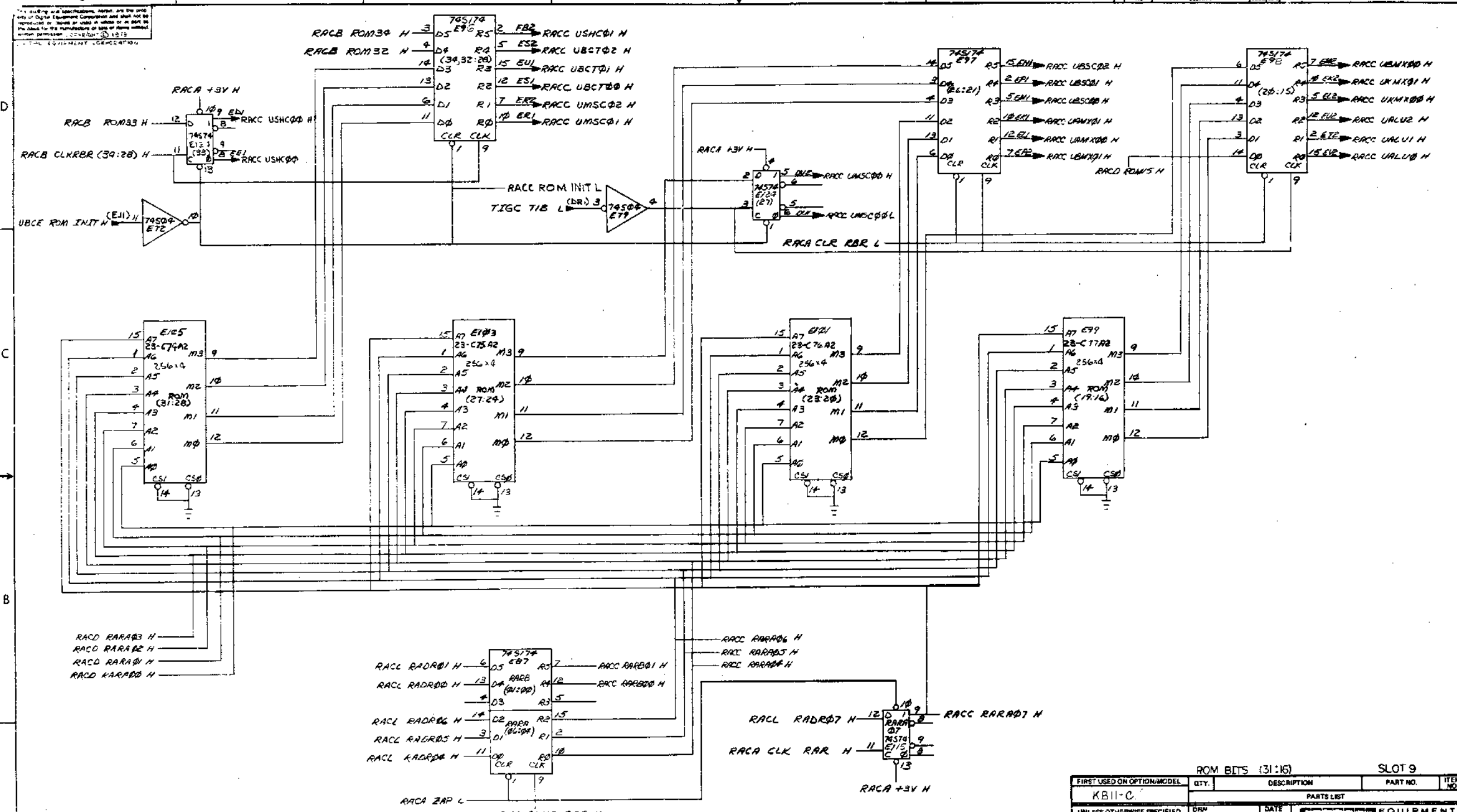
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DIGITAL EQUIPMENT CORPORATION

1-2-2 18W 2

REV. NO.	1
CHG. NO.	
DATE	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
ROM BITS (47:32) SLOT 9				
KB11-C				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XX - .02	10° 30'	EQUIPMENT CORPORATION		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
FINISH				
B-DD-KB11-C		SIZE CODE		NUMBER
SCALE		DCS M8123-0-1		REV. B
SHEET 3 OF 14		DIST		

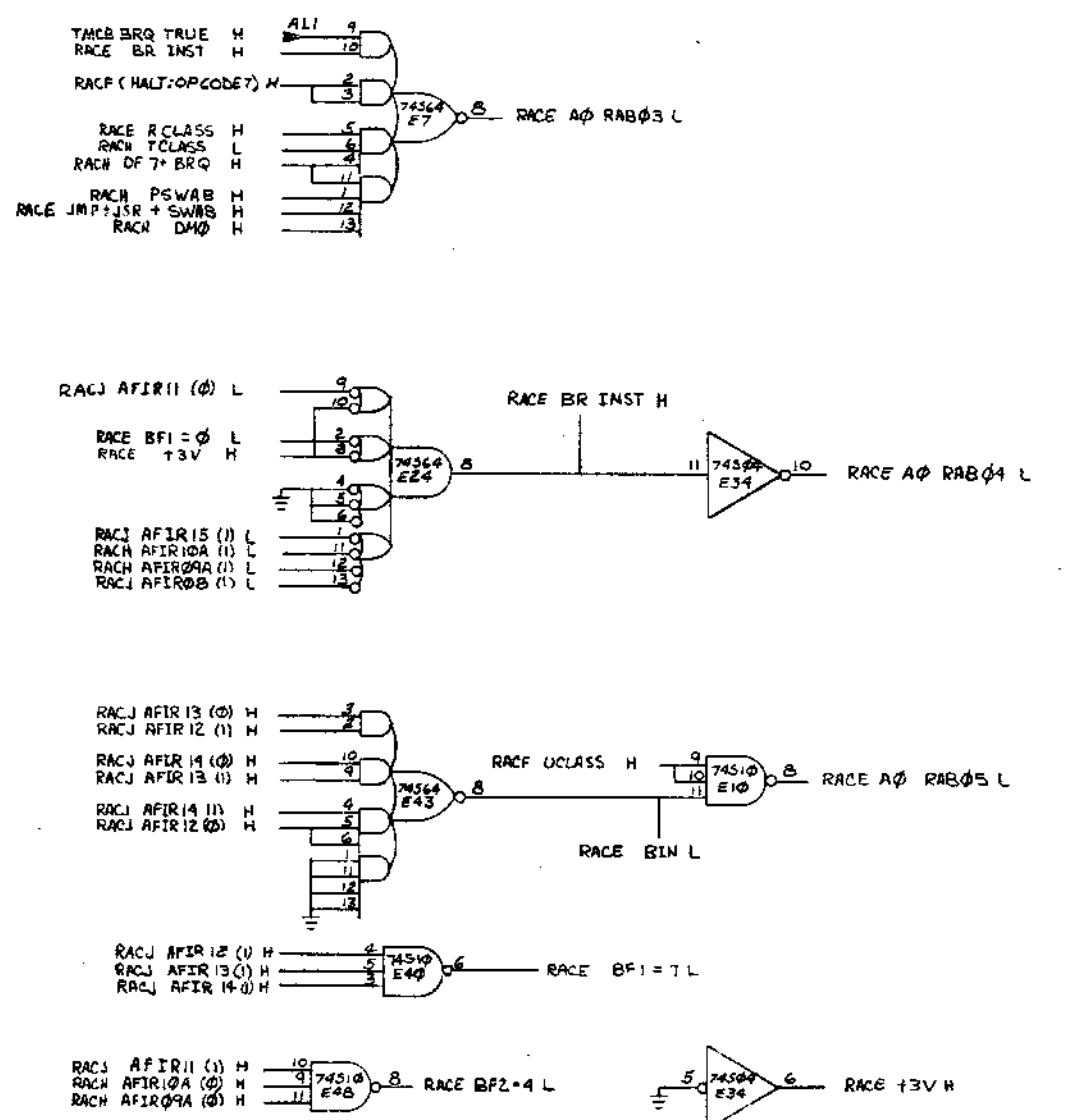
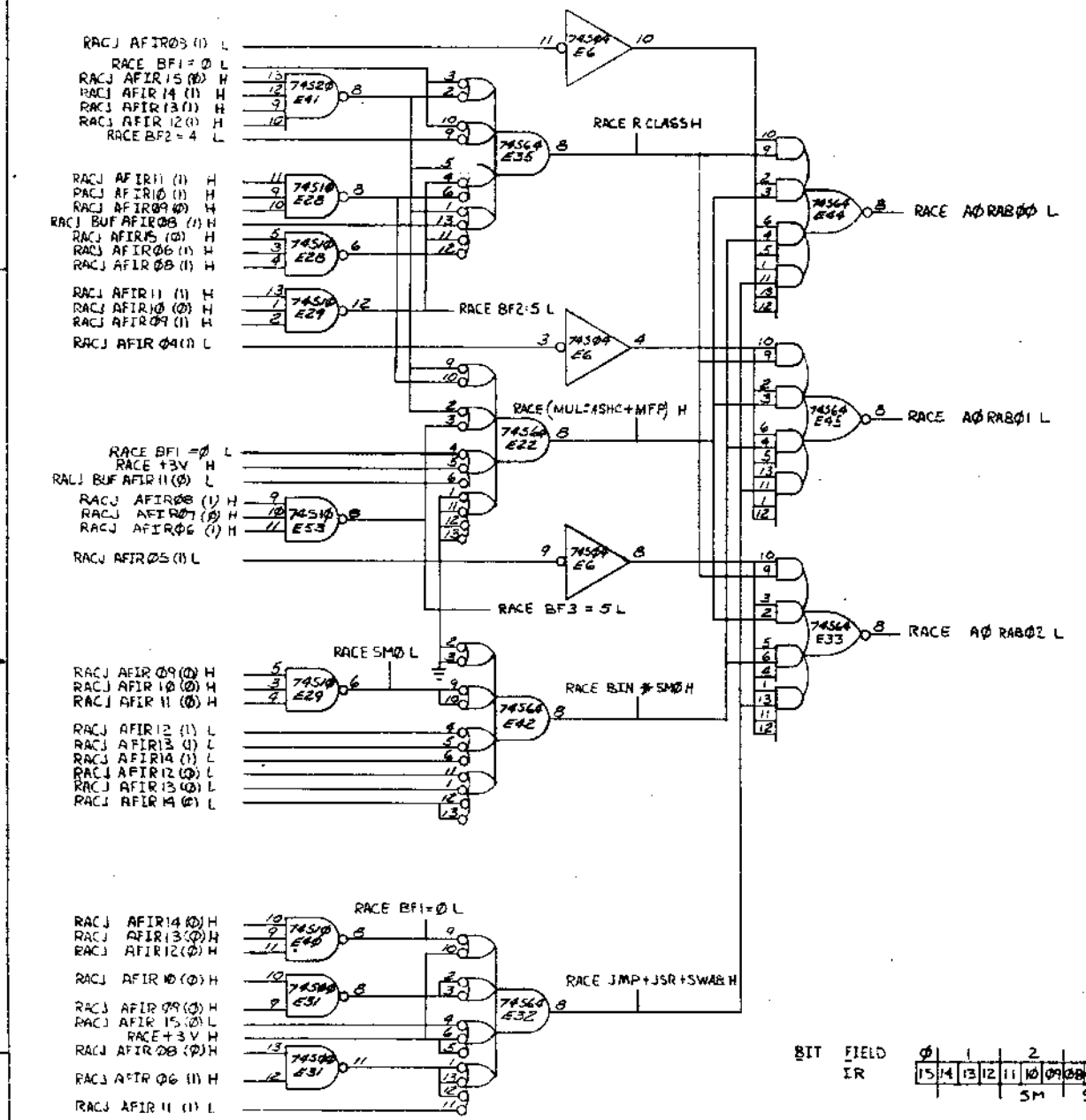


REV	DATE

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-C					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES		DATE	EQUIPMENT CORPORATION		
TOLERANCES		DATE	DATE		
DECIMALS	ANGLES	DATE	TITLE		
.XXX - .008	10° 30'	DATE	ROM ADDR. CONTROL		
.XX - .02		DATE	DATE		
X - .1		DATE	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	DATE		
MATERIAL		NEXT HIGHER ASSY.		SIZE CODE	NUMBER
+		B-DD-KB11-C		DCS	M8123-0-1
FINISH		SCALE	SHEET 4 OF 14		DIST.

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 DCS M8123-0-1



BIT FIELD IR

0	1	2	3	4	5
15	14	13	12	11	10
09	08	07	06	05	04
03	02	01	00		
		SM	SF	DM	DF

S = source
 M = mode
 F = field
 D = destination

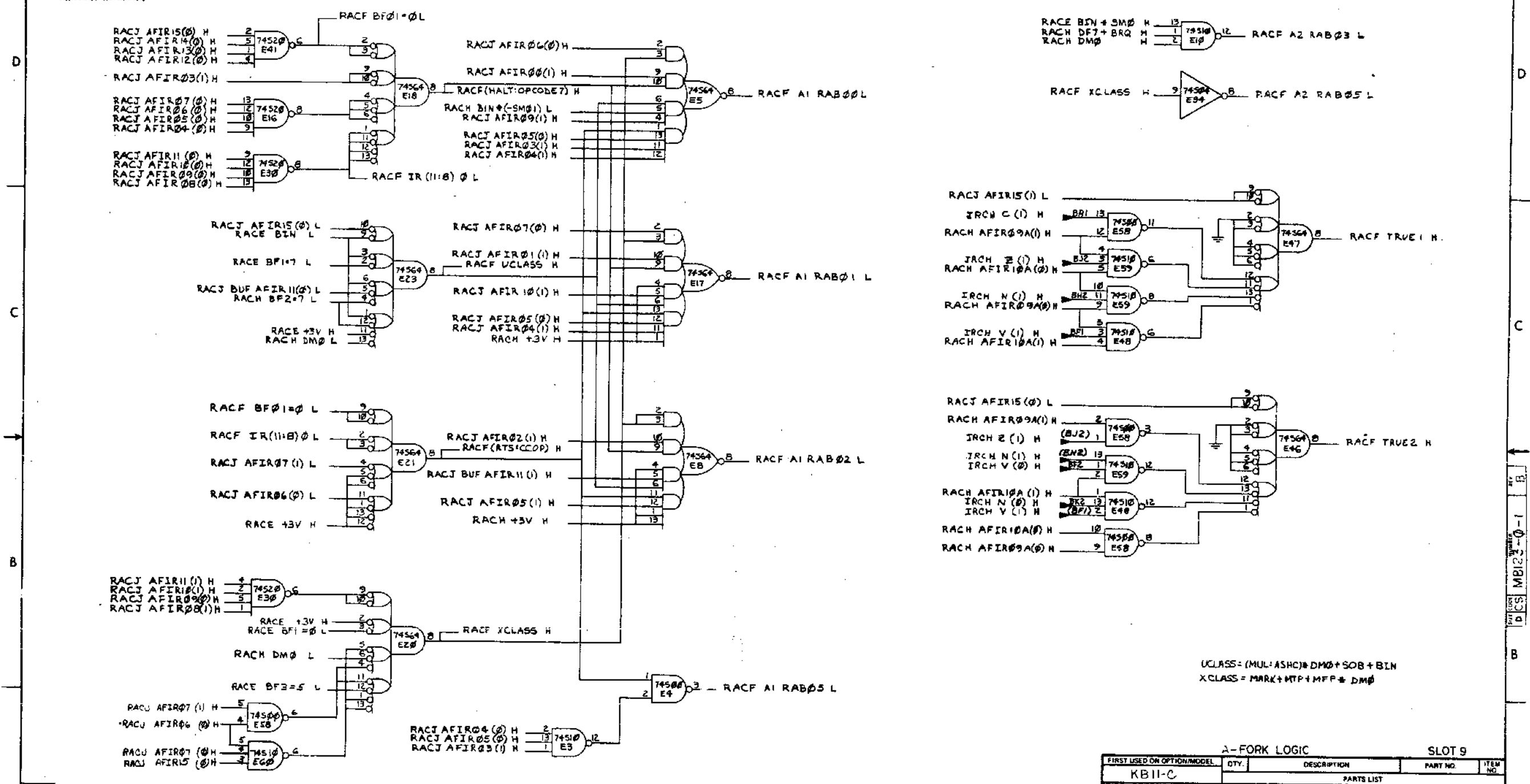
NOTE: UCLASS = (MUL + RSHC) * DM0 + SOB + BIN
 RCLASS = (CLR + B + ASL + B) + MFP + SXT + XOR
 TCLASS EXCLUDES [MFP + NEG + B + (-DM0)] FROM RCLASS WHEN COMBINED

A-FORK LOGIC SLOT 9

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-C				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
XXX = .005	XX = .02	ROM ADDR CONTROL (RACE)		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		MATERIAL		
FINISH		NEXT HIGHER ASSY.		
		SCALE		
		SHEET 6 OF 14		
		DIST		

DCS M8123-0-1

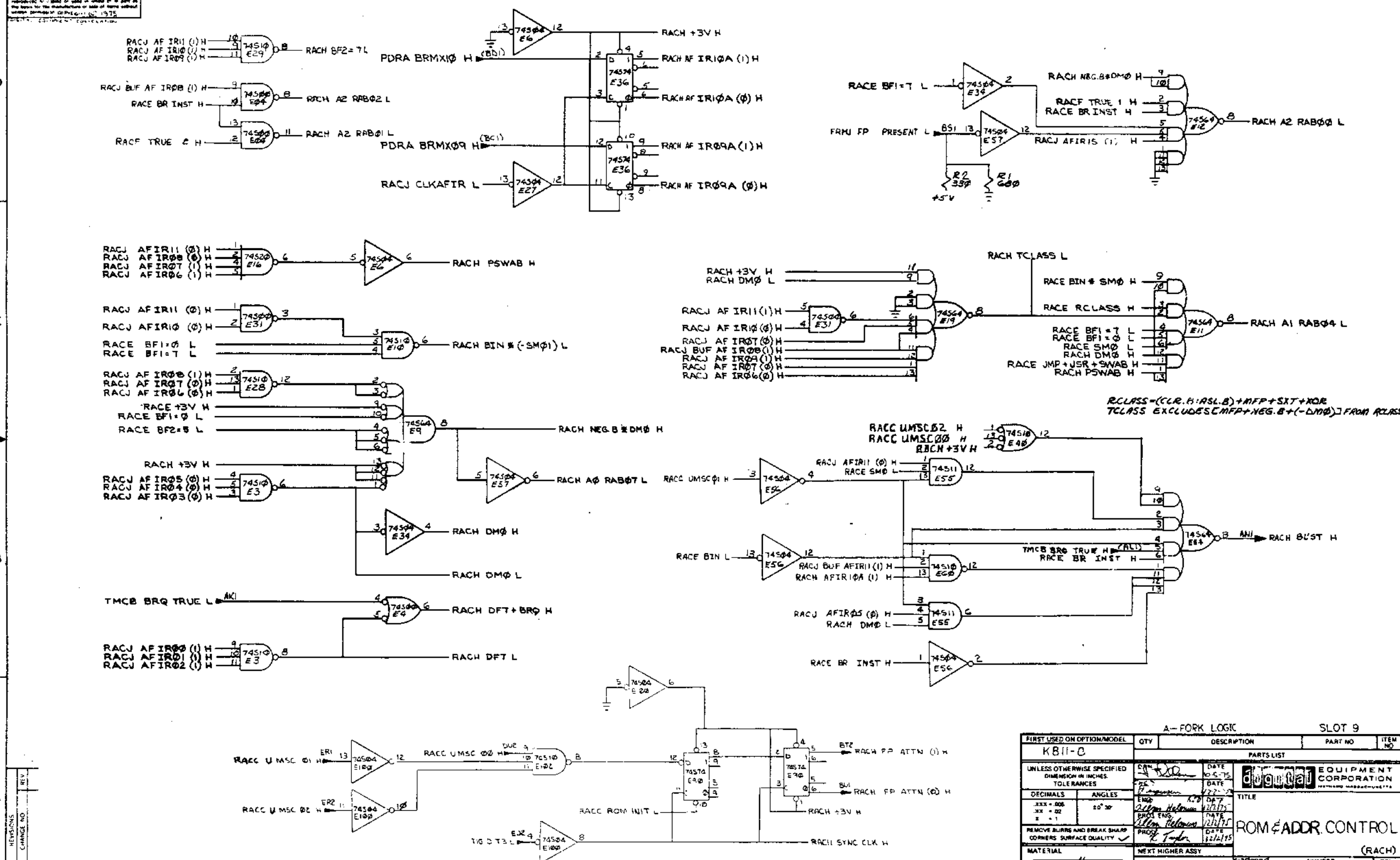
THIS DRAWING IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE BY THE DATA TAGS. THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE BY THE DATA TAGS. THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE BY THE DATA TAGS.



UCLASS = (MUL + ASHC) * DM0 + SOB + BIN
 XCLASS = MARK + MTP + MFP + DM0

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-C					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE	PARTS LIST		
DECIMALS	ANGLES	DATE	TITLE		
XXX - .008	10' 30"	DATE	ROM & ADDR CONTROL		
XX - .015		DATE	(RACE)		
X - .030		DATE	REV. B		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	SCALE		
MATERIAL		DATE	D/GS MB123-0-1		
NEXT HIGHER ASSY.		DATE	REV. B		
FINISH		DATE	D/GS MB123-0-1		

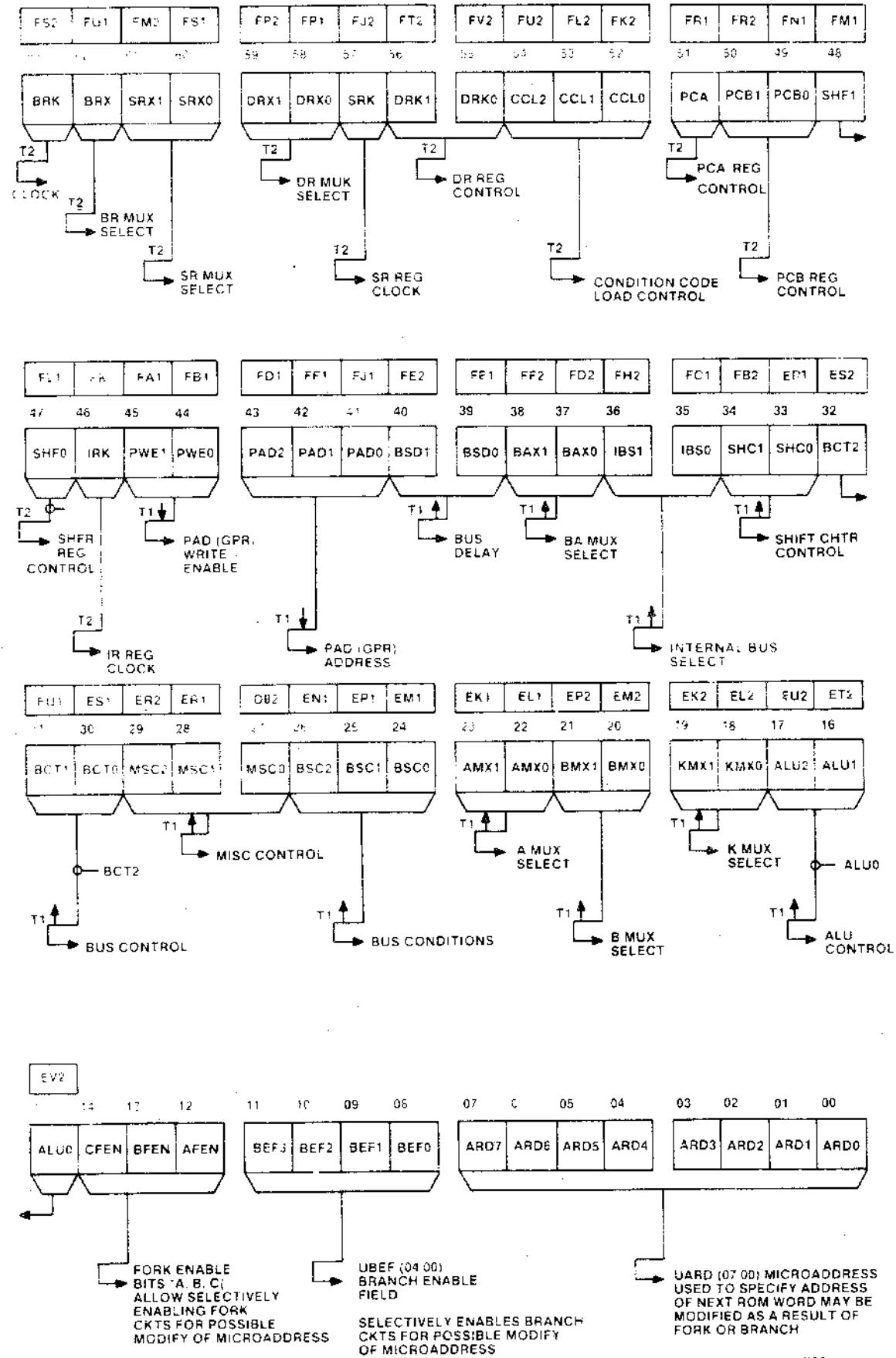
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$RCLASS = (CLR.H + ASL.B) + MFP + SIT + XOR$
 $TCLASS = EXCLUDES C.MFP + NEG.B + (-DM0) FROM RCLASS$

FIRST USED ON OPTION/MODEL		QTY	DESCRIPTION	PART NO	ITEM NO
KB11-C					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES		DATE	DATE	EQUIPMENT CORPORATION	
DECIMALS	ANGLES	10-5-75	12-2-75	ROM & ADDR. CONTROL	
.XXX ± .008	10° ± 30'	DESIGNED BY	DATE	TITLE	
.XX ± .02		ILLUSTRATED BY	DATE	ROM & ADDR. CONTROL (RACH)	
.X ± .1		CHECKED BY	DATE	SIZE CODE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		APPROVED BY	DATE	NUMBER	
MATERIAL	NEXT HIGHER ASSY			DCS M8123-0-1	
FINISH	SCALE			REV	
	SHEET 5 OF 14			B	

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ROM WORD FIELDS

TRP-731A-41A

MICROPROGRAM BIT USAGE

Bit Positions	Contents	Clocked At
RACA		
63	bus register clock (UBRK)	T2
62	bus register multiplexer (UBRX)	T2
61-60	source register MUX (USRX)	T2
59-58	destination register MUX (UDRX)	T2
57	source register clock (USRK)	T2
56-55	destination register clock (UDRK)	T2
54-52	condition-code load (UCCL)	T2
51	program counter A CLK (UPCA)	T2
50-49	program counter B CLK (UPCB)	T2
48-47	shifter control (USHF)	T2
46	instruction register CLK (UIRK)	T2
RACB		
45-44	pad write-enable (UPWE)	T1 + 15 ns
43-41	scratchpad address (UPAD)	T1 + 15 ns
40-39	bus delay (UBSD)	T1
38-37	bus address multiplexer (UBAX)	T1
36-35	internal bus (UIBS)	T1
RACC		
34-33	shift counter (USHC)	T1
32-30	bus control (UBCT)	T1
29-27	miscellaneous control (UMSC)	T1
26-24	bus conditions (UBSC)	T1
23-22	A multiplexer (UAMX)	T1
21-20	B multiplexer (UBMX)	T1
19-18	constant multiplexers (UKMX)	T1
17-15	arithmetic logic unit cont (UALU)	T1
RACD		
14	fork C enable (UCFEN)	AVAILABLE IMMEDIATELY
13	fork B enable (UBFEN)	
12	fork A enable (UAFEN)	
11-08	branch-enable (UBEF)	
07-00	microprogram address (UADR)	

ROW WORD FIELD AND CONTROL OF DATA FLOW

Microword bits are sent to modules in the CPU to act as control signals.

- Bits may also be used in combinational logic that generates control signals for all CPU operations.

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BRK BRX SRX DRX SRK DRK CCL PCA PCB SHF IRK PWE PAD BSD BAX IBS SHC BCT MSC BSC ANX BRX KRX ALU FEN BEN UAD FPS CLS FPC PGE

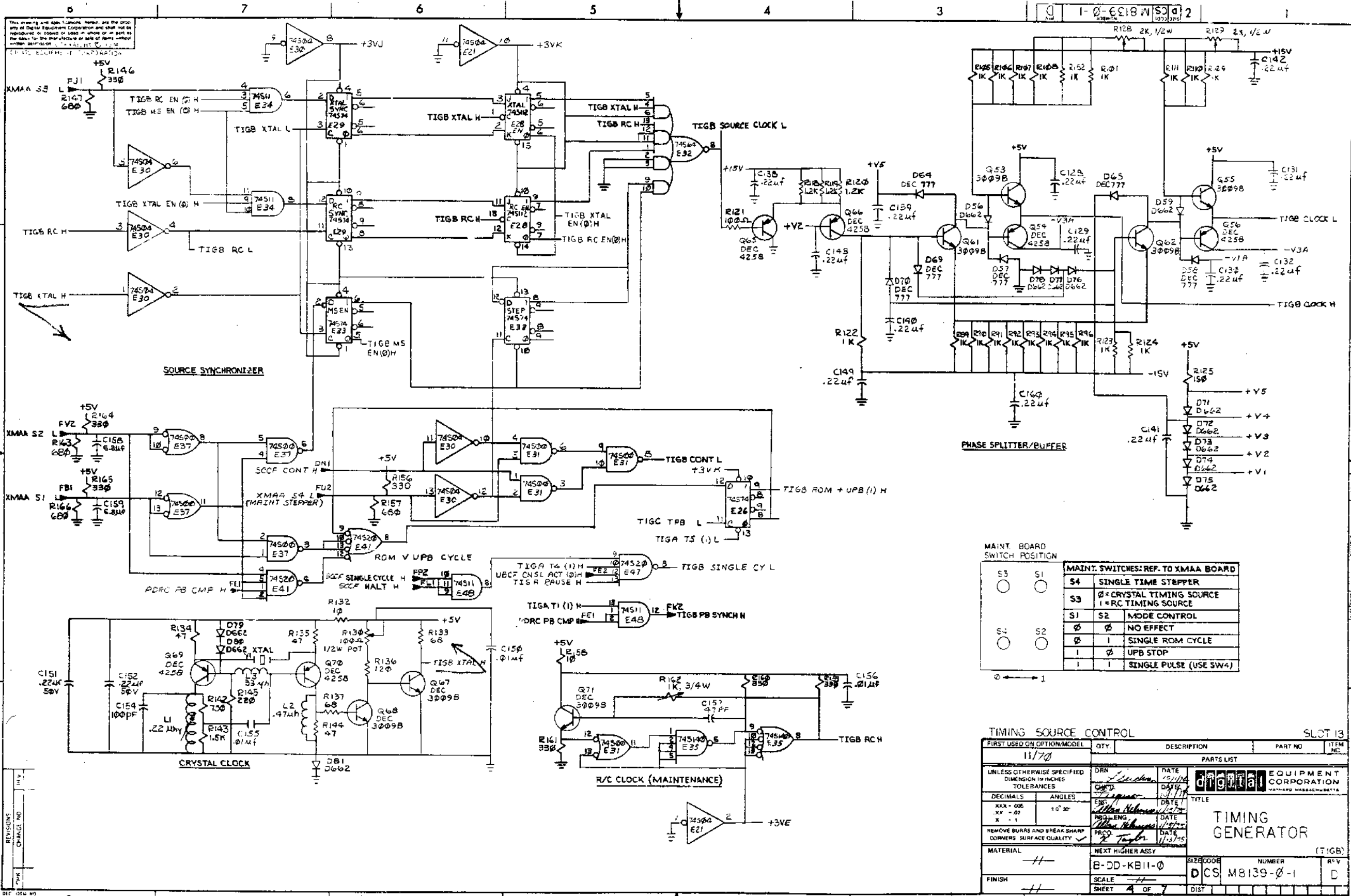
Table of binary data for ROM & ADDR. CONTROL, rows 000-053. Columns include BRK, BRX, SRX, DRX, SRK, DRK, CCL, PCA, PCB, SHF, IRK, PWE, PAD, BSD, BAX, IBS, SHC, BCT, MSC, BSC, ANX, BRX, KRX, ALU, FEN, BEN, UAD, FPS, CLS, FPC, PGE.

BRK BRX SRX DRX SRK DRK CCL PCA PCB SHF IRK PWE PAD BSD BAX IBS SHC BCT MSC BSC ANX BRX KRX ALU FEN BEN UAD FPS CLS FPC PGE

Table of binary data for ROM & ADDR. CONTROL, rows 054-127. Columns include BRK, BRX, SRX, DRX, SRK, DRK, CCL, PCA, PCB, SHF, IRK, PWE, PAD, BSD, BAX, IBS, SHC, BCT, MSC, BSC, ANX, BRX, KRX, ALU, FEN, BEN, UAD, FPS, CLS, FPC, PGE.

REVISIONS table with columns: CHK, CHANGE NO., REV.

Form with fields: TITLE (ROM & ADDR. CONTROL), SIZE CODE (DCS), NUMBER (M8123-0-1), SHEET (12 OF 14), DIST.



MAINT. BOARD SWITCH POSITION

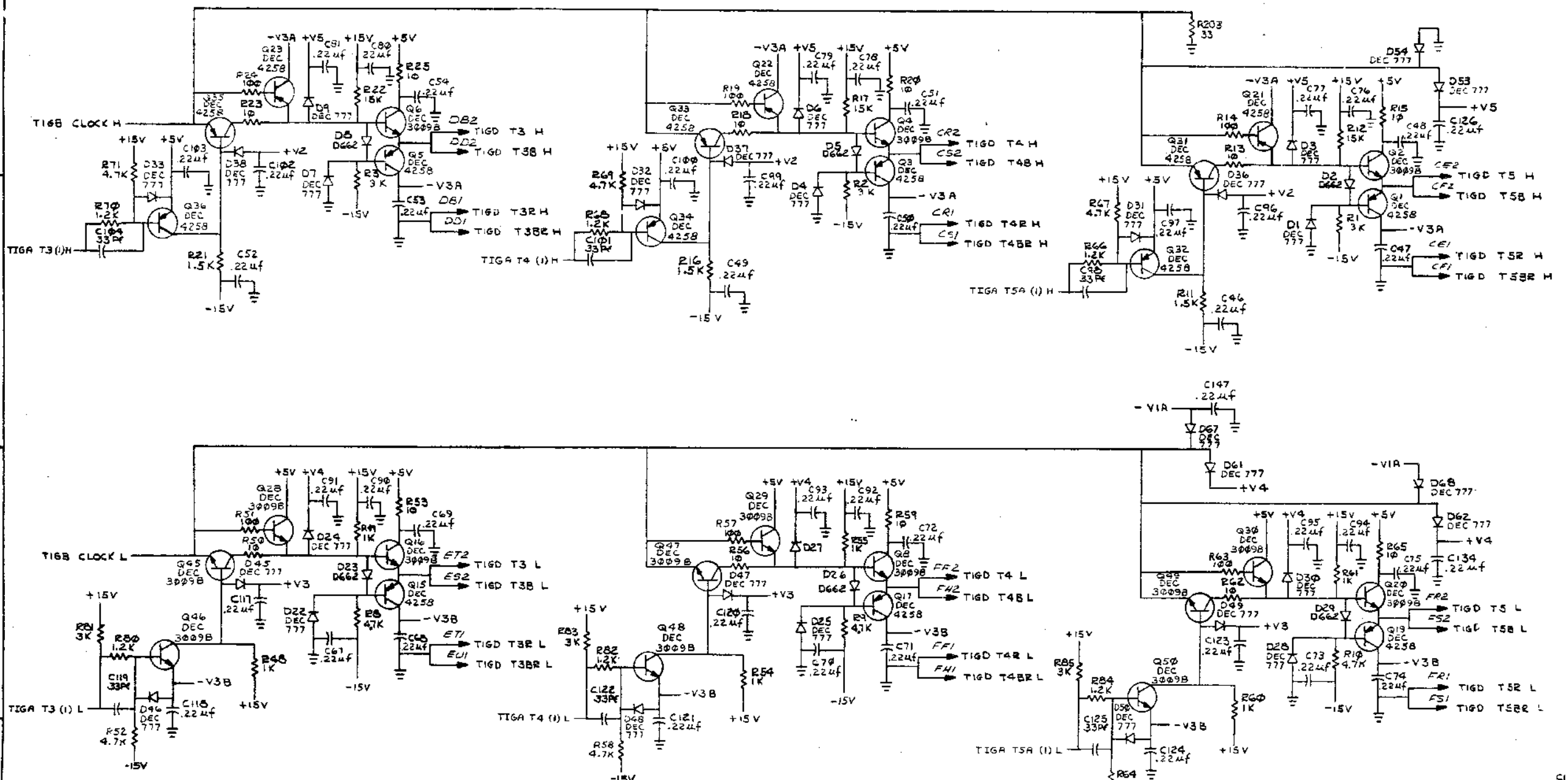
S3	S1	MAIN. SWITCHES: REF. TO XMAA BOARD		
<input type="radio"/>	<input type="radio"/>	S4	SINGLE TIME STEPPER	
<input type="radio"/>	<input type="radio"/>	S3	0 = CRYSTAL TIMING SOURCE 1 = RC TIMING SOURCE	
<input type="radio"/>	<input type="radio"/>	S1	S2	MODE CONTROL
<input type="radio"/>	<input type="radio"/>	0	0	NO EFFECT
<input type="radio"/>	<input type="radio"/>	1	1	SINGLE ROM CYCLE
<input type="radio"/>	<input type="radio"/>	1	0	UPB STOP
<input type="radio"/>	<input type="radio"/>	1	1	SINGLE PULSE (USE SW4)

TIMING SOURCE CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	TITLE		
.XXX - .006	10° 30'	TIMING GENERATOR		
.XX - .01		DATE		
X - 1		DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
NEXT HIGHER ASSY				
FINISH				
SHEET 4 OF 7				
DIST				

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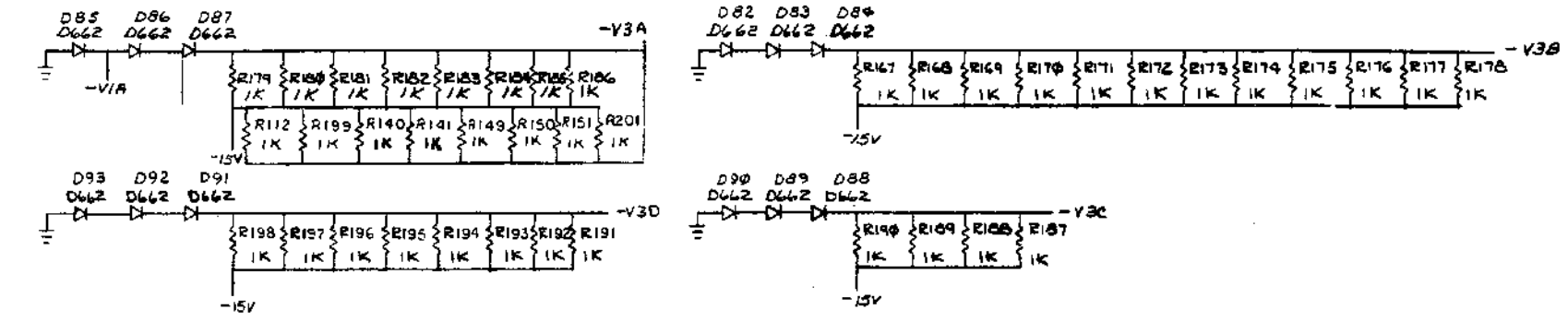
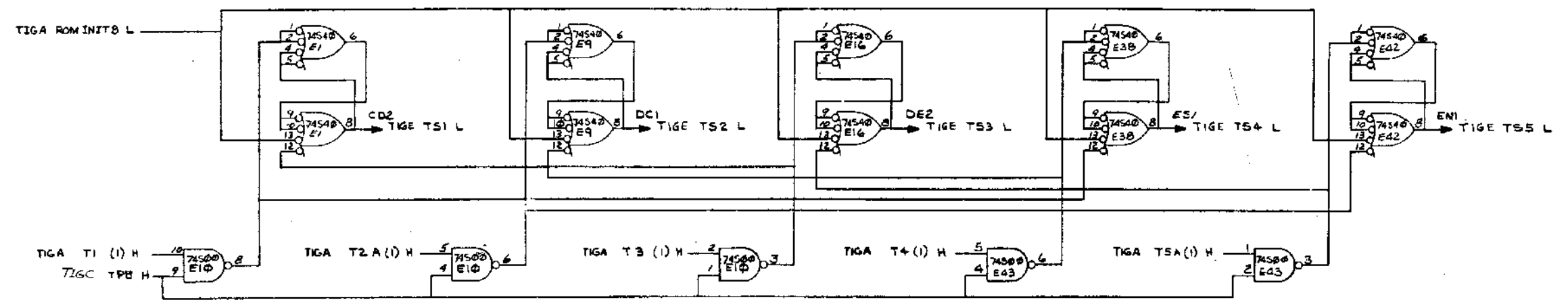
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FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN. <i>Handman</i>	DATE <i>11/70</i>	Digital EQUIPMENT CORPORATION
DECIMALS	ANGLES	CHKD. <i>Handman</i>	DATE <i>11/70</i>	
XXX - 000	10' 30"	ENG. <i>Walter Wilson</i>	DATE <i>11/70</i>	TIMING GENERATOR
XX - 00		DRWR. ENGR. <i>Walter Wilson</i>	DATE <i>11/70</i>	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PROD. <i>R Taylor</i>	DATE <i>11/70</i>	
MATERIAL	NEXT HIGHER ASSY	(TIGD)		
FINISH	B-DD-KB11-0	SIZE CODE	NUMBER	REV
	SCALE	DCS	M8139-0-1	D
	SHEET 6 OF 7	DIST		

REV	
CHG	
REV	

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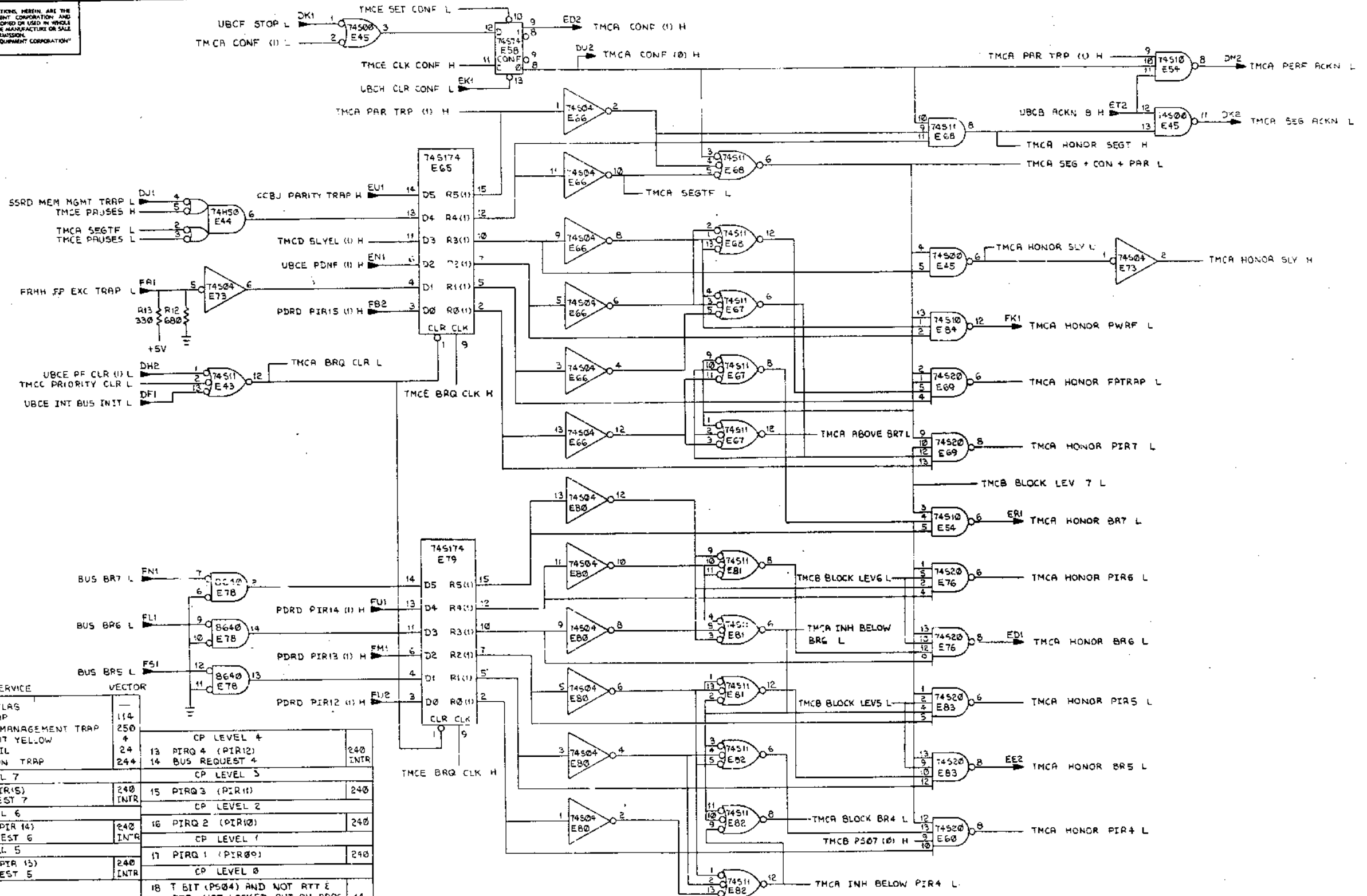


TIMING STATE DRIVERS		SLOT 13	
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
11/70			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DATE	DIGITAL EQUIPMENT CORPORATION	
TOLERANCES	DATE	MILITARY MANUFACTURING	
DECIMALS	DATE	TITLE TIMING GENERATOR (TIGE)	
ANGLES	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	SIZE CODE	
MATERIAL	NEXT HIGHER ASSY.	NUMBER	REV.
FINISH	SCALE	DIGITAL M 8139-0-1	D
	SHEET 7 OF 7	DIST.	

REV. NO.	REV.
1	
2	
3	
4	
5	
6	
7	
8	

DIGITAL EQUIPMENT CORPORATION
M 8139-0-1

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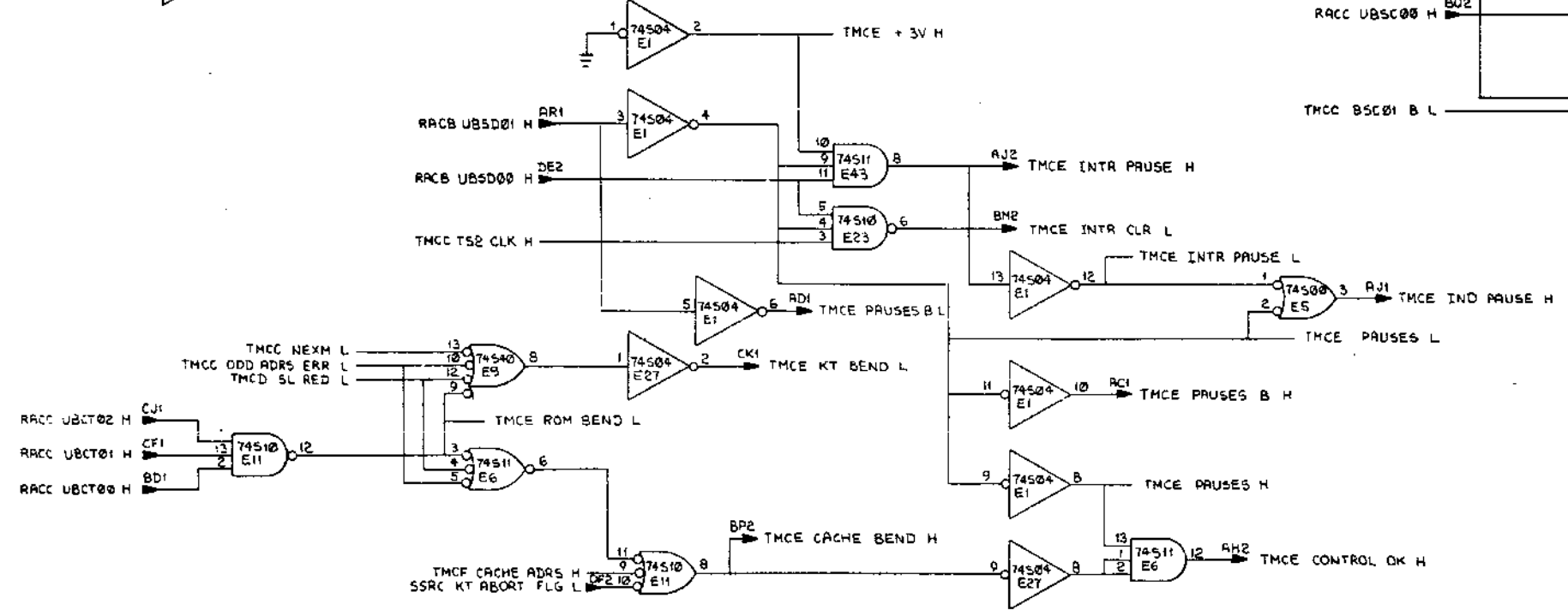
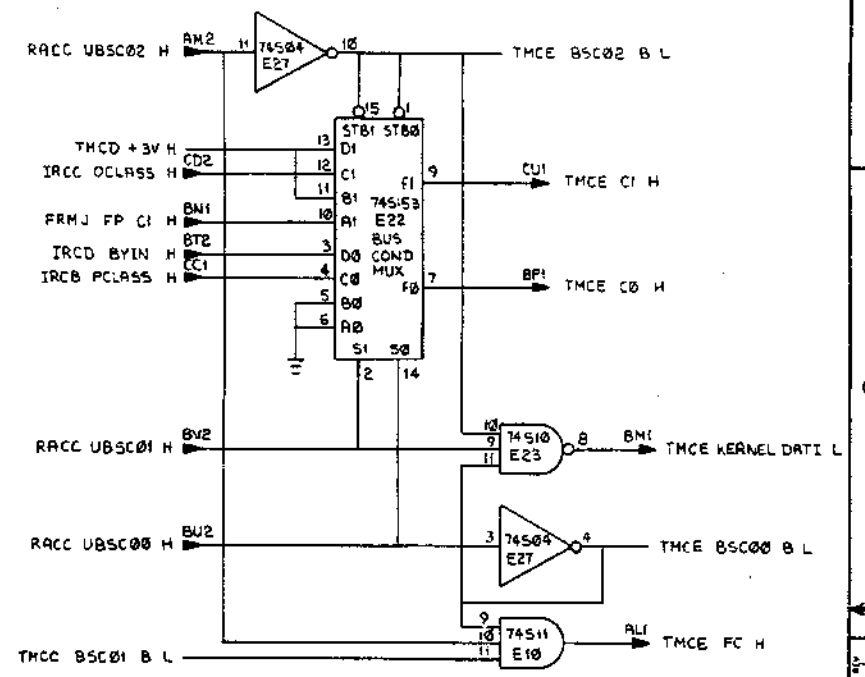
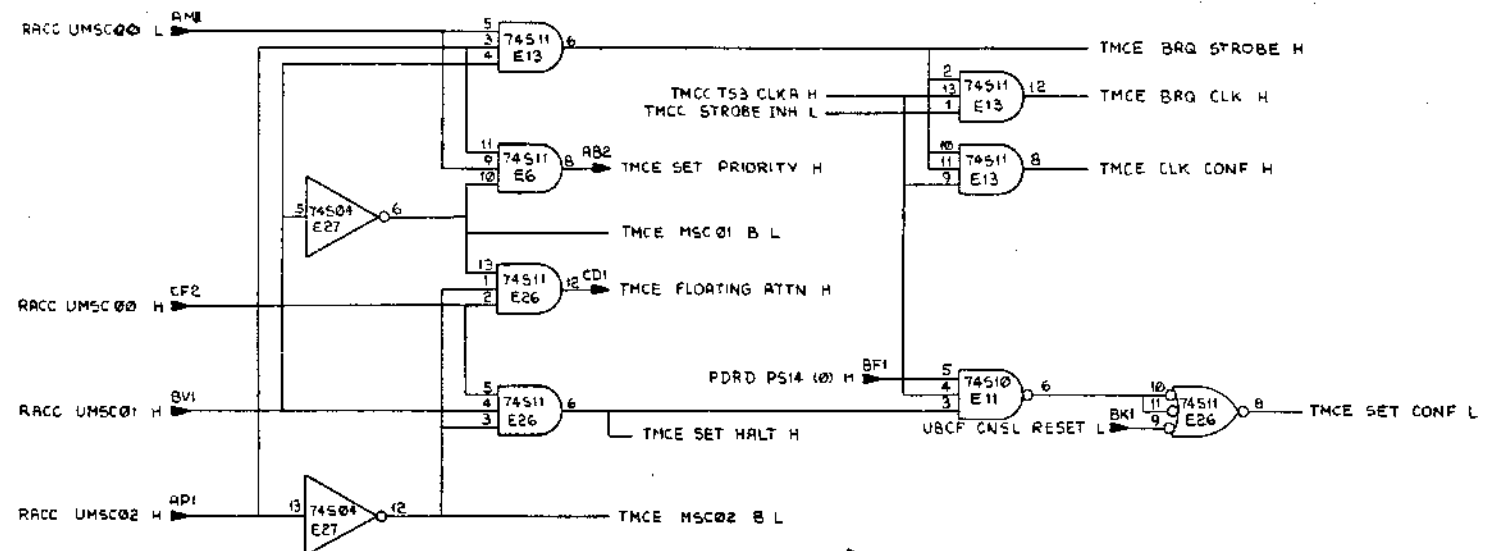
ORDER OF SERVICE	VECTOR	CP LEVEL	INTR
1 CONSOLE FLAG	114		
2 PARITY TRAP	250		
3 SEG MEM MANAGEMENT TRAP	4		
4 STACK LIMIT YELLOW	24		
5 POWER FAIL	24		
6 FP EXCEPTION TRAP	244		
CP LEVEL 7			
7 PIRQ 7 (PIR15)	240	13 PIRQ 4 (PIR12)	240
8 BUS REQUEST 7	INTR	14 BUS REQUEST 4	INTR
CP LEVEL 6			
9 PIRQ 6 (PIR14)	240	15 PIRQ 3 (PIR11)	240
10 BUS REQUEST 6	INTR	16 PIRQ 2 (PIR10)	240
CP LEVEL 5			
11 PIRQ 5 (PIR13)	240	17 PIRQ 1 (PIR00)	240
12 BUS REQUEST 5	INTR		
CP LEVEL 0			
		18 T BIT (P504) AND NOT RTT E RTT NOT LOCKED OUT BY PROC STATUS LEVELS BUT SERVICED LAST	14

REVISIONS		
CHK	CHANGE NO.	REV.

(PRIORITY ARBITRATION) SLOT II
 TITLE TRAP & MSC CONTROL (TMCA) SIZE CODE NUMBER REV.
 DCS M8135-0-1 *
 SCALE SHEET 2 OF 7 DIST.

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UBSC 01	00
L	L
L	H
H	L
H	H

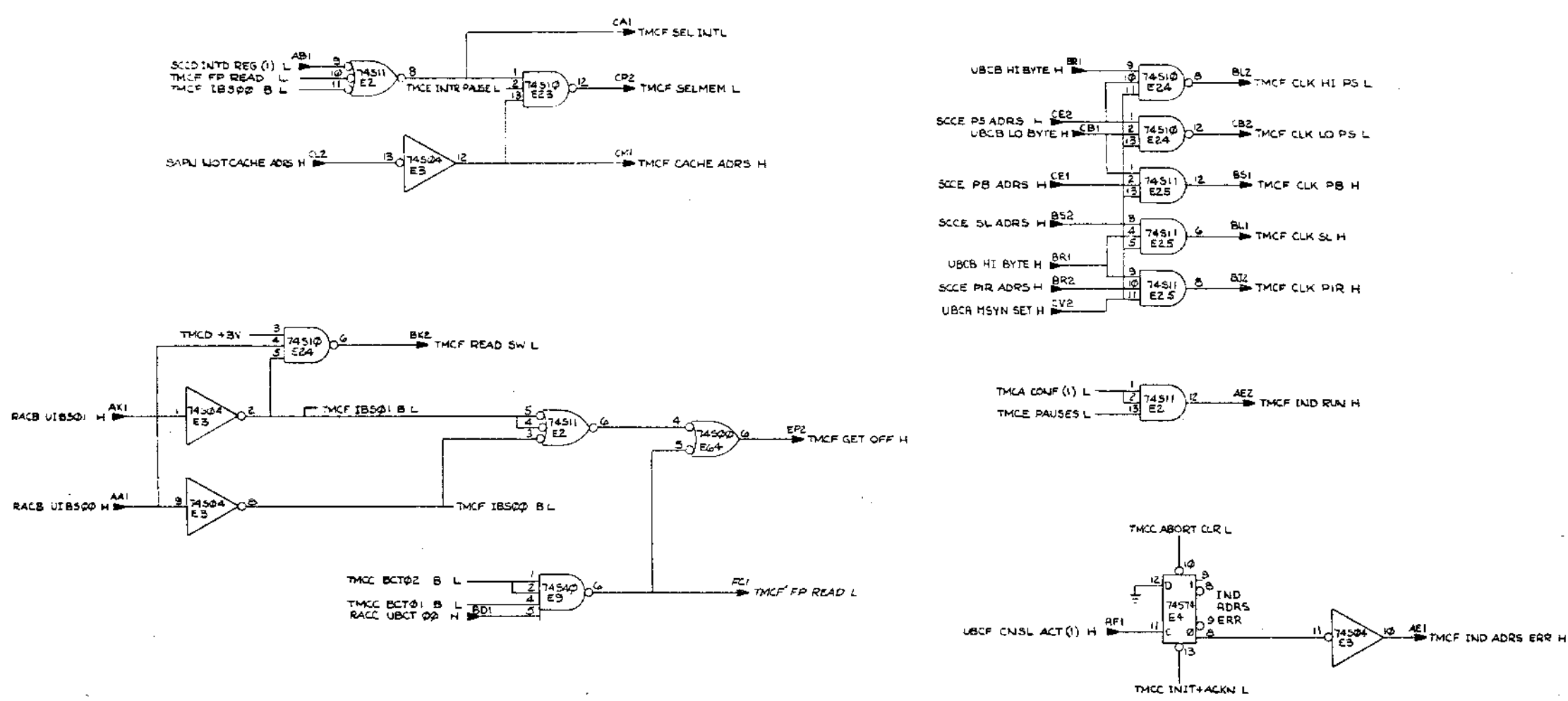


REVISIONS		
CHK	CHANGE NO.	REV.

(MSC, BCT, BSC DECODE) SLOT 11

TITLE	TRAP & MSC CONTROL	SIZE CODE	D CS	NUMBER	MB135-0-1	REV.	
SCALE		SHEET	6	OF	7	DIST.	

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REV. LOGS		
CHK	CHANGE NO.	REV.

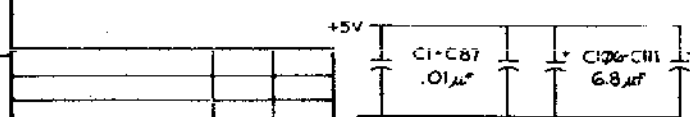
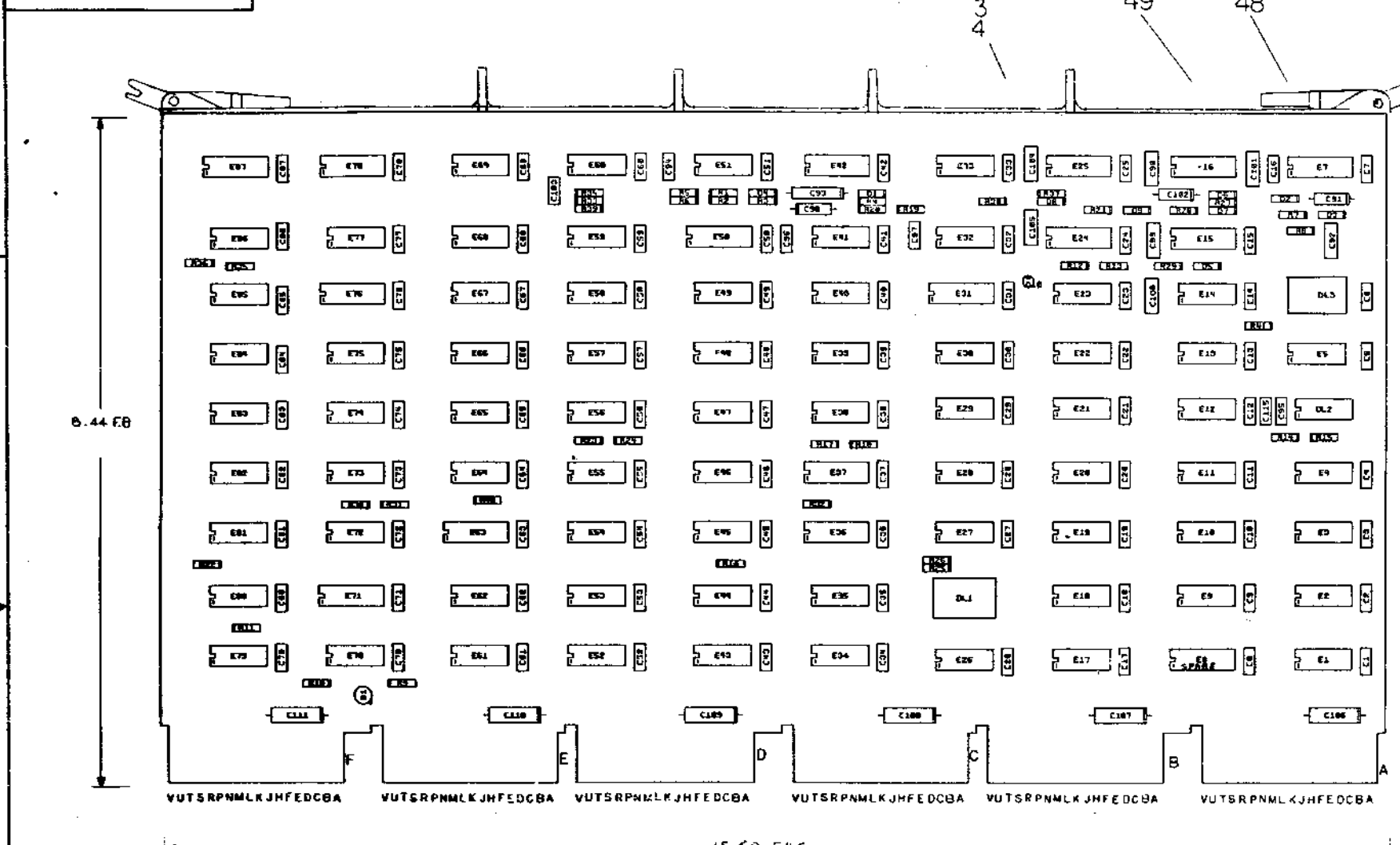
(BRMX SELECTION FP READ) SLOT 11		TITLE	SIZE CODE	NUMBER	REV.
TRAP & MSC CONTROL		DCS	M8135-0-1	1	*
SCALE	SHEET 7 OF 7	DIST.			

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NOTES:

★ MODULE LOCATION IS SLOT 12



IC TYPE	QTY	DESCRIPTION	REF
IC DEC 745175	8	IC DEC 745175	B 16
IC DEC 745157	8	IC DEC 745157	B 16
IC DEC 745112	8	IC DEC 745112	B 16
IC DEC 74123	8	IC DEC 74123	B 16
IC DEC 7442	8	IC DEC 7442	B 16
IC TYPE	GND	+5V	

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

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	R25	RESISTOR, 620R, 1/4W, 5%	1303178	56
1	R26	RESISTOR, 120R, 1/4W, 5%	1300247	55
A/R		WIRE, BUSS #30 AWG	3105740-55	54
REF		FLOW DIAGRAM	D-FD-M8136-0-B	53
1	DL3	DELAY LINE 100NS	1609559	52

REF	DESCRIPTION	PART NO.	ITEM NO.	
REF	X-Y COORDINATE HOLE LOCATION	K-CO-M8136-0-4	1	
REF	ASSY/DRILLING HOLE LAYOUT	D-AM-M8136-0-5	2	
REF	MODULE ECO HISTORY	B-AM-M8136-0-6	3	
1	ETCHED CIRCUIT BOARD	5011340	4	
2	C92, C101	CAPACITOR 330pf 100V 5%	1000023	5
7	C93, C106 THRU C111	CAPACITOR 6.8uf 35V 10%	1005306	6
93	C1 THRU C87, C94, C96, C97, C100, C103, C105	CAPACITOR -0.01uf 100V 20%	1001610-01	7
4	C98, C99, C104, C105	CAPACITOR 1200pf 100V 5%	1002424	8
1	C102	CAPACITOR 2.2uf 20V 10%	1002627	9
1	C95	CAPACITOR 82pf 100V 5%	1000015	10
2	C90, C91	CAPACITOR .47uf 35V 10%	1005965	11
9	D1 THRU D8	DIODE D864	1100114	12
1	D10	DIODE, LIGHT EMITTING MM5054-Z	1110864	13
2	R32, R16	RESISTOR 100 OHM 1/4W 5%	1300229	14
2	R15, R40	RESISTOR 150 OHM 1/4W 5%	1300250	15
3	R13, R24, R31	RESISTOR 390 OHM 1/4W 5%	1300309	16
5	R11, R10, R22, R39, R41	RESISTOR 1K 1/4W 5%	1300365	17
6	R1, R5, R17, R19, R33, R35	RESISTOR 330 OHM 1/4W 5%	1300295	18
5	R8, R21, R27, R29, R37	RESISTOR 15K 1/4W 5%	1300456	19
1	R9	RESISTOR 3.9K 1/4W 5%	1300444	20
3	R12, R30, R23	RESISTOR 180 OHM 1/4W 5%	1301322	21
6	R2, R6, R18, R20, R34, R36	RESISTOR 880 OHM 1/4W 5%	1301424	22
1	R14	RESISTOR 300 OHM 1/4W 5%	1301425	23
2	R3, R7	RESISTOR 20K 1/4W 5%	1302291	24
2	R4, R29	RESISTOR 30K 1/4W 5%	1302294	25
1	R38	RESISTOR 470 OHM 1/4W 5%	1300318	26
1	D1	TRANSISTOR DEC 3009B	1503100	27
2	E14, E73	IC DEC 74H30	1909059	28
2	E1, E86	IC DEC 74H50	1909060	29
4	E61, E82, E70, E79	IC DEC 8841	1909705	30
13	E3, E22, E26, E34, E39, E27, E43, E58, E68, E88, E75, E77, E84	IC DEC 74500	1910532	31
9	E2, E4, E9, E38, E52, E56, E57, E72, E85	IC DEC 74504	1910534	32
3	E20, E44, E48	IC DEC 74510	1910536	33
9	E18, E19, E23, E30, E32, E40, E54, E66, E87	IC DEC 74511	1910537	34
3	E10, E85, E74	IC DEC 74520	1910539	35
16	E13, E11, E17, E21, E29, E28, E33, E41, E45, E51, E59, E81, E82, E93, E60, E64	IC DEC 74574	1910544	36
4	E24, E31, E36, E50	IC DEC 745112	1910545	37
4	E12, E35, E49, E55	IC DEC 745140	1910546	38
1	E63	IC DEC 745157	1910548	39
5	E7, E15, E16, E25, E42	IC DEC 74123	1910436	40
1	E37	IC DEC 74193	1910018	41
1	E40	IC DEC 8885	1910649	42
2	E78, E87	IC DEC 7442	1910046	43
2	E71, E76	IC DEC 745175	1910957	44
4	E88, E53, E47, E5	IC DEC 8640	1911469	45
1	DL1	DELAY LINE (50ns)	1609428	46
1	DL2	DELAY LINE (tapped)	1611243	47
1		HANDLE ASSY	1210711-02	48
12		EYELETS	3006732	49
REF		TIMING DIAGRAM	D-TD-M8136-0-1	50
REF		DESCRIPTION		51

11/70

ETCH BOARD REV C

DRN. W. AMOUILLE DATE 10-29-74
 CHR'D. DENNY VINCENT DATE 12-3-74
 ENG. [Signature] DATE 1-6-75
 PROD. [Signature] DATE 1-11-75

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TITLE UNIBUS CONSOLE CONTROL (UBC)

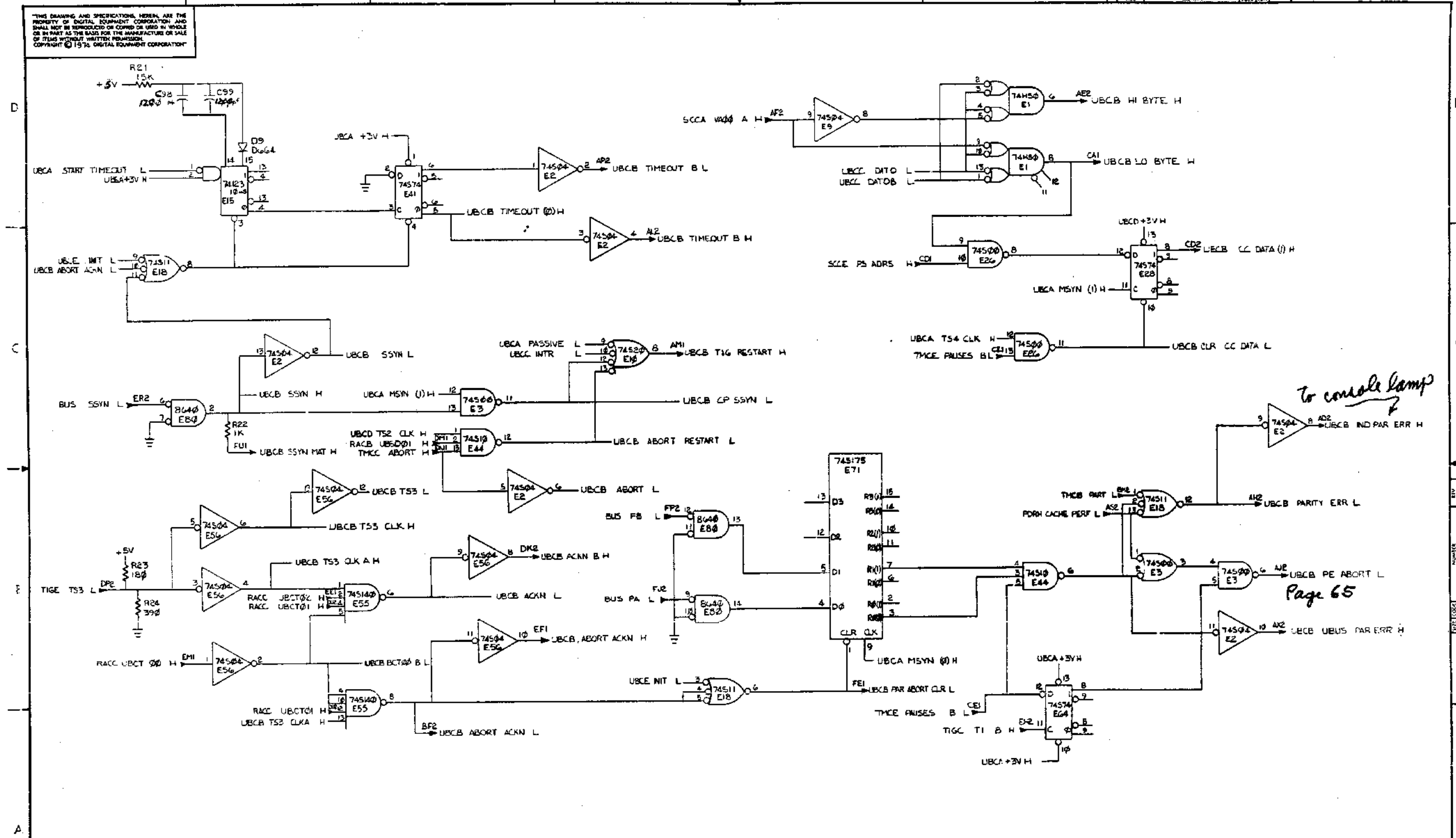
SIZE CODE NUMBER DCS M8136-0-1 REV F

SCALE SHEET 1 OF 5

SEMICONDUCTOR CONVERSION CHART

REV	DESCRIPTION	DATE
1	ORIGINAL	11-17-74
2	REVISED	12-17-74
3	REVISED	1-6-75
4	REVISED	1-11-75

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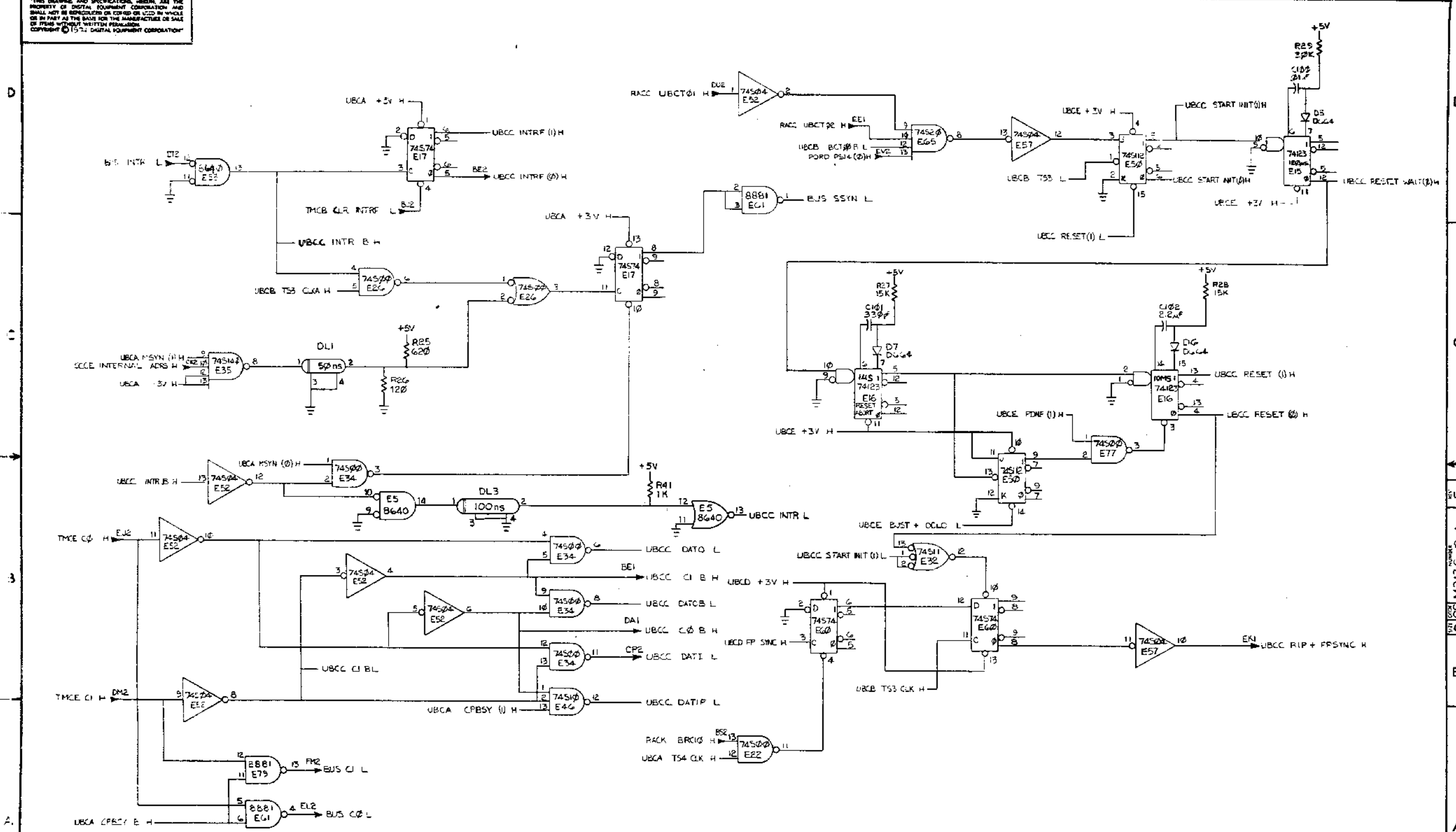


(PARITY AND TIMING CONTROL) SLOT 12

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(UBCEB)	SIZE CODE	NUMBER	REV.
UNIBUS/CONSOLE CONT	D CS	M8136-0-1	F	
SCALE	SHEET 3	OF 8	DIST.	

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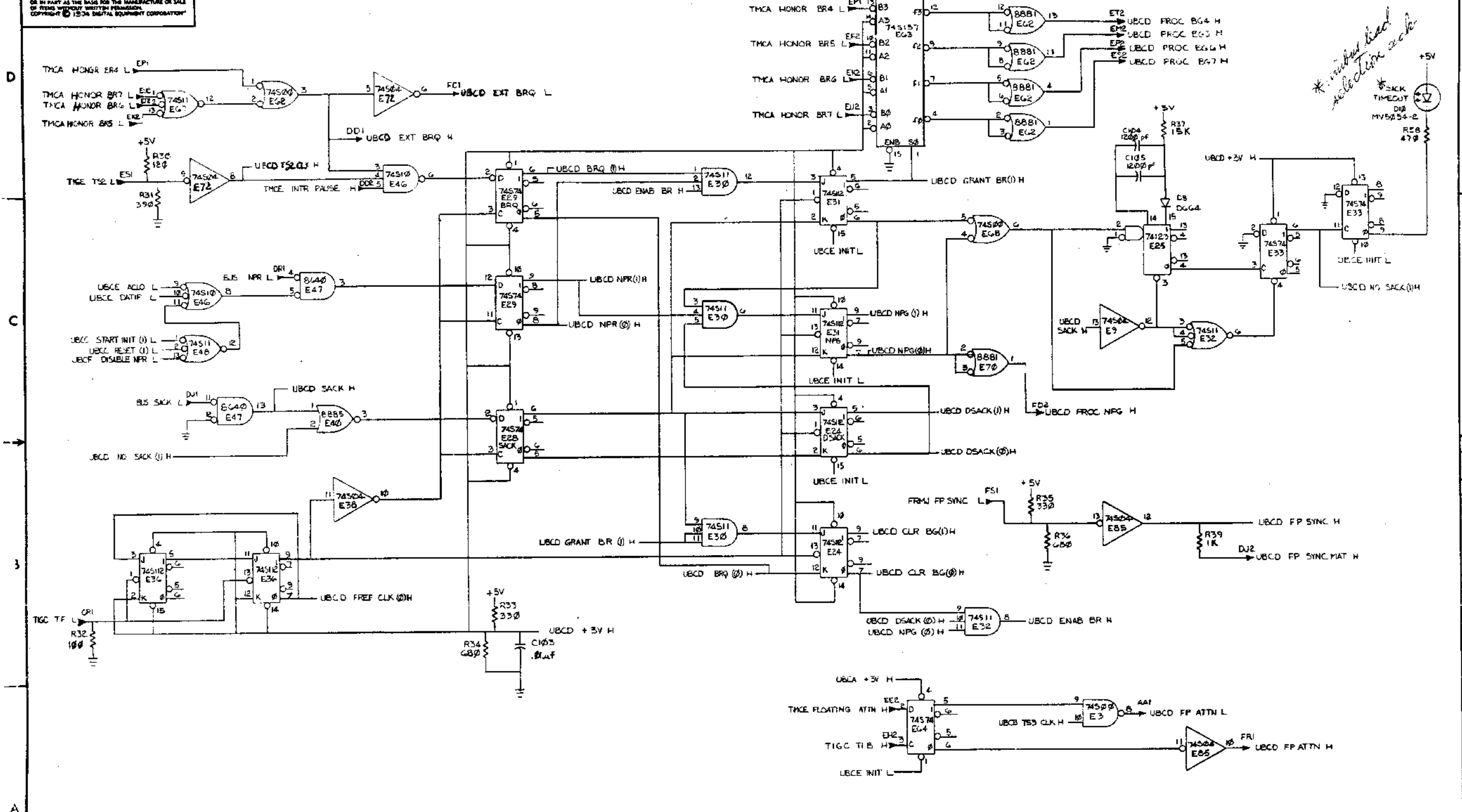


(RESET CONTROL) SLOT 12

REVISIONS		
CHK	CHANGE NO.	REV.

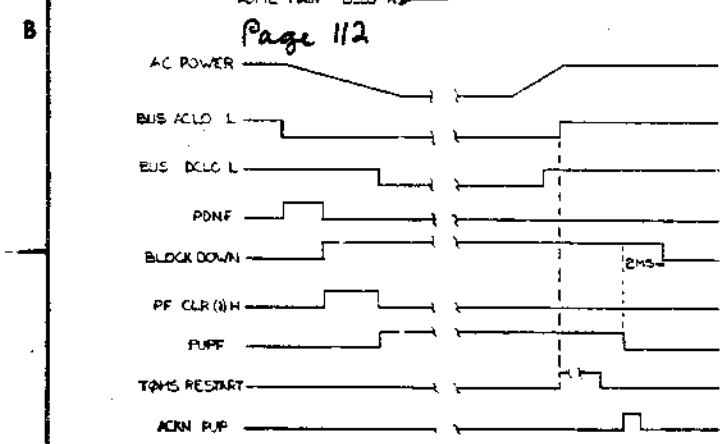
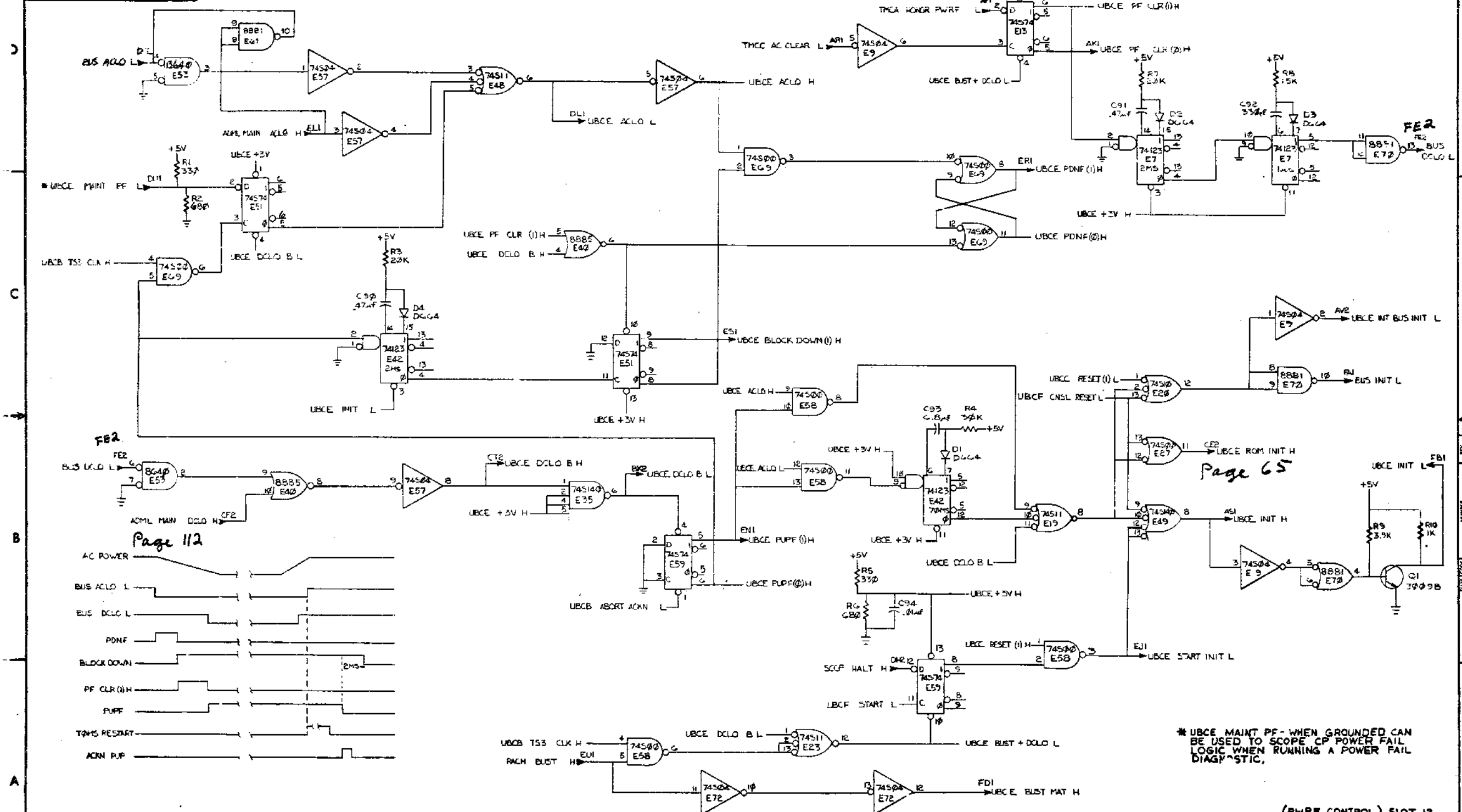
TITLE	UNIBUS / CONSOLE CONT.	SIZE/CD	D / CS	NUMBER	M8136-0-1	REV.	F
SCALE		SHEET	4	OF	8	DIST.	

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1-0-9216W [CS] D 2



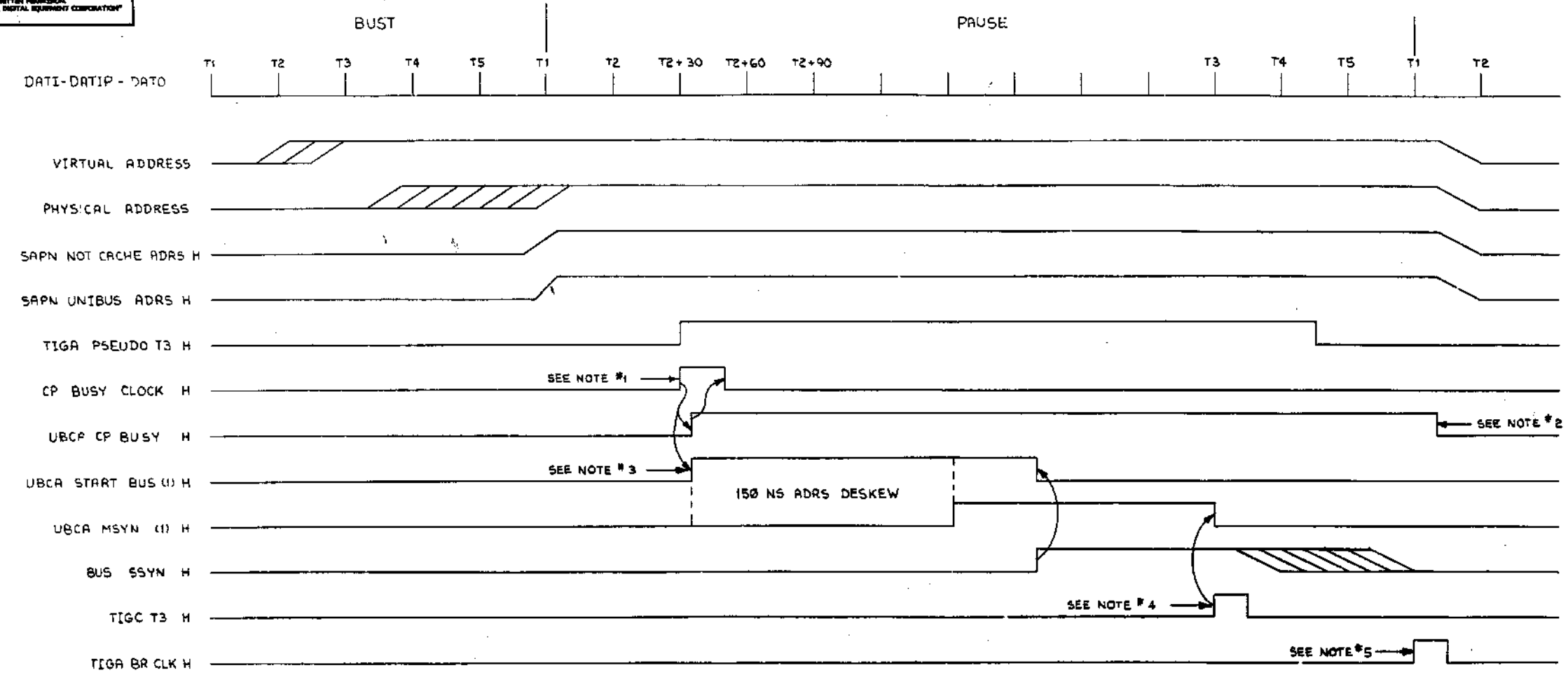
* UBCE MAINT PF - WHEN GROUNDING CAN BE USED TO SCOPE CP POWER FAIL LOGIC WHEN RUNNING A POWER FAIL DIAGNOSTIC.

(PWR/F CONTROL) SLOT 12

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(UBCE)	SIZE/CODE	NUMBER	REV.
UNIBUS/CONSOLE CONT.	D CS	M8136-0-1	F	97
SCALE	SHEET	OF	DIST.	

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NOTES:

1. SET CP BUSY IF -(NPR + NPG + SACK + DSACK + ABORT + B BUSY)
2. CP BUSY IS NOT CLEARED IF DATIP CYCLE. IT IS CLEARED ON DATO PORTION OF DATIP/DATO
3. USED TO START DATO ADDRESS DESKEW ON DATIP/DATO OPERATION
4. 75 NS DATA DESKEW IS OBTAINED BY 2 STAGE SYNCHRONIZER ON TIGA. UNIBUS DATA IS LOADED INTO PDRH BUFFER REGISTER AT T3
5. ADDRESS & CONTROL ARE DESKEWED FROM T3 TO T1. PDRH BUFFER REGISTER LOADED TO BR AT T1.

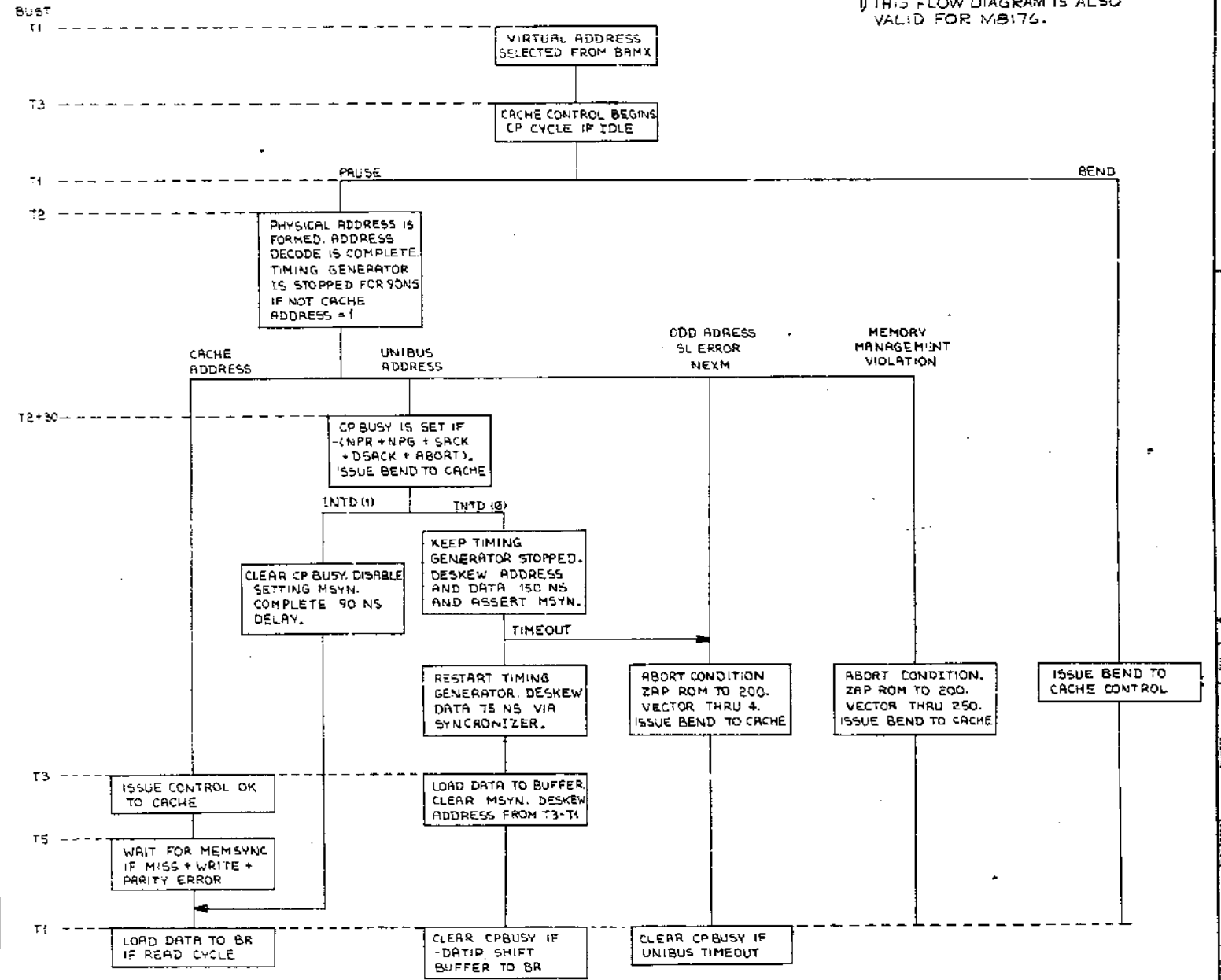
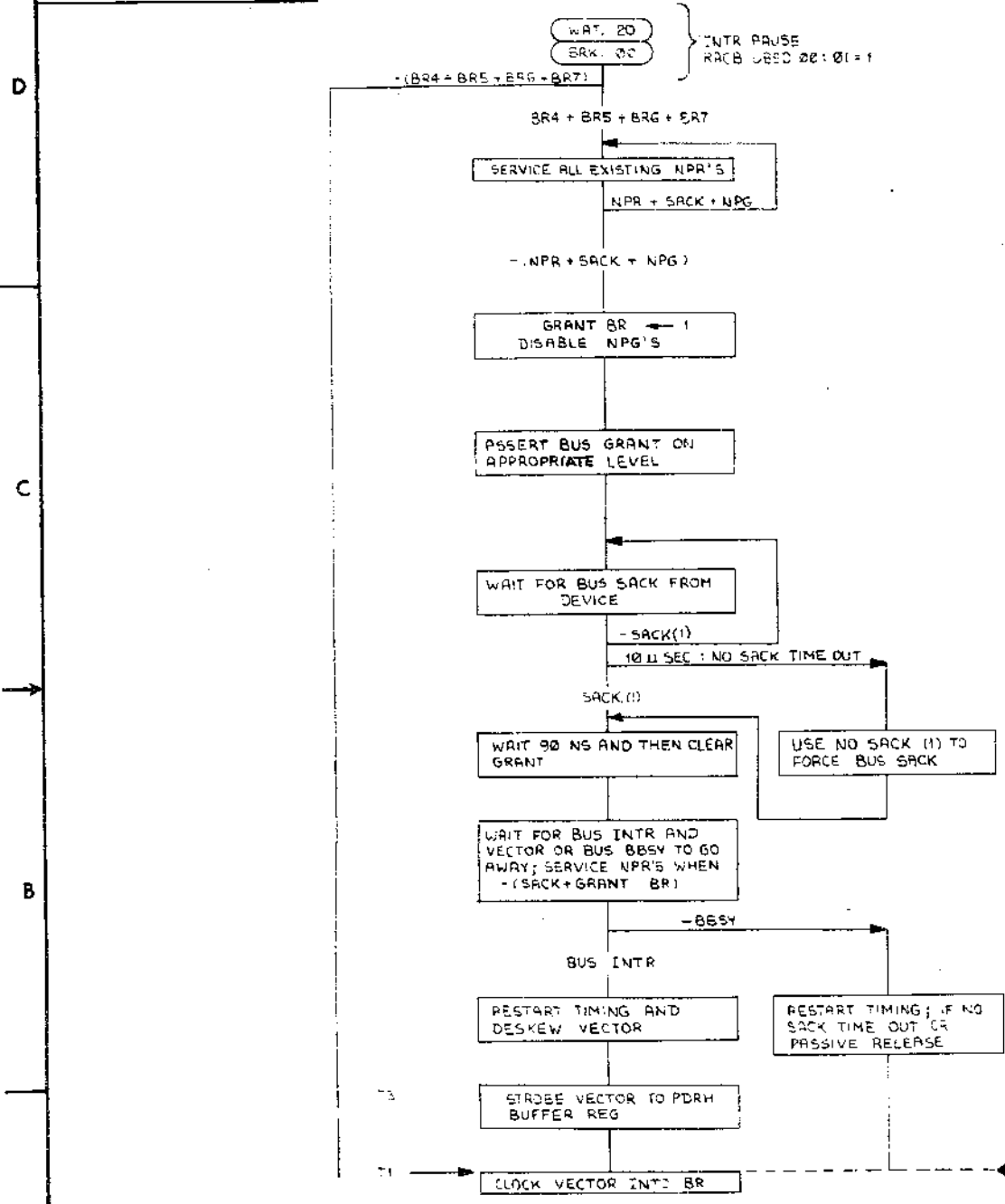
REV.	CHG. NO.	DATE

FIRST USED ON OPTION/MODEL 11/70	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
DIMENSIONAL TOLERANCE		DATE	digital	
DIMENSIONS ARE MILLIMETERS INCHES UNLESS OTHERWISE SPECIFIED		DATE		
MILLIMETERS	INCHES	DATE		
ANGLES	ANGLES	DATE		
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	TITLE TIMING DIAGRAM	
MATERIAL	FINISH	DATE	SIZE CODE D TD	NUMBER M8136-0-7
SCALE		DATE	REV.	
SHEET 1 OF 1		DIST.		

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V 8 - 0 - 9218 W C E 2

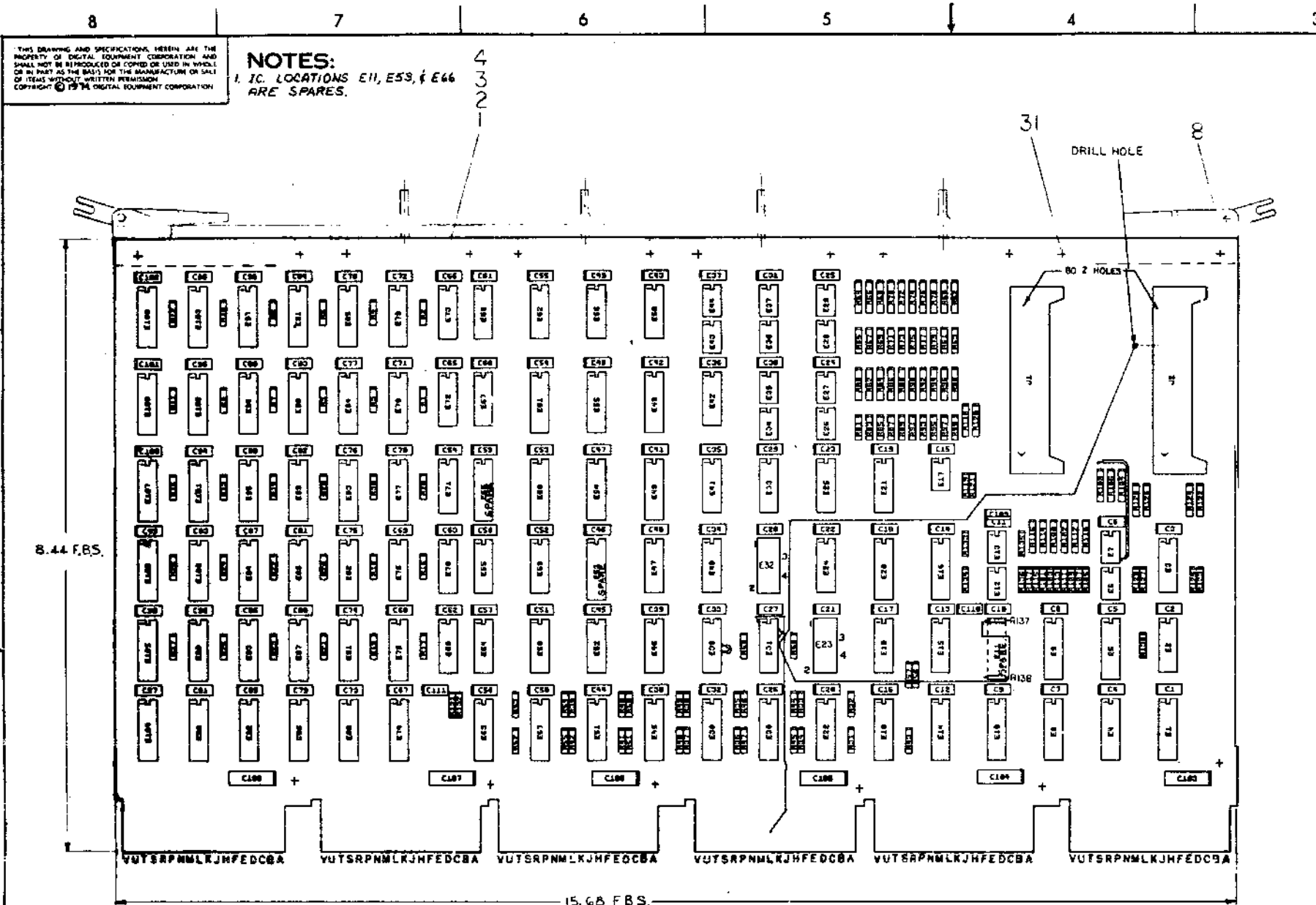
NOTE:
THIS FLOW DIAGRAM IS ALSO VALID FOR M8174.



REV	CHG	NO	BY	DATE
1				
2				
3				
4				
5				
6				
7				
8				

FIRST USED ON OPTION/MODEL 11/70	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
digital				
TITLE FLOW DIAGRAM				
MATERIAL			SIZE CODE D FD	NUMBER M8136-0-8
FINISH			SCALE	REV. A
THIRD ANGLE PROJECTION			SHEET 1 OF 1	DIST.

193



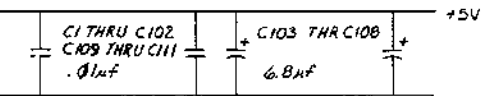
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NOTES:
1. IC LOCATIONS E11, E53, & E46 ARE SPARES.

IC TYPE	QTY	QTY
IC DEC 74585	8	16
IC DEC 1912069	8	16
IC DEC 8440	1	8
IC DEC 745175	8	16
IC DEC 74552	4	8
IC DEC 745153	8	16
IC DEC 745193	8	16
IC TYPE	GND	+5V

AA2 CA2 EA2
AV1 CV1 EV1
BA2 DA2 FA2
DV1 DV1 FV1

AC2 AH1 AN2 AT1
BC2 BH1 BN2 BT1
CC2 CH1 CN2 CT1
DC2 DH1 DN2 DT1
EC2 EH1 EN2 ET1
FC2 FH1 FN2 FT1



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REF	DESCRIPTION	PART NO	ITEM NO
REF	X-Y COORDINATE HOLE LOCATION	K-CD-M8143-B-4	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AN-M8134-B-5	2
REF	MODULE ECO HISTORY	B-MH-M8134-B-6	3
1	ETCHED CIRCUIT BOARD	5011385	4
R	C103 THRU C109	CAPACITOR, 0.01µ, 100V, 20%	1085306
105	C1 THRU C102, C109 THRU C111	CAPACITOR, 0.1µ, 100V, 20%	1001610-01
2	CONNECTOR, 40 PIN	1209441	7
1	HANDLE, HEX MODULE	1210711-2	8
3	R131, R133, R135	RESISTOR, 330 OHM, 1/4W, 5%	1300295
20	R31 THRU R55, R130, R58, R59	RESISTOR, 1K, 1/4W, 5%	1300365
3	R132, R134, R136	RESISTOR, 680 OHM, 1/4W, 5%	1301424
36	R60, R62, R64, R66, R68, R70, R72, R74, R76, R78, R80, R82, R84, R86, R88, R90, R92, R94, R96, R98, R100, R102, R104, R106, R108, R110, R112, R114, R116, R118, R120, R122, R124, R126, R128, R130	RESISTOR, 121 OHM, 1/4W, 1%	1301782
36	R61, R63, R65, R67, R69, R71, R73, R75, R77, R79, R81, R83, R85, R87, R89, R91, R93, R95, R97, R99, R101, R103, R105, R107, R109, R111, R113, R115, R117, R119, R121, R123, R125, R127, R129, R131	RESISTOR, 196 OHM, 1/4W, 1%	1302956
30	R1 THRU R30	RESISTOR, 820 OHM, 1/4W, 5%	1303178
2	E23, E32	DIGIT/Delay LINE	1609559
1	E2	I.C. DEC 74H74	1909667
2	E8, E9	I.C. DEC 74193	1910018
1	E40	I.C. DEC 74S00	1910532
4	E19, E50, E56, E62	I.C. DEC 74S04	1910534
1	E39	I.C. DEC 74S10	1910536
2	E24, E52	I.C. DEC 74S11	1910537
1	E46	I.C. DEC 74S64	1910542
9	E64, E65, E67 THRU R73	I.C. DEC 74S140	1910546
14	E1, E4, E8, E10, E14, E20, E26, E74, E80, E86, E92, E96, E104, E18	I.C. DEC 74S153	1910547
19	E12, E13, E17, E26 THRU E29, E34 THRU E37, E43, E44, E7, E6	I.C. DEC 75452	1910645
7	E16, E22, E30, E34, E45, E51, E57	I.C. DEC 74S175	1910957
9	E15, E21, E25, E33, E41, E42, E47, E58, E68	I.C. DEC 82502	1911291
2	E3, E31	I.C. DEC 8640	1911489
8	E48, E49, E54, E56, E60, E61	I.C. DEC 74S85	1912089-00
30	E75 THRU E79, E81 THRU E85, E87 THRU E91, E93 THRU E97, E99 THRU E103, E105 THRU E109	I.C. DEC 1912069	1912069
12	EYELET	8008732	31
4	WIRE #30 AWG BUSS (RETROFIT)	91-05740-55	32
1	R54	RESISTOR 270 Ω 1/4 W 5%	1301972
1	R57	RESISTOR 390 Ω 1/4 W 5%	1300309

FIRST USED ON OPTION MODEL: 11/70

ETCH BOARD REV: B

DATE: 12/2/74
M. J. AMULLI
DATE: 12/1/74
F. FERGUSON
DATE: 11/1/75
D. HELLENUS
DATE: 11/1/75

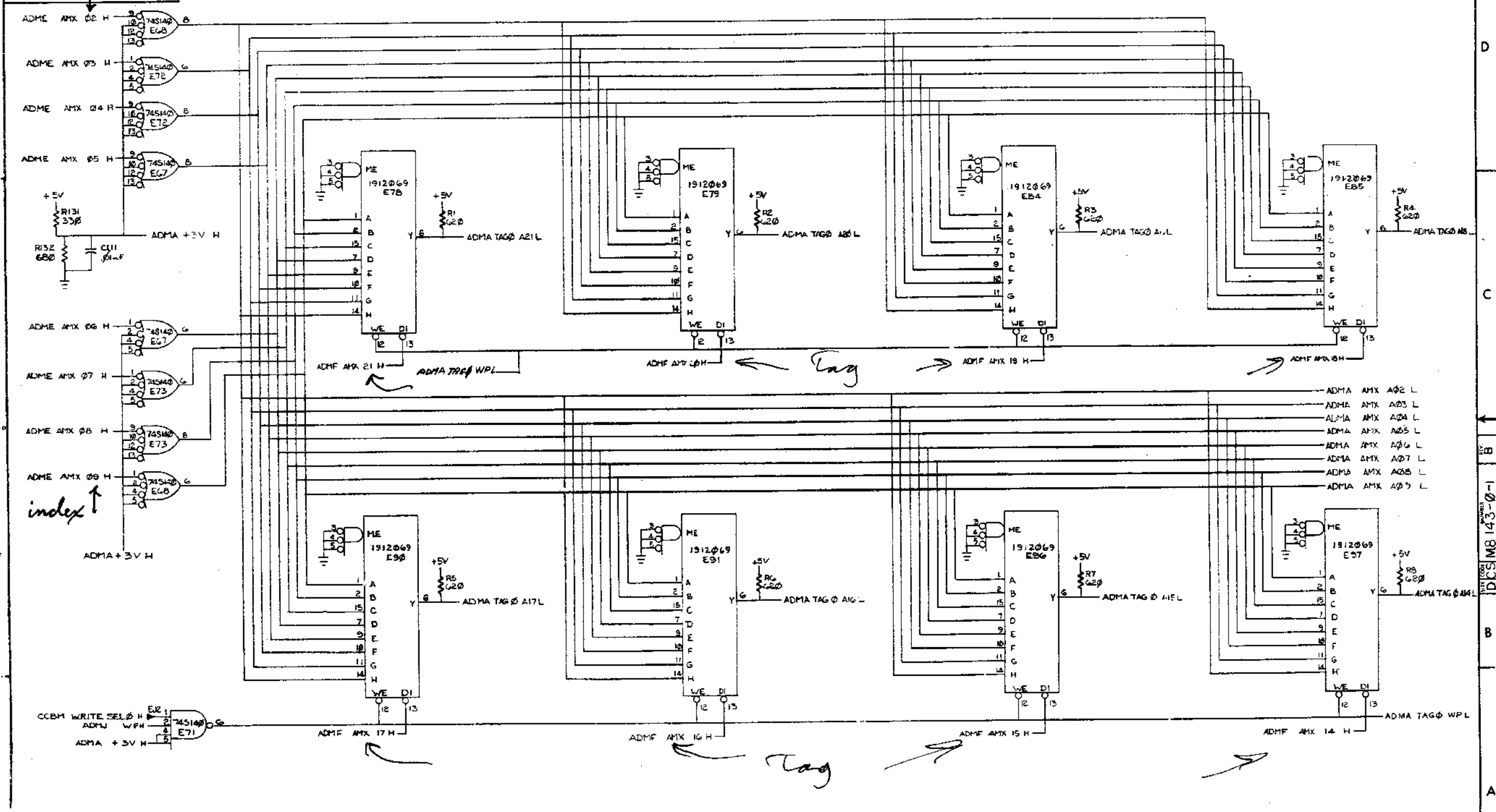
digital EQUIPMENT CORPORATION
ADDRESS MEMORY BD

SIZE CODE: DCS
NUMBER: M8143-0-1
REV: B

SCALE: 1/16
SHEET: 1 OF 12

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REVISIONS		
X	CHANGE NO.	REV.

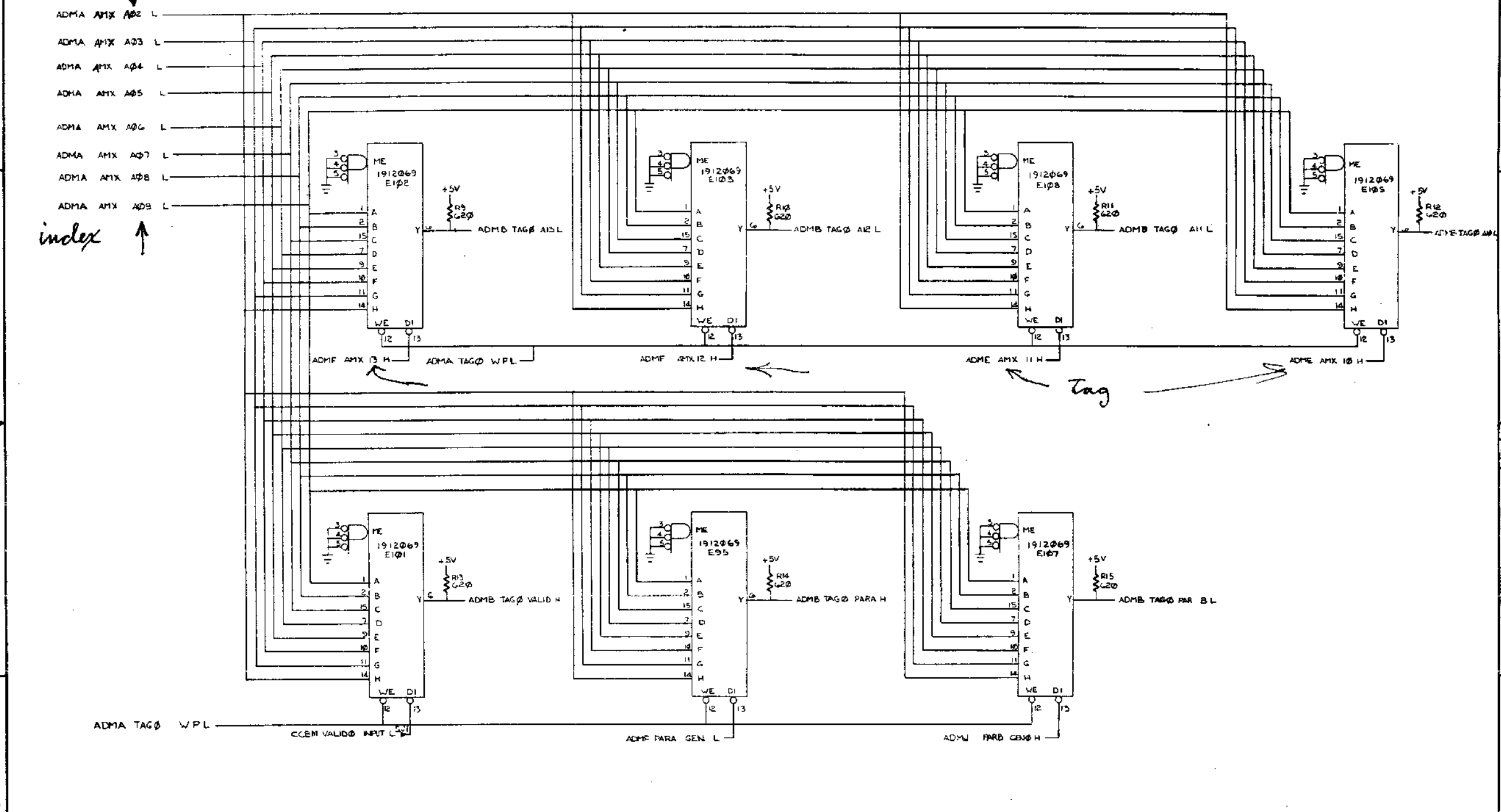
TITLE		(ADMA)	SIZE	CODE	NUMBER	REV.
ADDRESS MEMORY BOARD		DCS	M8143-0-1			B
SCALE	SHEET 2	OF 12	DIST.			

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ADMA AMX A02 L
 ADMA AMX A03 L
 ADMA AMX A04 L
 ADMA AMX A05 L
 ADMA AMX A06 L
 ADMA AMX A07 L
 ADMA AMX A08 L
 ADMA AMX A09 L

index ↑



REVISIONS		
CHK	CHANGE NO.	REV.

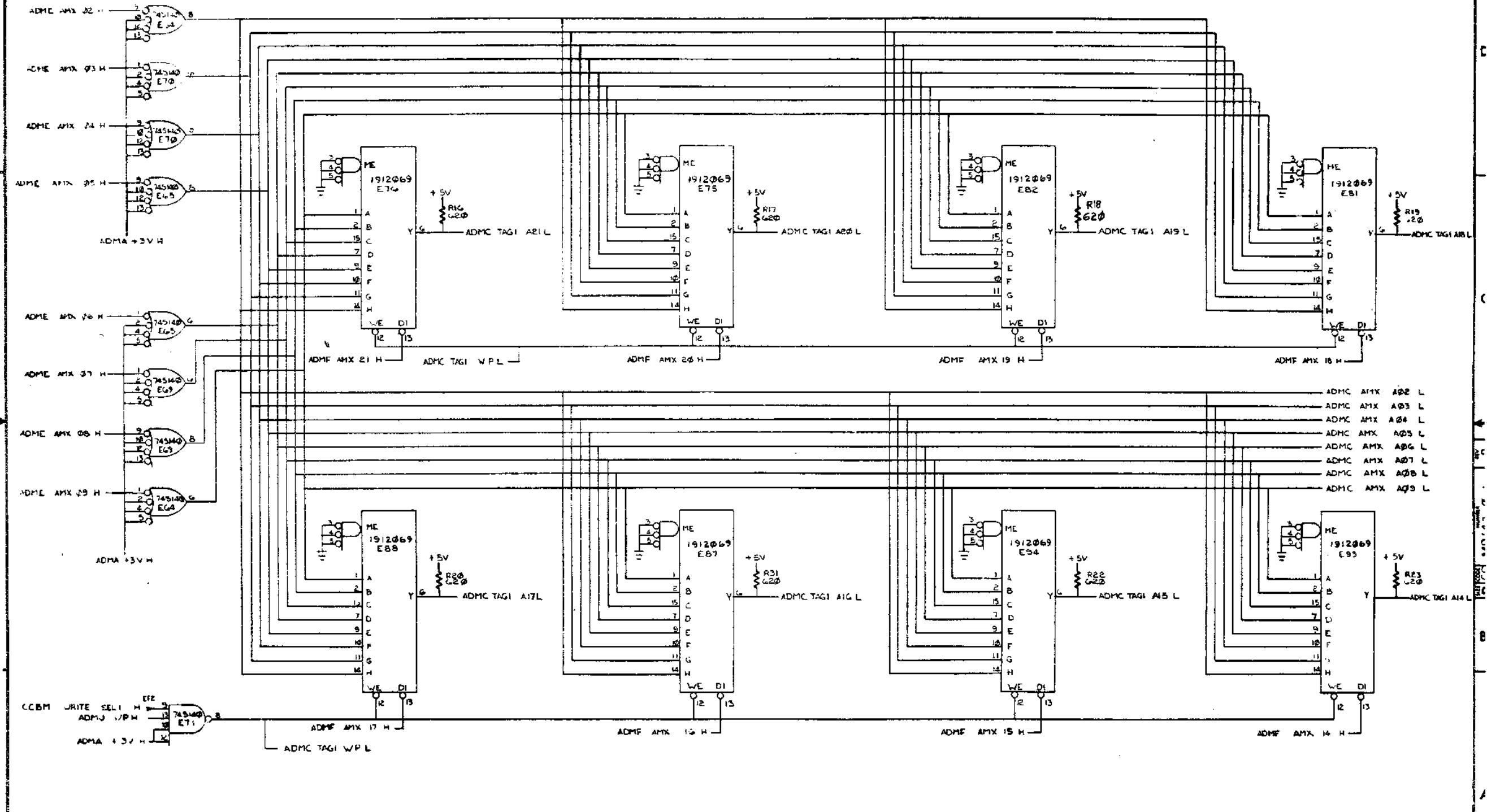
104

(TAG0) SLOT 18

TITLE	(ADMB) SIZE CODE	NUMBER	REV.
ADDRESS MEMORY BOARD	DCS	M8143-0-1	B.
SCALE	SHEET 3 OF 12	DIST.	

196

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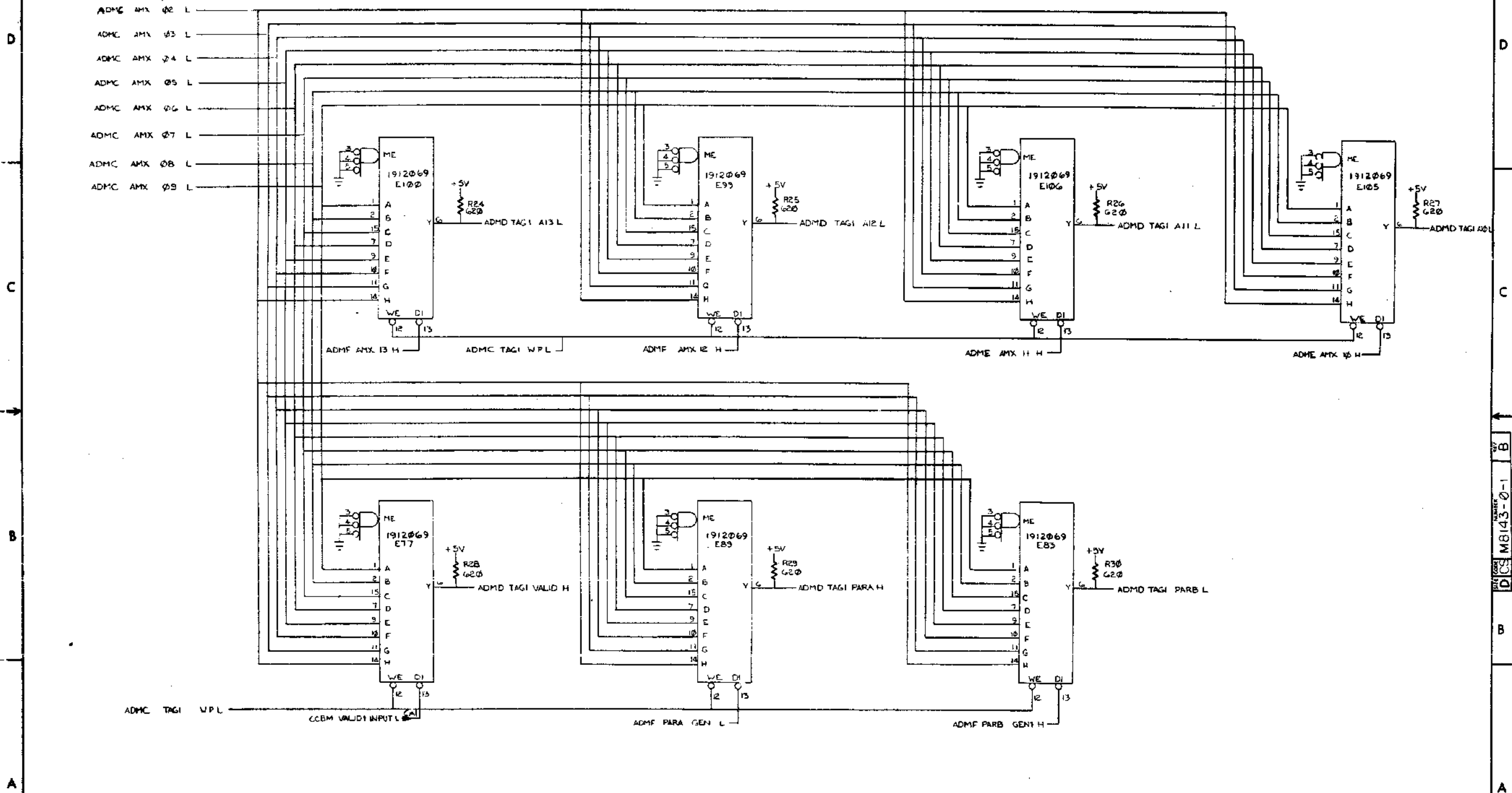
REVISIONS		
CHK	CHANGE NO.	REV.

(TAG1) SLOT 18

TITLE	SIZE/SCALE	NUMBER	REV.
ADDRESS MEMORY BOARD	D CS	M8143-0-1	B
SCALE	SHEET 4 OF 12	DIST.	

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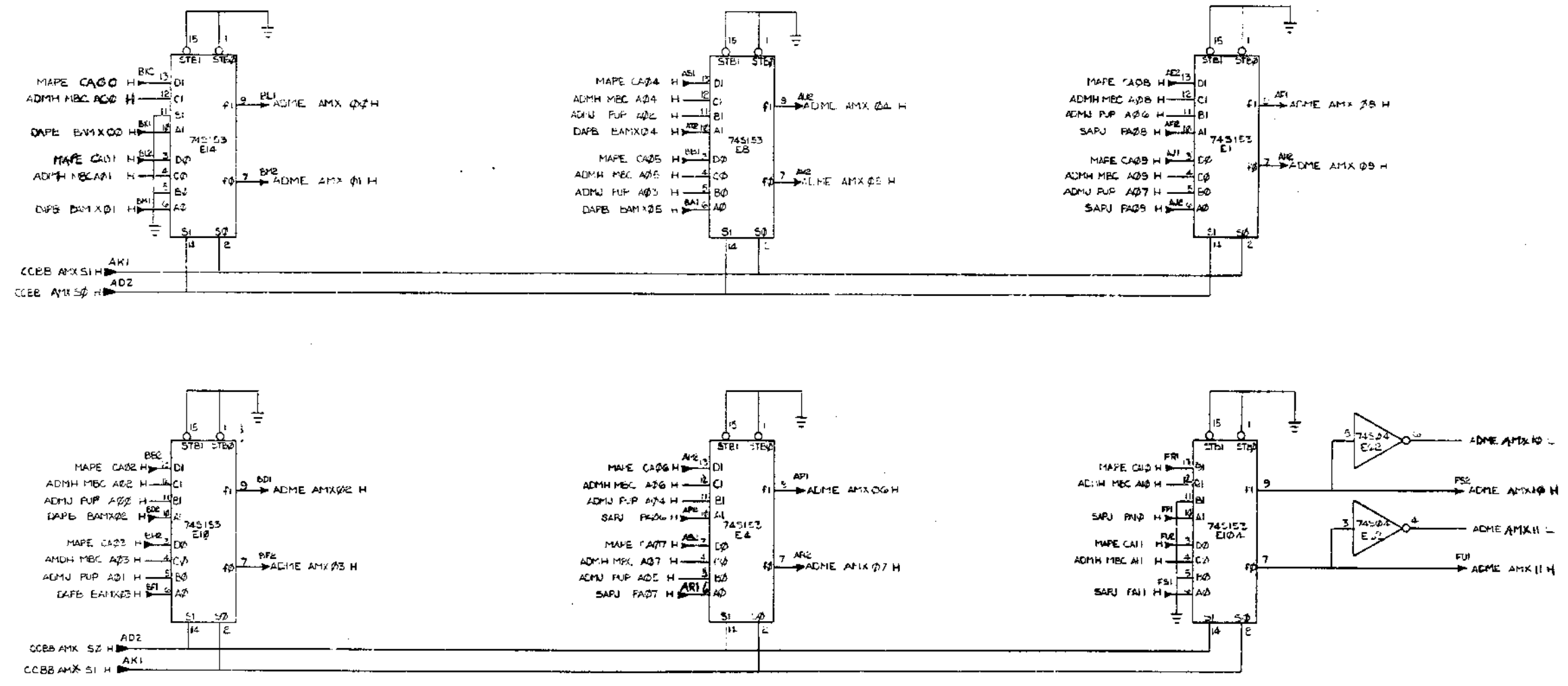
8 1-0-018W S10 2



REVISIONS		
CHK	CHANGE NO.	REV.

(TAGI) SLOT 18

TITLE	(ADMD)	SIZE	CODE	NUMBER	REV.
ADDRESS MEMORY BOARD	D CS	M8143-0-1	B		
SCALE	SHEET	5	OF	12	DIST.



S1	S0	OUTPUT
0	0	CPU
0	1	POWER UP
1	0	FISC
1	1	UNIBUS

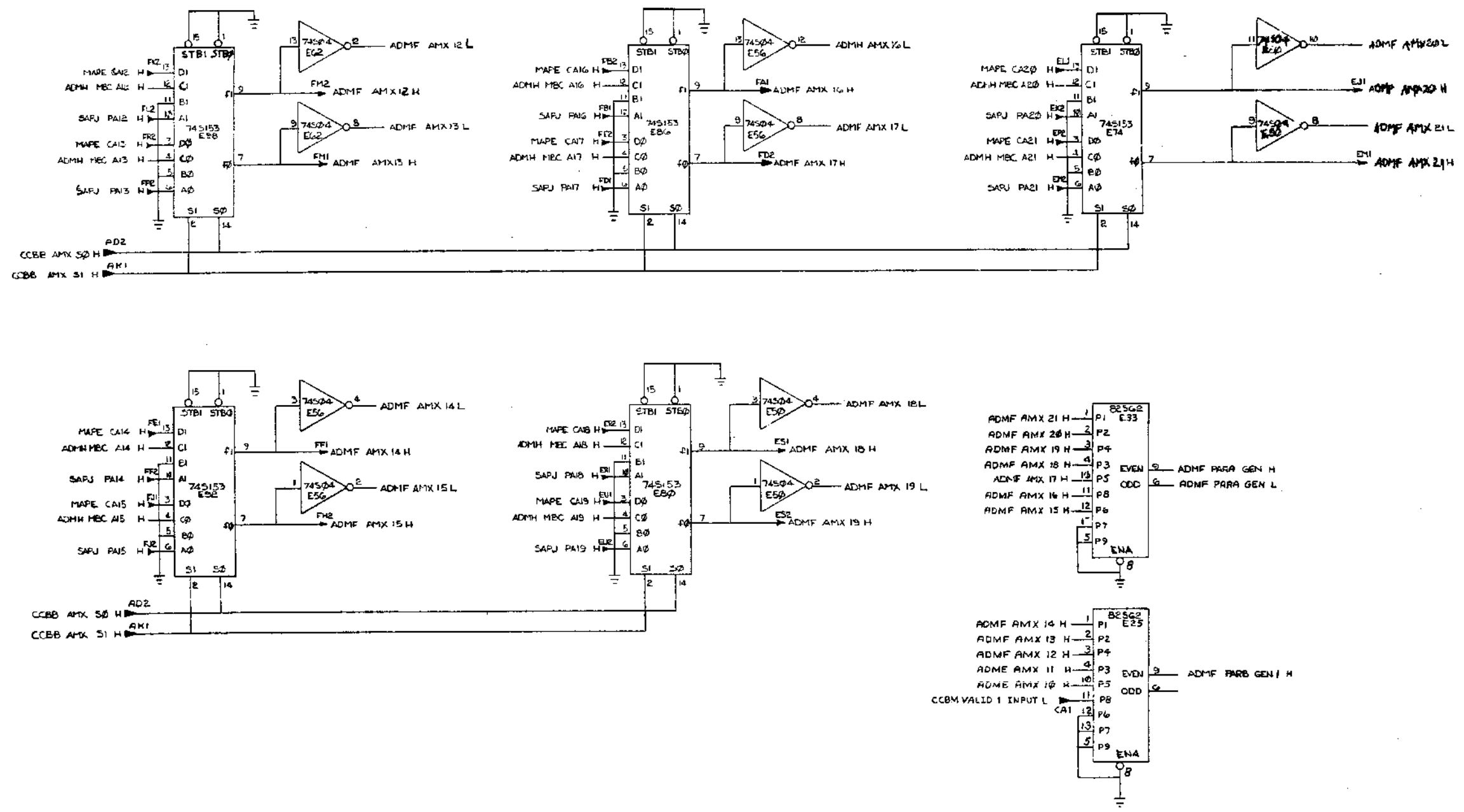
(ADDRESS MULTIPLEXOR) SLOT 18

REVISIONS		
CHK	CHANGE NO.	REV.

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1-00-01919-002



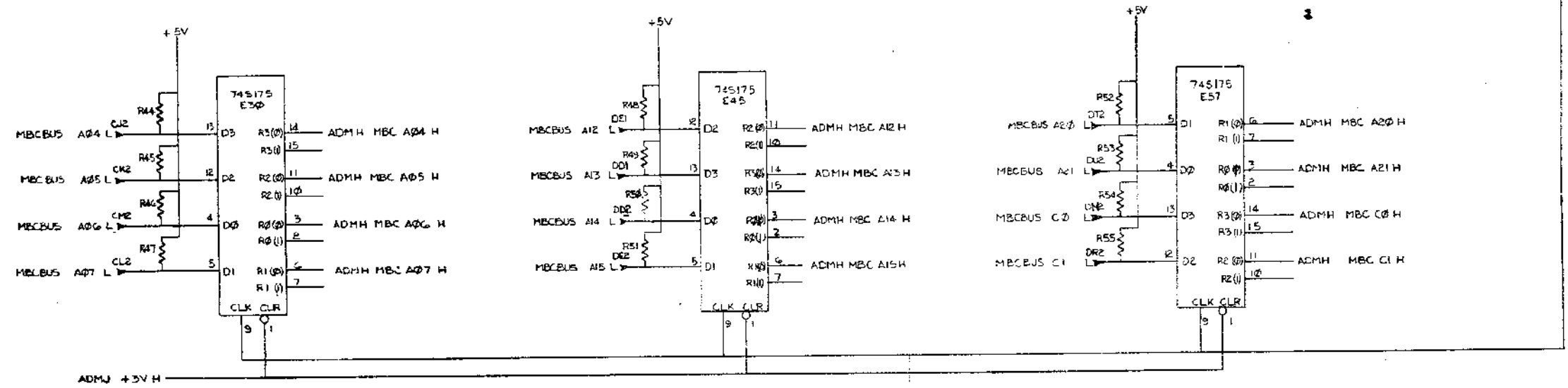
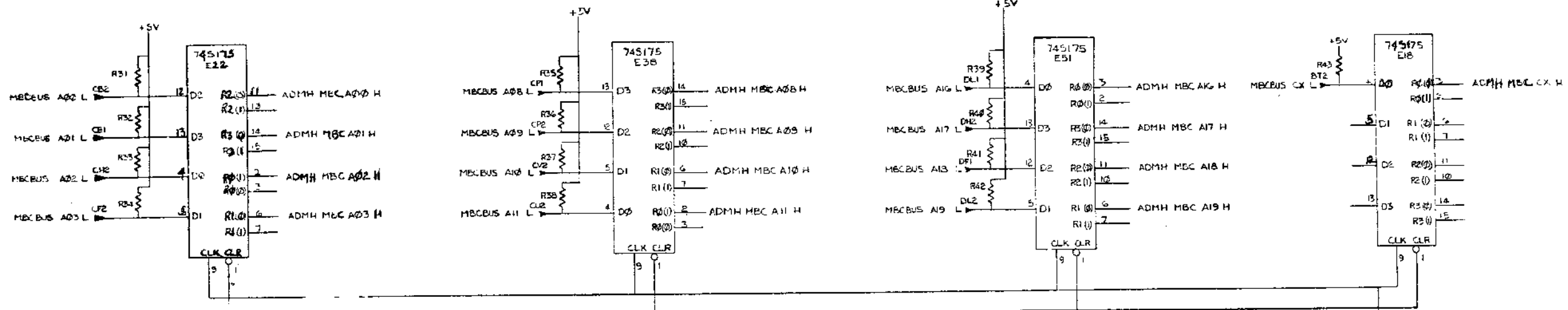
(ADDRESS MULTIPLEXOR) SLOT 18

REVISIONS		
CHK	CHANGE NO.	REV.

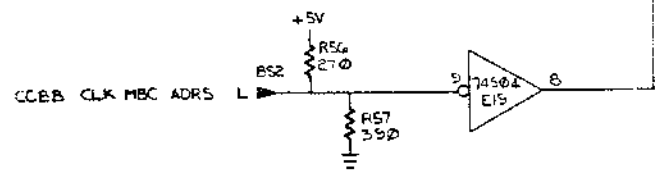
TITLE	(ADMF) SIZE CODE	NUMBER	REV.
ADDRESS MEMORY BOARD D CS	M8143-0-1	B	
SCALE	SHEET 7 OF 12	DIST.	

200

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*NOTE
ALL PULLUP RESISTORS ARE 1K 1/4W 5%

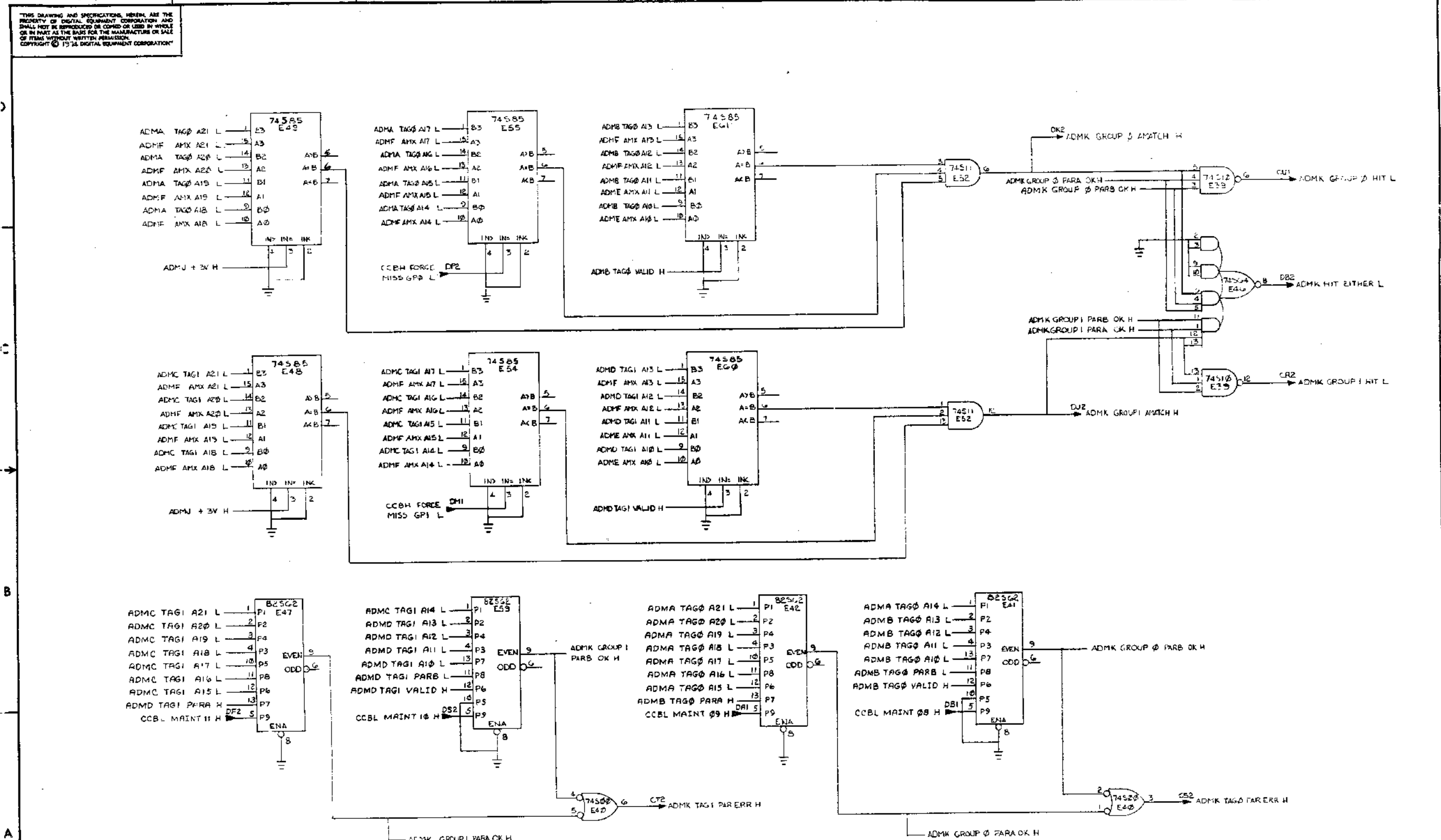


(MBC ADDRESS BUFFER) SLOT 18

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ADMH) ADDRESS MEMORY BOARD	SIZE CODE	NUMBER	REV.
SCALE	SHEET 8 OF 12	DIST.	MS143-0-1	B

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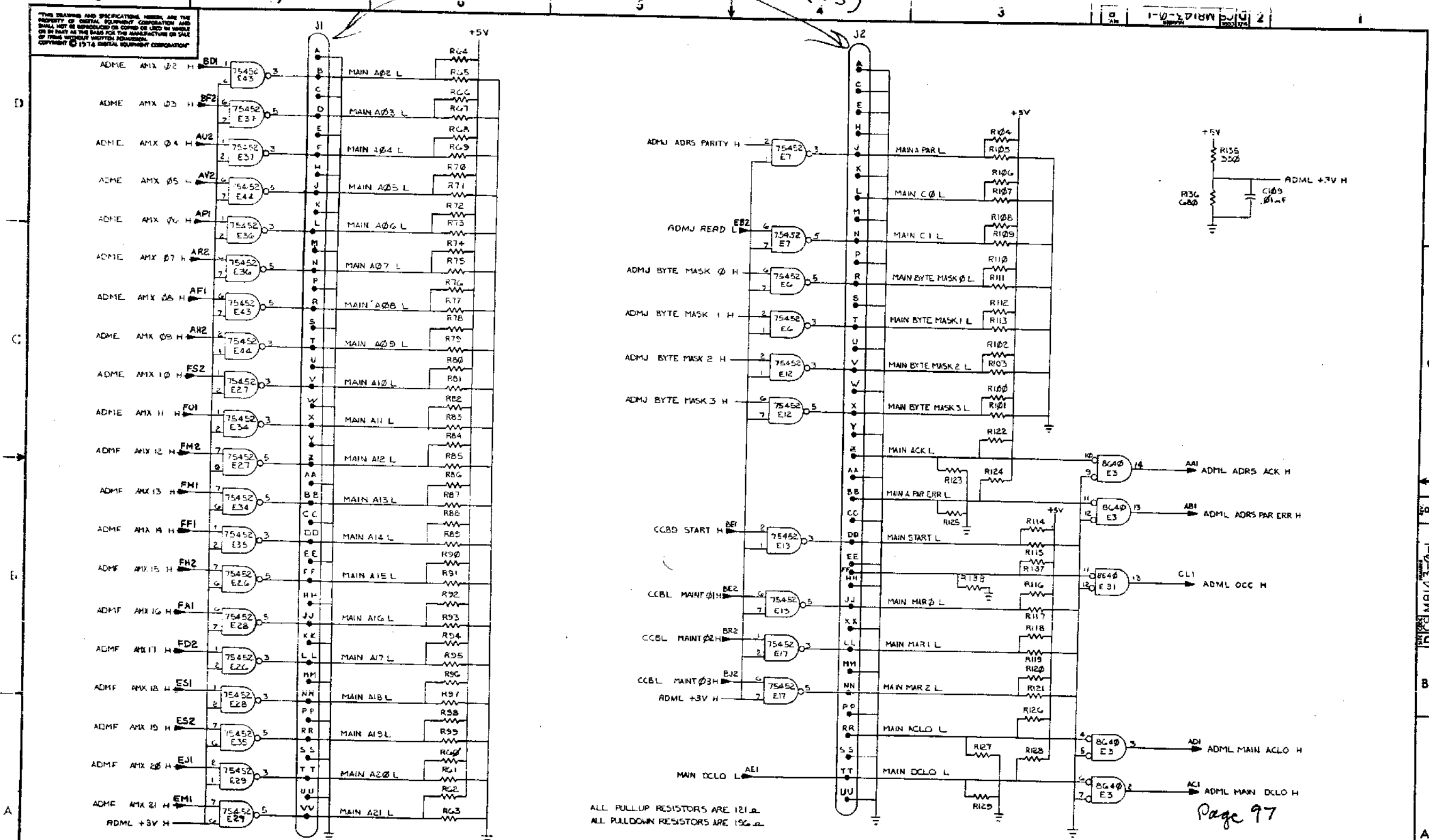
(EQUALS CHECK, PARITY CHECK) SLOT 18

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ADMK)	SIZE CODE	NUMBER	REV.
ADDRESS MEMORY BOARD	DCS	M8143-0-1	8	
SCALE	SHEET 10 OF 12	DIST.		

M8158(JL) to Memory M8158(J3)

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ALL PULLUP RESISTORS ARE 121 Ω
ALL PULLDOWN RESISTORS ARE 156 Ω

Page 97

(MAIN MEMORY ADRS DRIVERS) SLOT 18

REVISIONS		
CHK	CHANGE NO.	REV.

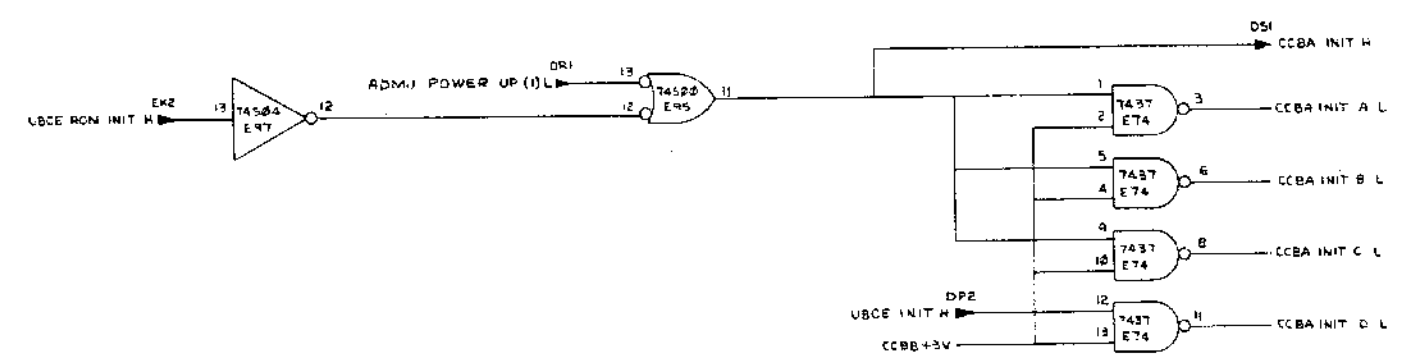
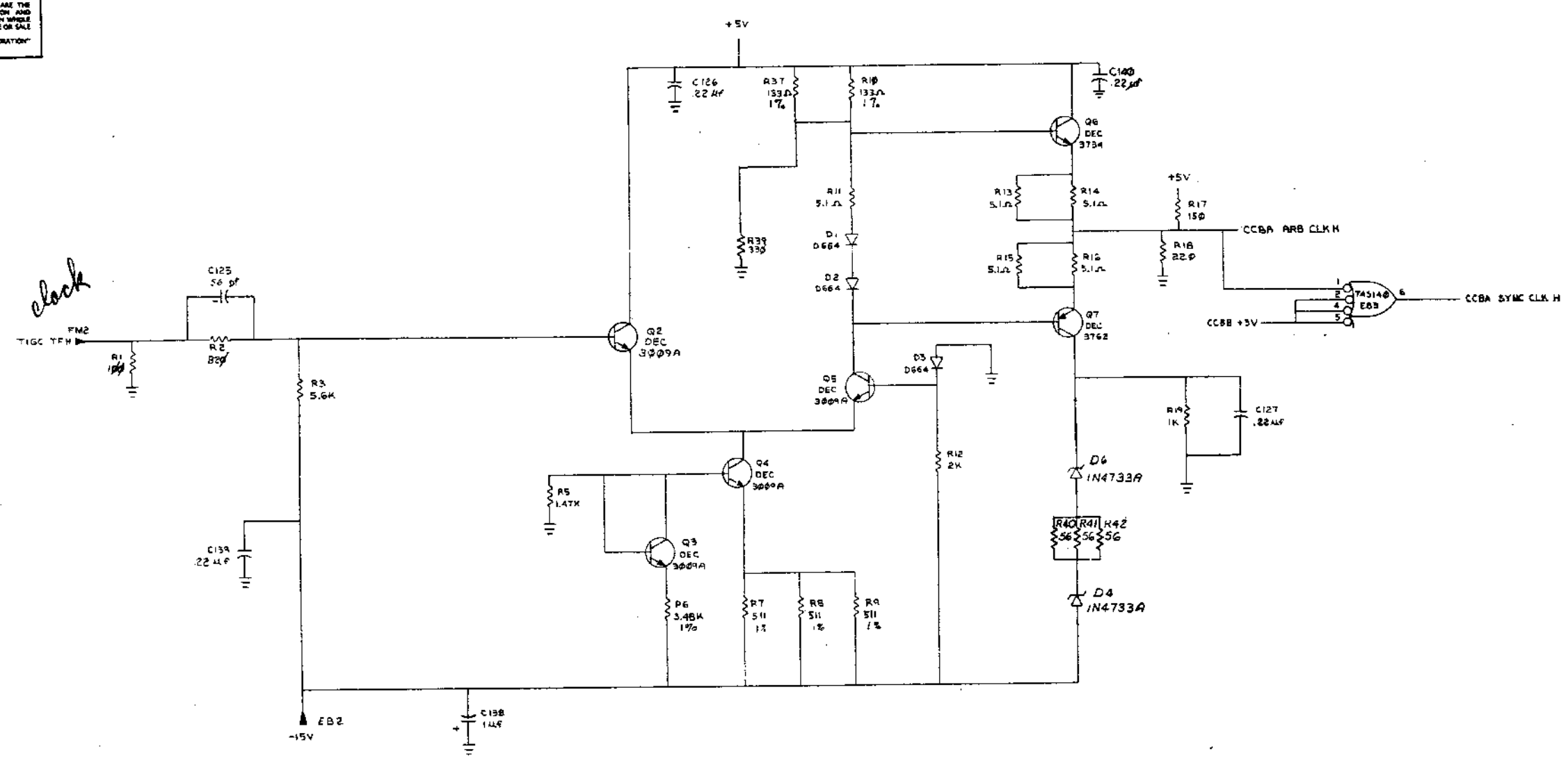
TITLE	(ADML)	SIZE/CODE	NUMBER	REV.
ADDRESS MEMORY BOARD	D/CS	M8143-0-1	B	
SCALE	SHEET 11	OF 12	DIST.	

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DCS M8142-0-1 2

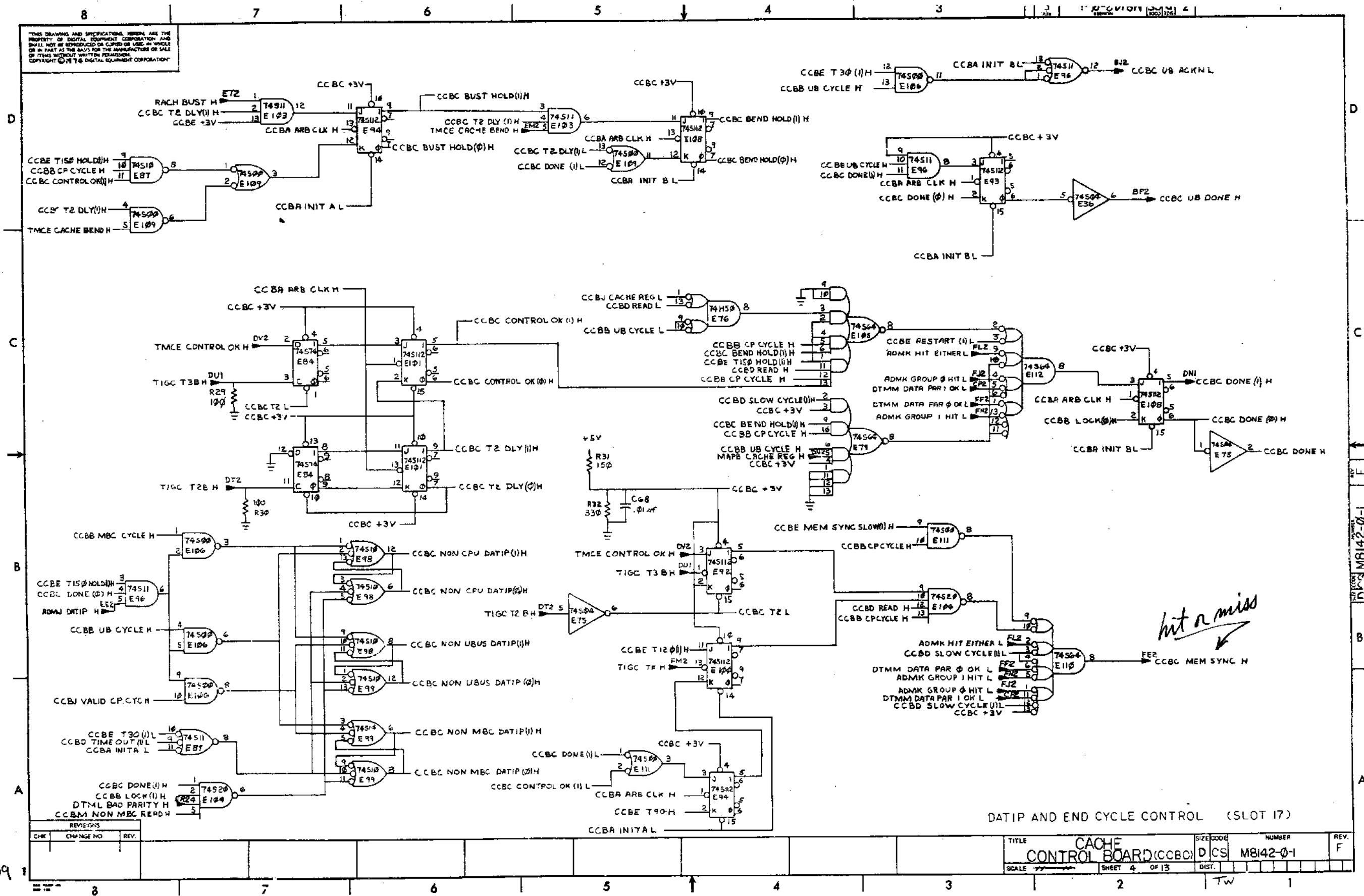


REVISIONS		
CHK	CHANGE NO	REV.

INIT + CLK LOGIC (SLOT 17)

TITLE	SIZE CODE	NUMBER	REV.
CACHE CONTROL BOARD (CCBA)	D	CS M8142-0-1	F
SCALE	SHEET	OF	DIST.
	2	13	

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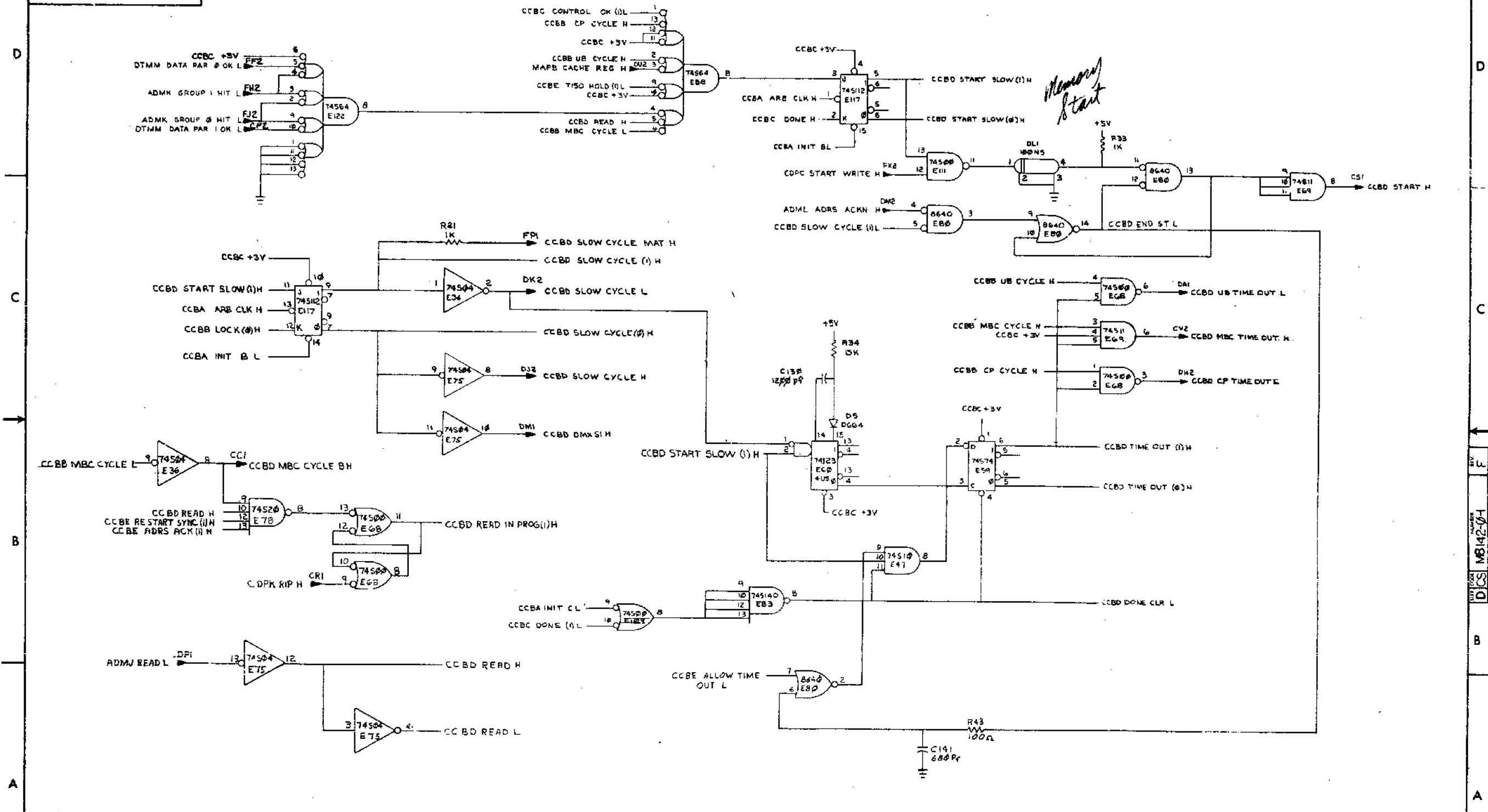
REVISIONS

CHK	CHANGE NO.	REV.

DATIP AND END CYCLE CONTROL (SLOT 17)

TITLE	CACHE CONTROL BOARD (CCBC)	SIZE CODE	NUMBER	REV.
SCALE	SHEET 4 OF 13	DIST.		F

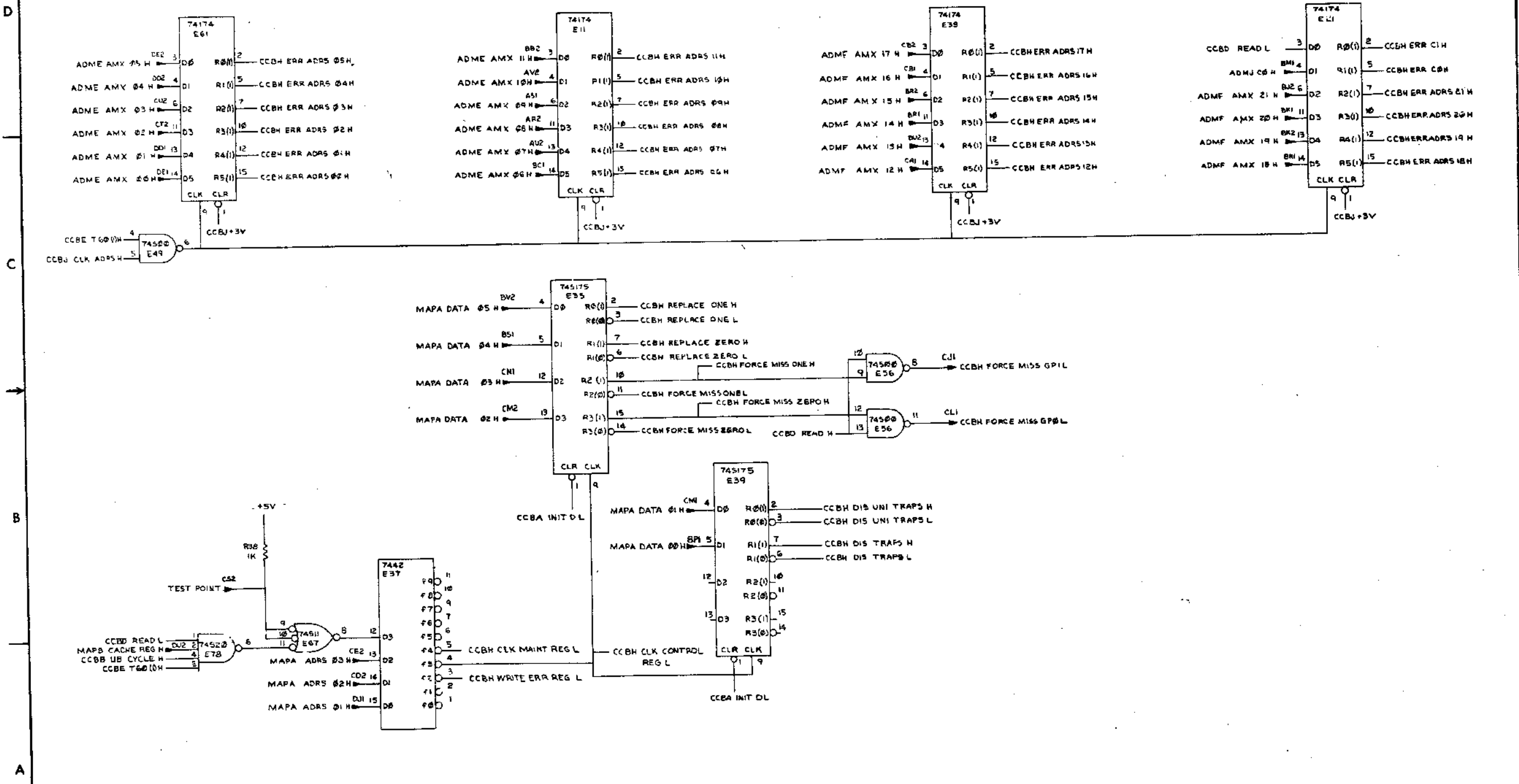
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REV. SHEETS		
CHK	CHANGE NO.	REV.

MAIN MEMORY CONTROL (SLOT 17)		TITLE	SIZE CODE	NUMBER	REV.
CACHE CONTROL BOARD (CCBD)		DCS	M8142-0-1	F	
SCALE	SHEET	OF	DIST.		
	5	13			

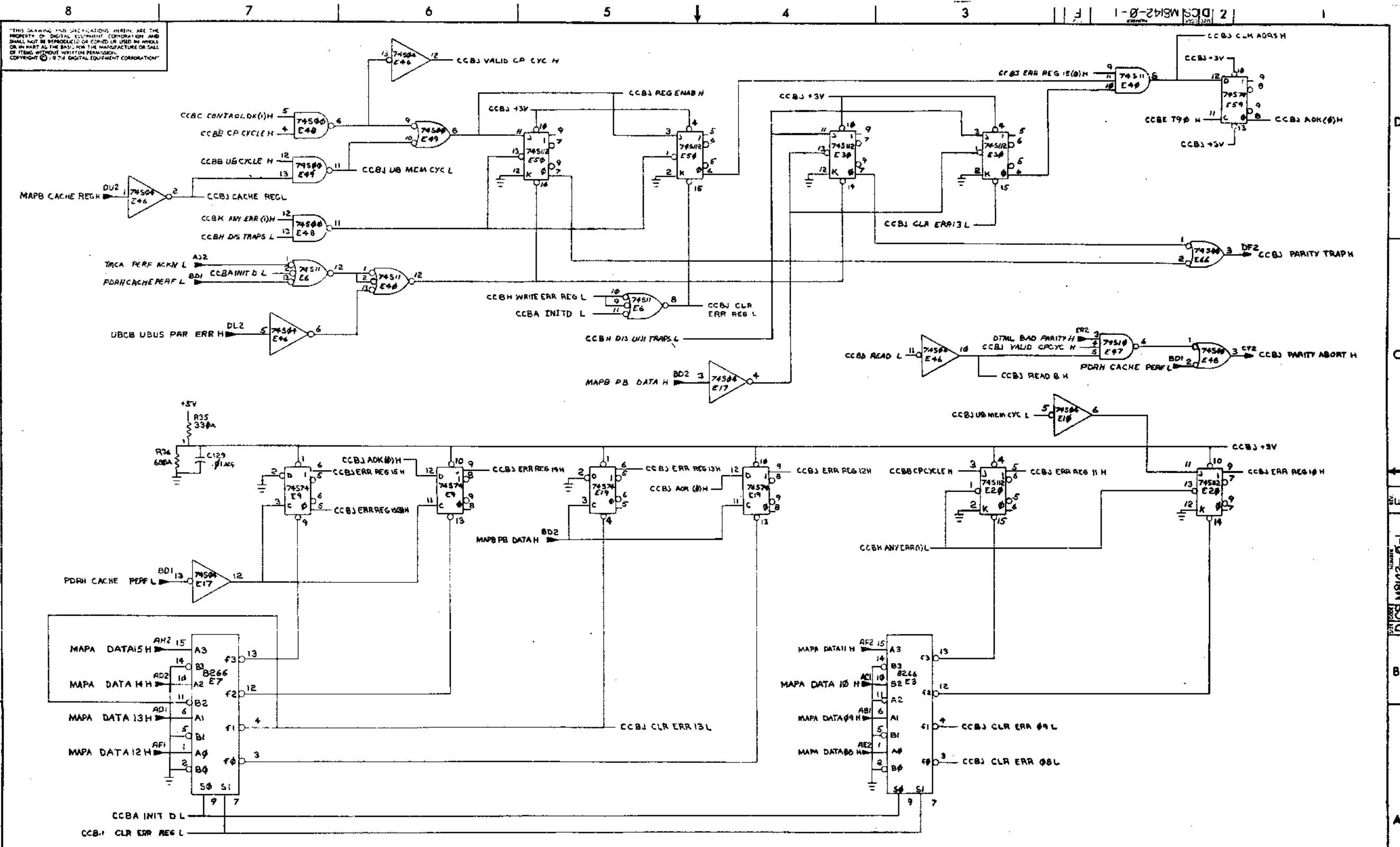
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REVISIONS		
CHK	CHANGE NO.	REV.

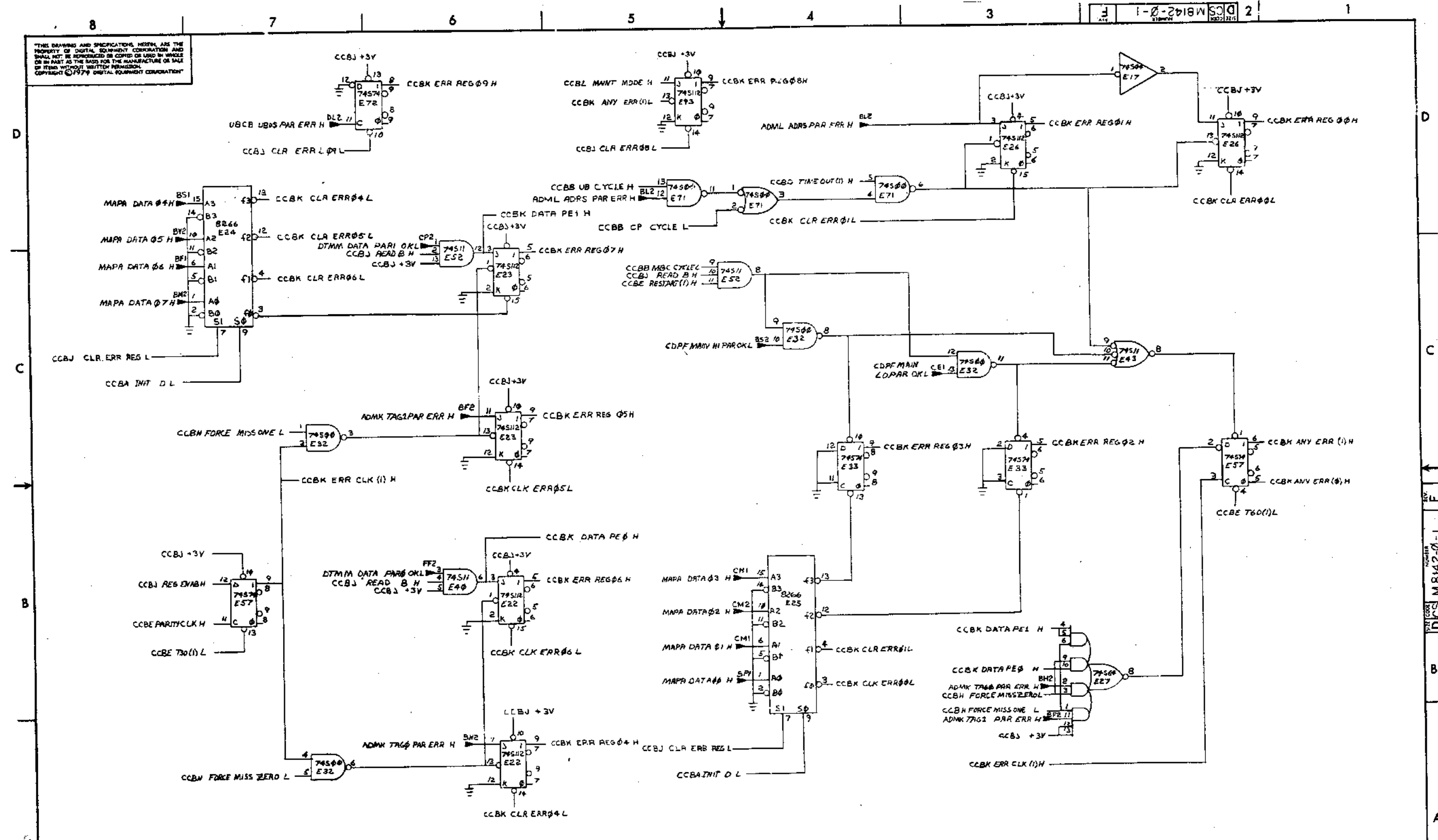
ERROR ADRS REG & DECODE (SLOT 17)

TITLE	CACHE CONTROL BOARD (CCB)	SIZE CODE	DCS	NUMBER	M8142-0-1	REV.	F
SCALE	1:1	SHEET	8	OF 13	DIST.		



REVISIONS			TITLE		SIZE	CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.	CACHE ERROR REGISTER (SLOT 17)					
			CACHE CONTROL BOARD (CCB)		D	CS	MB142-0-1	F
			SCALE	SHEET 9 OF 15				

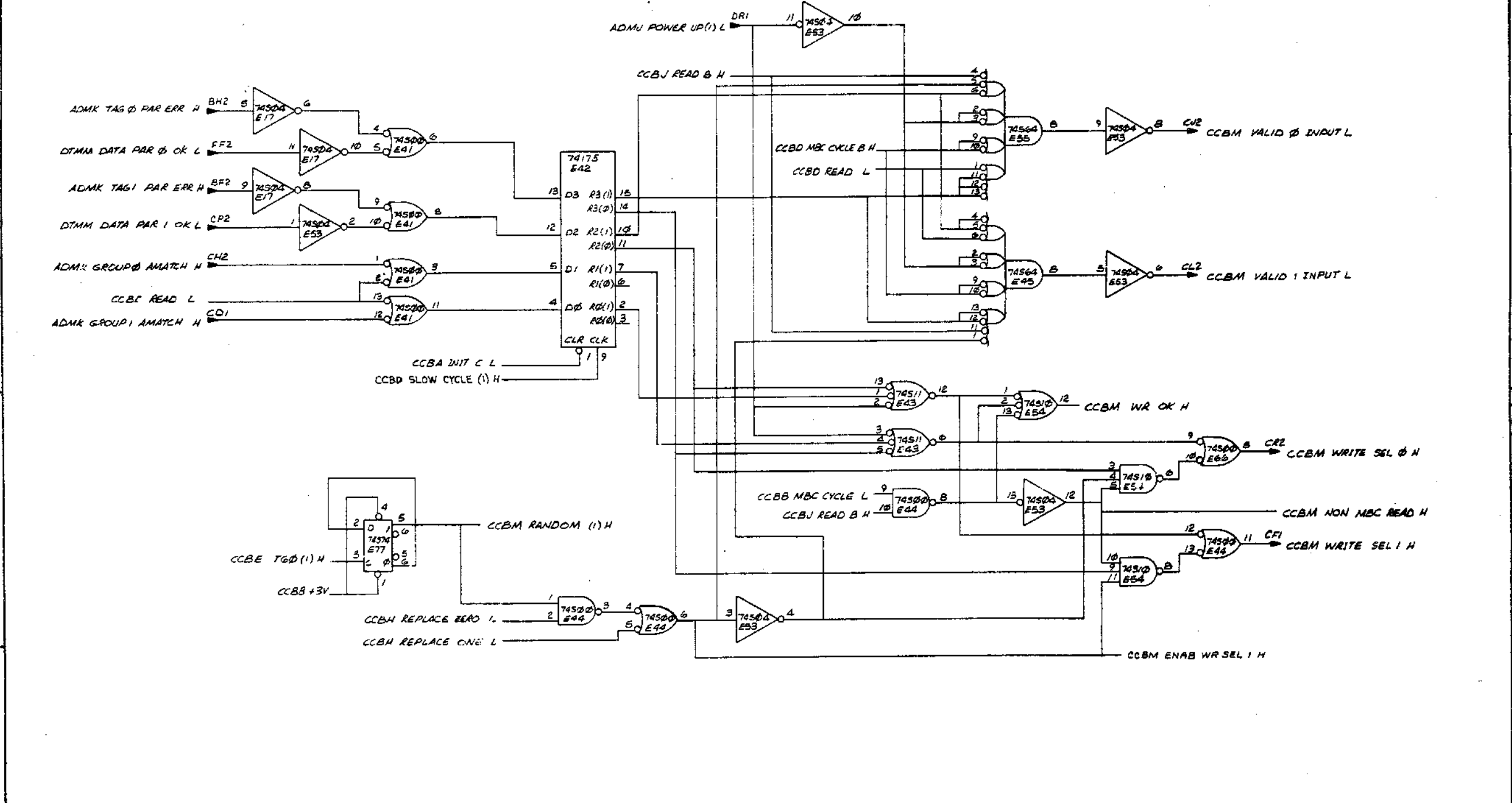
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CACHE ERROR REGISTER (SLOT 17)

REVISIONS			TITLE		NUMBER		REV.
CHK	CHANGE NO.	REV.	CACHE (CCBK) CONTROL BOARD		D/CS M8142-0-1		F
			SCALE	SHEET 10 OF 13	DIST.		

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REVISIONS			VALID AND WRITE SELECT LOGIC (SLOT 17)			
CHK	CHANGE NO.	REV.	TITLE	SIZE CODE	NUMBER	REV.
			CACHE CONTROL BOARD (CCBM)	D	CS M8142-0-1	F
			SCALE	SHEET 12 OF 13	DIST.	

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1777740	ERROR ADDRESS LOW
1777742	ERROR ADDRESS HI
1777744	ERROR REGISTER
1777746	CONTROL REGISTER
1777750	MAINTENANCE REGISTER
1777752	HIT MISS

CACHE ERROR REGISTER	
BIT	DESCRIPTION
ERR REG 15	CPU ABORT
ERR REG 14	CPU ABORT AFTER ADRS LOCK
ERR REG 13	PARITY ERROR ON DATA TO UNIBUS
ERR REG 12	PARITY ERROR ON DATA TO UNIBUS AFTER ADRS LOCK
ERR REG 11	ERROR DURING CP CYCLE
ERR REG 10	ERROR DURING UNIBUS CYCLE
ERR REG 09	CPU RECEIVED PARITY ERROR FROM UNIBUS CYCLE
ERR REG 08	ERROR IN MAINTENANCE MODE
ERR REG 07	FAST DATA MEMORY PARITY ERROR GROUP 1
ERR REG 06	FAST DATA MEMORY PARITY ERROR GROUP 0
ERR REG 05	ADDRESS MEMORY PARITY ERROR GROUP 1
ERR REG 04	ADDRESS MEMORY PARITY ERROR GROUP 0
ERR REG 03	MAIN MEMORY PARITY ERROR ODD WORD
ERR REG 02	MAIN MEMORY PARITY ERROR EVEN WORD
ERR REG 01	MAIN MEMORY ADDRESS PARITY ERROR
ERR REG 00	MAIN MEMORY TIMEOUT

CONTROL REGISTER	
BIT	DESCRIPTION
05	FORCE REPLACEMENT TO GROUP 1
04	FORCE REPLACEMENT TO GROUP 0
03	FORCE MISS GROUP 1 (READ CYCLES)
02	FORCE MISS GROUP 0 (READ CYCLES)
01	DISABLE UNIBUS PB TRAPS
00	DISABLE CPU AND FAST MEMORY TRAPS

CACHE MAINTENANCE REGISTER	
BIT	DESCRIPTION
MAINT 15	FORCE MAIN MEMORY ODD WORD, HI BYTE PARITY BIT TO 1
MAINT 14	FORCE MAIN MEMORY ODD WORD, LO BYTE PARITY BIT TO 1
MAINT 13	FORCE MAIN MEMORY EVEN WORD, HI BYTE PARITY BIT TO 1
MAINT 12	FORCE MAIN MEMORY EVEN WORD, LO BYTE PARITY BIT TO 1
MAINT 11	FORCE WRONG ADDRESS MEMORY PARITY GROUP 1
MAINT 10	FORCE WRONG ADDRESS MEMORY PARITY GROUP 0
MAINT 09	FORCE WRONG ADDRESS MEMORY PARITY GROUP B
MAINT 08	FORCE WRONG ADDRESS MEMORY PARITY GROUP 0
MAINT 07	FORCE FAST DATA MEMORY, GROUP 1 HI BYTE PARITY BIT TO 1
MAINT 06	FORCE FAST DATA MEMORY, GROUP 1 LO BYTE PARITY BIT TO 1
MAINT 05	FORCE FAST DATA MEMORY, GROUP 0 HI BYTE PARITY BIT TO 1
MAINT 04	FORCE FAST DATA MEMORY, GROUP 0 LO BYTE PARITY BIT TO 1
MAINT 03	MAIN MEMORY MARGIN CODE
MAINT 02	
MAINT 01	
MAINT 00	NOT USED

MAINT 3	MAINT 2	MAINT 1	DESCRIPTION
0	0	0	NORMAL OPERATION
0	0	1	CHECK WRONG ADDRESS PARITY
0	1	0	EARLY STROBE MARGIN
0	1	1	LATE STROBE MARGIN
1	0	0	LOW CURRENT MARGIN
1	0	1	HIGH CURRENT MARGIN
1	1	0	NOT USED
1	1	1	NOT USED

		11/70 PARITY ERROR RESPONSE					
		ACTION*			BITS SET IN ERROR REGISTER		
SOURCE OF CYCLE	CYCLE TYPE	TYPE OF ERROR	ALL TRAPS ENABLED	DISABLE WARNING TRAPS (CR00 1)	DISABLE ALL TRAPS (CR 01, 00 3)		
CPU to CACHE	DATI/P	MAIN BUS TIMEOUT	ABORT	ABORT	ABORT	15, 11, 0	
		MAIN BUS PARITY	ABORT	ABORT	ABORT	15, 11, 1	
		MAIN MEM WANTED WORD	ABORT	ABORT	ABORT	15, 11, 2 or 3	
	DATO/B	MAIN MEM OTHER WORD	TRAP	NO ACTION	NO ACTION	11, 2 or 3	
		FAST MEM ADDRESS	TRAP	NO ACTION	NO ACTION	11, 4 or 5	
		FAST MEM DATA	TRAP	NO ACTION	NO ACTION	11, 8 or 7	
UNIBUS (thru MAP) to CACHE	DATI/P	MAIN BUS TIMEOUT	UNIBUS TIMEOUT	UNIBUS TIMEOUT	UNIBUS TIMEOUT	NONE	
		MAIN BUS PARITY	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT	UNIBUS TIMEOUT	10, 1	
		MAIN MEM WANTED WORD	UNIBUS PB, TRAP	UNIBUS PB, TRAP	UNIBUS PB	13, 10, 2 or 3	
	DATO/B	MAIN MEM OTHER WORD	TRAP	NO ACTION	NO ACTION	10, 2 or 3	
		FAST MEM ADDRESS	TRAP	NO ACTION	NO ACTION	10, 4 or 5	
		FAST MEM DATA	TRAP	NO ACTION	NO ACTION	10, 6 or 7	
CPU to UNIBUS (thru MAP) to CACHE	DATI/P	MAIN BUS TIMEOUT	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT	UNIBUS TIMEOUT	10, 0	
		MAIN BUS PARITY	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT	UNIBUS TIMEOUT	10, 1	
		FAST MEM ADDRESS	TRAP	NO ACTION	NO ACTION	10, 4 or 5	
	DATO/B	MAIN BUS TIMEOUT	UNIBUS TIMEOUT	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT	UNIBUS TIMEOUT	10, 4 or 5
		MAIN BUS PARITY	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT, TRAP	UNIBUS TIMEOUT	UNIBUS TIMEOUT	10, 1
		FAST MEM ADDRESS	TRAP	NO ACTION	NO ACTION	NO ACTION	10, 4 or 5

* ALL TRAPS VECTOR TO 114

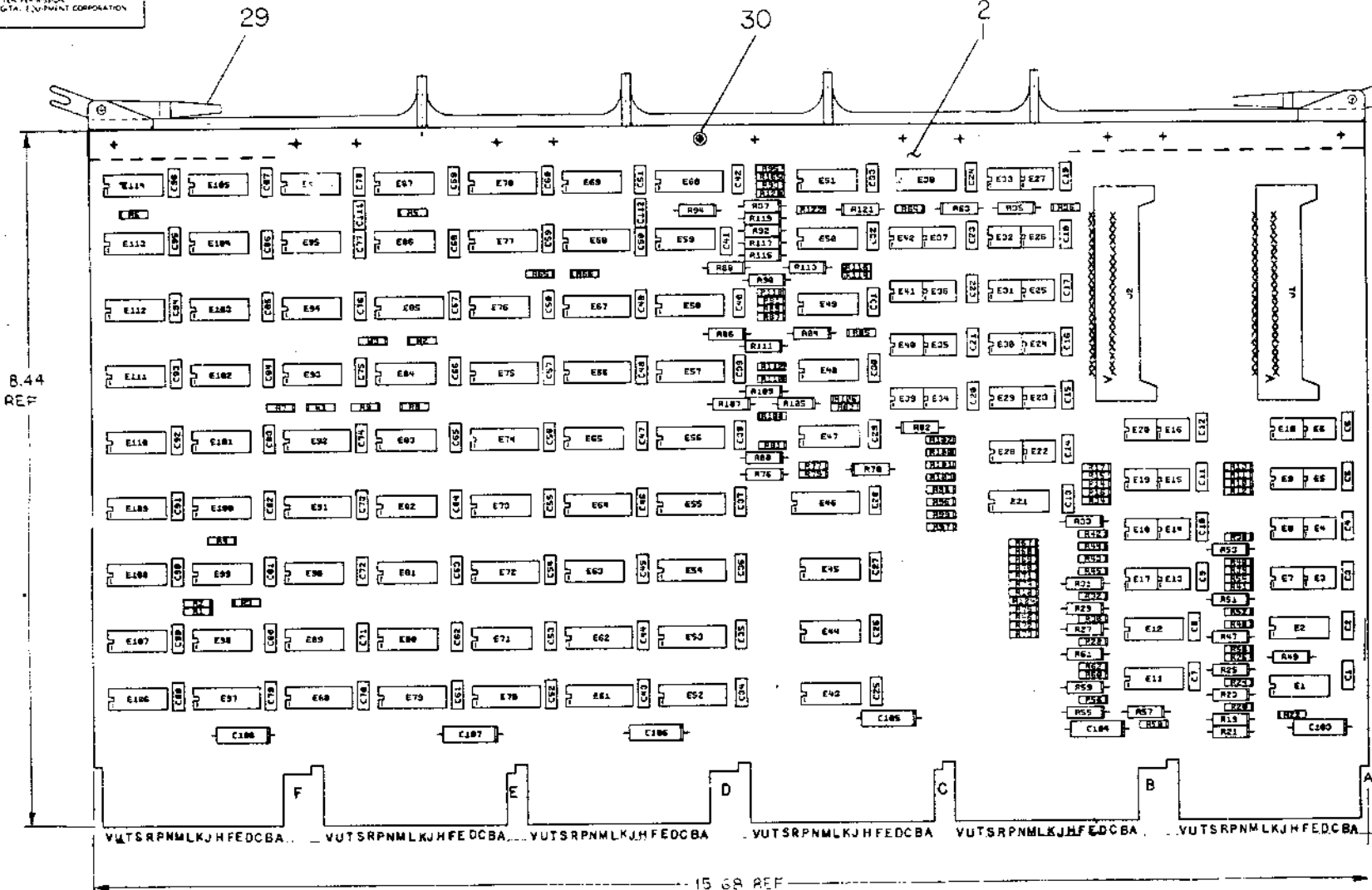
NOTES

- THESE TABLES ONLY COVER SINGLE ERRORS.
- THE PROCESSOR ALSO WILL ABORT TO 114 WHEN DOING DATI/P CYCLES ON THE UNIBUS AND THE DEVICE ASSERTS PB. IN THESE CASES, BIT 9 SETS IN THE ERROR REGISTER.
- ERRORS ON MASSBUS CYCLES ARE HANDLED BY THE MASSBUS CONTROLS, AND HAVE AN EFFECT ON THE ERROR REGISTER.

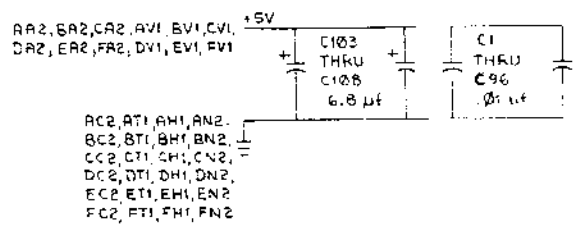
REVISIONS		
CHK	CHANGE NO	REV

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NOTES: E77 AND E78 ARE SPARES.



IC TYPE	GND	+5V
IC DEC 8640	1	8
IC DEC 745175	8	16
IC DEC 75453	4	8
IC DEC 75452	4	8
IC DEC 745156	8	16
IC DEC 8166	8	16
IC PIN LOCATIONS		



REF	X-Y COORDINATE HOLE LOCATION	K-CC-M8145-E-4	1
REF	ASSY DRILLING HOLE LAYOUT	D-AH-M8145-F-5	2
REF	MODULE ECO HISTORY	B-MH-M8145-B-6	3
1	ETCHED CIRCUIT BOARD	5011386	4
98	C1 THRU C96, C111, C112	CAPACITOR, 6.8 μf, 100V, 20%	5
6	C103 THRU C108	CAPACITOR, 6.8 μf, 35V, 20%	6
2	R5, R65	RESISTOR, 330 OHM, 1/4W, 5%	7
43	R1 THRU R4, R7 THRU R9, R10 THRU R16, R38 THRU R46, R67 THRU R75, R96 THRU R104	RESISTOR, 1K, 1/4W, 5%	8
2	R6, R66	RESISTOR, 680 OHM, 1/4W, 5%	9
38	R19, R21, R23, R25, R27, R29, R31, R33, R35, R37, R41, R43, R45, R51, R53, R55, R57, R59, R61, R63, R76, R78, R80, R82, R84, R86, R88, R90, R92, R94, R105, R107, R109, R111, R113, R115, R117, R119, R121	RESISTOR, 121 OHM, 1/2W, 1%	10
38	R20, R22, R24, R26, R28, R30, R32, R34, R36, R48, R50, R52, R54, R56, R58, R60, R62, R64, R77, R79, R81, R83, R85, R87, R89, R91, R93, R95, R106, R108, R110, R112, R114, R116, R118, R120, R122, R165	RESISTOR, 186 OHM, 1/4W, 1%	11
4	E52, E79, E89, E97	I.C. DEC 826F	12
5	E81, E92, E99, E100, E103	I.C. DEC 74580	13
4	E59, E80, E99, E108	I.C. DEC 74584	14
5	E43, E84, E90, E98, E107	I.C. DEC 74510	15
6	E73, E76, E83, E106, E109, E110	I.C. DEC 74511	16
2	E93, E113	I.C. DEC 74520	17
4	E88, E87, E94, E95	I.C. DEC 74584	18
6	E86, E101, E102, E104, E111, E112	I.C. DEC 74574	19
2	E44, E114	I.C. DEC 745140	20
9	E55, E58, E64, E66, E67, E70, E72, E74, E75	I.C. DEC 745158	21
18	E4, E6, E9, E10, E14, E16, E18, E20, E22, E23, E24, E25, E27, E34, E35, E36, E37, E26	I.C. DEC 75452	22
12	E46, E53, E54, E56, E57, E60, E61, E62, E68, E85, E91, E92	I.C. DEC 745175	23
18	E3, E5, E7, E9, E13, E15, E17, E19, E28, E29, E30, E31, E32, E33, E39, E40, E41, E42	I.C. DEC 75453	24
6	E21, E45, E59, E63, E65, E71	I.C. DEC 82562	25
11	E1, E2, E11, E12, E38, E47, E48, E49, E50, E51, E105	I.C. DEC 8640	26
3	W1, W2, W3	JUMPER	27
2	J1, J2	CONNECTOR BERG 40 PIN	28
1		HANDLE ASSY	29
12		EYELET	30
1		BLOCK DIAGRAM	31

1170

ETCH BOARD REV B

DATE 12/18/74
 CHK'D FERGLUSON
 ENG A. L. N. HELENIUS
 PROD A. L. N. HELENIUS
 NEXT HIGHER ASSY K. TAYLOR

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CACHE DATA PATH

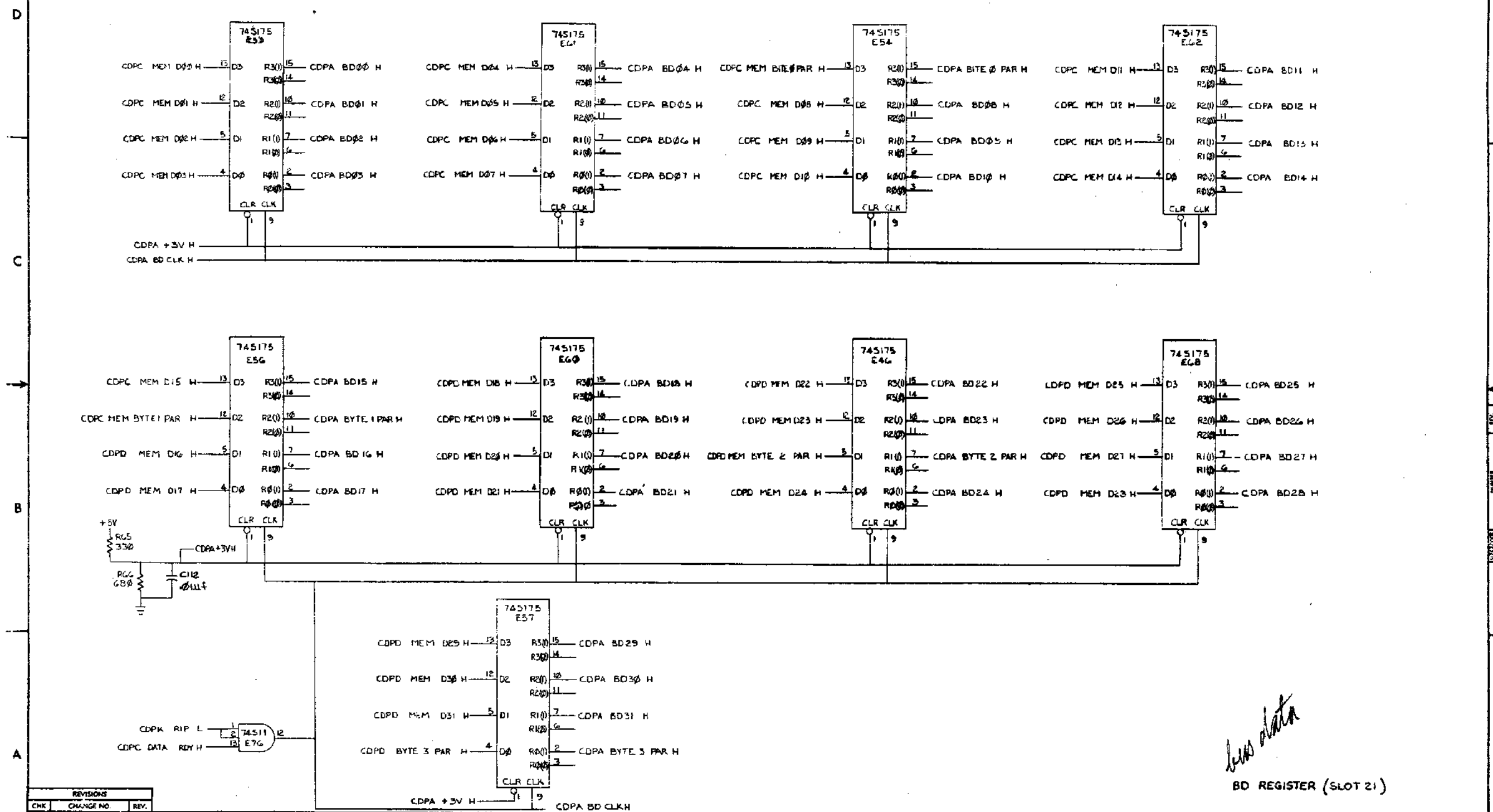
SIZE CODE DCS NUMBER M8145-0-1 REV C

SEMICONDUCTOR CONVERSION CHART

127

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1-0-0718W 2



less data
BD REGISTER (SLOT 2)

REVISIONS		
CHK	CHANGE NO.	REV.

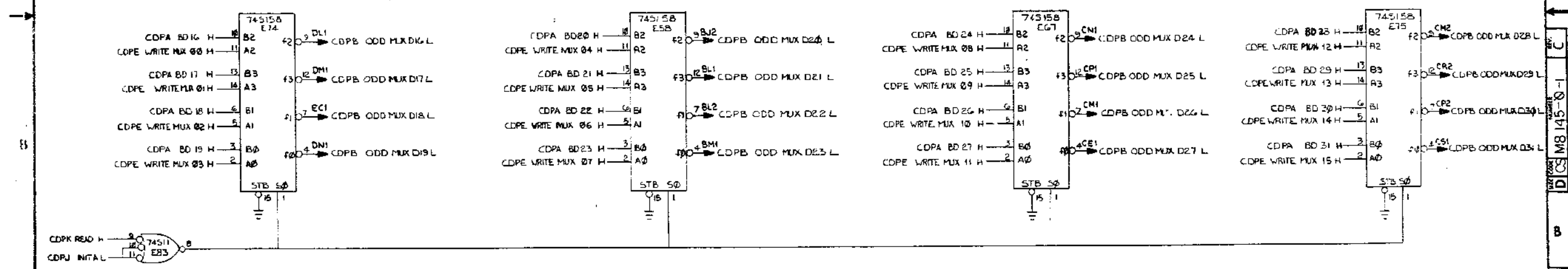
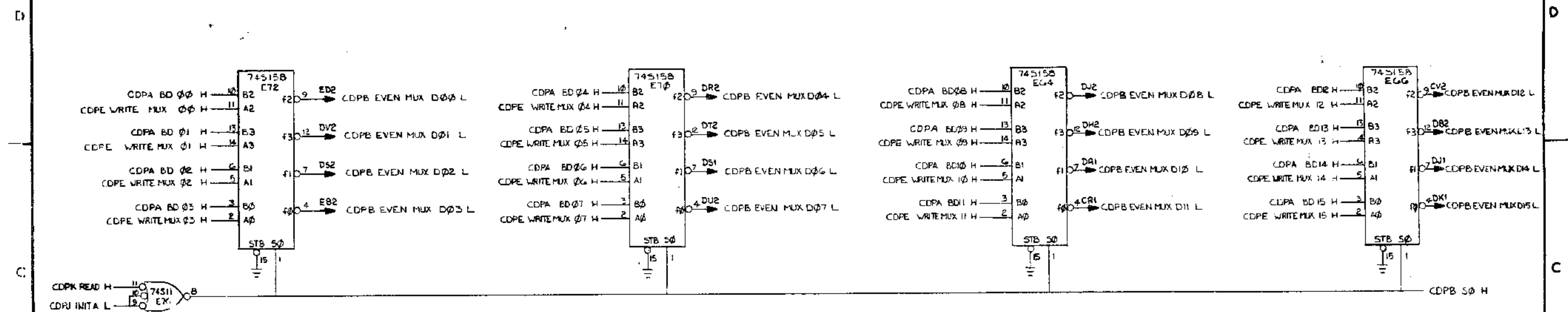
128

TITLE	(CDPA)	SIZE/CODE	NUMBER	REV.
CACHE DATA PATH	D CS	MB145-0-1	G	
SCALE	SHEET 2 OF 10	DWT		

220

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17-0-57187-1 2



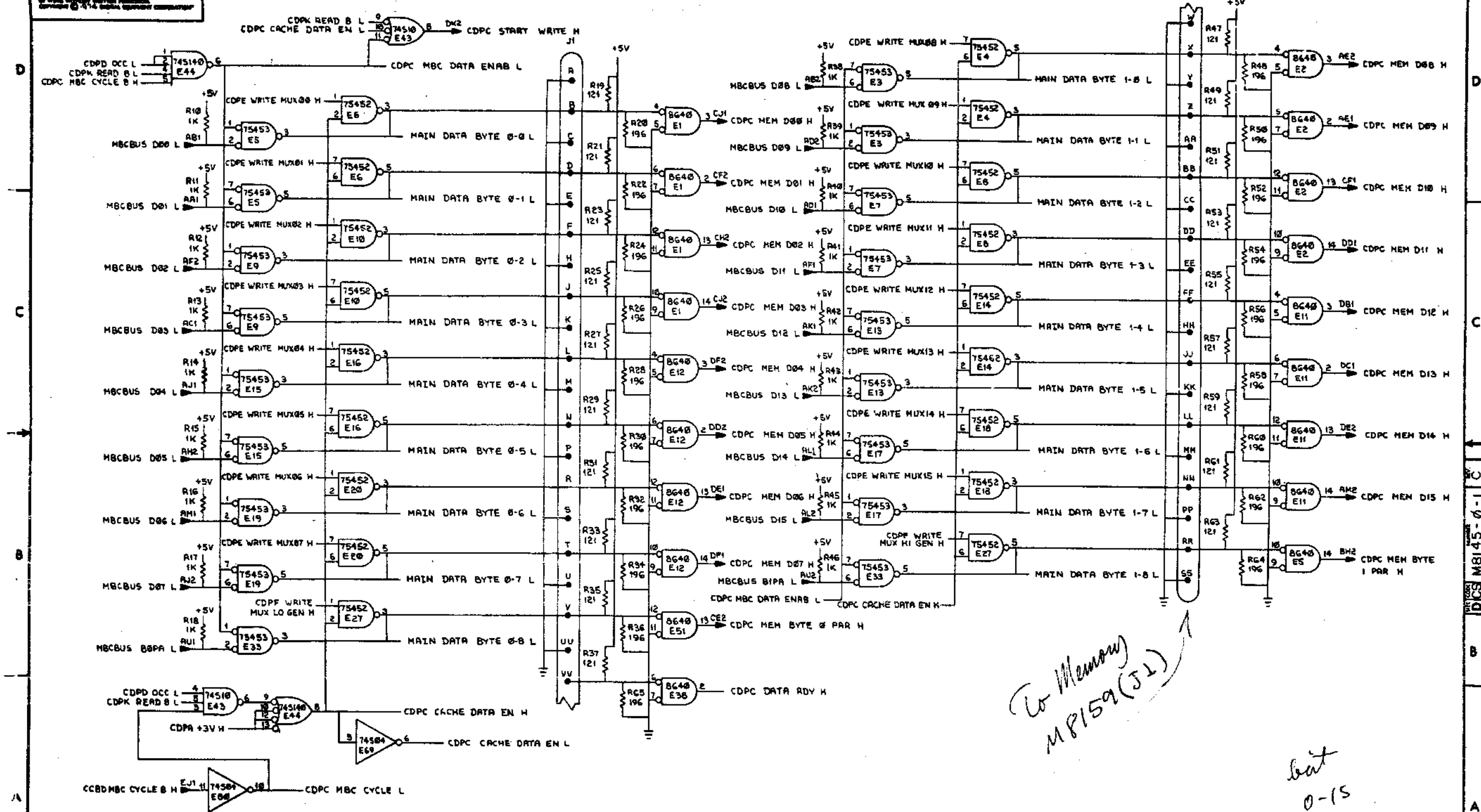
* NOTE:
S0 H SELECTS BD REGISTER

DATA MULTIPLEXER (SLOT 21)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE/CODE	NUMBER	REV.
CACHE DATA PATH	D CS M8145-0-1	C	
SCALE	SHEET 3 OF 10	DIST	

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To Memory
MP159 (JL)

best
0-15

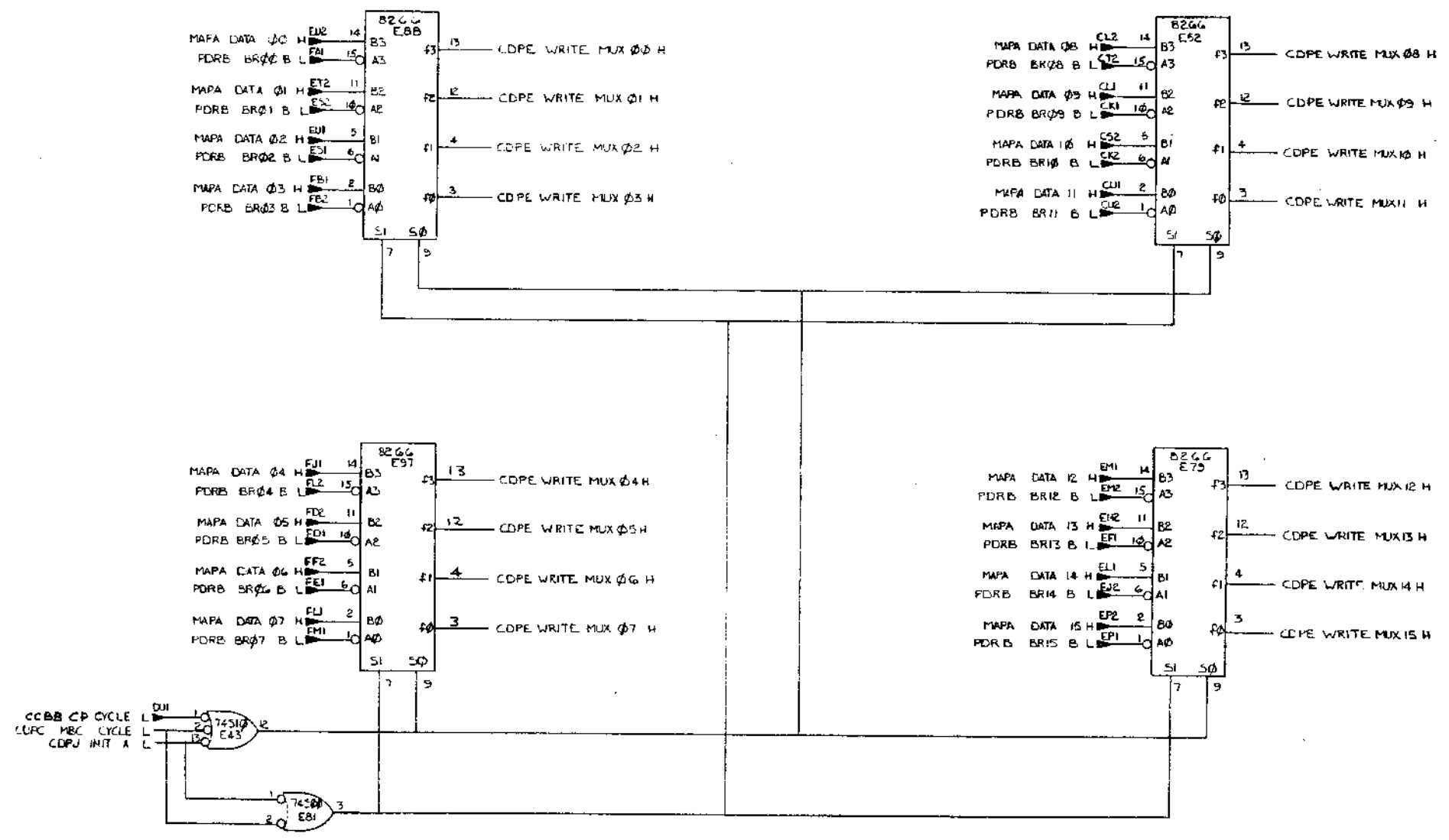
MAIN MEMORY EVEN WORD (SLOT 21)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	CACHE DATA PATH (CDPC)	SIZE/COOR	DCS	NUMBER	M8145-0-1	REV.	C
SCALE		SHEET	4	OF	10	DIST.	

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170-5718W 2



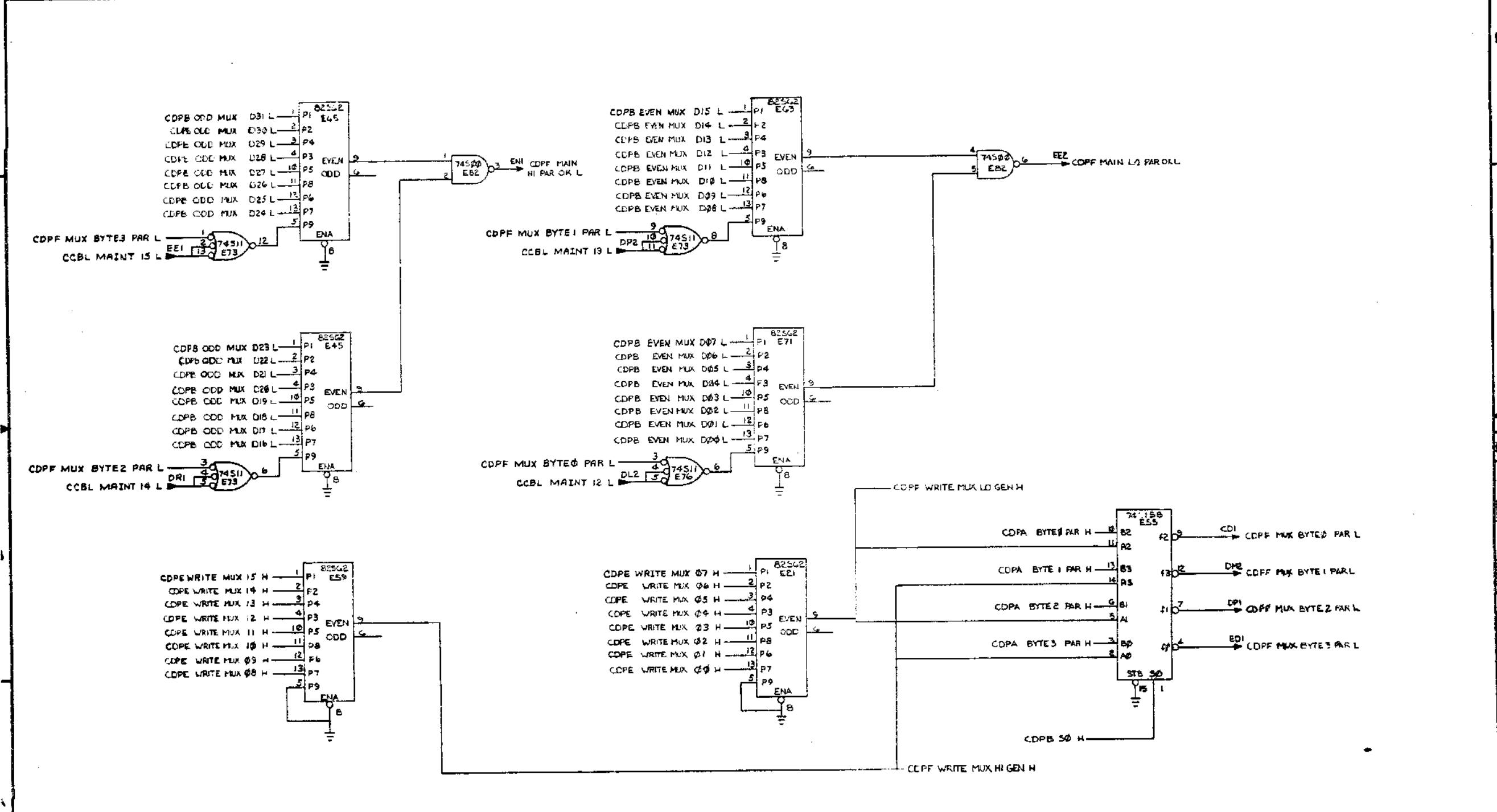
S1	S0	OUTPUT	OPERATION
L	L	MAP DATA	UNIBUS CYCLE
L	H	BR DATA	CP CYCLE
H	L	MAP DATA	CAN'T HAPPEN
H	H	ALL PS	MBC CYCLE, PUP

WRITE MULTIPLEXER (SLOT 21)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CDPE)	SIZE/COOD	NUMBER	REV.
CACHE DATA PATH	D/CS	M8145-0-1	C	
SCALE	SHEET 6 OF 10	DIST.		

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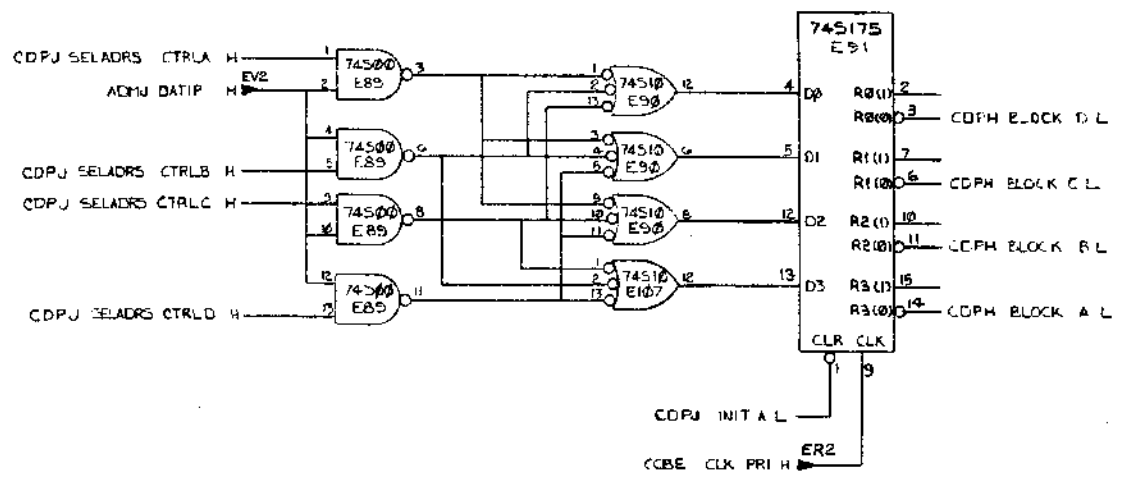
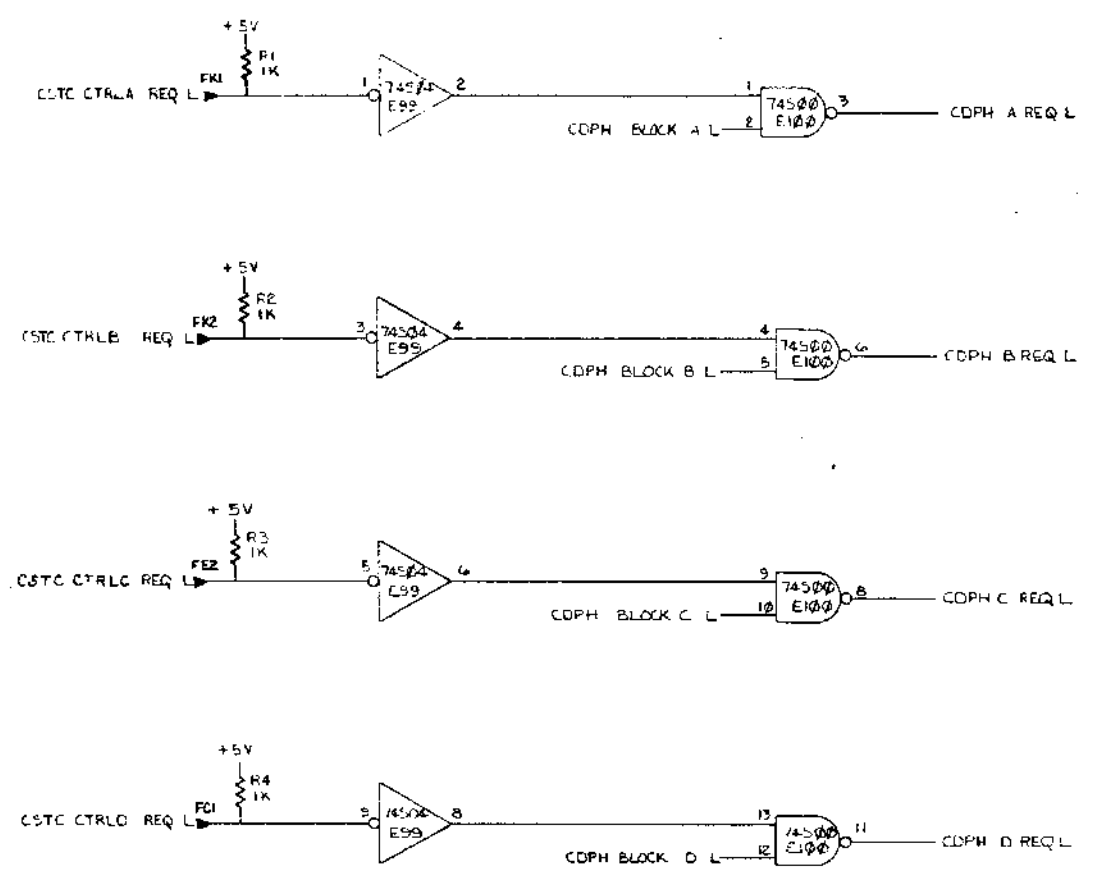
MEMORY PARITY CONTROL (SLOT 21)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CDPF)	SIZE/COE	NUMBER	REV.
CACHE DATA PATH	DCS	M8145-0-1	C	
SCALE	SHEET 7 OF 10	DIST.		

DCS M8145-0-1

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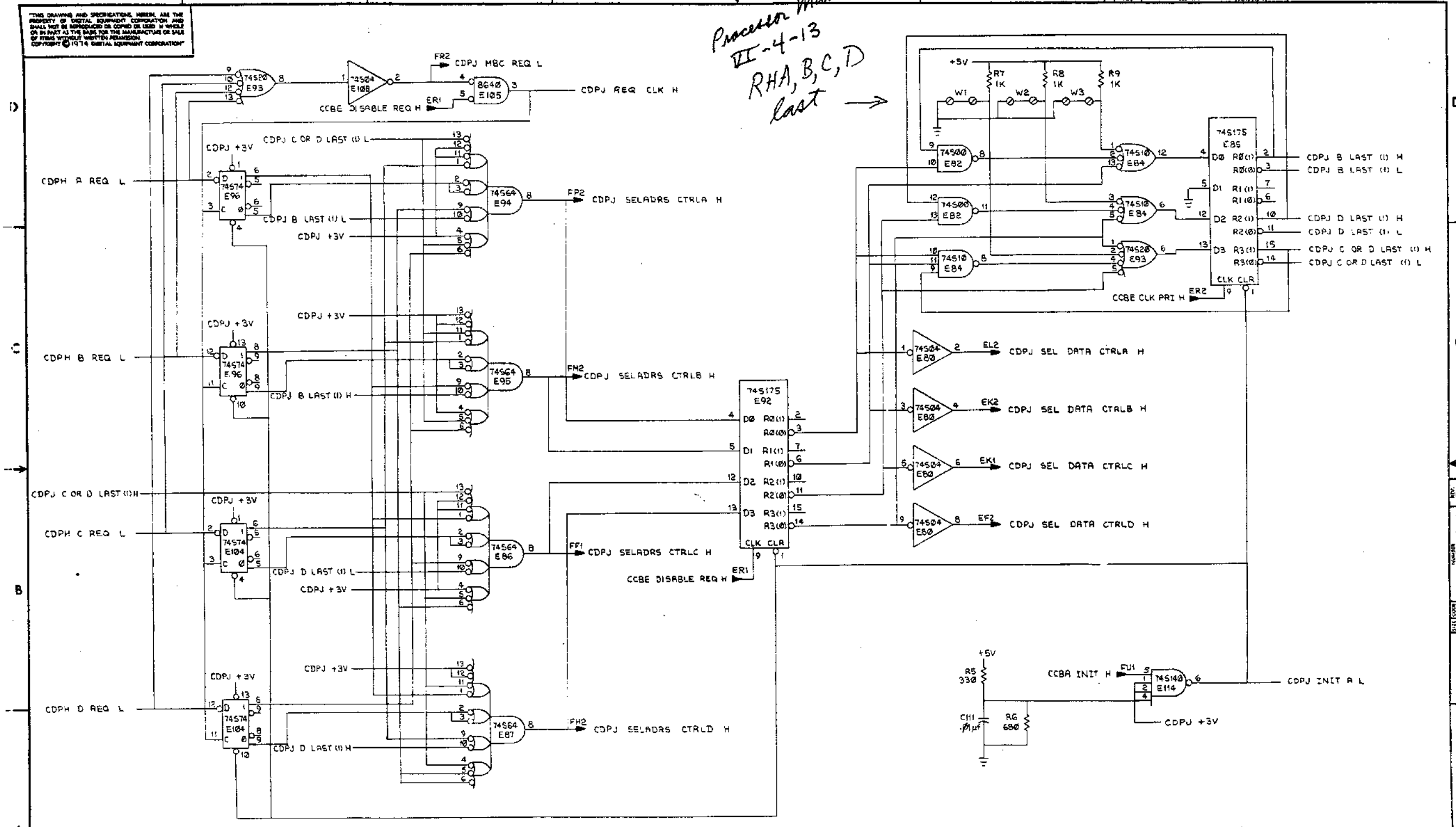
Handwritten signature
 (RH70)
 MBC REQUEST (SLOT 21)

REVISIONS		
OK	CHANGE NO.	REV.

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*Processor Manual
II-4-13
RHA, B, C, D
last*

1-0-9718W DCS M8145-0-1 2

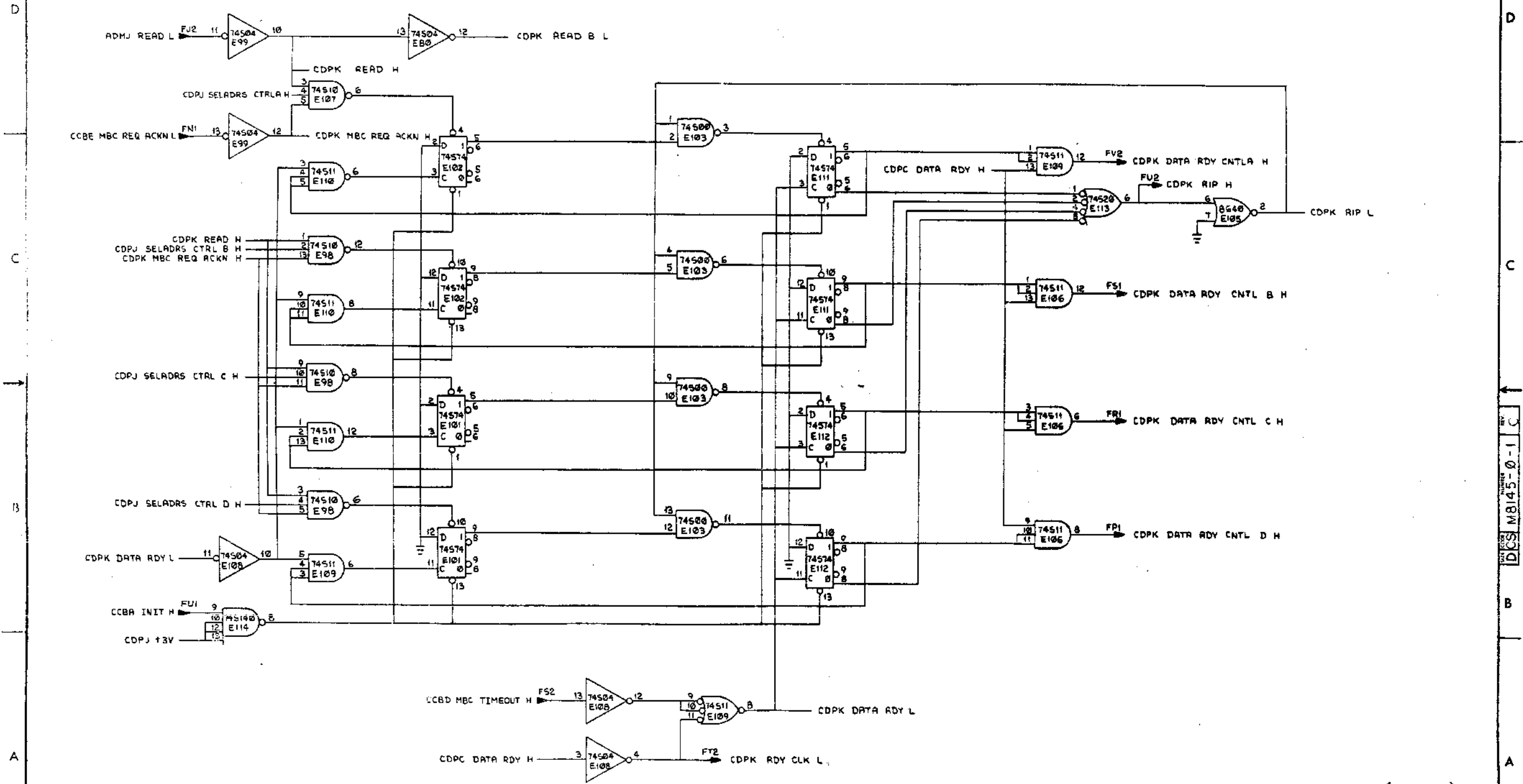


REVISIONS		
CHK	CHANGE NO.	REV.

MBC ARBITRATOR (SLOT 21)

TITLE	CACHE DATA PATH (CDPJ)	SIZE CODE	D/CS	NUMBER	M8145-0-1	REV.	C
SCALE		SHEET	9	OF	10	DIST.	

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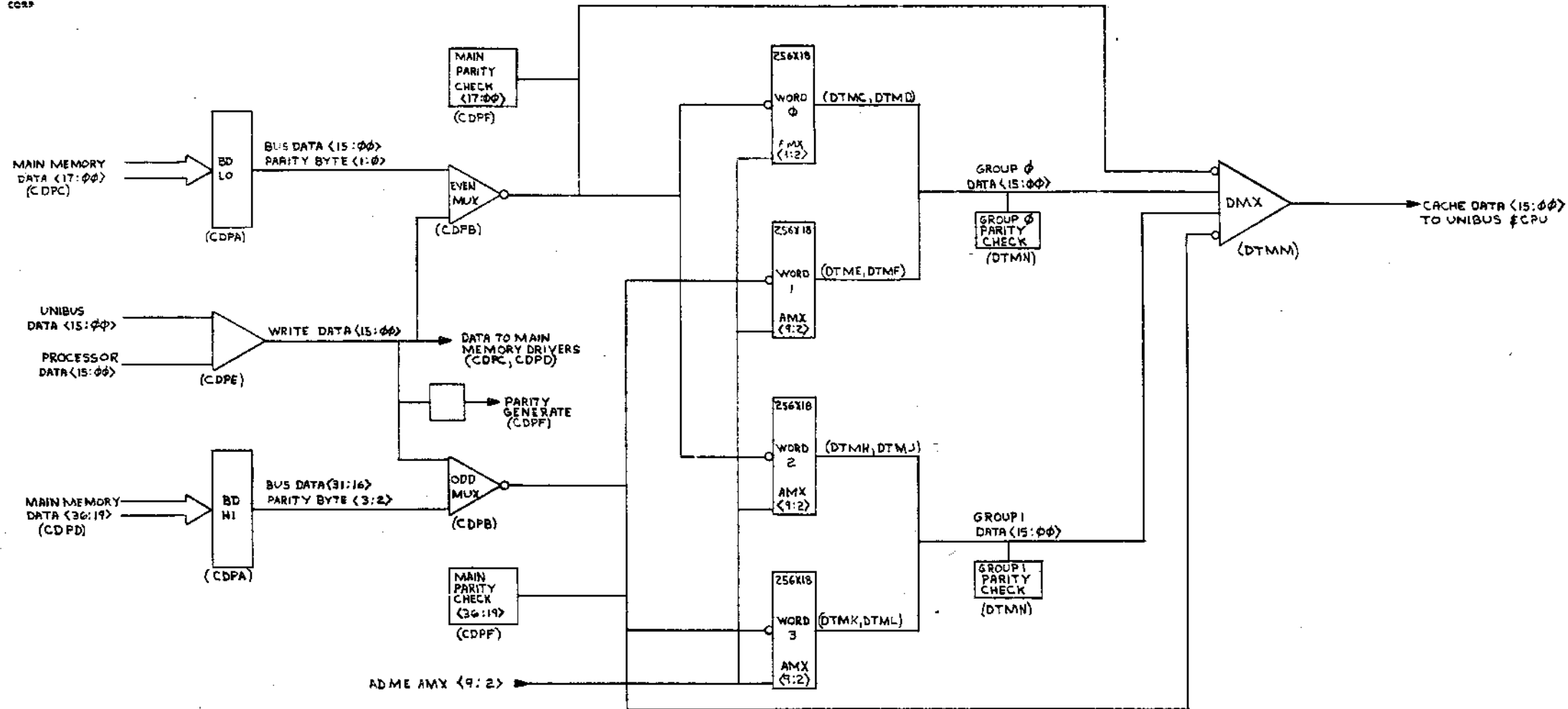
MBC DATA CONTROL (SLOT 21)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	CACHE DATA PATH (CDPK)	SIZE CODE	D CS	NUMBER	M8145-0-1	REV.	C
SCALE		SHEET	10	OF	10	DIST.	

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WORD SELECT

READ	A0	MISS	RANDOM	WORD SELECT	FUNCTION
0	0	0	X	0, 2	WRITE HIT
0	1	0	X	1, 3	WRITE HIT
1	0	0	X	0, 2	READ HIT
1	1	0	X	1, 3	READ HIT
1	X	1	0	0, 1	READ MISS
1	X	1	1	2, 3	READ MISS

REV	
CHANGE NO	
CHK	
DEC FORM NO	100

FIRST USED ON OPTION/ MODEL
11/70

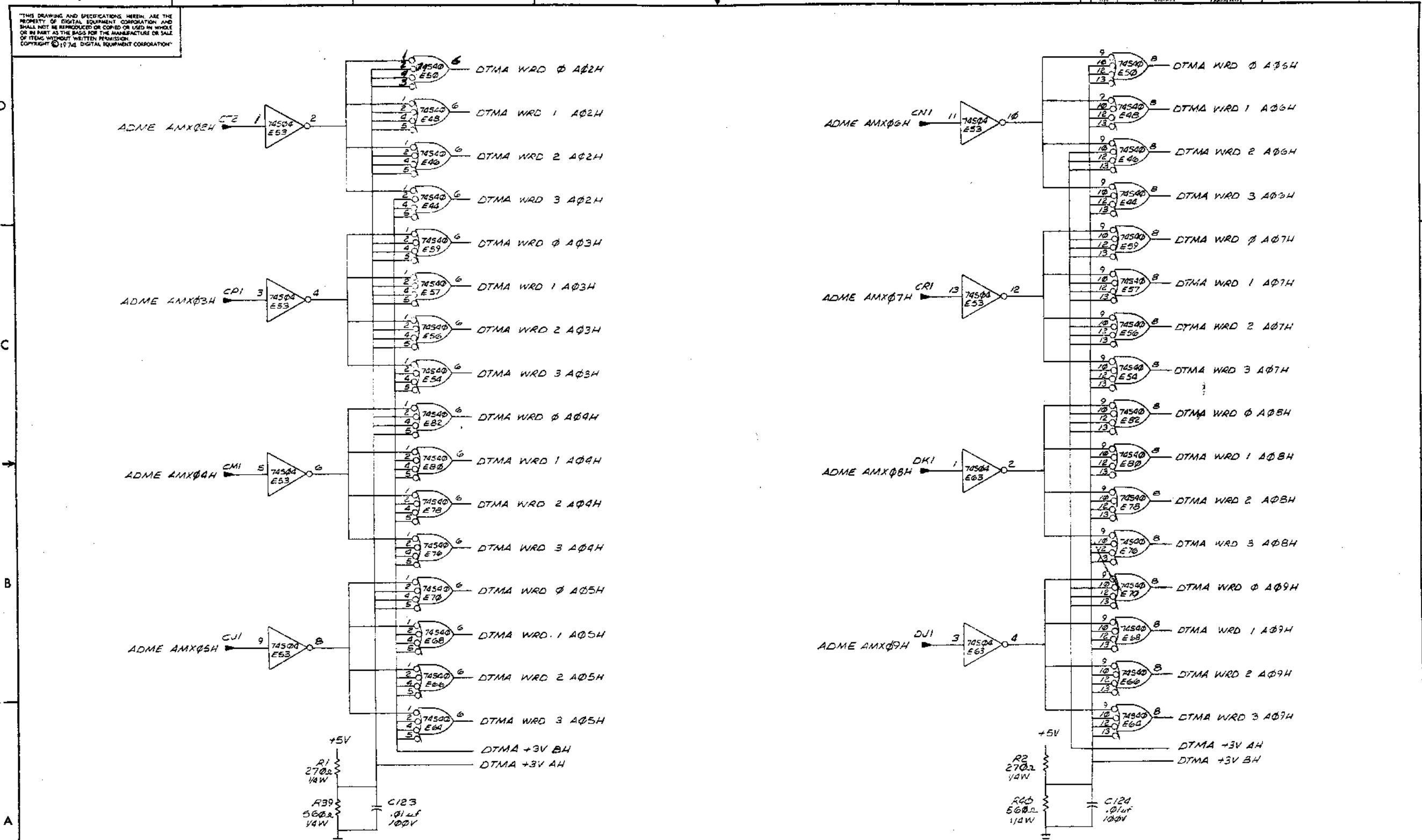
DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS FRACTIONS ANGLES
= .008 = 1/64 = 0°30'
FINAL SURFACE QUALITY 1
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			
CHK'D	DATE	DIGITAL EQUIPMENT CORPORATION MAYFORD, MASSACHUSETTS	
DATE	DATE	TITLE CACHE DATA PATH	
DATE	DATE	SIZE/CODE NUMBER D E D M8145-0-7	
DATE	DATE	SCALE SHEET 1 OF 1	
DATE	DATE	REV *	

PART NO. M8145-0-7

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1-1-0019W DCS 2

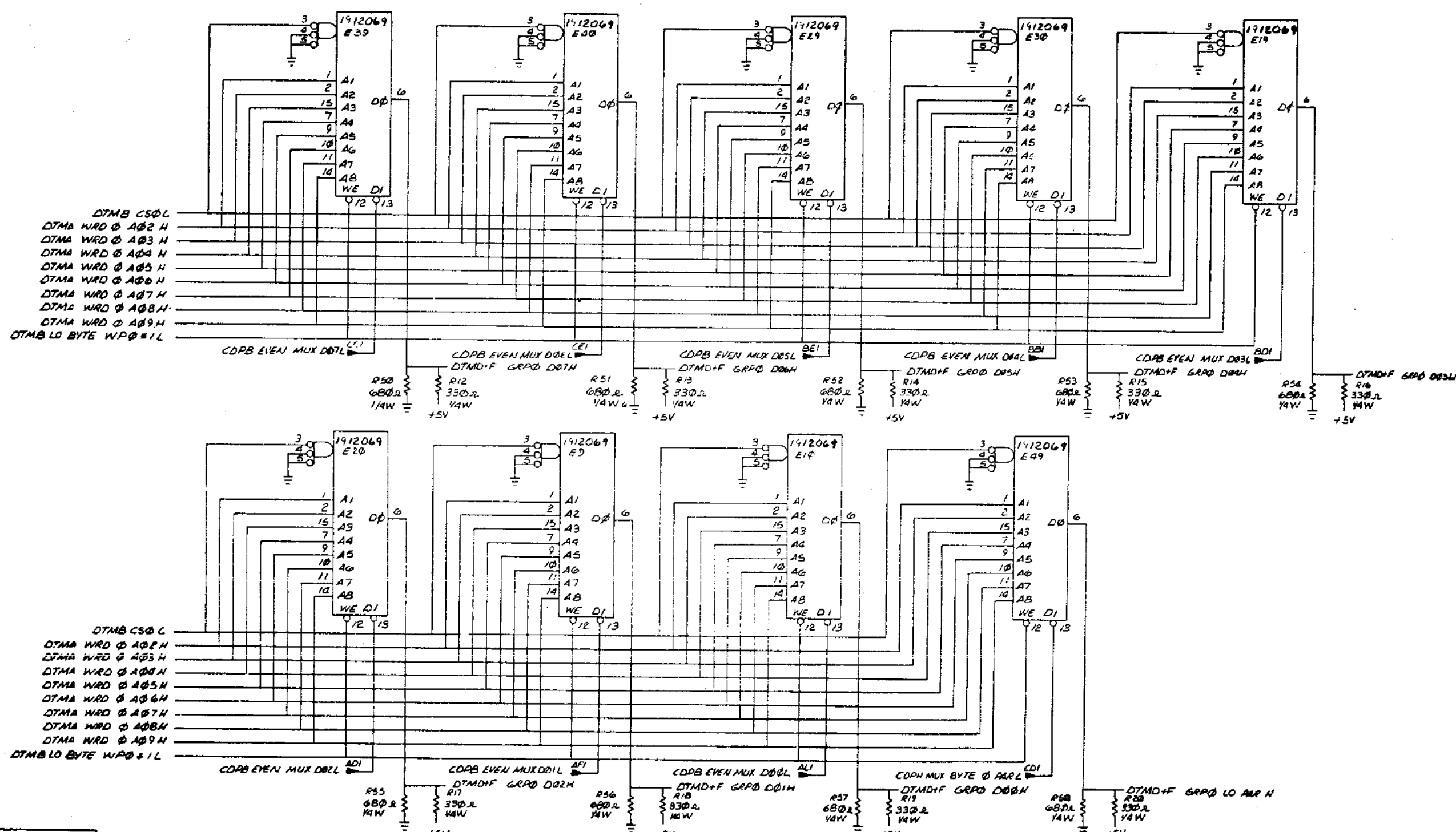


REVISIONS		
CHK	CHANGE NO.	REV.

SLOT 20 (ADDRESS DRIVERS)

TITLE	DATA MEMORY (DTMA)	SIZE CODE	D CS	NUMBER	M8144-0-1	REV.	*
SCALE	1/1	SHEET	2	OF	14	DIST.	

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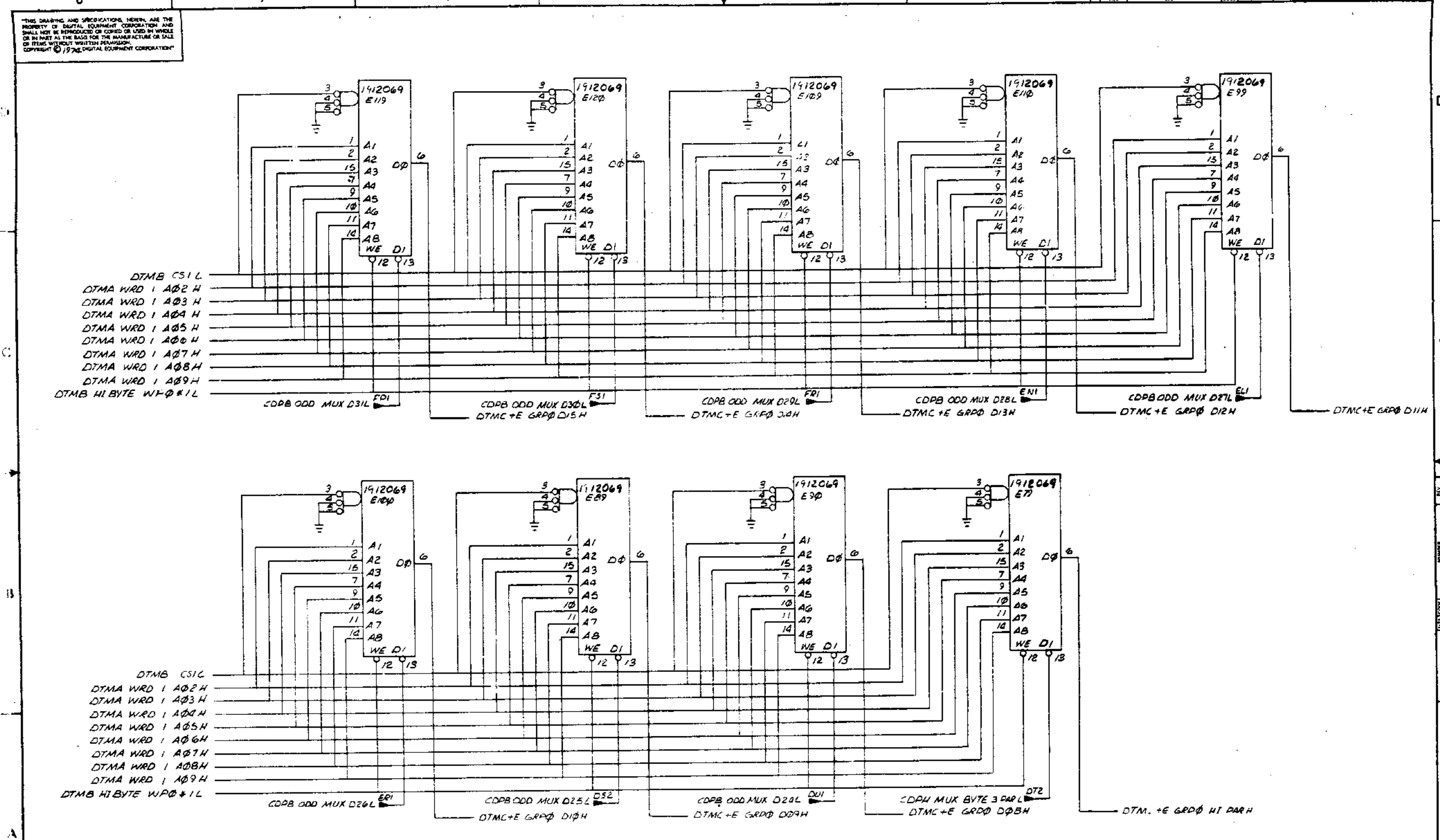


REVISIONS		
CHK	CHANGE NO.	REV.

SLOT 20 (WORD 0 LO BYTE)

TITLE	DATA MEMORY (DTMD)	SIZE CODE	D CS	NUMBER	M8144-0-1	REV.	*
SCALE	1/1	SHEET	5 OF 14	DIST.			

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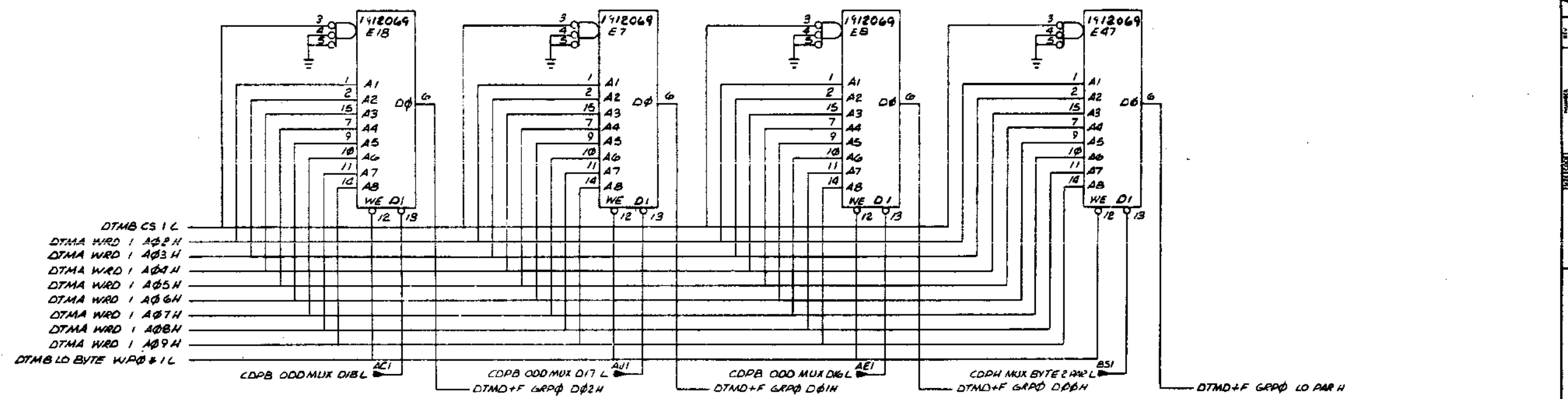
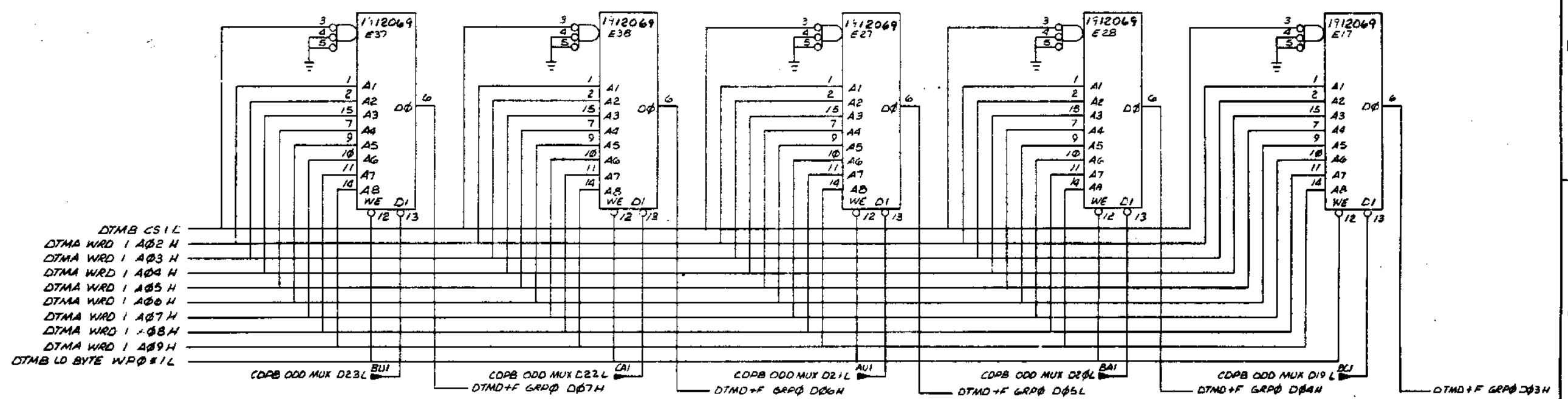


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		DATA MEMORY (DTM) DCS		SIZE CODE		NUMBER		REV.	
SCALE		SHEET 6 OF 14		DIST.		M8144-0-1		*	

SLOT 20 (WORD 1 HI BYTE)

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REVISIONS		
CHK	CHANGE NO.	REV.

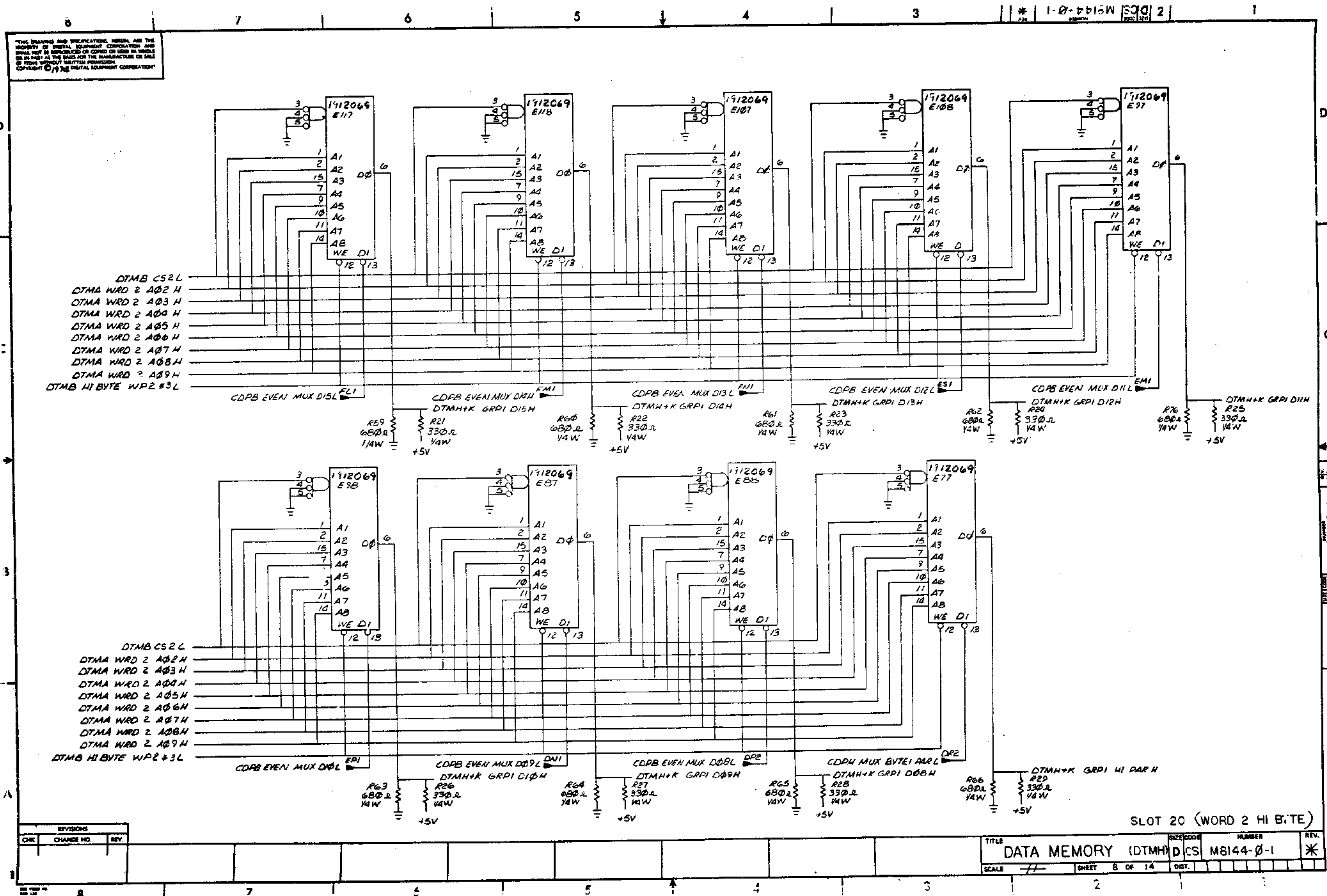
144

SLOT 20 (WORD 1 LO BYTE)

TITLE	DATA MEMORY (DTMF)	SIZE CODE	DCS	NUMBER	M8144-0-1	REV.	*
SCALE	1/1	SHEET	7 OF 14	DET.			

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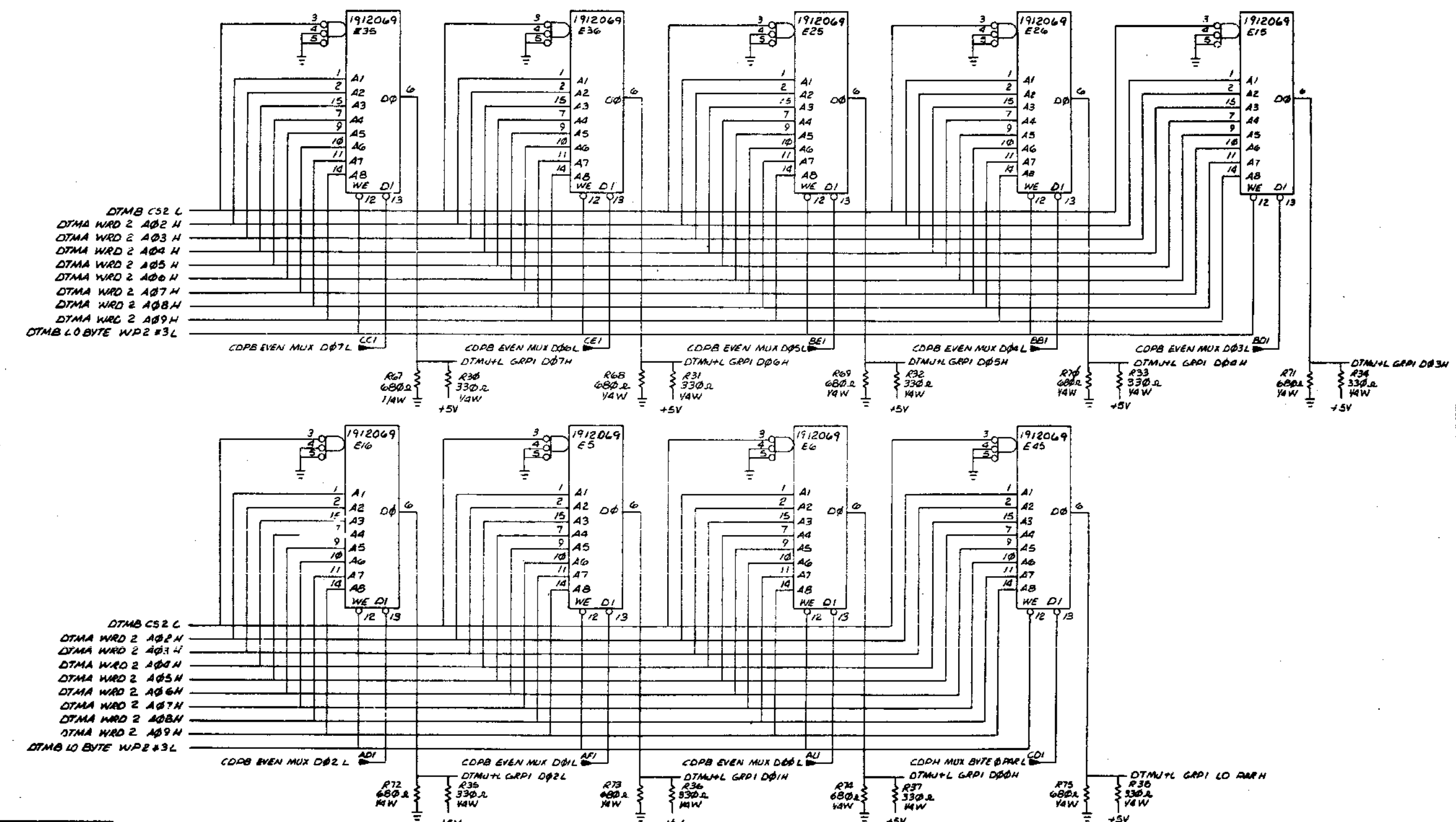


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SLOT CODE		NUMBER		REV.	
DATA MEMORY (DTMH)		D CS		M8144-0-1		*	
SCALE	SHEET	DIST.		REV.		REV.	
1/1	8 OF 14						

D CS M8144-0-1

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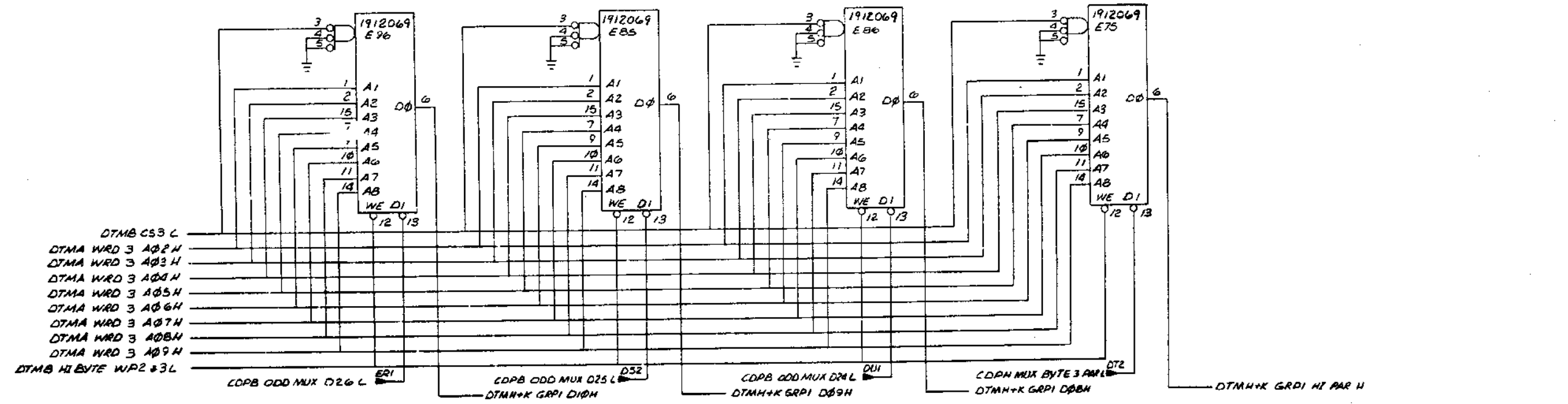
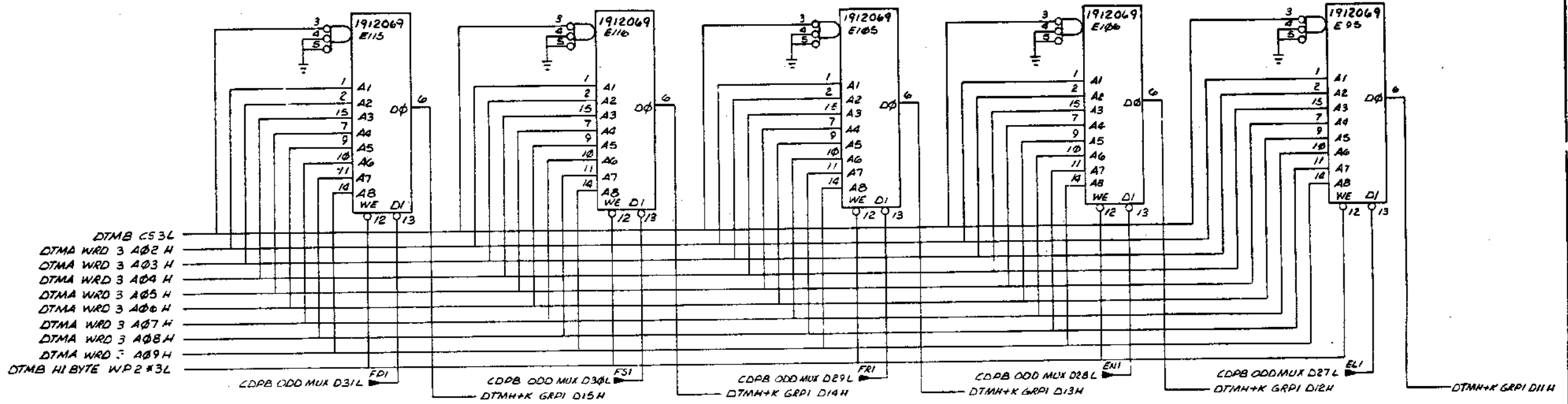
DTMB CS2 L
 DTMA WRD 2 A02 H
 DTMA WRD 2 A03 H
 DTMA WRD 2 A04 H
 DTMA WRD 2 A05 H
 DTMA WRD 2 A06 H
 DTMA WRD 2 A07 H
 DTMA WRD 2 A08 H
 DTMA WRD 2 A09 H
 DTMB LO BYTE WP2 #3L

DTMB CS2 L
 DTMA WRD 2 A02 H
 DTMA WRD 2 A03 H
 DTMA WRD 2 A04 H
 DTMA WRD 2 A05 H
 DTMA WRD 2 A06 H
 DTMA WRD 2 A07 H
 DTMA WRD 2 A08 H
 DTMA WRD 2 A09 H
 DTMB LO BYTE WP2 #3L

SLOT 20 (WORD 2 LO BYTE)

REVISIONS		
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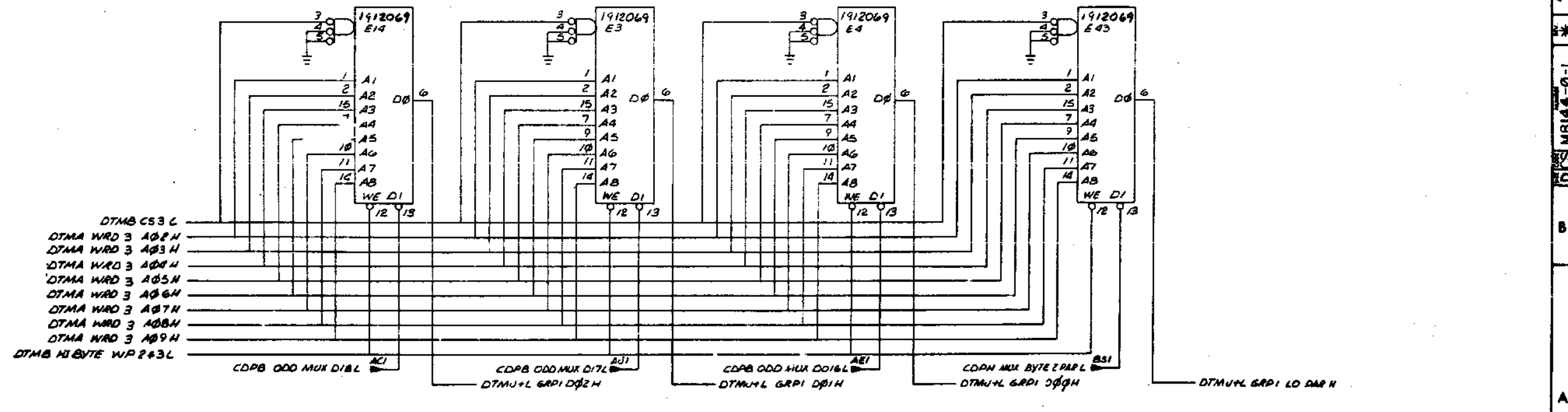
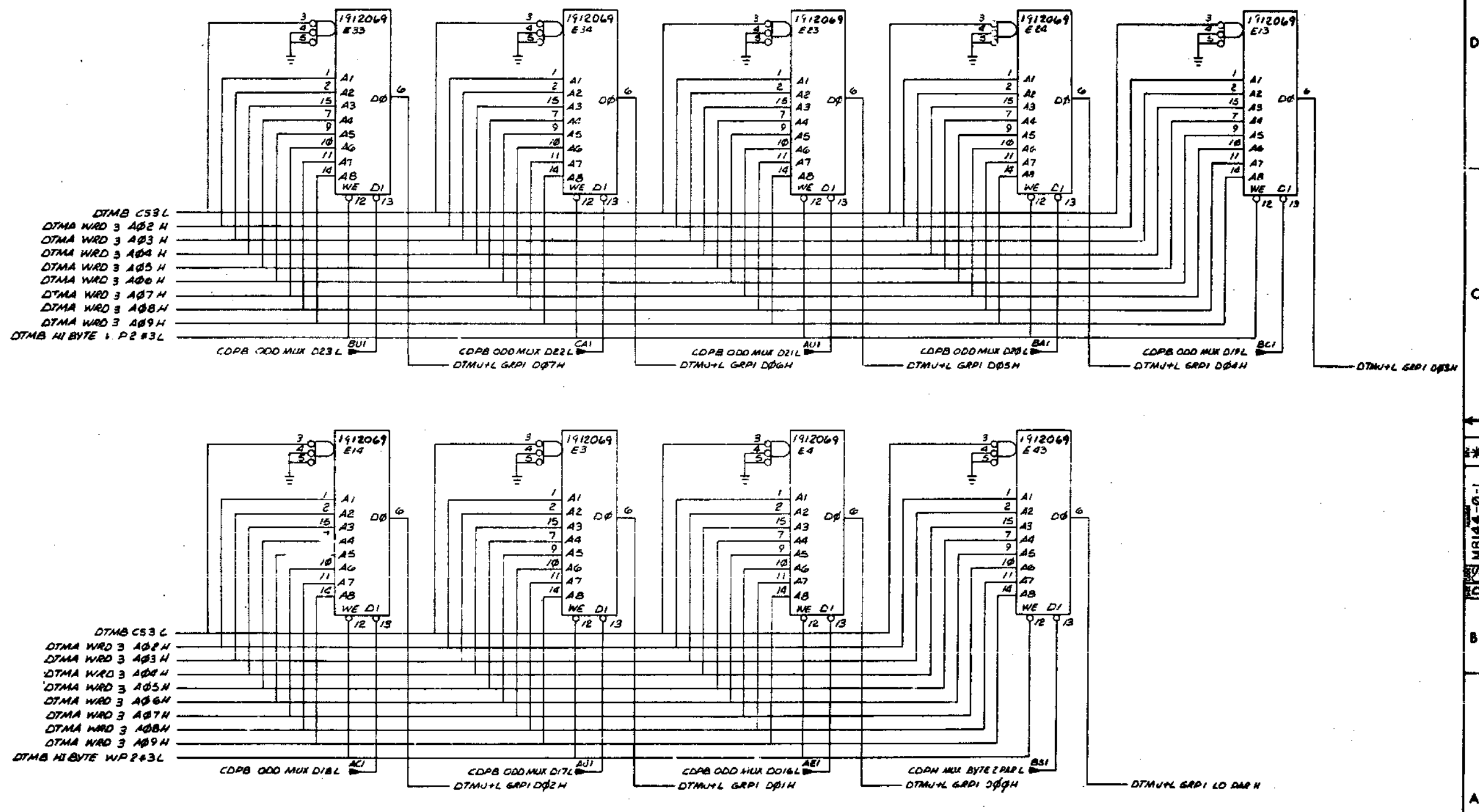
REV. SIGNS		
CHK	CHANGE NO.	REV.

TITLE		SIZE CODE		NUMBER		REV.
DATA MEMORY (DTMK)		DCS	MBI44-0-1		*	
SCALE	SHEET	OF	DIST.			
1:1	10	14				

SLOT 20 (WORD 3 HI BYTE)

239

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D
C
B
A

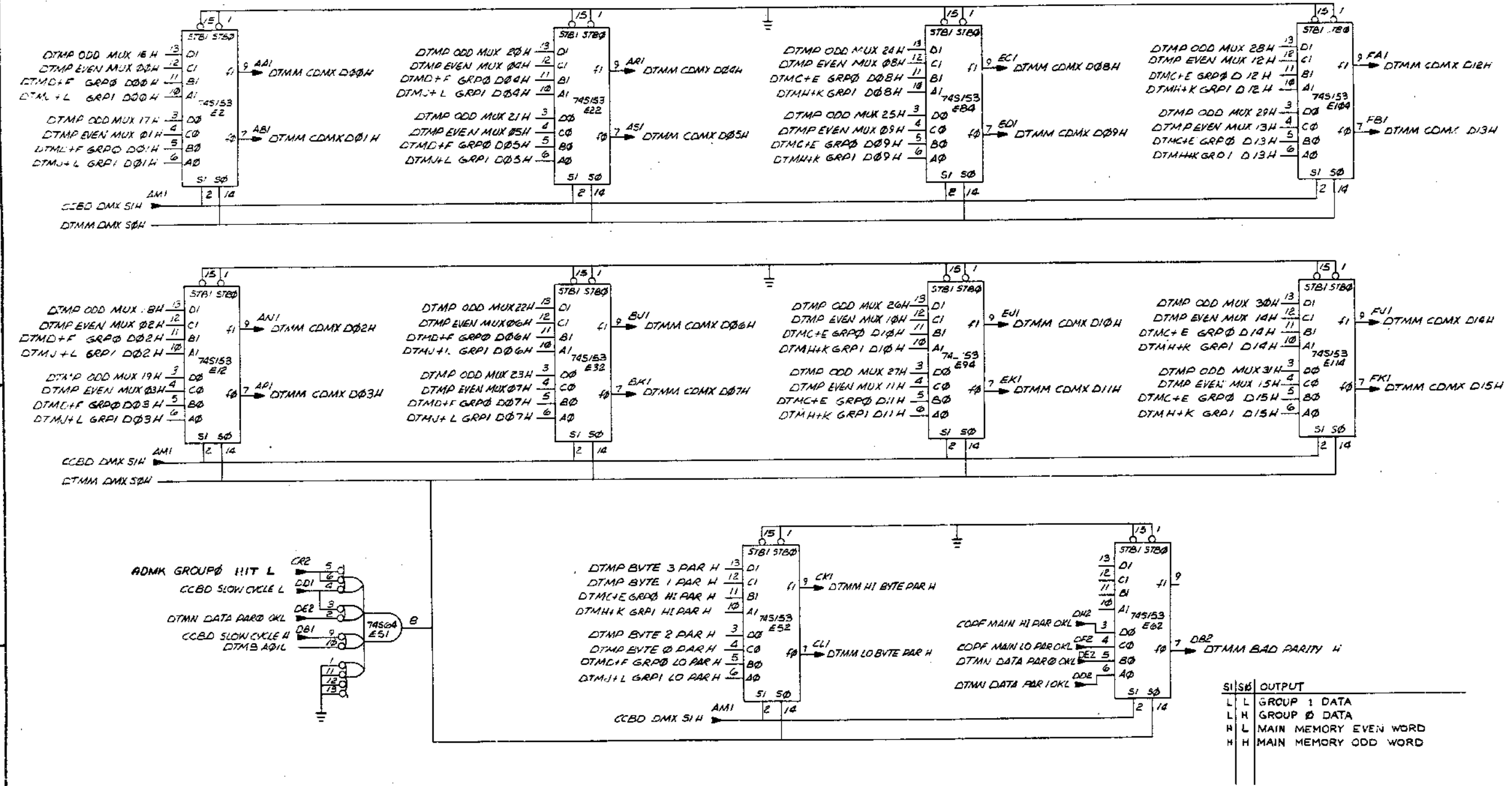
* 1-0-0016W SQD 2

SLOT 20 (WORD 3 LO BYTE)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	DATA MEMORY (DTML)	DIGIT	1	OF	14	DIST.	
SCALE							

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SI/S0	OUTPUT
L L	GROUP 1 DATA
L H	GROUP 0 DATA
H L	MAIN MEMORY EVEN WORD
H H	MAIN MEMORY ODD WORD

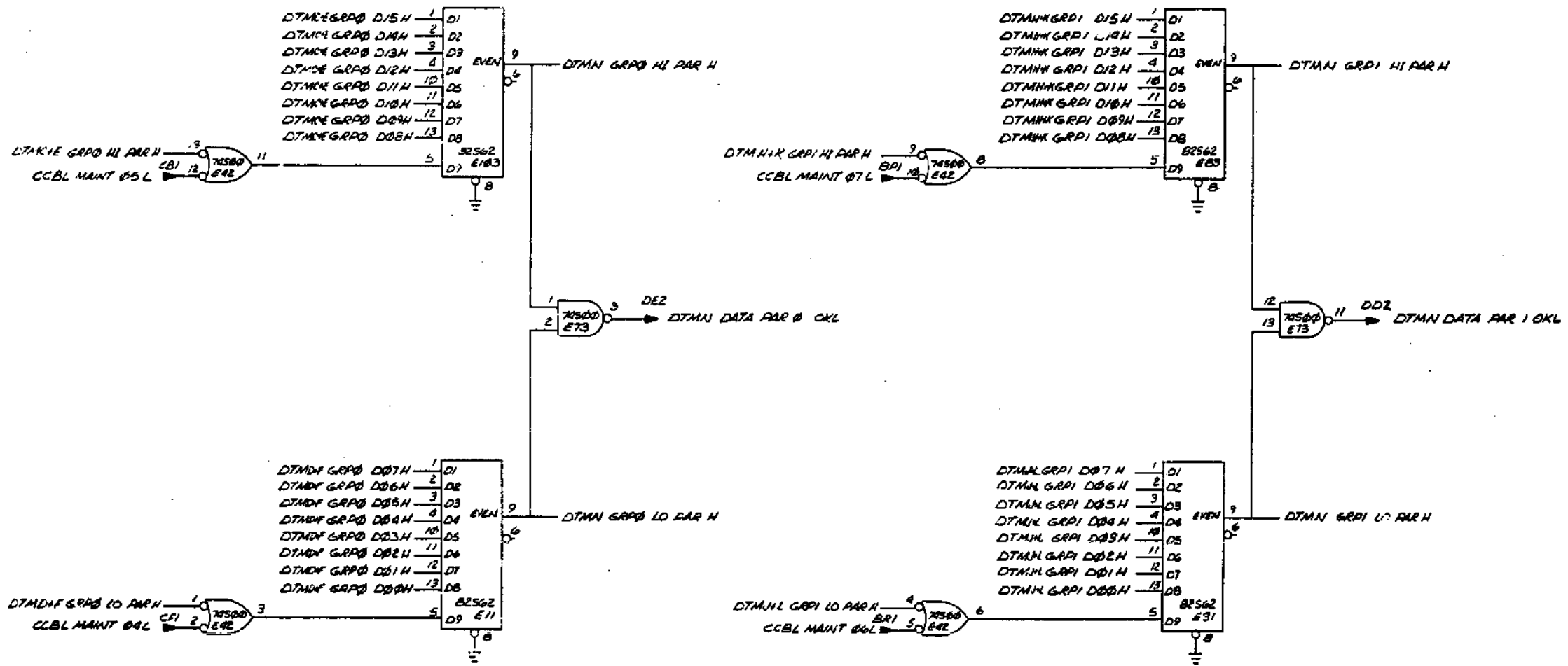
SLOT 20 (DATA OUTPUT MULTIPLEXER)

CHK	CHANGE NO	REV.

TITLE	DATA MEMORY (DTMM)	SIZE CODE	D CS	NUMBER	M8144-0-1	REV.	*
SCALE	---	SHEET	12	OF	14	DIST.	

REV. M8144-0-1

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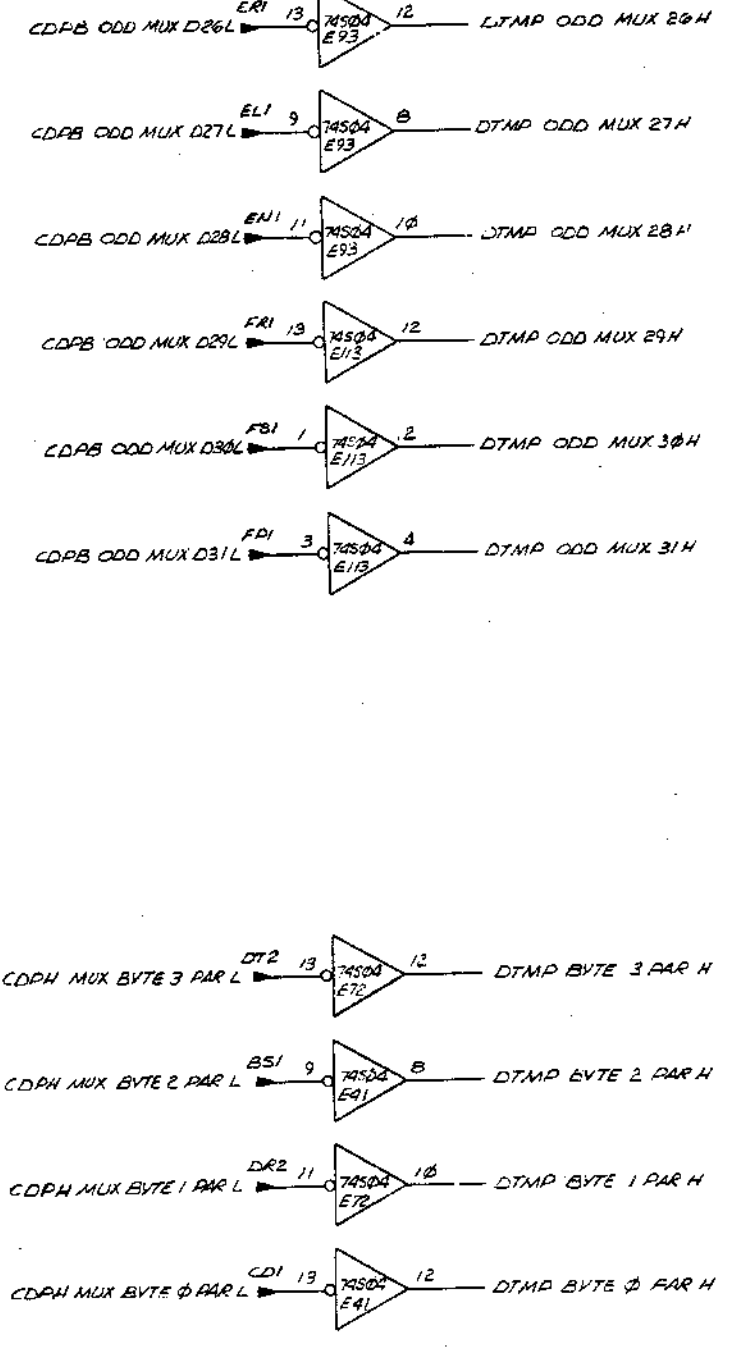
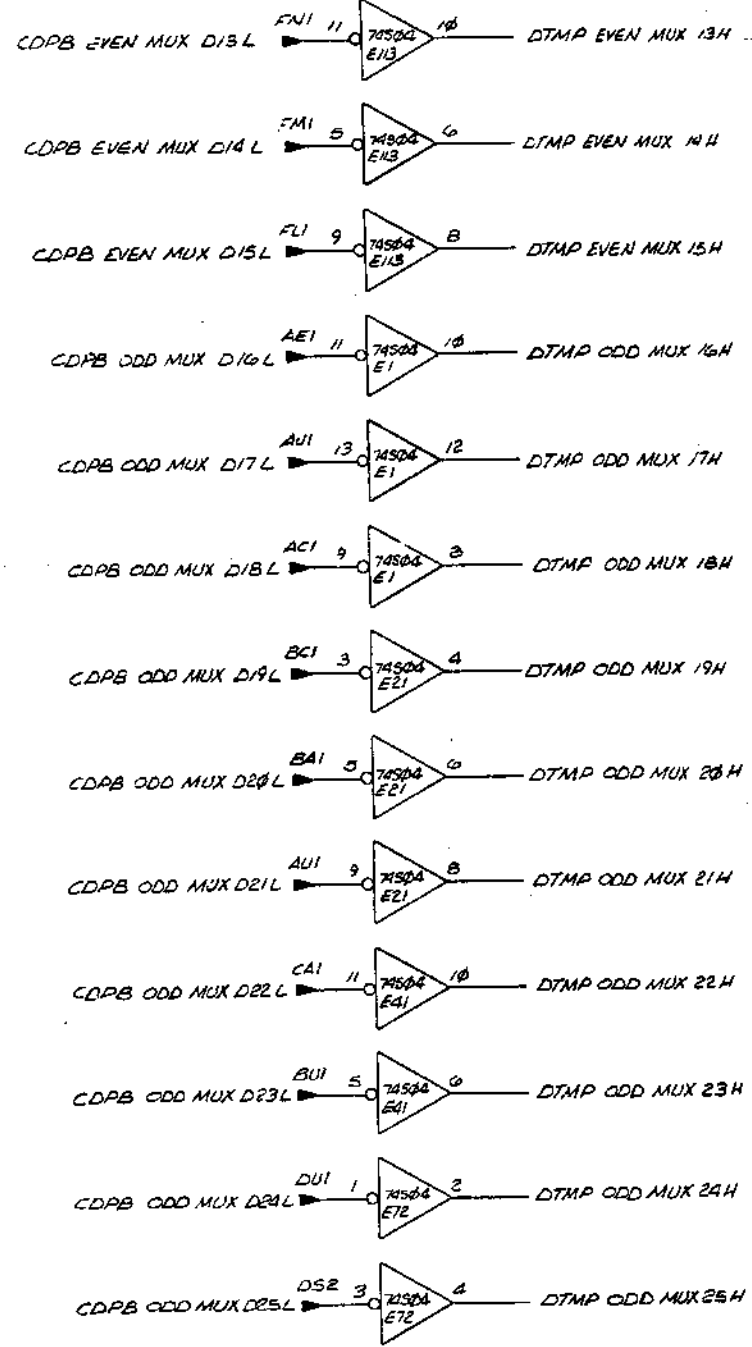
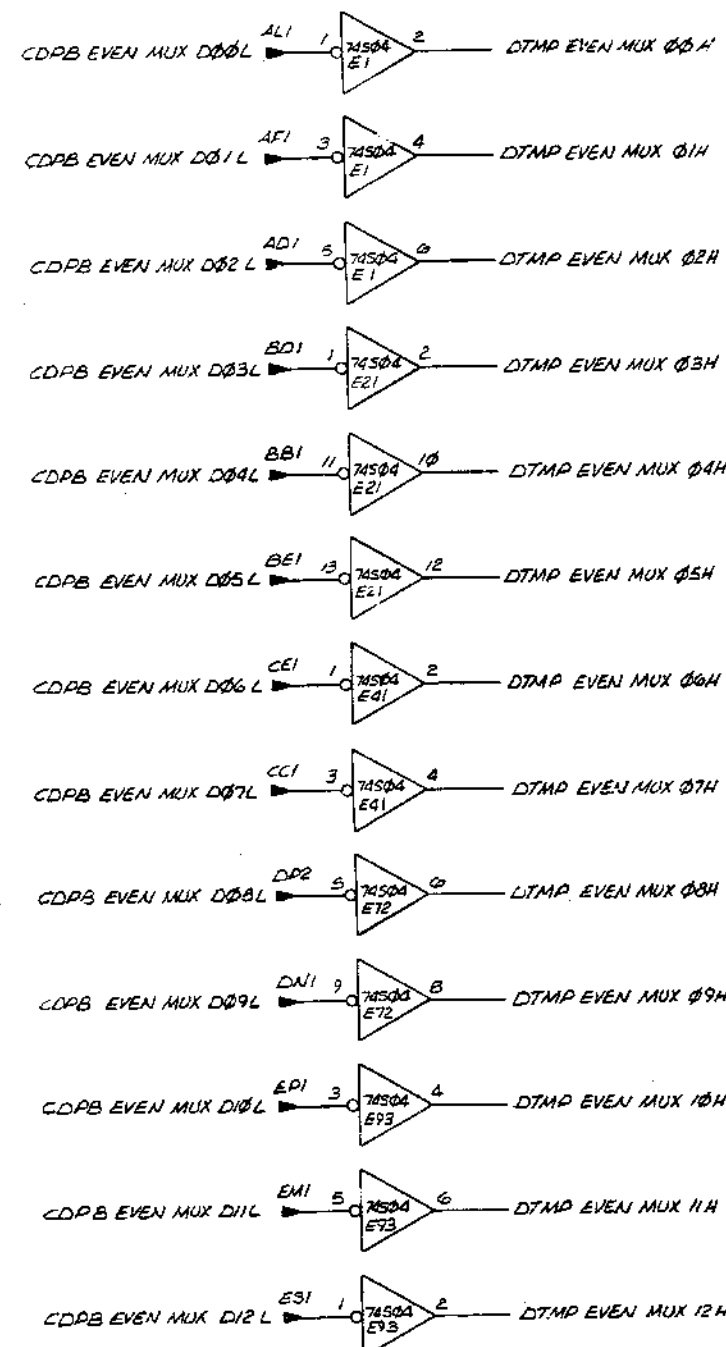


REVISIONS		
CHK	CHANGE NO.	REV.

SLOT 20 (FAST MEMORY PARITY CHECKERS)

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1-0-7478 WSD 2



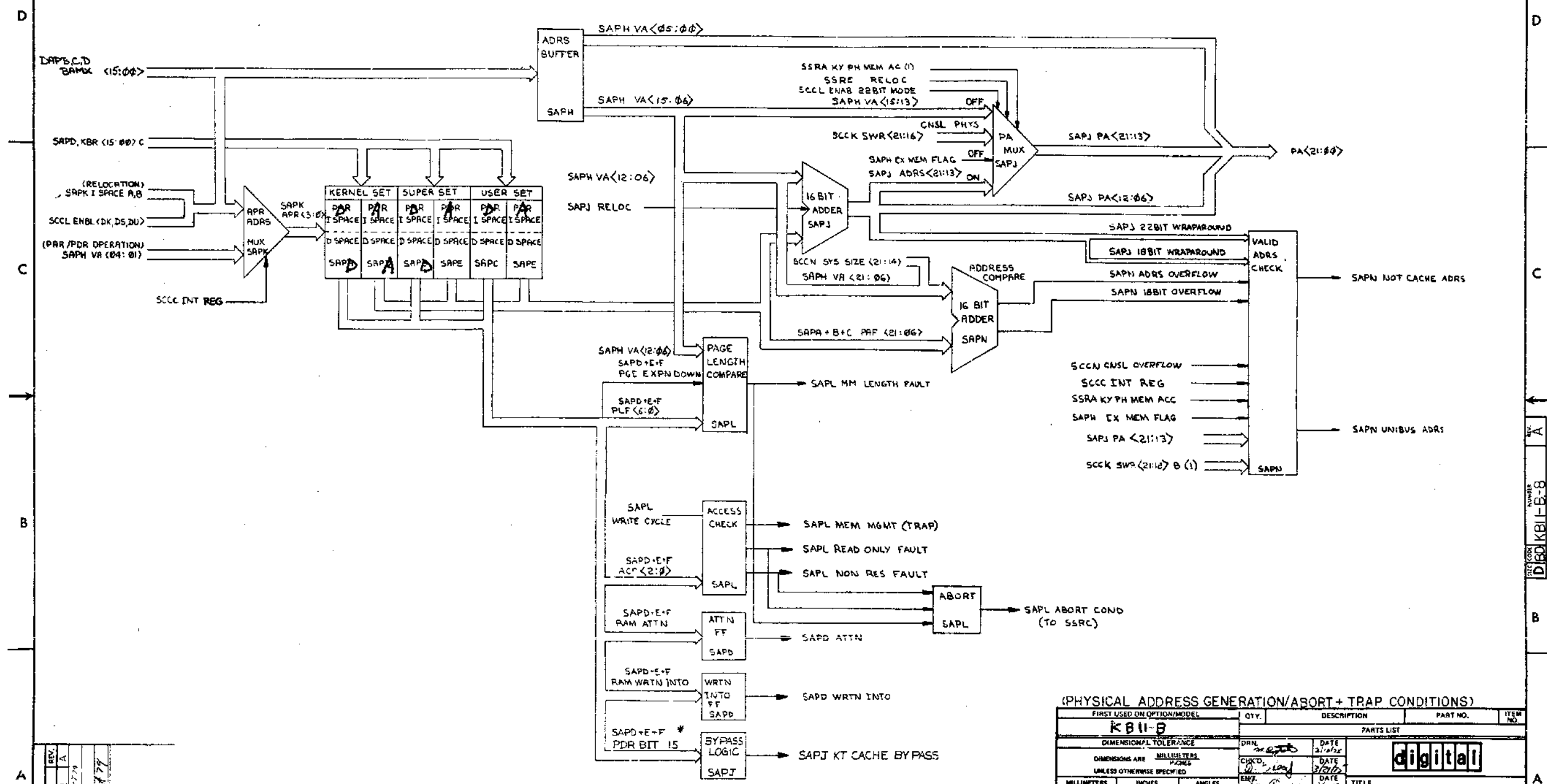
SLOT 20 (MAIN MEMORY DATA INVERTERS)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE/CODE	NUMBER	REV.
DATA MEMORY (DTMP)	D CS	M8144-0-1	*
SCALE	SHEET	OF	DIST.
	14	14	

243

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* THIS LOGIC IS ONLY ON KB11-CM (11/74)

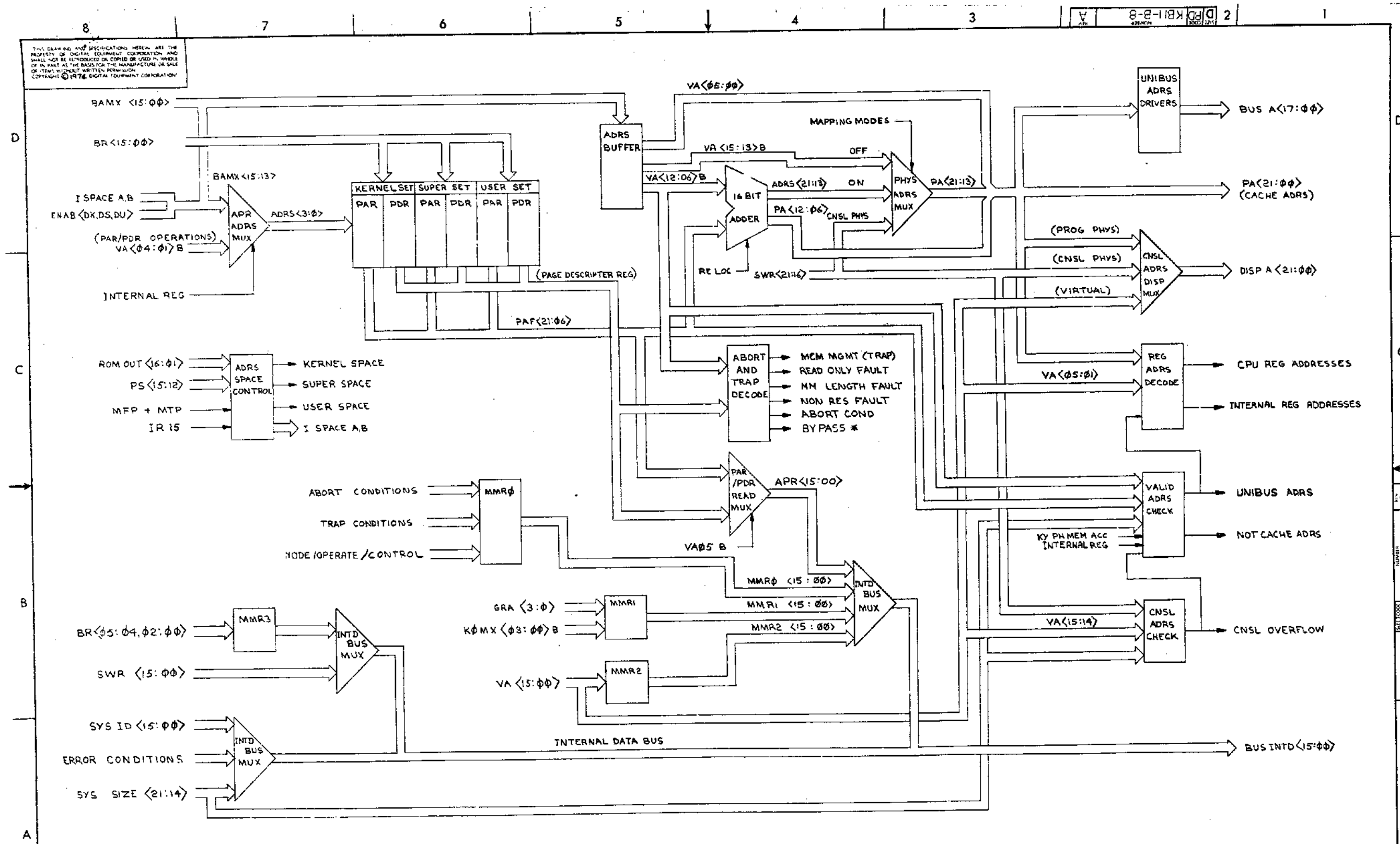
(PHYSICAL ADDRESS GENERATION/ABORT+ TRAP CONDITIONS)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-B				
DIMENSIONAL TOLERANCE				
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED				
MILLIMETERS	INCHES	ANGLES	TITLE	
XXX = ±0.10	XXX = ±0.008	XXX = 10° 30'	digital MEMORY MANAGEMENT BLOCK DIAGRAM	
XX = ±0.08	XX = ±0.02			
X = ±0.2	X = ±0.1			
THIRD ANGLE PROJECTION				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			NEXT HIGHER ASSY.	
MATERIAL			SIZE CODE	NUMBER
FINISH			B-DD-NB1-E	D10 KB11-B-8
			SCALE	REV.
			SHEET 1 OF 2	A

REV. NO. 1

REV.	CHANGE NO.	DATE	BY
1	1	11/74	V. BOAEN

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* THIS SIGNAL ONLY EXISTS ON KB11-CM (11/74)

REVISIONS			TITLE		SIZE/CODE	NUMBER	REV.
CHK	CHANGE NO	REV	MEMORY MANAGEMENT BLOCK DIAGRAM		D/BD	KB11-B-8	A
			SCALE	SHEET 2 OF 2	DIST		

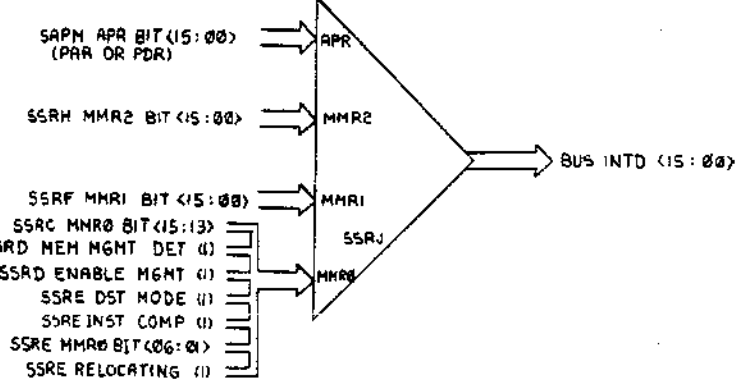
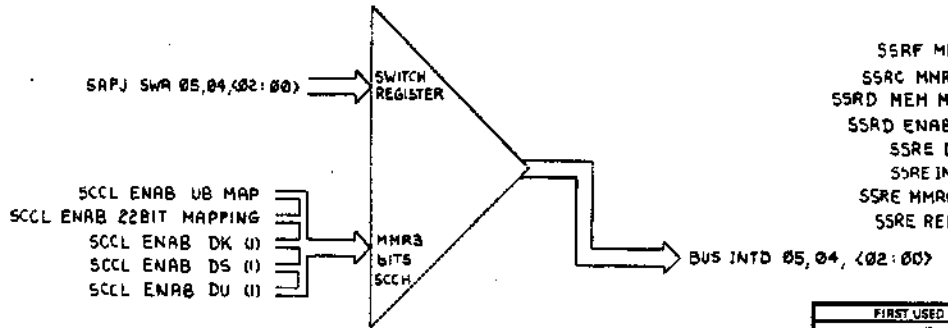
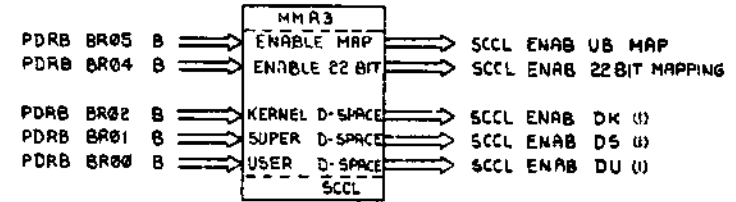
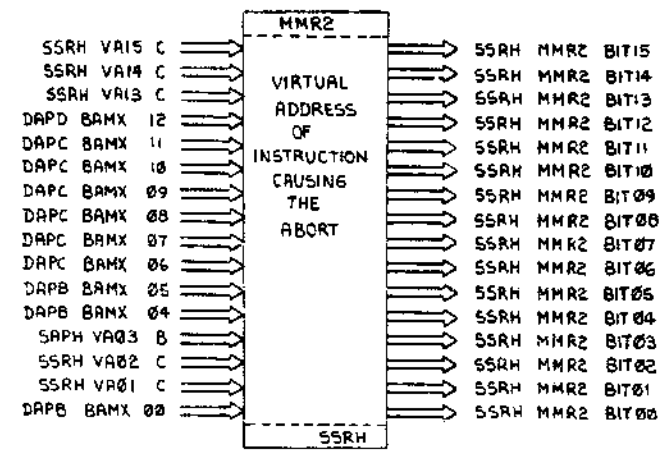
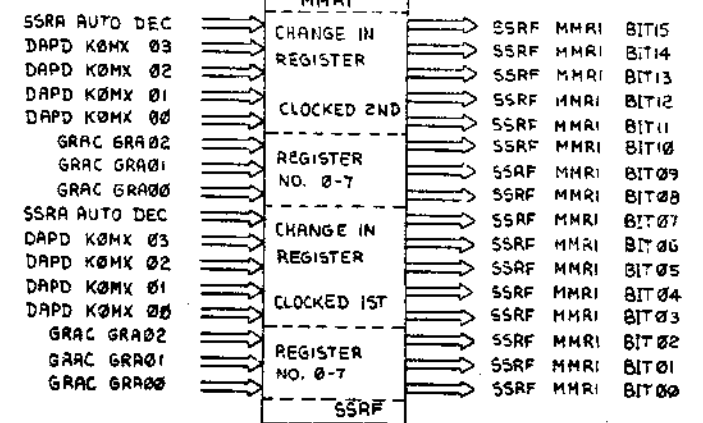
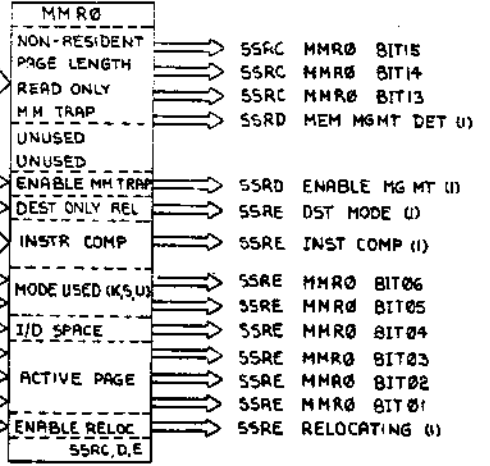
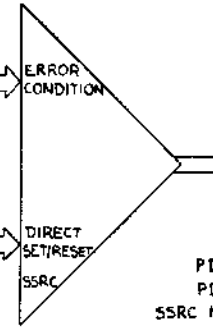
245

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D 80 KB11-B-4 2

SAPL NON RES FAULT
SAPL MM LENGTH FAULT
SAPL READ ONLY FAULT
SSRD MEM MGMT B (TRAP)

PDRB BR15 B
PDRB BR14 B
PDRB BR13 B
PDRB BR12 B

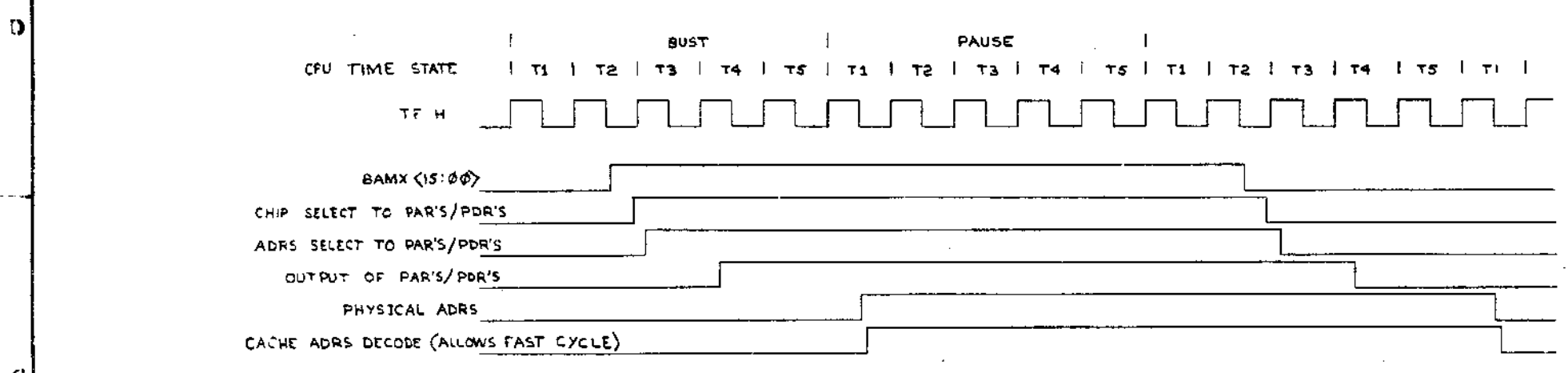


REV.	CHANGE NO.	REV.

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-B				
PARTS LIST				
digital				
TITLE MEM MANAGEMENT REGISTERS				
NEXT HIGHER ASSY.				
MATERIAL				
FINISH				
B-DD-KB11-B		SIZE CODE	NUMBER	REV.
SCALE		D 80	KB11-B-4	
SHEET 1 OF 1		DIST.		

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NOTES:
 1. THE PURPOSE OF THIS DIAGRAM IS TO ILLUSTRATE THE FLOW OF DATA. THE TIME DELAYS INDICATED ARE WORST CASE PROPAGATION DELAYS OF GATES AND MAY VARY.
 2. THE TIMING DIAGRAM REPRESENTS THE TIME PERIOD IN WHICH THE CHANGE TAKES PLACE BUT NOT NECESSARILY THE ACTUAL CHANGE IN POLARITY OF THE SIGNAL. A HIGH LEVEL OR PULSE ON THE DIAGRAM REPRESENTS AN ASSERTED SIGNAL.



REV. NO. 1
 CHANGE NO. 1
 DATE 1/24/75

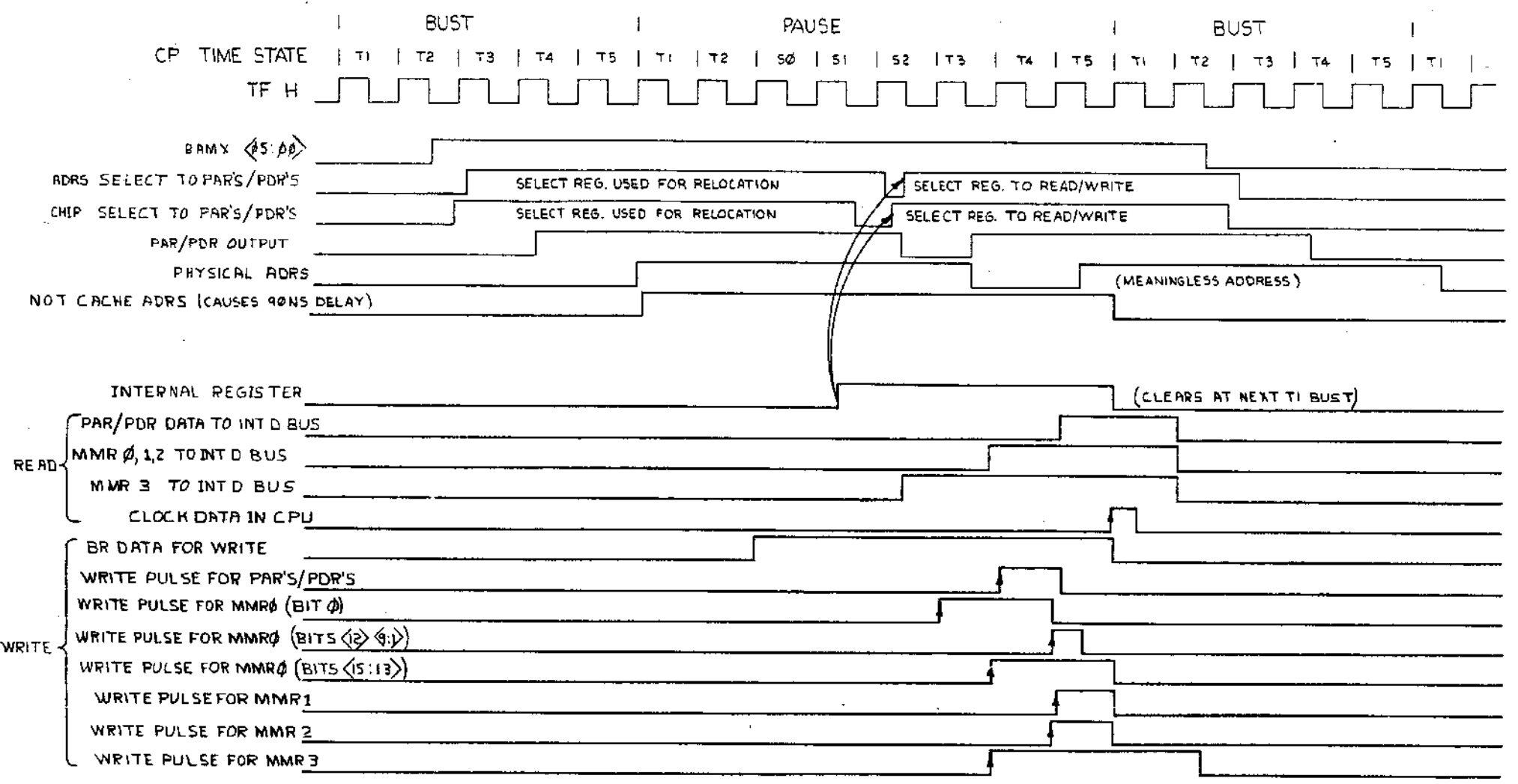
THIRD ANGLE PROJECTION		DESCRIPTION		DWG. PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES					
ANGLES 10' 30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE INCHES			
SURFACE QUALITY IN	CHECK ONE	0 TO 0.25	0.25 TO 0.50	0.50 TO 1.00	1.00 TO 2.00
		0.25	0.50	1.00	2.00
MICROINCHES	PREFERRED	1.004	1.008	1.012	1.016
		1.024	1.028	1.032	1.036
QUANTITY & VARIATION	DRN. <i>M. G. [Signature]</i>	FIRST USED ON		DIGITAL	
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D. <i>[Signature]</i>	TITLE		CACHE ADDRESS TIMING	
DO NOT SCALE DRWG	ENG. <i>[Signature]</i>	SIZE		D	
MATERIAL	PROD. <i>[Signature]</i>	NUMBER		D TD KB11-B-10	
FINISH	PROJ. <i>[Signature]</i>	SCALE		1	
		SHEET		OF 1	

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6-8-118X DTD 2

- NOTES:
- 1 THE PURPOSE OF THIS DIAGRAM IS TO ILLUSTRATE THE FLOW OF DATA. THE TIME DELAYS INDICATED ARE WORST CASE PROPAGATION DELAYS OF GATES AND MAY VARY
 - 2 CLOCKED SIGNALS ARE INDICATED BY AN #
 - 3 THE TIMING DIAGRAM REPRESENTS THE TIME PERIOD IN WHICH THE CHANGE TAKES PLACE BUT NOT NECESSARILY THE ACTUAL CHANGE IN POLARITY OF THE SIGNAL. A HIGH LEVEL OR PULSE ON THE DIAGRAM REPRESENTS AN ASSERTED SIGNAL.



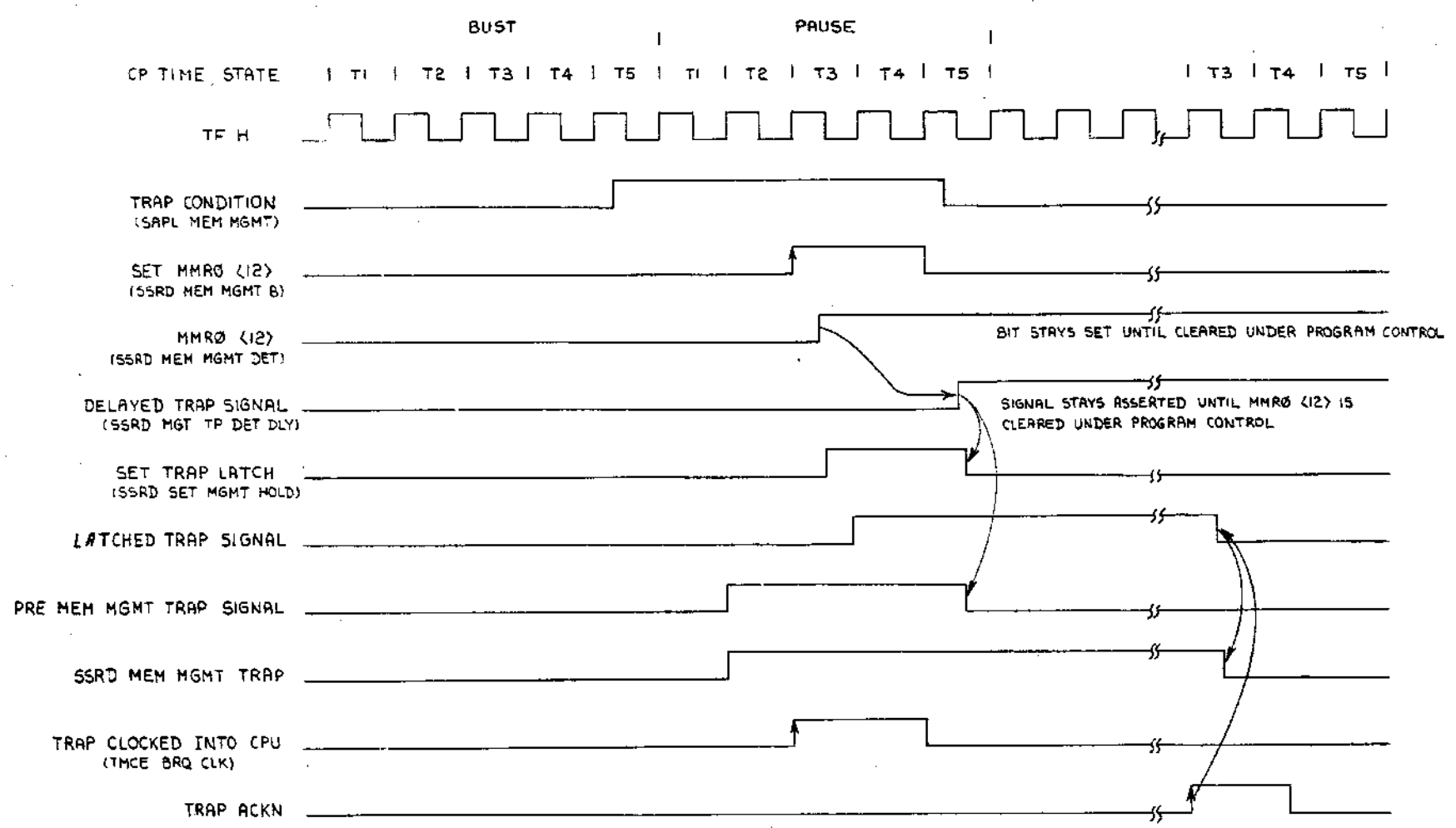
FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KBII-B					
PARTS LIST					
DIMENSIONAL TOLERANCE		DRN. <i>John Hays</i>	DATE <i>3/1/75</i>	digital	
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		CHKD. <i>D. Hays</i>	DATE <i>3/1/75</i>		
MILLIMETERS	INCHES	ANGLES	ENG. <i>John Hays</i>	DATE <i>3/1/75</i>	TITLE
XX +0.10	XX +0.008	XX 10° 30'	PROJ. ENG. <i>John Hays</i>	DATE <i>3/1/75</i>	INTERNAL REGISTERS
XX +0.05	XX +0.005	XX	PROC. <i>John Hays</i>	DATE <i>3/1/75</i>	CYCLE TIMING
X +0.2	X +0.1				
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.			
MATERIAL				SIZE CODE	NUMBER
FINISH				D TD	KBII-B-9
			SCALE		REV.
			SHEET 1 OF 1		

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5-8-118X 010 2

NOTES:

1. THE PURPOSE OF THIS DIAGRAM IS TO ILLUSTRATE THE FLOW OF DATA. THE TIME DELAYS INDICATED ARE WORST CASE PROPAGATION DELAYS OF GATES AND MAY VARY.
2. CLOCKED SIGNALS ARE INDICATED BY Δ
3. THE TIMING DIAGRAM REPRESENTS THE TIME PERIOD IN WHICH THE CHANGE TAKES PLACE BUT NOT NECESSARILY THE ACTUAL CHANGE IN POLARITY OF THE SIGNAL. A HIGH LEVEL OR PULSE ON THE DIAGRAM REPRESENTS AN ASSERTED SIGNAL.

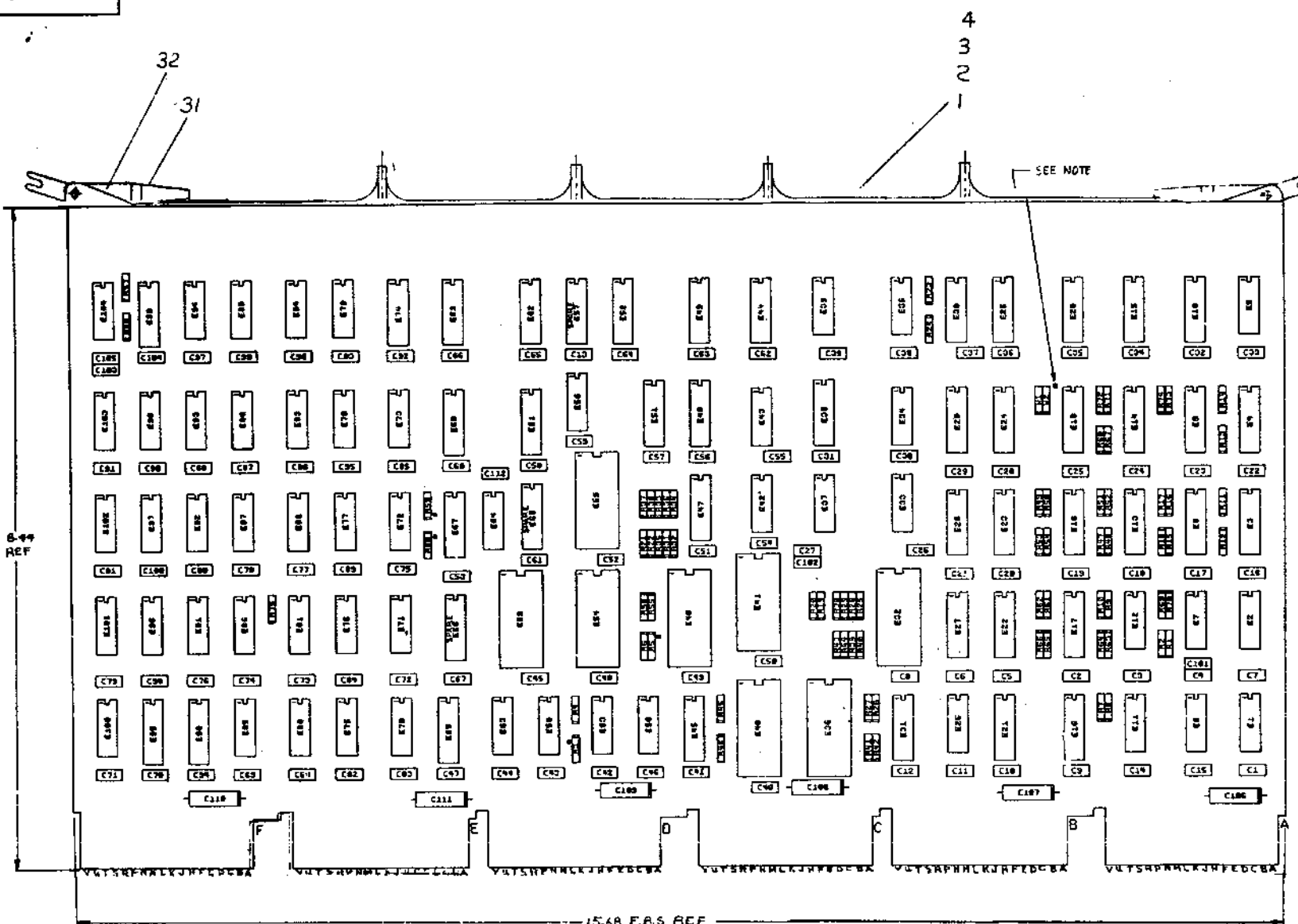


REV.	CHG	NO.

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
KB11-B					
DIMENSIONAL TOLERANCE		PARTS LIST			
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		DRN. R. Braslin	DATE 3-13-75	digital	
UNLESS OTHERWISE SPECIFIED		CHKD. R. Braslin	DATE 3/13/75		
MILLIMETERS	INCHES	ENG. R. Braslin	DATE 3/13/75	TITLE MEM MGMT TRAP TIMING	
XX - +0.13	XX - +0.005	PROL. ENG. R. Braslin	DATE 3/13/75		
XX - +0.08	XX - +0.002	PROD. R. Braslin	DATE 3/13/75	NEXT HIGHER ASSY.	
X - +0.2	X - +0.1				
THIRD ANGLE PICTORING	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	MATERIAL	SCALE	SIZE CODE	NUMBER
		B-DD-KB11-B		D TD	KB11-B-5
		FINISH	SHEET 1 OF 1	DIST	REV.

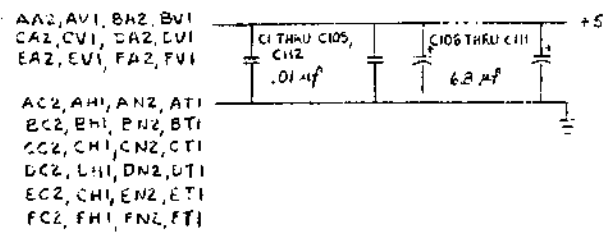
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NOTES: * OPTIONAL COMPONENTS



REF	X-Y COORDINATE HOLE LOCATION	K-CO-M8137-0-4	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AH-M8137-0-5	2
REF	MODULE ESD HISTORY	B-MH-M8137-0-8	3
1	ETCHED CIRCUIT BOARD	5011313	4
106	C1 THRU C105 C112	CAP. 0.1uf 100V 20%	5
8	C106 THRU C111	CAP. 0.1uf 35V 10%	6
2	R4, R6	RESISTOR 150 OHM 1/4W 5%	7
24	R1, R7, R9, R11, R13, R15, R17, R19, R21, R23, R25, R27, R29, R31, R33, R35, R37, R39, R41, R43, R45, R47, R49, R51, R53, R55, R57, R61, R63, R65, R67, R69, R71, R73	RESISTOR 330 OHM 1/4W 5%	8
1	R75	RESISTOR 1K 1/4W 5%	9
34	R2, R8, R10, R12, R14, R16, R18, R20, R22, R24, R26, R28, R30, R32, R34, R36, R38, R40, R42, R44, R46, R48, R50, R52, R54, R56, R58, R62, R64, R66, R68, R70, R72, R74	RESISTOR 680 OHM 1/4W 5%	10
1	E100	IC DEC 74H21	11
1	E101	IC DEC 7437	12
4	E50, E56, E70, E79	IC DEC 7408	13
2	E17, E13	IC DEC 7485	14
8	E36, E40, E55, E54, E32, E41, E59, E46	IC DEC 74S181	15
5	E103, E16, E93, E73, E85	IC DEC 74S88	16
9	E97, E78, E5, E43, E39, E71, E37, E91, E35	IC DEC 74S84	17
1	E96	IC DEC 74S95	18
2	E75, E83	IC DEC 74S18	19
11	E82, E47, E26, E98, E2, E7, E80, E11, E6, E1, E92	IC DEC 74S11	20
3	E34, E33, E42	IC DEC 74S28	21
8	E64, E77, E72, E84, E89, E94	IC DEC 74S48	22
6	E58, E88, E12, E81, E86, E104	IC DEC 74S64	23
3	E58, E102, E63	IC DEC 74S74	24
3	E85, E90, E95	IC DEC 74S153	25
7	E27, E21, E18, E16, E8, E22, E31	IC DEC 74S157	26
3	E3, E99, E4	IC DEC 74S158	27
2	E45, E47	IC DEC 74182-1	28
24	E89, E74, E44, E38, E88, E82, E52, E49, E67, E61, E51, E48, E14, E30, E29, E28, E9, E20, E19, E23, E10, E15, E25, E24	IC DEC 3101A	29
1	W1	INSULATED JUMPER	30
1		HANDLE ASSEMBLY	31
12		EYELET HANDLE	32

IC TYPE	GND	+5V
IC DEC 3101A	B	16
IC DEC 74182-1	B	16
IC DEC 74S158	B	16
IC DEC 74S157	B	16
IC DEC 74S153	B	16
IC DEC 74S181	12	24
IC DEC 74S5	B	16



AA2, AV1, BA2, BV1
CA2, CV1, DA2, DV1
EA2, EV1, FA2, FV1

AA2, AH1, AN2, AT1
BC2, BH1, BN2, BT1
CC2, CH1, CN2, CT1
DC2, LH1, DN2, DT1
EC2, EH1, EN2, ET1
FC2, FH1, FN2, FT1

FIRST USED ON OPTION MODEL: 11/70

ETCH BOARD REV: B

DATE: 10-22-74
BY: DE KELLOG
DATE: 11-17-74
BY: FERGUSON
DATE: 1-20-75
BY: SHARON A. SMITH
DATE: 1-20-75
BY: SHARON A. SMITH
DATE: 1-22-75

digital EQUIPMENT CORPORATION

TITLE: SYS ADRS PATH

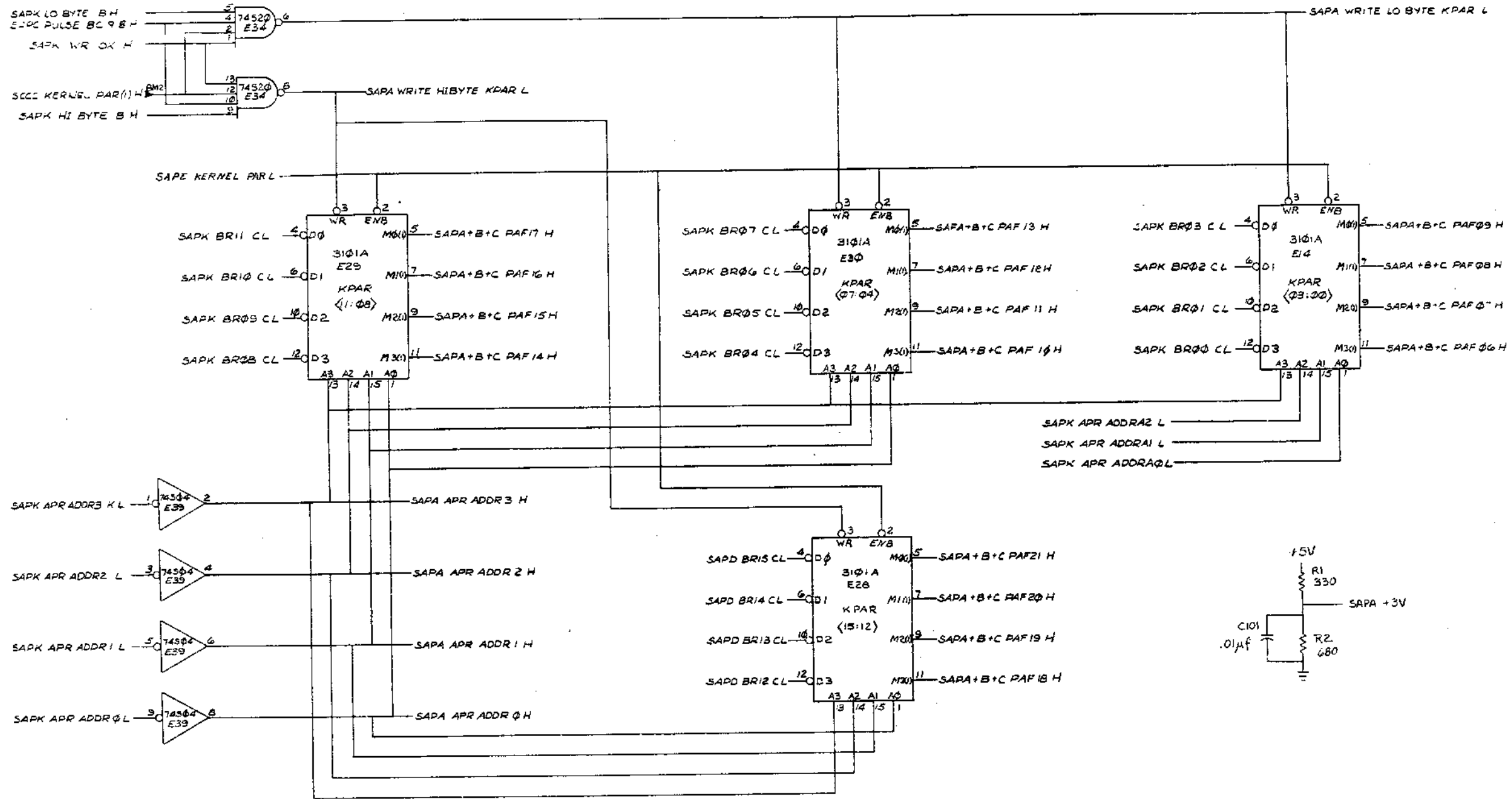
SIZE/CODE: DCS M8137-0-1
NUMBER: 1
REV: A

SEMICONDUCTOR CONVERSION CHART

SCALE: 1 OF 13

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REV. 2
 CS M8137-0-1
 10-2-81EW

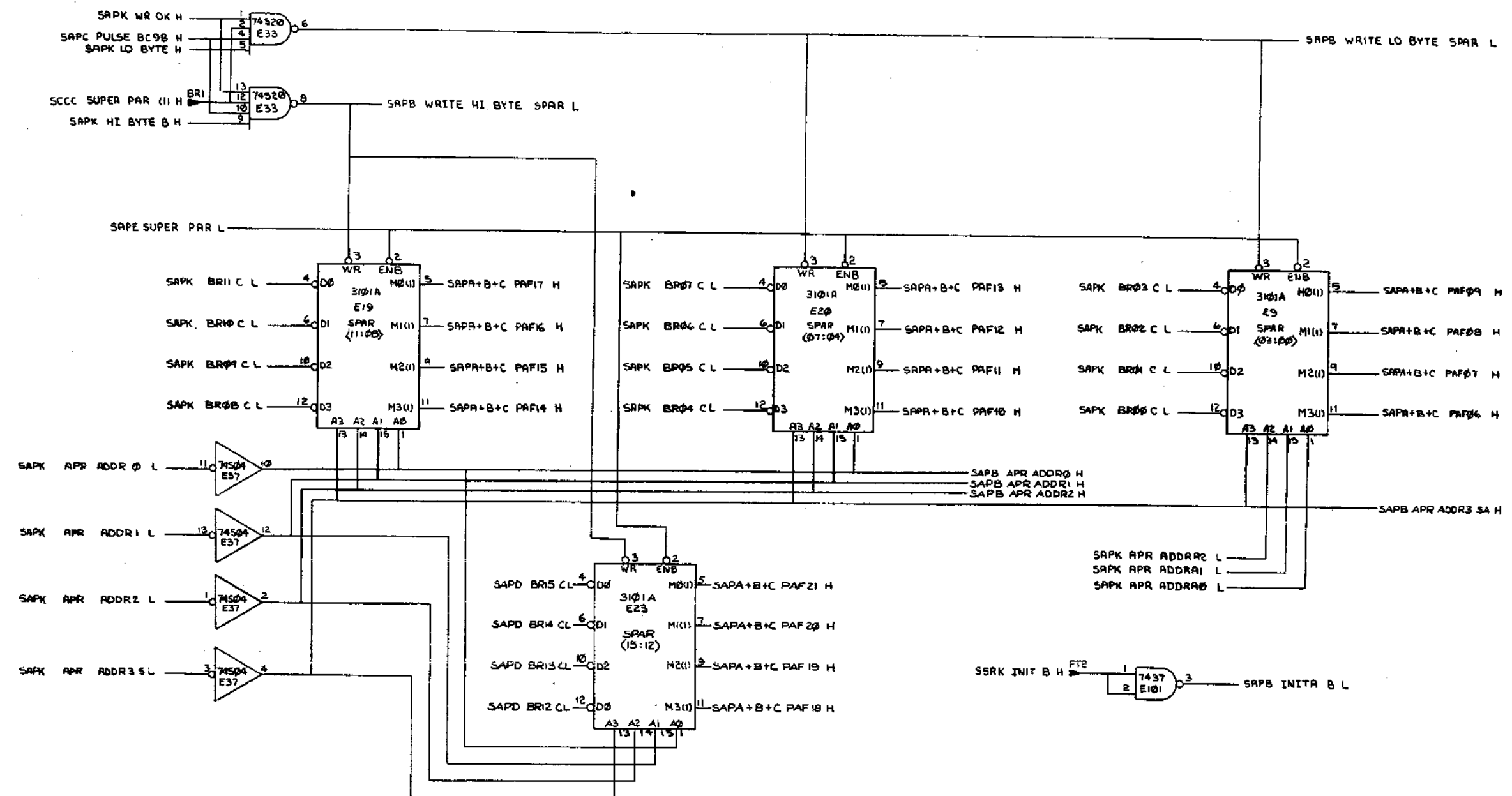


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE/COOD		NUMBER		SLOT	
SYS. ADRS PATH (SAPA)		D CS		M8137-0-1		14	
SCALE		SHEET		DIST.		REV.	
1/1		2 OF 13				A	

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DCS M8137-0-1



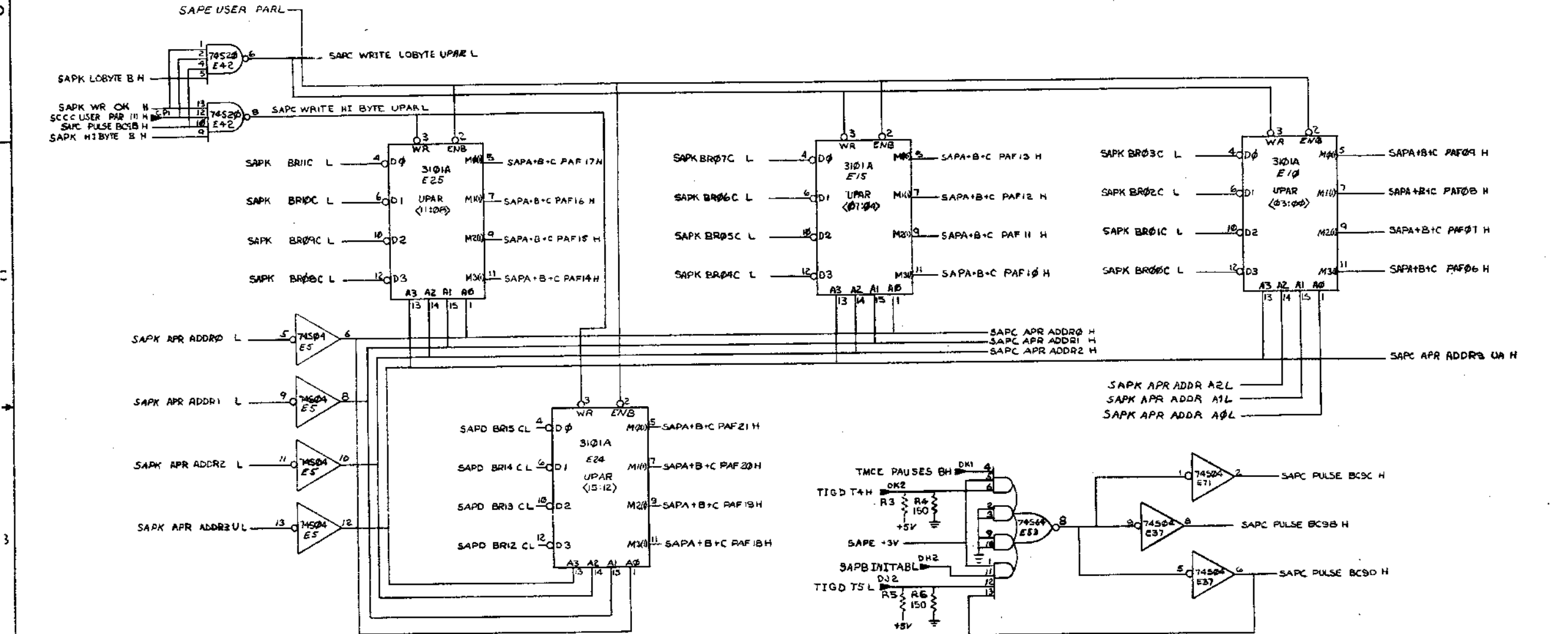
SUPERVISOR PAGE ADDRESS REGISTERS (PAR) SLOT 14			
FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
11/70			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES			
DECIMALS	ANGLES	TITLE	
XXX - .005	± 0° 30'	SYS. ADRS. PATH	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER (SAPB)
FINISH	SCALE	DCS M8137-0-1	REV. A
SHEET 3 OF 13		DIST.	

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REV	
CHG	
REV	
CHG	

252

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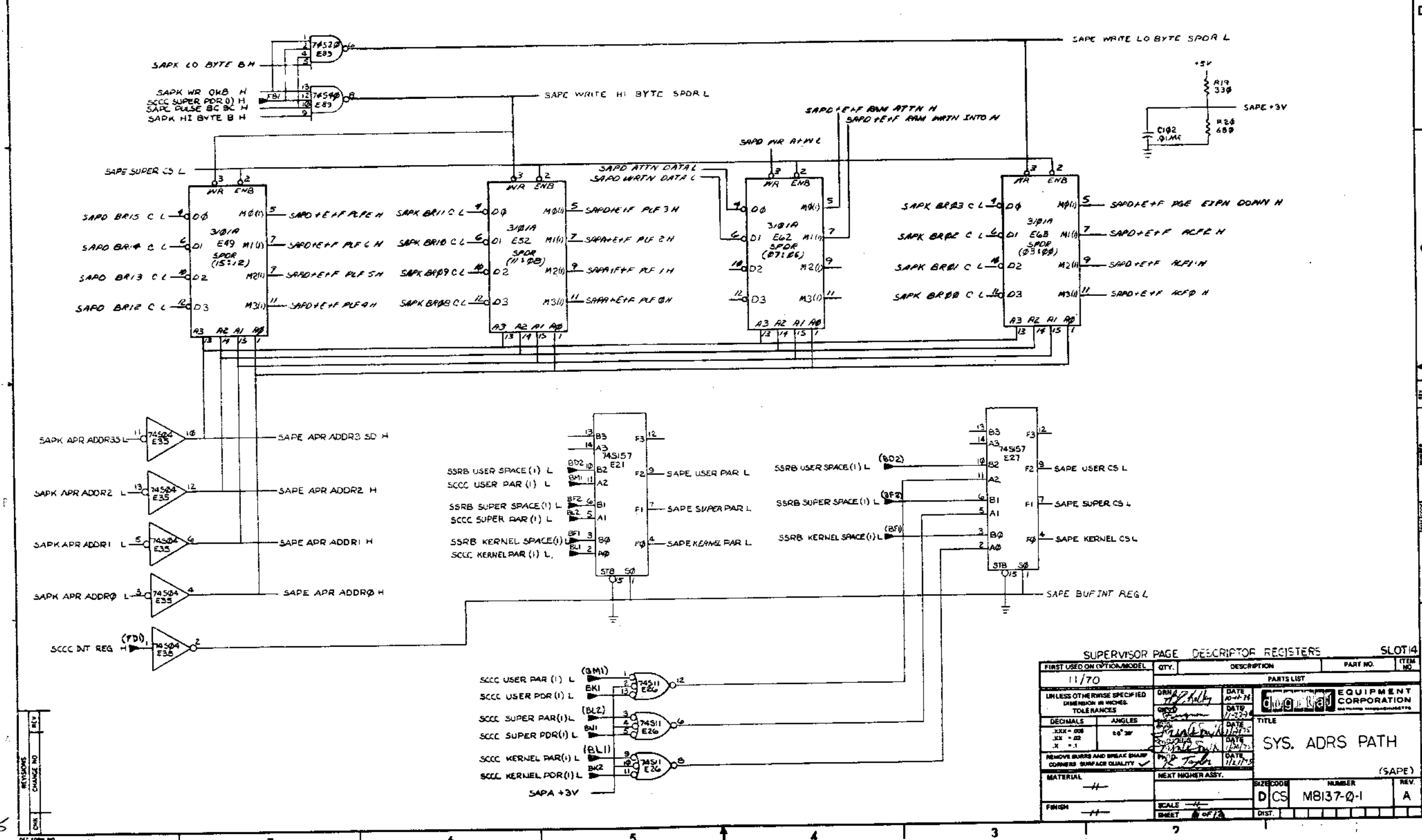


USER PAGE ADDRESS REGISTERS (PAR)				SLOT 14	
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.	
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 10-10-74	DIGITAL EQUIPMENT CORPORATION		
DECIMALS	ANGLES	DATE 11/29/74	TITLE		
XXX + .006	± 0° 30'	DATE 1/29/75	SYS. ADRS. PATH		
XX + .02		DATE 1/29/75			
X + .1		DATE 1/29/75			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 1/29/75			
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.	
+		DCS	M8137-0-1	A	
FINISH	SCALE	SHEET	4 of 13	DIST.	

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 REV. 1
 CHG. NO.
 DEC 1974

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DIGITAL EQUIPMENT CORPORATION

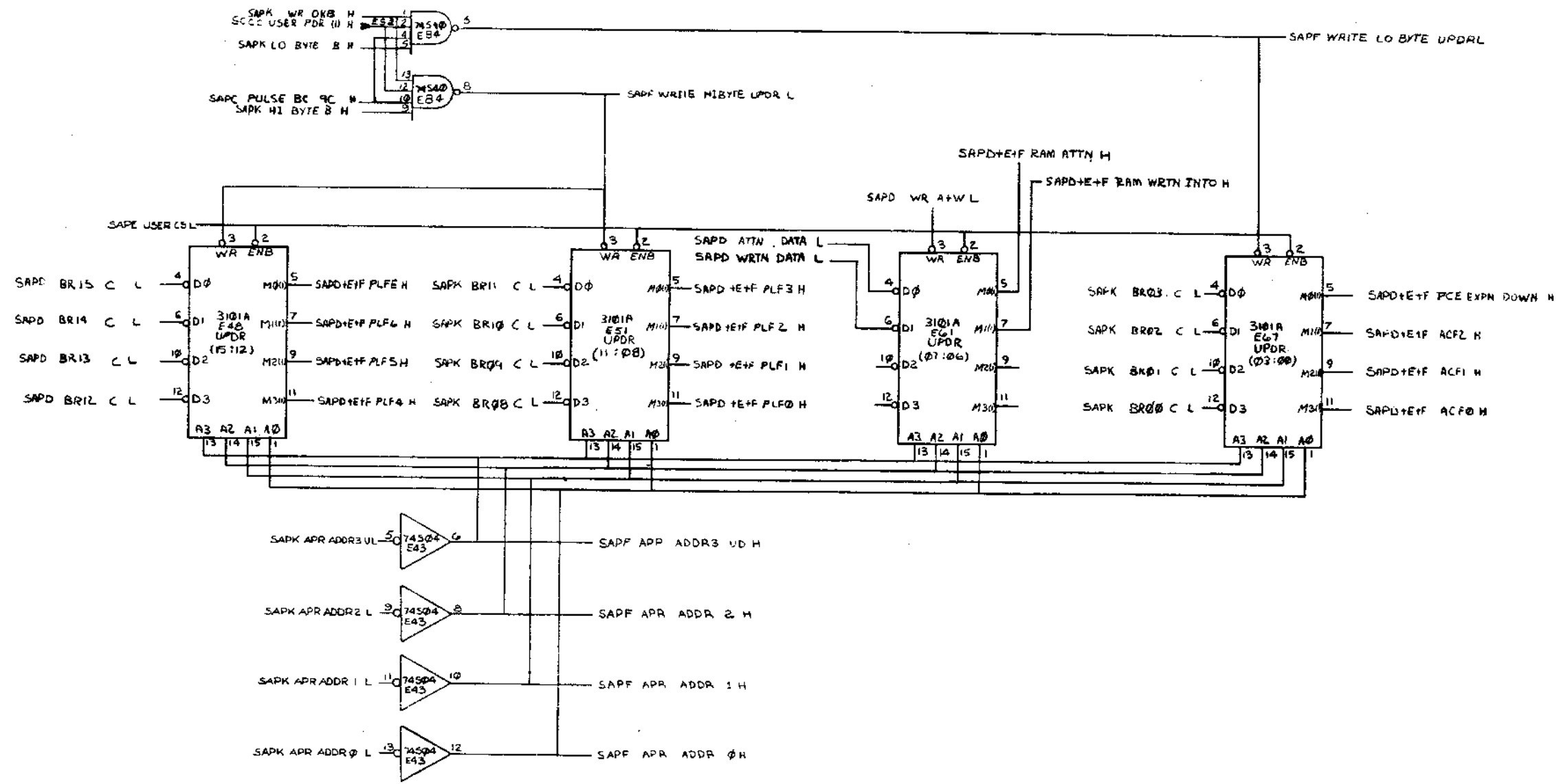


FIRST USED ON (OPTIONAL MODEL)		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES					
DECIMALS	ANGLES	DRN	DATE	 EQUIPMENT CORPORATION	
.XXX - .008	± 0° 30'	BY	DATE		
.X - .02		CHKD	DATE	SYS. ADRS PATH	
.X - .1		APP'D	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL		NEXT NUMBER ASSY.		(SAPK) NUMBER MB137-Q-1	
FINISH		SCALE			
		SHEET		DIST.	

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V 1-0-7-18 W 50 2

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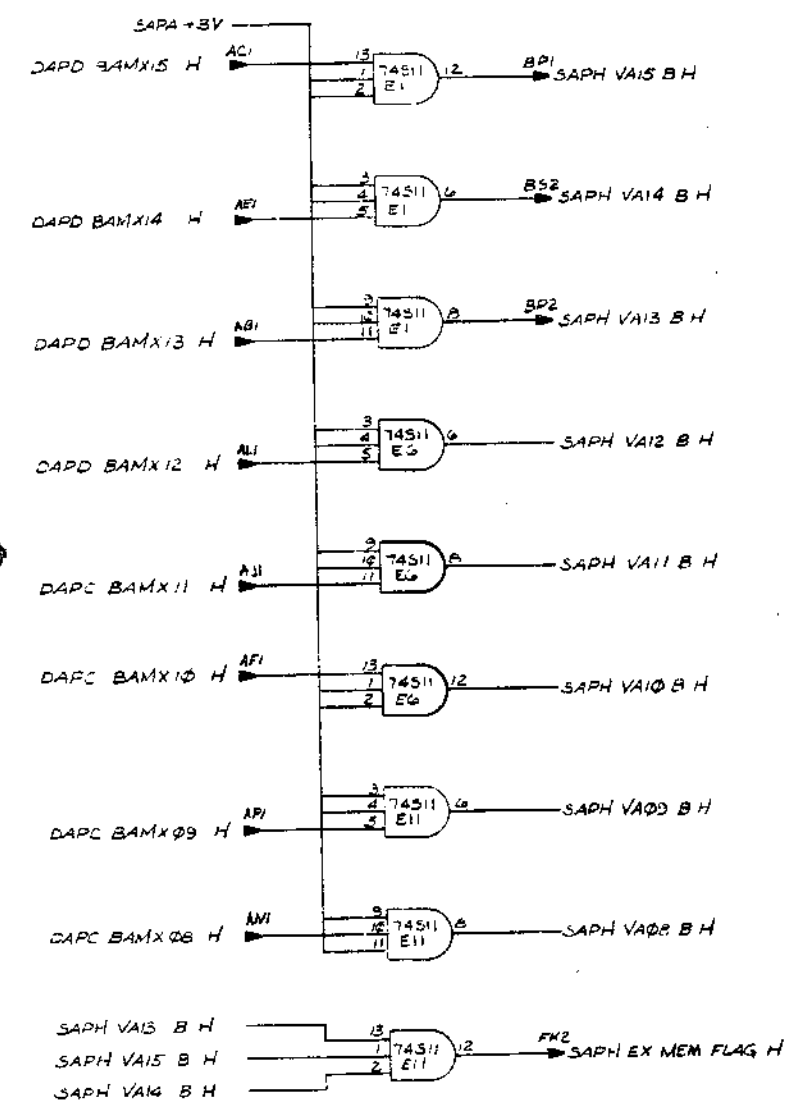


USER PAGE DESCRIPTOR REGISTERS SLOT 14

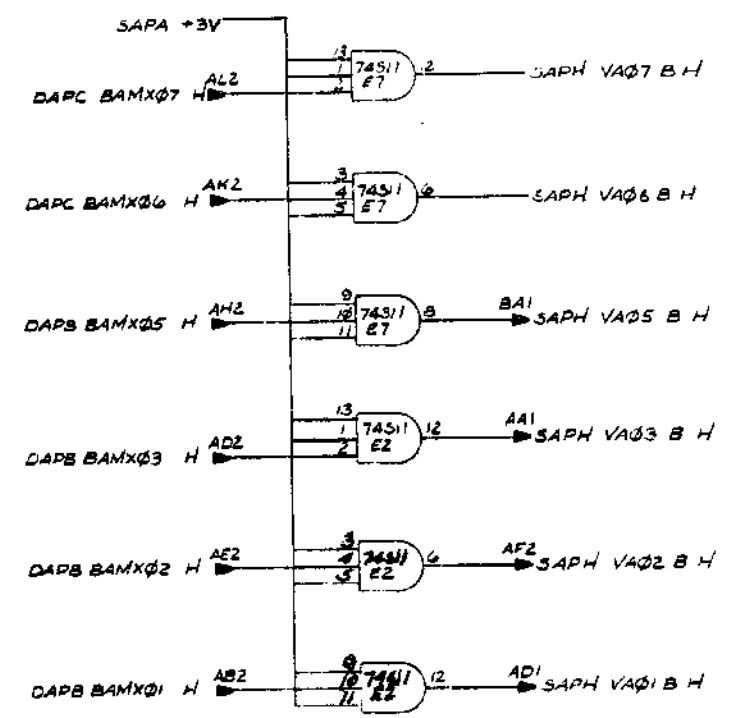
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN 10-1-74	DATE	DIGITAL EQUIPMENT CORPORATION	
DECIMALS	CHGD. 12-2-74	DATE	PARTS LIST	
ANGLES	ENG. 12-2-74	DATE	TITLE	
.XXX - .006 XX - .02 X - .1	DRN 12-2-74	DATE	SYS. ADRS. PATH	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PRD. 12-2-74	DATE	SIZE CODE NUMBER (SAPF)	
MATERIAL			DCS M8137-0-1	REV. A
FINISH				
		SCALE		
		SHEET	7 of 13	

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DCS M8137-0-1 2



Virtual address

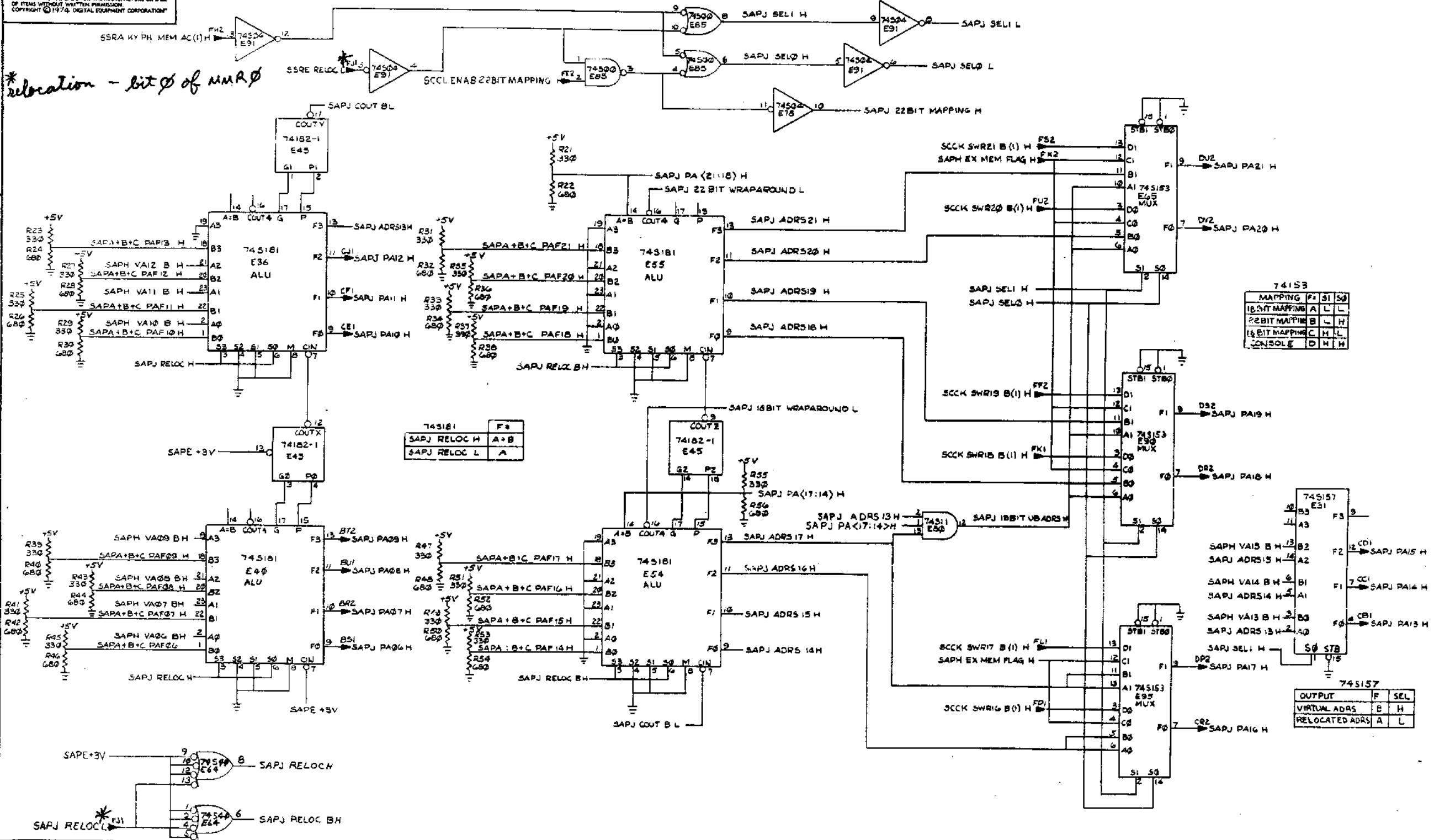


REVISIONS		
CHK	CHANGE NO.	REV.

ADDRESS BUFFERS		SLOT 14	
TITLE	SIZE CODE	NUMBER	REV.
SYS ADRS PATH(SAPH)	DCS	M8137-0-1	A
SCALE	SHEET	DIST.	
#	6 OF 13		

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*relocation - bit of MMR



REVISIONS

CHK	CHANGE NO.	REV.

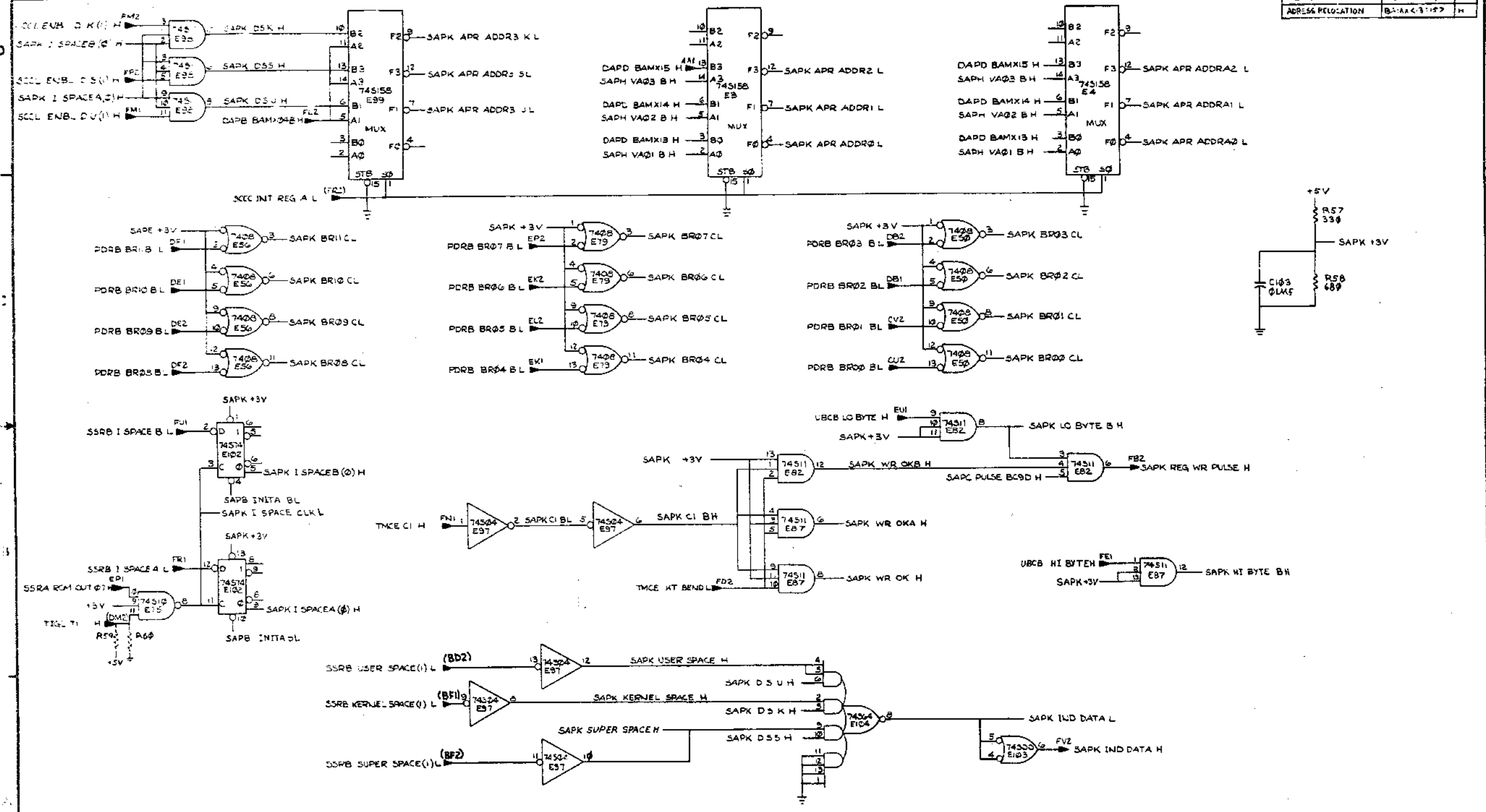
RELOCATION LOGIC SLOT 14

TITLE: SYS ADRS PATH(SAPJ) SIZE CODE: DCS NUMBER: M8137-0-1 REV. A

SCALE: 1/1 SHEET: 9 OF 13 DIST.:

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745158		
FUNCTION	APR ADDR SELECT	CELL
PREM NIGHT REGISTER OPERATION	VA < 04:01 >	L
ADDRESS RELOCATION	BA:AA < 3:1 >	H



REVISIONS		
CHK	CHANGE NO.	REV.

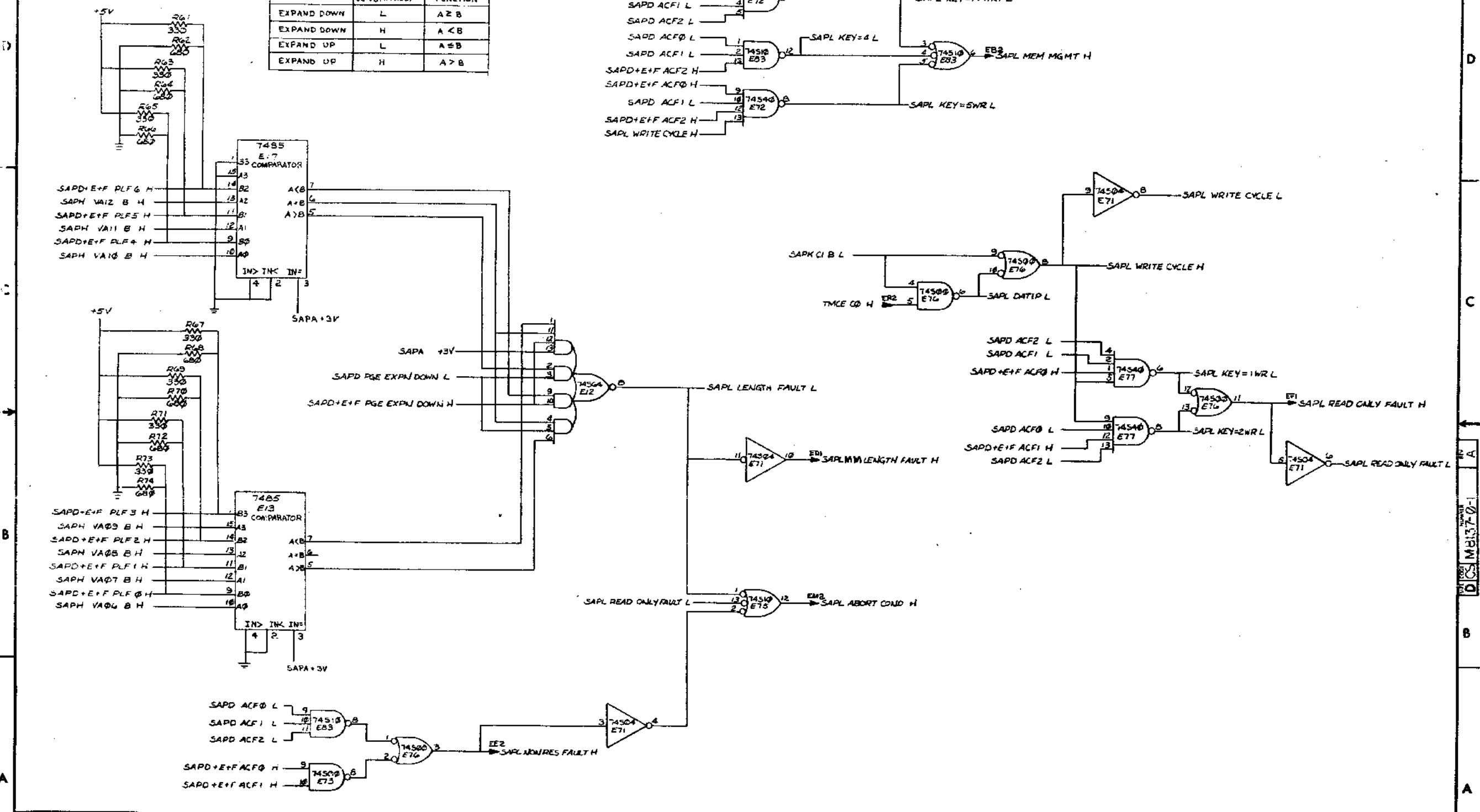
REGISTER SELECT AND CONTROL		SLOT 14	
TITLE	SIZE/CODE	NUMBER	REV.
SYS. ADRS PATH(SAPK)	D CS	M8137-0-1	A
SCALE	SHEET 10 OF 13	DIST.	

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7485 LENGTH FAULT

	MEM MGMT LENGTH FAULT	FUNCTION
EXPAND DOWN	L	A ≥ B
EXPAND DOWN	H	A < B
EXPAND UP	L	A ≤ B
EXPAND UP	H	A > B



REVISIONS

CHK	CHANGE NO.	REV.

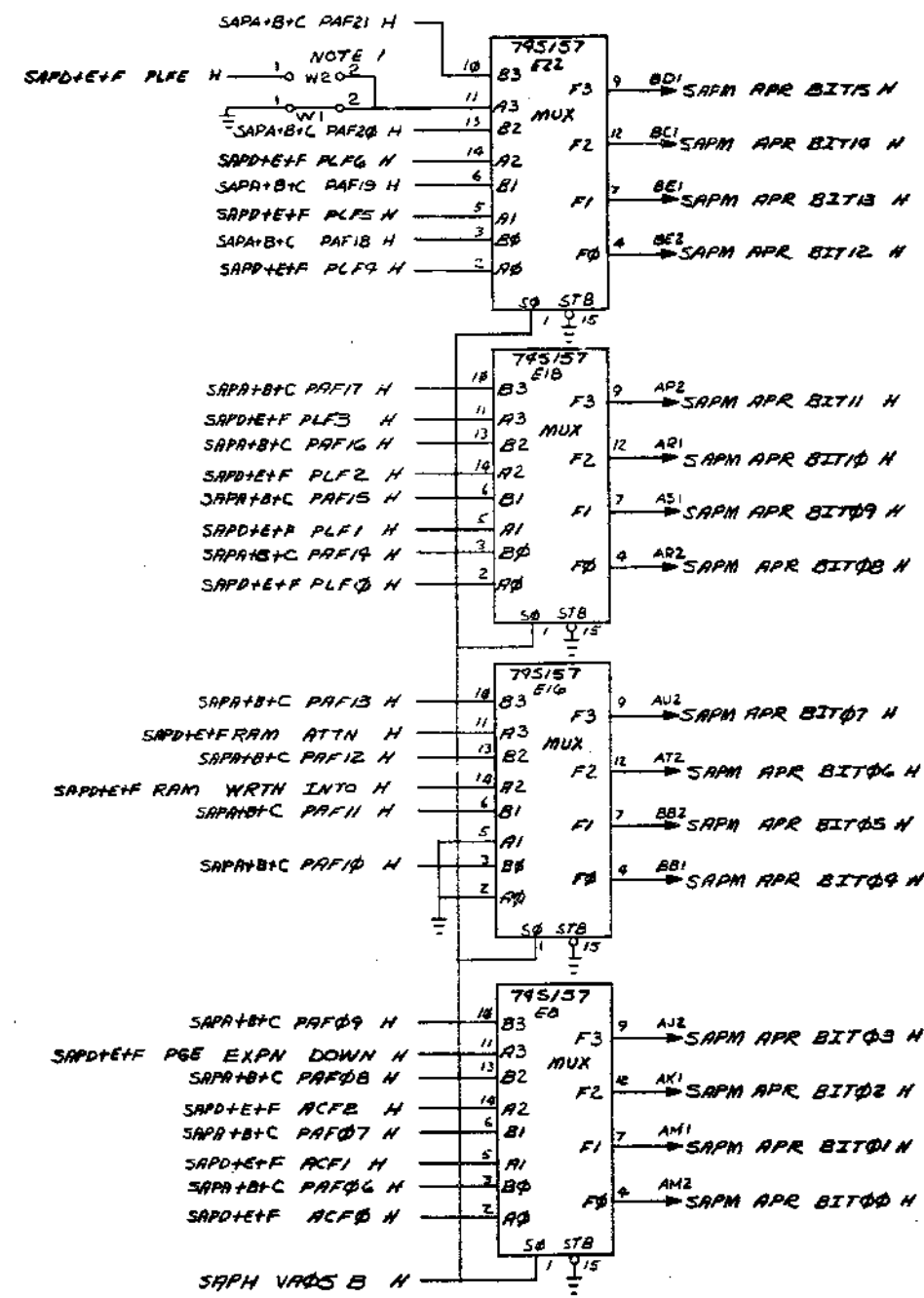
ABORT AND TRAP DECODE SLOT 14

TITLE	SYN. ADPS PATH(SAPL)	REV. A
SCALE	SHEET 4 OF 13	DIST.

DCS M8137-0-1

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74S157

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

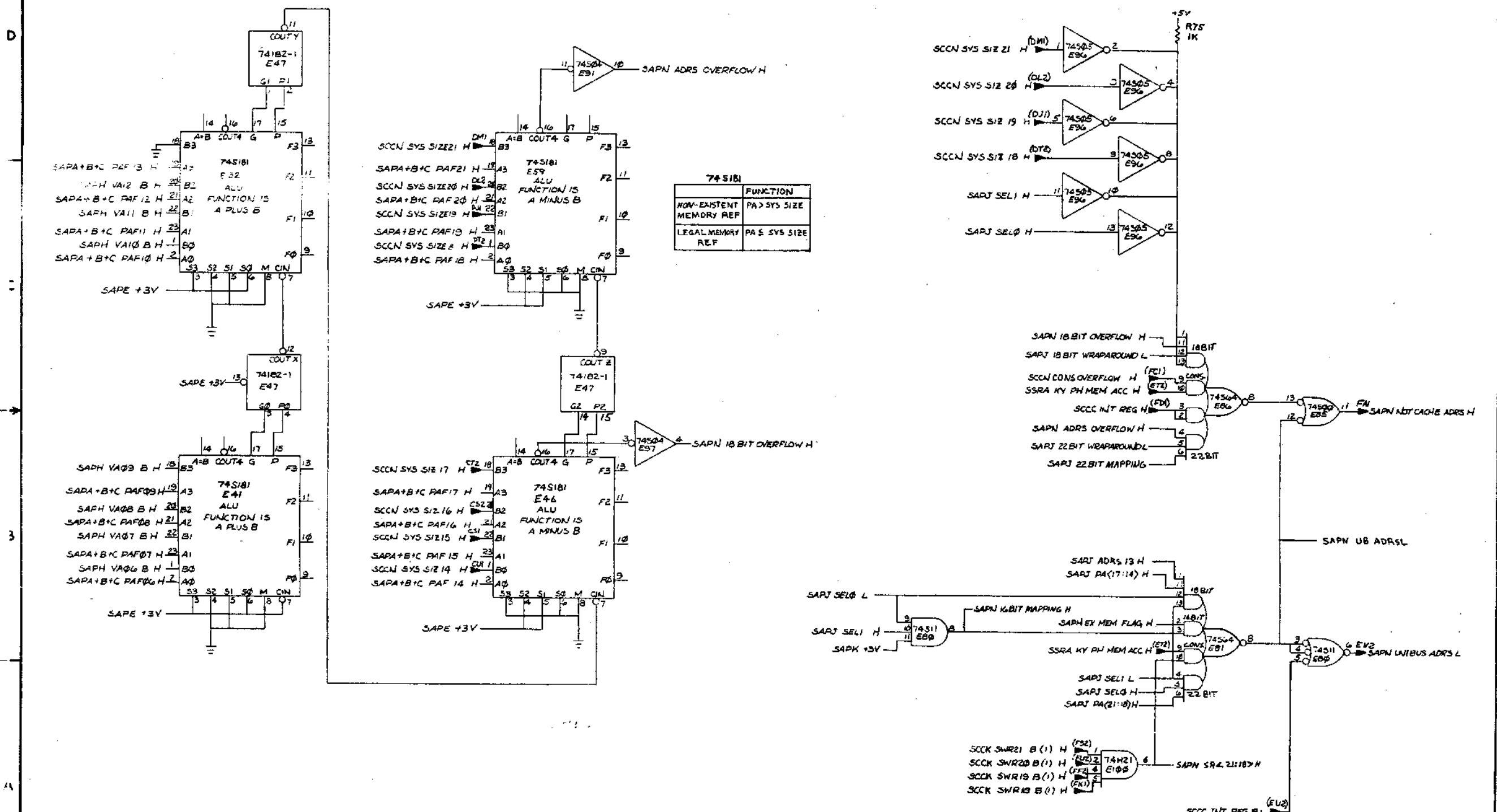
NOTES:
1. PROVISIONS FOR WIRE JUMPER. JUMPER IS NORMALLY INSERTED TO CONNECT "A3" TO GROUND.

PAR/POR READ MULTIPLEXERS SLOT 14

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES		DATE 11-22-70		
TOLERANCES		DATE 11-22-70		
DECIMALS	ANGLES	DATE 11-22-70		
.001	±0°30'	DATE 11-22-70		
.002		DATE 11-22-70		
.005		DATE 11-22-70		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE 12-11-73		
		SHEET 12-11-73		
		DIST.		
		TITLE		
		SYS. ADRS. PATH		
		(SAPM)		
		SIZE CODE		
		NUMBER		
		REV.		
		DCS M8137-0-1		
		A		

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74S181	
FUNCTION	FUNCTION
NON-EXISTENT MEMORY REF	PA > SYS SIZE
LEGAL MEMORY REF	PA <= SYS SIZE

REVISIONS		
CHK	CHANGE NO.	REV.

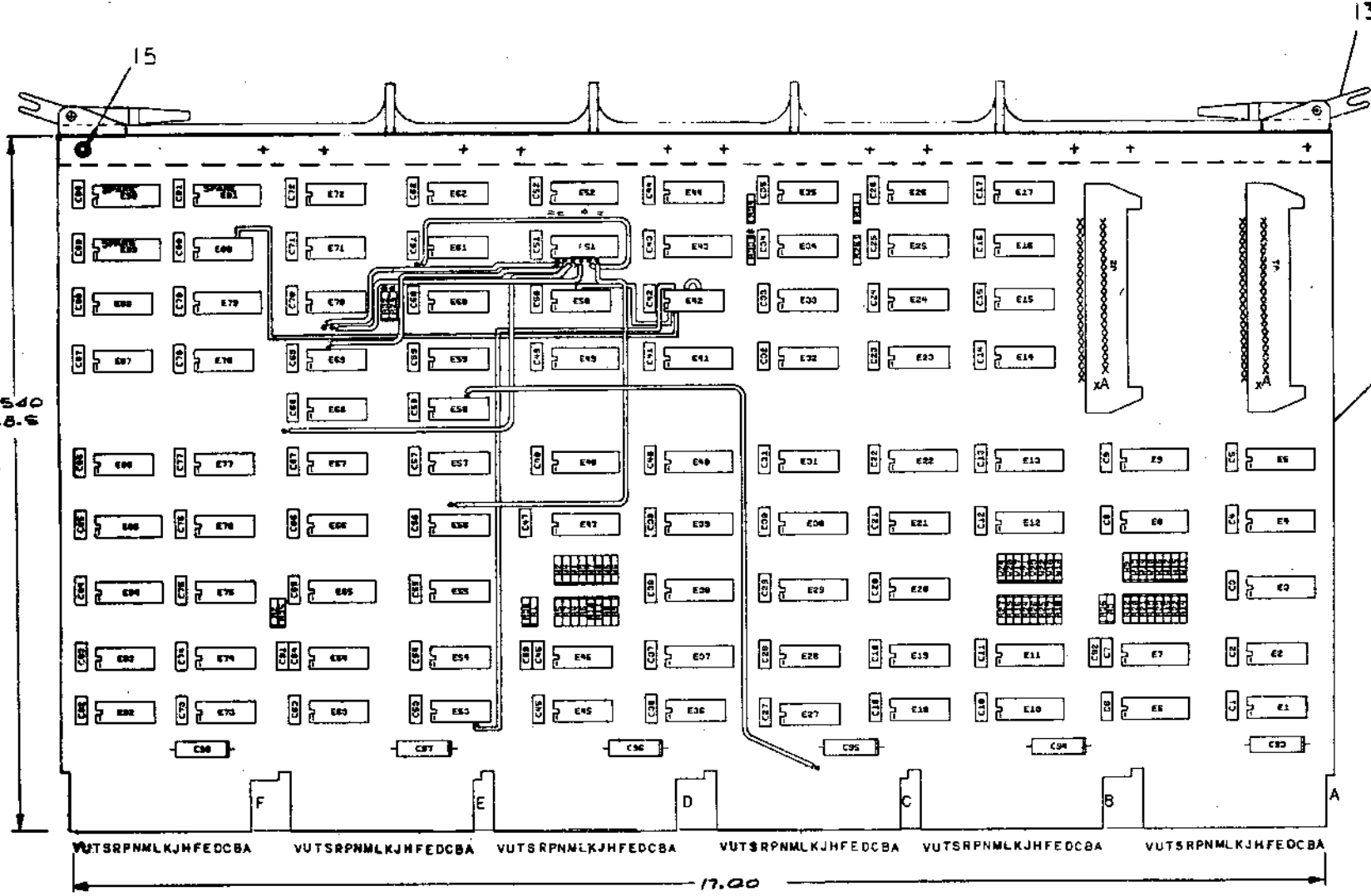
VALID ADDRESS CHECK SLOT 14

TITLE	SIZE/NO.	NUMBER	REV.
SYS ADRS PATH (SAPN)	DCS	M8137-0-1	A
SCALE	SHEET	OF	
	13	13	

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NOTES:

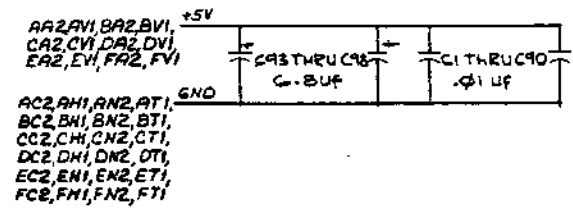
- * OPTIONAL COMPONENTS.
- E81, E89, F83 ARE SPARE IC LOCATIONS.



IC	DEC	QTY	IC
IC DEC 74157	8	16	
IC DEC 745133	8	16	
IC DEC 8234	8	16	
IC DEC 74155	8	16	
IC DEC 745174	8	16	
IC DEC 745158	8	16	
IC DEC 74153	8	16	
IC DEC 7483	12	5	
IC TYPE	GND	+5V	

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

IC PIN LOCATIONS



REF	DESCRIPTION	QTY	PART NO.	ITEM NO.
REF	X-Y COORDINATE HOLE LOCATION		R-CO-M8148-0-4	1
REF	ASSY/DRILLING HOLE LAYOUT		D-AM-M8148-0-5	2
REF	MODULE ECO HISTORY		B-W-M8148-0-8	3
1	ETCHED CIRCUIT BOARD		5011355	4
8	C93 THRU C98		1905308	5
93	C1 THRU C92, C95		1001810-D1	6
2	J1, J2		1209941	7
1	R34		1300250	8
3	R1, R2, R3		1300295	9
1	R28		1300309	10
25	R4 THRU R27, R31		1300385	11
3	R30, R35, R36		1301424	12
1	HANDLE ASSY HEX		1210711-02	13
3	SW, PKR DIP PKG W/B SW		1211164-04	14
12	EYELET HANDLE		9006732	15
1	E24		1905547	16
3	E1, E2, E14		1904688	17
5	E63, E73, E74, E82, E83		1907905	18
1	E23		1909713	19
7	E18, E19, E27, E28, E36, E45, E46		1909849-00	20
2	E6, E7		1909932	21
7	E3, E4, E5, E39, E40, E47, E48		1909937	22
3	E15, E16, E17		1910153	23
2	E60, E71		1910532	24
12	E20, E50, E58, E61, E66, E67, E75, E76, E78, E80, E85, E87		1910534	25
1	E62		1910536	26
9	E64, E25, E26, E31, E33, E42, E44, E54, E55		1910537	27
5	E21, E70, E71, E72, E88		1910538	28
1	E57		1910541	29
3	E37, E34, E35		1910542	30
3	E8, E9, E12		1910549	31
2	E13, E29		1910550	32
1	E19		1910558	33
2	E37, E38		1911315	34
10	E22, E30, E41, E43, E51, E52, E65, E64, E85, E49		1911903	35
2	E10, E11		1910555	36
5	E53, E56, E56, E68, E69		1910544	37
40	WIPE 30 AWG BUSS (RETROFIT)		3105740-55	38
3	SWITCH COVER		121284-4	39

REVISIONS

REV	DATE	DESCRIPTION
1	11/14/78	INITIAL DESIGN
2	12/27/78	REVISED FOR MANUFACTURE
3	1/23/79	REVISED FOR MANUFACTURE
4	1/23/79	REVISED FOR MANUFACTURE
5	1/23/79	REVISED FOR MANUFACTURE

DATE: 12/27/78
 DATE: 1/23/79
 DATE: 1/23/79
 DATE: 1/23/79
 DATE: 1/23/79

DESIGNED BY: P. SCHNORR
 CHECKED BY: P. SCHNORR
 DATE: 11/14/78
 DATE: 12/27/78
 DATE: 1/23/79
 DATE: 1/23/79

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

SCALE: 1 OF 13

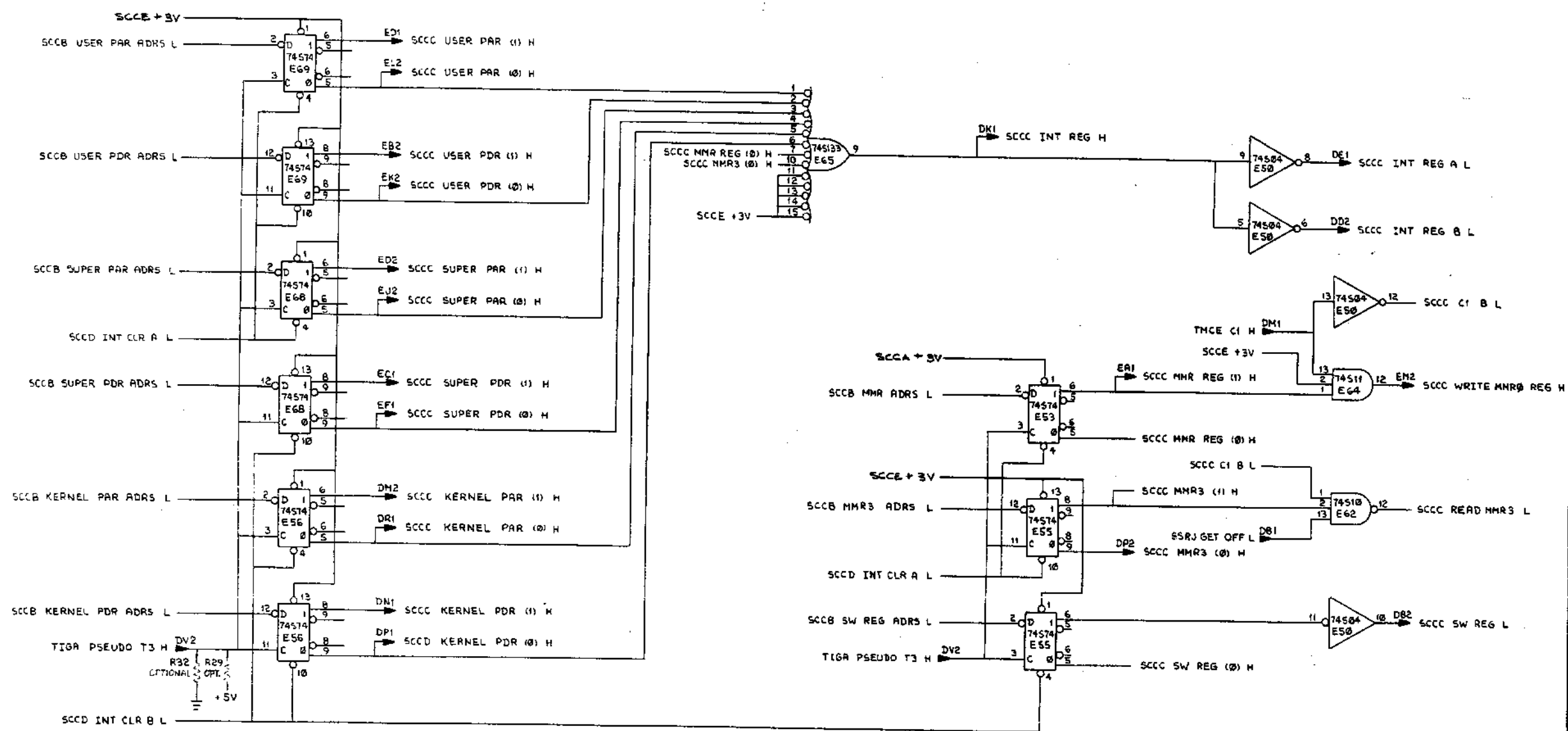
SEMICONDUCTOR CONVERSION CHART

digital EQUIPMENT CORPORATION
 TITLE: SYS DESC / CNSL CABLES
 SUBCODE: DCS M8148-0-1
 NUMBER: 8
 REV: B

263

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1-0-0-187187 DCS 2



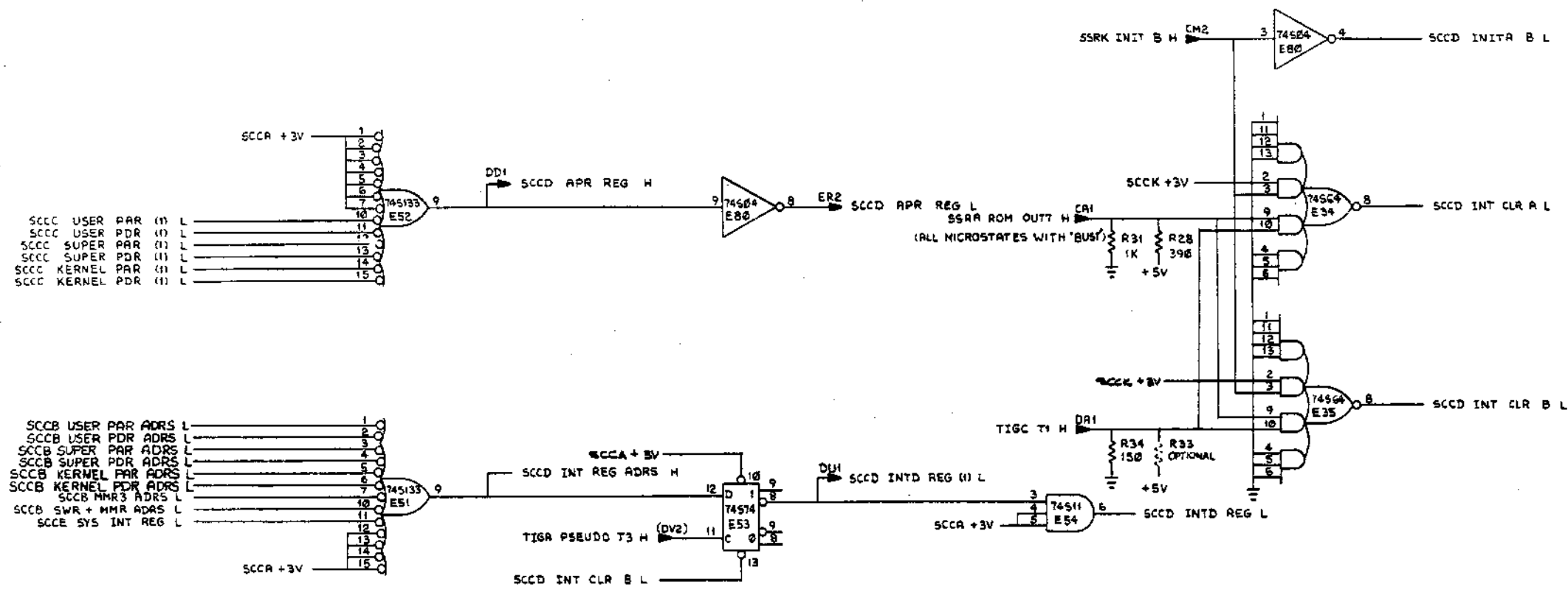
REVISIONS		
CHK	CHANGE NO.	REV.

174

REG ADDRESS DECODE SLOT 16
 TITLE: SYS DESC/CNSL CABLES (SCCC) DCS M8140-0-1
 SCALE: SHEET 4 OF 13 DIST. 266

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1 2 3 4 5 6 7 8



REVISIONS		
CHK	CHANGE NO.	REV.

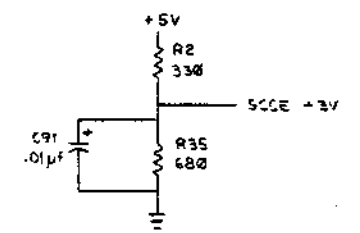
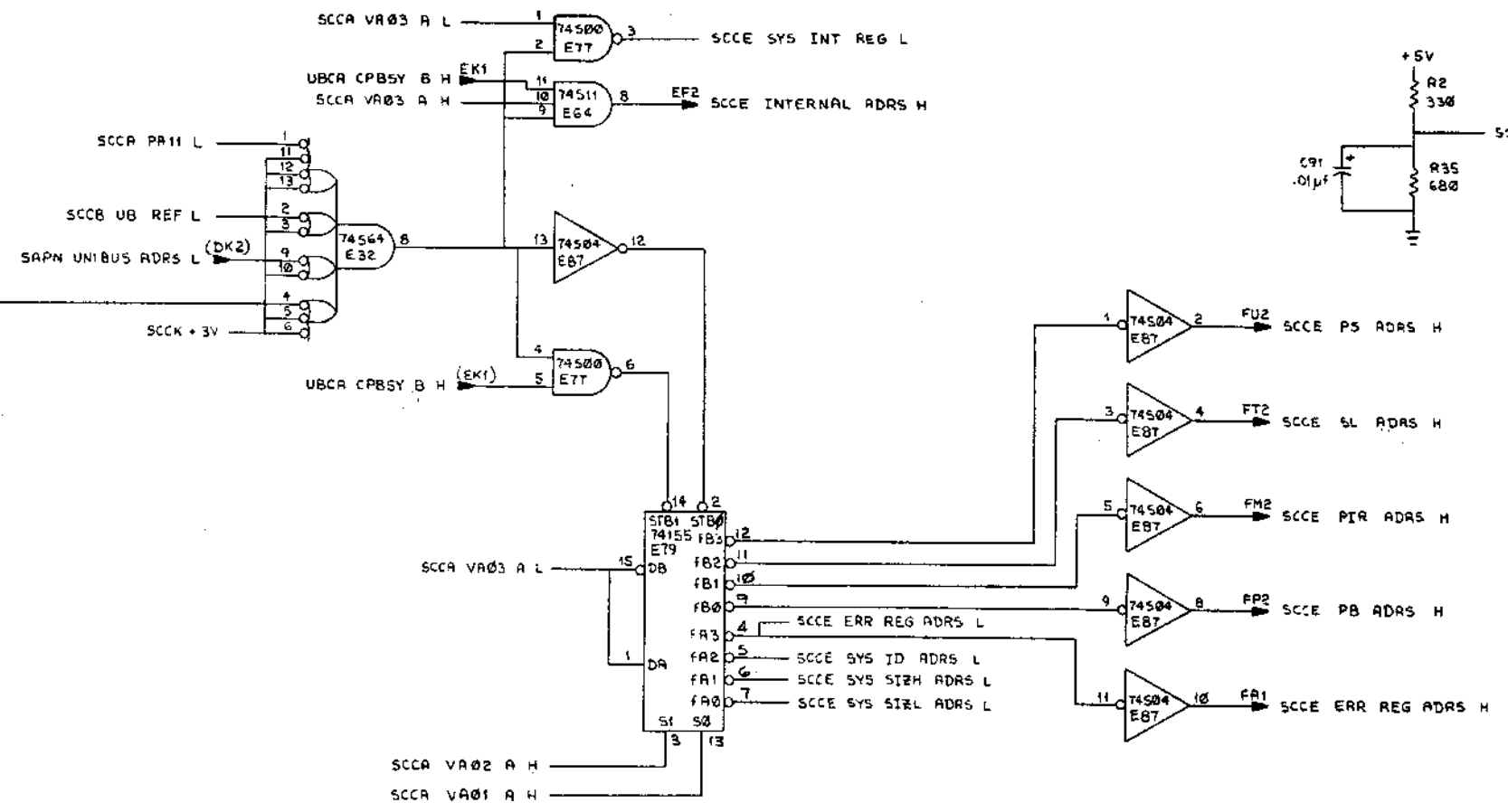
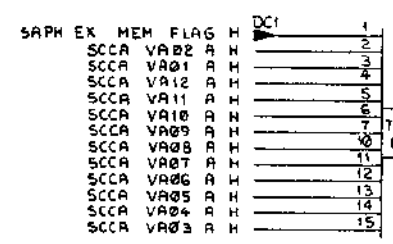
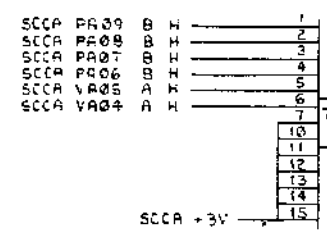
REG ADDRESS DECODE SLOT 16

TITLE	SIZE/SCALE	NUMBER	REV.
SYS DESC/CNSL CABLES (SCCD)	D CS	M8140-0-1	B
SCALE	SHEET 5 OF 13	DIST.	

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1-0-0718W 500 2



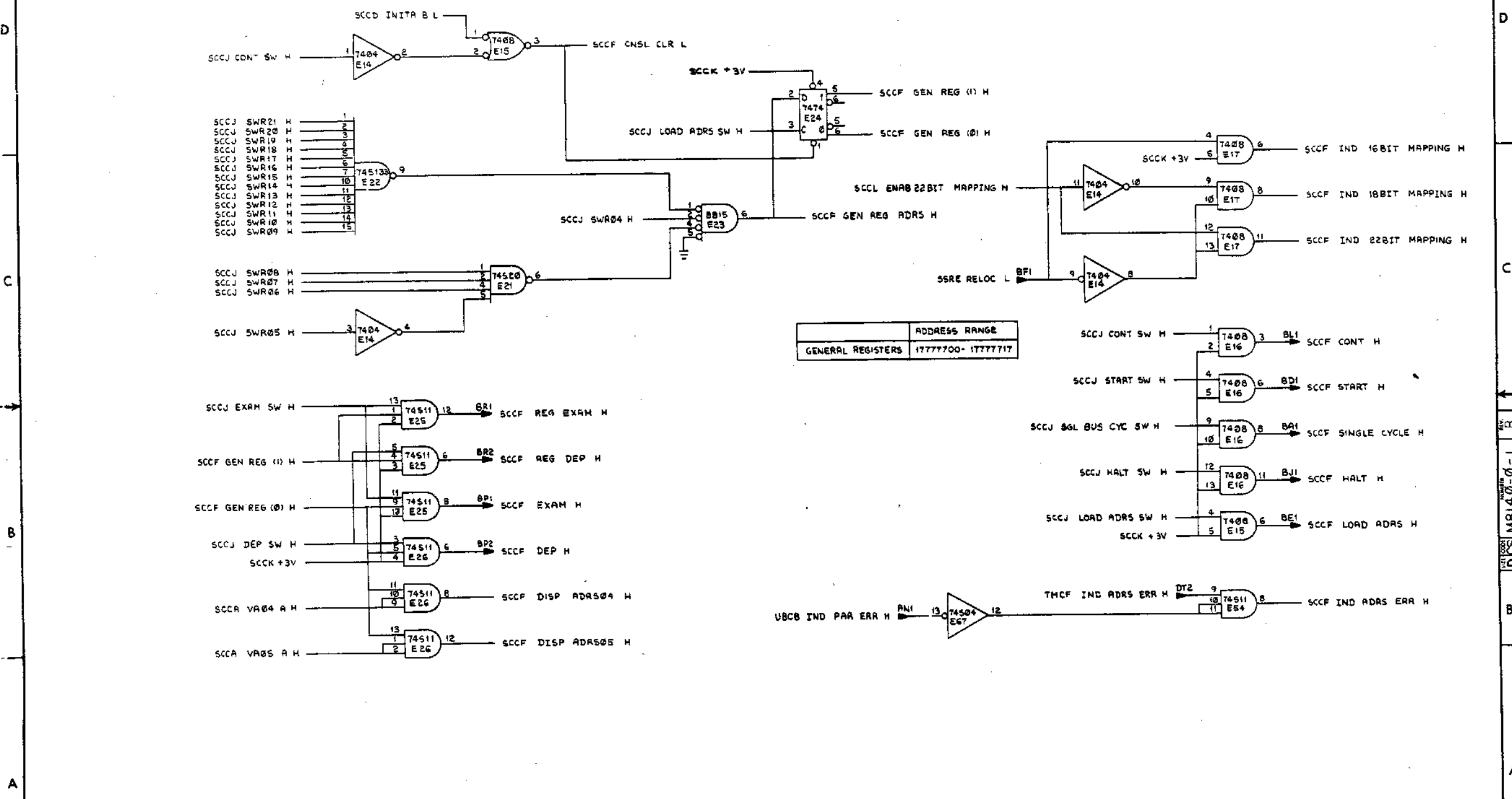
SYSTEM REG (STB0)	UNIBUS REG (STB1)	SCCA VA03 A	SCCA VA02 A (S1)	SCCA VA01 A (S0)	TRUE OUTPUT SIGNAL (IF OUTPUTS)	REGISTER ADDRESS
H	H	X	X	X	NONE	NONE
L	L	H	L	L	SCCE PB ADRS	17777770
L	L	H	L	H	SCCE PIR ADRS	17777772
L	L	H	H	L	SCCE S1 ADRS	17777774
L	L	H	H	H	SCCE P5 ADRS	17777776
L	H	L	L	L	SCCE SYS SIZL ADRS	17777760
L	H	L	L	H	SCCE SYS SIZH ADRS	17777762
L	H	L	H	L	SCCE SYS ID ADRS	17777764
L	H	L	H	H	SCCE ERR REG ADRS	17777766

REVISIONS		
CHK	CHANGE NO.	REV.

SYSTEM REG ADDRESS DECODE SLOT 16

TITLE: SYS DESC/CNSL CABLES (SCCE) DCS M8140-0-1
SHEET 6 OF 13
SCALE: DIST.

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GENERAL REGISTERS	ADDRESS RANGE
	17777700-17777717

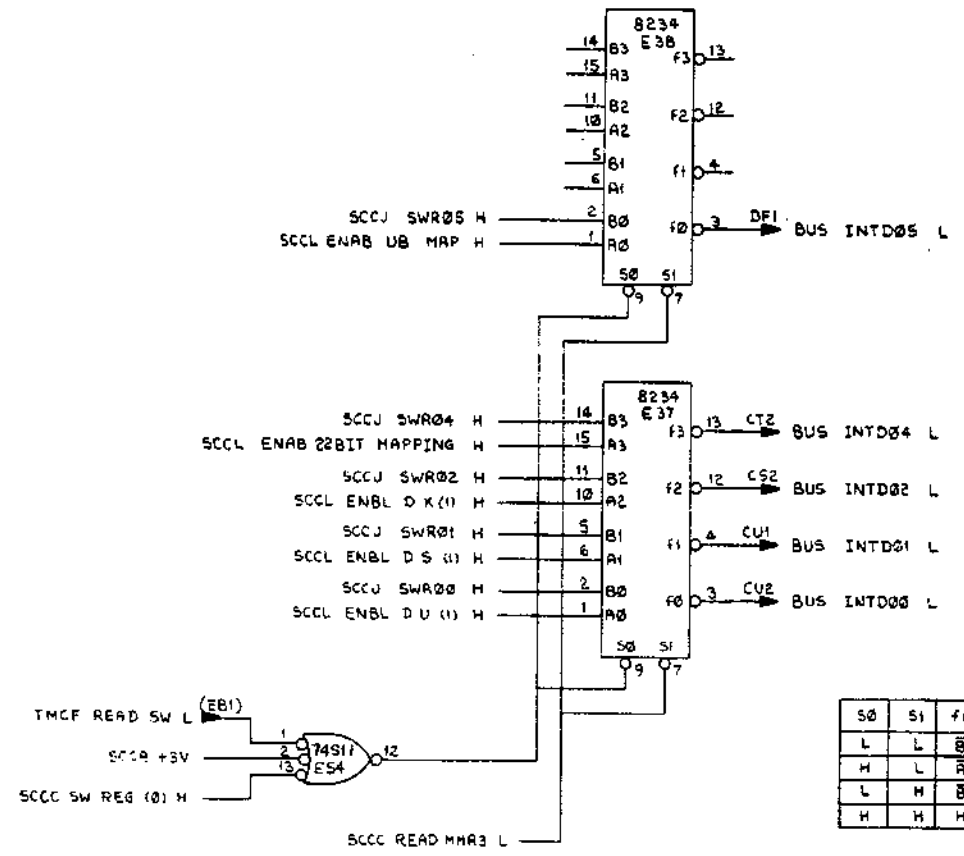
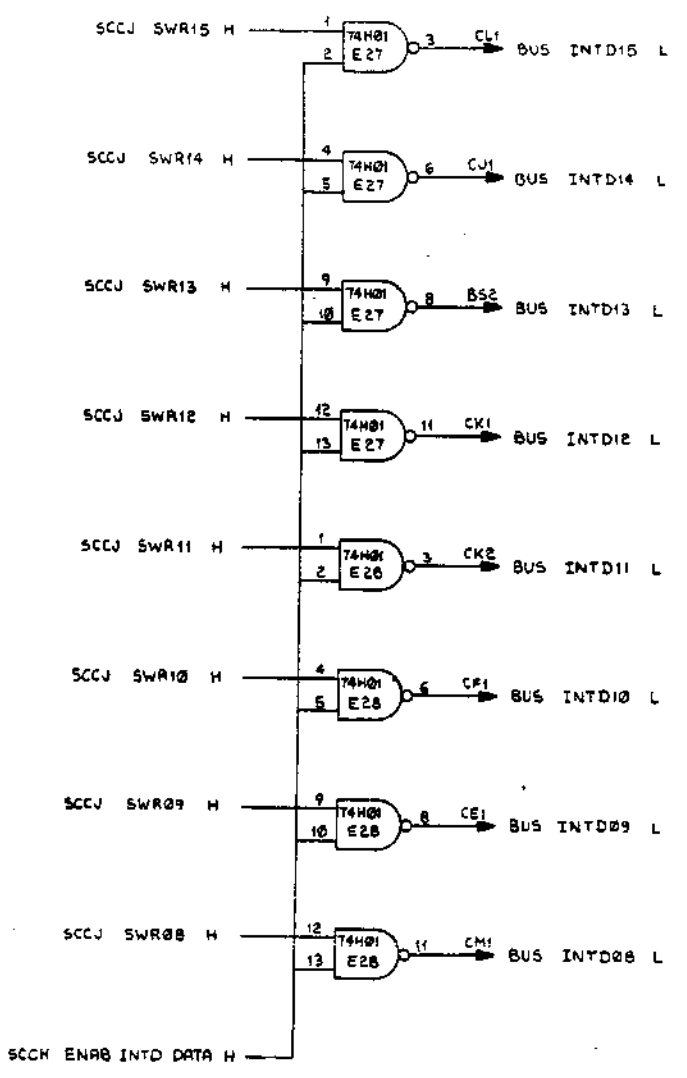
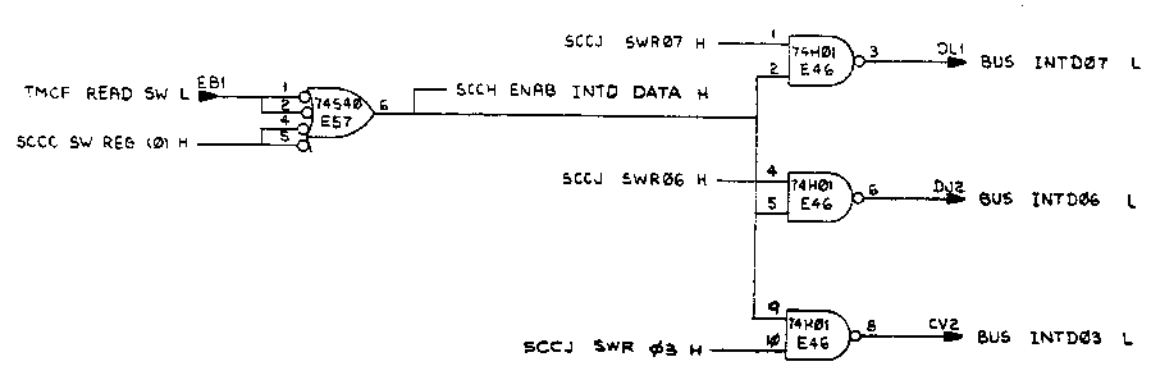
REVISIONS		
CHK	CHANGE NO.	REV.

GENERAL REGISTER DECODE SLOT 16			
TITLE	SIZE CODE	NUMBER	REV.
SYS DESC/CNSL CABLES(SCCF)	D CS	M8140-0-1	B
SCALE	SHEET 7 OF 13	DIST.	

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1-0-018W DCS 2



8234

S0	S1	fA	OUTPUT
L	L	B	SWITCH REGISTER
H	L	B	MEM MGMT REG3
L	H	B	SWITCH REGISTER
H	H	H	NONE

REVISIONS		
CHK	CHANGE NO.	REV.

INTERNAL BUS DRIVERS SLOT 16

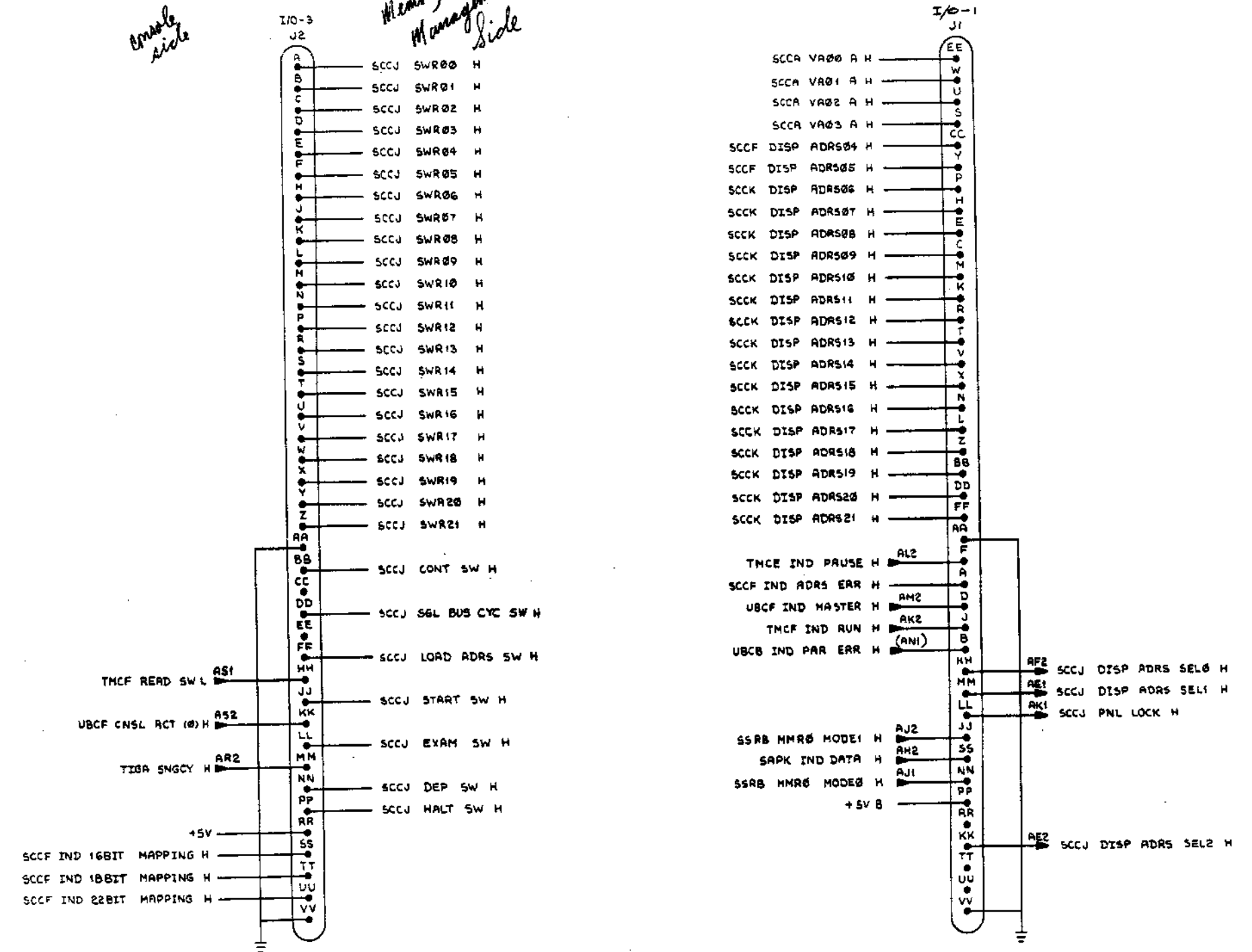
TITLE	SIZE CODE	NUMBER	REV.
SYS DESC/CNSL CABLES(SCCH)	DCS	M8140-0-1	8
SCALE	SHEET 8 OF 13	DIST.	

178

270

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console side
Memory Management Side



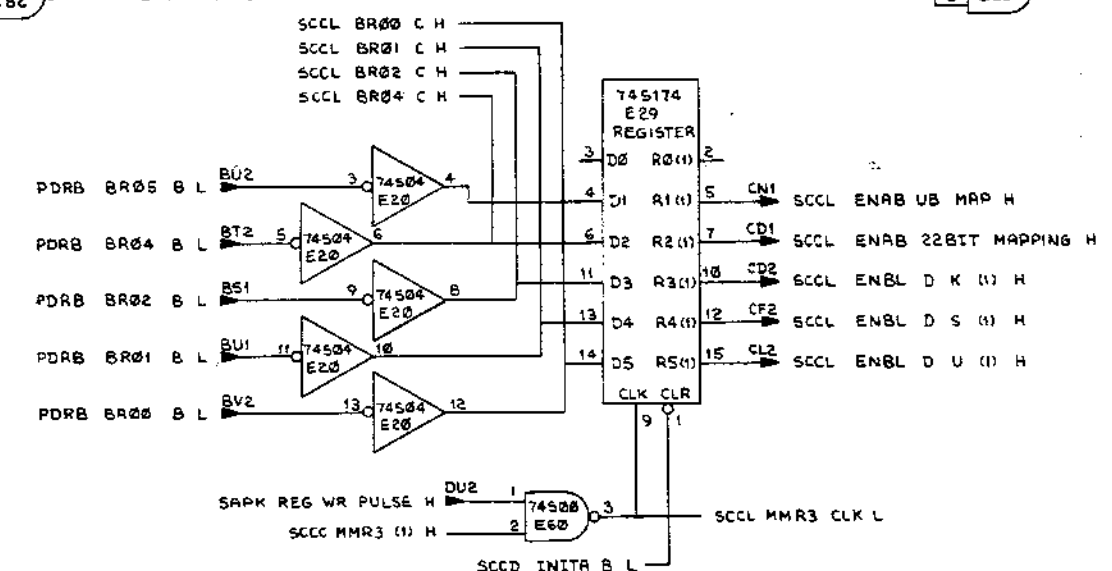
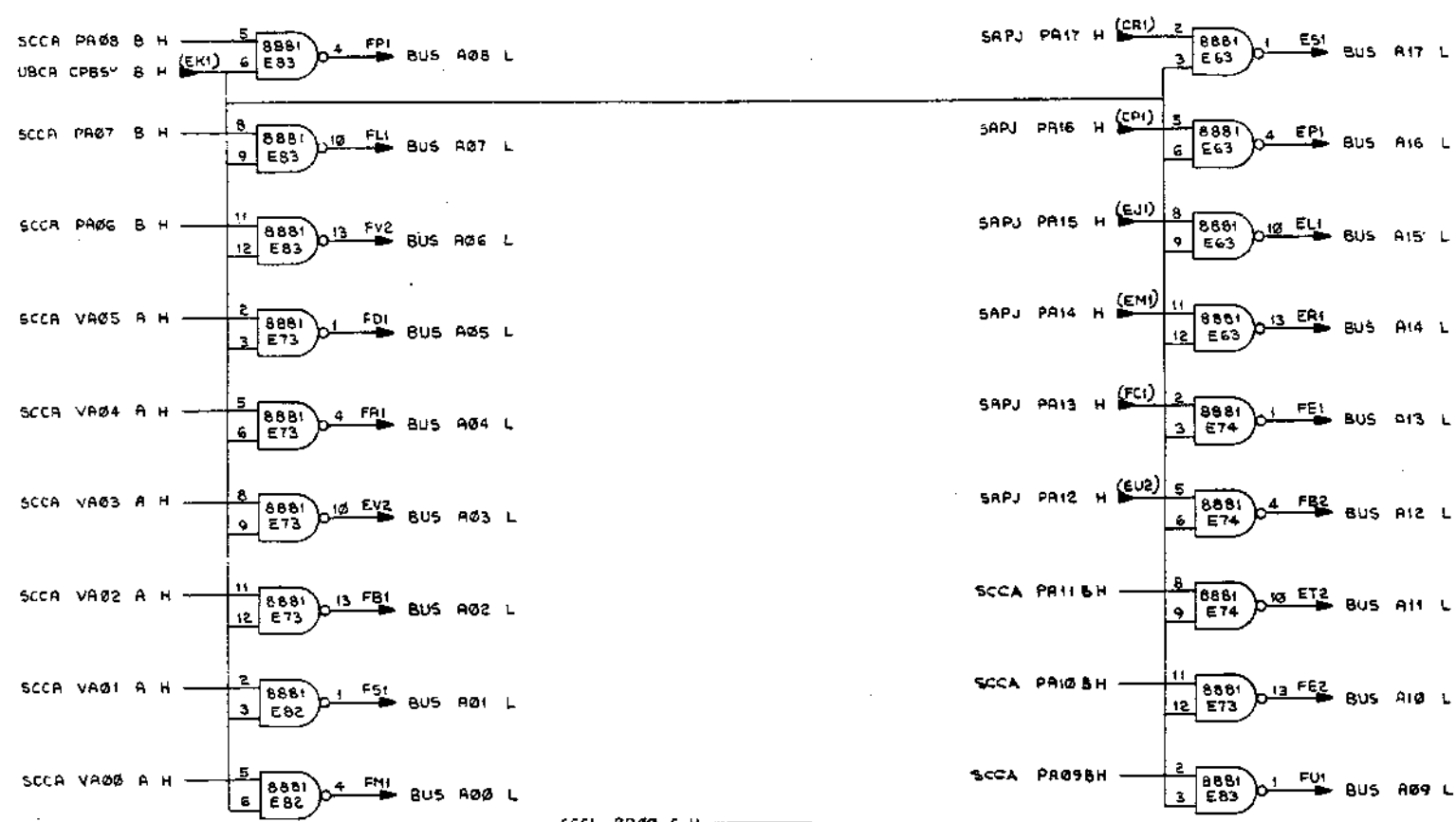
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE				SIZE CODE	NUMBER	REV.
SYS DESC/CNSL CABLES (SCCJ)				D CS	M8140-0-1	B
SCALE		SHEET 9 OF 13		DIST.		

SCC/CNSL CABLES SLOT 16

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DCS M8140-0-1BWS002



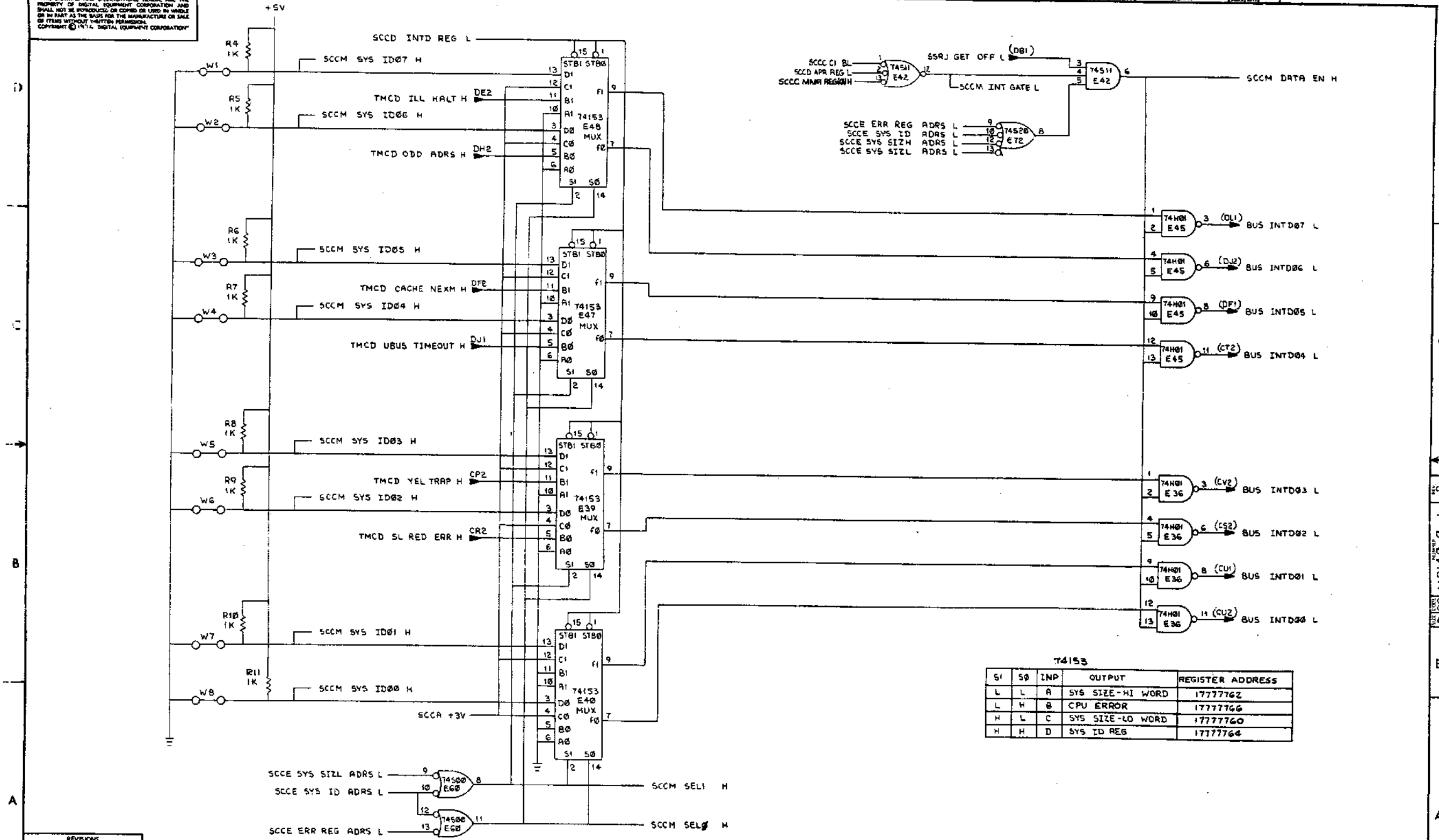
REVISIONS		
CHK	CHANGE NO.	REV.

UNIBUS ADDRESS DRIVERS +MMR3 SLOT 16

TITLE	SIZE CODE	NUMBER	REV.
SYS DESC/CNSL CABLES(SCCL)	DCS	M8140-0-1	B
SCALE	SHEET 11 OF 13	DIST.	

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1-0-0718W SCD 2



74153

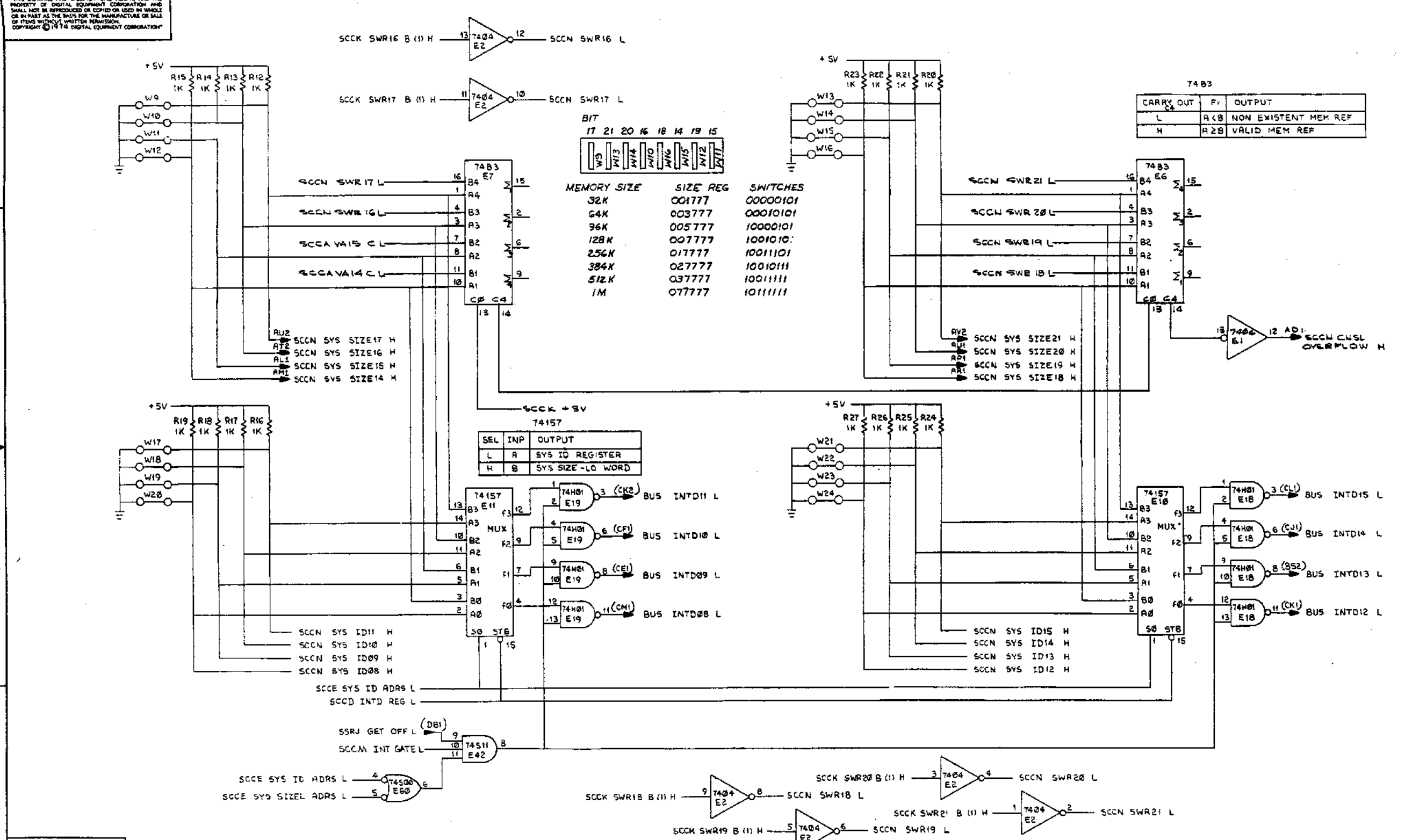
SI	SB	INP	OUTPUT	REGISTER ADDRESS
L	L	A	SYS SIZE-HI WORD	17777762
L	H	B	CPU ERROR	17777766
H	L	C	SYS SIZE-LO WORD	17777760
H	H	D	SYS ID REG	17777764

REVISIONS		
CHK	CHANGE NO.	REV.

SYSTEM REGISTER BITS (07:00) SLOT 16

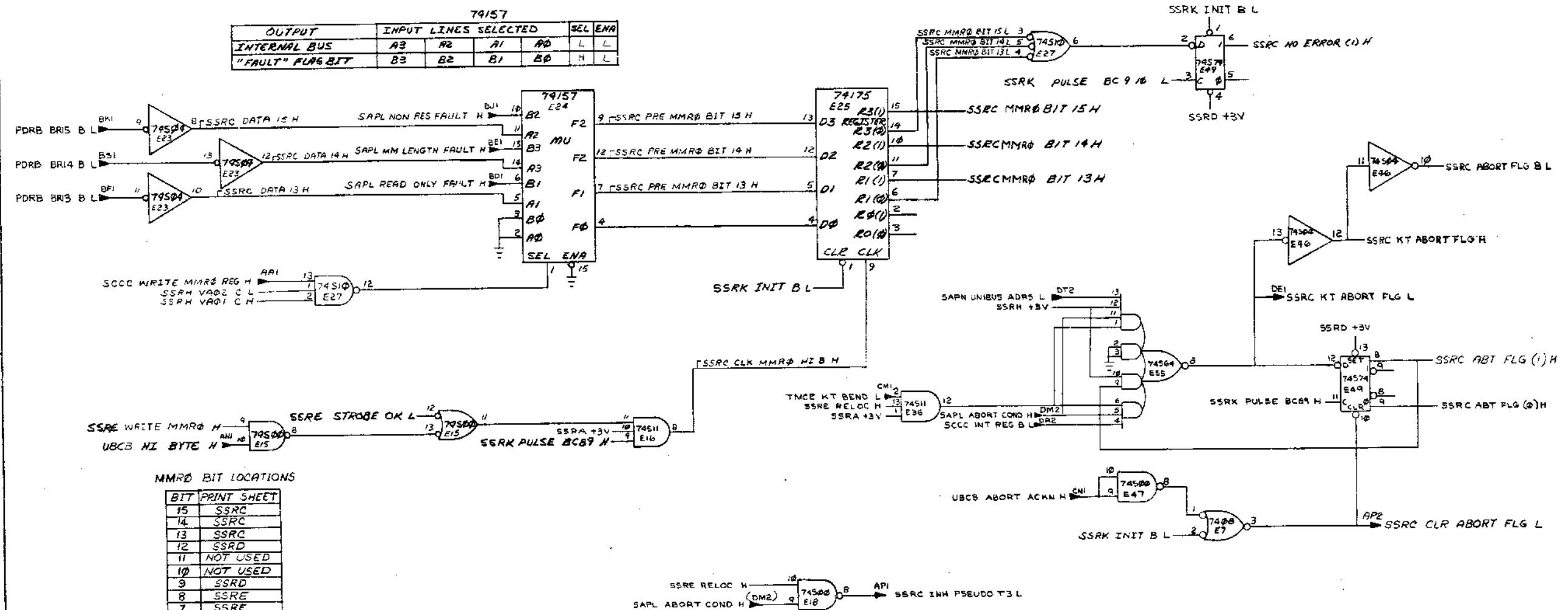
TITLE	SIZE CODE	NUMBER	REV.
SYS DESC/CNSL CABLES(SCCM)	D CS	M8140-0-1	B
SCALE	SHEET 12 OF 13	DIST.	

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79157						
OUTPUT	INPUT LINES SELECTED			SEL	ENA	
INTERNAL BUS	A3	A2	A1	A0	L	L
"FAULT" FLAG BIT	B3	B2	B1	B0	H	L



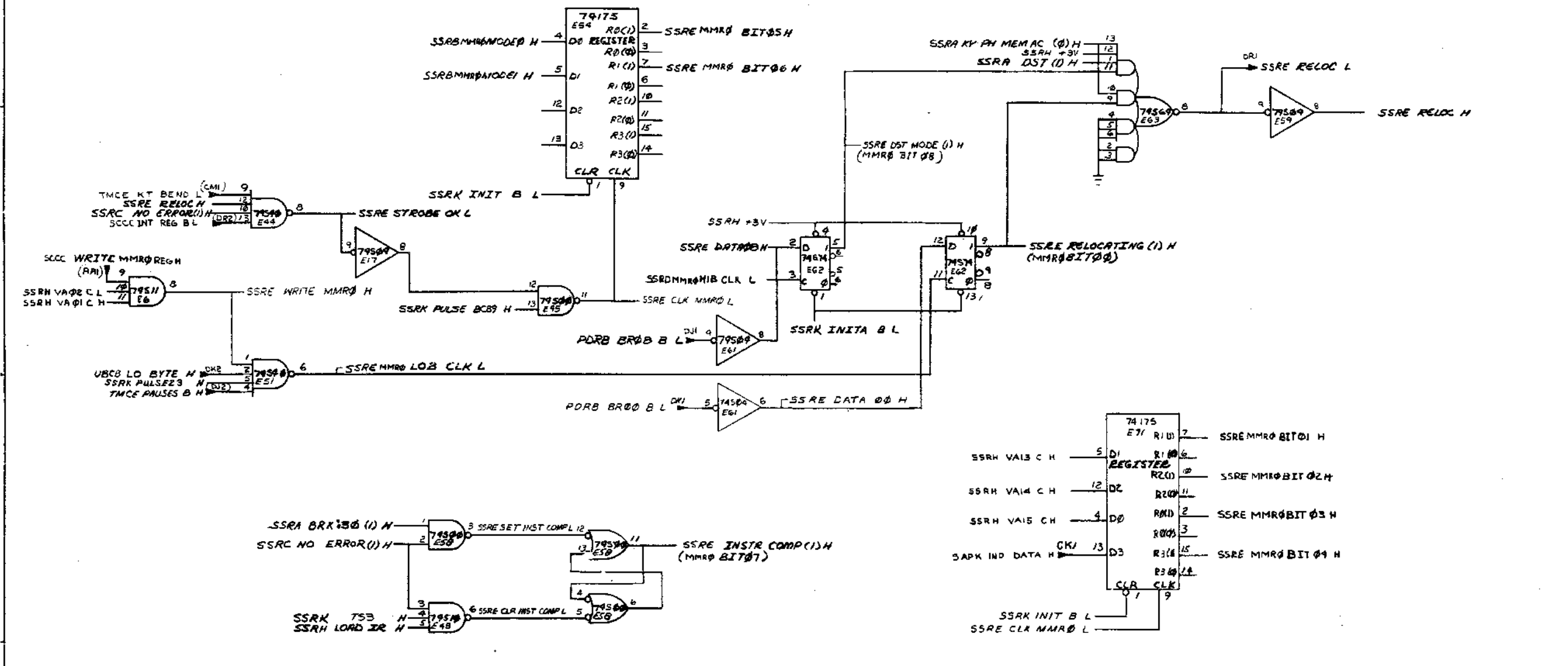
MMR0 BIT LOCATIONS

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

MEM MGMT REGISTER *0-ABORT FLAGS SLOT 5

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/75				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES.				
TOLERANCES				
DECIMALS	ANGLES	DATE		
XXX - .008	±0° 30'	DATE	TITLE	
XX - .02		DATE	SYS. STATUS REG.	
X - .1		DATE	(SSRC)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV
---		DCS	M813B-0-1	F
FINISH	SCALE	SHEET	4 OF 12	DIST
---	---			

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MEM MGMT REGISTER #0-MODE OPERATE CONTROL SLOT 15

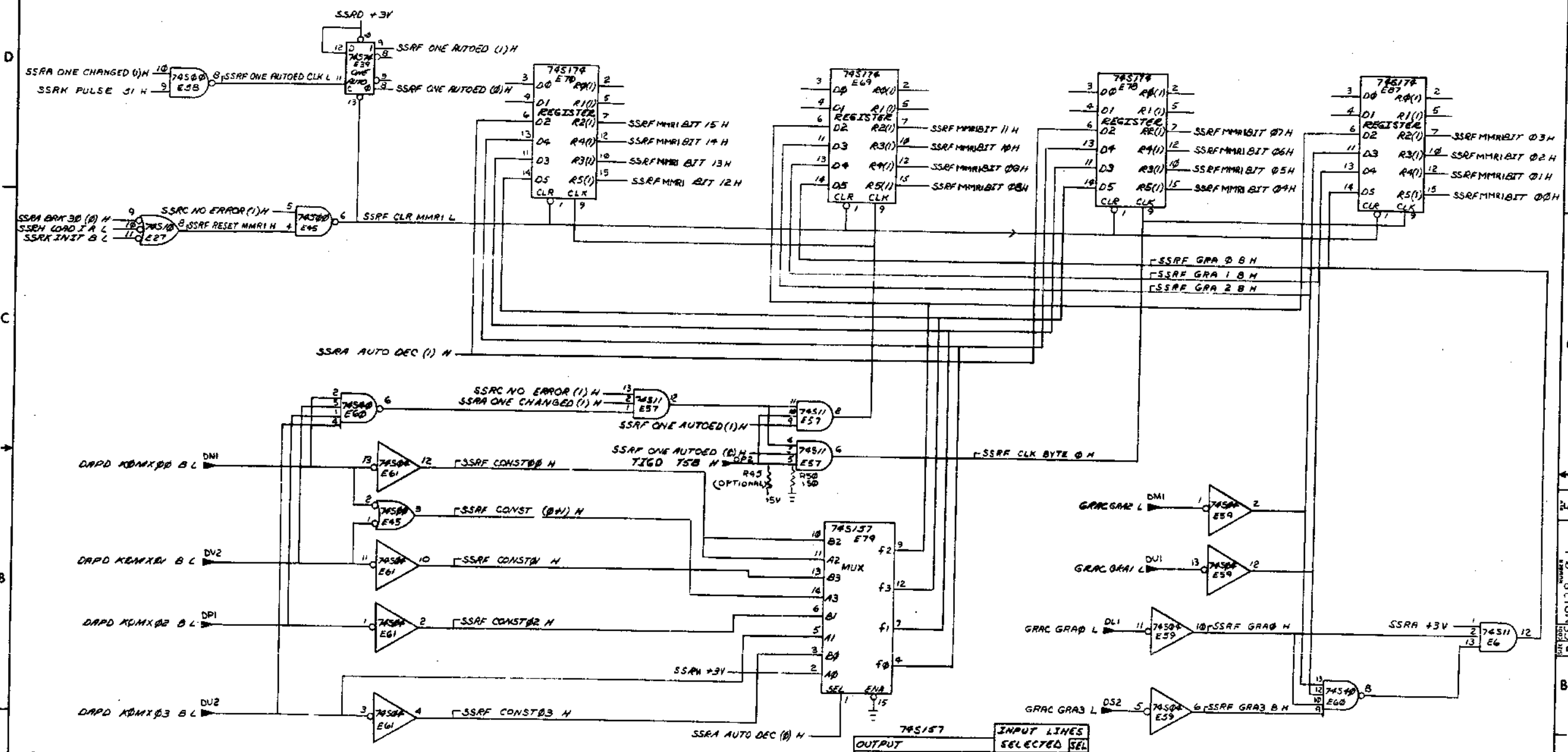
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
.XXX + .008	± 0° 30'	DATE	DIGITAL EQUIPMENT CORPORATION	
.XX + .02		DATE	PART NUMBER 1452-0000-115	
.X + .1		DATE	TITLE	
REMOVE BLURS AND BRU/X SHARP		DATE	SYS. STATUS REG.	
CONFORM SURFACE QUALITY		DATE	(SSRE)	
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
FINISH	SCALE	DCS	MB138-0-1	F
	SHEET 6 OF 12	DIST.		

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REV	CHANGE NO.	DESCRIPTION

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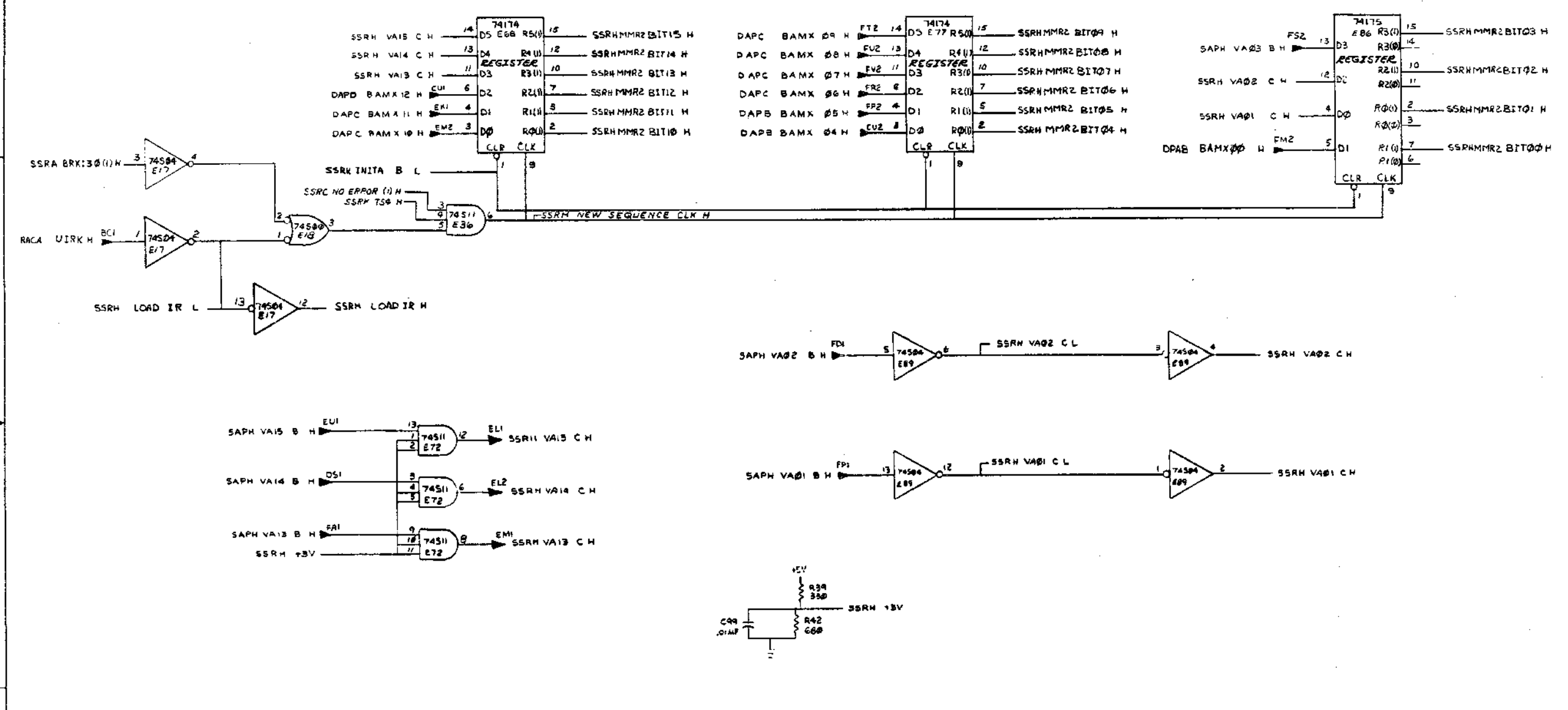
10-8180150 2



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

MEM MGMT REGISTER #1-AUTO INC/DEC INFO.		SLOT 15	
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
11/70			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED		DATE	
DIMENSION IN INCHES		12/16/74	
TOLERANCES		DATE	
DECIMALS	ANGLES	12/27/75	
XXX - 000	10° 30'	DATE	
XX - 02		12/27/75	
X - 1		DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	
MATERIAL		1/20/75	
FINISH			
NEXT HIGHER ASSY			
TITLE			
SYS. STATUS REG.			
MATERIAL			
DCS M8138-0-1			
NUMBER			
REV. F			
SCALE			
SHEET 7 OF 12			

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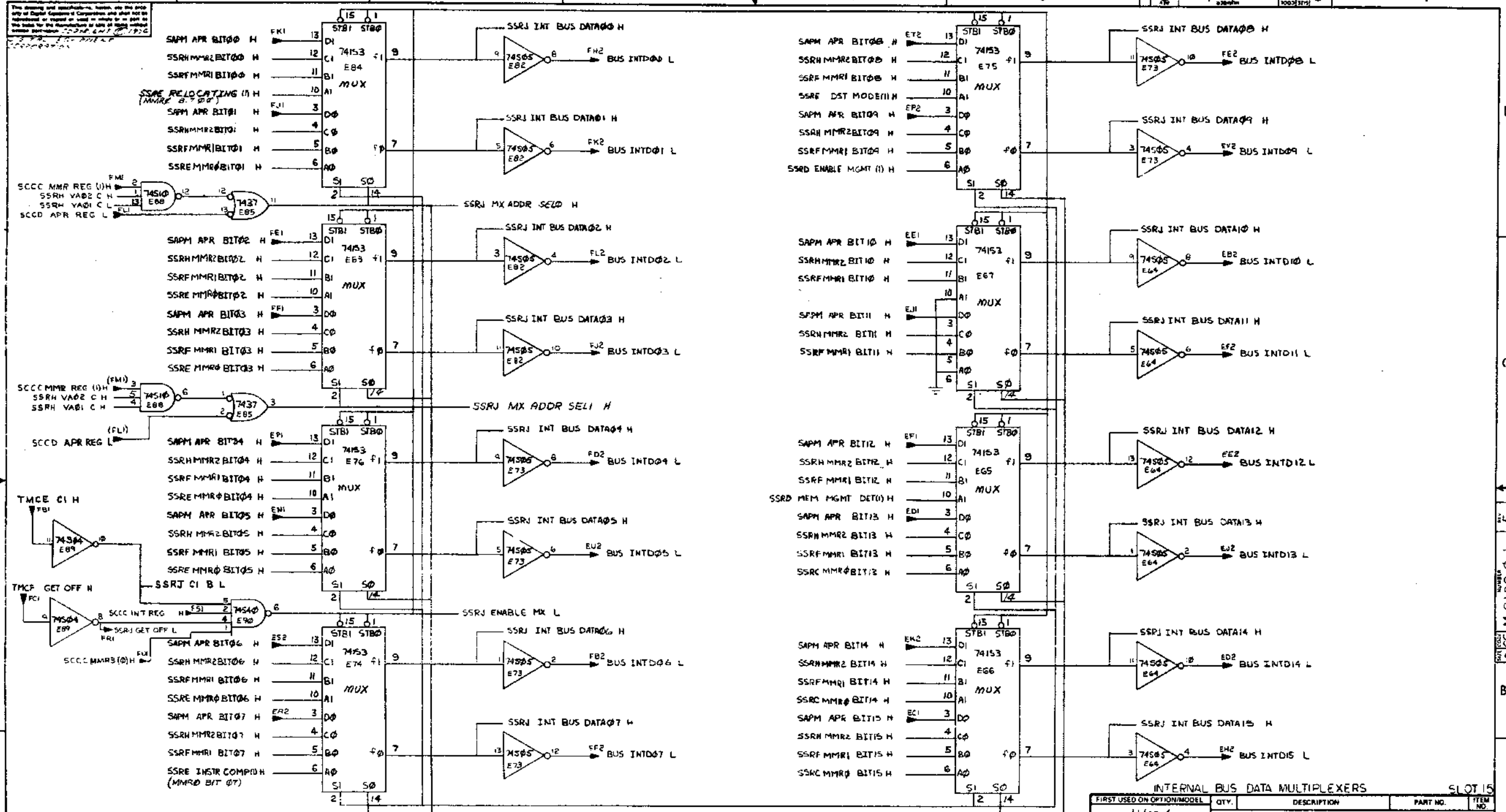


MEM MGMT REGISTER #2 INST OR TRAP VECTOR ADDRESS SLOT 15

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 10/1/70 DATE 10/1/70 DATE 10/1/70 DATE 10/1/70 DATE 10/1/70	EQUIPMENT CORPORATION CORPORATION	
DECIMALS	ANGLES	TITLE SYS. STATUS REG. (SSRH)		
MATERIAL		SCALE	SIZE CODE	NUMBER
FINISH		SHEET 8 OF 12	DCS M8138-0-1	REV. F

DCS M8138-0-1

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REV.	
CHG.	
CHK.	
DES.	

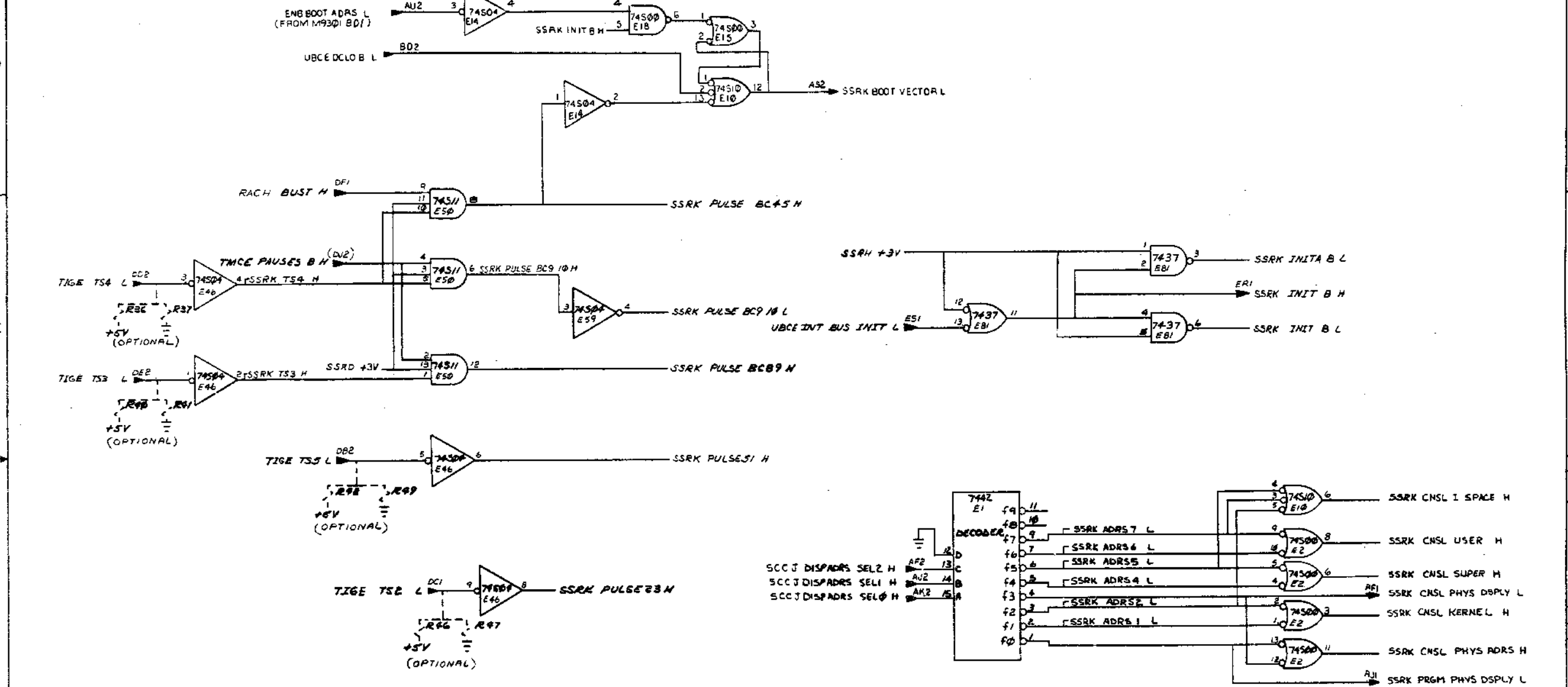
74153	
OUTPUT	INPUT LINES SELECTED
MEM MGMT REG 0	A1 A0 L L L L
MEM MGMT REG 1	B1 B0 L H L L
MEM MGMT REG 2	C1 C0 H L L L
APR	D1 D0 H H L L

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11170				

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE	DATE
DECIMALS	ANGLES	DATE	DATE
XXX - 006	20° 30'	DATE	DATE
X - 1		DATE	DATE
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE	DATE
MATERIAL		NEXT HIGHER ASSY.	
FINISH		SCALE	
		SHEET 9 OF 12	

EQUIPMENT CORPORATION		TITLE	
DCS M 8138-0-1		SYS. STATUS REG.	
NUMBER		REV.	
DCS M 8138-0-1		F	

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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	L
CONSOLE PHYSICAL	L	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

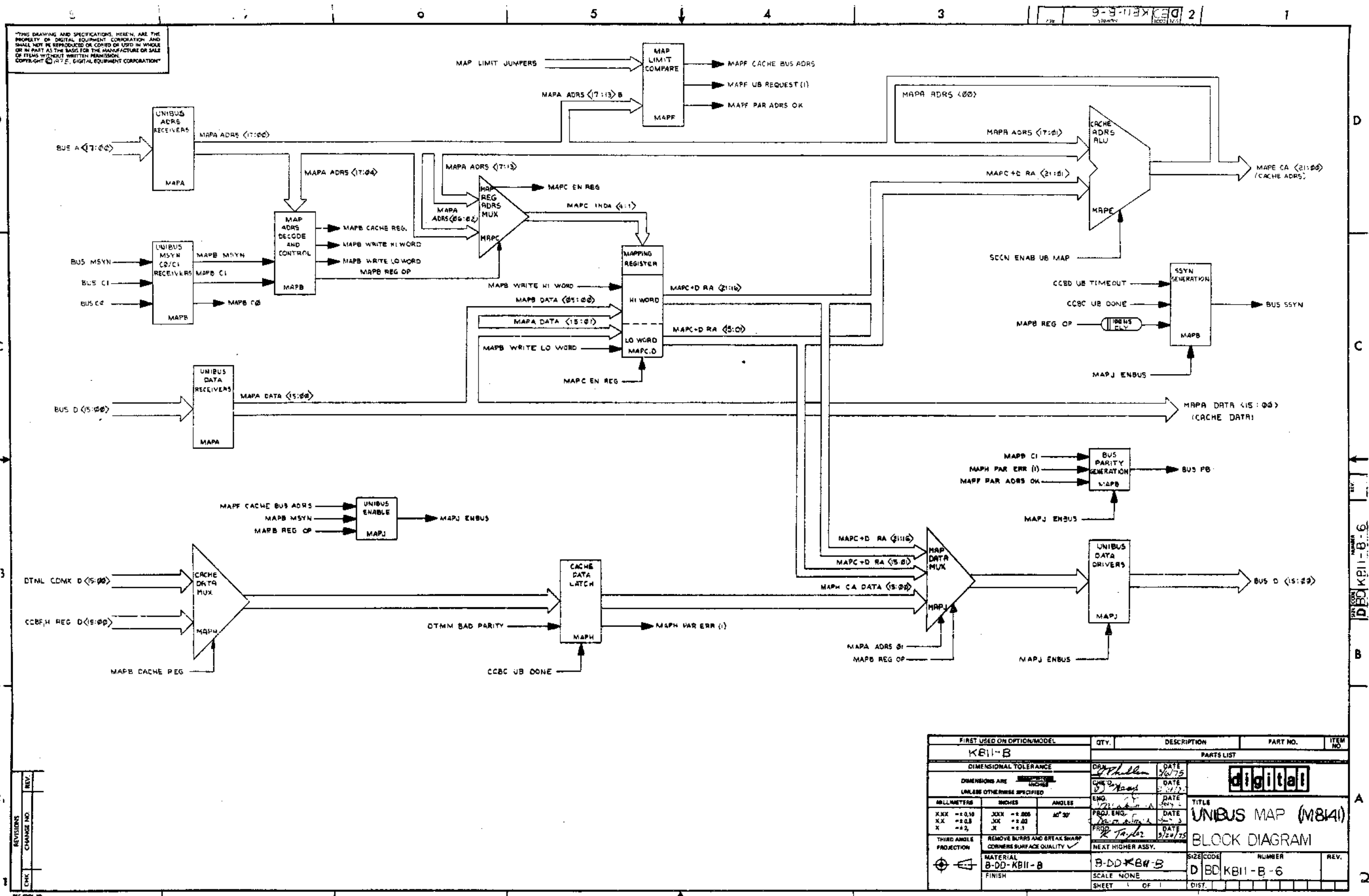
CNSL. ADRS. SEL. SWITCH, TIMING LOGIC, INIT SLOT 15

FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/70				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE	EQUIPMENT CORPORATION	
XXX - 006	± 0° 30'	11/70	TITLE	
REMOVES BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROG	DATE	SYS. STATUS REG.	
MATERIAL	NEXT HIGHER ASSY	DATE	(SSRK)	
FINISH	SCALE	DATE	SIZE CODE	NUMBER
	SHEET 1 OF 12		DCS M8138-0-1	REV. F

REV	NO	DATE
1	1	11/70

205

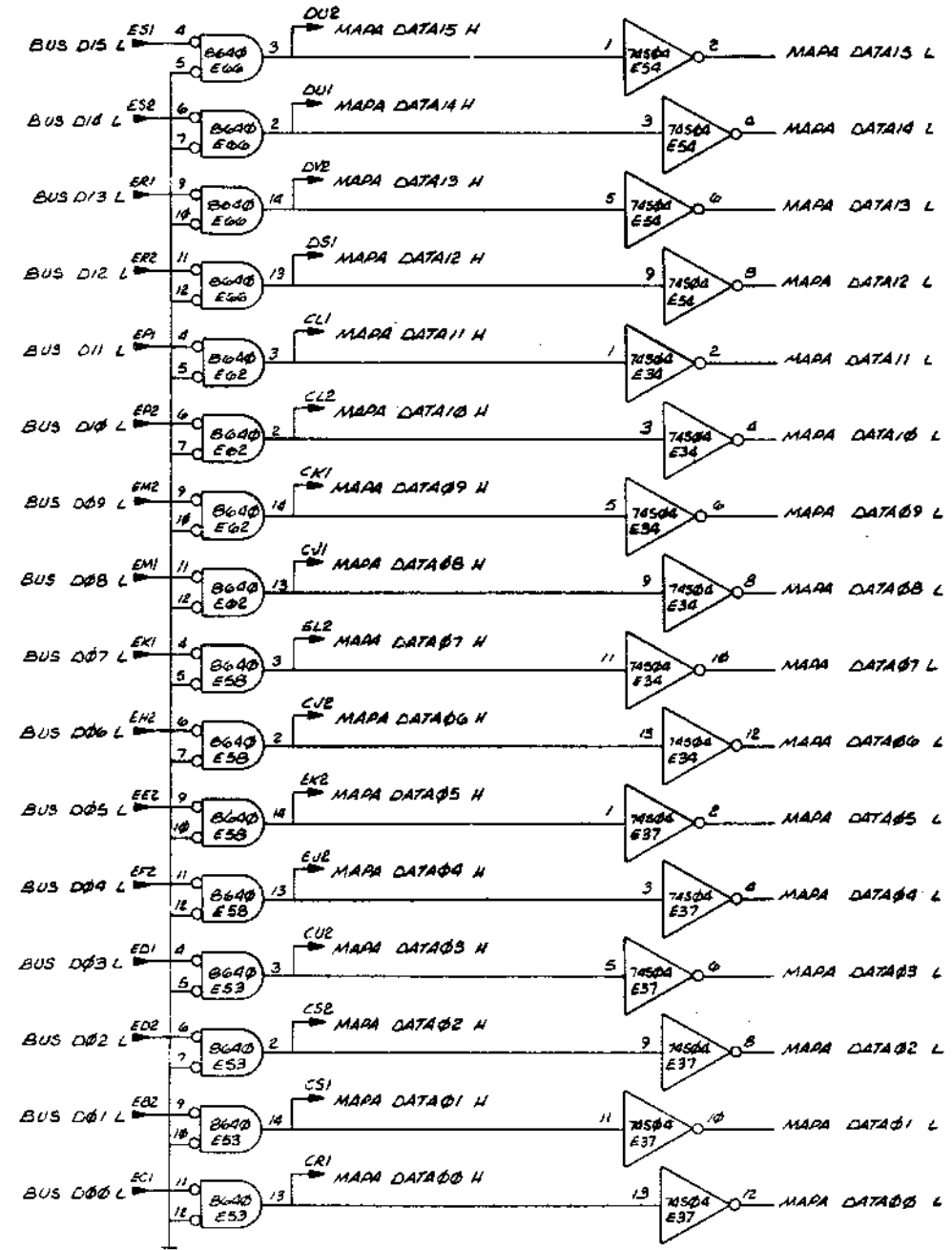
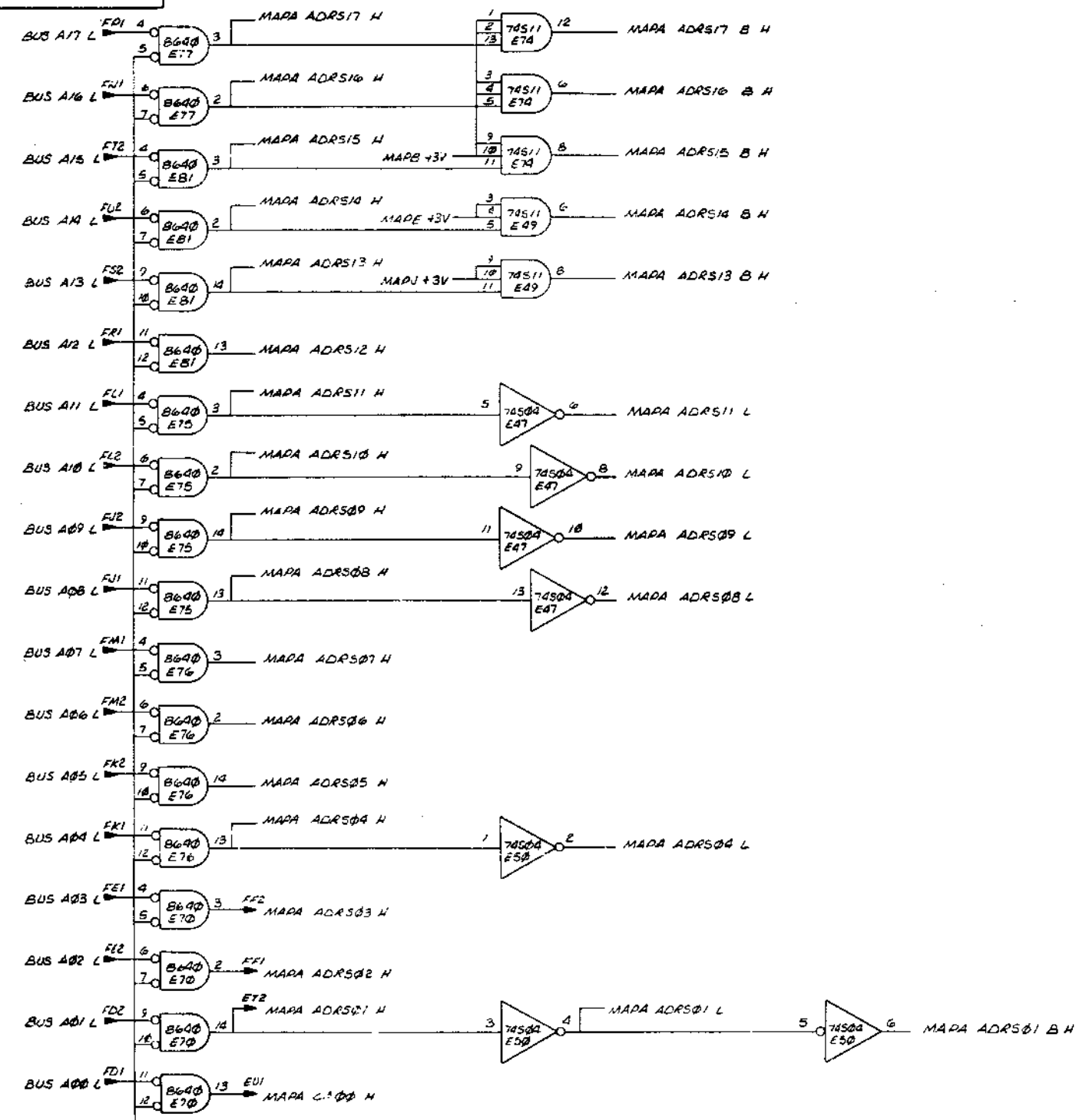
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FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.								
KB11-B													
DIMENSIONAL TOLERANCE													
DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED													
MILLIMETERS	INCHES	ANGLES	PARTS LIST										
X.XX ± 0.10	XXX ± 0.005	∠ 30°	<table border="1"> <tr> <td>DATE</td> <td>2/6/75</td> </tr> <tr> <td>DATE</td> <td>2/6/75</td> </tr> <tr> <td>DATE</td> <td>2/6/75</td> </tr> <tr> <td>DATE</td> <td>2/6/75</td> </tr> </table>			DATE	2/6/75	DATE	2/6/75	DATE	2/6/75	DATE	2/6/75
DATE	2/6/75												
DATE	2/6/75												
DATE	2/6/75												
DATE	2/6/75												
X.X ± 0.05	XXX ± 0.001		TITLE										
X ± 0.5	X ± 0.1		UNIBUS MAP (M814)										
THIRD ANGLE PROJECTION			BLOCK DIAGRAM										
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			NEXT HIGHER ASSY.										
MATERIAL		B-DD-KB11-B	SIZE CODE	NUMBER	REV.								
FINISH			D	DD	KB11-B-6								
SCALE		NONE	SHEET	OF	DIST.								

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1-0-1018 W 2



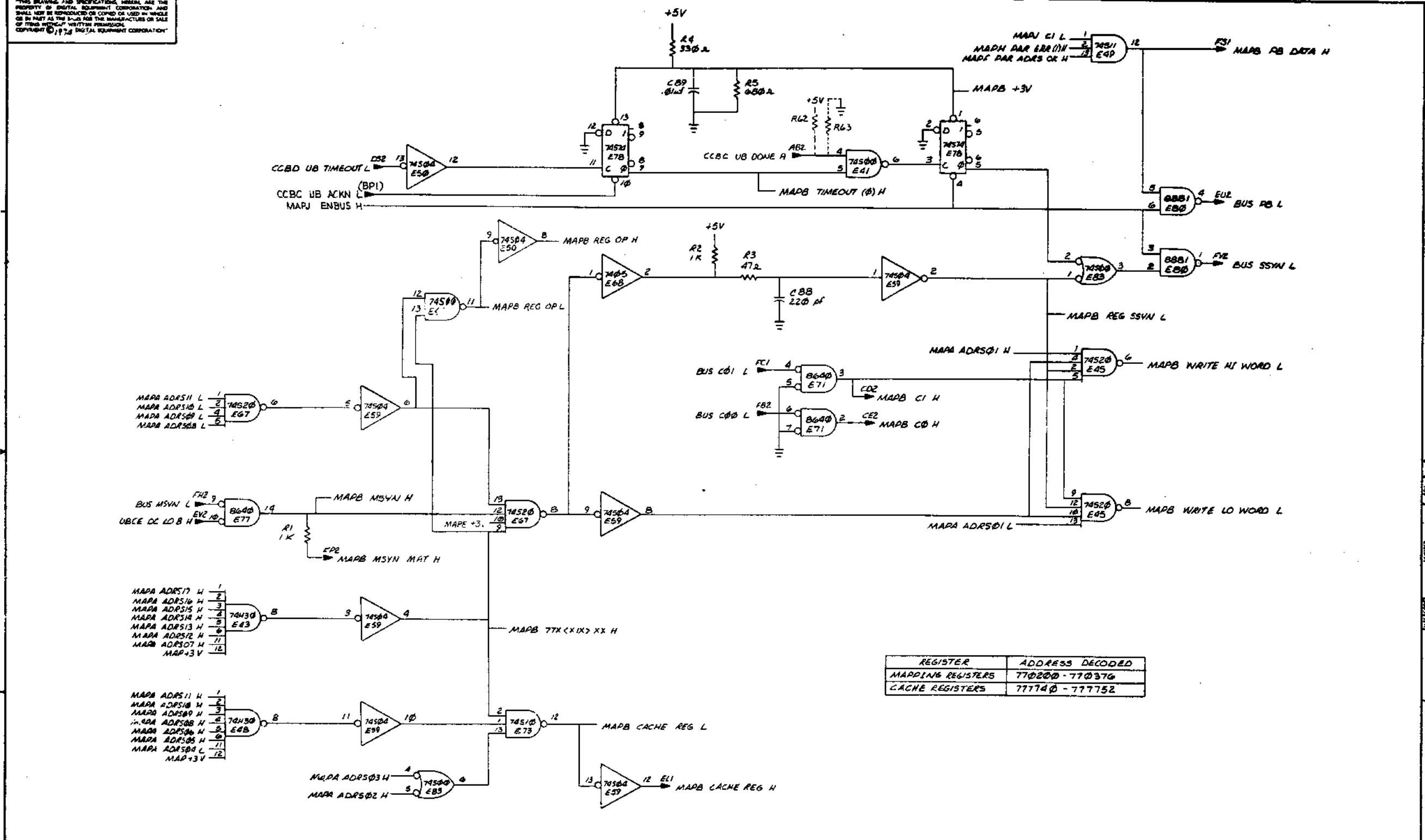
REVISIONS		
CHK	CHANGE NO	REV

BUS ADDRESS AND DATA RECEIVERS SLOT 22

TITLE	UNIBUS MAP (MAPA)	SIZE CODE	D CS	NUMBER	M8141-0-1	REV.	A
SCALE	1/1	SHEET	2 OF 9	DIST.			

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1-0-1418W SCD 2



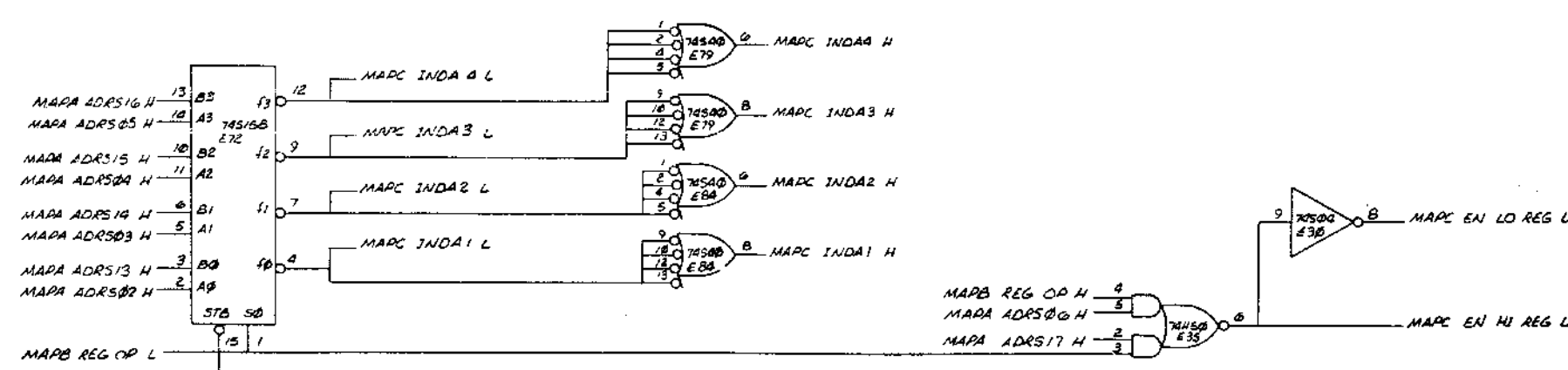
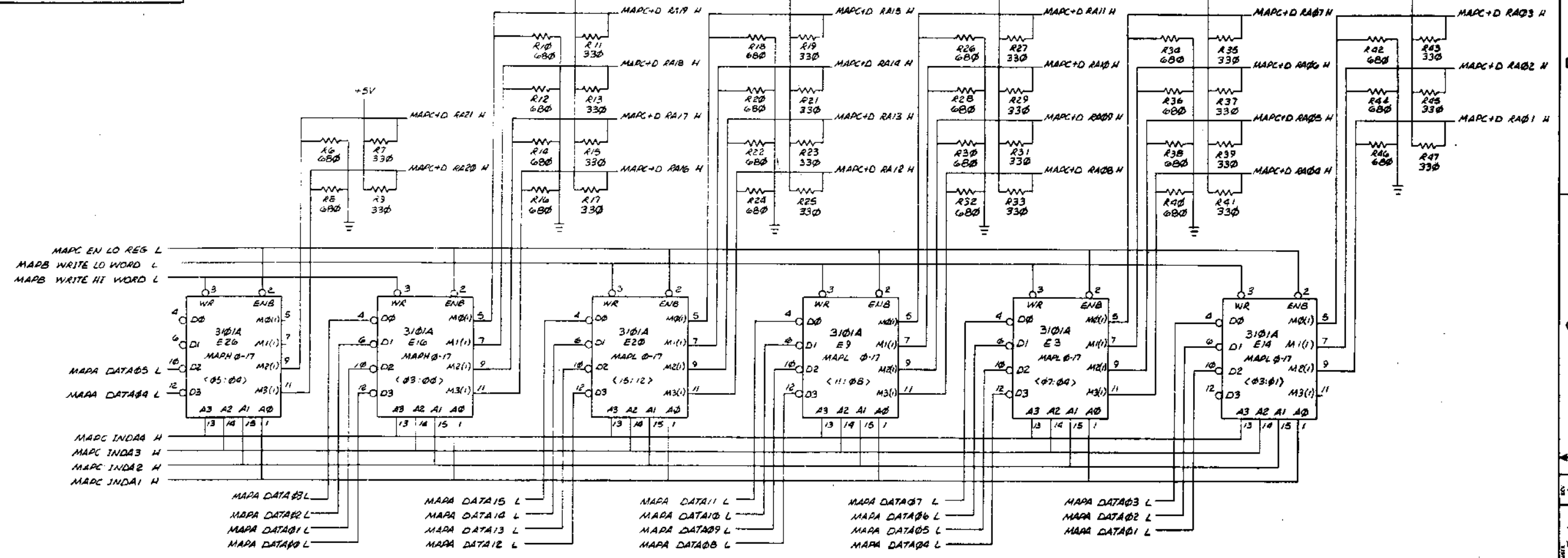
REGISTER	ADDRESS DECODED
MAPPING REGISTERS	770200 - 770376
CACHE REGISTERS	777740 - 777752

REVISIONS		
CHK	CHANGE NO	REV.

MAP ENABLE-BUS CONTROL LINES-ADDRESS DECODE SLOT 22

TITLE	SIZE CODE	NUMBER	REV.
UNIBUS MAP (MAPB)	DCS	M8141-0-1	A
SCALE	SHEET	3 OF 9	DIST.

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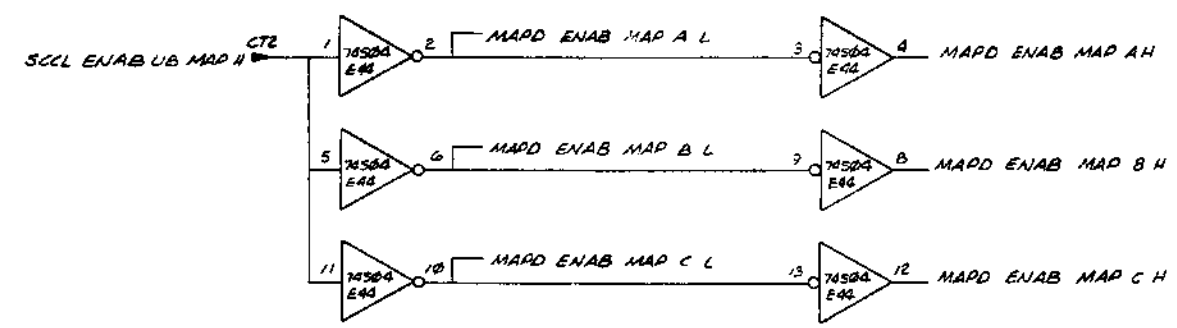
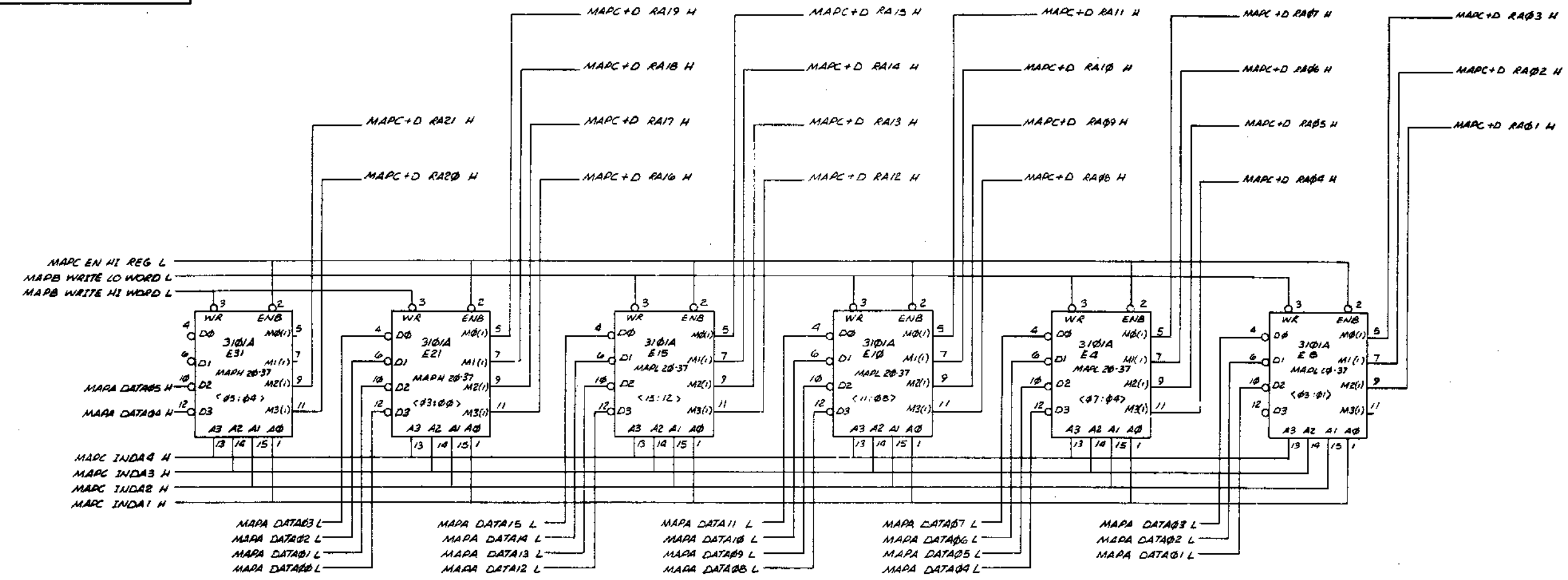
74S15B			
S0	INP	OUTPUT	FUNCTION
L	A	MAPA ADRS <05:02>	MAPPING REGISTER REFERENCE
H	B	MAPA ADRS <16:13>	UNIBUS ADDRESS RELOCATION

REVISIONS		
CHK	CHANGE NO.	REV.

LOWER MAPPING REGISTER SLOT 22

TITLE	UNIBUS MAP (MAPC)	SIZE/CODE	D/CS	NUMBER	M8141-0-1	REV.	A
SCALE	#	SHEET	4	OF	9	DIST.	

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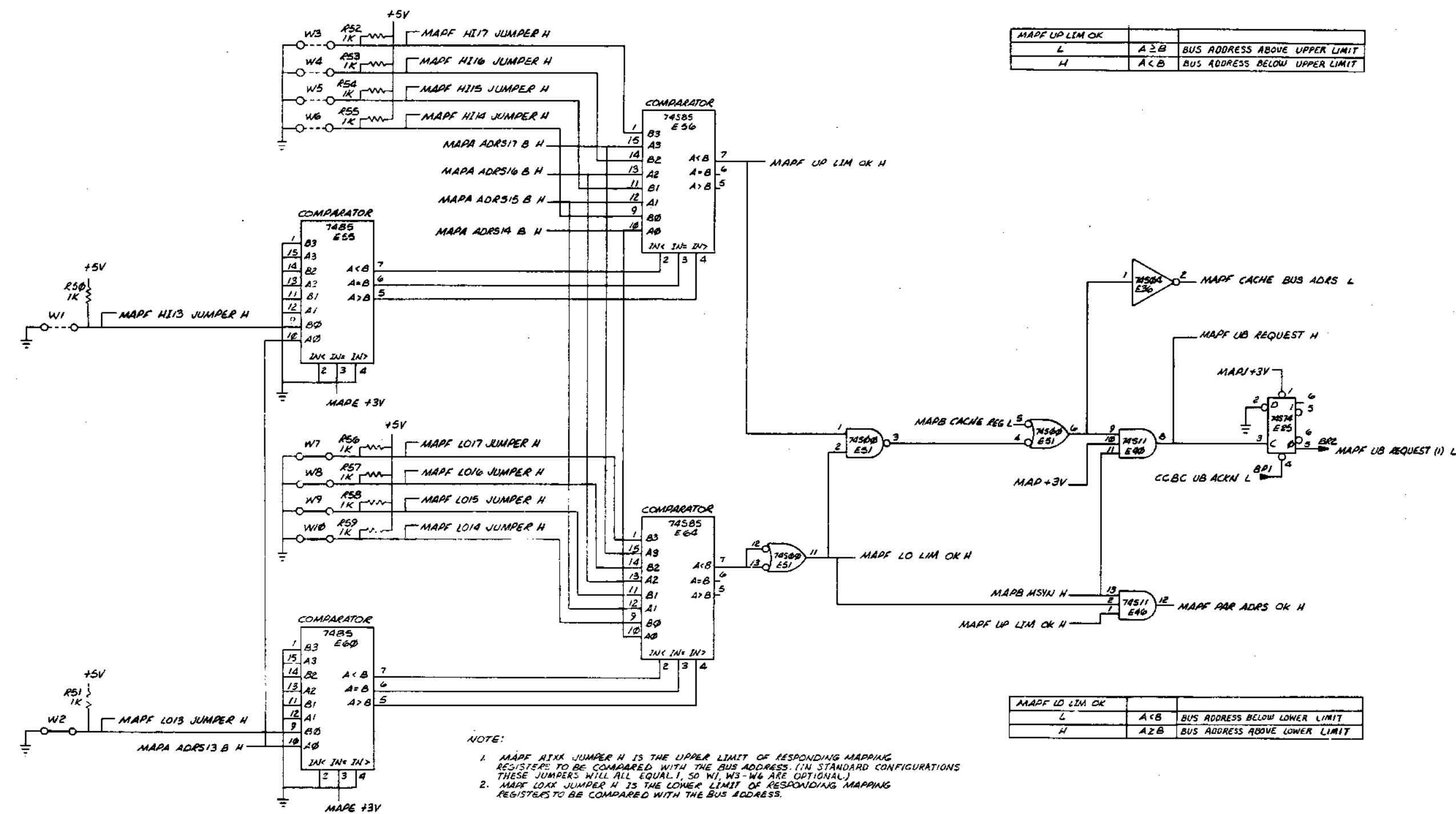
REVISIONS		
CHK	CHANGE NO.	REV.

UPPER MAPPING REGISTER SLOT 22

TITLE	UNIBUS MAP (MAPD)	SIZE CODE	DCS	NUMBER	M 8141-0-1	REV.	A
SCALE	#	SHEET	5	OF	9	CIST.	

293

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MAPF UP LIM OK		
L	A ≥ B	BUS ADDRESS ABOVE UPPER LIMIT
H	A < B	BUS ADDRESS BELOW UPPER LIMIT

MAPF LO LIM OK		
L	A < B	BUS ADDRESS BELOW LOWER LIMIT
H	A ≥ B	BUS ADDRESS ABOVE LOWER LIMIT

NOTE:
 1. MAPF HI x JUMPER H IS THE UPPER LIMIT OF RESPONDING MAPPING REGISTERS TO BE COMPARED WITH THE BUS ADDRESS. (IN STANDARD CONFIGURATIONS THESE JUMPERS WILL ALL EQUAL 1, SO W1, W3-W6 ARE OPTIONAL.)
 2. MAPF LO x JUMPER H IS THE LOWER LIMIT OF RESPONDING MAPPING REGISTERS TO BE COMPARED WITH THE BUS ADDRESS.

REVISIONS		
CHK	CHANGE NO.	REV.

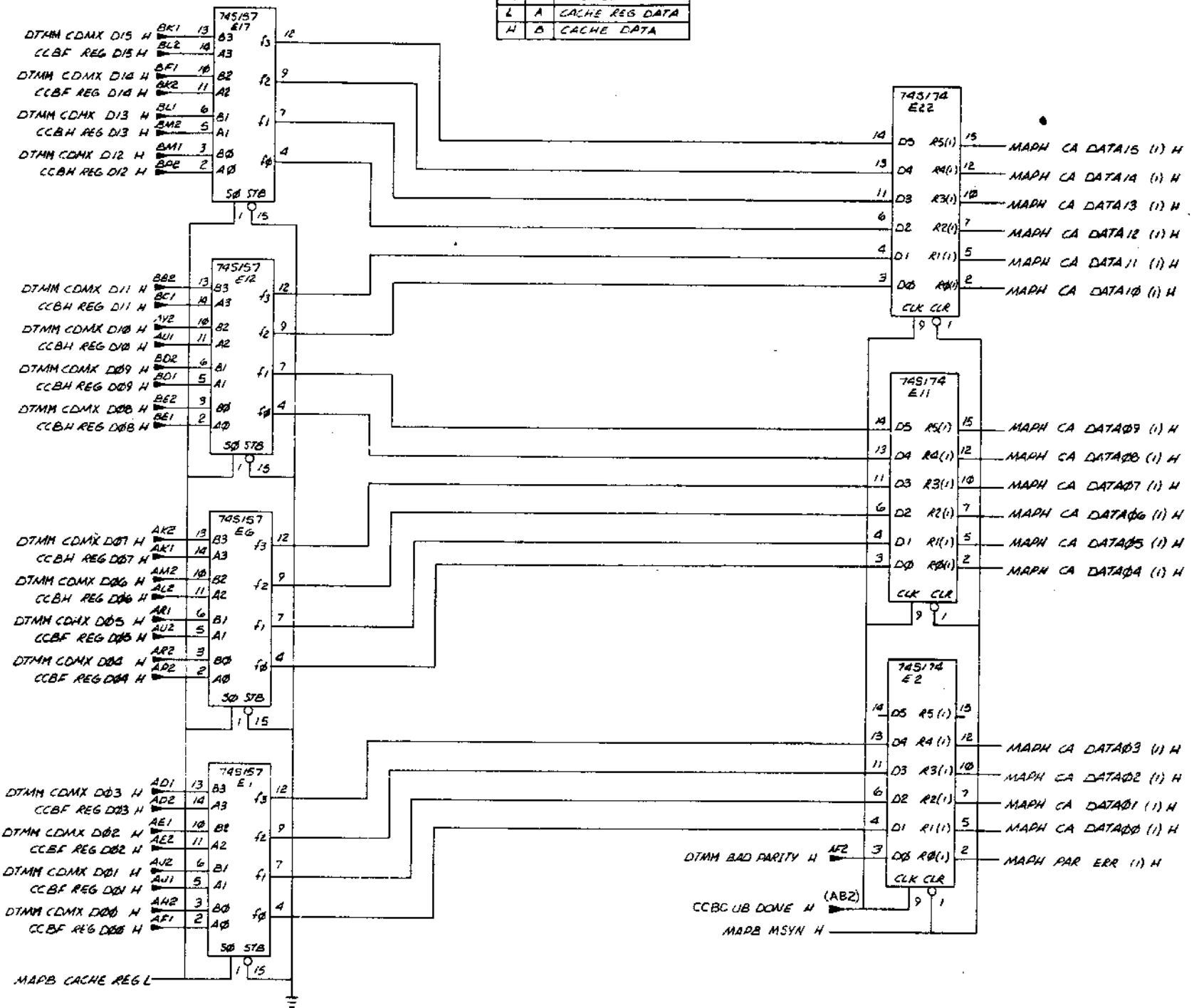
MAP LIMIT COMPARATOR SLOT 22

TITLE	SIZE CODE	NUMBER	REV.
UNIBUS MAP (MAPF)	D CS	M 8141-0-1	A
SCALE	SHEET	OF	DIST.
#	7	9	

295

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74S157		
SD INP		OUTPUT
L	A	CACHE REG DATA
H	B	CACHE DATA



D
C
B
A

REV. A
NUMBER M8141-0-1
D/C S M8141-0-1

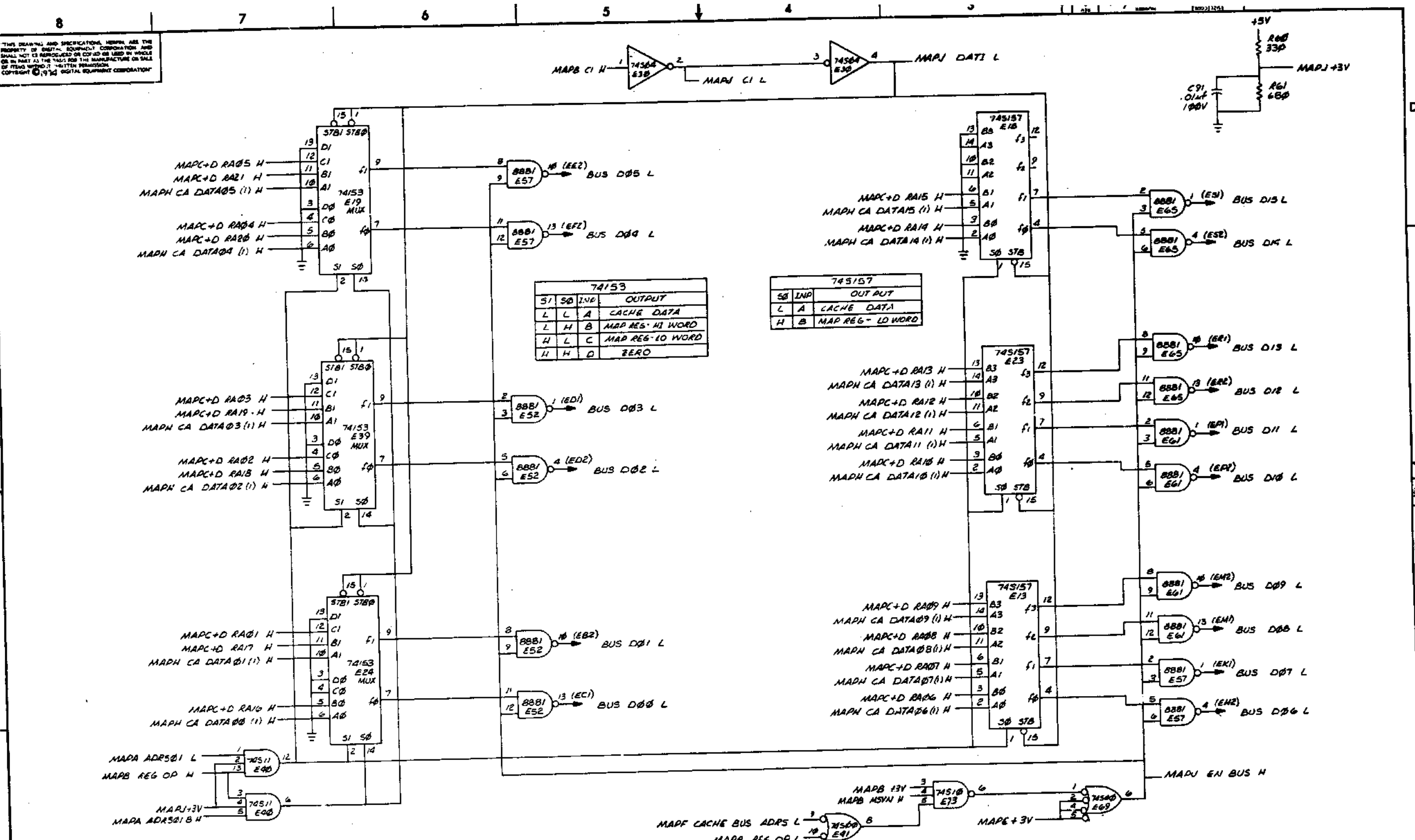
204

REVISIONS		
CHK	CHANGE NO.	REV.

CACHE DATA MUX
SLOT 22
TITLE UNIBUS MAP (MAPB) SIZE CODE DCS NUMBER M8141-0-1 REV. A
SCALE 1/8 SHEET 8 OF 9 DIST.

296

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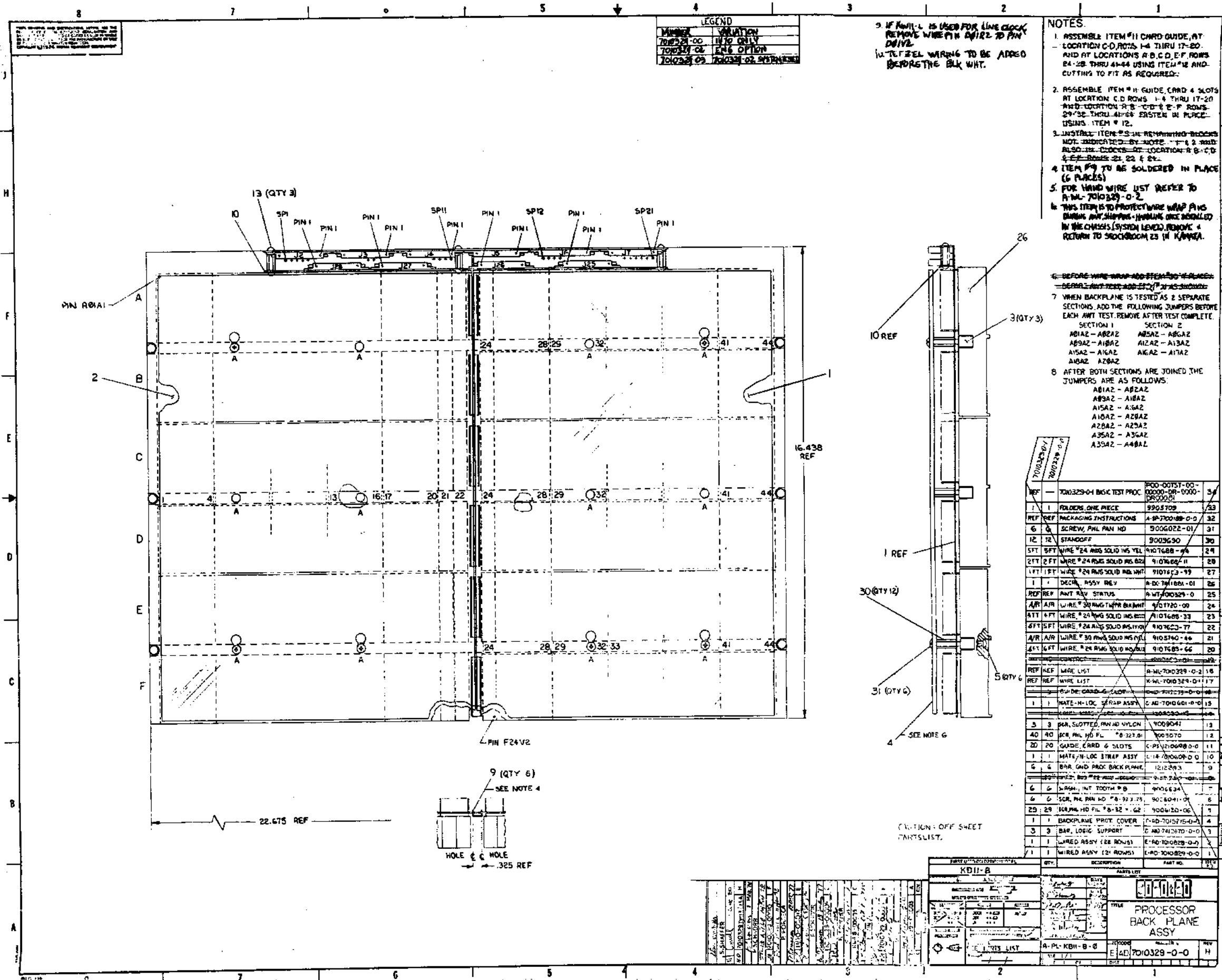
S1	S0	INP	OUTPUT
L	L	A	CACHE DATA
L	H	B	MAP REG - HI WORD
H	L	C	MAP REG - LO WORD
H	H	D	ZERO

S0	INP	OUTPUT
L	A	CACHE DATA
H	B	MAP REG - LO WORD

DATA MUX AND DRIVERS SLOT 22

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE CODE	NUMBER	REV.
UNIBUS MAP (MAPJ)	D CS	M8141-0-1	A
SCALE	SHEET	9 OF 9	DIST



LEGEND	
7010329-00	IN TO ONLY
7010329-02	ENG OPTION
7010329-03	7010329-02 SYSTEMS

9. IF KAVIL-L IS USED FOR LINE CLOCK REMOVE WIRE PIN D012 TO PIN D012L. WIRING TO BE ADDED BEFORE THE BLK WHT.

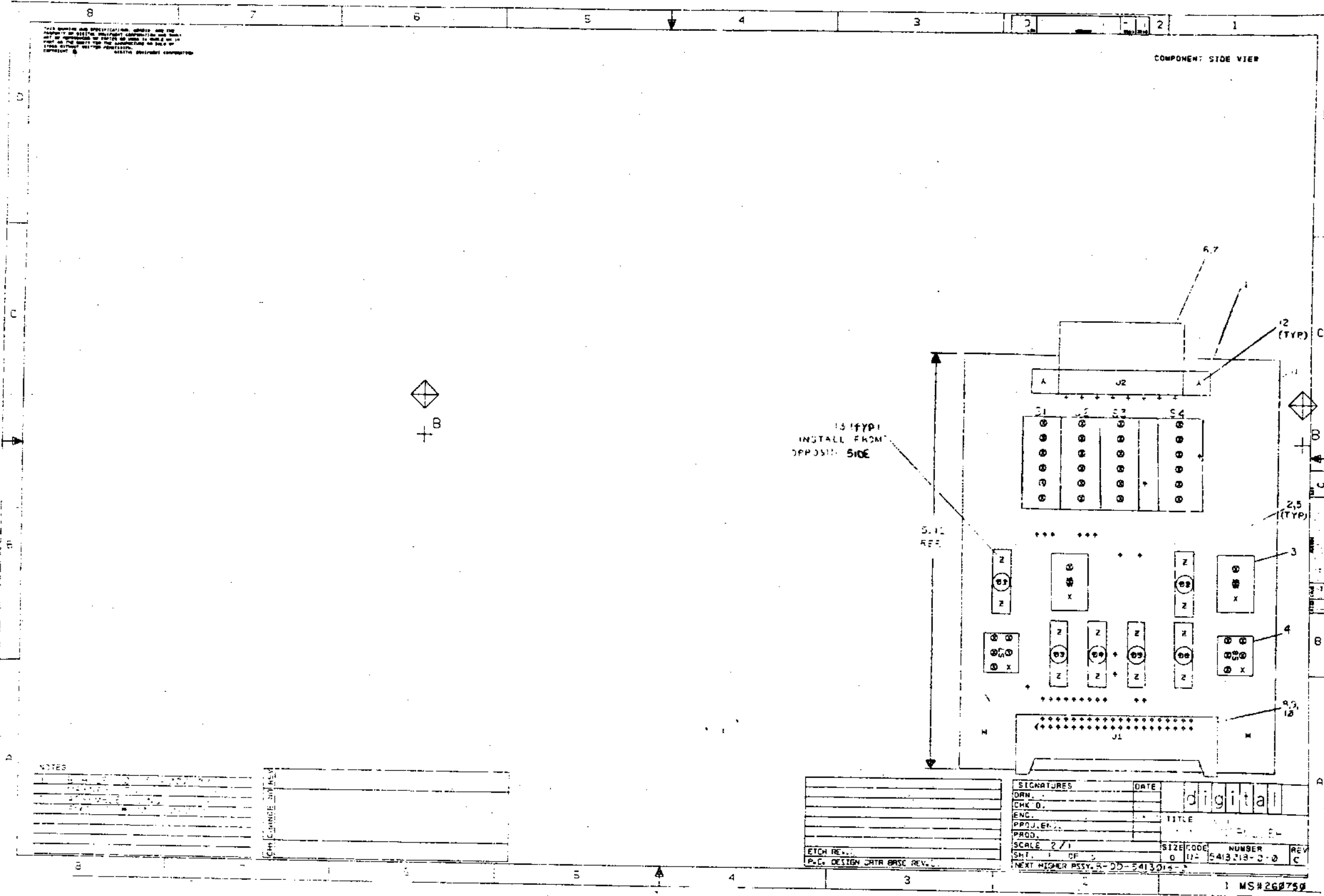
- NOTES:**
- ASSEMBLE ITEM #11 CARD GUIDE, AT LOCATION C-D ROWS 1-4 THRU 17-20 AND AT LOCATIONS A-B, C-D, E-F ROWS 21-28 THRU 41-44 USING ITEM #11 AND CUTTING TO FIT AS REQUIRED.
 - ASSEMBLE ITEM #11 GUIDE CARD 4 SLOTS AT LOCATION C-D ROWS 1-4 THRU 17-20 AND LOCATION A-B, C-D, E-F ROWS 21-28 THRU 41-44 FASTEN IN PLACE USING ITEM #12.
 - INSTALL ITEM #13 IN REMAINING BLOCKS NOT INDICATED BY NOTE #1 & 2 AND ALSO IN BLOCKS AT LOCATION A-B, C-D & E-F ROWS 21, 22 & 23.
 - ITEM #19 TO BE SOLDERED IN PLACE (6 PLACES)
 - FOR WIRE LIST REFER TO A-PL-7010329-0-2
 - THIS ITEM IS TO PROTECT WIRE WRAP PINS DURING ANY SHIPPING - HANDLING OPERATIONS IN THE CHASSIS (SYSTEM LEVEL) REMOVE & RETURN TO STOCK ROOM 23 IN KANRA.

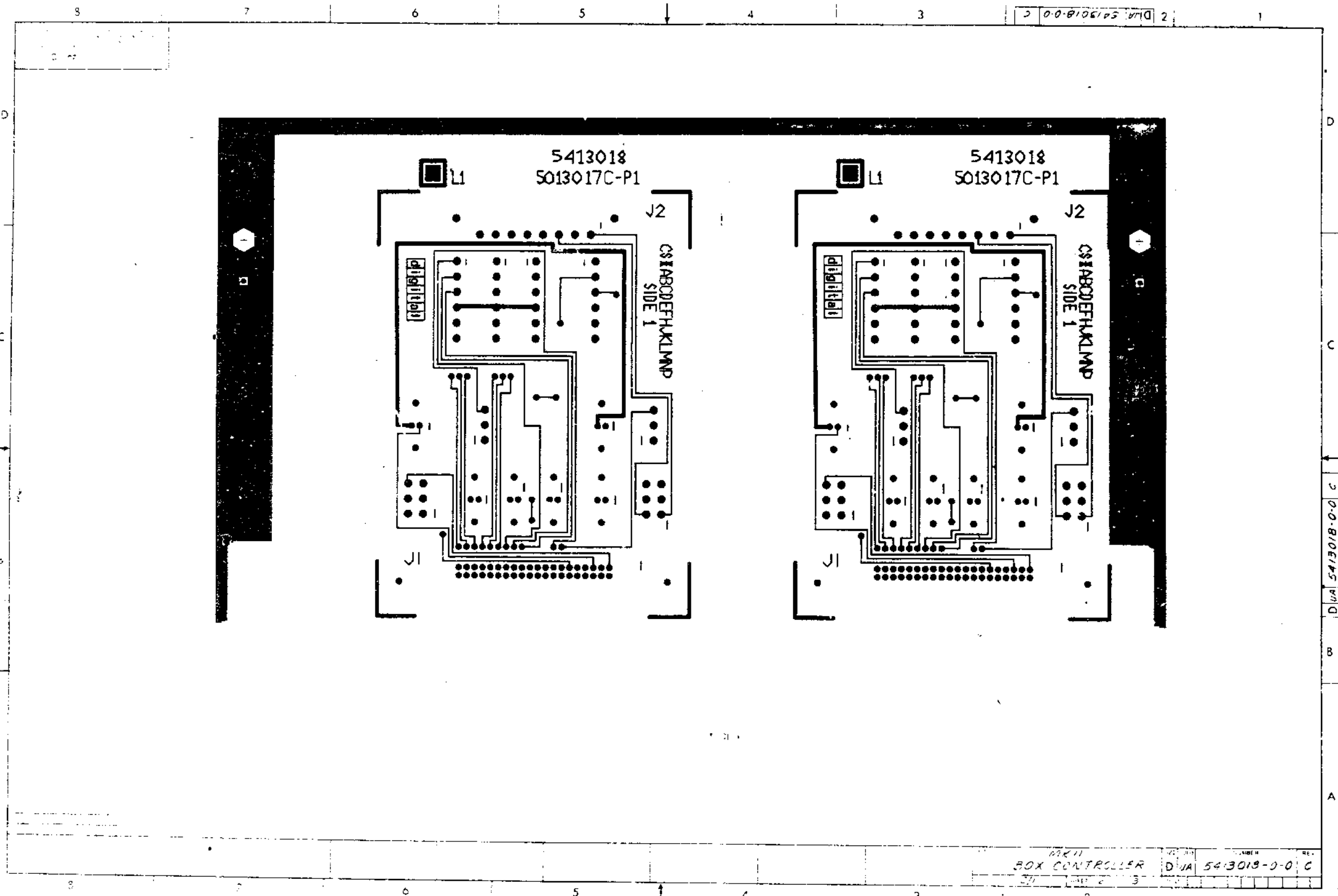
6. BEFORE WIRE WRAP ADD ITEM #10 IN PLACE - SERIAL WIRE TEST ADD ITEM #10 IN PLACE
7. WHEN BACKPLANE IS TESTED AS 2 SEPARATE SECTIONS, ADD THE FOLLOWING JUMPERS BEFORE EACH WMT TEST REMOVE AFTER TEST COMPLETE.
- SECTION 1 SECTION 2
- A01A2 - A02A2 A05A2 - A06A2
- A03A2 - A04A2 A07A2 - A08A2
- A09A2 - A10A2 A11A2 - A12A2
- A13A2 - A14A2 A15A2 - A16A2
- A17A2 - A18A2 A19A2 - A20A2
- A21A2 - A22A2 A23A2 - A24A2
- A25A2 - A26A2 A27A2 - A28A2
- A29A2 - A30A2 A31A2 - A32A2
- A33A2 - A34A2 A35A2 - A36A2
- A37A2 - A38A2 A39A2 - A40A2
- A41A2 - A42A2 A43A2 - A44A2
- A45A2 - A46A2 A47A2 - A48A2
- A49A2 - A50A2 A51A2 - A52A2
- A53A2 - A54A2 A55A2 - A56A2
- A57A2 - A58A2 A59A2 - A60A2
- A61A2 - A62A2 A63A2 - A64A2
- A65A2 - A66A2 A67A2 - A68A2
- A69A2 - A70A2 A71A2 - A72A2
- A73A2 - A74A2 A75A2 - A76A2
- A77A2 - A78A2 A79A2 - A80A2
- A81A2 - A82A2 A83A2 - A84A2
- A85A2 - A86A2 A87A2 - A88A2
- A89A2 - A90A2 A91A2 - A92A2
- A93A2 - A94A2 A95A2 - A96A2
- A97A2 - A98A2 A99A2 - A100A2

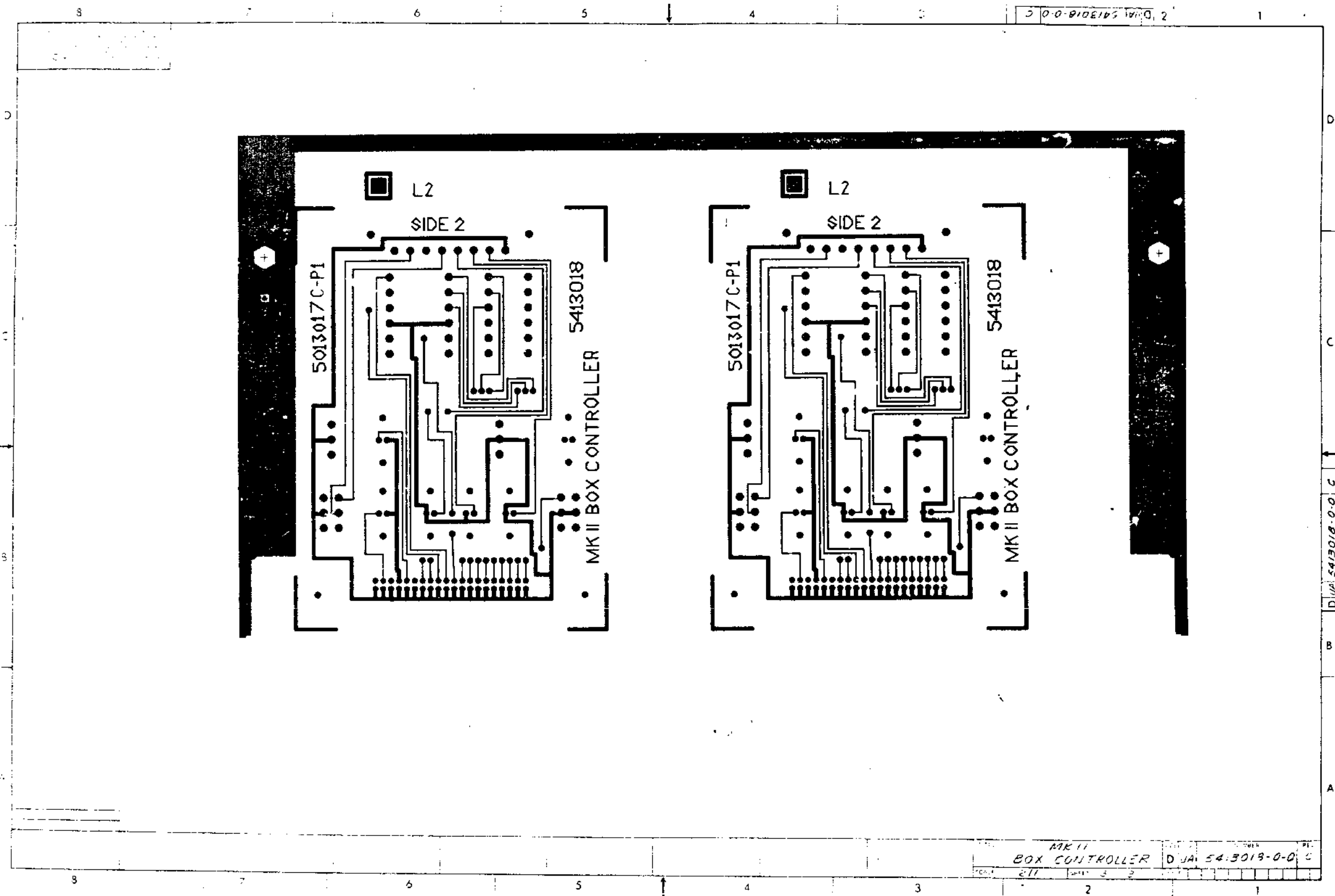
REF	QTY	DESCRIPTION	PART NO.	REV
REF		7010329-01 BSK TEST PROC	800-00751-00-00000-DR-0000-000001	34
1	1	FOLDERS, ONE PIECE	9903709	33
REF	REF	PACKAGING INSTRUCTIONS	A-PL-7010329-0-2	32
6	6	SCREW, PHL PAN HD	9006022-01	31
12	12	STANDOFF	9003630	30
57	57	WIRE #24 AWG SOLID INS YEL	9107688-76	29
27	27	WIRE #24 AWG SOLID INS BRN	9107687-11	28
17	17	WIRE #24 AWG SOLID INS WHT	9107683-59	27
1	1	DECR. ASSY REV	A-DC-7010329-0-1	26
REF	REF	WMT REV STATUS	A-WT-7010329-0	25
A/R	A/R	WIRE #30 AWG TMR BRN WMT	9107720-09	24
A/T	A/T	WIRE #24 AWG SOLID INS BRN	9107688-33	23
A/T	A/T	WIRE #24 AWG SOLID INS YEL	9107688-77	22
A/R	A/R	WIRE #30 AWG SOLID INS YEL	9107740-46	21
A/T	A/T	WIRE #24 AWG SOLID INS WHT	9107683-66	20
REF	REF	WIRE LIST	A-PL-7010329-0-2	18
REF	REF	WIRE LIST	A-PL-7010329-0-1	17
1	1	MATE-N-LOC STRAP ASSY	C-AD-7010329-0-0	15
3	3	BAR, SLOTTED, PHL HD NYLON	9009041	13
40	40	SCR, PHL HD FL	9003070	12
20	20	GUIDE, CARD & SLOTS	C-PS-7010329-0-0	11
1	1	MATE-N-LOC STRAP ASSY	C-AD-7010329-0-0	10
6	6	BAR, GUID PROC BACK PLANE	1212283	9
6	6	WIRE, INT TOOTH #8	9106634	7
6	6	SCR, PHL PAN HD	9006041-01	6
25	25	SCR, PHL HD FL	9006120-06	1
1	1	BACKPLANE PROT COVER	C-AD-7010329-0-0	4
3	3	BAR, LOGIC SUPPORT	C-AD-7010329-0-0	3
1	1	WIRE ASSY (28 ROWS)	E-AD-7010329-0-0	2
1	1	WIRE ASSY (21 ROWS)	E-AD-7010329-0-0	1

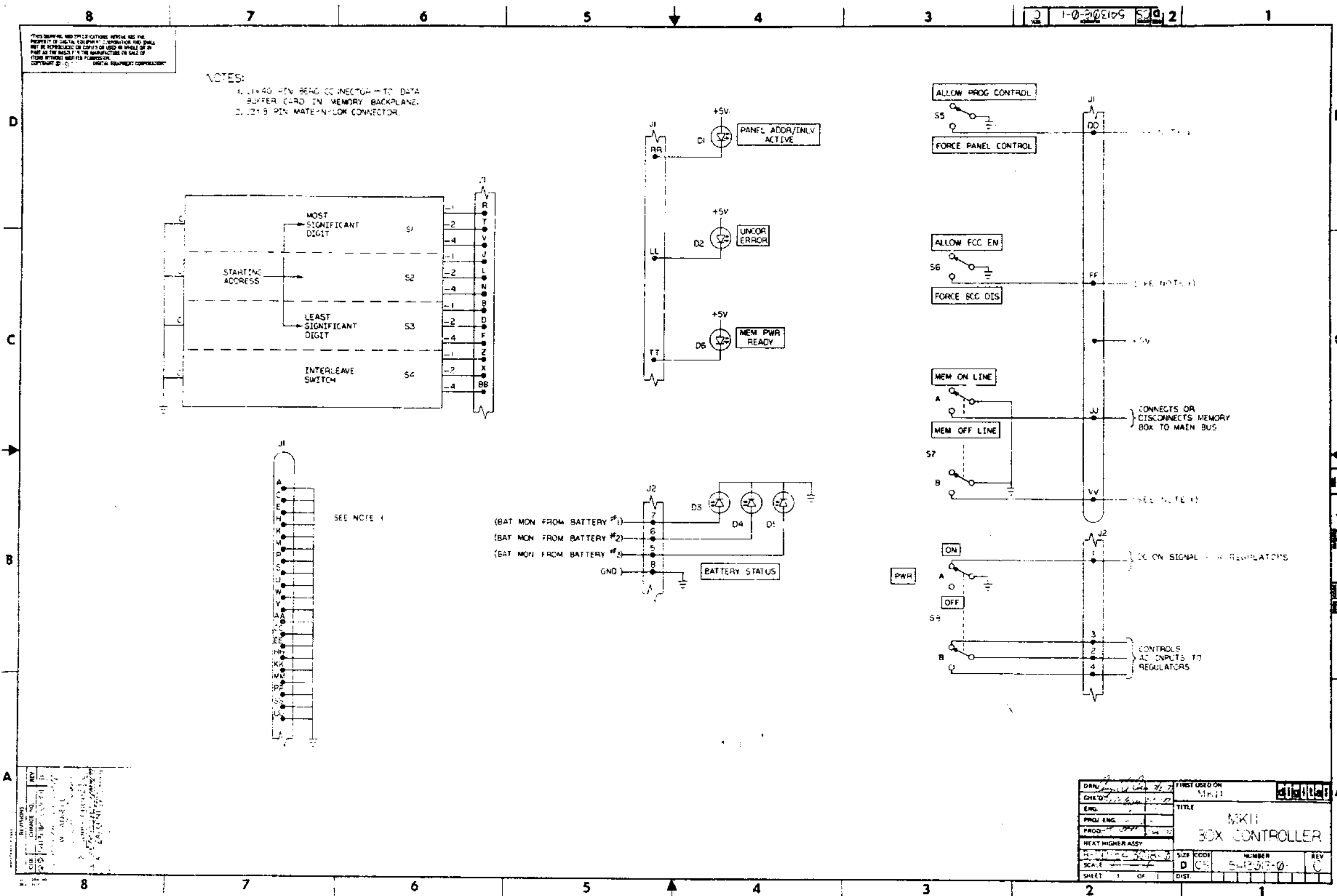
CAUTION: OFF SHEET PARTS LIST.

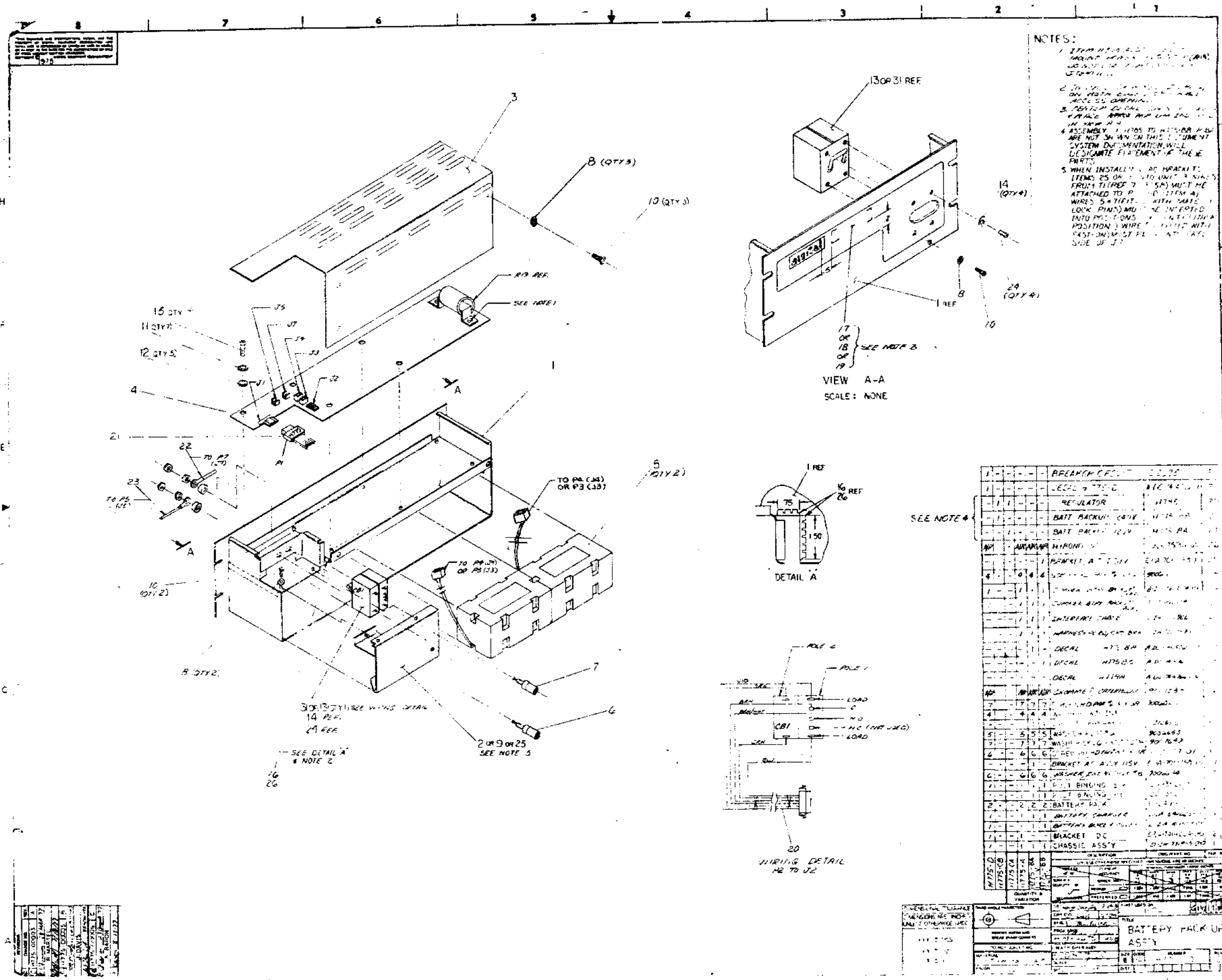
PARTS LIST	
QTY	DESCRIPTION
1	PROCESSOR BACK PLANE ASSY





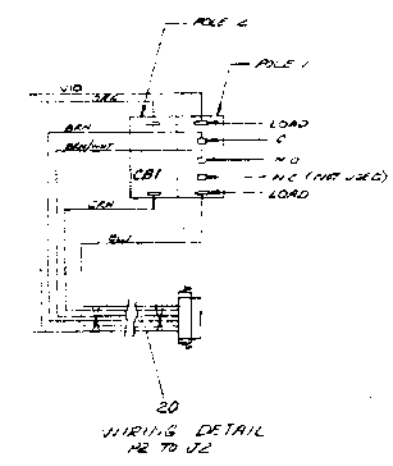
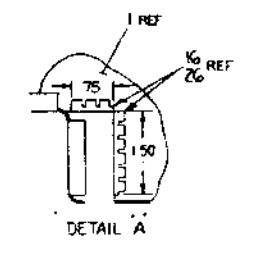
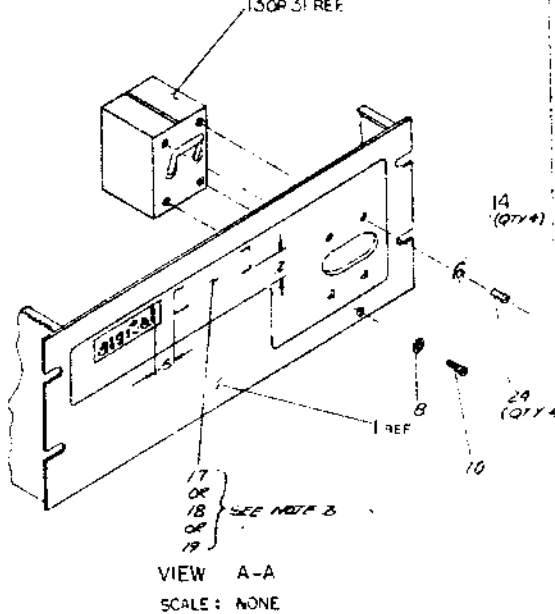






NOTES:

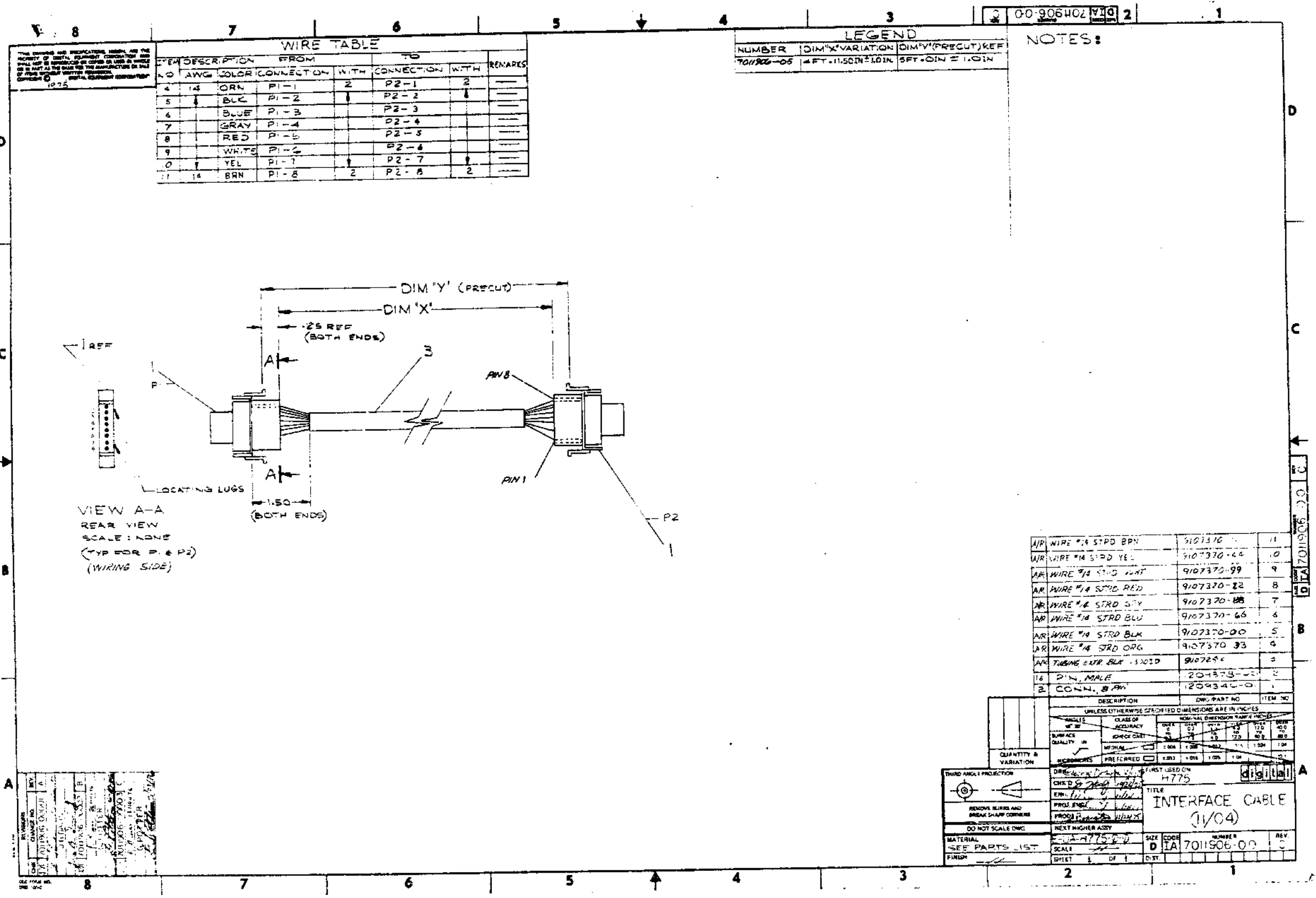
1. THIS UNIT IS TO BE MOUNTED ON A CHASSIS AS SHOWN IN THE DRAWING.
2. THE BATTERY PACK IS TO BE MOUNTED ON THE CHASSIS AS SHOWN IN THE DRAWING.
3. THE REGULATOR IS TO BE MOUNTED ON THE CHASSIS AS SHOWN IN THE DRAWING.
4. ASSEMBLY IN THIS DRAWING IS NOT SHOWN IN THIS DOCUMENT SYSTEM DOCUMENTATION WILL BE SHOWN IN THE DRAWING.
5. WHEN INSTALLED AS SHOWN IN THE DRAWING THE BATTERY PACK MUST BE ATTACHED TO THE CHASSIS AS SHOWN IN THE DRAWING. WIRE 5 (ATTACHED WITH MATE LOCK PINS) MUST BE INSERTED INTO POSITION 1 WIRE 6 (ATTACHED WITH FASTON) MUST BE ATTACHED TO THE SIDE OF J1.



QTY	DESCRIPTION	REF	UNIT
1	BATTERY PACK	1	11775-01
1	REGULATOR	1	11775-02
1	BATT. BACKUP	1	11775-03
1	BATT. BACKUP	1	11775-04
1	BRACKET A	1	11775-05
1	BRACKET B	1	11775-06
1	BRACKET C	1	11775-07
1	BRACKET D	1	11775-08
1	BRACKET E	1	11775-09
1	BRACKET F	1	11775-10
1	BRACKET G	1	11775-11
1	BRACKET H	1	11775-12
1	BRACKET I	1	11775-13
1	BRACKET J	1	11775-14
1	BRACKET K	1	11775-15
1	BRACKET L	1	11775-16
1	BRACKET M	1	11775-17
1	BRACKET N	1	11775-18
1	BRACKET O	1	11775-19
1	BRACKET P	1	11775-20
1	BRACKET Q	1	11775-21
1	BRACKET R	1	11775-22
1	BRACKET S	1	11775-23
1	BRACKET T	1	11775-24
1	BRACKET U	1	11775-25
1	BRACKET V	1	11775-26
1	BRACKET W	1	11775-27
1	BRACKET X	1	11775-28
1	BRACKET Y	1	11775-29
1	BRACKET Z	1	11775-30
1	BRACKET AA	1	11775-31
1	BRACKET AB	1	11775-32
1	BRACKET AC	1	11775-33
1	BRACKET AD	1	11775-34
1	BRACKET AE	1	11775-35
1	BRACKET AF	1	11775-36
1	BRACKET AG	1	11775-37
1	BRACKET AH	1	11775-38
1	BRACKET AI	1	11775-39
1	BRACKET AJ	1	11775-40
1	BRACKET AK	1	11775-41
1	BRACKET AL	1	11775-42
1	BRACKET AM	1	11775-43
1	BRACKET AN	1	11775-44
1	BRACKET AO	1	11775-45
1	BRACKET AP	1	11775-46
1	BRACKET AQ	1	11775-47
1	BRACKET AR	1	11775-48
1	BRACKET AS	1	11775-49
1	BRACKET AT	1	11775-50
1	BRACKET AU	1	11775-51
1	BRACKET AV	1	11775-52
1	BRACKET AW	1	11775-53
1	BRACKET AX	1	11775-54
1	BRACKET AY	1	11775-55
1	BRACKET AZ	1	11775-56
1	BRACKET BA	1	11775-57
1	BRACKET BB	1	11775-58
1	BRACKET BC	1	11775-59
1	BRACKET BD	1	11775-60
1	BRACKET BE	1	11775-61
1	BRACKET BF	1	11775-62
1	BRACKET BG	1	11775-63
1	BRACKET BH	1	11775-64
1	BRACKET BI	1	11775-65
1	BRACKET BJ	1	11775-66
1	BRACKET BK	1	11775-67
1	BRACKET BL	1	11775-68
1	BRACKET BM	1	11775-69
1	BRACKET BN	1	11775-70
1	BRACKET BO	1	11775-71
1	BRACKET BP	1	11775-72
1	BRACKET BQ	1	11775-73
1	BRACKET BR	1	11775-74
1	BRACKET BS	1	11775-75
1	BRACKET BT	1	11775-76
1	BRACKET BU	1	11775-77
1	BRACKET BV	1	11775-78
1	BRACKET BW	1	11775-79
1	BRACKET BX	1	11775-80
1	BRACKET BY	1	11775-81
1	BRACKET BZ	1	11775-82
1	BRACKET CA	1	11775-83
1	BRACKET CB	1	11775-84
1	BRACKET CC	1	11775-85
1	BRACKET CD	1	11775-86
1	BRACKET CE	1	11775-87
1	BRACKET CF	1	11775-88
1	BRACKET CG	1	11775-89
1	BRACKET CH	1	11775-90
1	BRACKET CI	1	11775-91
1	BRACKET CJ	1	11775-92
1	BRACKET CK	1	11775-93
1	BRACKET CL	1	11775-94
1	BRACKET CM	1	11775-95
1	BRACKET CN	1	11775-96
1	BRACKET CO	1	11775-97
1	BRACKET CP	1	11775-98
1	BRACKET CQ	1	11775-99
1	BRACKET CR	1	11775-100

REV	DATE	DESCRIPTION
1	11/15/77	INITIAL RELEASE
2	11/15/77	REVISION 1
3	11/15/77	REVISION 2
4	11/15/77	REVISION 3
5	11/15/77	REVISION 4
6	11/15/77	REVISION 5
7	11/15/77	REVISION 6
8	11/15/77	REVISION 7
9	11/15/77	REVISION 8
10	11/15/77	REVISION 9
11	11/15/77	REVISION 10

REV	DATE	DESCRIPTION
1	11/15/77	INITIAL RELEASE
2	11/15/77	REVISION 1
3	11/15/77	REVISION 2
4	11/15/77	REVISION 3
5	11/15/77	REVISION 4
6	11/15/77	REVISION 5
7	11/15/77	REVISION 6
8	11/15/77	REVISION 7
9	11/15/77	REVISION 8
10	11/15/77	REVISION 9
11	11/15/77	REVISION 10



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1075

WIRE TABLE						
ITEM NO	DESCRIPTION	FROM	TO	REMARKS		
4	14 ORN	P1-1	2 P2-1	2		
5	14 BLK	P1-2	2 P2-2	2		
6	14 BLUE	P1-3	2 P2-3	2		
7	14 GRAY	P1-4	2 P2-4	2		
8	14 RED	P1-5	2 P2-5	2		
9	14 WHITE	P1-6	2 P2-6	2		
10	14 YEL	P1-7	2 P2-7	2		
11	14 BRN	P1-8	2 P2-8	2		

LEGEND		
NUMBER	DIM 'X' VARIATION	DIM 'Y' (PRE-CUT) REF
1	± FT. ± 11.50 IN ± 1.0 IN	5 FT. ± 0.1 IN ± 1.0 IN

NOTES:

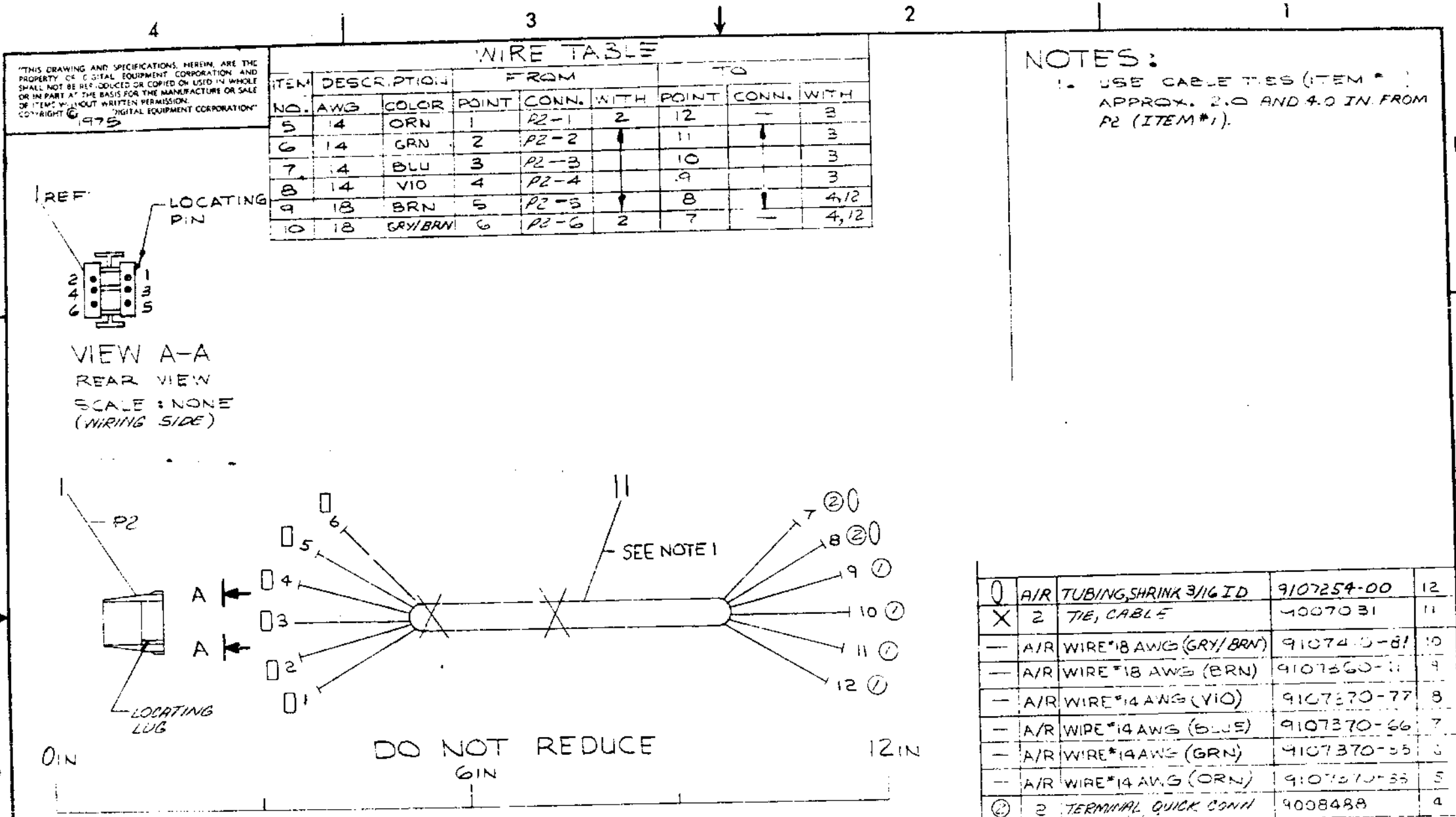
VIEW A-A
REAR VIEW
SCALE: NONE
(TYP FOR P. 1 & P. 2)
(WIRING SIDE)

QTY	DESCRIPTION	DWG. PART NO.	ITEM NO.
11	WIRE #14 STRD BRN	9107370-11	11
10	WIRE #14 STRD YEL	9107370-10	10
9	WIRE #14 STRD WHT	9107370-99	9
8	WIRE #14 STRD RED	9107370-88	8
7	WIRE #14 STRD GRY	9107370-77	7
6	WIRE #14 STRD BLU	9107370-66	6
5	WIRE #14 STRD BLK	9107370-00	5
4	WIRE #14 STRD ORG	9107370-93	4
3	TUBING EXTR. BLK. 1/2" ID	9107254	3
2	PIN, MALE	204378-00	2
1	CONN., B. PIN	1209340-0	1

THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
REMOVE BURRS AND BREAK SHARP CORNERS	DO NOT SCALE DWG.
DO NOT SCALE DWG.	SEE PARTS LIST
MATERIAL	SCALE
FINISH	SHEET 1 OF 1
CLASS OF ACCURACY	CLASS OF ACCURACY
SURFACE QUALITY	MECHANICAL
QUANTITY & VARIATION	PRECISION
DRAWN BY	DATE
CHECKED BY	DATE
PROJ. ENG.	DATE
PROD. ENG.	DATE
TITLE	NUMBER
INTERFACE CABLE	7011906-00
(1/04)	REV
	1

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	10/15/75



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ITEM NO.	DESCRIPTION	FROM			TO			
		AWG	COLOR	POINT	CONN.	WITH	POINT	CONN.
5	14	ORN	1	P2-1	2	12	-	3
6	14	GRN	2	P2-2	1	11	1	3
7	14	BLU	3	P2-3	1	10	1	3
8	14	VIO	4	P2-4	1	9	1	3
9	18	BRN	5	P2-5	1	8	1	4,12
10	18	GRY/BRN	6	P2-6	2	7	-	4,12

NOTES:
 1. USE CABLE TIES (ITEM #) APPROX. 2.0 AND 4.0 IN. FROM P2 (ITEM #1).

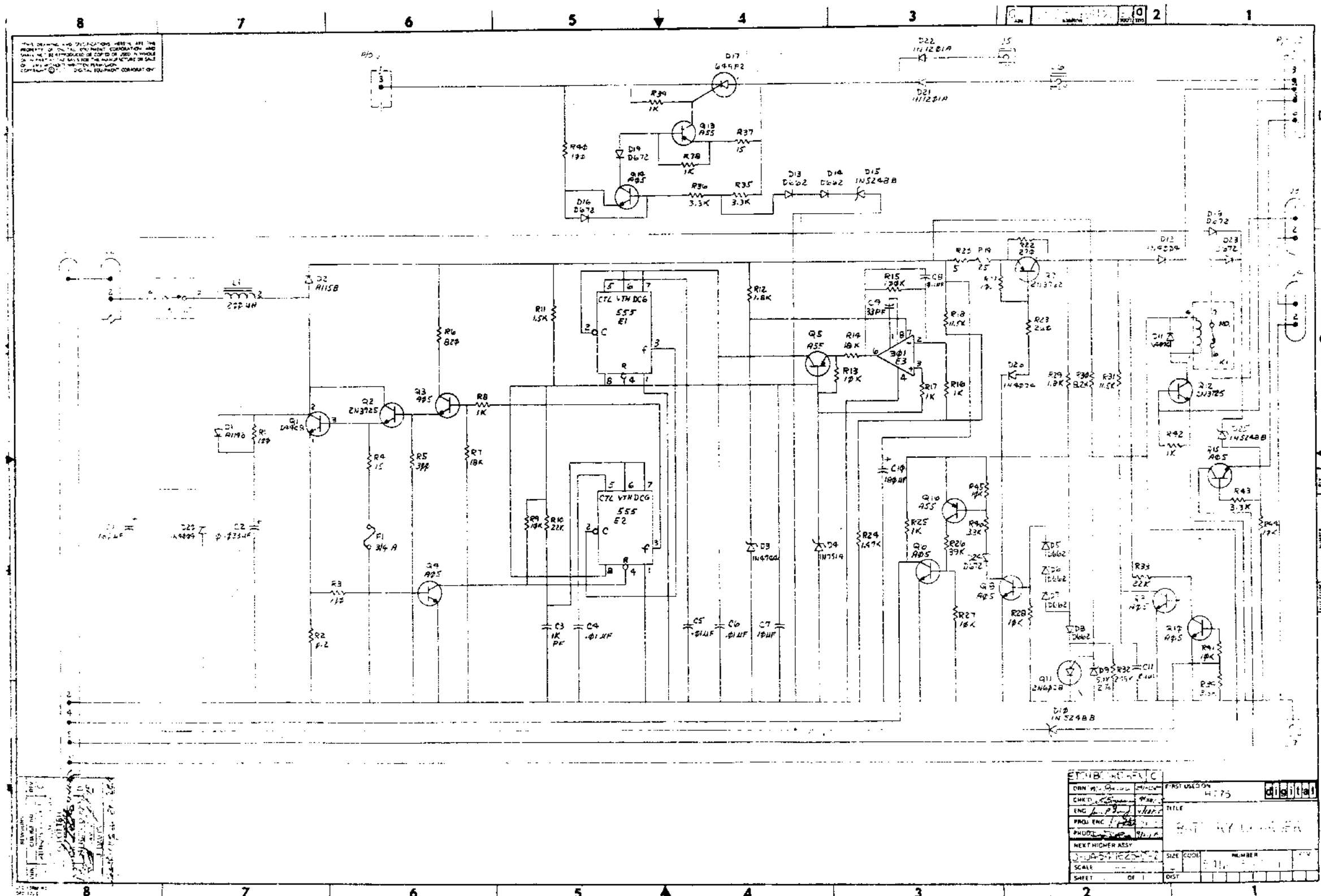
FOR MANUFACTURING PURPOSES ONLY

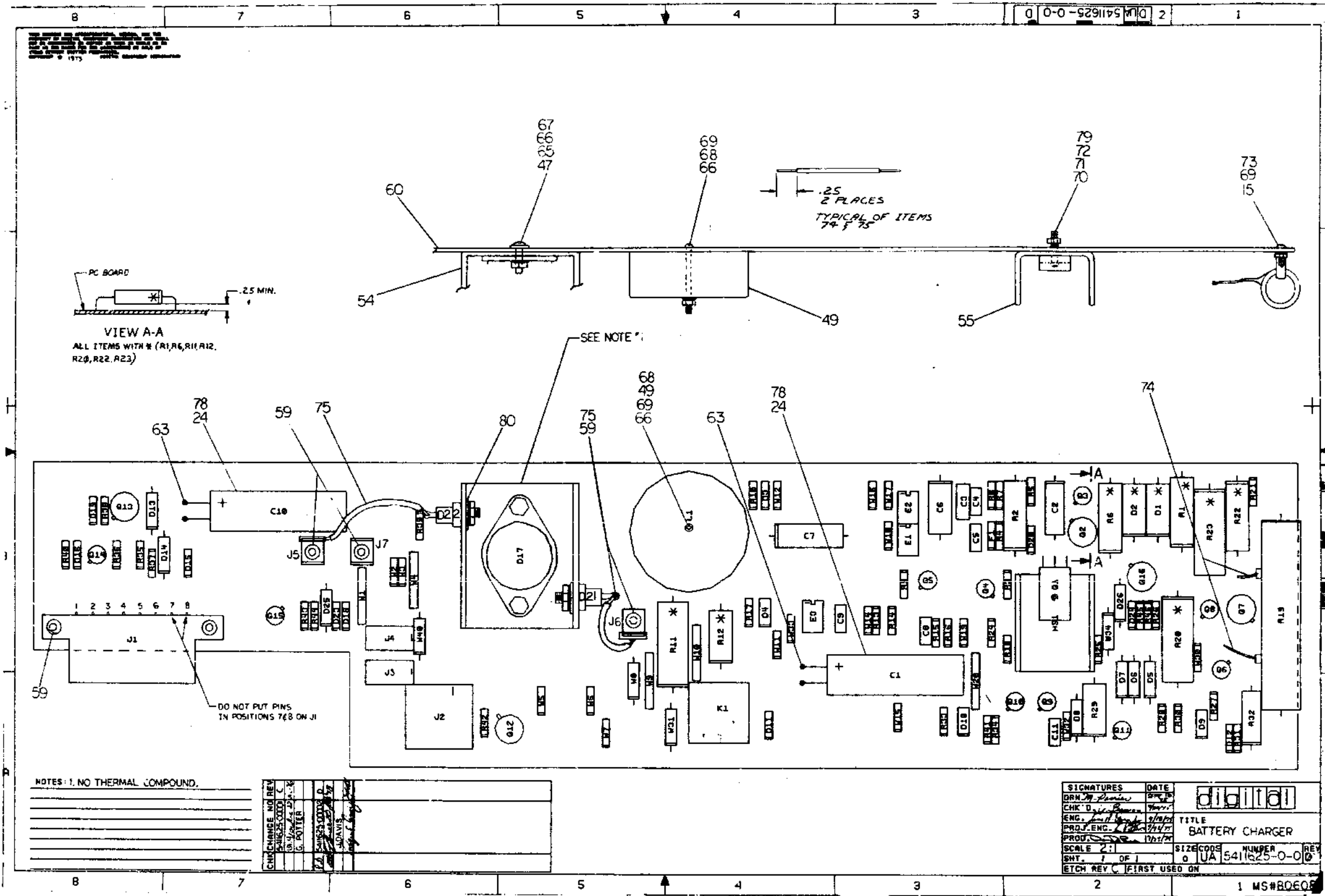
QTY.	DESCRIPTION	PART NO.	ITEM NO.
12	AIR TUBING, SHRINK 3/16 ID	9107254-00	12
X 2	TIE, CABLE	4007031	11
-	A/R WIRE*18 AWG (GRY/BRN)	9107400-81	10
-	A/R WIRE*18 AWG (BRN)	9107260-11	4
-	A/R WIRE*14 AWG (VIO)	9107370-77	8
-	A/R WIRE*14 AWG (BLUE)	9107370-66	7
-	A/R WIRE*14 AWG (GRN)	9107370-55	6
-	A/R WIRE*14 AWG (ORN)	9107270-55	5
2	TERMINAL, QUICK CONN	9008488	4
4	TERMINAL, QUICK CONNECT	9007969	3
6	PIN (FEMALE)	1209379-00	2
1	CONN, 6 PIN (FEMALE)	1210321-00	1

REV.	CHANGE NO.	DATE	BY	CHK
A	000001	1-2-76	J.R. DAVIS JR.	J.R.D.

FIRST USED ON OPTION/MODEL	SYM	QTY.	DESCRIPTION	PART NO.	ITEM NO.
H775					
DIMENSIONAL TOLERANCE			DRN	DATE	
DIMENSIONS ARE INCHES UNLESS OTHERWISE SPECIFIED			CHK'D	DATE	
MILLIMETERS	INCHES	ANGLES	ENG.	DATE	
X.XX ±0.10 X.X ±0.5 X ±2	.XXX ±.005 .XX ±.02 X ±.1	10° 30'	PROJ. ENG.	DATE	
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	PROD.	DATE	TITLE
MATERIAL SEE PARTS LIST	FINISH	E-UA-H775-00	SCALE 1/1	SHEET	OF
PARTS LIST			NUMBER		REV.
CITIA 7011759-0-0			CITIA 7011759-0-0		A

CITIA 7011759-0-0 REV. A





NOTES: 1. NO THERMAL COMPOUND.

CHANGE NO	REV	DATE	BY
1	1	1/27/77	...
2	1	...	...
3	1	...	...
4	1	...	...
5	1	...	...
6	1	...	...
7	1	...	...
8	1	...	...

SIGNATURES	DATE	digital
DRW. [Signature]	DATE	
CHK'D [Signature]	DATE	TITLE
ENG. [Signature]	DATE	BATTERY CHARGER
PROJ. ENG. [Signature]	DATE	SCALE 2:1
PROD. [Signature]	DATE	SIZE CODE 0
		NUMBER 541625-0-0
		REV. 0
ETCH REV. C	FIRST USED ON	

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION			
PARTS LIST				ETCH REV C			
MADE BY	CHECKED	SECTION	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	P. BOSSMAN	1	4-18-75	11-4-75			
ENG	PROG	ISSUED SECT	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	D. DEROME	1	4-18-75	9-25-75			
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	UNIT	REV	ECO NO.	DATE
1	1302380	RESISTOR 100 OHM, 2W 5%	1	R1			
2	1311644	RESISTOR 0.2 OHM, 2W 3%	1	R2			
3	1311220	RESISTOR 170 OHM, 1/4W 5%	3	R3 R2 R40			
4	1301421	RESISTOR 15 OHM, 1/4W 10%	2	R4 R37			
5	1301425	RESISTOR 300 OHM, 1/4W 5%	1	R5			
6	1301966	RESISTOR 820 OHM, 2W 10%	1	R6			
7	1302465	RESISTOR 18K, 1/4W 5%	2	R7 R14			
8	1300365	RESISTOR 1K, 1/4W 5%	7	R8 R16 R17 R25 R38 R39 R42			
9	1300479	RESISTOR 10K, 1/4W 5%	7	R9 R13 R27 R28 R41 R44 R45			
10	1301038	RESISTOR 22K, 1/4W 5%	2	R10 R33			
11	1301897	RESISTOR 1.5K, 5W 5%	1	R11			
12	1303122	RESISTOR 1.0K, 1W 5%	2	R12 R29			
13	1302466	RESISTOR 100K, 1/4W 5%	1	R15			
14	1302108	RESISTOR 1.47K, 1/4W	1	R24			
15	1302192	RESISTOR 25 OHM 25W WITH BRACKETS 1%	1	R19			
16	1305815	RESISTOR 5 OHM, 5W 5%	1	R20			
17	1305380	RESISTOR 270 OHM, 2W 5%	1	R22			
18	1309963	RESISTOR 260 OHM, 5W 1%	1	R23			
19	1303179	RESISTOR 9.2K 1/4W 5%	2	R26 R30			
20	1309415	RESISTOR 11.5K, 1/4W 1%	2	R16 R31			
21	1300424	RESISTOR 2.49K 3/4W 1%	1	R32			
22	1300439	RESISTOR 3.3K, 1/4W 5%	5	R34 R35 R36 R43 R46			

TITLE BATTERY CHARGER ASSY NO D-UA-5411625-0-0 SIZE CODE A PL NUMBER 5411625-0-0 REV ECO NO. D 541625-0002 SHEET 1 OF 4

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION			
PARTS LIST				ETCH REV C			
MADE BY	CHECKED	SECTION	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	P. BOSSMAN	1	4-18-75	11-4-75			
ENG	PROG	ISSUED SECT	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	D. DEROME	1	4-18-75	9-25-75			
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	UNIT	REV	ECO NO.	DATE
45	1105275	DIODE 10GZ	5	D1			
46	1110306	DIODE 1201A RECT	2	D2			
47	1109465	SCR MCR6491	1	D3			
48	1210929-03	3/4 AMP. RECTIFIER	1	D4			
49	1612500	INDUCTOR 200 OH	1	D5			
50	1211138-01	RELAY 8PDT 6VDC	1	D6			
51	1211139	RELAY SOCKET HOUSING	1	D7			
52	1211342-06	CONN. MATE-N-LOCK 6 PIN	1	D8			
53	1211342-02	HEADER MATE-N-LOCK 2 PIN	2	D9			
54	1212645	HEAT SINK	1	HS1			
55	1212487	HEAT SINK	1	HS2			
56	1911944	IC LM555 TIMER	2	U1 U2			
57	1910282	IC LM31A OP AMP	1	U3			
58	9008219	QUICK CONNECT 1/4 IN. SINGLE MALE 90°	1	Q1			
59	9009000	EYELETS	5	E1			
60	5011624	ETCHNET CIRCUIT BOARD	1	CB			
61	1209340	8 PIN MATE-N-LOCK	1	PI1			
62	1209456-01	SOCKETS FOR 1209340	6	SI-1, SI-2, SI-3, SI-4, SI-5, SI-6			
63	9009118-03	TERMINAL, SOLDER	4	T1			
64	9007113	DOUBLE MALE QUICK CONNECT 90°	2	Q2 Q3			

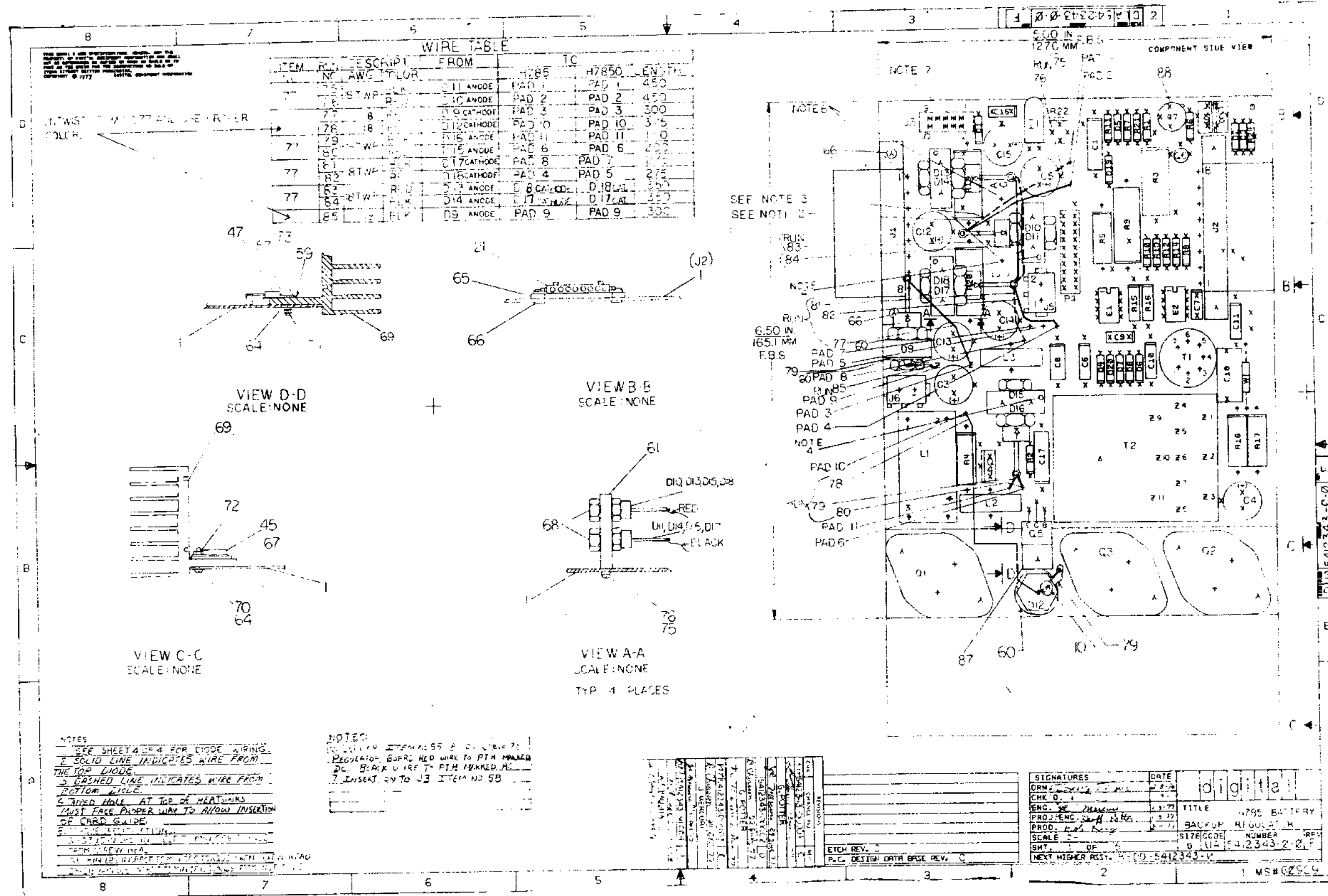
TITLE BATTERY CHARGER ASSY NO D-UA-5411625-0-0 SIZE CODE A PL NUMBER 5411625-0-0 REV ECO NO. D 541625-0002 SHEET 1 OF 4

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION			
PARTS LIST				ETCH REV C			
MADE BY	CHECKED	SECTION	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	P. BOSSMAN	1	4-18-75	11-4-75			
ENG	PROG	ISSUED SECT	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	D. DEROME	1	4-18-75	9-25-75			
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	UNIT	REV	ECO NO.	DATE
23	1000284	CAPACITOR 0.01 MFD, 100V, MYLAR	1	C6			
24	1102070-02	CAPACITOR 180 MFD, 50V, 672D SPRAGUE	2	C1 C10			
25	1000035	CAPACITOR 1000 MFD, 100V	1	C2			
26	1000042	CAPACITOR 100PF, 100V	1	C3			
27	1000031	CAPACITOR .01 MFD, 100V	2	C4 C5			
28	1000819	CAPACITOR 10 MFD, 20V	1	C7			
29	1000030	CAPACITOR 0.1 MFD 100V	2	C8 C11			
30	1000034	CAPACITOR 33PF, 100V	1	C9			
31	1000033	TRANSISTOR 2N3725	1	Q1			
32	1000032	TRANSISTOR 2N3725	2	Q2 Q11			
33	1000031	TRANSISTOR 2N3725	8	Q3 Q4 Q6 Q8 Q9 Q10 Q11 Q12			
34	1000030	TRANSISTOR 2N3725	3	Q5 Q13 Q14			
35	1000029	TRANSISTOR 2N3762	1	Q7			
36	1000028	TRANSISTOR 2N3725	1	Q11			
37	1102990-01	DIODE GE A1158 FAST REC RECT.	1	D1			
38	1102990-02	DIODE GE A1158 FAST REC RECT.	1	D2			
39	1102948	DIODE IN4744 15V ZENER	1	D3			
40	1102948	DIODE IN4744 15V ZENER	1	D4			
41	1102948	DIODE IN4744 15V ZENER	1	D5			
42	1102948	DIODE IN4744 15V ZENER	1	D6			
43	1102948	DIODE IN4744 15V ZENER	1	D7			
44	1102948	DIODE IN4744 15V ZENER	4	D11 D12 D20 D26			
45	1102948	DIODE IN5248 18V ZENER	1	D15 D25 D10			

TITLE BATTERY CHARGER ASSY NO D-UA-5411625-0-0 SIZE CODE A PL NUMBER 5411625-0-0 REV ECO NO. D 541625-0002 SHEET 2 OF 4

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION			
PARTS LIST				ETCH REV C			
MADE BY	CHECKED	SECTION	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	P. BOSSMAN	1	4-18-75	11-4-75			
ENG	PROG	ISSUED SECT	DATE	DATE	DATE	DATE	DATE
JIM DAVIS	D. DEROME	1	4-18-75	9-25-75			
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	UNIT	REV	ECO NO.	DATE
65	9006024-1	6-32 x 1/8 PHW SCREW	2	S1			
66	9006653	FLAT WASHER	3	W1			
67	9008185	6-32 x 1/8 PHW SCREW	2	S2			
68	9007853-1	6-32 x 1/8 PHW SCREW	1	S3			
69	9006560	6-32 x 1/8 PHW SCREW	2	S4			
70	9006010-3	4-40 x 5/16 PHW SCREW	1	S5			
71	9006655	FLAT WASHER	1	W2			
72	9006557	4-40 PHW NUT	1	N1			
73	9006024-1	6-32 x 1/8 PHW SCREW	2	S6			
74	9107350-49	WIRE #22 AWG STRANDED 1000 X 1/2 L	2	W1 W2			
75	5107360-22	WIRE #18 AWG STRANDED 1000 X 2 1/2 L	2	W3 W4			
76	9007970	FEMALE 1/4 IN. INSULATED	2	F1 F2			
78	9007834	DOUBLE STICKY TAPE	1	ST1			
79	9008206	TERMINAL COMPONENT	2	T2			
80	9008664	FLAT WASHER	2	W3			
81	D-CS-5411625-2-1	CIRCUIT SCHEMATIC	1	CS			
82	D-AM-5411625-2-5	ASSY DRILLING HOLE CARD	1	AM			
83	D-MS-5411625-5-5	DRILLING HOLE CARD	1	MS			
84	9009118-07	TERMINAL, SOLDER	15	T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14			
85	9009118-08	TERMINAL, SOLDER	9	T1 T2 T3 T4 T5 T6 T7 T8 T9			

TITLE BATTERY CHARGER ASSY NO D-UA-5411625-0-0 SIZE CODE A PL NUMBER 5411625-0-0 REV ECO NO. D 541625-0002 SHEET 3 OF 4



SEE SHEET 4 OF 4 FOR DIODE WIRING.
 2. SOLID LINE INDICATES WIRE FROM THE TOP DIODE.
 3. DASHED LINE INDICATES WIRE FROM BOTTOM DIODE.
 4. TYPED HOLE AT TOP OF HEAT SINKS MUST FACE PROPER WAY TO ALLOW INSERTION OF CARD GUIDE.
 5. THIS IS REGULATOR BOARD.
 6. THIS IS BATTERY BOARD.
 FROM REV. 10/64
 BY: [Signature]
 CHECKED BY: [Signature]

ITEM NO.	DESCRIPTION	FROM	TO	LENGTH
77	D11 ANODE	PAD 1	PAD 1	450
77	D10 ANODE	PAD 2	PAD 2	450
77	D9 CATHODE	PAD 3	PAD 3	300
77	D12 CATHODE	PAD 10	PAD 10	300
77	D16 ANODE	PAD 11	PAD 11	100
77	D15 ANODE	PAD 8	PAD 6	200
77	D17 CATHODE	PAD 4	PAD 5	275
77	D14 ANODE	D17 CATHODE	D18 CATHODE	350
85	D9 ANODE	PAD 9	PAD 9	300

1. TWIST TOGETHER AND USE THERMALLY CONDUCTIVE SOLDER.

SEE NOTE 3
 SEE NOTE 2

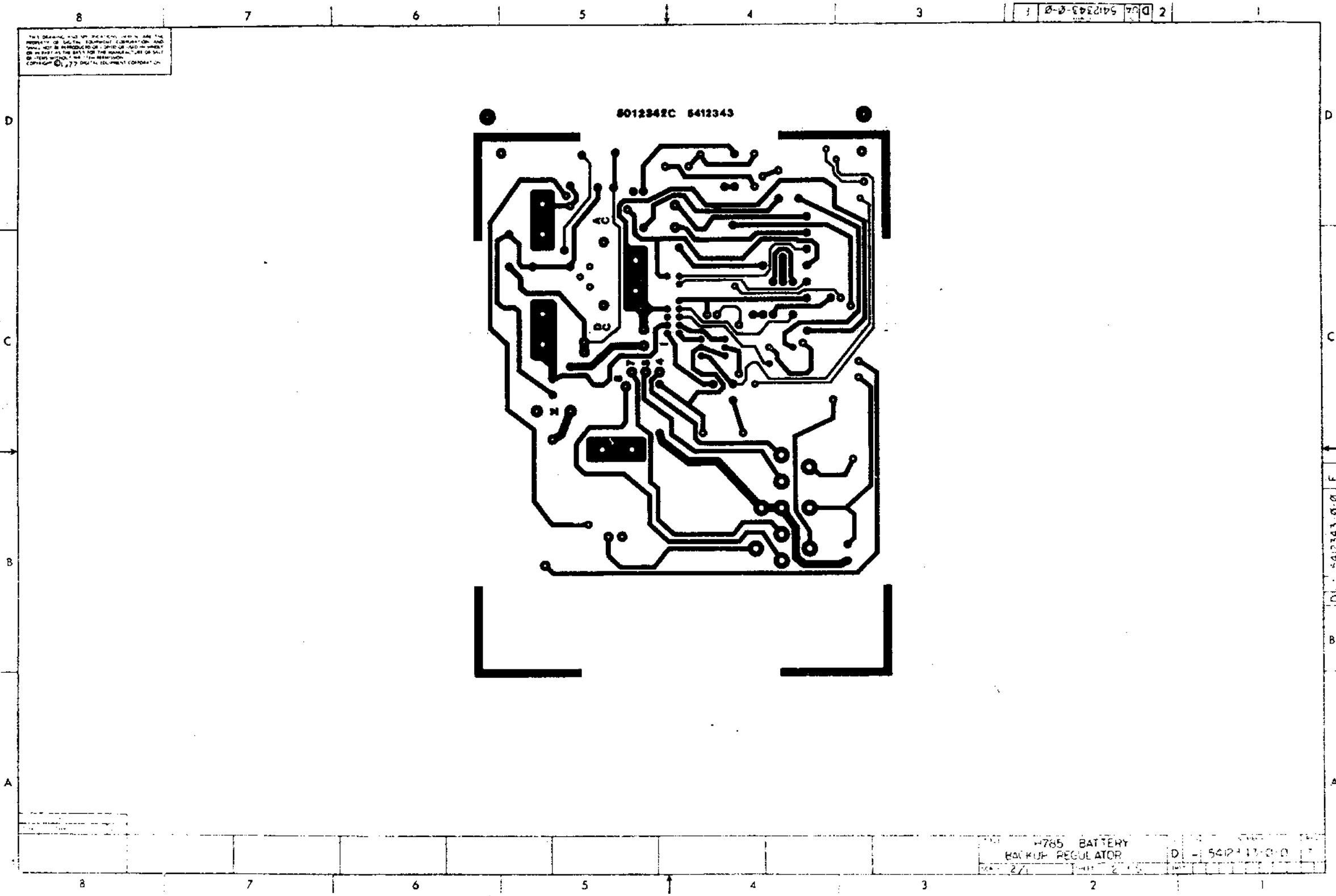
NOTES
 1. SEE SHEET 4 OF 4 FOR DIODE WIRING.
 2. SOLID LINE INDICATES WIRE FROM THE TOP DIODE.
 3. DASHED LINE INDICATES WIRE FROM BOTTOM DIODE.
 4. TYPED HOLE AT TOP OF HEAT SINKS MUST FACE PROPER WAY TO ALLOW INSERTION OF CARD GUIDE.
 5. THIS IS REGULATOR BOARD.
 6. THIS IS BATTERY BOARD.
 FROM REV. 10/64
 BY: [Signature]
 CHECKED BY: [Signature]

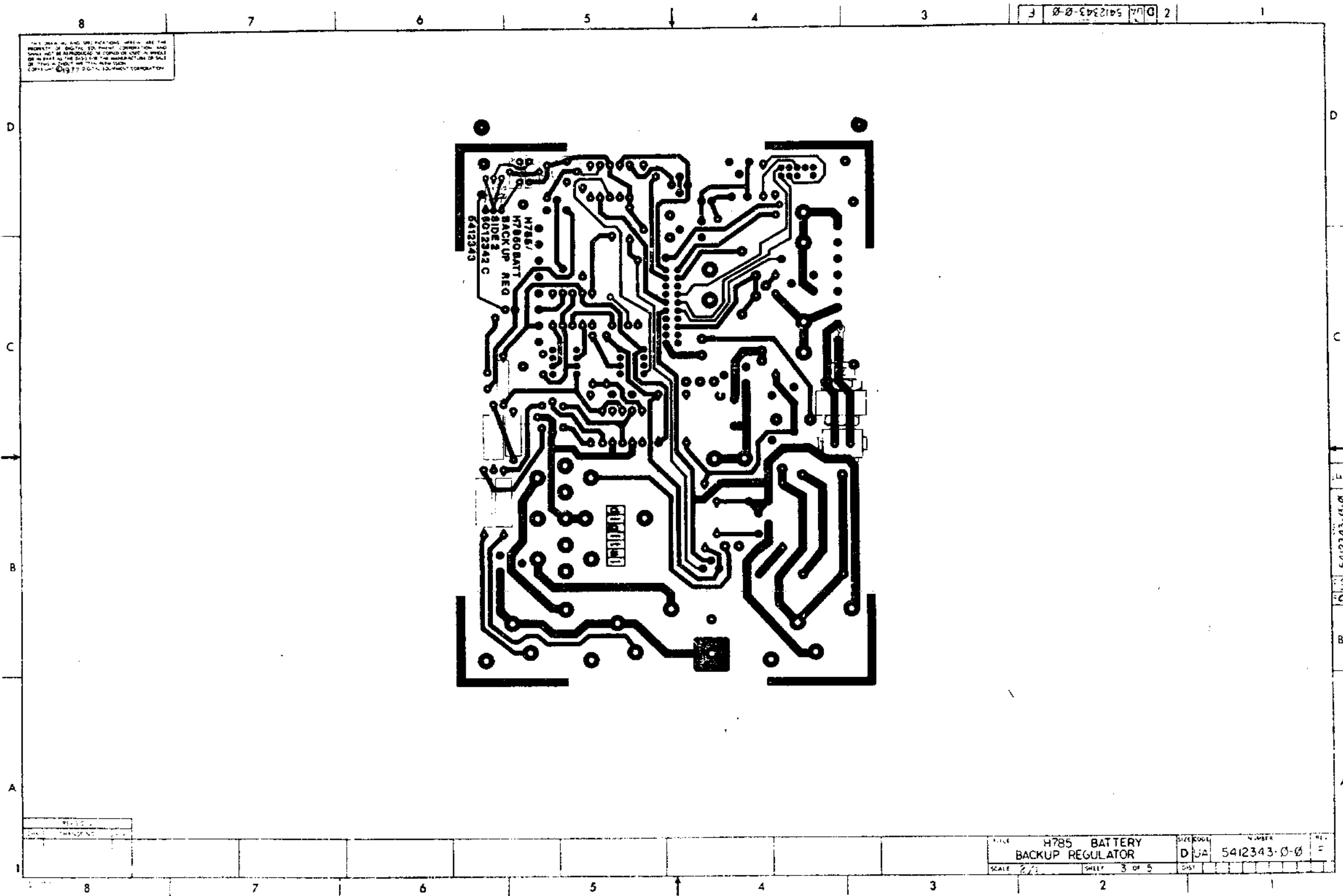
NOTES
 1. INSERTION TO J3 ITEM NO 58

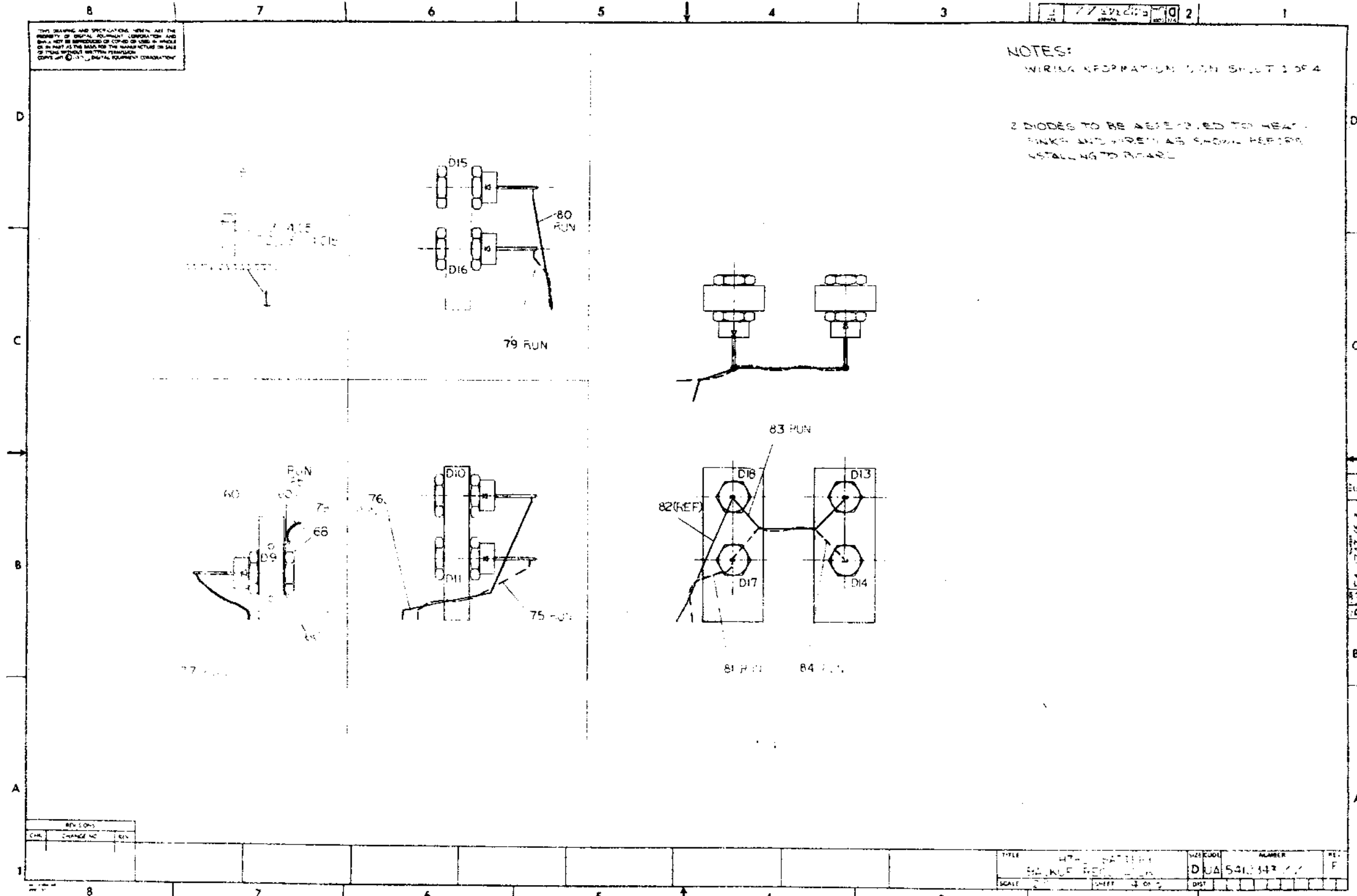
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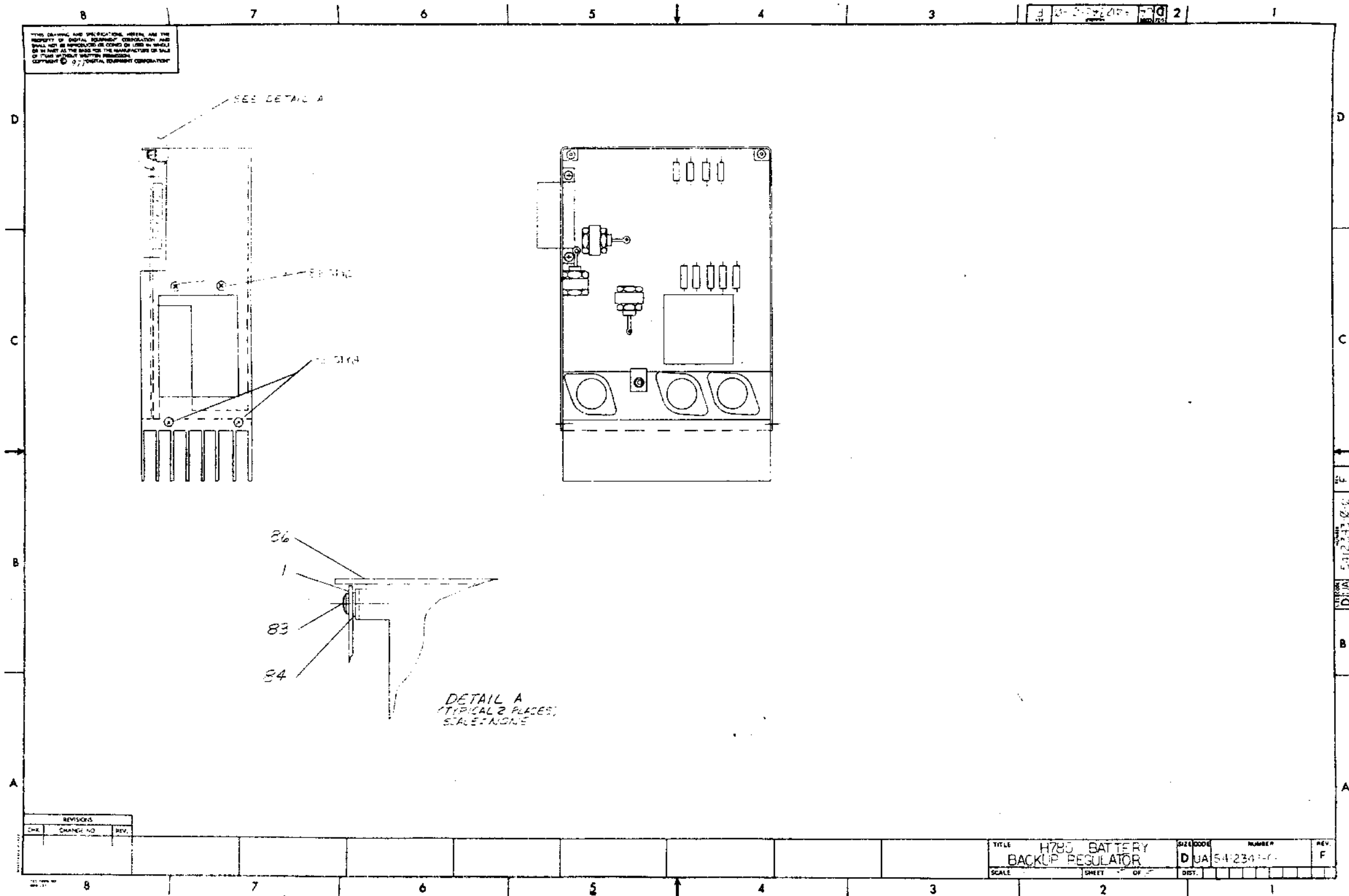
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[Signature]	3/65	SCALE
[Signature]	4/65	SMT
[Signature]	5/65	NEXT HIGHER ASST.

digital
 TITLE: 1795 BATTERY
 BACKUP FIGURE 1 H
 SITE CODE: 1042343-2-0
 NUMBER: 1
 REV: 1
 MS# 6295









LINE	ITEM	QUANTITY	DESCRIPTION	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	1	ETCH BRD 54-12343	5012342-00		1	
2	2	1	2.2MFD 35V 10% 1505 S.TA	1002431-00	(10-00)	1	C10
3	3	1	180 MFD 50V H% 6720 AL EL	1012607-02		1	C3-C5
4	4	1	1000.0 MFD 100V 5%200PPM DM15S	1000042-00	(10-00)	1	C7
5	5	1	.015 MFD 50V 2% M.POLYCARB	1010646-00		1	C8
6	6	1	470.0 MFD 100V 5%200PPM DM15S	1000024-00	(10-00)	1	C9
7	7	2	1 MFD 35V 10% 1505 S.TA	1001776-00	(10-00)	2	C6,C11
8	8	3	560 MFD 20V H% 6720 AL EL	1012607-00		3	C12-C14
9	9	1	1200 MFD 6.3V H% 6720 AL EL	1012607-01		1	C15
10	10	2	.1 MFD 50V 20% Z5U DISC	1010621-00		2	C16,C19
11	11	2	.10 MFD 20V 10% 1505 S.TA	1004813-00	(10-00)	2	C1,C17
12	12	1	.1 MFD 100V 20% Z5U DISC	1000030-00		1	C18
13	13	2	IN 750A VZ= 10.0 5% .40W PPER S.A.V.R.C	1100125-00		2	D2,D3
14	14	7	D 672 TR= 15NS PIV= 50V 5P	1105275-00		7	D1,D4-D8,D20
15	15	6	IN 300A PIV=100 I= 6A D04 SM	1109440-00		6	D10,D11,D13-D16
16	16	4	IN 300A PIV=100 I=6A S	1113366-00		4	D17,D18,D19,C12
17	17	1	IN 4744 VZ= 15.0 10% 1W Y	1105648-00		1	D19
18	18	1				1	
19	19	1	SOCKET, 1W 20POS EDGE MOUNT	1211004-02		1	P4
20	20	2	MATE=N-LOK RPIN, HOUSING, SKT	1209340-00		2	J1, J2
21	21	16	MATE=N-LOK SKT PCB TAB LOOSE	1209456-01		16	
22	22	2	MATE=N-LOK 2PIN PC TYPE	1211342-02		2	J5, J6
23	23	1	LAMP 6VA200MA, T1-3/4PINS#2319	1209219-01		1	L1
24	24	1				1	
25	25	1				1	
26	26	1	47 1/4" 5% CC (13-00)	1300702-00		1	R2
27	27	1	200 5% 5% RW (13-00)	1309639-00		1	R3
28	28	1	3 3% 5% (13-00)	1312602-00		1	R4
29	29	1	1.2 K 1% 10% CC (13-00)	1307950-00		1	R5
30	30	2	2.7 K 1/4" 5% CC (13-00)	1300426-00		2	R6, R7

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		FIRST USED ON:		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				
CHK	PCU NO	REV	NO		MADE BY:	DATE:	TITLE	SIZE:	CODE:	DOCUMENT NUMBER	REV
B.N	12004	F			D. FILORDEAU	31-JUL-78	PARTS LIST				
					R. PUZZO	31-JUL-78	7795 BATTERY BACKUP REGULATOR				
					J. MERCURI	31-JUL-78					
					R. KING	31-JUL-78		K	PL	5412343-0-GRP	F
					J. MERCURI	31-JUL-78	ASSY. C.: 5412343-0-V				3

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ACTUATED BY PRIST 2E(2)

PARTS LIST

SHEET 2 OF 3

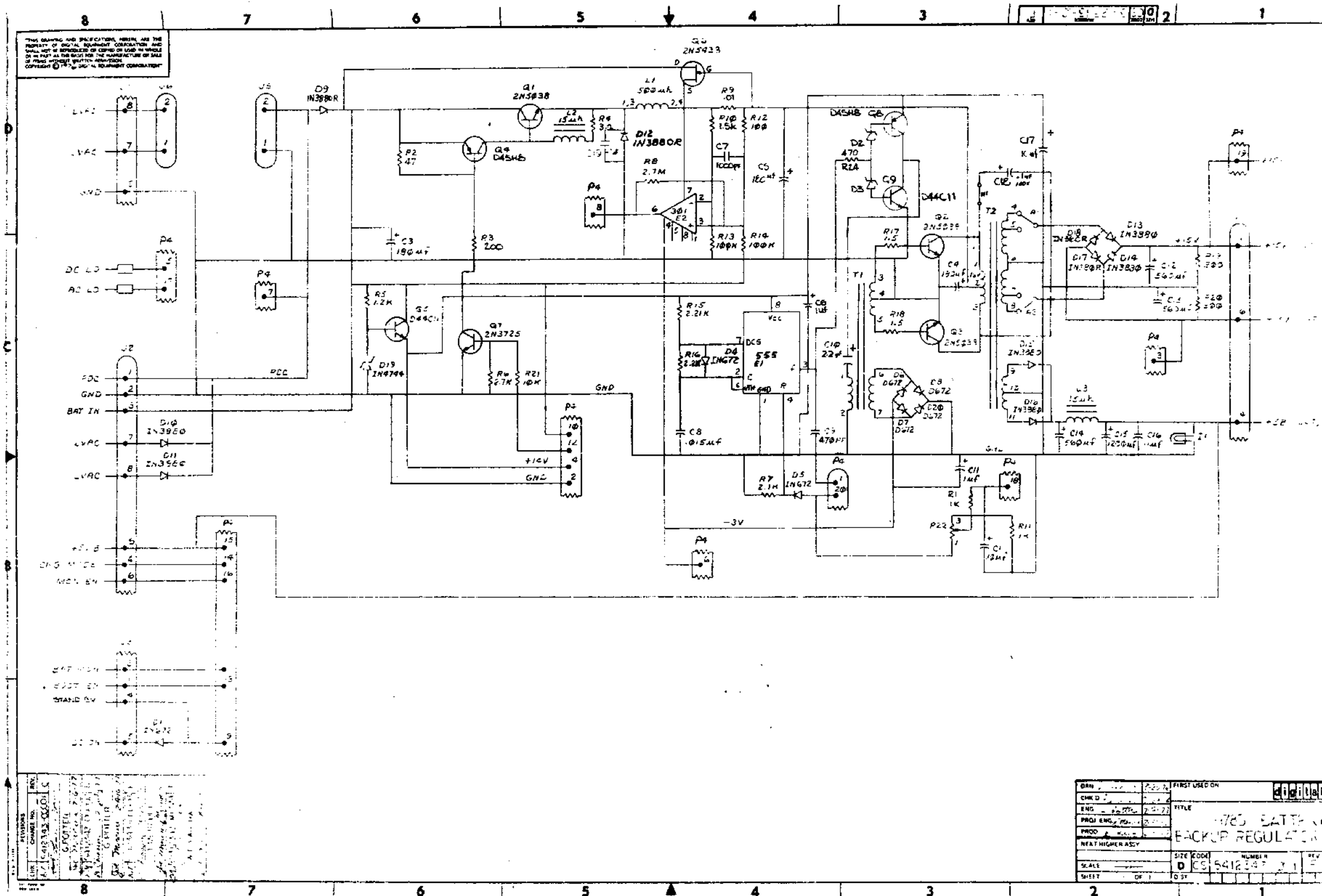
LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
31	31		1329680-00	2.7 M 1/4W 5% CC (13-00)	1	R8
32	32		1313712-00	.01 5W 3% WW (13-00)	1	R9
33	33		1300365-00	1 K 1/4W 5% CC (13-00)	2	R1, R11
34	34		1300229-00	100 1/4W 5% CC (13-00)	1	R12
35	35		1302466-00	100 K 1/4W 5% CC (13-00)	2	R13, R14
36	36		1312404-00	2.71 K 1/2W 1% PN60-F 100PPM (13-00)	2	R15, R16
37	37		1313579-00	1.5 3W 5% WW (13-00)	2	R17, R18
38	38		1309855-00	300 2W 5% CC (13-00)	2	R19, R20
39	39		1300479-00	10 K 1/4W 5% CC (13-00)	1	R21
40	40		1310852-00	200 200 POT S	1	R22
41	41		1300391-00	1.5 K 1/4W 5% CC (13-00)	1	R10
42	42		1300316-00	470 1/4W 5% CC (13-00)	1	R24
43	43	BLANK				
44	44	BLANK				
45	45		1510969-00	2N 5038 NPN 140WC SI 90 50 Y	3	Q1-Q3
46	46		1510708-00	D 45HR PNP 50WT SI 60 60 Y	2	Q4, Q8
47	47		1512790-00	D 44C11 NPN 30W SI 80 40	2	Q5, Q9
48	48		1511686-00	DEC5433 FET N 350MW 10 25 1A 200	1	Q6
49	49		1510959-00	2N 3725 NPN 3.5WC SI 50 60 P	1	Q7
50	50	BLANK				
51	51		1612593-00	500 UH 6A 6	1	L1
52	52		1613874-00	CHOKER, 15UH 4A	2	L2, L3
53	53		1613876-00	XFMR, POWER, RATIO 1:12 7PIN S	1	T1
54	54		1613875-00	XFMR, POWER, RATIO 1:2:13 1000MH	1	T2
55	55		7013690-00	CABLE 2 PIN AC DC LOW	1	
56	56		1911944-00	555CN TIMER, FUNCT. BLOCK	1	E1
57	57		1910282-00	301AN OP AMP	1	E2
58	58		7013384-10	10 CONDUCTOR EXTENDER CABLE	1	
59	59		1213071-06	INSULATOR, RUBBER SILICONE	1	
60	60		1213071-05	INSULATOR, RUBBER THERMAL	3	
61	61		7417414-00	HEAT SINK (DUAL)	4	
62	62		7417413-00	HEAT SINK (SINGLE)	1	
63	63		9006655-00	WASHER, FLAT, .312 O.D. X .125 I.D. X .025 T	1	
64	64		9006656-00	WASHER, FLAT, .312 O.D. X .156 I.D. X .027	6	
65	65		9006706-00	WASHER, NYLON, FLAT #4 .375 OD X .031 THK	2	
66	66		9006745-00	EYELET, POLLED FLANGE, .120 OD X .260 LG	4	
67	67		1213071-02	INSULATOR, RUBBER SILICONE SM	3	
68	68		9006505-00	NUT, KEP, 6-32X 3/8 AF CS/	10	
69	69		1210737-04	HEAT SINK, REGULATOR	1	
70	70		9007793-00	SCREW, BIND, SLOT, 6-32X 9/16 SS/PAS	6	
71	71		9007649-00	***** THIS ITEM IS NOT USED *****	-	
72	72		9008185-00	NUT, KEP, 6-32X 1/4 AF CS/	6	
73	73		9008033-01	SCREW, PAN, PHIL, 4-40X 9/16 SS/PAS	1	
74	74		9006557-00	NUT, KEP, 4-40X 1/4 AF CS	1	
75	75		9006632-00	WASHER, LOCK, INT, .260 OD X .120 ID X .015 THK	8	
76	76		9006010-04	SCREW, BIND, SLOT, 4-40X 5/16 SS/PAS	8	
77	77		9107430-02	WIRE, STRND, 18AWG, IPVC (UL1429) (91-00 A/R	1	
78	78		9009185-00	JUMPER, WIRE, INSULATED, BLACK BAND	1	W1

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE PARTS LIST M785 BATTERY BACKUP REGULATOR	SIZE: CODE: K PL	DOCUMENT NUMBER 5412343-0-DBP	REV 1F
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PARTS LIST

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
79	79		9008506-00	TERM LUG 1POS SOLDER,FLAT	2	
80	80		9009149-00	PIN, STAKING, P.C. BOARD, .025 X .025	9	J3
81	81		9008404-02	SCREW,FLAT,PHIL, 6-32X 5/16 SS/PAS 1000	2	
82	82		9009142-02	SCREW, PHILLIPS FLAT HEAD, SELF TAP, 4-4X	4	
83	83		9026010-01	SCREW,PAN ,PHIL, 4-40X 5/16 SS/PAS	2	
84	84		9008079-00	WASHER, FLAT FIBER OD. 1/4	2	
85	85		9925212-00	CARTON, DIE CUT 2412 100	1	
86	86	D-1A-7417410-1-0	7417410-00	REGULATOR BRACKET	1	
87	87		9009769-00	WASHER, RECTANGULAR .405X.225X.060	1	
88	88		9007201-00	TRANSIPADS #10253	1	
89	89		9009731-03	CAP,PLASTIC	7	

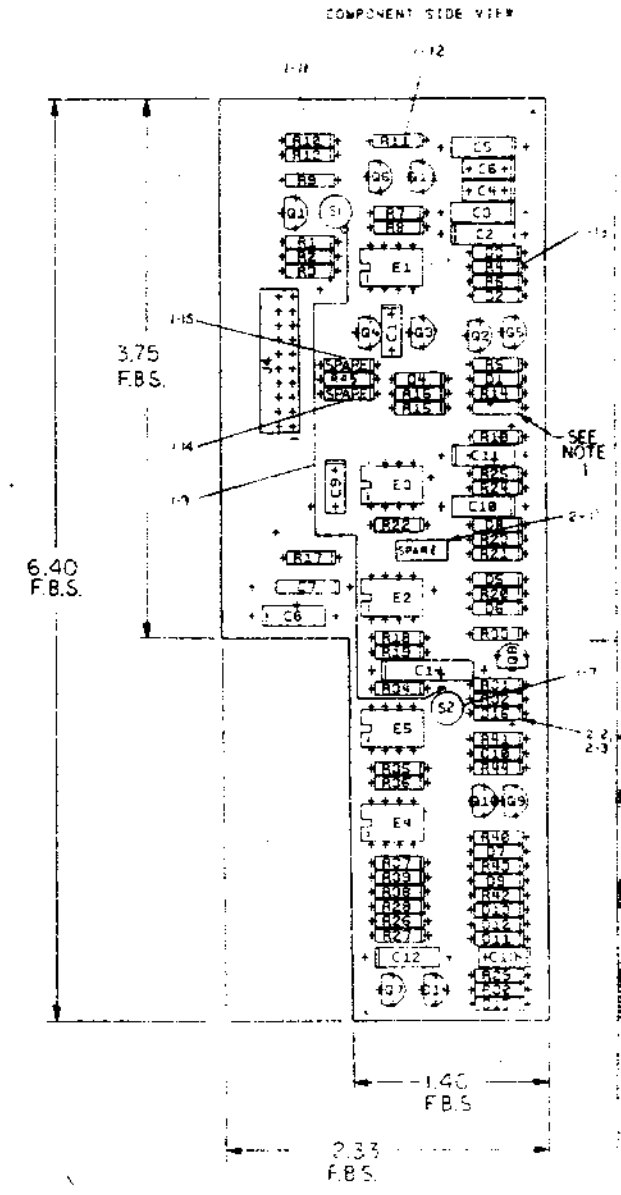
DIGITAL EQUIPMENT CORPORATION MAYFIELD, MASSACHUSETTS	TITLE PARTS LIST H785 BATTERY BACKUP REGULATOR	DATE 11/1/78	DOCUMENT NUMBER S412343-0-000	REV 1
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REWORK INSTRUCTIONS

- ECO #1
- 1 CUT ETCH BETWEEN R4 AND D16 (THIS PTH HAS AN ETCH RUN CONNECTING THE ANODE OF D16 TO IT ON SIDE 2.)
 - 2 CUT ETCH ON RIGHT SIDE OF C14 ON THE ETCH LINE THAT HAS PREVIOUSLY BEEN CUT, SIDE 1.
 - 3 INSERT ECO WIRE FROM THE DRAIN OF Q10 TO THE LEFT SIDE OF C14, TACK SOLDER TO ETCH LINE ON THE LEFT SIDE OF C14, SIDE 1. THIS IS THE SAME ETCH LINE THAT WAS CUT ON THE RIGHT SIDE OF C14. ECO WIRE IS TO BE ROUTED TO THE TOP OF THE BOARD FROM THE DRAIN OF Q10 THEN RUN ALONG THE BOARD AND COME DOWN TO THE LAND OF ETCH THAT IT HAS TO BE SOLDERED TO THE LEFT SIDE OF C14.
 - 4 DRILL A .0635 DIA. HOLE (DRILL #52) BENEATH R32 (SIDE 1) MAKING SURE THE ONLY ETCH DRILLED IS THE ONE WITH BOTH ITS ENDS CUT (SEE STEPS 1 AND 2 OF REWORK INSTRUCTIONS). THIS HOLE HAS TO HOLD DEC 12-12416-02. BE SURE OF SPACING BEFORE DRILLING.
 - 5 DRILL A .0635 DIA. HOLE (DRILL #52) ABOVE Q1 TO THE LEFT SIDE OF R1 (SIDE 1) BE SURE OF SPACING. THIS HOLE MUST HOLD DEC 12-12416-02. DO NOT PIERCE ETCH ON SIDE 2.
 - 6 ON SIDE 2, CUT ETCH LEADING AWAY FROM PIN 9 OF J4.
 - 7 INSERT DEC 12-12416-02 IN BOTH HOLES PREVIOUSLY DRILLED. DO NOT INSERT FULLY. INSERT SO THAT ENOUGH OF THE LEAD IS THROUGH THE BOARD THAT WILL PERMIT A COUPLE WRAPS OF AN ECO WIRE. THEN GLUE IN PLACE WITH DEC 90-09157. MAKE SURE THAT TABS ON DEC 12-12416-02 ARE FACING EACH OTHER ON SIDES 1 AND 2.
 - 8 ON DEC PART 12-12416-02 THE ONE THAT IS LOCATED CLOSEST TO J4 ON SIDE 1, CONNECT THE LEAD THAT GOES THROUGH THE BOARD, TO PIN J4-9 ON SIDE 2. THIS IS DONE WITH AN ECO WIRE INSTALLED ON SIDE 2.
 - 9 WITH AN ECO WIRE CONNECT BOTH CASE TABS OF DEC 12-12416-02 ON SIDE 1 TOGETHER.
 - 10 DEC PART 12-12416-02 THAT HAS BEEN INSTALLED BENEATH R32 ON SIDE 1, CONNECT AN ECO WIRE FROM THIS PART'S PIN ON SIDE 1 WITH THE OTHER END OF THE ECO WIRE TO THE
- ECO #2
- COMPONENT DELETES SIDE 1:
- 2-1. C15 (P/N 1000021)
 - 2-2. D16 (P/N 1110068)
- COMPONENT ADDS SIDE 1:
- 2-3. D16 (ZENER BI-DIRECTIONAL P/N 114913-00)



NOTES

1. CHANGE NUMBER
2. DATE
3. BY
4. REASON

CHANGE NUMBER	DATE	BY	REASON
1			
2			
3			
4			

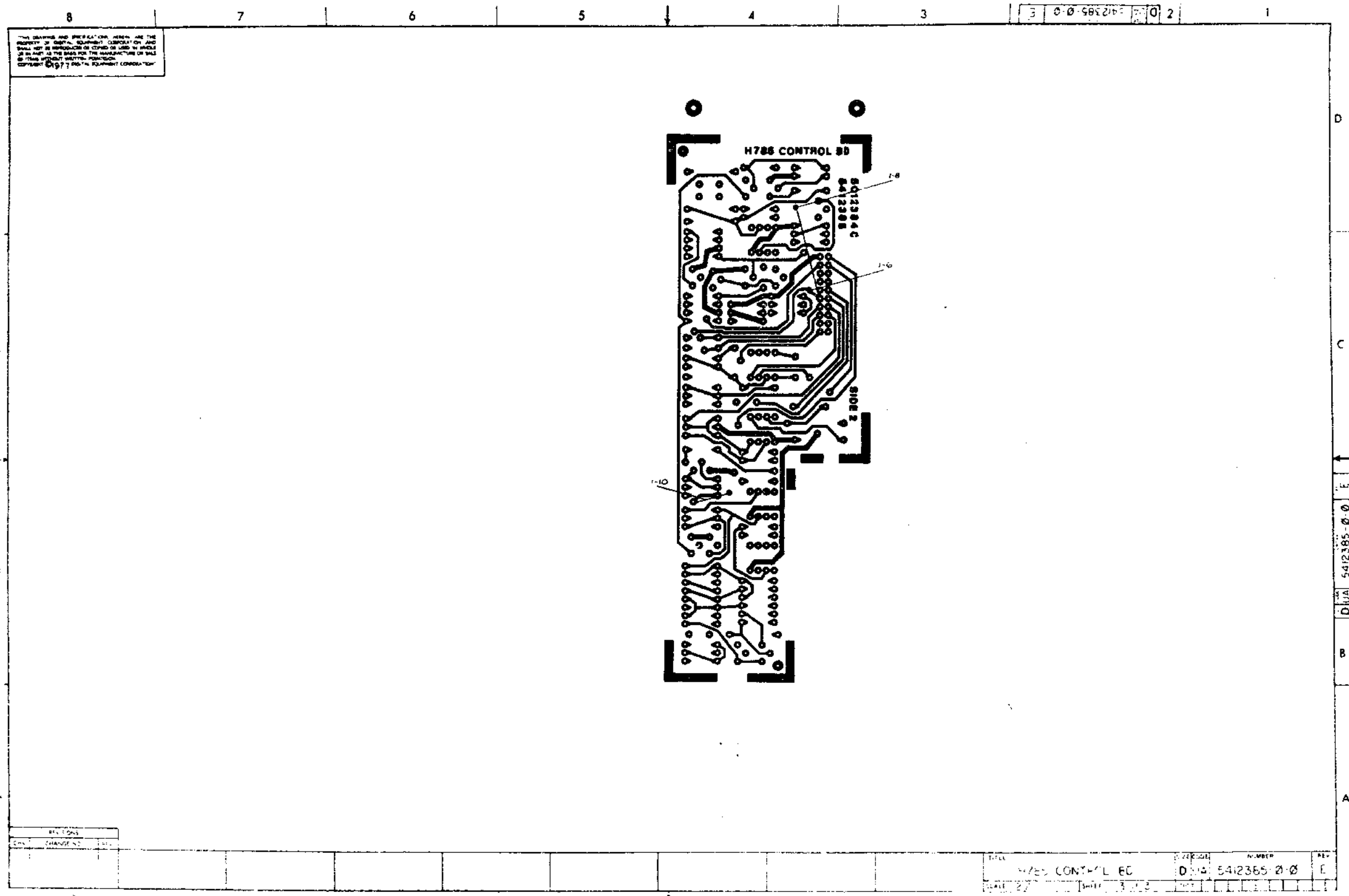
ETCH REV. C	P.C. DESIGN DATA BASE REV. C
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SIGNATURES	DATE
DRN. F. GREGGALO	11 11 68
CHK. D. F. SEIDMAN	12 11 68
ENG. W. J.
PROJ. ENG.
SCALE 2/1	...
SH. 1 OF 3	...
NEXT HIGHER ASSEMBLY B.C. 11236	...

H785 CONTROL BD

STANDARD NUMBER

UA 15412385-22 E



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REVISIONS	
NO.	DESCRIPTION

TITLE	H785 CONTROL EC	DWG NO.	5412365-0-0	REV.	E
DATE	27	SCALE	1:1		

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	D-MD-5012384-0-0	5012384-00	5412385	1	
2	2		1001610-01	.01 MFD 100V OR 50V Z5U DISC/800PF MIN	4	C1,C4,C6,C13
3	3		1004813-00	10 MFD 20V 10% 150D S.TA (10-00	1	C2
4	4		1001776-00	1 MFD 35V 10% 150D S.TA (10-00	3	C3,C5,C11
5	5		1000061-00	8200.0 MMF 100V 10% 663UW MYLR (10-00	1	C7
6	6		1005965-00	.47 MFD 35V 10% 150D S.TA (10-00	2	C8,C12
7	7		1000009-00	33.0 MMF 100V 5%200PPM DM15S (10-00	1	C9
8	8		1005306-00	6.8MFD 35V 10% 150D S.TA (10-00	1	C14
9	9		1105275-00	D 672 TR= 15NS FIV= 60V SP	9	D1,D2,D3,D5,D6,D9,D10,D12,D13
10	10		1109988-00	1N 964B VZ= 13.0 5% .40W Y	1	D4
11	11		1102808-00	1N 752A VZ= 5.6 5% .40W P	2	D11,D15
12	12		1110968-00	2N 5062 SCR@100V I=.8A T092	1	D14
13	13		1110713-00	SZ710910 VZ= 5.1 2% M	1	D7
14	14		1114913-00	VZ= 18.0 10% 1W	1	D16
15	15		1300398-00	1.8 K 1/4W 5% CC (13-00	2	R32,R38
16	16		1300479-00	10 K 1/4W 5% CC (13-00	11	R1,R13,R18,R19,R20,R21,R28, CONT R31,R42-R44
17	17		1300229-00	100 1/4W 5% CC (13-00	5	R3,R5,R25,R29,R45
18	18		1301322-00	180 1/4W 5% CC (13-00	1	R4
19	19		1302177-00	47 K 1/4W 5% CC (13-00	1	R6
20	20		1302394-00	30 K 1/4W 5% CC (13-00	1	R7
21	21		1302091-00	330 K 1/4W 5% CC (13-00	1	R8
22	22		1300365-00	1 K 1/4W 5% CC (13-00	6	R2,R9,R12,R14,R37,R40
23	23		1300426-00	2.7 K 1/4W 5% CC (13-00	1	R16
24	24		1302092-00	220 K 1/4W 5% CC (13-00	1	R15
25	25		1301423-00	6.8 K 1/4W 5% CC (13-00	1	R17
26	26		1302871-00	1.21 K 1/4W 1% RN55D-F 100PPM (13-00	1	R35
27	27		1302955-00	750 1/4W 1% RN55D-F 100PPM (13-00	1	R34
28	28		1303312-00	10.0 K 1/4W 1% RN55D-F 100PPM (13-00	1	R36
29	29		1302466-00	100 K 1/4W 5% CC (13-00	3	R22,R39,R41

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		
CHK	ECD NO	REV	FIRST USED ON:		
W.H	00003	E	DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		
			MADE BY: F.MALANSON	DATE: 21-FEB-78	TITLE
			PARTS LIST		
			CHECKED: F.SEIDMAN	DATE: 21-FEB-78	H785 CONTROL BOARD
			DSN.ENG.: J.MERCURI	DATE: 21-FEB-78	
			PROD.: R.B.KING	DATE: 21-FEB-78	SIZE: CODE: DOCUMENT NUMBER: REV:
			RESP.ENG.: J.MERCURI	DATE: 21-FEB-78	ASSY.NO.: D-U4-5412385-0-0 EDIT: 4

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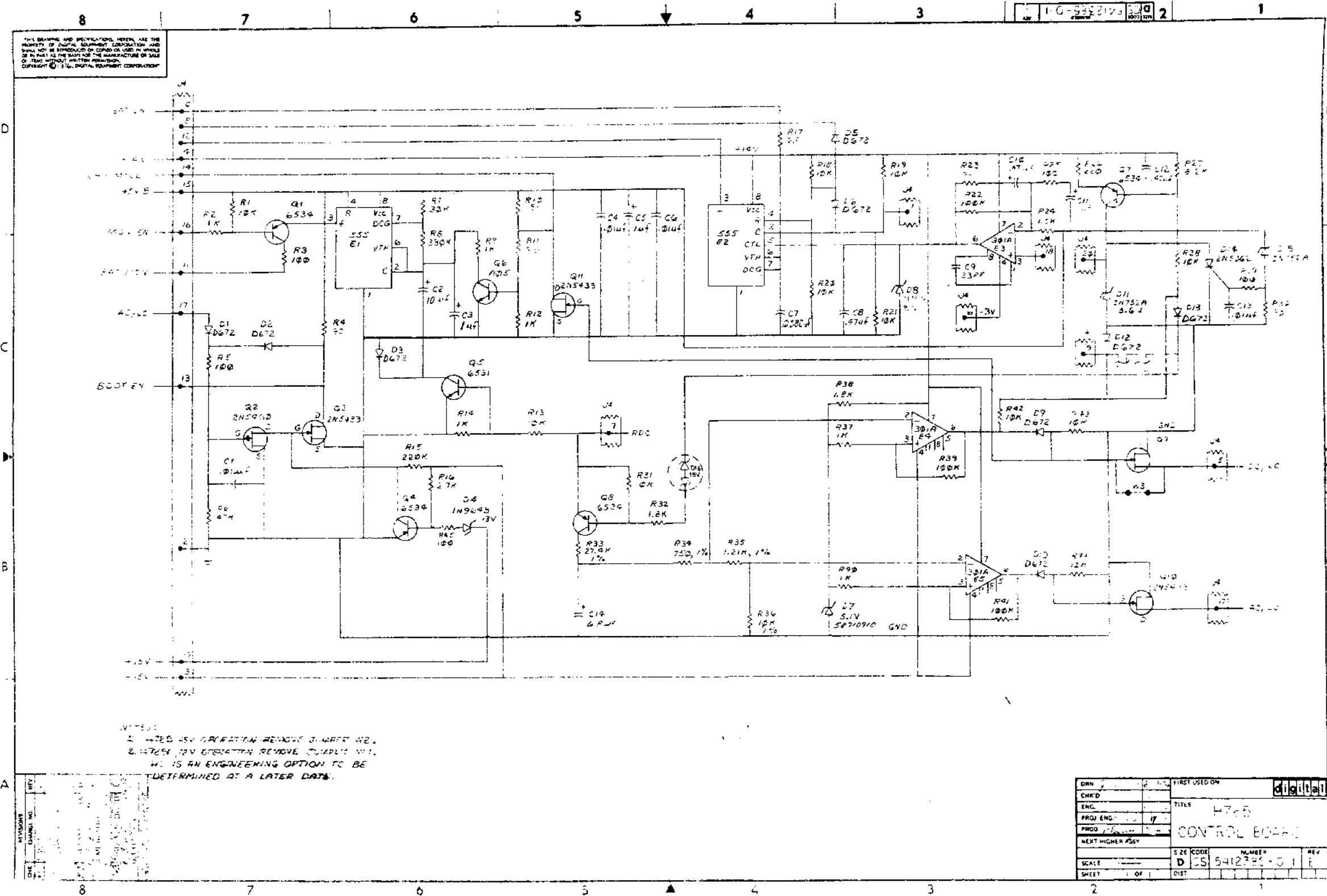
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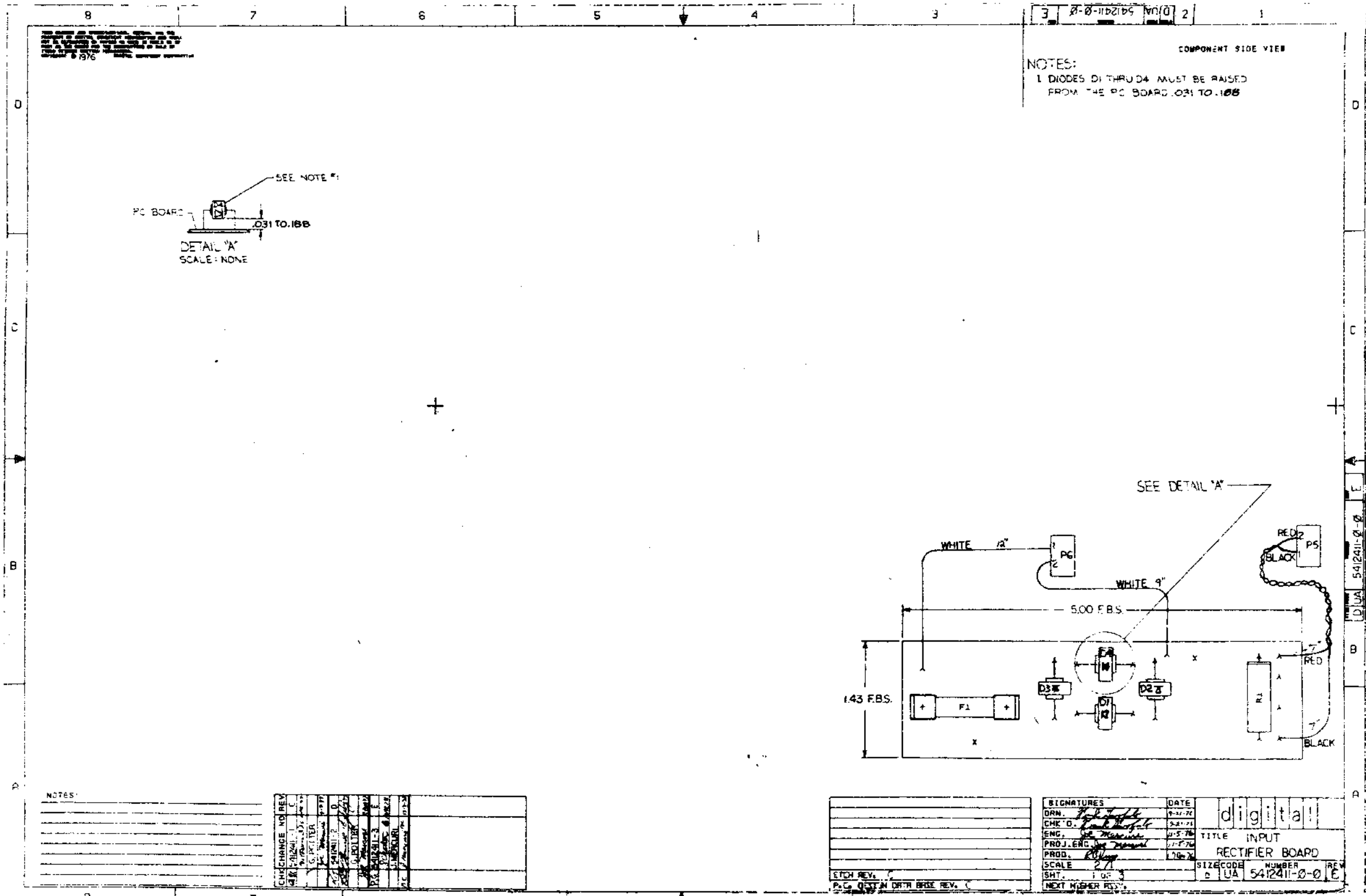
PARTS LIST

SHEET 2 OF 2

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
30	30		1300271-00	220 1/4W 5% CC (13-00	1	R26
31	31		1303179-00	8.2 K 1/4W 5% CC (13-00	1	R27
32	32		1302751-00	30 1/4W 5% CC (13-00	1	R30
33	33		1309417-00	27.4 K 1/4W 1% RN55D-F 100PPM (13-00	1	R33
34	34		1503409-00	DEC6534D PNP 310MW SI 40 90 P	4	Q1,Q4,Q7,Q8
35	35		1510233-00	2N 5460 FET 310MW SIP CHNML	1	Q2
36	36		1511686-00	DEC5433 FET N 350MW 10 25 1A 20U	4	Q3,Q9,Q10,Q11
37	37		1509338-00	DEC6531B NPN 310MW SI 40 90 P	1	Q5
38	38		1510705-00	XA 05 NPN 500MW SI 60 50 P	1	Q6
39	39		1911944-00	555CN TIMER,FUNCT.BLOCK	2	E1,E2
40	40		1910282-00	301AN OP AMP	3	E3,E4,E5
41	41		1300391-00	1.5 K 1/4W 5% CC (13-00	2	R10,R24
42	42		1213335-00	HEADER 20POS RT ANGLE FOR 12-13334	1	J4
43	43		1300439-00	3.3 K 1/4W 5% CC (13-00	1	R11
44	44		1212416-02	THERMOSTAT,00160,N/C,SPST,AUTO RESET	2	S1,S2
45	45		1300432-00	3 K 1/4W 5% CC (13-00	1	R23
46	46		1109990-00	1N 757A VZ= 9.1 5% .40W P	1	DB
47	47		1005965-00	.47 MFD 35V 10% 150D S.TA (10-00	1	C10
48	48		9009157-00	ADHESIVE, PERMABOND #101	A/R	
49	49		9105740-55	WIRE(WRAP)30AWG UL1423 (91-00	A/R	

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE PARTS LIST H785 CONTROL BOARD	SIZE CODE PL	DOCUMENT NUMBER 5412345-00	REV 1
---	---	-----------------	-------------------------------	----------





COMPONENT SIDE VIEW

NOTES:
 1 DIODES D1 THRU D4 MUST BE RAISED FROM THE PC BOARD .031 TO .100

SEE NOTE #1

PC BOARD

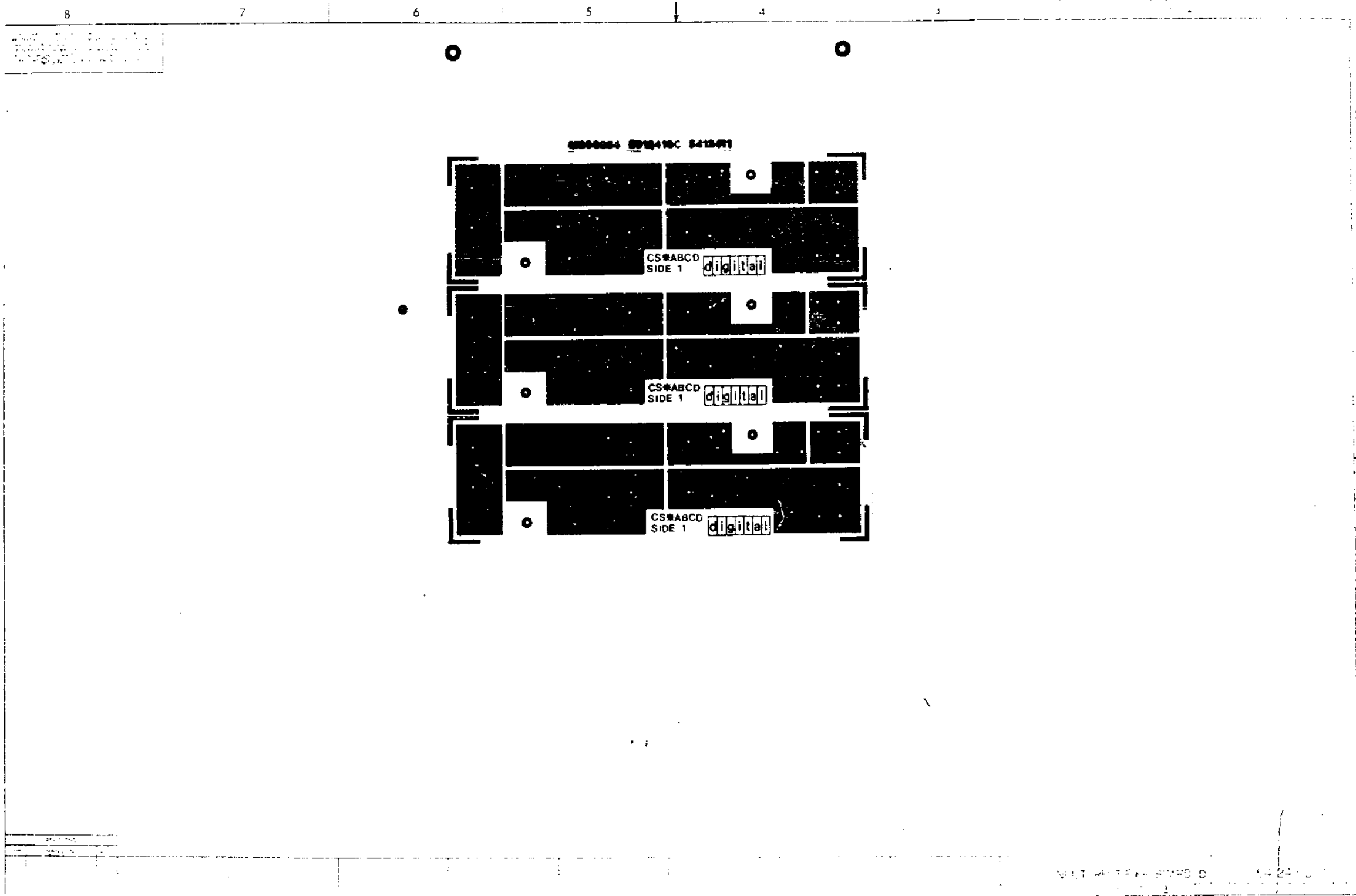
.031 TO .100

DETAIL 'A'
 SCALE: NONE

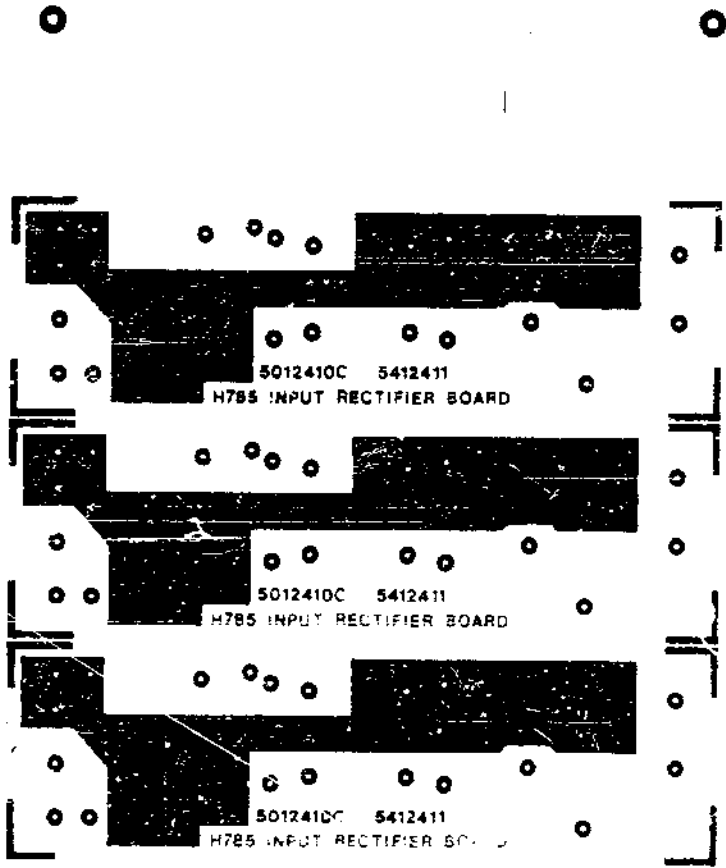
NOTES:

CHANGE NO	REV	DATE	BY

ETCH REV. C	DATE 8-21-74	digital
P.C. QUANTITY DATA BRD REV. C	DATE 8-21-74	
SIGNATURES	DATE	TITLE
DRN. <i>[Signature]</i>	8-21-74	INPUT
CHK'D. <i>[Signature]</i>	8-21-74	RECTIFIER BOARD
ENG. <i>[Signature]</i>	8-21-74	SIZE CODE
PROJ. ENG. <i>[Signature]</i>	8-21-74	NUMBER
PROD. <i>[Signature]</i>	8-21-74	5412411-0-0
SCALE 2/1	REV. E	
SHT. 1 OF 3		
NEXT NUMBER 001		



3 7 6 5 4



AUTOMATED BY PRTLST 1D(11)

PARTS LIST

SHEET 1 OF 1

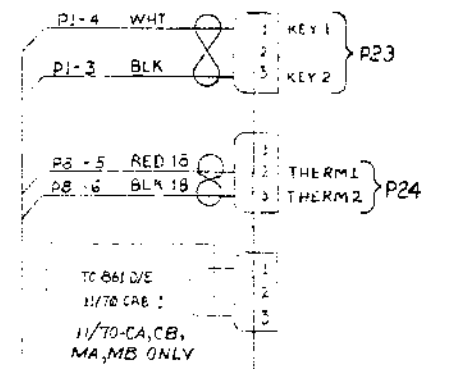
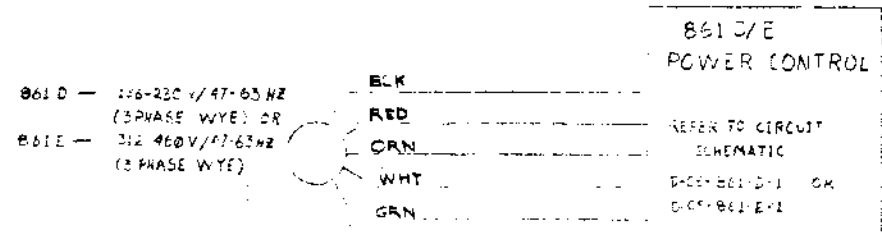
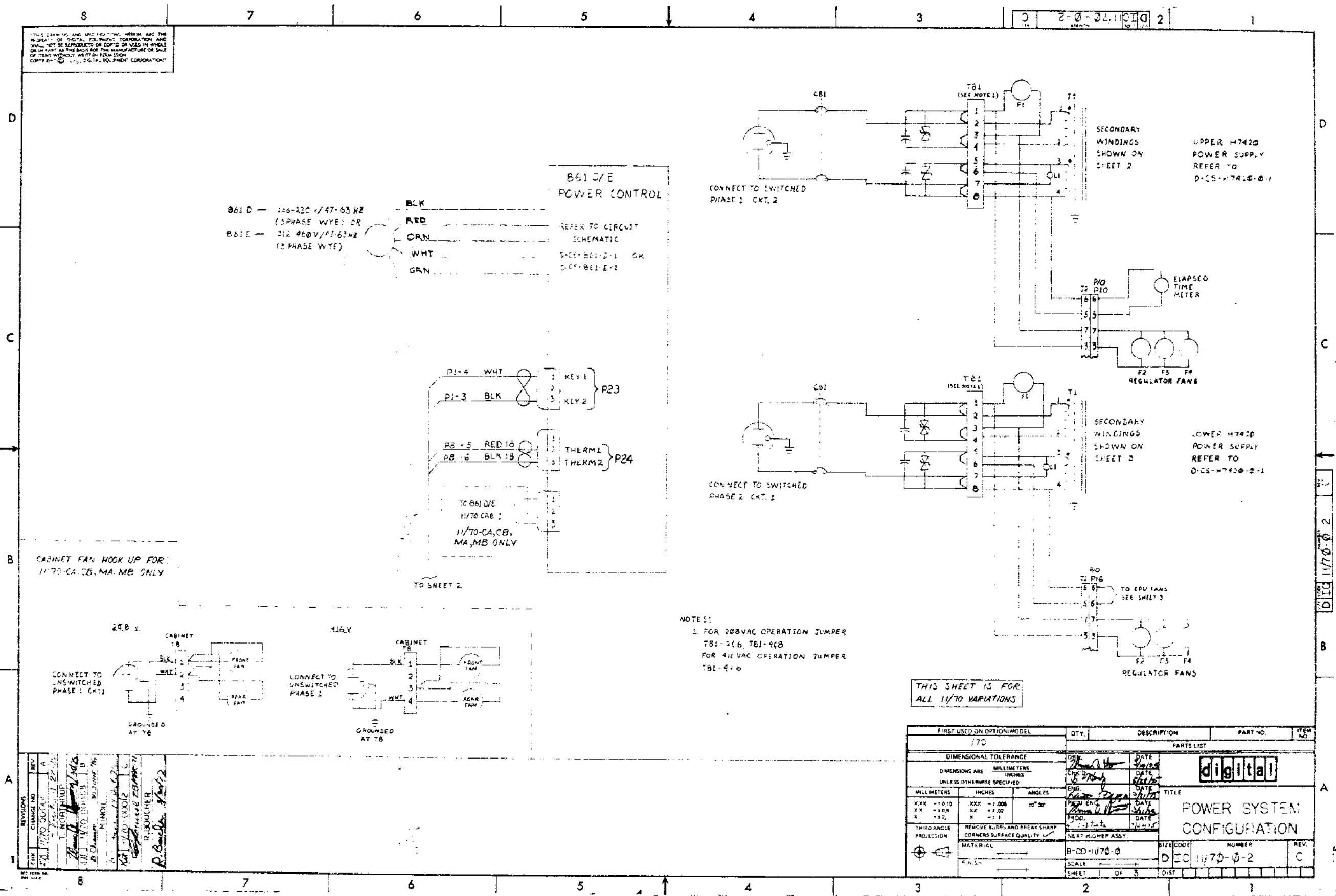
LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	D-MD-5012410-0-0	5012410-00	5412411	1	
2	2		1110615-00	MR 752 PIV=200 I=22A A264 SM	4	D1-D4
3	3		1210821-02	MATE-N-LOK 2PIN,HOUSING,SKT	2	P5,P6
4	4		1209379-01	MATE-N-LOK PIN 20-14AWG LOOSE	4	
5	5		1302609-00	4.7 K 2W 10% CC (13-00	1	R1
6	6		9009000-00	EYELET, ROLLED FLANGE, .121 OD X .156 LG	2	
7	7		9008390-00	FUSE, REG BLOW, 10.000A, 250V, CERAMIC	1	
8	8		9007203-00	CLIP, FUSE, WITH STOP, SCREW MOUNTED	2	
9	9		9107360-99	WIRE,STRND,18AWG,IPVC UL1429 (91-00 A/R		
10	10		9107430-02	WIRE,STRND,18AWG,IPVC (UL1429) (91-00 A/R		

11 NOTE: MS60954 ETCH REV C CS REV B

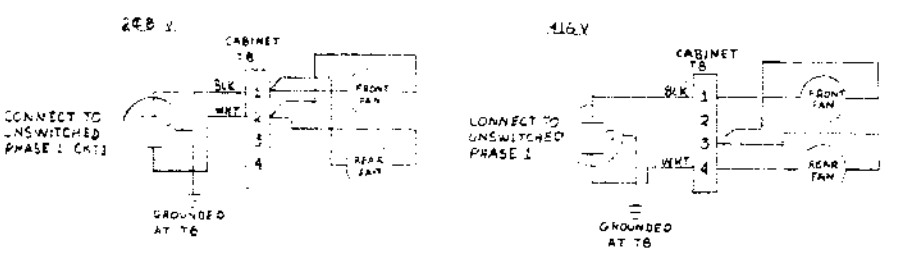
REVISION HISTORY			VARIATIONS FOR THIS ASSY.		FIRST USED ON:		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
CHK	ECD NO	REV			MADE BY:	DATE:	TITLE			
	00003	E	00		D.BILODEAU	08-MAR-78	PARTS LIST			
					F.GAROFALO	08-MAR-78	INPUT RECTIFIED BOARD			
					J.MERCURI	08-MAR-78	SIZE	CODE	DOCUMENT NUMBER	REV
					R.B.KING	08-MAR-78	K	PL	5412411-0-0	E
					J.MERCURI	08-MAR-78	ASSY.NO.: D-UA-5412411-0-0			EDIT#
										3

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CABINET FAN HOOK UP FOR 11/70-CA,CB,MA,MB ONLY

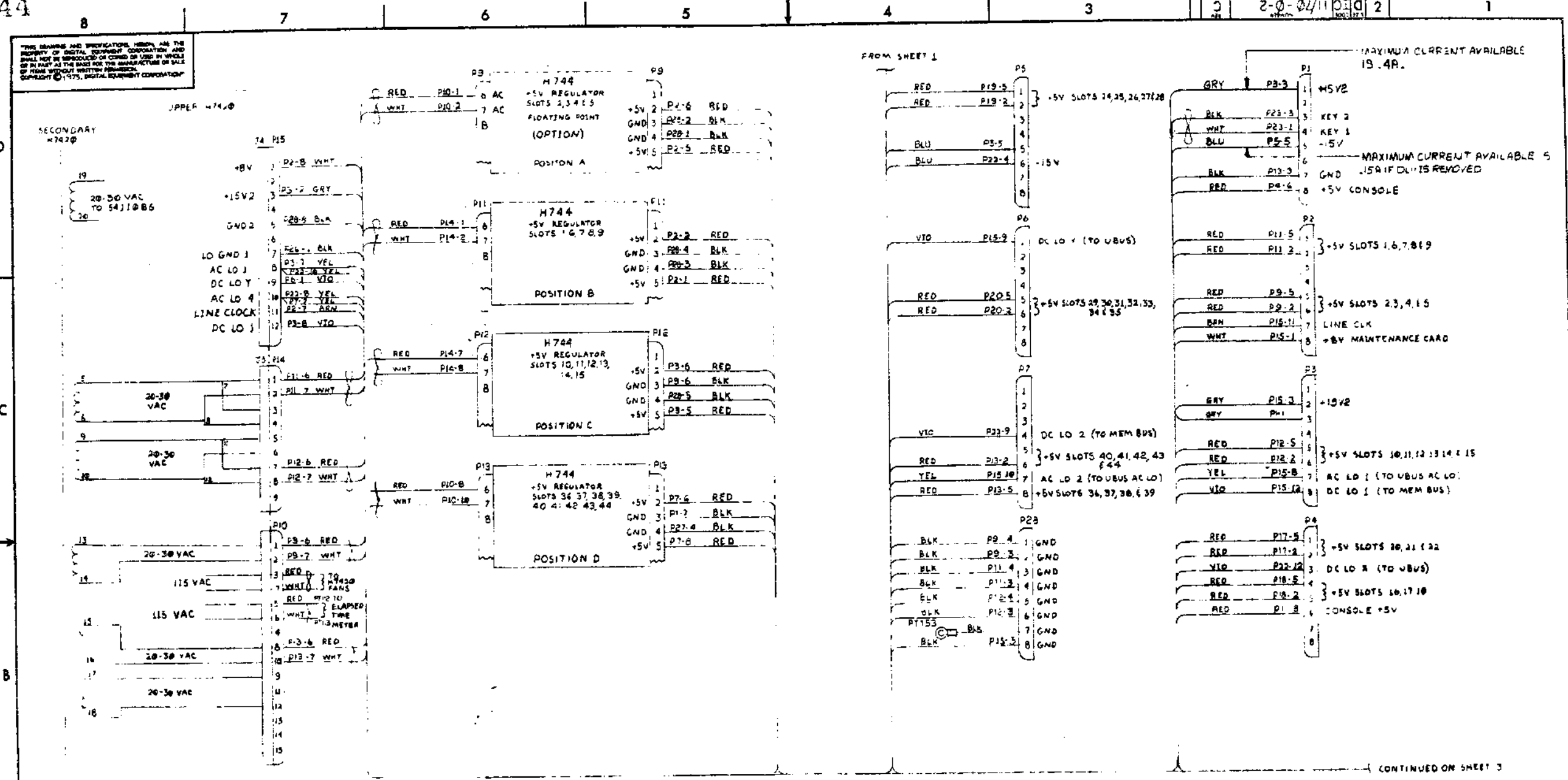


NOTES:
 1. FOR 208VAC OPERATION JUMPER T81-2/6, T81-4/8
 FOR 415 VAC OPERATION JUMPER T81-4/6

THIS SHEET IS FOR ALL 11/70 VARIATIONS

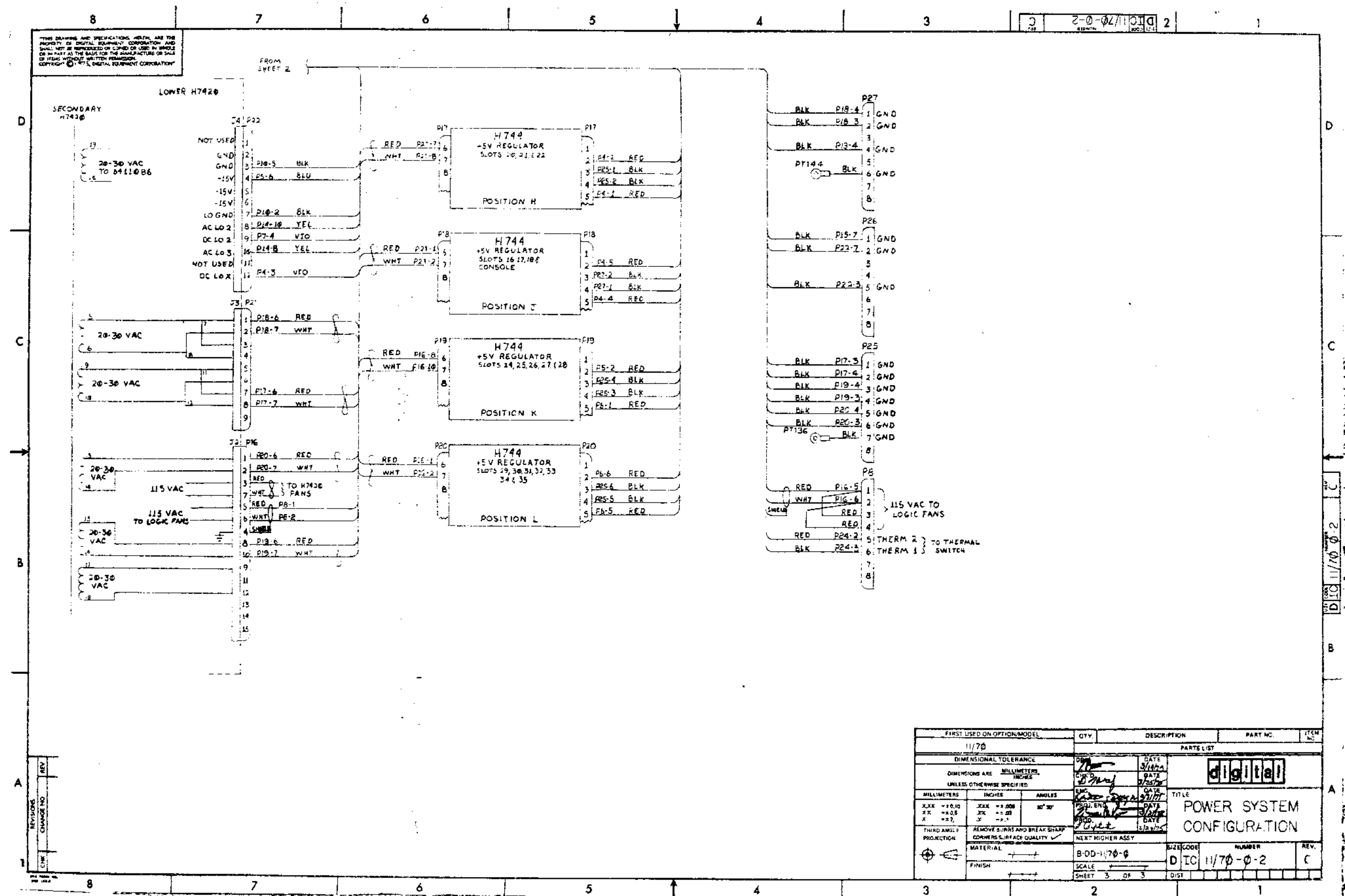
REV	DATE	BY	CHKD	DESCRIPTION
1	11/70	...	...	...
2	...	...	...	...
3	...	...	...	...

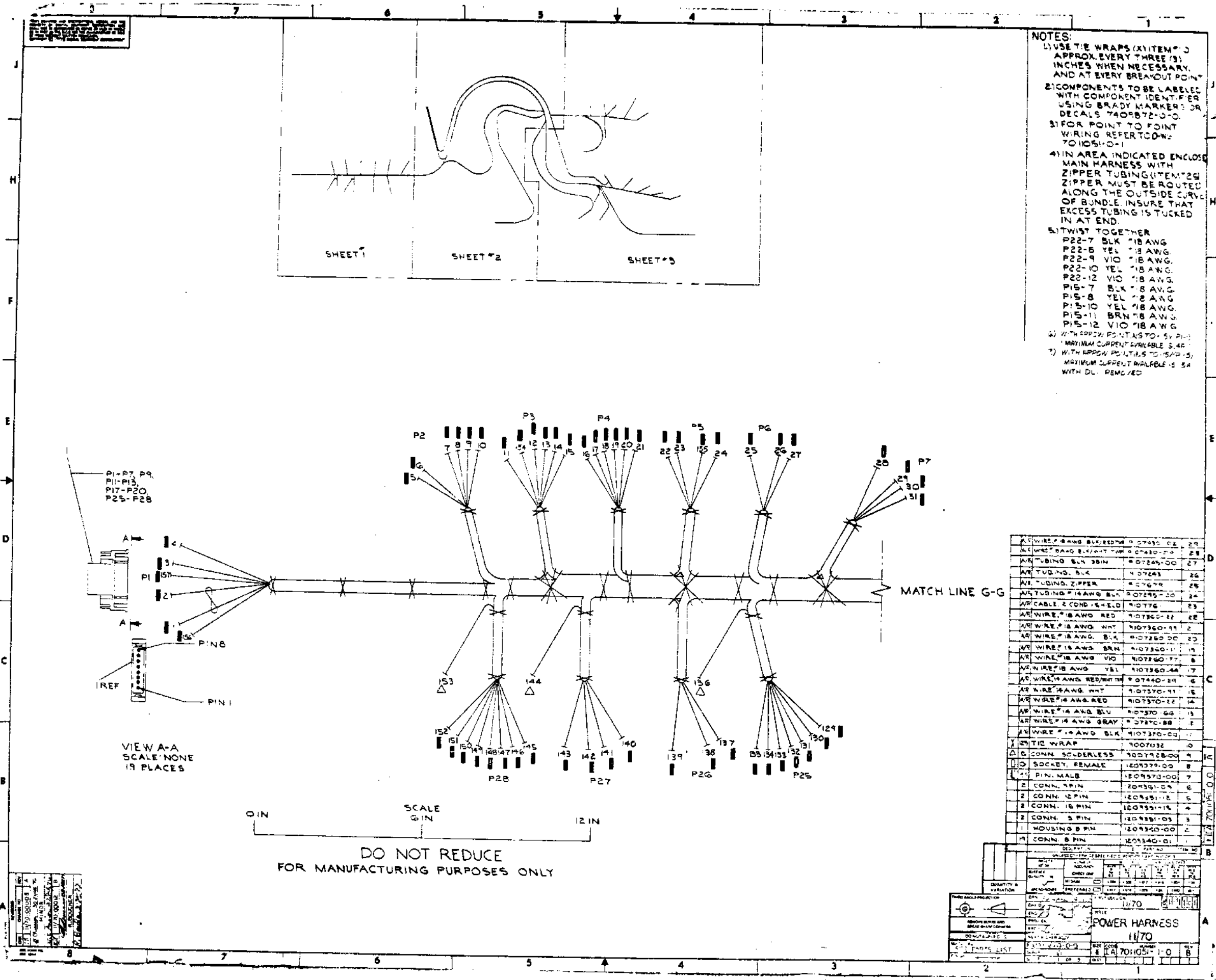
FIRST USED ON OPTION/MODEL 170	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
DIMENSIONAL TOLERANCE		DATE	TITLE	
DIMENSIONS ARE MILLIMETERS		11/70	POWER SYSTEM CONFIGURATION	
UNLESS OTHERWISE SPECIFIED		DATE	REV. C	
MILLIMETERS	INCHES	ANGLES	SIZE CODE NUMBER	
XXX +0.10	XXX +1.008	90° 30'	B-00-1170-0	
XX +0.05	XX +0.004		D-00-1170-0-2	
X +0.2	X +0.1		SHEET 1 OF 3	
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	SCALE	
		NEXT POWER ASSY.	SHEET 1 OF 3	



FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
PARTS LIST				
DIMENSIONAL TOLERANCE				
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED				
MILLIMETERS	INCHES	ANGLES	TITLE	
±.10	±.008	±.00	POWER SYSTEM CONFIGURATION	
±.02	±.001	±.01		
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		REV
MATERIAL		NEXT HIGHER ASSY		NUMBER
SCALE		SIZE CODE		REV
SHEET		Dwg No		REV

Dwg No 1170-02





NOTES:

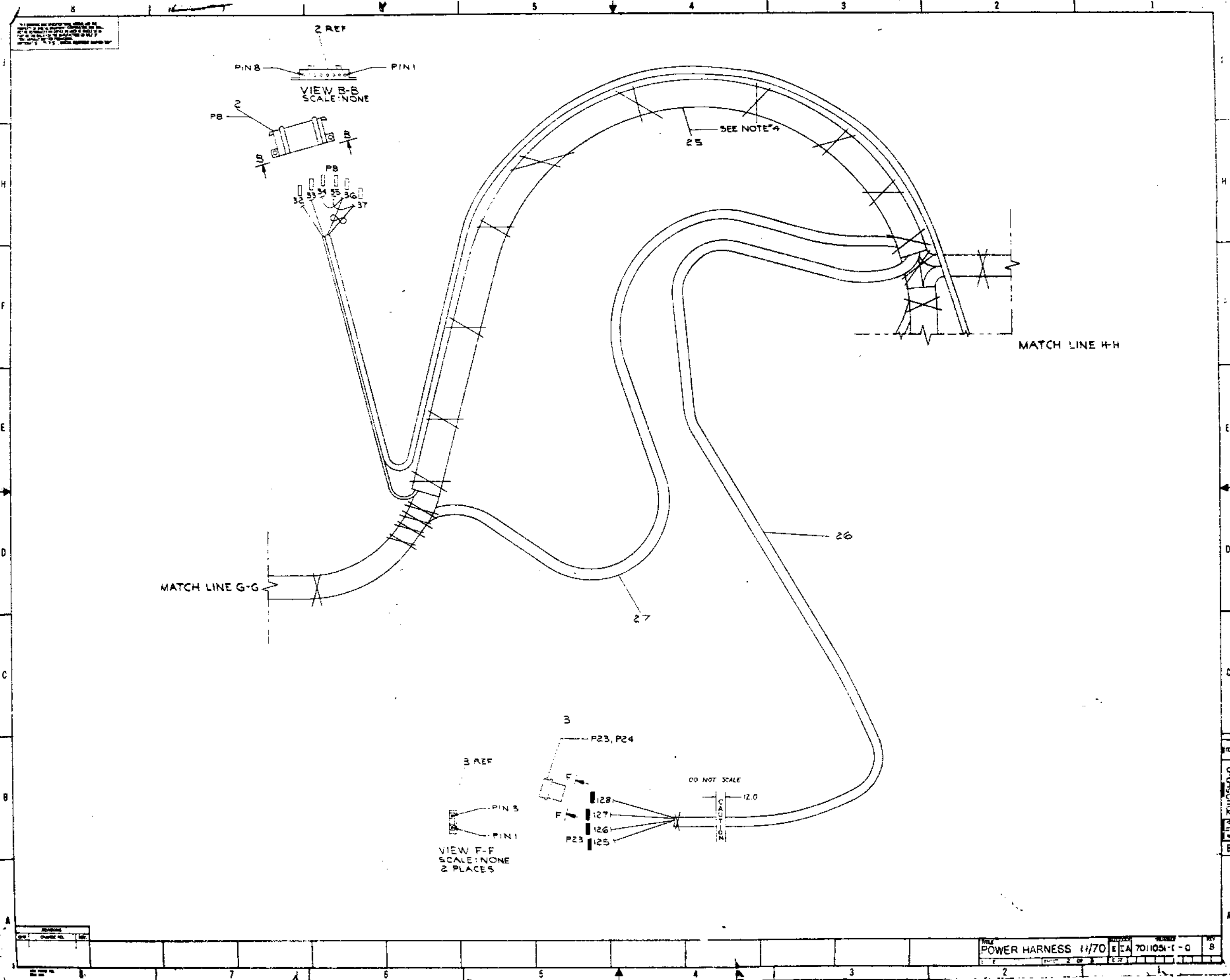
- 1) USE TIE WRAPS (X ITEM 2) APPROX. EVERY THREE (3) INCHES WHEN NECESSARY, AND AT EVERY BREAKOUT POINT
- 2) COMPONENTS TO BE LABELED WITH COMPONENT IDENT. PER USING BRADY MARKER OR DECALS 740872-0-0.
- 3) FOR POINT TO POINT WIRING REFER TO DWG 701051-0-1
- 4) IN AREA INDICATED ENCLOSE MAIN HARNESS WITH ZIPPER TUBING (ITEM 29) ZIPPER MUST BE ROUTED ALONG THE OUTSIDE CURVE OF BUNDLE. INSURE THAT EXCESS TUBING IS TUCKED IN AT END.
- 5) TWIST TOGETHER
 P22-7 BLK 18 AWG
 P22-8 YEL 18 AWG
 P22-9 VIO 18 AWG
 P22-10 YEL 18 AWG
 P22-12 VIO 18 AWG
 P15-7 BLK 18 AWG
 P15-8 YEL 18 AWG
 P15-10 YEL 18 AWG
 P15-11 BRN 18 AWG
 P15-12 VIO 18 AWG

2) WITH APPROX POINTS TO 5/P/15
 1) MAXIMUM CURRENT AVAILABLE IS 3A
 3) WITH APPROX POINTS TO 5/P/15, MAXIMUM CURRENT AVAILABLE IS 3A WITH DL. REMOVED

29	WIRE 18 AWG BLK RED WHT	107490-02	29
28	WIRE 18 AWG BLK WHT	107490-01	28
27	WIRE TUBING BLK 30 IN	107265-00	27
26	WIRE TUBING BLK	107265-00	26
25	WIRE TUBING ZIPPER	107265-00	25
24	WIRE TUBING 18 AWG BLK	107265-00	24
23	WIRE CABLE 2 COND. 18 AWG	107265-00	23
22	WIRE 18 AWG RED	107360-22	22
21	WIRE 18 AWG WHT	107360-11	21
20	WIRE 18 AWG BLK	107360-00	20
19	WIRE 18 AWG BRN	107360-11	19
18	WIRE 18 AWG VIO	107360-11	18
17	WIRE 18 AWG YEL	107360-11	17
16	WIRE 18 AWG RED/WHT	107440-01	16
15	WIRE 18 AWG WHT	107370-11	15
14	WIRE 18 AWG RED	107370-11	14
13	WIRE 18 AWG BLU	107370-00	13
12	WIRE 18 AWG GRAY	107370-00	12
11	WIRE 18 AWG BLK	107370-00	11
10	TIE WRAP	1007032	10
9	CONN. SOLDERLESS	1007928-00	9
8	SOCKET, FEMALE	1009379-00	8
7	PIN, MALE	1009379-00	7
6	2 CONN. 3 PIN	1009351-09	6
5	2 CONN. 16 PIN	1009351-18	5
4	2 CONN. 16 PIN	1009351-18	4
3	2 CONN. 3 PIN	1009351-03	3
2	HOUSING 8 PIN	1009360-00	2
1	19 CONN. 8 PIN	1009360-01	1

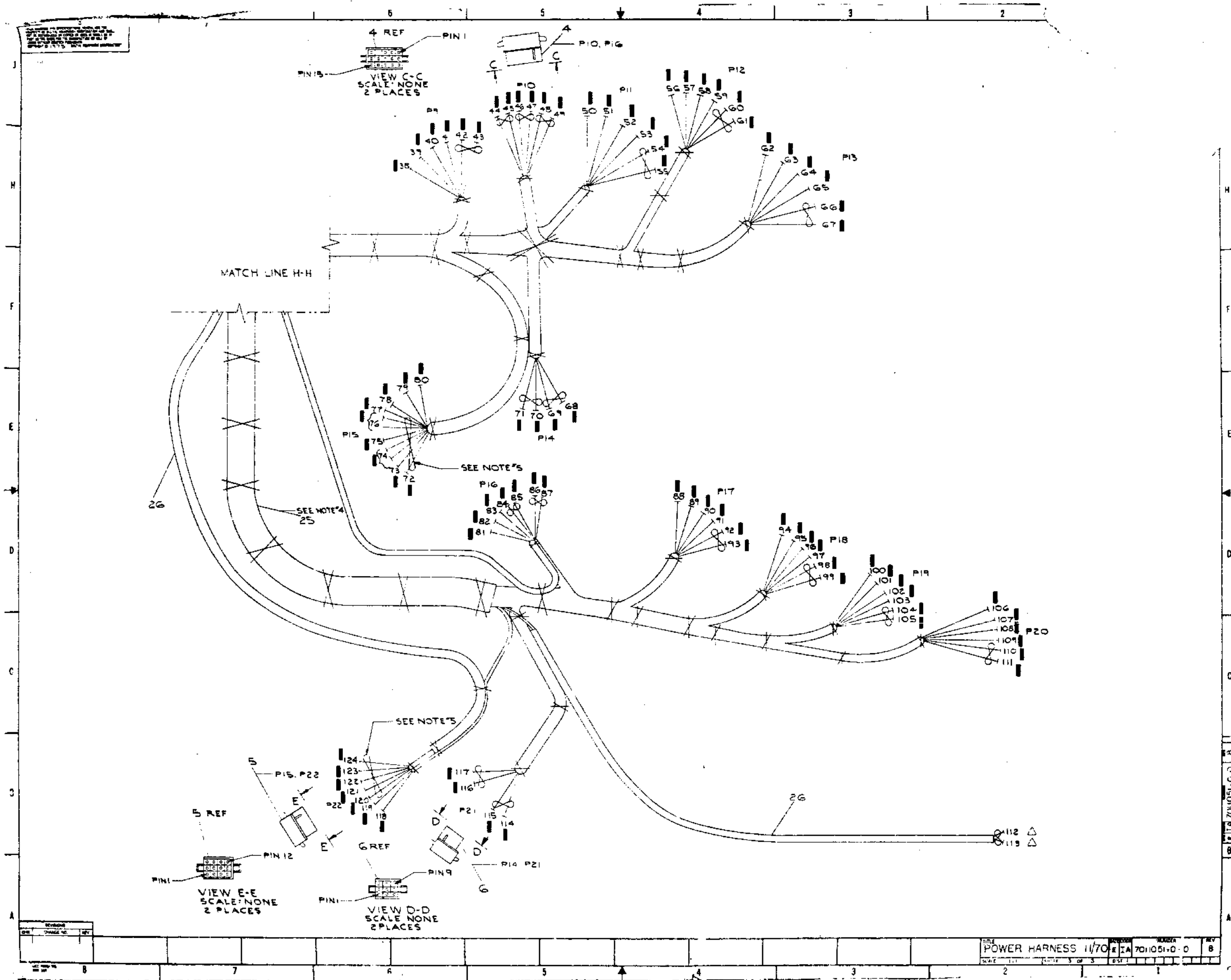
POWER HARNESS
 1170
 1170
 1170

PARTS LIST
 1170
 1170



REV	DESCRIPTION	DATE

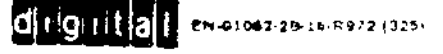
POWER HARNESS 11/70	EIA 7011051-C-0	8
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CUSTOMER PRINT SET					MECHANICAL					CUSTOMER PRINT SET				
MFG SET	DWG NO	DRAWING NO	REV	DESCRIPTION	OPTION NO / FILE DATE	MFG SET	DWG NO	DRAWING NO	REV	DESCRIPTION	OPTION NO / FILE DATE			
	34	B-DD-H224-0	=	3	32 Kx18 BIT STACK (H224-C) 32 Kx19 BIT STACK (H224-E)									
	35	D-UA-H224-0-0	=	1	32 Kx18 BIT MEMORY STACK ASSY									
		E-IA-7012189-0-0		2	CORE PLANE WIRING ASSY									
	36	D-UA-G236-0-0		1	UNIT ASSY G236									
		D-CS-G236-0-1		4	32K MEM DRIVE									
		K-CO-G236-0-4		-	X-Y COORD HOLE LOCATION									
		D-AH-G236-0-5		4	ASSY DRILL HOLE LAYOUT									
		B-MH-G236-0-6		1	MODULE ECO HISTORY									
		A-PL-G236-0-0		5	PARTS LIST									
	37	D-UA-G116-0-0		1	UNIT ASSY G116									
		A-PL-G116-0-0		5	PARTS LIST									
		D-CS-G116-0-1		11	32K SENSE INHIBIT									
		K-CO-G116-0-4		-	X-Y COORD HOLE LOCATION									
		D-AH-G116-0-5		4	ASSY DRILL HOLE LAYOUT									
		B-MH-G116-0-6		1	MODULE ECO HISTORY									

CUSTOMER PRINT SET CODES
 C = INCLUDES ALL PRINTS (DRAWING, PHOTO, ETC.)
 S = CONFIDENTIAL AND/OR SPECIAL OPERATIONS (SPECIAL)

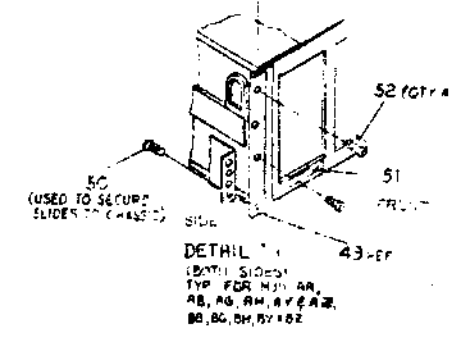
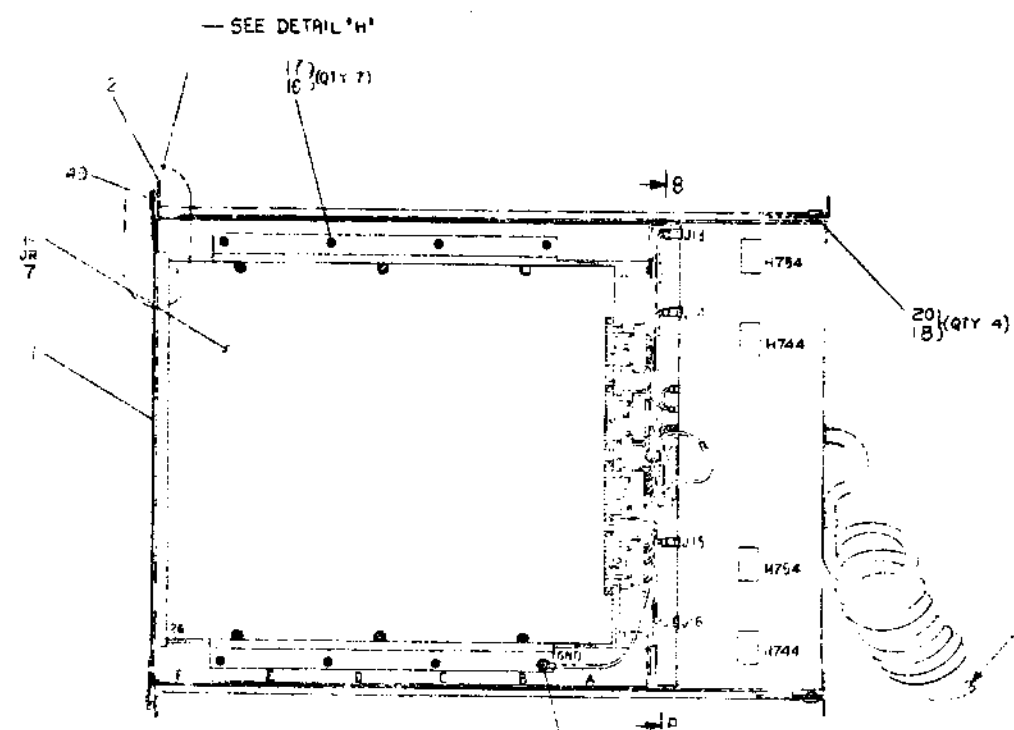
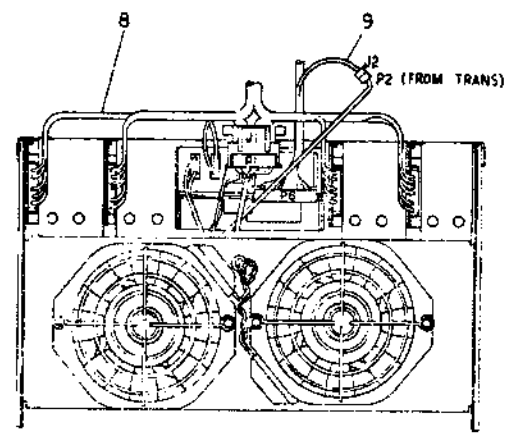
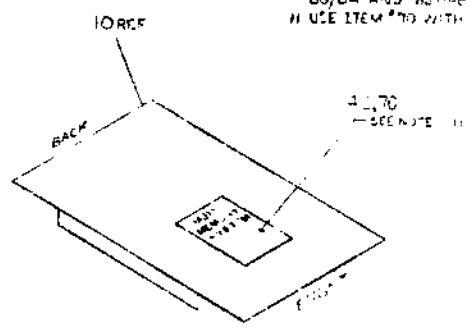
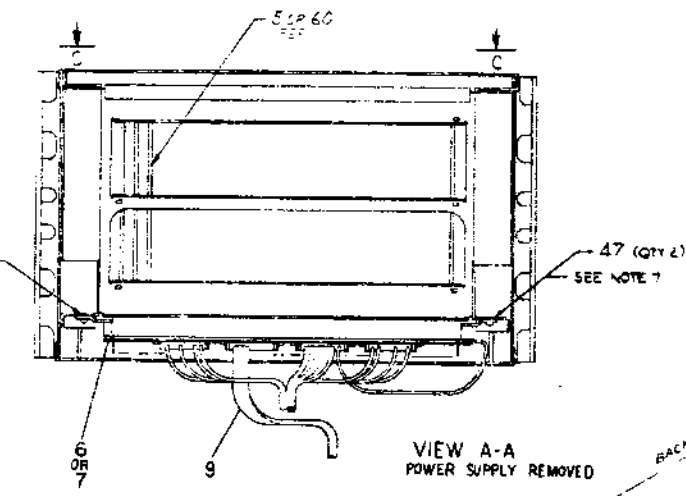
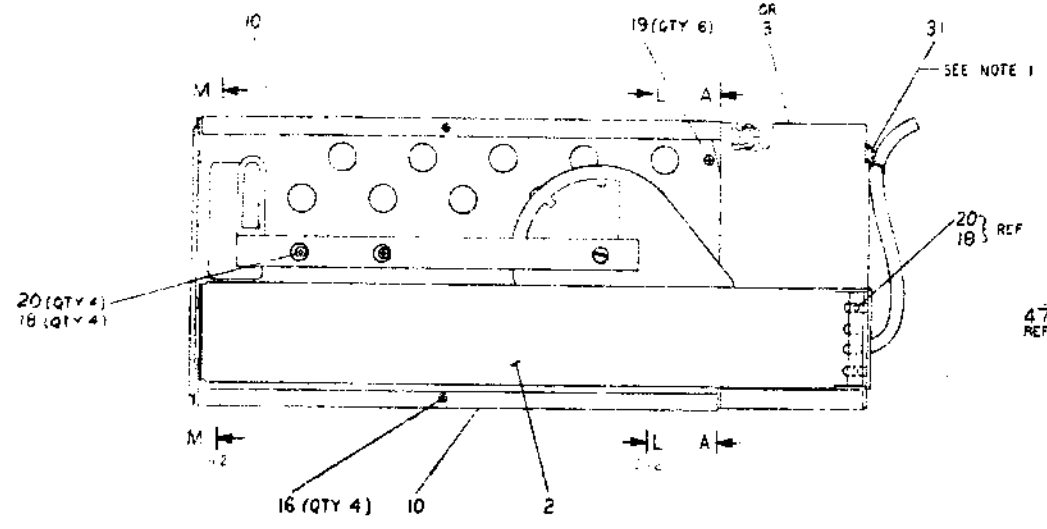
DRI 103



REV 10 05 10 8 10 MJ11-0 K

LEGEND							
NUMBER	VARIATION	NUMBER	VARIATION	NUMBER	VARIATION	NUMBER	VARIATION
MJII-BA	64K 16 BIT MEM 115V	MJII-BG	MJII-BA(5)MJII-BE 115V	MJII-AA	32K 18 BIT MEM. 115V	MJII-AG	MJII-AA (3)MJII-AE 115V
MJII-BB	64K 16 BIT MEM 230V	MJII-BH	MJII-BB(5)MJII-BE 230V	MJII-AB	32K 18 BIT MEM. 230V	MJII-AH	MJII-AB (3)MJII-AE 230V
MJII-BC	MJII-BA WITH CAB 115V	MJII-BM	32K 18 BIT MEM. MODULE SET	MJII-AC	MJII-AA WITH CAB 115V	MJII-AM	16K 18 BIT MEMORY MODULE SET
MJII-BD	MJII-BB WITH CAB 230V	MJII-BY	MJII-BA-NO CABLES 115V	MJII-AD	MJII-AB WITH CAB 230V	MJII-AY	MJII-AA-NO CABLES 115V
MJII-BE	64K 16 BIT EXPAN (2 MJII-BM)	MJII-BZ	MJII-BB-NO CABLES 230V	MJII-AE	32K 18 BIT EXPANSION (2-MJII-AM)	MJII-AZ	MJII-AB-NO CABLES 230V

- NOTES:
- 1 USE EXISTING HARDWARE TO MOUNT ITEM # 31
 - 2 FOR MJII-AA/AB/AC/AD EXPANSION UNIT INSTALLATION WITH 11/70 CABINET 1 USE DATA EXPANSION CABLE ASSY (70J024) AND ADDRESS EXPANSION CABLE ASSY (70J024) IF RECEIVED FOR EXPANSION UNIT INSTALLATION WITH 11/70 CABINET 2 USE 70J024-0-2 FOR MODIFICATION TO BE MADE TO CABLES BEFORE INSTALLATION.
 - 3 PIN FOR DOOR MTG TO BE REMOVED REAR OF CAB (BOTTOM).
 - 4 FOR 11/70 SYSTEM EXPANSION SEE 2-AR-11/70-0-1
 - 5 ADDITIONAL ITEM #40 WITH (4) 1/2" PIECES OF HARDWARE ITEM # 8 1/4-30 TO BE SUPPLIED WITH EACH UNIT. AD. 37 IS TO BE FITTED BY PLAST. BR.
 - 6 ITEM #44 (861-D) TO BE SUPPLIED TO BE SUPPLIED WITH EACH MJII-AC/AM IN PLASTIC BAG
 - 7 INSTALL ITEM #7 BETWEEN ITEM #1 AND ITEM #8 DO NOT USE ITEM #1 (EL-PAS) BACKPLATE IS USED
 - 8 INSTALL ITEM #10 WITH ITEM #10 USING ITEM #10-0-1
 - 9 LOCATE ITEM #20 AT 1/2" FROM EACH BG/BU AND ADJIB 180
 - 10 USE ITEM #10 WITH MJII-B



BOTTOM VIEW
ITEM #10 COVER REMOVED
FOR CLARITY

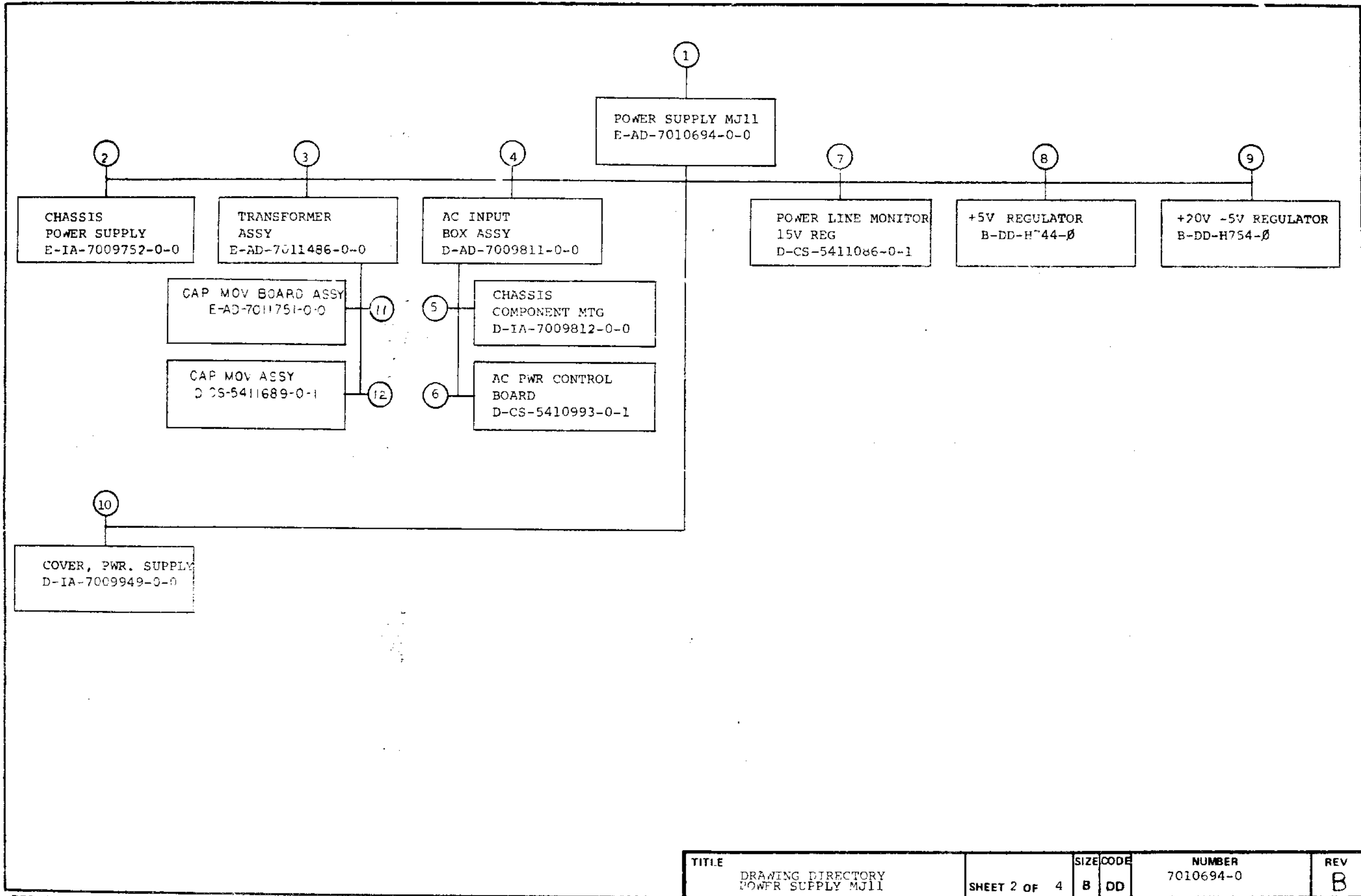
VIEW B-B
REVOLVED 90° CCW
WIRING SIDE OF POWER SUPPLY
ITEM # 3 OR 4

DETAIL H
1/2" SIDE
FOR MJII-AA,
AB, AC, AM, AY, AZ,
BB, BC, BH, BY, BZ

OFF SHIP PARTS LIST EXISTS SEE
A PL 11/70-0-1

ITEM NO	DESCRIPTION	QTY	UNIT
1
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UNIT ASSY
MJII-A



TITLE	DRAWING DIRECTORY POWER SUPPLY MJ11	SHEET 2 OF 4	SIZE CODE B DD	NUMBER 7010694-0	REV B
-------	--	--------------	-------------------	---------------------	----------

CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET		MECHANICAL				
1	MFG. SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	1	MFG. SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1		2	POWER SUPPLY MJ11				6		1	AC PWR CONTROL BD.	
				1	COVER, POWER SUPPLY						1	X-Y COORDINATE HOLE LOC.	
				1	THROUGH WIRE						1	ASSY/DRILLING HOLE LAYOUT	
											1	MODULE ECO HISTORY	
											REF	ETCH CIRCUIT BOARD	
		2		1	CHASSIS, POWER SUPPLY				7		4	PWR. LINE MONITOR/ 15V REG	
				1	CHASSIS, POWER SUPPLY						1	X-Y COORDINATE HOLE LOC.	
				1	SIDE, POWER SUPPLY						1	ASSY/DRILLING HOLE LAYOUT	
				1	HOUSING COMP. CHASSIS						REF	ETCH CIRCUIT BOARD	
		3		2	TRANSFORMER ASSY				8		2	DRAWING DIRECTORY H744	
				1	DECAL								
		4		2	AC IMPUT BOX ASSY				9		3	DRAWING DIRECTORY H754	
				1	DECAL 115V								
				1	POWER CORD				10		1	COVER, POWER SUPPLY	
				1	DECAL 230V						1	STRIP, CLAMP	
				1	POWER CONTROL HARNESS								
				1	POWER JUMPER								
				1	VARISTOR ASSY				11			CAP MOV BOARD ASSEMBLY	
				1	DECAL (PLUG NUMBERS)								
		5		1	CHASSIS COMPONENT MTG.				12			CAP MOV ASSEMBLY	
				1	PLATE SWITCH							MODULE ECO HISTORY	
				1	PLATE COMPONENT MTG.								

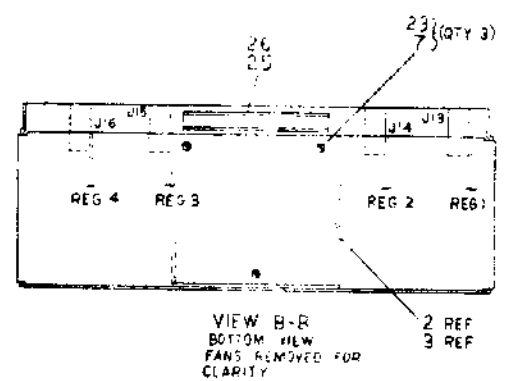
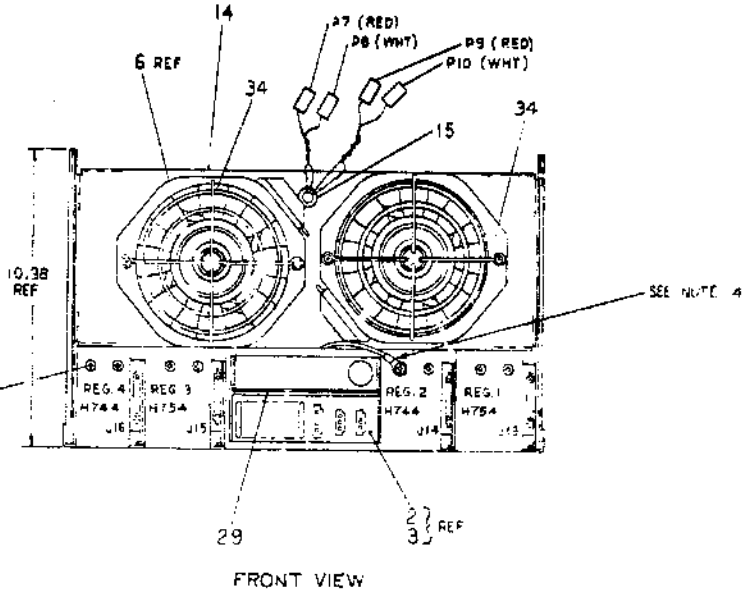
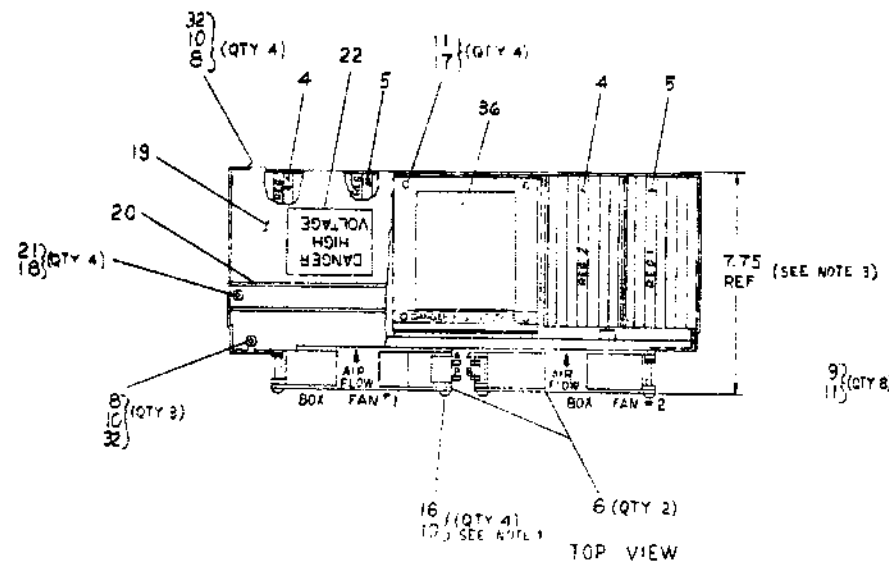
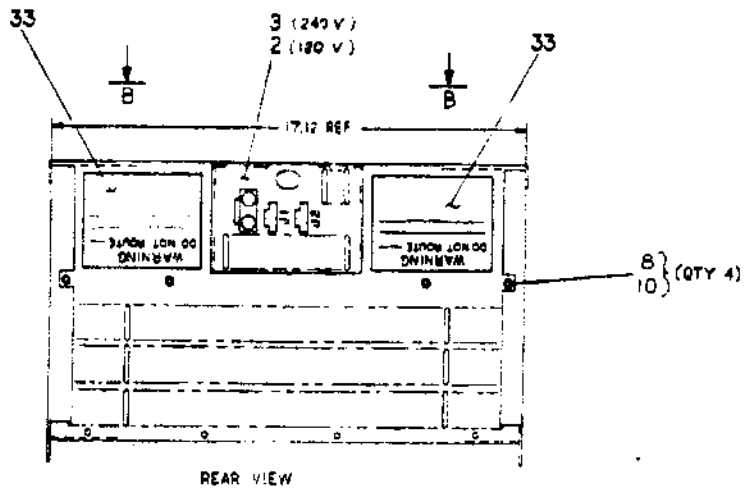
CUSTOMER PRINT SET CODES
 X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
 C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
 S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE
 DRAWING DIRECTORY POWER SUPPLY MJ11
 SHEET 4 OF 4
 SIZE CODE B DD
 NUMBER 7010694-0
 REV B

REVISIONS

LEGEND	
NUMBER	VARIATION
7010694-0	120V 50/60 HZ
7010694-1	240V 50/60 HZ

- NOTES:
- TIGHTEN FAN SCREWS TO 10 IN-LBS WITH A TORQUE SCREW DRIVER.
 - SEE NOTE 3 FOR ITEM #6 (DEC SPEC #121174-00) USE ONLY 1/2" HIGH FAN IN THIS ASSY. DO NOT USE 3" HIGH FAN.
 - ATTACH GROUND WIRE FROM TRANSFORMER (GRN/YEL WIRE) USING EXISTING HARDWARE.



ITEM NO	DESCRIPTION	QTY	UNIT
1	AC INPUT BOX ASSY 240V	1	EA-7010694-0
2	240V REGULATOR (H744)	2	H744
3	120V REGULATOR (H744)	2	H744
4	SCR PH. HD TRUSS PD 12X62	4	9008404-2
5	SCR PH. HD TRUSS PD 12X62	4	9008404-2
6	FAN 1/2 VAC 50/60 HZ (1/2)	2	121174-00
7	SCR PH. HD TRUSS PD 12X62	4	9008404-2
8	SCR PH. HD TRUSS PD 12X62	4	9008404-2
9	SCR PH. HD TRUSS PD 12X62	4	9008404-2
10	SCR PH. HD TRUSS PD 12X62	4	9008404-2
11	SCR PH. HD TRUSS PD 12X62	4	9008404-2
12	SCR PH. HD TRUSS PD 12X62	4	9008404-2
13	SCR PH. HD TRUSS PD 12X62	4	9008404-2
14	SCR PH. HD TRUSS PD 12X62	4	9008404-2
15	SCR PH. HD TRUSS PD 12X62	4	9008404-2
16	SCR PH. HD TRUSS PD 12X62	4	9008404-2
17	SCR PH. HD TRUSS PD 12X62	4	9008404-2
18	SCR PH. HD TRUSS PD 12X62	4	9008404-2
19	SCR PH. HD TRUSS PD 12X62	4	9008404-2
20	SCR PH. HD TRUSS PD 12X62	4	9008404-2
21	SCR PH. HD TRUSS PD 12X62	4	9008404-2
22	SCR PH. HD TRUSS PD 12X62	4	9008404-2
23	SCR PH. HD TRUSS PD 12X62	4	9008404-2
24	SCR PH. HD TRUSS PD 12X62	4	9008404-2
25	SCR PH. HD TRUSS PD 12X62	4	9008404-2
26	SCR PH. HD TRUSS PD 12X62	4	9008404-2
27	SCR PH. HD TRUSS PD 12X62	4	9008404-2
28	SCR PH. HD TRUSS PD 12X62	4	9008404-2
29	SCR PH. HD TRUSS PD 12X62	4	9008404-2
30	SCR PH. HD TRUSS PD 12X62	4	9008404-2
31	SCR PH. HD TRUSS PD 12X62	4	9008404-2
32	SCR PH. HD TRUSS PD 12X62	4	9008404-2
33	SCR PH. HD TRUSS PD 12X62	4	9008404-2
34	SCR PH. HD TRUSS PD 12X62	4	9008404-2
35	SCR PH. HD TRUSS PD 12X62	4	9008404-2
36	SCR PH. HD TRUSS PD 12X62	4	9008404-2

(SEE NOTE 3)

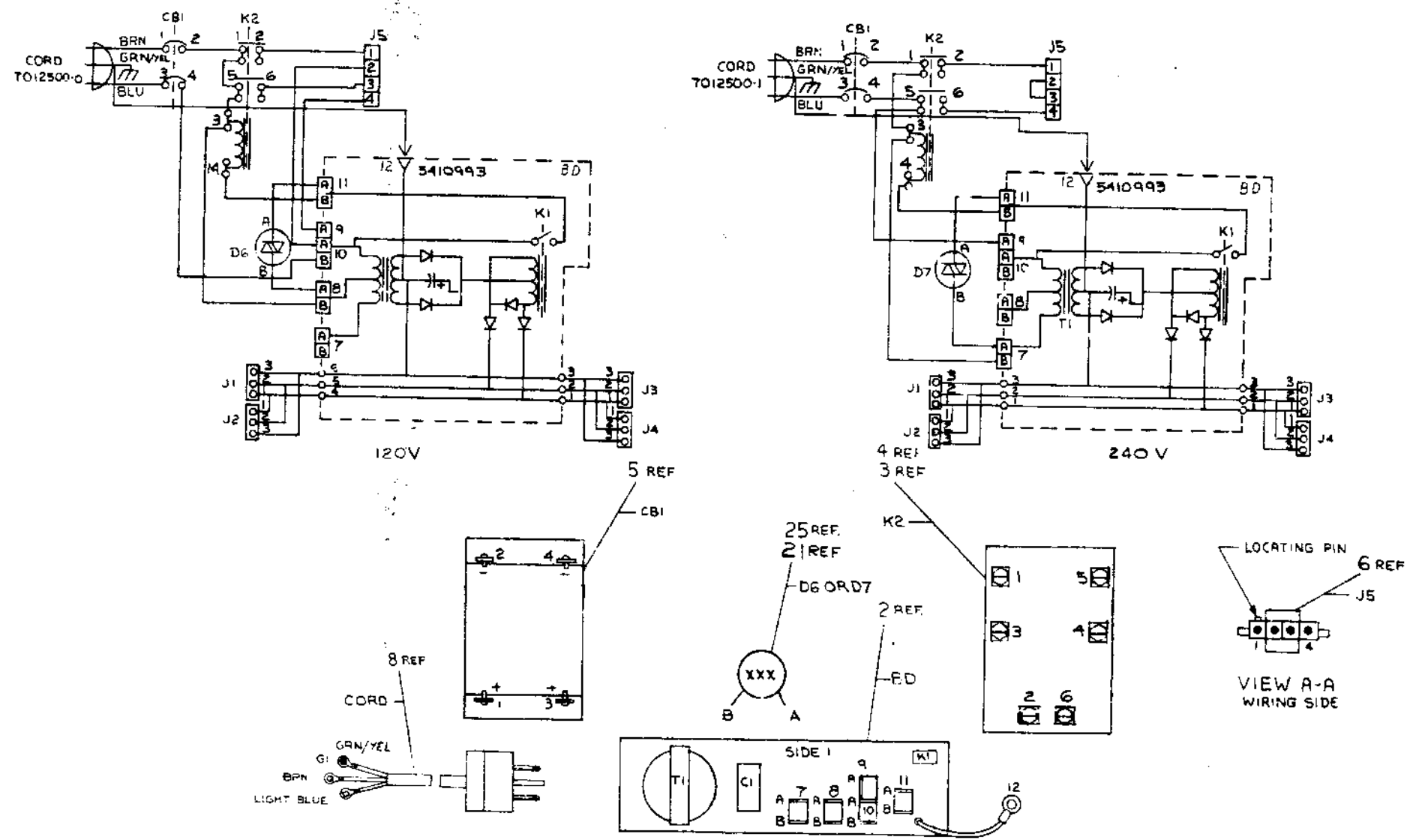
POWER SUPPLY
MULTI

7010694-0

1

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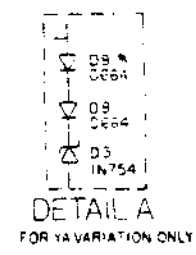
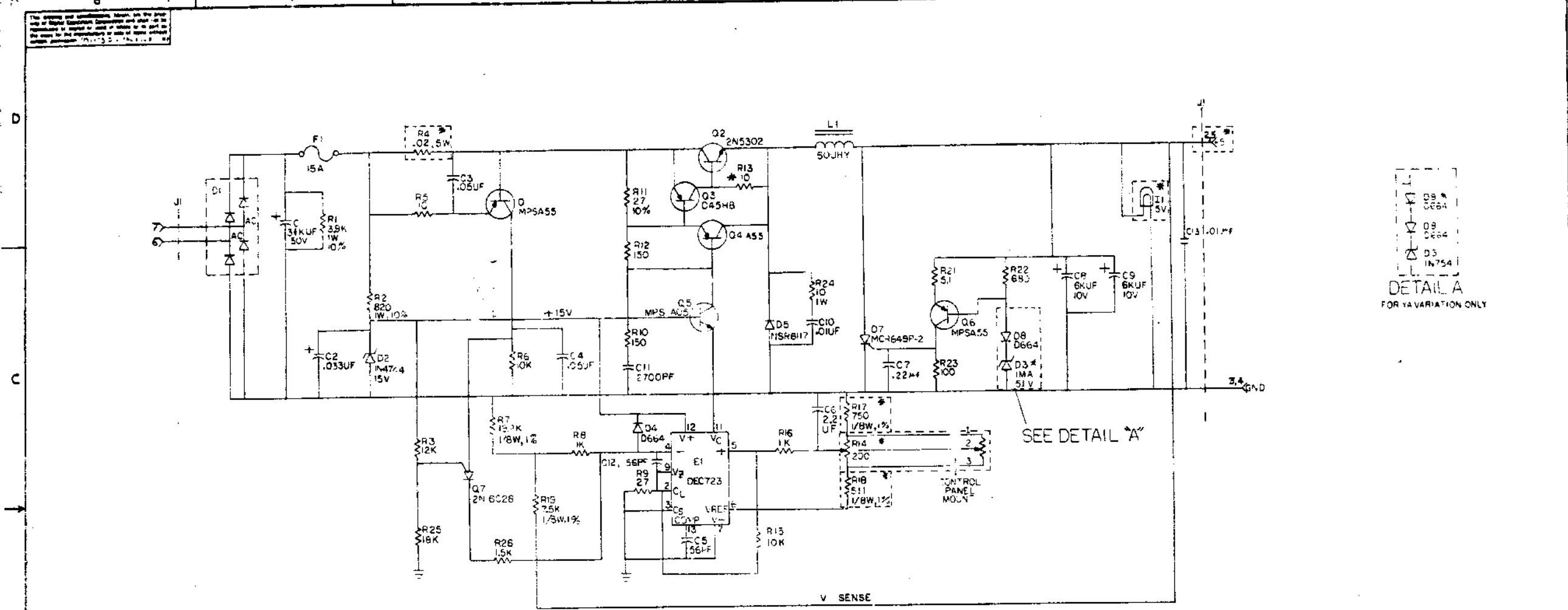
0-0-18600Z PVQ 2



REV	CHANGE NO	REV

TITLE: AC INPUT BOX ASS'Y
 SCALE: NONE
 SHEET: 2 OF 2
 SIZE CODE: D AD
 NUMBER: 7009811-0-C
 REV: 3

1-0-074 H744-0-1



SEE DETAIL "A"

* FUSIBLE RESISTOR

- FOR YA VARIATION COMPONENT VALUES ARE AS FOLLOWS:
- R4 - 06 SW
 - R7 - 1K 10TURN
 - R9 - 100 1/8W
 - R19 - 100 1/8W
 - D3 - 1N754
 - J1 - 15
 - J1 - 2.5 - 20-80V
- * D3 - 0664 ADDED FOR YA VARIATION ONLY

UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/4W, 5%

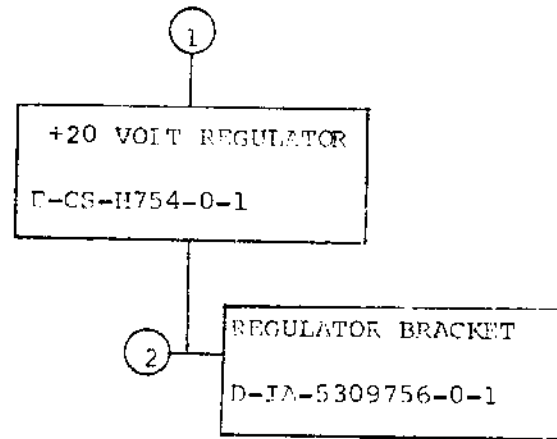
U1	7414	00010	Y	5
A1	BARON	5-3-74	W	1
A2	BARON	5-3-74	W	1
A3	BARON	5-3-74	W	1
A4	BARON	5-3-74	W	1
A5	BARON	5-3-74	W	1
A6	BARON	5-3-74	W	1
A7	BARON	5-3-74	W	1
A8	BARON	5-3-74	W	1
A9	BARON	5-3-74	W	1
A10	BARON	5-3-74	W	1
A11	BARON	5-3-74	W	1
A12	BARON	5-3-74	W	1
A13	BARON	5-3-74	W	1
A14	BARON	5-3-74	W	1
A15	BARON	5-3-74	W	1
A16	BARON	5-3-74	W	1
A17	BARON	5-3-74	W	1
A18	BARON	5-3-74	W	1
A19	BARON	5-3-74	W	1
A20	BARON	5-3-74	W	1

QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO
		PARTS LIST		
		ETCH BOARD REV F H		
		digital EQUIPMENT CORPORATION		
		5V REGULATOR		
		DICS H744-0-1		

CUSTOMER PRINT SET		ELECTRICAL					CUSTOMER PRINT SET		MECHANICAL					
	MFG SET	FIND NO	DRAWING NO	REV	NO OF SHT	OPTION NO / FILE DATE		MFG SET	FIND NO	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO / FILE DATE
X		1	B-DD-H754-0	=	3		X		1	E-CS-H754-0-1	=	2	-20 VOLT REGULATOR	
X			E-CS-H754-0-1	=	2					D-PS-1210737-0-0		1	HEAT SINK FLIGHT LOCK	
			K-CO-H754-0-4	-						C-FA-5309758-0-0		1	CAPACITOR BRACKET	
			D-AP-H754-0-5		1									
			B-MU-H754-0-6		1									
			5010531	-										
			A-SP-H754-0-8		3									
									2	D-FA-5409756-0-0		1	BRACKET REGULATOR	
										A-SS-5309756-0-1		1	SILK SCREEN	
										A-SS-5309756-0-2		1	SILK SCREEN	
										A-SS-5309756-0-3		1	SILK SCREEN	

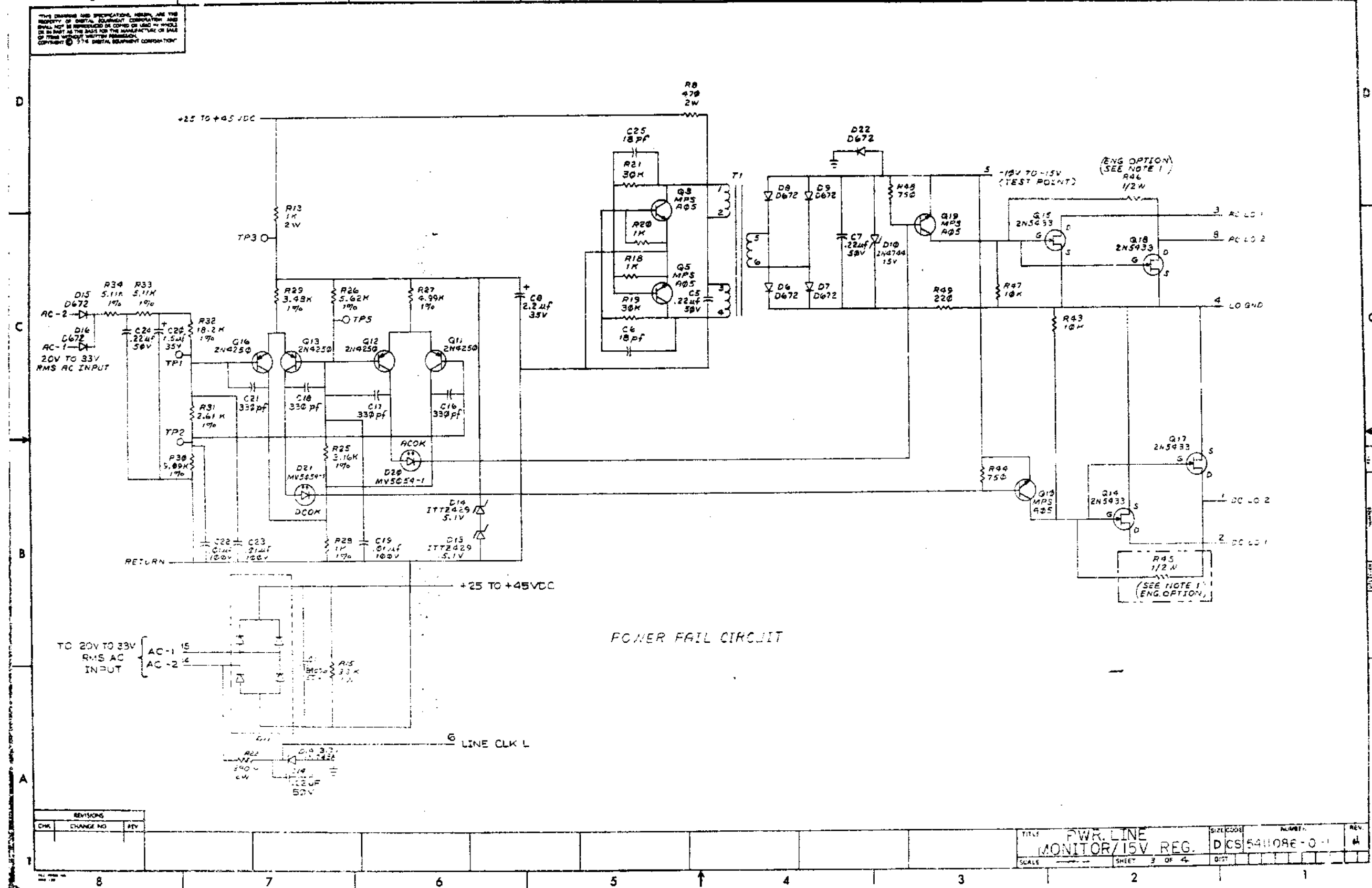
CUSTOMER PRINT SET CODES
 X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
 C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
 S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE: +20 VOLT REGULATOR
 SHEET OF: 8 DD NUMBER: 1004-1 REV: E



TITLE	SHEET	OF	SIZE	CODE	NUMBER	REV
+20 VOLT REGULATOR	3	3	B	DD	11754-0	B

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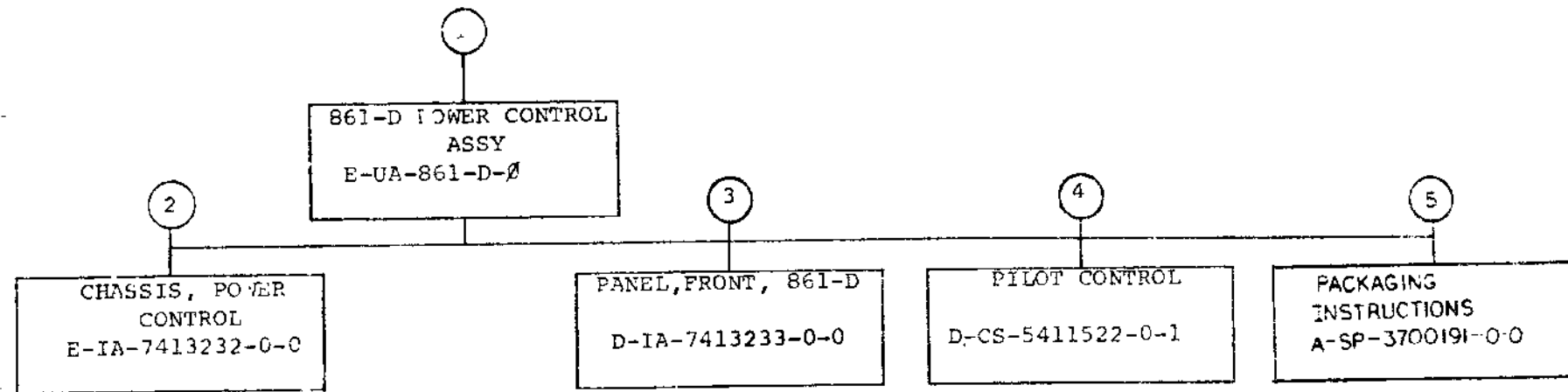


REVISIONS		
CHK	CHANGE NO	REV

TITLE	PWR. LINE MONITOR/15V REG.	SIZE CODE	D/CS/541086-0-1	NUMB.		REV.	
SCALE		SHEET	3 OF 4	DIST.			

DCS/541086-0-1 U

280



TITLE	SHEET	OF	SIZE	CODE	NUMBER	REV
861-D POWER CONTROL	2	3	B	DD	861-D	B

262

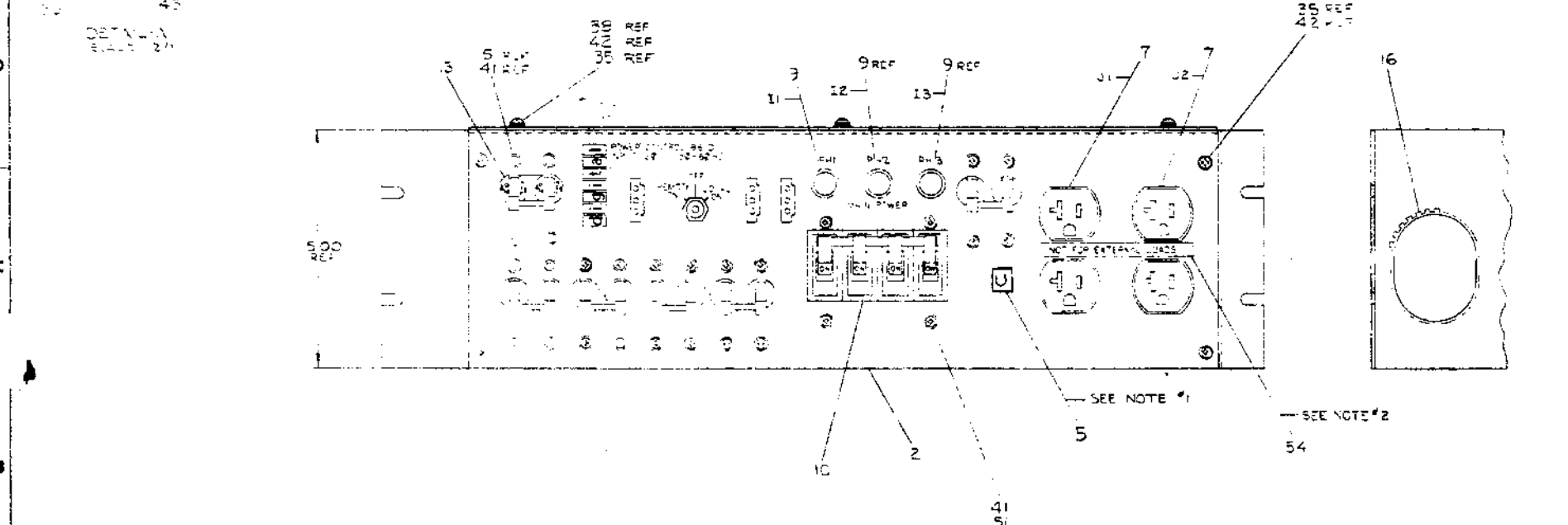
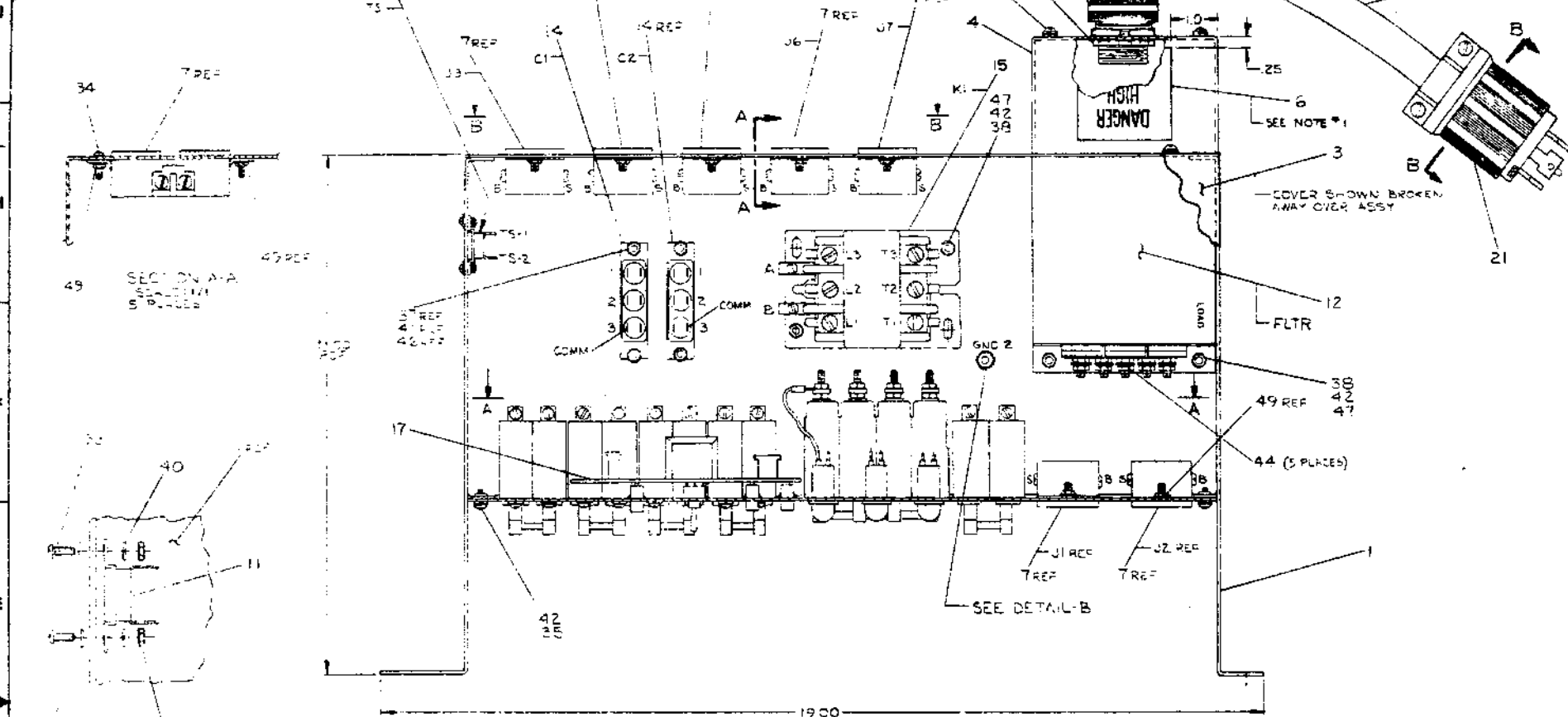
CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET		ELECTRICAL						
		MFG SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE			MFG SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X			1	*	2	861-D POWER CONTROL ASSY		X			1	*	2	861-D POWER CONTROL ASSY	
X				*	3	861-D POWER CONTROL ASSY P.L.		X				*	1	861-D POWER CONTROL SCHEMATIC	
					1	COVER, POWER CONTROL							4	861-D TEST PROCEDURE	
					1	BRACKET, STRAIN RELIEF									
					1	MOV ASSY									
					1	PILOT LAMP ASSY									
					1	HARNESS #1, POWER CONTROL									
					1	HARNESS #3, POWER CONTROL									
					1	HARNESS #5, POWER CONTROL									
					1	HARNESS #6, POWER CONTROL		X			4	*	1	PILOT CONTROL	
					1	HARNESS #8, POWER CONTROL								DRILL TAPE	
					1	JUMPER, WIRE								MODULE ECO HISTORY	
					1	DECAL (NOT FOR EXTERNAL LOADS)								PILOT CONTROL TEST PROCEDURE	
														ASSY DRILL HOLE LAYOUT	
			2		2	CHASSIS, POWER CONTROL									
					1	SILK SCREEN, CHASSIS									
			3		2	PANEL, FRONT, 861-D									
					1	SILK SCREEN, FRONT PANEL, 861-D									
X			5		2	PACKAGING INSTRUCTIONS, 861-D									
					2	FULL OVERLAP CARTON									
					2	LAMINATED BUILDUP									
					1	TAPE - GLASPLEX									

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

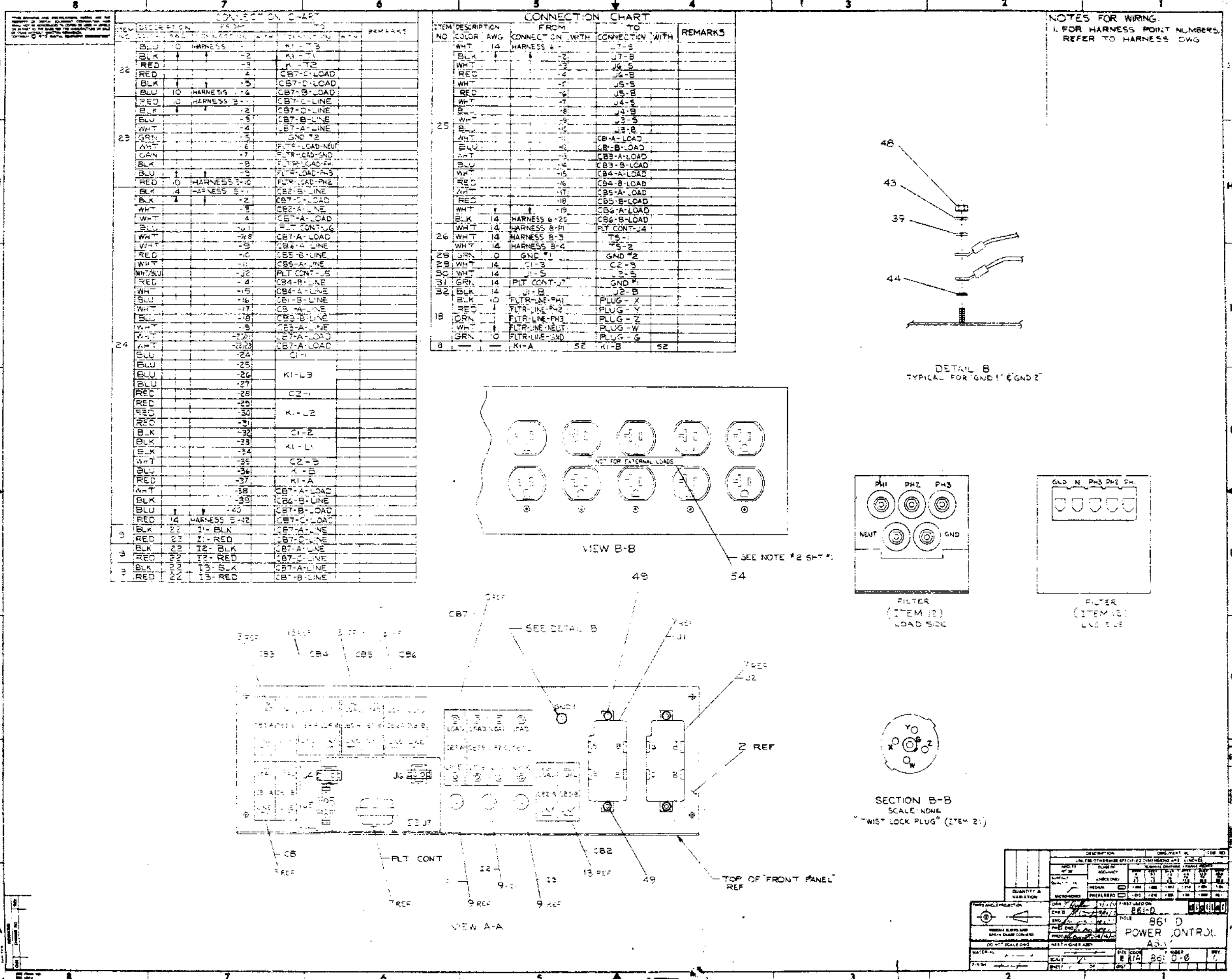
TITLE: 861-D POWER CONTROL
 SHEET 3 OF 3
 SIZE CODE: B DD
 NUMBER: 861-D
 REV: B

1. LOCATE DECALS (ITEM # 46)
2. APPROX AS SHOWN.
3. PLACE DECALS AT THE
4. FOLLOWING LOCATIONS:

NOTES:
1. LOCATE DECALS (ITEM # 46)
2. APPROX AS SHOWN.
3. PLACE DECALS AT THE
4. FOLLOWING LOCATIONS:

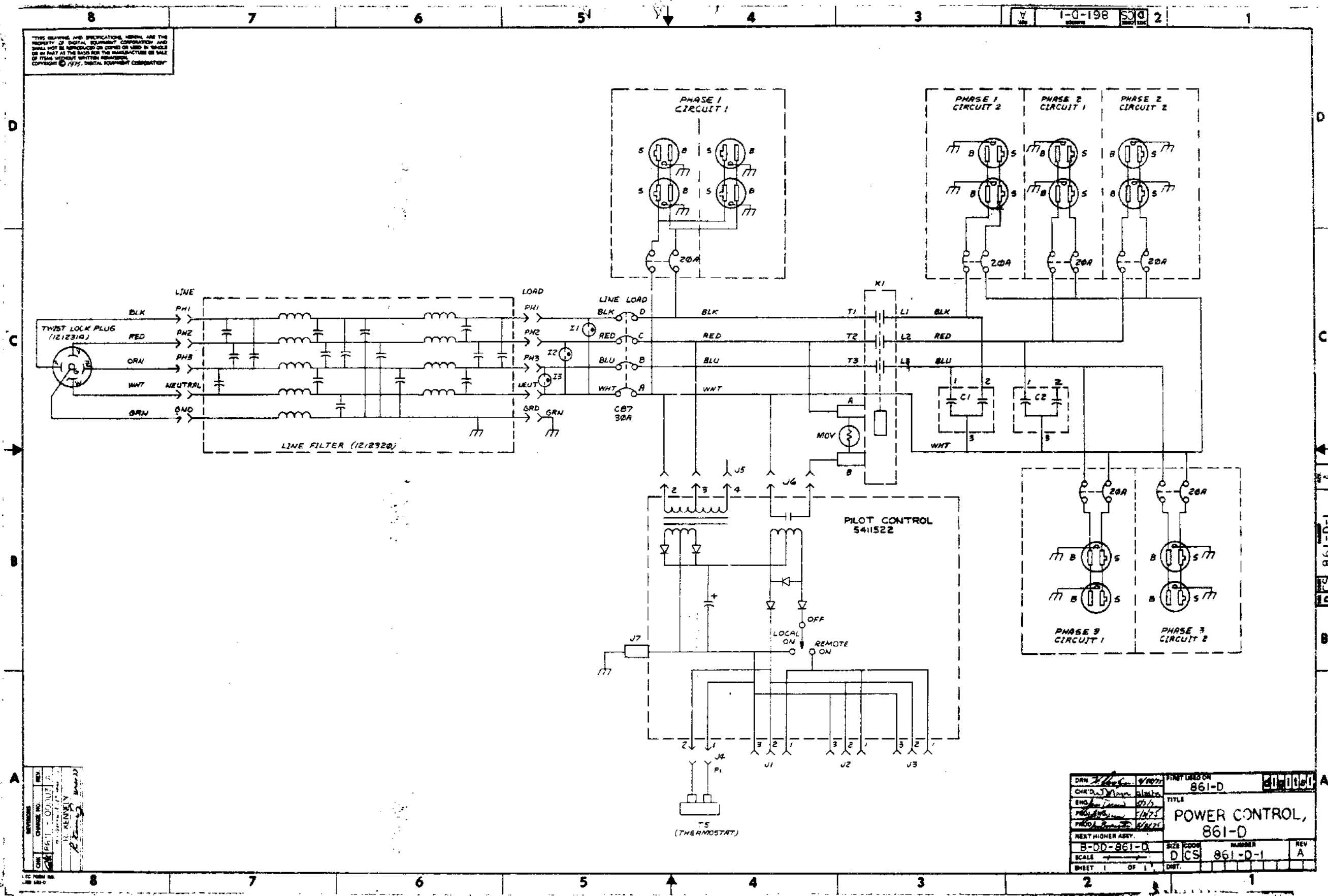


DESCRIPTION		QTY	UNIT	REF
1	COVER SHOWN BROKEN	1	PCB	3
2	FLTR	1	PCB	12
3	FLTR	1	PCB	12
4	FLTR	1	PCB	12
5	FLTR	1	PCB	12
6	FLTR	1	PCB	12
7	FLTR	1	PCB	12
8	FLTR	1	PCB	12
9	FLTR	1	PCB	12
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13	FLTR	1	PCB	12
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15	FLTR	1	PCB	12
16	FLTR	1	PCB	12
17	FLTR	1	PCB	12
18	FLTR	1	PCB	12
19	FLTR	1	PCB	12
20	FLTR	1	PCB	12
21	FLTR	1	PCB	12
22	FLTR	1	PCB	12
23	FLTR	1	PCB	12
24	FLTR	1	PCB	12
25	FLTR	1	PCB	12
26	FLTR	1	PCB	12
27	FLTR	1	PCB	12
28	FLTR	1	PCB	12
29	FLTR	1	PCB	12
30	FLTR	1	PCB	12
31	FLTR	1	PCB	12
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77	FLTR	1	PCB	12
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92	FLTR	1	PCB	12
93	FLTR	1	PCB	12
94	FLTR	1	PCB	12
95	FLTR	1	PCB	12
96	FLTR	1	PCB	12
97	FLTR	1	PCB	12
98	FLTR	1	PCB	12
99	FLTR	1	PCB	12
100	FLTR	1	PCB	12



DESCRIPTION		ORG PART NO.	REV NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
QUANTITY	A	VAR	
DESCRIPTION	QTY	UNIT	REVISION
861-D			
TITLE		861-D	
POWER CONTROL		ASSEMBLY	
SCALE		1:1	
DATE		88-0-0	
DRAWN BY		EIA	
CHECKED BY		EIA	
APPROVED BY		EIA	

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REV	DATE	BY	CHK
1	10/17/77
2

DRN	DATE	BY	CHK
...
...
...
...
...
...
...
...
...
...

D CS 861-D-1

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION	
PARTS LIST					
MADE BY	Tyrone Quillin	CHECKED	<i>[Signature]</i>	SECTION	1
DATE	8/11/75	DATE	8/11/75	ISSUED SECT	1
ENG	<i>[Signature]</i>	PROD	<i>[Signature]</i>		
DATE	4/14/75	DATE	4/14/75		
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	VAR	REVISION
1	D-1A-741332-0-0	CHASSIS, POWER CONTROL	1		
2	D-1A-741333-0-0	PANEL, FRONT, 861-D	1		
3	D-1A-741334-0-0	COIL, POWER CONTROL	1		
4	D-1A-741335-0-0	BRACKET, STRAIN RELIEF	1		
5	3412063-00	DR. W. UT	1		
6	3412064-00	DECAL, "DANGER HIGH VOLTAGE"	1		
7	1212265-00	POWER CONN RECEPTACLE, 2EA, 125VAC	2		
8	D-1A-741336-0-0	MO. ASSY	1		
9	D-1A-741337-0-0	PILOT LAMP ASSY	3		
10	1212307-00	CIRCUIT BREAKER, 4 POLE, 10A, 242 VAC	1		
11	1212198-00	THERMOSTAT, SPEC, FIXED TEMP	1		
12	1212320-00	FILTER	1		
13	1212174-01	CIRCUIT BREAKER, 2 POLE, 25 AMP	6		
14	1000034-00	DC PAPER CAPACITOR, 1000 VDC	2		
15	1212366-00	CONTACTOR, 1 POLE, 40A, 600 VAC	1		
16	9003010-00	GROMMET, CATERPILLAR	A/R		
17	D-CS-3411522-0-1	PILOT CONTROL	1		
18	1700078-00	POWER CORD, 5 WIRE, 10 AWC, (15FT)	A/P		
19	1212410-00	STRAIN RELIEF	1		
20	9009305-01	LOCKWUT, 3/4" PIPE THREAD	1		
21	1212314-00	PLUG, TWIST LOCK, 4 POLE/5 WIRE	1		
22	D-1A-741338-0-0	HARNES #1, POWER CONTROL	1		

TITLE: 861-D POWER CONTROL ASSY
 ASSY NO.: E-1A-861-D-2
 SIZE CODE: A PL
 NUMBER: 861-D-2
 REV: C
 ECO NO: 861-D-00002
 SHEET 1 OF 3
 DIST

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION	
PARTS LIST					
MADE BY	Tyrone Quillin	CHECKED	<i>[Signature]</i>	SECTION	1
DATE	8/11/75	DATE	8/11/75	ISSUED SECT	1
ENG	<i>[Signature]</i>	PROD	<i>[Signature]</i>		
DATE	4/14/75	DATE	4/14/75		
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	VAR	REVISION
45	9006556-00	NUT, HEX #4-40	1		
46	9006558-00	NUT, HEX #6-32	4		
47	9006561-00	NUT, HEX #8-32	4		
48	9006564-00	NUT, HEX #10-32	1		
49	9008185-00	NUT, KEPS #6-32	14		
50	9006051-1	SCR, PHL PAN HD #8-32 x 3.00 LG	2		
51	9006020-1	SCR, PHL PAN HD #6-32 x .25 LG	28		
52	9006633-00	WASHER, INT FOOTY, #6	1		
53	A-SP-3700191-0-0	PACKAGING INSTRUCTIONS 861-D	1		
54	A-DC-7416382-0-1	DECAL (NOT FOR EXTERNAL LOADS)	2		
REF D-CS-861-D-1		861-D POWER CONTROL CIRCUIT SCHEMATIC			

TITLE: 861-D POWER CONTROL ASSY
 ASSY NO.: E-1A-861-D-2
 SIZE CODE: A PL
 NUMBER: 861-D-2
 REV: C
 ECO NO: 861-D-00002
 SHEET 1 OF 3
 DIST

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY VARIATION	
PARTS LIST					
MADE BY	Tyrone Quillin	CHECKED	<i>[Signature]</i>	SECTION	1
DATE	8/11/75	DATE	8/11/75	ISSUED SECT	1
ENG	<i>[Signature]</i>	PROD	<i>[Signature]</i>		
DATE	4/14/75	DATE	4/14/75		
ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QTY	VAR	REVISION
23	D-1A-741339-0-0	HARNES #2, POWER CONTROL	1		
24	D-1A-741340-0-0	HARNES #3, POWER CONTROL	1		
25	D-1A-741341-0-0	HARNES #4, POWER CONTROL	1		
26	D-1A-741342-0-0	HARNES #5, POWER CONTROL	1		
27	D-1A-741343-0-0	HARNES #6, POWER CONTROL	1		
28	D-1A-741344-0-0	HARNES #7, POWER CONTROL	1		
29	D-1A-741345-0-0	HARNES #8, POWER CONTROL	1		
30	D-1A-741346-0-0	HARNES #9, POWER CONTROL	1		
31	D-1A-741347-0-0	HARNES #10, POWER CONTROL	1		
32	D-1A-741348-0-0	HARNES #11, POWER CONTROL	1		
33	D-1A-741349-0-0	HARNES #12, POWER CONTROL	1		
34	D-1A-741350-0-0	HARNES #13, POWER CONTROL	1		
35	D-1A-741351-0-0	HARNES #14, POWER CONTROL	1		
36	D-1A-741352-0-0	HARNES #15, POWER CONTROL	1		
37	D-1A-741353-0-0	HARNES #16, POWER CONTROL	1		
38	D-1A-741354-0-0	HARNES #17, POWER CONTROL	1		
39	D-1A-741355-0-0	HARNES #18, POWER CONTROL	1		
40	D-1A-741356-0-0	HARNES #19, POWER CONTROL	1		
41	D-1A-741357-0-0	HARNES #20, POWER CONTROL	1		
42	D-1A-741358-0-0	HARNES #21, POWER CONTROL	1		
43	D-1A-741359-0-0	HARNES #22, POWER CONTROL	1		
44	D-1A-741360-0-0	HARNES #23, POWER CONTROL	1		

TITLE: 861-D POWER CONTROL ASSY
 ASSY NO.: E-1A-861-D-2
 SIZE CODE: A PL
 NUMBER: 861-D-2
 REV: C
 ECO NO: 861-D-00002
 SHEET 1 OF 3
 DIST

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DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS			
PACKAGING INSTRUCTION		REV: _____	DATE: _____
TITLE 861-D-E POWER CONTROL		_____	_____
MATERIAL REQUIREMENTS			
Quantity	Purchase Specification No.	Description	
1	9905726	Full-Overlap Carton	
1	9905727	Laminated Buildup	
5 ft.	9905729	Glasflex Tape	
PACKAGING INSTRUCTIONS			
Step	Procedure		
1	Set up and tape Full-Overlap Carton (9905726) using one strip of Glasflex tape.		
2	Place 861 Power Control into Laminated Buildup (9905727) as shown in Figure 1. Make sure that the slots in the Laminated Buildup align with the power control chassis.		
3	Pick up Laminated Buildup from both sides and slide it into the Full-Overlap Carton (front end first).		
4	Coil the cable on the rear of the power control so that it will fit into the carton.		
5	Close and seal carton with Glasflex tape.		

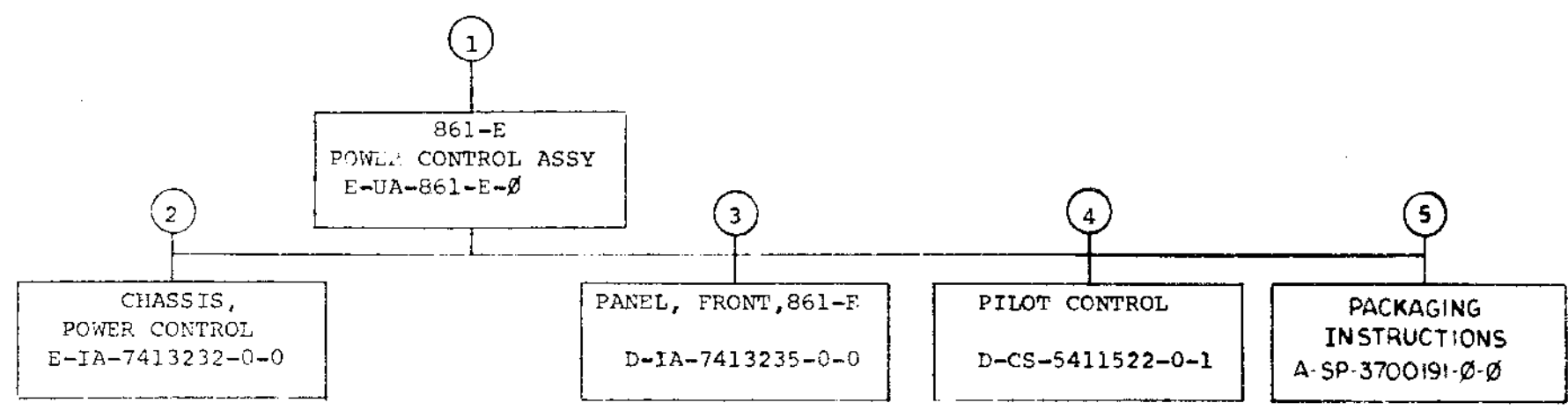
ENG. <i>[Signature]</i>	APPD. <i>[Signature]</i>	DATE: 5/10/75	SIZE: A	CODE: SP	NUMBER: 3700-91-0-0	REV: _____
-------------------------	--------------------------	---------------	---------	----------	---------------------	------------

PACKAGING INSTRUCTION		REV: _____	DATE: _____
TITLE 861-D-E POWER CONTROL PACKAGING INSTRUCTION		_____	_____

NOTE
Make changes to "C" size original only and rephotograph.

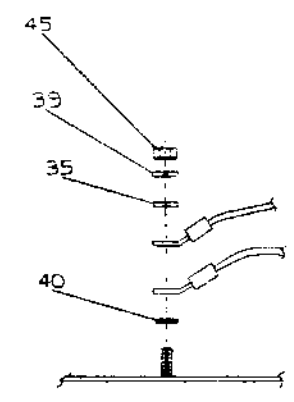
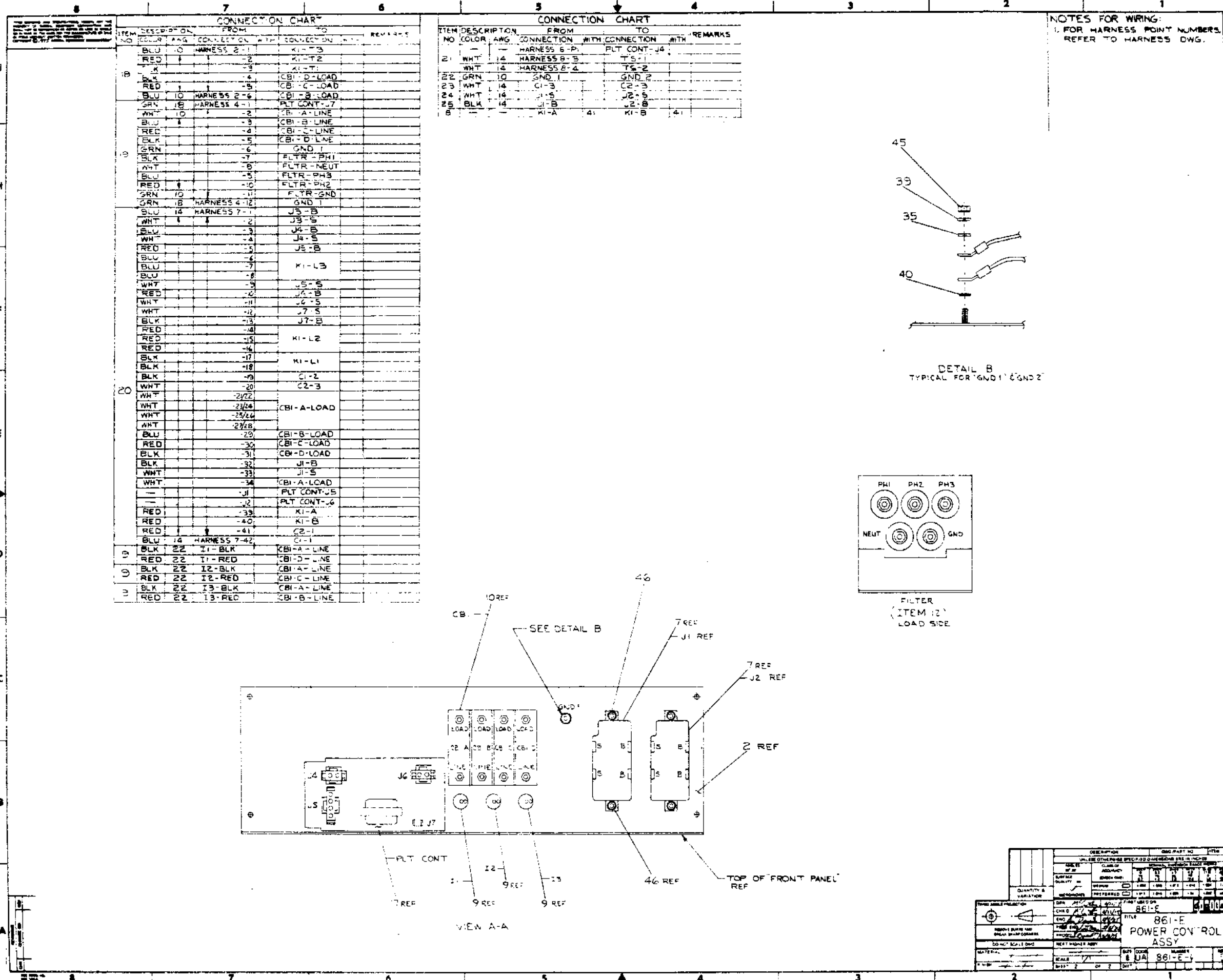
ENG. <i>[Signature]</i>	APPD. <i>[Signature]</i>	DATE: 5/10/75	SIZE: A	CODE: SP	NUMBER: 3700-91-0-0	REV: _____
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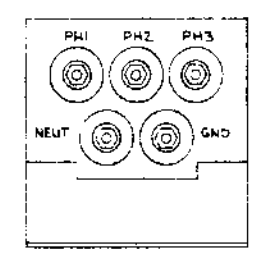


TITLE	SHEET	OF	SIZE	CODE	NUMBER	REV
861-E POWER CONTROL	2	3	B	DD	861-E	B

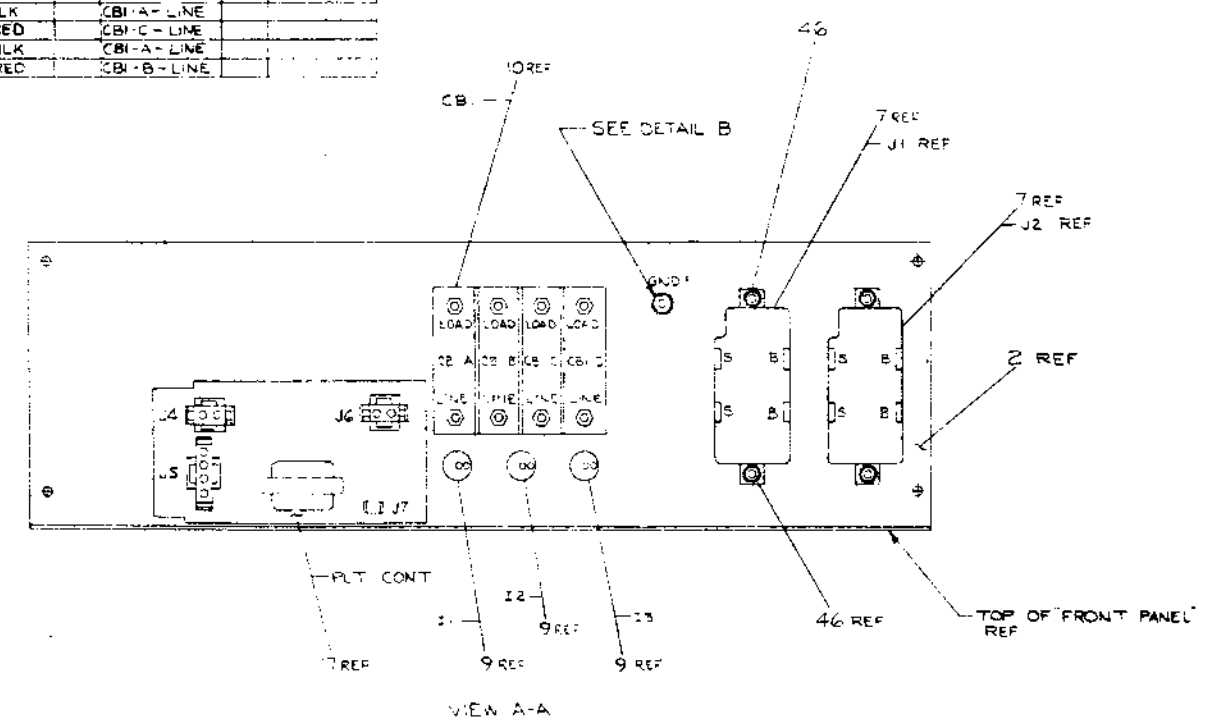
CUSTOMER PRINT SET		MECHANICAL				CUSTOMER PRINT SET		ELECTRICAL				
MFG SET	FIND NO	DRAWING NO	REV	NO OF SHT	DESCRIPTION	MFG SET	FIND NO	DRAWING NO	REV	NO OF SHT	DESCRIPTION	OPTION NO / FILE DATE
X	1	E-UA-861-E-Ø	*	2	861-E POWER CONTROL ASSY	X	1	B-DD-861-E	*	3	861-E POWER CONTROL	
X		A-PI-861-T-Ø	*	3	861-E POWER CONTROL ASSY P.L.	X		D-CS-861-E-1	*	1	861-E POWER CONTROL SCHEMATIC	
		C-MD-7413234-0-0		1	COVER, POWER CONTROL			A-SP-861-E-2		4	TEST PROCEDURE 861-E	
		D-MD-7413419-0-0		1	BRACKET, STRAIN RELIEF							
		C-IA-701052-0-0		1	MOV ASSY							
		C-IA-7011053-0-0		1	PILOT LAMP ASSY							
		D-IA-7010938-0-0		1	HARNES #2, POWER CONTROL							
		D-IA-7010936-0-0		1	HARNES #4, POWER CONTROL							
		D-IA-7010971-0-0		1	HARNES #7, POWER CONTROL							
		C-JA-7010968-0-J		1	HARNES #8, POWER CONTROL							
		D-IA-7010972-0-0		1	JUMPER, WIRE	X	4	D-CS-5411522-0-1	*	1	PILOT CONTROL	
		A-DC-7416582-0-1		1	DECAL (NOT FOR EXTERNANAL LOADS)			A-SP-5411522-0-7			TEST PROCEDURE	
	2	E-IA-7413232-0-0		2	CHASSIS, POWER CONTROL							
		B-SS-7413232-0-1		1	SILK SCREEN, CHASSIS							
	3	B-SS-7413235-0-1		1	SILK SCREEN, FRONT PANEL, 861-E							
		D-IA-7413235-0-0		2	PANEL, FRONT, 861-E							
	4	D-CS-5411522-0-1			PILOT CONTROL							
		K-CO-5411522-0-4			DRILL TAPE							
		D-AH-5411522-0-5			ASSY DRILLING HOLE LAYOUT							
		B-MI-5411522-0-6		1	MODULE ECO HISTORY							
	5	A-SP-3700191-0-0		2	PACKAGING INSTRUCTIONS, 861-E							
		A-PS-9905726-0-0		2	FULL OVERLAP CARTON							
		A-PS-9905727-0-0		2	LAMINATED BUILDUP							
		A-PS-9905729-0-0		1	GLASFLEX TAPE							
CUSTOMER PRINT SET CODES						TITLE		SIZE CODE		NUMBER		REV
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED						861-E POWER CONTROL		SHEET 3 OF 3 B DD		861-E		B



DETAIL B
TYPICAL FOR GND 1 & GND 2



FILTER
(ITEM 12)
LOAD SIDE




DESCRIPTION	861-E	QTY	1
CLASSIFICATION	861-E	REV	1
DATE	1/1/54	BY	JA
APPROVED	[Signature]	CHECKED	[Signature]
DESIGNED	[Signature]	TESTED	[Signature]
SCALE	1/1	NO. OF SHEETS	2
861-E POWER CONTROL ASSY			

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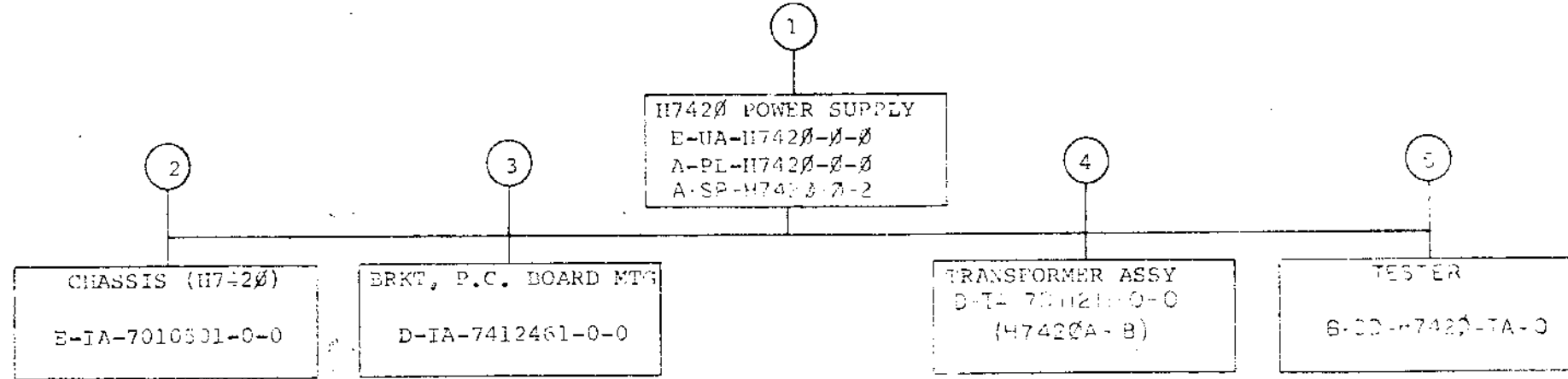
DRAWING NUMBER	INIT REL	AUTOMATIC WIRE TESTER (AWT) REVISION STATUS												REV				
	T7	A	B	C	D	E	F	H	J	K	L	M	AWT					
S-AD-7010829-0-0	*	*	*	*	*	*	*	*	*	*	*	*						
E-AD-7010828-0-0	*	*	*	*	*	*	*	*	*	*	*	*						
K-WL-7010329-0-1	*	A	B	B	C	C	C	D	E	F	H	J						
A-WL-7010329-0-2	*	*	*	A	A	B	F	B	E	B	C	C						
N-AD-7010329-0-0	*	*	*	*	*	A	B	B	E	E	C	C						
D-CS-5411337-0-1	C	C	C	C	C	C	C	C	C	C	C	C						
F-CS-5411339-0-1	B	B	B	B	H	B	H	B	B	B	B	H						

REVISIONS		REV	CHG NO
CHK	DATE	A	
		B	
		C	
		D	
		E	
		F	
		H	
		J	
		K	
		L	
		M	

DRN D. HEALY	DATE 1/21/71		EQUIPMENT CORPORATION	
CHK'D D. HEALY	DATE 1/22/71		7010329-0	
ENG G.H.	DATE	TITLE PROC BACK PLANE 7010329		
PRD ENG	DATE	AWT REVISION STATUS		
PRD	DATE	SIZE CODE A WT	NUMBER 7010329-0	REV 1
FIRST USED ON 1011-0		DIST		
SCALE		SHEET 1 OF 1		

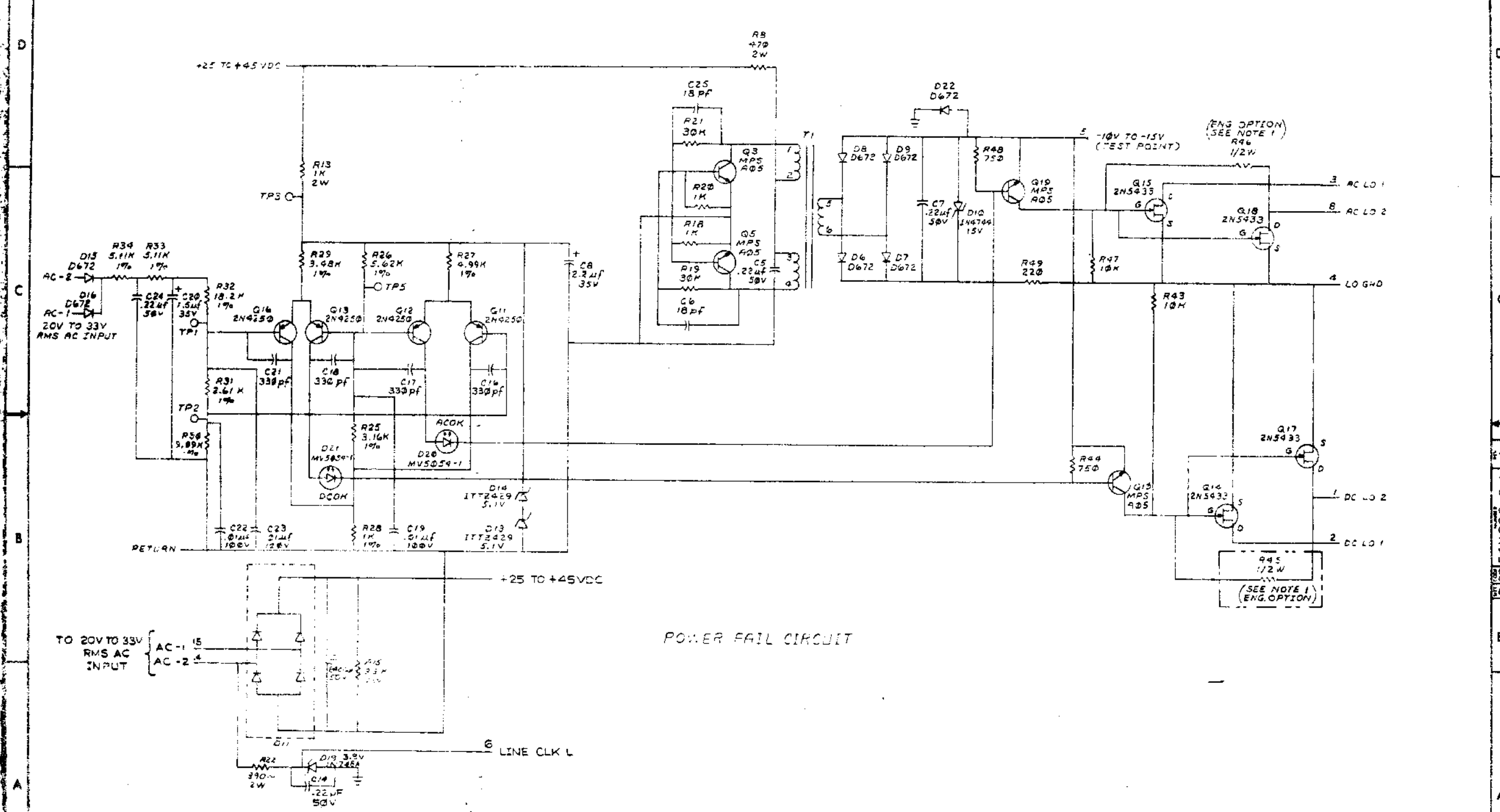
DRA 123

7010329-0-0-0



TITLE	SHEET OF	SIZE CODE	NUMBER	REV
H7420 POWER SUPPLY	1 OF 1	B DD	H7420-0	E

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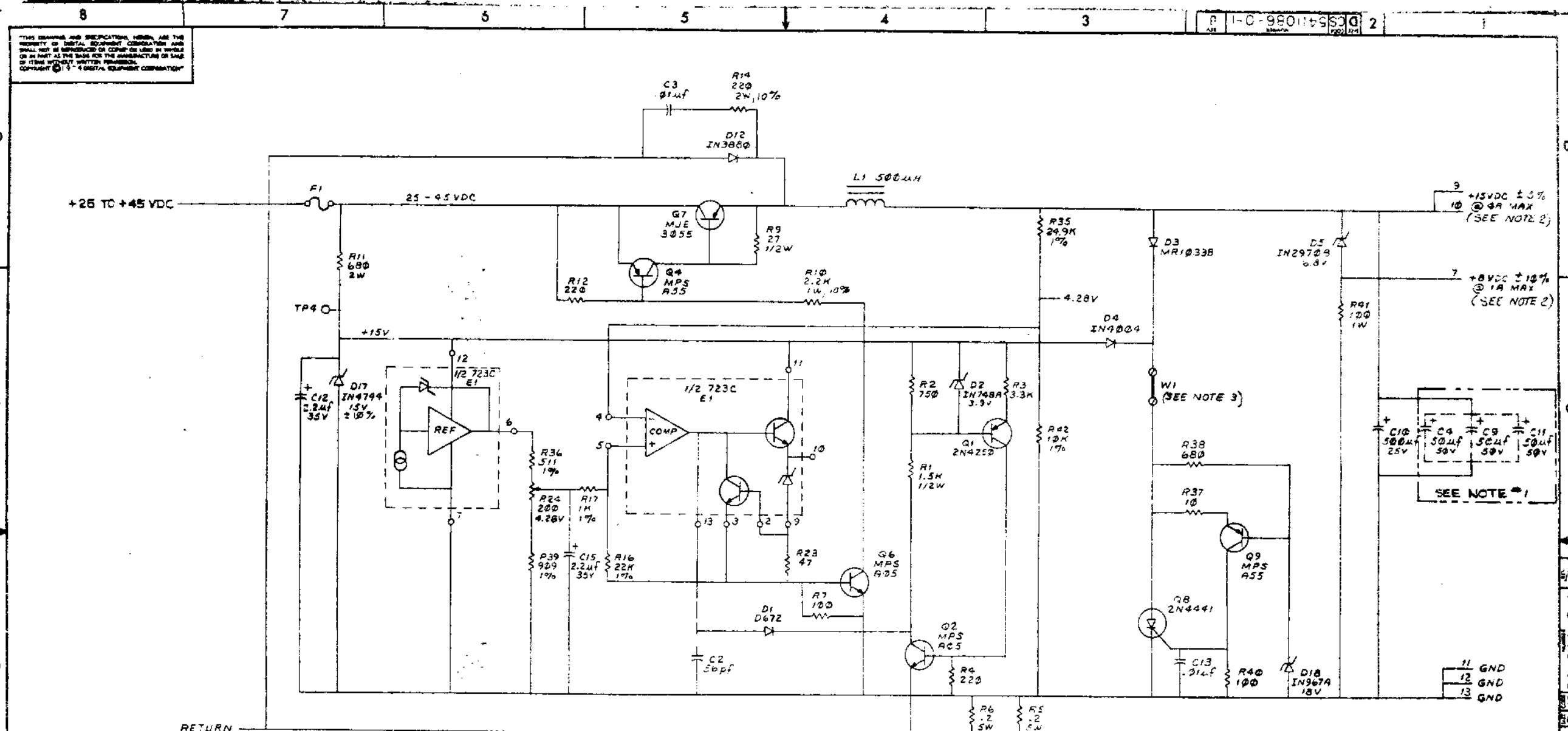
POWER FAIL CIRCUIT

REV	CHG	NO	BY

TITLE	PWR. LINE MONITOR/15V REG.	SIZE/CODE	NUMBER	REV
SCALE		SHEET	3 OF 4	4

DCS 5411086-C-1

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15V REGULATOR
(SEE NOTE #4)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PWR. LINE MONITOR/15V REG.	SIZE/CODE	NUMBER	REV.
SCALE	SHEET 2 OF 4	DIST.	D/CS 5411086-0-1	1

D/CS 5411086-0-1

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY / VARIATION	
PARTS LIST				U7420A	U7420B
MADE BY	CHECKED	DATE	SECTION		
DATE	DATE	DATE	ISSUED SECT		
ENG	PROD	DATE			
DATE	DATE				
ITEM NO	DWG NO	PART NO	DESCRIPTION		
1	E-0A-7413501-0-0		SHASS:11 H7420A	1	1
2	D-0A-7413430-0-0		POWER SUPPLY BOARD	1	1
3	D-0A-7413463-0-0		B-KIT, P.C. BOARD MFG.	1	1
4	D-0A-7413125-0-0		FRONT ASSEMBLY H7420A	1	1
5	D-0A-7413701-0-0		POWER INDICATOR ASSEMBLY	1	1
6	D-0A-7413024-0-0		CABLE, RECTILAT. BOARD	1	1
7	D-0A-7413728-0-0		CABLE, PAN POWER	1	1
8	D-0A-7413727-0-1		POWER CORD ASSY. 1120V	1	1
9	D-0A-7413727-0-2		POWER CORD ASSY. 220V	1	1
10	D-0A-7413727-0-3		FRONT POWER ASSY.	1	1
11	D-0A-7413183-0-1		POWER LINE MONITOR	1	1
12	1204450-01		FAN	4	4
13	121224-01		CIRCUIT BREAKER (20A)	1	1
14	121224-02		CIRCUIT BREAKER (15A)	1	1
15	900620-01		SCR, PH. PAN HD #6-32 x .25	8	8
16	900625-01		SCR, PH. PAN HD #6-32 x .62	13	13
17	900625-02		SCR, PH. PAN HD #6-32 x .62	13	13
18	900626-01		NUT, NER #8-32	2	2
19	900626-02		NUT, NER #6-32	5	5
20	900624-01		SPACER, #6-32 x .19	2	2
21	900625-02		SPACER, #6-32 x .50	2	2
22	900633-01		WASHER, INT. TIGHT LOCK #6	24	24

DEC FORM DEC 1975 (01) 1011 NFD
ORA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY / VARIATION	
PARTS LIST				U7420A	U7420B
MADE BY	CHECKED	DATE	SECTION		
DATE	DATE	DATE	ISSUED SECT		
ENG	PROD	DATE			
DATE	DATE				
ITEM NO	DWG NO	PART NO	DESCRIPTION		
23	900650-01		RELAY, SPST	1	1
24	900916-01		CLIP, PAN MOUNTING	14	14
25	A-0A-7413184-0-0		POWER SUPPLY BOARD H742A	1	1
26	A-0A-7413186-0-0		POWER SUPPLY BOARD H742B	1	1
27	A-0A-7413187-0-0		POWER SUPPLY BOARD H742C	1	1
28	A-0A-7413188-0-0		POWER SUPPLY BOARD H742D	1	1
29	9007969-01		TERMINAL, 20 PIN CONNECT	4	4
30	9007970-01		WIRE, #14 AWG, 10 FT	24	24
31	900826-01		WASHER, CARB. PAN. ADJUSTING	2	2
32	D-0A-7413211-0-0		TRANSFORMER ASSY.	1	1
33	3612680-01		SAFETY GROUND CORD	1	1
34	9008274-01		SCR, PH. HD. BRUSH (10A) 110V	4	4
35	9006589		WINNEMAN SPEED NUT 11-32	4	4
36	A-0A-7413265-0-0		POWER SUPPLY BOARD H742A	1	1
37	A-0A-7413267-0-0		POWER SUPPLY BOARD H742B	1	1
38	9007027-01		SCR, PAN HD. 6-50X5 16	1	1
39	9007224		FUSE 7 AMP SLOW BLOW	1	1
40	9008728-01		RELAY, SPST	1	1
41	9008372		8-32 WASHER EXT. TIGHT	1	1
42	4901173-01		CONDUCTIVE SHEATH	1	1
43	121224-01		CIRCUIT BREAKER 20A SCREW TERM	1	1
44	121224-02		CIRCUIT BREAKER 15A SCREW TERM	1	1

DEC FORM DEC 1975 (01) 1011 NFD
ORA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY / VARIATION	
PARTS LIST				U7420A	U7420B
MADE BY	CHECKED	DATE	SECTION		
DATE	DATE	DATE	ISSUED SECT		
ENG	PROD	DATE			
DATE	DATE				
ITEM NO	DWG NO / PART NO	DESCRIPTION			
45	9006026-01	SCR PH PAN HD #6-32 x 3/4	1	1	1
46	9007033	TIE CABLE	1	1	1
47	9006933	BLOCK, TERM MARKER STRIP	1	1	1

DEC FORM DEC 1975 (01) 1011 NFD
ORA 110