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# FIELD MAINTENANCE PRINT SET

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D-IA-7012500-0-0 AC POWER CORD  
 D-CS-5411086-0-1 POWER LINE MONITOR  
 D-AD-7011486-0-0 TRANSFORMER ASSY  
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 MP#555 7014251-0 REGULATOR FIELD MAINTENANCE PRINT SET ORDER NO.  
 E-AD-7014226-0 BACKPLANE MK11 MEMORY  
 B-DD-5412637-0-0 BACKPLANE ETCH CIRCUIT BOARD  
 B-PL-5412637-0-0 BACKPLANE ETCH CIRCUIT BOARD (PL)  
 B-CS-5412637-0-1 BACKPLANE ETCH CIRCUIT BOARD  
 E-IA-7014228-0-0 POWER HARNESS MK11  
 D-IA-7010581-0-0 WIRE HARNESS AD/DC LO  
 D-IA-7014312-0-0 HARNESS, BOX CONTROL INTERNAL (MK11)  
 D-IA-7014311-9F-0 CABLE BOX CONTROLLER  
 D-IA-7014520-08-0 CABLE, POWER BATTERY BACK UP  
 D-UA-BC#8R-0-0 I/O CABLE BC#8R

UNIT VARIATIONS COVERED BY THIS PRINT SET

**MK11-B  
 Field Maintenance  
 Print Set**

**Digital Equipment  
 Corporation**

REVISIONS	REV.		USED ON OPTION/MODEL		DRN.	DATE	TITLE: UNIT ASSY MK11							
	CHG. NO.		11/70		D. HEALY	OCT 77								
	DATE				CHK'D D. HEALY	DATE OCT 77								
					PROJ. ENG. A. ZACCONI	DATE 11-2-77	SIZE <b>B</b>	CODE <b>TC</b>	NUMBER MK11-B-1			REV. <b>A</b>		
				SHEET 2 OF 2		FIELD SERV. J. HOLDERBY	DATE 11-2-77	DIST.						

EN-01124 16 NB 76 (1/27)



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## DRAWING DIRECTORY

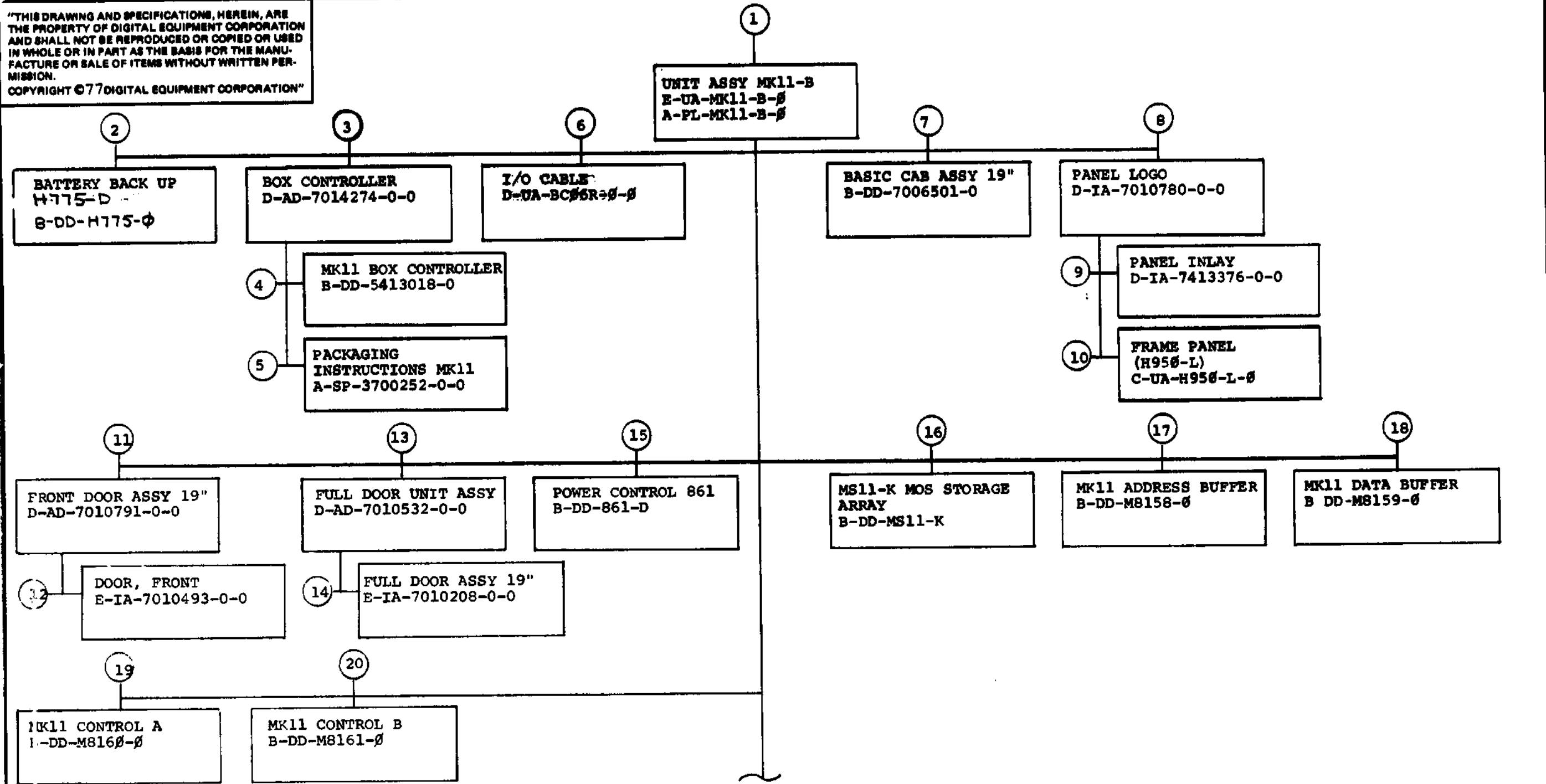
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UNIT VARIATIONS	
VAR	TITLE
MK11-BA	64K WORDS ECC MOS MEM CONT AND P.C. SPACE FOR (7) MK11-BE 115V 50/60 HZ
MK11-BB	SAME AS MK11-BA EXCEPT 230V 50/60 HZ
MK11-BC	MK11-BA PLUS CAB 115V 50/60 HZ
MK11-BD	MK11-BB PLUS CAB 230V 50/60 HZ
MK11-BE	(2) MS11-KE 64 K WORDS (M7984)
MK11-BF	(8) MS11-KE 256 K WORDS (M7984)
MK11-BG	MK11-BA PLUS (3) MK11-BE PLUS (1) MK11-BF FULL BOX/CABLES BOX 512 K WORDS 115V 50/60 HZ
MK11-BH	MK11-BB PLUS (3) MK11-BE PLUS (1) MK11-BF FULL BOX/CABLES BOX 512 K WORDS 230V 50/60 HZ
MK11-BY	MK11-BA WITH NO CABLES, BATTERY AND CONTROLLER 115V 50/60 HZ
MK11-BZ	MK11-BB WITH NO CABLES, BATTERY AND CONTROLLER 230V 50/60 HZ

REVISIONS	REV.	A		DRN.	DATE	<div style="border: 1px solid black; padding: 2px; display: inline-block;">digital</div>												
	CHANGE NO.	MK11-B-1		D. HEALY	OCT 77		UNIT ASSY MK11											
	CHK	MK11-B-1		C4K'D.	DATE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">SIZE</td> <td style="width: 5%;">CODE</td> <td style="width: 40%;">NUMBER</td> <td style="width: 45%;">REV</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">DD</td> <td style="text-align: center;">MK11-B</td> <td style="text-align: center;">A</td> </tr> <tr> <td colspan="4" style="text-align: center;">DIST.      </td> </tr> </table>		SIZE	CODE	NUMBER	REV	B	DD	MK11-B	A	DIST.		
	SIZE	CODE		NUMBER	REV													
	B	DD		MK11-B	A													
DIST.																		
			D. HEALY	OCT 77														
			PROJ. ENG.	DATE	11-2-77													
			PROD.	DATE	11-2-77													

SHEET 1 OF 6

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.  
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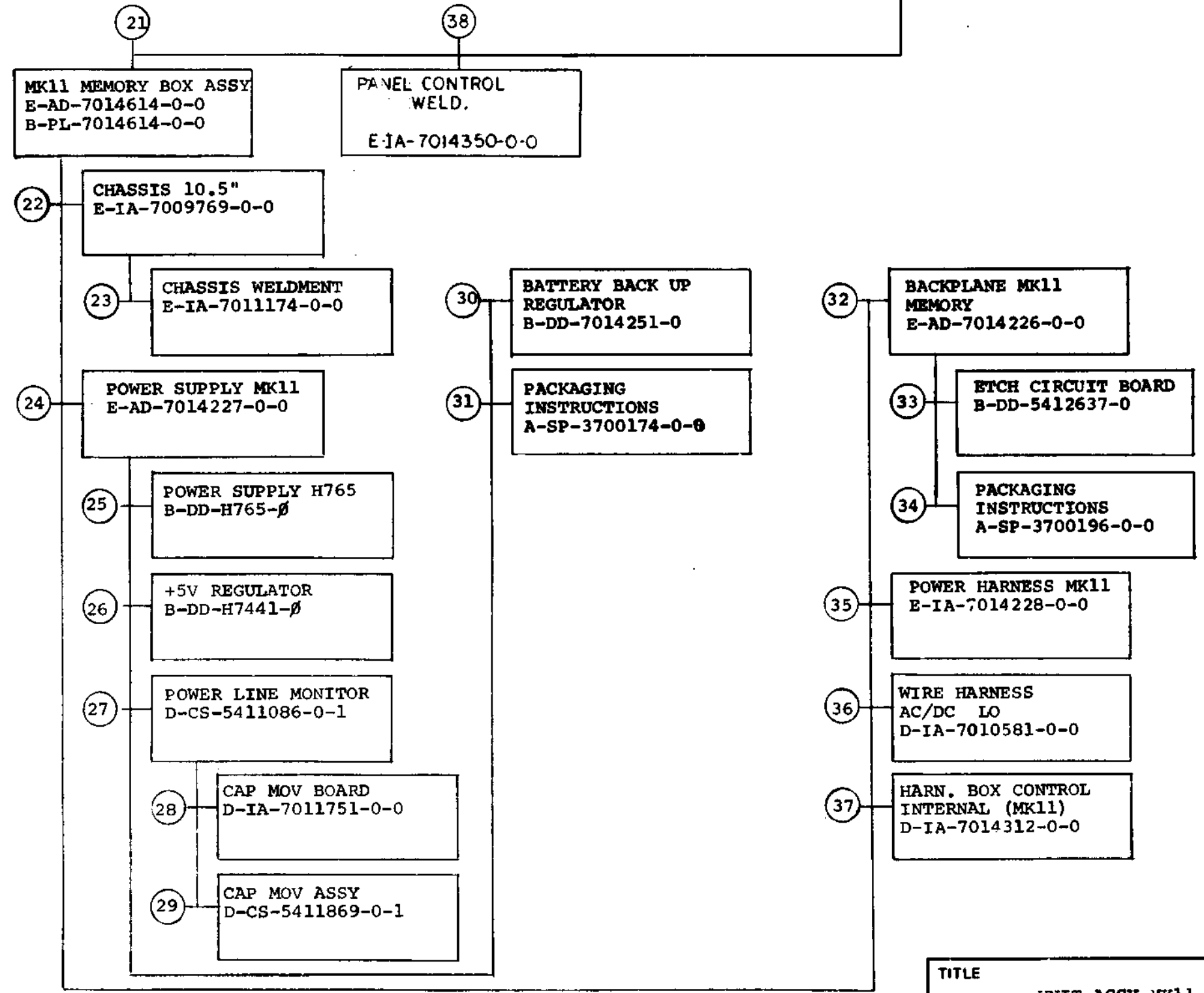


SEE SHEET #3

TITLE	UNIT ASSY MK11	SIZE CODE	NUMBER	REV
		B DD	MK11-B	A
SHEET 2 OF 6				

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CONTINUED FROM SHEET #2



TITLE	UNIT ASSY MK11	SIZE CODE	NUMBER	REV
		B DD	MK11-B	A
SHEET 3 OF 6				

FIND NO.	DRAWING NO.	DESCRIPTION	TYPE	FIND NO.	DRAWING NO.	DESCRIPTION	TYPE
1	MP00523	UNIT ASSY MK11 (PRINT SET ORDER NO)	-	4	B-DD-5413018-0	MK11 BOX CONTROLLER	E/M
	B-TC-MK11-8-1	UNIT ASSY MK11 (FIELD MAINTENANCE PRINT SET)	-				
	E-UA-MK11-8-0	UNIT ASSY MK11	E/M				
	A-PL-MK11-8-0	UNIT ASSY MK11 (PL)	E/M				
	E-AR-11/70-0-5	11/70 SYSTEM EXPANSION (MK11)	E/M				
	D-BS-MF11S-K-3	MF11S BLOCK DIAGRAM	E	5	A-SP-3700252-0-0	PACKAGING INSTRUCTIONS MK11	M
	D-BD-MK11-0-3	MK11 BLOCK DIAGRAM	E				
	D-TD-MK11-0-4	MK11 TIMING DIAGRAMS	E				
	A-PS-3612427-22	DECAL (M8158-J1)	M				
	A-PS-3612427-23	DECAL (M8158-J2)	M				
	A-PS-3612427-24	DECAL (M8158-J3)	M				
	A-PS-3612427-25	DECAL (M8158-J4)	M	6	D-UA-BC06R-0-0	I/O CABLE BC06R	E/M
	A-PS-3612427-26	DECAL (M8159-J5)	M				
	D-IA-7014311-0-0	CABLE, BOX CONTROLLER	E/M				
	D-IA-7014520-0-0	CABLE, POWER BATTERY BACK UP	E/M				
	D-UA-BC06R-0-0	I/O CABLE BC06R	E/M				
	C-MD-7419162-0-0	BAR, CABLE	M	7	B-DD-7006501	BASIC CAB ASSY 19"	M
	C-PS-1214578-0-0	BLANK PANEL	M				
	D-IA-7011223-0-0	BASKET WIRE CABLE	M				
	C-IA-7011222-0-0	BAR ASSY BASKET	M				
	C-MD-7413983-0-0	CLAMP, WIRE BASKET	M	8	D-IA-7010870-0-0	PANEL LOGO	M
	C-MD-7419249-0-0	BAR STRAIN RELIEF (FRONT)	M				
	C-MD-7419176-0-0	BAR STRAIN RELIEF (REAR)	M				
	C-IA-7010695-0-0	861-D TO 861-D HARNESS	E/M				
	C-MD-7413659-0-0	BRACKET SHIPPING	E/M				
	C-MD-7419482-0-0	CABLE HOLDER	E/M	9	D-IA-7413376-0-0	PANEL, INLAY	M
	A-DC-7409873-0-0	DECAL, POWER CONN.	M		C-SS-7413376-0-4	SILK SCREEN (WHITE)	M
	A-PS-3612427-27	DECAL (M8159-J1)	M		C-SS-7413376-0-3	SILK SCREEN (BRITE ROSE)	M
	A-PS-3612427-28	DECAL (M8159-J2)	M		C-SS-7413376-0-2	SILK SCREEN (BRITE ROSE)	M
	A-PS-3612427-29	DECAL (M8159-J3)	M		C-SS-7413376-0-1	SILK SCREEN (MAGNETA)	M
	A-PS-3612427-30	DECAL (M8159-J4)	M				
	A-PS-3612427-31	DECAL (7014274-J1)	M				
2	B-DD-H775-0	BATTERY BACK UP H775-D	E/M	10	C-UA-H950-L-0	FRAME PANEL (H950-L)	M
					A-PL-H950-L-0	FRAME PANEL (H950-L)	M
					D-SC-1209693-0-0	FRAME PANEL (PLASTIC)	M
3	C-AD-7014274-0-0	BOX CONTROLLER	E/M				
	C-PS-7412577-0-0	CONSOLE	M				
				11	D-AD-7010791-0-0	FRONT DOOR ASSY 19"	M
					D-MD-7406763-0-0	PIN SHORT DOOR	M
					D-MD-7406816-0-0	PIN SHORT DOOR	M

TYPE: E ELECTRICAL  
M MECHANICAL  
E/M ELECTRO/MECHANICAL

digital

TITLE

UNIT ASSY MK11

SHEET 4 OF 6

SIZE CODE  
B DD

NUMBER  
MK11-B

REV  
A

FIND NO.	DRAWING NO.	DESCRIPTION	TYPE	FIND NO.	DRAWING NO.	DESCRIPTION	TYPE
	D-MD-7406807-0-0	SHORT DOOR PIVOT SUPPORT	M				
12	E-IA-7010498-0-0	DOOR FRONT	M	19	B-DD-M8160-0	MK11 CONTROL A	E/M
	D-MD-7413209-0-0	HAT SECTION	M				
	D-MD-7413210-0-0	SUPPORT SIDE	M				
	D-MD-7412947-0-0	SUPPORT DOOR	M	20	B-DD-M8161-0	MK11 CONTROL B	E/M
	E-IA-7412945-0-0	DOOR FRONT	M				
13	D-AD-7010532-0-0	FULL DOOR UNIT ASSY	M	21	E-AD-7014614-0-0	MK11 MEMORY BOX ASSY	E/M
	B-MD-7406816-0-0	PIN SHORT DOOR	M		B-PL-7014614-0-0	MK11 MEMORY BOX ASSY (PL)	E/M
	B-MD07406671-0-0	PIN DOOR	M		C-MD-7413975-0-0	SPACER SHIM	M
	C-MD-7406807-0-0	PIVOT SUPPORT, SHORT DOOR	M		C-MD-7414018-0-0	PROTECTOR, RIGHT METAL EDGE	M
					C-MD-7414016-0-0	PROTECTOR, LEFT METAL EDGE	M
					D-IA-7009768-0-0	COVER CHASSIS	
14	E-IA-7010208-0-0	FULL DOOR ASSY 19"	M				
	E-IA-7412520-0-0	FULL DOOR 19"	M	22	E-IA-7009769-0-0	CHASSIS 10.5	M
	C-MD-7412523-0-0	HAT SECTION	M		D-IA-7411703-0-0	CHASSIS FRONT	M
	C-MD-7412522-0-0	SUPPORT UPPER	M		D-MD-7411705-0-0	BRACKET CARD GUIDE	M
	C-MD-7412947-0-0	SUPPORT	M				
15	B-DD-861-D	POWER CONTROL 861	E/M	23	E-IA-7011174-0-0	CHASSIS WELDMENT	M
					E-IA-7411707-0-0	CHASSIS SIDE	M
					D-MD-7411706-0-0	BRACKET, HAT	M
16	B-DD-MS11-K	MS11-K MOS STORAGE ARRAY	E/M				
				24	E-AD-7014227-0-0	POWER SUPPLY MK11	E/M
					A-DC-5309414-0-0	DECAL UL	M
					A-DC-5309413-0-0	DECAL NFPA	M
17	B-DD-M8158-0	MK11 ADDRESS BUFFER	E/M		A-DC-7409872-0-0	DECAL (P)	M
18	B-DD-M8159-0	MK11 DATA BUFFER	E/M	25	B-DD-H765-0	POWER SUPPLY H765	E/M

TYPE: E ELECTRICAL  
M MECHANICAL  
E/M ELECTRO/MECHANICAL




TITLE UNIT ASSY MK11

SHEET 5 OF 6

SIZE CODE  
B DD

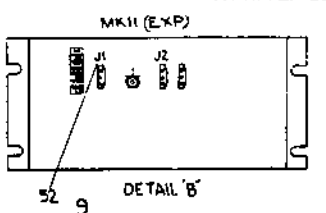
NUMBER  
MK11-B

REV  
A

FIND NO.	DRAWING NO.	DESCRIPTION	TYPE	FIND NO.	DRAWING NO.	DESCRIPTION	TYPE								
					A-WT-7014226-0	AWT REV STATUS	M								
					A-DC-7409873-0-0	DECAL ASSY REV	M								
					K-WL-7014226-0-1	WIRE LIST	E								
26	B-DD-H7441-Ø	+5V REGULATOR	E/M												
				33	B-DD-5412637-0	ETCH CIRCUIT BOARD	E/M								
27	D-CS-5411086-0-1	POWER LINE MONITOR/15V REGULATOR	E/M												
	A-SP-11/45-TA-2	TEST PROCEDURE	M												
	A-SP-5411086-0-3	ENGINEERING SPECIFICATION	M												
	D-IA-7010138-0-0	HARNES INTERCONNECTION	E/M	34	A-SP-3700196-0-0	PACKAGING INSTRUCTIONS	M								
28	D-IA-7011751-0-0	CAP MOV BOARD	E/M	35	E-IA-7014228-0-0	POWER HARNES MK11	E/M								
					A-DC-7409872-0-0	DECAL (P) BLK/CLR	M								
					A-DC-7409873-0-0	DECAL (J) BLK/CLR	M								
29	D-CS-5411689-0-1	CAP MOV ASSY	E/M												
				36	D-IA-7010581-0-0	WIRE HARNES AC/DC LO	E/M								
30	B-DD-7014251-0	BATTERY BACK UP REGULATOR	E/M												
				37	D-IA-7014312-0-0	HARNES, BOX CONTROL INTERNAL (MK11)	E/M								
					A-DC-7409872-0-0	DECALS (P)	M								
				38	E-IA-7014350-0-0	PANEL CONTROL WELD,	M								
					E-MD-7419085-0-0	MTG PANEL CONTROL	M								
					E-MD-7419087-0-0	REAR COVER	M								
31	A-SP-3700174-0-0	PACKAGING INSTRUCTION	M												
32	E-AD-7014226-0-0	BACKPLANE (MK11 MEMORY)	E/M												
	C-MD-7412933-0-0	MEMORY MTG BRACKET	M												
	C-MD07412943-0-0	MEMORY MTG BAR	M												
	A-DC-7409873-0-0	DECALS (J)	M												
TYPE: E ELECTRICAL M MECHANICAL E/M ELECTRO/MECHANICAL						TITLE UNIT ASSY MK11		SHEET 6 OF 6		SIZE CODE B DD		NUMBER MK11 B		REV A	

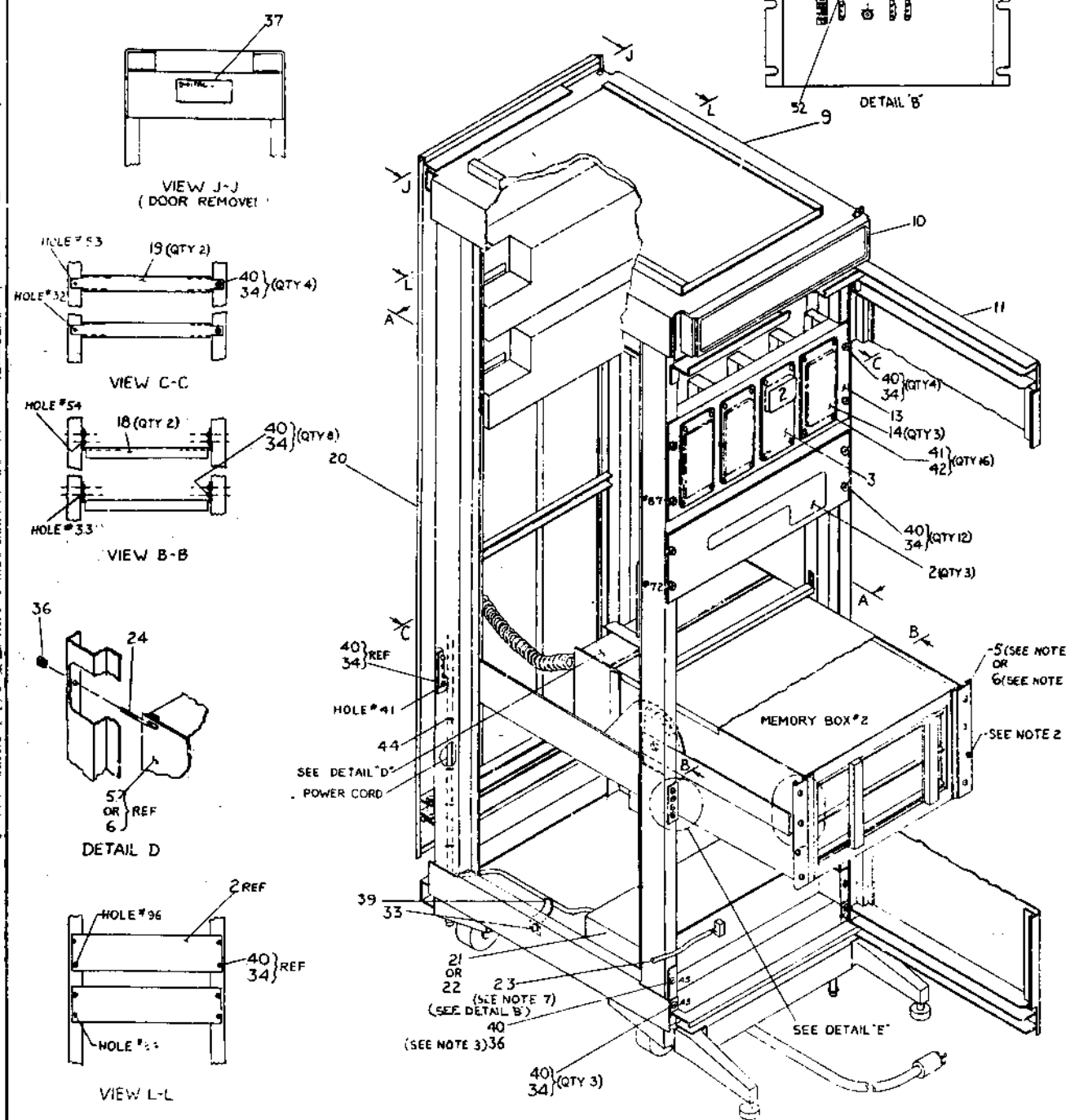


UNIT ASSY  
MKII



LEGEND		
PART NO	DESCRIPTION	VARIATION
MKII-BA	64K WORD ECC MOS MEMT CONT (PS SPACE FOR 7 MKII-BE 115V)	115V 50/60 HZ
MKII-BB	SAME AS MKII-BA EXCEPT 230V	230V 50/60 HZ
MKII-BC	MKII-BA + CAB	115V 50/60 HZ
MKII-BD	MKII-BB + CAB	230V 50/60 HZ
MKII-BE	(2)MSII-KE 64K WORD (M7984)	
MKII-BF	BIMSII-KE 256K WORD (M7984)	
MKII-BG	MKII-BA + 3 MKII-BE + (1)MKII-BF FULL BOX/CABLES BOX 512K W	115V 50/60 HZ
MKII-BH	MKII-BB + 3 MKII-BE + (1)MKII-BF FULL BOX/CABLES BOX 512K W	230V 50/60 HZ
MKII-BY	MKII-BA WITH NO CABLES, BTRY + CONTROLLER	115V 50/60 HZ
MKII-BZ	MKII-BB WITH NO CABLES, BTRY + CONTROLLER	230V 50/60 HZ

- NOTES:
- HARDWARE CALLED OUT IN VIEW A-A TO BE SUPPLIED LOOSE IN A PLASTIC BAG.
  - REMOVE SHIPPING HARDWARE BOTH SIDES.
  - NEP MAT ITEM #36 TO BE USED TO BREAK THRU CABINET FINISH WHERE NEEDED FOR A STATIC GROUND.
  - ITEM #26, 28 THRU 31 (2) ITEM #25 ARE PART OF ITEM 3 (SEE PARTS LIST).
  - ITEM #27, 28 THRU 31 (2) ITEM #25 ARE PART OF ITEM #6 (SEE PARTS LIST).
  - HOLES SHOWN FOR COURSE SLIDE, HOLES FOR CHASSIS TRACK SLIDE SEE E-AR-1170-D-5.
  - ITEM #23 (BA OR BB) TO BE SUPPLIED WITH EACH MKII-BC, BD IN PLASTIC BAG.
  - ITEMS 32-60 TO BE ATTACHED TO CABLES AS THEY ARE CONFIGURED INTO THE SYSTEM.



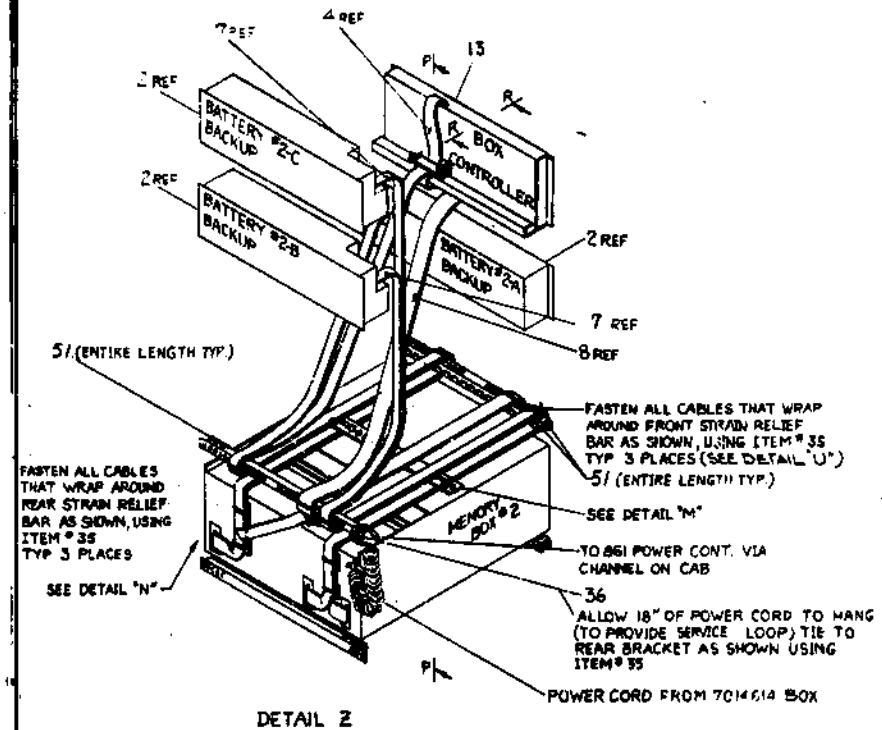
FOR PARTS LIST SEE A-AR-MKII-B-3

REV	DATE	DESCRIPTION
1		

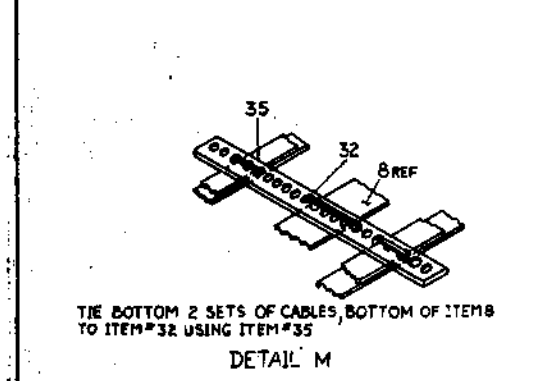
UNIT ASSY  
MKII

SEE PARTS LIST

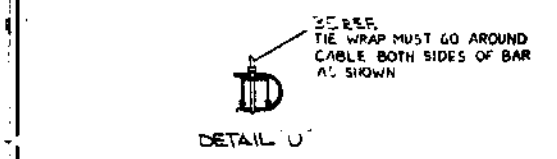
MKII-B-3



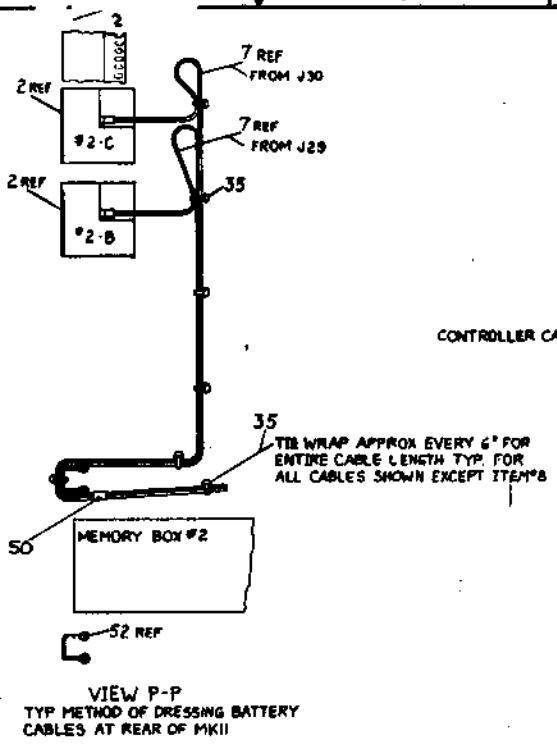
DETAIL Z



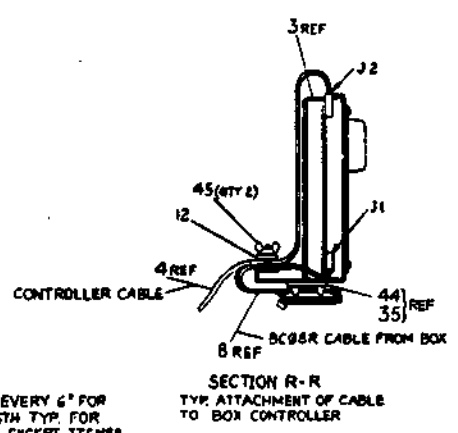
DETAIL M



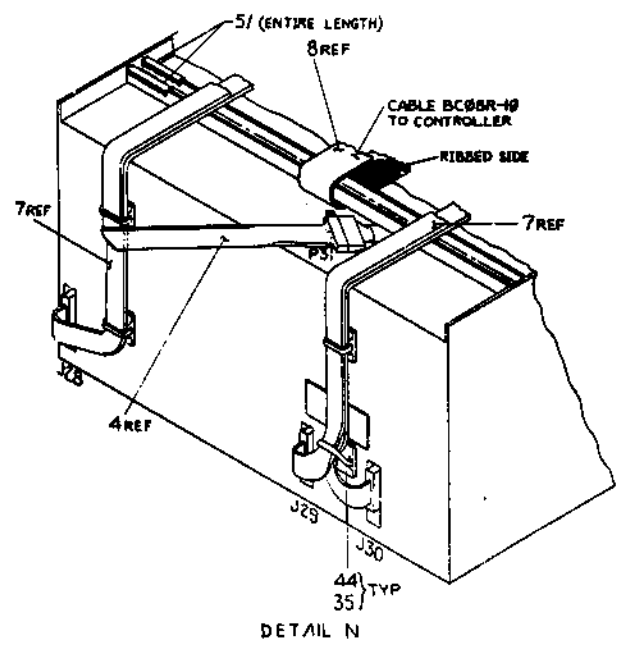
DETAIL U



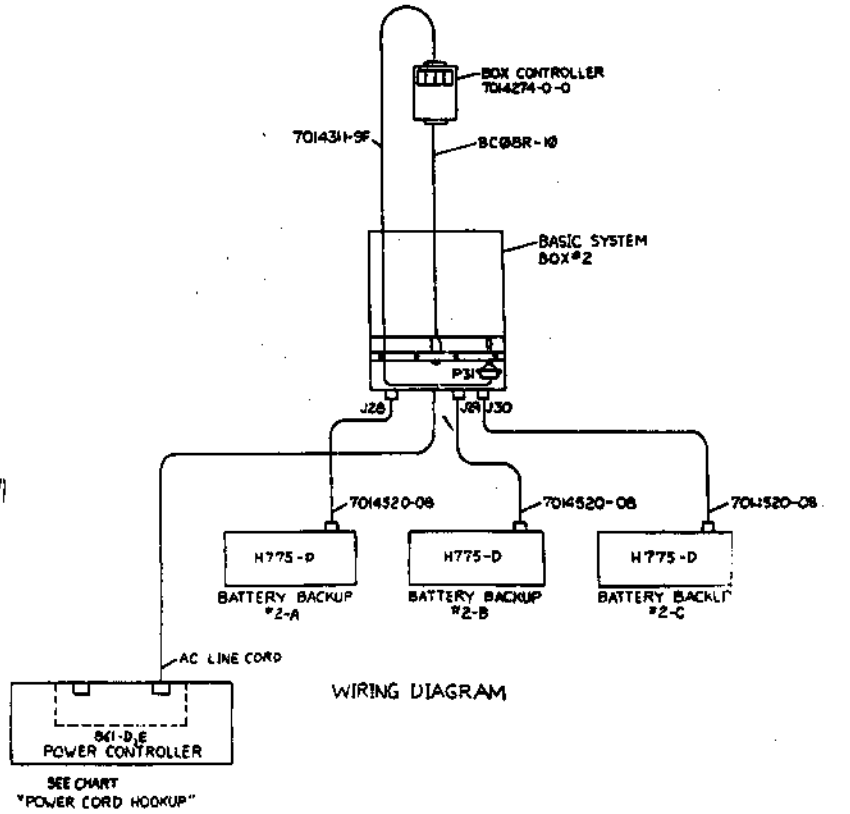
VIEW P-P  
 TYP METHOD OF DRESSING BATTERY  
 CABLES AT REAR OF MKII



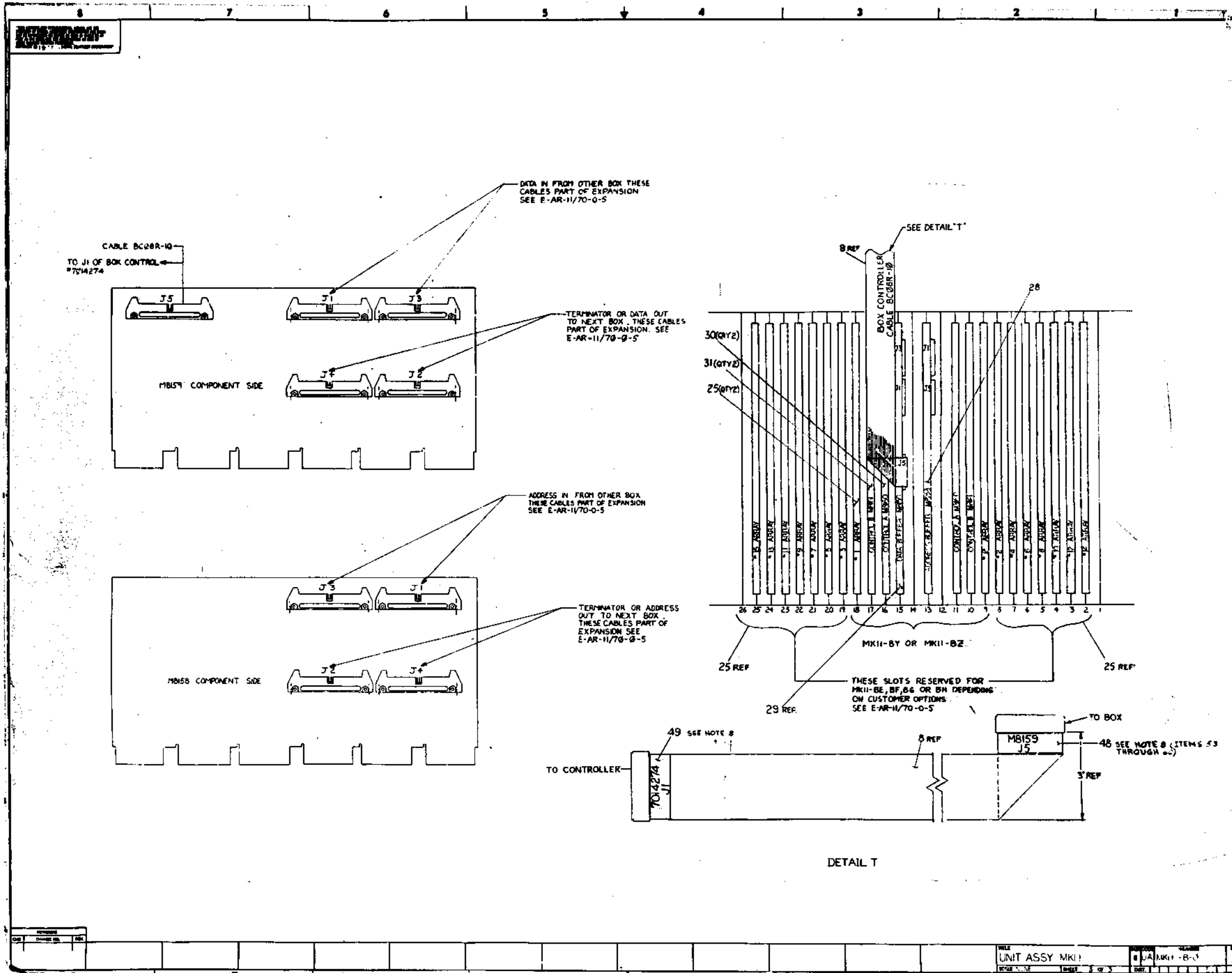
SECTION R-R  
 TYP ATTACHMENT OF CABLE  
 TO BOX CONTROLLER



DETAIL N



WIRING DIAGRAM



DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY VARIATION									
PARTS LIST												
MADE BY M. CHOINIERE	CHECKED D. HEALY	SECTION 1										
DATE 6 SEPT 77	DATE 20 SEPT 77	ISSUED SECT. 1										
ENG A. M. Zaccari	PROD K. Taylor	ISSUED SECT. 1										
DATE 11-1-77	DATE 11-1-77											
ITEM NO.	DWG NO./PART NO.	DESCRIPTION	MK11-BA	MK11-BB	MK11-BC	MK11-BD	MK11-BE	MK11-BF	MK11-BG	MK11-BH	MK11-BY	MK11-BZ
1	E-AR-11/70-0-5	11/70 SYSTEM EXPANSION (MK11)										
2	E-UA-H775-D-β	BATTERY BACK UP										
3	C-AD-7014274-0-0	BOX CONTROLLER										
4	D-IA-7014311-91-β	CABLE, BOX CONTROLLER										
5	E-UA-MK11-BY-β	UNIT ASSY MK11 115V 50/60 HZ										
6	E-UA-MK11-BZ-β	UNIT ASSY MK11 230V 50/60 HZ										
7	D-IA-7014520-08-0	CABLE, POWER BATTERY BACK UP										
8	D-UA-BC66R-1β-β	I/O CABLE BC66R										
9	C-PL-7006501-35-0	BASIC CAB ASSY 19"										
10	D-IA-7010780-1-0	PANEL, LOGO										
11	D-AD-7010791-0-0	FRONT DOOR ASSY										
12	C-MD-7419162-0-0	BAR, CABLE										
13	E-IA-7014950-0-0	MTG PANEL CONTROL										
14	C-PS-1214578-0-0	BLANK PANEL										
15	D-IA-7011223-1-0	BASKET WIRE CABLE (2 BAY)										
16	C-IA-7011222-0-0	BAR ASSY BASKET										
17	C-MD-7413983-0-0	CLAMP, WIRE BASKET										
18	C-MD-7419249-0-0	BAR, STRAIN RELIEF (FRONT)										
19	C-MD-7419176-0-0	BAR, STRAIN RELIEF (REAR)										
20	D-AD-7010532-0-0	FULL DOOR UNIT ASSY										
21	E-UA-861-D-β	POWER CONTROL 115V										
22	E-UA-861-E-β	POWER CONTROL 230V										
TITLE UNIT ASSY MK11	ASSY NO. E-UA-MK11-β-β	SIZE A	CODE PL	NUMBER MK11-B-β				REV A	ECO NO. 00001			
SHEET 1 OF 3		DWT										

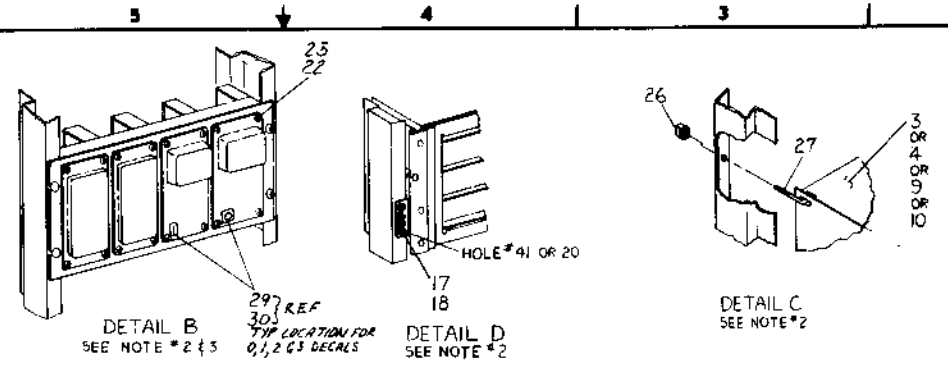
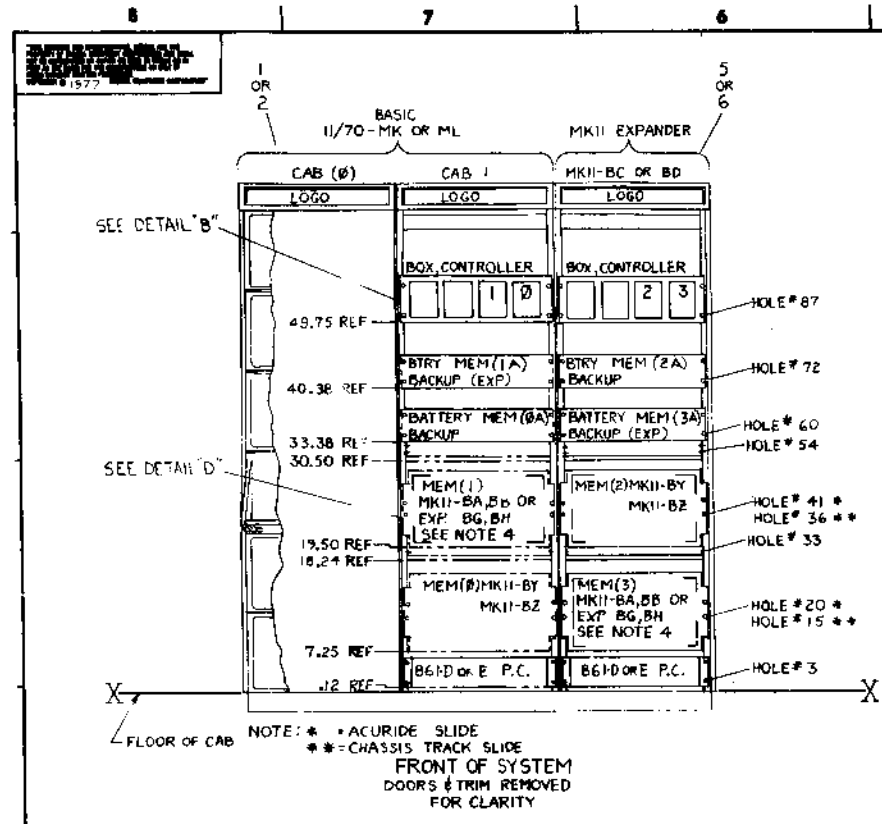
DEC FORM  
DRA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY VARIATION									
PARTS LIST												
MADE BY M. CHOINIERE	CHECKED D. HEALY	SECTION 1										
DATE 6 SEPT 77	DATE 20 SEPT 77	ISSUED SECT. 1										
ENG A. M. Zaccari	PROD K. Taylor	ISSUED SECT. 1										
DATE 11-1-77	DATE 11-1-77											
ITEM NO.	DWG NO./PART NO.	DESCRIPTION	MK11-BA	MK11-BB	MK11-BC	MK11-BD	MK11-BE	MK11-BF	MK11-BG	MK11-BH	MK11-BY	MK11-BZ
45	9006570-00	NUT, WING #6 - 32	2	2	2	2	-	-	2	2	-	-
46	D-UA-BC66R-8β-β	CABLE (8' - 6") (BOX TO BOX)	4	4	-	-	-	-	4	4	-	-
47	D-UA-BC66R-1β-β	CABLE (10' - 0") (CAB TO CAB)	-	-	4	4	-	-	-	-	-	-
48	3612427-26	DECAL, (M8159-J5)	1	1	1	1	-	-	1	1	-	-
49	3612427-31	DECAL, (7014274-J1)	1	1	1	1	-	-	1	1	-	-
50	9008890-00	TAPE, FIBRE GLASS .50 w	A/R	A/R	A/R	A/R	-	-	A/R	A/R	-	-
51	9007036-00	GROMMET ALLIGATOR	A/R	A/R	A/R	A/R	-	-	A/R	A/R	-	-
52	A-DC-7409873-1-0	DECAL, POWER CORR.	-	-	-	-	-	-	-	-	-	-
53	A-PS-3612427-22	DECAL (M8158-J1)	1	1	1	1	-	-	1	1	-	-
54	A-PS-3612427-23	DECAL (M8158-J2)	1	1	1	1	-	-	1	1	-	-
55	A-PS-3612427-24	DECAL (M8158-J3)	1	1	1	1	-	-	1	1	-	-
56	A-PS-3612427-25	DECAL (M8158-J4)	1	1	1	1	-	-	1	1	-	-
57	A-PS-3612417-27	DECAL (M8159-J1)	1	1	1	1	-	-	1	1	-	-
58	A-PS-3612427-28	DECAL (M8159-J2)	1	1	1	1	-	-	1	1	-	-
59	A-PS-3612427-29	DECAL (M8159-J3)	1	1	1	1	-	-	1	1	-	-
60	A-PS-3612427-30	DECAL (M8159-J4)	1	1	1	1	-	-	1	1	-	-
NOTE: MK11-BY, BZ ARE UNIT SUB ASSEMBLIES OF MK11-BA, BB												
TITLE UNIT ASSY MK11	ASSY NO. E-UA-MK11-β-β	SIZE A	CODE PL	NUMBER MK11-B-β				REV A	ECO NO. 00001			
SHEET 3 OF 3		DWT										

DEC FORM  
DRA 110

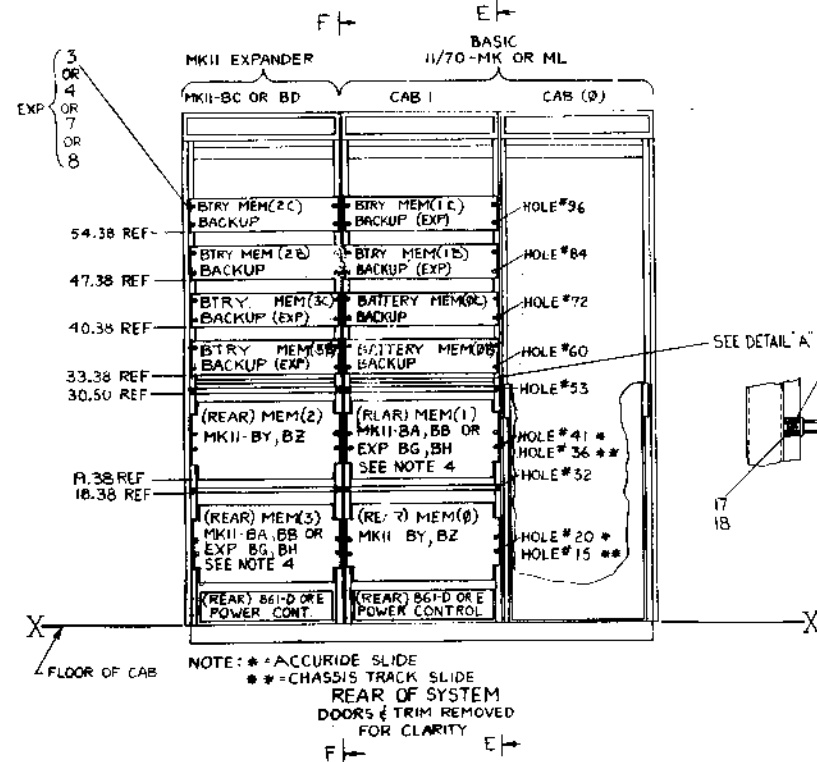
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY VARIATION									
PARTS LIST												
MADE BY M. CHOINIERE	CHECKED D. HEALY	SECTION 1										
DATE 6 SEPT 77	DATE 20 SEPT 77	ISSUED SECT. 1										
ENG A. M. Zaccari	PROD K. Taylor	ISSUED SECT. 1										
DATE 11-1-77	DATE 11-1-77											
ITEM NO.	DWG NO./PART NO.	DESCRIPTION	MK11-BA	MK11-BB	MK11-BC	MK11-BD	MK11-BE	MK11-BF	MK11-BG	MK11-BH	MK11-BY	MK11-BZ
23	C-IA-7010695-0-0	861-D TO 861-D HARNESS	-	-	1	1	-	-	-	-	-	-
24	C-MD-7413659-0-0	BRACKET SHIPPING	-	-	1	1	-	-	-	-	-	-
25	D-UA-M811-KE-β	M811-K MOS STORAGE ARRAY 32K WORDS	-	-	-	-	2	8	14	14	2	2
26	E-AD-7014614-00-0	MK11 MEMORY BOX ASSY 115V 50/60 HZ	-	-	-	-	-	-	-	-	1	-
27	E-AD-7014614-01-0	MK11 MEMORY BOX ASSY 230V 50/60 HZ	-	-	-	-	-	-	-	-	1	-
28	D-UA-M8158-β-β	MK11 ADDRESS BUFFER	-	-	-	-	-	-	-	1	1	-
29	D-UA-M8159-β-β	MK11 DATA BUFFER	-	-	-	-	-	-	-	1	1	-
30	D-UA-M816β-β-β	MK11 CONTROL A	-	-	-	-	-	-	-	2	2	-
31	D-UA-M8161-β-β	MK11 CONTROL B	-	-	-	-	-	-	-	2	2	-
32	C-MD-7419482-0-0	CABLE HOLDER	1	1	1	1	-	-	1	1	-	-
33	9006568-00	NUT, KEPS, 5/16-18	-	-	1	1	-	-	-	-	-	-
34	9007786-00	NUT TINNEMAN #10 - 32	-	-	51	51	-	-	-	-	-	-
35	9007031-00	TIE WRAP	-	-	-	-	-	-	-	-	-	-
36	9006565-00	NUT, KEPS #10 - 32	A/R	A/R	A/R	A/R	-	-	-	-	-	-
37		DECAL CABINET DESIGNATION	-	-	-	-	-	-	-	-	-	-
38			-	-	-	-	-	-	-	-	-	-
39	9008887-00	JUMPER ASSY	-	-	-	-	-	-	-	-	-	-
40	9009700-00	SCREW, SEMS PH HD TRUSS #10 - 32 x .50	-	-	52	52	-	-	-	-	-	-
41	9008301-03	SCR PH HD TRUSS #4 - 40 x .25	-	-	16	16	-	-	-	-	-	-
42	9006632-00	WASH. EXT. TOOTH LOCK #4	-	-	16	16	-	-	-	-	-	-
43	9009760-00	CLIP	-	-	4	4	-	-	-	-	-	-
44	9008264-00	MOUNT, CABLE ADHESIVE BACK	A/R	A/R	A/R	A/R	-	-	A/R	A/R	-	-
TITLE UNIT ASSY MK11	ASSY NO. E-UA-MK11-β-β	SIZE A	CODE PL	NUMBER MK11-B-β				REV A	ECO NO. 00001			
SHEET 2 OF 3		DWT										

DEC FORM  
DRA 110

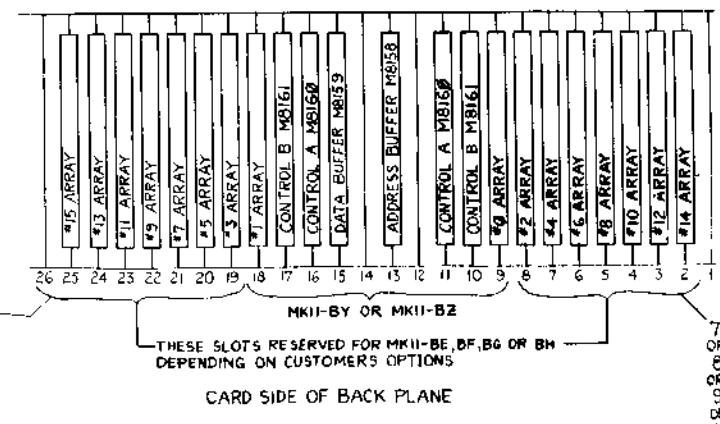
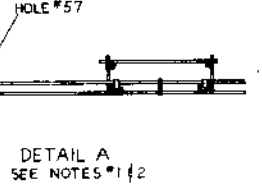


PANEL DESIGNATION	DECAL NAME	ITEM NO.
* MKII-BY, BZ	MEM 0	29
* BATTERY MEM BACKUP	BAT 0-A	29
* BATTERY MEM BACKUP	BAT 0-B	29
* BATTERY MEM BACKUP	BAT 0-C	29
* MKII-BA, BB OR EXP. BG, BH	MEM 1	30
* BTRY MEM BACKUP (EXP)	BAT 1-A	30
* BTRY MEM BACKUP (EXP)	BAT 1-B	30
* BTRY MEM BACKUP (EXP)	BAT 1-C	30
* MKII-BY, BZ	MEM 2	31
* BTRY MEM BACKUP	BAT 2-A	31
* BTRY MEM BACKUP	BAT 2-B	31
* BTRY MEM BACKUP	BAT 2-C	31
* MKII-BA, BB OR EXP. BG, BH	MEM 3	32
* BTRY MEM BACKUP	BAT 3-A	32
* BTRY MEM BACKUP	BAT 3-B	32
* BTRY MEM BACKUP	BAT 3-C	32

- NOTES:
- CABLE HOLDER SUPPLIED WITH ITEM #5 OR #6 TO BE MOUNTED IN HOLES #57 BETWEEN CAB #1 & MKII-BC OR BD EXP CAB.
  - FOR VIEW ORIENTATION SEE E-1A-MKII-B-0 SH#1.
  - FOR MKII EXPANDER CAB ADD BOX 3. FOR 11/70 EXPANSION ADD BOX 1, USING EXISTING HARDWARE SUPPLIED TO MOUNT IN PLACE.
  - THIS EXPANSION BOX USED FOR EITHER MEMORY #1 OR #3 WILL BE MKII-BY OR BZ WITH CUSTOMER OPTIONS.
  - ALL BCOGR OUTPUT INPUT CABLES MUST BE PLUGGED INTO THE INTERFACE MODULE CARDS WITH THE RED STRIPE VIEWED FROM MODULE SIDE 1 TO THE LEFT OF THE CONNECTOR.
  - ON BCOGR CABLES RIBBED SIDE WILL BE VISIBLE ON OUT CABLES AND SMOOTH SIDE ON IN CABLES AS VIEWED FROM SIDE 1 OF BOARD.



\* INDICATES DECIMALS APPLIED TO FRONT PANELS  
 ALL OTHERS - REAR PANELS (AS NOTED)



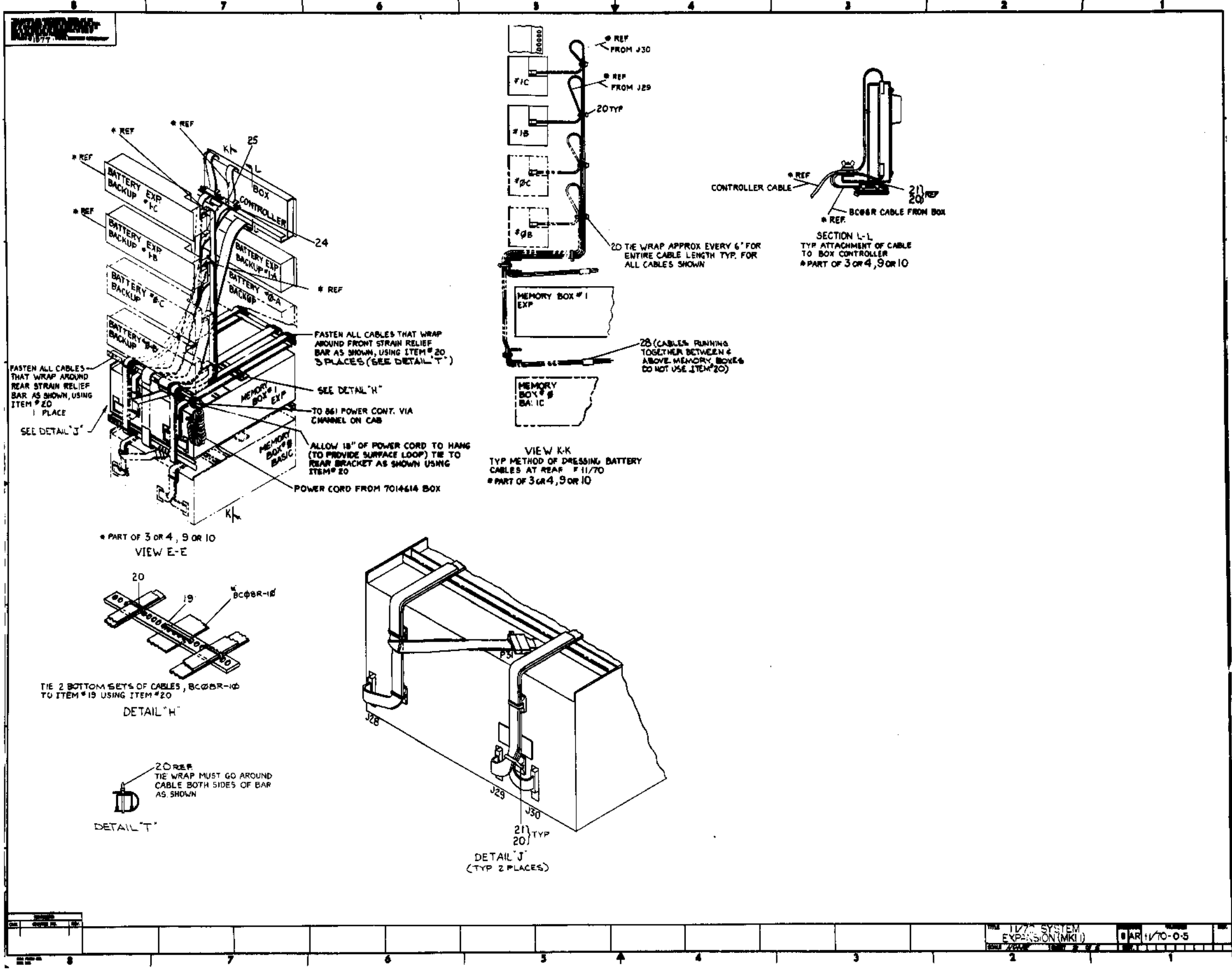
11/70 CABLE 10'-0"	BC06 B06	33
1 MKII MEMORY BOX DECAL	3616976-23	32
1 MKII MEMORY BOX DECAL	3616976-02	31
1 MKII MEMORY BOX DECAL	3616976-01	30
1 MKII MEMORY BOX DECAL	3616976-00	29
1 TAPE FIBRE GLASS 50W	3006800-0-0	28
1 BRACKET SHIPPING	3006559-0-0	27
1 NUT TINNERMAN #10-32	3006558-00	26
1 RIBBAR, CABLE	3006557-0-0	25
1 NUT WING #6-32	3006570-00	24
1 REFWASH EXT TOOTH LOCK #4	3006432-00	23
1 REFWASH EXT TOOTH LOCK #4	3006432-00	22
1 R MOUNT, CABLE ADM. BACK	3006264-00	21
1 TIE WRAP	3007031-00	20
1 CABLE HOLDER	3007419-482-0-0	19
1 NUT TINNERMAN #10-32	3007786-00	18
1 SCR SEMS PHOTODUSS #2-56	3006900-00	17
1 UNIT ASSY LA36	3006134-0-0	16
1 CABLE (10'-0")	3006134-10	15
1 CABLE (8'-6")	3006134-0F	14
1 CABLES, DATA SET B	3006134-03-0	13
1 UNIT ASSY MKII	3006134-0	12
1 UNIT ASSY MKII	3006134-0	11
1 UNIT ASSY MKII	3006134-0	10
1 UNIT ASSY MKII	3006134-0	9
1 UNIT ASSY MKII	3006134-0	8
1 UNIT ASSY MKII	3006134-0	7
1 UNIT ASSY MKII	3006134-0	6
1 UNIT ASSY MKII	3006134-0	5
1 UNIT ASSY MKII	3006134-0	4
1 UNIT ASSY MKII	3006134-0	3
1 UNIT ASSY 11/70 (MKII BASIC)	3006134-0	2
1 UNIT ASSY 11/70 (MKII BASIC)	3006134-0	1

11/70 SYSTEM EXPANSION (MKII)

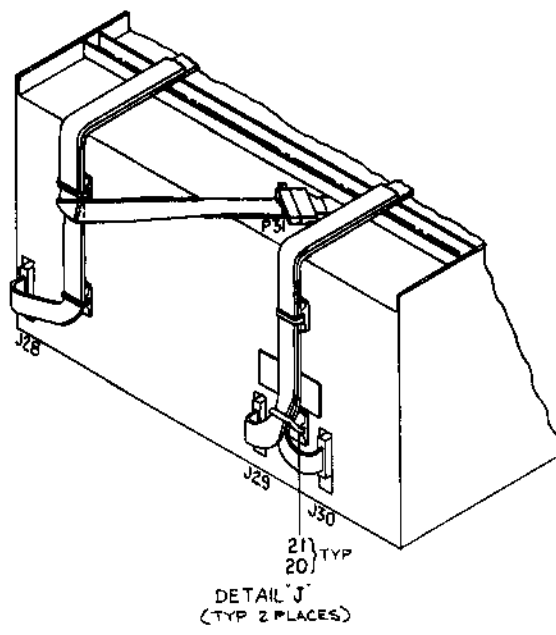
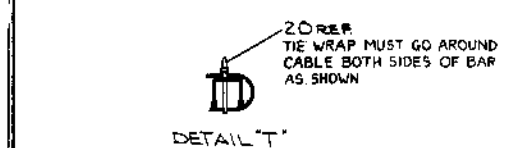
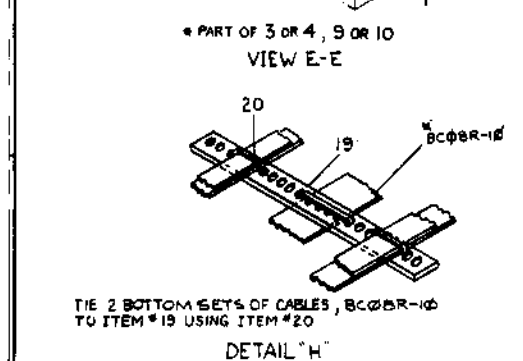
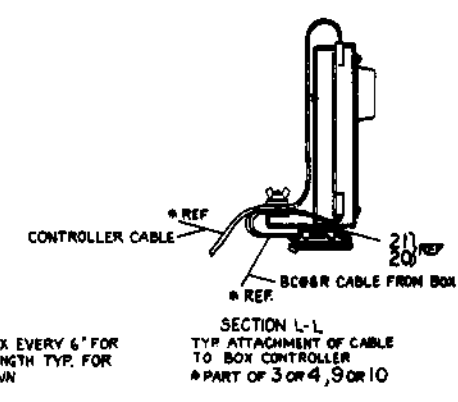
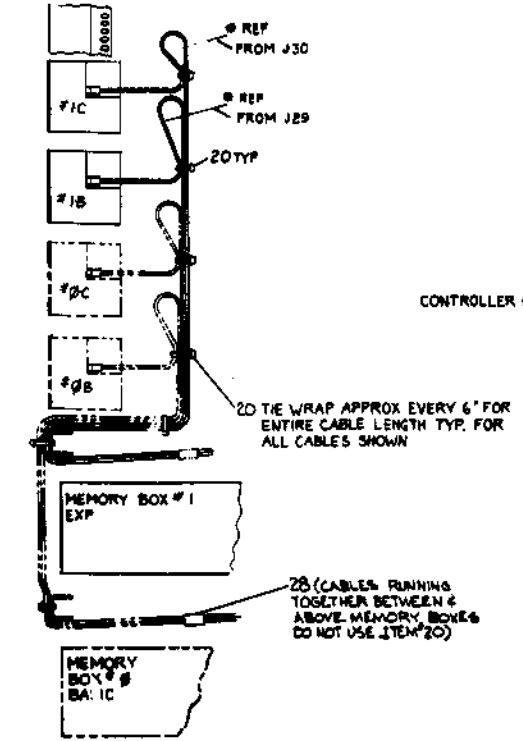
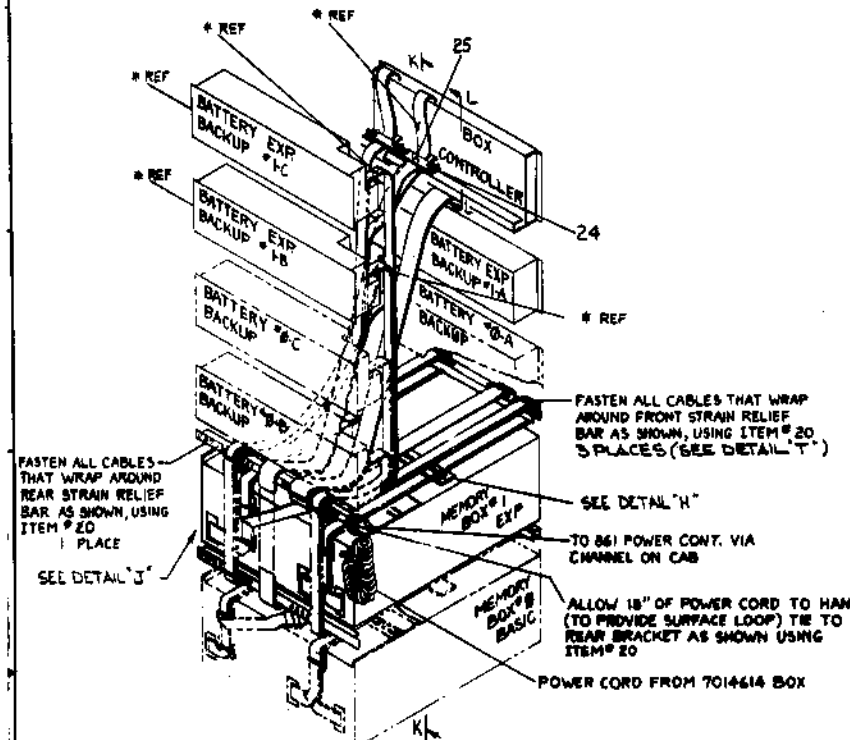
DATE: 11/70

REV: 05

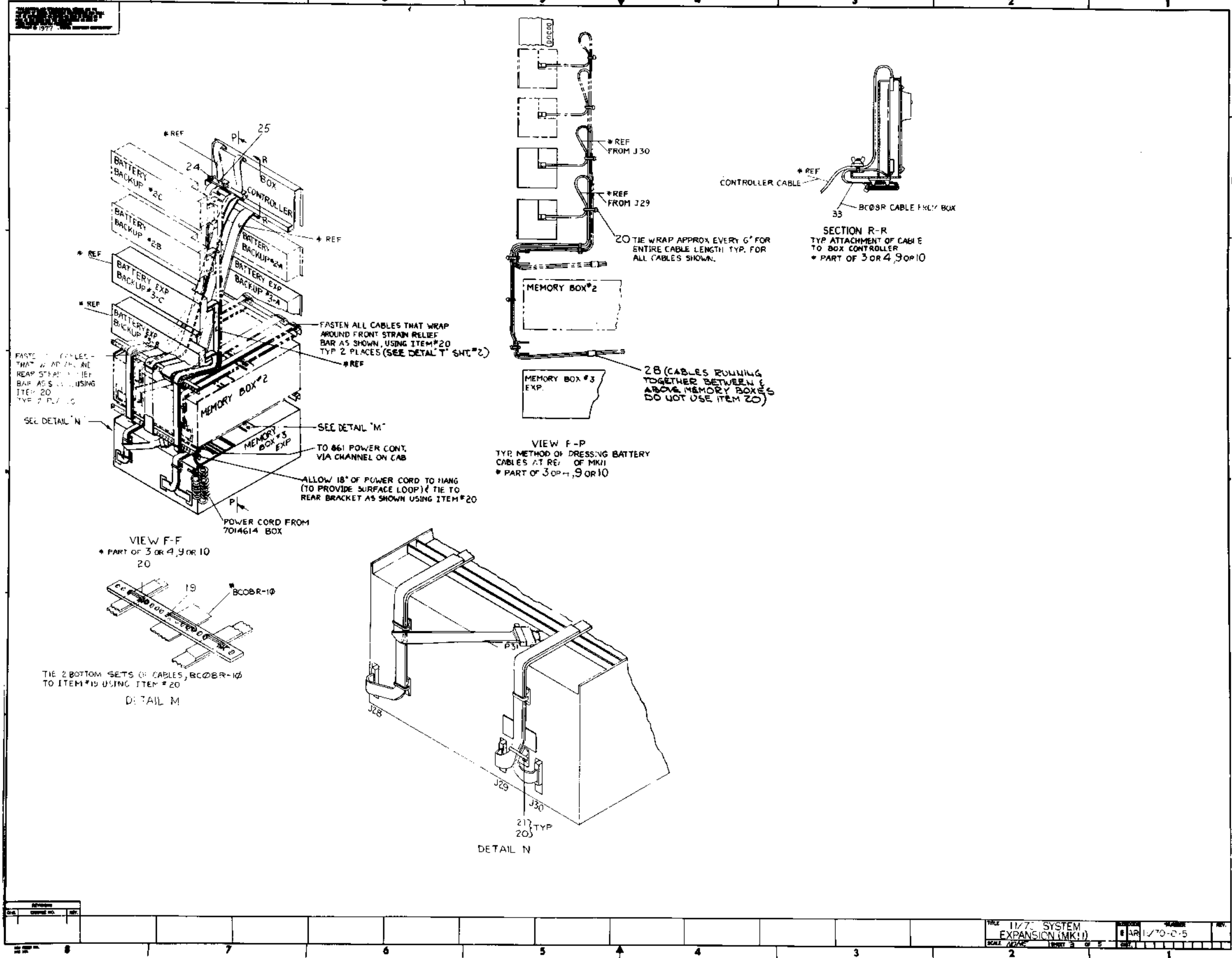
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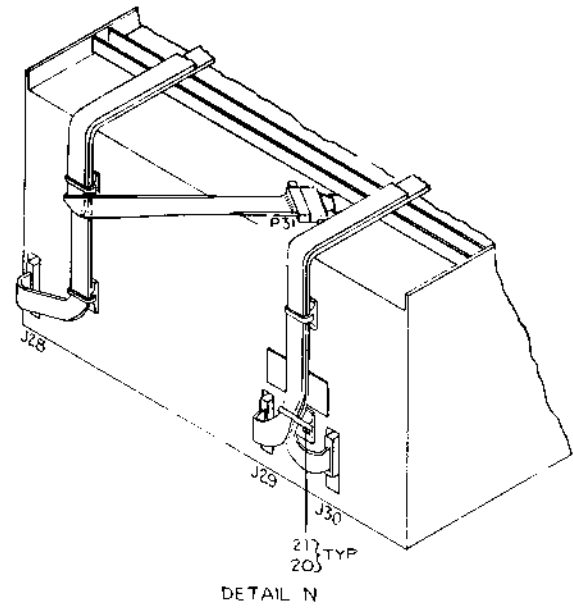
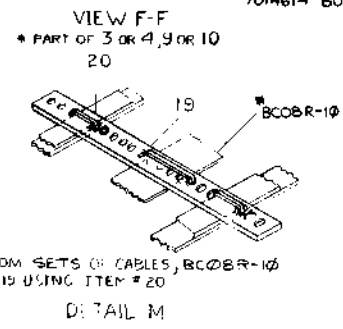
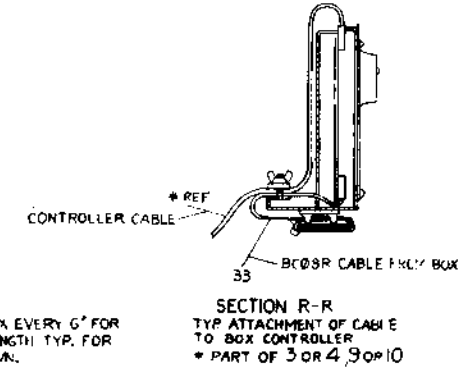
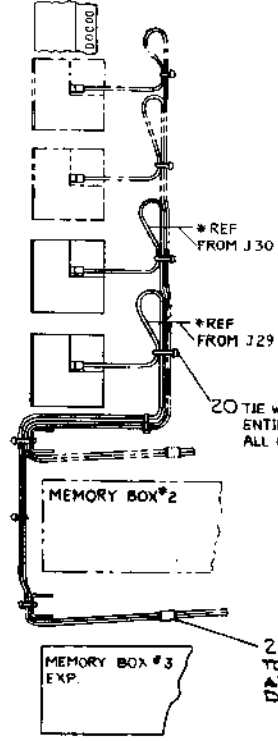
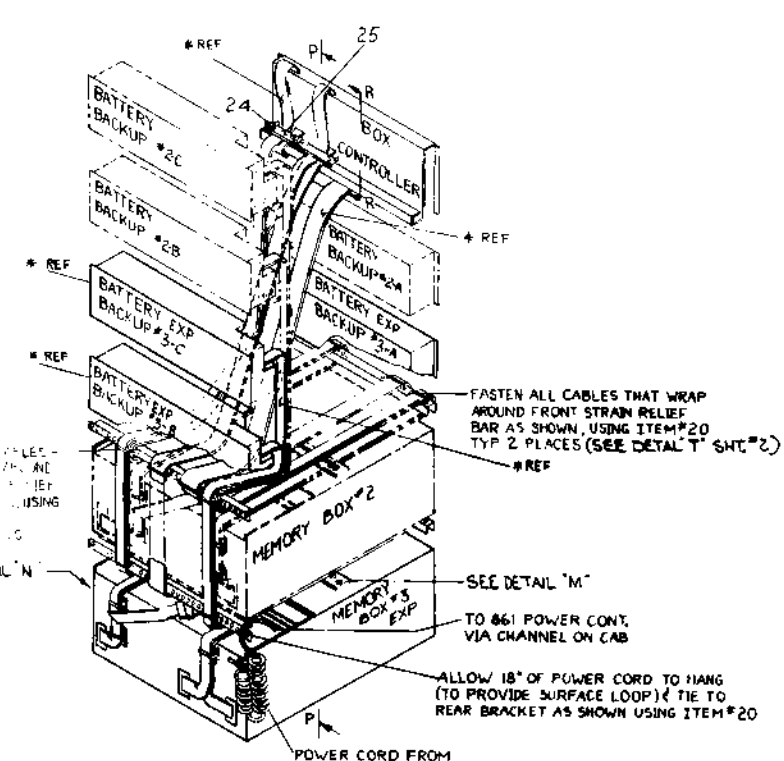
1177A SYSTEM EXPANSION (MK I)



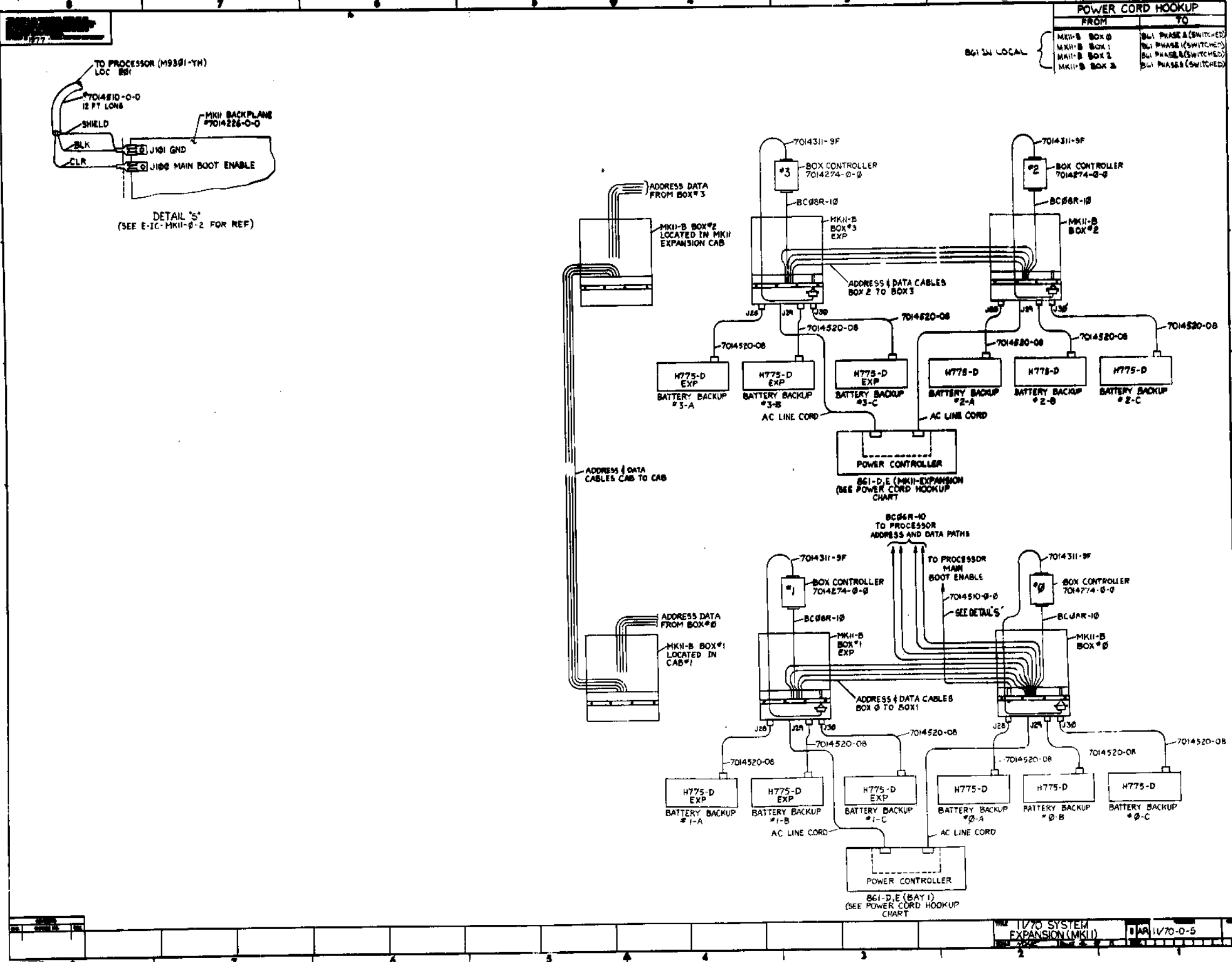
1177A SYSTEM EXPANSION (MK I) BAR 1170-0-5



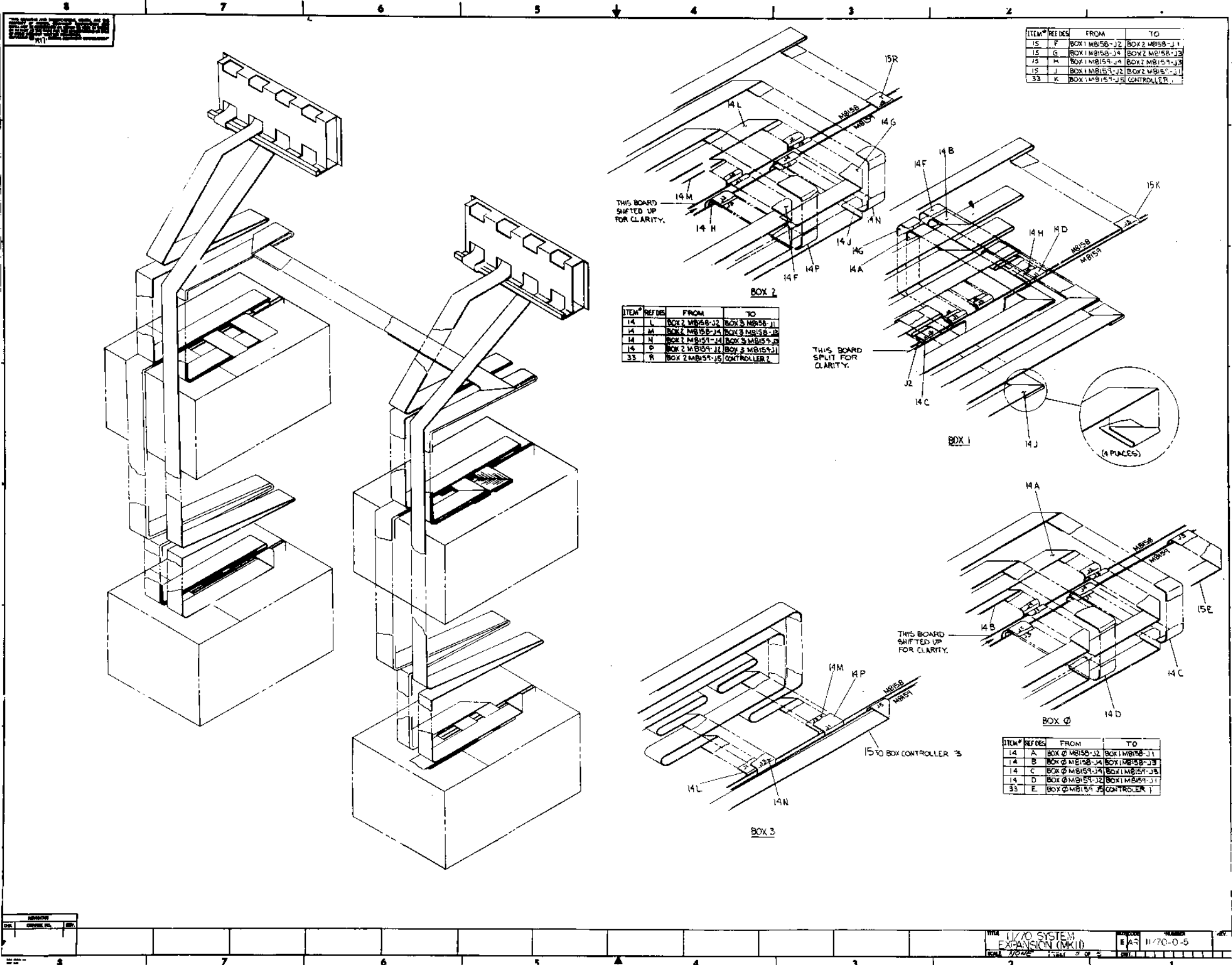
11/77



REV	DESCRIPTION







ITEM#	REF DES	FROM	TO
15	F	BOX 1 MB158-J2	BOX 2 MB158-J1
15	G	BOX 1 MB158-J4	BOX 2 MB158-J3
15	H	BOX 1 MB159-J4	BOX 2 MB159-J3
15	J	BOX 1 MB159-J2	BOX 2 MB159-J1
33	K	BOX 1 MB159-J5	CONTROLLER 2

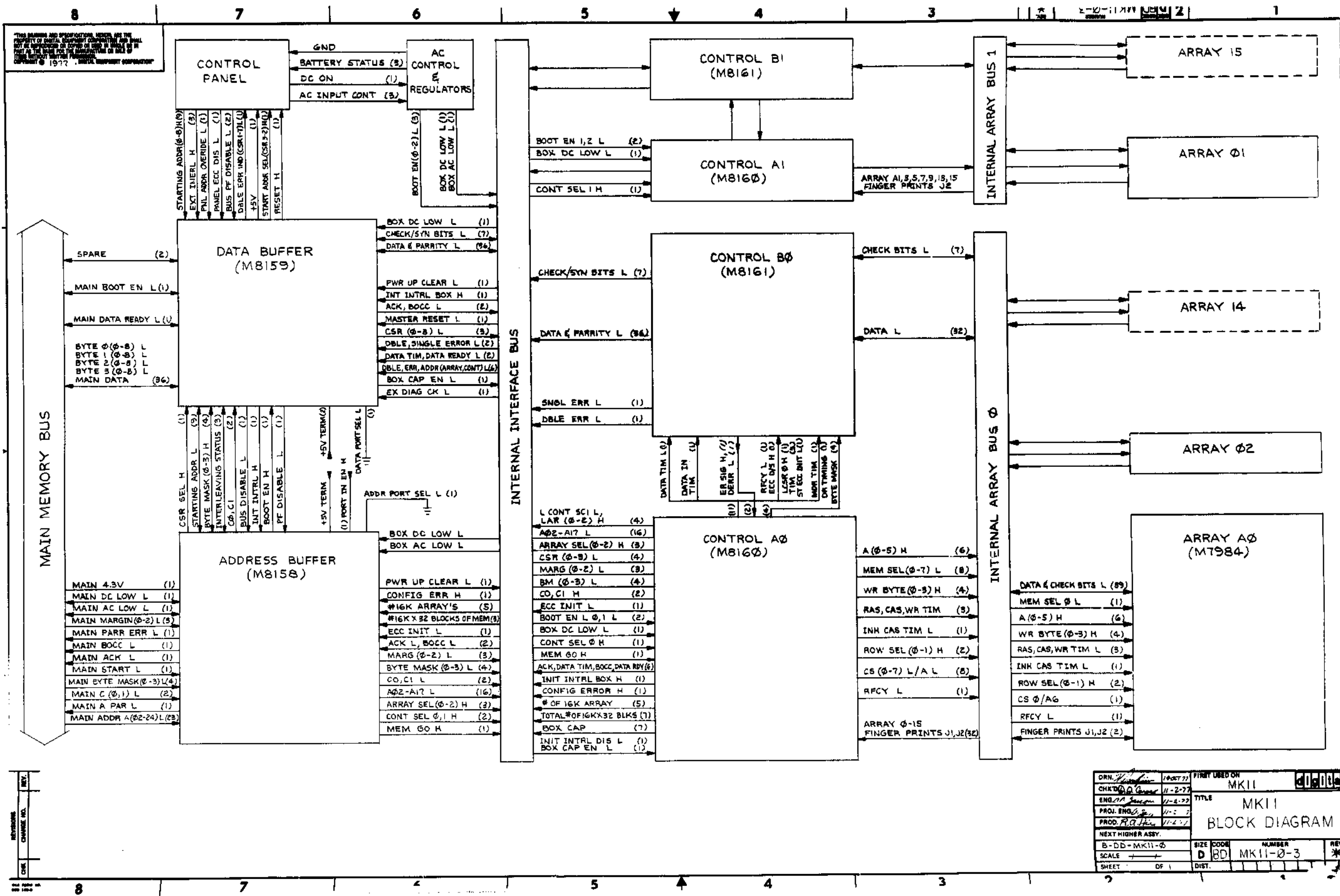
BOX 2

ITEM#	REF DES	FROM	TO
14	L	BOX 2 MB158-J2	BOX 3 MB158-J1
14	M	BOX 2 MB158-J4	BOX 3 MB158-J3
14	N	BOX 2 MB159-J4	BOX 3 MB159-J3
14	P	BOX 2 MB159-J2	BOX 3 MB159-J1
33	R	BOX 2 MB159-J5	CONTROLLER 2

BOX 1

ITEM#	REF DES	FROM	TO
14	A	BOX 1 MB158-J2	BOX 1 MB158-J1
14	B	BOX 1 MB158-J4	BOX 1 MB158-J3
14	C	BOX 1 MB159-J4	BOX 1 MB159-J3
14	D	BOX 1 MB159-J2	BOX 1 MB159-J1
33	E	BOX 1 MB159-J5	CONTROLLER 1

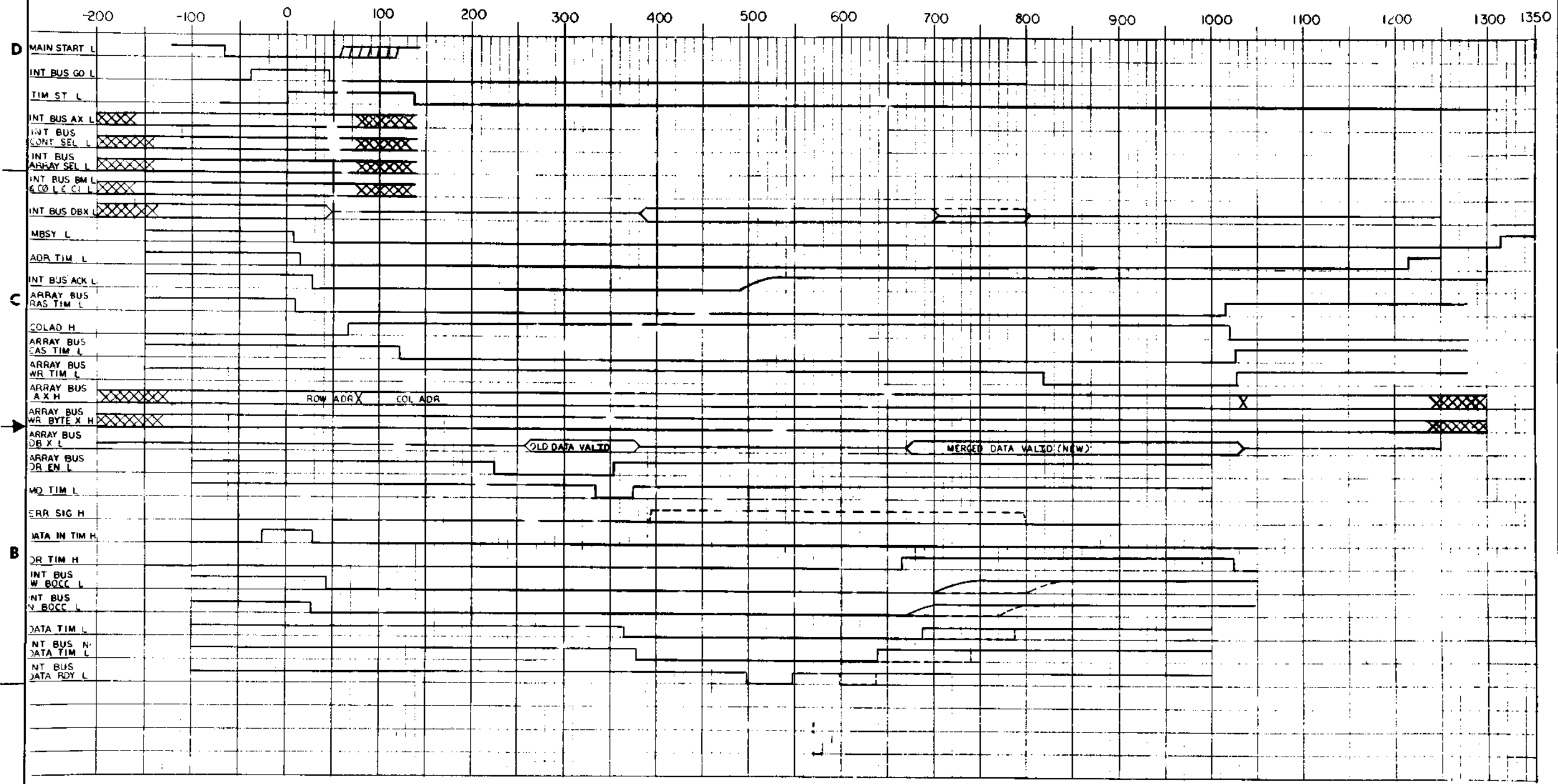
REV	DATE	BY



DRN. <i>[Signature]</i>	1-10-77	FINISH USED ON	MK11
CHK'D <i>[Signature]</i>	11-2-77	TITLE	MK11
ENG. <i>[Signature]</i>	11-2-77	BLOCK DIAGRAM	
PROJ. ENG. <i>[Signature]</i>	11-2-77		
PROD. <i>[Signature]</i>	11-2-77		
NEXT HIGHER ASSY.			
B-DD-MK11-0	SIZE CODE	NUMBER	REV.
SCALE	D	BD	MK11-0-3
SHEET	OF 1	DIST.	

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EXCHANGE CYCLE

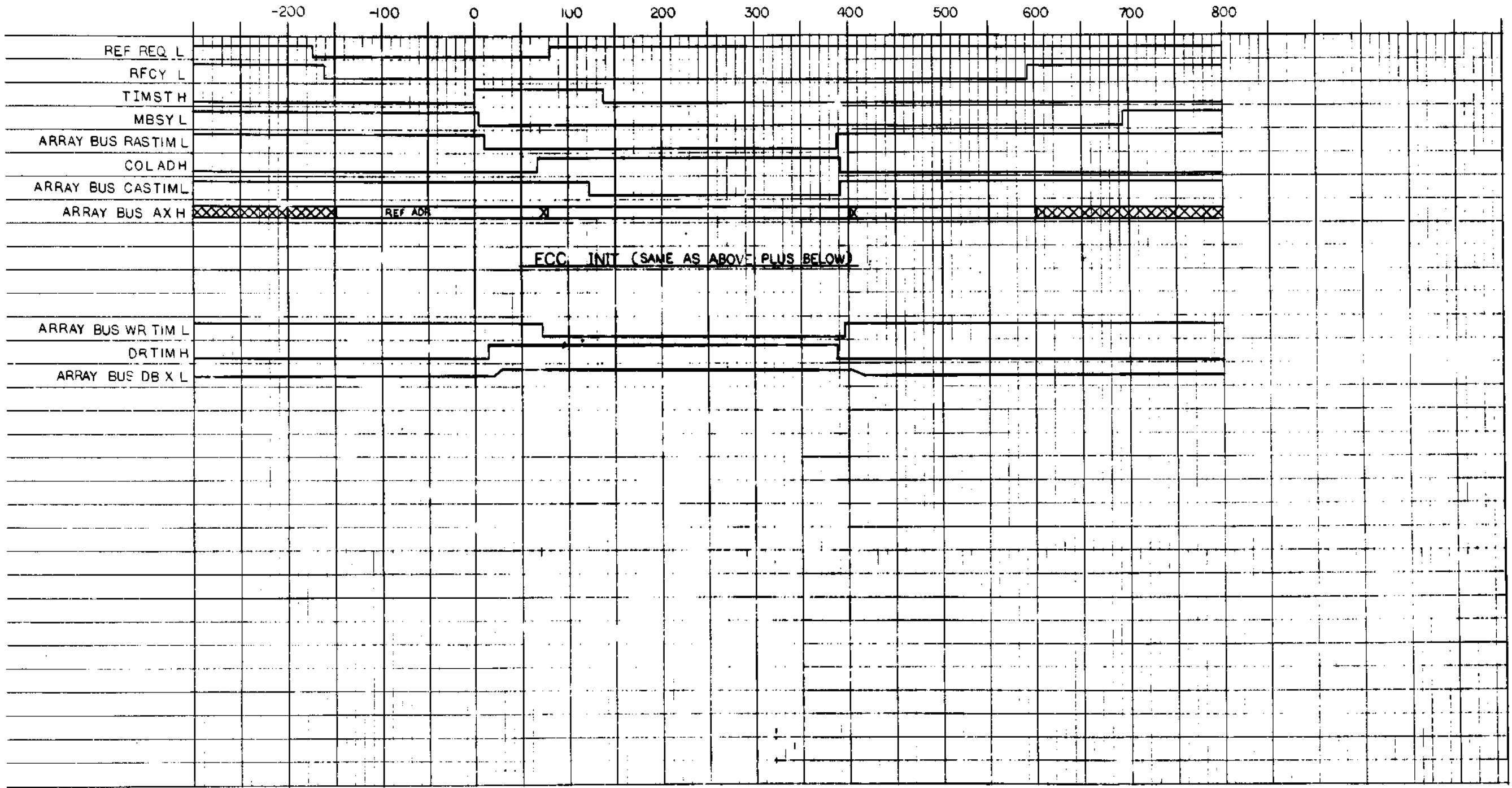


REV.	
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REV.	
REV.	
REV.	
REV.	
REV.	
REV.	

DRN. <i>[Signature]</i>	18 OCT 77	FIRST USED ON	MKII
CHK'D BY <i>[Signature]</i>	11-2-77	TITLE	MKII
ENGR. <i>[Signature]</i>	11-1-77	NUMBER	2
PROJ. ENGR. <i>[Signature]</i>	11-1-77	REV.	*
PROD. RA. <i>[Signature]</i>	11-2-77	SCALE	NONE
NEXT HIGHER ASSY.		SHEET	1 OF 5
B-00-MKII-8		DIST.	

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REFRESH CYCLE

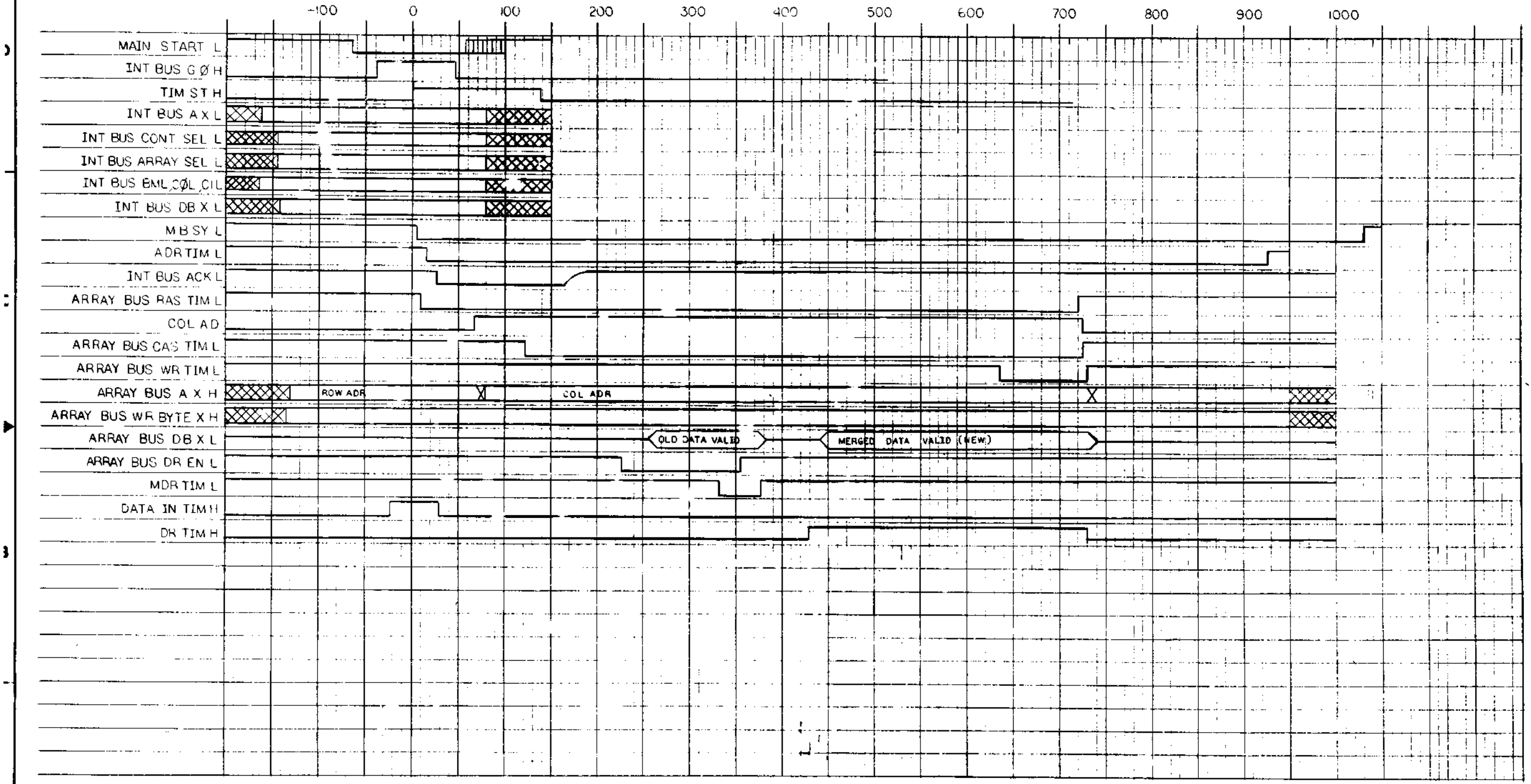


REV. 1  
REV. 2  
REV. 3  
REV. 4  
REV. 5  
REV. 6  
REV. 7  
REV. 8

DRN. E. DeVore	12-27-77	DATE	12-27-77
CHK'D. P. Gannon	1-2-78	DATE	1-2-78
ENGR. J. Brown	1-3-78	DATE	1-3-78
PROJ. ENGR. J. Brown	1-3-78	DATE	1-3-78
PROD. R. H. Hall	1-3-78	DATE	1-3-78
NEXT HIGHER ASSY.		TITLE	
B-DD-MKII - 0		MKII	
SCALE NONE		TIMING DIAGRAM	
SHEET 2 OF 5	REV. *	DTI MKII - 0 - 4	REV. *

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WRITE (Ø-3 BYTE) INTERNAL RMW CYCLE

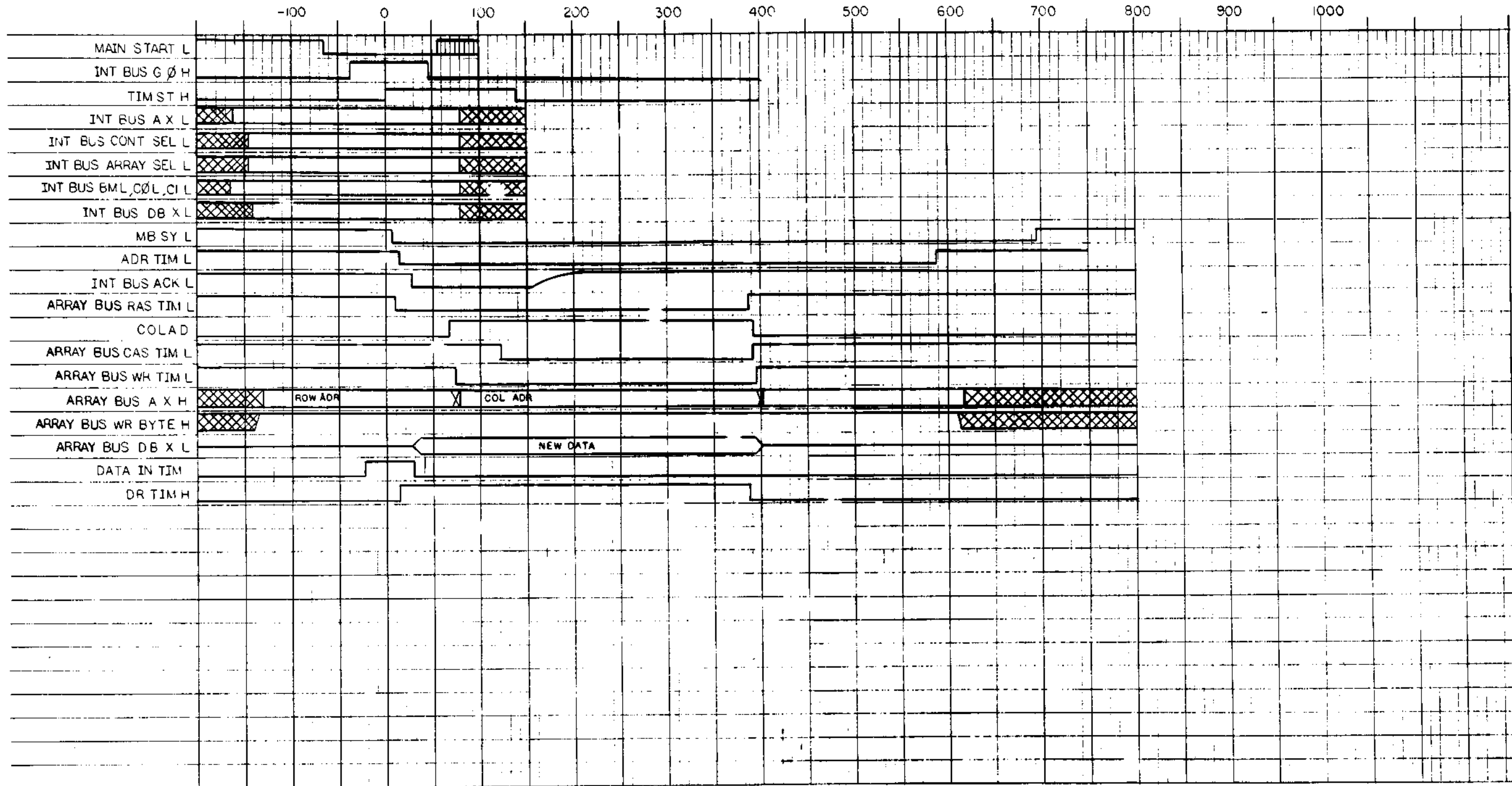


REV.	
CHK.	
CHG.	
NO.	

DRN. E DeV/Diso	130RT??	FIRST USED ON	40000
CHK'D BY	G. Gentry	11-2-77	MKII
ENR. BY	A. Jones	11-2-77	TITLE
PROJ. ENR. BY	A. Jones	11-2-77	MKII
PROD. BY	R. Hall	11-2-77	TIMING DIAGRAM
NEXT HIGHER ASSY.			
B-DD-MKII-Ø		SIZE CODE	NUMBER
SCALE NONE		D TD	MKII - Ø - 4
SHEET 3 OF 5		DIST.	

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WRITE (4 BYTE) CYCLE



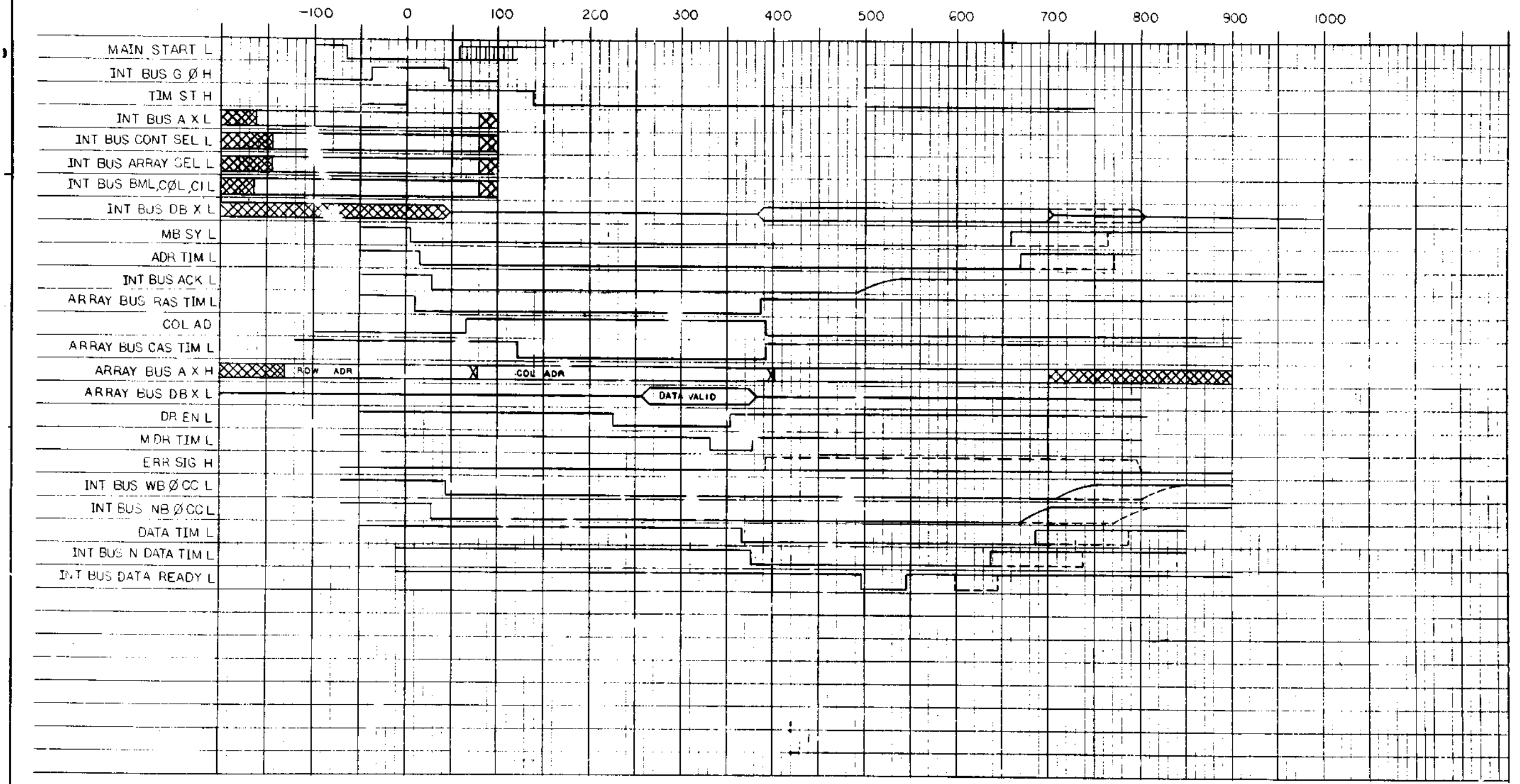
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DRN. E. DeVCLD.	1/10/77	FIRST TIME ON	30-00-0
CHK'D	11-2-77	TITLE	MKII
ENG.	11-2-77		
PRG. R. Q.	11-2-77		
NEXT HIGHER ASSY.			
B-00-MKII-0		SIZE CODE	NUMBER
SCALE NONE		D TD	MKII-0-4
SHEET 4 OF 5		DIST.	

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READ CYCLE



REV.	
CHANGE NO.	
DATE	

DRN. E. DeVellis	11-2-77	FIRST USED ON	MKII
CHK'D D. G. Gandy	11-2-77	TITLE	MKII
ENG. J. P. Gandy	11-2-77		
PROD. R. G. Gandy	11-2-77		
NEXT HIGHER ASSY.			
B-DD-MKII-Ø		SIZE CODE	Ø TD MKII-Ø-4
SCALE NONE		NUMBER	Ø TD MKII-Ø-4
SHEET 5 OF 5		DIST.	

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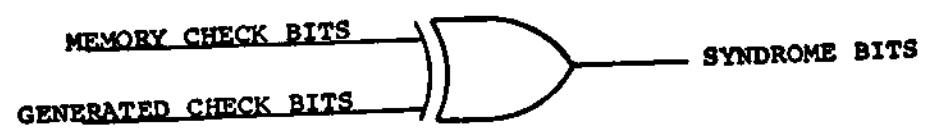
### MODIFIED HAMMING CODE MATRIX

DATA BITS  
 SYNDROME BITS

	BYTE 0							BYTE 1							BYTE 2							BYTE 3							CHECK BITS											
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	C1	C2	C4	C8	C16	C32	Ct	
S1	X	X		X		X		X	X		X		X		X	X		X		X		X	X		X		X		X	X		X		X		X				
S2		X	X				X	X		X	X				X	X		X	X				X	X		X	X				X	X		X	X				X	X
S4				X	X	X	X					X	X	X					X	X	X					X	X	X		X	X	X	X	X	X					
S8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
S16	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X					
S32								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X				
St	X		X		X	X		X		X		X	X		X		X		X	X		X		X		X	X		X		X		X	X						

NOTES:

- EACH CHECK BIT IS THE RESULT OF ODD PARITY GENERATED ON THE DATA BITS DESIGNATED BY X. i.e. C1 IS  $\sum(1,3,5,7,9,\dots,29,31)$ . C32 IS  $\sum(8$  thru 31). THE EXCEPTION IS Ct, WHICH IS THE RESULT OF EVEN PARITY.
- SYNDROME BITS (S1 etc.) ARE FORMED BY A COMPARISON OF THE CHECK BITS READ FROM MEMORY AND THE NEW CHECK BITS GENERATED ON THE DATA READ FROM MEMORY.
- A SINGLE ERROR WILL CAUSE AN ODD NUMBER OF SYNDROME BITS TO GO HIGH  
 e.g. IF BIT 1 FAILS S1, S8, & S16 WILL GO HIGH.  
 IF BIT 15 FAILS S1, S2, S4, S8, & S32 WILL GO HIGH.  
 A DOUBLE ERROR WILL CAUSE AN EVEN NUMBER OF SYNDROME BITS TO GO HIGH.  
 e.g. IF BITS 0 & 1 FAIL S1 & ST WILL GO HIGH; BUT S8 & S16 WILL NOT SINCE C8 & C16 ARE COMMON TO BITS 0 & 1 AND THE PARITY REMAINS UNCHANGED.

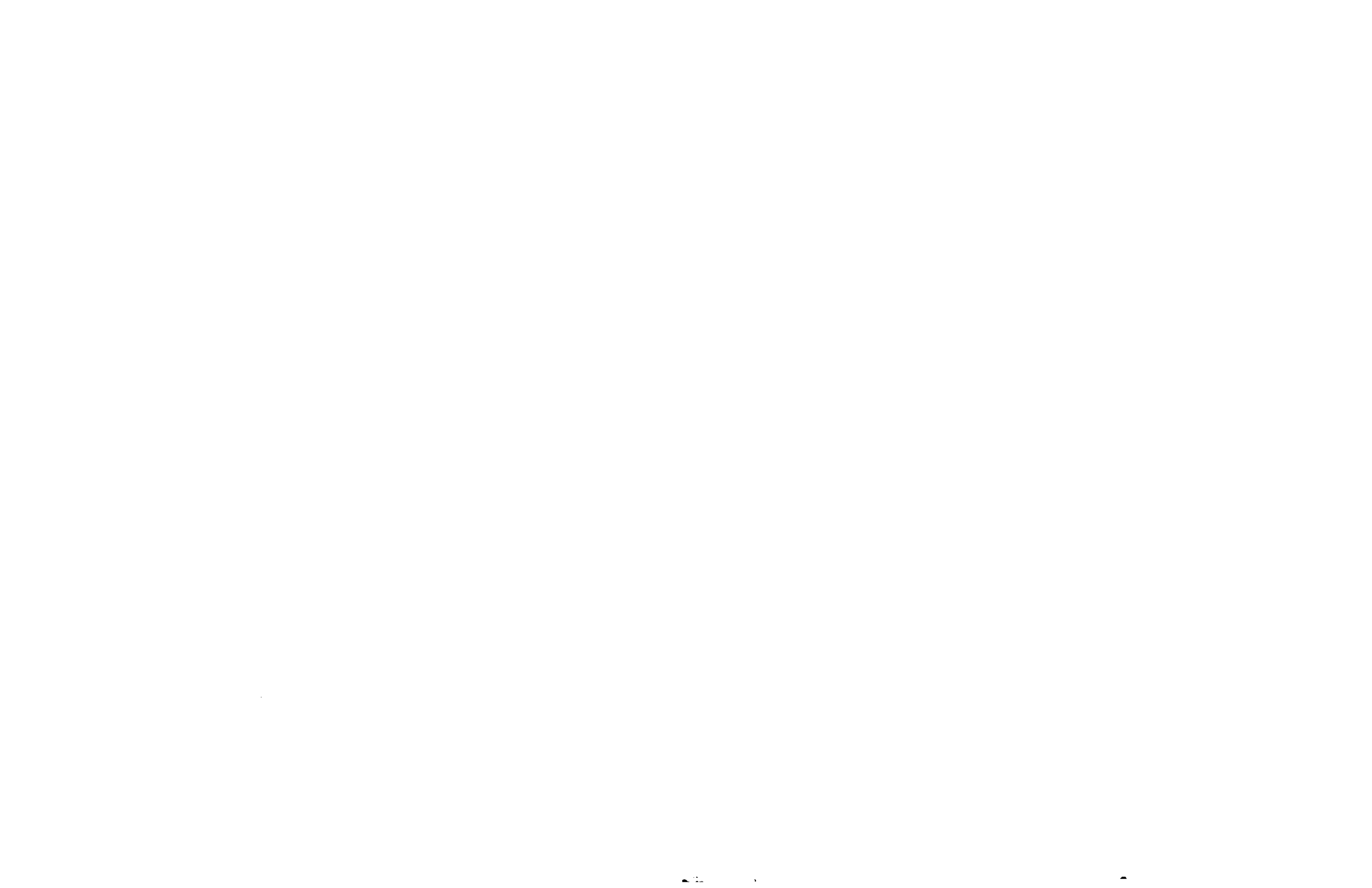


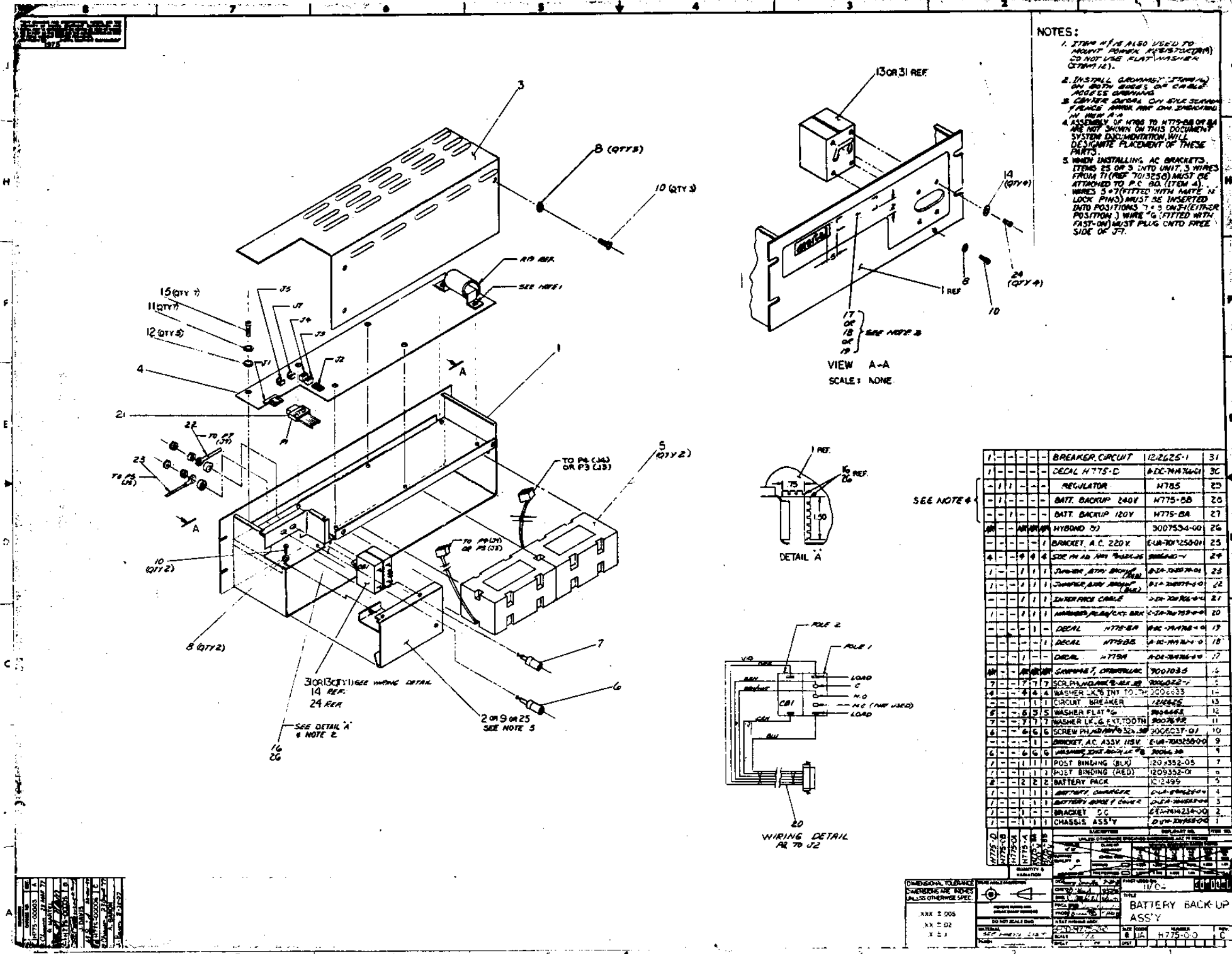
QUANTITY & VARIATION	DESCRIPTION	DWG/PART NO.	ITEM NO.
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
	ANGLES ±0.30°	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE INCHES
	SURFACE QUALITY IN	MEDIUM <input type="checkbox"/>	OVER 1/8" ±.004 ±.008 ±.012 ±.018 ±.024 ±.04
	MICROINCHES	PREFERRED <input checked="" type="checkbox"/>	±.012 ±.018 ±.025 ±.04 ±.063 ±0.1
THIRD ANGLE PROJECTION	DRN. <i>[Signature]</i> 21 JAN 77	FIRST USED ON	MFIIS-K
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D <i>[Signature]</i> 5 MAR 77	TITLE	MFIIS-K
DO NOT SCALE DWG	ENG. <i>[Signature]</i> 4/17/77		ERROR CHECK CODE
MATERIAL	PROD. <i>[Signature]</i> 4/17/77		
FINISH	NEXT HIGHER ASSY.		
	A-PL-MFIIS-K-0	SIZE CODE	B BS
		NUMBER	MFIIS-K-3
		DIST.	

REVISIONS	REV.
CHANGE NO.	
CHK	



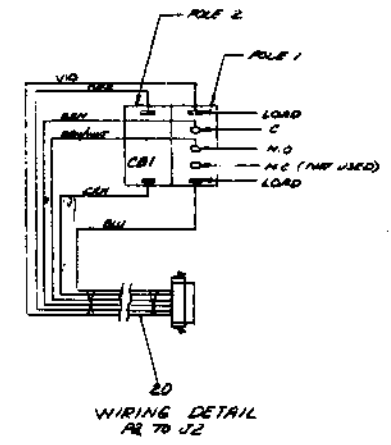
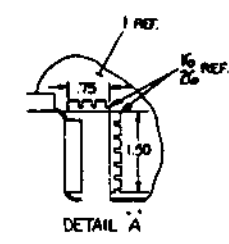
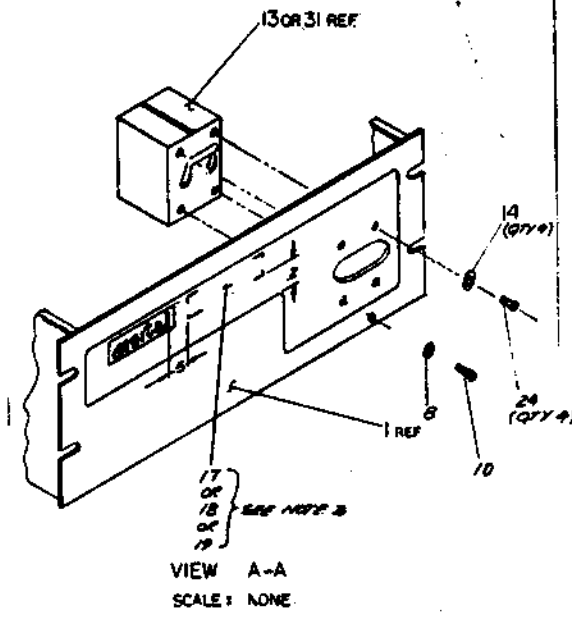






**NOTES:**

- ITEM #1 IS ALSO USED TO MOUNT POWER RESISTOR (R) DO NOT USE FLAT WASHER (ITEM #12).
- INSTALL GROUNDING STRAP ON BOTH SIDES OF CABLE HOLES GRABBING CENTER GROOVE ON SIDE SEAM. PLACE MARK AND DIM. MARKING IN VIEW A-A.
- ASSEMBLY OF WTB TO HTS-BA OR BA ARE NOT SHOWN ON THIS DOCUMENT. SYSTEM DOCUMENTATION WILL DESIGNATE PLACEMENT OF THESE PARTS.
- WHEN INSTALLING AC BRACKETS ITEM 25 OR 3 INTO UNIT, 3 WIRES FROM T1 (REF 701250) MUST BE ATTACHED TO P.C. BD. (ITEM 4). WIRES 5-7 (FITTED WITH WHITE N LOCK PINS) MUST BE INSERTED INTO POSITIONS 7-9 ON STRIP (POSITION 3 WIRE 6 (FITTED WITH FAST-ON) MUST PLUG ONTO FREE SIDE OF J7).



1	-	-	-	BREAKER CIRCUIT	122625-1	31
1	-	-	-	DECAL HTS-C	A-D-74474-01	30
1	1	1	1	REGULATOR	H785	25
1	1	1	1	BATT. BACKUP 240V	H775-BB	20
1	1	1	1	BATT. BACKUP 120V	H775-BA	21
1	1	1	1	HYBRID D3	3007534-00	26
1	1	1	1	BRACKET, A.C. 220V	E-UN-701250-01	25
4	1	1	1	SEE PR AD FOR DIMENSIONS	UNSPECIFIED	29
1	1	1	1	WASHER, EXT. INT. TO	E-UN-701250-01	23
1	1	1	1	WASHER, EXT. INT. TO	E-UN-701250-01	22
1	1	1	1	ENTER FORCE CABLE	E-UN-701250-01	21
1	1	1	1	WASHER, EXT. INT. TO	E-UN-701250-01	20
1	1	1	1	DECAL HTS-BA	A-D-74474-01	19
1	1	1	1	DECAL HTS-BE	A-D-74474-01	18
1	1	1	1	DECAL HTS-A	A-D-74474-01	17
1	1	1	1	SCREW, PAN HEAD, #2-1/2	3007035	14
1	1	1	1	SCR. PAN HEAD, #2-1/2	3006022	5
1	1	1	1	WASHER, K.6 INT. TO	3006033	11
1	1	1	1	CIRCUIT BREAKER	122625	13
1	1	1	1	WASHER FLAT #6	3006042	12
1	1	1	1	WASHER LK. G. EXT. TOOTH	3007032	11
1	1	1	1	SCREW PH. PAN H. #2-1/2	3006037-01	10
1	1	1	1	BRACKET, AC ASSY. 115V	E-UN-701250-00	9
1	1	1	1	WASHER, EXT. INT. TO	3006030	8
1	1	1	1	POST BINDING (BLK)	1209352-05	7
1	1	1	1	POST BINDING (RED)	1209352-01	6
1	1	1	1	BATTERY PACK	102495	5
1	1	1	1	BATTERY CHARGER	E-UN-701250-01	4
1	1	1	1	BATTERY BONDING COVER	E-UN-701250-01	3
1	1	1	1	BRACKET, P.C.	E-UN-701250-00	2
1	1	1	1	CHASSIS ASSY	E-UN-701250-00	1

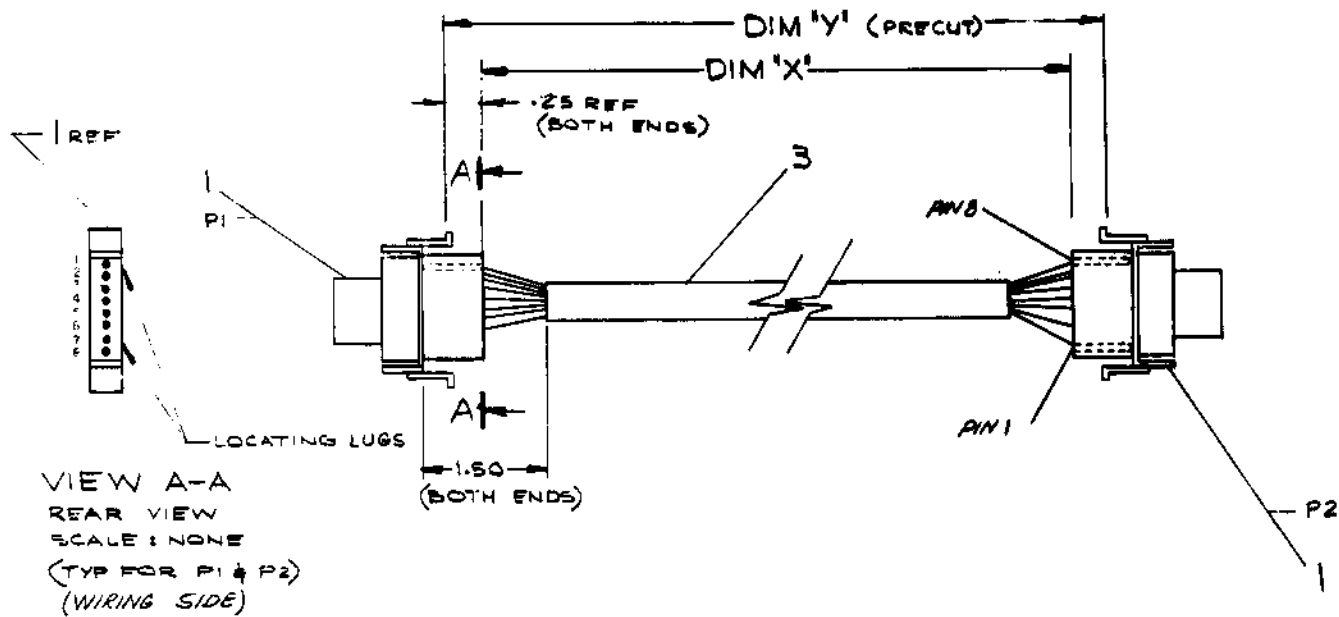
XX Z 005	XX Z 02	X Z 1
DIMENSIONAL TOLERANCE		
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPEC.		
DO NOT SCALE DRAW		
REVISIONS		
REV	DATE	DESCRIPTION
1	11/02	BATTERY BACK-UP ASS'Y
2		
3		
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WIRE TABLE							
ITEM NO	DESCRIPTION	FROM		TO		REMARKS	
		AWG	COLOR	CONNECTION	WITH		CONNECTION
4	14	ORN	P1-1	2	P2-1	2	---
5	14	BLK	P1-2	1	P2-2	1	---
6	14	BLUE	P1-3	1	P2-3	1	---
7	14	GRAY	P1-4	1	P2-4	1	---
8	14	RED	P1-5	1	P2-5	1	---
9	14	WHITE	P1-6	1	P2-6	1	---
10	14	YEL	P1-7	1	P2-7	1	---
11	14	BRN	P1-8	2	P2-8	2	---

LEGEND		
NUMBER	DIM 'X' VARIATION	DIM 'Y' (PRECUT) REF
TOWERS-08	4 FT. ± 1.50 IN ± 1.0 IN	8 FT. ± 1.0 IN

NOTES:



1/R	WIRE #14 STRD BRN	9107370-11	11
1/R	WIRE #14 STRD YEL	9107370-44	10
1/R	WIRE #14 STRD WHT	9107370-99	9
1/R	WIRE #14 STRD RED	9107370-82	8
1/R	WIRE #14 STRD GRY	9107370-88	7
1/R	WIRE #14 STRD BLU	9107370-66	6
1/R	WIRE #14 STRD BLK	9107370-00	5
1/R	WIRE #14 STRD ORG	9107370-33	4
1/R	TUBING, EXT. BLK - SJOID	807296	3
14	PIN, MALE	1204378-00	2
2	CONN., 8 AWG	1209340-0	1

QUANTITY & VARIATION	DESCRIPTION		DWS. PART NO.	ITEM NO.
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
	CLASS OF ACCURACY			
	SURFACE QUALITY			
	PREPARED			
	THIRD ANGLE PROJECTION			
	DR. <i>[Signature]</i> FIRST USED ON			
	CHKD. <i>[Signature]</i> H775			
	ENGR. <i>[Signature]</i>			
	PROJ. <i>[Signature]</i>			
	TITLE		INTERFACE CABLE	
	DO NOT SCALE DIMS		(11/04)	
	NEXT HIGHER ASSY.			
	MATERIAL			
	SEE PARTS LIST			
	FINISH			
	SCALE			
	SHEET			
	OF			
	DWT.			
	REV.			

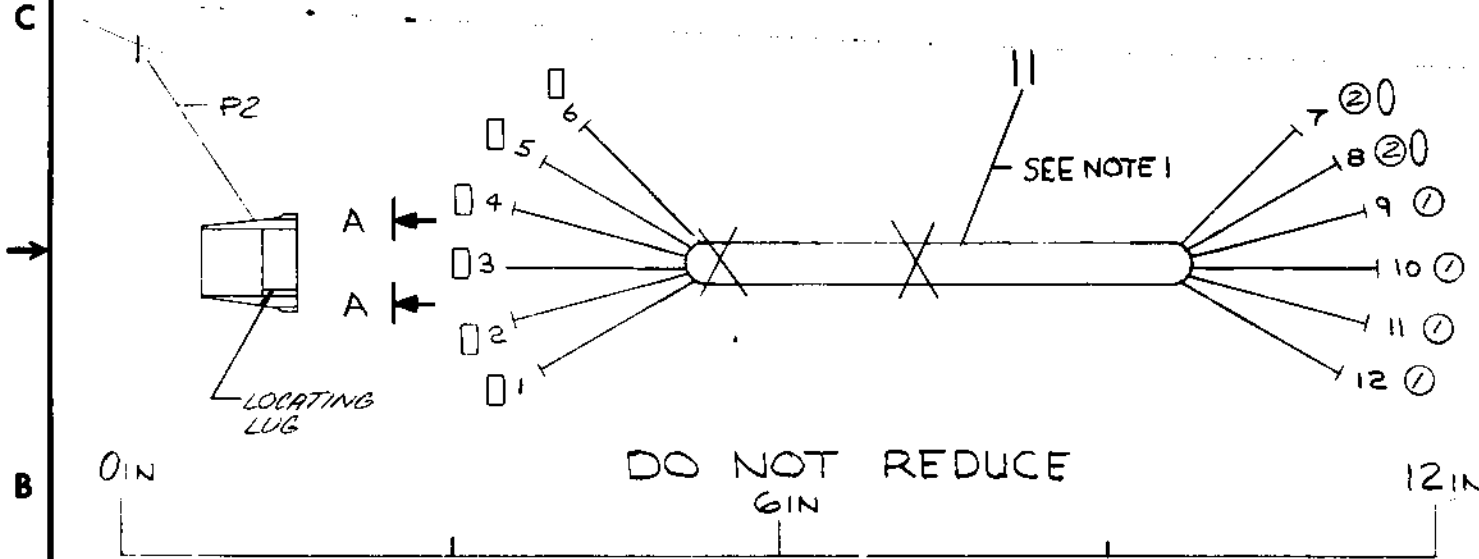
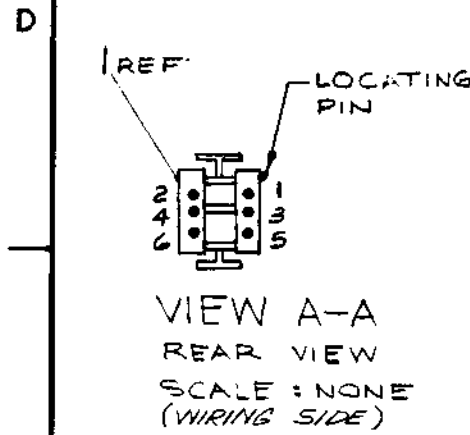
REV.	DESCRIPTION
1	INITIAL ISSUE
2	REVISION 1
3	REVISION 2
4	REVISION 3
5	REVISION 4
6	REVISION 5
7	REVISION 6
8	REVISION 7
9	REVISION 8
10	REVISION 9
11	REVISION 10
12	REVISION 11
13	REVISION 12
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95	REVISION 94
96	REVISION 95
97	REVISION 96
98	REVISION 97
99	REVISION 98
100	REVISION 99
101	REVISION 100

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

**NOTES:**

- 1. USE CABLE TIES (ITEM #11) APPROX. 2.0 AND 4.0 IN. FROM P2 (ITEM #1).



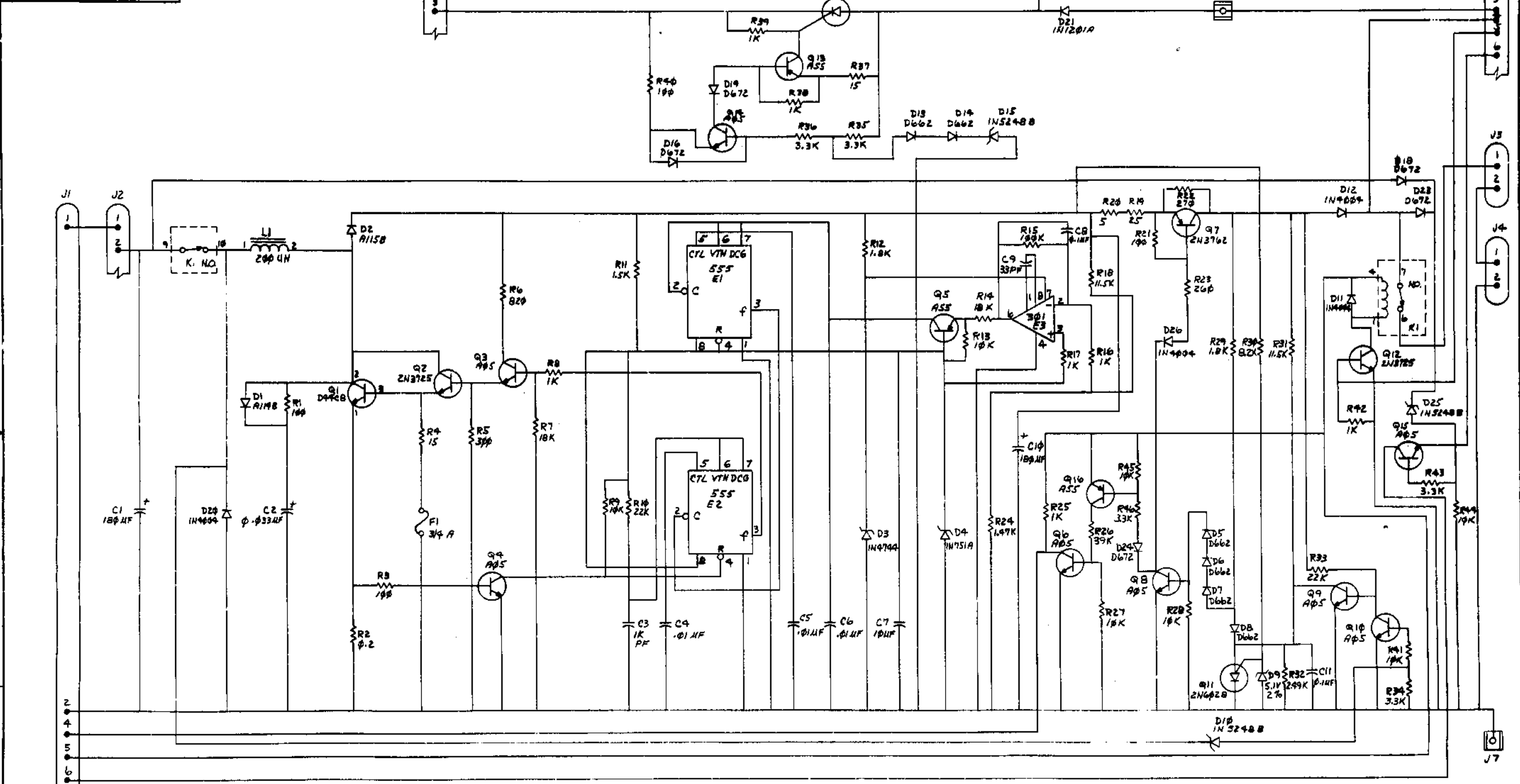
FOR MANUFACTURING PURPOSES ONLY

QTY.	DESCRIPTION	PART NO.	ITEM NO.
12	AIR TUBING, SHRINK 3/16 I.D.	9107254-00	12
2	TIE, CABLE	9007031	11
-	A/R WIRE *18 AWG (GRY/BRN)	9107410-81	10
-	A/R WIRE *18 AWG (BRN)	9107360-11	9
-	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)	9107370-33	5
2	TERMINAL, QUICK CONN	9008488	4
4	TERMINAL, QUICK CONNECT	9007969	3
6	PIN (FEMALE)	1209379-00	2
1	CONN, 6 PIN (FEMALE)	1210821-06	1

REV.	CHANGE NO.	DATE	BY
A	00001	7-2-75	J.B. DAVIS, JR.

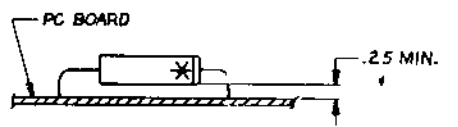
FIRST USED ON OPTION/MODEL H775		PARTS LIST	
DIMENSIONAL TOLERANCE		DRN 7-12-75	DATE
DIMENSIONS ARE INCHES UNLESS OTHERWISE SPECIFIED		CHKD 10/22/75	DATE
MILLIMETERS	INCHES	ANGLES	DATE
X.XX ±0.10	.XX ±.006	30° 30'	10/22/75
X.X ±0.5	.XX ±.02		10/22/75
X ±.2	.X ±.1		10/22/75
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	PROJ. ENG.	DATE
		PROD.	DATE
MATERIAL SEE PARTS LIST	FINISH	TITLE HARNESS, PC BOARD/CKT. BREAKER	
		SIZE CODE E-UA-H775-00	NUMBER 7011759-0-0
		SCALE 1/1	REV. A
		SHEET 1 OF 1	DIST.

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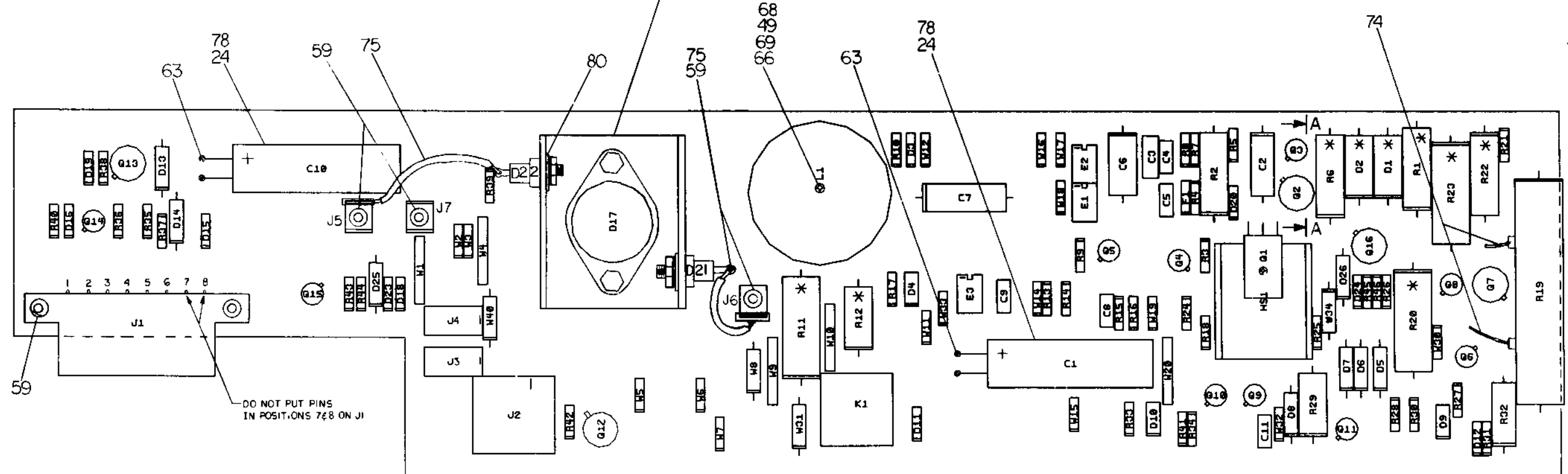
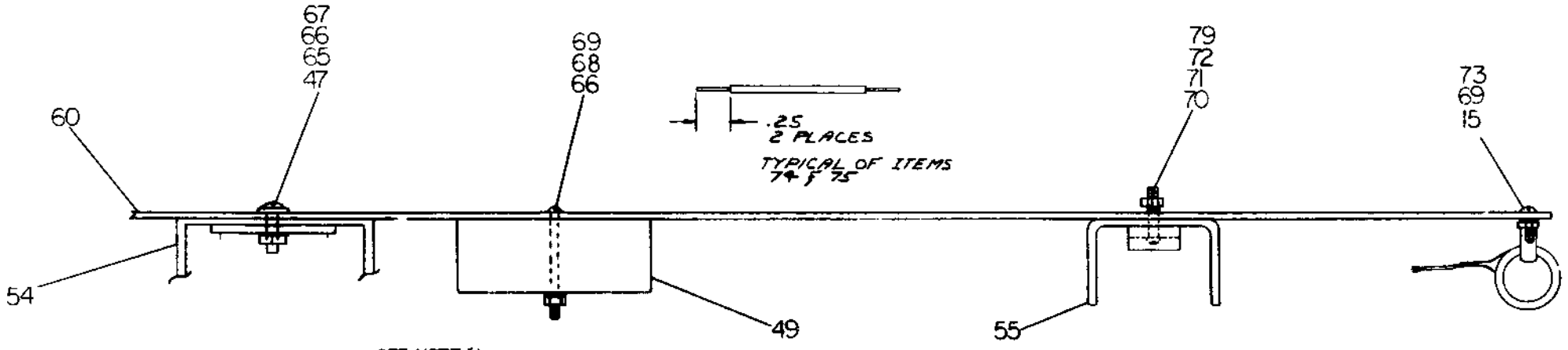


REV.	REV. 1
CHK.	SALES-0001 C
DATE	11/15/75
BY	SALES-0001 D
DATE	11/15/75
BY	SALES-0001 E
DATE	11/15/75
BY	SALES-0001 F
DATE	11/15/75

ETCH BOARD REV C	
DRN. <i>[Signature]</i>	FIRST USED ON H775
CHK'D <i>[Signature]</i>	TITLE
ENG. <i>[Signature]</i>	BATTERY CHARGER
PROJ. ENG. <i>[Signature]</i>	
NEXT HIGHER ASSY.	
D-0A-5411625-0-1	SIZE CODE NUMBER REV.
SCALE	D CS 5411625-0-1 D
SHEET 1 OF 1	DIST.



VIEW A-A  
 ALL ITEMS WITH \* (R1, R6, R11, R12, R20, R22, R23)



NOTES: 1. NO THERMAL COMPOUND.

CHANGE NO	REV	DATE	BY	CHK
5411625-000	C	7/10/75	G. POTTER	
	D	7/10/75	J. DAVIS	
	E	7/10/75	J. DAVIS	

SIGNATURES	DATE	TITLE
DRN <i>[Signature]</i>	7/10/75	BATTERY CHARGER
CHK <i>[Signature]</i>	7/10/75	
ENG. <i>[Signature]</i>	7/10/75	
PROD. <i>[Signature]</i>	7/10/75	

SCALE 2:1  
 SHT. 1 OF 1  
 ETCH REV C FIRST USED ON

<b>digital</b>	
SIZE CODE	NUMBER
0 UA	5411625-0-0
REV	1 MS#80608

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION			
PARTS LIST				ETCH REV C			
MADE BY JIM DAVIS		CHECKED P. BOSSMAN		SECTION			
DATE 4-18-75		DATE 11-4-75		1			
ENG JIM DAVIS		PROD D. DEROME		ISSUED SECT.			
DATE 4-18-75		DATE 9-25-75		1			
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QTY	CODE	QTY	CODE	QTY
1	1302380	RESISTOR 100 OHM, 2W 5%	1	R1			
2	1311604	RESISTOR 0.2 OHM, 2W 3%	1	R2			
3	1300229	RESISTOR 100 OHM, 1/4W 5%	3	R3	R21	R40	
4	1301421	RESISTOR 15 OHM, 1/4 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	R23
9	1300479	RESISTOR 10K, 1/4W 5%	7	R9	R18	R27	R28
10	1301808	RESISTOR 22K, 1/4W 5%	2	R10	R33		
11	1301897	RESISTOR 1.5K, 5W 5%	1	R11			
12	1303122	RESISTOR 1.8K, 1W 5%	2	R12	R29		
13	1302466	RESISTOR 100K, 1/4W 5%	1	R15			
14	1305108	RESISTOR 1.47K, 1%, 1/4W	1	R24			
15	1300190	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 8.2K 1/4W 5%	2	R26	R30		
20	1309415	RESISTOR 11.5K, 1/4W 1%	2	R18	R31		
21	1300424	RESISTOR 2.49K 3/4W 1%	1	R32			
22	1300439	RESISTOR 3.3K, 1/4W 5%	5	R34	R35	R36	R43
TITLE BATTERY CHARGER		ASSY NO. D-UA-5411625-0-0	SIZE CODE A PL	NUMBER 5411625-0-0	REV. ECO NO. D	SHEET 1 OF 4	

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

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION			
PARTS LIST				ETCH REV C			
MADE BY JIM DAVIS		CHECKED P. BOSSMAN		SECTION			
DATE 4-18-75		DATE 11-4-75		1			
ENG JIM DAVIS		PROD D. DEROME		ISSUED SECT.			
DATE 4-18-75		DATE 9-25-75		1			
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QTY	CODE	QTY	CODE	QTY
23	1005784	CAPACITOR 0.01 MFD, 100V, MYLAR	1	C6			
24	1012607-02	CAPACITOR 180 MFD, 50V, 672D SPRAGUE	2	C1	C10		
25	1000050	CAPACITOR .033 MFD, 100V	1	C2			
26	1000042	CAPACITOR 1KPF, 100V	1	C3			
27	1001610-01	CAPACITOR .01 MFD, 100V	2	C4	C5		
28	1004813	CAPACITOR 10 MFD, 20V	1	C7			
29	1000030	CAPACITOR 0.1 MFD 100V	2	C8	C11		
30	1000009	CAPACITOR 33PF, 100V	1	C9			
31	1510421	TRANSISTOR D44CB	1	Q1			
32	1510959	TRANSISTOR 2N3725	2	Q2	Q12		
33	1510705	TRANSISTOR A05	8	Q3	Q4	Q6	Q8
34	1510706	TRANSISTOR A55	3	Q5	Q13	Q16	
35	1509649	TRANSISTOR 2N3762	1	Q7			
36	1510877	TRANSISTOR 2N6028	1	Q11			
37	1112595-01	DIODE GE A114B FAST REC RECT.	1	D1			
38	1112594-01	DIODE GE A115B FAST REC RECT.	1	D2			
39	1105648	DIODE IN4744 15V ZENER	1	D3			
40	1110994	DIODE IN751A 5.1V ZENER	1	D4			
41	1100113	DIODE 1.662	6	D5	D6	D7	D8
42	1110713	DIODE 5.1V 2% ZENER	1	D9			
43	1105796	DIODE IN4004 RECT.	4	D11	D12	D20	D26
44	1110766	DIODE IN5248B 18V ZENER	3	D15	D25	D19	
TITLE BATTERY CHARGER		ASSY NO. D-UA-5411625-0-0	SIZE CODE A PL	NUMBER 5411625-0-0	REV. ECO NO. D	SHEET 2 OF 4	

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

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION			
PARTS LIST				ETCH REV C			
MADE BY JIM DAVIS		CHECKED P. BOSSMAN		SECTION			
DATE 4-18-75		DATE 11-4-75		1			
ENG JIM DAVIS		PROD D. DEROME		ISSUED SECT.			
DATE 4-18-75		DATE 9-25-75		1			
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QTY	CODE	QTY	CODE	QTY
45	1105275	DIODE D672	5	D16	D19	D18	D23
46	1110006	DIODE 1201A RECT	2	D21	D22		
47	1109465	SCR MCR649P2	1	D17			
48	1210929-03	3/4 AMP. FICOFUSE	1	F1			
49	1612500	INDUCTOR 200 UH	1	L1			
50	1211138-01	RELAY DPDT 6VDC	1	K1			
51	1211139	RELAY SOCKET HOUSING	1	KK1			
52	1211342-06	CONN. MATE-N-LOCK 6 PIN	1	J2			
53	1211342-02	HEADER MATE-N-LOCK 2 PIN	2	J3	J4		
54	1212645	HEAT SINK	1	HS2			
55	1212487	HEAT SINK	1	HS1			
56	1911844	IC LM555 TIMER	2	E1	E2		
57	1910282	IC LM301A OP AMP	1	E3			
58	9008219	QUICK CONNECT 1/4 IN. SINGLE MALE 90°	1	J6			
59	9009000	EYELETS	5				
60	5011624	ETCHED CIRCUIT BOARD	1				
61	1209340	6 PIN MATE-N-LOCK	1	J1			
62	1209456-01	SOCKETS FOR 1209340	6	J1-1	J1-2	J1-3	J1-4
63	9009118-03	TERMINAL, SOLDER	4	J5	J7		
64	9007113	DOUBLE MALE QUICK CONNECT 90°	2	J5	J7		
TITLE BATTERY CHARGER		ASSY NO. D-UA-5411625-0-0	SIZE CODE A PL	NUMBER 5411625-0-0	REV. ECO NO. D	SHEET 3 OF 4	

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

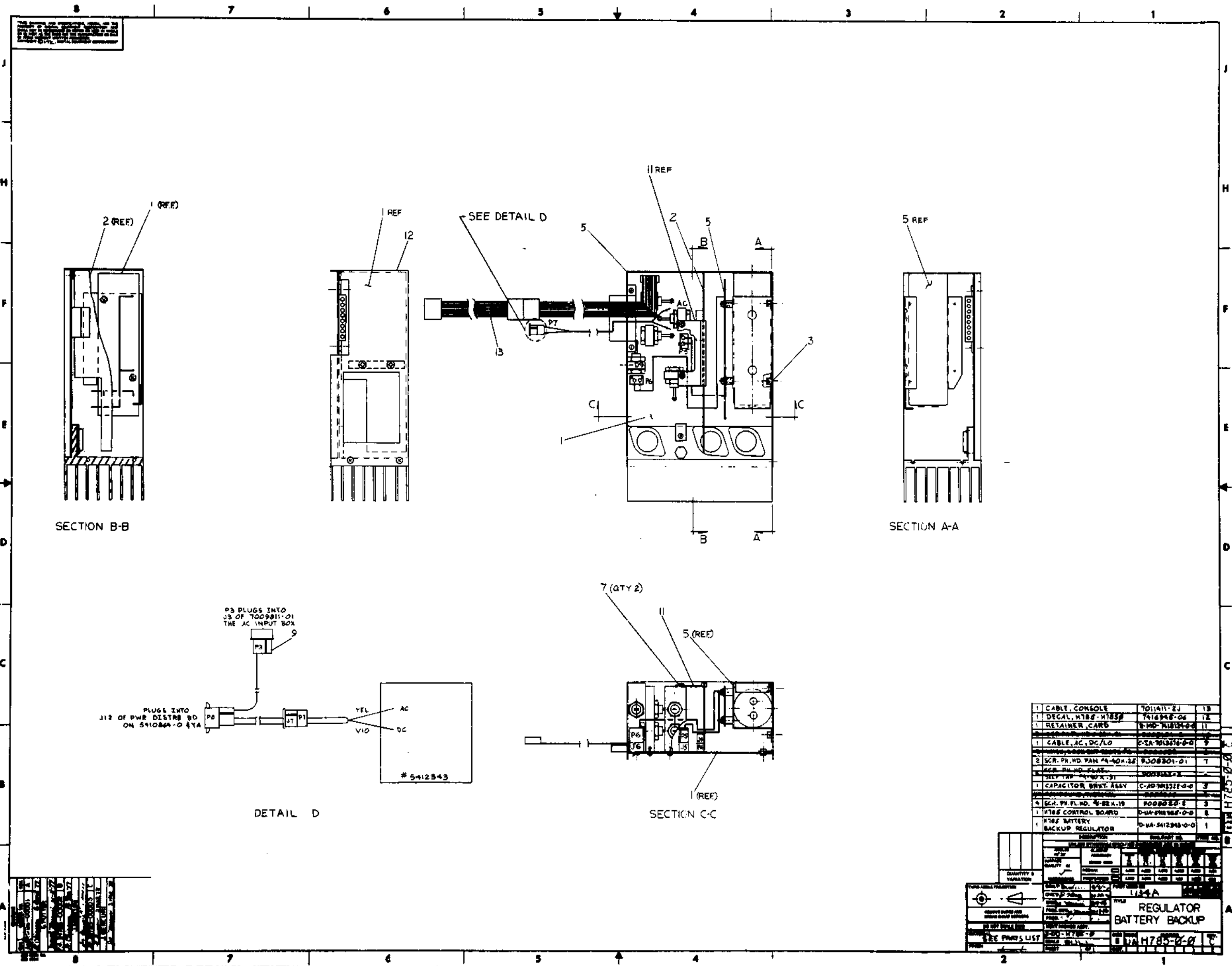
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION			
PARTS LIST				ETCH REV C			
MADE BY JIM DAVIS		CHECKED P. BOSSMAN		SECTION			
DATE 4-18-75		DATE 11-4-75		1			
ENG JIM DAVIS		PROD D. DEROME		ISSUED SECT.			
DATE 4-18-75		DATE 9-25-75		1			
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QTY	CODE	QTY	CODE	QTY
65	9006024-1	6-32 x 1/2 PPH SCREW	2				
66	9006653	FLAT WASHER	3				
67	9008185	6-32 KEP NUT (1/4 AF)	2				
68	9007853-1	6-32 x 1 1/8 PPH SCREW	1				
69	9006560	6-32 KEP NUT (5/16 AF)	3				
70	9006010-1	4-40 x 5/16 PPH SCREW	1				
71	9006655	FLAT WASHER	1				
72	9006557	4-40 KEP NUT	1				
73	9006020-1	6-32 x 1/2 PPH SCREW	2				
74	9107350-99	WIRE #22 AWG STRANDED IPVC x 1 1/2" L	2				
75	9107360-22	WIRE #18 AWG STRANDED IPVC x 2 1/2" L	2				
77	9007970	FEMALE FAST-ON INSULATED	2				
78	9007834	DOUBLE BACK STICKY TAPE	A/R				
79	9008268	THERMAL COMPOUND	A/R				
80	9006664	FLAT WASHER	2				
81	D-CS-5411625-β-1	CIRCUIT SCHEMATIC	REF				
82	D-AH-5411625-β-5	ASSY/DRILLING HOLE LAYOUT	REF				
83	B-NH-5411625-β-6	MODULE ECO HISTORY	REF				
84	9009185-ββ	JUMPER, WIRE, WHITE INS. .4 LONG	16				
85	9009185-ββ	JUMPER, WIRE, WHITE INS. .6 LONG	9				
TITLE BATTERY CHARGER		ASSY NO. D-UA-5411625-0-0	SIZE CODE A PL	NUMBER 5411625-0-0	REV. ECO NO. D	SHEET 4 OF 4	

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







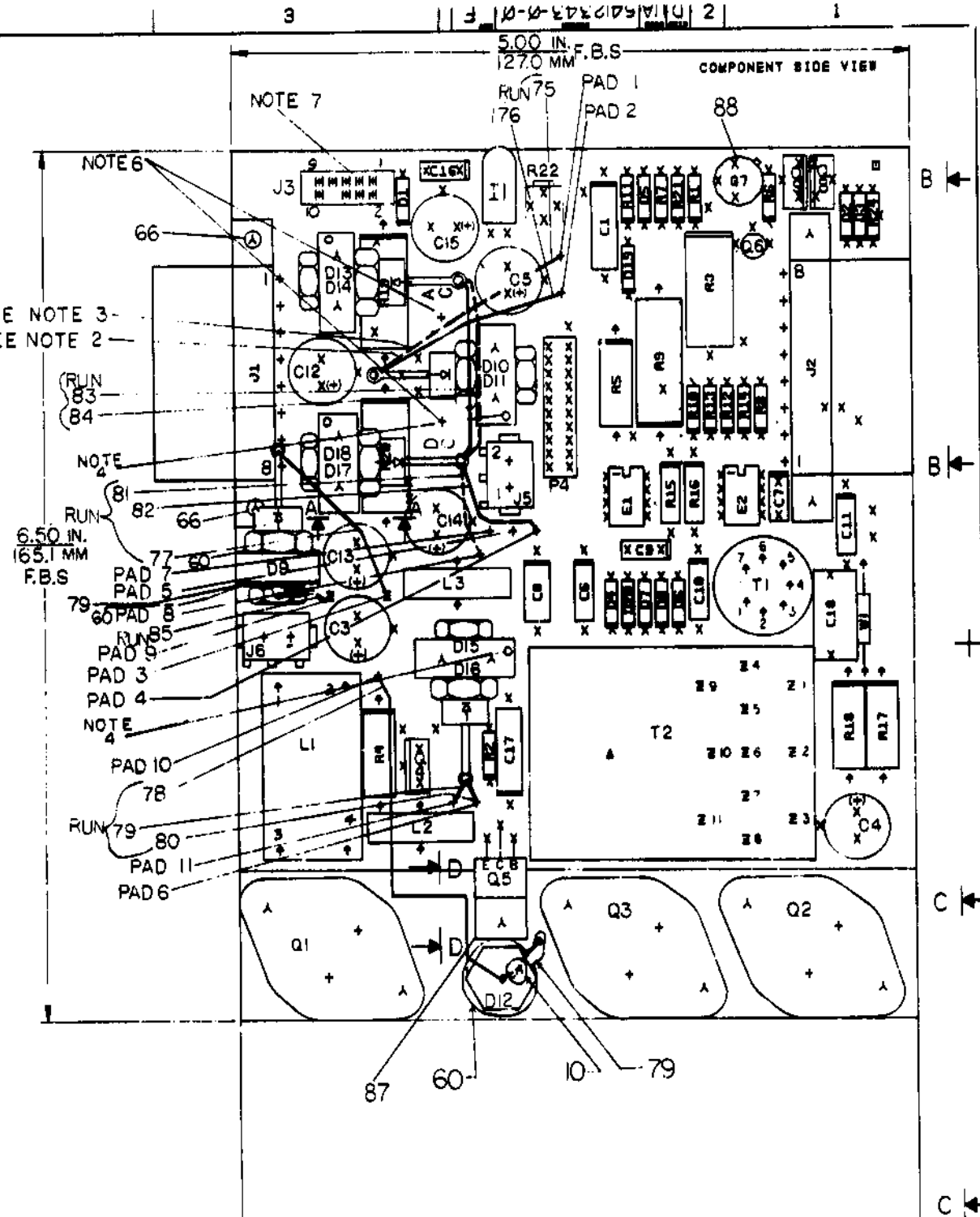
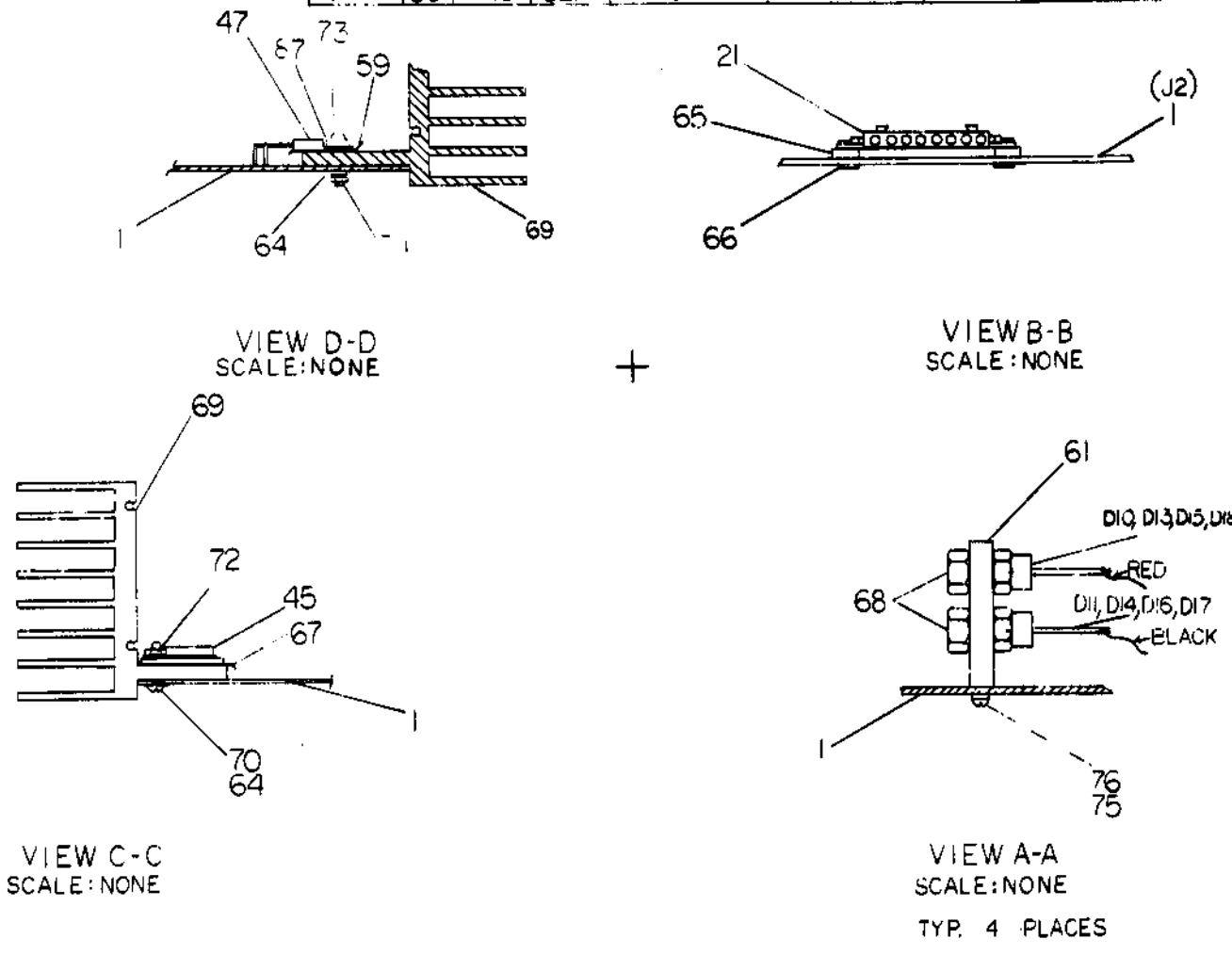


QUANTITY & VARIATION	DESCRIPTION	UNIT	AMOUNT
1	REGULATOR BATTERY BACKUP	REGULATOR BATTERY BACKUP	1
SEE PARTS LIST			

**WIRE TABLE**

ITEM NO	RUN NO	DESCRIPT.	FROM	TO	LENGTH
77	75	18TWP BLK	D 11 ANODE	PAD 1	4.50
	76	18 RED	D 10 ANODE	PAD 2	4.50
	77	18 RED	D 9 CATHODE	PAD 3	3.00
	78	18 RED	D 12 CATHODE	PAD 10	3.75
77	79	18TWP BLK	D 16 ANODE	PAD 11	1.50
	80	18 RED	D 15 ANODE	PAD 6	2.00
77	81	18TWP BLK	D 7 CATHODE	PAD 8	2.75
	82	18TWP RED	D 18 CATHODE	PAD 4	2.75
77	83	18TWP RED	D 13 ANODE	D 18 CATHODE	3.50
	84	18TWP BLK	D 14 ANODE	D 17 CATHODE	3.50
	85	18 BLK	D 9 ANODE	PAD 9	3.00

UNTWIST ITEM NO. 77 AND USE PROPER COLOR.



**NOTES:**

- SEE SHEET 4 OF 4 FOR DIODE WIRING.
- SOLID LINE INDICATES WIRE FROM THE TOP DIODE.
- DASHED LINE INDICATES WIRE FROM BOTTOM DIODE.
- TAPPED HOLE AT TOP OF HEATSINKS MUST FACE PROPER WAY TO ALLOW INSERTION OF CARD SLIDE.
- TORQUE SPECIFICATIONS:  
Q1-Q3 10 IN-LBS INSPECT TO MIN OF 5 TORQUE FROM SCREW HEAD  
Q5 8 IN-LBS INSPECT TO MIN OF 5 TORQUE FROM SCREW HEAD  
Q9-D18 16 IN-LBS INSPECT TO MIN OF 12 TORQUE FROM NUT SIDE

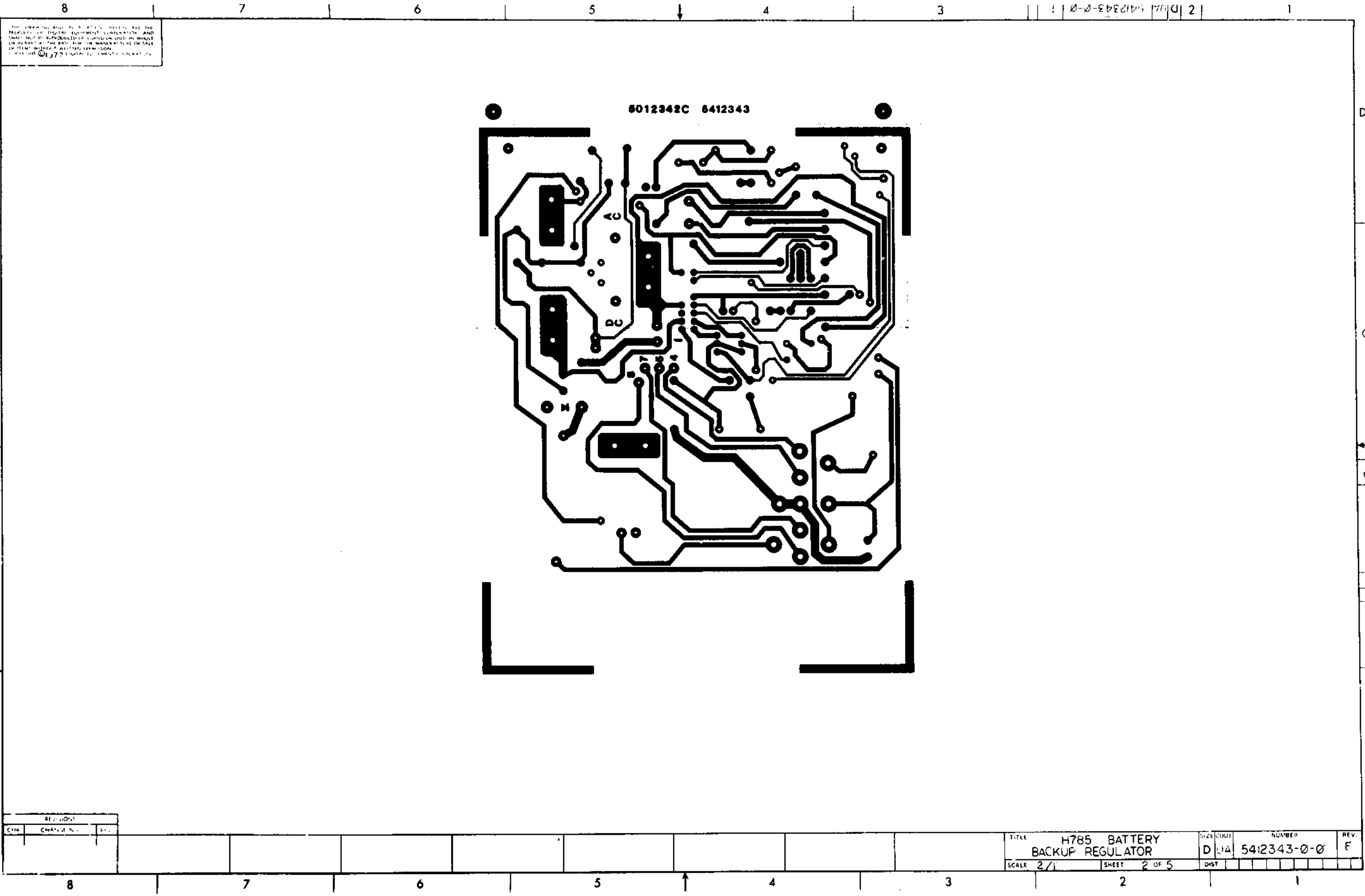
**NOTES:**

- SOLDER ITEM NO. 55 AS PL. CABLE TO REGULATOR BOARD RED WIRE TO PTH MARKED DC. BLACK WIRE TO PTH MARKED AC.
- INSERT ON TO J3 ITEM NO. 58.

REV.	DATE	BY	CHK'D
1	1-3-77	J. MORGAN	
2	1-3-77	A. DAVENPORT	
3	1-3-77	G. POTTER	
4	1-3-77		
5	1-3-77		
6	1-3-77		
7	1-3-77		
8	1-3-77		
9	1-3-77		
10	1-3-77		

SIGNATURES		DATE	TITLE
DRN	<i>[Signature]</i>	1-3-77	
CHK'D	<i>[Signature]</i>	1-3-77	
ENG.	<i>[Signature]</i>	1-3-77	
PROJ. ENG.	<i>[Signature]</i>	1-3-77	
PROD. REP.	<i>[Signature]</i>	1-3-77	
SCALE 2-1			SIZE CODE NUMBER
SHT. 1 OF 5			D UA 5412343-0-0 F
NEXT HIGHER ASSY. 5-00-5412343-0			

DUA 5412343-0-0 F

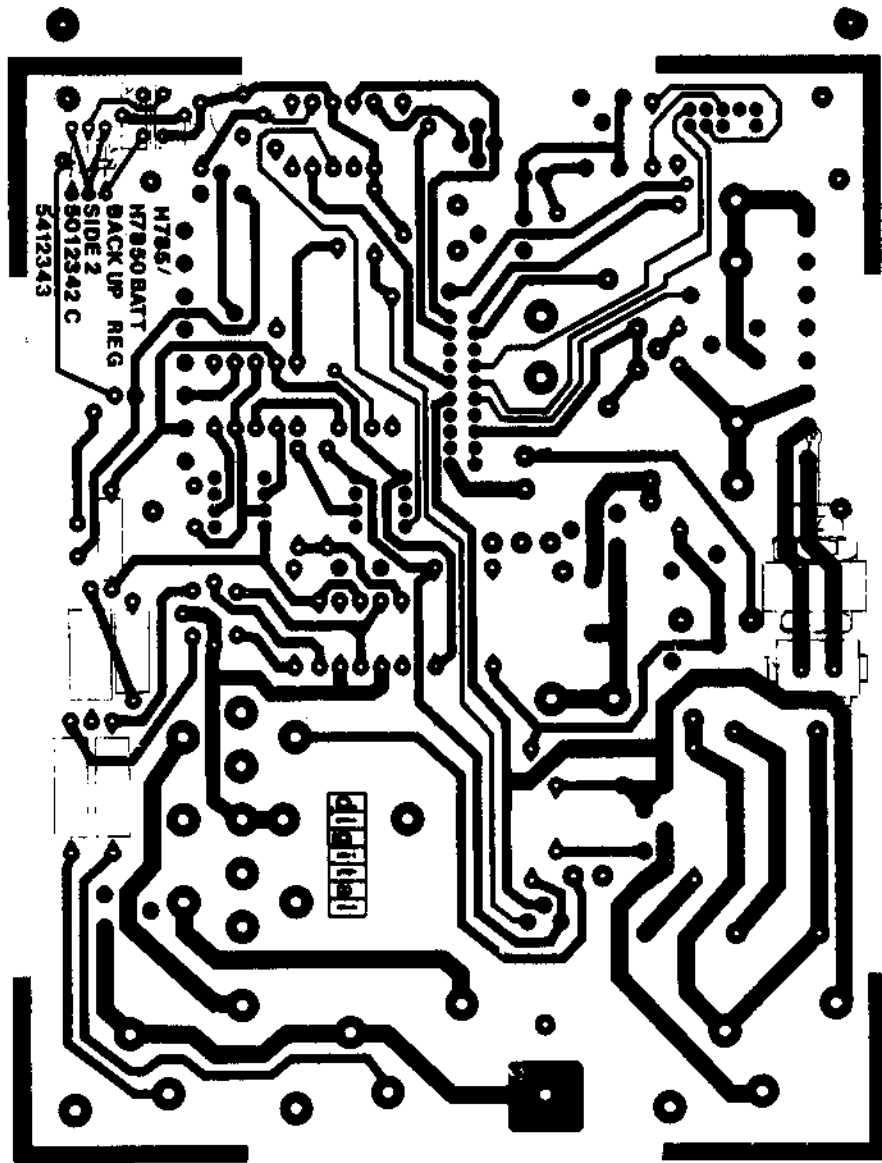


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 THE PATENT OFFICE AT 1777 MASSACHUSETTS AVENUE, CAMBRIDGE, MA 02142

REVISIONS		
DATE	CHANGES	BY

TITLE	H785 BATTERY BACKUP REGULATOR	SIZE/DRAWING	D/1A	NUMBER	5412343-0-0	REV	F
SCALE	2/1	SHEET	2 OF 5	DIST			

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REVISIONS		
CHK	CHANGE NO	REV

DEC 1978  
REV 117

TITLE	H785 BATTERY BACKUP REGULATOR	SIZE/CODE	D UA	NUMBER	5412343-0-0	REV.	F
SCALE	2/1	SHEET	3 OF 5	DIST.			

DUA 5412343-0-0 2

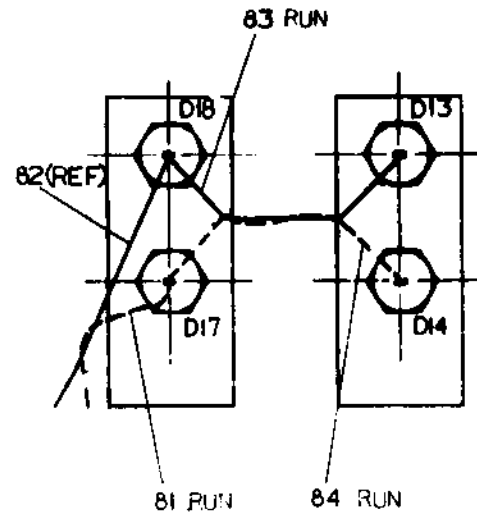
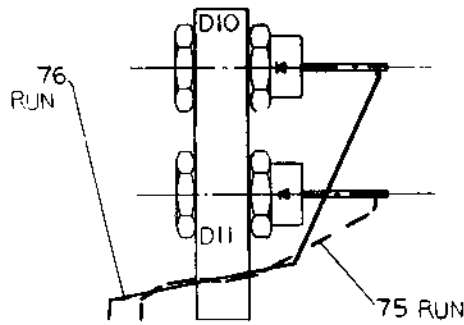
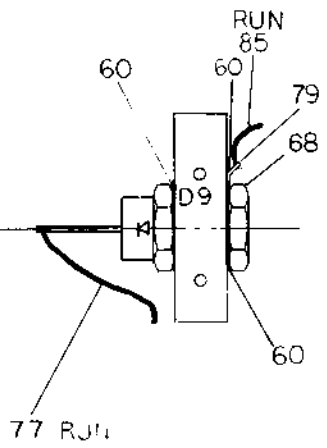
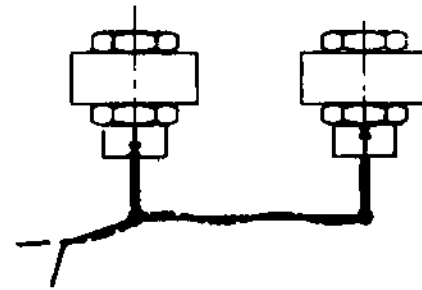
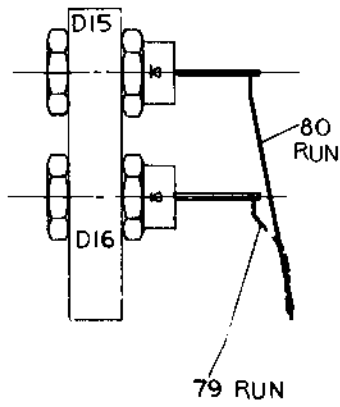
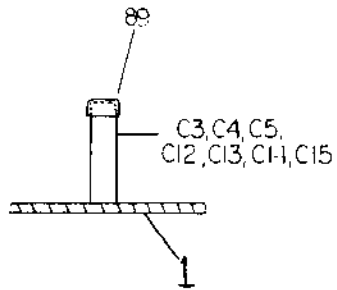
DUA 5412343-0-0

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NOTES:

1. WIRING INFORMATION IS ON SHEET 1 OF 4.

2. DIODES TO BE ASSEMBLED TO HEAT-SINKS AND WIRED AS SHOWN BEFORE INSTALLING TO BOARD.

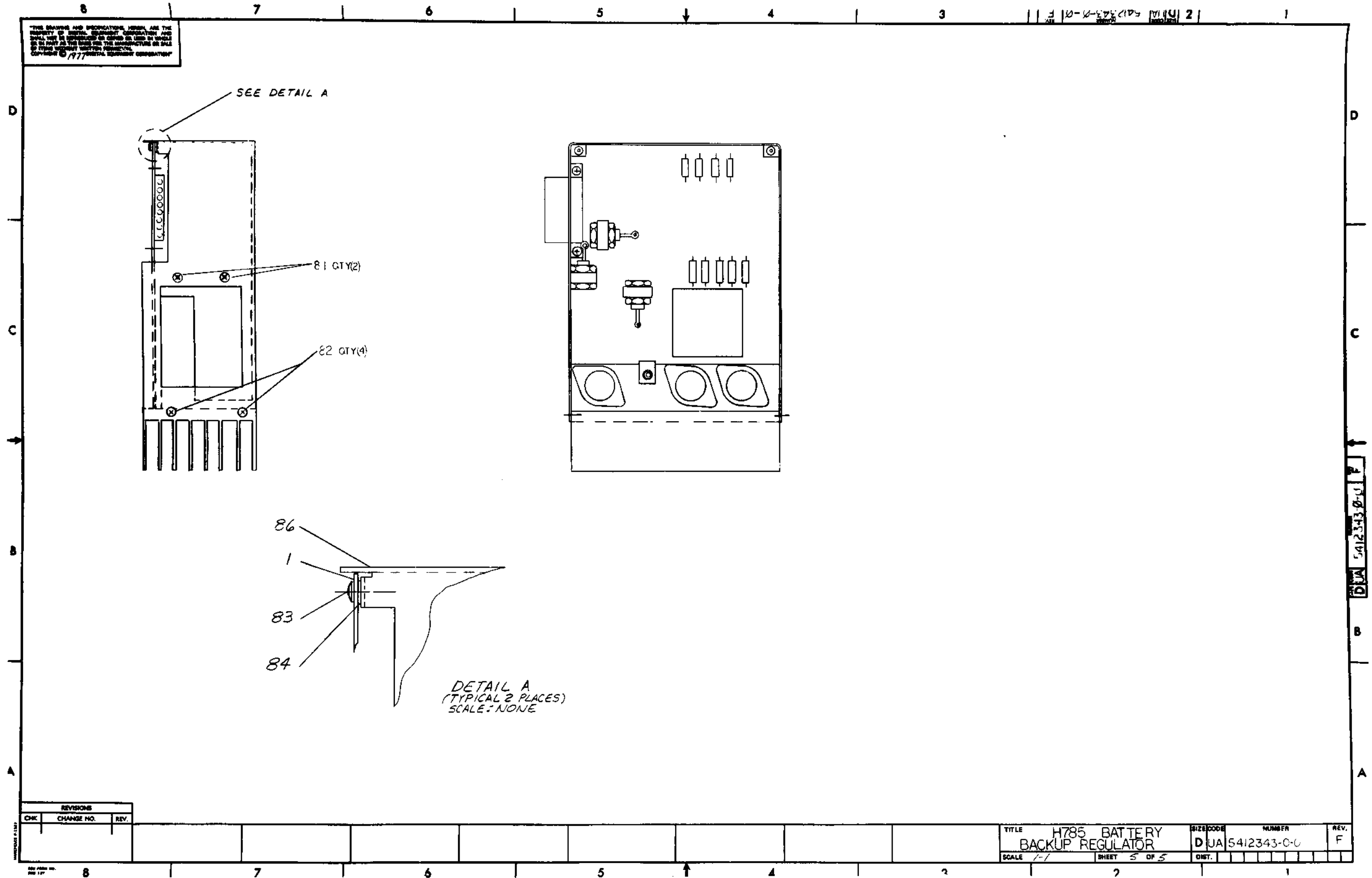


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	H785 BATTERY BACKUP REGULATOR	SIZE CODE	NUMBER	REV.
SCALE	2/1	SHEET	4 OF 5	F
DIST.				

DUA 5412343-0-4 F

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DETAIL A  
 (TYPICAL 2 PLACES)  
 SCALE: NONE

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	H785 BATTERY BACKUP REGULATOR	SIZE CODE	DJA	NUMBER	5412343-0-0	REV.	F
SCALE	1-1	SHEET	5	OF	5	QNT.	

DJA 5412343-0-0 F



LINE ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	D-MD-5012342-A-0	5012342-00		ETCH BRD 54-12343
2	2		1002431-00		2.2MFD 35V 10% 150S S.TA (10-00) 1 C10
3	3		1012607-02		180 MFD 50V H% 672D AL EL 3 C3-C5
4	4		1000042-00		1000.0 MMF 100V 5%200PPM DM15S (10-00) 1 C7
5	5		1012646-00		.015 MFD 50V 2% M.POLYCARB 1 C8
6	6		1000024-00		470.0 MMF 100V 5%200PPM DM15S (10-00) 1 C9
7	7		1001776-00		1 MFD 35V 10% 150D S.TA (10-00) 2 C6,C11
8	8		1012607-00		560 MFD 20V H% 672D AL EL 3 C12-C14
9	9		1012607-01		1200 MFD 6.3V H% 672D AL EL 1 C15
10	10		1010621-00		.1 MFD 50V 20% 125U DISC 2 C16,C19
11	11		1004813-00		10 MFD 20V 10% 150D S.TA (10-00) 2 C1,C17
12	12		1000030-00		.1 MFD 100V 20% 25U DISC 1 C18
13	13	BLANK			
14	14		1100125-00		1N 758A VZ= 10.0 5% .40W PPER S.A.V.EC 2 D2,D3
15	15		1105275-00		D 672 TR= 15NS PIV= 60V SP 7 D1,D4-D8,D20
16	16		1109440-00		1N 3880 PIV=100 I= 6A D04 SM 6 D10,D11,D13-D16
17	17		1113366-00		1N 3880P PIV=100 I=6A S 4 D17,D18,D9,D12
18	18		1105648-00		1N 4744 VZ= 15.0 10% 1W Y 1 D19
19	19	BLANK			
20	20		1211004-02		SOCKET,100 20POS EDGE MOUNT 1 P4
21	21		1209340-00		MATE-N-LOK 8PIN,HOUSING,SKT 2 J1,J2
22	22		1209456-01		MATE-N-LOK SKT PCB TAB LOOSE 16
23	23		1211342-02		MATE-N-LOK 2PIN PC TYPE 2 J5,J6
24	24		1209219-01		LAMP 6V@200MA,T1-3/4PINS#2319 1 L1
25	25	BLANK			
26	26		1300202-00		47 1/4W 5% CC (13-00) 1 R2
27	27		1309639-00		200 5W 5% WW (13-00) 1 R3
28	28		1312682-00		3 3W 5% (13-00) 1 R4
29	29		1302950-00		1.2 K 1W 10% CC (13-00) 1 R5
30	30		1300426-00		2.7 K 1/4W 5% CC (13-00) 2 R6,R7

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		FIRST USED ON:		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				
CHK	ECO NO	REV			MADE BY:	DATE:	TITLE	SIZE:	CODE:	DOCUMENT NUMBER	REV
B.N	00024	F			D. BILLOEAU	31-JUL-78	PARTS LIST	K	PL	5412343-0-DBP	F
					CHECKED: R. PUZZO	31-JUL-78	H785 BATTERY BACKUP REGULATOR				
					DSN. ENG.: J. MERCURI	31-JUL-78					
					PROD.: R. KING	31-JUL-78					
					RESP. ENG.: J. MERCURI	31-JUL-78	ASSY. NO.: D-UA-5412343-0-0				EDIT# 3

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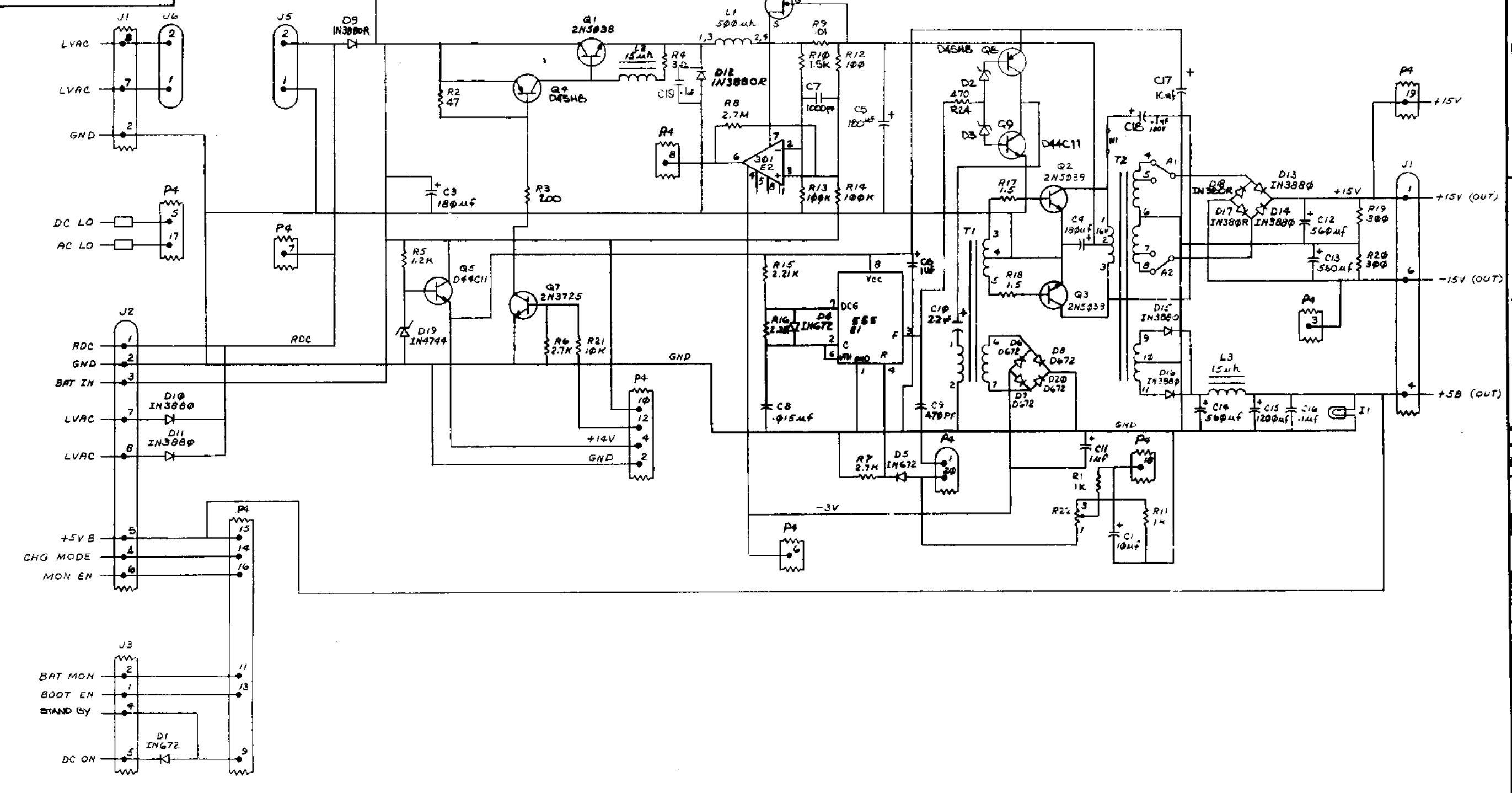
LINE ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
31	31	1309680-00	2.7 M 1/4W 5%	CC (13-00)	1 R8
32	32	1313712-00	.01 5W 3%	WW (13-00)	1 R9
33	33	1300365-00	1 K 1/4W 5%	CC (13-00)	2 R1,R11
34	34	1300229-00	100 1/4W 5%	CC (13-00)	1 R12
35	35	1302466-00	100 K 1/4W 5%	CC (13-00)	2 R13,R14
36	36	1312404-00	2.21 K 1/2W 1% RN60D-C 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 20% 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			0
44	44	BLANK			0
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 20U		1 Q6
49	49	1510959-00	2N 3725 NPN 3.5WC SI 50 60 P		1 Q7
50	50	BLANK			0
51	51	1612593-00	500 UH 6A	S	1 L1
52	52	1613874-00	CHOKER, 15UH 4A		2 L2,L3
53	53	1613876-00	XFMR, POWER, RATIO 1:2 7PIN	S	1 T1
54	54	1613875-00	XFMR, POWER, RATIO 1:2:3 100UH		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	7013384-1D	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	9006565-00	NUT, KEP , 10-32X 3/8 AF	CS/	10
69	69	1210737-04	HEAT SINK, REGULATOR		1
70	70	9007793-04	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		
78	78	9009185-00	JUMPER, WIRE, INSULATED, BLACK BAND		1 W1

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE PARTS LIST H785 BATTERY BACKUP REGULATOR	SIZE K	CODE PL	DOCUMENT NUMBER 5412343-0-DBP	REV F
---	--	-----------	------------	----------------------------------	----------

LINE	REF	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	U3
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, 4-40	4	
83	83		9006010-01	SCREW,PAN ,PHIL, 4-40X 5/16 SS/PAS	2	
84	84		9008479-00	WASHER, FLAT FINE OD, 1/4	2	
85	85		9905212-00	CARTON, DIE CUT 2412 100	1	
86	86	D-1A-7417410-0-0	7417410-00	REGULATOR BRACKET	1	
87	87		9009769-00	WASHER, RECTANGULAR .405X.225X.060	1	
48	88		9007201-00	TRANSIPADS #10253	1	
49	89		9009731-03	CAP,PLASTIC	7	

DIGITAL EQUIPMENT CORPORATION NAYBARD, MASSACHUSETTS	TITLE	SIZE(COEF)	DOCUMENT NUMBER	REV
	PARTS LIST M785 BATTERY BACKUP REGULATOR	K PL	5412343-0-DBP	P

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REV.	REV.
CHG. NO.	REV. NO.
DATE	BY
17 5412343-0001 C	G. POTTER
18 5412343-0002 D	J. M. MERRILL
19 5412343-0003 E	J. M. MERRILL
20 5412343-0004 F	J. M. MERRILL
21 5412343-0005 G	J. M. MERRILL
22 5412343-0006 H	J. M. MERRILL
23 5412343-0007 I	J. M. MERRILL
24 5412343-0008 J	J. M. MERRILL
25 5412343-0009 K	J. M. MERRILL
26 5412343-0010 L	J. M. MERRILL
27 5412343-0011 M	J. M. MERRILL
28 5412343-0012 N	J. M. MERRILL
29 5412343-0013 O	J. M. MERRILL
30 5412343-0014 P	J. M. MERRILL
31 5412343-0015 Q	J. M. MERRILL
32 5412343-0016 R	J. M. MERRILL
33 5412343-0017 S	J. M. MERRILL
34 5412343-0018 T	J. M. MERRILL
35 5412343-0019 U	J. M. MERRILL
36 5412343-0020 V	J. M. MERRILL
37 5412343-0021 W	J. M. MERRILL
38 5412343-0022 X	J. M. MERRILL
39 5412343-0023 Y	J. M. MERRILL
40 5412343-0024 Z	J. M. MERRILL

DRN. J. MERRILL	8-20-76	FIRST USED ON	8-20-76
CHK'D J. MERRILL	8-26-76	TITLE	H785 BATTERY BACKUP REGULATOR
ENG. G. POTTER	7-8-77	SIZE	D
PROJ. ENG. J. MERRILL	2-0-77	CODE	5412343-0-1
PROD. G. KLEIN	2-8-77	NUMBER	F
NEXT HIGHER ASSY.		DIST.	
SCALE	1:1		
SHEET	1 OF 1		

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0-0-0-98212385-0-0 2

REWORK INSTRUCTIONS

ECO #1

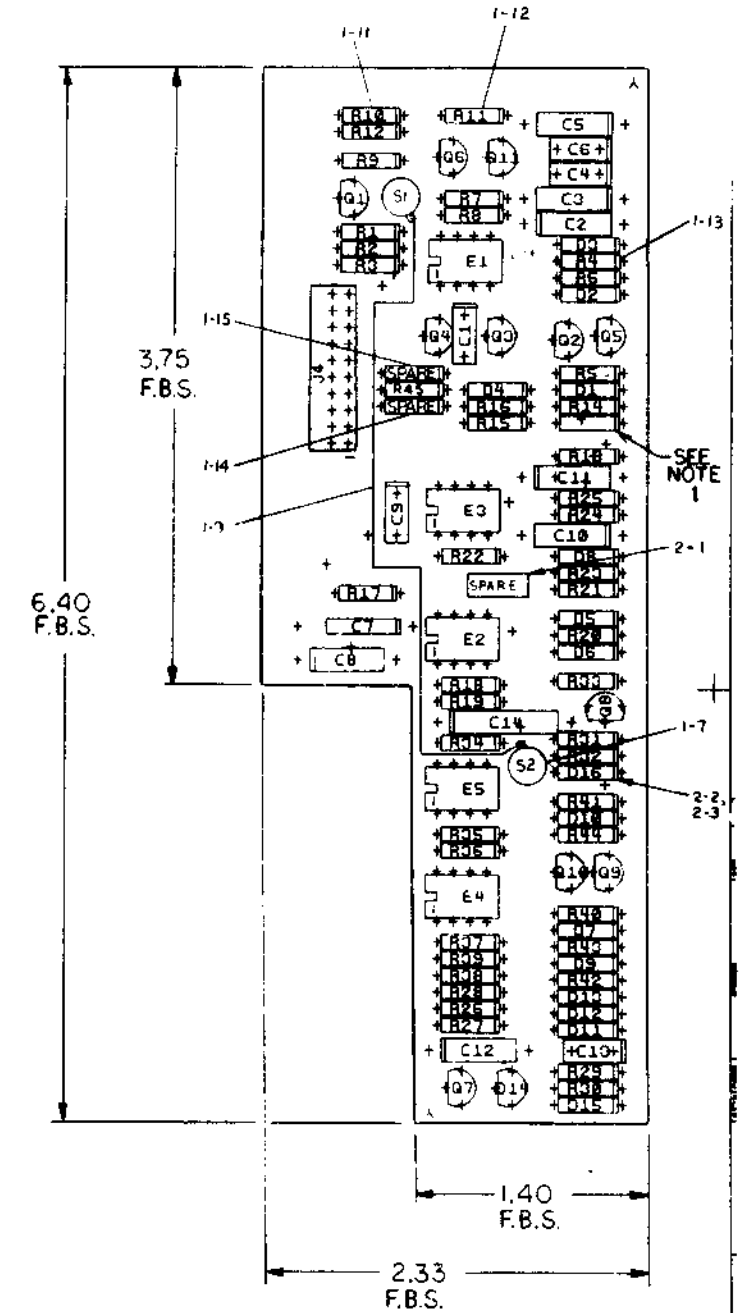
- 1-1 CUT ETCH BETWEEN R41 AND D16. (THIS ETCH LINE RUNS OVER TO THE DRAIN OF Q10) SIDE 1.
- 1-2 CUT ETCH ON RIGHT SIDE OF C14. ON THE ETCH LINE THAT HAS PREVIOUSLY BEEN CUT, SIDE 1.
- 1-3 INSERT ECO WIRE FROM THE DRAIN OF Q10 TO THE LEFT SIDE OF C14, TACK SOLDER TO ETCH LINE ON THE LEFT SIDE OF C14, 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.
- 1-4 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.
- 1-5 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.
- 1-6 ON SIDE 2, CUT ETCH LEADING AWAY FROM PIN 9 OF J4.
- 1-7 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 9009157. MAKE SURE THAT TABS ON DEC 12-12416-02 ARE FACING EACH OTHER ON SIDE 1. (S1 AND S2)
- 1-8 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.
- 1-9 WITH AN ECO WIRE, CONNECT BOTH CASE TABS OF DEC. 12-12416-02 ON SIDE 1 TOGETHER.
- 1-10 DEC PART 12-12416-02 THAT HAS BEEN INSTALLED BENEATH R32 ON SIDE 1. CONNECT AN ECO WIRE FROM THIS PARTS PIN ON SIDE 2 WITH THE OTHER END OF THE ECO WIRE GOING TO THE PTH

- BETWEEN R41 AND D16. (THIS P.T.H HAS AN ETCH RUN CONNECTING THE ANODE OF D16 TO IT ON SIDE 2.)
- 1-11 CHANGE R10 FROM 13-13151 3.6K OHM TO 1300391 1.5K OHM.
- 1-12 CHANGE R11 FROM 13-00316 470 OHM TO 13-00439 3.3K OHM.
- 1-13 CHANGE R4 FROM 13-00309 390 OHM TO 13-01322 180 OHM.
- 1-14 REMOVE W2 INSULATED JUMPER 90-09185.
- 1-15 REMOVE D17, IN 758A 11-00125
- 1-16 GLUE ALL ECO WIRES DOWN WITH DEC. 90-09157.

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 1114913-00)

COMPONENT SIDE VIEW



NOTES:

1. COMPONENT NOT INSTALLED

CHANGE NO	REV	DATE	BY	CHKD	DESCRIPTION
02	5412385-1		G. POTTER		
01	5412385-0		G. POTTER		
00	5412385-0				

ETCH REV. C	P.C. DESIGN DATA BASE REV. C
-------------	------------------------------

SIGNATURES	DATE	TITLE
DRN. F. GAROFALO	12-1-76	H785 CONTROL BD.
CHK'D. F. SEIDMAN	12-8-76	
ENG. J. MESSIAH	12 DEC 76	
PROJ. ENG. J. MESSIAH	12 DEC 76	
SCALE 2/1	SHT. 1 OF 3	SIZE CODE NUMBER REV
		0 UA 5412385-0-0 E

NEXT HIGHER ASSY. B-DD-5412385-0

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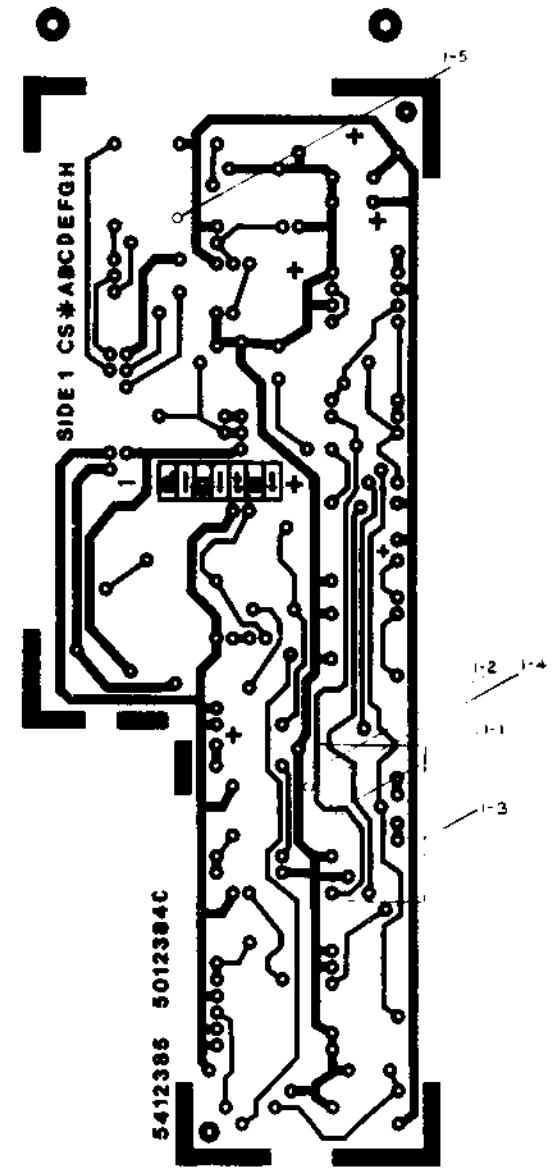
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DIA 5412385-0-0 E 2

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REVISIONS

CHK	CHANGE NO	DATE

TITLE	H785 CONTROL BD	SIZE CODE	DIA	NUMBER	5412385-0-0	REV.	E
SCALE	2/1	SHEET	2 OF 3	DIST.			

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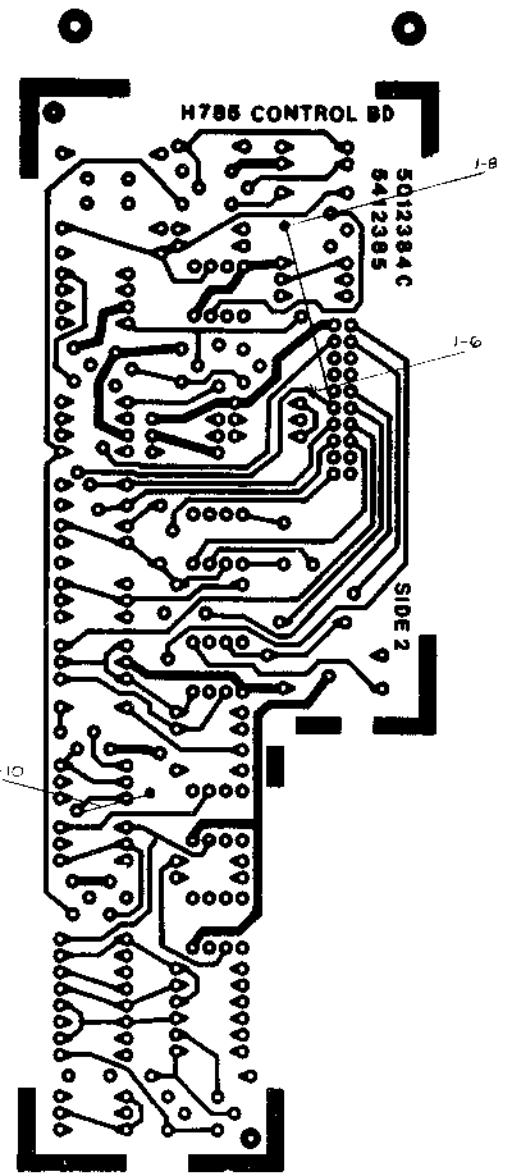
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D U A 5412385-0-0 2

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D U A 5412385-0-0 E

REVISION									
NO.	DESCRIPTION	DATE	BY	CHKD	APP'D	DATE	BY	CHKD	APP'D

TITLE	H785 CONTROL BD	SIZE CODE	D U A	NUMBER	5412385-0-0	REV.	E
SCALE	2/1	SHEET	3 OF 3	DIST.			

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 DR 50V Z5U DISC/800PF MIN	4	C1,C4,C6,C13
3	3		1004813-00 10 MFD 20V 10% 150D 8.TA (10-00)	1	C2
4	4		1001776-00 1 MFD 35V 10% 150D 8.TA (10-00)	3	C3,C5,C11
5	5		1000061-00 8200.0 MMF 100V 10% 663UM MYLR (10-00)	1	C7
6	6		1005965-00 .47 MFD 35V 10% 150D 8.TA (10-00)	2	C8,C12
7	7		1000009-00 33.0 MMF 100V 5%200PPM DM158 (10-00)	1	C9
8	8		1005306-00 6.8MFD 35V 10% 150D 8.TA (10-00)	1	C14
9	9		1105275-00 D 672 TR= 15NS PIV= 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 8Z710910 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.		FIRST USED ON:		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS					
CHK	ECO NO	REV					TITLE					
				00			PARTS LIST					
W.H	00003	E			MADE BY:	F.MALANSON	DATE:	21-FEB-78	H785 CONTROL BOARD			
					CHECKED:	F.SEIDMAN	DATE:	21-FEB-78				
					DSN.ENG.:	J.MERCURI	DATE:	21-FEB-78				
					PROD.:	R.B.KING	DATE:	21-FEB-78	SIZE	CODE	DOCUMENT NUMBER	REV
									K	PL	5412385-0-0	E
					RESP.ENG.:	J.MERCURI	DATE:	21-FEB-78	ASSY.NO.:		D-UA-5412385-0-0	EDIT#
												4

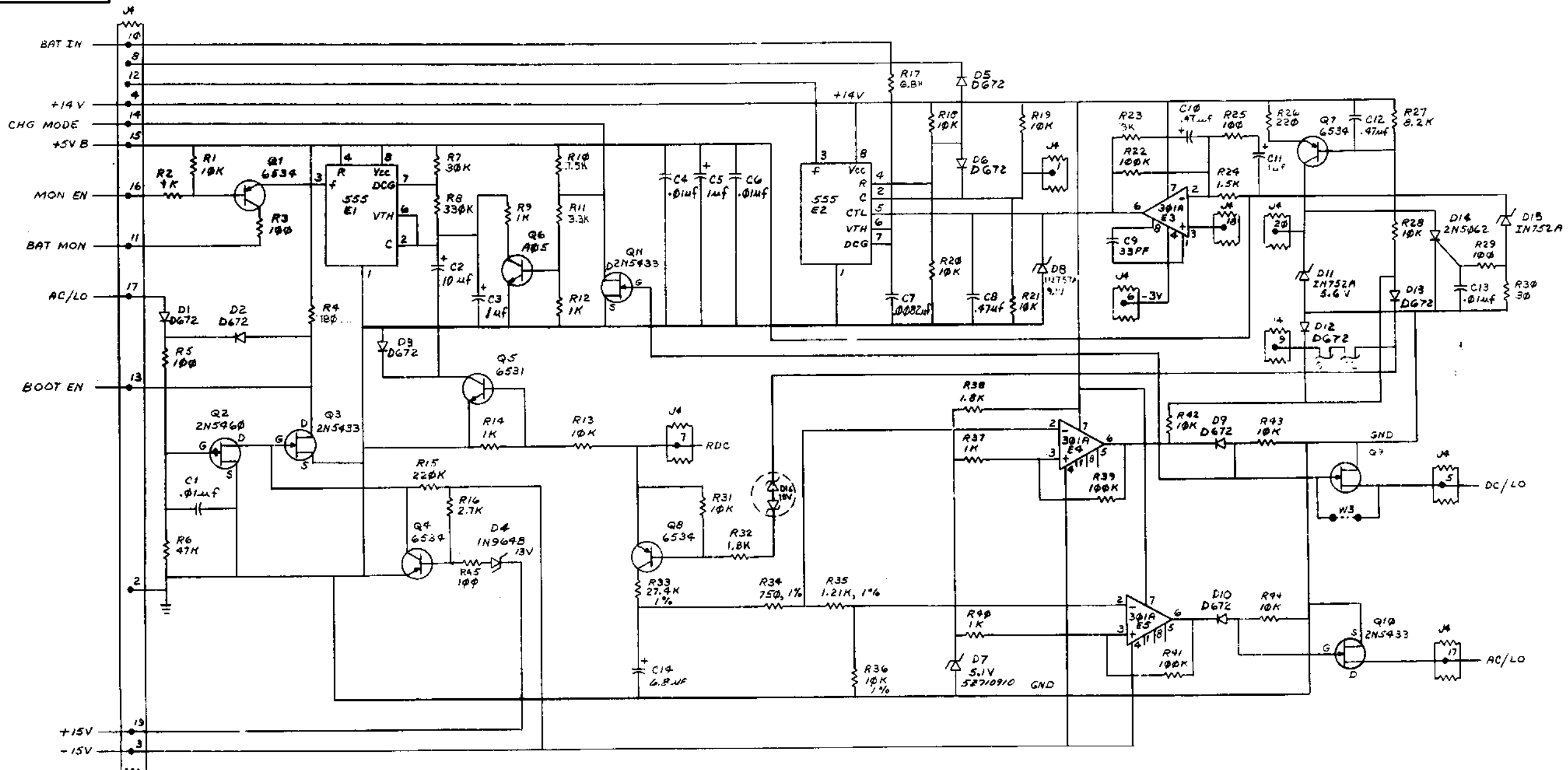
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LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
30	30		1300271-00	220 1/4W 5% CC (13-00	1	R26
31	31		1303179-00	8.2 K 1/4W 5% CC (13-00	1	R27
32	32		1302751-00	30 1/4W 5% CC (13-00	1	R30
33	33		1309417-00	27.4 K 1/4W 1% RN55D-F 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 CHNHL	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	D8
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 H785 CONTROL BOARD	PARTS LIST	SIZE K	CODE FL	DOCUMENT NUMBER 5412385-0-0	REV E
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NOTES:  
 1. ~~FOR NORMAL OPERATION REMOVE JUMPER W2.~~  
 2. ~~FOR TEST OPERATION REMOVE JUMPER W1.~~  
 W3 IS AN ENGINEERING OPTION TO BE DETERMINED AT A LATER DATE.

REV.	DATE	BY	CHKD
1	12/17/76	J. MERCURI	
2	1/12/77	G. POTTER	

DRN. 9/18/76	FIRST USED ON	40-1030
CHK'D	TITLE	H785
ENGR.	CONTROL BOARD	
PROJ. ENGR.	SIZE	D
PROD. ENGR.	CODE	CS
NEXT HIGHER ASSY.	NUMBER	5412385-0-1
SCALE	REV.	E
SHEET 1 OF 1	DIST.	

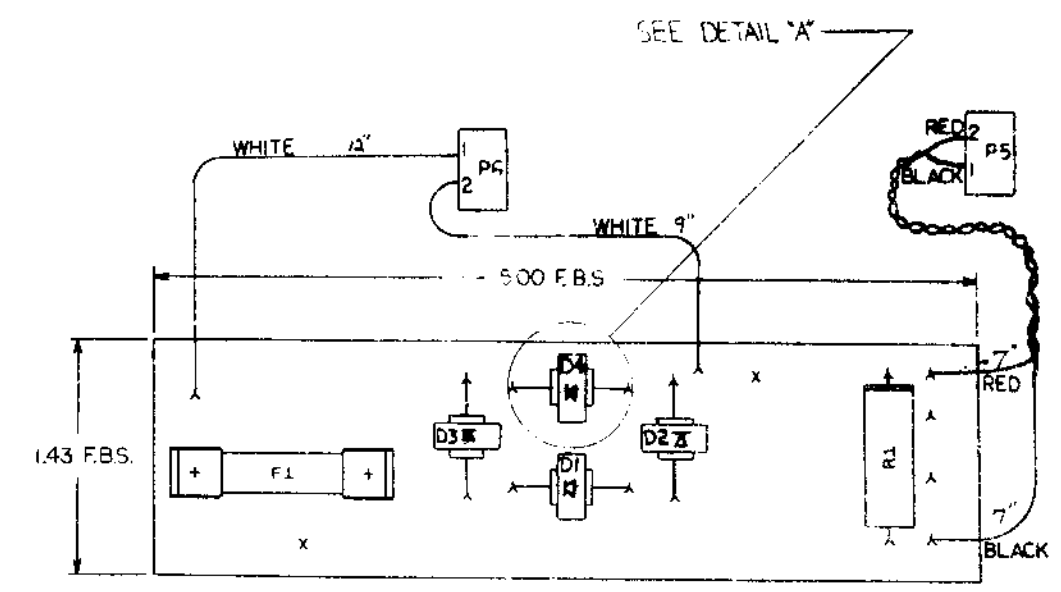
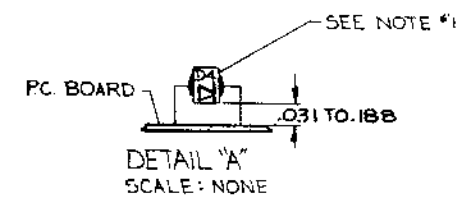
8 7 6 5 4 3 2 1

DATE: 11-5-74  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

3 0-0-11241b 2 1

COMPONENT SIDE VIEW

NOTES:  
 1. DIODES D1 THRU D4 MUST BE RAISED FROM THE PC BOARD .031 TO .105



NOTES:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CHKCHANGE NO	REV	DATE	BY	CHK
02	541241-1	9-21-74	G. POTTER	
01	541241-2	11-5-74	G. POTTER	
00	541241-3	11-5-74	G. POTTER	

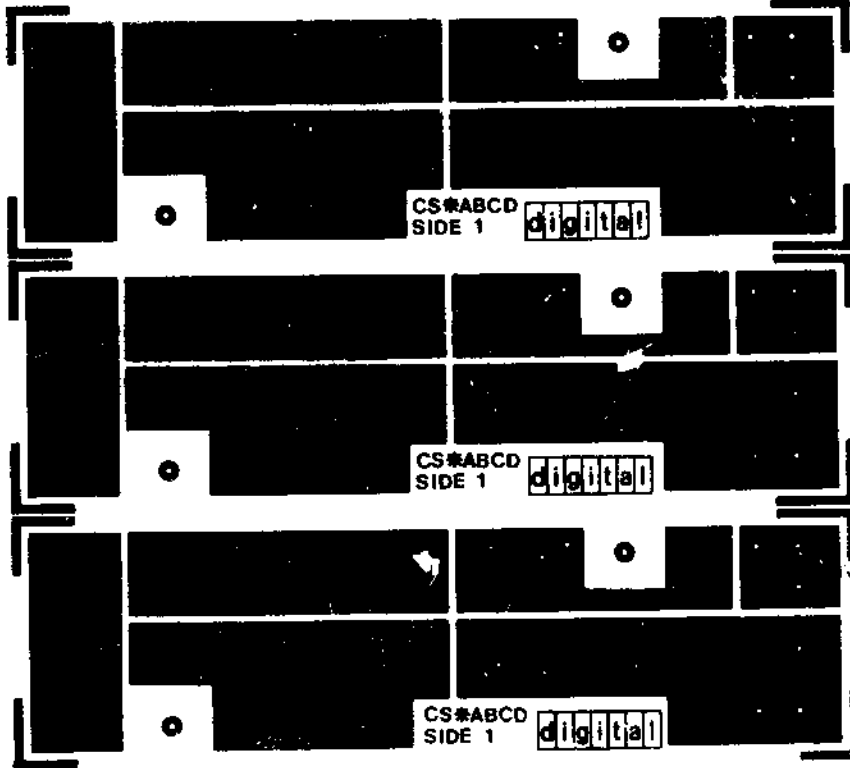
ETCH: REV. C  
 P.C. DESIGN DATA BASE REV. C

SIGNATURES	DATE	TITLE
DRN. [Signature]	9-21-74	digital RECTIFIER BOARD
CHK'D. [Signature]	9-21-74	
ENG. [Signature]	11-5-74	
PROJ. ENG. [Signature]	11-5-74	
PROD. [Signature]	12-2-74	
SCALE 2/1	SHT. 1 OF 3	SIZE CODE NUMBER
NEXT HIGHER ASSY.		D UA 541241-0-0

D UA 541241-0-0

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MS-6064 60413C 6413-01



REVISIONS	
NO.	CHANGE NO.

TITLE	INPUT RECTIFIER BOARD	SIZE	D-12
SCALE	2/1	SHEET	2 OF 3

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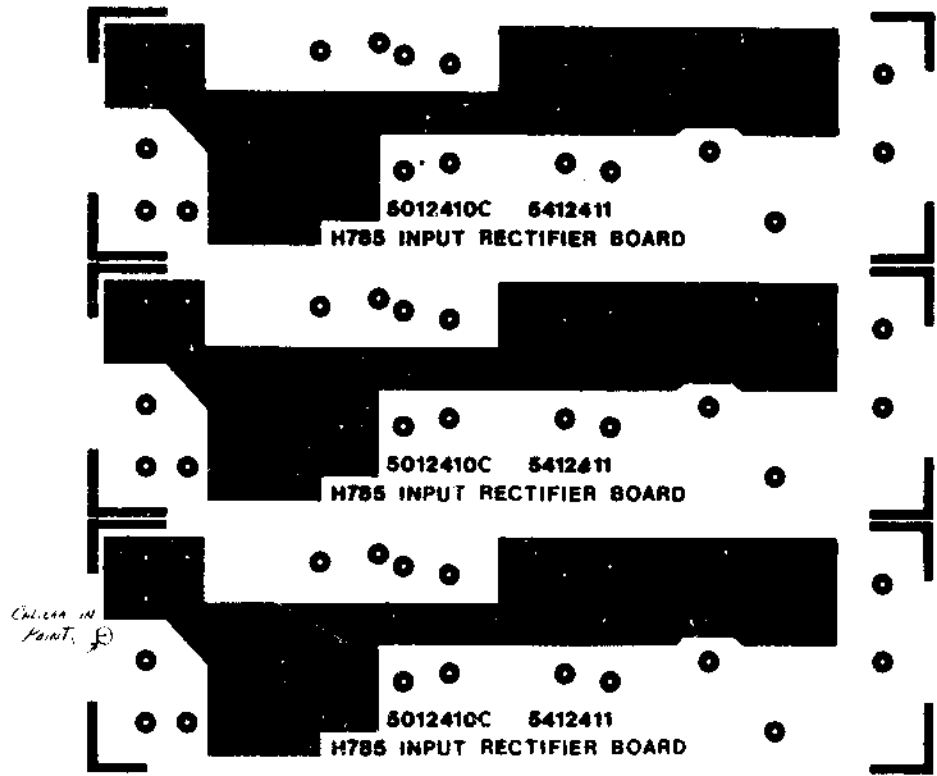
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D|UA|5412411-0-0|2

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D|UA|5412411-0-0

REVISIONS		
CHK	CHAR-GE	DATE

TITLE	SIZE CODE	NUMBER	REV.
INPUT RECTIFIER BOARD	D UA	5412411-0-0	E
SCALE 2/1	SHEET 3 OF 3	DIST.	

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	SIZE	CODE	DOCUMENT NUMBER	REV
---	00003	E	00	D.BILODEAU	08-MAR-78	PARTS LIST				
				F.GAROFALO	08-MAR-78	INPUT RECTIFIER BOARD				
				J.MERCURI	08-MAR-78					
				R.B.KING	08-MAR-78		K	PL	5412411-0-0	E
				J.MERCURI	08-MAR-78	ASSY.NO.:			D-UA-5412411-0-0	3

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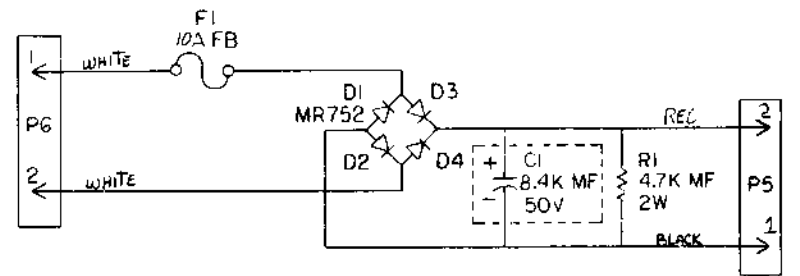
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CS 5412411-0-1

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NOTES:

- 1. C1 WILL BE CONNECTED TO BOARD AT NEXT HIGHER ASSEMBLY.



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

DEC FORM NO. 080 135 B

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QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
FIRST USED ON OPTION MODEL				
ETCH BOARD REV C				
DRN		DATE 7-15-76	 <p>TITLE: INPUT RECTIFIER BOARD</p> <p>SIZE CODE: D CS NUMBER: 5412411-0-1 REV: C</p>	
CHN		DATE		
ENG		DATE 7-15-76		
PROJ. ENG.		DATE 11-7-76		
PROD.		DATE 12-7-76		
NEXT HIGHER ASSY				
DEC NO.	EIA NO.	DEC NO.	EIA NO.	
SEMICONDUCTOR CONVERSION CHART				
SCALE: 1:1	SHEET: 1 OF 1		DIST.	

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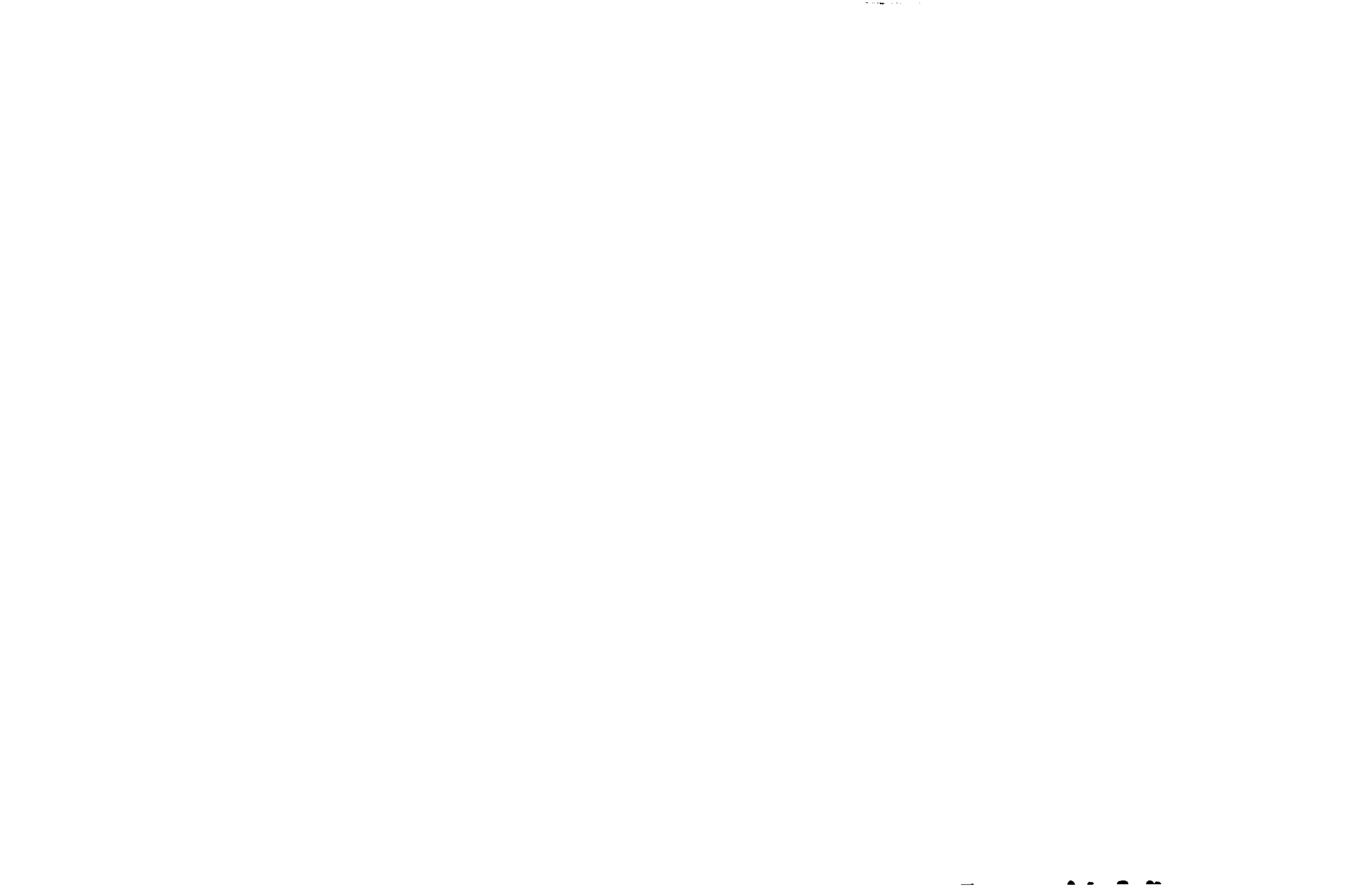
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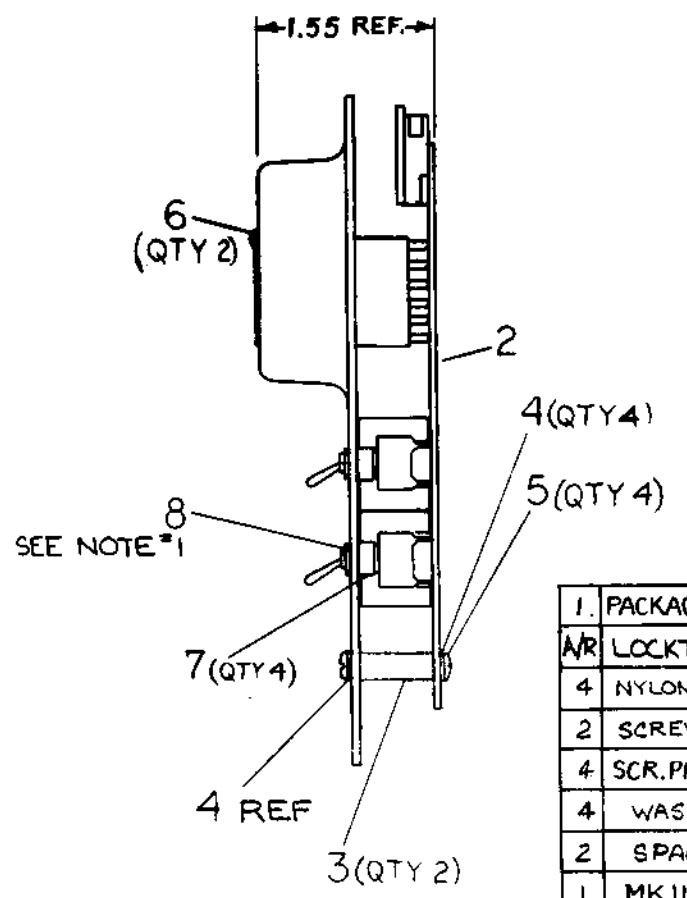
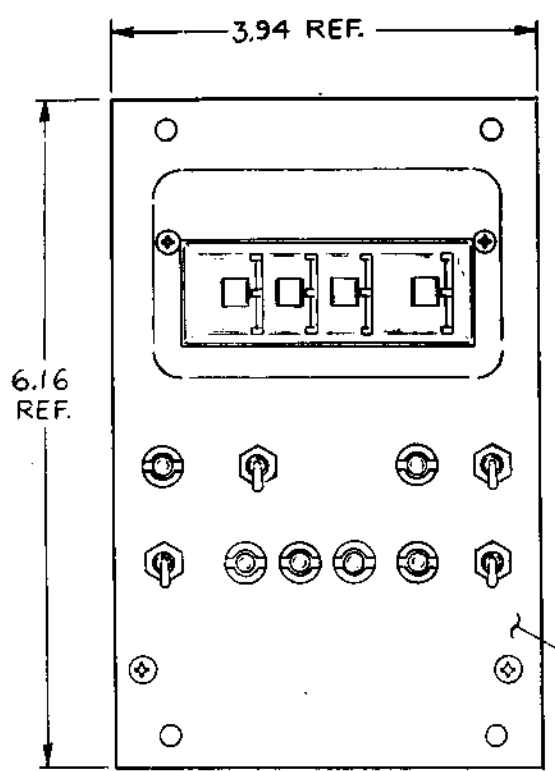
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NOTE:  
I-LOCKTITE TO BE APPLIED TO  
THREAD PORTION OF TOGGLE  
SWITCH BEFORE MOUNTING  
CONSOLE (ITEM #1)



ITEM NO.	DESCRIPTION	DWG./PART NO.	ITEM NO.
1	PACKAGING INSTR MKII	A-SP-3700252-00	9
1/R	LOCKTITE	9009321-00	8
4	NYLON, SPACER, 265 ID X .125 L6	9009565-02	7
2	SCREW SELF-TAP 4X.25, BLK	9009315-01	6
4	SCR. PH HD TRUSS #6-32 X .31	9006021-03	5
4	WASHER INT TOOTH LOCK #6	9006633-00	4
2	SPACER, 6-32 X .69	9006858-00	3
1	MKII BOX CONTROLLER	D-UA-5413018-0-0	2
1	CONSOLE	G-PS-1214577-0-0	1

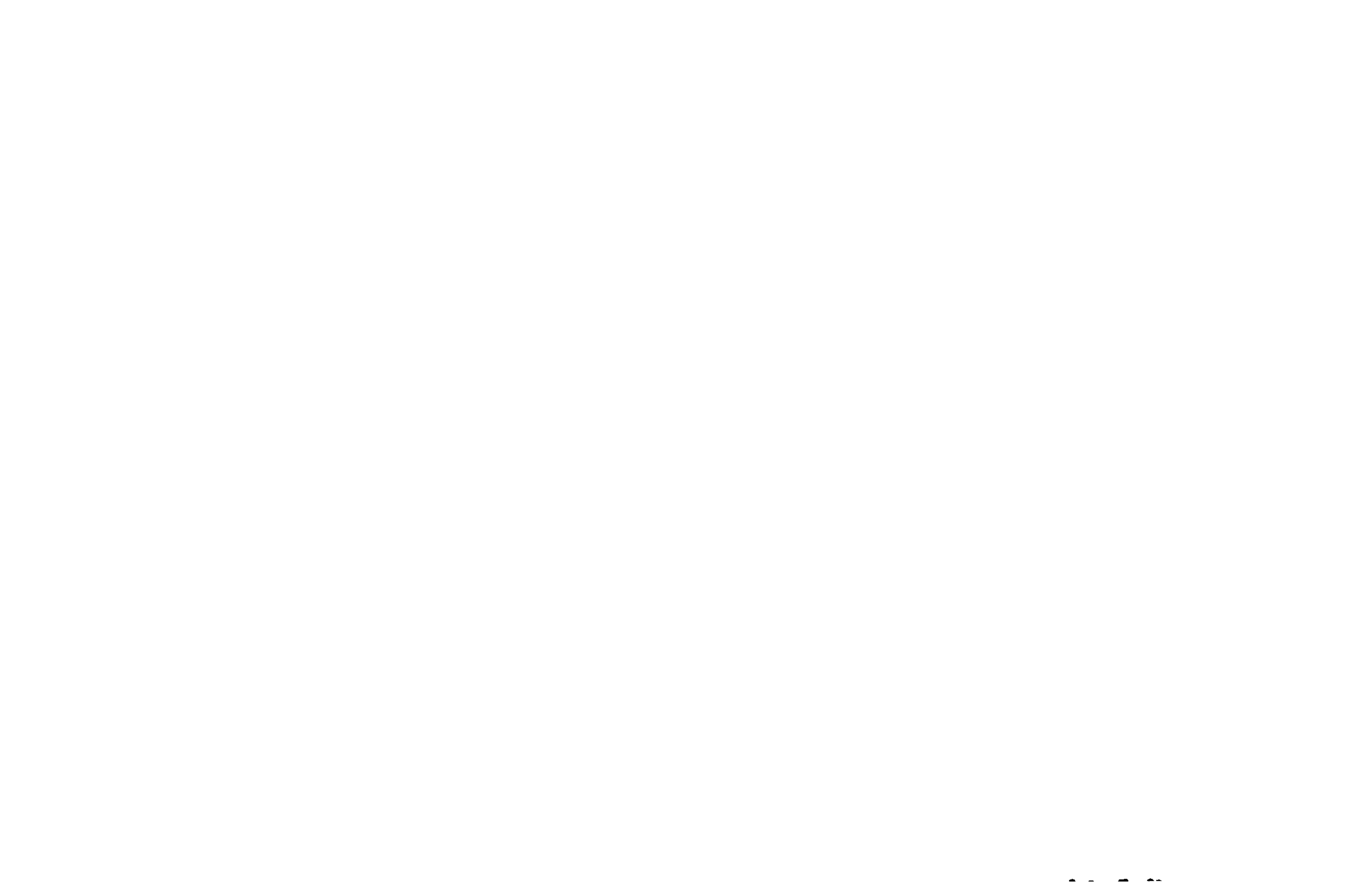
REV.	CHG	NO.	DATE	BY	APP
1	A	00001	7/24/77	L. Boudreau	

DESCRIPTION		DWG./PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
ANGLES 30° 30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE INCHES	
SURFACE QUALITY IN MICRONS	CHECK ONE: MEDIUM <input type="checkbox"/> PREFERRED <input checked="" type="checkbox"/>	OVER 0 TO 1.25	OVER 1.25 TO 4.0
		OVER 4.0 TO 12.5	OVER 12.5 TO 40.0
		±.004	±.008
		±.012	±.016
		±.025	±.04
		±.08	±.1
THIRD ANGLE PROJECTION	DRN. L. Callis	16 JUN 77	FIRST USED ON
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D BY: [Signature]	23 Sep 77	MKII
DO NOT SCALE DWG	ENG. [Signature]	16 Sep 77	TITLE
	PROD. [Signature]	16 Sep 77	BOX CONTROLLER ASSY MKII-0
MATERIAL SEE PARTS LIST	E-UA MKII-0-0	SIZE CODE C	NUMBER AD 7014274-C-0
FINISH		SHEET	REV. 1

7014274-C-0

MANUFACTURE PARTS

DEC FORM NO. 100-C



DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS														
				A	B	C												
D-UA-5413018-0-0	3		MK11 BOX CONTROLLER	A	B	C												
B-PL-5413018-0-0	1		MK11 BOX CONTROLLER	A	B	C												
D-CS-5413018-0-1	1		MK11 BOX CONTROLLER	A	B	C												
D-MD-5413018-0-0	4		DRILL & ETCH DRAWING	A	A	B												
		5013017	ETCHED BOARD	B	B	C												
		5413018-0-1	P.C. DESIGN DATA BASE	DEF-														
B-DD-5413018-0	1		MK11 BOX CONTROLLER	*	A	B												

**NOTES:**

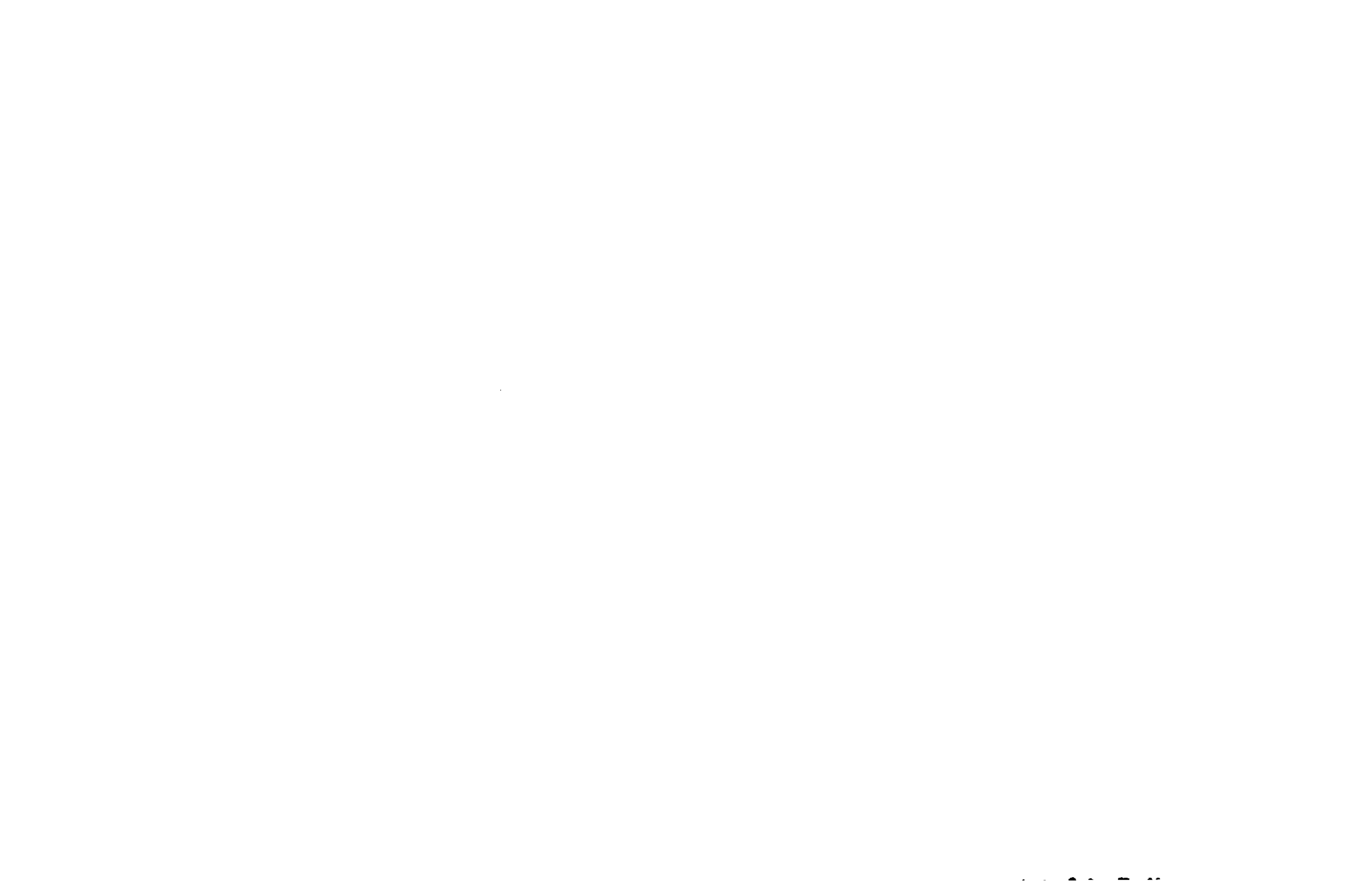
DATE	CHG NO.	ORIG.	REV.	REVISIONS														
				*	A	B												
-				*	A	B												
9-77	00001																	
11-77	00002																	

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USED ON OPTION/MODEL	DRN. L. METZGER	AUG 16 77	TITLE
MK11	CHK'D <i>B. Bosman</i>	17 AUG 77	MK11 BOX CONTROLLER
	ENG. <i>W. Hayes</i>	23 AUG 77	SIZE B CODE DD NUMBER 5413018-0
	PROD. <i>W. Hayes</i>	23 AUG 77	REV. B
			SHEET 1 OF 1



COMPONENT SIDE VIEW

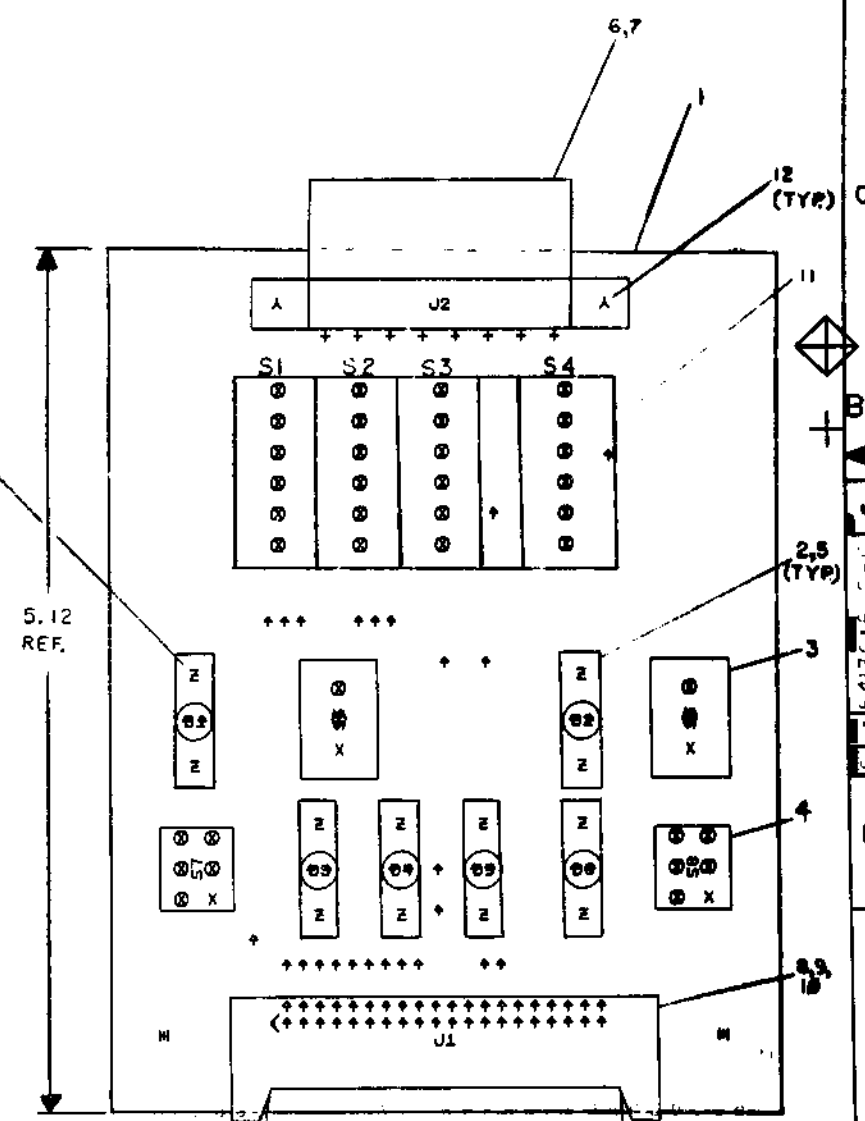
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 PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION  
 STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN  
 PERMISSION OF DIGITAL, INCORPORATED.

D  
C  
B  
A

D  
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B  
A



13 (TYP)  
INSTALL FROM  
OPPOSITE SIDE



NOTES:

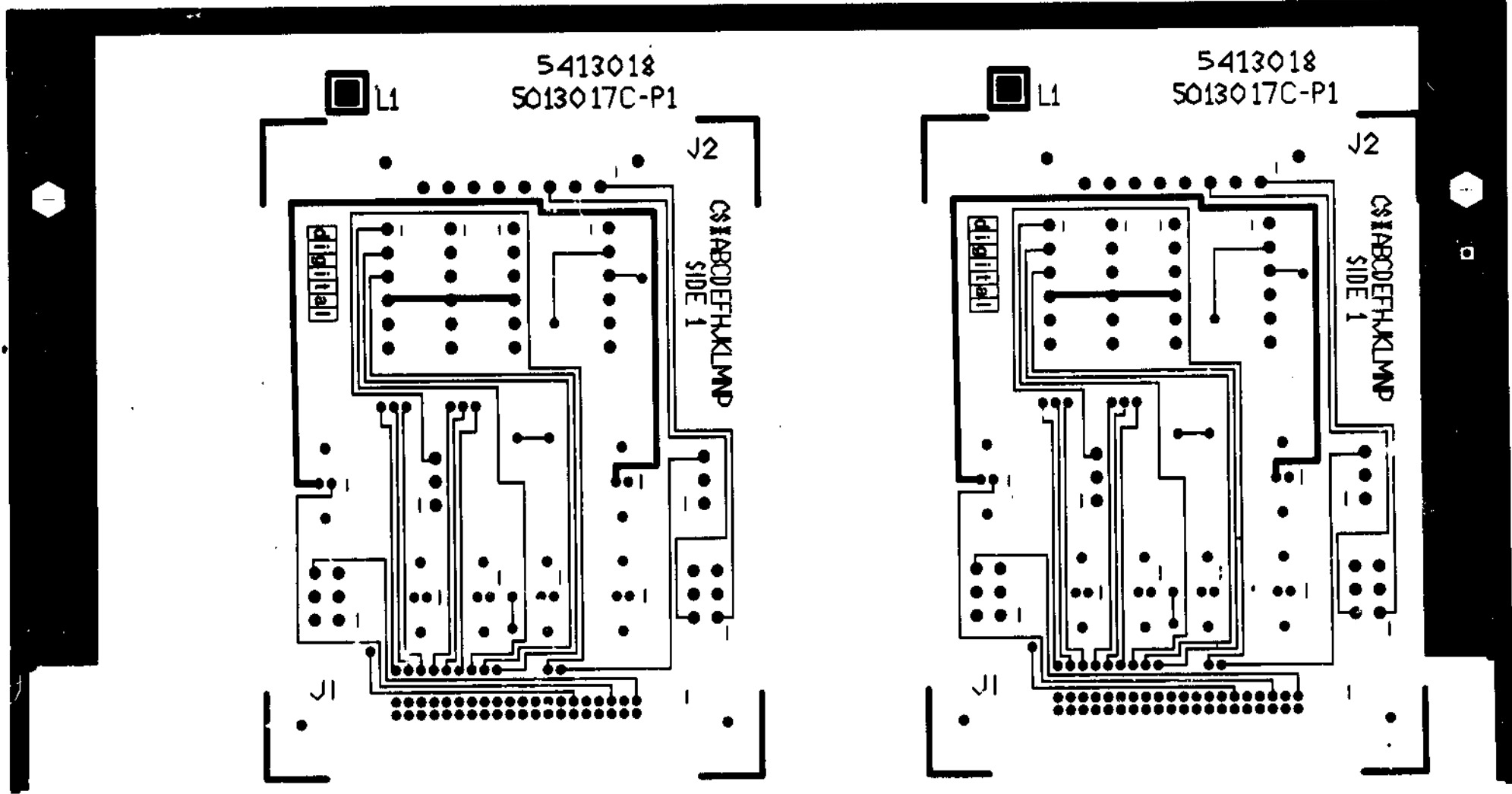
1.	B HOLES 0465 1+000-00451 MAYNARD ONLY
2.	ASSEMBLE USING SOLDER FIXTURE * 7014920-0-0

CHANGE NO	REV

ETCH REV. C
P.C. DESIGN DATA BASE REV. CL

SIGNATURES	DATE	digital
DRN.	11/20/77	
CHK D.	11/20/77	TITLE MK II BOX CONTROLLER
ENG.	11/20/77	
PROJ. ENG.	11/20/77	SIZE CODE NUMBER REV 0 UA 5413018-0-0 C
PROD.		
SCALE 2/1		NEXT HIGHER ASSY. B-DD-5413018-0
SHT. 1 OF 3		

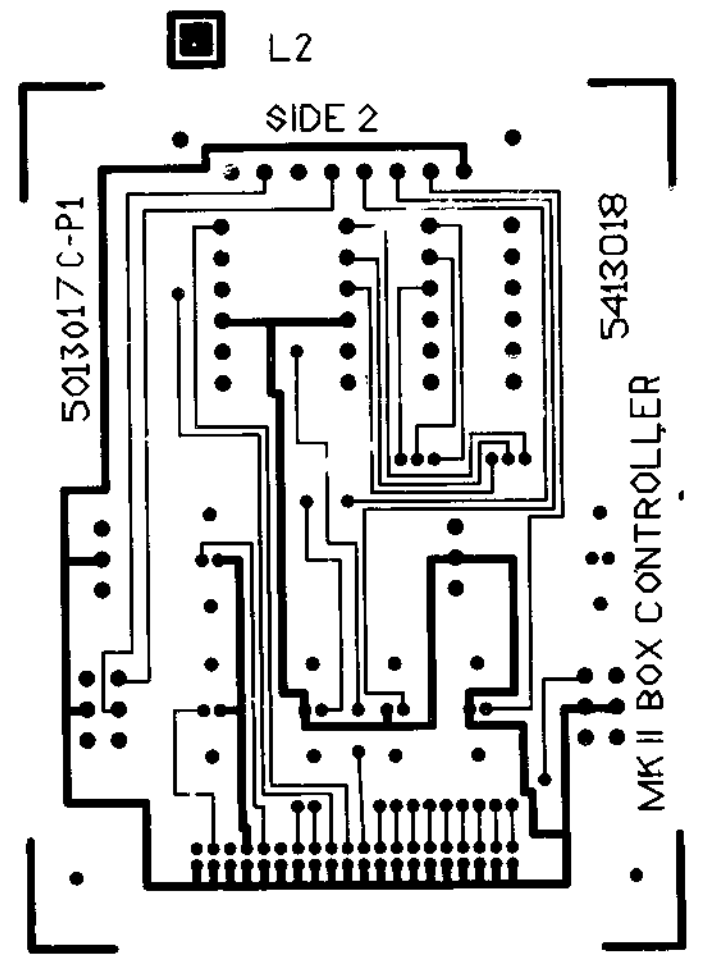
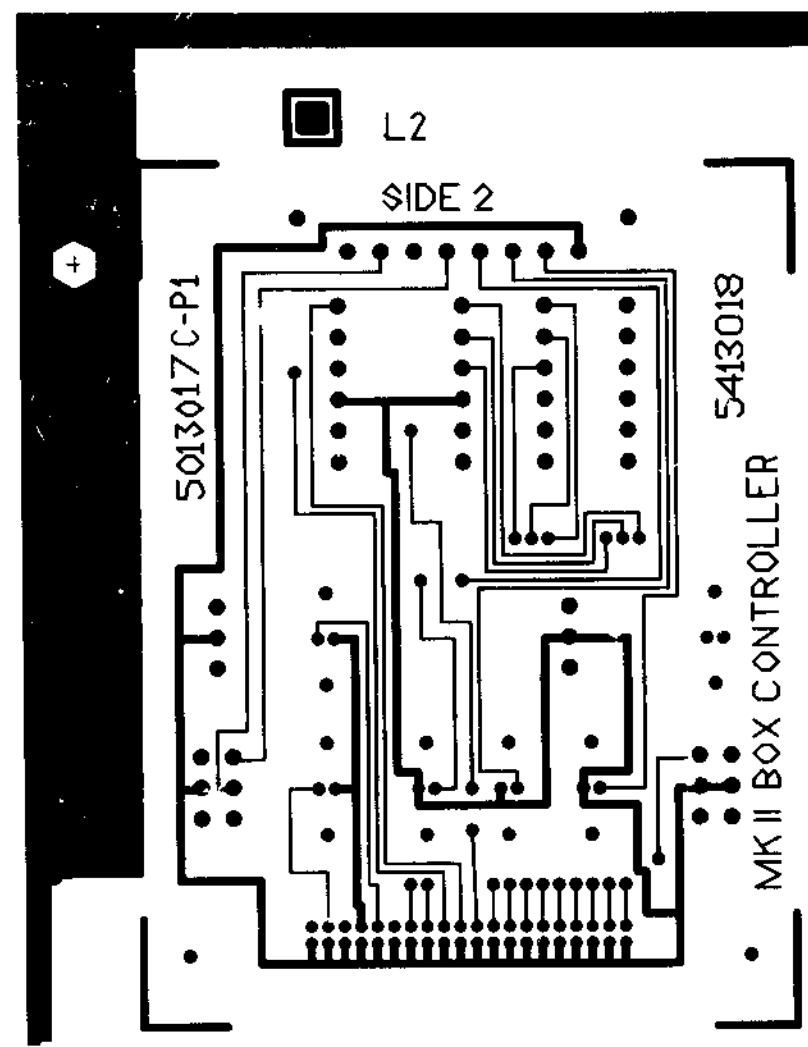
8 7 6 5 4 3 2 1



DUA 5413018-0-0 C

MR11 BOX CONTROLLER		SIZE CODE DUA	NUMBER 5413018-0-0	REV. C
SHEET 2/1	SHEET 2 OF 3		DIST.	

8 7 6 5 4 3 2 1



TITLE	MK II BOX CONTROLLER		SIZE CODE	DUA	NUMBER	5413018-0-0	REV.	C
SCALE	2/1	SHEET	3	OF	3	DIST.		

DWA 5413018-0-0 C

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION											NOTES:							
MADE BY C. BEVERLIE DATE 5/5/77		CHECKED W. ANGELL DATE 5/17/77		SECTION 1													USED ON: OPTION/MODEL MK11					
ENG W. ANGELL DATE 23 AUG 77		PROD J.C. STEPHENS DATE 23 AUG 77		ISSUED SECTION 1																		
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	REF																		REF DESIGNATION
	D-CS-5413018-0-1		CIRCUIT SCHEMATIC	REF																		
	D-UA-5413018-0-0		UNIT ASSEMBLY	REF																		
	B-DD-5413018-0		DWG. DIRECTORY	REF																		
	D-MD-5013017-0-0		DRILL & ETCH DWG.	REF																		
1		5013017	ETCHED	1																		
2		11-10324-00	LED MV5054-1	6																		D1 thru D6
3		12-09590-00	SW. TOGGLE 1P	2																		S5, S6
4		12-09592-00	SW. TOGGLE 2P	2																		S7, S8
5		12-10848-02	HOLDER, SINGLE, LED	6																		
6		12-09456-01	SOCKET TERMINAL	8																		
7		12-09340-00	SOCKET HOUSING 8 PIN	1																		J2
8		12-09941-02	CONN 40 PIN RT ANG. HDR.	1																		J1
9		12-09941-03	LATCH, LEFT (FOR RT ANG. HDR)	1																		
10		12-09941-04	LATCH, RIGHT (FOR RT ANG. HDR)	1																		
11		12-14467-00	SWITCH, THUMBWHEEL ASSY	1																		S1, S2, S3, S4
12		90-06732-00	EYELET	2																		
13		90-08327-01	PAN HD. SELF TAPPING SCREW	12																		
14		<del>90-05240-55</del>	<del>WIRE, #32, 24 IN, GREEN</del>	<del>1</del>																		

ECO. NO.  
0001  
0002

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TITLE  
MK11 BOX CONTROLLER

ASSY NO.  
D-UA-5413018-0-0  
SHEET 1 OF 1

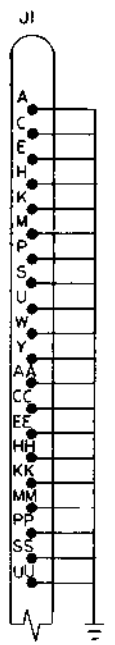
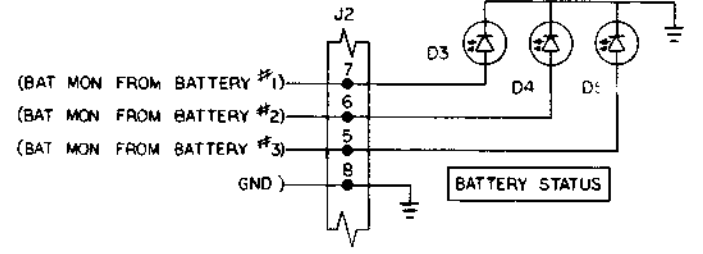
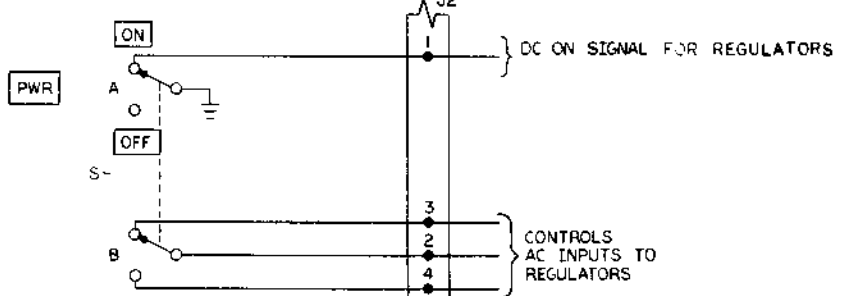
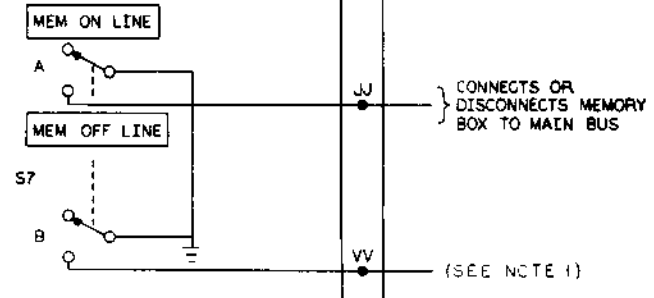
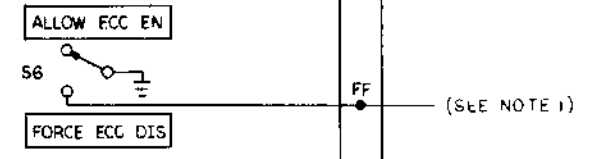
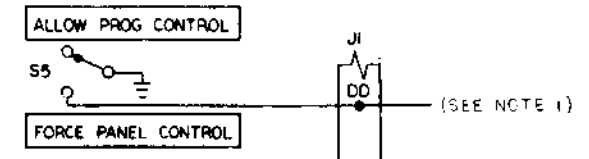
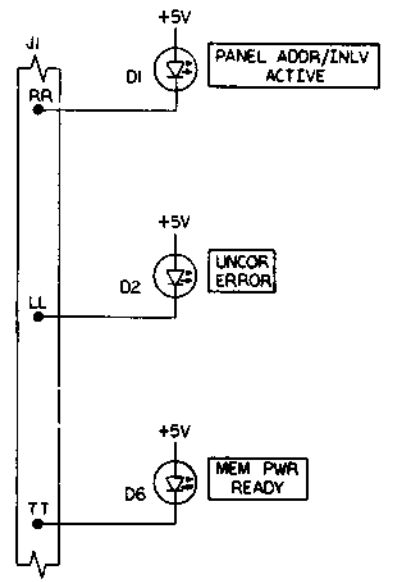
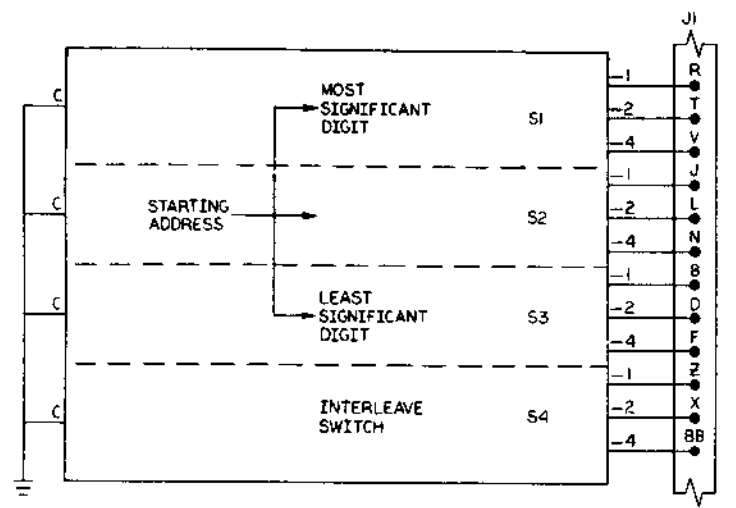
SIZE CODE NUMBER  
B PL 5413018-0-0  
INSERTION PARTS LIST DATA BASE REV

REV.  
C



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NOTES:  
1. J1=40 PIN BERG CONNECTOR--TO DATA BUFFER CARD IN MEMORY BACKPLANE.  
2. J2=8 PIN MATE-N-LOK CONNECTOR.



SEE NOTE 1

REV	DATE	BY	CHK'D
B	12/15/77	W. ANGELL	
A	12/15/77	W. ANGELL	

DRN: <i>[Signature]</i>	FIRST USED ON: MKII
CHK'D: <i>[Signature]</i>	TITLE: MKII BOX CONTROLLER
ENG: <i>[Signature]</i>	NUMBER: 5413018-0-1
PROJ. ENG: <i>[Signature]</i>	REV: C
PROD: <i>[Signature]</i>	SIZE CODE: D CS
NEXT HIGHER ASSY:	SHEET 1 OF 1
B-D-5413018-0	DIST.

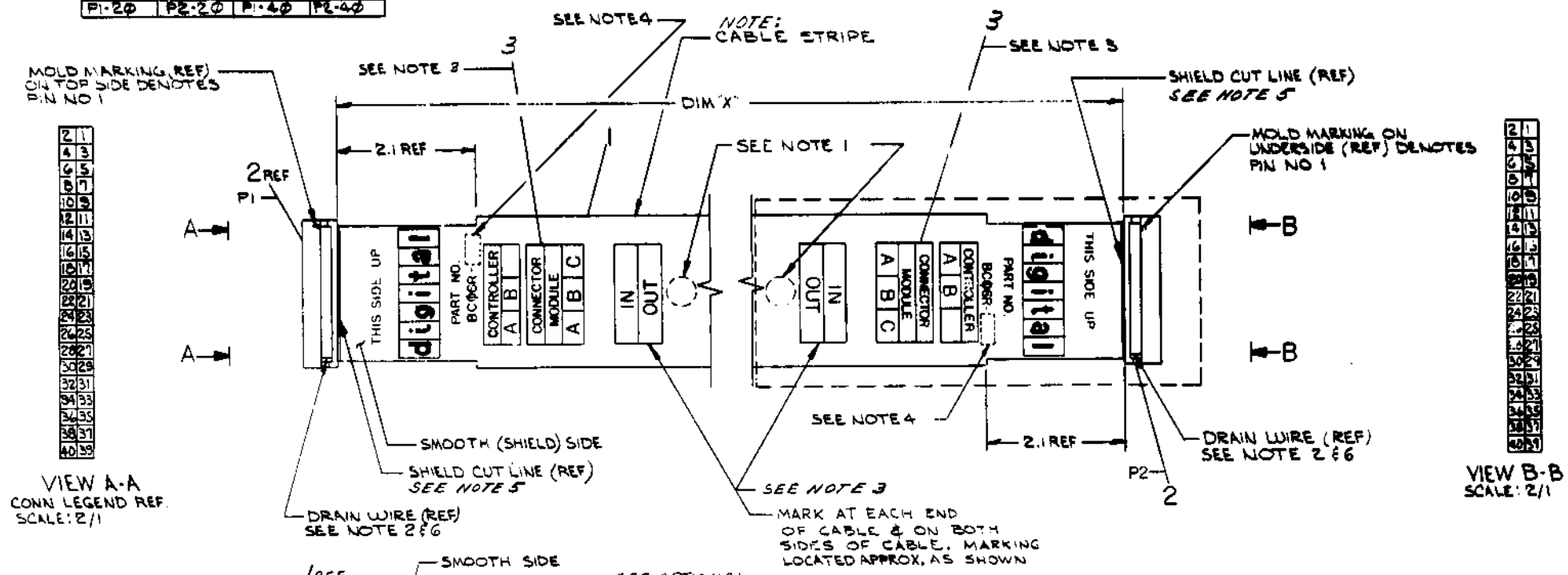
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WIRE TABLE			
FROM	TO	FROM	TO
P1-1	P2-1	P1-2	P2-2
P1-2	P2-2	P1-22	P2-22
P1-3	P2-3	P1-23	P2-23
P1-4	P2-4	P1-24	P2-24
P1-5	P2-5	P1-25	P2-25
P1-6	P2-6	P1-26	P2-26
P1-7	P2-7	P1-27	P2-27
P1-8	P2-8	P1-28	P2-28
P1-9	P2-9	P1-29	P2-29
P1-10	P2-10	P1-30	P2-30
P1-11	P2-11	P1-31	P2-31
P1-12	P2-12	P1-32	P2-32
P1-13	P2-13	P1-33	P2-33
P1-14	P2-14	P1-34	P2-34
P1-15	P2-15	P1-35	P2-35
P1-16	P2-16	P1-36	P2-36
P1-17	P2-17	P1-37	P2-37
P1-18	P2-18	P1-38	P2-38
P1-19	P2-19	P1-39	P2-39
P1-20	P2-20	P1-40	P2-40

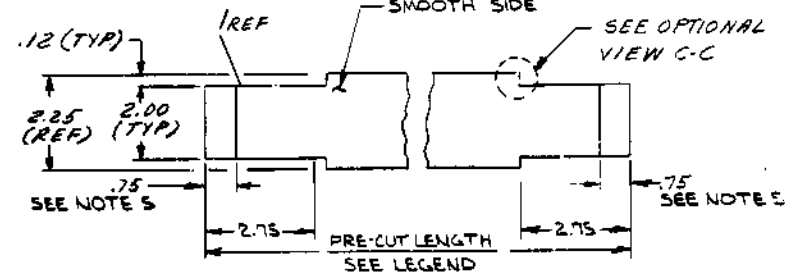
LEGEND			
NUMBER	DIM X"	PRE-CUT LENGTH	REMARKS
BC06R-01	1 FT	1 FT 1.5 IN ± 1 IN	SEE PRE-CUT VIEW C-C
BC06R-02	2 FT	2 FT 1.5 IN ± 1 IN	
BC06R-03	3 FT	3 FT 1.5 IN ± 1 IN	
BC06R-04	4 FT	4 FT 1.5 IN ± 1 IN	
BC06R-05	4 FT 6 IN	4 FT 7.5 IN ± 1.5 IN	
BC06R-06	6 FT	6 FT 1.5 IN ± 2 IN	
BC06R-08	8 FT	8 FT 1.5 IN ± 2 IN	
BC06R-10	10 FT	10 FT 1.5 IN ± 2 IN	
BC06R-12	12 FT	12 FT 1.5 IN ± 3 IN	
BC06R-20	20 FT	20 FT 1.5 IN ± 3 IN	
BC06R-25	25 FT	25 FT 1.5 IN ± 3 IN	
BC06R-30	30 FT	30 FT 1.5 IN ± 6 IN	
BC06R-50	50 FT	50 FT 1.5 IN ± 10 FT	
BC06R-60	60 FT	60 FT 1.5 IN ± 12 FT	
BC06R-75	75 FT	75 FT 1.5 IN ± 15 FT	
BC06R-100	100 FT	100 FT 1.5 IN ± 2 FT	
BC06R-07	7 FT	7 FT 1.5 IN ± 2 IN	
BC06R-08	8 FT 6 IN	8 FT 1.5 IN ± 1 IN	SEE PRE-CUT VIEW C-C

- NOTES:
1. INSPECTION & TEST STAMPS TO BE PLACED AT EACH END OF THE CABLE ASSEMBLY.
  2. DRAIN WIRE CONNECTS TO PIN NO 40.
  3. RUBBER STAMP INFORMATION SHOWN USING INK (ITEM 3) & ART WORK DEC NO. A-DC-741658-0-0
  4. STAMP APPLICABLE OPTION DASH NO. ACCORDING TO LENGTH.
  5. REMOVE SHIELD .75" FROM END OF PRECUT CABLE (SEE VIEW C-C).
  6. COVER EXPOSED DRAIN WIRE WITH ITEM 4 PRIOR TO ASSY (BOTH ENDS)

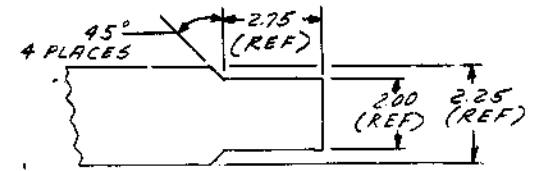


VIEW A-A  
CONN LEGEND REF.  
SCALE: 2/1

VIEW B-B  
SCALE: 2/1



VIEW C-C  
PRE-CUT VIEW  
SCALE: NONE



OPTIONAL VIEW C-C  
PRE-CUT VIEW  
SCALE: NONE

REV	DATE	BY	CHKD	DESCRIPTION
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A/R	PLASTIC TAPE	3612511-0	4
N/R	INK	4901150	3
2	CONNECTOR 40 SOCKET	1211206	2
A/R	CABLE 40 COND FLAT W/SHIELD	17-00034	1

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.
RP04			

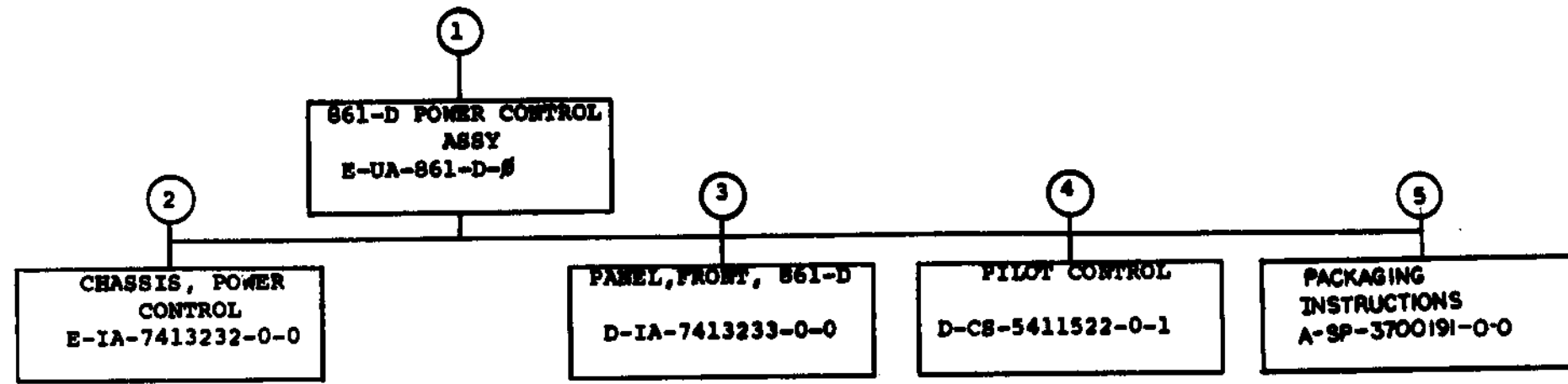
  

PARTS LIST			
DRN	DATE	TITLE	
6	3-22-75	digital EQUIPMENT CORPORATION	
2	3-22-75	BC06R I/O CABLE	
1	3-22-75		

MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
SEE PARTS LIST	E-1A-1005007-0-0			
	E-1A-1005008-0-0			
FINISH	SCALE NONE			

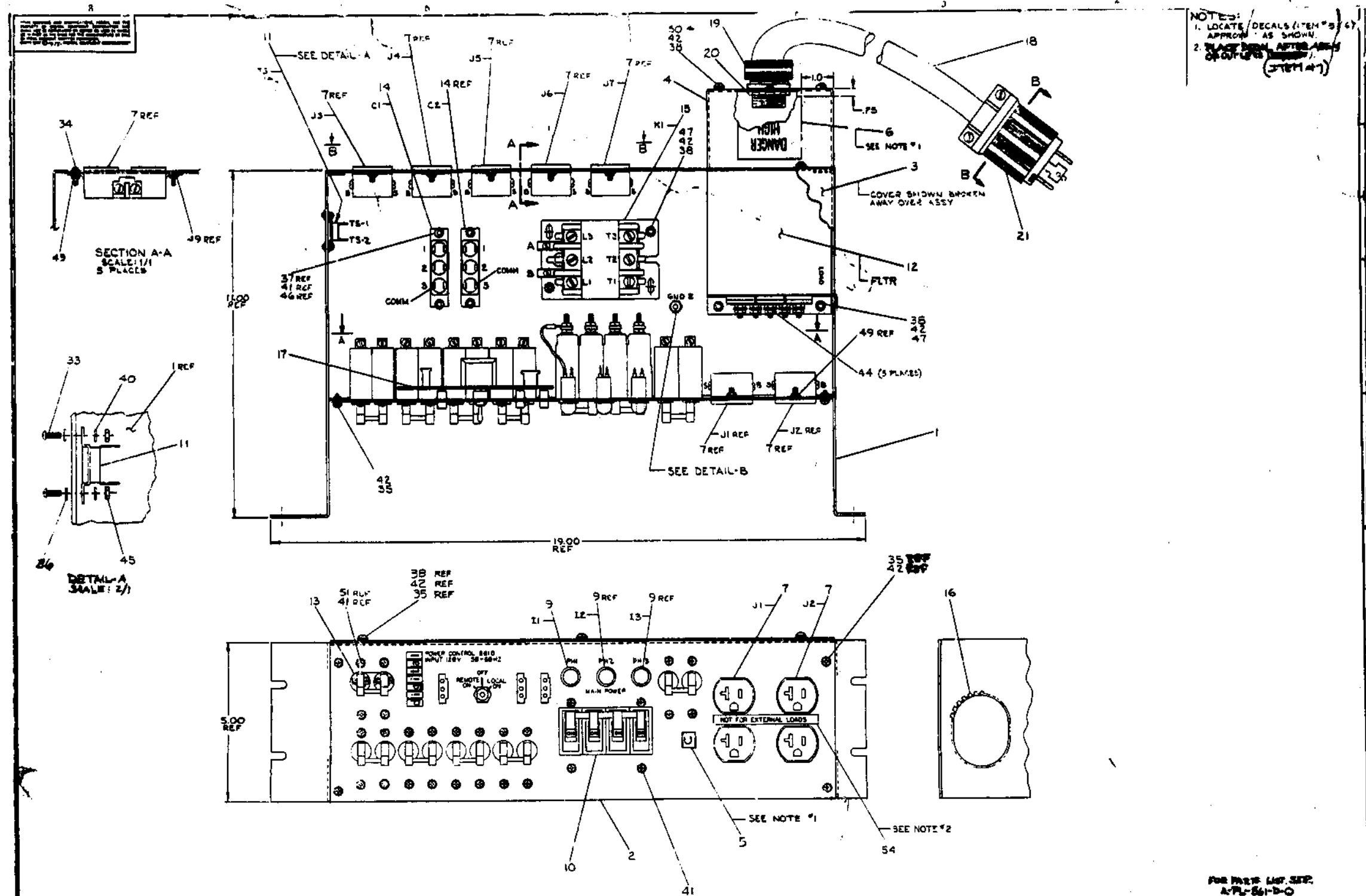




TITLE	SIZE CODE	NUMBER	REV
861-D POWER CONTROL	B DD	861-D	D
SHEET 2 OF 3			

CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET		ELECTRICAL								
		MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE			MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X			1	E-UA-861-D-Ø	F	2	861-D POWER CONTROL ASSY		X			1	B-DD-861-D	D	2	861-D POWER CONTROL ASSY	
X				A-PL-861-D-Ø	F	3	861-D POWER CONTROL ASSY P.L.		X				D-CS-861-D-1	*	1	861-D POWER CONTROL SCHEMATIC	
				C-MD-7413234-0-0		1	COVER, POWER CONTROL						A-SP-861-D-2		4	861-D TEST PROCEDURE	
				D-MD-7413419-0-0		1	BRACKET, STRAIN RELIEF										
				C-IA-7011052-0-0		1	MOV ASSY										
				C-IA-7011053-0-0		1	PILOT LAMP ASSY										
				D-IA-7010966-0-0		1	HARNESS #1, POWER CONTROL										
				D-IA-7010967-0-0		1	HARNESS #3, POWER CONTROL										
				D-IA-7010969-0-0		1	HARNESS #5, POWER CONTROL										
				D-IA-7010970-0-0		1	HARNESS #6, POWER CONTROL										
				C-IA-7010968-0-0		1	HARNESS #8, POWER CONTROL		X			4	D-CS-5411522-0-1	*	1	PILOT CONTROL	
				D-IA-7010972-0-0		1	JUMPER, WIRE						K-CO-5411522-0-4			DRILL TAPE	
				A-DC-7416582-0-1		1	DECAL (NOT FOR EXTERNAL LOADS)						B-MH-5411522-0-6			MODULE ECO HISTORY	
				A-SP-861-0-3			ENGINEERING SPEC 861/866						A-SP-5411522-0-7			PILOT CONTROL TEST PROCEDURE	
													D-AH-5411522-0-5			ASSY DRILL HOLE LAYOUT	
			2	E-IA-7413232-0-0		2	CHASSIS, POWER CONTROL										
				B-SS-7413232-0-1		1	SILK SCREEN, CHASSIS										
			3	D-IA-7413233-0-0		2	PANEL, FRONT, 861-D										
				B-SS-7413233-0-1		1	SILK SCREEN, FRONT PANEL, 861-D										
X			5	A-SP-3700191-0-0	-	2	PACKAGING INSTRUCTIONS, 861-D										
				A-PS-9905726-0-0	-	2	FULL OVERLAP CARTON										
				A-PS-9905727-0-0	-	2	LAMINATED BUILDUP										
				A-PS-9905729-0-0	-	1	TAPE - GLASFLEX										

CUSTOMER PRINT SET CODES	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED	TITLE	SHEET	OF	SIZE	CODE	NUMBER	REV
		861-D POWER CONTROL	3	3	B	DD	861-D	D



NOTES:  
 1. LOCATE DECALS (ITEM'S 47) APPROX AS SHOWN.  
 2. PLACE FROM AFTER ASSEMBLY OF OUTLET (ITEM 47)  
 (J787147)

SECTION A-A  
 SCALE: 1/1  
 5 PLACES

SECTION A-A  
 SCALE: 1/1  
 5 PLACES

DETAIL-A  
 SCALE: 2/1

ITEM	DESCRIPTION	QTY	REF
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FOR PARTS LIST SEE: A-PL-861-D-0

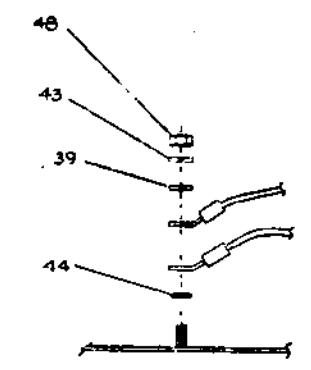
QTY	DESCRIPTION	REF
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881-D  
 POWER CONTROL ASSY

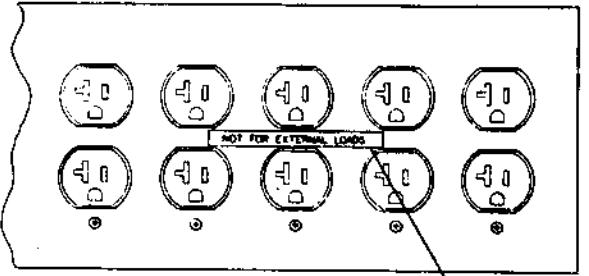
CONNECTION CHART						
ITEM NO.	DESCRIPTION	FROM	WITH	CONNECTION	TO	REMARKS
22	BLK	10		HARNESS 1-1	K1-T3	
	BLK		-2		K1-T1	
	RED		-3		K1-T2	
	RED		-4		CB7-C-LOAD	
	BLK		-5		CB7-D-LOAD	
	BLU	10		HARNESS 3-1	CB7-B-LOAD	
	RED	10		HARNESS 3-1	CB7-C-LINE	
	BLK		-2		CB7-D-LINE	
	BLU		-3		CB7-B-LINE	
	WHT		-4		CB7-A-LINE	
23	GRN		-5		GND #2	
	WHT		-6		FLTR-LOAD-NEUT	
	GRN		-7		FLTR-LOAD-GND	
	BLK		-8		FLTR-LOAD-PH1	
	BLU		-9		FLTR-LOAD-PH2	
	RED	10		HARNESS 3-10	FLTR-LOAD-PH3	
	BLK	14		HARNESS 5-1	CB2-B-LINE	
	WHT		-2		CB2-A-LINE	
	WHT		-3		CB3-A-LINE	
	BLU		-4		CB3-B-LINE	
24	WHT		-4		CB7-A-LOAD	
	BLU		-13		PLT CONT-J4	
	WHT		-14		CB7-A-LOAD	
	WHT		-15		CB7-A-LINE	
	RED		-10		CB5-B-LINE	
	WHT/BLU		-12		PLT CONT-J5	
	RED		-14		CB4-B-LINE	
	WHT		-12		CB4-A-LINE	
	BLU		-16		CB1-B-LINE	
	WHT		-17		CB1-A-LINE	
25	BLU		-8		CB3-B-LINE	
	WHT		-19		CB3-A-LINE	
	WHT		-10		CB7-A-LOAD	
	WHT		-21/23		CB7-A-LOAD	
	BLU		-24		CI-1	
	BLU		-25			
	BLU		-26		K1-L3	
	BLU		-27			
	RED		-28		C2-1	
	RED		-29			
26	RED		-30		K1-L2	
	RED		-31			
	BLK		-32		CI-2	
	BLK		-33			
	BLK		-34		K1-L1	
	WHT		-35		C2-3	
	RED		-34			
	RED		-37		K1-B	
	WHT		-38		K1-A	
	BLK		-39		CB7-A-LOAD	
27	BLU		-40		CB7-B-LOAD	
	RED	14		HARNESS 5-12	CB7-C-LOAD	
	BLK	22		I1-BLK	CB7-A-LINE	
	RED	22		I1-RED	CB7-D-LINE	
	BLK	22		I2-BLK	CB7-A-LINE	
	RED	22		I2-RED	CB7-C-LINE	
	BLK	22		I3-BLK	CB7-A-LINE	
	RED	22		I3-RED	CB7-B-LINE	

CONNECTION CHART						
ITEM NO.	DESCRIPTION	FROM	WITH	CONNECTION	TO	REMARKS
25	WHT	14		HARNESS 6-1	J7-5	
	BLK		-2		J7-8	
	WHT		-3		J6-5	
	RED		-4		J6-8	
	WHT		-7		J5-5	
	RED		-6		J5-8	
	WHT		-7		J4-5	
	BLU		-8		J4-8	
	WHT		-9		J3-5	
	BLU		-10		J3-8	
26	WHT		-11		CB4-A-LOAD	
	BLU		-8		CB4-B-LOAD	
	WHT		-9		CB3-A-LOAD	
	BLU		-10		CB3-B-LOAD	
	WHT		-15		CB4-A-LOAD	
	RED		-16		CB4-B-LOAD	
	WHT		-17		CB5-A-LOAD	
	RED		-18		CB5-B-LOAD	
	WHT		-19		CB6-A-LOAD	
	BLK	14		HARNESS 6-20	CB6-B-LOAD	
28	WHT	14		HARNESS 8-P1	PLT CONT-J4	
	WHT	14		HARNESS 8-B	T5-1	
	WHT	14		HARNESS 8-3	T5-2	
	WHT	14		HARNESS 8-4	T5-3	
	GRN	10		GND #1	GND #2	
	WHT	14		CI-3	C2-5	
	WHT	14		J1-5	J2-5	
	GRN	14		PLT CONT-J7	GND #1	
	BLK	14		J1-B	J2-B	
	GRN	10		FLTR-LINE-PH1	PLUG-X	
18	BLK			FLTR-LINE-PH2	PLUG-Y	
	BLK			FLTR-LINE-PH3	PLUG-Z	
	BLU			FLTR-LINE-NEUT	PLUG-W	
	GRN	10		FLTR-LINE-GND	PLUG-G	
				K1-A	K1-B	

NOTES FOR WIRING:  
1. FOR HARNESS POINT NUMBERS REFER TO HARNESS DWS.

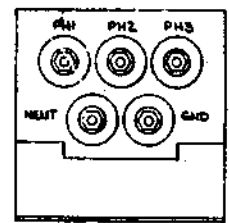


DETAIL B  
TYPICAL FOR "GND1" & "GND2"

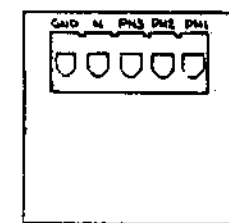


VIEW B-B

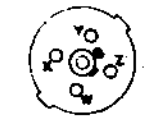
SEE NOTE #2 SHT #1



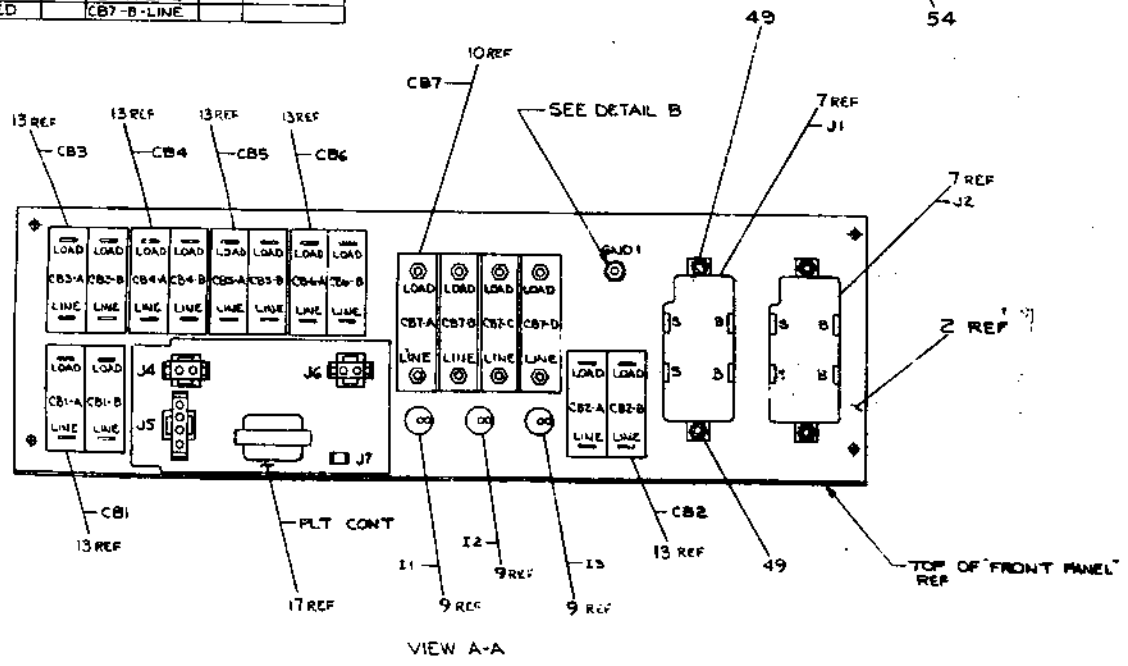
FILTER (ITEM 12)  
LOAD SIDE



FILTER (ITEM 12)  
LINE SIDE



SECTION B-B  
SCALE: NONE  
TWIST LOCK PLUG (ITEM 21)



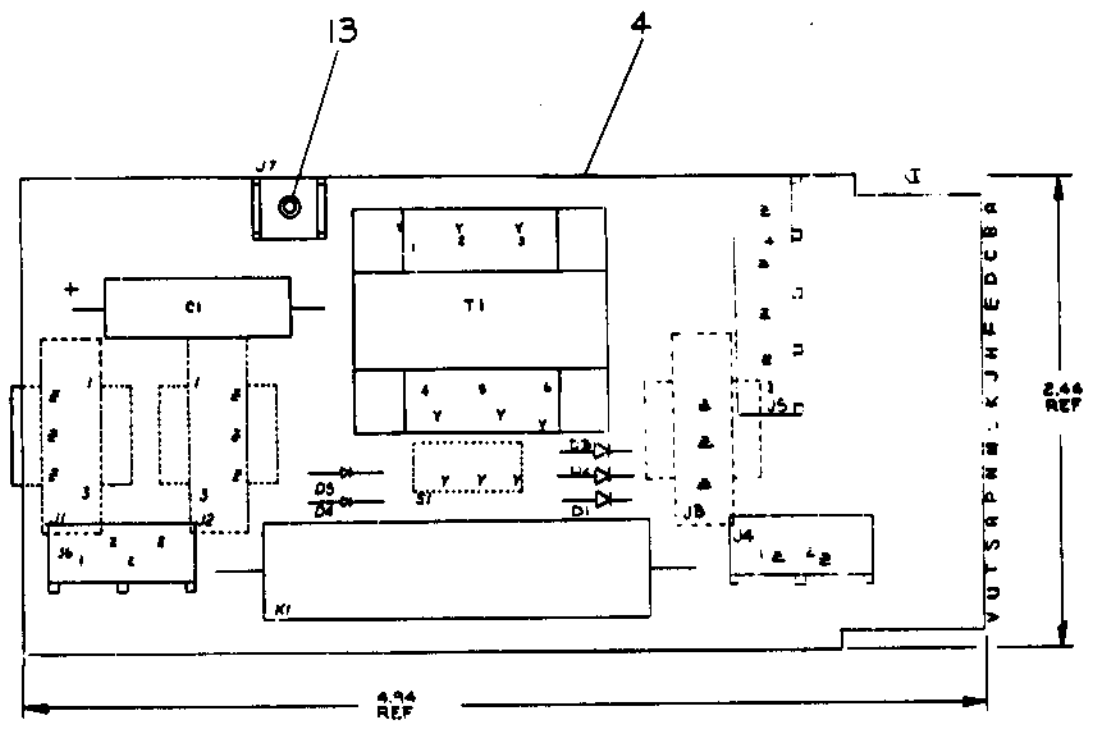
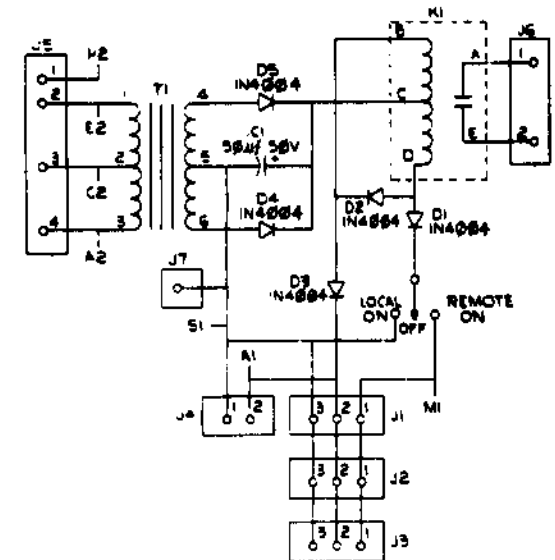
VIEW A-A

QUANTITY & TOLERANCE	REV	DATE	BY	CHKD
	1			
<p>861-D POWER CONTROL ASSEMBLY</p>				

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN BRACKETS ARE FOR INFORMATION ONLY. DIMENSIONS IN SQUARE BRACKETS ARE FOR INFORMATION ONLY.

**NOTES:**

REF	X-Y COORDINATE HOLE LOCATION	K-CO-5411522-0-4	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AN-5411522-0-5	2
REF	MODULE ECO HISTORY	B-MN-5411522-0-6	3
1	ETCHED CIRCUIT BOARD	3011521	4
1 KI	RELAY, REED, 48 V COL, 2.5 A CNT	1212267-00	5
1 T1	TRANSFORMER MMC 5415	1612342-00	6
1 C1	CAP 50 MFD 50V TANT	1000080-00	7
5 D1-D5	DIODE 1N4004	1105716-00	8
1 S1	SWITCH	1211180-00	9
5 J1-J5	HOUSING, SOCKET	1204350-03	10
1 J5	CONN, UNIVERSAL, 4 PIN HEADER	1212297-01	11
2 J4, J6	CONN, UNIVERSAL, 2 PIN HEADER	1212297-00	12
1	EYELET	9006732-00	13
5	TERMINAL, SOCKET CONTACT	1204456-01	14
1 J7	TERMINAL, SOLDERLESS	9007112-00	15



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

**SEMICONDUCTOR CONVERSION CHART**

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

**PARTS LIST**

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

**REVISIONS**

REV	DESCRIPTION	DATE
1		

**digital EQUIPMENT CORPORATION**

TITLE: **PILOT CONTROL**

NUMBER: **DICS5411522-0-1**

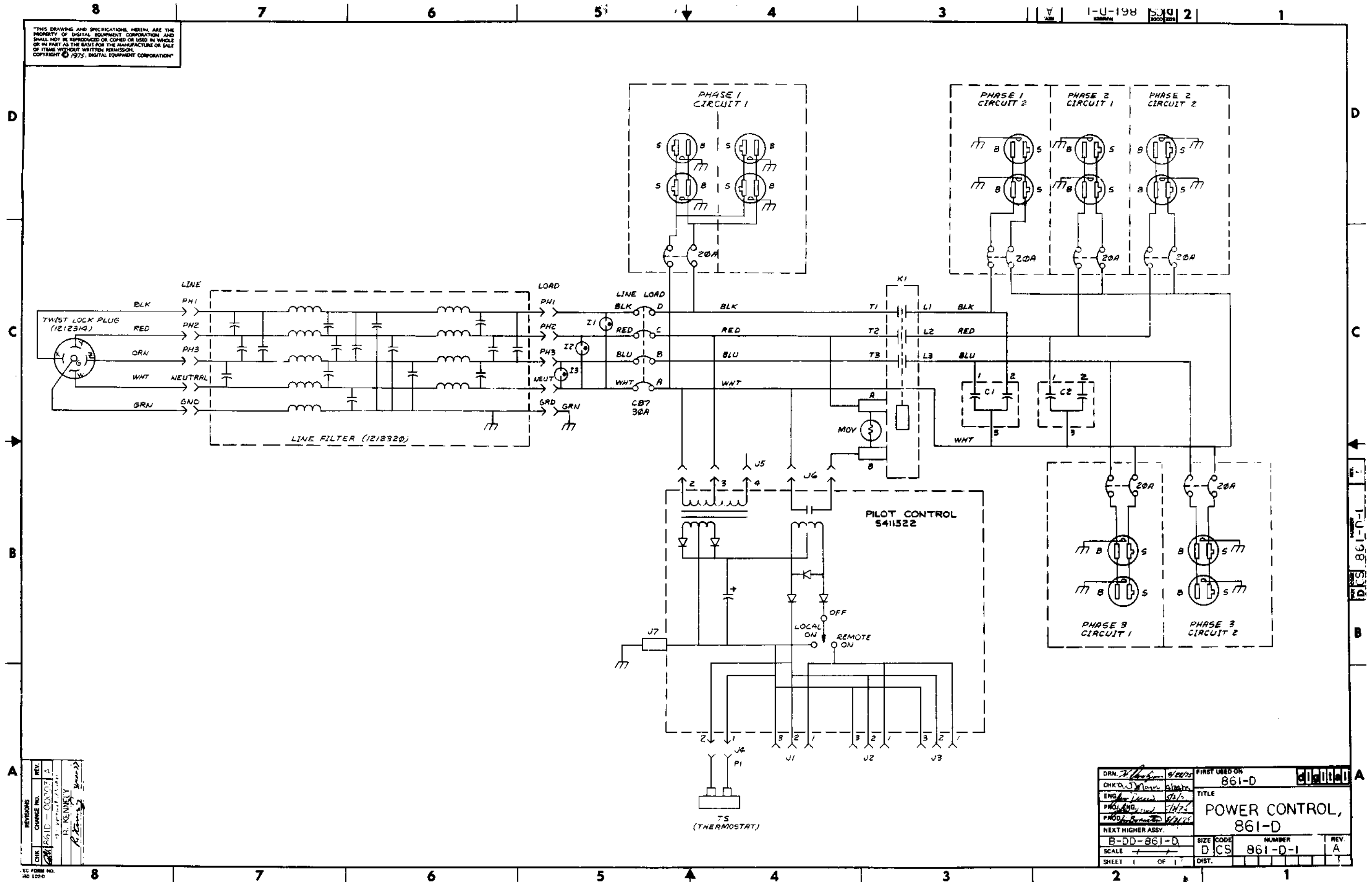
REV: **8**

SCALE: NONE

SHEET 1 OF 1



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REV.	REV.
2	2
1	1
0	0
CHG	CHG
1	1
0	0
CHG	CHG
1	1
0	0

DRN. <i>[Signature]</i>	DATE <i>4/22/75</i>	FIRST USED ON	861-D
CHK'D. <i>[Signature]</i>	DATE <i>5/1/75</i>	TITLE	POWER CONTROL, 861-D
ENG. <i>[Signature]</i>	DATE <i>4/22/75</i>	SIZE	D
PROJ. <i>[Signature]</i>	DATE <i>4/22/75</i>	CODE	CS
PROD. <i>[Signature]</i>	DATE <i>4/22/75</i>	NUMBER	861-D-1
NEXT HIGHER ASSY.		REV.	A
B-DD-861-0		SCALE	1 OF 1
SHEET	OF	DATE	

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION	
PARTS LIST					
MADE BY Tyrone Quillin DATE 3/11/75		CHECKED McCarthy DATE 4/9/75		SECTION 1	
ENG Jim Drew DATE 4/6/75		PROD Jim Bornatien DATE 4/11/75		ISSUED SECT. 1	
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	861-D		
1	E-IA-7413232-0-0	CHASSIS, POWER CONTROL	1		
2	D-IA-7413233-0-0	PANEL, FRONT, 861-D	1		
3	C-MD-7413234-0-0	COVER, POWER CONTROL	1		
4	D-MD-7413419-0-0	BRACKET, STRAIN RELIEF	1		
5	3612063-00	DECAL, UL	1		
6	3610267-0-0	DECAL, "DANGER HIGH VOLTAGE"	1		
7	1212265-00	POWER CONN RECEPTACLE, 2#A, 125VAC	7		
8	C-IA-7011052-0-0	MOV ASSY	1		
9	C-IA-7011053-0-0	PILOT LAMP ASSY	3		
10	1211037-02	CIRCUIT BREAKER 4POL, 3#A, 24# VAC	1		
11	1211158-00	THERMOSTAT, SPST, FIXED TEMP	1		
12	1212320-00	FILTER	1		
13	1212124-05	CIRCUIT BREAKER, 2 POLE, 2# AMP	6		
14	1000034-00	DC PAPER CAPACITOR, 100# VDC	2		
15	1212266-01	CONTACTOR, 3 POLE, 4#A, 6# VAC	1		
16	9007035-00	GROMMET, CATERPILLAR	A/R		
17	D-CS-5411522-0-1	PILOT CONTROL	1		
18	1700028-00	POWER CORD, 5 WIRE, 1# AWG, (15 FT)	A/R		
19	1212410-00	STRAIN RELIEF	1		
20	9009309-01	LOCKNUT, 3/4" PIPE THREAD	1		
21	1212314-00	PLUG, TWIST LOCK, 4 POLE/5 WIRE	1		
22	D-IA-7010966-0-0	HARNESS #1, POWER CONTROL	1		
TITLE 861-D POWER CONTROL ASSY		ASSY NO. E-UA-861-D-#	SIZE CODE A PL	NUMBER 861-D-#	REV. ECO NO F 861-D-00007
		SHEET 1 OF 3	DIST.		

DEC FORM DEC 16 (325)-1031-NB70  
DRA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION	
PARTS LIST					
MADE BY Tyrone Quillin DATE 3/11/75		CHECKED McCarthy DATE 4/9/75		SECTION 1	
ENG Jim Drew DATE 4/6/75		PROD Jim Bornatien DATE 4/11/75		ISSUED SECT. 1	
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	861-D		
45	9006556-00	NUT, HEX #4-40	2		
46	9006558-00	NUT, HEX #6-32	4		
47	9006561-00	NUT, HEX #8-32	4		
48	9006564-00	NUT, HEX #10-32	2		
49	9008185-00	NUT, KEYS #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	20		
52	9006633-00	WASHER, INT TOOTH #6	2		
53	A-SP-3700191-0-0	PACKAGING INSTRUCTIONS 861-D (INTERPLANT)	1		
54	A-DC-7416582-0-1	DECAL (NOT FOR EXTERNAL LOADS)	2		
55	A-SP-3700191-2-0	PACKAGING INSTRUCTIONS 861-D (CUSTOMER)	0		
REF D-CS-861-D-1		861-D POWER CONTROL CIRCUIT SCHEMATIC			
TITLE 861-D POWER CONTROL ASSY		ASSY NO. E-UA-861-D-#	SIZE CODE A PL	NUMBER 861-D-#	REV. ECO NO F 861-D-00007
		SHEET 3 OF 3	DIST.		

DEC FORM DEC 16 (325)-1031-NB70  
DRA 110

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY/VARIATION	
PARTS LIST					
MADE BY Tyrone Quillin DATE 3/11/75		CHECKED McCarthy DATE 4/9/75		SECTION 1	
ENG Jim Drew DATE 4/6/75		PROD Jim Bornatien DATE 4/11/75		ISSUED SECT. 1	
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	861-D		
23	D-IA-7010967-0-0	HARNESS #3, POWER CONTROL	1		
24	D-IA-7010969-0-0	HARNESS #5, POWER CONTROL	1		
25	D-IA-7010970-0-0	HARNESS #6, POWER CONTROL	1		
26	C-IA-7010968-0-0	HARNESS #8, POWER CONTROL	1		
27					
28	D-IA-7010972-0-0	JUMPER, WIRE (GRN #10-AWG)	1		
29	D-IA-7010972-1-0	JUMPER, WIRE (WHT #14-AWG)	1		
30	D-IA-7010972-2-0	JUMPER, WIRE (WHT #14-AWG)	2		
31	D-IA-7010972-3-0	JUMPER, WIRE (GRN #14-AWG)	1		
32	D-IA-7010972-4-0	JUMPER, WIRE (BLK #14-AWG)	2		
33	9006010-01	SCR, PHL PAN HD, #4-40 x .31 LG	2		
34	9006021-01	SCR, PHL PAN HD, #6-32 x .31 LG	5		
35	9006037-01	SCR, PHL PAN HD, #8-32 x .38 LG	10		
36	9006655-00	WASHER, FLAT, #4	2		
37	9006653-00	WASHER, FLAT, #6	4		
38	9006660-00	WASHER, FLAT, #8	12		
39	9006664-00	WASHER, FLAT, #10	2		
40	9006688-00	WASHER, SPLIT LOCK #4	2		
41	9007801-00	WASHER, SPLIT LOCK #6	32		
42	9006690-00	WASHER, SPLIT LOCK #8	16		
43	9007906-00	WASHER, SPLIT LOCK #10	2		
44	9007651-00	WASHER, EXT TOOTH LOCK #10	7		
TITLE 861-D POWER CONTROL ASSY		ASSY NO. E-UA-861-D-#	SIZE CODE A PL	NUMBER 861-D-#	REV. ECO NO F 861-D-00007
		SHEET 2 OF 3	DIST.		

DEC FORM DEC 16 (325)-1031-NB70  
DRA 110

**DIGITAL EQUIPMENT CORPORATION  
MAYNARD MASSACHUSETTS**

**PACKAGING INSTRUCTION**  
861-D-E AND 866-D-E POWER CONTROL

REV: A DATE: 5/77

LEGEND	
3700191-00	861 D & E INTERPLANT
3700191-01	861/866 D & E CUSTOMER

**MATERIAL REQUIREMENTS**  
3700191-00 INTERPLANT

Quantity	Purchase Specification No.	Description
1	9905726	Full-Overlap Carton
1	9905727	Laminated Buildup
5 ft.	9905729	Tape, Carton Sealing 3 in. wide

**PACKAGING INSTRUCTIONS**  
3700191-00

- Step Interplant Procedure (Refer to Figures 1 & 2)
- Set up and tape Full-Overlap Carton (9905726) using one strip of Carton Sealing Tape (9905729).
  - Place 861 or 866 Power Control into Laminated Buildup (9905727) as shown in Figure 1, 2. Make sure that the slots in the Laminated Buildup align with the power control chassis.
  - Pick up Laminated Buildup from both sides and slide it (front end first) into the Full-Overlap Carton.
  - Coil the cable on the rear of the 861 power control or the separate 866 cable, so that it will fit into the carton.
  - Close and seal carton with carton sealing tape.

ENG: *John Gaudet* 5/77 APPD: *Ken M. ...* 9/78  
DEC 9-(031)-1031-1-0871  
DRA - 120

SIZE CODE NUMBER 3700191-00  
REV A

SHEET 1 OF 4

**PACKAGING INSTRUCTION**  
861-D-E AND 866-D-E POWER CONTROL PROGRAMS INSTRUCTION

REV: A DATE: 5/77

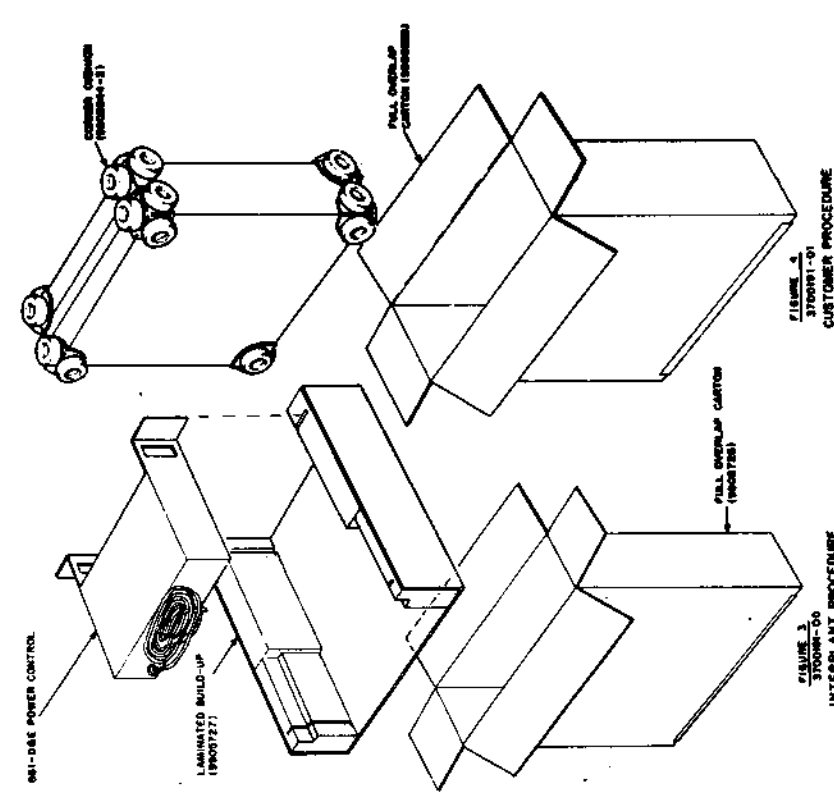


FIGURE 1  
3700191-00  
INTERPLANT PROCEDURE

NOTE: Make changes in "C" size original only and rephotograph.

ENG. APPD. SIZE CODE NUMBER 3700191-00 REV A

SHEET 1 OF 4

**PACKAGING INSTRUCTION**  
861-D-E AND 866-D-E POWER CONTROL

CONTINUATION SHEET

**MATERIAL REQUIREMENTS**  
3700191-01 CUSTOMER

Quantity	Purchase Specification No.	Description
1	9906038	Full-Overlap Carton
8	9905044-02	Toro Pad, Corner Cushion
6 ft.	9905729	Tape, Carton Sealing 3 in. wide

Customer Procedure (Refer to Figures 2 & 4)  
3700191-01

- Follow Interplant Procedure Steps 1 through 5.
- Set up and tape Full-Overlap Carton (9906038) using Carton Sealing Tape.
- Place one (1) Toro Pad (9905044-02) in the bottom of each corner of Full-Overlap Carton.
- Place packaged 861 or 866 Power Control into the outer Full-Overlap Carton. Ensure that the package rests on the Toro Pads. (See Figures 2 and 4)
- Place one (1) Toro Pad on top of each corner of the inner Carton.
- Close and seal Carton with Carton Sealing Tape.

SIZE CODE NUMBER 3700191-00  
REV A

SHEET 2 OF 4

**PACKAGING INSTRUCTION**  
861-D-E AND 866-D-E POWER CONTROL PROGRAMS INSTRUCTION

REV: A DATE: 5/77

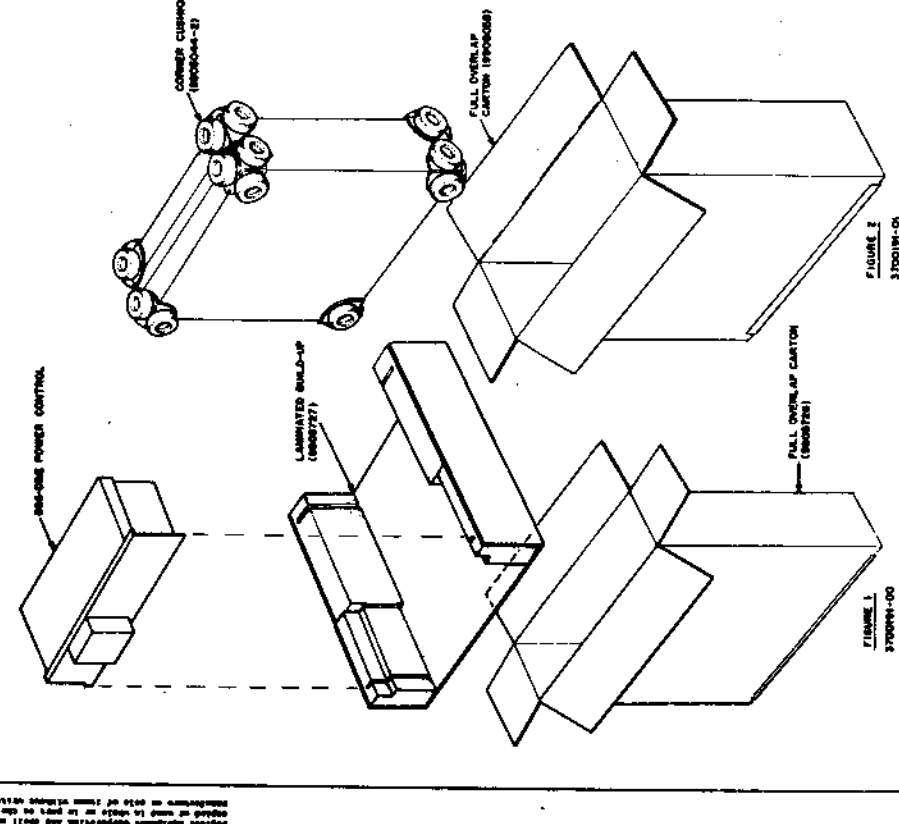
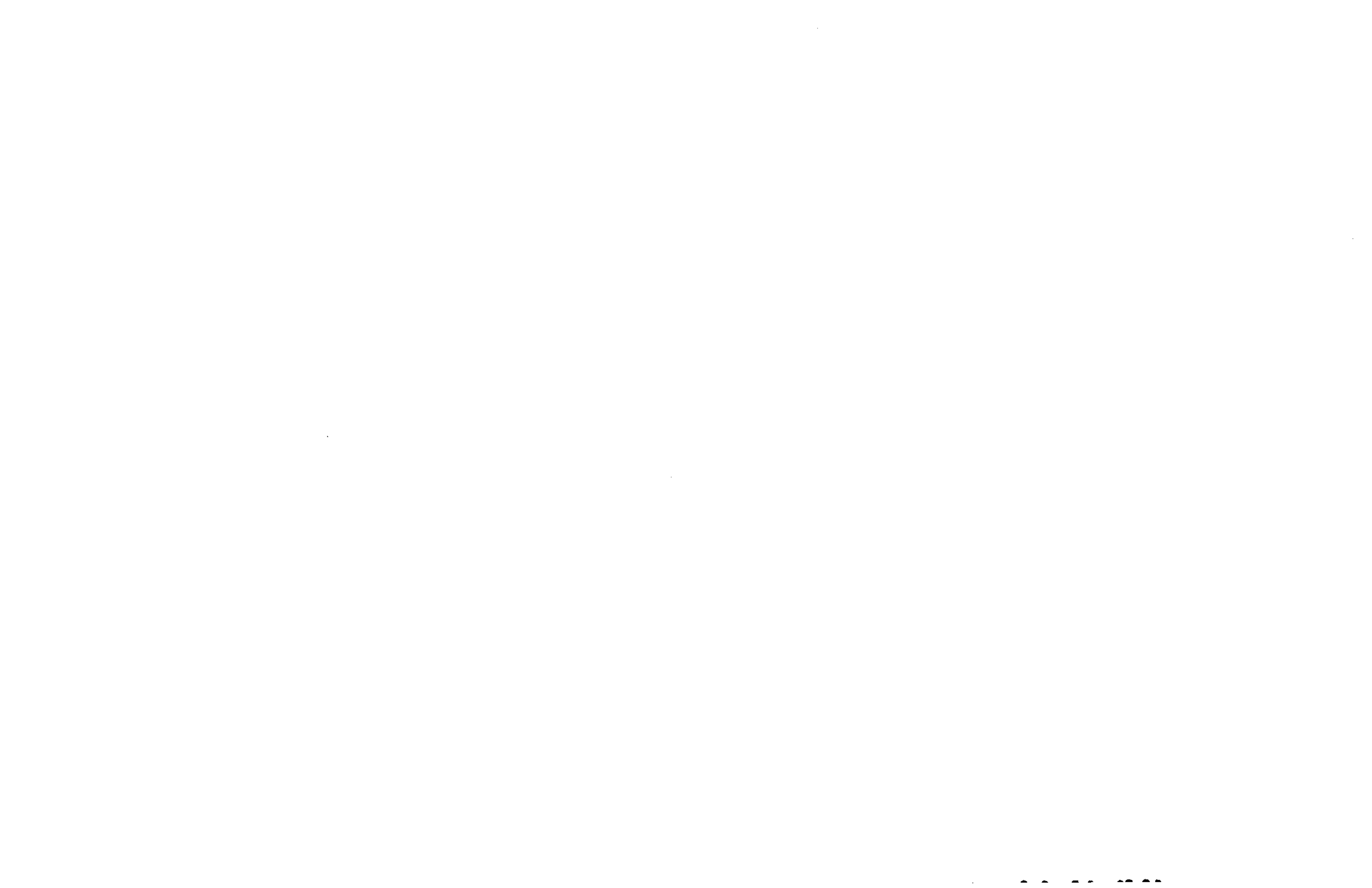


FIGURE 2  
3700191-00  
CUSTOMER PROCEDURE

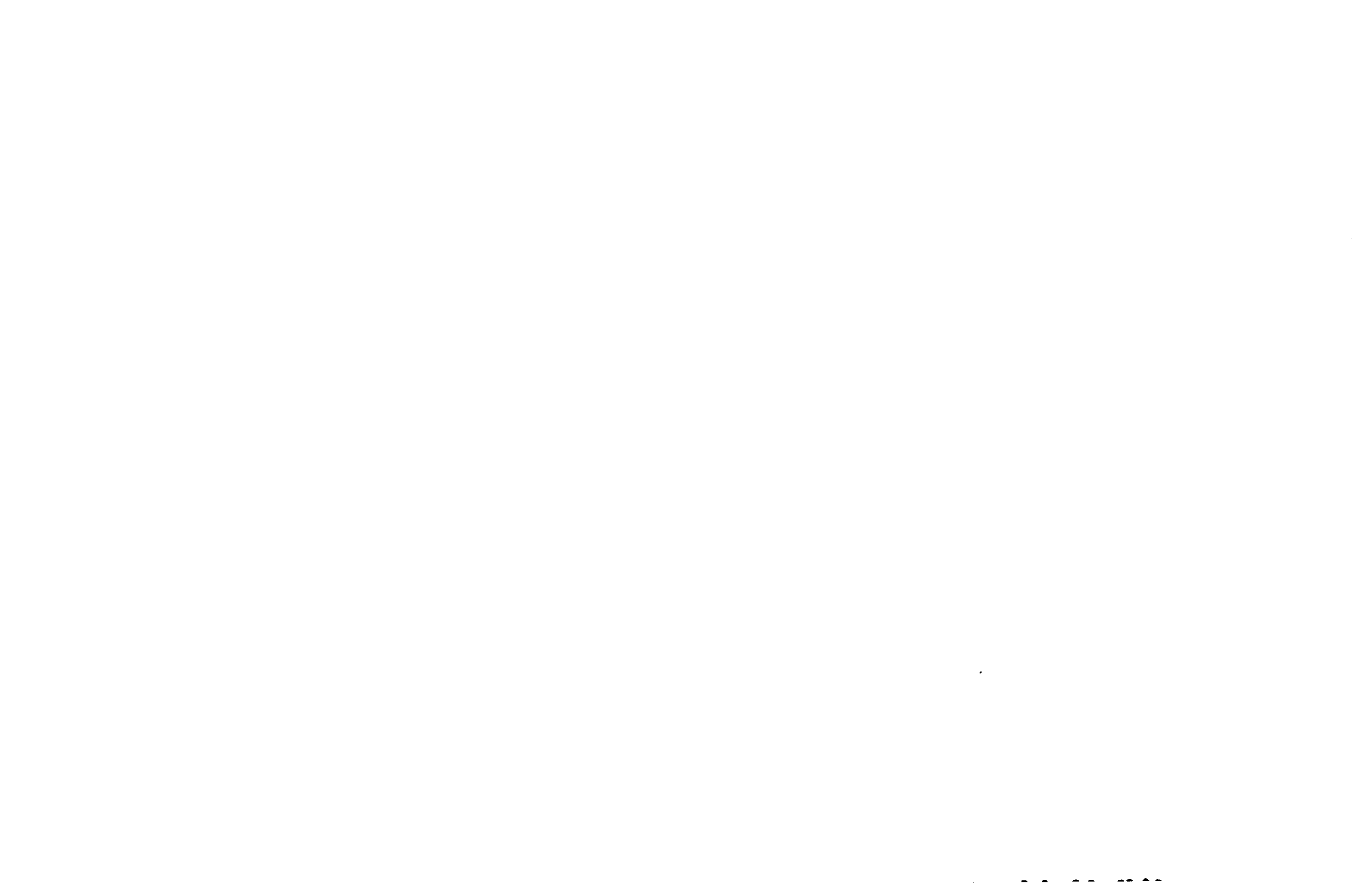
NOTE: Make changes in "C" size original only and rephotograph.

ENG. APPD. SIZE CODE NUMBER 3700191-00 REV A

SHEET 3 OF 4







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## CUSTOMER PRINT SET INDEX

THIS IS PRINT SET 

--	--	--	--

NOTE: FOR FIELD MAINTENANCE PRINT SET  
SFE B-TC-MS11-K-~~4~~

UNIT VARIATIONS		PRINT SET
VAR	TITLE	
MS11-KA	16K X 39 MOS STORAGE ARRAY (M7984-AA) 4K MOS RAM'S	
MS11-KB	8K X 39 MOS STORAGE ARRAY (M7984-BA) 4K MOS RAM'S	
MS11-KE	16K X 39 MOS STORAGE ARRAY (M7984-EA) 4K MOS RAM'S NOTE: THIS OPTION DIRECTLY REPLACES MS11-KA	

REVISIONS		USED ON OPTION/MODEL	DRN.	DATE	TITLE	SIZE	CODE	NUMBER	REV
DATE	CHG. NO.		H. Darakjian	FEB 77	DRAWING DIRECTORY MS11-K MOS STORAGE ARRAY	B	DD	MS11-K- $\phi$	A
9-77	MS11-K-1	MS11S-K	CHK'D	DATE		DIST			
			J. Carbery	5 MAY 77					
			PROVING	DATE					
			J. B. Martin	4/7/77					
			PROD.	DATE					
			J. B. Martin	4/7/77					
			FIELD SERV.	DATE					
			J. C. J. m/W	19 Apr 77					
		SHEET 1 OF 2							

DRB 106





DRAWING NO.	NO. OF SHTS	PART NO.	DESCRIPTION	REVISIONS																		
				A	B	C	D	E	F	G	H	I	J	K	L							
B-DD-M7984-0	1		MS11-K (ARRAY)	*	A	B	C															
D-UA-M7984-0-0	9		MS11-K (ARRAY)	B	C	D	E															
B-PL-M7984-0-0	13		MS11-K (ARRAY)	B	C	D	E															
D-CS-M7984-0-1	17		MS11-K (ARRAY)	B	C	D	E															
D-MD-5011997-0-0	5		DRILL & ETCH DRAWING	B	B	B	C															
		5011997	ETCHED BOARD	C	C	C	D															
M7984-0-L			P.C. DESIGN DATA BASE	REF	-	-	-															
M7984-0-PL			INSERTION P.L. DATA BASE	REF	-	-	-															

NOTES: VARIATIONS DEPENDENT ON MOS VENDOR REFERENCE SHEETS

NO MIXING OF MOS CHIPS VENDORS ALLOWED.

M7984-AA (16K x 39,4K RAM) = M7984-AB, AC, AD, ETC. → B-PL-M7984-0-0 (SHEETS 1-3)  
 D-UA-M7984-0-0 (SHEETS 1, 7-11)

M7984-BA (8K x 39,4K RAM) = M7984-BB, BC, BD, ETC. → B-PL-M7984-0-0 (SHEETS 1-3)  
 D-UA-M7984-0-0 (SHEETS 2, 7-10, 12)

M7984-CA (16K x 39,16K RAM) = M7984-CB, CC, ETC. B-PL-M7984-0-0 (SHEETS 4, 5)  
 D-UA-M7984-0-0 (SHEETS 3, 7-11)

M7984-DA (16K x 39,16K RAM) = M7984-DB, DC, DD, ETC. B-PL-M7984-0-0 (SHEETS 4, 5)  
 D-UA-M7984-0-0 (SHEETS 4, 7-10, 13)

M7984-EA (16K x 39,4K FAST RAM) = M7984-EB, EC, ETC. B-PL-M7984-0-0 (SHEETS 6, 7)  
 D-UA-M7984-0-0 (SHEETS 5, 7-11)

M7984-FA (32K x 39,16K RAM) = M7984-FB, FC, ETC. B-PL-M7984-0-0 (SHEETS 8, 9)  
 D-UA-M7984-0-0 (SHEETS 6, 7-10, 12)

REVISIONS	DATE	CHG NO.	REV.
ORIG			
6-77	00001	A	
8-77	00002	B	
1-78	00003	C	

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USED ON OPTION/MODEL	DRN S. Beltzer	7DEC76	TITLE
MS11-K	CHK'D <i>J. Boeman</i>	7 DEC 76	MS11-K (ARRAY)
	ENG <i>J. M. ...</i>	12/20/76	SIZE CODE
	PROD <i>J. L. ...</i>	1/18/77	BDD
			NUMBER
			M7984-0
			REV.
			C
			SHEET 1 OF 1

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES: * M7984-AA = M7984-AB, AC, AD, ETC. WITH DIFFERENT 4K MOS DEVICES * M7984-BA = M7984-BB, BC, BD, ETC. WITH DIFFERENT 4K MOS DEVICES			
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 1		M7984-AA*					M7984-BA*						
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1		M7984-AB	M7984-AC	M7984-AD	M7984-AE	M7984-AF		M7984-BB	M7984-BC	M7984-BD	M7984-BE	M7984-BF	REF DESIGNATION
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION														
	D-CS-M7984-0-1		CIRCUIT SCHEMATIC	REF	REF	REF	REF	REF			REF	REF	REF	REF	REF		
	D-UA-M7984-0-0		UNIT ASSEMBLY	REF	REF	REF	REF	REF			REF	REF	REF	REF	REF		
	B-DD-M7984-0		DWG DIRECTORY	REF	REF	REF	REF	REF			REF	REF	REF	REF	REF		
	D-MD-5011997-0-0	5011997	DRILL & ETCH DRAWING	REF	REF	REF	REF	REF			REF	REF	REF	REF	REF		
1		21-13731-01	4K MOS RAM 16 PIN IN MOSTEK (275NS)	156	-	-	-	-			-	-	-	-	-	E5 thru E12, E17 thru E24, E28 thru E35, E39 thru E46, E49 thru E56, E60 thru E67, E81 thru E88, E90 thru E97, E99 thru E110, E111 thru E122, E124 thru E135, E137 thru E184, E70 THRU E77	
				-	-	-	-	-			78	-	-	-	-	E5, E6, E9, E10, E17, E18, E21, E22, E28, E29, E32, E33, E39, E40, E43, E44, E49, E50, E53, E54, E60, E61, E64, E65, E70, E71, E74, E75, E81, E82, E85, E86, E90, E91, E94, E95, E99, E100, E103, E104, E107, E108, E111, E112, E115, E116, E119, E120, E124, E125, E128, E129, E132, E133, E137, E138, E141, E142, E145, E146, E149, E150, E153, E154, E157, E158, E161, E162, E165, E166, E169, E170, E173, E174, E177, E178, E181, E182	
2		21-13735-01	4K MOS RAM 16 PIN IC MOSTEK (200NS)	-	156	-	-	-			-	-	-	-	-	SAME AS M7984-AB SAME AS M7984-BB	
3		90-09185-00	JUMPER, INSULATED	5	5	5	5	5			-	-	-	-	-	W1, W2, W3, W4, X1 W1, W2, W3, W4, W6, X1	
4		50 11997	ETCH BOARD	1	1	1	1	1			1	1	1	1	1		
5		10 12084-01	CAP 8 UF 25V 10% S.TANT	13	13	13	13	13			13	13	13	13	13	C182 thru C186, C188 thru C195	
6		10 01610-01	CAP .01 UF 100V DISC	23	23	23	23	23			23	23	23	23	23	C156, C157, C159 thru C174, C176 thru C179, C181	
7		10 10274-01	CAP .22 UF 50V 80% 20% CER	155	155	155	155	155			155	155	155	155	155	C1 thru C155	
8		11 10994-00	DIODE ZENER 1N751A 5.1V - 5%	1	1	1	1	1			1	1	1	1	1	D1	
E.C.O. NO.	00003																
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				SHEET 1 OF 9						INSERTION PARTS LIST DATA BASE REV							

DIGITAL EQUIPMENT CORPORATION PARTS LIST					QUANTITY / VARIATION										NOTES: * M7984-AA = M7984-AB, AC, AD, ETC. WITH DIFFERENT 4K MOS DEVICES * M7984-BA = M7984-BB, BC, BD, ETC. WITH DIFFERENT 4K MOS DEVICES
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 2	M7984-AA*					M7984-BA*					
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1	M7984-AB	M7984-AC	M7984-AD	M7984-AE	M7984-AF	M7984-BB	M7984-BC	M7984-BD	M7984-BE	M7984-BF	
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION												REF DESIGNATION
9		12 10711-02	HANDLE HEX		1	1	1	1	1	1	1	1	1	1	
10		13 01972-00	RES 270 1/4W 5% CC		2	2	2	2	2	2	2	2	2	2	R94, R102
11		13 02124-00	RES 18 1/4W 5% CC		84	84	84	84	84	84	84	84	84	84	R1 thru R47, R50 thru R53, R56 thru R59, R65 thru R93
12		13 00365-00	RES 1K 1/4W 5% CC		7	7	7	7	7	7	7	7	7	7	R63, R95, R201 thru R205
13		13 02177-00	RES 47K 1/4W 5% CC		9	9	9	9	9	9	9	9	9	9	R48, R49, R54, R55, R60, R61, R62, R64, R103
14		19 10091-00	IC DEC 7437		3	3	3	3	3	3	3	3	3	3	E1, E47, E48
15		19 10533-00	IC DEC 74S03		1	1	1	1	1	1	1	1	1	1	E3
16		19 10534-00	IC DEC 74S04		1	1	1	1	1	1	1	1	1	1	E25
17		19 12746-00	IC DEC 74S37		10	10	10	10	10	10	10	10	10	10	E13, E14, E26, E27, E37, E57, E58, E68, E69, E89
18		19 12068-00	IC DEC 74128		2	2	2	2	2	2	2	2	2	2	E15, E36
19		19 11676-00	IC DEC 74S139		1	1	1	1	1	1	1	1	1	1	E2
20		19 13777-00	IC DEC 74LS240		10	10	10	10	10	10	10	10	10	10	E4, E16, E38, E59, E78, E79, E80, E98, E123, E136
21		90 06732-00	EYELET		12	12	12	12	12	12	12	12	12	12	
22		91 05740-55	WIRE, #30 AWG (GRN)		A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	
23		91 07256-11	TUBING, CLEAR		A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	
24		2113910-01	4K MOS RAM 16 PIN IC FUJITSU (250NS)		-	-	156	-	-	-	-	-	-	-	SAME AS M7984-AB SAME AS M7984-BB
25		21 13790-01	4K MOS RAM 16 PIN IC INTEL (250NS)		-	-	-	156	-	-	-	-	-	-	SAME AS M7984-AB SAME AS M7984-BB
26		21 13892-01	4K MOS RAM 16 PIN IC HITACHI (250NS)		-	-	-	-	156	-	-	-	-	-	SAME AS M7984-AB SAME AS M7984-BB

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			MS11-K (ARRAY)	D-UA-M7984-0-0	B	PL	M7984-0-0	E
				SHEET 2 OF 9	INSERTION PARTS LIST DATA BASE REV			

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES: * M7984-AA = M7984-AB, AC, AD, ETC. WITH DIFFERENT 4K MOS DEVICES * M7984-BA = M7984-BB, BC, BD, ETC. WITH DIFFERENT 4K MOS DEVICES		
				M7984-AA*					M7984-BA*							
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 3		M7984-AB	M7984-AC	M7984-AD	M7984-AE	M7984-AF	M7984-BB	M7984-BC	M7984-BD	M7984-BE	M7984-BF	REF DESIGNATION
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1												
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION													
27		11 14384-00	GREEN DIODE, LED		1	1	1	1	1	1	1	1	1	1	D3	
28		11 09991-00	DIODE ZENER, IN754A 6.8V - 5%		1	1	1	1	1	1	1	1	1	1	D2	
29		13 00202-00	RES 47 1/4W 5% CC		1	1	1	1	1	1	1	1	1	1	R1 $\beta\beta$	

E.C.O. NO.

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TITLE  
MS11-K (ARRAY)

ASSY NO.  
D-UA-M7984- $\beta$ - $\beta$   
SHEET 3 OF 9

SIZE CODE NUMBER  
B PL M7984- $\beta$ - $\beta$

REV.  
E

INSERTION PARTS LIST DATA BASE REV

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION								NOTES:			
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 1		M7984-CA*				M7984-DA*				* M7984-CA = M7984-CB, CC WITH DIFFERENT 16K MOS DEVICES * M7984-DA = M7984-DB, DC WITH DIFFERENT 16K MOS DEVICES	
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1		M7984-CB	M7984-CC					M7984-DB	M7984-DC		
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-CB	M7984-CC							M7984-DB	M7984-DC		REF DESIGNATION
	D-CS-M7984-β-1		CIRCUIT SCHEMATIC	REF	REF							REF	REF		
	D-UA-M7984-β-β		UNIT ASSEMBLY	REF	REF							REF	REF		
	B-DD-M7984-β		DWG DIRECTORY	REF	REF							REF	REF		
	D-MD-5011997-β-β	5011997	DRILL & ETCH DRAWING	REF	REF							REF	REF		
1		21-13825-01	16K MOS MEMORY 16 PIN MOSTEK (2ββNS)	156	-							-	-		E5 thru E12, E17 thru E24, E28 thru E35, E39 thru E46, E49 thru E56, E6β thru E67, E7β thru E77, E81 thru E88, E9β thru E97, E99 thru E11β, E111 thru E122, E124 thru E135, E137 thru E184
				-	-							-	-		
				-	-							-	-		
				-	-							-	-		
				-	-							39	-		E5, E9, E17, E21, E28, E32, E39, E43, E49, E53, E6β, E64, E7β, E74, E81, E85, E9β, E94, E99, E1β3, E1β7, E111, E115, E119, E124, E128, E132, E137, E141, E145, E149, E153, E157, E161, E165, E169, E173, E177, E181
2		21-14408-01	16K MOS MEMORY 16 PIN FUJITSU (2ββNS)	-	156							-	-		SAME AS M7984-CB
				-	-							-	39		SAME AS M7984-DB
3		90 09185-00	JUMPER, INSULATED	8	8							-	-		W1, W2, W3, W4, W7, W8, W9, X1
				-	-							7	7		W1, W2, W3, W4, W7, W9, X1
4		50 11997	ETCH BOARD	1	1							1	1		
5		10 12084-01	CAP 8 UF 25V 10% S.TANT	13	13							13	13		C182 thru C186, C188 thru C195
6		10 01610-01	CAP .01 UF 1ββV DISC	23	23							23	23		C156, C157, C159 thru C174, C176 thru C179, C181
7		10 10274-01	CAP .22 UF 50V 80% CER	155	155							155	155		C1 thru C155
8		11 10994-00	DIODE ZENER 1N751A 5.1V - 5%	1	1							1	1		D1
9		12 10711-02	HANDLE HEX	1	1							1	1		
10		13 01972-00	RES 270 1/4W 5% CC	2	2							2	2		R94, R1β2

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TITLE  
MS11-K (ARRAY)

ASSY NO.  
D-UA-M7984-β-β

SIZE  
B

CODE  
PL

NUMBER  
M7984-β-β

REV.  
E

SHEET 4 OF 9

INSERTION PARTS LIST DATA BASE REV

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION								NOTES: * M7984-CA = M7984-CB,CC WITH DIFFERENT 16K MOS DEVICES * M7984-DA = M7984-DB,DC WITH DIFFERENT 16K MOS DEVICES
				M7984-CA*				M7984-DA*				
MADE BY DATE	P. BOSSMAN 6 DEC 76	CHECKED DATE	P. BOSSMAN 15 DEC 76	SECTION 1								
ENG DATE	J. MANTON 12/20/76	PROD DATE	F.S. LIN 1/18/77	ISSUED SECTION 1								
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-CB	M7984-CC					M7984-DB	M7984-DC	REF DESIGNATION
11		13 02124-00	RES 18 1/4W 5% CC	84	84					84	84	R1 thru R47, R5 $\emptyset$ thru R53, R56 thru R59, R65 thru R93
12		13 00365-00	RES 1K 1/4W 5% CC	7	7					7	7	R63, R95, R2 $\emptyset$ 1 thru R2 $\emptyset$ 5
13		13 02177-00	RES 47K 1/4W 5% CC	9	9					9	9	R48, R49, R54, R55, R6 $\emptyset$ , R61, R62, R64, R1 $\emptyset$ 3
14		19 10091-00	IC DEC 7437	3	3					3	3	E1, E47, E48
15		19 10533-00	IC DEC 74S $\emptyset$ 3	1	1					1	1	E3
16		19 10534-00	IC DEC 74S $\emptyset$ 4	1	1					1	1	E25
17		19 12746-00	IC DEC 74S37	10	10					10	10	E13, E14, E26, E27, E37, E57, E58, E68, E69, E89
18		19 12068-00	IC DEC 74128	2	2					2	2	E15, E36
19		19 11676-00	IC DEC 74S139	1	1					1	1	E2
20		19 13777-00	IC DEC 74LS240	10	10					10	10	E4, E16, E38, E59, E78, E79, E8 $\emptyset$ , E98, E123, E136
21		90 06732-00	EYELET	12	12					12	12	
22		91 05740-55	WIRE, #30 AWG (GRN)	A/R	A/R					A/R	A/R	
23		91 07256-11	TUBING, CLEAR	A/R	A/R					A/R	A/R	
24		11 14384-00	GREEN DIODE, LED	1	1					1	1	D3
25		11 09991-00	DIODE ZENER IN754A 6.8V - 5%	1	1					1	1	D2
26		13 00202-00	RES 47 1/4W 5% CC	1	1					1	1	R1 $\emptyset$ $\emptyset$

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 TITLE  
MS11-K (ARRAY)

 ASSY NO.  
D-UA-M7984- $\emptyset$ - $\emptyset$ 

 SIZE  
B PL

 NUMBER  
M7984- $\emptyset$ - $\emptyset$ 

 REV.  
E

SHEET 5 OF 9

INSERTION PARTS LIST DATA BASE REV

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION								NOTES:								
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 1		M7984-EA*								* M7984-EA = M7984-EB,EC,ED,EE WITH DIFFERENT 4K MOS DEVICES						
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 2		M7984-EB	M7984-EC	M7984-ED	M7984-EE											
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-EB	M7984-EC	M7984-ED	M7984-EE													REF DESIGNATION
	D-CS-M7984- $\beta$ -1		CIRCUIT SCHEMATIC	REF	REF	REF	REF													
	D-UA-M7984- $\beta$ - $\beta$		UNIT ASSEMBLY	REF	REF	REF	REF													
	B-DD-M7984- $\beta$		DWG DIRECTORY	REF	REF	REF	REF													
	D-MD-5011997- $\beta$ - $\beta$	5011997	DRILL & ETCH DRAWING	REF	REF	REF	REF													
1		21 13914-01	4K MOS RAM 16 PIN IC DEC (2 $\beta$ $\beta$ NS)	156	-	-	-													E5 thru E12, E17 thru E24, E28 thru E35, E39 thru E46, E49 thru E56, E6 $\beta$ thru E67, E7 $\beta$ thru E77, E81 thru E88, E9 $\beta$ thru E97, E99 thru E122, E124 thru E135, E137 thru E184
2		21 13735-01	4K MOS RAM 16 PIN IC MOSTEK (2 $\beta$ $\beta$ NS)	-	156	-	-													SAME AS M7984-EB
3		90 09185-00	JUMPER, INSULATED	6	6	6	6													W1, W2, W3, W4, W8, X1
4		50 11997	ETCH BOARD	1	1	1	1													
5		10 12084-01	CAP, 8 UF 25V 10% S.TANT	13	13	13	13													C182 thru C186, C188 thru C195
6		10 01610-01	CAP, .01 UF 1 $\beta$ $\beta$ V DISC	23	23	23	23													C156, C157, C159 thru C174, C176 thru C179, C181
7		10 10274-01	CAP, .22 UF 5 $\beta$ V 80% 20% CER	155	155	155	155													C1 thru C155
8		11 10994-00	DIODE ZENER 1N751A 5.1V - 5%	1	1	1	1													D1
9		12 10711-02	HANDLE HEX	1	1	1	1													
10		13 01972-00	RES 270 1/4W 5% CC	2	2	2	2													R94, R1 $\beta$ 2
11		13 02124-00	RES 18 1/4W 5% CC	84	84	84	84													R1 thru R47, R5 $\beta$ thru R53, R56 thru R59, R65 thru R93
12		13 00365-00	RES 1K 1/4W 5% CC	7	7	7	7													R63, R95, R2 $\beta$ 1 thru R2 $\beta$ 5
13		13 02177-00	RES 47K 1/4W 5% CC	9	9	9	9													R48, R49, R54, R55, R6 $\beta$ , R61, R62, R64, R1 $\beta$ 3
E.C.O. NO.																				
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				SHEET 6 OF 9				INSERTION PARTS LIST DATA BASE REV												

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION												NOTES:		
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 1		M7984-EA*												* M7984-EA = M7984-EB, EC, ED, EE WITH DIFFERENT 4K MOS DEVICES
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1		M7984-EB	M7984-EC	M7984-ED	M7984-EE									
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-EB	M7984-EC	M7984-ED	M7984-EE									REF DESIGNATION		
14		19 10091-00	IC DEC 7437	3	3	3	3									E1, E47, E48		
15		19 10533-00	IC DEC 74S $\beta$ 3	1	1	1	1									E3		
16		19 10534-00	IC DEC 74S $\beta$ 4	1	1	1	1									E25		
17		19 12746-00	IC DEC 74S37	10	10	10	10									E13, E14, E26, E27, E37, E57, E58, E68, E69, E89		
18		19 12068-00	IC DEC 74128	2	2	2	2									E15, E36		
19		19 11676-00	IC DEC 74S139	1	1	1	1									E2		
20		19 13777-00	IC DEC 74LS24 $\beta$	10	10	10	10									E4, E16, E38, E59, E78, E79, E8 $\beta$ , E98, E123, E136		
21		90 06732-00	EYELET	12	12	12	12											
22		91 05740-55	WIRE, #30 AWG (GRN)	A/R	A/R	A/R	A/R											
23		91 07256-11	TUBING, CLEAR	A/R	A/R	A/R	A/R											
24		21 14114-01	4K MOS MEMORY 16 PIN IC MOTOROLA (2 $\beta$ $\beta$ NS)	-	-	156	-									SAME AS M7984-EB		
25		11 14384-00	GREEN DIODE, LED	1	1	1	1									D3		
26		11 09991-00	DIODE ZENER, IN754A 6.8V - 5%	1	1	1	1									D2		
27		13 00202-00	RES 47 1/4W 5% CC	1	1	1	1									R1 $\beta$ $\beta$		
28		21 14475-01	4K MOS RAM 16 PIN IC FUJITSU (2 $\beta$ $\beta$ NS)				156									SAME AS M7984-EB		
E.C.O. NO.																		
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							SHEET 7 OF 9				INSERTION PARTS LIST DATA BASE REV							



DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:							
MADE BY P. BOSSMAN DATE 6 DEC 76		CHECKED P. BOSSMAN DATE 15 DEC 76		SECTION 1		M7984-FA*										* M7984-FA = M7984-FB, FC WITH DIFFERENT 16K MOS DEVICES					
ENG J. MANTON DATE 12/20/76		PROD F.S. LIN DATE 1/18/77		ISSUED SECTION 1		M7984-FB	M7984-FC														
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-FB	M7984-FC																REF DESIGNATION
	D-CS-M7984-β-1		CIRCUIT SCHEMATIC	REF	REF																
	D-UA-M7984-β-β		UNIT ASSEMBLY	REF	REF																
	B-DD-M7984-β		DWG DIRECTORY	REF	REF																
	D-MD-5011997-β-β	5011997	DRILL & ETCH DRAWING	REF	REF																
1		21 13825-01	16K MOS MEMORY 16 PIN MOSTEK (2ββNS)	78	-																E5, E6, E9, E1β, E17, E18, E21, E22, E28, E29, E32, E33, E39, E4β, E43, E44, E49, E5β, E53, E54, E6β, E61, E64, E65, E7β, E71, E74, E75, E81, E82, E85, E86, E9β, E91, E94, E95, E99, E1ββ, E1β3, E1β4, E1β7, E1β8, E111, E112, E115, E116, E119, E12β, E124, E125, E128, E129, E132, E133, E137, E138, E141, E142, E145, E146, E149, E15β, E153, E154, E157, E158, E151, E162, E165, E166, E169, E17β, E173, E174, E177, E178, E181, E182
2		21 14408-01	16K MOS MEMORY 16 PIN FUJITSU (2ββNS)	-	78																SAME AS M7984-FB
3		90 09185-00	JUMPER, INSULATED	8	8																W1, W2, W3, W4, W7, W9, W1β, X1
4		50 11997	ETCH BOARD	1	1																
5		10 12084-01	CAP 8 UF 25V 10% S.TANT	13	13																C182 thru C186, C188 thru C195
6		10 01610-01	CAP .01 UF 1ββV DISC	23	23																C156, C157, C159 thru C174, C176 thru C179, C181
7		10 10274-01	CAP .22 UF 50V 80% 20% CER	155	155																C1 thru C155
8		11 10994-00	DIODE ZENER 1N751A 5.1V - 5%	1	1																D1
9		12 10711-02	HANDLE HEX	1	1																
10		13 01972-00	RES 270 1/4W 5% CC	2	2																R94, R1β2
11		13 02124-00	RES 18 1/4W 5% CC	84	84																R1 thru R47, R5β thru R53, R56 thru R59, R65 thru R93
E.C.O. NO.																					
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				SHEET 8 OF 9				INSERTION PARTS LIST DATA BASE REV													

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION														NOTES:  * M7984-FA = M7984-FB, FC WITH DIFFERENT 16K MOS DEVICES			
				M7984-FA*															REF DESIGNATION		
MADE BY DATE		CHECKED DATE		SECTION																	
P. BOSSMAN 6 DEC 76		P. BOSSMAN 15 DEC 76		1																	
ENG DATE		PROD DATE		ISSUED SECTION																	
J. MANTON 12/20/76		F.S. LIN 1/18/77		1																	
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M7984-FB	M7984-FC																
12		13 00365	RES 1K 1/4W 5% CC	7	7														R63, R95, R201 thru R205		
13		13 02177-00	RES 47K 1/4W 5% CC	9	9														R48, R49, R54, R55, R60, R61, R62, R64, R103		
14		19 10091-00	IC DEC 7437	3	3														E1, E47, E48		
15		19 10533-00	IC DEC 74S03	1	1														E3		
16		19 10534-00	IC DEC 74S04	1	1														E25		
17		19 12746-00	IC DEC 74S37	10	10														E13, E14, E26, E27, E37, E57, E58, E68, E69, E89		
18		19 12068-00	IC DEC 74128	2	2														E15, E36		
19		19 11676-00	IC DEC 74S139	1	1														E2		
20		19 13777-00	IC DEC 74LS240	10	10														E4, E16, E38, E59, E78, E79, E80, E98, E123, E136		
21		90 06732-00	EYELET	12	12																
22		91 05740-55	WIRE, #30 AWG (GRN)	A/R	A/R																
23		91 07256-11	TUBING, CLEAR	A/R	A/R																
24		11 14384-00	GREEN DIODE, LED	1	1														D3		
25		11 09991-00	DIODE ZENER, 1N754A 6.8V - 5%	1	1														D2		
26		13 00202-00	RES 47 1/4W 5% CC	1	1														R100		
E.C.O. NO.				TITLE MS11-K (ARRAY)												ASSY NO. D-UA-M7984-0-0		SIZE B	CODE PL	NUMBER M7984-0-0	REV. E
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M7984 5011997 D-P1

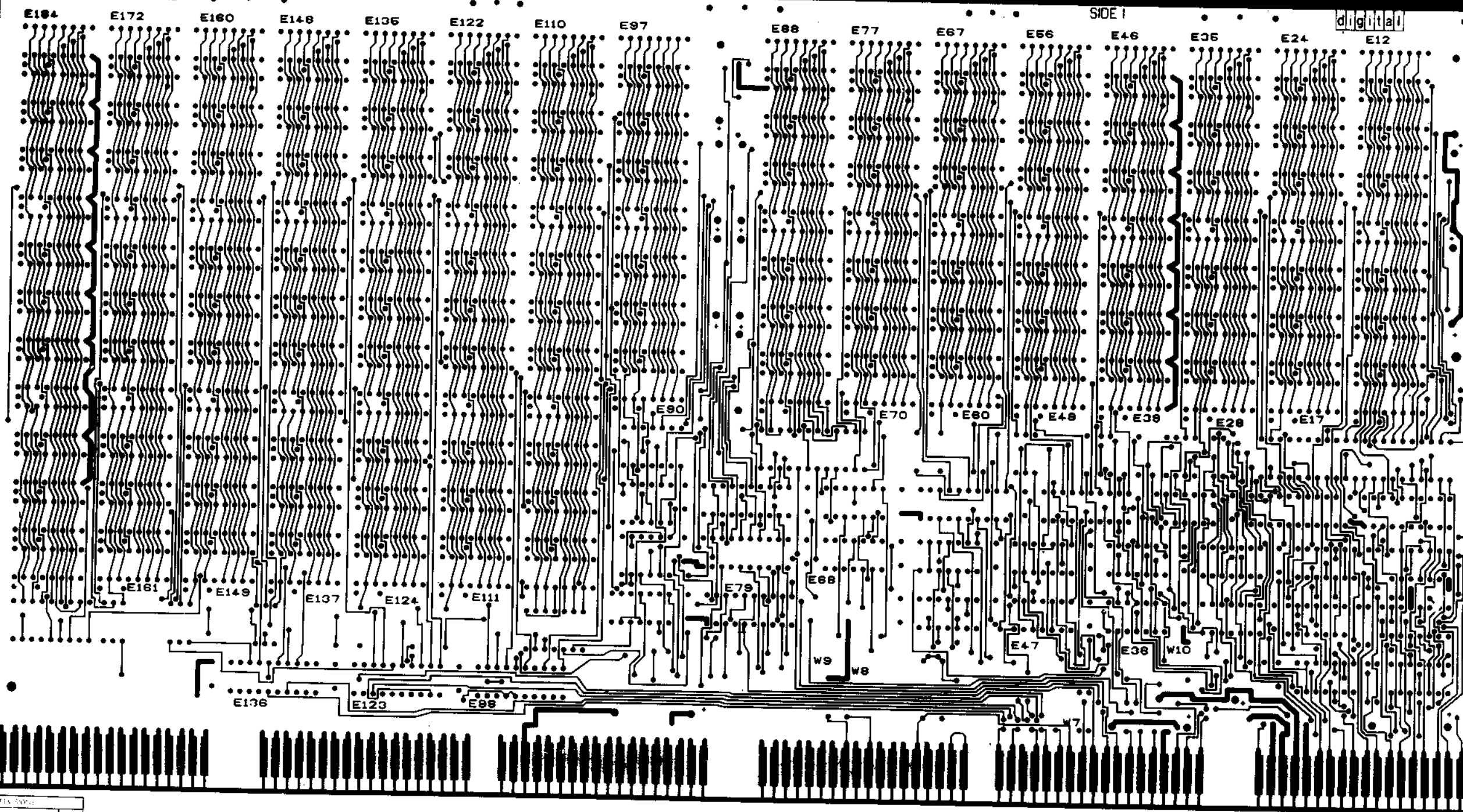
LAYER 1

L1

CSXABCDEFGHIJKLMNPRS

SIDE 1

digital

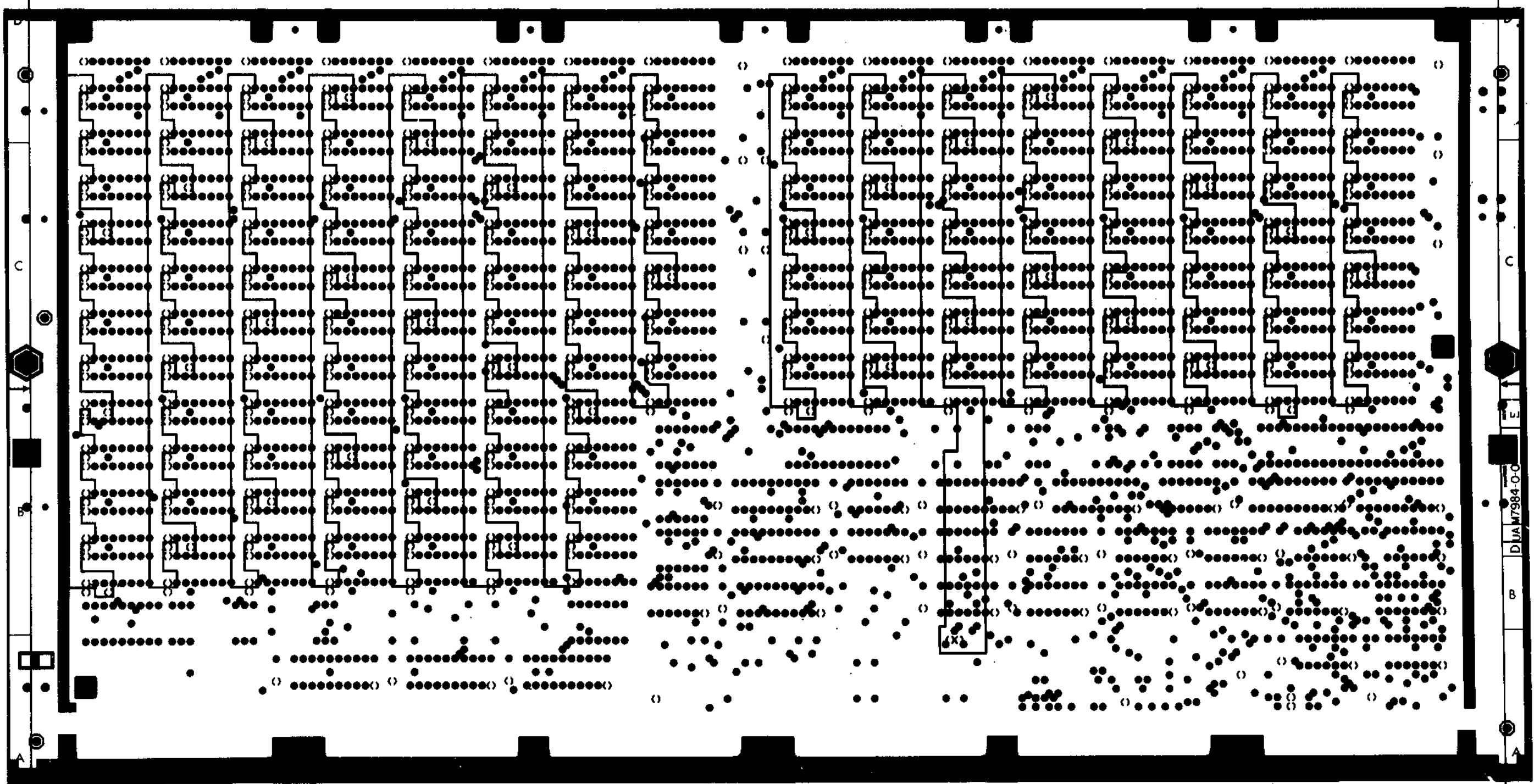


REV	DATE	BY	CHKD

TITLE		MS1K (ARRAY)		SIZE CODE	NUMBER		REV
SCALE		2/1	SHEET	DUA	M7984-0-0		E
R		7	6	5	4	3	2
							1

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M7984 5011997 D-P1



REVISIONS		
CHK	DESCRIPTION	REV

TITLE	MS11K (ARRAY)	SIZE CODE	DUA	NUMBER	M7984-0-0	REV	E
SCALE	2/1	SHEET	8	OF	13	DIST	

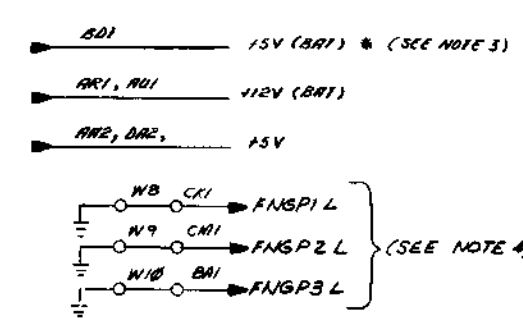
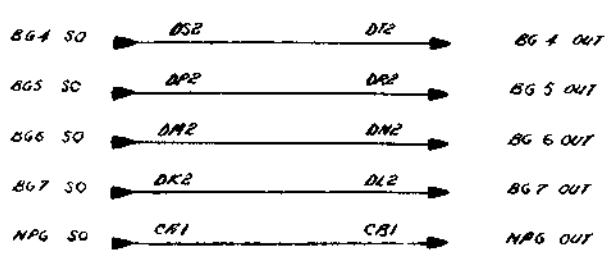
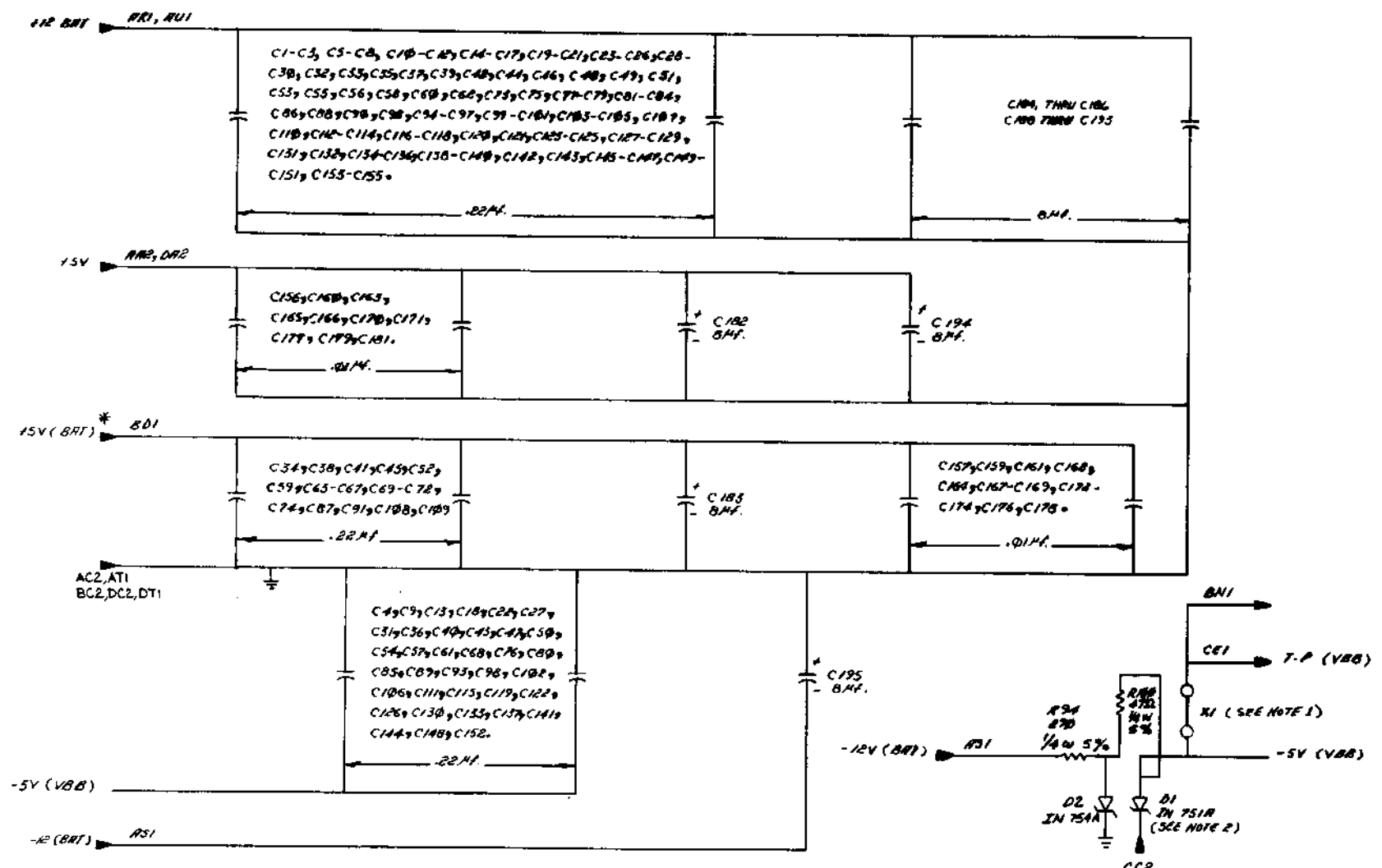
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NOTES:  
1. JUMPERS TO BE CONNECTED FOR EACH VARIATION AS FOLLOWS:

MODULE VAR'S	JUMPER SETTINGS	ARRAY CONFIGURATION
AB, AC, AD, AE, AF ETC.	W1, W2, W3, W4, X1	16K X 39, 4K RAM'S FULLY POPULATED
BB, BC, BD ETC.	W1, W2, W3, W4, W5, X1	8K X 39, 4K RAM'S 1/2 POPULATED
CB, CC ETC.	W1, W2, W3, W4, W5, W6, W7, X1	4K X 39, 16K RAM'S FULLY POPULATED
DB, DC ETC.	W1, W2, W3, W4, W5, W6, W7, X1	16K X 39, 16K RAM'S 1/2 POPULATED
EB, EC, ED ETC.	W1, W2, W3, W4, W5, W6, X1	16K X 39, 4K RAM'S FULLY POPULATED
FB, FC ETC.	W1, W2, W3, W4, W5, W6, W7, W8, X1	32K X 39, 4K RAM'S 1/2 POPULATED

2. PIN CC2 MAY BE FLOATED TO VARY -5V (VBB). THE VARIABLE (VBB) IS APPLIED TO PIN CB1.  
3. (\*) INDICATES +5V BATTERY BACK-UP.  
4. JUMPERS TO BE CONNECTED FOR EACH ARRAY CONFIGURATION AS FOLLOWS:

ARRAY CONFIGURATION	JUMPER 1 (W1)	JUMPER 2 (W2)	JUMPER 3 (W3)
AB, AC ETC.	1	1	1
BB, BC ETC.	1	1	1
CB, CC ETC.	1	1	0
DB, DC ETC.	1	0	1
EB, EC ETC.	0	0	1
FB, FC ETC.	1	0	0



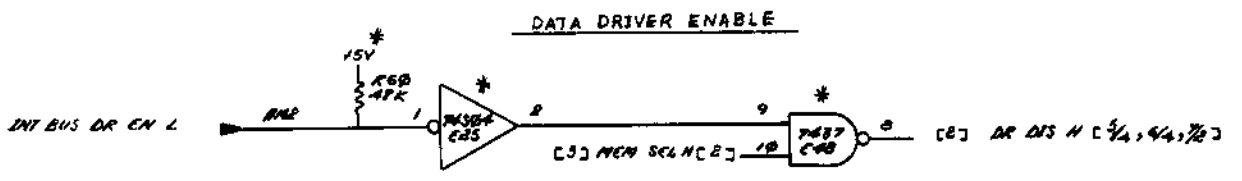
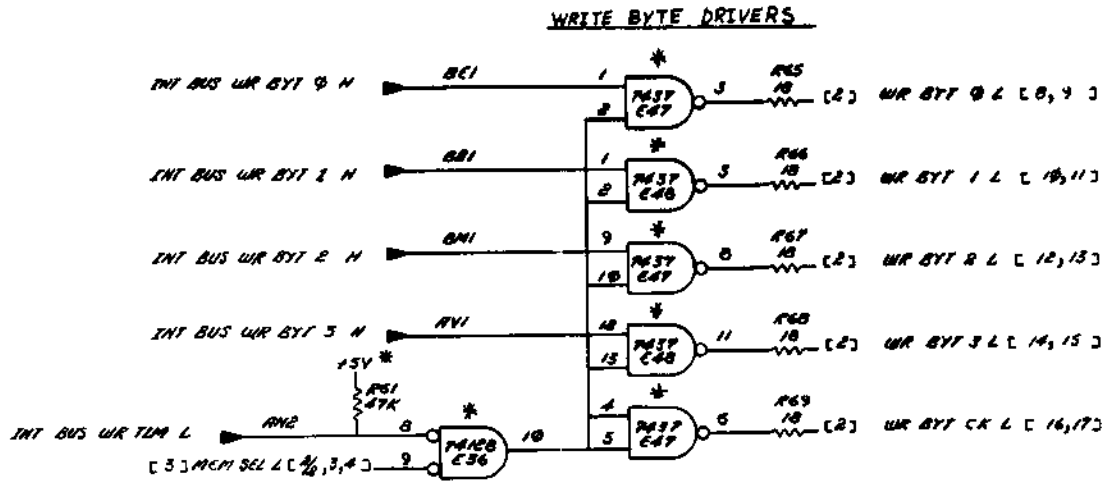
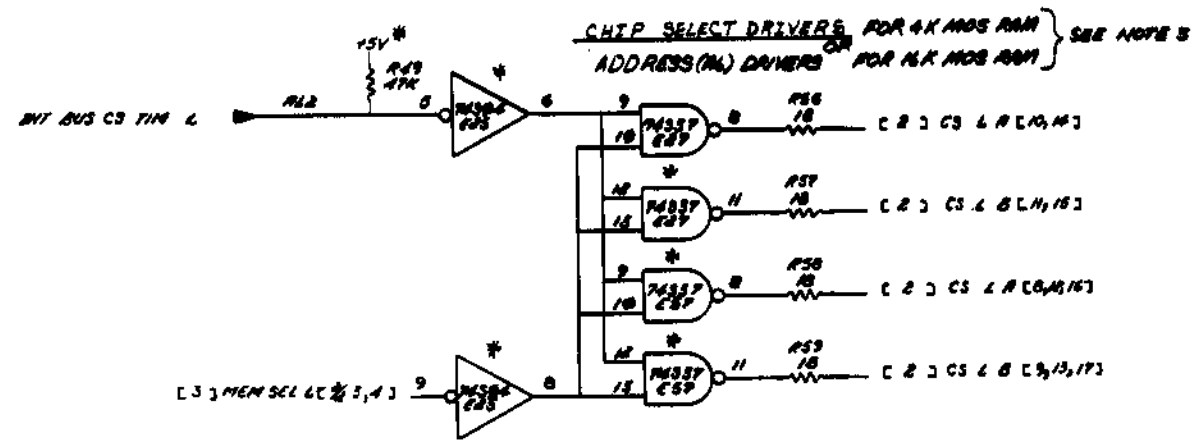
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1	12/15/76	J. MANTON	J. MANTON	J. MANTON	INITIAL RELEASE
2	1/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
3	2/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
4	3/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
5	4/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
6	5/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
7	6/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
8	7/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
9	8/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
10	9/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
11	10/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
12	11/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION
13	12/15/77	J. MANTON	J. MANTON	J. MANTON	REVISION

DATE	BY	FIRST USED ON
12/15/76	J. MANTON	MS11-K (ARRAY)
1/15/77	J. MANTON	
2/15/77	J. MANTON	
3/15/77	J. MANTON	
4/15/77	J. MANTON	
5/15/77	J. MANTON	
6/15/77	J. MANTON	
7/15/77	J. MANTON	
8/15/77	J. MANTON	
9/15/77	J. MANTON	
10/15/77	J. MANTON	
11/15/77	J. MANTON	
12/15/77	J. MANTON	

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NOTES:  
1. SIGNAL NAMES WILL BE REFERENCED AS FOLLOWS:  
[ X ] SIGNAL NAME [ Y/Z ]  
NUMBER OF CONNECTION POINTS ON ASSIGNATION SHEET.  
ASSIGNATION SHEET NUMBER.  
SOURCE SHEET NUMBER.

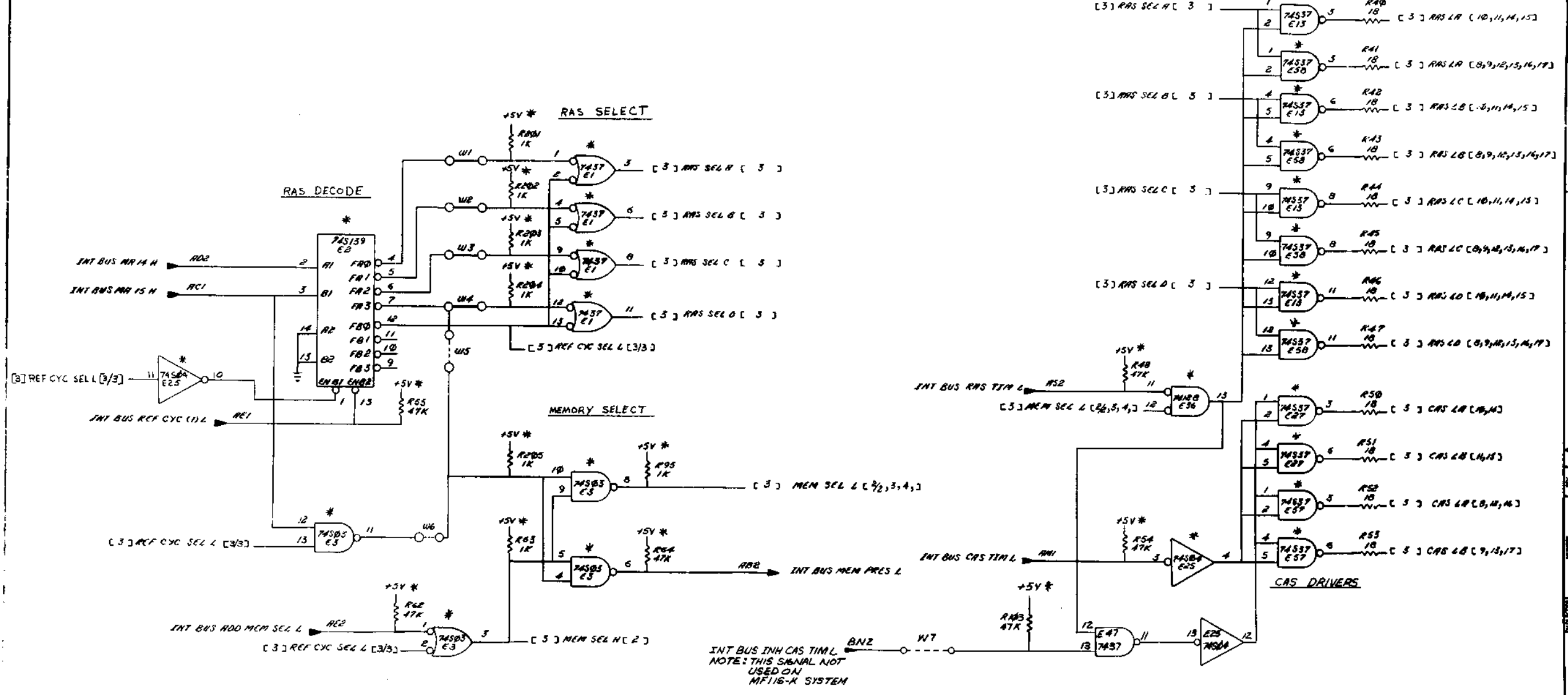
EXAMPLE:  
[ 3 ] MEM SEL L [ 2, 3, 4 ]  
ASSIGNATION (E) IS AN IMPLIED ONE WHEN NOT SHOWN.  
2. SIGNALS DESIGNATED (INT BUS) ARE CONNECTED VIA MODULE FINGERS TO INTERNAL BUS A/B.  
3. FOR 16K MODE RAM SIGNAL CEL IS ADDRESS (A6)



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MS11-K (ARRAY)	SIZE CODE	D CS	NUMBER	M7984-0-1	REV.	E
SCALE	NONE	SHEET	2 OF 17	DIST.			

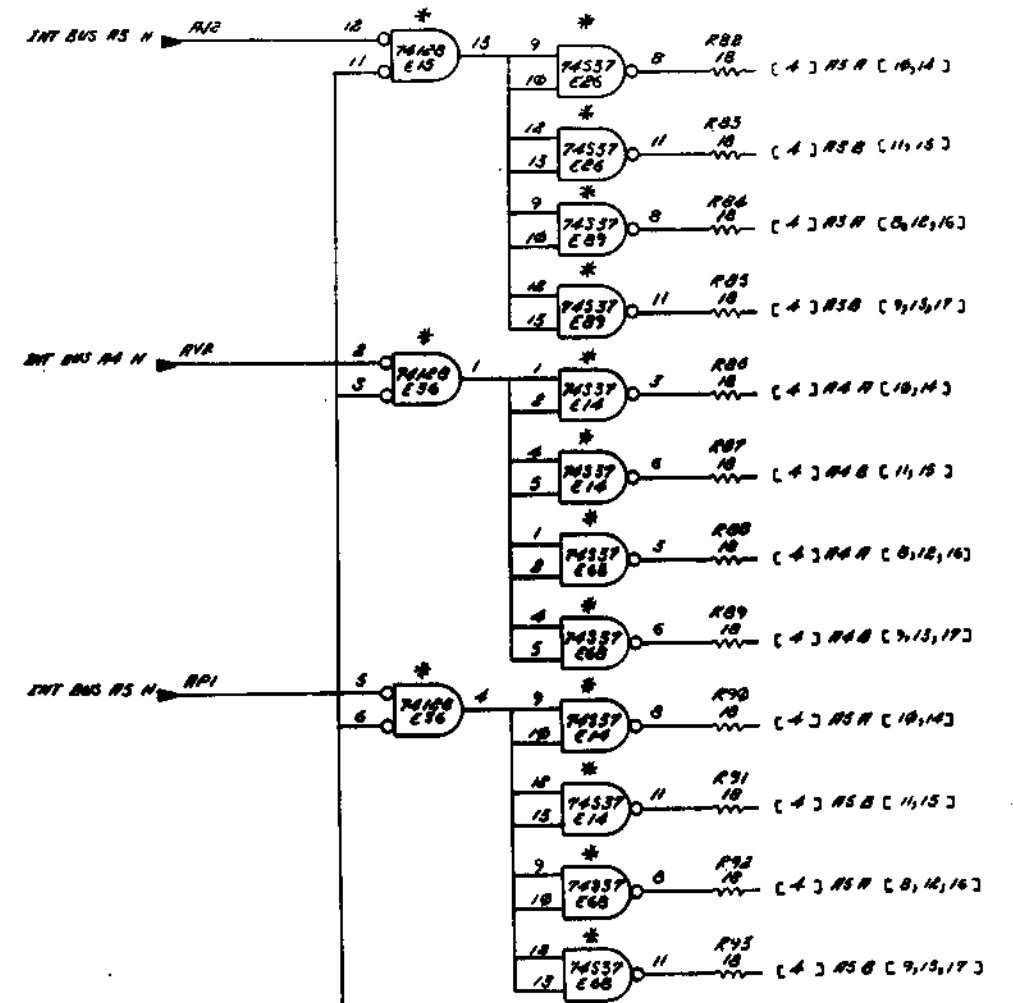
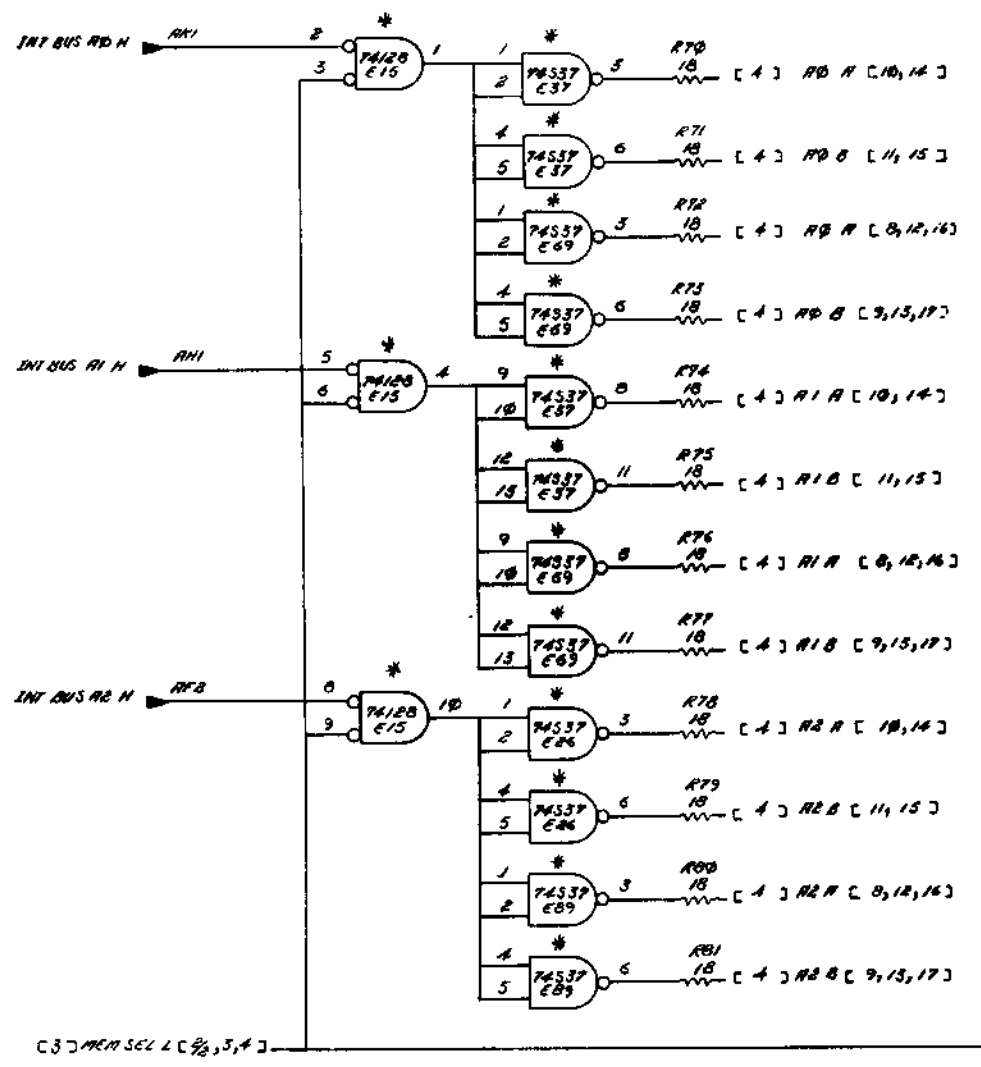
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REVISIONS			TITLE		SIZE CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.	MS11-K (ARRAY)		D	M 7984-0-1	E
			SCALE	NONE	SHEET	3 OF 17	DIST.

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ADDRESS DRIVERS



C33 MEM SEL C 2,3,4

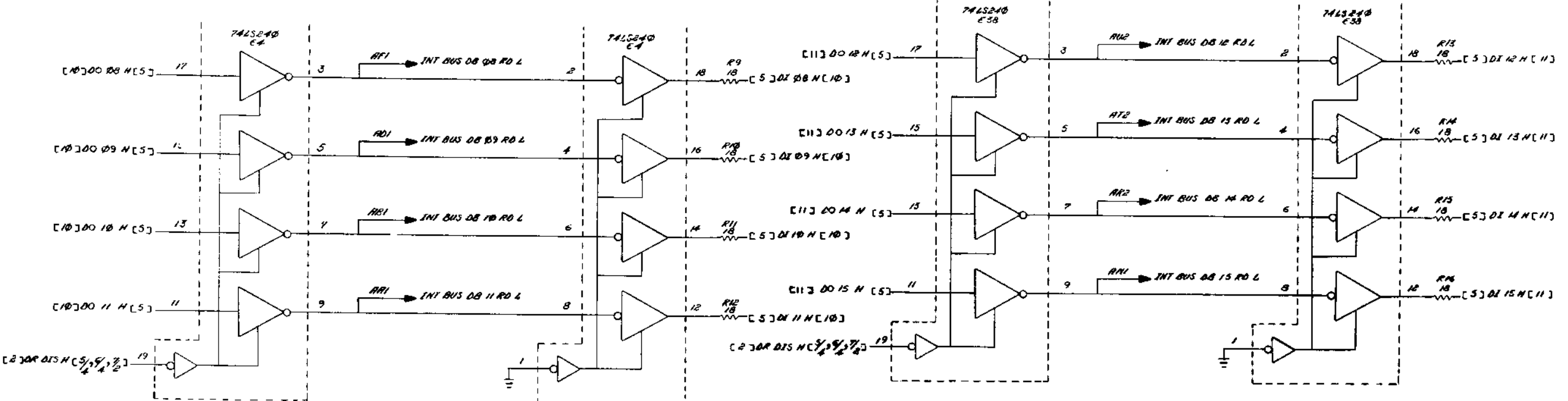
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CHK	CHANGE NO.	REV.

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SCALE	NONE	SHEET	4	OF	17	DIET.	



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DCS M7984-0-1 E

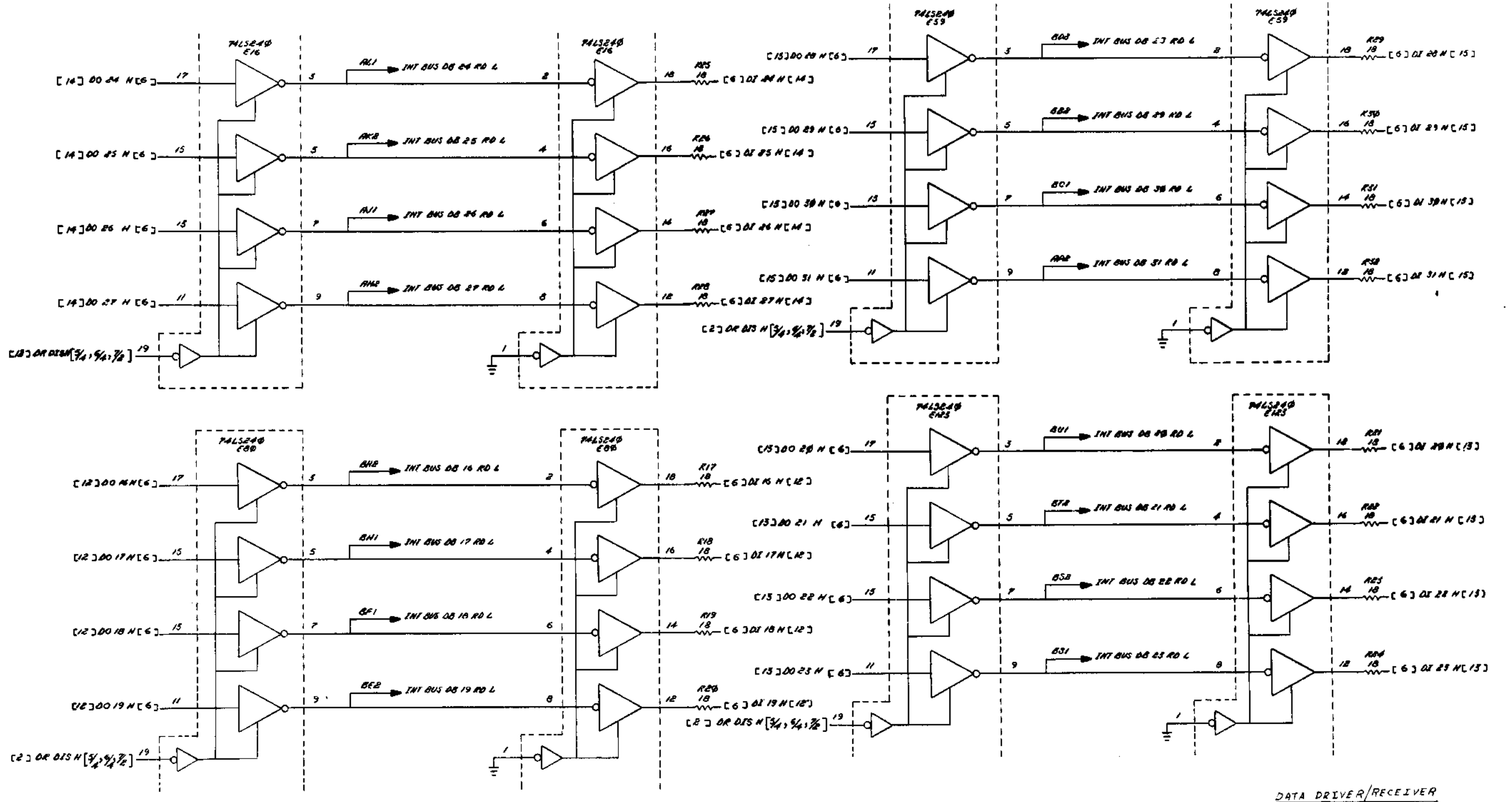


DATA DRIVER/RECEIVER

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE/CODE	NUMBER	REV.
MS11-K (ARRAY)	DCS	M7984-0-1	E
SCALE NONE	SHEET 5 OF 17	DIST.	

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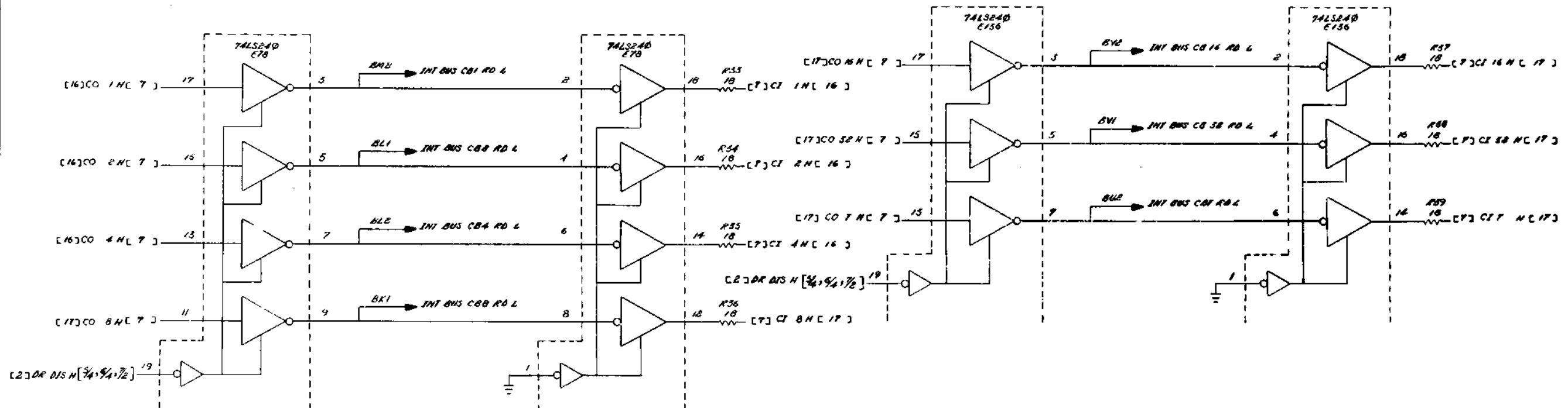


DATA DRIVER/RECEIVER

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MS11-K (ARRAY)	SIZE CODE	DCS	NUMBER	M7984-0-1	REV.	E
SCALE	NONE	SHEET	6 OF 17	DIST.			

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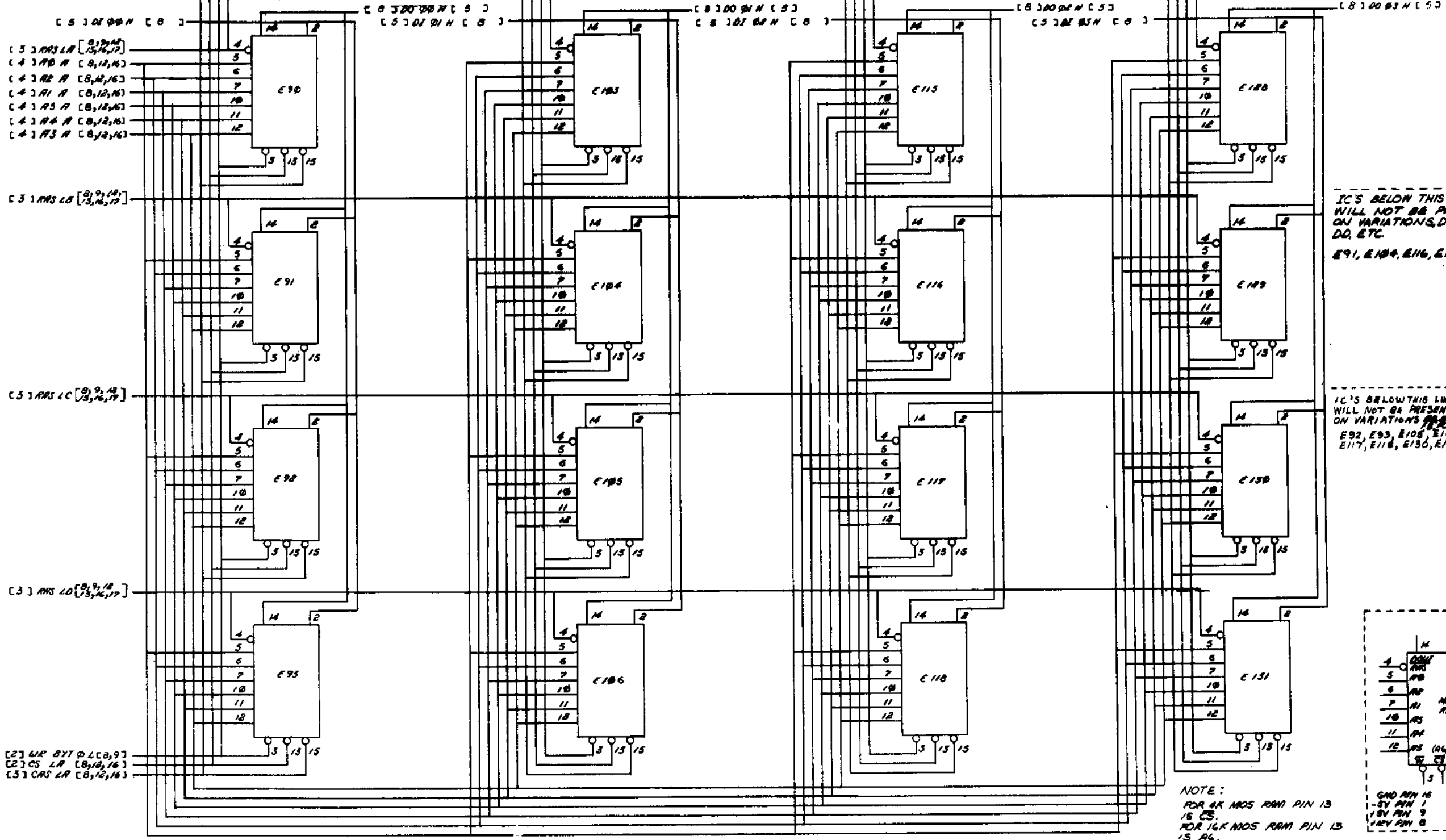


DATA DRIVER/RECEIVER

REVISIONS		
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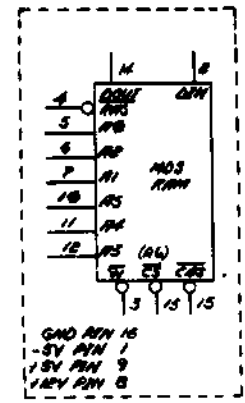
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SCALE	NONE	SHEET	7	OF	17	DIST.	

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E91, E104, E116, E129.

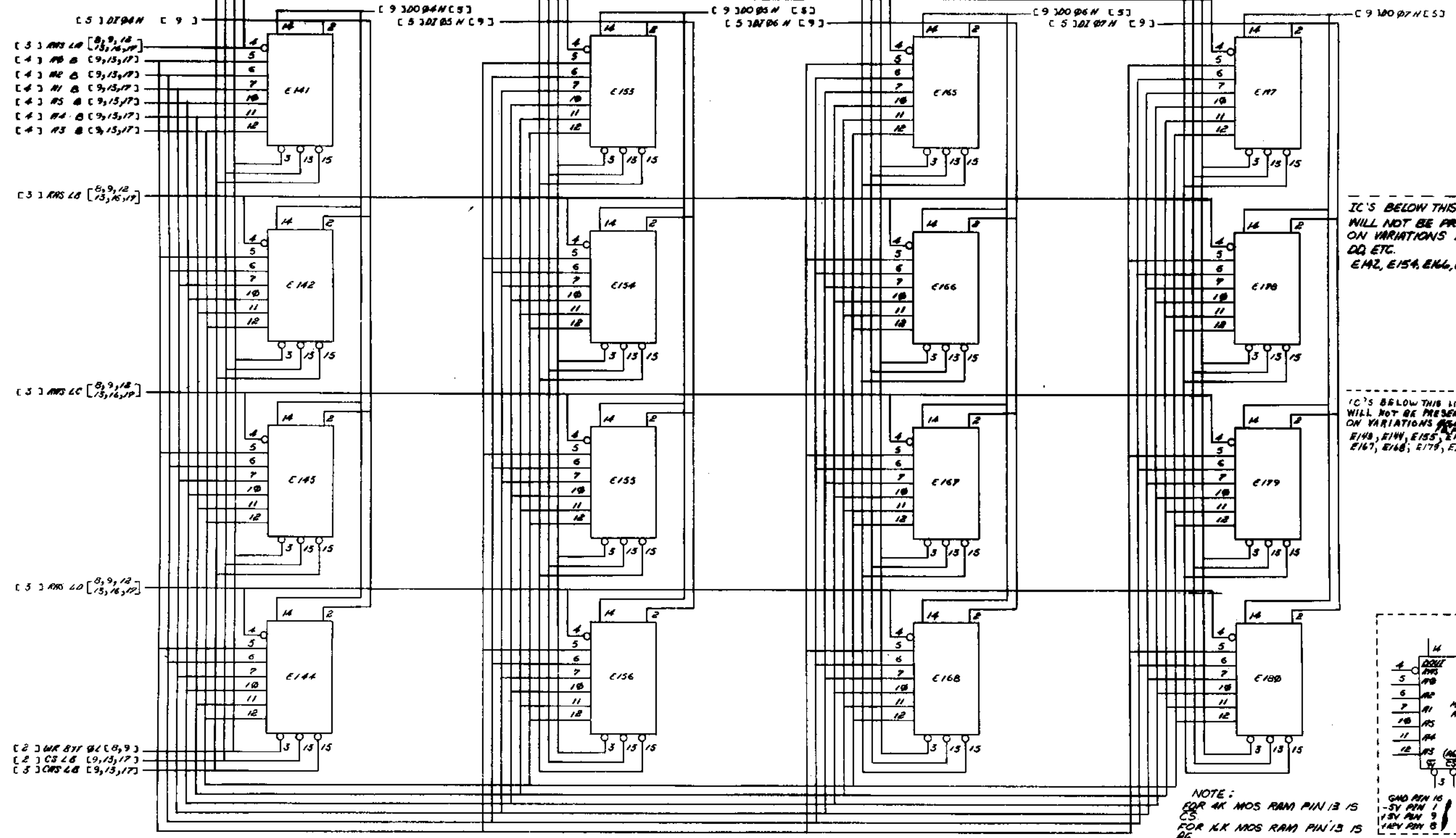
IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS, DB, DC DD, ETC.  
E92, E93, E108, E109, E117, E118, E130, E131



NOTE:  
FOR 4K MOS RAM PIN 13 IS AG.  
FOR 16K MOS RAM PIN 13 IS AG.

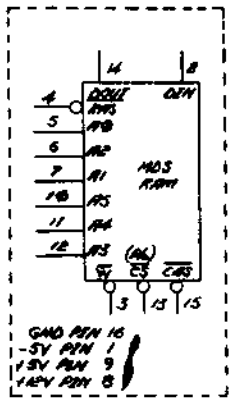
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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC. E142, E154, E166, E178

IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC. E148, E150, E155, E156, E167, E168, E179, E180

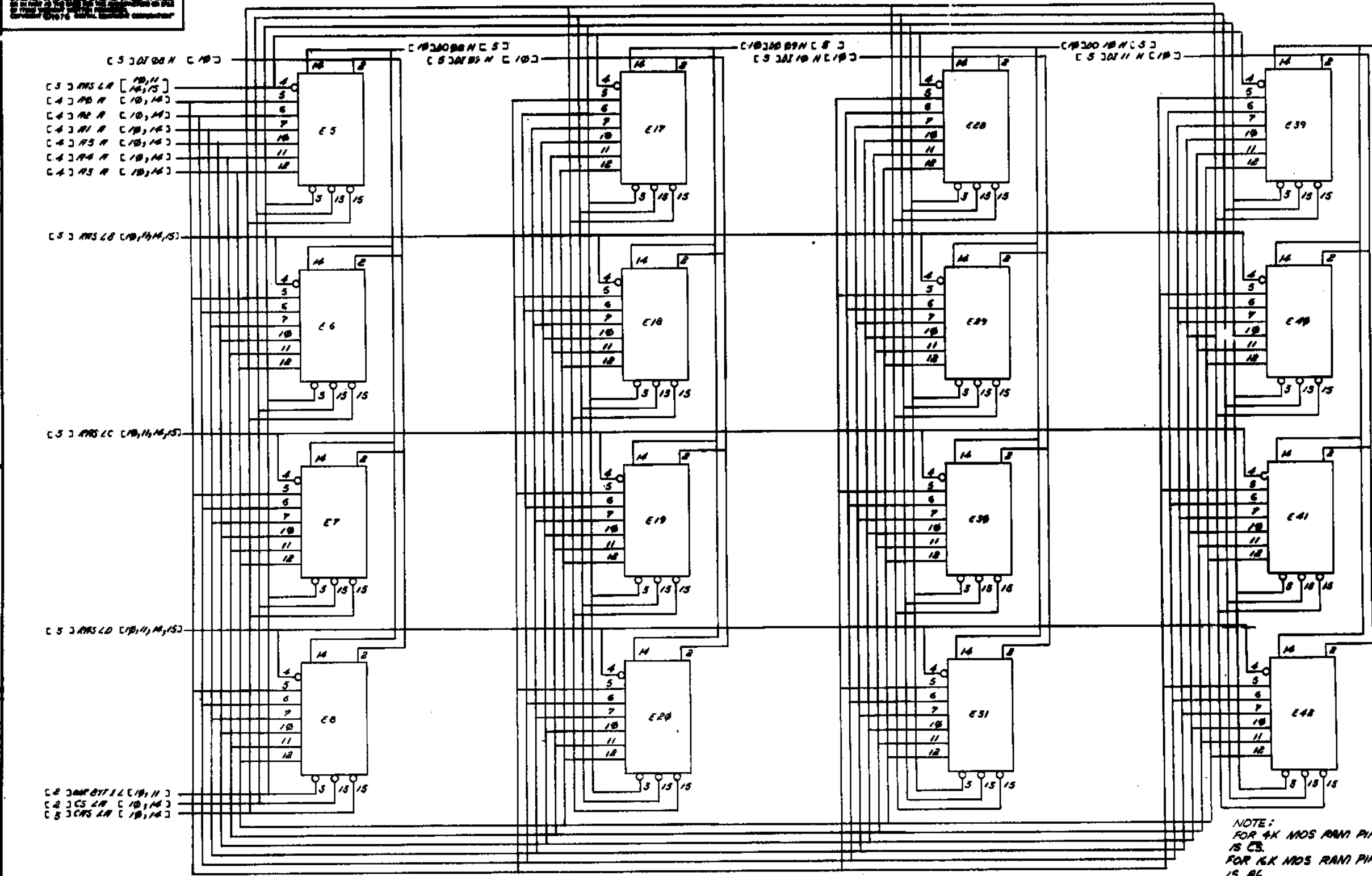


NOTE: FOR 4K MOS RAM PIN 13 IS CS. FOR 1K MOS RAM PIN 13 IS AG.

REVISES		
CHK	CHANGE NO.	REV.

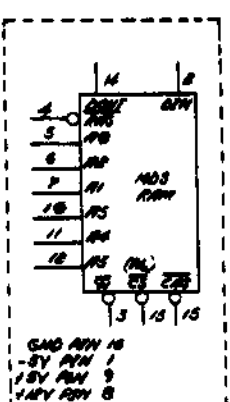
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SCALE	NONE	SHEET	9 OF 17	DIST.			

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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS D8, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48, D49, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D60, D61, D62, D63, D64, D65, D66, D67, D68, D69, D70, D71, D72, D73, D74, D75, D76, D77, D78, D79, D80, D81, D82, D83, D84, D85, D86, D87, D88, D89, D90, D91, D92, D93, D94, D95, D96, D97, D98, D99, D100.

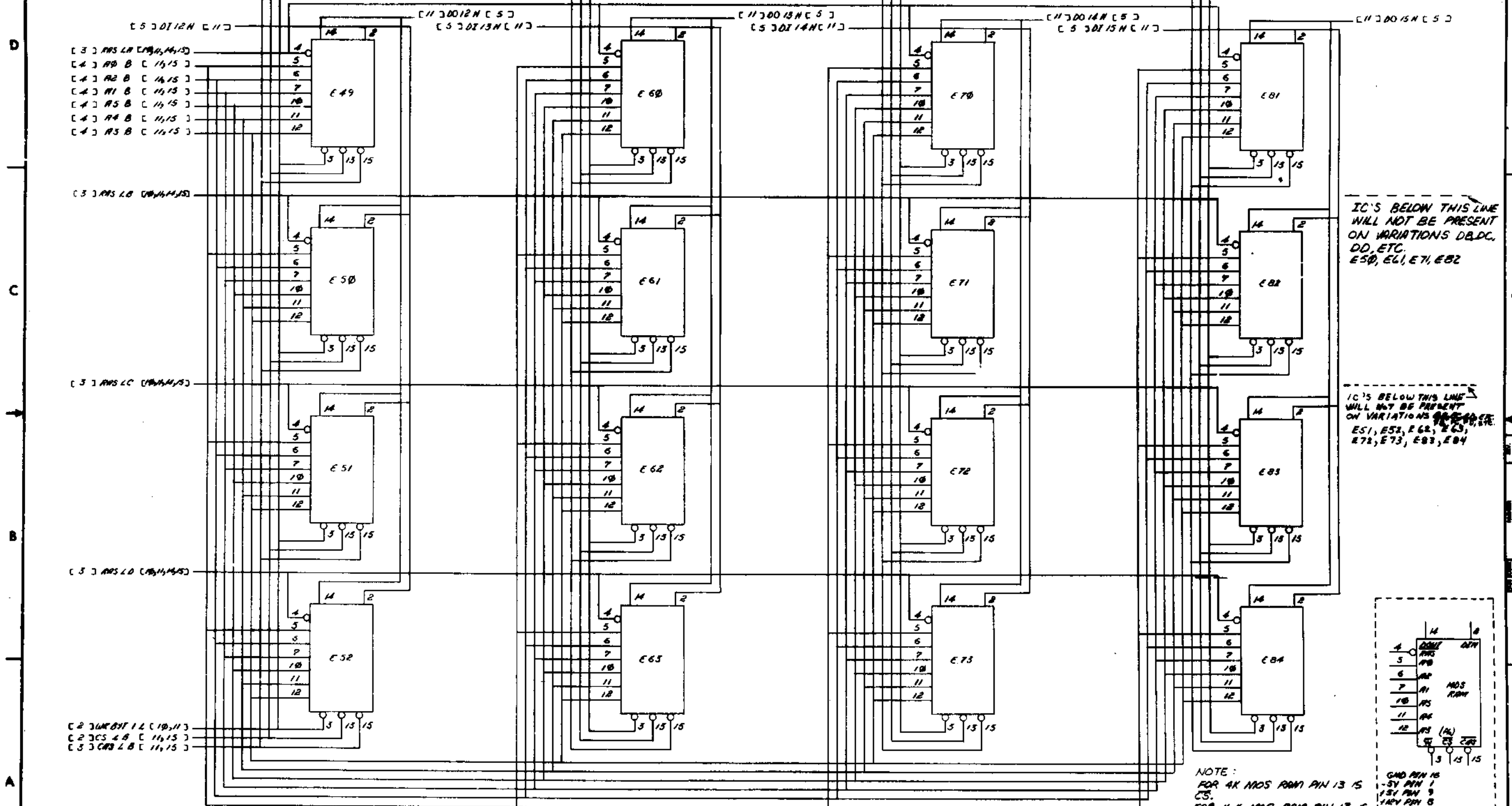
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NOTE:  
FOR 4K MOS RAM PIN 13 IS CS.  
FOR 16K MOS RAM PIN 13 IS AG.

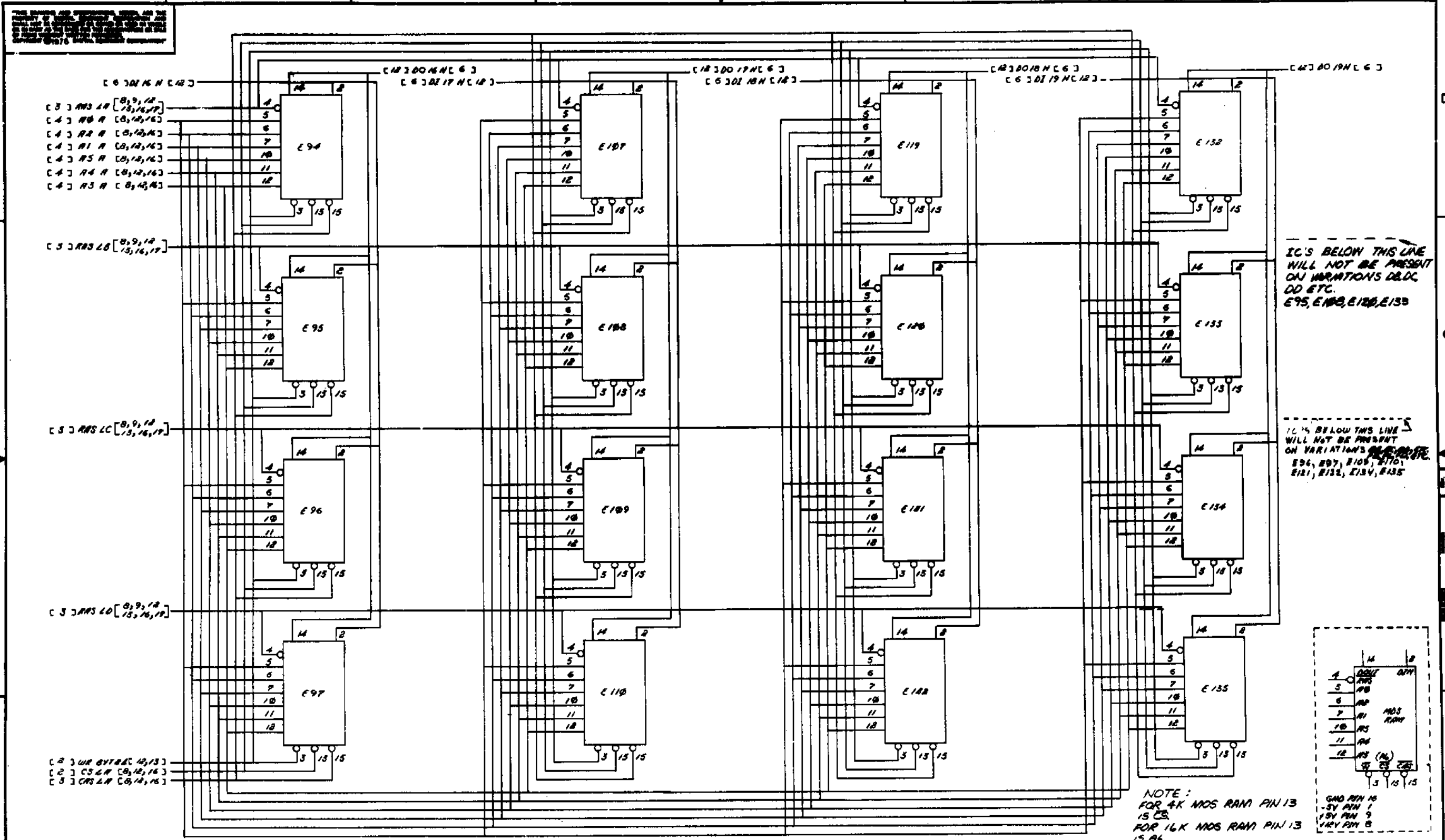
REV.	CHANGE NO.	REV.

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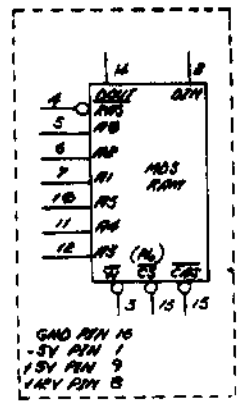
REVISIONS		
CHK	CHANGE NO.	REV.

DCS M7984-0-1 E



IC'S BELOW THIS LINE  
WILL NOT BE PRESENT  
ON VARIATIONS D & D.C.  
D.D. ETC.  
E95, E100, E120, E130

IC'S BELOW THIS LINE  
WILL NOT BE PRESENT  
ON VARIATIONS D & D.C. ETC.  
E96, E97, E105, E110,  
E121, E122, E134, E135

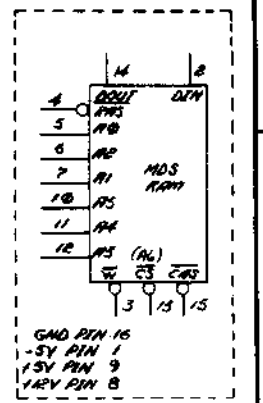
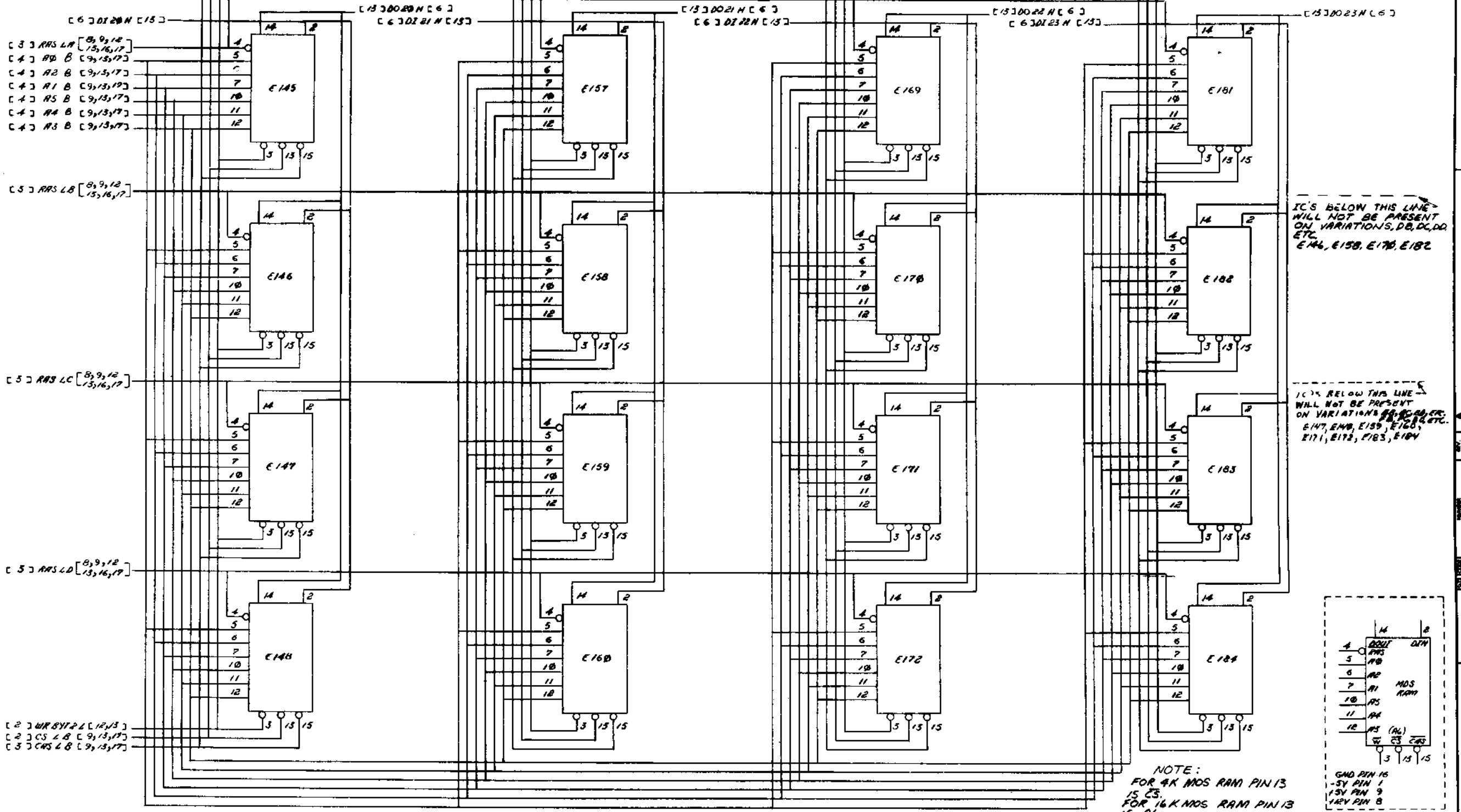


NOTE:  
FOR 4K MOS RAM PIN 13  
IS GND.  
FOR 16K MOS RAM PIN 13  
IS A6.

REVISIONS		
CHK	CHANGE NO.	REV.



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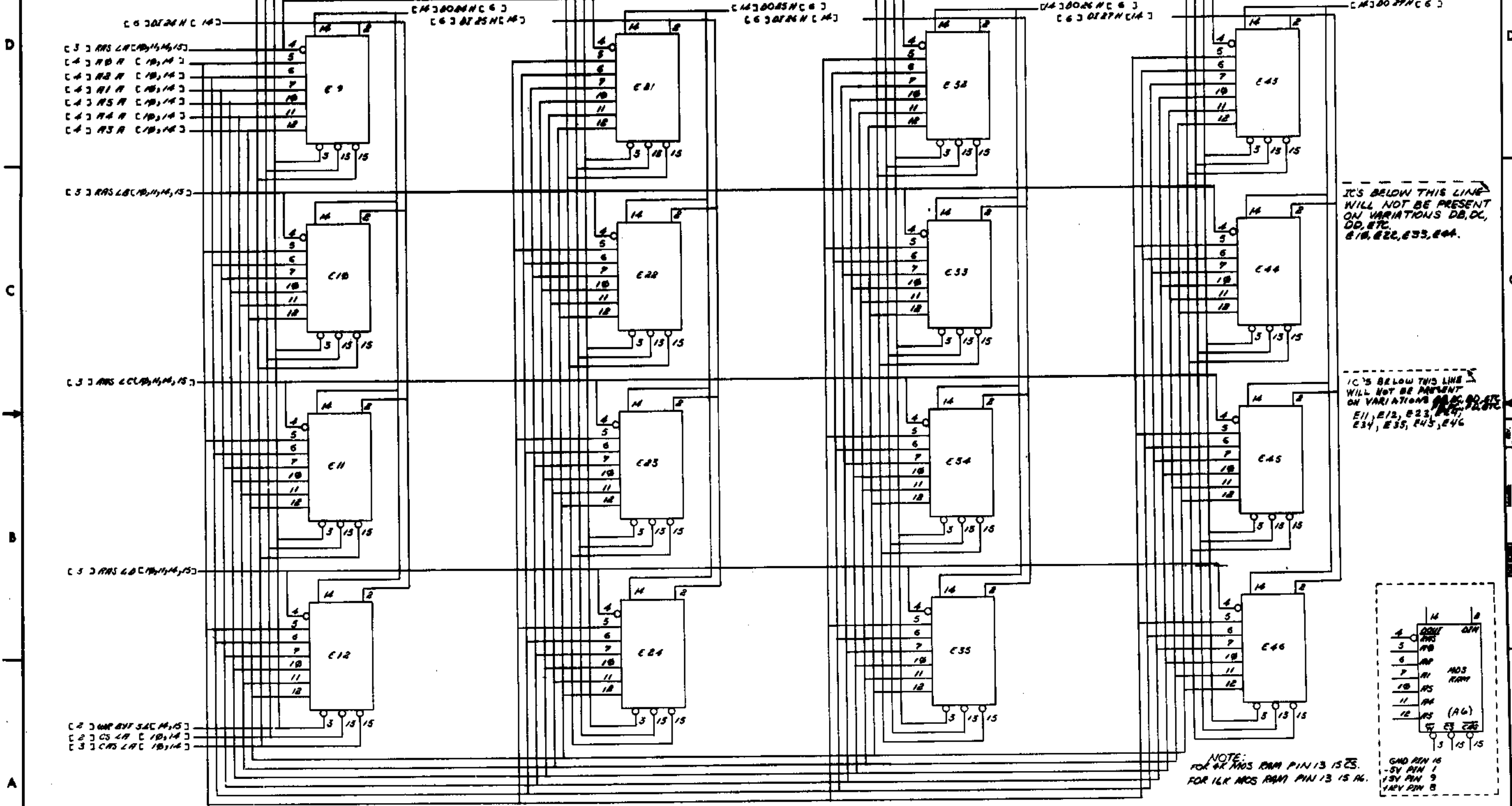


NOTE:  
FOR 4K MOS RAM PIN 13 IS CS.  
FOR 16K MOS RAM PIN 13 IS AL.

REVISIONS		
CHK	CHANGE NO.	REV.

DCS M7984-0-1 E

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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC. E10, E22, E33, E44.

IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DD, DC, DD, ETC. E11, E12, E23, E34, E35, E45, E46.

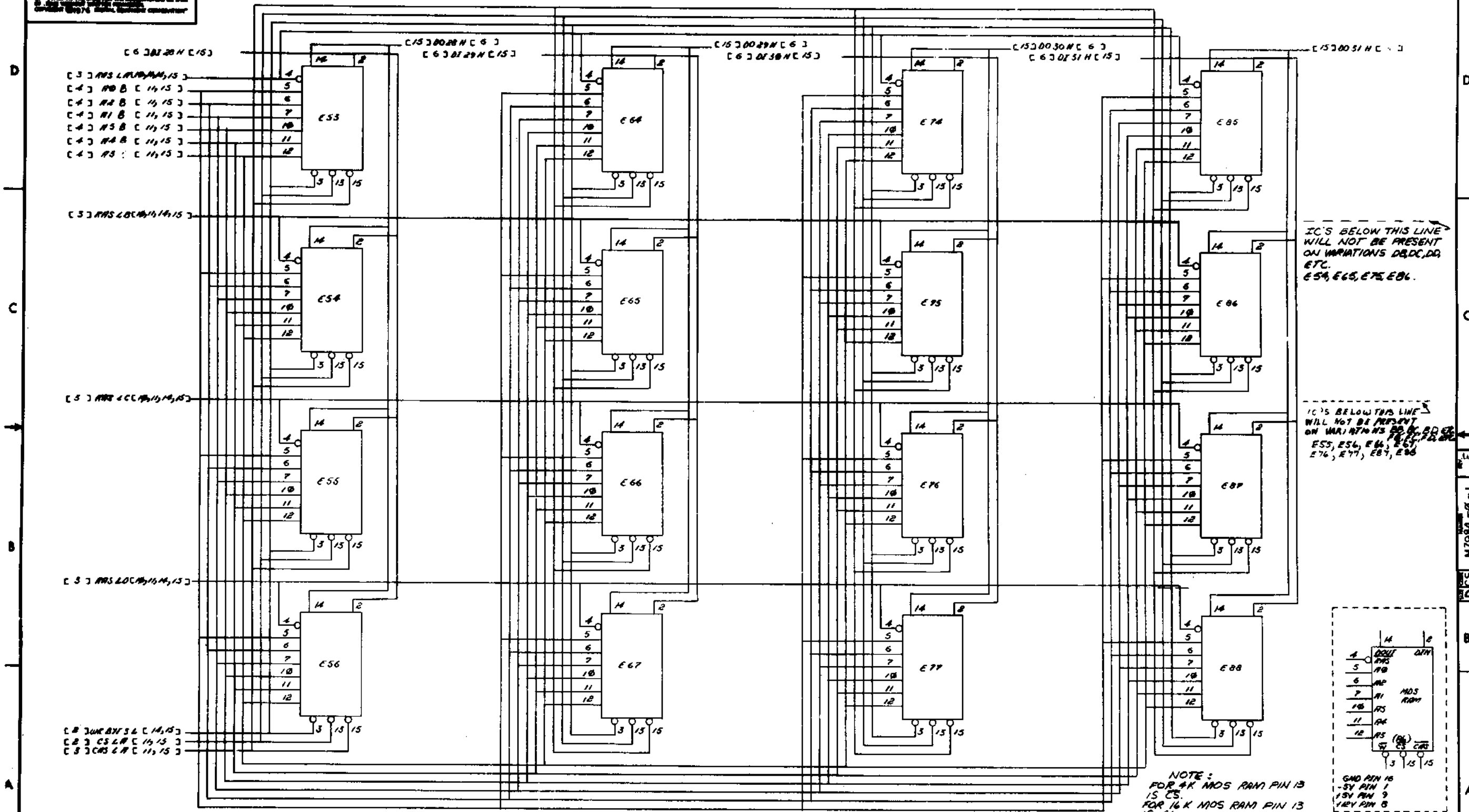
NOTE:  
FOR 4K MOS RAM PIN 13 IS ZS.  
FOR 16K MOS RAM PIN 13 IS 16.

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MS11-K (ARRAY)	SIZE/CODE	DCS	NUMBER	M7984-Ø-1	REV.	E
SCALE	NONE	SHEET	14 OF 17	DIST.			

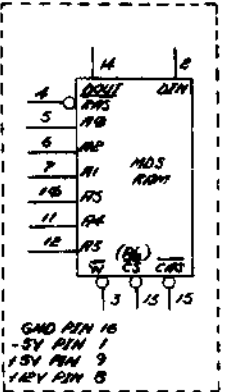
DCS M7984-Ø-1 E

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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS D0, D1, D2, ETC. E54, E65, E76, E86.

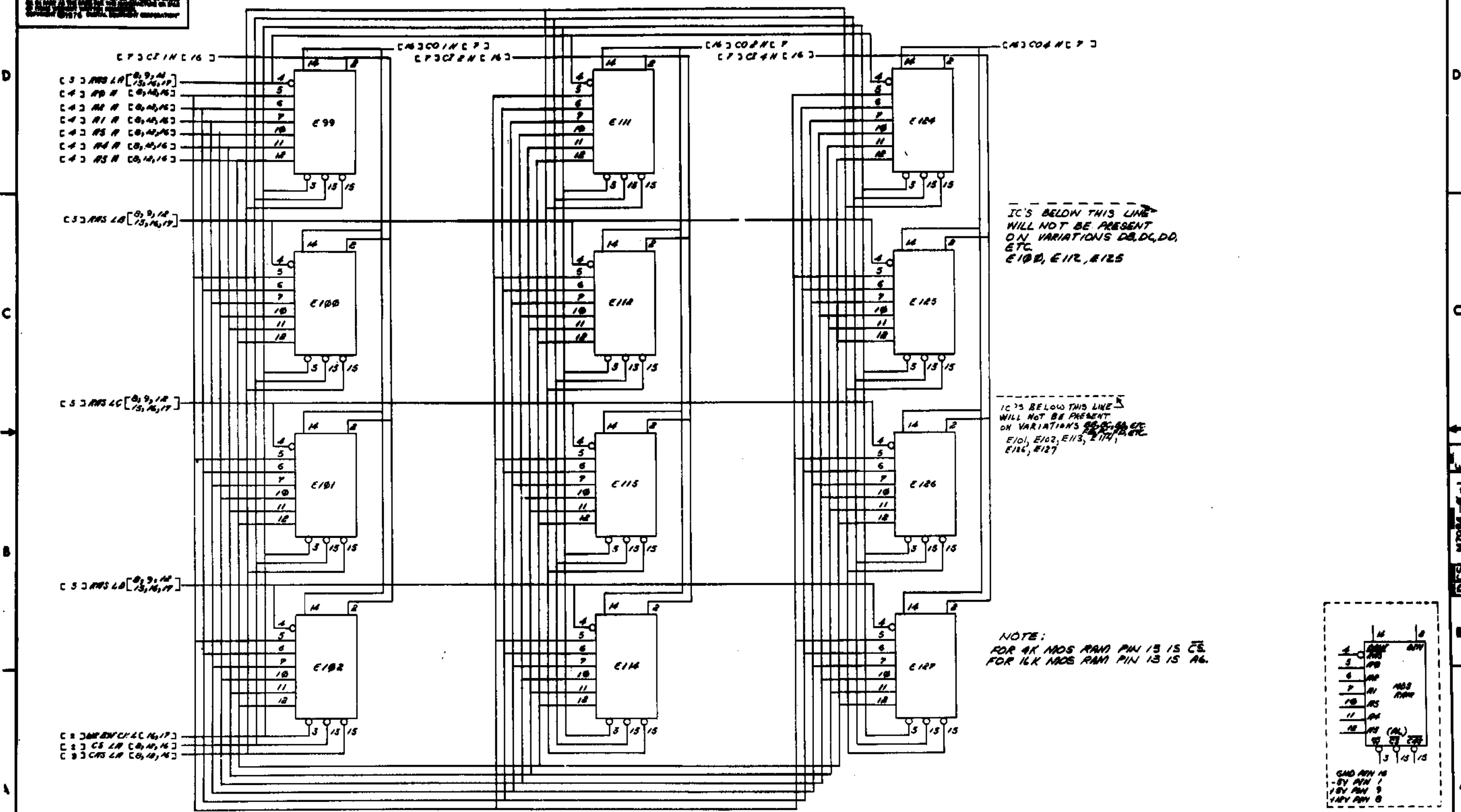
IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS D0, D1, D2, ETC. E55, E56, E66, E67, E76, E77, E87, E88.



NOTE:  
FOR 4K MOS RAM PIN 13 IS CS.  
FOR 16K MOS RAM PIN 13 IS A6.

REV.	CHANGE NO.	REV.

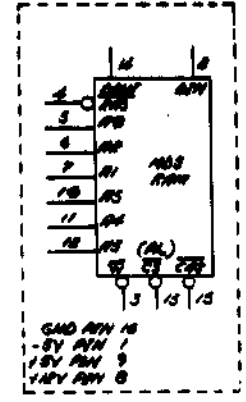
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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC. E100, E112, E125

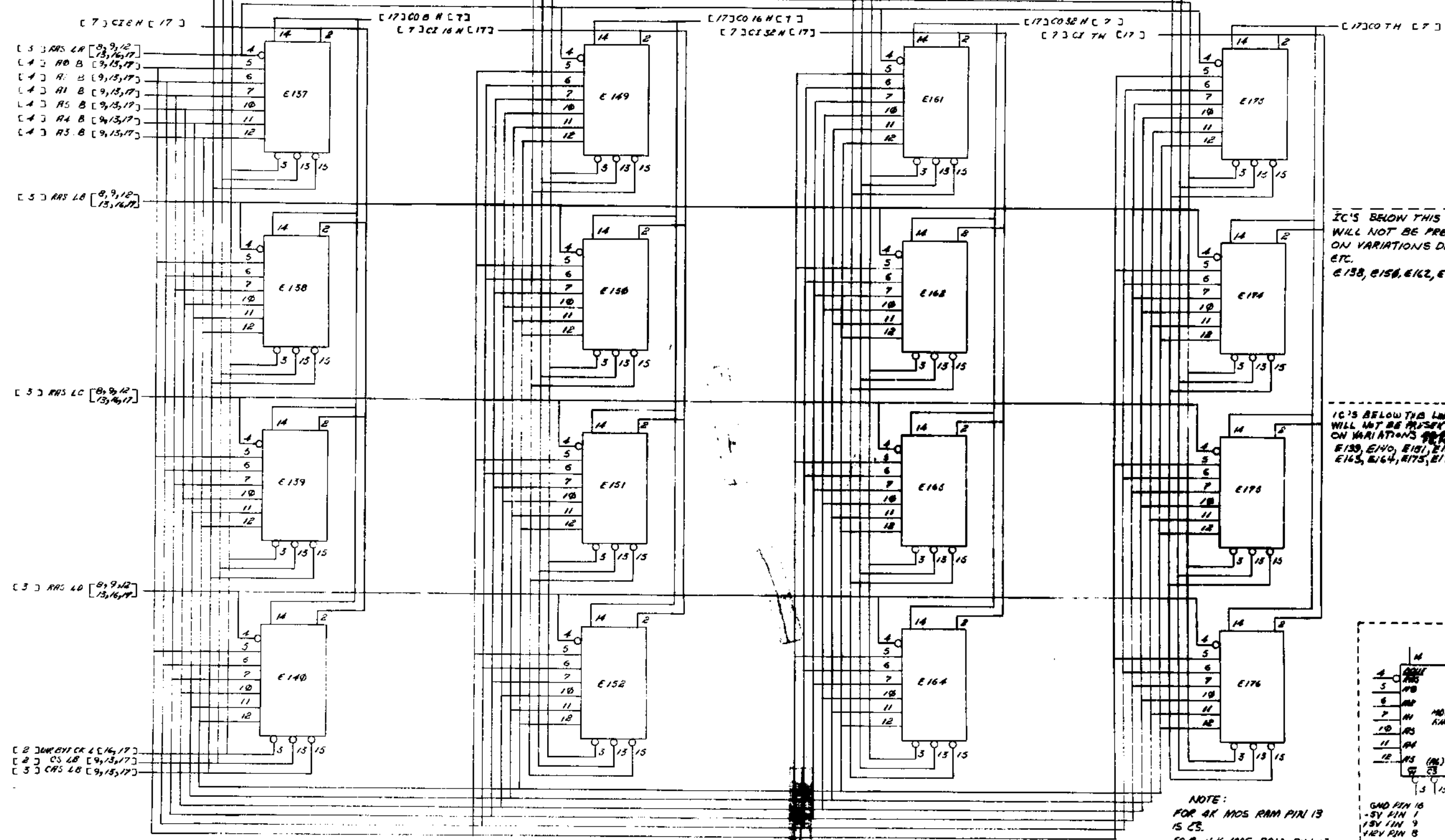
IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC. E101, E102, E113, E114, E116, E127

NOTE:  
FOR 4K MOS RAM PIN 13 IS CS.  
FOR 16K MOS RAM PIN 13 IS A6.



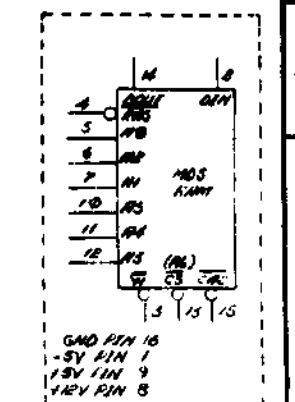
REV.	DATE	BY	CHK	CHANGE NO.	REV.

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IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DB, DC, DD, ETC.  
E138, E158, E162, E174

IC'S BELOW THIS LINE WILL NOT BE PRESENT ON VARIATIONS DD, DD, DD, ETC.  
E139, E140, E161, E152, E163, E164, E175, E176



NOTE:  
FOR 8K MOS RAM PIN 13 IS CS.  
FOR 16K MOS RAM PIN 13 IS AG.

REVISIONS		
CHK	CHANGE NO.	REV.



REV. A	0-8518W NUMBER M8158-0	DD CODE	B SIZE
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DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS																			
B-DD-M8158-0	1		MK11 ADDRESS BUFFER	* A																			
D-UA-M8158-0-0	6		MK11 ADDRESS BUFFER	A B																			
B-PL-M8158-0-0	3		MK11 ADDRESS BUFFER	A B																			
D-CS-M8158-0-1	10		MK11 ADDRESS BUFFER	A B																			
D-MD-5012647-0-0	5		DRILL & ETCH DRAWING	A B																			
		5012647	ETCHED BOARD	B C																			
M8158-0-L			P.C. DESIGN DATA BASE	REF																			

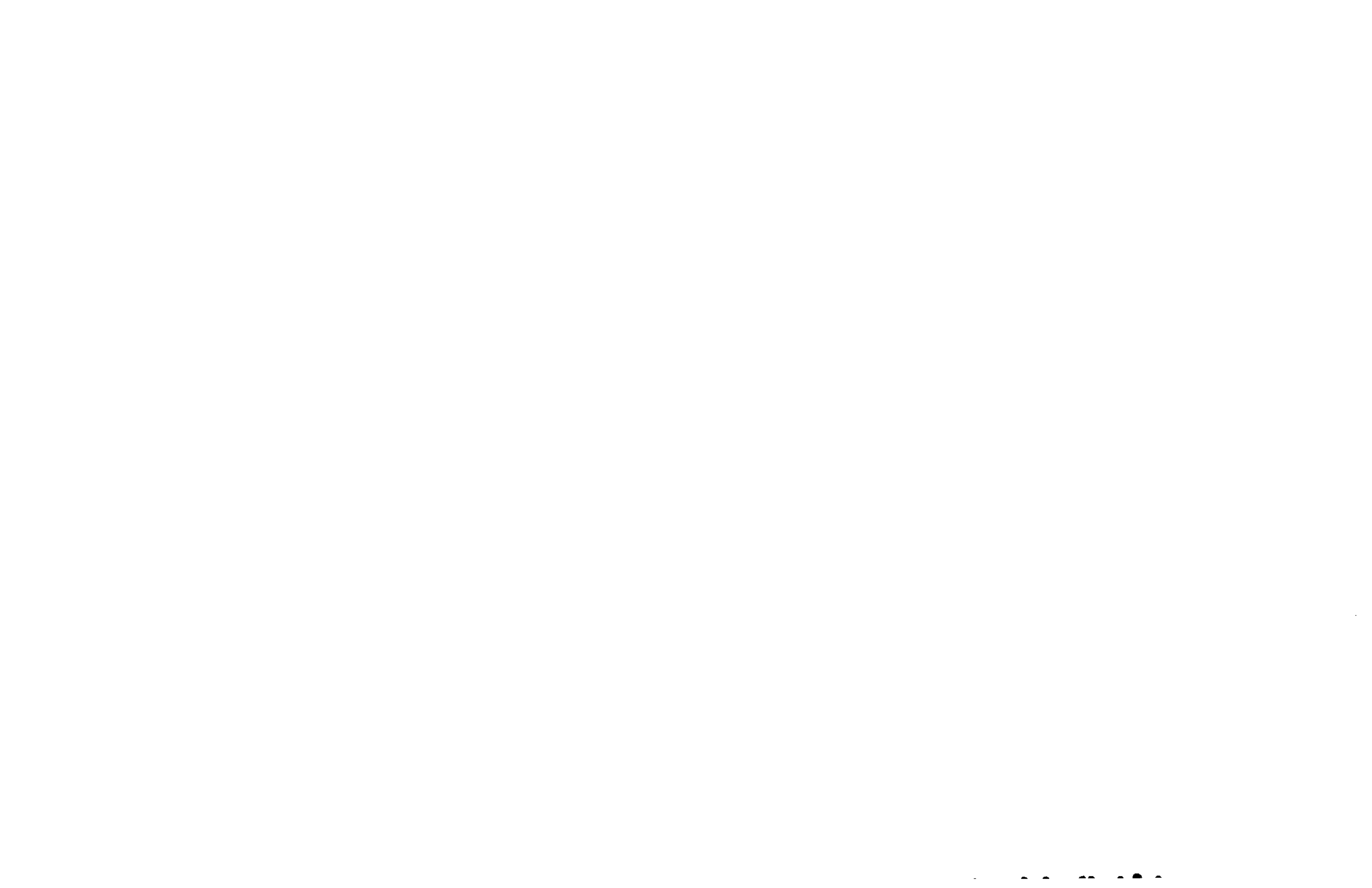
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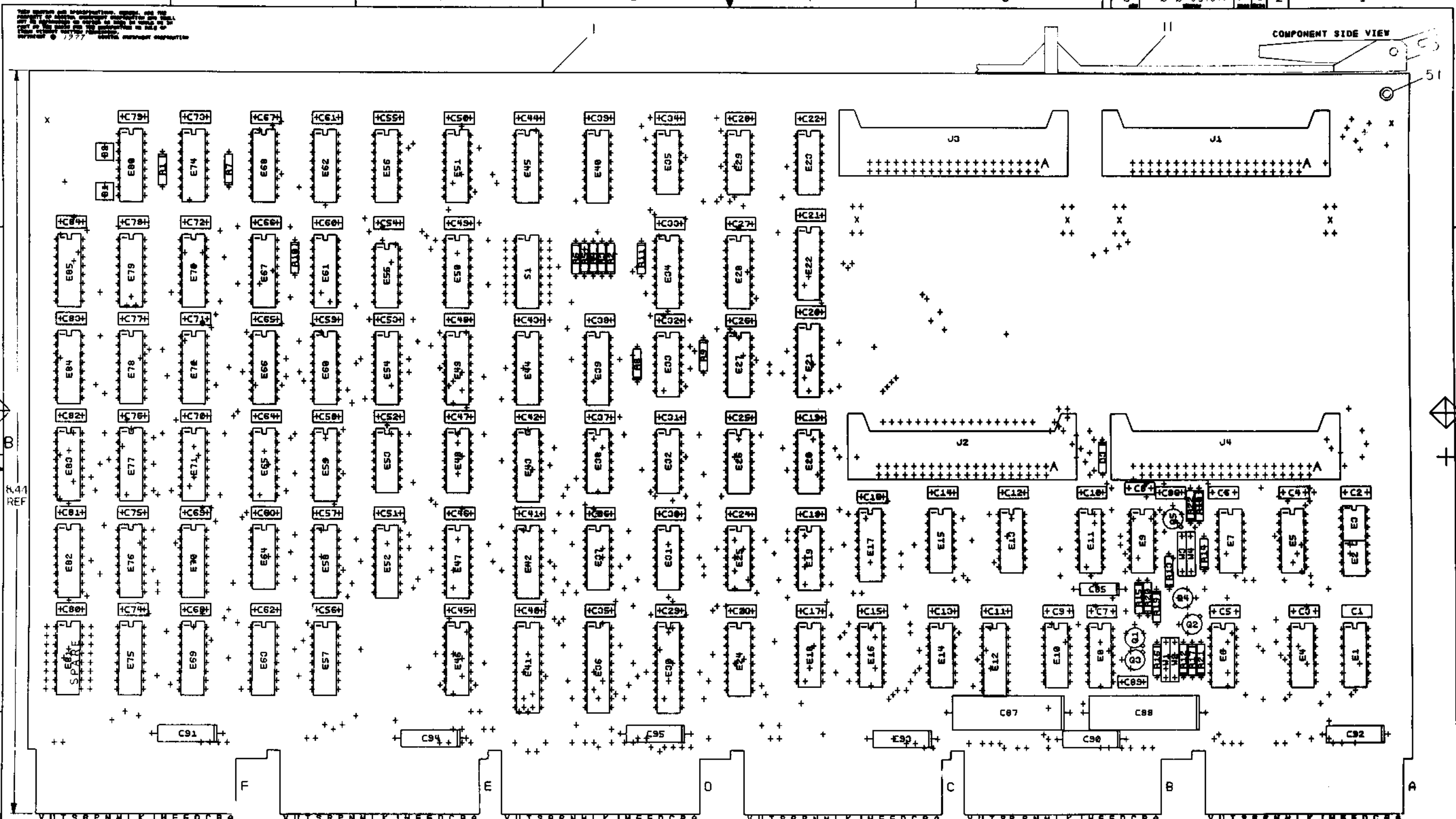
REVISIONS	DATE	CHG NO.	REV.																				
	2-25-78	-0000	A																				

USED ON OPTION/MODEL	DRN. LORA METZGER	OCT 13 '77	TITLE																				
MK11	CHK'D. <i>D. Boroman</i>	OCT 13, 1977	MK11 ADDRESS BUFFER																				
	ENG. <i>R. A. Hill</i>	OCT 26, 1977	SIZE CODE	B	DD	NUMBER	M8158-0	REV.	A														
	PROD. <i>R.A. Hill</i>	OCT 26 '77	SHEET	1	OF	1																	





COMPONENT SIDE VIEW



NOTES:  
 1. AT MODULE ASSEMBLY INSTALL  
 W1 & W3, NOT W2 & W4

CHG	NO	REV


SIGNATURES		DATE
DRN. <i>[Signature]</i>		11-23-79
CHK'D. <i>[Signature]</i>		11-23-79
ENG. <i>[Signature]</i>		11-23-79
PROJ. ENG. <i>[Signature]</i>		11-23-79
PROG.		
SCALE 2/1		
SHT. 1 OF 6		
NEXT HIGHER ASSY. B-DD-M8158-0		

digital	
TITLE MK11 ADDRESS BUFFER	
9128	COO#
0 UA M8158-0-0	NUMBER
B	REV

8

7

6

5

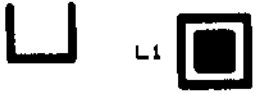
4

3

2 DUA M8158-0-0 B

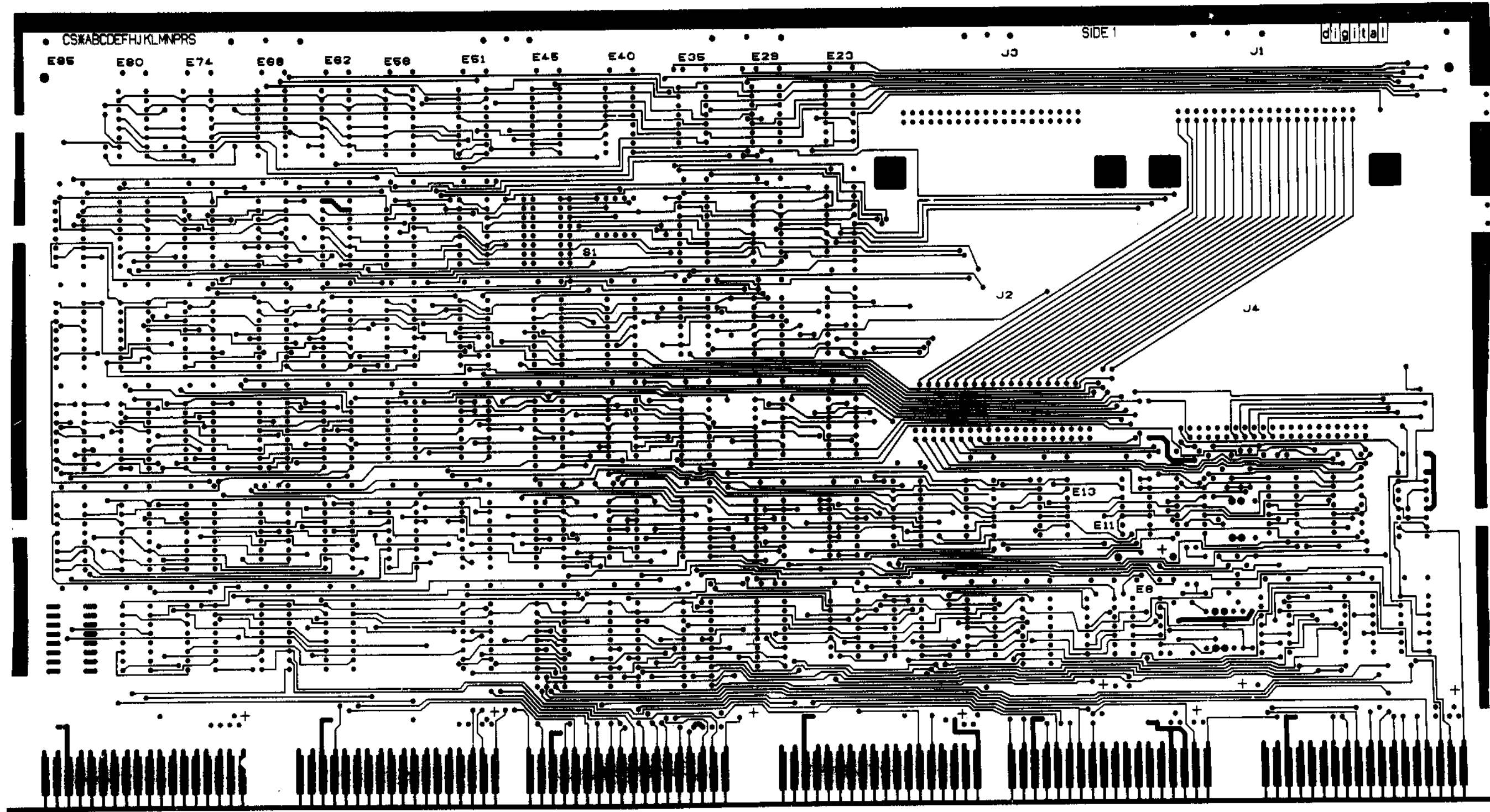
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M8158 5012647C-P1

# LAYER 1



REVISIONS		
CHK	CHANGE NO	REV

TITLE	MKII ADDRESS BUFFER	SIZE/CODE	DUA	NUMBER	M8158-0-0	REV.	B
SCALE	2/1	SHEET	2	OF	6	DIST.	

8

7

6

5

4

3

2

1

8

L2

7

6

5

4

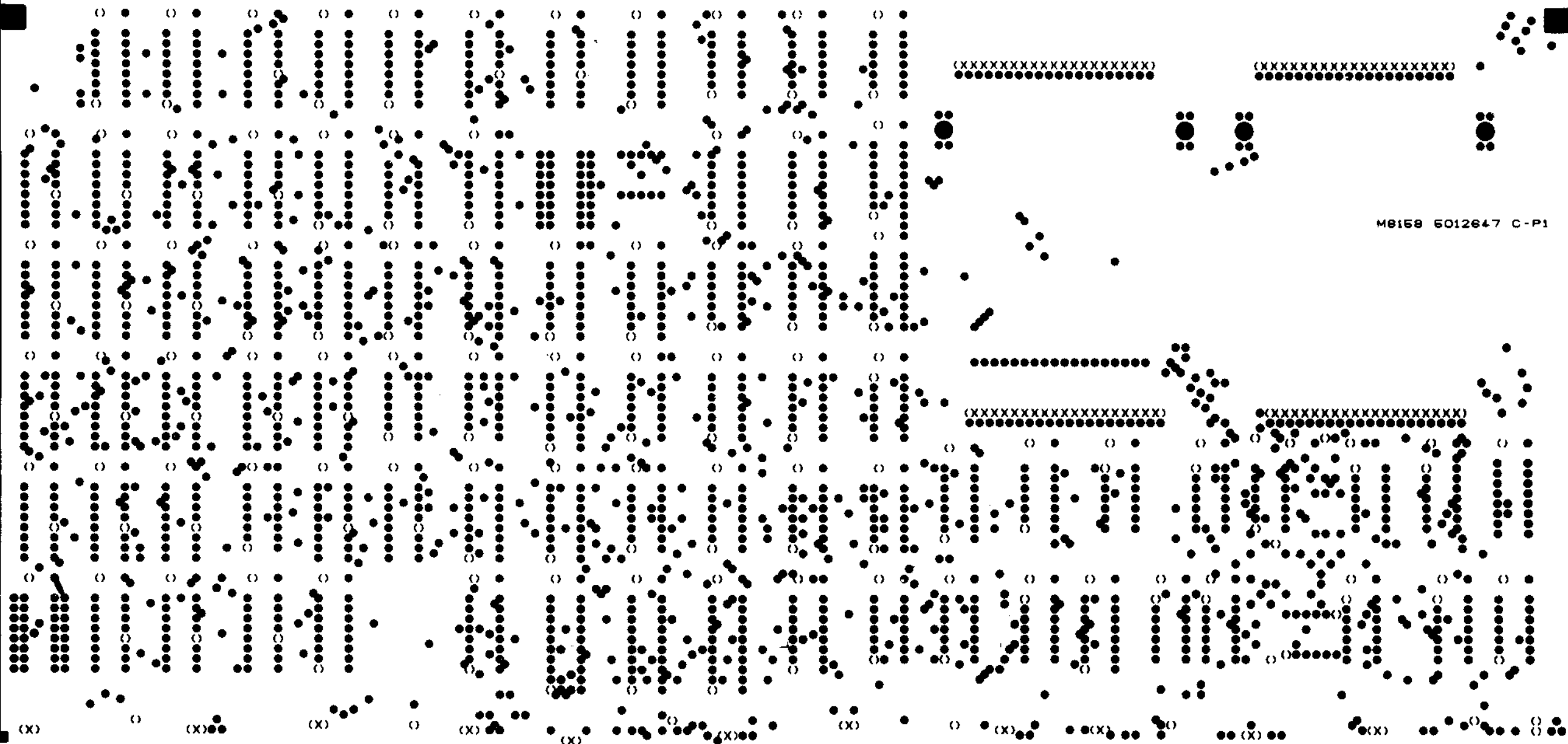
3

DUA M8158-0-0 2

1

©1978

LAYER 12



M8158 5012647 C-P1

REVISIONS		
CHK	CHANGE NO	REV

TITLE	MK11 ADDRESS BUFFER	SIZE CODE	DUA	NUMBER	M8158-0-0	REV.	B
SCALE	2/1	SHEET	3	OF	6	DIST.	

8

7

6

5

4

3

2

1

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M8158 5012647 C-P1

M8158 5012647C-P1 MK11 ADDRESS BUFFER SIDE 2

REVISIONS			TITLE	SIZE CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.				
			MK11 ADDRESS BUFFER	DUA	M8158-0-0	B
			SCALE 2/1	SHEET 4 OF 6	DIST.	

8

7

6

5

4

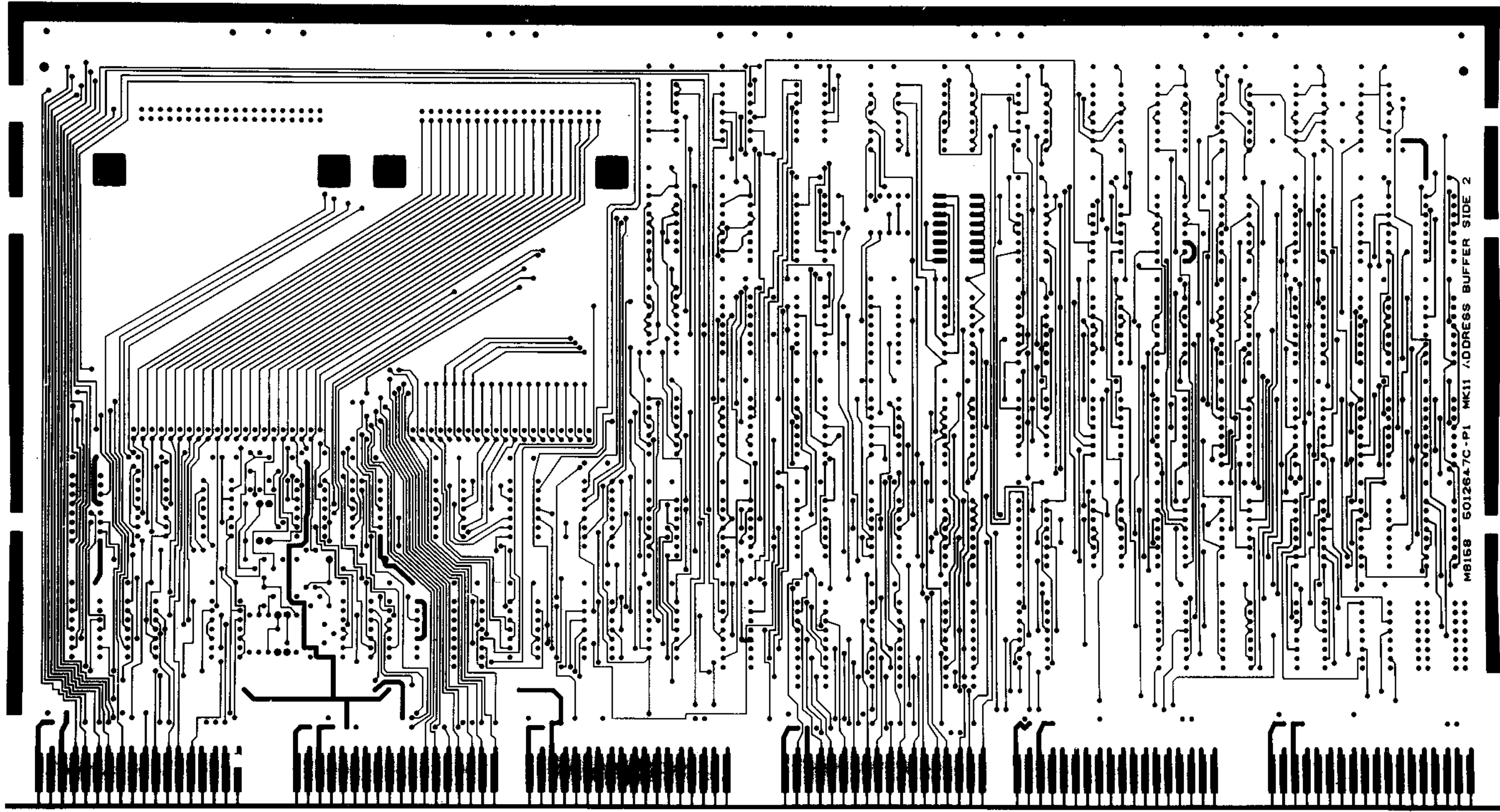
3

8 0-0-8518W DUA 2

1

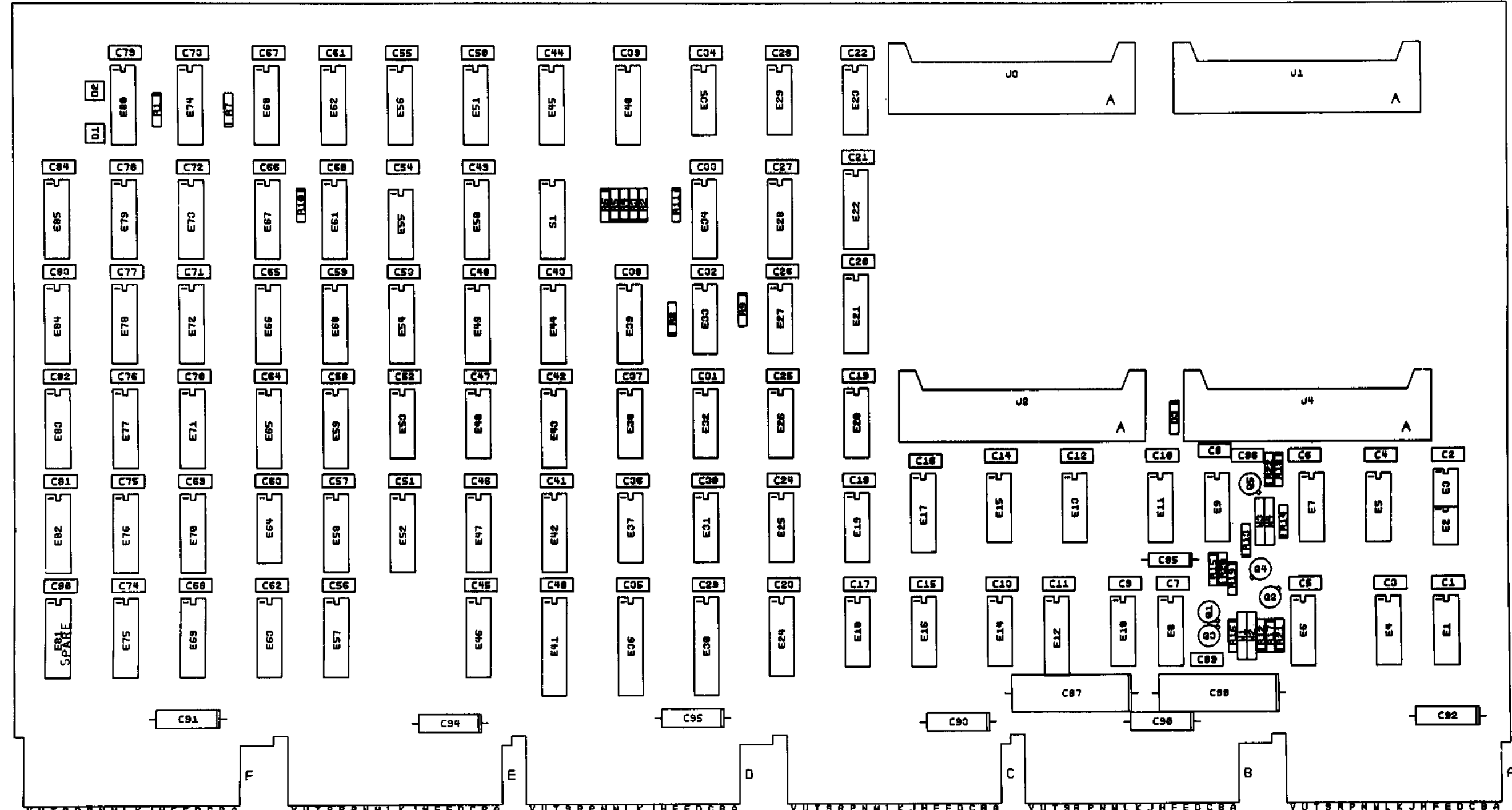
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4 A34AJ



..... M8158 501264-7C-P1 MK11 ADDRESS BUFFER SIDE 2

REVISIONS			TITLE		SIZE/CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.					
			MK11 ADDRESS BUFFER		DUA	M8158-0-0	B
			SCALE	2/1	SHEET	5 of 6	DIST.



VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

NOTES:

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CHANGE NO	REV

SIGNATURES		DATE	digital
DRN. <i>Henry F. Weinmann</i>		11-23-77	
CHK. <i>D.W. [unclear]</i>		11-30-77	TITLE MK11 ADDRESS BUFFER
ENG.			
PROJ. ENG.			
PROD.			SIZE CODE NUMBER REV d UAM8158-0-0 B
SCALE 2:1			
SHT. 6 OF 6			
NEXT HIGHER ASSY. B-DD-M8158-0			

# DIGITAL EQUIPMENT CORPORATION PARTS LIST

MADE BY DATE	JOAN ROGERS 19 APR 77	CHECKED DATE	S. TUTTLE 12 JUL 77
SECTION	1		
ENG DATE	D. H. Amaker 10/26/77	PROD DATE	R. A. Hill 26 Oct '77
ISSUED SECTION	1		

## QUANTITY / VARIATION

NOTES:

*USED ON: OPTION/MODEL  
MK11*

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	104690	QUANTITY	VARIATION	REF DESIGNATION
	D-CS-M8158-0-1		CIRCUIT SCHEMATIC	REF			
	D-UA-M8158-0-0		UNIT ASSEMBLY	REF			
	B-DD-M8158-0		DWG DIRECTORY	REF			
	D-MD-5012647-0-0		DRILL & ETCH DRAWING	REF			
1		5012647	ETCH BOARD		1		
2		1000064	CAP 3.9UF 10V, 10%	TANT	1		C85
3		1001610-01	CAP .01UF, 100V	DISK	84		C1 thru C84
4		1010274-00	CAP .22UF, 50V	CER	1		C89
5		1011683-00	CAP .022UF, 50V, 10%	CER	1		C86
6		1012084-01	CAP 8UF, 25V	AL	6		C90 thru C95
7		1012219-00	CAP 47UF, 30V	AL	2		C87, C88
8		1105275-00	DIODE D672		1		D3
9		1110324-00	DIODE LED		2		D1, D2
10		1209941-02	CONN 40 PIN		4		J1, J2, J3, J4
11		1210711-02	HANDLE (HEX)		1		
12		1211164-04	SWITCH (DIP) 8 POSITION		1		S1
13		1300250-00	RES 150, 1/4W, 5%	CC	1		R15
14		1300271-00	RES 220, 1/4W, 5%	CC	2		R1, R7
15		1300316-00	RES 470, 1/4W, 5%	CC	1		R8
16		1300426-00	RES 2.7K, 1/4W, 5%	CC	2		R9, R10
17		1300447-00	RES 4.7K, 1/4W, 5%	CC	6		R2, R3, R4, R5, R6, R11

E.C.O. NO. 10000

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		SHEET 1 OF 3	INSERTION PARTS LIST DATA BASE REV			

# DIGITAL EQUIPMENT CORPORATION PARTS LIST

MADE BY DATE	JOAN ROGERS 19 APR 77	CHECKED DATE	S. TUTTLE 12 JUL 77
SECTION	1		
ENG DATE	D. W. [Signature] 10/26/77	PROD DATE	R. A. Hill 26 OCT '77
ISSUED SECTION	1		

## QUANTITY / VARIATION

NOTES:

*USED ON: OPTION/MODEL  
MK11*

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	104690	REF DESIGNATION
18		1300479-00	RES 10K. 1/4W, 5% CC	1	R28
19		1301424-00	RES 680, 1/4W, 5% CC	2	R17, R18
20		1302388-00	RES 2K 1/4W, 5% CC	2	R21, R22
21		1302391-00	RES 20K. 1/4W, 5% CC	2	R12, R14
22		1303177-00	RES 2.4K, 1/4W, 5% CC	2	R19, R16
23		1503409-00	TRANS. DEC 6534D PNP	2	Q2, Q4
24		1509338-00	TRANS. DEC 6531B NPN	3	Q1, Q3, Q5
25		1300385-00	RES 1K 1/4W, 5% CC	1	R13
26		1909932-01	DEC I.C. 7483A	10	E58, E69, E78, E72, E73, E76, E77, E79, E83, E84
27		1909955-00	DEC I.C. 7412	1	E33
28		1912819-00	DEC I.C. 74LS42	1	E39
29		1910091-00	DEC I.C. 7437	2	E55, E23
30		1912828-00	DEC I.C. 74LS85	1	E44
31		1910532-00	DEC I.C. 74S00	1	E38
32		1910534-00	DEC I.C. 74S04	6	E29, E31, E35, E48, E53, E64
33		1910542-00	DEC I.C. 74S64	2	E26, E37
34		1910544-00	DEC I.C. 74S74	2	E25, E27
35		1910547-00	DEC I.C. 74S153	7	E21, E22, E24, E28, E50, E54, E61
36		1910548-00	DEC I.C. 74S157	1	E34
37		1910549-00	DEC I.C. 74S158	1	E47
38		1910645-00	DEC I.C. 75452	2	E2, E3

E.C.O. NO.

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TITLE  
**MK11 ADDRESS BUFFER**

ASSY NO.  
D-UA-M8156-0-0

SIZE CODE  
**B PL**

NUMBER  
M8158-0-0

REV.  
**B**

SHEET 2 OF 3

INSERTION PARTS LIST DATA BASE REV



DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:						
MADE BY DATE		JOAN ROGERS 19 APR 77		CHECKED DATE		S. TUTTLE 12 JUL 77		SECTION 1												USED ON: OPTION/MODEL MK11
ENG DATE		D. M. [Signature] 10/26/77		PROD DATE		R.A. Hill 26 OCT '77		ISSUED SECTION 1												
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	104690													REF DESIGNATION			
39		1910878-00	DEC I.C. 7427	1													E18			
40		1910956-00	DEC I.C. 74S151	2													E4Ø, E6Ø			
41		1911469-00	DEC I.C. 8640	10													E4, E5, E6, E7, E8, E11, E13, E14, E2Ø, E1Ø			
42		1911573-00	DEC I.C. 74S280	4													E9, E15, E16, E19			
43		1911641-00	DEC I.C. 74S257	2													E46, E57			
44		1911983-00	DEC I.C. 74S133	1													E17			
45		1912125-00	DEC I.C. 74S135	1													E12			
46		1912388-00	DEC I.C. 74S02	2													E1, E32			
47		1912827-00	DEC I.C. 74LS83	13													E45, E51, E52, E59 E63, E65, E67, E68, E71, E75, E78, E82, E85			
48		1912844-00	DEC I.C. 74LS151	3													E42, E43, E66			
49		1912845-00	DEC I.C. 74LS153	5													E49, E56, E62, E74, E8Ø			
50		1913462-00	DEC I.C. 74S240	3													E3Ø, E36, E41			
51		9000024-01	EYELET (HANDLE)	12																
			I.C. SPARE	REF													E 81			
52		9009135-00	JUMPER WIRE WHITE INSULATION	A/R													W1, W2, W3, W4			

E.C.O. NO.

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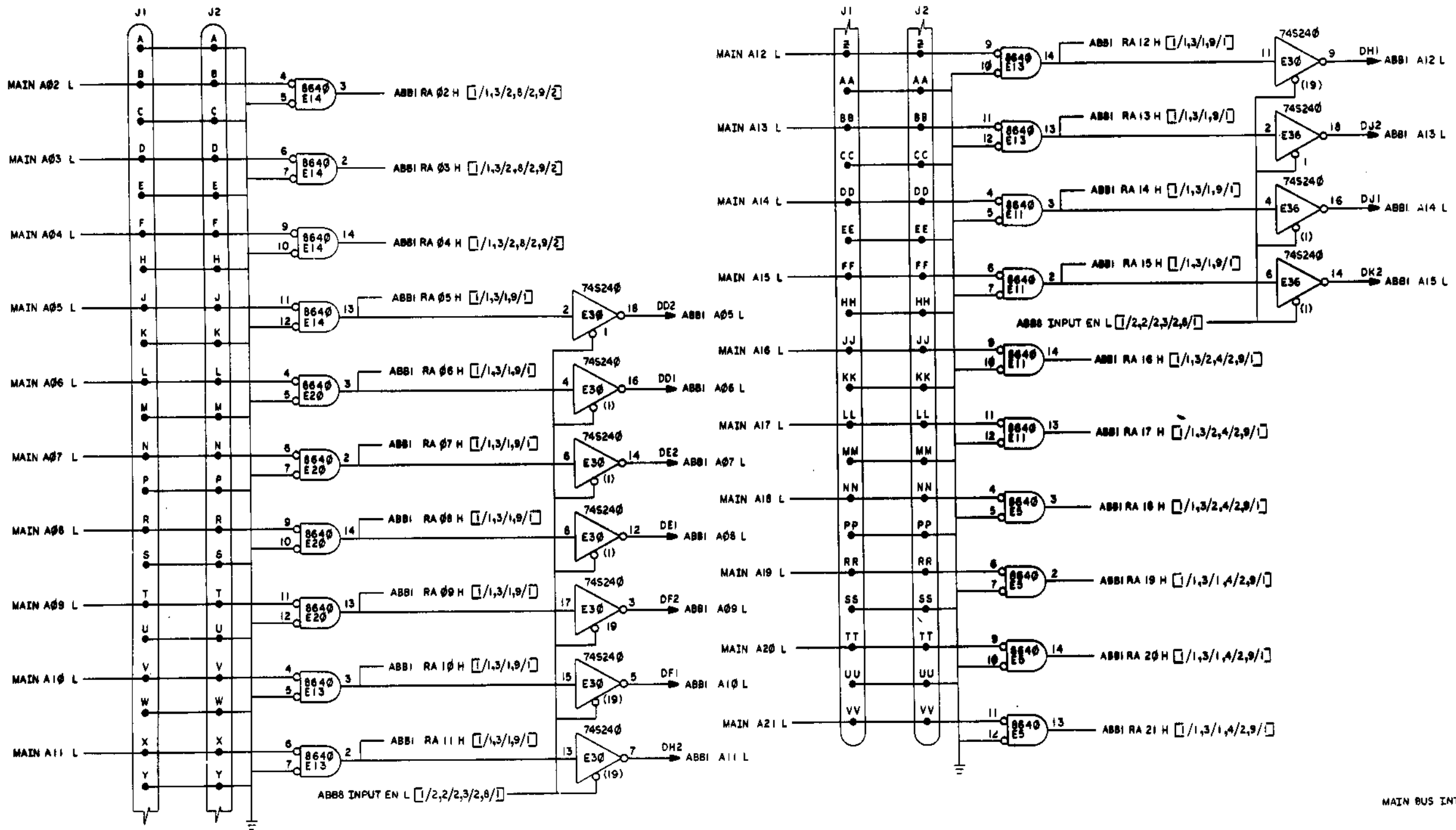
TITLE  
MK11 ADDRESS BUFFER

ASSY NO.  
D-UA-M8158-0-0  
SHEET 3 OF 3

SIZE B	CODE PL	NUMBER M8158-0-0	REV. B
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INSERTION PARTS LIST DATA BASE REV

1977

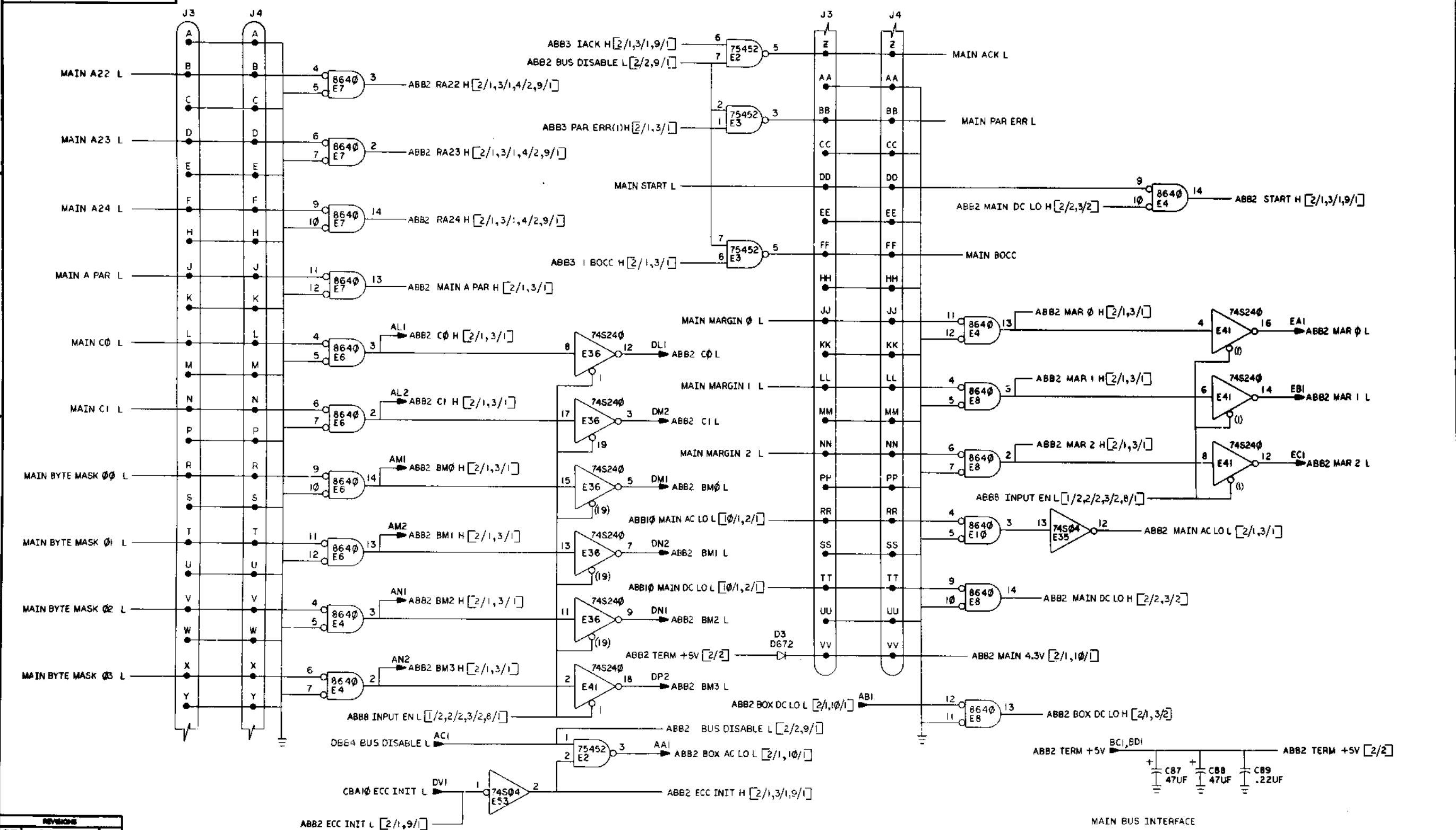


MAIN BUS INTERFACE

DESIGNED BY	DATE
CHECKED BY	DATE
ENG. NO.	REV.
PROJ. NO.	REV.
PROD. R. D. / H. I. / 10-26-77	
NEXT HIGHER ASSY.	
B-DD-M8158-0	
SCALE	
SHEET	

DRN. /	7-26-77	PRINT NUMBER	00-0000
CHKD. /	8-3-77	TITLE	MKII ADDRESS BUFFER (ABB1)
ENG. /	10-3-77	SCALE	D CS M8158-0-1
PROJ. ENG. /	10-3-77	REV.	B
PROD. R. D. / H. I. / 10-26-77			
NEXT HIGHER ASSY.			
B-DD-M8158-0			
SCALE			
SHEET			

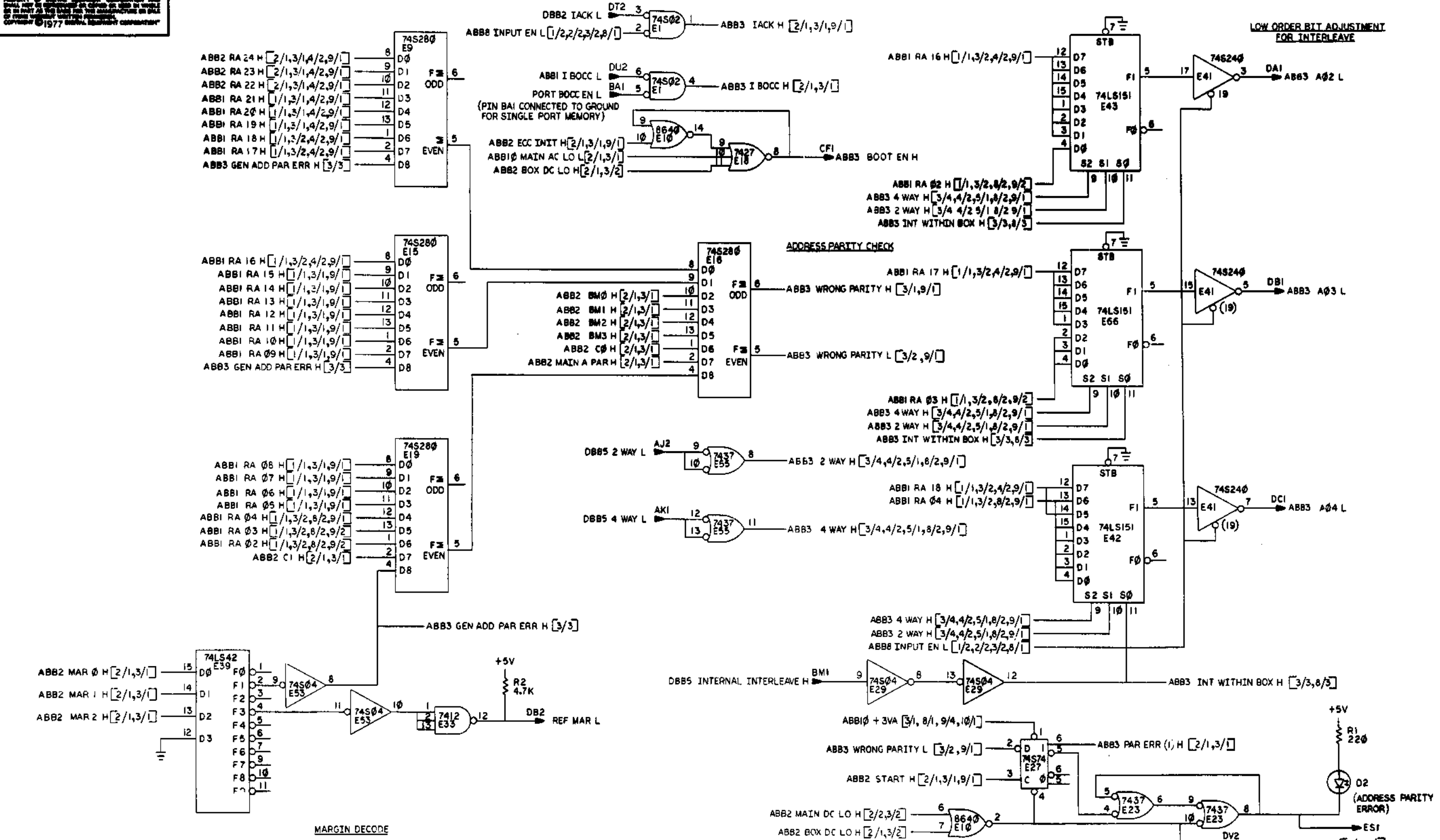
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB2)	SIZE CODE	NUMBER	REV.
MK11 ADDRESS BUFFER	D	CS	M8158-0-1	B
SCALE	SHEET	2 OF 10	DIST.	

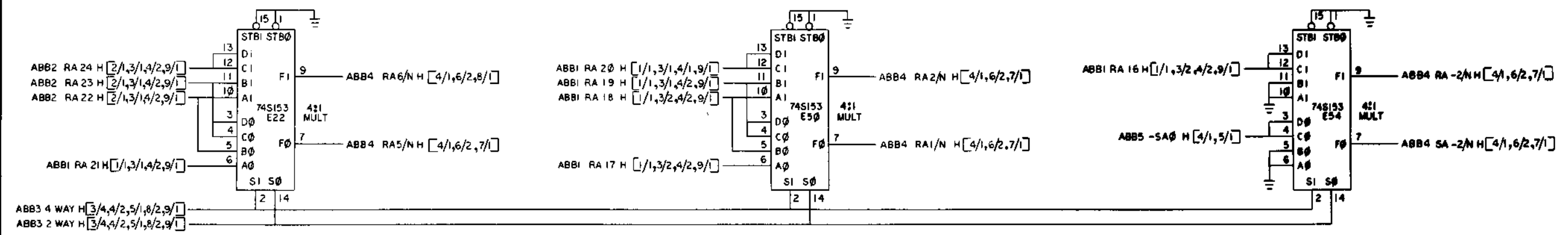
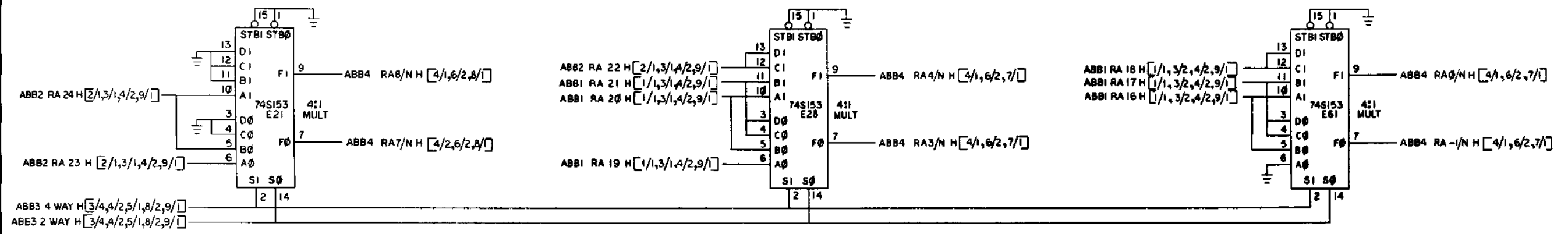
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB3)	SIZE CODE	NUMBER	REV.
MKII ADDRESS BUFFER		D CS	M8158-0-1	
SCALE		SHEET	3 OF 10	

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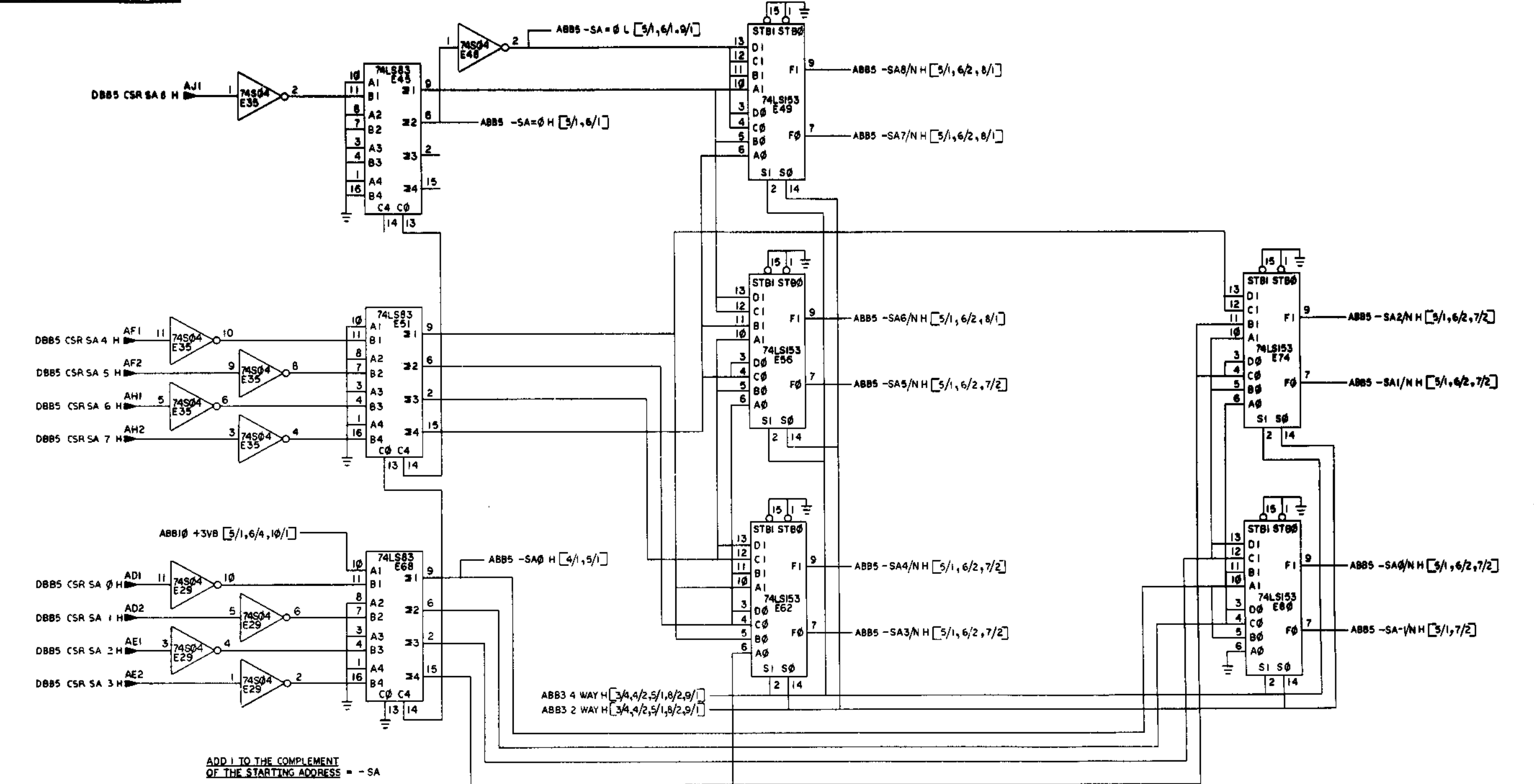


DIVIDE RAW (MAIN BUS) ADDRESS BY THE NUMBER OF WAYS EXTERNALLY INTERLEAVED

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB4)	SIZE CODE	NUMBER	REV.
MKII ADDRESS BUFFER	D/CS	M8158-0-1	B	
SCALE	SHEET	4 OF 10	DMT.	

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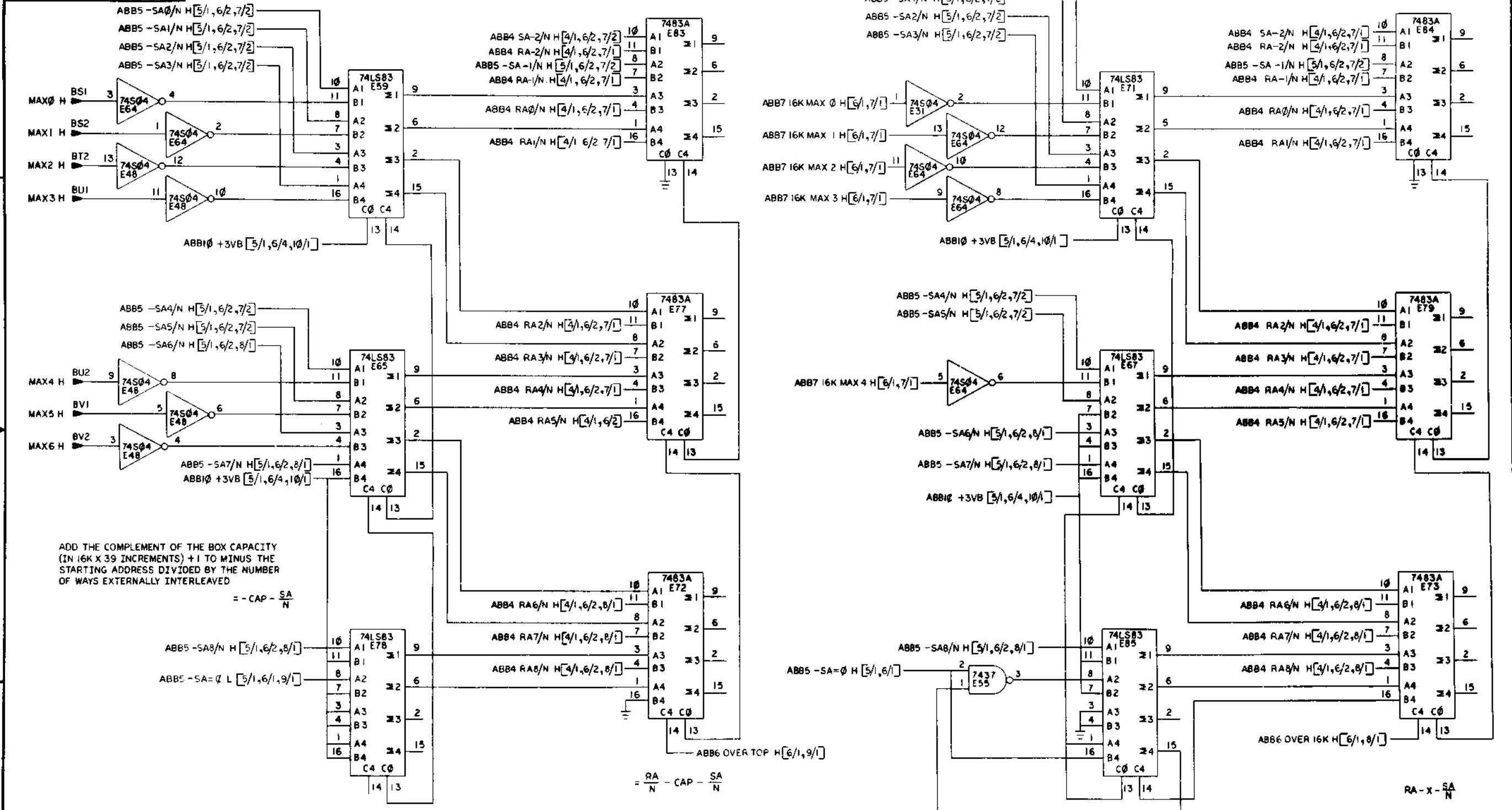
ADD 1 TO THE COMPLEMENT OF THE STARTING ADDRESS = - SA

DIVIDE - SA BY THE NUMBER OF WAYS EXTERNALLY INTERLEAVED = - SA / N

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB5)	SIZE/CODE	NUMBER	REV.
MKII ADDRESS BUFFER	D/CS	M8158-0-1	8	
SCALE	SHEET	5 OF 10	DIST.	

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ADD THE COMPLEMENT OF THE BOX CAPACITY (IN 16K X 39 INCREMENTS) + 1 TO MINUS THE STARTING ADDRESS DIVIDED BY THE NUMBER OF WAYS EXTERNALLY INTERLEAVED

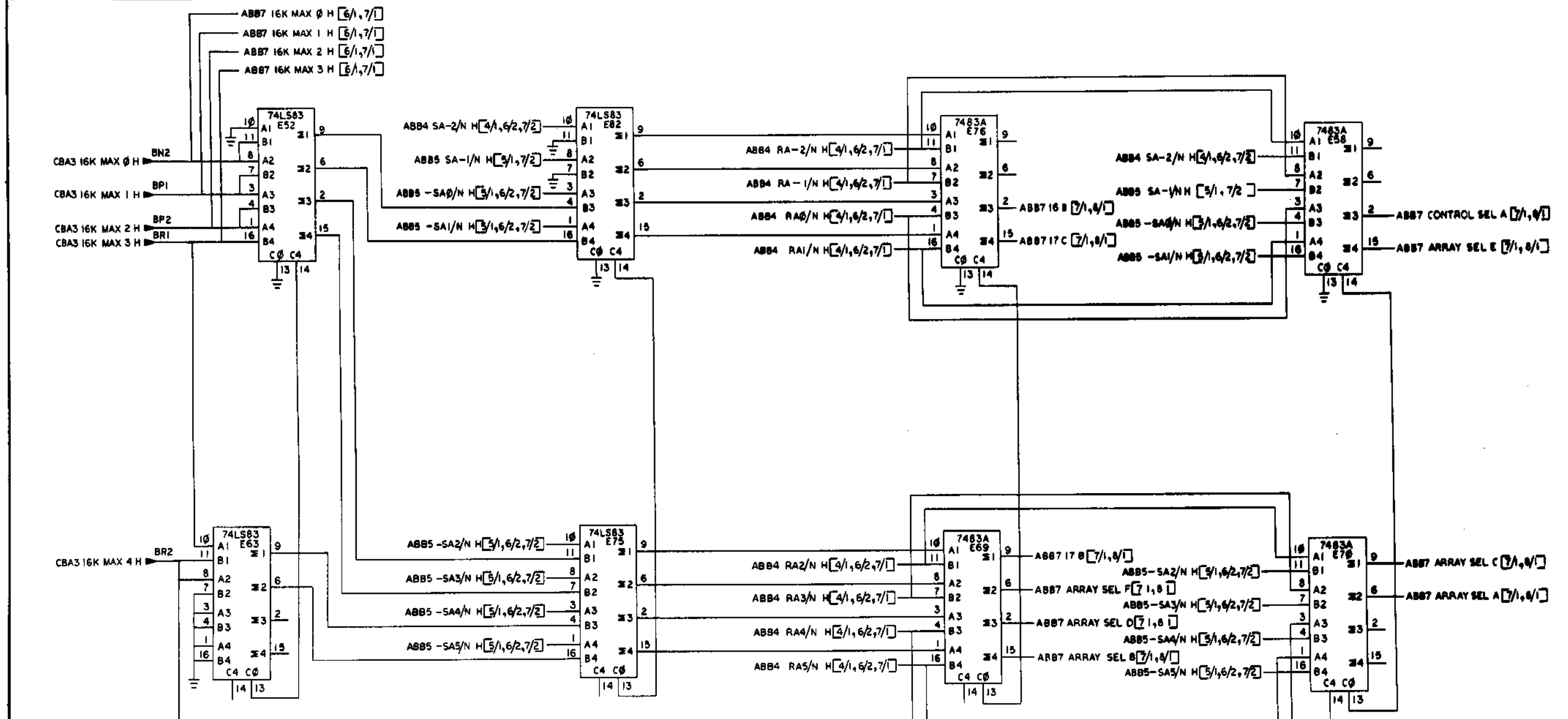
$$= -CAP - \frac{SA}{N}$$

ADD THE COMPLEMENT OF THE NUMBER OF 16K X 39 ARRAY (X) CARDS + 1 TO MINUS THE STARTING ADDRESS DIVIDED BY THE NUMBER OF WAYS EXTERNALLY INTERLEAVED = -X - SA/N

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB6) SIZE CODE	NUMBER	REV.
MKII ADDRESS BUFFER	D CS	M8158-01	B
SCALE	SHEET	6 OF 10	DIST.

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MULTIPLY NUMBER OF 16K X 39 ARRAYS IN BOX BY 3 - 3X

ADD 3X TO MINUS STARTING ADDRESS DIVIDED BY NUMBER OF WAYS EXTERNALLY INTERLEAVED =  $3X - \frac{SA}{N}$

ADD  $3X - \frac{SA}{N}$  TO RAW ADDRESS DIVIDED BY NUMBER OF WAYS EXTERNALLY INTERLEAVED =  $\frac{RA}{N} + 3X - \frac{SA}{N}$

ADD MINUS STARTING ADDRESS DIVIDED BY N TO RAW ADDRESS DIVIDED BY N =  $\frac{RA}{N} - \frac{SA}{N}$

REVISIONS		
CHK	CHANGE NO.	REV.

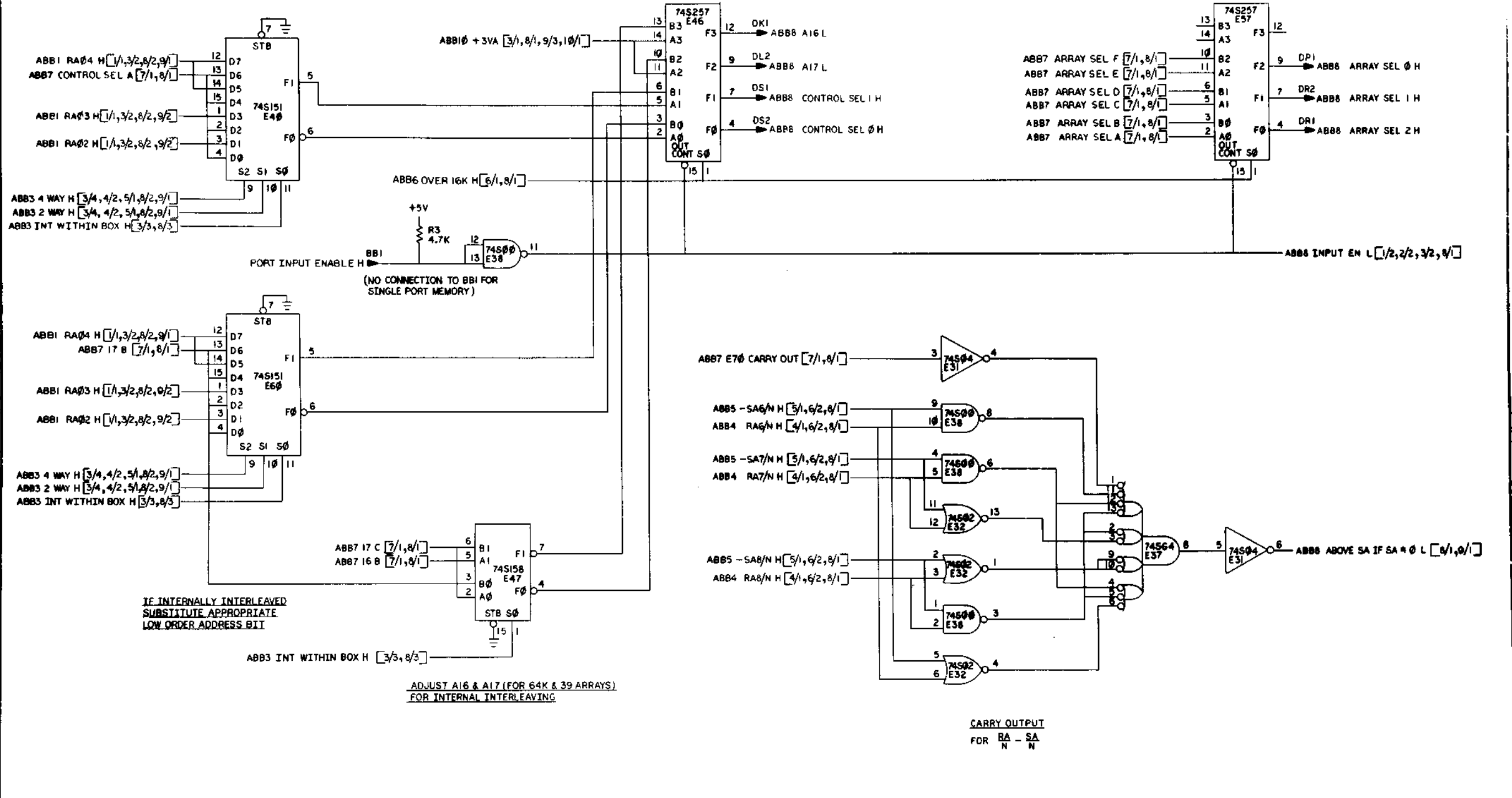
TITLE	(ABB7)	SIZE/CODE	NUMBER	REV.
MKII ADDRESS BUFFER	D/CS	M8158-0-1	B	
SCALE	SHEET	7 OF 10	DWT.	



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1-0-8918W SC 2

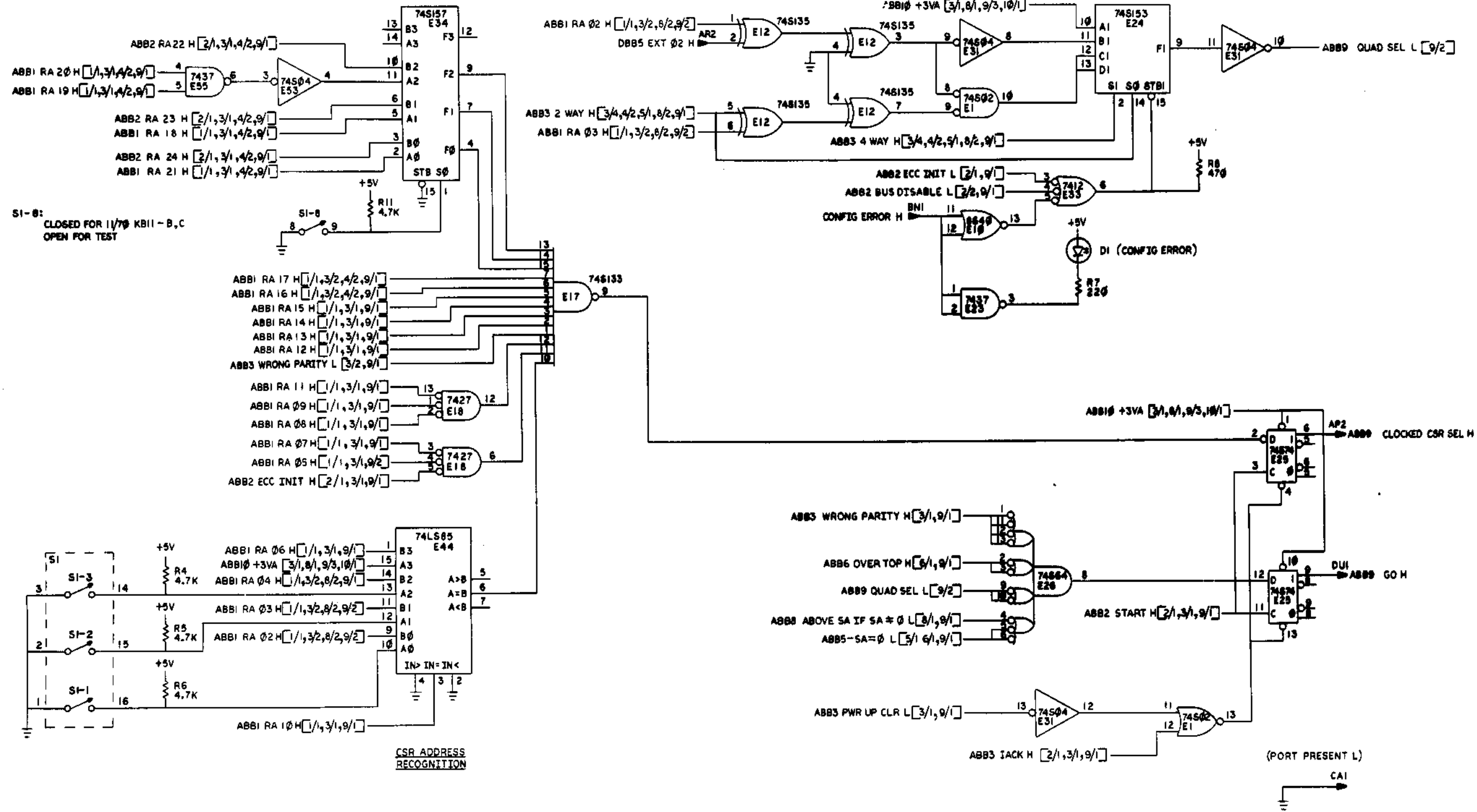
OUTPUT BOX NORMALIZED ADDRESS FOR CONTROLLER & ARRAY SELECTION



REV.	CHK.	CHANGE NO.	REV.	TITLE	SIZE/COOD.	NUMBER	REV.
				MKII ADDRESS BUFFER	D CS	M8158-0-1	
				SCALE	SHEET	8 OF 10	DWT.

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LOW ORDER ADDRESS SELECTION FOR EXTERNAL INTERLEAVE



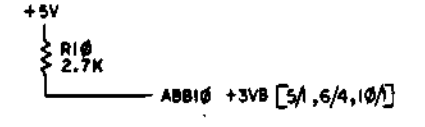
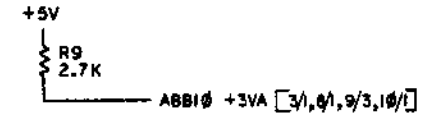
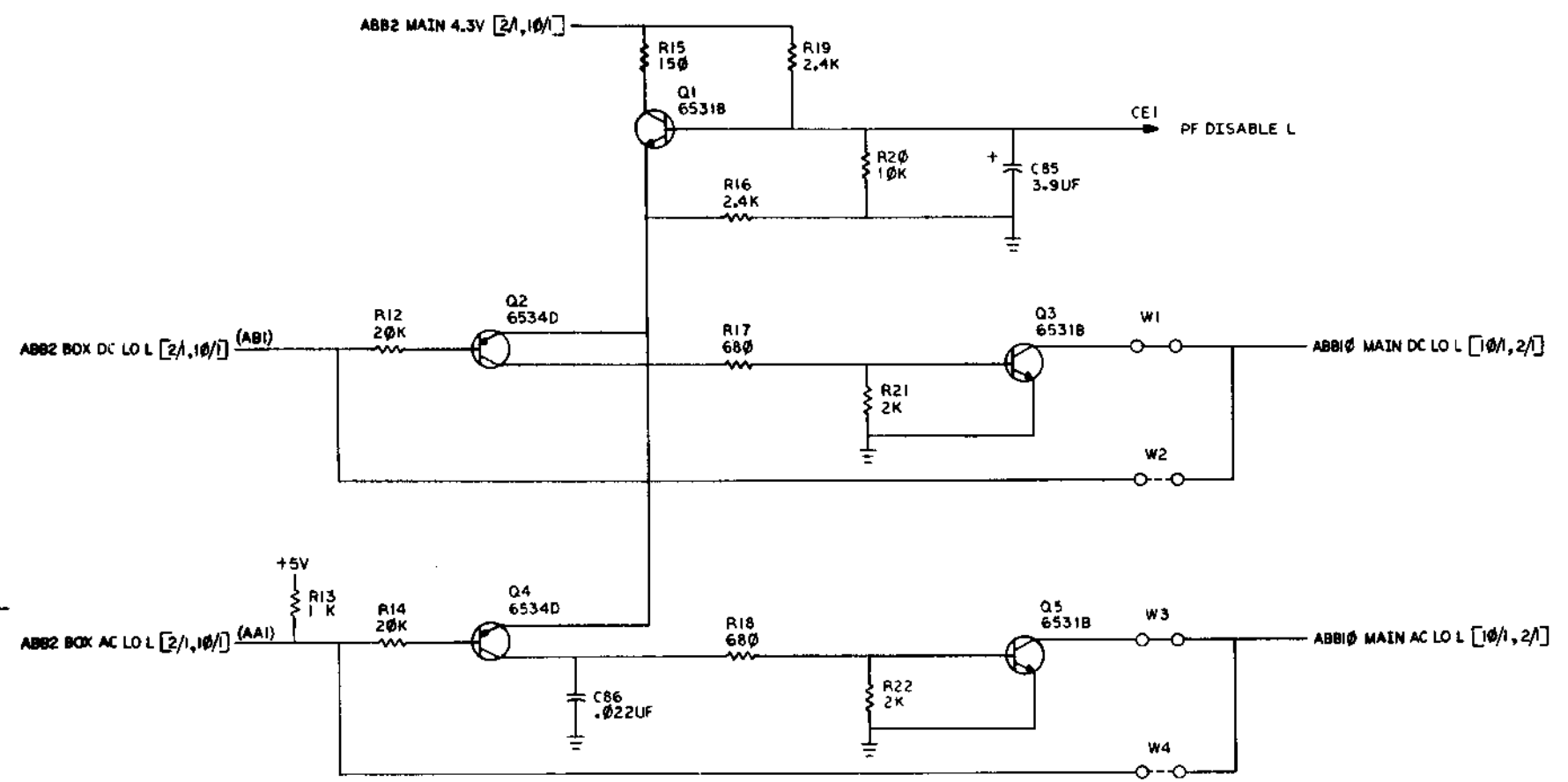
SI-8:  
CLOSED FOR 1/179 KB11-B,C  
OPEN FOR TEST

CSR ADDRESS RECOGNITION

REV.	CHANGE NO.	DATE

TITLE	(ABB9)	SIZE CODE	NUMBER	REV.
MK11 ADDRESS BUFFER	DCS	M8158-01	B	
SCALE	SHEET 9 OF 10	DWT.		

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SPARES

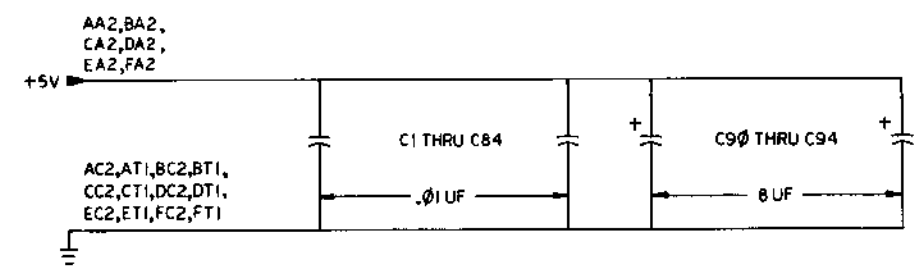
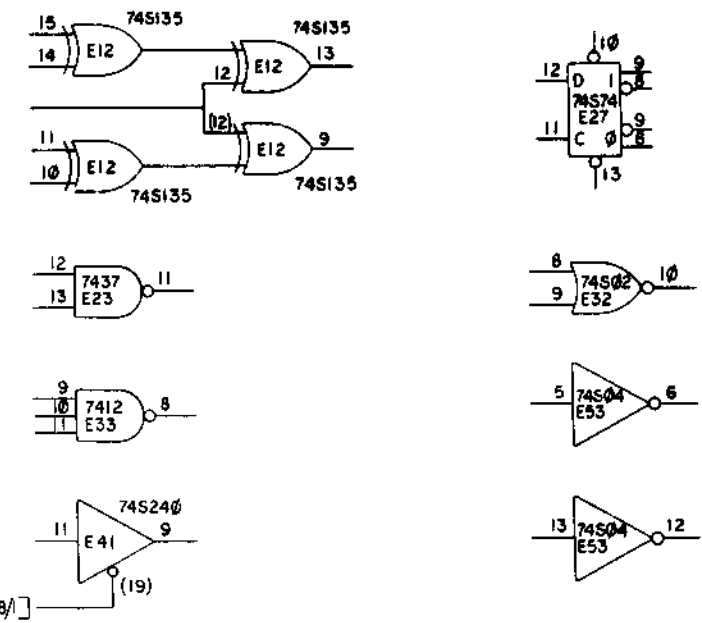


ABB0 INPUT EN L [1/2, 2/2, 3/2, 8/1]

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(ABB10)	SIZE CODE	NUMBER	REV.
MK11 ADDRESS BUFFER	D CS	M8158-0-1	B	
SCALE	SHEET	10	OF	10
	DIST.			



DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS																		
				1	2	3	4	5	6	7	8	9	10	11	12							
B-DD-M8159-0	1		MK11 DATA BUFFER	*	A	B																
D-UA-M8159-0-0	7		MK11 DATA BUFFER																			
K-PL-M8159-0-DBP	2		MK11 DATA BUFFER		c	D	E															
D-CS-M8159-0-1	15		MK11 DATA BUFFER		c	D	E															
D-MD-5012664-0-0	5		DRILL & ETCH DRAWING		c	D	D															
		5012664	ETCHED BOARD		D	E	E															
K-PC-M8159-0-DBC			P.C. DESIGN DATA BASE		REF	E	-															

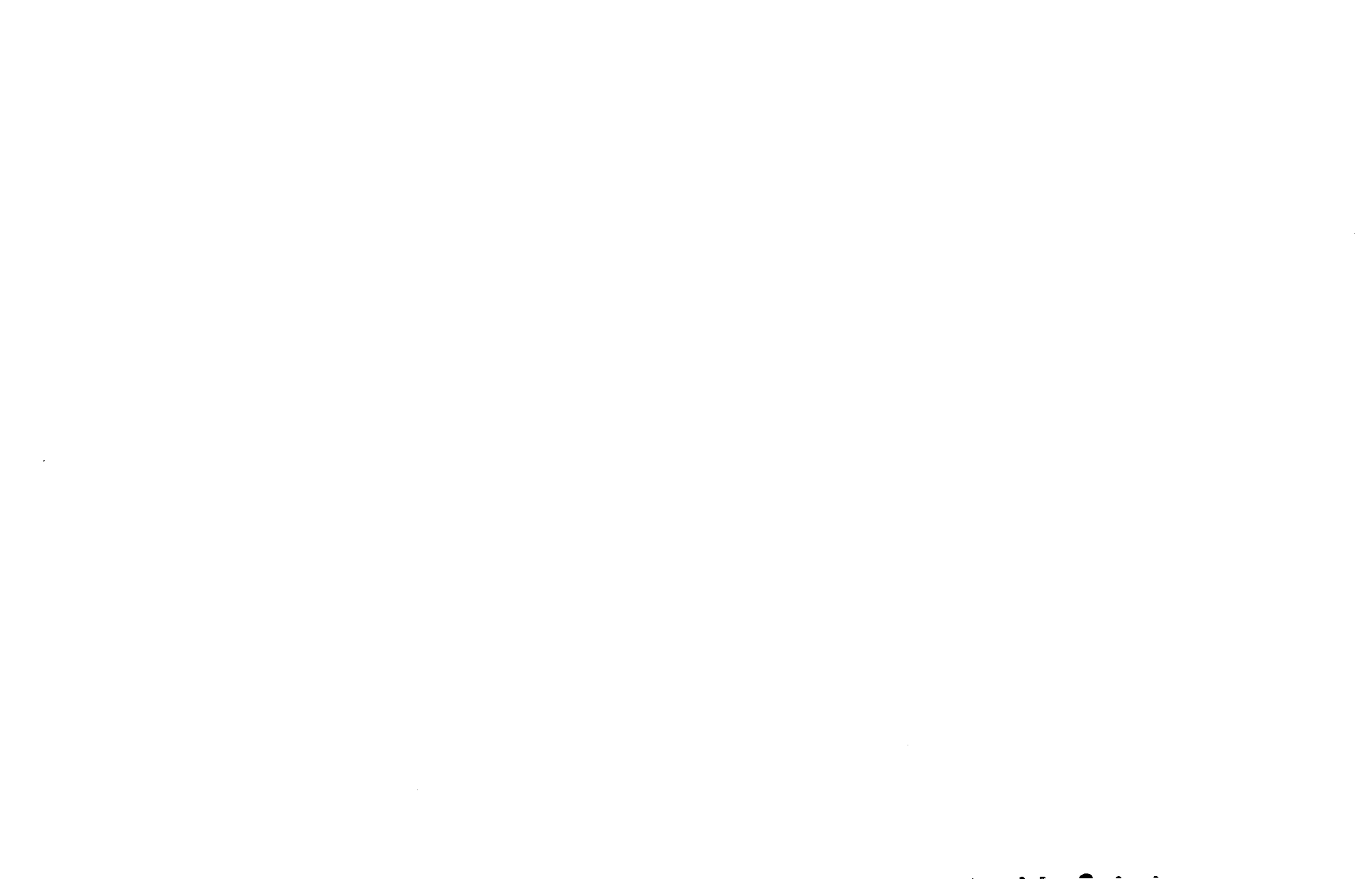
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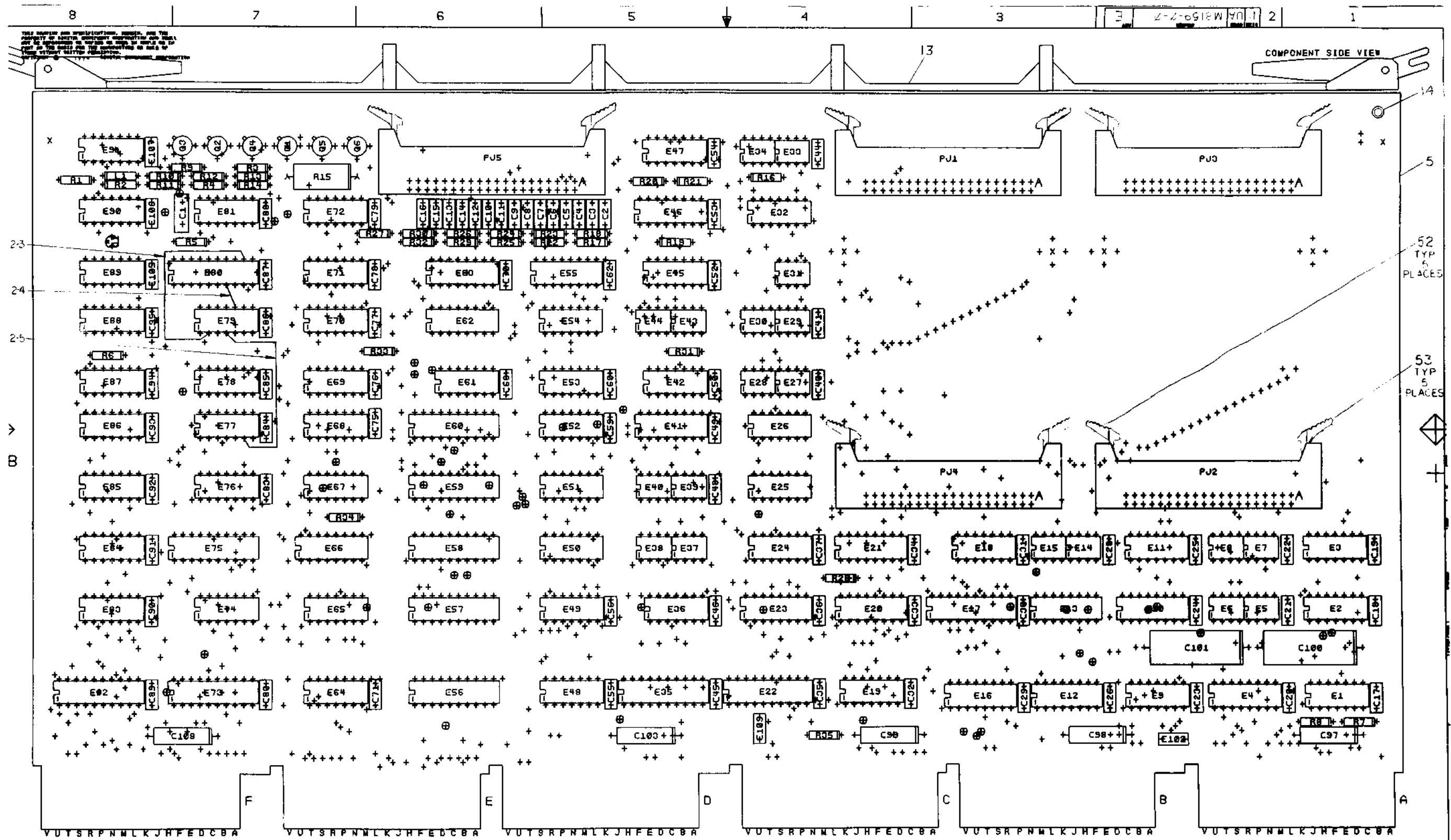
REVISIONS		DATE	CHG NO.	REV.	DESCRIPTION
	ORIG				
4-78	00001			A	
7-78	00002			B	

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USED ON OPTION/MODEL MK11	DRN. LORA METZGER	OCT 13, 77	TITLE MK11 DATA BUFFER
	CHK'D <i>[Signature]</i>	OCT 13, 77	
	ENG. <i>[Signature]</i>	11-2-77	SIZE CODE B DD
	PROD. R.A. Hill	NOV 2, 77	NUMBER M8159-0
			REV. B
			SHEET 1 OF 1





NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

2. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

4. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

5. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

CHANGE NO	REV	DATE	BY	CHK'D	REVISION
1	D				
2					
3					
4					
5					

ETCH REV. E-P2	
P.C. DESIGN DATA BASE REV. EL2, EM2	

SIGNATURES		DATE
DRN.		
CHK'D.		
ENC.		
PROJ. ENC.		
PRD.		
SCALE 2:1		
SHT. 1 OF 1		
NEXT HIGHER ASSY. E-00-M8159-2		

digital	
TITLE MK II DATA BUFFER	
SIZE CODE	NUMBER
D UA M8159-0-0	REV E

# LAYER 1

5012864E-P2 M8159

2.1 2.0

digital

SIDE 1

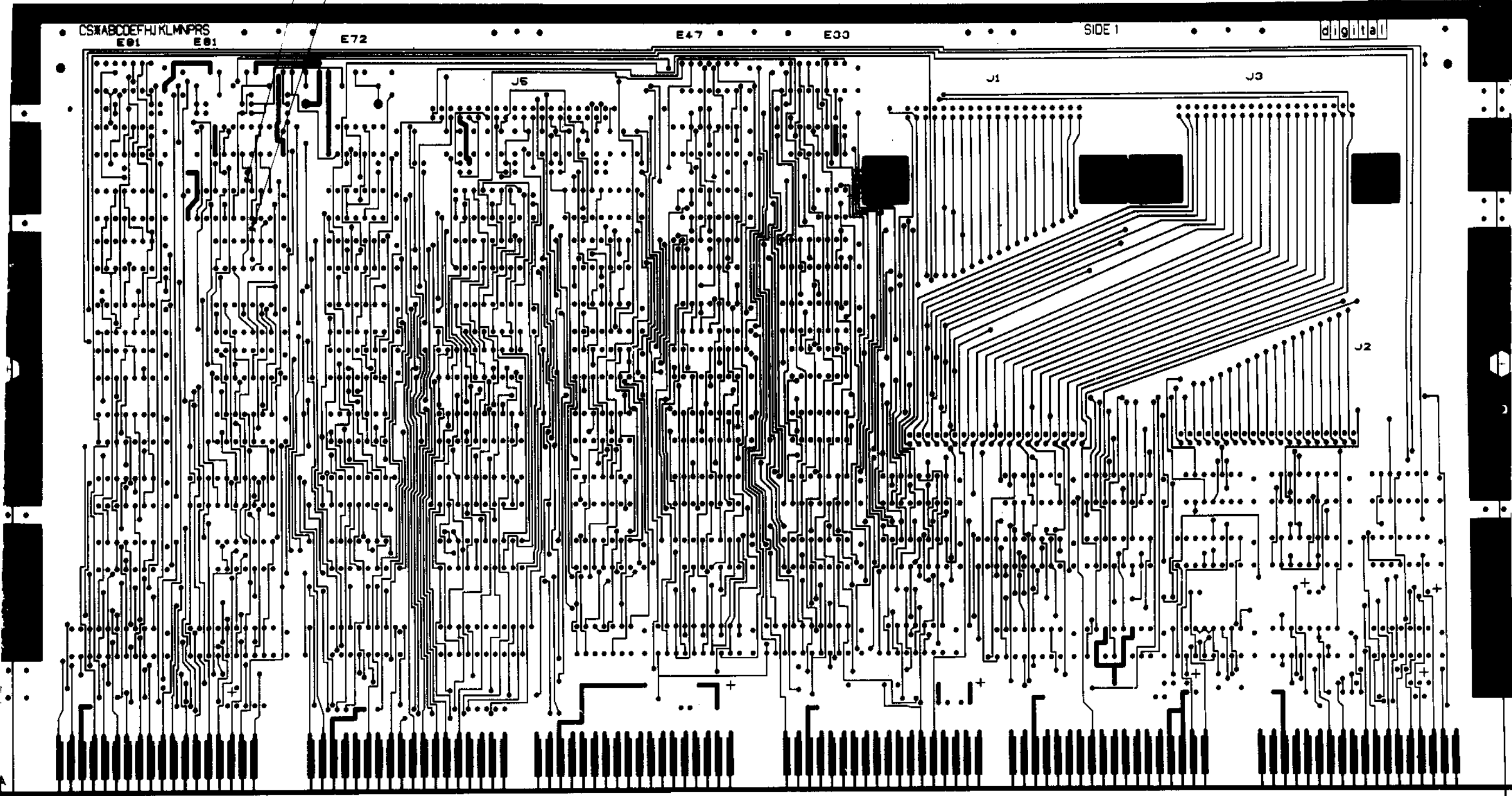
E30

E47

E72

E81

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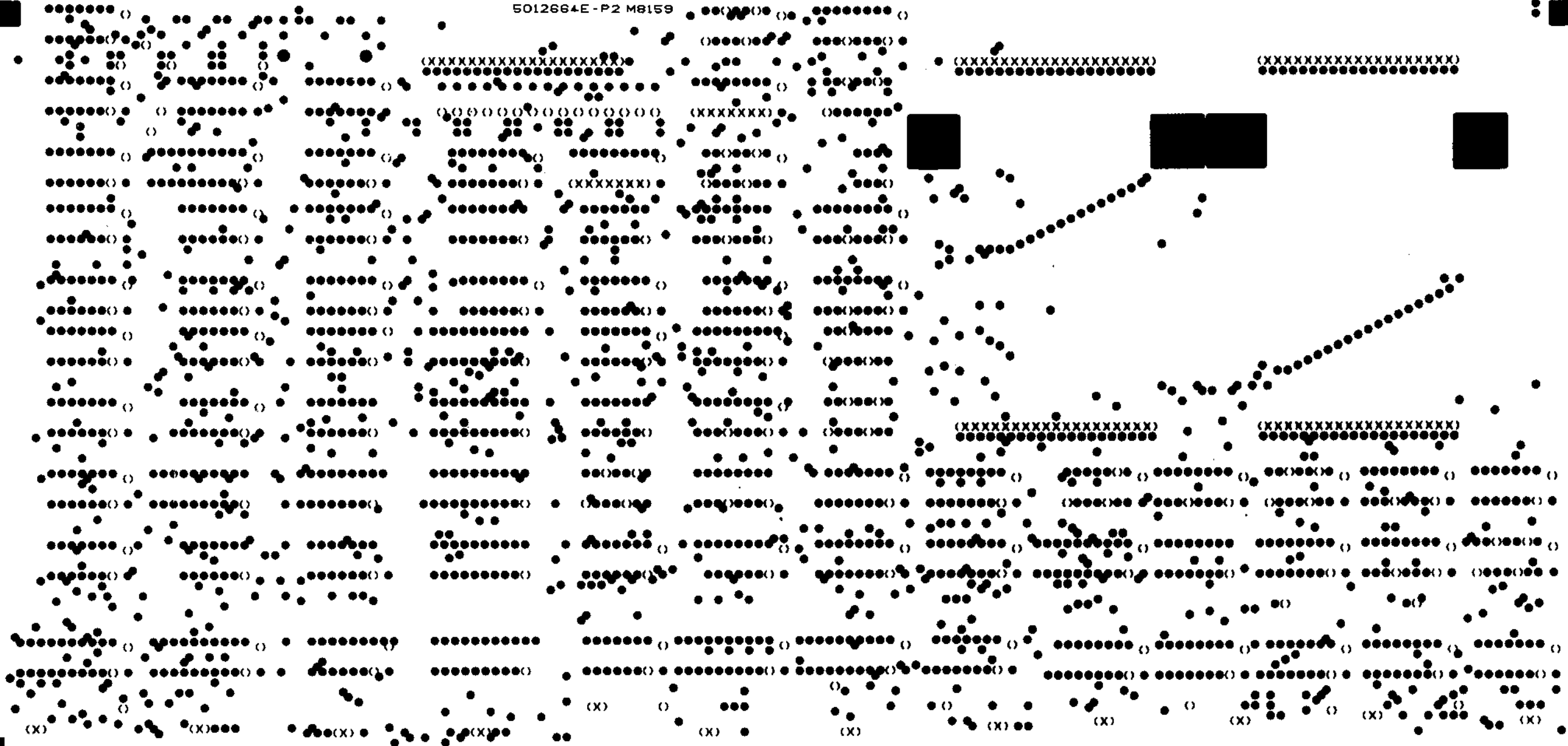
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SCALE	2/1	SHEET	2 OF 7	E
DIST.				



LAYER 2

L2

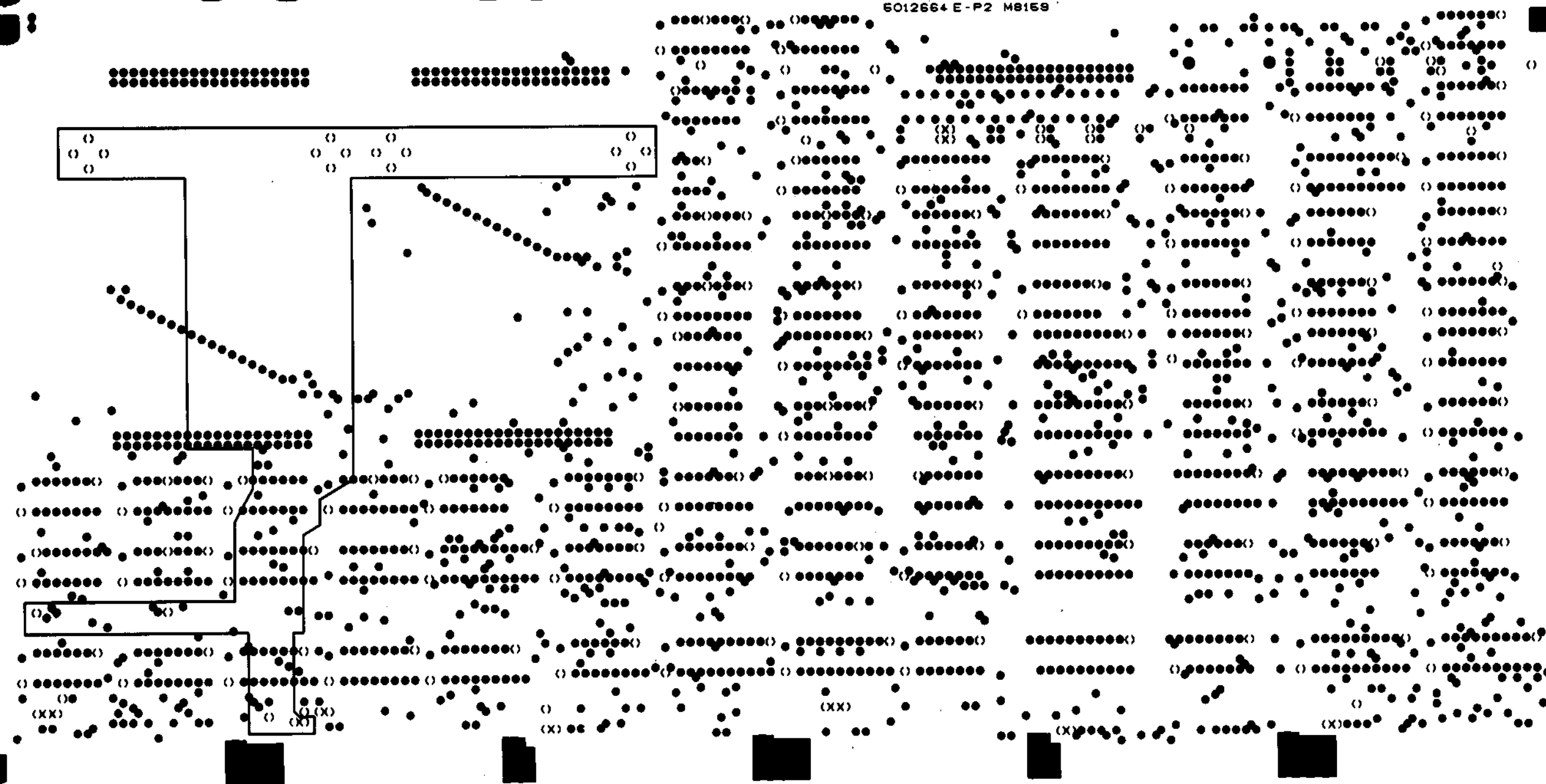
5012664E-P2 M8159



REV	DATE	BY

0 83400

5012664 E-P2 M8159



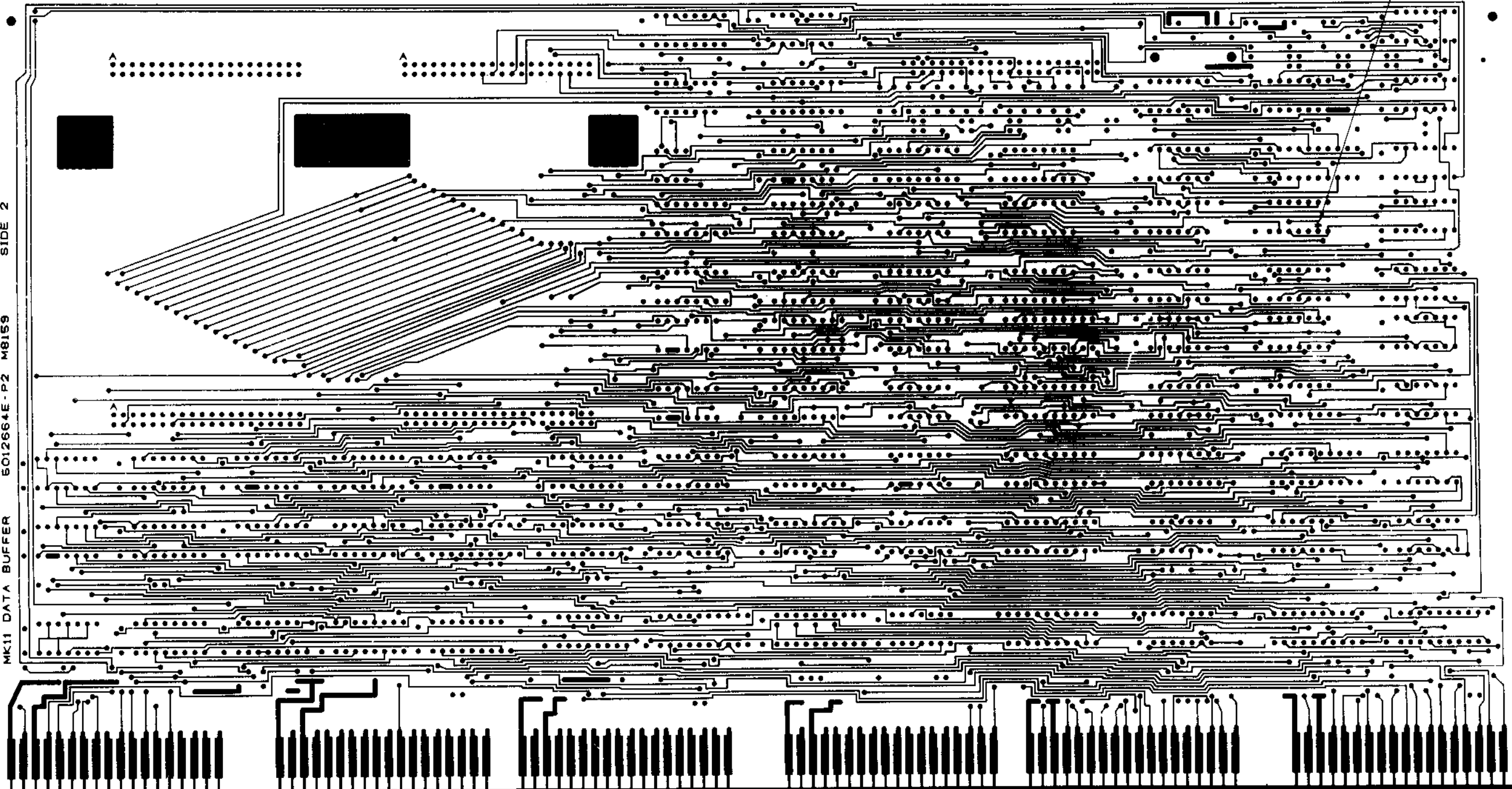
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SCALE	2/1	SHEET	4	OF	7	DIST.	

8 7 6 5 4 3 2 1

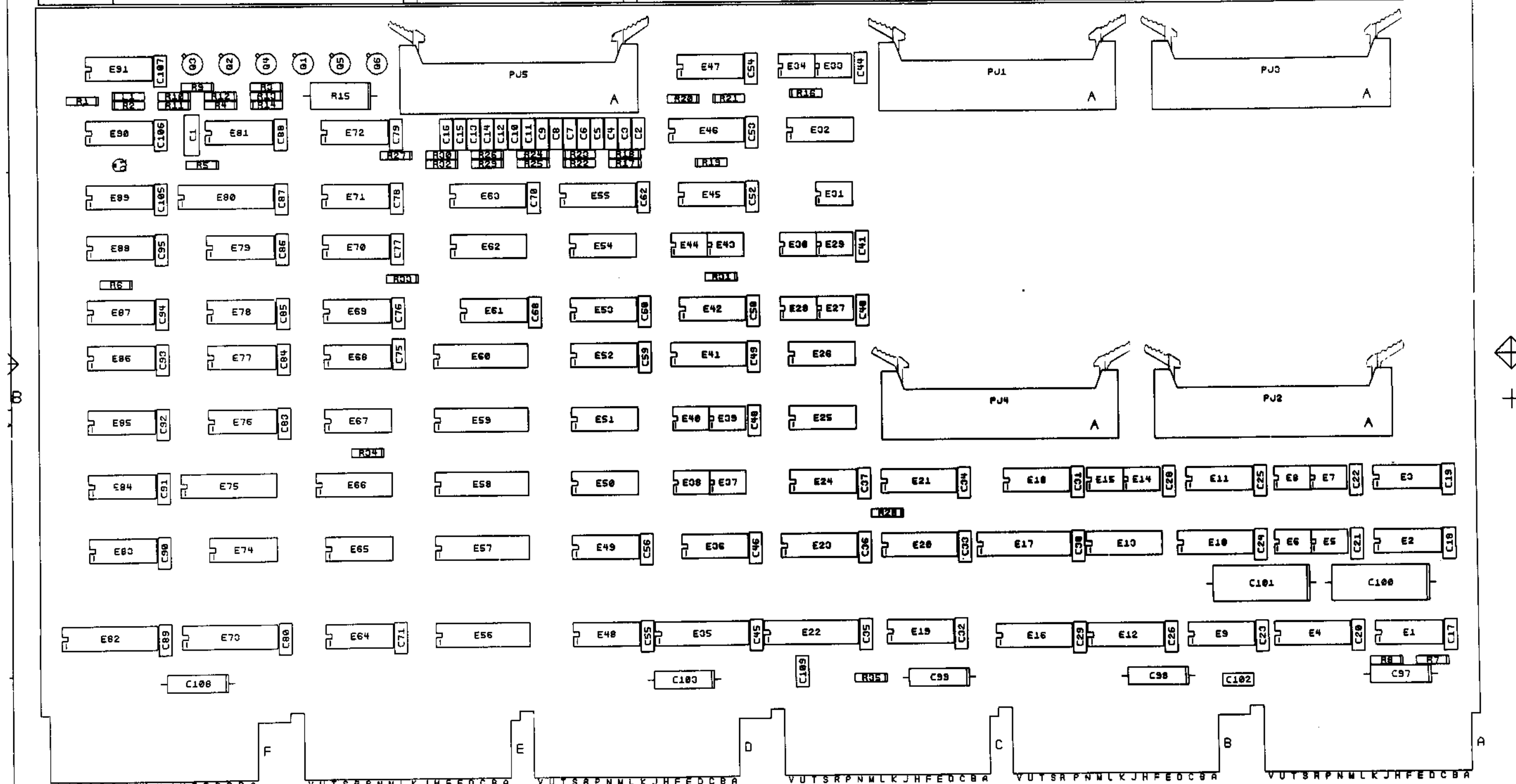
2 DUA M8159-0 E

LAYER 4

5012664E-P2 M8159 SIDE 2 MK11 DATA BUFFER



TITLE	MK11 DATA BUFFER	REV CODE	DUA	NUMBER	M8159-0-0	DES.	E
SCALE	2/1	SHEET	5 OF 7	DIST.			



NOTES:

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

VUYSRPNMLKJHFEDCBA

CH	CHANGE NO	REV

SIGNATURES	DATE	digital
ORN. <i>[Signature]</i>	11/27/78	
CHK'D. <i>[Signature]</i>	11/27/78	TITLE MK11
ENC. <i>[Signature]</i>	11/27/78	DATA BUFFER
PROJ. ENG. <i>[Signature]</i>	11/27/78	SCALE 1:1
PROD. <i>[Signature]</i>	11/27/78	SHT. 6 OF 7
NEXT HIGHER ASSY. E-DD-M8159-C		SIZE COOG NUMBER REV
		0 UA M8159-0-0 E

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REWORK INSTRUCTIONS

ECO#2

ETCH CUTS SIDE 1

2-0 CUT ETCH GOING FROM E79-10 TO E80-12

2-1 CUT ETCH GOING FROM E79-4 LOCATED BETWEEN E80-13;14 NEXT TO THE FEED-THRU

ETCH CUT SIDE 2:

2-2 CUT ETCH GOING TO E79-2

WIRE ADDS SIDE 1:

2-3 E80-12 TO E79-2

2-4 E80-7 TO E79-10

2-5 E79-4 TO E77-6

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
MKII DATA BUFFER	D UA	M8159-0-0	E
SCALE	SHEET	OF	DIST.
	7	7	

LINE ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	D-CS-M8159-0-1		CIRCUIT SCHEMATIC	REF	
2	D-UA-M8159-0-0		UNIT ASSEMBLY	REF	
3	3-DD-M8159-0-0		DWG DIRECTORY	REF	
4	D-MD-5012664-0-0		DRILL & ETCH DWG	REF	
5		5012664-00	M8159	1	
6		1001610-01	.01 MFD 100V OR 50V Z5U DISC/800PF MIN	76	C2-C26,C40,C41,C44,C45,C46, C48,C49,C50,C52,C53-C56,C59, C60,C62,C68,C70,C71,C75-C80, C83-C95,C105,C106,C107,C28-C37
7		1012219-00	47. MFD 30V G8 600D AL EL	2	C100,C101
8		1010274-01	.22 MFD 50V X8 3C023 CER.	2	C102,C109
9		1000015-00	82.0 MMF 100V 85200PPM DM155 (10-00)	1	C1
10		1012004-01	8 MFD 25V G8 30D AL EL (10-12)	5	C97,C98,C99,C103,C104
11		1110324-00	LED 1MCD@10MA 9HV5054-10HP4802	1	D1
12		1209941-02	HEADER 100 40POS RT ANGLE	5	J1,J2,J3,J4,J5
13		1210711-02	HANDLE, HEX MODULE, 10-1/2	1	
14		1211164-04	8W, DIP 1P 1A 8POS	2	E46,E55
15		9000024-01	EYELFT, ROLLED FLANGE, .121 OD X .196 LG	12	
16		1300202-00	47 1/4W 5% CC (13-00)	1	R3
17		1300229-00	100 1/4W 5% CC (13-00)	2	R5,R35
18		1300271-00	220 1/4W 5% CC (13-00)	4	R31,R32,R33,R34
19		1300316-00	470 1/4W 5% CC (13-00)	3	R13,R14,R16
20		1300365-00	1 K 1/4W 5% CC (13-00)	6	R1,R9,R10,R11,R12,R7
21		1300479-00	10 K 1/4W 5% CC (13-00)	16	R6,R8,R17-R30
22		1301972-00	270 1/4W 5% CC (13-00)	1	R2
23		1302602-00	56 1/4W 5% CC (13-00)	1	R4
24		1305281-00	75 1W 5% CC (13-00)	1	R15
25		1503100-00	DEC3009B NPN 200MW SI 20 25 P	1	Q1
26		1503409-00	DEC6534D PNP 310MW SI 40 90 P	1	Q4
27		1509330-00	DEC6531B NPN 310MW SI 40 90 P	4	Q2,Q3,Q5,Q6

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		
CHK	ECO NO	REV	FIRST USED ON: MK11		
BF	00002	E	MADE BY: S TUTTLE DATE: 22-JUN-70		
			CHECKED: D. CAPUSO DATE: 22-JUN-70		
			DSN. ENG.: D. SMELSER DATE: 22-JUN-70		
			PROD.: R. HILL DATE: 22-JUN-70		
			RESP. ENG.: D. SMELSER DATE: 22-JUN-70		
			ASSY. NO.: D-UA-M8159-0-0		

DIGITAL EQUIPMENT CORPORATION  
 MAYNARD, MASSACHUSETTS

TITLE  
 PARTS LIST

MK11 DATA BUFFER

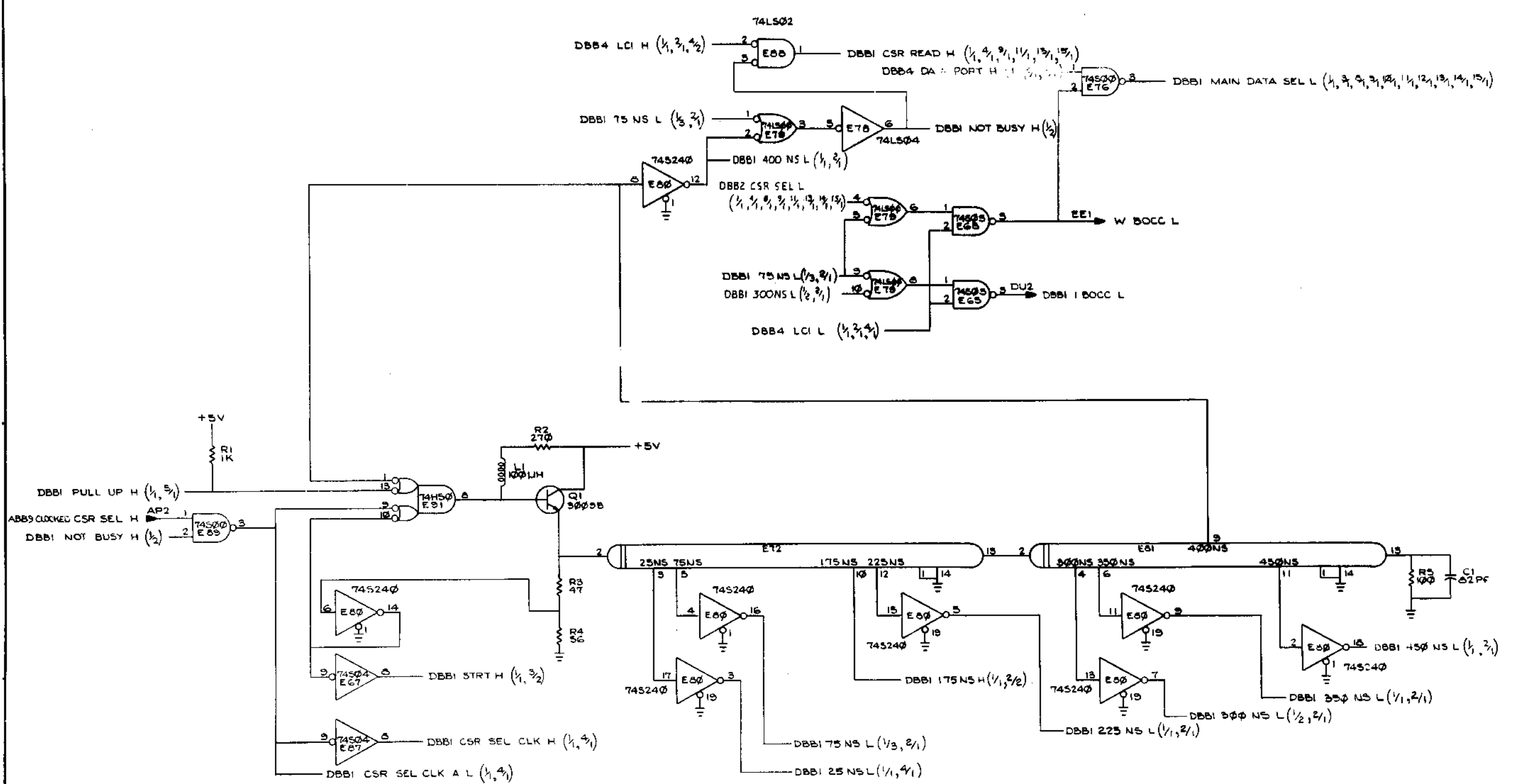
SIZE/CODE	DOCUMENT NUMBER	REV
K	PL	M8159-U-DWP
		3

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LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
28	28		1610662-00	100.0 UH 108 165MA #DD1 00	1	L1
29	29		1611243-00	DELAY=25-30 NS, 10TAPS RCT#L-183 E PE#9829	2	E72, E81
30	30		1909060-00	DEC 74H50 A-0-I XPNDR GATE-DUAL 2X2	1	E91
31	31		1910532-00	74S00 NAND GATE-QUAD 2IN	3	E76, E86, E89
32	32		1910533-00	74S03 NAND GATE-QUAD 2IN, OPN COLLECT	2	E65, E68
33	33		1910534-00	74S04 INVERTER GATE-HEX 1IN	4	E1, E54, E67, E87
34	34		1910536-00	74S10 NAND GATE-TRIPLE 3IN	1	E77
35	35		1910542-00	74S64 A-0-I XPRD GATE, 4-2-3-2 14	1	E9
36	36		1910544-00	74S74 FF-D DUAL, EDGE TRIGGER	2	E42, E69
37	37		1910550-00	74S174 FF-D HEX	1	E4
38	38		1910645-00	75452 DRIVER, PERIPH, DUAL, NAND	19	E5, E6, E7, E8, E14, E15, E27, E28, E29, E30, E31, E33, E34, E37, E38, E39, E40, E43, E44
					CONT	E2, E11, E18, E25, E26, E32, E45, E47, E50
39	39		1911469-00	DEC 8640 RECEIVER, BUS, QUAD, UNIBUS, 0-RU	9	E19, E48, E64, E74
					CONT	E3, E24, E36, E49, E51, E52, E71, E83, E84, E85
40	40		1911573-00	74S280 PARITY GEN/CHKR, 9BIT ODD/EVEN	4	E21
41	41		1911712-00	74S51 AND-OR GATE-INVERT DUAL 2W/2IN	1	E53, E79
42	42		1912388-00	74S02 NOR GATE-QUAD 2IN, POS	10	E88
					CONT	E78, E61
43	43		1912697-00	LS174 FF-D HEX W/CLEAR	1	E70
44	44		1912799-00	LS00 NAND-GATE-QUAD 2IN, POSITIVE	2	E20, E23, E12, E13
45	45		1912801-00	LS02 NOR-GATE-QUAD 2IN	1	E10, E16, E41, E66
46	46		1912803-00	LS04 INVERTER GATE-HEX 1IN	2	E62, E63
47	47		1912813-00	LS27 NOR GATE-TRIPLE 3IN	1	E17, E22, E35, E56, E57, E58, E59, E60, E73, E75, E80, E82
48	48		1912847-00	LS157 MUX 1 OF 2 (QUAD)	4	
49	49		1912853-00	LS175 FF-D QUAD	4	
50	50		1912867-00	LS298 MUX 1 OF 4, 2IN W/STORAGE	2	
51	51		1913462-00	74S240 OCTAL BUFFER, INVERTING TRI-STA	12	
					CONT	
52	52		1209941-03	HEADER RT ANGLE LEFT LATCH FOR	5	
53	53		1209941-04	HEADER RT ANGLE, RIGHT LATCH FOR	5	
54	54		9105740-55	WIRE(WPAP)30AWG UL1423 (9)-00 A/P		

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE MK11 DATA BUFFER	PARTS LIST	SIZE: CODE: K PL	DOCUMENT NUMBER MR159-0-DBP	REV: 1F
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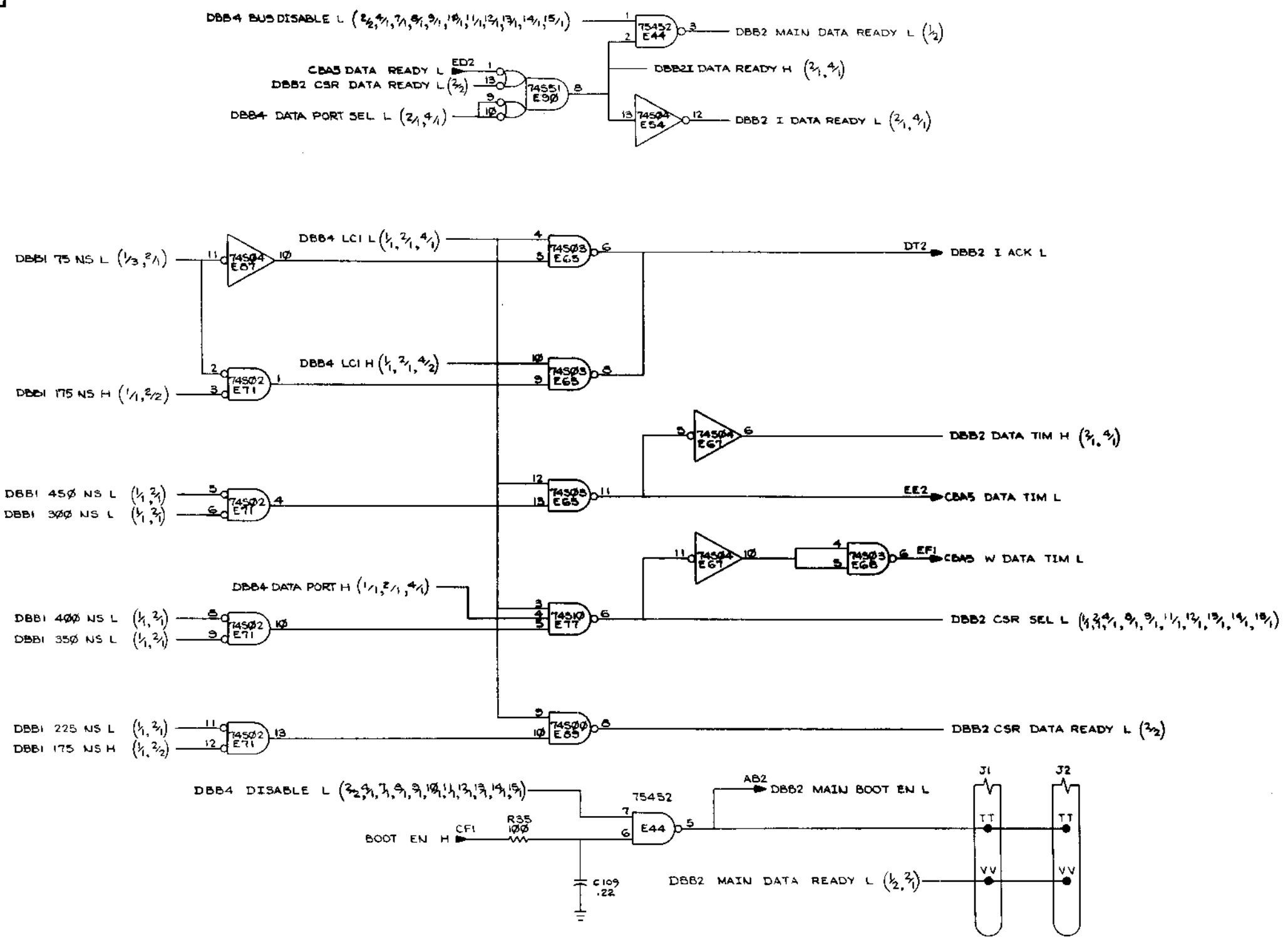


REV	DATE	BY	CHK'D BY	APP'D BY
1	11-2-77	A. ZACCONI		
2	11-2-77	A. ZACCONI		
3	11-2-77	A. ZACCONI		
4	11-2-77	A. ZACCONI		

DRN. S. Camby	8-24-77	FIRST USED ON	MK11
CHK'D BY	P. G.	11-2-77	
END. BY		11-2-77	
PROJ. ENG.		11-2-77	
PROG. RA		11-2-77	
NEXT HIGHER ASSY.		SIZE	CODE
E-DD-M8159-0		D	CS
SCALE		NUMBER	REV.
		M8159-0-1	E
SHEET	OF 15	DIST.	



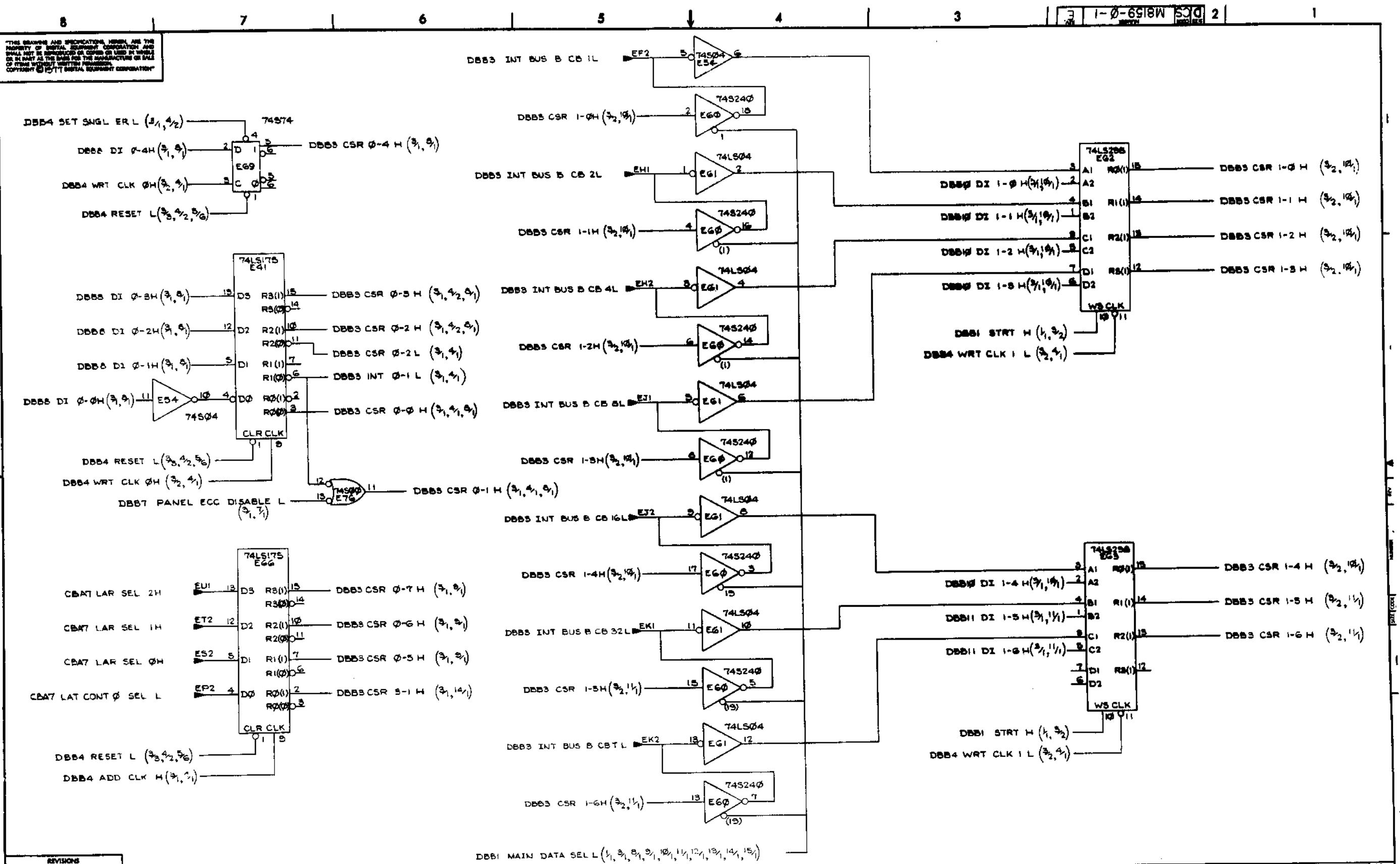
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB2) MKII DATA BUFFER	SIZE CODE	D CS	NUMBER	M8159-0-1	REV.	E
SCALE		SHEET	2	OF	15		

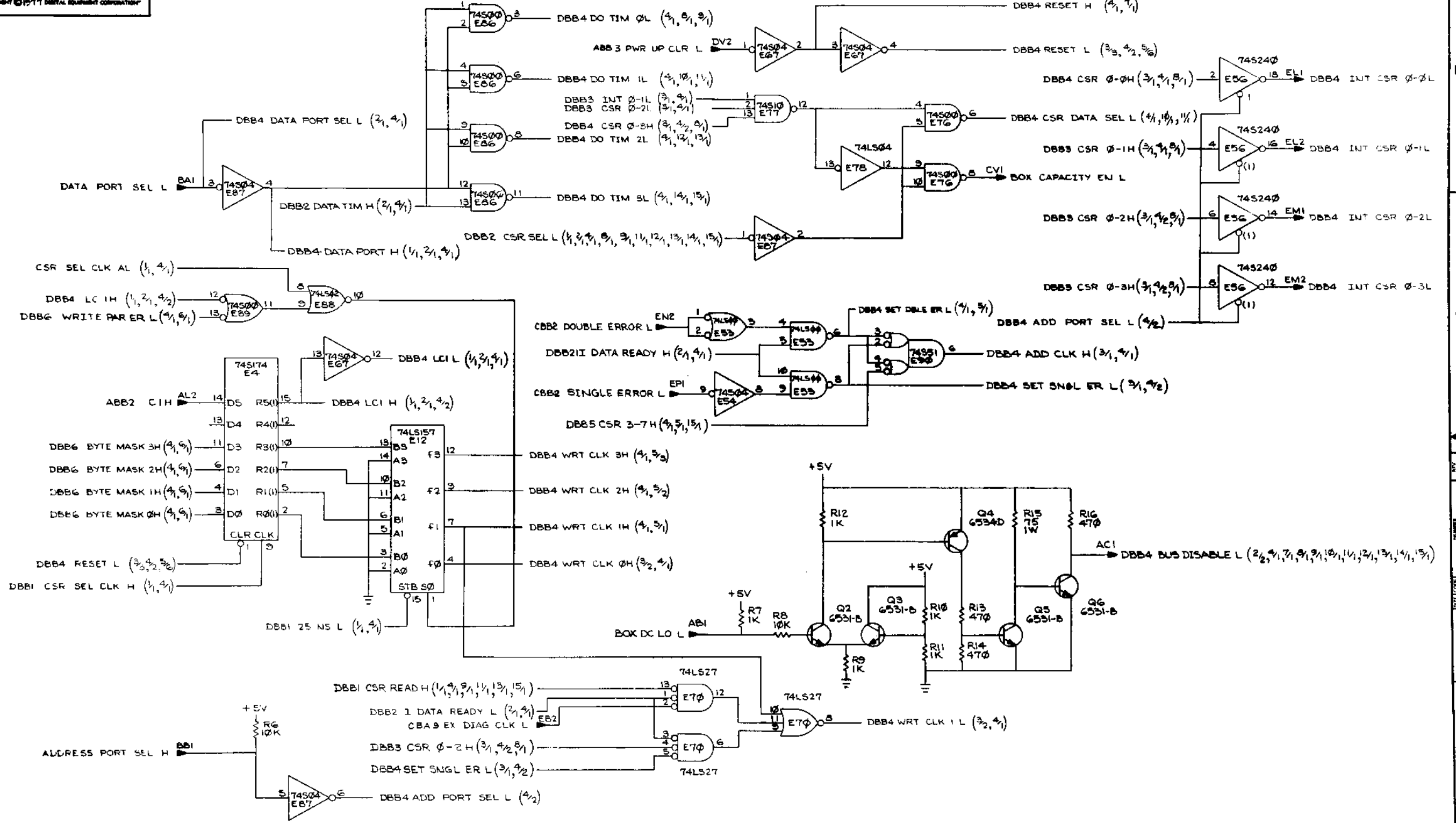
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REVISIONS		
CHK	CHANGE NO.	REV.

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SCALE	1/1	SHEET	3	OF	15	DIST.	

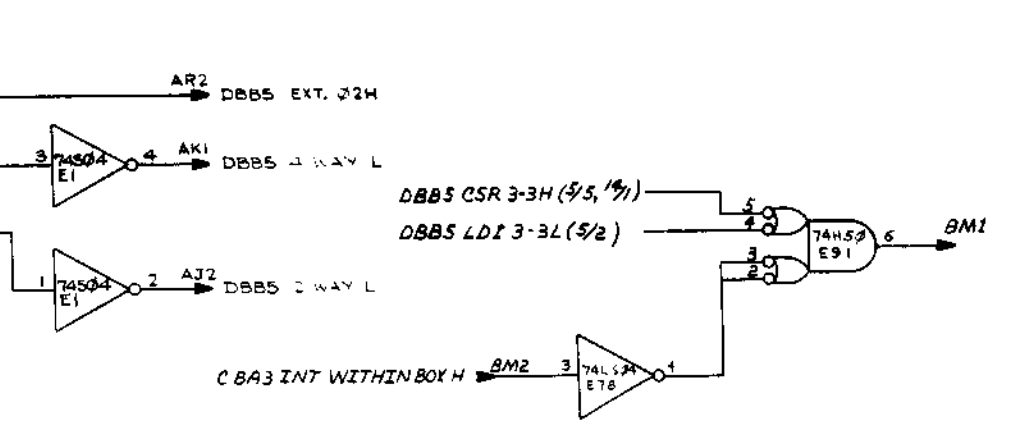
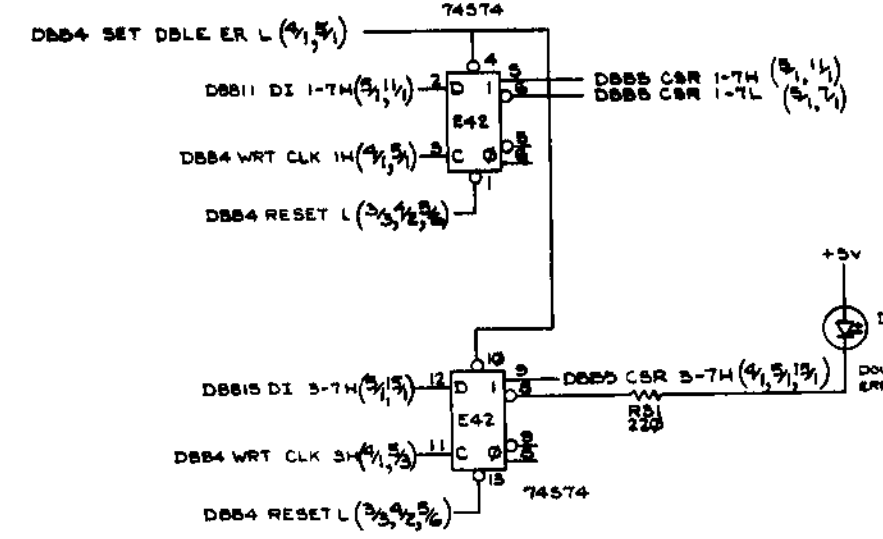
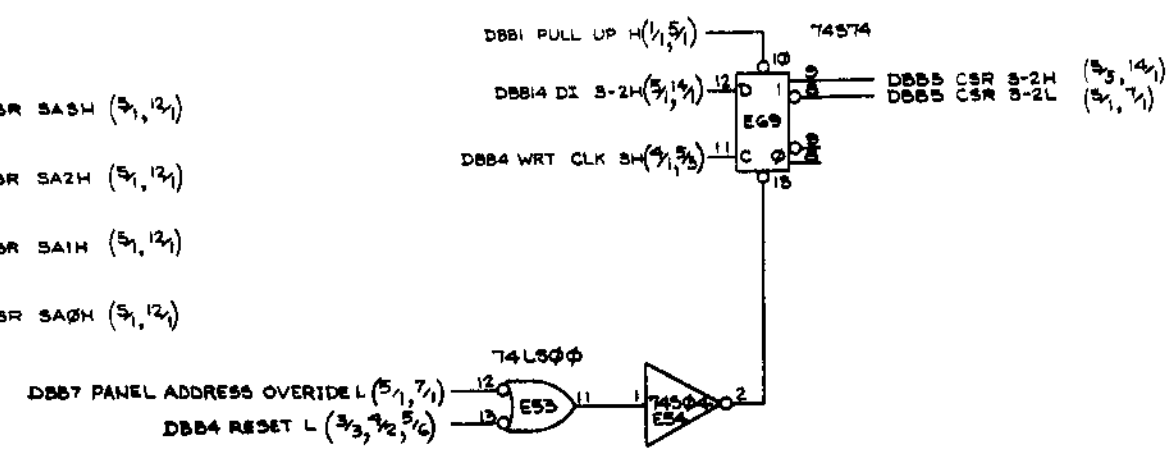
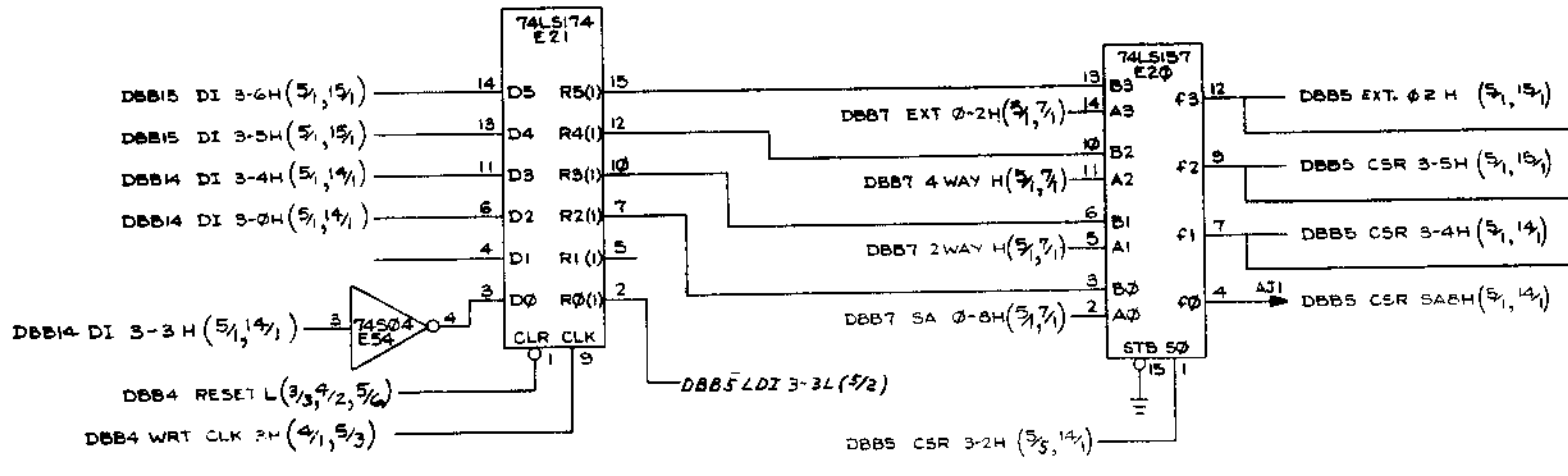
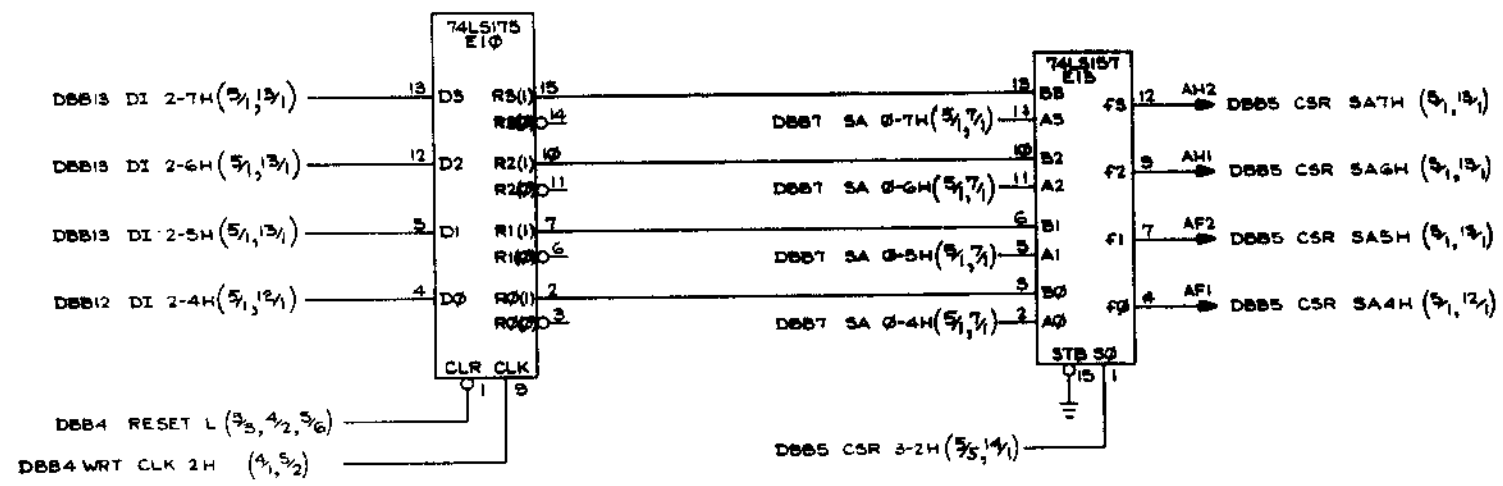
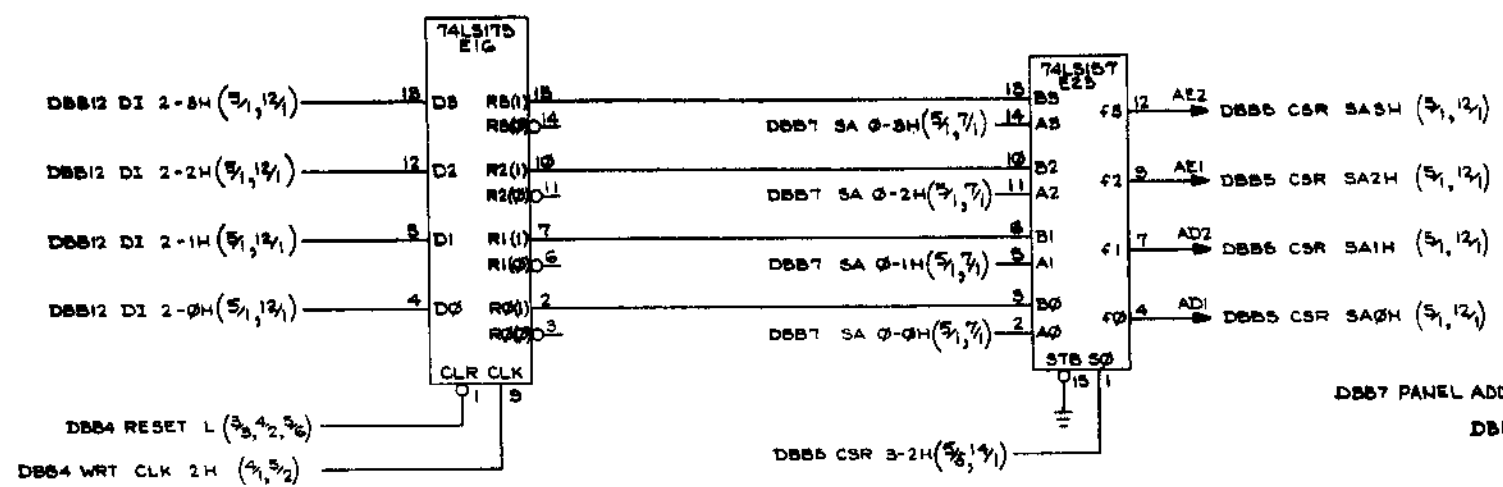
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REVISIONS			TITLE	SIZE CODE	NUMBER	REV.
CHK.	CHANGE NO.	REV.				
			MK II DATA BUFFER	DCS	M8159-0-1	E

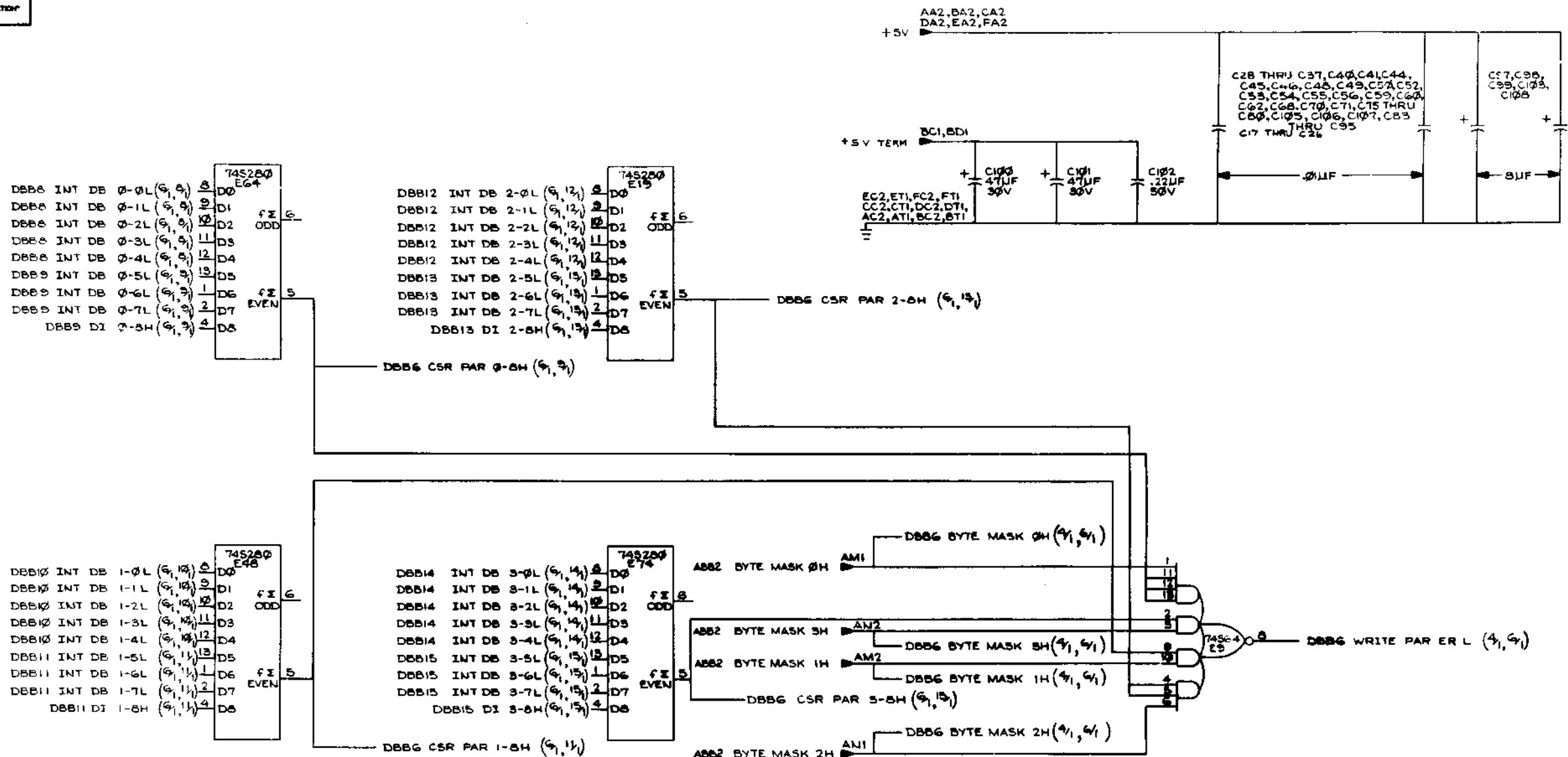
SCALE: 1/16" = 1" SHEET 4 OF 15 DIST.

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REVISIONS		
CHK	CHANGE NO.	REV.

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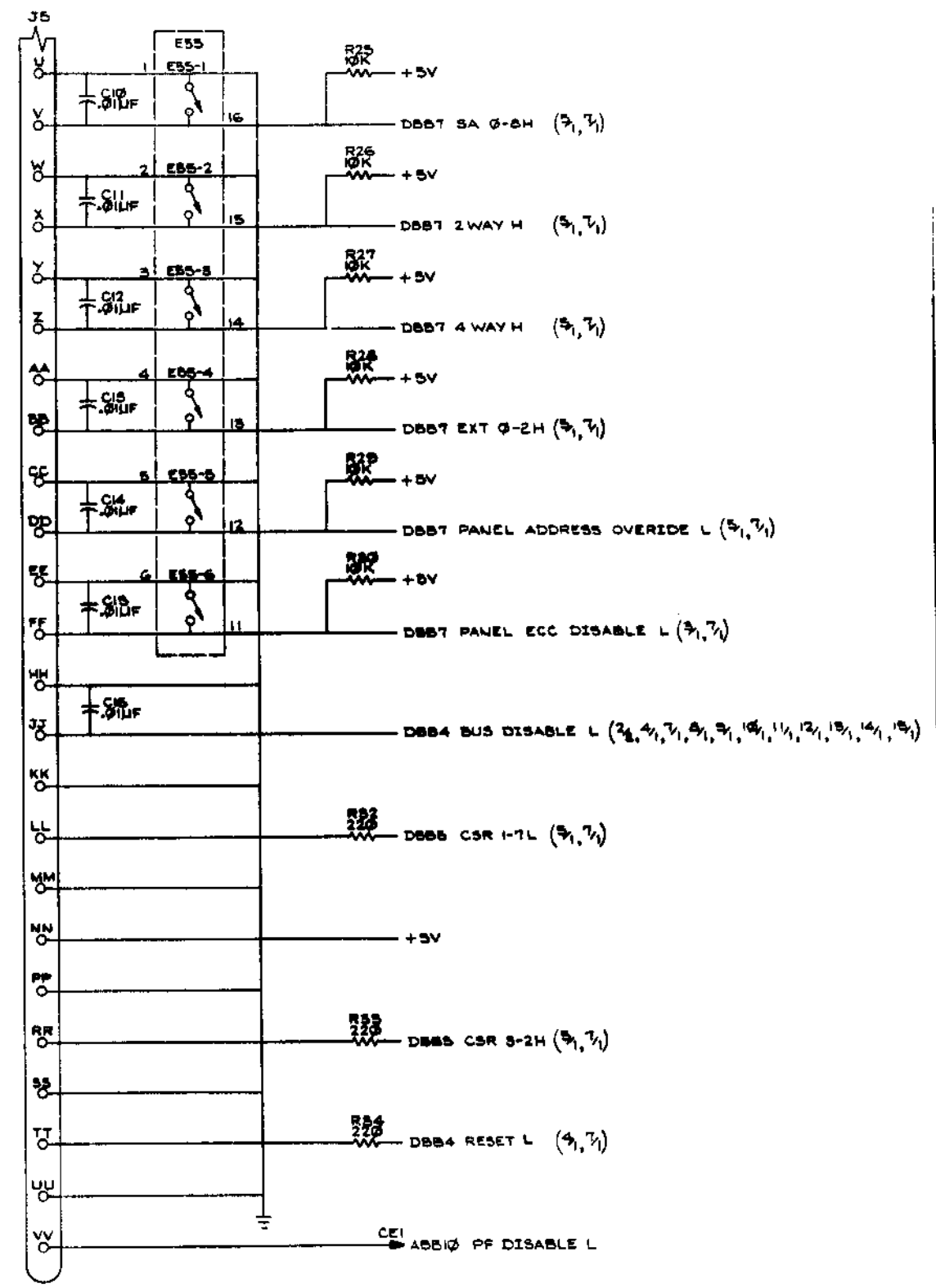
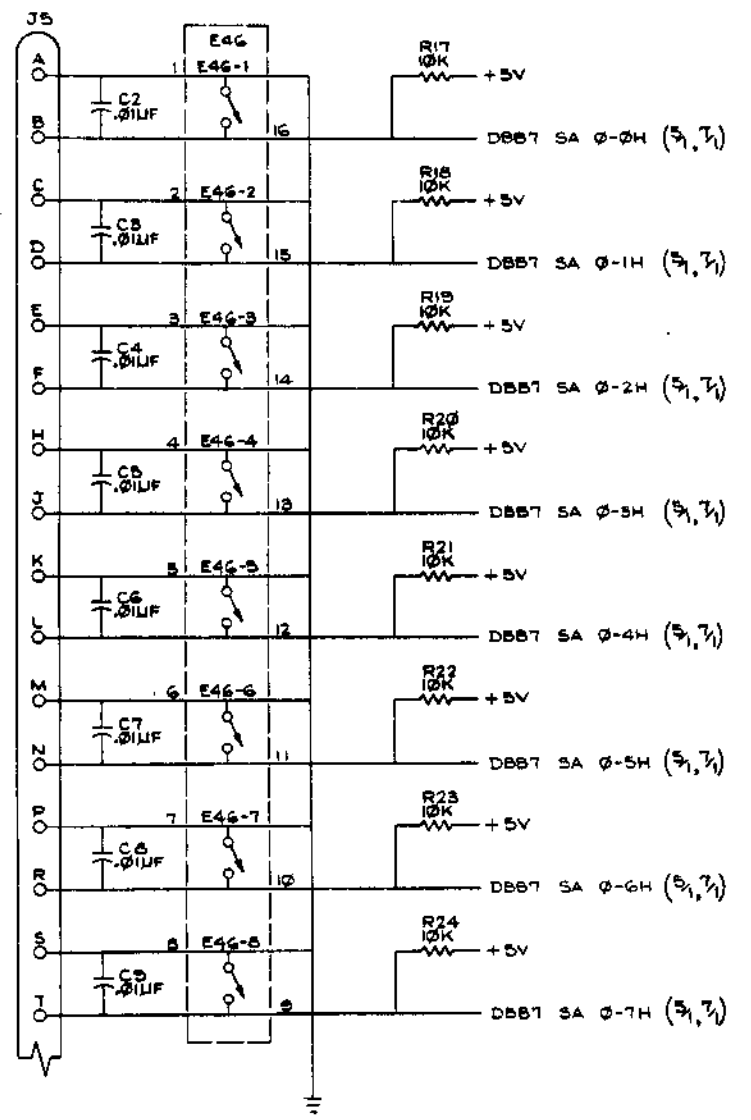


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB6) MK11 DATA BUFFER	SIZE CODE	DCS	NUMBER	M8159-0-1	REV.	E
SCALE	1:1	SHEET	6	OF	15	DIST.	

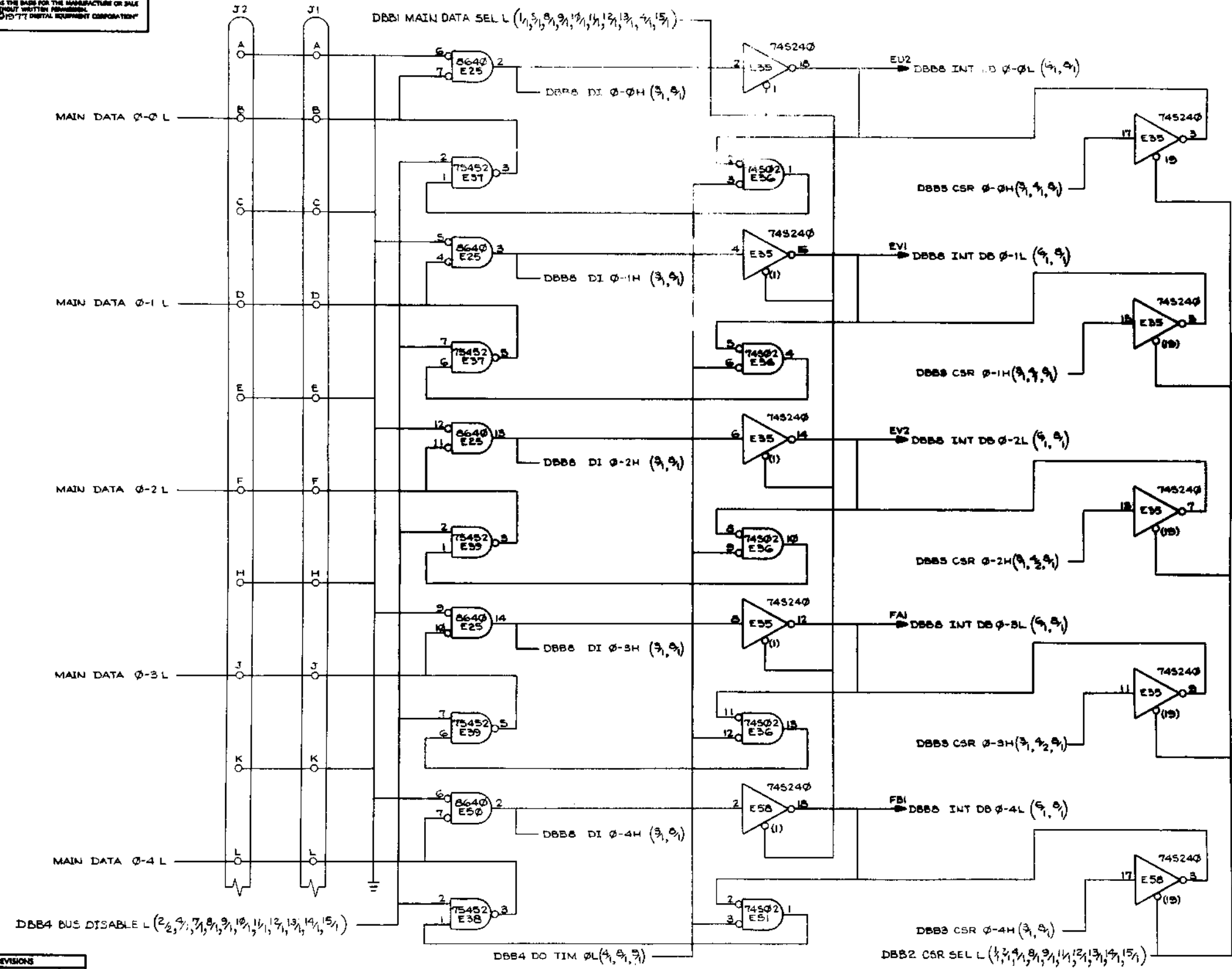
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1-0-6918W SOD 2



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB7) MK II DATA BUFFER	SIZE/COOB	D/CS	NUMBER	M8159-0-1	REV.	E
SCALE	1/1	SHEET	7	OF	15	DIST.	



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB8)	SIZE CODE	NUMBER	REV.
MK11 DATA BUFFER	DCS	M8159-0-1	E	
SCALE	SHEET 8 OF 15	DIST.		

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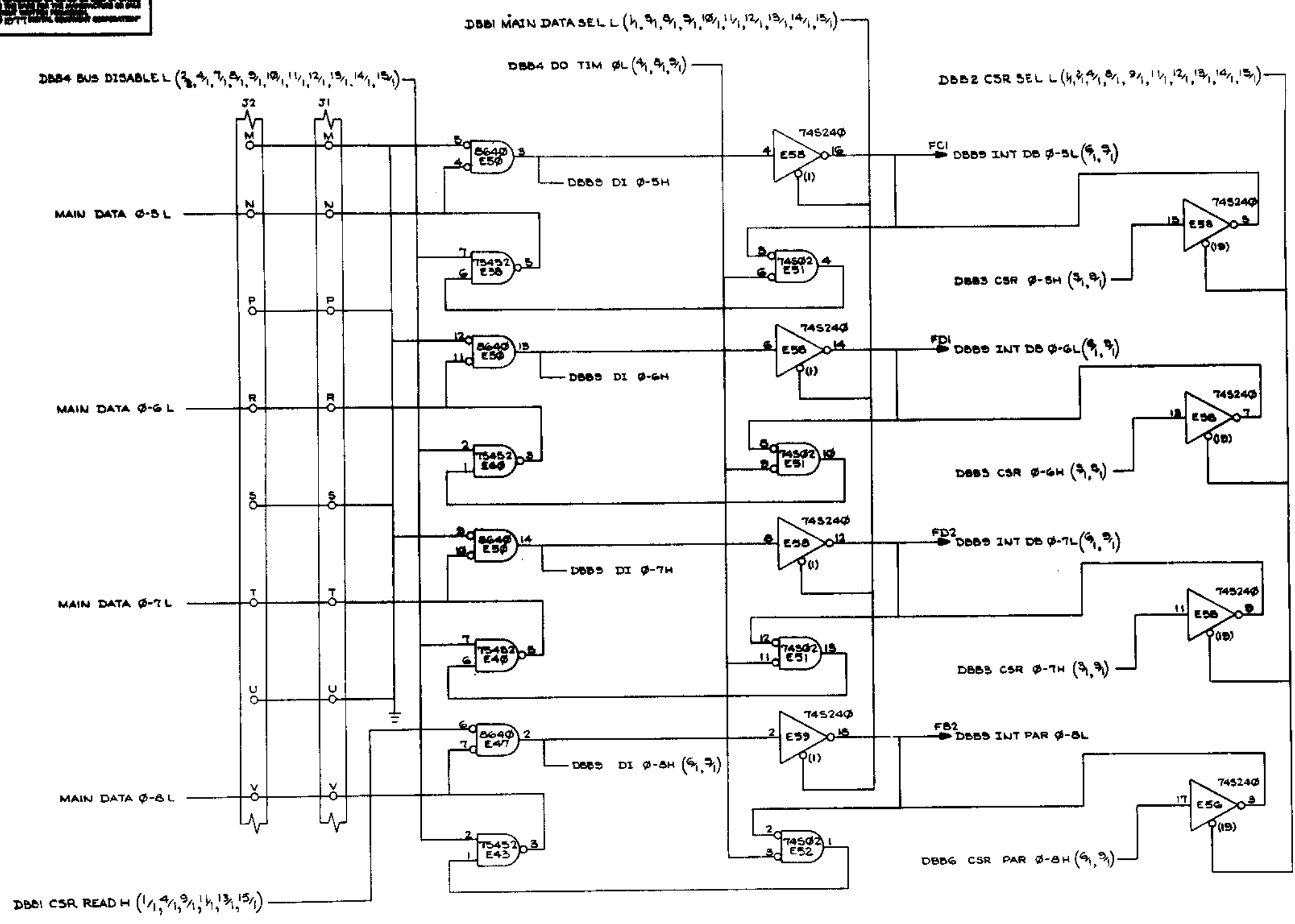
6

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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB9) MKII DATA BUFFER	SIZE CODE	NUMBER	REV.
SCALE	SHEET 9 OF 15	DIST.	D CS M8159-0-1	E

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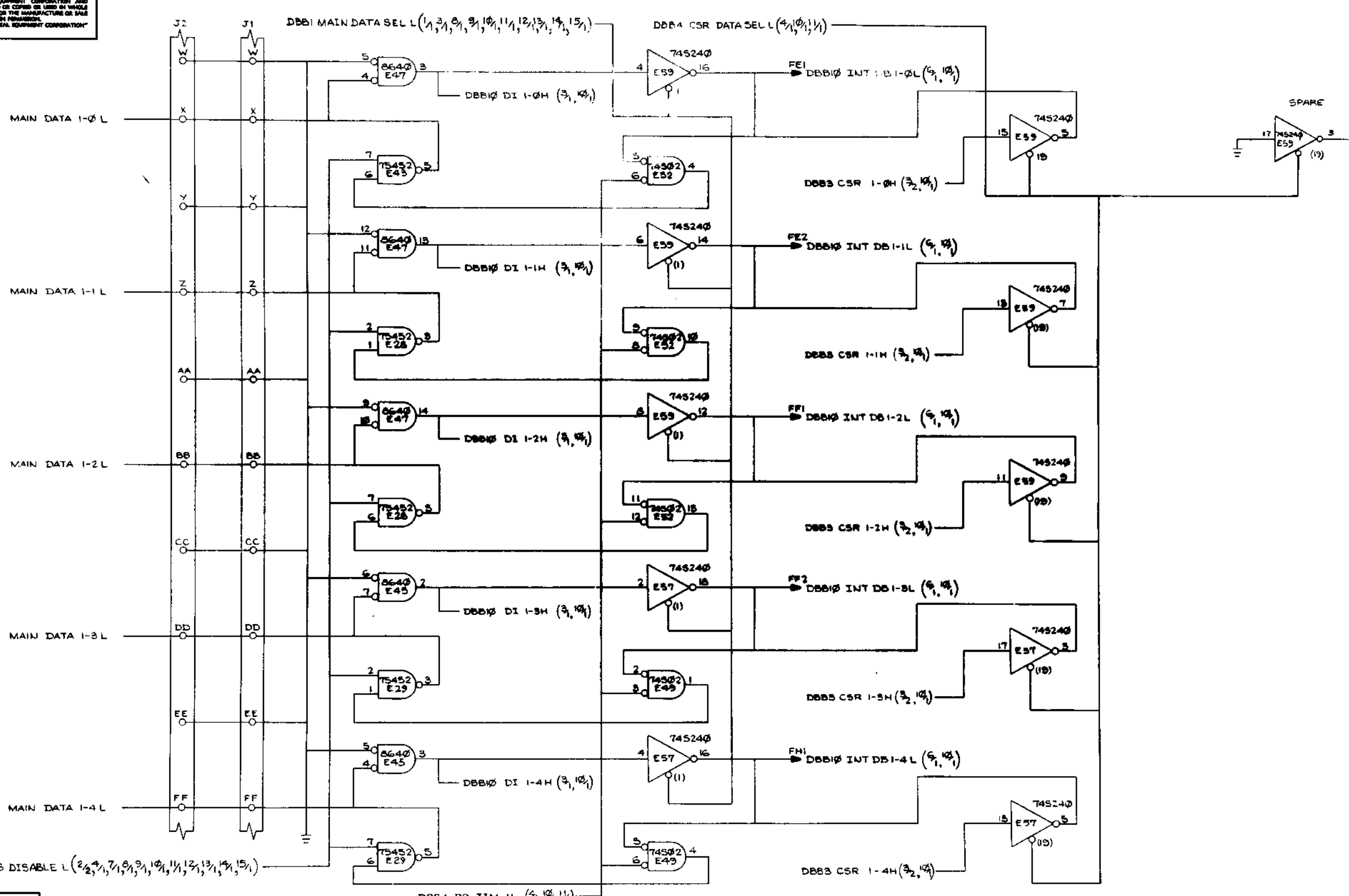
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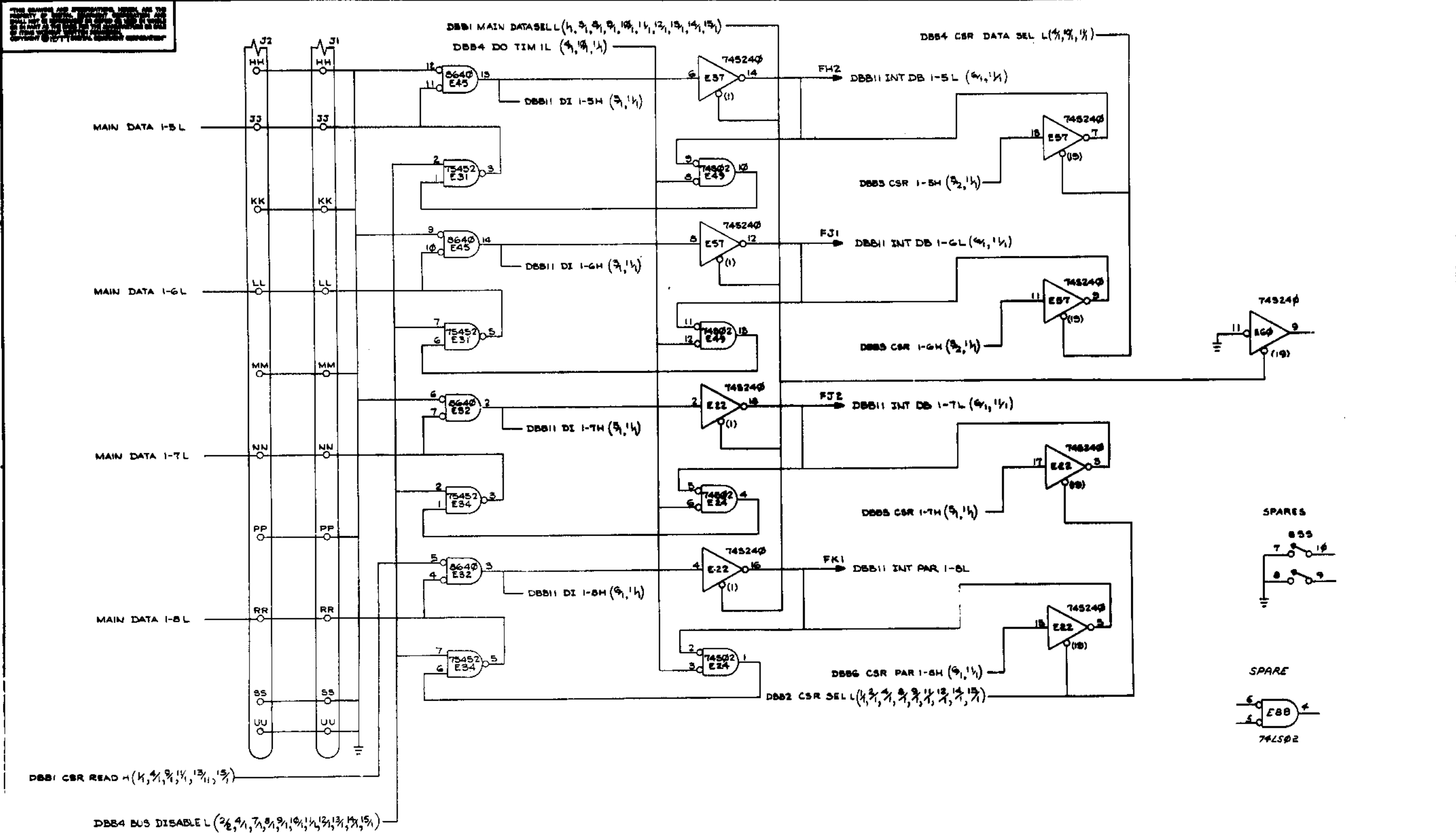
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REVISIONS		
CHK	CHANGE NO.	REV.

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MKII DATA BUFFER	DCS	M8159-0-1	E	
SCALE	SHEET 10	OF 15	DIST.	

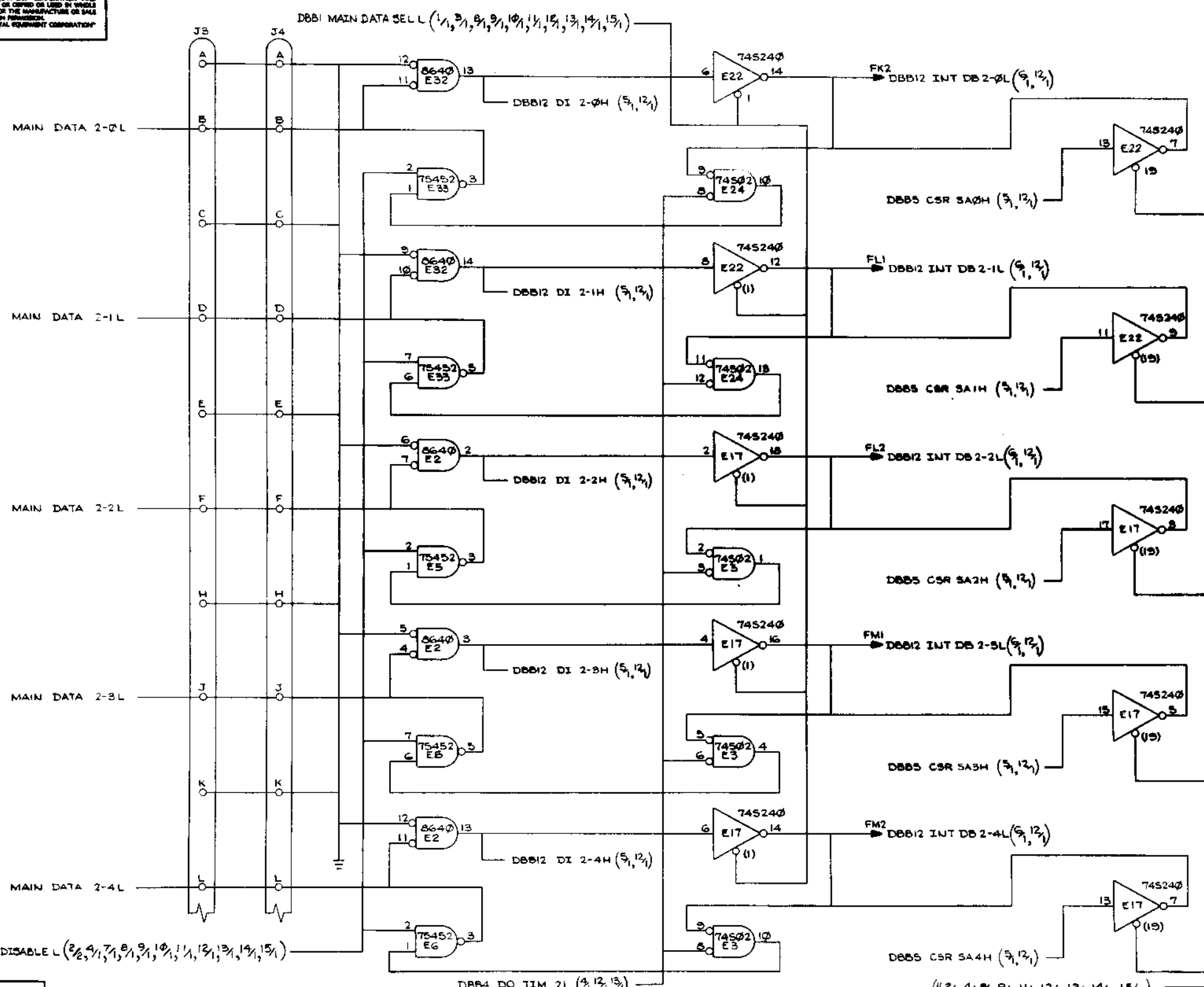
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB11) MK II DATA BUFFER	SIZE CODE	D CS	NUMBER	M8159-0-1	REV.	E
SCALE	1-1	SHEET	OF 15	DIST.			

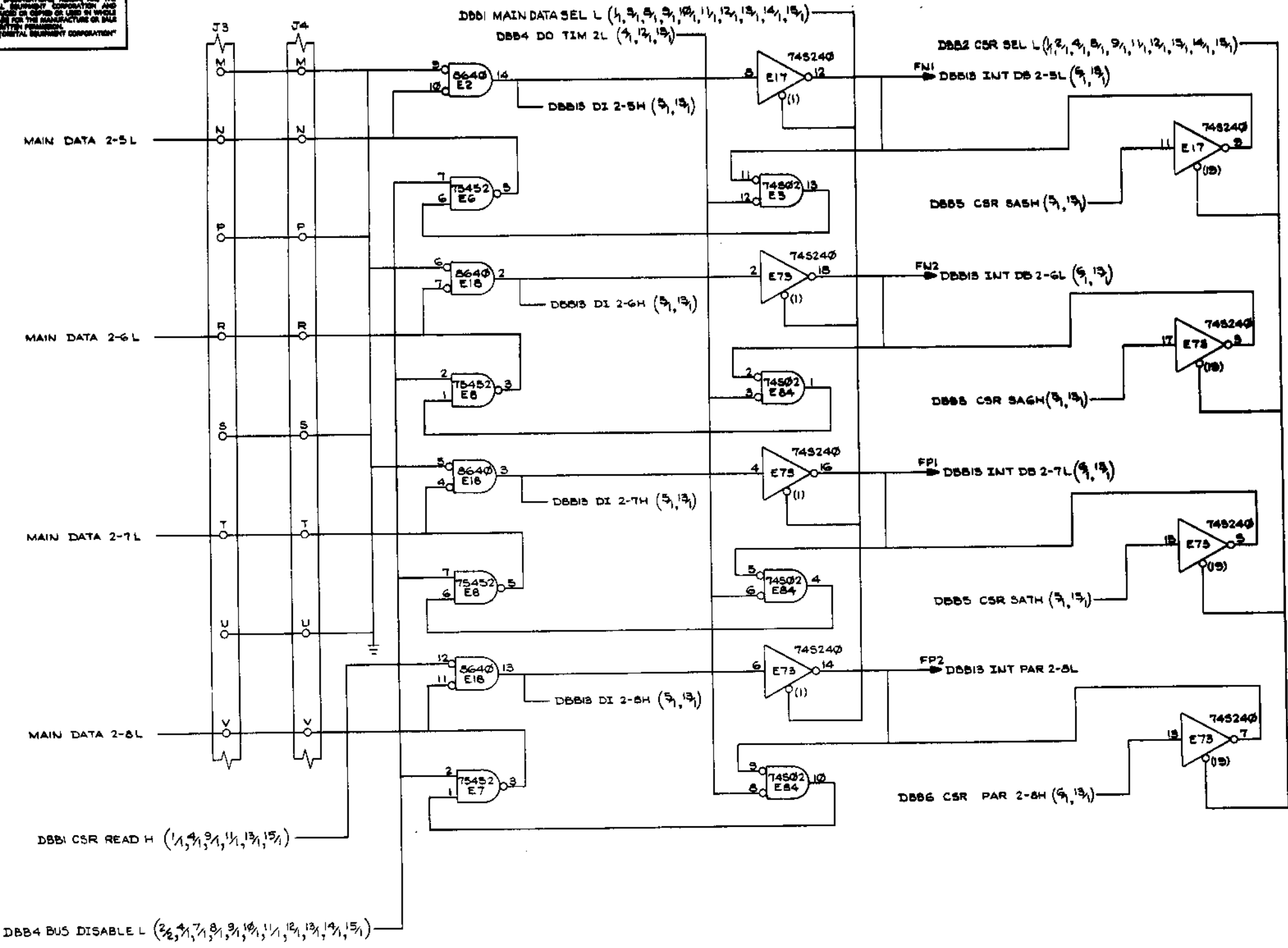
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB12)	SIZE/CODE	NUMBER	REV.
MKII DATA BUFFER		DCS	M8159-3-1	E
SCALE		SHEET	2 OF 15	

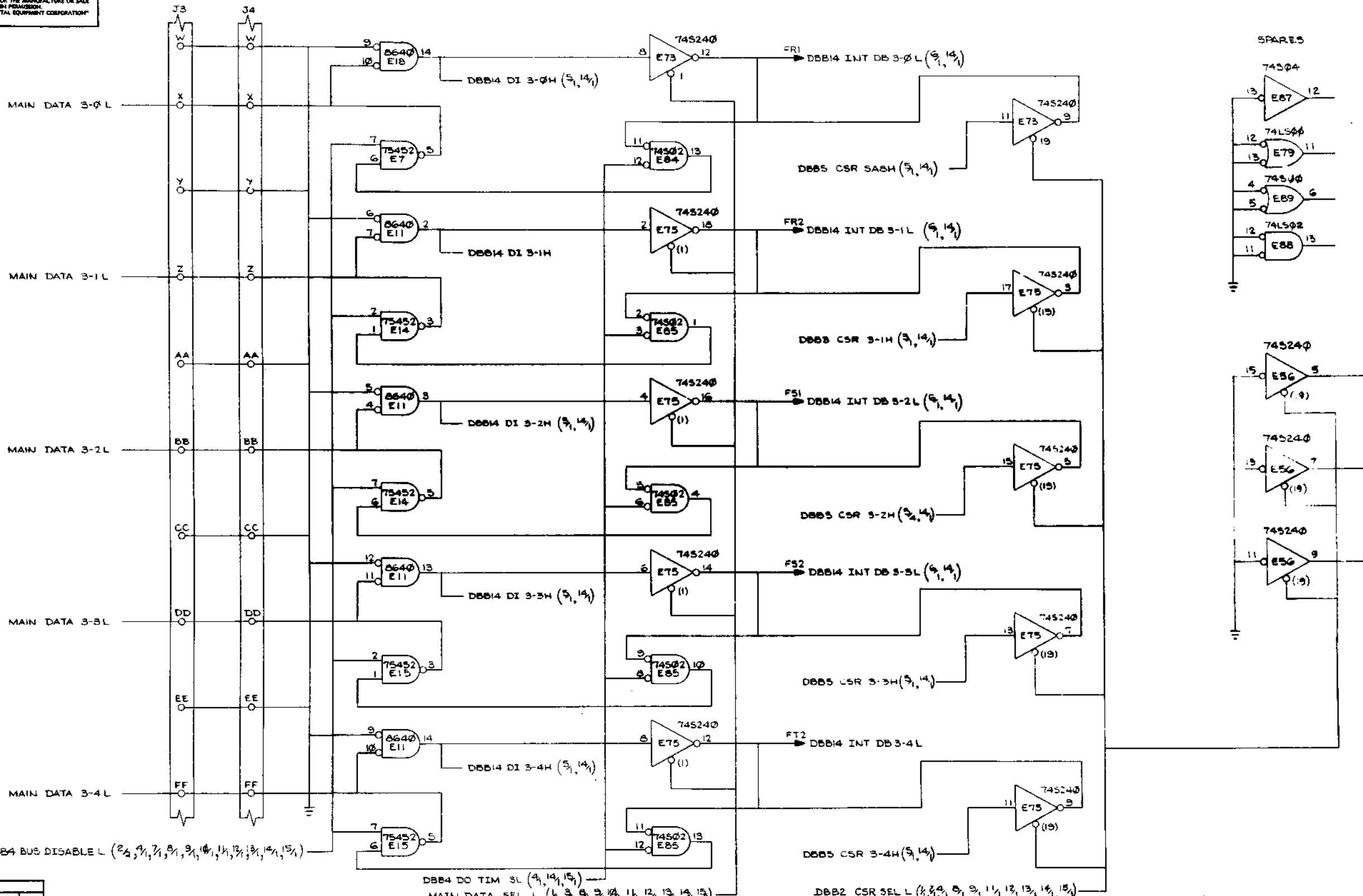
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB13) MK II DATA BUFFER	SIZE CODE	D CS	NUMBER	M8159-0-1	REV.	E
SCALE	1/1	SHEET	3	OF 15	DWT.		

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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(DBB14)	SIZE CODE	NUMBER	REV.
MKII DATA BUFFER		DCS	M8159-0-1	E
SCALE		SHEET	4 OF 5	



REV. C

NUMBER M8160-0

SIZE CODE B DD

DRAWING NO.	NO. OF SHTS	PART NO.	DESCRIPTION	REVISIONS													
				*	A	B	C										
B-DD-M8160-0-0	1		MK11 CONTROL A	*	A	B	C										
D-UA-M8160-0-0	7		MK11 CONTROL A	B	C	D	E										
K-PL-M8160-0-DBP	3		MK11 CONTROL A	B	C	D	E										
D-CS-M8160-0-1	11		MK11 CONTROL A	B	C	D	E										
D-MD-5012676-0-0	5		DRILL & ETCH DRAWING	B	C	D	D										
		5012676	ETCHED BOARD	C	D	D	D										
M8160-0-L			P.C. DESIGN DATA BASE	REF	-	-	-										

NOTES:

REVISIONS	DATE	CHG NO.	REV.														
				B	C												
	3-78	00002	B														
	7-78	00003	C														

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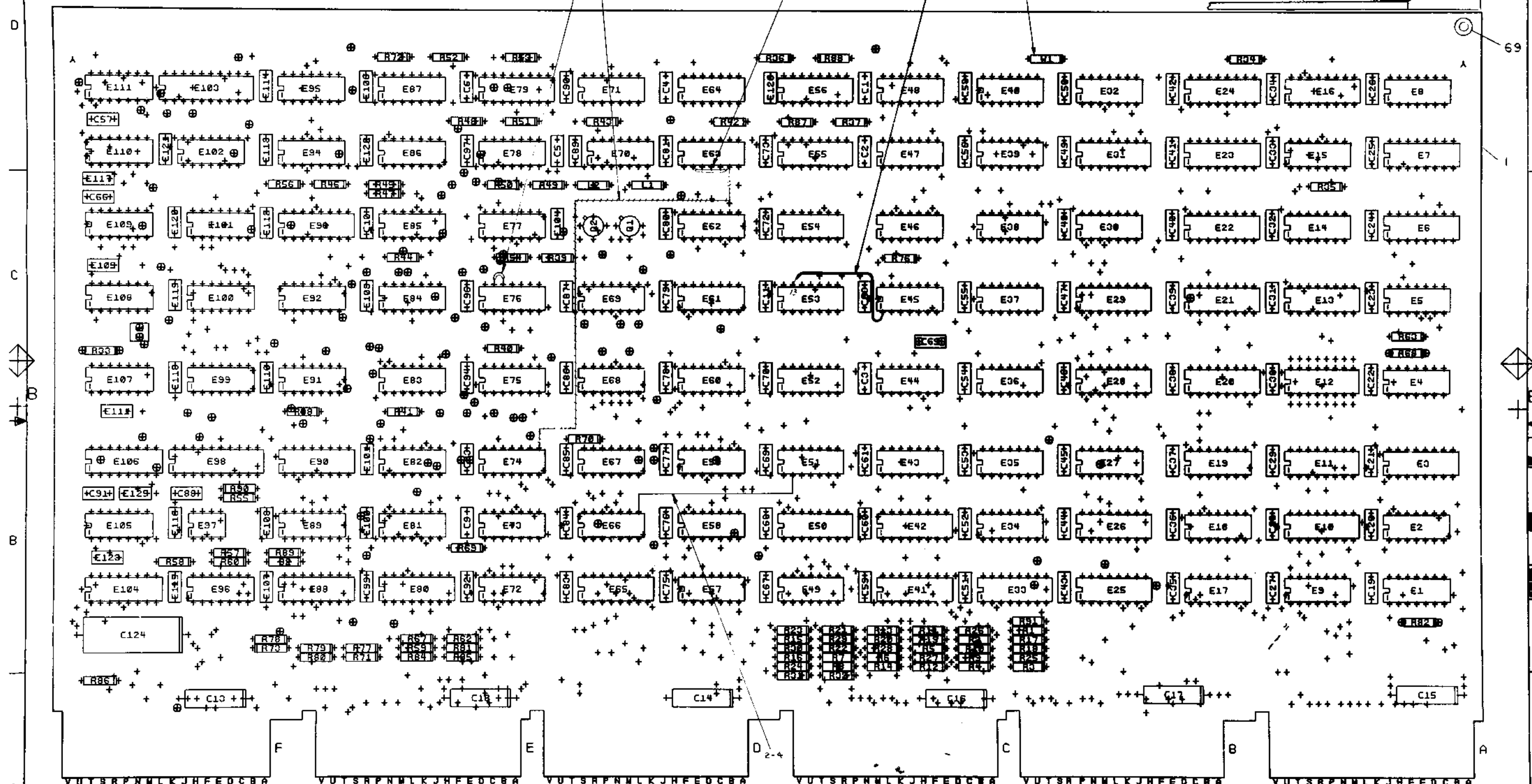


USED ON OPTION/MODEL MK11	DRN. P. BOSSMAN <i>PB</i>	11/2/77	TITLE MK11 CONTROL A
	CHK'D P. BOSSMAN <i>PB</i>	11/2/77	SIZE CODE B DD
	ENG. <i>RA Hill</i>	11/2/77	NUMBER M8160-0
	PROD. RA Hill	11/2/77	REV. C
SHEET 1 OF 1			





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NOTES: 1. W1 NOT INSTALLED AT ASSY FOR REF ONLY.

CHANGE NO	REV	DATE	BY	CHK'D
1	0		A. ZACCONI	
2	1		A. ZACCONI	

ETCH REV. DPI  
P.C. DESIGN DATA BASE REV. DLI & DMI

SIGNATURES		DATE	digital
DRN.			
CHK'D.			
ENG.			
PROJ. ENG.			
PROD.			
SCALE			
SHT. OF			
NEXT HIGHER REV. B-DD-M8160-0			

TITLE	SIZE	CODE	NUMBER	REV
MKII CONTROL A	D	UA	M8160-0-0	E

M8160 5012878DP1

# LAYER 1

DATE: 10/1/71

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CS\*ABCDEFGHIJKLMNPRS

E111

E103

E95

E87

E79

E71

E64

E48

E40

SIDE 1

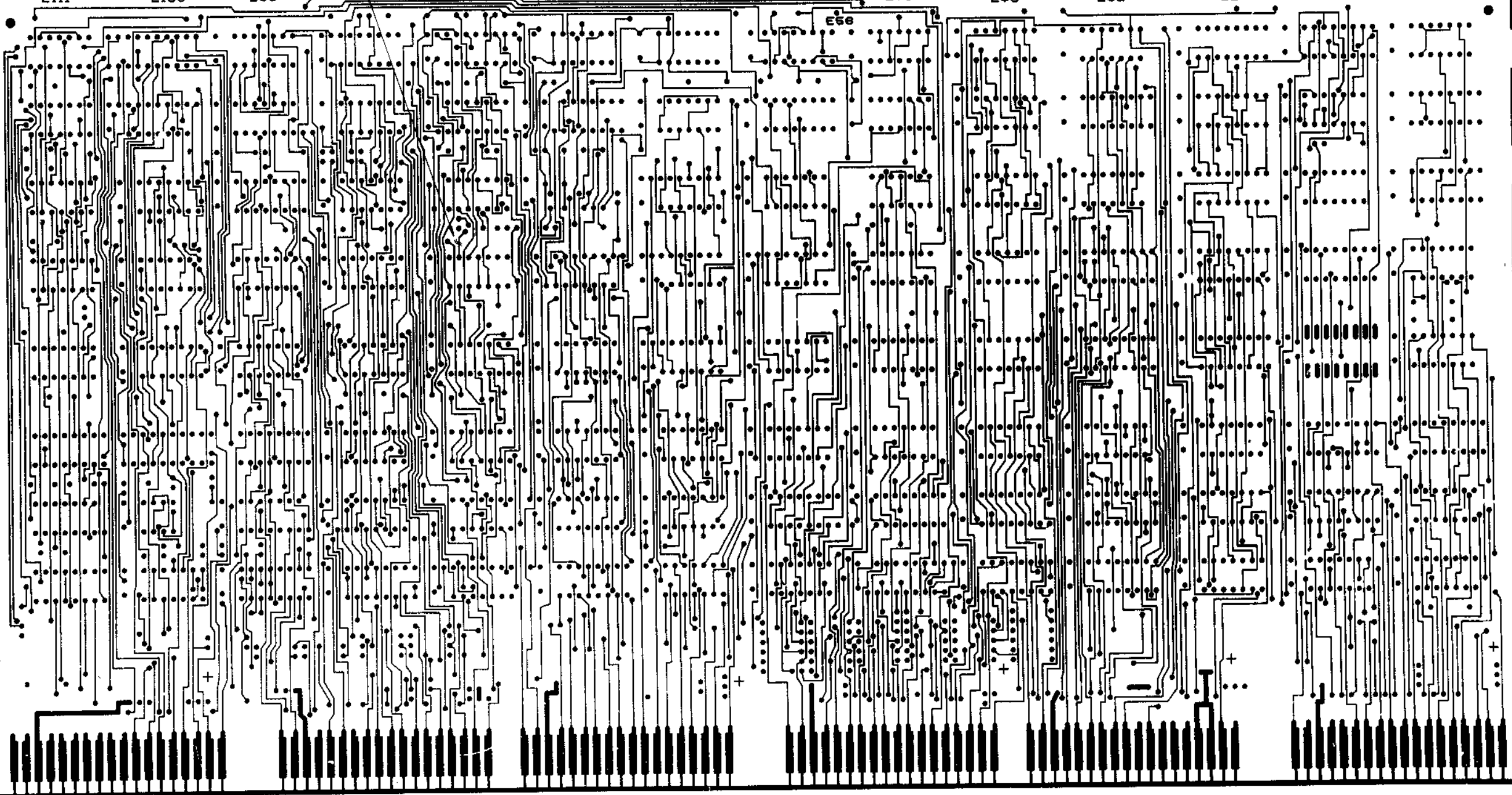
E32

E24

E18

E8

digital



FILE	MK11 CONTROL A	SIZE	CODE	NUMBER	REV.
SHEET	2/1	SHEET	2	OF	7
		SIST			
				1	E

8

7

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3

2

1

M8160  
50128760P1



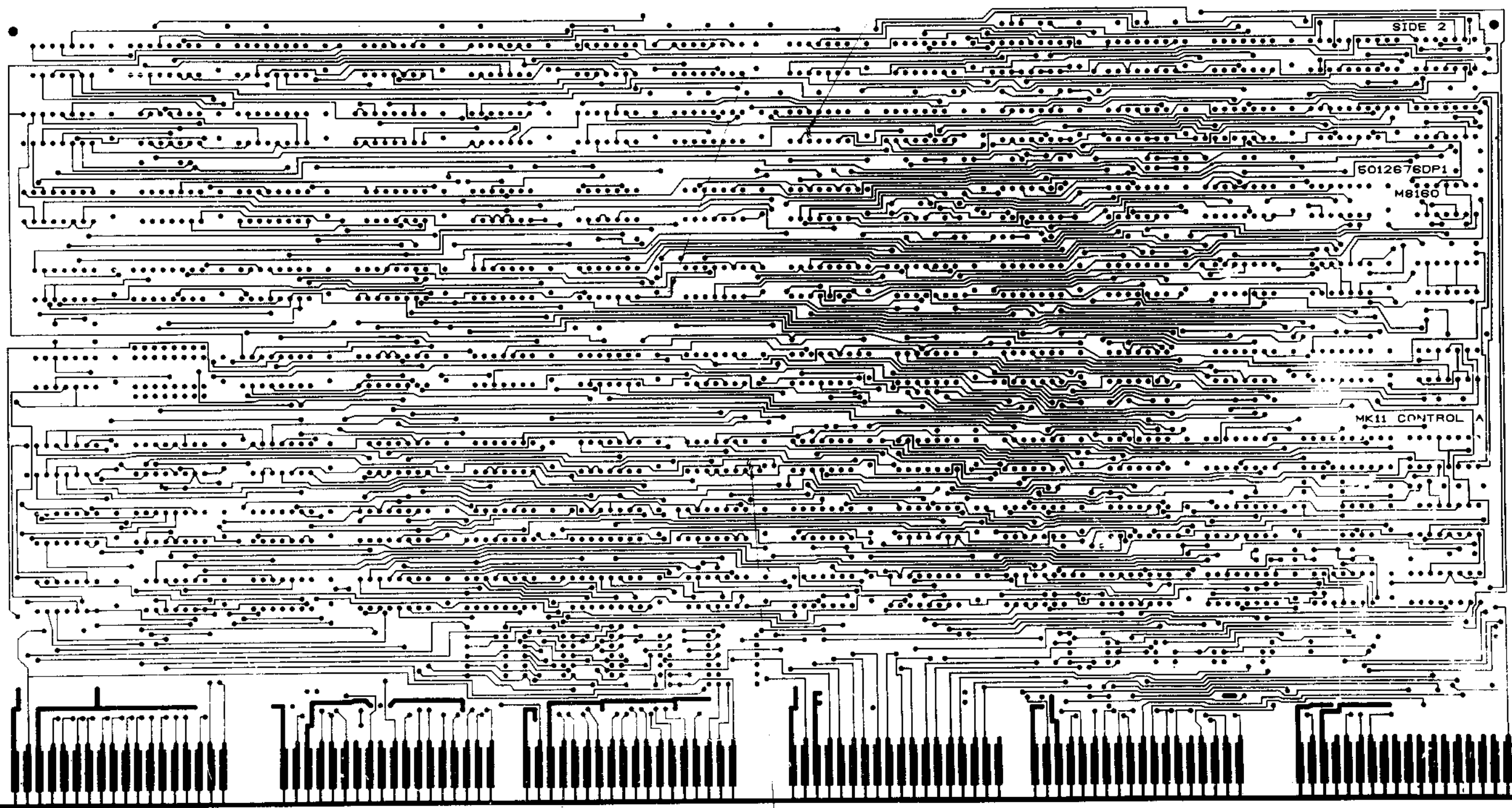
							TITLE	SIZE CODE	NUMBER	REV
							MKII CONTROL A	DJA	M8160-0-0	E
							SCALE 2/1	SHEET 3	OF 7	DIST

M8160 5012676DP1



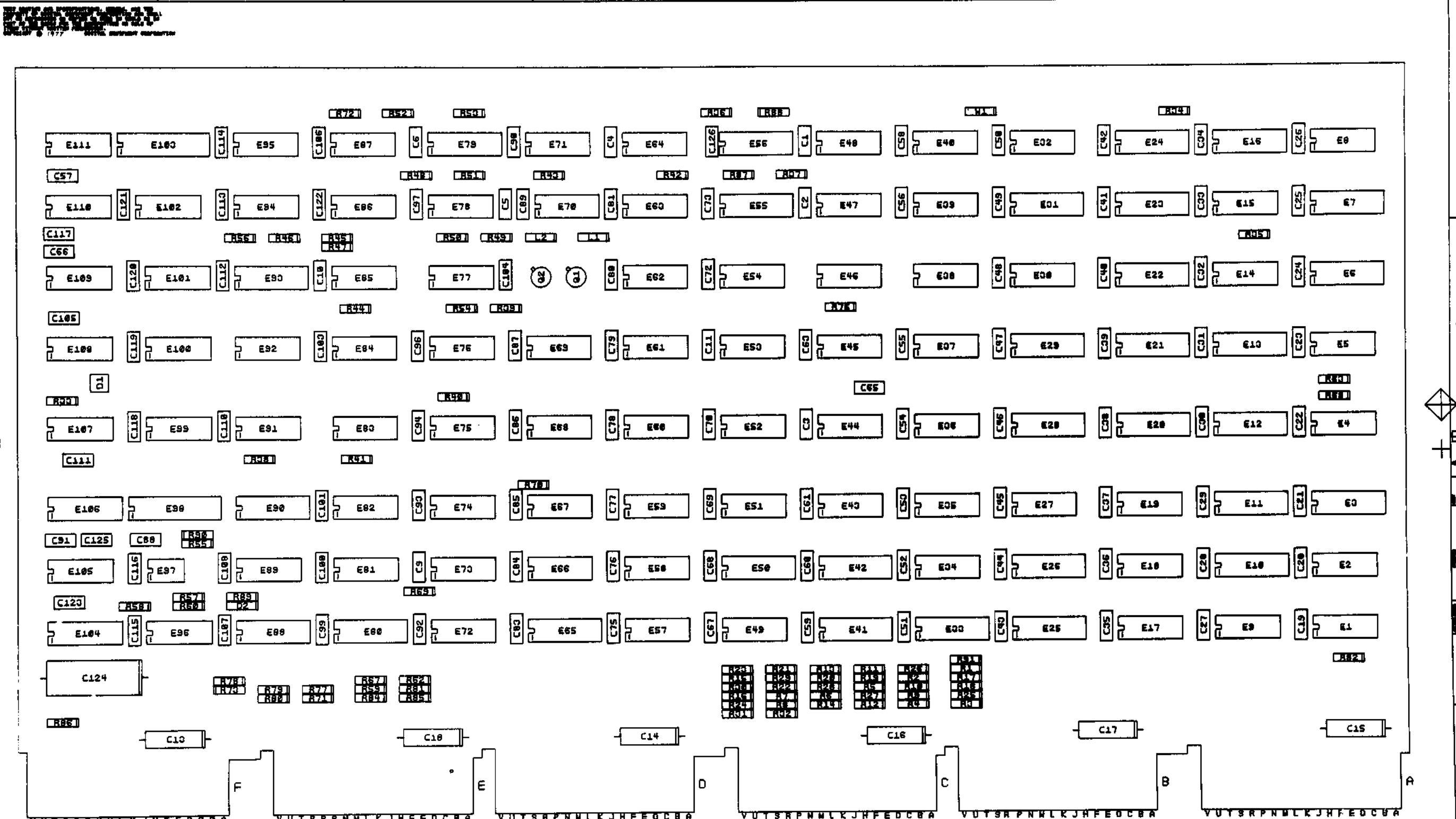
TITLE	MK11 CONTROL A	SIZE CODE	DUA	NUMBER	M8160-0-0	REV.	E
SCALE	2/1	SHEET	4	OF	7	DIST.	

AYER 834A J



2-2

TITLE	MKII CONTROL A	SIZE CODE	D JA	NUMBER	M8160-0-0	REV.	E
SCALE	2/1	SHEET	5	OF	7	DIST.	



NOTES:

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CHANGE NO	REV

REF DRAWING ONLY

SIGNATURES		DATE	digital
DRN. <i>J. Brennan</i>		10/18/72	
CHK'D. <i>J. Brennan</i>		10/27/72	
ENG. <i>J. Brennan</i>		11/15/72	
PROJ. ENG. <i>J. Brennan</i>		11/17/72	
PROD.			
SCALE 2/1			
SHT. 6 OF 7			
NEXT HIGHER ASSY. B-DD-M8160-0			
TITLE	MKII CONTROL A		
SIZE	CODE	NUMBER	REV
d	UA	M8160-0-0	E

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ECO #1  
 ETCH CUT, SIDE 2:  
 1-1. FROM E45-1 TO E53-11.  
 WIRE ADDS, SIDE 1:  
 1-2. FROM E45-1 TO E53-13.

ECO #2  
 ETCH CUTS SIDE 2:  
 2-1. FROM E63-6 TO E79-6  
 2-2. FROM E51-2 TO E68-10  
 WIRE ADDS SIDE 1:  
 2-3. FROM E63-6 TO E79-8  
 2-4. FROM E51-2 TO E66-8

ECO #3  
 WIRE DELETE SIDE 1:  
 3-1 REMOVE WIRE FROM E63-6 TO E79-8  
 ETCH CUT SIDE 1:  
 3-2 AT E76-13  
 WIRE ADDS SIDE 1:  
 3-3 FROM E76-13 TO E76-12  
 3-4 FROM E63-6 TO E63-2

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
MKII CONTROL A	D UA	M8160-0-0	E
SCALE	SHEET	OF	DIST.
	7	7	

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	D-CB-M8160-0-1		CIRCUIT SCHEMATIC		REF
2	2	D-UA-M8160-0-0		UNIT ASSEMBLY		REF
3	3	B-DD-M8160-0-0		DWG DIRECTORY		REF
4	4		5012676-00	M8160	1	
5	5		1000042-00	1000.0 MMF 100V 50200PPM DM158 (10-00)	1	C65
6	6		1000015-00	82.0 MMF 100V 50200PPM DM158 (10-00)	6	C1,C2,C4=C6,C11
7	7		1012219-00	47. MFD 30V GS 600D AL EL	1	C124
8	8		1012121-00	220.0 MMF 100V 10200PPM DM158	2	C3,C88
9	9		1012004-01	8 MFD 25V GS 10D AL EL (10-12)	6	C13=C10
10	10		1001610-01	.01 MFD 100V OR 50V ZSU DISC/800PF MIN	99	C19=C61,C63,C67-C70,C73,C72, C126,C75=C81,C83-C87,C89,C90, C92,C9,C93,C94,C96,C104,C97, C99=C101,C103,C10,C122,C106, C107,C108,C110,C112-C116,C119, C118,C120,C121,C123,C125,C91, C111,C105,C66,C117,C57
11	11		1105275-00	D 672 TR= 15NS PIV= 60V SP	1	D2
12	12		1110324-00	LED 1MCD@10MA 0MV5054-10HP40R2	1	D1
13	13		1210711-02	HANDLE,HEX MODULE,10-1/2	1	
14	14		1300165-00	1 K 1/4W 5% CC (13-00)	45	R1=R32,R59,R62,R67,R71,R73, R77,R78,R79,R80,R81,R84,R85, R91
15	15		1300447-00	4.7 K 1/4W 5% CC (13-00)	15	R44,R47,R54,R55,R56,R69,R82, R68,R86,R70,R87,R88,R34,R72, R63
16	16		1300479-00	10 K 1/4W 5% CC (13-00)	2	R36,R37
17	17		1300316-00	470 1/4W 5% CC (13-00)	1	R35
18	18		1302124-00	10 1/4W 5% CC (13-00)	1	R40
19	19		1300229-00	100 1/4W 5% CC (13-00)	5	R42,R43,R39,R76,R90
20	20		1300271-00	220 1/4W 5% CC (13-00)	1	R33

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
CHK	ECO NO.	REV	NO	FIRST USED ON:	MADE BY:	DATE:	TITLE	
E.R	00003	E		MK11	D. CARUSO	28-JUN-78	PARTS LIST	
					CHECKED: D. CARUSO	28-JUN-78	MK11 CONTROL A	
					DBN, ENG. J. B. ZACCONI	28-JUN-78		
					PROD. R. HILL	28-JUN-78		
					RESP, ENG. J. A. ZACCONI	28-JUN-78		
							SIZE: K	CODE: PL
							DOCUMENT NUMBER: M8160-0-D8P	REV: E
							ASSY. NO.: B-DD-M8160-0-0	EDITS: 2

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LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
21	21		1300295-00	330 1/4W 5% CC (13-00)	1	R11
22	22		1301890-00	560 1/4W 5% CC (13-00)	1	R10
23	23		1301972-00	270 1/4W 5% CC (13-00)	4	R49,R51,R53,R46
24	24		1301322-00	180 1/4W 5% CC (13-00)	4	R45,R48,R50,R52
25	25		1303044-00	100 K 1/4W 1% RN55D-F 100PPM (13-00)	1	R57
26	26		1302398-00	470 K 1/4W 5% CC (13-00)	1	R60
27	27		1303313-00	12.1 K 1/4W 1% RN55D-F 100PPM (13-00)	1	R58
28	28		1311594-00	30.1 K 1/4W 1% RN55D-F 100PPM (13-00)	1	R09
29	29		1503100-00	DEC3009B NPN 200MW SI 20 25 P	2	Q1,Q2
30	30		1610662-00	100.0 UH 10% 165MA 0DD1 00	2	L1,L2
31	31		1611243-00	DELAY=25-250NS,10TAPS RCL0L=103 E PE09029	5	E53,E54,E64,E70,E71
32	32		1911469-00	DEC 8640 RECEIVER,BUS,QUAD,UNIBUS,Q-BU	1	E46
33	33		1909705-00	DEC 8001-INAND GATE-QUAD 2IN,OPN COLL.	1	E95
34	34		1910649-00	8005 NOR GATE-QUAD 2IN,FAST	2	E62,E66
35	35		1910532-00	74808 NAND GATE-QUAD 2IN	14	E0,E37,E48,E51,E69,E75,E82, E100,E108,E109,E60,E105,E76, CONT E67
36	36		1912799-00	L800 NAND-GATE-QUAD 2IN,POSITIVE	3	E45,E52,E78
37	37		1912746-00	DEC 74837 NAND GATE-QUAD 2IN	1	E110
38	38		1912308-00	74802 NOR GATE-QUAD 2IN,POS	3	E50,E99,F102
39	39		1910533-00	74803 NAND GATE-QUAD 2IN,OPN COLLECT	2	E91,E96
40	40		1910534-00	74804 INVERTER GATE-HEX 1IN	14	E4,E17,E36,E32,E47,E49,E57, CONT E59,E61,E60,E01,E09,E101,E111
41	41		1912801-00	L802 NOR-GATE-QUAD 2IN	1	E63
42	42		1910535-00	74805 INVERTER GATE-HEX 1IN,OPEN CO	2	E92,E15
43	43		1912800-00	L811 AND GATE-TRIPLE 3IN	1	E40
44	44		1913777-00	L8240 DRIVER,LINE,OCTAL,TRI-ST	1	E103
45	45		1910536-00	74810 NAND GATE-TRIPLE 3IN	2	E30,E83
46	46		1910870-00	7427 NOR GATE-TRIPLE 3IN	1	E14
47	47		1911712-00	74851 AND-OR GATE-INVERT DUAL 2W/2IN	5	E1,E2,E9,E18,E30
48	48		1912823-00	L873 FF-JK DUAL W/CLEAR	1	E39
49	49		1910539-00	74820 NAND GATE-DUAL 4INPUT	1	E72
50	50		1910548-00	748157 MUX 1 OF 2 (QUAD)	1	K79
51	51		1909713-00	DEC 8015 NOR GATE-DUAL 4IN	14	E44
52	52		1910544-00	74874 FF-D DUAL,EDGE TRIGGER	5	E74,E84,E85,E86,E87
53	53		1912824-00	L874 FF-D DUAL,EDGE TRIGGER,POS	3	E73,E94,E107
54	54		1909050-00	7475 LATCH 4BIT	5	E65,E80,E88,E90,E104
55	55		1909932-00	7403 ADDER-4BIT	2	E6,E28
56	56		1912843-00	LS139 DECODER, 2 OF 4(DUAL)& DEMUX	1	E24
57	57		1912844-00	LS151 MUX 1 OF 8 & DATA SELECTOR	4	E25,E29,E33,E41
58	58		1910547-00	748153 MUX 1 OF 4 (DUAL)	6	E3,E11,E26,F42,E50,E93
59	59		1911675-00	748138 DECODER-THREE INPUT	1	E10
60	60		1910652-00	74174 FF-D HEX	2	E7,E20
61	61		1911713-00	74163 COUNTER,SYNCHR,4-BIT	1	E31
62	62		1912837-00	L8123 ONE SHOT-DUAL,RETRIGGERABLE	1	E56
63	63		1910035-00	DEC 74197 COUNTER,ASYNCH UP,H1 SPEED 828	4	E27,E19,E43,E35
64	64		1912857-00	LS197 COUNTER,BINARY,PRESETTABLE	2	E5,E34
65	65		1913462-00	748240 OCTAL BUFFER,INVERTING TRI-STA	1	E98

TITLE	PARTS LIST	SIZE	CODE	DOCUMENT NUMBER	REV
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	MK11 CONTROL A	K	PL	M8160-0-DRP	E

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
66	66		1912125-00	748135 XOR/NOR GATE-QUAD 2IN	1	E106
67	67		1912064-00	LS279 LATCH,QUAD-S-R	1	E16
68	68		1910956-00	748151 MUX 1 OF 8	1	E21
69	69		1912054-00	LS193 COUNTER,SYNCHR,4BIT,UP/DN,BINA	2	E22,E23
70	70		1910544-01	74874-60GG-D DUAL,EDGE TRIGGER,SYNCHR	1	E77
71	71		1911944-00	555CN TIMER,FUNCT,BLOCK	1	E97
72	72		9000024-01	EYELET, ROLLED FLANGE, .121 OD X .196 LG	12	
73	73		9105740-55	WIRE(WRAP)30AWG UL1423 (91-00 A/R		

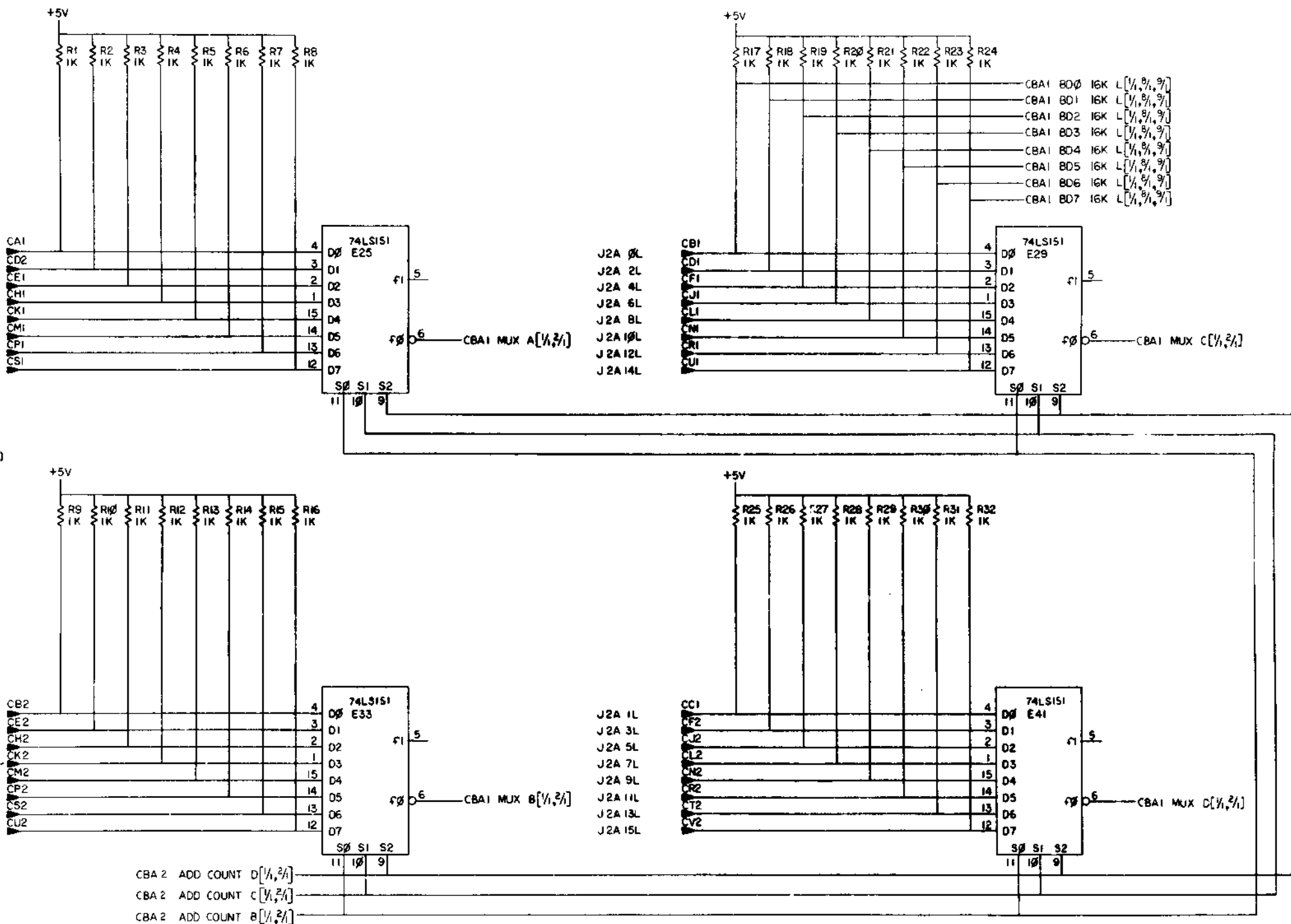
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE MK11 CONTROL A	PARTS LIST	SIZE K	CODE PL	DOCUMENT NUMBER M8160-Q-DBP	REV E
---	-------------------------	------------	-----------	------------	--------------------------------	----------

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- J1A 0L
- J1A 2L
- J1A 4L
- J1A 6L
- J1A 8L
- J1A 10L
- J1A 12L
- J1A 14L

ARRAY CONFIGURATION CODE

J2L	J1L	DESCRIPTION
0	0	NO CARD
0	1	32 KW (4 K RAMS)
1	0	32 KW (16 K RAMS)
1	1	128 KW (16 K RAMS)

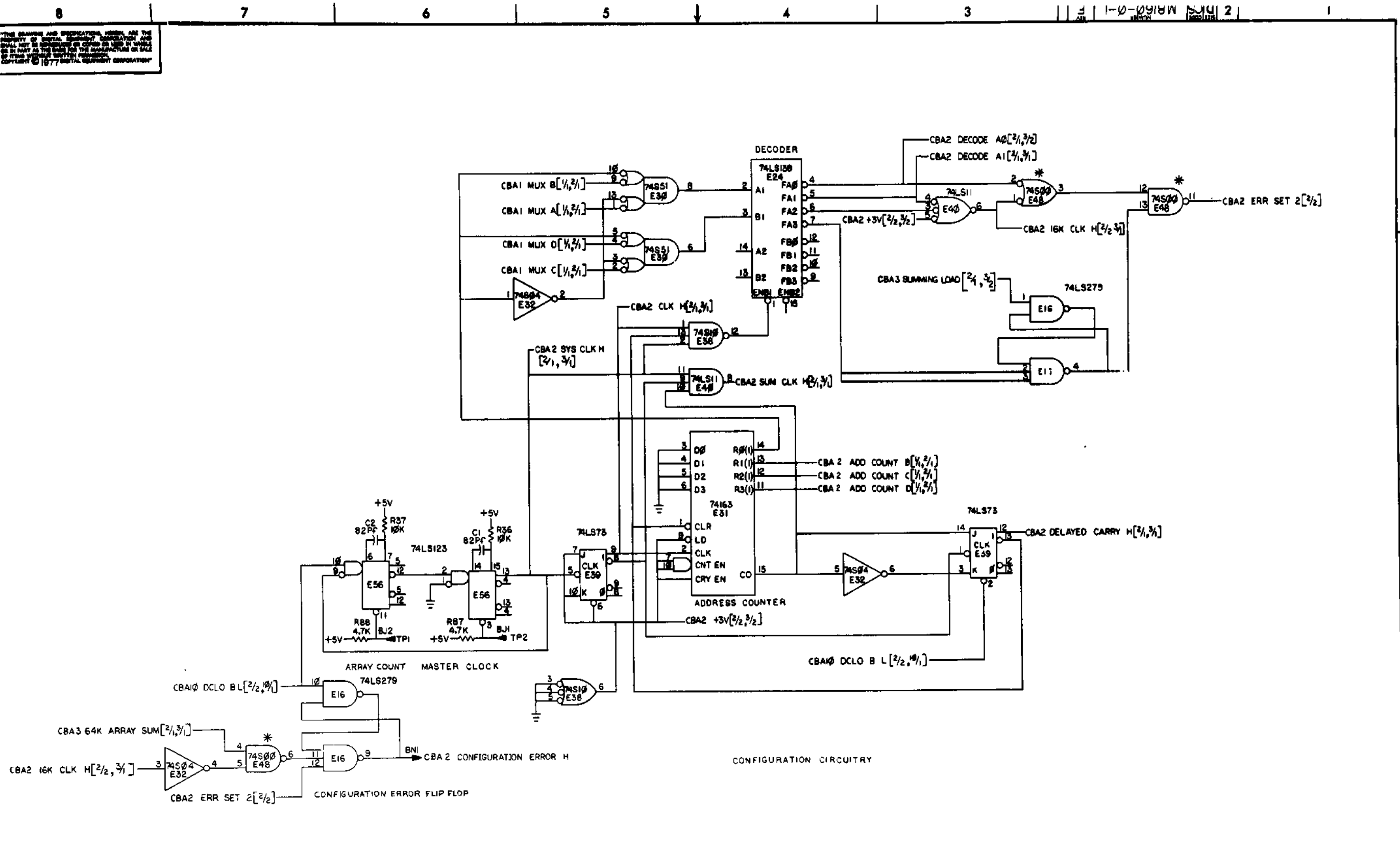


CONFIGURATION CIRCUITRY  
ARRAY FINGERPRINT MUX

REV.	DATE	BY	CHKD.
1	11-2-77	A. ZACCONI	A. ZACCONI
2	11-2-77	A. ZACCONI	A. ZACCONI
3	11-2-77	A. ZACCONI	A. ZACCONI
4	11-2-77	A. ZACCONI	A. ZACCONI
5	11-2-77	A. ZACCONI	A. ZACCONI
6	11-2-77	A. ZACCONI	A. ZACCONI
7	11-2-77	A. ZACCONI	A. ZACCONI
8	11-2-77	A. ZACCONI	A. ZACCONI

DRAWN BY: S. Carney	DATE: 8-1-77	FIRST USED ON: MK II	DIGITAL
CHK'D BY: P. G...	DATE: 11-2-77	TITLE: MK II (CBA1)	
ENG. BY: P. G...	DATE: 11-2-77		
PROJ. ENG. BY: P. G...	DATE: 11-2-77		
PROD. BY: P. G...	DATE: 11-2-77		
NEXT HIGHER ASSY: B-DD-MB100-0	SIZE CODE: D CS	NUMBER: M8160-0-1	REV. E
SCALE: 1/1	SHEET: OF 1	DIST.	

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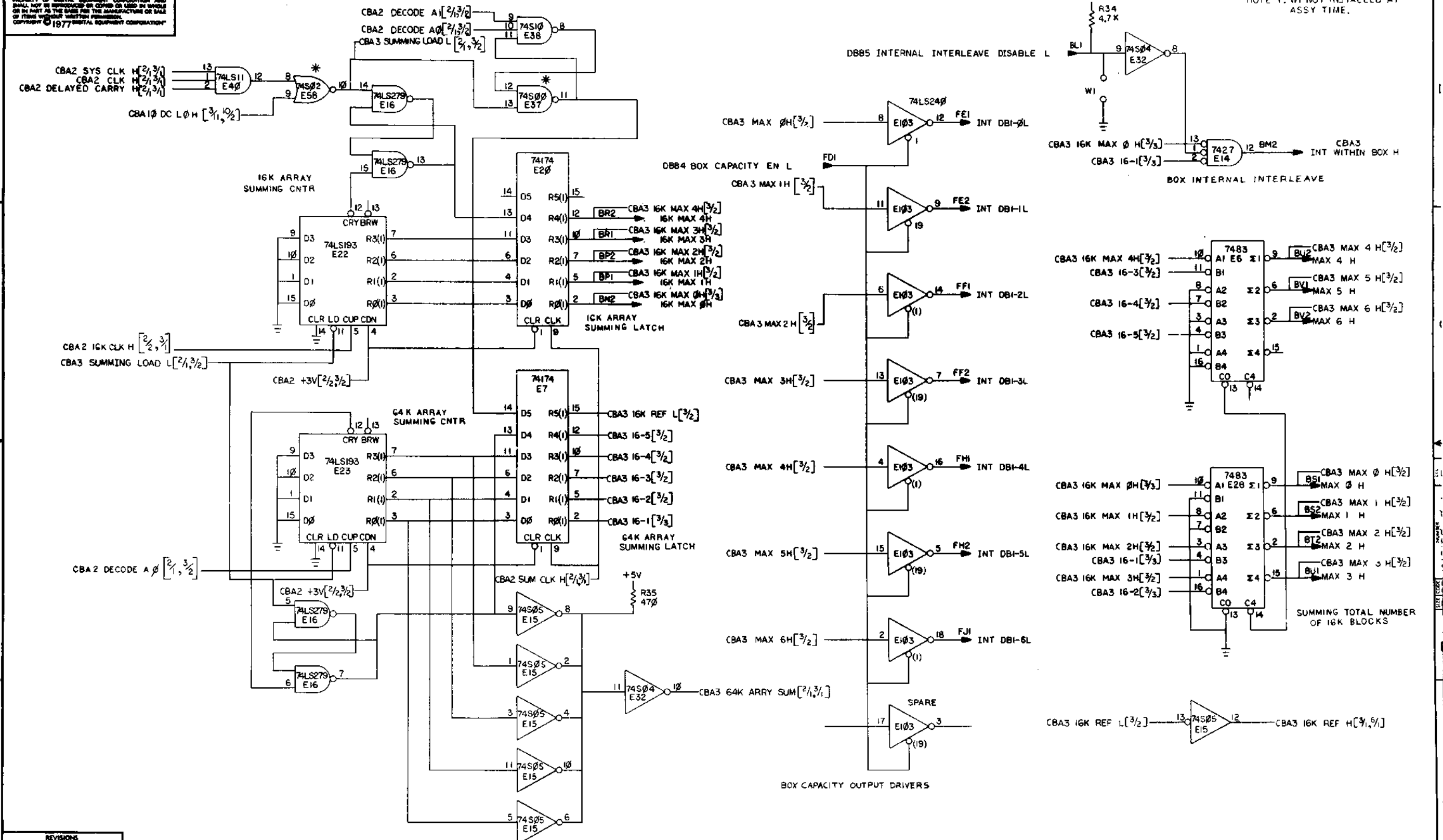


REVISIONS			TITLE		NUMBER		REV.
CHK	CHANGE NO.	REV.	MK II CONTROL A		DCS	M8160-0-1	E
			SCALE	SHEET 2 OF 1	DIST.		

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1-0-0918W 2

NOTE 1: W1 NOT INSTALLED AT ASSY TIME.



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MK II CONTROL A (CBA3)	SIZE	CODE	NUMBER	REV.
SCALE	1/1	SHEET	3	OF	11
DIST.					

8

7

6

5

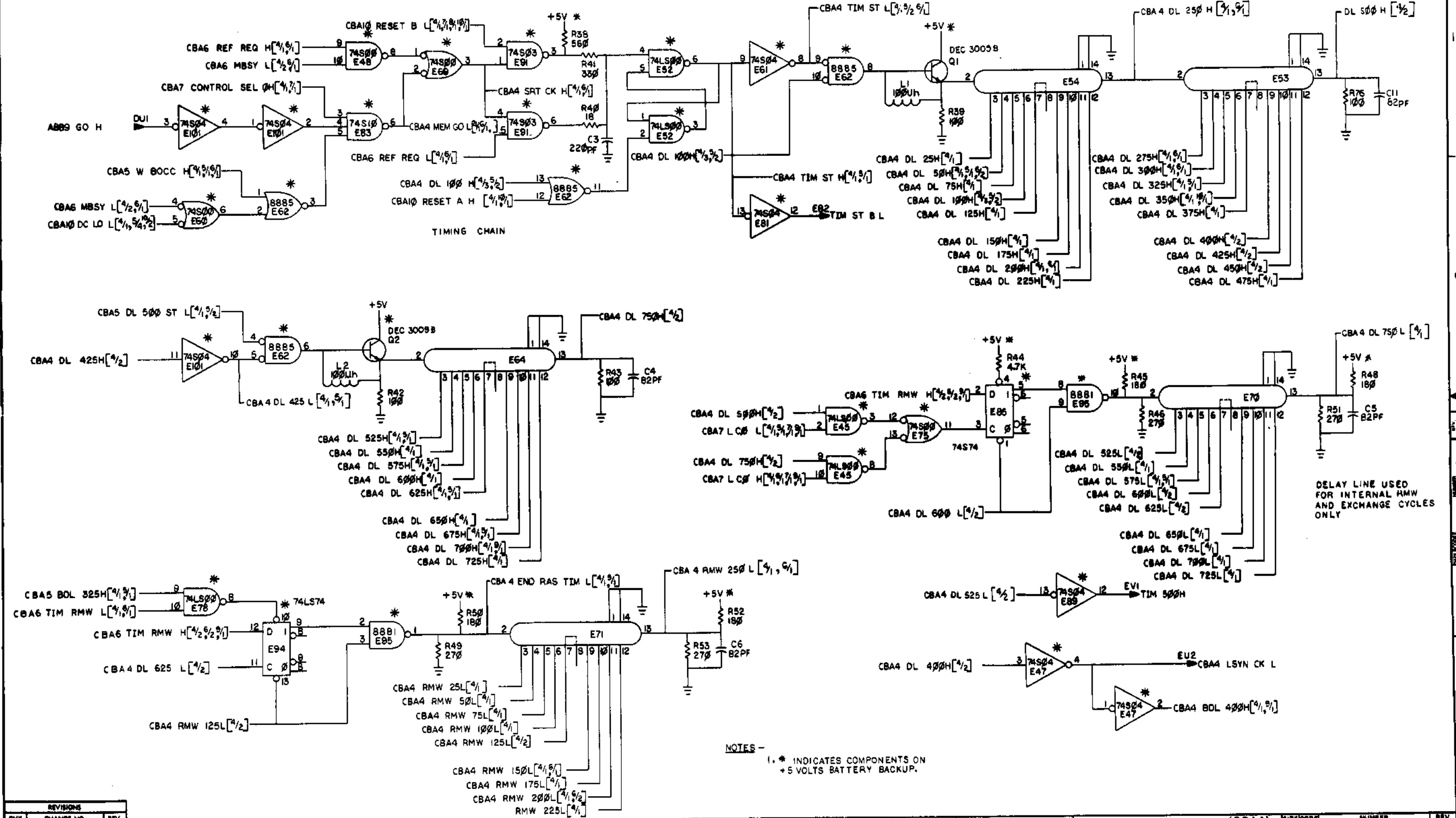
4

3

2

1

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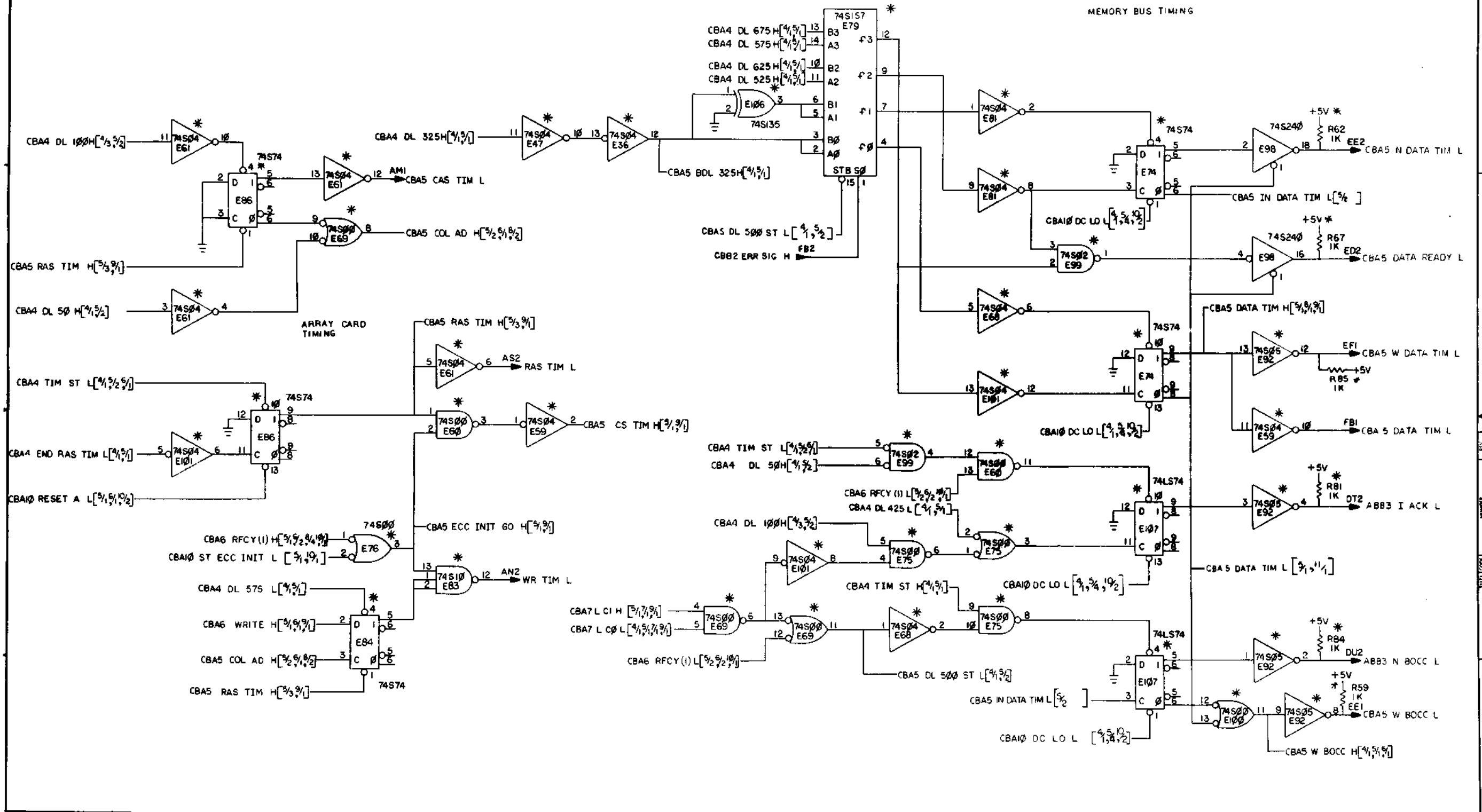
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CBA4) MKII CONTROL A	SIZE/CODE	DCS	NUMBER	MB160-0-1	REV.	E
SCALE		SHEET	4	OF	1	DIST.	

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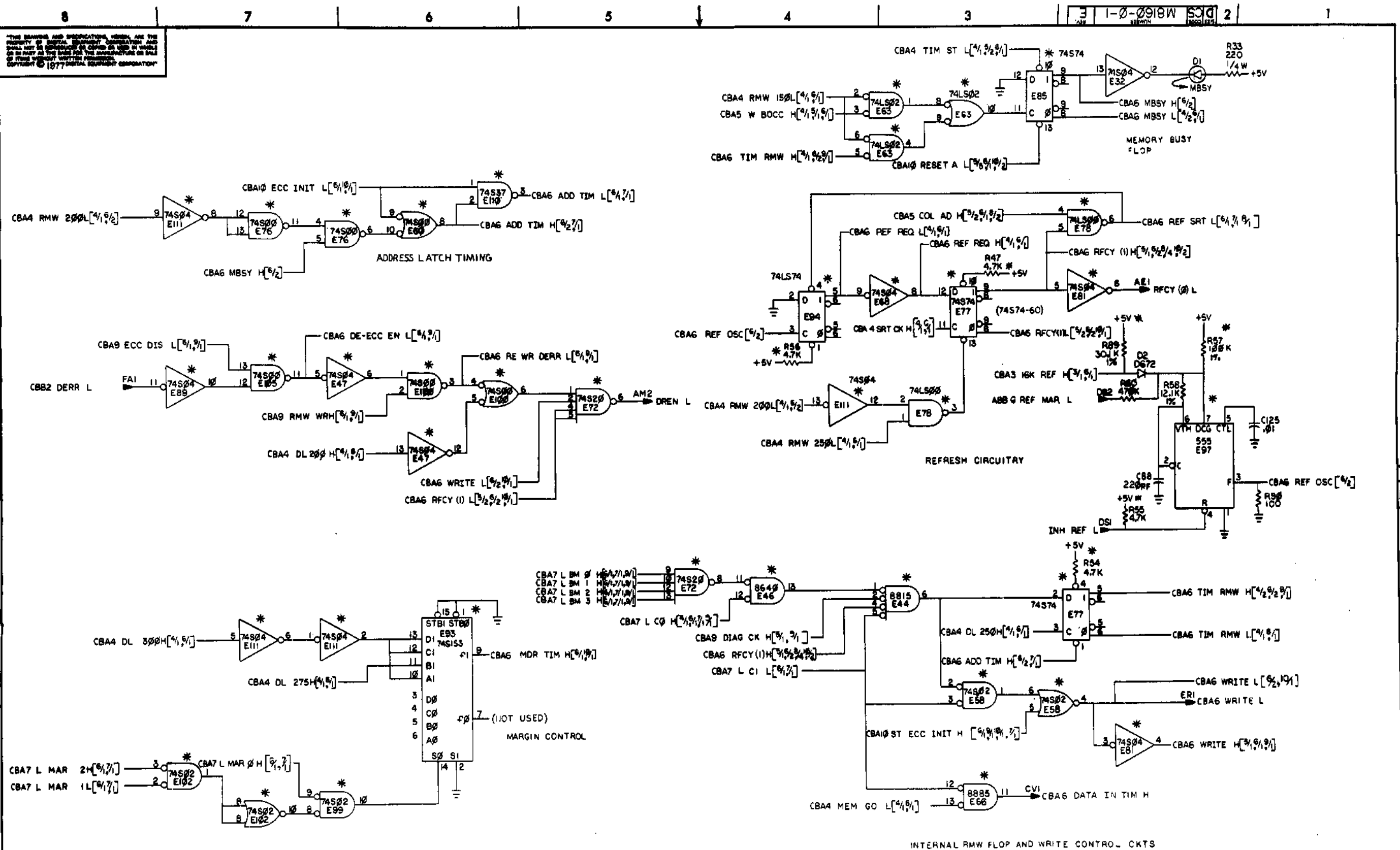
SINGLE ERROR TIME EXTENSION

MEMORY BUS TIMING



CHK	CHANGE NO.	REV.

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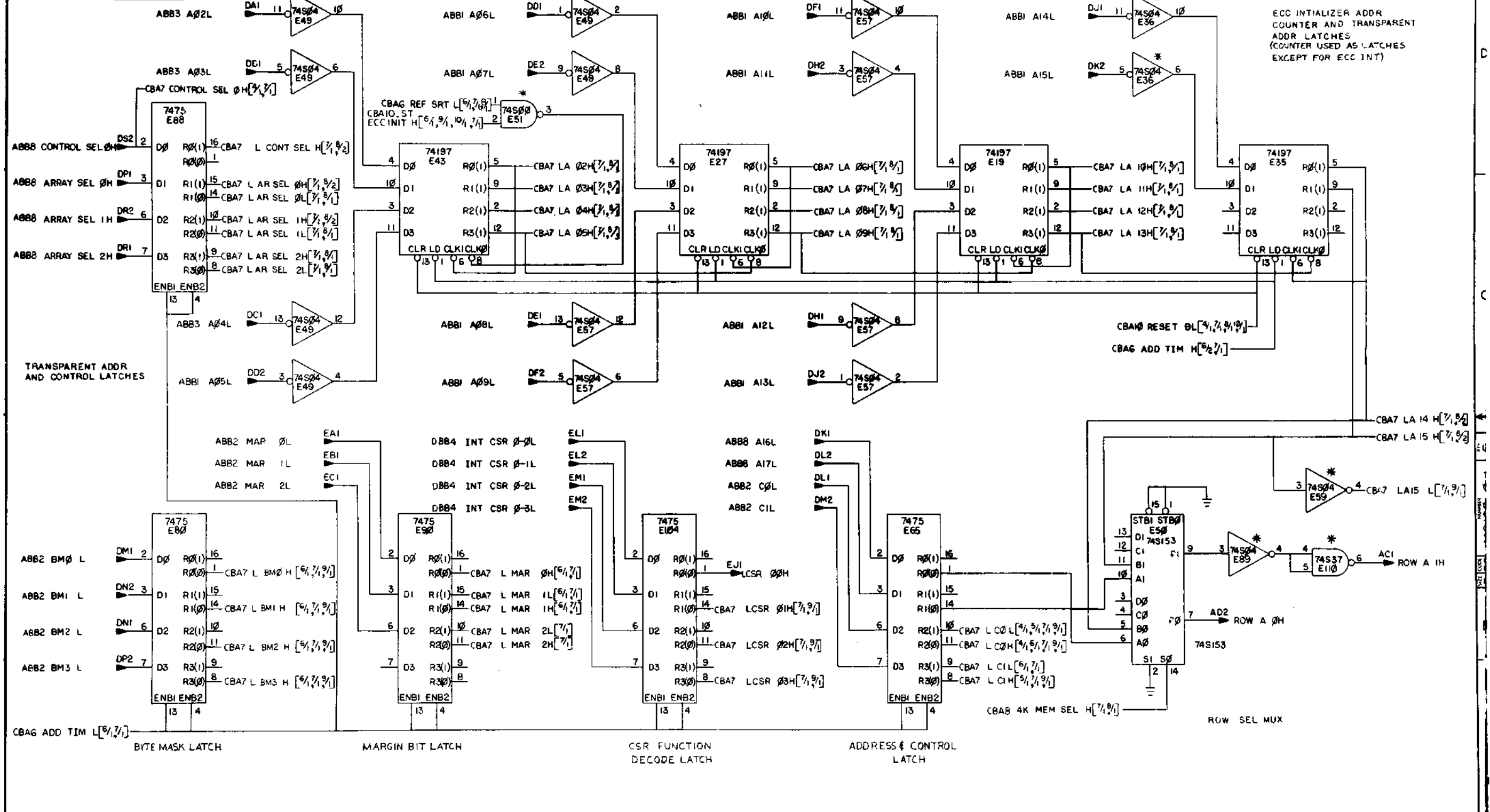


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MK II CONTROL A (CBA6)	SIZE	D CS	NUMBER	MB160-0-1	REV.	E
SCALE		SHEET	6	OF		DIST.	



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ECC INITIALIZER ADDR COUNTER AND TRANSPARENT ADDR LATCHES (COUNTER USED AS LATCHES EXCEPT FOR ECC INT)

CBA7 RESET 0L [7/1, 9/1]  
CBA7 ADD TIM H [6/2, 7/1]

TRANSPARENT ADDR AND CONTROL LATCHES

BYTE MASK LATCH

MARGIN BIT LATCH

CSR FUNCTION DECODE LATCH

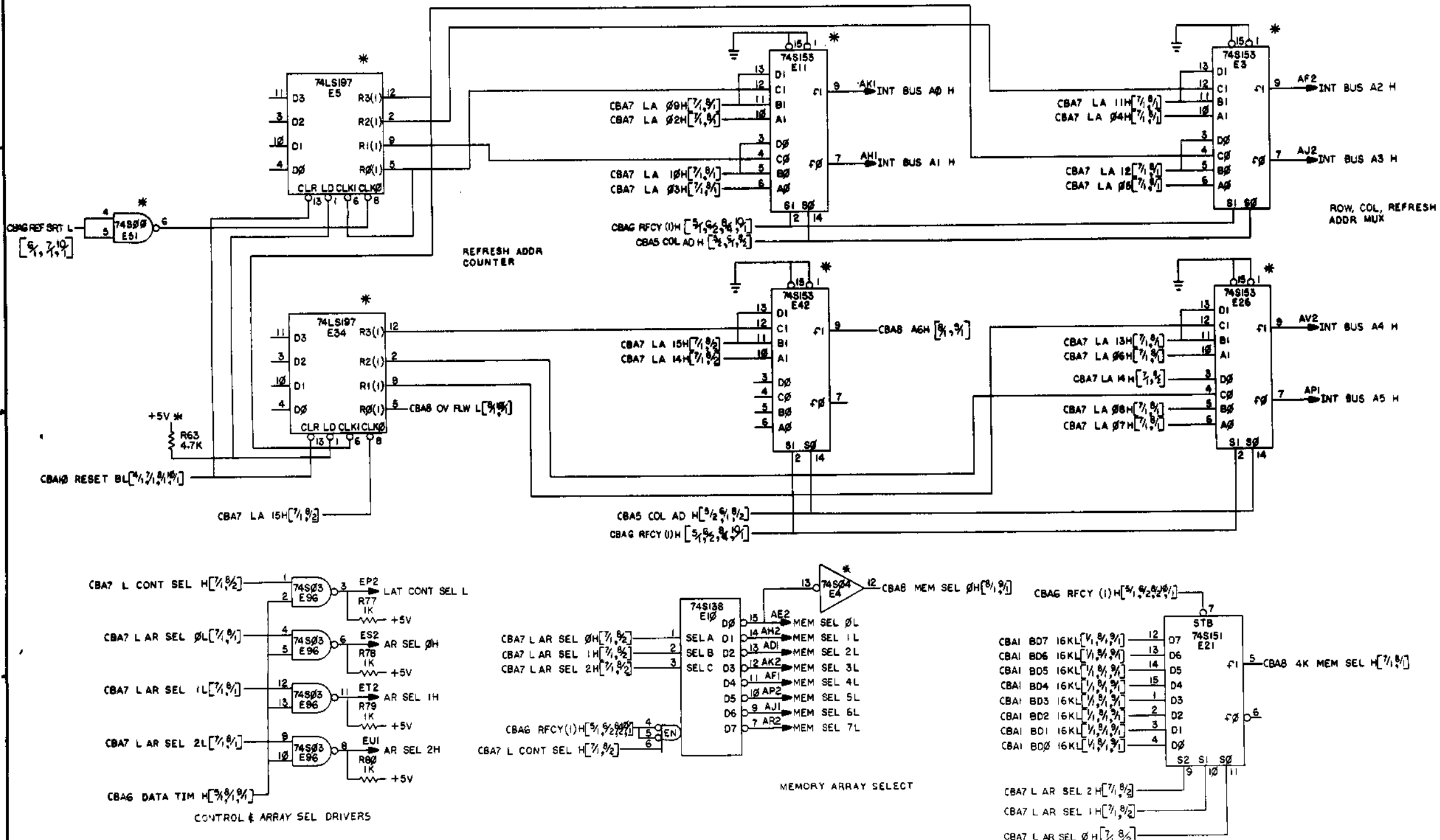
ADDRESS CONTROL LATCH

ROW SEL MUX

REVISIONS		
CL X	CHANGE NO.	REV.

TITLE	MK II CONTROL A (CBA7)	SIZE CODE	DCS	NUMBER	M8160-0-1	REV.	E
SCALE		SHEET	7	OF	1	DIST.	

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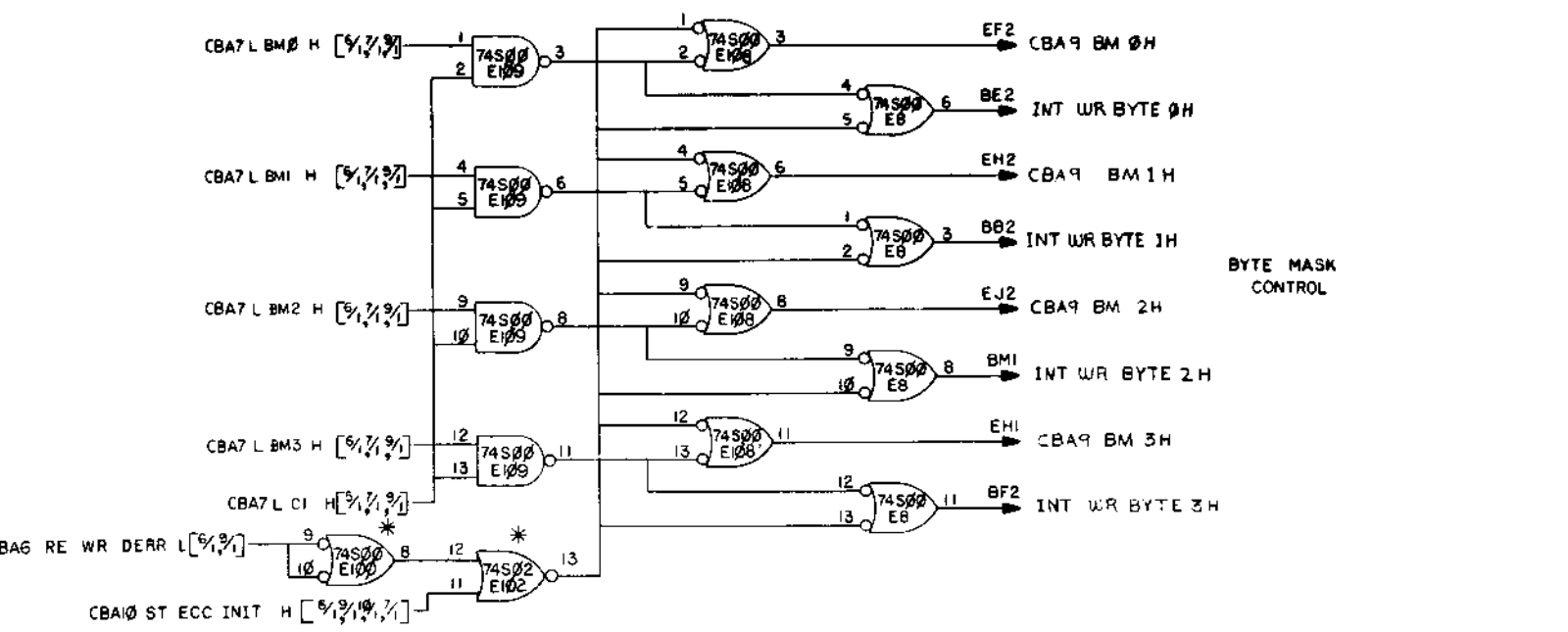
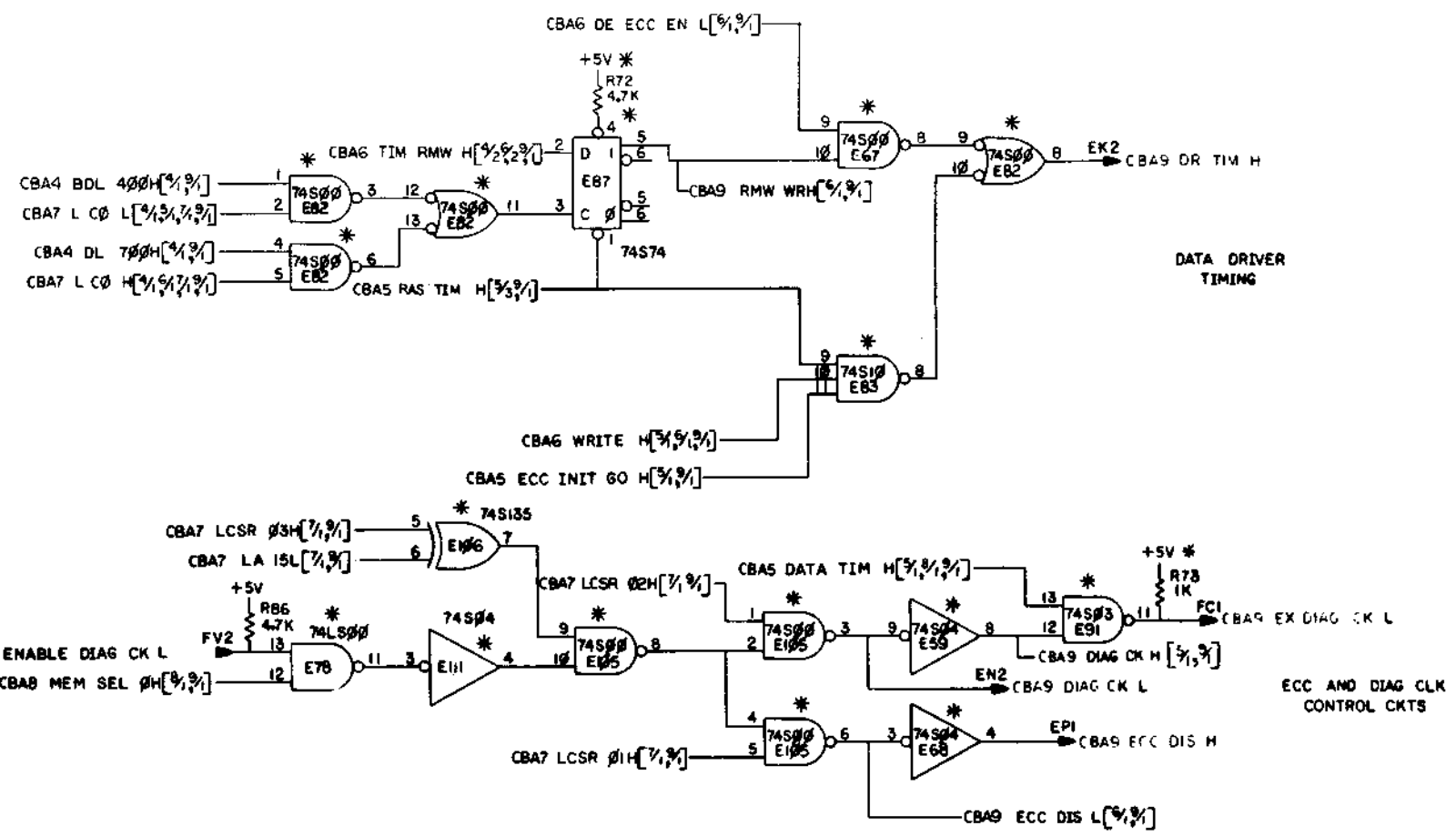
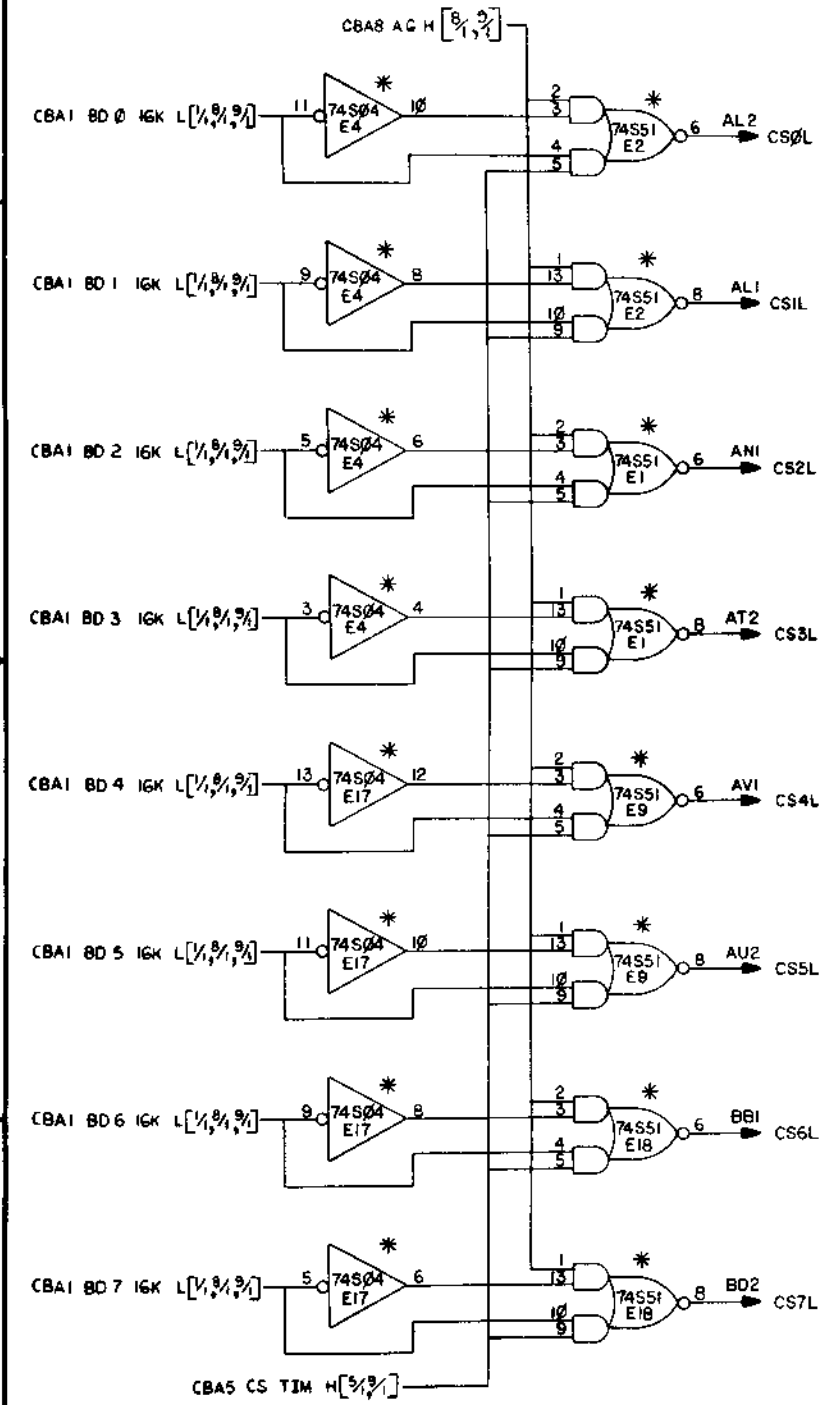


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CBA8)	SIZE/CODE	NUMBER	REV.
MKII CONTROL A	DCS	M8160-0-1	E	
SCALE	SHEET	OF	DIST.	
	8	11		

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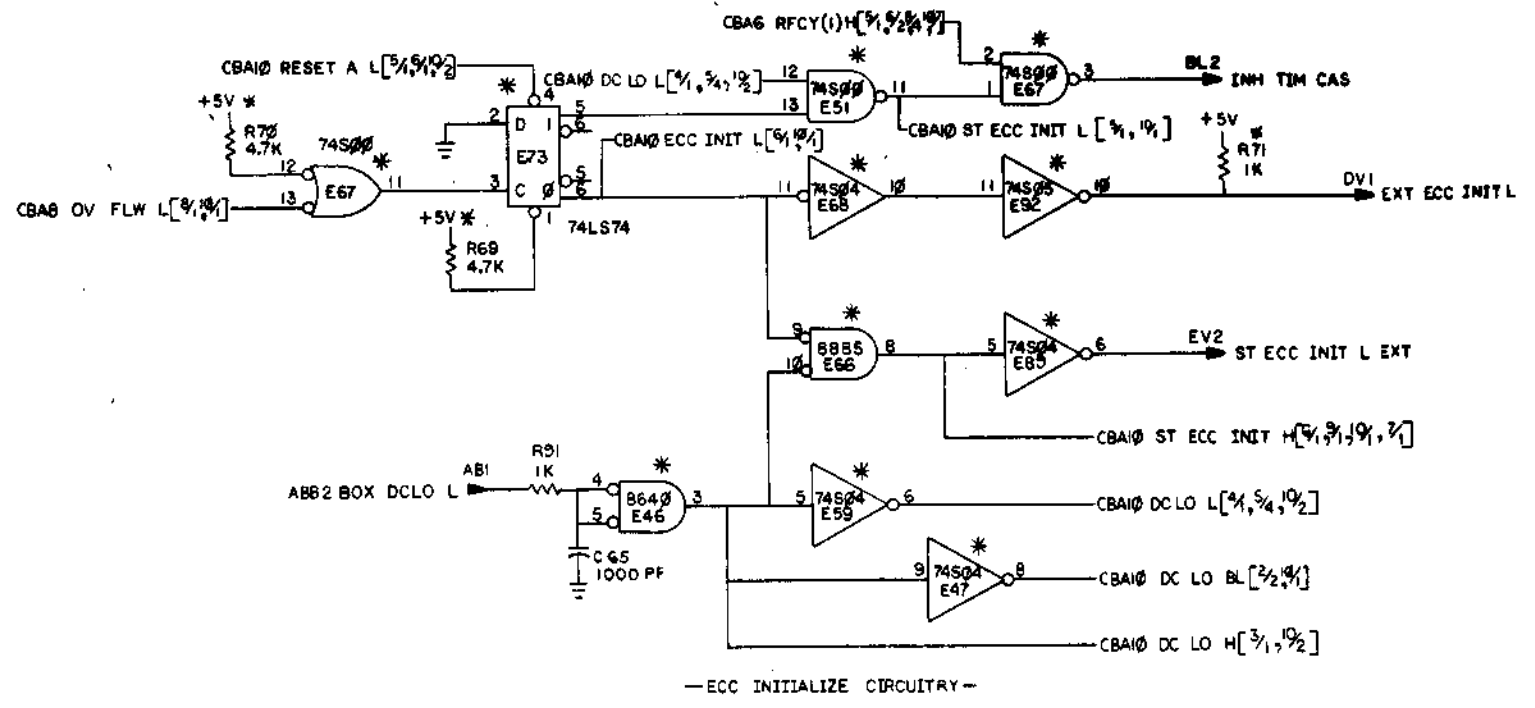
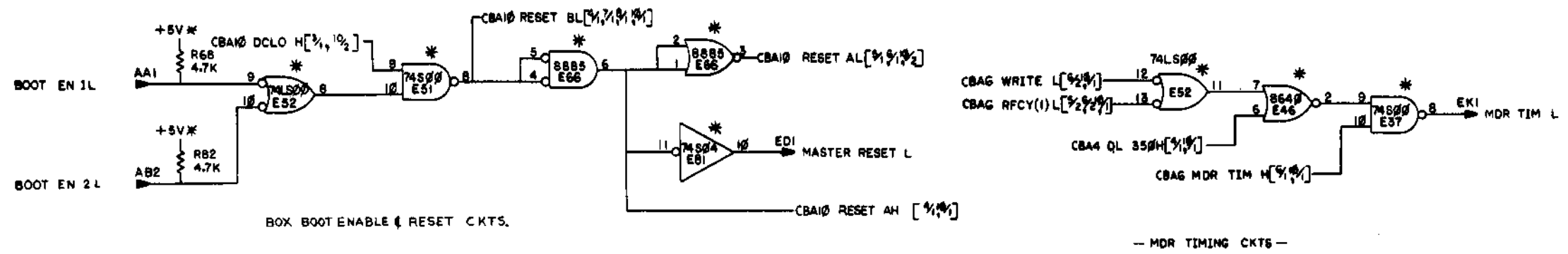
CS TIMING/AG MUX CKTS



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CBA9) MKII CONTROL A	SIZE CODE	D CS	NUMBER	M8160-0-1	REV.	E
SCALE		SHEET	9	OF	11	DIST.	

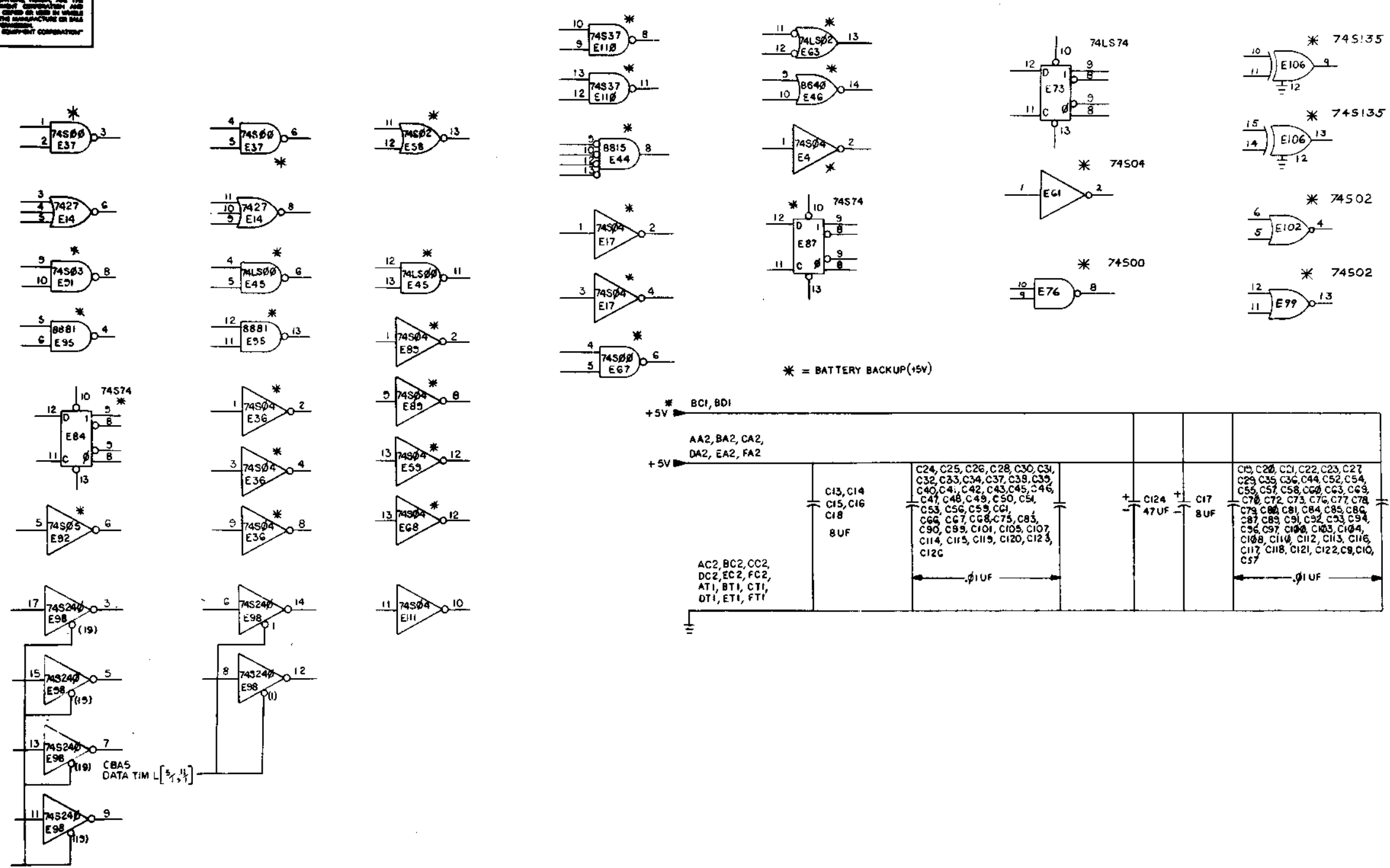
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REVISIONS		
CHK	CHANGE NO.	REV.

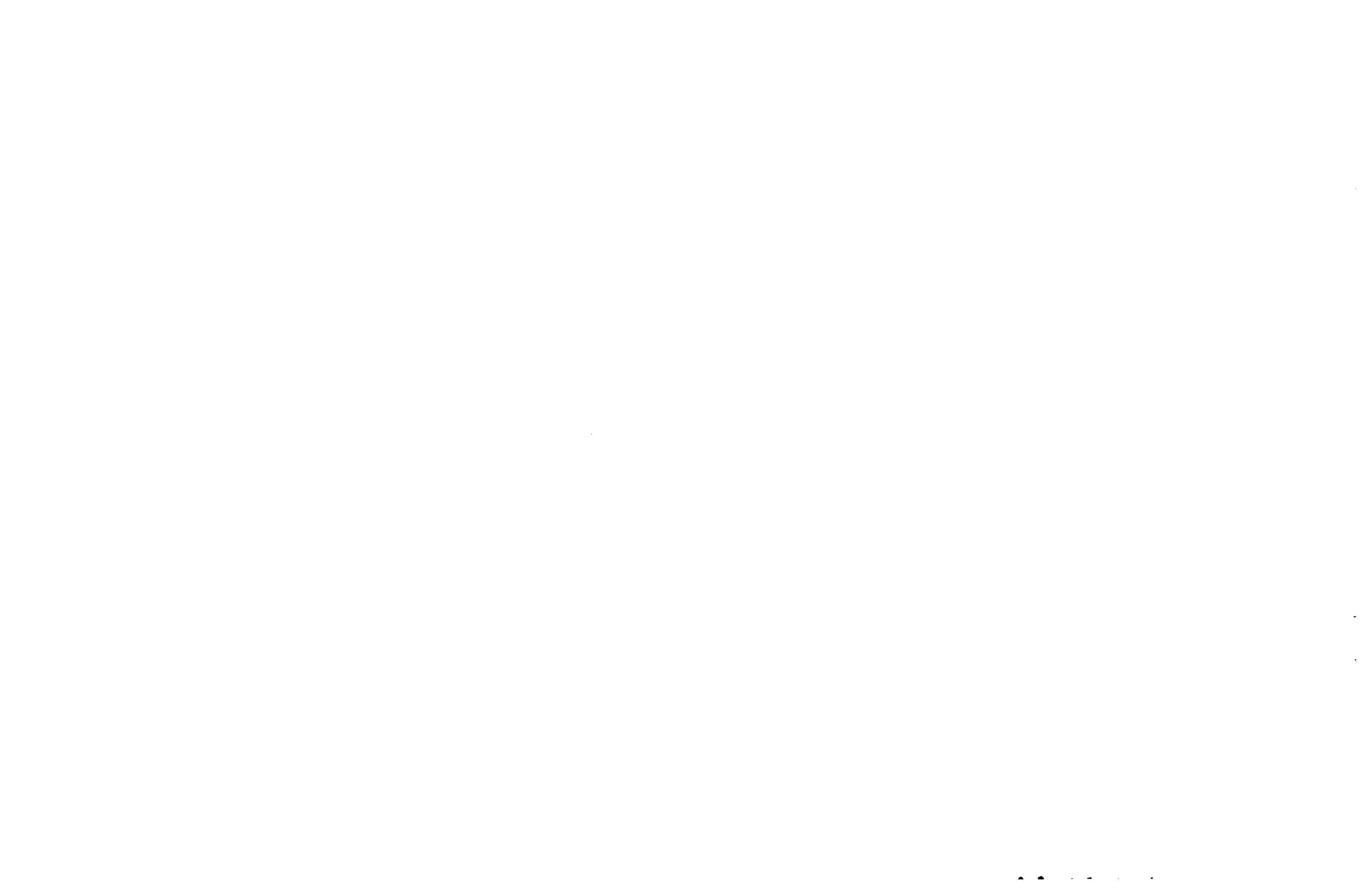
TITLE	(CBA10)	SIZE/ CODE	NUMBER	REV.
MKII CONTROL A	DCS	M8160-0-1	E	
SCALE	SHEET	OF	DIST.	

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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	(CBAT)	SIZE CODE	NUMBER	REV.
MKII CONTROL A		D	CS M8160-0-1	E
SCALE	1/1	SHEET	1 OF 1	DIST.



DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS																		
				1	2	3	4	5	6	7	8	9	10	11	12							
B-DD-M8161-0	1		MK11 CONTROL B	*																		
D-UA-M8161-0-0	5		MK11 CONTROL B	A																		
B-PL-M8161-0-0	2		MK11 CONTROL B	A																		
D-MD-M8161-0-0	5		DRILL & ETCH DRAWING	A																		
D-CS-M8161-0-1	9		MK11 CONTROL B	A																		
		5012677	ETCHED BOARD	B																		
M8161-0-L			P.C. DESIGN DATA BASE	REF																		

**NOTES:**

REVISIONS  
DATE  
CHG NO.  
REV.

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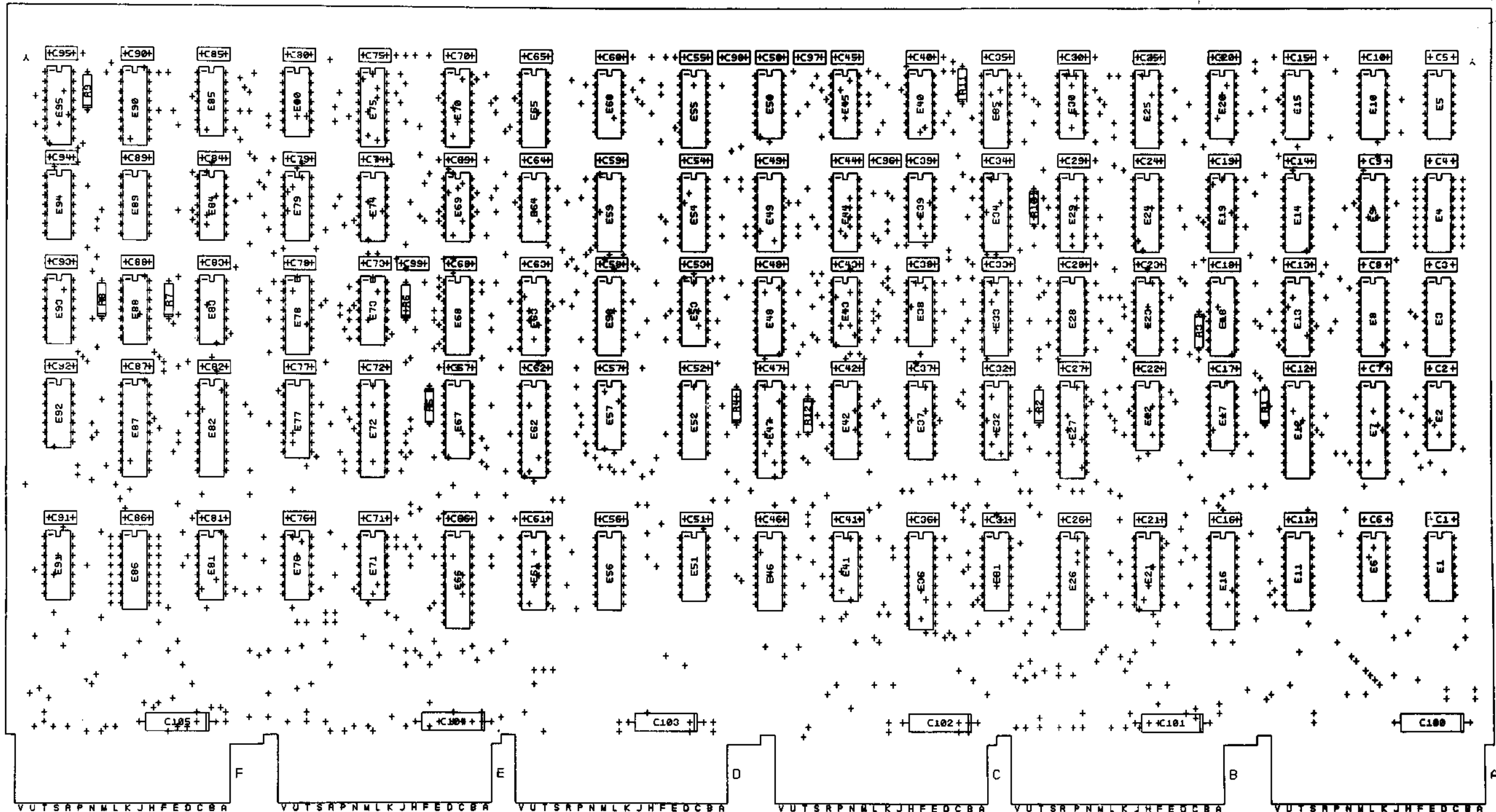
USED ON OPTION/MODEL	DRN.	TITLE	SIZE	CODE	NUMBER	REV.
MK11	L. METZGER 7/7/77	MK11 CONTROL B	B	DD	M8161-C	*
	CHK'D P. Bossman 7/18/77					
	ENG. A.D. Ferrari 10/26/77					
	PROD. R.C. Hill 10/26/77					
		SHEET 1 OF 1				





COMPONENT SIDE VIEW

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NOTES:  
1. B HOLES .0745 (+.000-.005) MAYNARD ONLY

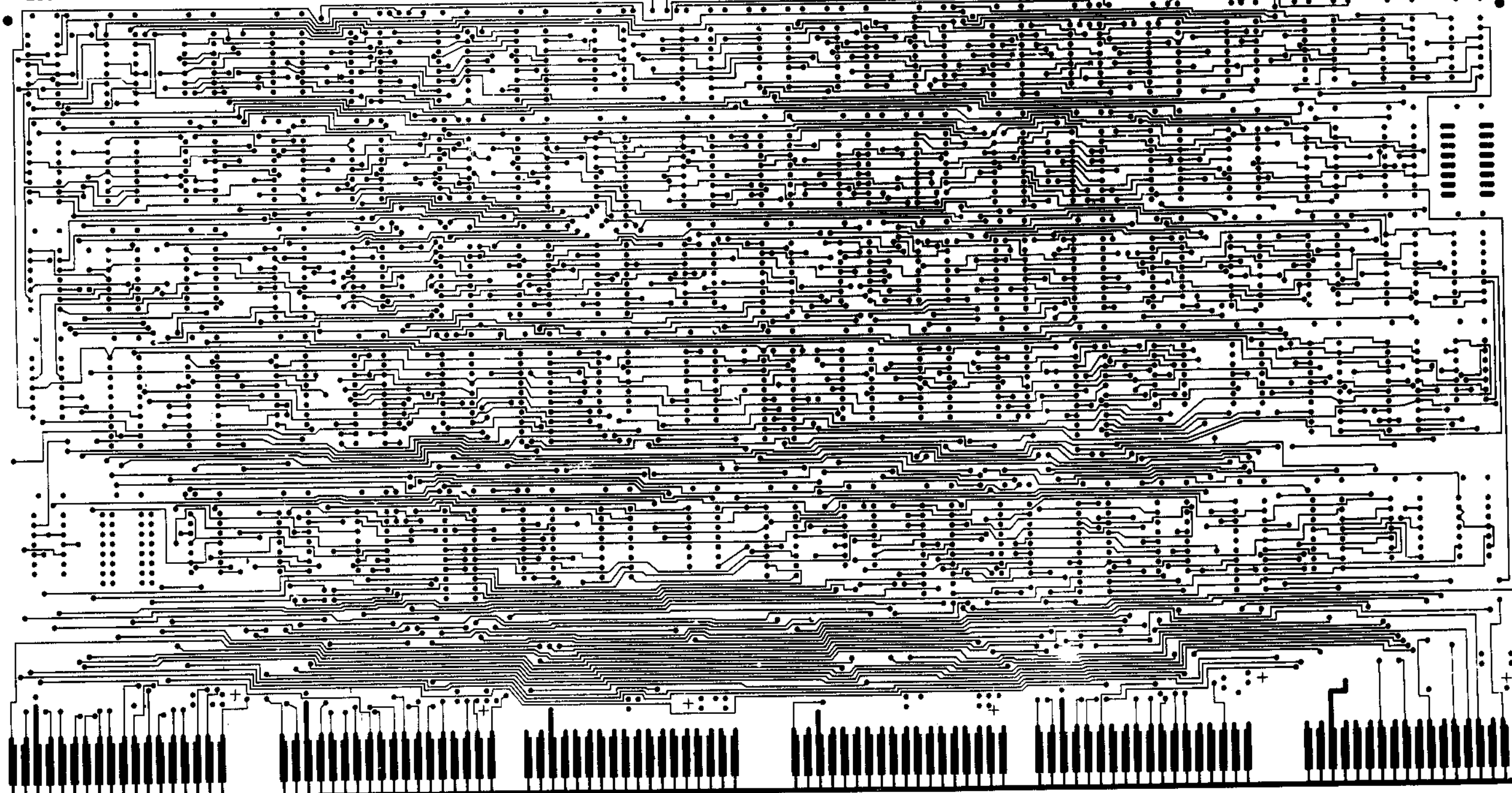
CHG	NO	REV

ETCH REV.	
P.C. DESIGN DATA BASE REV.	

SIGNATURES		DATE	digital
DRN. LEAN ROGERS			
CHK'D. BEVERLY J. L.			TITLE MK11 CONTROL B
ENG. J. J. ...			
PROJ. ENG. ...			SIZE CODE NUMBER REV D UA MB161-0-0 A
PROO. ...			
SCALE 2/1			NEXT HIGHER ASSY. B-DD-MB161-0
SHT. 1 OF 6			

CS#ABCDEFGHIJKLMNPRS  
E95 E90 E85 E80 E75 E70 E65 E60 E55 E50 E45 E40 E35 E30 E25 E20 E15 E10 E5

digital



8

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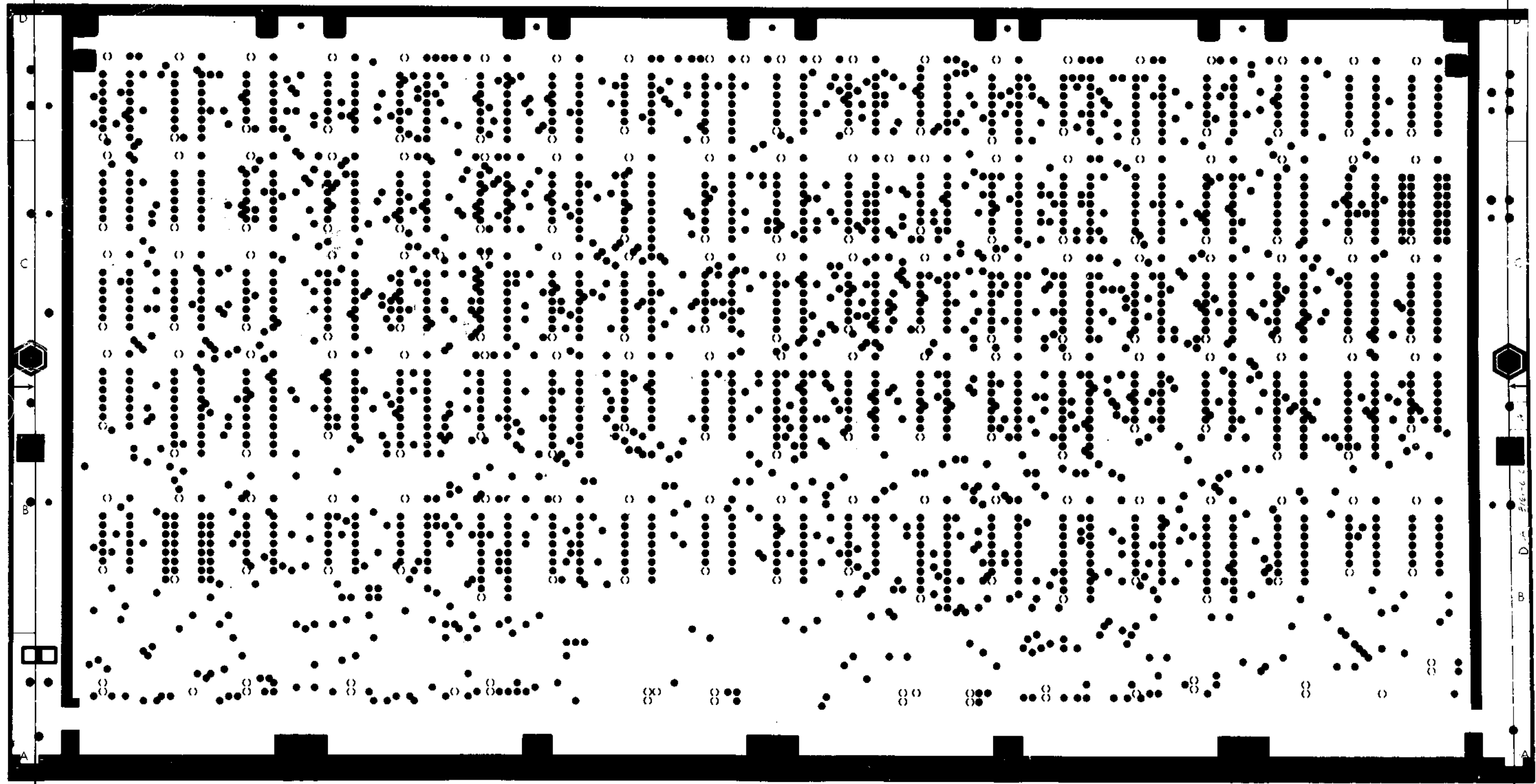
0-0-191804 2

1

M8161 5012677 B

LAYER 12

L2



MKII CONTROL B		D JA	M8161-0-0
SCALE	2/1	SHEET	3 OF 6
		DIST	

8

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B

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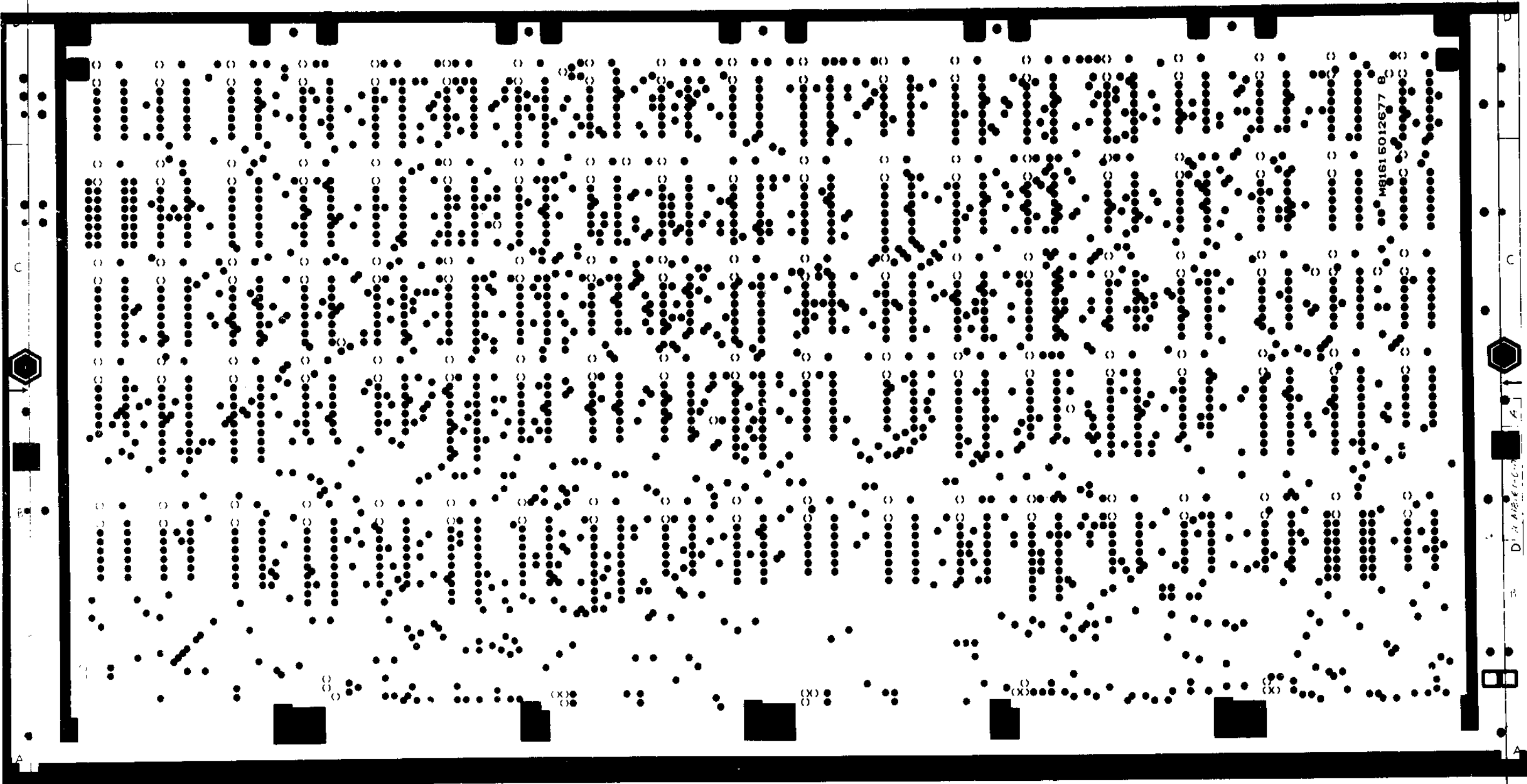
3

0-0-121R W MP D 2

1



E R34AJ



MB1616012677 B

DIA MB1616012677 B

MK II CONTROL B

DIA VB161-0-0 A

2/1 SHEET 4 6 DIST

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1

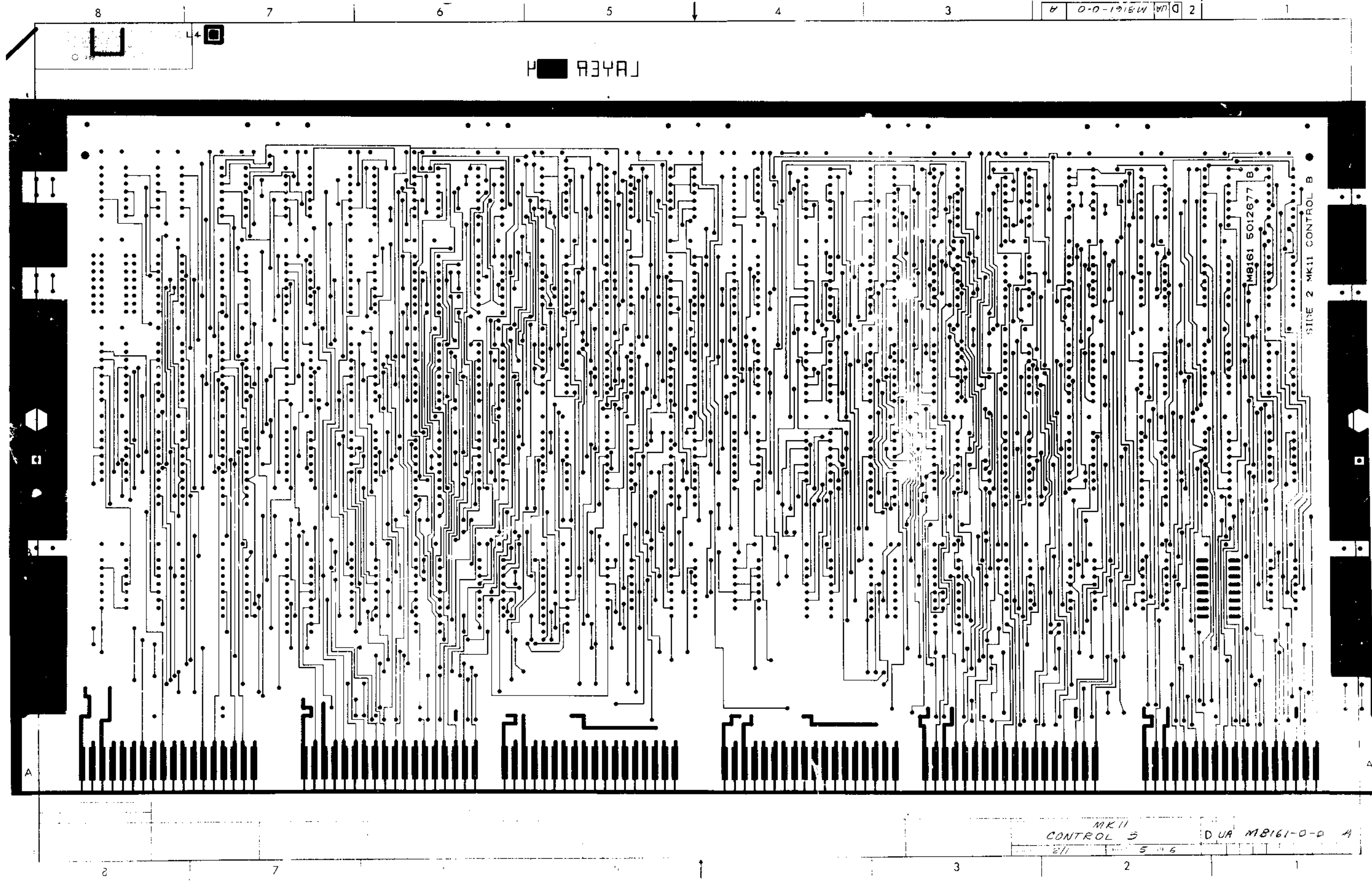
2 DUA MB161-0-0 A

PA34AJ

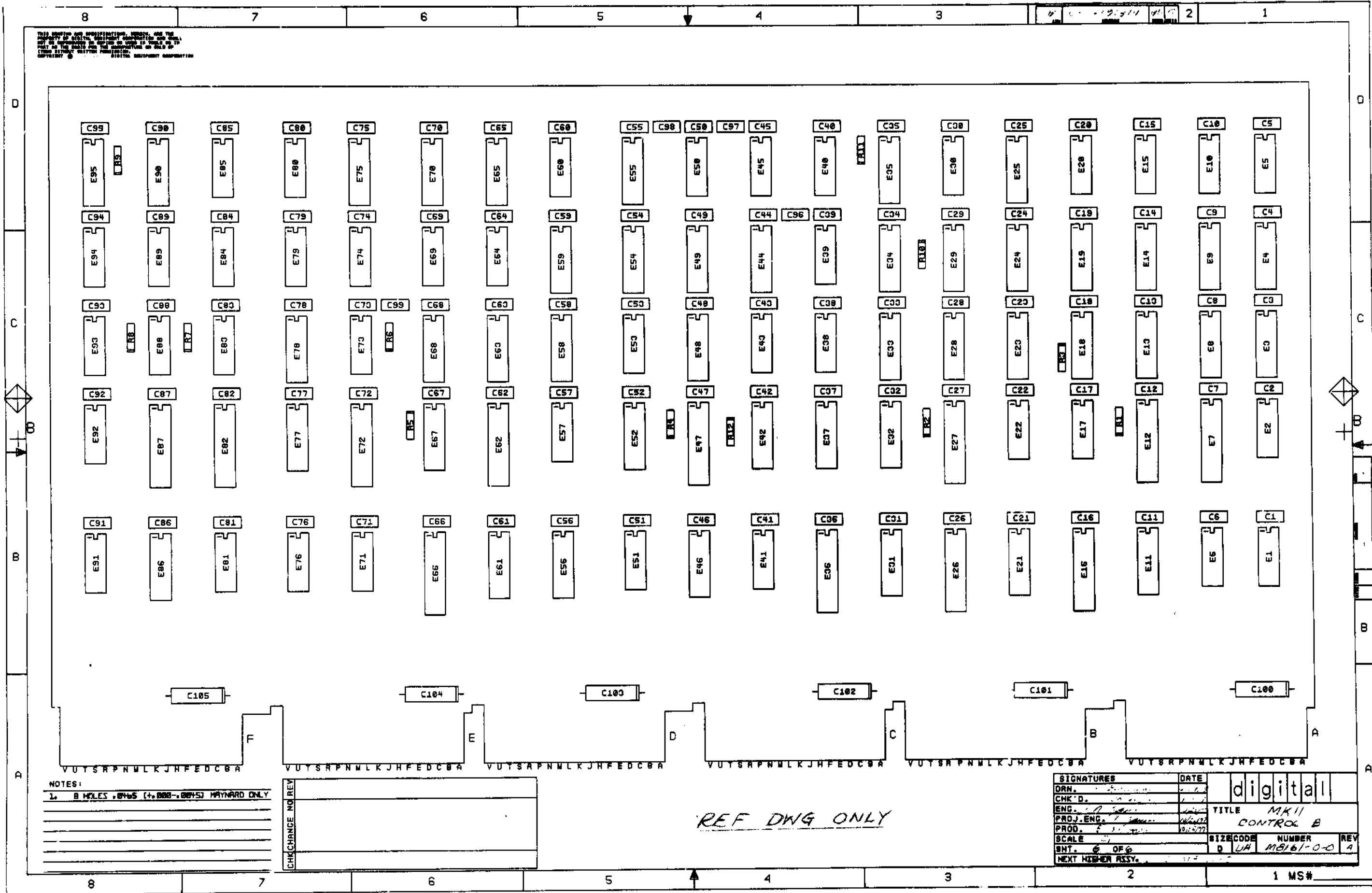
MB161 5012677 B

SIDE 2 MK11 CONTROL B

MK11 CONTROL B DUA MB161-0-0 A



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NOTES:  
 1. B FILES .B465 (+.000-.005) MAYNARD ONLY

CHG	NO	REV

REF DWG ONLY

SIGNATURES		DATE	digital
DRN			
CHK'D.			
ENG.			
PROJ. ENG.			
PROD.			
SCALE			
SNT.	6 OF 6		
NEXT HIGHER ASSY.			
TITLE	MKII CONTROL B		
SIZE	CODE	NUMBER	
D	UA	MB161-0-0	
REV	A		

1 MS#

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:				
MADE BY DATE J. ROGERS 26 April 77		CHECKED C. BEVERLIE DATE June 27, 1977		SECTION 1										USED ON: OPTION/MODEL MK II				
ENG DATE <i>C.P. Zannoni</i> 10/26/77		PROD R.A. Hill DATE October 26, 1977		ISSUED SECTION 1														
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	REF														REF DESIGNATION
	D-CS-M8161-0-1		CIRCUIT SCHEMATIC	REF														
	D-UA-M8161-0-0		UNIT ASSEMBLY	REF														
	B-DD-M8161-0		DWG. DIRECTORY	REF														
	D-MD-5012677-0-0		DRILL & ETCH DWG.	REF														
1		5012677	ETCHED BOARD	1														
2		10-01610-01	CAP .010F 100 V (DISC)	95														C1 thru C48, C50 thru C96
3		10-12084-01	CAP 8.0 35V 10% S.TANT	6														C100 thru C105
4		10-12121-00	CAP 220 PF 100V 1% (DM)	4														C49, C97, C98, C99
5		13-00229-00	RES 100 1/4W 5%	5														R1, R2, R4, R6, R9
6		13-00365-00	RES 1K 1/4W 5%	6														R3, R7, R8, R10, R11, R12
7		13-00447-00	RES 4.7K 1/4W 5%	1														R5
8		19-09713-00	DEC I.C. 8815	1														E64
9		19-10532-00	DEC I.C. 74S00	5														E50, E69, E73, E74, E89
10		19-10533-00	DEC I.C. 74S03	1														E88
11		19-10534-00	DEC I.C. 74S04	6														E1, E51, E71, E76, E85, E92
12		19-10536-00	DEC I.C. 74S10	1														E84
13		19-10539-00	DEC I.C. 74S20	1														E93
14		19-10542-00	DEC I.C. 74S64	3														E80, E81 E94
15		19-12697-00	DEC I.C. 74LS174	8														E3, E8, E11, E21, E23, E31 E46, E56
16		19-10655-00	DEC I.C. 74157	2														E77, E78
17		19-10878-00	DEC I.C. 7427	1														E83

E.C.O. NO.

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TITLE  
MK11 CONTROL B

ASSY NO.  
D-UA-M8161-0-  
SHEET 1 OF 2

SIZE CODE NUMBER REV.  
B PL M8161-0-0 A  
INSERTION PARTS LIST DATA BASE REV —

# DIGITAL EQUIPMENT CORPORATION PARTS LIST

QUANTITY / VARIATION

NOTES:

*USED ON: OPTION/MODEL  
MK11*

MADE BY J. ROGERS	CHECKED C. BEVERLIE	SECTION	
DATE 26 April 77	DATE June 27, 1977	1	
ENG <i>A. D. Zaccari</i>	PROD <i>RA Hill</i>	ISSUED SECTION	
DATE <i>10/26/77</i>	DATE <i>OCTOBER 26, 1977</i>	1	

ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION
18		19-11573-00	DEC I.C. 74S280
19		19-11675-00	DEC I.C. 74S138
20		19-12125-00	DEC I.C. 74S135
21		19-12388-00	DEC I.C. 74S02
22		19-12803-00	DEC I.C. 74LS04
23		19-19957-00	DEC I.C. 74S175
24		19-13462-00	DEC I.C. 74S240
25		12-10711-02	HANDLE METAL (HEX)
26		90-00024-01	EYELET
			SPARE 16 PIN IC

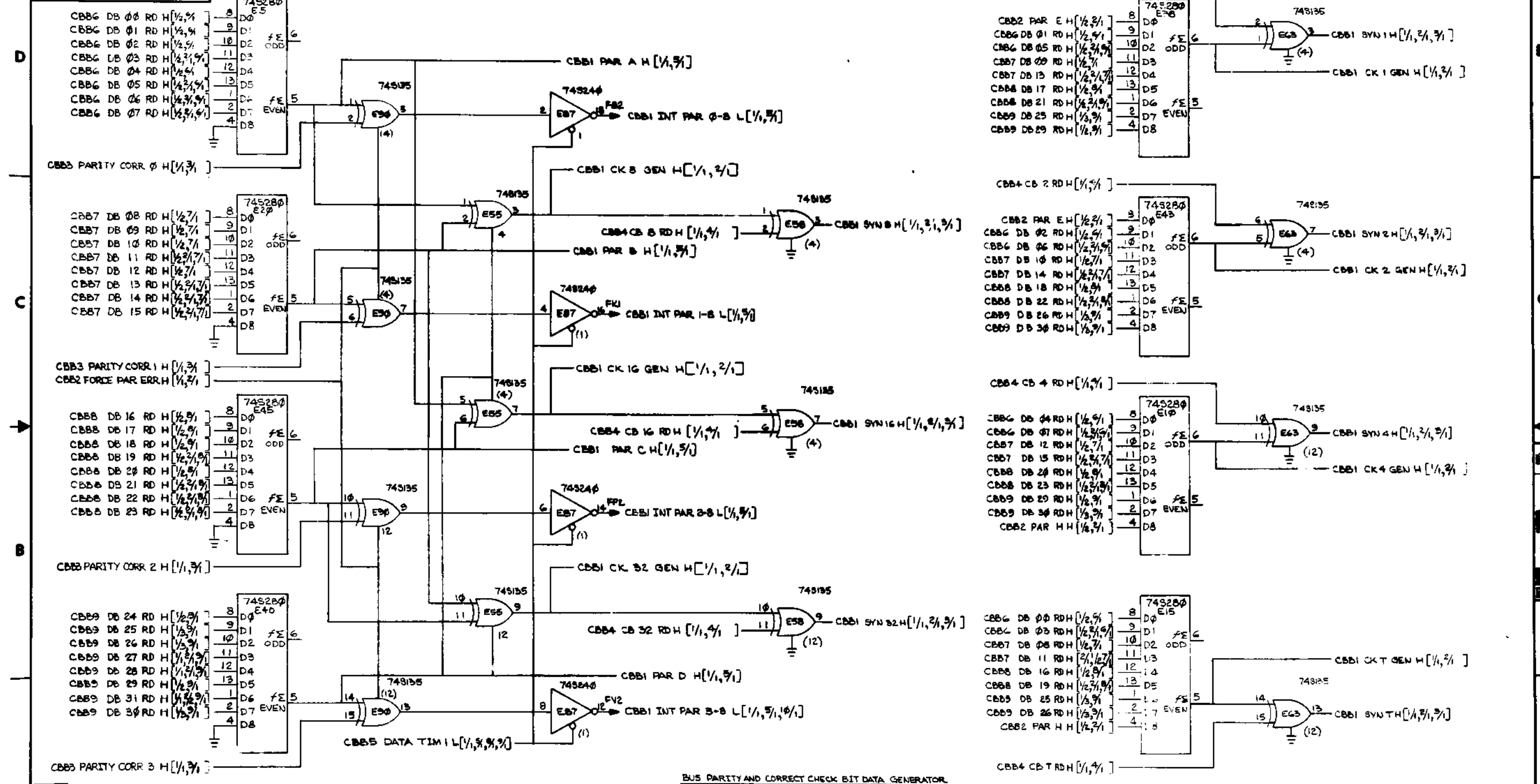
11																			
5																			
15																			
3																			
6																			
12																			
12																			
1																			
12																			
REF																			

REF DESIGNATION
E5, E10, E15, E20, E30, E38, E39, E40, E43, E45, E79
E19, E34, E54, E59, E75
E14, E18, E29, E35, E44, E48, E49, E52, E55, E58, E63, E68, E90, E95, E32
E53, E60, E91
E2, E6, E17, E22, E41, E57
E9, E13, E24, E25, E28, E33, E37, E42, E61, E65, E67, E70
E7, E12, E16, E26, E27, E30, E47, E62, E66, E72, E82, E87
E4, E86

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			SHEET 2 OF 2	INSERTION PARTS LIST DATA BASE REV —			



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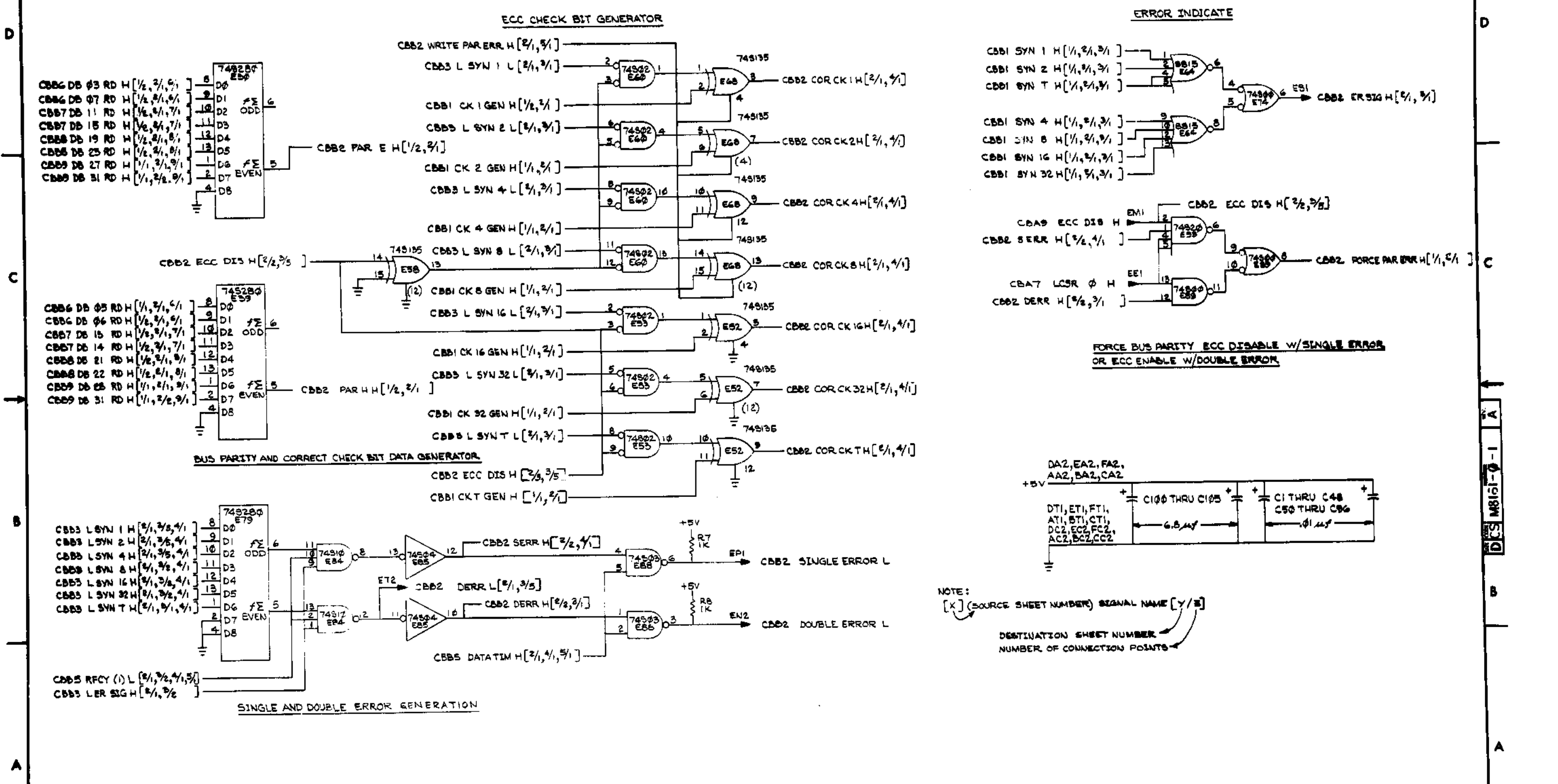


BUS PARITY AND CORRECT CHECK BIT DATA GENERATOR

REV.	
CHG.	
CHK.	
REVISE	
CHANGE NO.	

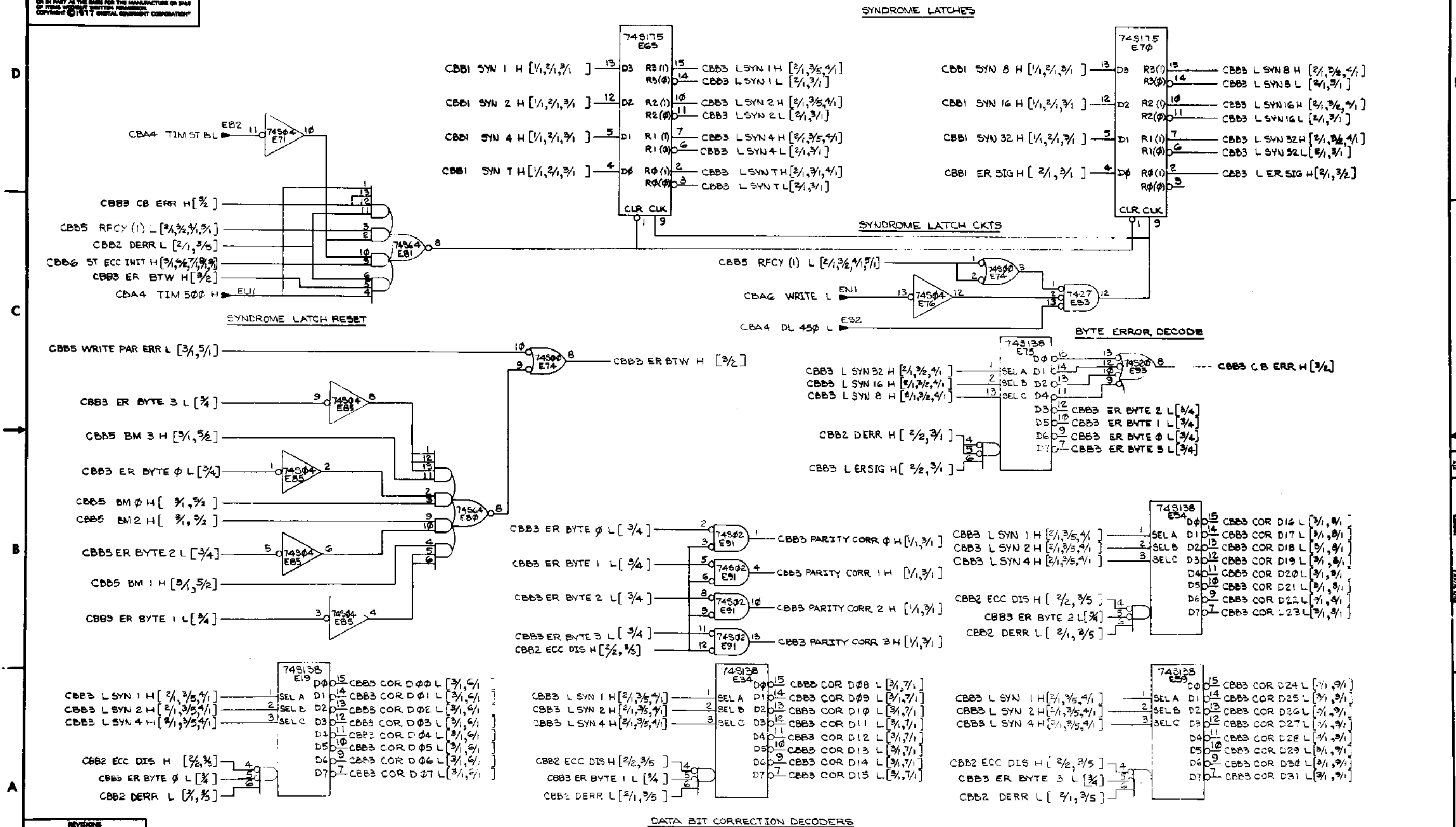
DRN. <i>J. S. [unclear]</i>	DATE <i>7/18/77</i>	FIRST USED ON	<i>MK11</i>
CHK'D <i>[unclear]</i>	<i>20 OCT 77</i>	TITLE	<i>MK11 CONTROL B</i>
END. <i>[unclear]</i>	<i>[unclear]</i>		<i>(CBB1)</i>
PROJ. ENG. <i>[unclear]</i>	<i>[unclear]</i>	SIZE CODE	<i>D CS</i>
PROD. RA <i>[unclear]</i>	<i>[unclear]</i>	NUMBER	<i>M8161-0-1</i>
NEXT HIGHER ASSY.		SCALE	<i>1 OF 10</i>
B-DD-M8161-0		SHEET	<i>01</i>
		REV.	<i>A</i>

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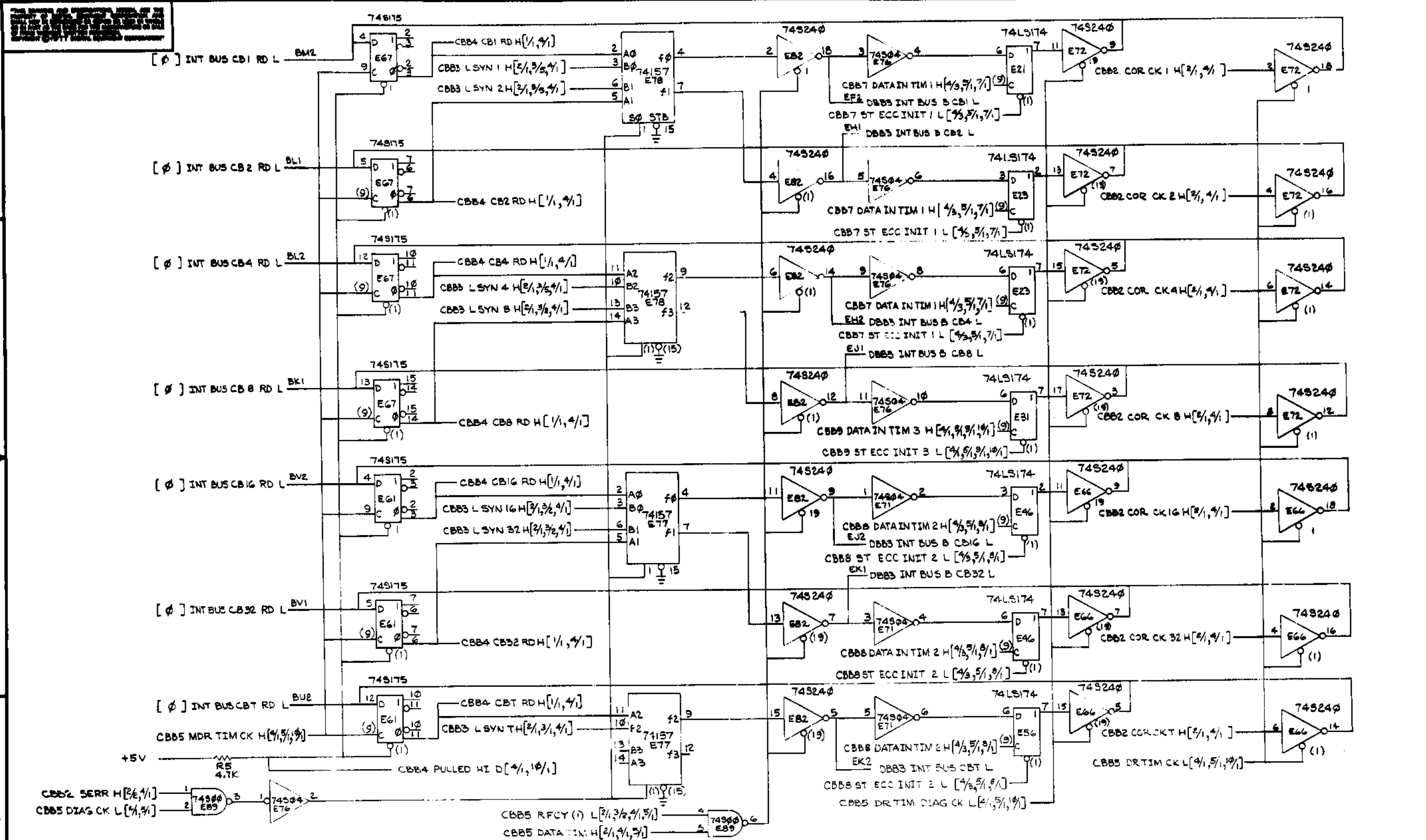
REVISIONS			TITLE				REVISION		NUMBER		REV.
CHK	CHANGE NO.	REV.	MKT CONTROL B (CBB2)				D	CS	M8161-0-1	A	A
			SCALE	SHEET	2	OF	10	DIST.			

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REVISIONS			TITLE			NUMBER			REV.
CHK	CHANGE NO.	REV.	MKII CONTROL B (CBB3)			D	CS	M8161-0-1	A
			SCALE	SHEET	3 OF 12	DIST.			

D E S M8161-0-1



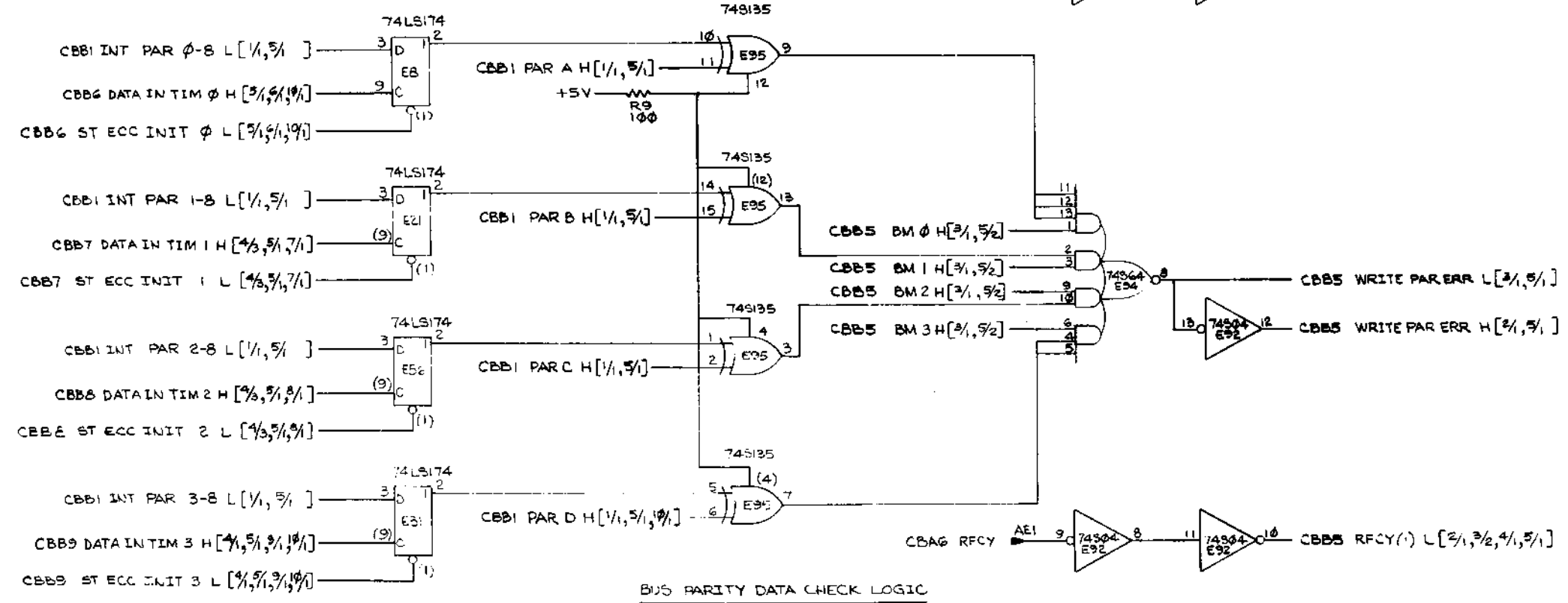
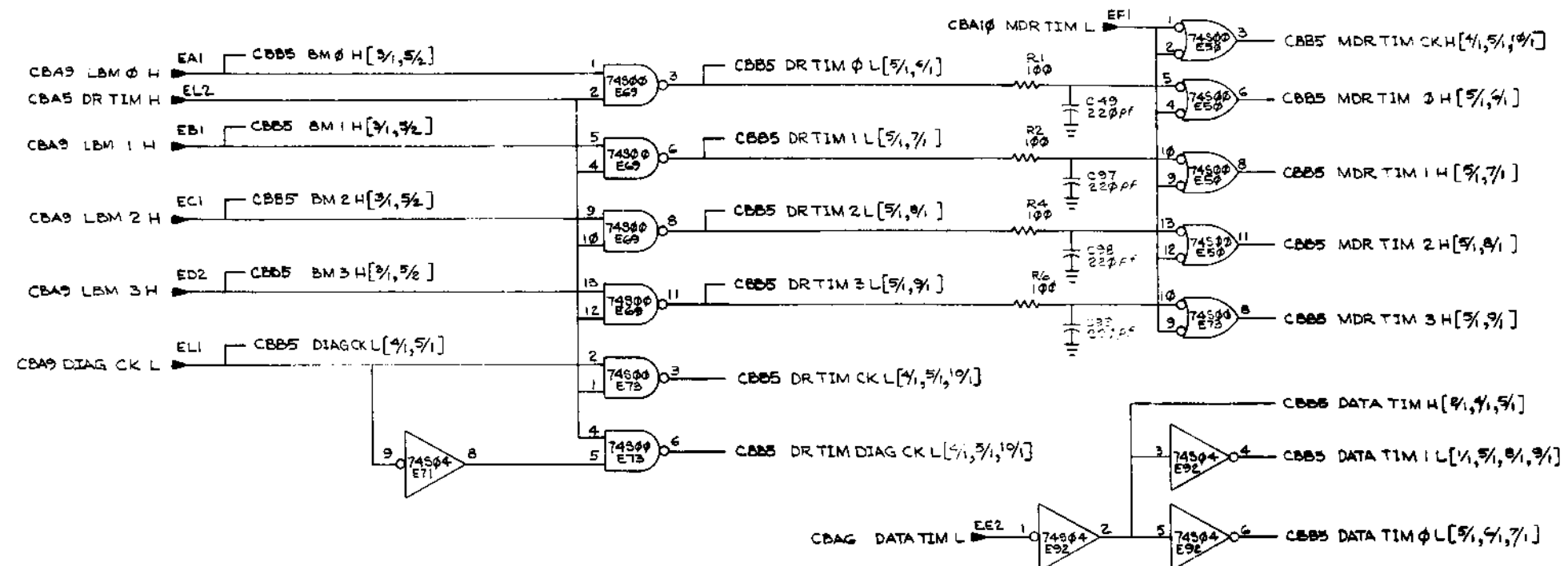
ECC CHECK BIT INTERNAL BUS RECEIVERS AND TRANSMITTERS (DIAG CSR CONTRL)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MKII CONTROL B (CBB4)	SIZE CODE	D CS	NUMBER	M8161-0-1	REV.	A
SCALE		SHEET	4	OF	10	DIET.	

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TIMING CONTROL FOR DATA PATHS

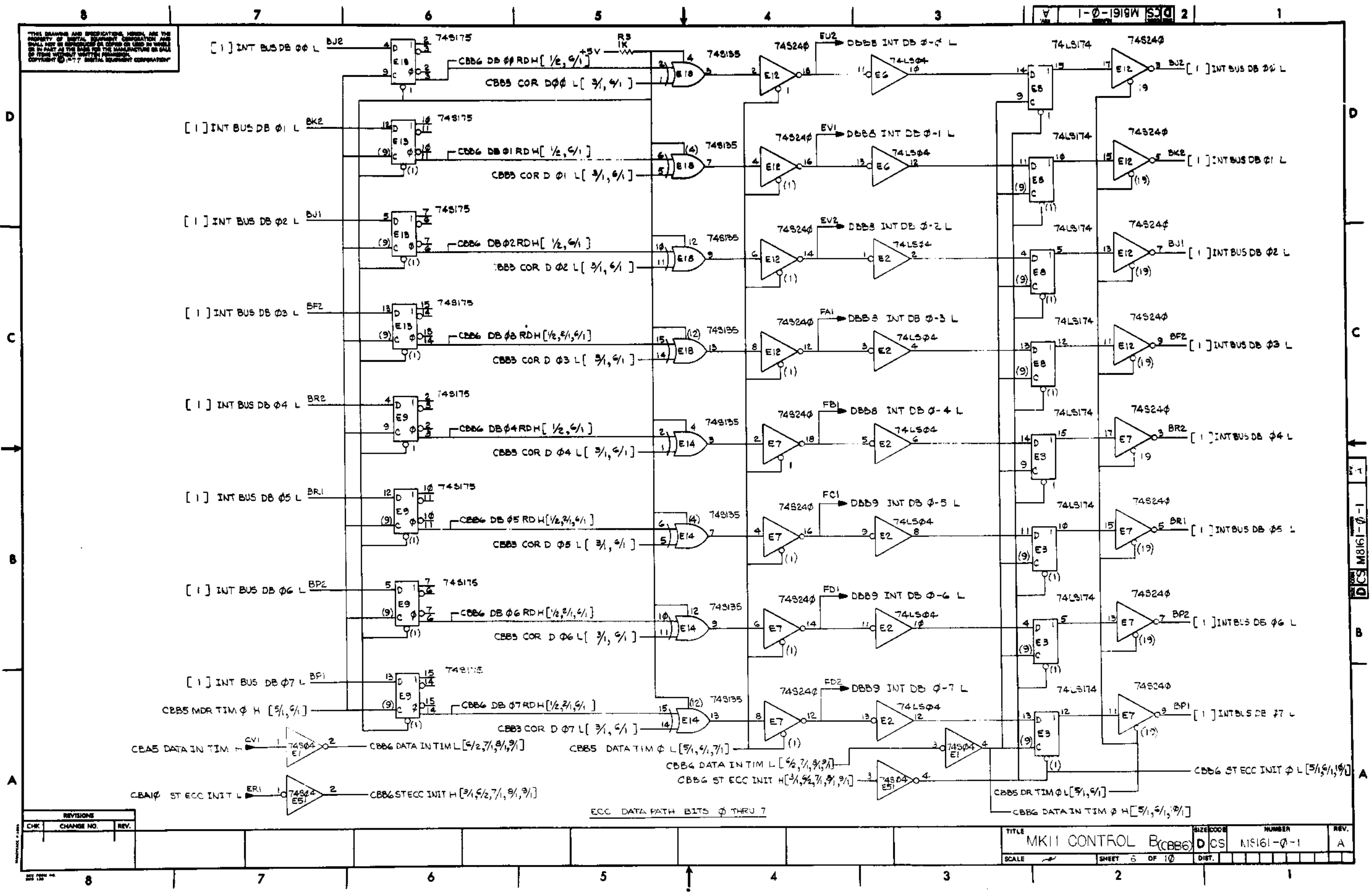


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
MKII CONTROL B (CBB5)	D CS	M8161-0-1	A
SCALE	SHEET	OF	DIST.
	5	10	

M8161-0-1

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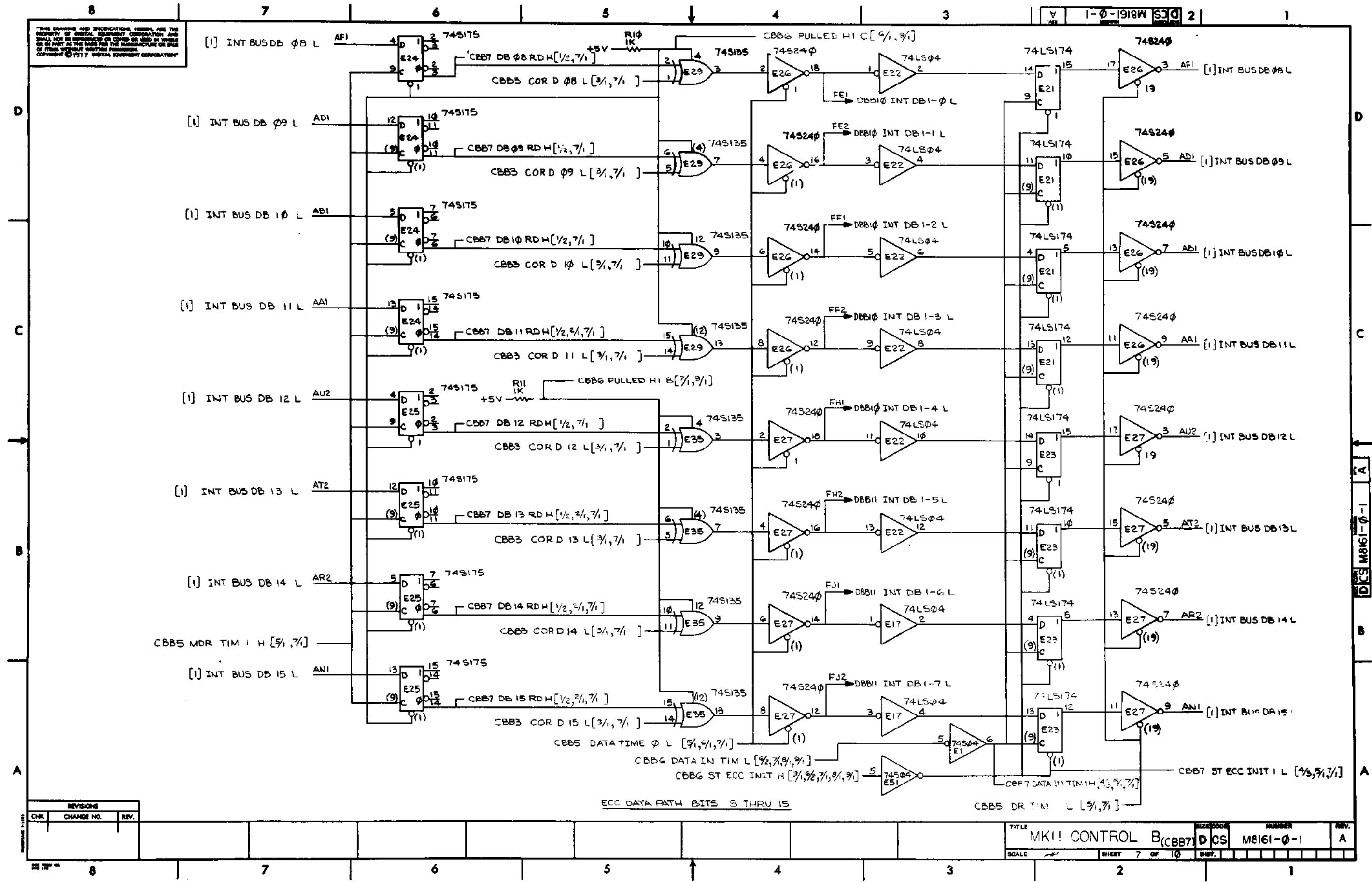
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MKII CONTROL B(CBB6)	SIZE CODE	D CS	NUMBER	MS161-0-1	REV.	A
SCALE		SHEET	5 OF 10	DIST.			

DCS M8161-0-1

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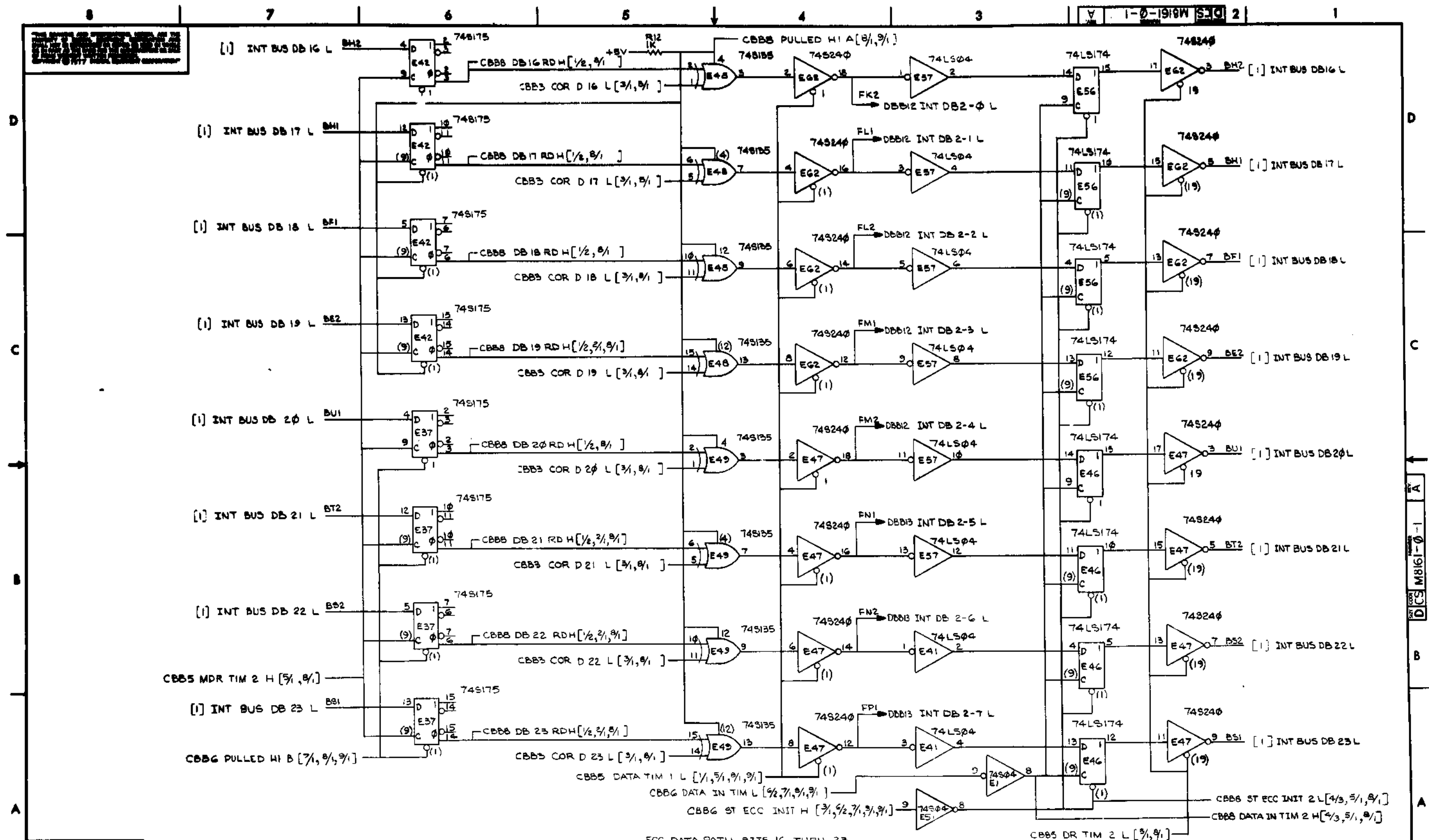
1-0-1918W SCD 2



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MKII CONTROL B (CBB7)	DCS	M8161-0-1	REV.	A
SCALE	SHEET 7 OF 10	DIST.			

DCS M8161-0-1



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	MKII CONTROL B (CBB8)	SIZE CODE	D CS	NUMBER	M8161-0-1	REV.	A
SCALE		SHEET	8	OF	10	DIST.	