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FIELD MAINTENANCE PRINT SET

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UNIT VARIATIONS COVERED BY THIS PRINT SET
8A100
8A205
8A405
8A425
8A625

8A FAMILY (SEM I)
Field Maintenance
Print Set

Digital Equipment
Corporation

Print Set Part Number MP-00415

REVISION HISTORY		REV.	ECO NUMBER	DATE	DRN.	DATE	TITLE	digital		
					M. P. DUGGAN	12-MAY-77	8A SEMICONDUCTOR MEMORY FAMILY	B	TC	
					L. NARHI	11-JUL-77				
					L. NARHI	11-JUL-77				
					L. NARHI	11-JUL-77				
					B. EASH	11-JUL-77	DOCUMENT NUMBER			
					NEXT HIGHER DOC. B-DD-8A-1		SIZE	CODE	NUMBER	REV.
							B	TC	8A-1-1	A
					SHEET 1 OF 2					

DRB 124A

MK

REV. A
NUMBER 8A-1-1
B TC

D-FD-M8315-Ø-24	FLOW DIAGRAM
D-FD-M8315-Ø-25	FLOW DIAGRAM
D-FD-M8315-Ø-26	FLOW DIAGRAM
D-FD-M8315-Ø-27	FLOW DIAGRAM
E-FD-PDP8/E-Ø-Ø6	PROCESSOR FLOW CHART
D-TD-PDP8/E-Ø-Ø5	TIMING (PDP8/E)
E-CS-M83ØØ-Ø-1	MAJOR REGISTERS
E-CS-M831Ø-Ø-1	MAJOR REGISTERS CONTROL
E-CS-M832Ø-Ø-1	BUS LOADS
E-CS-M833Ø-Ø-1	TIMING GENERATOR
A-SP-KM8-A-1	FIELD INSTALLATION AND ACCEPTANCE PROCEDURE
D-CS-M8317-Ø-1	OPTION BOARD #2
D-UA-M8317-Ø-Ø	UNIT ASSY
B-PL-M8317-Ø-Ø	PARTS LIST
D-TD-KM8-A-4	AUTO RESTART/BOOT SEQUENCE
D-TD-KM8-A-5	BOOTSTRAP TIMING
D-FD-KM8-A-6	FLOW CHART OPTION #2
A-SP-KM8-A-7	ROM PROG. INST.
A-SP-DK8-A-1	FIELD INST. AND ACCEPTANCE PROCEDURE
D-CS-M8316-Ø-1	OPTION BOARD #1
D-UA-M8316-Ø-Ø	UNIT ASSY
B-PL-M8316-Ø-Ø	PARTS LIST
E-UA-KC9-A-Ø	BEZEL ASSY
D-AD-7010644-Ø-Ø	KEYBOARD ASSY
D-CS-5411241-Ø-1	INDICATOR DISPLAY
D-CS-5411316-Ø-1	REGISTERS AND CONTROL
A-SP-KT8-A	FIELD INSTALLATION AND ACCEPTANCE PROCEDURE
D-UA-M8416-Ø-Ø	KT8-A UNIT ASSY
B-PL-M8416-Ø-Ø	PARTS LIST
D-CS-M8416-Ø-1	MEMORY MANAGEMENT OPTION
D-CS-M9Ø2Ø-Ø-1	KT8-A TERMINATOR CARD
A-SP-MS8-C-Ø	FIELD INSTALLATION AND ACCEPTANCE PROCEDURE
D-CS-M8417-Ø-1	PDP-8 MOS MEMORY
D-UA-M8417-Ø-Ø	UNIT ASSY
B-PL-M8417-Ø-Ø	PARTS LIST
A-SP-MR8-F-2	FIELD INSTALLATION AND ACCEPTANCE PROCEDURE
D-CS-M8349-Ø-1	1K PROM
A-SP-MS8-A-1	FIELD INSTALLATION AND ACCEPTANCE PROCEDURE
D-CS-M8311-Ø-1	4K X 12 MOS MEMORY

TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SHEET 2 OF 2	SIZE	CODE	NUMBER	REV.
			B	TC	8A-1-1	A

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DRAWING DIRECTORY

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FOR FIELD MAINTENANCE PRINT SET SEE
B-TC-8A-1-1

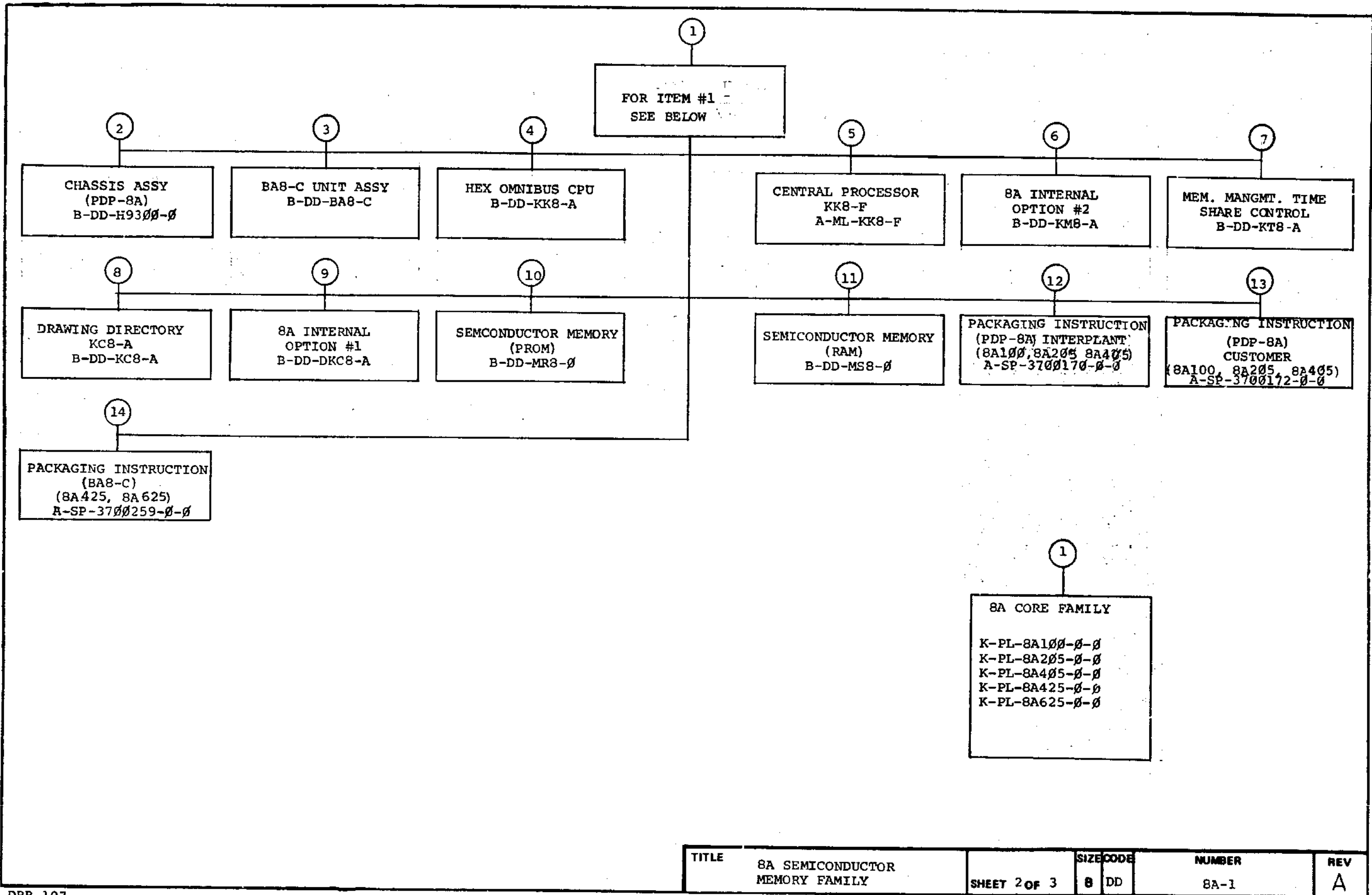
UNIT VARIATIONS	
VAR	TITLE
8A100	12 SLOT OMNIBUS W/KK8A CPU
8A205	12 SLOT OMNIBUS W/KK8A CPU OPTION #2 AND G8016 REGULATOR
8A405	12 SLOT OMNIBUS W/KK8A CPU OPTION #2 AND G8018 REGULATOR
8A425	20 SLOT OMNIBUS W/KK8A CPU AND OPTION #2
8A625	20 SLOT OMNIBUS W/KK8-F CPU AND OPTION #2

REVISIONS	CHANGE NO.	REV.
XX	BA-1-MK02C	A

USED ON OPTION/MODEL	DRN. M.P. DUGGAN	DATE 12 77 MAY	TITLE 8A SEMICONDUCTOR MEMORY FAMILY <div style="float: right; border: 1px solid black; padding: 2px; font-weight: bold;">digital</div>
8A100	CHK'D. <i>Larry Harlow</i> PROJ. ENG. <i>Larry Harlow</i>	DATE 11 - JUL -77	SIZE CODE B DD
8A205			
8A405			
8A425			
8A625			
PROB.		DATE 25 27 77	NUMBER 8A-1
SHEET 1 OF 3		REV A	
			DIST.

DRB 106A

MK



TITLE	SIZE CODE	NUMBER	REV
8A SEMICONDUCTOR MEMORY FAMILY	B DD	8A-1	A

FIND NO.	DRAWING NO.	DESCRIPTION	TYPE	FIND NO.	DRAWING NO.	DESCRIPTION	TYPE
1	MP00415	FIELD MAINTENANCE PRINT SET (MP)	-	9	B-DD-DK8-A	8A INTERNAL OPTION #1	-
	B-TC-8A-1-1	FIELD MAINTENANCE PRINT SET (TC)	-				
	K-PL-8A100-0-0	8A SEMICONDUCTOR MEMORY FAMILY (8A100)	E/M				
	K-PL-8A205-0-0	8A CORE FAMILY (8A205)	E/M				
	K-PL-8A405-0-0	8A CORE FAMILY (8A405)	E/M				
	K-PL-8A425-0-0	8A CORE FAMILY (8A425)	E/M	10	B-DL-MR8-0	SEMICONDUCTOR MEMORY (PROM)	-
	K-PL-8A625-0-0	8A CORE FAMILY (8A625)	E/M				
2	B-DD-H9300	CHASSIS ASSY (PDP-8A)	-				
3	B-DD-BA8-C	BA8-C UNIT ASSY	-	11	B-DD-MS8-0	SEMICONDUCTOR MEMORY (RAM)	-
				12	A-SP-3700170-0-0	PACKAGING INSTRUCTION, INTERPLANT (PDP-8A)	-
4	B-DD-KK8-A	HEX OMNIBUS CPU	-				
				13	A-SP-3700172-0-0	PACKAGING INSTRUCTION, CUSTOMER (PDP-8A)	-
5	A-ML-KK8-F	CENTRAL PROCESSOR KK8-F	-				
				14	A-SP-3700259-0-0	PACKAGING INSTRUCTION, INTERPLANT W/CONSOLE (BA8-C)	-
6	B-DD-KM8-A	8A INTERNAL OPTION #2	-				
7	B-DD-KT8-A	MEM MANAGEMENT AND TIME SHARE CONTROL	-				
8	B-DD-KC8-A	DRAWING DIRECTORY KC8-A	-				

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



TITLE
8A SEMICONDUCTOR MEMORY FAMILY

SHEET 3 OF 3

SIZE CODE
B DD

NUMBER
8A-1

REV
A

PARTS LIST

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
					AA	AB	AC	AD	AE	AF	AK	AL	AM	AN	AP	AR		
1	1	D-UA-H9300-0-0	H9300-AA	CHASSIS ASSY 8/A W FANS 115V 60H	1	0	1	0	1	0	1	0	1	0	0	0	0	0
2	2	D-UA-H9300-0-0	H9300-AB	CHASSIS ASSY 8/A W FANS 230V 50H	0	1	0	1	0	1	0	1	0	1	0	0	0	0
3	3	D-UA-H9300-0-0	H9300-AC	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	0	0	0	0	0	0	0	1	0	1	0	0
4	4	D-UA-H9300-0-0	H9300-AD	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	0	0	0	0	0	0	0	0	1	0	1	0
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9	A-PL-KK8-A-0	00KK8-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KK8-F-0	00KK8-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-PL-MS8-C-0	00MS8-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	12	A-PL-MS8-C-0	00MS8-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	13	A-PL-MS8-A-0	00MS8-AA	PDP8A RAM 1K	0	0	1	1	0	0	0	0	0	0	0	1	1	1
14	14	A-PL-MS8-A-0	00MS8-AB	PDP8A RAM 2K	0	0	0	0	1	1	0	0	0	0	0	0	0	0
15	15	A-PL-MS8-A-0	00MS8-AD	PDP8A RAM 4K	0	0	0	0	0	0	1	1	0	0	0	0	0	0
16	16	C-UA-MR8-F-0	00MR8-FB	1KX12 CONTENT ALTERABLE ROM & 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	17	A-PL-KM8-A-0	00KM8-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-PL-DK8-A-0	00DK8-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	19	E-UA-KC8-A-0	00KC8-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	20	D-UA-KT8-A-0	00KT8-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	21	A-PL-8A-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER PDP8A CUSHION	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: 8A100		DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG:	ECD NUMBER	REV	SECTION A OF B	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE		PARTS LIST					
DF	8A-1-MK002B	B	SECTION, VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8-NOV-77	8A SEMICONDUCTOR MEMORY FAMILY		8A100					
			[A] AA,AB,AC,AD,AE,AF,AK,AL,AM,AN,AP,AR	RESP.ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER							
			[B] AS,AT,AU,AV,FA,FB,FC,FD	MFG.ENG.: J V KANE	DATE: 8-NOV-77	SIZE	CODE	NUMBER	REV				
			[C]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	K	PL	8A100-0-0	B	FILE NAME:	EDIT #:		
			[D]		#B-DD-8A-1					MK0384.PLS	7		
			[E]										
			[F]										

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MK

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				AA	AB	AC	AD	AE	AF	AK	AL	AM	AN	AP	AR		
31	31	A-PL-KM8-A-0	00KM8-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KM8-A-0	00KM8-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
33	33	A-PL-KM8-A-0	00KM8-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION A OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A100			K	PL	8A100-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION								
				AS	AT	AU	AV	FA	FB	FC	FD	
1	1	D-UA-H9300-0-0	H9300-AA	CHASSIS ASSY 8/A W FANS 115V 60H	0	0	0	0	1	0	0	0
2	2	D-UA-H9300-0-0	H9300-AB	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	0	0	0	1	0	0
3	3	D-UA-H9300-0-0	H9300-AC	CHASSIS ASSY 8/A W FANS 230V 50H	1	0	1	0	0	0	1	0
4	4	D-UA-H9300-0-0	H9300-AD	CHASSIS ASSY 8/A W FANS 230V 50H	0	1	0	1	0	0	0	1
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
9	9	A-PL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
11	11	A-PL-MSB-C-0	00MSB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
12	12	A-PL-MSB-C-0	00MSB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
13	13	A-PL-MSB-A-0	00MSB-AA	PDP8A RAM 1K	0	0	0	0	0	0	0	0
14	14	A-PL-MSB-A-0	00MSB-AB	PDP8A RAM 2K	1	1	0	0	0	0	0	0
15	15	A-PL-MSB-A-0	00MSB-AD	PDP8A RAM 4K	0	0	1	1	0	0	0	0
16	16	C-UA-MRB-F-0	00MRB-FB	1KX12 CONTENT ALTERABLE ROM & 25	0	0	0	0	1	1	1	1
17	17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
18	18	A-PL-DKCB-A-0	00DKCB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
19	19	E-UA-KCB-A-0	00KCB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
21	21	A-PL-BA-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER PDP8A CUSHION	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
27	27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
28	28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
29	29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-
30	30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: 8A100		DRN: M DUGGAN	DATE: 12-MAY-77	DBP D I G I T A L	
ENG!	ECO NUMBER	REV	SECTION B OF B	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE PARTS LIST	
DF	BA-1-MK002B	B	SECTION, VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8-NOV-77	8A SEMICONDUCTOR MEMORY FAMILY 8A100	
			[A] AA,AB,AC,AD,AE,AF, AK,AL,AM,AN,AP,AR	RESP.ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER	
			[B] AS,AT,AU,AV,FA,FB, FC,FD	MFG.ENG.: J V KANE	DATE: 8-NOV-77	SIZE!CODE!	NUMBER
			[C]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	K PL	8A100-0-0
			[D]		#B-DD-8A-1	FILE NAME:	EDIT #
			[E]			MK0384.PLS	7
			[F]				

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LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				AS	AT	AU	AV	FA	FB	FC	FD						
31	31	A-PL-KMB-A-0	00KMB-AB	***	THIS	ITEM	IS	NOT	USED	***	-	-	-	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	***	THIS	ITEM	IS	NOT	USED	***	-	-	-	-	-	-	-
33	33	A-PL-KMB-A-0	00KMB-AD	***	THIS	ITEM	IS	NOT	USED	***	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION B OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A100			K	PL	BA100-0-0	B

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION											
					AA	AB	AC	AD	BM	BN	BP	BR	BS	BT	BU	BV
1	1	D-UA-H9300-0-0	H9300-AA	CHASSIS ASSY 8/A W FANS 115V 60H	1	0	0	0	1	0	1	0	0	0	0	0
2	2	D-UA-H9300-0-0	H9300-AB	CHASSIS ASSY 8/A W FANS 230V 50H	0	1	0	0	0	1	0	1	0	0	0	0
3	3	D-UA-H9300-0-0	H9300-AC	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	1	0	0	0	0	0	1	0	1	0
4	4	D-UA-H9300-0-0	H9300-AD	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	0	1	0	0	0	0	0	1	0	1
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
9	9	A-PL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-PL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	0	0	0	0	1	1	0	0	1	1	0	0
12	12	A-PL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	0	0	0	0	1	1	0	0	1	1
13	13	A-PL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
14	14	A-PL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
15	15	A-PL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
17	17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-PL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	0	0	0	0	0	0	0	0	0	0	0	0
19	19	E-UA-KCB-A-0	00KCB-AA	PROGRAMMER'S CONSOLE	0	0	0	0	0	0	0	0	0	0	0	0
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
21	21	A-PL-8A-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER PDP8A CUSHION	1	1	1	1	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
27	27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
28	28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
29	29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
30	30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: BA205		DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECD NUMBER	REV	SECTION A OF C	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE PARTS LIST							
DF	BA-1-MK002B	B	SECTION, VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8-NOV-77	8A SEMICONDUCTOR MEMORY FAMILY							
			[A] AA,AB,AC,AD,AM,BN, BP,BR,BS,BT,BU,BV	RESP.ENG.: L NARHI	DATE: 8-NOV-77	8A205							
			[B] CM,CN,CP,CR,CS,CT, CU,CV,DM,DN,DP,DR			DOCUMENT NUMBER							
			[C] DS,DT,DU,DV			SIZE CODE NUMBER REV							
			[D]	MFG.ENG.: J V KANE	DATE: 8-NOV-77	K	PL	BA205-0-0	B				
			[E]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	FILE NAME:		EDIT #:					
			[F]		#B-DD-BA-1	MK0385.PLS		5					

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MK

AUTOMATED BY PRTLST.3P(44)

P A R T S L I S T

SHEET A2 OF A2

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
				AA	AB	AC	AD	BM	BN	BP	BR	BS	BT	BU	BV	
31	31	A-PL-KM8-A-0	00KM8-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KM8-A-0	00KM8-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KM8-A-0	00KM8-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-

! D ! I ! G ! I ! T ! A ! L !	! TITLE	! SIZE ! CODE !	! DOCUMENT NUMBER	! REV !
	8A SEMICONDUCTOR MEMORY FAMILY			
	8A205	SECTION A OF C	K ! PL ! 8A205-0-0	B

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
					CM	CN	CP	CR	CS	CT	CU	CV	DM	DN	DP	DR		
31	31	A-PL-KM8-A-0	00KM8-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KM8-A-0	00KM8-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KM8-A-0	00KM8-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION B OF C	SIZE	CODE	DOCUMENT NUMBER	REV
							8A205			K	PL	8A205-0-0	B

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION			
					DS	DT	DU	DV
1	1	D-UA-H9300-0-0	H9300-AA	CHASSIS ASSY 8/A W FANS 115V 60H	0	0	0	0
2	2	D-UA-H9300-0-0	H9300-AB	CHASSIS ASSY 8/A W FANS 230V 50H	0	0	0	0
3	3	D-UA-H9300-0-0	H9300-AC	CHASSIS ASSY 8/A W FANS 230V 50H	1	0	1	0
4	4	D-UA-H9300-0-0	H9300-AD	CHASSIS ASSY 8/A W FANS 230V 50H	0	1	0	1
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-
9	9	A-PL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-
11	11	A-PL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	1	1	0	0
12	12	A-PL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	1	1
13	13	A-PL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-
14	14	A-PL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-
15	15	A-PL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-
17	17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-
18	18	A-PL-OKCB-A-0	00KCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	1	1	1	1
19	19	E-UA-KCB-A-0	00KCB-AA	PROGRAMMER'S CONSOLE	1	1	1	1
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-
21	21	A-PL-8A-1-2		SHIPPING LIST	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER PDP8A CUSHION	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	*** THIS ITEM IS NOT USED ***	-	-	-	-
27	27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-
28	28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-
29	29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-
30	30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-

REVISION HISTORY			BASIC PART NO: 8A205	DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECD NUMBER	REV	SECTION C OF C	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE PARTS LIST							
DF	BA-1-MK002B	B	SECTION. VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8-NOV-77	8A SEMICONDUCTOR MEMORY FAMILY 8A205							
			[A] AA,AB,AC,AD,BM,BN, BP,BR,BS,BT,BU,BV	RESP.ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER							
			[B] CM,CN,CP,CR,CS,CT, CU,CV,DM,DN,DP,DR	MFG.ENG.: J V KANE	DATE: 8-NOV-77	K	PL	8A205-0-0		REV B			
			[C] DS,DT,DU,DV	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	FILE NAME:		EDIT #:					
			[D]		#B-DD-8A-1	MK0385.PLS		5					
			[E]										
			[F]										

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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION			
					DS	DT	DU	DV
31	31	A-PL-KMB-A-0	00KMB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	8A INTERNAL OPTION 2	1	1	1	1
33	33	A-PL-KMB-A-0	00KMB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION C OF C	SIZE	CODE	DOCUMENT NUMBER	REV
							8A205			K	PL	8A205-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				AA	AB	AC	AD	BM	BN	BP	BR	BS	BT	BU	BV		
1	1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9	A-FL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-FL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	0	0	0	0	1	1	0	0	1	1	0	0	0
12	12	A-FL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	0	0	0	0	1	1	0	0	1	1	0
13	13	A-FL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	14	A-FL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	15	A-FL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	17	A-FL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-FL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	0	0	0	0	0	0	0	0	0	0	0	0	0
19	19	E-UA-KCB-A-0	00KCB-AA	PROGRAMMER'S CONSOLE	0	0	0	0	0	0	0	0	0	0	0	0	0
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
21	21	A-FL-8A-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER FDP8A CUSHION	1	1	1	1	1	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	0	0	0	0	0	0	0	0	0	0	0	0	0
27	27	D-UA-H9300-0-0	H9300-BA	CHASSIS ASSY 8/A 8 AMP 115V 60HZ	1	0	0	0	1	0	1	0	0	0	0	0	0
28	28	D-UA-H9300-0-0	H9300-BB	CHASSIS ASSY 8/A 4 AMP 230V 50HZ	0	1	0	0	0	1	0	1	0	0	0	0	0
29	29	D-UA-H9300-0-0	H9300-BH	H9300-AB EXCEPT 68018 230V 60HZ	0	0	1	0	0	0	0	0	1	0	1	0	0
30	30	D-UA-H9300-0-0	H9300-BJ	H9300-AA EXCEPT 68018 115V 50HZ	0	0	0	1	0	0	0	0	0	1	0	1	1

REVISION HISTORY			BASIC PART NO: 8A405		DRN: M DUGGAN		DATE: 12-MAY-77		DIGITAL							
ENG	ECO NUMBER	REV	SECTION A OF C	CHK'D:		DATE:	TITLE	PARTS LIST								
DF	BA-1-MK002B	B	SECTION. VARIATION INDEX	L NARHI		8-NOV-77	BA SEMICONDUCTOR MEMORY FAMILY 8A405									
			[A] AA,AB,AC,AD,BM,BN, BP,BR,BS,BT,BU,BV													
			[B] CM,CN,CP,CR,CS,CT, CU,CV,DM,DN,DP,DR	L NARHI		8-NOV-77										
			[C] DS,DT,DU,DV,LM,LN, LP,LR,LS,LT,LU,LV	L NARHI		8-NOV-77										
			[D]				DOCUMENT NUMBER									
			[E]				SIZE CODE NUMBER REV									
			[F]	J V KANE		8-NOV-77	K PL 8A405-0-0 B									
				ASSEMBLY NUMBER:			TOP DOCUMENT NUMBER:	FILE NAME:	EDIT #							
							#B-DD-8A-1	MK0386.PLS	4							

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MK

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION											
					AA	AB	AC	AD	BM	BN	BP	BR	BS	BT	BU	BV
31	31	A-PL-KMB-A-0	00KMB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KMB-A-0	00KMB-AD	KMB-AC W NO BOOTSTRAP ROMS	0	0	0	0	0	0	0	0	0	0	0	0

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION A OF C	SIZE	CODE	DOCUMENT NUMBER	REV
							8A405			K	PL	8A405-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				CM	CN	CP	CR	CS	CT	CU	CV	DM	DN	DP	DR		
1	1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9	A-PL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-PL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	1	1	0	0	1	1	0	0	1	1	0	0	0
12	12	A-PL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	1	1	0	0	1	1	0	0	1	1	1
13	13	A-PL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	14	A-PL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	15	A-PL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-PL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	1	1	1	1	1	1	1	1	1	1	1	1	1
19	19	E-UA-KCB-A-0	00KCB-AA	PROGRAMMER'S CONSOLE	0	0	0	0	0	0	0	0	1	1	1	1	1
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
21	21	A-PL-BA-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER FDP8A CUSHION	1	1	1	1	1	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	0	0	0	0	0	0	0	0	0	0	0	0	0
27	27	D-UA-H9300-0-0	H9300-BA	CHASSIS ASSY 8/A 3 AMP 115V 60HZ	1	0	1	0	0	0	0	0	1	0	1	0	0
28	28	D-UA-H9300-0-0	H9300-BB	CHASSIS ASSY 8/A 4 AMP 230V 50HZ	0	1	0	1	0	0	0	0	0	1	0	1	0
29	29	D-UA-H9300-0-0	H9300-BH	H9300-AB EXCEPT 68018 230V 60HZ	0	0	0	0	1	0	1	0	0	0	0	0	0
30	30	D-UA-H9300-0-0	H9300-BJ	H9300-AA EXCEPT 68018 115V 50HZ	0	0	0	0	0	1	0	1	0	0	0	0	0

REVISION HISTORY			BASIC PART NO: 8A405		DRN:	M DUGGAN	DATE:	12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECO NUMBER	REV	SECTION B OF C	CHK'D:	L NARHI	DATE:	8-NOV-77	TITLE	PARTS LIST							
DF	BA-1-MK002B	B	SECTION. VARIATION INDEX	DES.ENG.:	L NARHI <td>DATE:</td> <td>8-NOV-77 <td>BA SEMICONDUCTOR MEMORY FAMILY</td> <td colspan="8">8A405</td> </td>	DATE:	8-NOV-77 <td>BA SEMICONDUCTOR MEMORY FAMILY</td> <td colspan="8">8A405</td>	BA SEMICONDUCTOR MEMORY FAMILY	8A405							
			[A] AA,AB,AC,AD,BM,BN, BP,BR,BS,BT,BU,BV	RESP.ENG.:	L NARHI <td>DATE:</td> <td>8-NOV-77 <td>DOCUMENT NUMBER</td> <td colspan="8"></td> </td>	DATE:	8-NOV-77 <td>DOCUMENT NUMBER</td> <td colspan="8"></td>	DOCUMENT NUMBER								
			[B] CM,CN,CP,CR,CS,CT, CU,CV,DM,DN,DP,DR	MFG.ENG.:	J V KANE <td>DATE:</td> <td>8-NOV-77 <td>SIZE:CODE: NUMBER</td> <td>REV</td> <td colspan="7"></td> </td>	DATE:	8-NOV-77 <td>SIZE:CODE: NUMBER</td> <td>REV</td> <td colspan="7"></td>	SIZE:CODE: NUMBER	REV							
			[C] DS,DT,DU,DV,LM,LN, LP,LR,LS,LT,LU,LV	ASSEMBLY NUMBER:	<td>TOP DOCUMENT NUMBER:</td> <td> <td>K PL</td> <td>8A405-0-0</td> <td>B</td> <td colspan="6"></td> </td>	TOP DOCUMENT NUMBER:	<td>K PL</td> <td>8A405-0-0</td> <td>B</td> <td colspan="6"></td>	K PL	8A405-0-0	B						
			[D]			#B-DD-8A-1		FILE NAME:	EDIT #							
			[E]					MK0386.PLS	4							
			[F]													

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PARTS LIST

SHEET B2 OF B2

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				CM	CN	CP	CR	CS	CT	CU	CV	DM	DN	DP	DR		
31	31	A-PL-KMB-A-0	00KMB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	BA INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KMB-A-0	00KMB-AD	KMB-AC W NO BOOTSTRAP ROMS	0	0	0	0	0	0	0	0	0	0	0	0	0

! D ! I ! G ! I ! T ! A ! L !	! TITLE	! BA SEMICONDUCTOR MEMORY FAMILY !	! SECTION B OF C !	! SIZE !	! CODE !	! DOCUMENT NUMBER !	! REV !
		! 8A405 !		! K !	! PL !	! 8A405-0-0 !	! B !

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				DS	DT	DU	DV	LM	LN	LP	LR	LS	LT	LU	LV		
1	1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	5	E-UA-BAB-C-0	00BAB-CA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
6	6	E-UA-BAB-C-0	00BAB-CB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
7	7	E-UA-BAB-C-0	00BAB-CH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
8	8	E-UA-BAB-C-0	00BAB-CJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9	A-FL-KKB-A-0	00KKB-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-FL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	1	1	0	0	1	1	0	0	1	1	0	0	0
12	12	A-FL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	1	1	0	0	1	1	0	0	1	1	1
13	13	A-FL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	14	A-FL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	15	A-FL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	17	A-FL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-FL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	1	1	1	1	1	1	1	1	1	1	1	1	1
19	19	E-UA-KCB-A-0	00KCB-AA	PROGRAMMER'S CONSOLE	1	1	1	1	0	0	0	0	0	0	0	0	0
20	20	D-UA-KTB-A-0	00KTB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
21	21	A-FL-BA-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	INSTR PKG COMPUTER 8A400,600,800	1	1	1	1	1	1	1	1	1	1	1	1	1
23	23	A-SP-3700172-0-0	3700172-00	INSTR PKG COMPUTER PDP8A CUSHION	1	1	1	1	1	1	1	1	1	1	1	1	1
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
26	26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	0	0	0	0	0	0	0	0	0	0	0	0	0
27	27	D-UA-H9300-0-0	H9300-BA	CHASSIS ASSY 8/A 8 AMP 115V 60HZ	0	0	0	0	1	0	1	0	0	0	0	0	0
28	28	D-UA-H9300-0-0	H9300-BB	CHASSIS ASSY 8/A 4 AMP 230V 50HZ	0	0	0	0	0	1	0	1	0	0	0	0	0
29	29	D-UA-H9300-0-0	H9300-BH	H9300-AB EXCEPT G8018 230V 60HZ	1	0	1	0	0	0	0	0	1	0	1	0	0
30	30	D-UA-H9300-0-0	H9300-BJ	H9300-AA EXCEPT G8018 115V 50HZ	0	1	0	1	0	0	0	0	0	1	0	1	1

REVISION HISTORY			BASIC PART NO: 8A405			DRN: M DUGGAN			DATE: 12-MAY-77			DBP			D I G I T A L		
ENG	ECO NUMBER	REV	SECTION C OF C	CHK'D:	L NARHI	DATE:	8-NOV-77	TITLE			PARTS LIST						
DF	BA-1-MK002B	B	SECTION. VARIATION INDEX	[A]	AA,AB,AC,AD,BM,BN, BP, BR, BS, BT, BU, BV	[B]	CM,CN,CP,CR,CS,CT, CU,CV,DM, DN, DP, DR	[C]	DS,DT,DU,DV,LM, LN, LP,LR,LS,LT,LU,LV	[D]		[E]		[F]		[G]	
			DES.ENG.: L NARHI			DATE: 8-NOV-77			DOCUMENT NUMBER			SIZE CODE NUMBER REV					
			MFG.ENG.: J V KANE			DATE: 8-NOV-77			K	PL	BA405-0-0	B					
			ASSEMBLY NUMBER:			TOP DOCUMENT NUMBER:			FILE NAME:			EDIT #					
						#B-DD-8A-1			MK0386.FLS			4					

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LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				DS	DT	DU	DV	LM	LN	LP	LR	LS	LT	LU	LV		
31	31	A-PL-KMB-A-0	00KMB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	8A INTERNAL OPTION 2	1	1	1	1	0	0	0	0	0	0	0	0	0
33	33	A-PL-KMB-A-0	00KMB-AD	KMB-AC W NO BOOTSTRAP ROMS	0	0	0	0	1	1	1	1	1	1	1	1	1

D	I	G	I	T	A	L	TITLE	SECTION C OF C	SIZE	CODE	DOCUMENT NUMBER	REV
							8A SEMICONDUCTOR MEMORY FAMILY					
							8A405					
									K	PL	8A405-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
				AA	AB	AC	AD	BH	BJ	BK	BL	BM	BN	BP	BR	
1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E-UA-BAB-C-0	00BAB-CA	20-SLOT OMNIBUS, 10.5 X 21", 2 GB0	1	0	0	0	1	0	0	0	0	1	0	1	0
6	E-UA-BAB-C-0	00BAB-CB	20-SLOT OMNIBUS, 10.5 X 21", 2 GB0	0	1	0	0	0	1	0	0	0	0	1	0	1
7	E-UA-BAB-C-0	00BAB-CH	SAME AS BAB-CB EXCEPT 240V 60HZ	0	0	1	0	0	0	1	0	0	0	0	0	0
8	E-UA-BAB-C-0	00BAB-CJ	SAME AS BAB-CA EXCEPT 120V 50HZ	0	0	0	1	0	0	0	1	0	0	0	0	0
9	A-PL-KK8-A-0	00KK8-A	8A-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1
10	D-UA-KK8-F-0	00KK8-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11	A-PL-M88-C-0	00M88-CA	16K 12BIT RAM, 4K CHIPS	0	0	0	0	1	1	1	1	1	0	0	0	0
12	A-PL-M88-C-0	00M88-CB	32K 12 BIT MOS RAM 4K CHIPS	0	0	0	0	0	0	0	0	0	1	1	2	2
13	A-PL-M88-A-0	00M88-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	A-PL-M88-A-0	00M88-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	A-PL-M88-A-0	00M88-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	C-UA-MR8-F-0	00MR8-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	A-PL-KM8-A-0	00KM8-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	A-PL-DKC8-A-0	00DKC8-AA	OPTION BOARD #1: SLU, XTAL CLOCK,	0	0	0	0	0	0	0	0	0	0	0	0	0
19	E-UA-KC8-A-0	00KC8-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
20	D-UA-KT8-A-0	00KT8-A	MEM MAN OPTION FOR KT8-A SYS	0	0	0	0	0	0	0	0	0	0	0	1	1
21	A-PL-8A-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	A-SP-3700170-0-0	3700170-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
23	A-SP-3700172-0-0	3700172-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	A-SP-3700259-0-0	3700259-01	INSTR PKG BAB-C CHASSIS ASSEMBLY	1	1	1	1	1	1	1	1	1	1	1	1	1
26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	1	1	1	1	1	1	1	1	1	1	1	1	1
27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: 8A425		DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECO NUMBER	REV	SECTION A OF B	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE		PARTS LIST					
DF	8A-1-MK002B	B	SECTION, VARIATION INDEX	DES. ENG.: L NARHI	DATE: 8-NOV-77	8A SEMICONDUCTOR MEMORY FAMILY		8A425					
			[A] AA, AB, AC, AD, BH, BJ, BK, BL, BM, BN, BP, BR	RESP. ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER							
			[B] BS, BT, BU, BV, CH, CN, CP, CR, CS, CT, CU, CV	MFG. ENG.: J V KANE	DATE: 8-NOV-77	SIZE	CODE	NUMBER	REV				
			[C] [D] [E] [F]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	K	PL	8A425-0-0	B	FILE NAME:	EDIT #:		
					#B-DD-8A-1					MK0387.PLS	4		

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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
					AA	AB	AC	AD	BH	BJ	BK	BL	BM	BN	BP	BR	
31	31	A-PL-KMS-A-0	00KMS-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMS-A-0	00KMS-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KMS-A-0	00KMS-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION A OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A425			K	PL	8A425-0-0	B

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
					BS	BT	BU	BV	CM	CN	CP	CR	CS	CT	CU	CV	
1	1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	5	E-UA-BAB-C-0	00BAB-CA	20-SLOT OMNIBUS,10.5 X 21",2 G80	0	0	0	0	1	0	1	0	0	0	0	0	0
6	6	E-UA-BAB-C-0	00BAB-CB	20-SLOT OMNIBUS,10.5 X 21",2 G80	0	0	0	0	0	1	0	1	0	0	0	0	0
7	7	E-UA-BAB-C-0	00BAB-CH	SAME AS BAB-CB EXCEPT 240V 60HZ	1	0	1	0	0	0	0	0	0	1	0	1	0
8	8	E-UA-BAB-C-0	00BAB-CJ	SAME AS BAB-CA EXCEPT 120V 50HZ	0	1	0	1	0	0	0	0	0	0	1	0	1
9	9	A-PL-KKB-A-0	00KKB-A	BA-CPU	1	1	1	1	1	1	1	1	1	1	1	1	1
10	10	D-UA-KKB-F-0	00KKB-F	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11	11	A-FL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	A-PL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	1	1	2	2	1	1	2	2	1	1	2	2	2
13	13	A-PL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	14	A-PL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	15	A-PL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	18	A-PL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	0	0	0	0	1	1	1	1	1	1	1	1	1
19	19	E-UA-KCB-A-0	00KCB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
20	20	D-UA-KTB-A-0	00KTB-A	MEM MAN OPTION FOR KTB-A SYS	0	0	1	1	0	0	1	1	0	0	1	1	1
21	21	A-PL-8A-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	22	A-SP-3700170-0-0	3700170-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
23	23	A-SP-3700172-0-0	3700172-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
24	24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	A-SP-3700259-0-0	3700259-01	INSTR PKG BAB-C CHASSIS ASSEMBLY	1	1	1	1	1	1	1	1	1	1	1	1	1
26	26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	1	1	1	1	1	1	1	1	1	1	1	1	1
27	27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
28	28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
29	29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
30	30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: 8A425		DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECD NUMBER	REV	SECTION B OF B	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE PARTS LIST							
DF	8A-1-MK002B	B	SECTION, VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8 NOV-77	8A SEMICONDUCTOR MEMORY FAMILY 8A425							
			[A] AA,AB,AC,AD,BH,EJ, BK,BL,BM,BN,BP,BR	RESP.ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER							
			[B] BS,BT,BU,BV,CM,CN, CP,CR,CS,CT,CU,CV	MFG.ENG.: J V KANE	DATE: 8-NOV-77	SIZE	CODE	NUMBER	REV				
			[C]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	K	PL	8A425-0-0	B	FILE NAME:	EDIT #		
			[D]		#B-DD-8A-1					MK0387.PLS	4		
			[E]										
			[F]										

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P A R T S L I S T

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				BS	BT	BU	BV	CM	CN	CP	CR	CS	CT	CU	CV		
31	31	A-PL-KMB-A-0	00KMB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMB-A-0	00KMB-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	
33	33	A-PL-KMB-A-0	00KMB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION B OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A425			K	PL	8A425-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				AA	AB	AC	AD	BH	BJ	BK	BL	BM	BN	BP	BR		
31	31	A-PL-KM8-A-0	00KM8-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KM8-A-0	00KM8-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KM8-A-0	00KM8-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION A OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A625			K	PL	8A625-0-0	B

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
				BS	BT	BU	BV	CM	CN	CP	CR	CS	CT	CU	CV	
1	D-UA-H9300-0-0	H9300-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2	D-UA-H9300-0-0	H9300-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3	D-UA-H9300-0-0	H9300-AC	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4	D-UA-H9300-0-0	H9300-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E-UA-BAB-C-0	00BAB-CA	20-SLOT OMNIBUS,10.5 X 21",2 GB0	0	0	0	0	1	0	1	0	0	0	0	0	0
6	E-UA-BAB-C-0	00BAB-CB	20-SLOT OMNIBUS,10.5 X 21",2 GB0	0	0	0	0	0	0	1	0	1	0	0	0	0
7	E-UA-BAB-C-0	00BAB-CH	SAME AS BAB-CB EXCEPT 240V 60HZ	1	0	1	0	0	0	0	0	0	0	1	0	1
8	E-UA-BAB-C-0	00BAB-CJ	SAME AS BAB-CA EXCEPT 120V 50HZ	0	1	0	1	0	0	0	0	0	0	0	1	0
9	A-PL-KKB-A-0	00KKB-A	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
10	D-UA-KKB-F-0	00KKB-F	CENTRAL PROCESSOR [8E]	1	1	1	1	1	1	1	1	1	1	1	1	1
11	A-PL-MSB-C-0	00MSB-CA	16K 12BIT RAM, 4K CHIPS	0	0	0	0	0	0	0	0	0	0	0	0	0
12	A-PL-MSB-C-0	00MSB-CB	32K 12 BIT MOS RAM 4K CHIPS	1	1	2	2	1	1	2	2	1	1	2	2	2
13	A-PL-MSB-A-0	00MSB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
14	A-PL-MSB-A-0	00MSB-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
15	A-PL-MSB-A-0	00MSB-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
16	C-UA-MRB-F-0	00MRB-FB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
17	A-PL-KMB-A-0	00KMB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
18	A-PL-DKCB-A-0	00DKCB-AA	OPTION BOARD #1: SLU,XTAL CLOCK,	0	0	0	0	1	1	1	1	1	1	1	1	1
19	E-UA-KCB-A-0	00KCB-AA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
20	D-UA-KTB-A-0	00KTB-A	MEM MAN OPTION FOR KTB-A SYS	0	0	1	1	0	0	1	1	0	0	1	1	1
21	A-PL-BA-1-2		SHIPPING LIST	1	1	1	1	1	1	1	1	1	1	1	1	1
22	A-SP-3700170-0-0	3700170-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
23	A-SP-3700172-0-0	3700172-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
24	A-SP-3700259-0-0	3700259-00	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
25	A-SP-3700259-0-0	3700259-01	INSTR PKG BAB-C CHASSIS ASSEMBLY	1	1	1	1	1	1	1	1	1	1	1	1	1
26	A-SP-3700259-0-0	3700259-02	INSTR PKG COMPUTER 8A820	1	1	1	1	1	1	1	1	1	1	1	1	1
27	D-UA-H9300-0-0	H9300-BA	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
28	D-UA-H9300-0-0	H9300-BB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
29	D-UA-H9300-0-0	H9300-BH	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
30	D-UA-H9300-0-0	H9300-BJ	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

REVISION HISTORY		BASIC PART NO: 8A625		DRN: M DUGGAN	DATE: 12-MAY-77	DBP	D	I	G	I	T	A	L
ENG	ECD NUMBER	REV	SECTION B OF B	CHK'D: L NARHI	DATE: 8-NOV-77	TITLE		PARTS LIST					
DF	EA-1-MK002B	B	SECTION, VARIATION INDEX	DES.ENG.: L NARHI	DATE: 8 NOV-77	8A SEMICONDUCTOR MEMORY FAMILY		8A625					
			[A] AA,AB,AC,AD,BH,BJ, BK,BL,BM,BN,BP,BR	RESP.ENG.: L NARHI	DATE: 8-NOV-77	DOCUMENT NUMBER							
			[B] BS,BT,BU,BV,CM,CN, CP,CR,CS,CT,CU,CV	DATE: 8-NOV-77	K	PL	8A625-0-0	REV	B				
			[C]	DATE: 8-NOV-77	FILE NAME:		MK0388.PLS						
			[D]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:		#B-DD-8A-1						
			[E]	DATE: 8-NOV-77	FILE NAME:		MK0388.PLS						
			[F]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:		#B-DD-8A-1						
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LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION													
				BS	BT	BU	BV	CM	CN	CP	CR	CS	CT	CU	CV		
31	31	A-PL-KMS-A-0	00KMS-AB	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	A-PL-KMS-A-0	00KMS-AC	8A INTERNAL OPTION 2	1	1	1	1	1	1	1	1	1	1	1	1	1
33	33	A-PL-KMS-A-0	00KMS-AD	*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-

D	I	G	I	T	A	L	TITLE	8A SEMICONDUCTOR MEMORY FAMILY	SECTION B OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							8A625			K	PL	8A625-0-0	B

ENGINEERING SPECIFICATION

digital

CONTINUATION SHEET

TITLE 8A100,205,405,425,625 FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

V. ACCEPTANCE PROCEDURE

Perform the acceptance tests referred to in table A. If abnormal indications are encountered, refer to the diagnostic listings for error descriptions. Refer to the operators handbook and the diagnostic listings for instructions on loading diagnostics.

Equipment required

1. 8A100,205,405,425,625 with 1-32K of semiconductor memory.
2. Programmer's Console (KCSA and DKCSA)
3. Paper tape input device.
4. Diagnostics and listings.

NOTE: If programmer's panel and paper tape input device are not available as part of the system being installed, they must be provided by the customer in good working order. If semiconductor memory is 1K PROM only, refer to the MR8-F Engineering Spec.

Table A

Acceptance 8A100,205,405,425,625

<u>Program Name</u>	<u>MAINDEC #</u>	<u>Accept Time</u>
PDP8A Central Processor Test	08-DJKKA	20 Minutes
1-32K Random Exerciser	08-DJEXA	20 Minutes
MS8-A or MS8-C/D MOS Memory	Refer to Acceptance Procedure for MS8-C/D and MS8-A.	
KT8-A Memory Management Option	Refer to Acceptance Procedure for KT8-A.	

SIZE A	CODE Sp	NUMBER 8A-1-4	REV
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ENGINEERING SPECIFICATION

digital

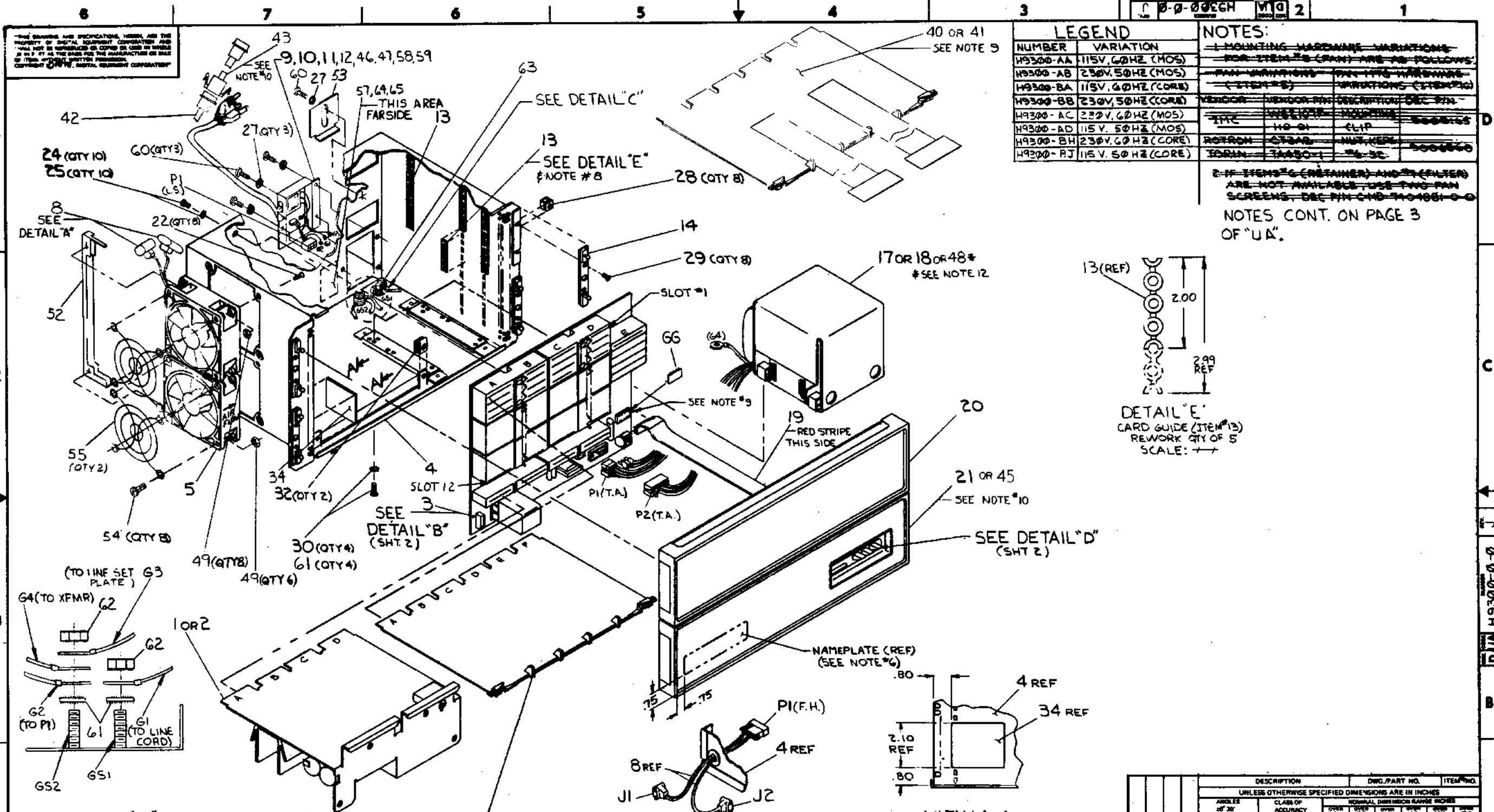
CONTINUATION SHEET

TITLE 8A100,205,405,425,625 FIELD INSTALLATION ACCEPTANCE PROCEDURE

- | | |
|------------------|--|
| DKCSA Option One | Refer to Acceptance Procedure for DKCSA. |
| KMSA Option Two | Refer to Acceptance Procedure for KMSA. |

SIZE A	CODE SP	NUMBER 8A-1-4	REV
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NUMBER	VARIATION
H9300-AA	115V, 60HZ (MOS)
H9300-AB	230V, 50HZ (MOS)
H9300-BA	115V, 60HZ (CORE)
H9300-BB	230V, 50HZ (CORE)
H9300-AC	230V, 60HZ (MOS)
H9300-AD	115V, 50HZ (MOS)
H9300-BH	230V, 60HZ (CORE)
H9300-BJ	115V, 50HZ (CORE)

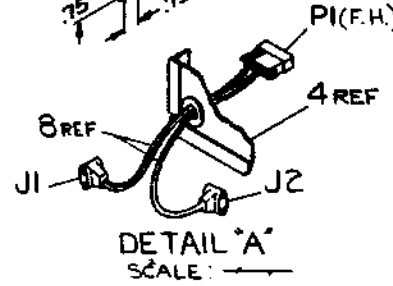
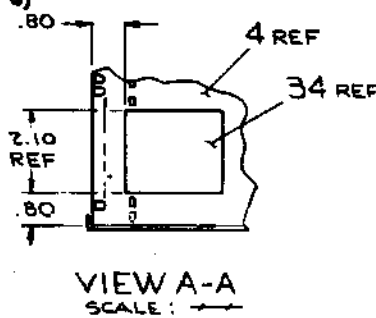
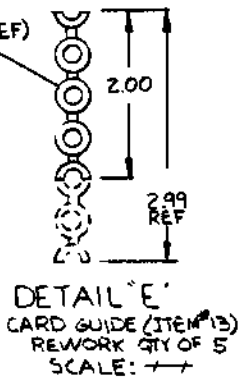
NOTES:

1. MOUNTING HARDWARE VARIATIONS FOR ITEM #8 (PIN) ARE AS FOLLOWS:

ITEM #8	VARIATION (ITEM #5)

2. IF ITEMS #6 (RETAINERS) AND #7 (FILTERS) ARE NOT AVAILABLE, USE TWO PAN SCREENS, DEC PIN CHD 714861-0-0

NOTES CONT. ON PAGE 3 OF "UA".



DETAIL "C" CHASSIS GROUNDS
SCALE: 1:1 (SECUREMENT OF GRND WIRE)

HEX BOARD REF SEE SHEET #3, NOTE #7 FOR PROPER MODULE SLOT ASSIGNMENTS

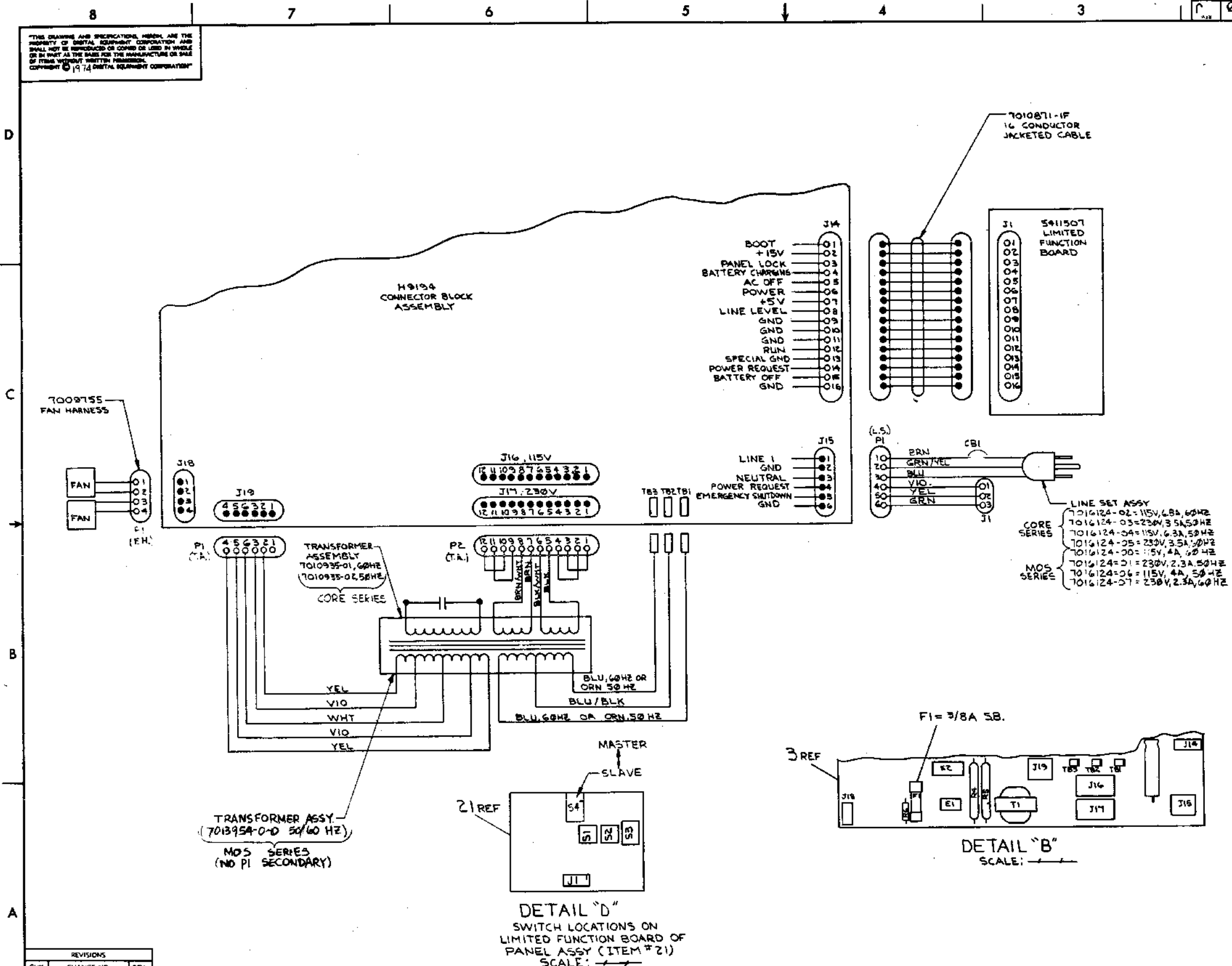
REV.	DATE	BY	CHKD	DESCRIPTION
1	11/18/77	L. KIZINA		REVISED AND REDRAWN
2	1/5/78	L. KIZINA		REVISED AND REDRAWN
3	2/1/78	L. KIZINA		REVISED AND REDRAWN
4	2/1/78	L. KIZINA		REVISED AND REDRAWN
5	2/1/78	L. KIZINA		REVISED AND REDRAWN
6	2/1/78	L. KIZINA		REVISED AND REDRAWN
7	2/1/78	L. KIZINA		REVISED AND REDRAWN
8	2/1/78	L. KIZINA		REVISED AND REDRAWN
9	2/1/78	L. KIZINA		REVISED AND REDRAWN
10	2/1/78	L. KIZINA		REVISED AND REDRAWN
11	2/1/78	L. KIZINA		REVISED AND REDRAWN
12	2/1/78	L. KIZINA		REVISED AND REDRAWN
13	2/1/78	L. KIZINA		REVISED AND REDRAWN
14	2/1/78	L. KIZINA		REVISED AND REDRAWN
15	2/1/78	L. KIZINA		REVISED AND REDRAWN
16	2/1/78	L. KIZINA		REVISED AND REDRAWN
17	2/1/78	L. KIZINA		REVISED AND REDRAWN
18	2/1/78	L. KIZINA		REVISED AND REDRAWN
19	2/1/78	L. KIZINA		REVISED AND REDRAWN
20	2/1/78	L. KIZINA		REVISED AND REDRAWN
21	2/1/78	L. KIZINA		REVISED AND REDRAWN
22	2/1/78	L. KIZINA		REVISED AND REDRAWN
23	2/1/78	L. KIZINA		REVISED AND REDRAWN
24	2/1/78	L. KIZINA		REVISED AND REDRAWN
25	2/1/78	L. KIZINA		REVISED AND REDRAWN
26	2/1/78	L. KIZINA		REVISED AND REDRAWN
27	2/1/78	L. KIZINA		REVISED AND REDRAWN
28	2/1/78	L. KIZINA		REVISED AND REDRAWN
29	2/1/78	L. KIZINA		REVISED AND REDRAWN
30	2/1/78	L. KIZINA		REVISED AND REDRAWN
31	2/1/78	L. KIZINA		REVISED AND REDRAWN
32	2/1/78	L. KIZINA		REVISED AND REDRAWN
33	2/1/78	L. KIZINA		REVISED AND REDRAWN
34	2/1/78	L. KIZINA		REVISED AND REDRAWN
35	2/1/78	L. KIZINA		REVISED AND REDRAWN
36	2/1/78	L. KIZINA		REVISED AND REDRAWN
37	2/1/78	L. KIZINA		REVISED AND REDRAWN
38	2/1/78	L. KIZINA		REVISED AND REDRAWN
39	2/1/78	L. KIZINA		REVISED AND REDRAWN
40	2/1/78	L. KIZINA		REVISED AND REDRAWN
41	2/1/78	L. KIZINA		REVISED AND REDRAWN
42	2/1/78	L. KIZINA		REVISED AND REDRAWN
43	2/1/78	L. KIZINA		REVISED AND REDRAWN
44	2/1/78	L. KIZINA		REVISED AND REDRAWN
45	2/1/78	L. KIZINA		REVISED AND REDRAWN
46	2/1/78	L. KIZINA		REVISED AND REDRAWN
47	2/1/78	L. KIZINA		REVISED AND REDRAWN
48	2/1/78	L. KIZINA		REVISED AND REDRAWN
49	2/1/78	L. KIZINA		REVISED AND REDRAWN
50	2/1/78	L. KIZINA		REVISED AND REDRAWN
51	2/1/78	L. KIZINA		REVISED AND REDRAWN
52	2/1/78	L. KIZINA		REVISED AND REDRAWN
53	2/1/78	L. KIZINA		REVISED AND REDRAWN
54	2/1/78	L. KIZINA		REVISED AND REDRAWN
55	2/1/78	L. KIZINA		REVISED AND REDRAWN
56	2/1/78	L. KIZINA		REVISED AND REDRAWN
57	2/1/78	L. KIZINA		REVISED AND REDRAWN
58	2/1/78	L. KIZINA		REVISED AND REDRAWN
59	2/1/78	L. KIZINA		REVISED AND REDRAWN
60	2/1/78	L. KIZINA		REVISED AND REDRAWN
61	2/1/78	L. KIZINA		REVISED AND REDRAWN
62	2/1/78	L. KIZINA		REVISED AND REDRAWN
63	2/1/78	L. KIZINA		REVISED AND REDRAWN
64	2/1/78	L. KIZINA		REVISED AND REDRAWN
65	2/1/78	L. KIZINA		REVISED AND REDRAWN
66	2/1/78	L. KIZINA		REVISED AND REDRAWN

DESCRIPTION		DWG. PART NO.		ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
ANGLE OF 30°	CLASS OF ACCURACY	OVER 0	0.2	0.5
		0.2	0.5	1.2
SURFACE QUALITY IN	CHECK ONE	1.001	1.002	1.003
		1.004	1.005	1.006
QUANTITY & VARIATION	MICROINCHES	PREFERRED		
THIRD ANGLE PROJECTION	DRN: [Signature]	FIRST USED ON	Digital	
REMOVE BURRS AND BREAK SHARP CORNERS	CHKD: [Signature]	TITLE	CHASSIS ASSY, H9300	
DO NOT SCALE DWG	ENG: [Signature]	SIZE	D	UA
MATERIAL SEE PARTS LIST	PROC: [Signature]	SCALE	1:1	
FINISH	FINISH	SHEET	1	OF 3

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ASSEMBLY INSTRUCTIONS

- OPERATIONS TO BE PERFORMED PER HARDWARE STANDARDS SP-7865098-0 AND/OR DEC WORKMANSHIP STANDARDS.
- ATTACH FOAM TAPE (ITEM #34) TO CHASSIS (ITEM #4) AS SHOWN IN VIEW A-A.
- INSTALL FAN HARNESS (ITEM #8) INTO CHASSIS AS SHOWN IN DETAIL "A".
- ~~ATTACH FILTER RETAINERS (ITEM #9) TO THE TWO CANS (ITEM #5) WITH #8-32 X .75 FLAT HEAD SCREWS (ITEM #25) AND THE APPROPRIATE MOUNTING HARDWARE (SEE NOTE #2) FOUR PLACES EACH FAN.~~
- PLUG FAN HARNESS CONNECTORS J1 & J2 (SEE DETAIL "A") ON TO THE FAN TERMINALS.
- ATTACH FANS TO CHASSIS WITH #8-32 X .75 FLAT HEAD SCREWS (ITEM #22) AND THE APPROPRIATE MOUNTING HARDWARE FOUR PLACES EACH FAN.
- REWORK FIVE CARD GUIDES (ITEM #13) AS SHOWN ON DETAIL "E".
- INSTALL FULL LENGTH CARD GUIDES (ITEM #13) AND REWORKED CARD GUIDES AS SHOWN (10 PLACES)
- INSTALL THE 1/4 TURN RECEPTACLES (ITEM #32) ON THE TWO TABS ON THE BOTTOM OF THE CHASSIS.
- ATTACH THE H9194 CONNECTOR BLOCK ASSEMBLY (ITEM #3) TO THE REAR OF THE CHASSIS WITH #8-32 X .25 PAN HEAD SCREWS (ITEM #24) AND #8 EXTERNAL TOOTH LOCK WASHERS (ITEM #25) TEN PLACES.
- PLUG P1 OF THE FAN HARNESS (4 PIN CONNECTOR) INTO J18 OF THE H9194 (SEE DETAIL "B", SHEET 2)
- ATTACH THE LINE SET (ITEM #12) TO THE REAR OF THE CHASSIS WITH THREE #6-32 X .25 LG PAN HEAD SCREWS (ITEM #60) AND THREE #8 EXTERNAL TOOTH LOCK WASHERS (ITEM #27) AS SHOWN. SEE DETAIL "C" (SHEET 1) FOR PROPER GROUNDING.
- PLUG P1 (8 PIN CONNECTOR) OF THE LINE SET INTO J15 OF THE H9194 (SEE DETAIL "B").
- PLUG ONE END OF THE 18 CONDUCTOR CABLE (ITEM #19) INTO J14 OF THE H9194 AS SHOWN.
- ~~SET THE TRANSFORMER ASSEMBLY (ITEM #17 OR 18) IN THE CHASSIS AND FASTEN THE GREEN WIRE TO THE CHASSIS WITH ONE #8-32 X .25 LG PAN HEAD SCREW (ITEM #22) TWO #8 EXTERNAL TOOTH LOCK WASHERS (ITEM #27) ONE FLAT WASHER (ITEM #23) AND ONE #8-32 X .25 LG PAN HEAD SCREW (ITEM #24) AS SHOWN IN DETAIL "B".~~
- PLACE THE TRANSFORMER ASSEMBLY IN POSITION (THE 18 CONDUCTOR CABLE SHOULD BE ROUTED UNDERNEATH THE TRANSFORMER) AND ATTACH TO THE CHASSIS WITH FOUR #10-32 X .50 PAN HEAD SCREWS (ITEM #30) AND #10 EXTERNAL TOOTH LOCK WASHERS (ITEM #31) AS SHOWN. SEE DETAIL "C" (SHEET 1) FOR PROPER GROUNDING.
- PLUG P2 OF THE TRANSFORMER ASSEMBLY (12 PIN CONNECTOR) INTO EITHER J16 (115V) OR J17 (230V) OF THE H9194 (SEE DETAIL "B").
- CONNECT THE THREE LARGE WIRES ON THE TRANSFORMER ASSEMBLY TO THE TABS TB1, TB2 AND TB3 (SEE DETAIL #B) ON THE H9194. THE BLU/BLK WIRE IS ALWAYS CONNECTED TO THE CENTER TAB (TB2).
- PLUG P1 OF THE TRANSFORMER ASSEMBLY (6 PIN CONNECTOR) INTO J19 OF THE H9194 (SEE DETAIL #B).
- PLUG THE 6010 REGULATOR BOARD (ITEM #2) INTO THE H9194 AS SHOWN, AND SECURE IN PLACE WITH THE TWO ATTACHED 1/4 TURN FASTENERS.
- ATTACH THE LATCH HOLDINGS (ITEM #14) TO THE CHASSIS WITH #10-32 X .75 FLAT HEAD SCREWS (ITEM #29) AND SPEED NUTS (ITEM #28).
- PLUG THE OTHER END OF THE 18 CONDUCTOR CABLE INTO J1 OF THE LIMITED FUNCTION PANEL (ITEM #21) SEE DETAIL #D.
- ATTACH THE LIMITED FUNCTION PANEL TO THE CHASSIS.
- ATTACH THE BLANK BEZEL ASSEMBLY (ITEM #20) TO THE CHASSIS.
- ~~SLIDE FILTERS (ITEM #1) INTO FILTER RETAINERS~~
- ITEMS 14, 16, 22, 23 & 24 THIS INSTRUCTION SHEET REFER TO NOTE #9 AND #10 FOR CORRECTIONS.



REVISIONS		
CHK	CHANGE NO.	REV

TITLE	CHASSIS ASSY, H9300	SIZE CODE	DUA	NUMBER	H9300-0-0	REV.	J
SCALE	SHEET 2 OF 3		DIST.	mk			

DUA H9300-0-0

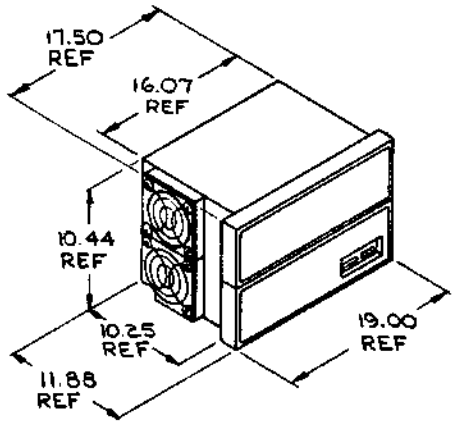
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MODULE ASSIGNMENTS AND POWER REQUIREMENTS (SEE NOTES #7,8)

OPTION	DESCRIPTION	BOARD SIZE	NO. SLOTS USED	ASSIGNED SLOT NO.	CURRENT		
					+5V	+15V	-15V
CMB-F	CARD RDR CONT.	QUAD	1	4-12	.55A	---	---
CMB-F	CARD RDR CONT.	↑	↑	4-12	.55A	---	---
DBB-EA	INTERPROC. BUFFER	↑	↑	2-12	.08A	---	.03A
DKB-EC	RTC, CRYSTAL	↑	↑	2-12	.34A	---	---
DKB-EP	RTC, PROG.	QUAD	2	2-12	1.43A	---	.07A
FKCB-A	OPTION #1	HEX	1	2-3	2.8A	.00A	.10A
OPB-EA, -EB	MODEM INTERFACE	QUAD	2	2-12	1.08A	.05A	.11A
DRB-EA	DIGITAL I/O	QUAD	1	2-12	2.25A	---	---
KAB-E	POSITIVE I/O	QUAD	1	4-12	1.48A	---	---
KCB-AA, -AB	PROG. CONSOLE	PHL. MT.	0	N.A.	2.5A	---	---
KDB-E	DATA BREAK	QUAD	1	4-12	1.2A	---	---
KGB-EA	REDAUNDANCY CHECK	QUAD	1	4-12	.94A	---	---
KRB-A	C.P.U.	HEX	1	1	9.8A	---	.04A
KLB-JA	ASYNC. DATA CONT.	QUAD	1	2-12	1.1A	.05A	.18A
KLB-M	MODEM CONTROL	QUAD	1	2-12	.40A	.04A	.04A
KMB-A	OPTION #2	HEX	1	2-3	2.8A	---	---
KNB-E	MEM. EXT. & T.S. CONT.	QUAD	1	4-12	1.8A	---	---
LEB-XX	LINE PRINTER CONT.	QUAD	1	2-12	.35A	---	---
LSB-F	LINE PRINTER CONT.	QUAD	1	2-12	.48A	---	---
MWB-AA	8K CORE, OPERATING	HEX	2	4-8	2.5A	---	---
MWB-AA	8K CORE, STANDBY	HEX	2	4-8	2.5A	---	---
MWB-AB	16K CORE, OPERATING	HEX	2	4-8	2.5A	---	---
MWB-AB	16K CORE, STANDBY	HEX	2	4-8	2.5A	---	---
MWB-AA	1K RAM	QUAD	1	2-12	2.8A	---	---
MWB-AB	2K RAM	↑	↑	2-12	3.0A	---	---
MWB-AC	3K RAM	↑	↑	2-12	4.0A	---	---
MWB-AD	4K RAM	↑	↑	2-12	5.8A	---	---
MWB-FB	1K PROM	↑	↑	2-12	3.8A	---	.35A
MSB-AA	1K RAM	↑	↑	4-12	1.4A	---	---
MSB-AB	2K RAM	↑	↑	4-12	2.1A	---	---
MSB-AC	3K RAM	↑	↑	4-12	2.8A	---	---
MSB-AD	4K RAM	↑	↑	4-12	3.5A	---	---
PCB-E, PRB-E	RDR/PUNCH CONTROL	↑	↑	4-12	.84A	---	.05A
RIB-E	RIB1 CONTROL	↑	↑	4-8	1.5A	---	---
RIB-EA	RIBS CONTROL	↑	↑	4-12	3.10A	---	---
TAB-AA	TABB CONTROL	↑	↑	2-12	2.08A	---	---
TWB-EA, -FA	TUIB CONTROL	↑	↑	4-12	4.18A	---	---
VCB-E	DISPLAY CONTROL	↑	↑	2-12	.31A	---	---
YTB-E	DISPLAY CONTROL	↑	↑	4-12	3.78A	.09A	.13A
YTB-E	PLOTTER CONTROL	QUAD	1	4-12	.42A	.01A	.03A
KKB-E	M8300 MAJOR REG.	QUAD	1	12	1.7	---	---
	M8310 MAJOR REG. CONT.	QUAD	1	11	.6	---	---
	M8320 TIMING GEN.	QUAD	1	10	1.2	---	---
	M8320 BUS LOAD	QUAD	1	1	1.0	1.0	.53
MCB-CA	16K MOS RAM	HEX	1	4-8	3.3A	---	.7A
MCB-CP	32K MOS RAM	↑	↑	4-8	3.5A	---	.7A
KTR-A	MEM. MANAGEMENT	↑	↑	4-8	3.8A	---	---
KLB-A	RLOI CONTROL	HEX	1	4-12	2.5A	.2A	.1A

AVAILABLE CURRENT -H9300-AA,AB $\frac{-15V}{2.0A}$ $\frac{+15V}{1A SHARED}$ $\frac{-15V}{2.5A}$

REVISIONS		
CHK	CHANGE NO.	REV



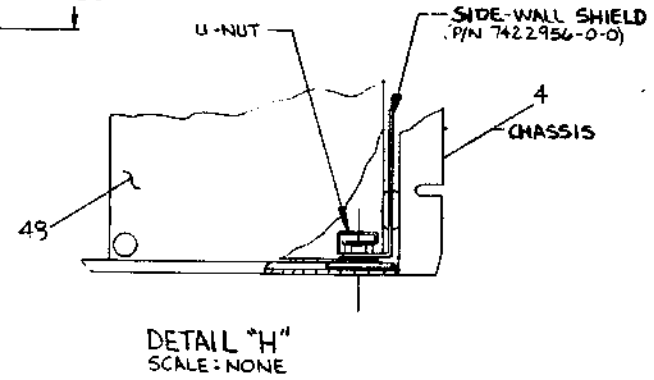
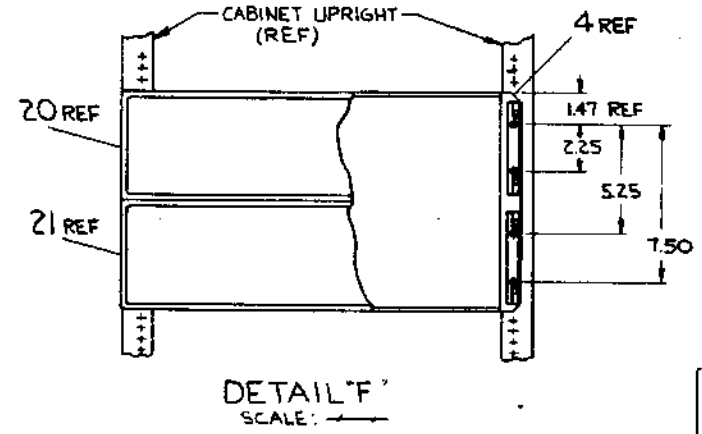
MAX. UNIT WEIGHT = 55 LB.

MOUNTING INSTRUCTIONS

- SEE DETAIL "F" FOR MFG DIM
- THE DIM FROM CENTER LINE OF RIGHT CAB UPRIGHT MOUNTING HOLE TO LEFT CAB UPRIGHT MOUNTING HOLE CENTER LINE IS 10.31.
- REMOVE THE BLANK BEZEL ASSY.
- REMOVE THE LIMITED FUNCTION PANEL AND DISCONNECT THE CABLE FROM THE LIMITED FUNCTION BO.
- REMOVE THE LATCH MOULDING (4 PLACES).
- REMOVE THE SPEED NUT, AND INSTALL ON CABINET POST. 8 PLACES PER MOUNTING DIMENSIONS.
- IF IT IS NECESSARY TO REMOVE THE FILTER RETAINER AND THE FILTER IN ORDER TO MOUNT THE BOX IN A CABINET.
- WITH THE BOX IN PLACE, IN THE CABINET, REPLACE THE LATCH MOULDING AND SPACERS SO AS TO SECURE THE BOX TO THE CABINET.
- PLUG THE CABLE INTO THE LIMITED FUNCTION BO AND REPLACE LIMITED FUNCTION PANEL.
- REPLACE THE BLANK BEZEL ASSY. REINSTALL THE 844708 RETAINER AND THE FILTER.
- FOR MOUNTING INSTRUCTIONS #4 AND #9, SEE NOTES #9 AND #10.

NOTES:

- REPLACE THE LINE REG. (ITEM #12) WITH A 115V 500-0-0 250VA 50/60 HZ TRANSFORMER ASSEMBLY H9300-0-0177 OF THE H9300.
- ALL H9300 POWER SUPPLY DC OUTPUTS ARE PROVIDED TO DRIVE LOGIC INTERNAL TO THE BASIC MACHINE ENCLOSURE. DIGITAL WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THE H9300 IF ANY DC POWER IS TAKEN OUTSIDE THE MACHINE.
- ENVIRONMENTAL CONDITIONS FOR H9300 ARE SPECIFIED IN DEC STD 102 CLASS "C" ENVIRONMENT.
- THIS ITEM (NAMEPLATE) IS SHOWN FOR REFERENCE ONLY. IT WILL BE ADDED ON A HIGHER LEVEL ASSEMBLY.
- INSTALL MODULES AS FOLLOWS: PLACEMENT OF HEX MODULES IS FROM SLOT #1 (TOP OF BACKPLANE) DOWN ↓ PLACEMENT OF QUAD MODULES IS FROM SLOT #2 (BOTTOM OF BACKPLANE) UP ↑
- CARD GUIDES (ITEM #13) ARE PROVIDED FOR SLOTS #1-10. WHEN A QUAD MODULE WITH AN H8511 OR H8511 CONNECTOR BLOCK (MRB-A, MSB-A, ETC) ON THE "E" SET OF FINGERS IS INSTALLED, IT IS NECESSARY TO CLIP OFF THE FRONT-LEFT CARD GUIDE IN THOSE SLOTS SO THAT THE CONNECTOR BLOCK MAY BE PROPERLY SEATED (REF DETAIL "E" FOR AN EXAMPLE OF CARD GUIDE REWORK).
- WHEN USED AS AN EXPANDER BOX THE BC08C ITEM 40, OR THE BC08H CABLE ITEM 41 GOES INTO SLOT 1 OF THE H9300. ALSO THE 16 CONDUCTOR CABLE ITEM 19 IS REMOVED IN EXPANDER BOX AND THE REMOTE SLAVE CIRCUIT ITEM 44 IS INSTALLED IN J14 OF THE H9194 CONNECTOR BLOCK ASSEMBLY.
- ITEM 21 IS REPLACED BY ITEM 45 IN EXPANDER BOX AND ITEM 42 AND 43 ARE INCLUDED IN EXPANDER BOX VARIATIONS. ITEM 43 IS TO BE USED WITH ITEM 42 WHEN EXPANDING TO BE. IN ALL OTHER EXPANSION VARIATIONS ITEM 42 IS USED ALONE.
- REMOVE GROUND WIRE (GRNATE OR GRN) FROM LINE SET ASSY (ITEM 51) IF IT IS A WELD STUD. NOTE LEAD MAY ALREADY BE FREE. ATTACH THIS GROUND WIRE TO CHASSIS (SEE DETAIL "E") USING ITEMS 27, 49, 50 AND 51. NOTE: HOLE IN RIGHT REAR SIDE MAY HAVE TO BE EXPANDED TO 1/8 IN. FOR #8 SCREW.
- FOR ITEM 46 WITH XFMR H9110 REV-B, A SPECIAL SIDE-WALL MAGNETIC SHIELD SHOULD BE INSTALLED (DEC #7422956-000) (SEE DETAIL "H"). U-NUTS ARE REMOVED FROM RIGHT SIDE OF ASSY AND PLACED ON SHIELD. SHIELD IS THEN POSITIONED FLUSH ALONG SIDE OF ASSY WITH U-NUTS ENTERING OVER MOUNTING HOLES OF ASSY. (ITEM 49, DATE CODED 79- -)



TITLE	SIZE CODE	NUMBER	REV.
CHASSIS ASSY, H9300	DUA	H9300-0-0	J
SCALE	SHEET	DIST.	
	3 OF 3		

MK 1

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
				AA	AB	AC	AD	BA	BB	BC	BD	BE	BF	BH	BJ	
1	1	D-CS-G8016-0-1	G8016-00	REGULATOR FOR H763	1	1	1	1	-	-	-	-	-	-	-	-
2	2	D-CS-G8018-0-1	G8018-00	H774 REGULATOR	-	-	-	-	1	1	1	1	1	1	1	1
3	3	D-AD-H9194-0-0	H9194-00	BUS CONN B/A B+4 SLOTS	1	1	1	1	1	1	1	1	1	1	1	1
4	4	E-IA-7016715-0-0	7016715-00	CHASSIS WELDMENT	1	1	1	1	1	1	1	1	1	1	1	1
5	5		1209403-01	FAN,115CFM,SLEEVE BRNG	2	2	2	2	2	2	2	2	2	2	2	2
6	6	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
7	7	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
8	8	D-IA-7009755-0-0	7009755-00	HARNESS FAN (H763) PDP8A	1	1	1	1	1	1	1	1	1	1	1	1
9	9	D-AD-7016124-0-0	7016124-00	C.B. LINE SET ASSY	1	-	-	-	-	-	-	-	-	-	-	-
10	10	D-AD-7016124-0-0	7016124-01	LINESET ASSY	-	1	-	-	-	-	-	-	-	-	-	-
11	11	D-AD-7016124-0-0	7016124-02	LINESET ASSY	-	-	-	-	1	-	1	-	1	-	-	-
12	12	D-AD-7016124-0-0	7016124-03	LINESET ASSY	-	-	-	-	-	1	-	1	-	1	-	-
13	13		1211630-00	CARD GUIDE	10	10	10	10	10	10	10	10	10	10	10	10
14	14		1209224-00	LATCH, NORYL PLASTIC	4	4	4	4	4	4	4	4	4	4	4	4
15	15	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
16	16	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
17	17	D-IA-7010935-0-0	7010935-01	TRANSFORMER ASSY 60HZ	-	-	-	-	1	-	1	-	1	-	1	-
18	18	D-IA-7010935-0-0	7010935-02	TRANSFORMER ASSY 50HZ	-	-	-	-	-	1	-	1	-	1	-	1
19	19	C-IA-7010871-0-0	7010871-1F	CABLE KEY BOARD 8A	1	1	1	1	1	1	-	-	-	-	1	1
20	20	D-AD-7009978-0-0	7009978-00	BEZEL ASSY (H763)PDP8A	1	1	1	1	1	1	1	1	1	1	1	1
21	21	D-AD-7010039-0-0	7010039-04	PANEL LIMITED FUNCTION	1	1	1	1	1	1	-	-	-	-	1	1
22	22		9006026-02	SCREW,FLAT,PHIL, 6-32X 3/4	8	8	8	8	8	8	8	8	8	8	8	8
23	23	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
24	24		9006035-01	SCREW,PAN,PHIL 8-32X 1/4 SS	10	10	10	10	10	10	10	10	10	10	10	10
25	25		9008072-00	WASHER, LOCK, EXTERNAL TOOTH #8	10	10	10	10	10	10	10	10	10	10	10	10
26	26	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-
27	27		9007649-00	WASHER, LOCK, EXTERNAL TOOTH #6	4	4	4	4	4	4	4	4	4	4	4	4
28	28		9007786-01	RETAINER, U-NUT, 10-32	8	8	8	8	8	8	8	8	8	8	8	8
29	29		9006075-02	SCREW,FLAT,PHIL, 10-32X 3/4	8	8	8	8	8	8	8	8	8	8	8	8
30	30		9006037-01	SCREW,PAN,PHIL 8-32X 3/8 SS	4	4	4	4	4	4	4	4	4	4	4	4

REVISION HISTORY		BASIC PART NO: H9300		DRN: D.SULLIVAN	DATE: 21-FEB-75	DBP	D	I	G	I	T	A	L
ENG	ECO NUMBER	REV	SECTION A OF B	<i>A. Gardner</i>	DATE: 09-MAY-75	TITLE	PARTS LIST						
DF	H9300-MK007	H	SECTION, VARIATION INDEX	CHK'D: P.GARDNER	DATE: 09-MAY-75	H9300 UNIT ASSEMBLY							
DF	H9300-MK008	J	[A] AA,AB,AC,AD,BA,BB, BC,BD,BE,BF,BH,BJ	DES.ENG.: P.GARDNER	DATE: 09-MAY-75	DOCUMENT NUMBER							
			[B] BK,BL,BM,BN	<i>Jay J. Price</i>	DATE: 22-OCT-80	SIZE	CODE	NUMBER	REV				
			[C]	RESP.ENG.: D.FRENIERE		K	PL	H9300-0-0	J				
			[D]	MFG.ENG.: D.DEHOME	DATE: 09-MAY-75	FILE NAME: MK0245.PLS							
			[E]	ASSEMBLY NUMBER: ID-UA-H9300-0-0	TOP DOCUMENT NUMBER: #B-DD-H9300-0	EDIT #: 13							

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MK

PARTS LIST

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION												
					AA	AB	AC	AD	BA	BB	BC	BD	BE	BF	BH	BJ	
31	31	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32		9008196-00	RECP. CLIP ON F/1/4 TURN FASTNR	2	2	2	2	2	2	2	2	2	2	2	2	2
33	33	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
34	34		9009087-00	FOAM, TAPE, SINGLE SIDED 1/8 THK	1	1	1	1	1	1	1	1	1	1	1	1	1
35	35	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
36	36	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
37	37	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
38	38	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
39	39	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
40	40	D-UA-BC80C-0-0	BC80C-04	BC80C CABLE	-	-	-	-	-	-	-	-	-	-	-	-	-
41	41	D-UA-BC08H-0-0	BC08H-1F	CABLE	-	-	-	-	-	-	-	2	2	-	-	-	-
42	42	C-IA-7008288-0-0	7008288-3F	CABLE ASSY	-	-	-	-	-	-	1	1	1	1	-	-	-
43	43	C-IA-7013953-0-0	7013953-01	8E POWER CONTROL ADAPTER CABLE	-	-	-	-	-	-	-	-	-	1	1	-	-
44	44	D-UA-5413011-0-0	5413011-00	H9300 REMOTE SLAVE CIRCUIT	-	-	-	-	-	-	1	1	1	1	-	-	-
45	45	D-AD-7009978-0-0	7009978-01	BLANK BEZEL ASSY	-	-	-	-	-	-	1	1	1	1	-	-	-
46	46	D-AD-7016124-0-0	7016124-04	LINESET ASSY	-	-	-	-	-	-	-	-	-	-	-	-	1
47	47	D-AD-7016124-0-0	7016124-05	LINESET ASSY	-	-	-	-	-	-	-	-	-	-	-	-	1
48	48	D-IA-7013954-0-0	7013954-00	MDS TRANSFORMER ASSY	1	1	1	1	-	-	-	-	-	-	-	1	-
49	49		9008185-00	NUT,KEP 6-32X 1/4 AF	14	14	14	14	14	14	14	14	14	14	14	14	14
50	50	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
51	51	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
52	52	D-IA-7421088-0-0	7421088-00	COVER,FAN HARNESS	1	1	1	1	1	1	1	1	1	1	1	1	1
53	53	C-MD-7421087-0-0	7421087-00	ENCLOSURE PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1
54	54		9006025-03	SCREW,TRUS,PHIL, 6-32X 5/8	8	8	8	8	8	8	8	8	8	8	8	8	8
55	55		1210263-00	GUARD,FINGER 4.125 X 4.125 MTG H	2	2	2	2	2	2	2	2	2	2	2	2	2
56	56	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-	-	-	-	-	-	-	-	-	-
57	57		3613210-00	/REPLACED BY 36-17674-00	1	1	1	1	1	1	1	1	1	1	1	1	1
58	58	D-AD-7016124-0-0	7016124-06	LINESET ASSY	-	-	-	1	-	-	-	-	-	-	-	-	-
59	59	D-AD-7016124-0-0	7016124-07	LINESET ASSY	-	-	1	-	-	-	-	-	-	-	-	-	-
60	60		9006020-01	SCREW,PAN,PHIL 6-32X 1/4 SS	4	4	4	4	4	4	4	4	4	4	4	4	4
61	61		9007651-00	WASHER, LOCK, EXTERNAL TOOTH #10	6	6	6	6	6	6	6	6	6	6	6	6	6
62	62		9006565-00	NUT,KEP 10-32X 3/8 AF	2	2	2	2	2	2	2	2	2	2	2	2	2
63	63		3612680-01	DECAL, GROUND SIGN PER 3S6 *	1	1	1	1	1	1	1	1	1	1	1	1	1
64	64		3613211-00	DECAL,CLEAR PREPRINTED CSA 1-1/4	1	1	1	1	1	1	1	1	1	1	1	1	1
65	65	A-DC-7416197-0-0	7416197-02	DECAL-UL LISTED EDP	1	1	1	1	1	1	1	1	1	1	1	1	1
66	66	C-IA-7013952-0-0	7013952-00	REMOTE INTERLOCK JUMPER ASSY	-	-	-	-	-	-	1	1	1	1	-	-	-

D	I	G	I	T	A	L	TITLE	SECTION A OF B	SIZE	CODE	DOCUMENT NUMBER	REV
							H9300 UNIT ASSEMBLY		K	PL	H9300-0-0	J

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION				
				BK	BL	BM	BN	
1	1	D-CS-G8016-0-1	G8016-00	*** THIS ITEM IS NOT USED ***	-	-	-	-
2	2	D-CS-G8018-0-1	G8018-00	H774 REGULATOR	1	1	1	1
3	3	D-AD-H9194-0-0	H9194-00	BUS CONN 8/A 8+4 SLOTS	1	1	1	1
4	4	E-IA-7016715-0-0	7016715-00	CHASSIS WELDMENT	1	1	1	1
5	5		1209403-01	FAN,115CFM,SLEEVE BRNG	2	2	2	2
6	6	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
7	7	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
8	8	D-IA-7009755-0-0	7009755-00	HARNESS FAN (H763) PDP8A	1	1	1	1
9	9	D-AD-7016124-0-0	7016124-00	*** THIS ITEM IS NOT USED ***	-	-	-	-
10	10	D-AD-7016124-0-0	7016124-01	*** THIS ITEM IS NOT USED ***	-	-	-	-
11	11	D-AD-7016124-0-0	7016124-02	*** THIS ITEM IS NOT USED ***	-	-	-	-
12	12	D-AD-7016124-0-0	7016124-03	*** THIS ITEM IS NOT USED ***	-	-	-	-
13	13		1211630-00	CARD GUIDE	10	10	10	10
14	14		1209224-00	LATCH, NORYL PLASTIC	4	4	4	4
15	15	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
16	16	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
17	17	D-IA-7010935-0-0	7010935-01	TRANSFORMER ASSY 60HZ	1	-	1	-
18	18	D-IA-7010935-0-0	7010935-02	TRANSFORMER ASSY 50HZ	-	1	-	1
19	19	C-IA-7010871-0-0	7010871-1F	*** THIS ITEM IS NOT USED ***	-	-	-	-
20	20	D-AD-7009978-0-0	7009978-00	BEZEL ASSY (H763)PDP8A	1	1	1	1
21	21	D-AD-7010039-0-0	7010039-04	*** THIS ITEM IS NOT USED ***	-	-	-	-
22	22		9006026-02	SCREW,FLAT,PHIL, 6-32X 3/4	8	8	8	8
23	23	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
24	24		9006035-01	SCREW,PAN,PHIL 8-32X 1/4 SS	10	10	10	10
25	25		9008072-00	WASHER, LOCK, EXTERNAL TOOTH #8	10	10	10	10
26	26	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
27	27		9007649-00	WASHER, LOCK, EXTERNAL TOOTH #6	4	4	4	4
28	28		9007786-01	RETAINER, U-NUT, 10-32	8	8	8	8
29	29		9006075-02	SCREW,FLAT,PHIL, 10-32X 3/4	8	8	8	8
30	30		9006037-01	SCREW,PAN,PHIL 8-32X 3/8 SS	4	4	4	4

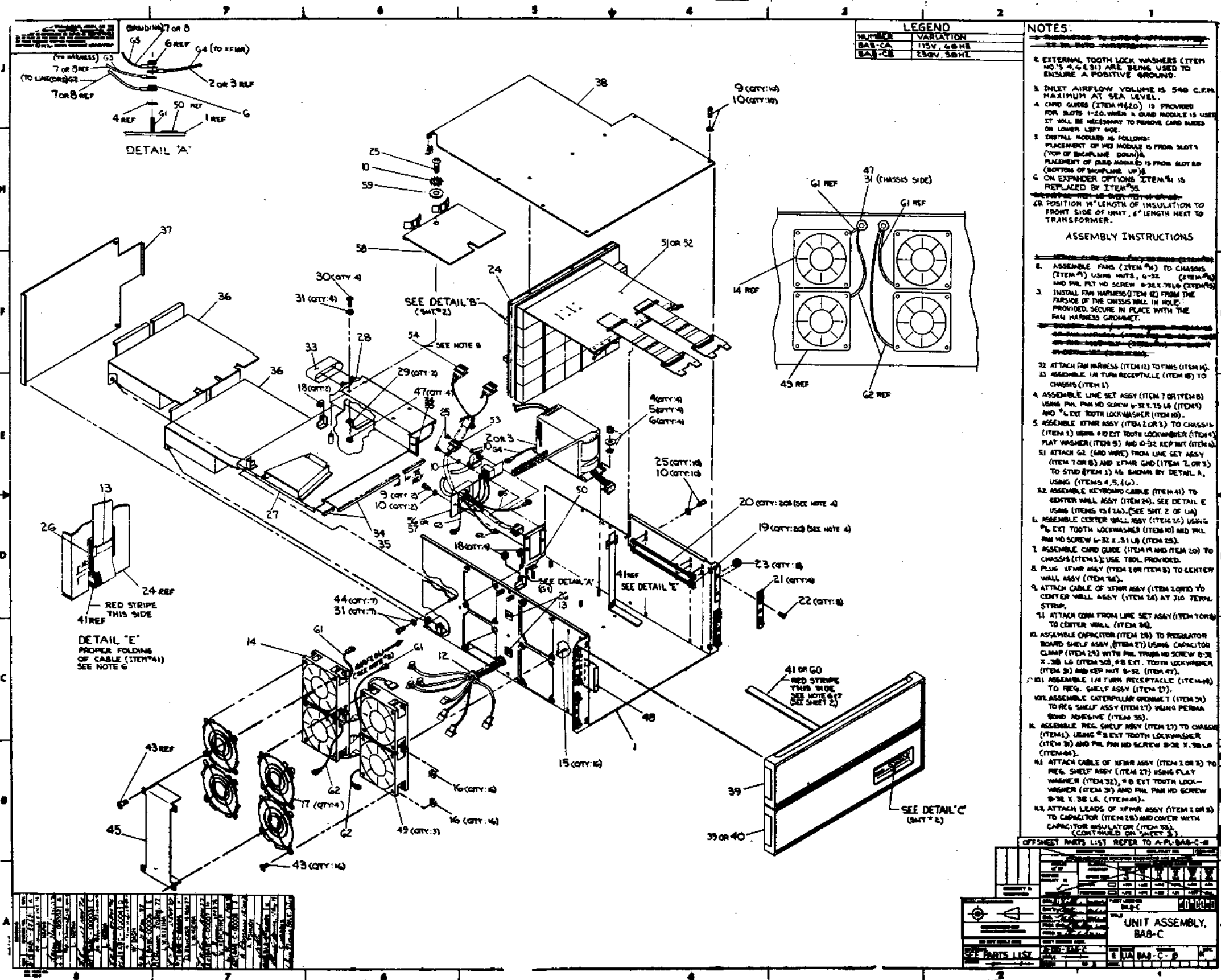
REVISION HISTORY			BASIC PART NO: H9300		DRN: D.SULLIVAN	DATE: 21-FEB-75	DBP	DIGITAL			
ENG	ECO NUMBER	REV	SECTION B OF B	CHK'D:		DATE:	TITLE	PARTS LIST			
DF	H9300-MK007	H	SECTION. VARIATION INDEX	<i>A. Karsch</i>		23-JUL-81					
DF	H9300-MK008	J	[A] AA,AB,AC,AD,BA,BB, BC,BD,BE,BF,BH,BJ [B] BK,BL,BM,BN	P.GARDNER		09-MAY-75	H9300 UNIT ASSEMBLY				
			[C]	DES.ENG.: P.GARDNER		09-MAY-75					
			[D]	RESP.ENG.: <i>D. P. P. P. P.</i> D. PREMIERE		22-OCT-80	DOCUMENT NUMBER				
			[E]	MFG.ENG.: D.DEHOME		09-MAY-75	SIZE: K	CODE: PL	NUMBER: H9300-0-0	REV: J	
			[F]	ASSEMBLY NUMBER: D-UA-H9300-0-0			TOP DOCUMENT NUMBER: #B-ED-H9300-0	FILE NAME: MK0245.PLS	EDIT #: 13		

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MK

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION			
					BK	BL	BM	BN
31	31	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
32	32		9008196-00	RECP. CLIP ON F/1/4 TURN FASTNR	2	2	2	2
33	33	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
34	34		9009087-00	FOAM, TAPE, SINGLE SIDED 1/8 THK	1	1	1	1
35	35	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
36	36	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
37	37	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
38	38	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
39	39	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
40	40	D-UA-BC80C-0-0	BC80C-04	BC80C CABLE	-	-	1	1
41	41	D-UA-BC08H-0-0	BC08H-1F	CABLE	2	2	-	-
42	42	C-IA-7008288-0-0	7008288-3F	CABLE ASSY	1	1	1	1
43	43	C-IA-7013953-0-0	7013953-01	BE POWER CONTROL ADAPTER CABLE	-	-	1	1
44	44	D-UA-5413011-0-0	5413011-00	H9300 REMOTE SLAVE CIRCUIT	1	1	1	1
45	45	D-AD-7009978-0-0	7009978-01	BLANK BEZEL ASSY	1	1	1	1
46	46	D-AD-7016124-0-0	7016124-04	LINESET ASSY	-	1	-	1
47	47	D-AD-7016124-0-0	7016124-05	LINESET ASSY	1	-	1	-
48	48	D-IA-7013954-0-0	7013954-00	*** THIS ITEM IS NOT USED ***	-	-	-	-
49	49		9008185-00	NUT,KEP 6-32X 1/4 AF	14	14	14	14
50	50	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
51	51	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
52	52	D-IA-7421088-0-0	7421088-00	COVER,FAN HARNESS	1	1	1	1
53	53	C-MD-7421087-0-0	7421087-00	ENCLOSURE PLATE	1	1	1	1
54	54		9006025-03	SCREW,TRUS,PHIL, 6-32X 5/8	8	8	8	8
55	55		1210263-00	GUARD,FINGER 4.125 X 4.125 MTG H	2	2	2	2
56	56	BLANK		*** THIS ITEM IS NOT USED ***	-	-	-	-
57	57		3613210-00	/REPLACED BY 36-17674-00	1	1	1	1
58	58	D-AD-7016124-0-0	7016124-06	*** THIS ITEM IS NOT USED ***	-	-	-	-
59	59	D-AD-7016124-0-0	7016124-07	*** THIS ITEM IS NOT USED ***	-	-	-	-
60	60		9006020-01	SCREW-PAN,PHIL 6-32X 1/4 SS	4	4	4	4
61	61		9007651-00	WASHER, LOCK, EXTERNAL TOOTH #10	6	6	6	6
62	62		9006565-00	NUT,KEP 10-32X 3/8 AF	2	2	2	2
63	63		3612680-01	DECAL, GROUND SIGN PER 3S6 *	1	1	1	1
64	64		3613211-00	DECAL,CLEAR PREPRINTED CSA 1-1/4	1	1	1	1
65	65	A-DC-7416197-0-0	7416197-02	DECAL-UL LISTED EDP	1	1	1	1
66	66	C-IA-7013952-0-0	7013952-00	REMOTE INTERLOCK JUMPER ASSY	1	1	1	1

DIGITAL										TITLE										SECTION B OF B										SIZE CODE										DOCUMENT NUMBER										REV									
										H9300 UNIT ASSEMBLY																				K PL										H9300-0-0										J									



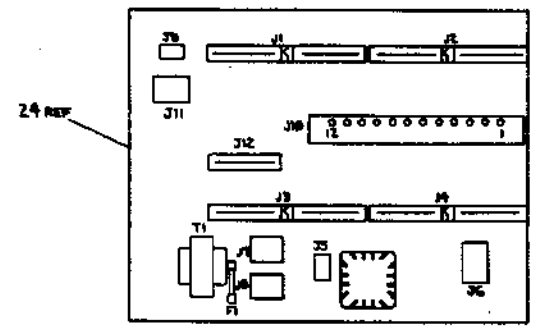
MODULE ASSIGNMENT AND POWER REQUIREMENTS

OPTION	DESCRIPTION	BOARD SIZE	NO. SLOTS USED	ASSIGNED SLOT NO.	CURRENT +5V	+15V	-15V
CMB-F	CARD RDR CONT	QUAD	1	4-20	50A		
CMB-F	CARD RDR CONT	QUAD	1	4-20	50A		
DMS-EA	INTERPROC BUFFER		1	2-20	30A		03A
DMS-EC	RTC CRYSTAL		1	2-20	30A		
DMS-EP	RTC PROG	QUAD	2	2-20	1.43A		07A
DKCB-A	OPTION ²	HEX	1	2-3	20A	06A	1A
DMS-EA-EB	MODEM INTERFACE	QUAD	2	2-20	1.80A	06A	1A
DMS-EA	DHITAL I/O	QUAD	1	2-20	2.25A		
KAB-E	POSITIVE I/O	QUAD	1	4-20	1.80A		
KCB-AA-AB	PROG. CONSOLE	PHL. HT.	0	N.A.	2.5A		
KDB-E	DATA BREAK	QUAD	1	4-20	1.2A		
KGB-EA	REDUNDANCY CHECK	QUAD	1	4-20	0.9A		
KRB-A	C.P.U.	HEX	1	1	5.0A		04A
MBE-BA	ASYN. DATA CONT.	QUAD	1	2-20	1.1A	03A	10A
MLS-N	MODEM CONTROL	QUAD	1	2-20	0.9A	04A	04A
MMS-AA OR-AB	OPTION ²	HEX	1	2-3	2.0A		
KMB-E	MEM. EXT. #1 & CONT.	QUAD	1	4-20	1.0A		
LEB-XH	LSBI CONTROL	QUAD	1	2-20	3.0A		
LSB-F	LSBI CONTROL	QUAD	1	2-20	4.0A		
MMS-AA	8K CORE, OPERATING	HEX	2	4-11	2.5A		
MMS-AA	8K CORE, STANDBY	HEX	2	4-11	2.5A		
MMS-AB	8K CORE, OPERATING	HEX	2	4-11	2.5A		
MMS-AB	8K CORE, STANDBY	HEX	2	4-11	2.5A		
MRS-AA	1K ROM	QUAD	1	2-20	2.0A		
MRS-AB	2K ROM		1	2-20	3.0A		
MRS-AC	3K ROM		1	2-20	4.0A		
MRS-AD	4K ROM		1	2-20	5.0A		
MRS-AB	1K PROM		1	2-20	3.8A		35A
MRS-AA	1K RAM		1	4-20	1.4A		
MRS-AB	2K RAM		1	4-20	2.1A		
MRS-AC	3K RAM		1	4-20	2.8A		
MRS-AD	4K RAM		1	4-20	3.5A		
PCPE, PMS-F	PCBS CONTROL		1	4-20	3.5A		02A
RXP-E	RXB CONTROL		1	4-20	1.5A		
RWB-EA	RWB CONTROL		3	4-20	3.8A		
TAB-AA	TUBS CONTROL		1	2-20	2.88A		
TWB-EA, FA	TUBS CONTROL		4	4-20	4.8A		
VDB-E	DISPLAY CONTROL		2	2-20	3A		
VTS-E	DISPLAY CONTROL		3	4-20	3.78A	09A	13A
XYB-E	PLOTTER CONTROL		1	4-20	4.2A	01A	03A
KXB-E	MMSB MAJOR REG.		1	0-19	1.7A		
	MMSB MAJOR REG. CONT.		1	0-19	60A		
	MMSB TIMING GEN.		1	0-20	12A		
	MMSB BUS LOAD		1	1	10A	10A	55A
ADB-B	A/D CONV.	QUAD	1	4-20	3.25A		
FPPB-A	FLOPPING POINT	HEX	2	4-20	85A		
KEB-E	MBS40, EAE IR		1	0-19	1.6A		
	MBS41, EAE REG.		1	0-18			
MLB-A	MSLU	HEX	1	4-20	2.5A	08A	425A
LAB-F	LAMB CONT.	QUAD	1	4-20	10A		
MFB-E	BOOT LOADER	QUAD	1	4-20	75A		05A
RWB-L	RWB CONT.	QUAD	2	4-20	3.5A		
TDB-E	TUBS CONT.	QUAD	1	4-20	1.3A		
VDB-A	VIDED DISPLAY CONT.	HEX	1	4-20	2.8A		

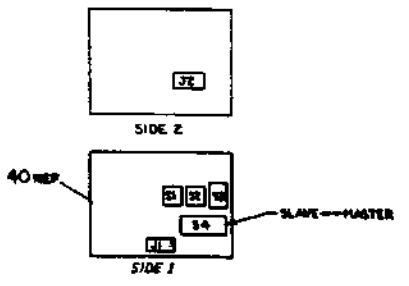
* WITH KEB-E OPTION, MBS38 & MBS39 MUST BE MOVED TO SLOTS 16 & 17 RESPECTIVELY. THE KEB-E OPTION PLUGS INTO SLOTS 18 & 19 (MBS31 & MBS34)

AVAILABLE CURRENT:

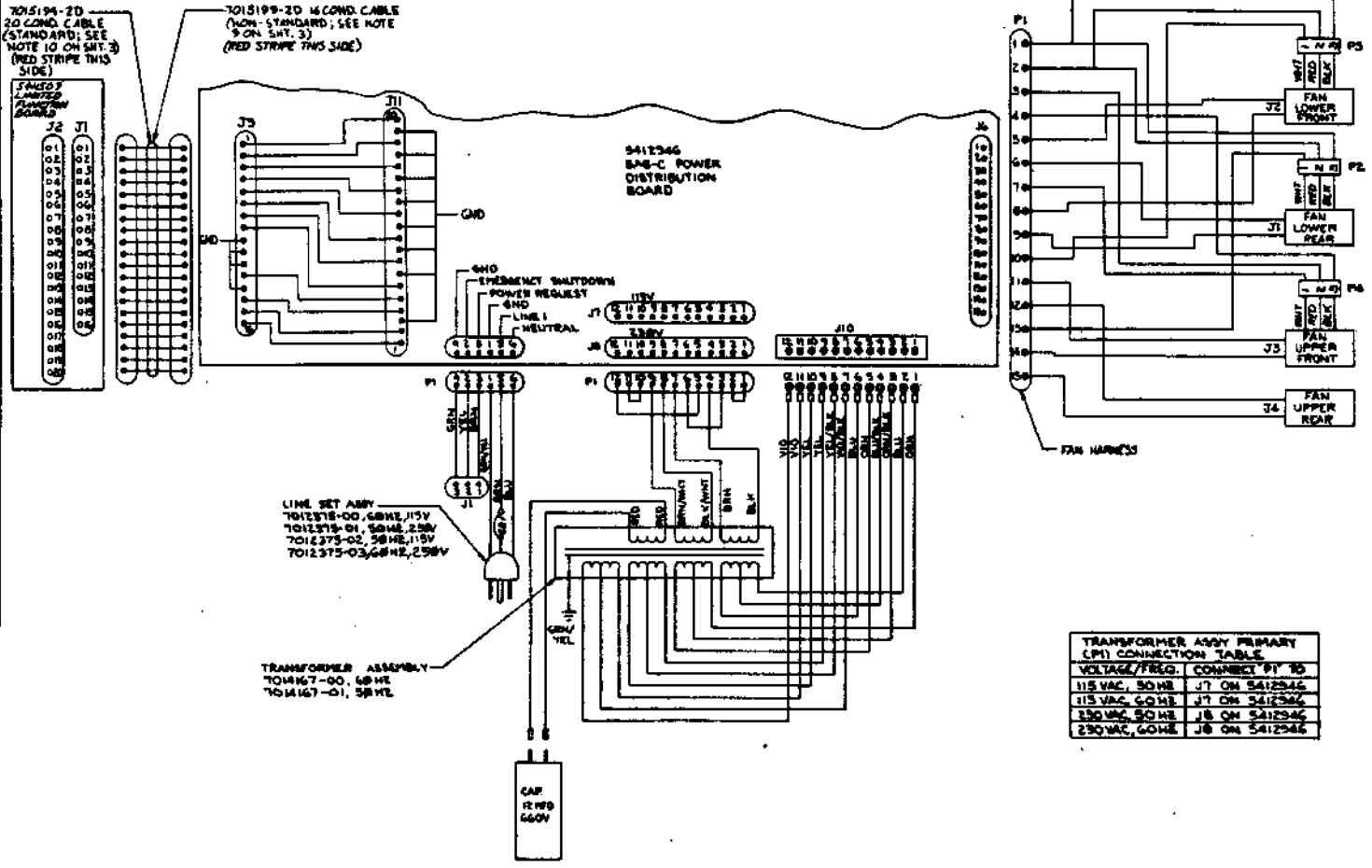
SLOTS ¹ THRU 10	1.2V	-15V	15V
	25A	2A	2A
	(MAX)	(MAX)	(MAX)
SLOTS ² THRU 20	+5V	-5V	+25V
	25A	2A	2A
	(MAX)	(MAX)	(MAX)



DETAIL "B"
JACK LOCATIONS ON POWER DISTRIBUTION BOARD OF CENTER WALL ASSEMBLY (ITEM# 84)



DETAIL "C"
SWITCH LOCATIONS ON LIMITED FUNCTION BOARD OF PANEL ASSY (ITEM# 40)



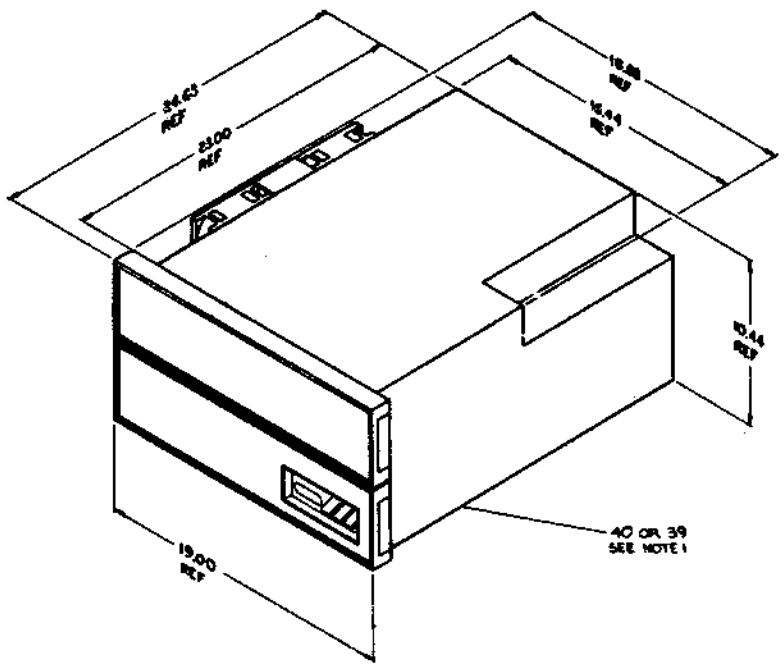
TRANSFORMER ASSY PRIMARY (PI) CONNECTION TABLE

VOLTAGE/FREQ.	CONNECT BY	TO
115 VAC, 60HZ	J7	ON 5412346
115 VAC, 60HZ	J7	ON 5412346
230 VAC, 60HZ	J8	ON 5412346
230 VAC, 60HZ	J8	ON 5412346

UNIT ASSEMBLY, BAG-C
 PART NUMBER: BAG-C-0
 REV: 0

BAG-C TORQUE SPECIFICATIONS	
ITEM	TORQUE ± 2 IN/LBS
16	12
6	25
9	13
23	13
30	15
2 OR 3 (TERMS)	15
44	15
22	12
43	12
19	12

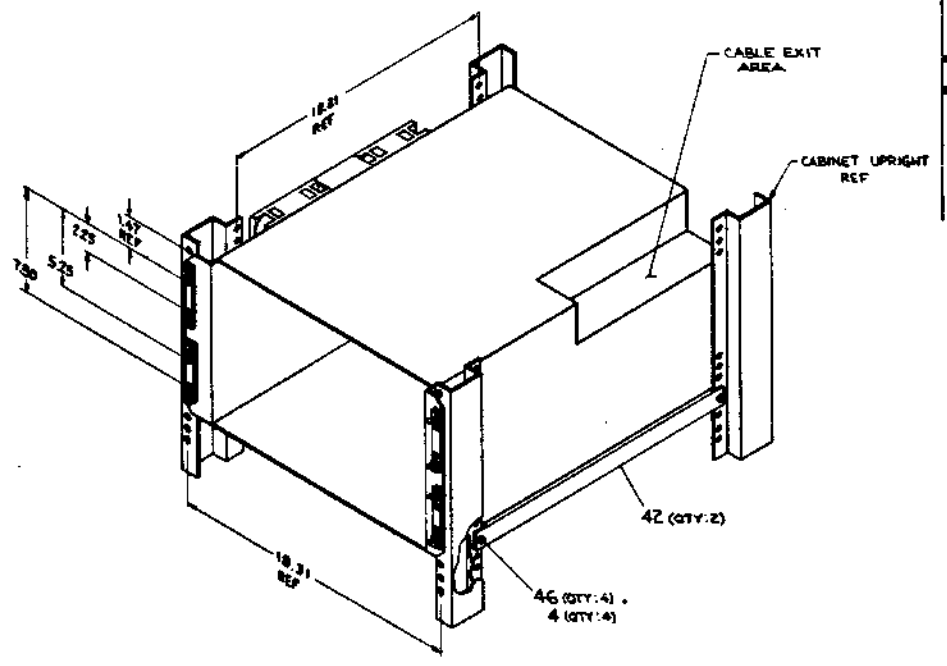
- 11.5 INSERT CONSOLE (ITEM 51) TO CENTER WALL ASSY (ITEM 20) USING PHL PAN HD SCREW 6-32, SPEED NUT AND INT. TOOTH LOCK WASHER (ITEM 22) AND FLAT WASHER (ITEM 52).
 12. INSERT LOWER GRID (ITEM 24) TO CHASSIS (ITEM 1) AND CENTER WALL ASSY (ITEM 24).
 - 12.1 INSERT UPPER GRID (ITEM 24) TO REG. SHELF ASSY (ITEM 27) AND CENTER WALL ASSY (ITEM 20).
 13. ADD 1/4 TURN RECEPTACLE (ITEM 46) TO TOP COVER (ITEM 24).
 14. ASSEMBLE TOP COVER (ITEM 24) TO CHASSIS (ITEM 1) USING #6 EXT TOOTH LOCKWASHER (ITEM 10) AND PHL PAN HD SCREW 6-32 X 1.5 LG (ITEM 9).
 15. ASSEMBLE REAR COVER (ITEM 37) TO CHASSIS (ITEM 1).
 16. ASSEMBLE LATCH MOLDING (ITEM 21) TO CHASSIS (ITEM 1) USING 10-32 SPEED NUT (ITEM 23) AND PHL FLAT HD SCREW 10-32 X .75 LG (ITEM 22).
 17. ATTACH KEYBOARD CABLE (ITEM 41) TO LIMITED FUNCTION PANEL (ITEM 40). SEE NOTE 7.
 18. ATTACH 3/4 BLANK BEZEL ASSEMBLY (ITEM 34) TO CHASSIS (ITEM 1). SEE NOTE 7.
 19. ATTACH GND STRAP (ITEMS 54+56) TO FANS (ITEMS 14+15) WITH SCREW PROVIDED THEN ATTACH GND STRAP TO CHASSIS STUDS (ITEM 1) WITH #8 NUT (ITEM 47) & EXT TOOTH LOCKWASHER (ITEM 51).
- NOTES
7. IN EXPANSION OPTIONS KEYBOARD CABLE IS REPLACED BY REMOTE INTERLOCK JUMPER (ITEM 55). THIS JUMPER IS INSERTED INTO 39 ON THE 5412946 POWER DISTRIBUTION BOARD. ALSO EXPANDER BOARDS DO NOT INCLUDE LIMITED FUNCTION PANELS (ITEM 40). IN THIS CASE THERE WILL BE TWO 3/4 BLANK BEZELS. THESE ARE TO BE MOUNTED ONE ON TOP OF THE OTHER ON THE CHASSIS FRONT.
 8. ALL EXPANDER BOX VARIATIONS WILL CONTAIN ITEMS 53 AND 54. USE ITEMS 53 AND 54 WHEN EXPANDING TO BE BOX. IN ALL OTHER EXPANSION VARIATIONS USE ONLY ITEM 53 AS POWER CONTROL CABLE.
 9. THIS CABLE TO BE USED WITH LIMITED FUNCTION BOARD ETC REV B OR EARLIER. (CS REV D OR EARLIER).
 10. THIS CABLE TO BE USED WITH LIMITED FUNCTION BOARD ETC REV C AND LATER. (CS REV E OR LATER).
- ASSEMBLY INSTRUCTIONS
- 13A. ATTACH WIRES TO CABLE THE MOUNT (ITEM 26) WITH CABLE TIE (ITEM 13).
 - 13B. ASSEMBLE HARNESS COVER (ITEM 42) AND FINGER GUARD (ITEM 17) TO FANS (ITEM 14) USING KEPNUT 6-32 (ITEM 40) AND PHL PAN HD SCREW 6-32 X .75 LG (ITEM 43).



MAX. UNIT WEIGHT = 117 LBS.

MOUNTING INSTRUCTIONS

1. SEE DETAIL "D" FOR MOUNTING DIMENSIONS.
2. REMOVE THE BLANK BEZEL ASSEMBLY OR PROGRAMMER'S PANEL.
3. REMOVE THE LIMITED FUNCTION PANEL AND DISCONNECT THE CABLE FROM THE LIMITED FUNCTION BOARD.
4. REMOVE THE LATCH MOLDING (4 PLCS).
5. REMOVE THE SPEED NUT, AND INSTALL ON CAB UPRIGHT. EIGHT PLACES PER MOUNTING DIMENSIONS.
6. IT MAY BE NECESSARY TO REMOVE THE FINGER GUARDS (4) AND HARNESS COVER IN ORDER TO MOUNT BOX IN CAB.
7. ATTACH MOUNTING RAILS USING SCREWS AND LOCK WASHERS TO LEFT AND RIGHT SIDE OF CABINET AS PER DETAIL "D".
8. WITH THE BOX IN PLACE, IN THE CABINET, REPLACE THE LATCH MOLDING, SO AS TO SECURE THE BOX TO THE CABINET.
9. PLUG THE CABLE INTO THE LIMITED FUNCTION PANEL AND REPLACE THE PANEL.
10. REPLACE BLANK BEZEL OR PROGRAMMER'S PANEL.
11. RE-INSTALL FINGER GUARDS AND HARNESS COVER.



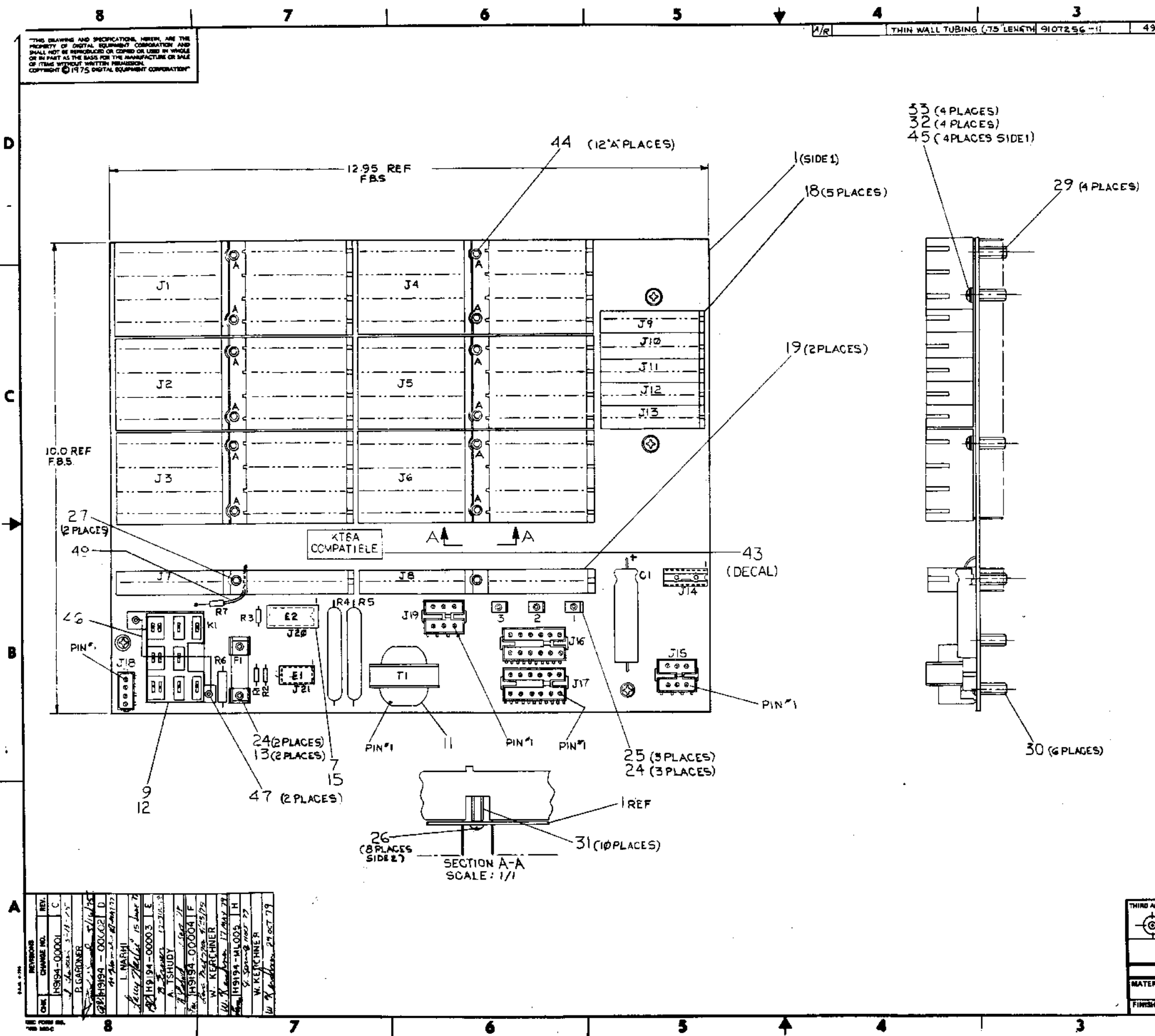
DETAIL "D"
MOUNTING DIMENSIONS

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY/VARIATION														
PARTS LIST			(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)			
MADE BY D. SULLIVAN			CHECKED <i>J. H. [unclear]</i>			SECTION 1											
DATE 22 MAR 76			DATE 26 JULY 76			ISSUED SECT.											
ENG <i>Larry Mather</i>			PROD <i>J. H. [unclear]</i>			ISSUED SECT.											
DATE 26 JULY 76			DATE 26 JULY 76			ISSUED SECT.											
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	BAB-CA	BAB-CB	BAB-CC	BAB-CD	BAB-CE	BAB-CF	BAB-CH	BAB-CJ	BAB-CK	BAB-CL	BAB-CM	BAB-CN			
23	9007786-01	NUT, SPEED #10-32	8	8	8	8	8	8	8	8	8	8	8	8			
24	7014245-0-0	WALL ASSY, CENTER	1	1	1	1	1	1	1	1	1	1	1	1			
25	9006021-01	SCR, PHL PAN HD #6-32 X .31LG.	10	12	10	12	10	12	10	12	10	12	10	12			
26	9008264	MOUNT, CABLE TIE	3	3	3	3	3	3	3	3	3	3	3	3			
27	D-AD-7012541-0-0	SHELF ASSY, REG. BOARD	1	1	1	1	1	1	1	1	1	1	1	1			
28	1011729-01	CAPACITOR, 12 MFD, 660 V	1	1	1	1	1	1	1	1	1	1	1	1			
29	1213156	CLAMP, CAPACITOR	2	2	2	2	2	2	2	2	2	2	2	2			
30	9006037-03	SCR, PHL TRUSS HD, #8-32 X .31 LG.	4	4	4	4	4	4	4	4	4	4	4	4			
31	9008072	WASHER, #8 EXT TOOTH LOCK	13	13	13	13	13	13	13	13	13	13	13	13			
32	9006668	WASHER, FLT, .625 X .200 I.D. X .032 THK	4	4	4	4	4	4	4	4	4	4	4	4			
33	1213683	TERMINAL, BOOT CAP	1	1	1	1	1	1	1	1	1	1	1	1			
34	9007036	GROMMET, CATERPILLAR	1	1	1	1	1	1	1	1	1	1	1	1			
35	9009157	ADHESIVE, PERMA BOND #102	RA	RA	RA	RA	RA	RA	RA	RA	RA	RA	RA	RA			
36	D-CS-G8018-0-1	REGULATOR BOARD ASSEMBLY (CORE)	2	2	2	2	2	2	2	2	2	2	2	2			
37	D-IA-7415703-0-0	COVER, REAR	1	1	1	1	1	1	1	1	1	1	1	1			
38	D-MD-7415706-0-0	COVER, TOP	1	1	1	1	1	1	1	1	1	1	1	1			
39	D-AD-7012452-0-0	BEZEL ASSY, 5.25 BLANK	1	1	2	2	2	2	1	1	2	2	2	2			
40	D-AD-7010039-03	PANEL, LIMITED FUNCTION	1	1	-	-	-	-	1	1	-	-	-	-			
41	C-IA-7015194-2D	20 COND. PANEL CABLE	1	1	-	-	-	-	1	1	-	-	-	-			
42	C-MD-7415702-0-0	RAIL, CHASSIS MOUNTING	2	2	2	2	2	2	2	2	2	2	2	2			
43	9006026-03	SCR, PHL TRUSS HD #6-32 X .75 LG.	16	16	16	16	16	16	16	16	16	16	16	16			
44	9006037-01	SCR, PHL PAN HD #8-32 X .38 LG.	7	7	7	7	7	7	7	7	7	7	7	7			
TITLE BAB-C UNIT ASSEMBLY			ASSY NO. B-DD-BAB-C			SIZE CODE A PL			NUMBER BAB-C-0			REV K			ECO NO.		
DEC FORM DEC 16-(325)-1031-N870 DRA 110			SHEET 2 OF 3			DIST.			ML								

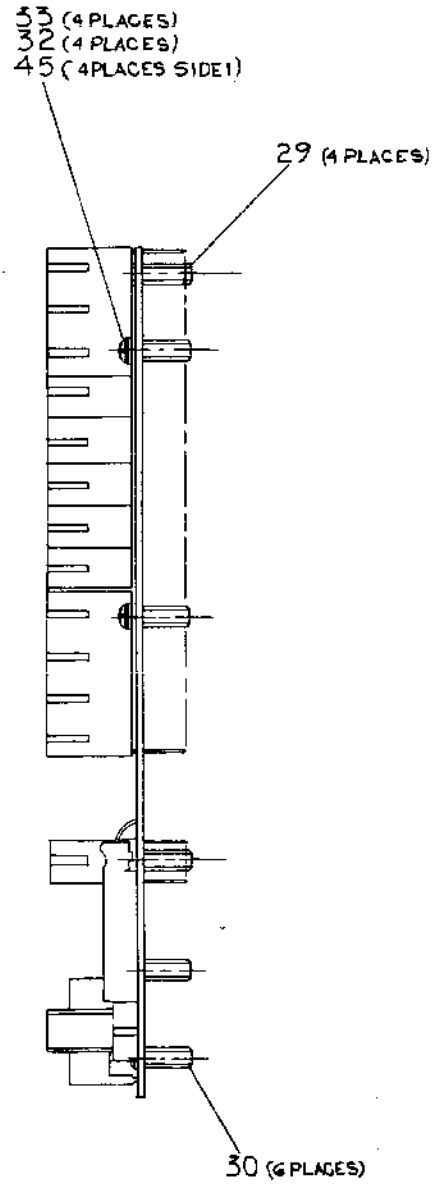
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY/VARIATION														
PARTS LIST			(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)			
MADE BY D. SULLIVAN			CHECKED <i>J. H. [unclear]</i>			SECTION 1											
DATE 22 MAR 76			DATE 26 JULY 76			ISSUED SECT.											
ENG <i>Larry Mather</i>			PROD <i>J. H. [unclear]</i>			ISSUED SECT.											
DATE 26 JULY 76			DATE 26 JULY 76			ISSUED SECT.											
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	BAB-CA	BAB-CB	BAB-CC	BAB-CD	BAB-CE	BAB-CF	BAB-CH	BAB-CJ	BAB-CK	BAB-CL	BAB-CM	BAB-CN			
45	D-MD-7416740-0-0	COVER, HARNPSS	1	1	1	1	1	1	1	1	1	1	1	1			
46	9006071-03	SCR, PHL TRUSS HD #10-32 X .38LG.	4	4	4	4	4	4	4	4	4	4	4	4			
47	9006563	NUT, KEPS # 8-32	6	6	6	6	6	6	6	6	6	6	6	6			
48	A-DC-7417273-0-0	WARNING LABEL	1	1	1	1	1	1	1	1	1	1	1	1			
49	7014193-00	FAN ASSEMBLY	3	3	3	3	3	3	3	3	3	3	3	3			
50	3612680-01	DECAL	1	1	1	1	1	1	1	1	1	1	1	1			
51	D-UA-DCB/C-04	CABLE, REX OMNIBUS EXPANDER	-	-	-	-	1	1	-	-	-	-	1	1			
52	D-UA-DCB/H-1F	CABLE, OMNIBUS EXPANDER	-	-	2	2	-	-	-	-	2	2	-	-			
53	C-IA-7008288-3F	CABLE, DC POWER CONTROL BUS	-	-	1	1	1	1	-	-	1	1	1	1			
54	C-IA-70-13953-01	CABLE, 8E DC POWER CONTROL ADAPTER	-	-	1	1	1	1	-	-	1	1	1	1			
55	D-UA-5417011-0-0	CIRCUIT, REMOTE SLAVE	-	-	1	1	1	1	-	-	1	1	1	1			
56	D-AD-7012375-02	LINE SET ASSY (115V, 50HZ)	-	-	-	-	-	-	-	-	1	1	-	1			
57	D-AD-7012375-03	LINE SET ASSY (230V, 60HZ)	-	-	-	-	-	-	-	-	1	1	-	1			
58	G8019	POWER DIST. CONTROL BOARD	1	1	1	1	1	1	1	1	1	1	1	1			
59	9006653	WASHER, FLAT #6	1	1	1	1	1	1	1	1	1	1	1	1			
60	C-IA-7015199-2D	16 COND. PANEL CABLE	*	*	-	-	-	-	*	*	-	-	-	-			
61	7011412-0F	CABLE, CHASSIS GND.	2	2	2	2	2	2	2	2	2	2	2	2			
62	7011412-0I	CABLE, CHASSIS GND.	2	2	2	2	2	2	2	2	2	2	2	2			
63	9007390-00	TUBING, SERRATE 1/4 IN. LENGTH	2	2	2	2	2	2	2	2	2	2	2	2			
TITLE BAB-C UNIT ASSEMBLY			ASSY NO. B-DD-BAB-C			SIZE CODE A PL			NUMBER BAB-C-0			REV K			ECO NO.		
DEC FORM DEC 16-(325)-1031-N870 DRA 110			SHEET 3 OF 3			DIST.			ML								

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			QUANTITY/VARIATION														
PARTS LIST			(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)	(115V-50HZ)	(230V-50HZ)	(115V-60HZ)	(230V-60HZ)			
MADE BY D. SULLIVAN			CHECKED <i>J. H. [unclear]</i>			SECTION 1											
DATE 22 MAR 76			DATE 26 JULY 76			ISSUED SECT.											
ENG <i>Larry Mather</i>			PROD <i>J. H. [unclear]</i>			ISSUED SECT.											
DATE 26 JULY 76			DATE 26 JULY 76			ISSUED SECT.											
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	BAB-CA	BAB-CB	BAB-CC	BAB-CD	BAB-CE	BAB-CF	BAB-CH	BAB-CJ	BAB-CK	BAB-CL	BAB-CM	BAB-CN			
1	D-IA-7012417-0	CHASSIS, BAB-C	1	1	1	1	1	1	1	1	1	1	1	1			
2	7014167-00	TRANSFORMER ASSY (60HZ)	1	-	1	-	1	-	1	-	1	-	1	-			
3	7014167-01	TRANSFORMER ASSY (50HZ)	-	1	-	1	-	1	-	1	-	1	-	1			
4	9007651	WASHER, #10 EXT TOOTH LOCK	8	8	8	8	8	8	8	8	8	8	8	8			
5	9006668	WASHER, FLT, .625 X .200 I.D. X .032 THK	4	4	4	4	4	4	4	4	4	4	4	4			
6	9006565	NUT, #10-32 KEPS	4	4	4	4	4	4	4	4	4	4	4	4			
7	D-AD-7012375-00	LINE SET ASSY (115V)	1	-	1	-	1	-	1	-	1	-	1	-			
8	D-AD-7012375-01	LINE SET ASSY (230V)	-	1	-	1	-	1	-	1	-	1	-	1			
9	9006020-01	SCR, PHL PAN HD #6-32 X .25 LG.	12	12	12	12	12	12	12	12	12	12	12	12			
10	9007649	WASHER, #6 EXT TOOTH LOCK	23	25	23	25	23	25	23	25	23	25	23	25			
11	9007013	GROMMET, 1/8 I.D. (BLK)	2	2	2	2	2	2	2	2	2	2	2	2			
12	D-IA-7014181-0-0	HARNASS, FAN	1	1	1	1	1	1	1	1	1	1	1	1			
13	9007031	CABLE TIE	6	6	6	6	6	6	6	6	6	6	6	6			
14	1213013	FAN, 5 IN., 135 CFM, 115 VAC	1	1	1	1	1	1	1	1	1	1	1	1			
15	9006026-02	SCR, PHL FLT HD #6-32 X .750 LG.	16	16	16	16	16	16	16	16	16	16	16	16			
16	9006560	NUT, KEP 6-32	32	32	32	32	32	32	32	32	32	32	32	32			
17	1213266-01	GUARD, FINGER	4	4	4	4	4	4	4	4	4	4	4	4			
18	9008196	RECEPTACLE, 1/4 TURN, .50 WIDE	8	8	8	8	8	8	8	8	8	8	8	8			
19	1212405-08	CARD GUIDE, FULL LENGTH (NATURAL)	20	20	20	20	20	20	20	20	20	20	20	20			
20	1212405-09	CARD GUIDE, FULL LENGTH (MAGENTA)	20	20	20	20	20	20	20	20	20	20	20	20			
21	1209224	LATCH HOLDING	4	4	4	4	4	4	4	4	4	4	4	4			
22	9006075-02	SCR, PHL FLT HD #10-32 X .75LG.	8	8	8	8	8	8	8	8	8	8	8	8			
TITLE BAB-C UNIT ASSEMBLY			ASSY NO. B-DD-BAB-C			SIZE CODE A PL			NUMBER BAB-C-0			REV K			ECO NO.		
DEC FORM DEC 16-(325)-1031-N870 DRA 110			SHEET 1 OF 3			DIST.			ML								

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1/8 THIN WALL TUBING (.75 LENGTH 9107256-11 49



QTY	REF	DESCRIPTION	DWG. PART NO.	ITEM NO.
1	R7	RES 1K 1/4W 5%	1300365-00	45
2		EYELET	9000024-07	47
1		SPRING RELAY HOLD DOWN	1216422-00	46
4		SCR. PHL PAN HD 8-32 x 5/16	9006036-01	45
12		SCR. SOCKET HD 8-32 x 3/8	9006339-08	44
1		DECAL "KTBA COMPATIBLE"	3615653-00	43
4/R		WIRE 30AWG SOLID GRN	9105740-55	42
4/R		WIRE 18 AWG STRANDED GRN	9107360-55	41
4/R		WIRE 22 AWG STRANDED GRN	9107350-55	40
REF		"OMNIBUS" SPEC	A-SP-OMNIB-US	39
REF		MODULE CRT HIST-DRY	8-DR-H9194-0-6	38
REF		ASSY/DRILLING HOLE LAYOUT	D-AR-H9194-0-5	37
REF		X-Y COORDINATE HOLE LOCATION	K-CO-H9194-0-4	36
REF		CIRCUIT SCHEMATIC	D-CS-H9194-0-1	35
REF		WIRE 24AWG GREEN	9107256-11	49
4		WASHER, FLAT #8	9006660	33
4		WASHER, INFL TOOTH #8	9006634	32
10		SPACER, 8-32 x .25 AF x .56	9009602	31
6		SPACER, 8-32 x .25 AF x .62	9009629	30
4		SPACER, 8-32 x .25 AF x 1.25	9009603	29
2		SCR. SOC. HD 8-32 x 1.25	9008471-08	27
3		SCR. PHL PAN HD 8-32 x .25	9006035-01	26
3		TERMINAL, SINGLE MALE TAB	9008219	25
5		EYELET	9009000	24
2		EYELET	9006746	23
1	J18	CONN, PC . . . 4 PIN	1211342-04	22
2	J15 J19	CONN, PC . . . 6 PIN	1211342-06	21
2	J16 J17	CONN, PC . . . 12 PIN	1211342-12	20
2	J7, J8	CONN BLK, 72 PIN SLTD	1211425-02	19
3	J9 -> J13	CONN BLK, 36 PIN SLTD	1211029	18
6	J1 -> J6	CONN BLK, 288 PIN SLTD	1210258-01	17
1	J21	SOCKET, IC, 14 PIN	1211813-01	16
2	J14, J20	SOCKET, IC, 16 PIN	1211813-02	15
6		CARD GUIDE, CENTER	1210678	14
2		CLIP, FUSE	9007203	13
1		SOCKET, RELAY	1210684	12
1	T1	TRANSFORMER	1611646	11
1	F1	FUSE 3/8 A, S.B	9007207	10
1	K1	RELAY, 3 POLE, 6V, 10 AMP	1210683-01	9
1	E1	QUAD CORE DRIVER 40II	1511102	8
1	E2	DIODE ARRAY	01A-7010866-0-0	7
1	R6	RES, 10 Ω, 2W, 10%	1300172	6
2	R4, R5	RES, 20 Ω, 10W, 1%	1305416	5
3	R1, R2, R3	RES, 2.2K 1/4W, 5%	1300417	4
1	C2	CAP, .02 μF, 100V, DUAL DISC	1010767	3
1	C1	CAP 930 μF, 30V	1010509-00	2
1		ETCHED CIRCUIT BOARD	5011505	1

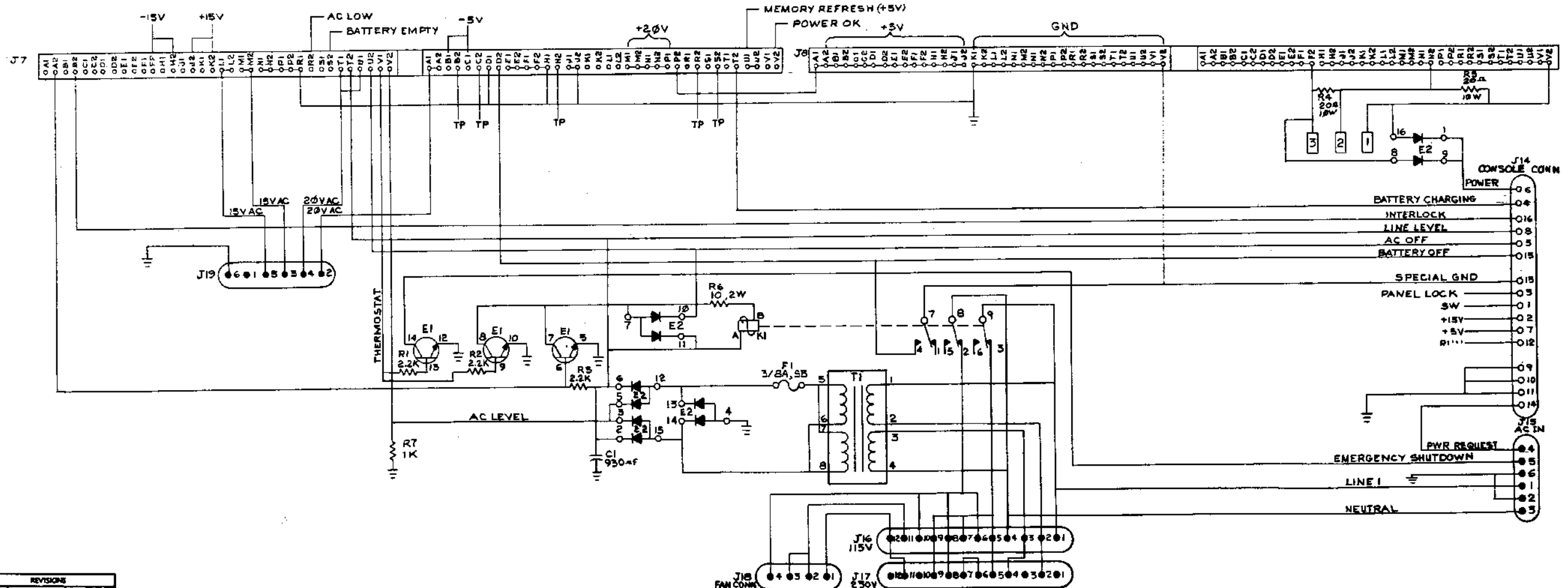
REF	DES	DESCRIPTION	DWG. PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
ANGLES OF 90°				
CLASS OF ACCURACY (CHECK ONE)				
SURFACE QUALITY IN				
MICROINCHES				
PREFERRED				
THIRD ANGLE PROJECTION				
REMOVE BURRS AND BREAK SHARP CORNERS				
DO NOT SCALE DWG				
MATERIAL				
FINISH				

DRN. <i>[Signature]</i>	1/28/75	FIRST USED ON	H9300
CHK'D <i>[Signature]</i>	2-8-75	TITLE	CONNECTOR BLOCK ASS'Y
ENG. <i>[Signature]</i>	2-29-75	SIZE	DAD
PROG. <i>[Signature]</i>	2-29-75	CODE	H9194-0-0
PROC. <i>[Signature]</i>	2-27-75	NUMBER	H
NEXT HIGHER ASSY.		REV.	
B-DD-H9194-0	SCALE 1/1	SHEET	OF
DIST.			

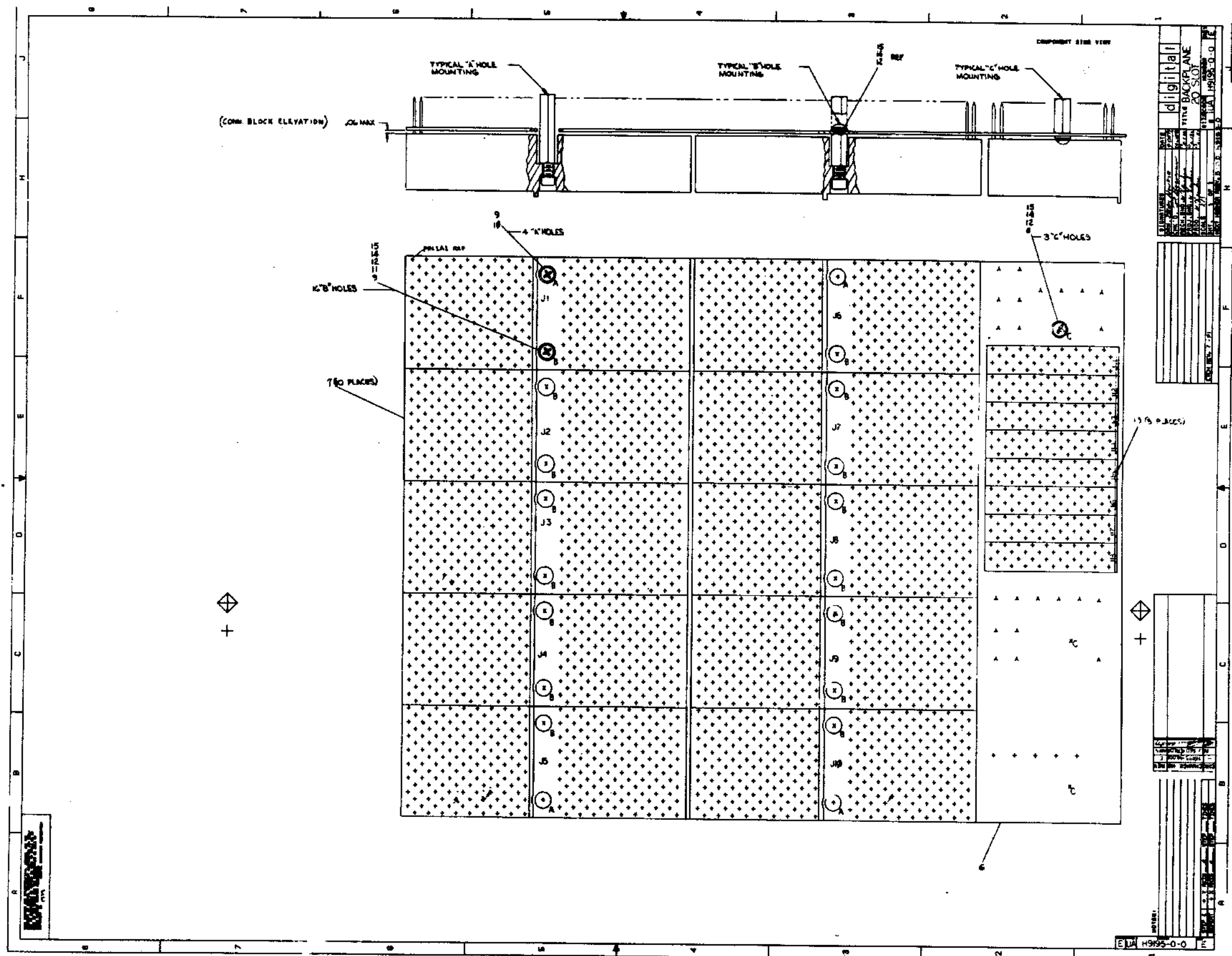
REV.	DATE	BY	DESCRIPTION
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PIN	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2
A	A01 = +5V ALL OTHERS = TP	+5V	B02/B03-BATTERY EMPTY, ALL OTHERS = TP	+5V	C01 = +5V ALL OTHERS = TP	+5V	D02/D03-PANEL LOCK, ALL OTHERS = TP	+15V	TEST POINT	+20V
B	TEST POINT	-15V	B02/B03-AC LOW, ALL OTHERS = TP	-15V	TEST POINT	-15V	TEST POINT	-15V	TEST POINT	BANK SEL 0
C	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
D	MA0 L	EMA0 L	MA4 L	INT STROBE H	I/O PAUSE L	TP1 H	NA8 L	IR0 L	TEST POINT	BANK SEL 1
E	MA1 L	EMA1 L	MA5 L	BREAK IN PROG L	C0 L	TP2 H	MA9 L	IR1 L	TEST POINT	+20V
F	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
H	MA2 L	EMA2 L	MA6 L	NA, MS, LOAD CONT L	C1 L	TP3 H	MA10 L	IR2 L	TEST POINT	MEMORY REFRESH
J	MA3 L	MEM START L	MA7 L	OVERFLOW L	C2 L	TP4 H	MA11 L	F L	TEST POINT	MEMORY REFRESH
K	MD0 L	MDDIR L	MD4 L	BREAK DATA CONT L	BUS STROBE H	TS1 L	MD8 L	D L	TEST POINT	+20V
L	MD1 L	SOURCE H	MD5 L	BREAK CYCLE L	INTERNAL I/O L	TS2 L	MD9 L	E L	TEST POINT	BANK SEL 2
M	MD2 L	STROBE H	MD6 L	LOAD ADD ENABLE L	NOT LAST XFER L	TS3 L	MD10 L	USER MODE L	TEST POINT	-5V
N	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
P	MD3 L	INHIBIT H	MD7 L	INT IN PROG H	INT REQUEST L	TS4 L	MD11 L	F SET L	TEST POINT	+20V
R	DATA 0 L	RETURN H	DATA 4 L	NTS STALL L	INITIALIZE H	LINK DATA L	DATA 8 L	PULSE LA H	TEST POINT	BANK SEL 3
S	DATA 1 L	WRITE H	DATA 5 L	RES	SKIPL	LINKLOAD L	DATA 9 L	STOP L	UNUSED	UNUSED
T	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	JUMPER	GROUND
U	DATA 2 L	ROM ADDRESS L	DATA 6 L	RUN L	CPMA DISABLE L	IND 1 L	DATA 10 L	KEY CONTROL L	UNUSED	UNUSED
V	DATA 3 L	LINK L	DATA 7 L	POWER OK H	MS, IR DISABLE L	IND 2 L	DATA 11 L	SW	UNUSED	UNUSED



REVISIONS		
CHK	CHANGE NO.	REV.

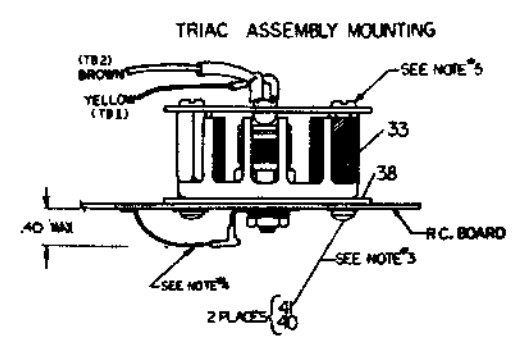
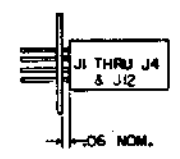
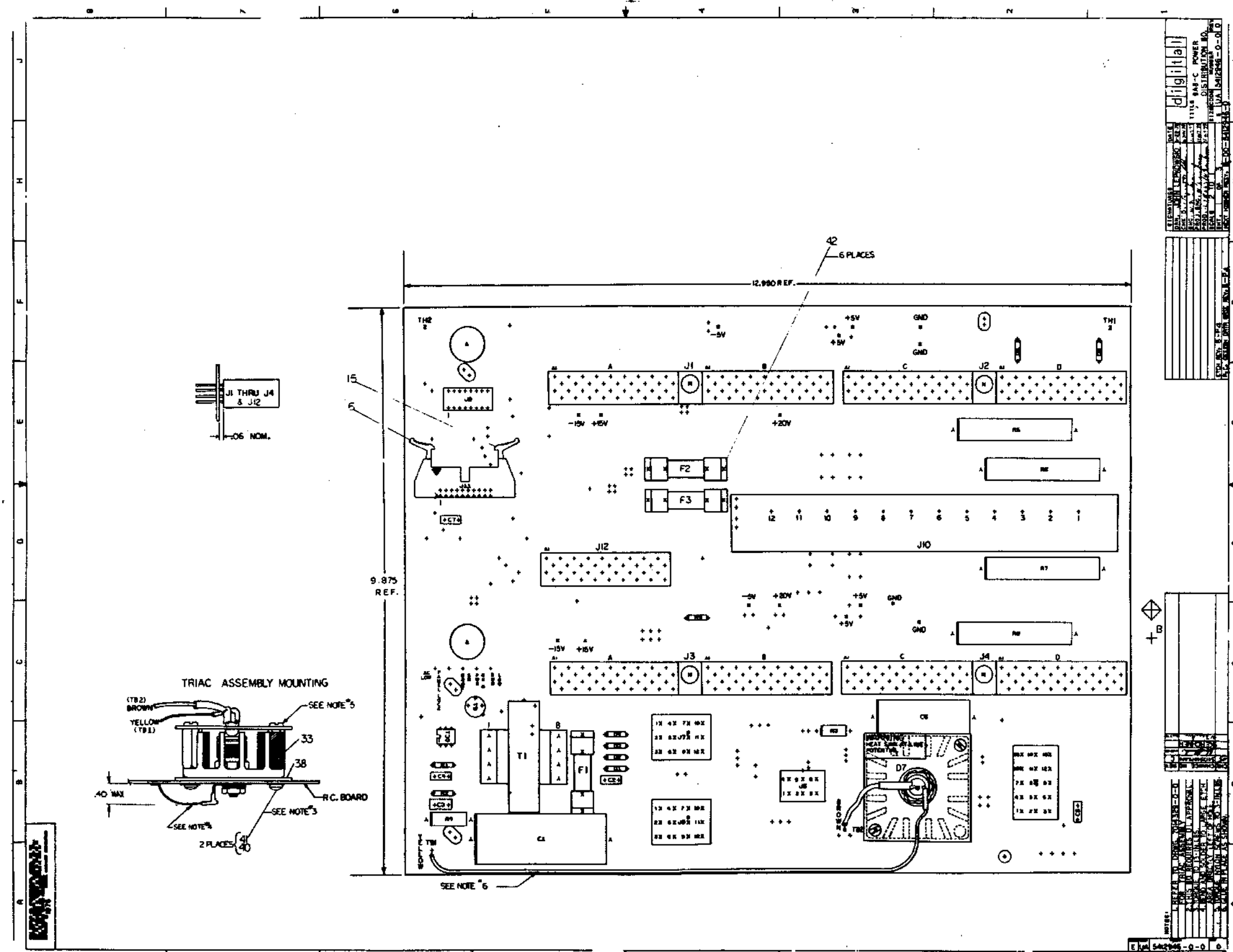


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PIN	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2
A	A01 = +5V, ALL OTHERS = TP	+5V	B02 & B03 = BATTERY EMPTY, ALL OTHERS = TP	+5V	C01 = +5V, ALL OTHERS = TP	+5V	D02 & D03 = PANEL LOCK, ALL OTHERS = TP	+15V	TEST POINT	+20V
B	TEST POINT	-15V	B02 & B03 = AC LOW, ALL OTHERS = TP	-15V	TEST POINT	-15V	TEST POINT	-15V	TEST POINT	BANK SEL 0
C	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
D	MA0 L	EMA0 L	MA4 L	INT STROBE H	I/O PAUSE L	TP 1 H	MA8 L	IR0 L	TEST POINT	BANK SEL 1
E	MA1 L	EMA1 L	MA5 L	BREAK IN PROG L	C0 L	TP 2 H	MA9 L	IR1 L	TEST POINT	+20V
F	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
H	MA2 L	EMA2 L	MA6 L	MA, MS, LOAD CONT L	C1 L	TP 3 H	MA10 L	IR2 L	TEST POINT	MEMORY REFRESH
J	MA3 L	MEM START L	MA7 L	OVERFLOW L	C2 L	TP 4 H	MA11 L	F L	TEST POINT	MEMORY REFRESH
K	MD0 L	MD DIR L	MD4 L	BREAK DATA CONT L	BUS STROBE L	TS 1 L	MD8 L	D L	TEST POINT	+20V
L	MD1 L	SOURCE H	MD5 L	BREAK CYCLE L	INTERNAL I/O L	TS 2 L	MD9 L	E L	TEST POINT	BANK SEL 2
M	MD2 L	STROBE H	MD6 L	LOAD ADD ENABLE L	NOT LAST XFER L	TS 3 L	MD10 L	USER MODE L	TEST POINT	-5V
N	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
P	MD3 L	INHIBIT H	MD7 L	INT IN PROG H	INT REQUEST L	TS 4 L	MD11 L	F SET L	TEST POINT	+20V
R	DATA 7 L	RETURN H	DATA 4 L	MTS STALL L	INITIALIZE H	LINK DATA L	DATA 8 L	PULSE LA H	TEST POINT	BANK SEL 3
S	DATA 1 L	WRITE H	DATA 5 L	RES 2	SKIP L	LINK LOAD L	DATA 9 L	STOP L	UNUSED	UNUSED
T	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	JUMPER	GROUND
U	DATA 2 L	ROM ADDRESS L	DATA 6 L	RUN L	CPMA DISABLE L	IND 1 L	DATA 10 L	KEY CONTROL L		UNUSED
V	DATA 3 L	LINK L	DATA 7 L	POWER OK H	MS, IR DISABLE L	IND 2 L	DATA 11 L	SW	UNUSED	UNUSED

DESIGNED BY: M. COO | E
 CHECKED BY: W. KIRCHNER
 DATE: 12/13/76

DATE: 12/13/76	REV: 1	FIRST USED ON: BA8-C
ENG: M. COO	DATE: 12/13/76	TITLE: 20 SLOT BACK PLANE
PROJ. ENG: M. COO	DATE: 12/13/76	SIZE: DCS
PROJ. NO: 1-0-9616H	DATE: 12/13/76	NUMBER: H9195-0-1
NEXT HIGHER ASSY: 0-DA-H3135-0-0	SCALE: 1:1	REV: E
SHEET 2 OF 2	DIST.:	



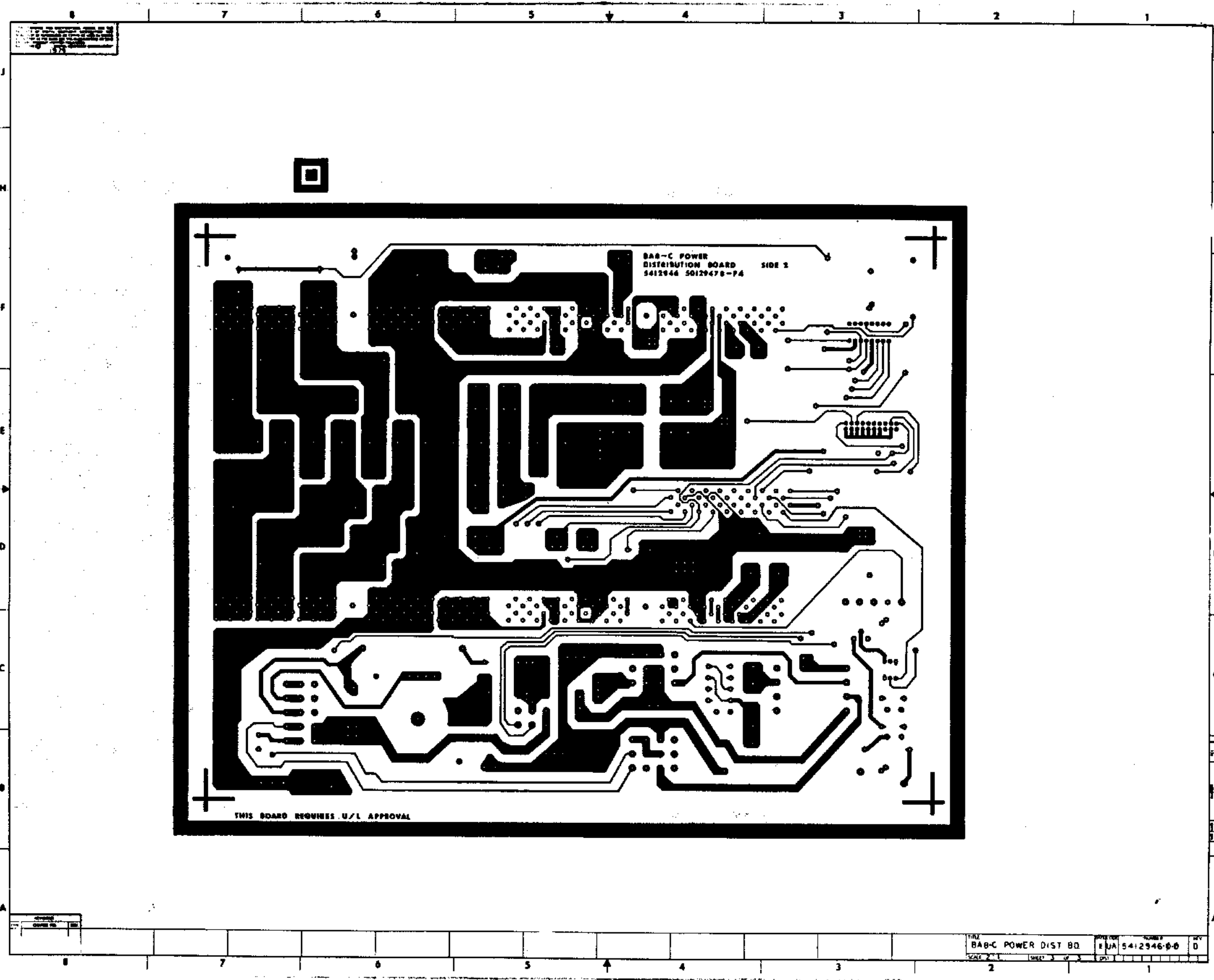
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DESIGNED BY	W. J. ...
DRAWN BY	...
CHECKED BY	...
APPROVED BY	...
PROJECT NO.	...
REV.	...
DESCRIPTION	DIGITAL
POWER DISTRIBUTION BOARD	
DATE	11/11/68
DESIGNED BY	...
DRAWN BY	...
CHECKED BY	...
APPROVED BY	...
PROJECT NO.	...
REV.	...
DESCRIPTION	DIGITAL
POWER DISTRIBUTION BOARD	

DATE	11/11/68
DESIGNED BY	...
DRAWN BY	...
CHECKED BY	...
APPROVED BY	...
PROJECT NO.	...
REV.	...
DESCRIPTION	DIGITAL
POWER DISTRIBUTION BOARD	

DATE	11/11/68
DESIGNED BY	...
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PROJECT NO.	...
REV.	...
DESCRIPTION	DIGITAL
POWER DISTRIBUTION BOARD	

NOTES:
 1. SEE NOTE 5 FOR TRIAC MOUNTING.
 2. SEE NOTE 6 FOR BOARD DIMENSIONS.
 3. SEE NOTE 7 FOR COMPONENT VALUES.
 4. SEE NOTE 8 FOR WELDING INSTRUCTIONS.
 5. SEE NOTE 9 FOR TESTING PROCEDURES.
 6. SEE NOTE 10 FOR SHIPPING PREPARATION.
 7. SEE NOTE 11 FOR STORAGE REQUIREMENTS.
 8. SEE NOTE 12 FOR REPAIR PROCEDURES.
 9. SEE NOTE 13 FOR DISPOSITION OF EXCESS MATERIAL.
 10. SEE NOTE 14 FOR RECORD KEEPING.
 11. SEE NOTE 15 FOR QUALITY CONTROL.
 12. SEE NOTE 16 FOR SAFETY PRECAUTIONS.
 13. SEE NOTE 17 FOR ENVIRONMENTAL REQUIREMENTS.
 14. SEE NOTE 18 FOR PACKAGING REQUIREMENTS.
 15. SEE NOTE 19 FOR LABELING REQUIREMENTS.
 16. SEE NOTE 20 FOR DOCUMENTATION REQUIREMENTS.
 17. SEE NOTE 21 FOR TRAINING REQUIREMENTS.
 18. SEE NOTE 22 FOR COMMUNICATIONS REQUIREMENTS.
 19. SEE NOTE 23 FOR REPORTING REQUIREMENTS.
 20. SEE NOTE 24 FOR CORRECTIVE ACTION REQUIREMENTS.
 21. SEE NOTE 25 FOR PREVENTIVE ACTION REQUIREMENTS.
 22. SEE NOTE 26 FOR CONTINUOUS IMPROVEMENT REQUIREMENTS.
 23. SEE NOTE 27 FOR CUSTOMER SATISFACTION REQUIREMENTS.
 24. SEE NOTE 28 FOR SUPPLIER PERFORMANCE REQUIREMENTS.
 25. SEE NOTE 29 FOR RISK MANAGEMENT REQUIREMENTS.
 26. SEE NOTE 30 FOR COMPLIANCE REQUIREMENTS.
 27. SEE NOTE 31 FOR ETHICAL REQUIREMENTS.
 28. SEE NOTE 32 FOR SOCIAL RESPONSIBILITY REQUIREMENTS.
 29. SEE NOTE 33 FOR ENVIRONMENTAL RESPONSIBILITY REQUIREMENTS.
 30. SEE NOTE 34 FOR EMPLOYEE WELFARE REQUIREMENTS.
 31. SEE NOTE 35 FOR COMMUNITY ENGAGEMENT REQUIREMENTS.
 32. SEE NOTE 36 FOR PRODUCTIVITY REQUIREMENTS.
 33. SEE NOTE 37 FOR COST EFFECTIVENESS REQUIREMENTS.
 34. SEE NOTE 38 FOR INNOVATION REQUIREMENTS.
 35. SEE NOTE 39 FOR LEADERSHIP REQUIREMENTS.
 36. SEE NOTE 40 FOR TEAMWORK REQUIREMENTS.
 37. SEE NOTE 41 FOR COMMUNICATIONS REQUIREMENTS.
 38. SEE NOTE 42 FOR CONFLICT RESOLUTION REQUIREMENTS.
 39. SEE NOTE 43 FOR DECISION MAKING REQUIREMENTS.
 40. SEE NOTE 44 FOR PROBLEM SOLVING REQUIREMENTS.
 41. SEE NOTE 45 FOR CHANGE MANAGEMENT REQUIREMENTS.
 42. SEE NOTE 46 FOR RISK ASSESSMENT REQUIREMENTS.
 43. SEE NOTE 47 FOR RISK MITIGATION REQUIREMENTS.
 44. SEE NOTE 48 FOR RISK MONITORING REQUIREMENTS.
 45. SEE NOTE 49 FOR RISK REPORTING REQUIREMENTS.
 46. SEE NOTE 50 FOR RISK REVIEW REQUIREMENTS.



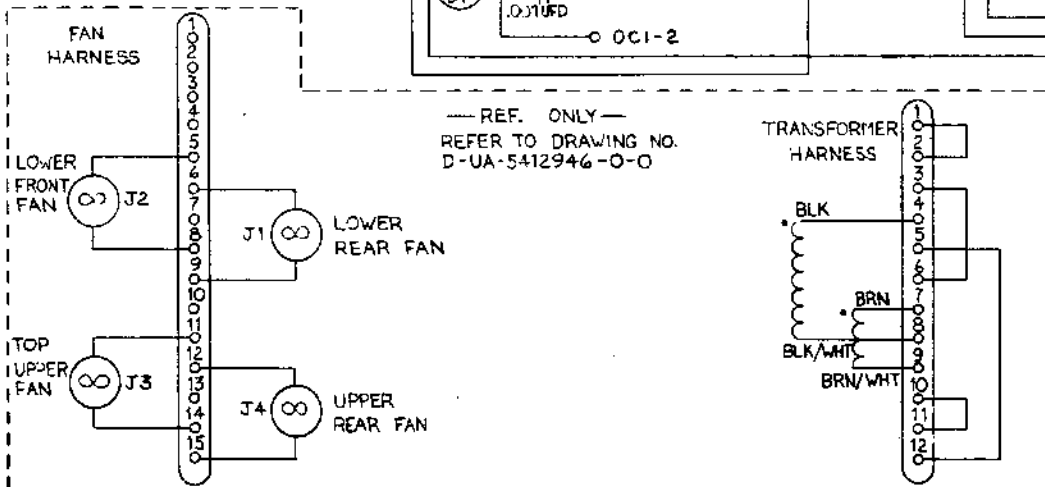
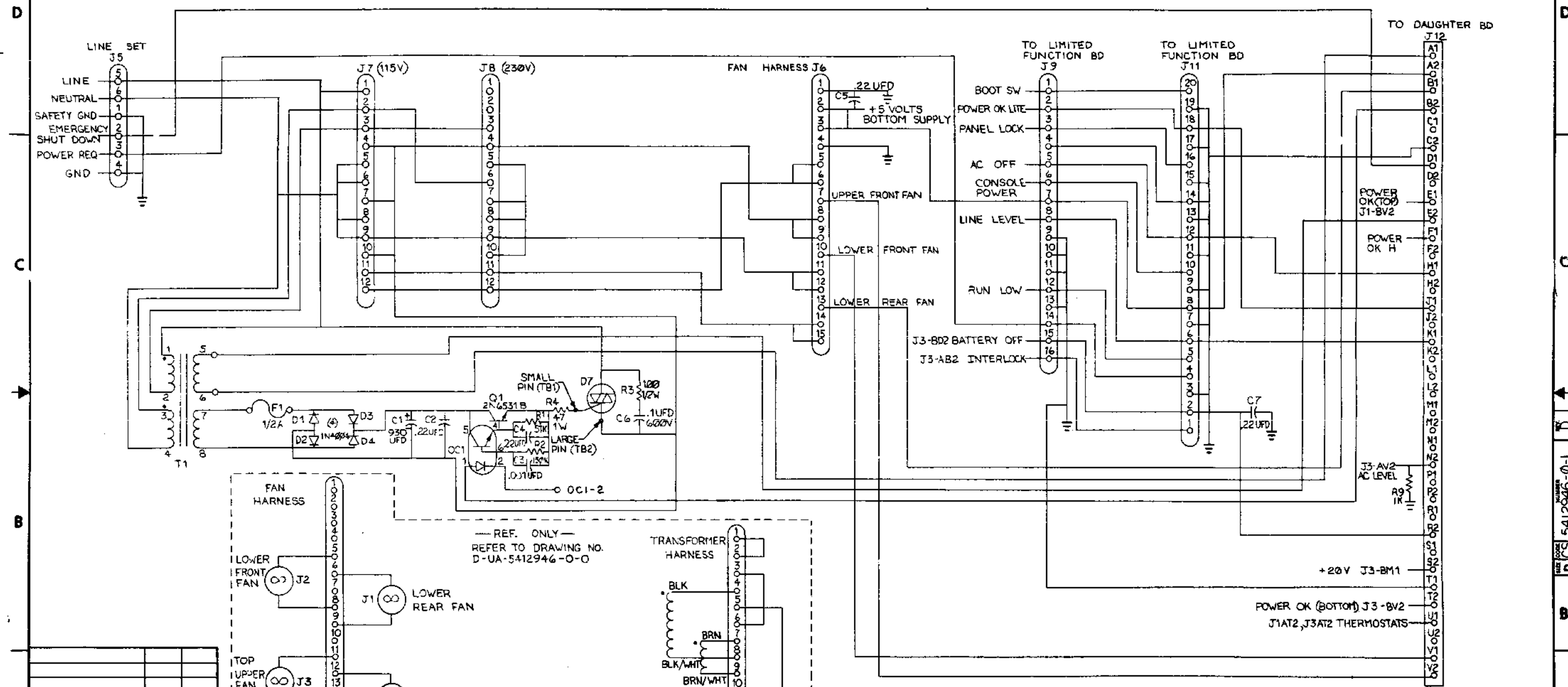
BAB-C POWER
DISTRIBUTION BOARD SIDE 1
5412946 50129470-PA

THIS BOARD REQUIRES U/L APPROVAL

TITLE	BAB-C POWER DIST BD	PROJECT NUMBER	5412946-00	REV	D
SCALE	1:1	SHEET	3 OF 3	DATE	

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NOTES:



REF. ONLY - REFER TO DRAWING NO. D-UA-5412946-0-0

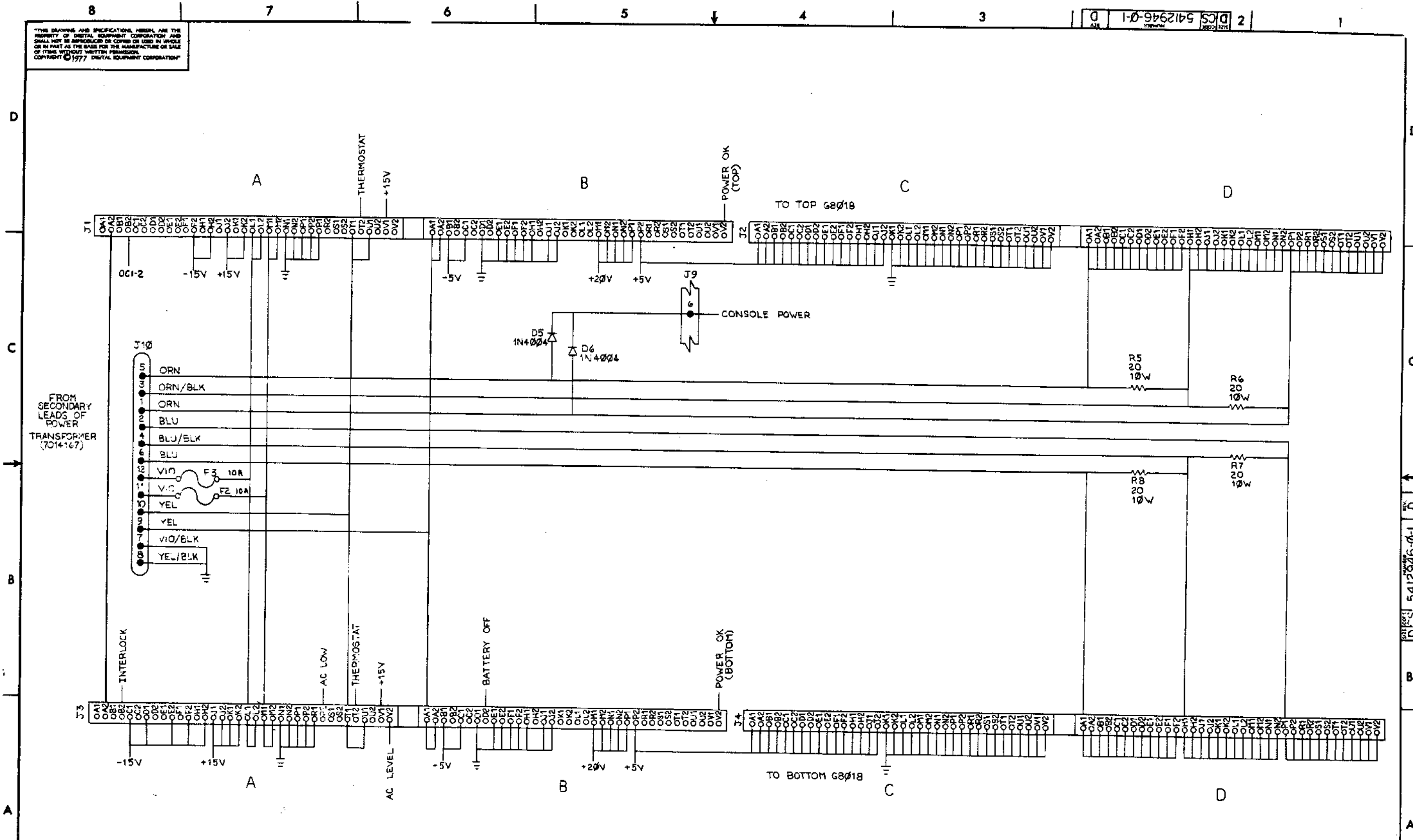
IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTS ARE STATED ABOVE		
IC PIN LOCATIONS		

W. Kerchner 11-07-77
W. Kerchner
15412946-00004 D
W. Kerchner 11-15-78
W. Kerchner
C. Bennett 2-14-78
5412946-00003 C
W. Kerchner
W. Kerchner
5412946-00002 B
A. Deluca
5412946-00001 A
W. Kerchner

FIRST USED ON OPTION MODEL		QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
BA8-C			ETCH BOARD REV.	B-F4		
PARTS LIST						
DRN: D. Zwickler		DATE: 7-18-77	<p>TITLE: BA8-C POWER DISTRIBUTION BOARD</p> <p>SIZE CODE: D CS 5412946-0-1</p> <p>NUMBER: 1</p> <p>REV: D</p>			
CHD: [Signature]		DATE: 23 May 77				
ENG: C. Bennett		DATE: 2-6-77				
PROJ. ENG: [Signature]		DATE: 5-6-77				
PROD: J. [Signature]		DATE: 7-27-77				
NEXT HIGHER ASSY: 5412946-0-0						
SCALE: 1 OF 2						
SHEET: 1 OF 2						
SEMICONDUCTOR CONVERSION CHART						
DEC NO.	EIA NO.	DEC NO.	EIA NO.			

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D E S I G N 5412946-0-1 2



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	BAB-C POWER DISTRIBUTION BOARD	SIZE CODE	D E S I G N	NUMBER	5412946-0-1	REV.	D
SCALE	1:1	SHEET	2 OF 2	DIST.			

D E S I G N 5412946-0-1 D

AUTOMATED BY PRTLST.2D(16)

PARTS LIST

SHEET A1 OF A2

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
1	1	E-MD-5012947-0-0	5012947-00	BABC POWER DISTRIBUTION BOARD	1	
2	2		1000043-00	1000.0 MMF 250V 20% YSF DISC	1	C3
3	3		1000033-00	.1 MFD 600V 10% NYLR	1	C6
4	4		1010509-00	.930 MFD 30V +75-10% AL EL	1	C1
5	5		1105796-00	1N 4004 PIV=400 I= 1A D041 SP	6	D1-D6
6	6		1209941-04	HEADER RT ANGLE, RIGHT	1	
7	7		1211425-00	CONN, CARD 72PIN SLOTTED DOUBLE	4	J1-J4
8	8		1211029-00	CONN, CARD 36PIN SLOTTED	1	J12
9	9		1211813-02	SKT, IC 16PIN DIP GOLD PLATE	1	J9
10	10		1209941-06	HEADER 100 20POS RT ANGLE	1	J11
11	11		1211905-01	TERM BLOCK 12POS 7/16 SPACING	1	J10
12	12		1212297-09	MATE-N-LOK 15PIN UNIV HEADER	1	J6
13	13		1212297-05	MATE-N-LOK 6PIN UNIV HEADER	1	J5
14	14		1212297-08	MATE-N-LOK 12PIN UNIV HEADER	2	J7, J8
15	15		1209941-03	HEADER RT ANGLE LEFT L	1	
16	16		1302199-00	47.0 1.0 W 5.0 % CC	1	R4
17	17		1300228-00	100.0 .50 W 5.0 % CC	1	R3
18	18		1304839-00	51.0 K .25 W 5.0 % CC	1	R1
19	19		1305416-00	20.0 10.0 W 1.0 % WW	4	R5-R8
20	20		1509338-00	DEC6531B NPN 310MM SI 40 90 P	1	Q1
21	21		1914194-00	OPTP-COUPLED ISOLATOR	1	OC1
22	22		9006707-00	*** THIS ITEM IS NOT USED ***	-	
23	23		1613282-00	XFMR P=AB S=14.52.12A	1	T1
24	24		9006023-01	*** THIS ITEM IS NOT USED ***	-	
25	25		9008185-00	*** THIS ITEM IS NOT USED ***	-	
26	26		9007203-00	*** THIS ITEM IS NOT USED ***	-	
27	27		9007208-00	FUSE, REG BLO 1/2 A, 250V GLASS	1	F1
28	28		9009000-00	*** THIS ITEM IS NOT USED ***	-	
29	29		9008838-00	FUSE, REG BLO 10 A, 32V GLASS	2	F2, F3
30	30		9107560-01	*** THIS ITEM IS NOT USED ***	-	

REVISION HISTORY			BASIC PART NO: 5412946			DRN: M.E.			DATE: 09-JUN-78			D I G I T A L											
ENG:	ECO NUMBER	REV	SECTION A OF A			CHK'D: J.P. LEPKOWSKI			DATE: 09-JUN-78			TITLE PARTS LIST											
ER	00003	C	SECTION VARIATION INDEX			DES.ENG: AL DELUCA			DATE: 09-JUN-78			DOCUMENT NUMBER											
WK	5412946-ML004	D	(A) 00	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	RESP.ENG.: AL DELUCA	DATE: 09-JUN-78	SIZE	CODE	NUMBER	REV	
						MFG.ENG.: J.V. KANE			DATE: 09-JUN-78			K PL 5412946-0-DBP D											
						ASSEMBLY NUMBER: E-UA-5412946-0-0			TOP DOCUMENT NUMBER: BAB-C			FILE NAME: 208050.PLS			EDIT # 6								
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AUTOMATED BY PRTLST.2D(16)

PARTS LIST

SHEET A2 OF A2

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER VARIATION	REFERENCE DESIGNATOR
					00		
31	31		1210929-01	*** THIS ITEM IS NOT USED ***	-		
32	32		1302396-00	150.0 K .25 W 5.0 x CC	1		R2
33	33		7014329-00	TRIAC ASSY	1		D7
34	34		1010274-00	.22 MFD 50V +80-20% Z5U CER	4		C2, C4, C5, C7
35	35		9105740-55	*** THIS ITEM IS NOT USED ***	-		
36	36		1300365-00	1.0 K .25 W 5.0 x CC	1		R9
37	37		9107256-11	*** THIS ITEM IS NOT USED ***	-		
38	38		7420187-00	PLATE LABEL	1		
39	39		9006431-0E	*** THIS ITEM IS NOT USED ***	-		
40	40		9007801-00	WASHER, LOCK, S.S. #6	2		
41	41		9006024-01	SCREW, PAN, PHIL 6-32X 1/2 SS	2		
42	42		9009513-03	CLIP, FUSE, WITH STOP, FOR PC BO	6		

D	I	G	I	T	A	L	TITLE	BAB-C POWER DISTRIBUTION BOARD	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	5412946-0-DBP	D

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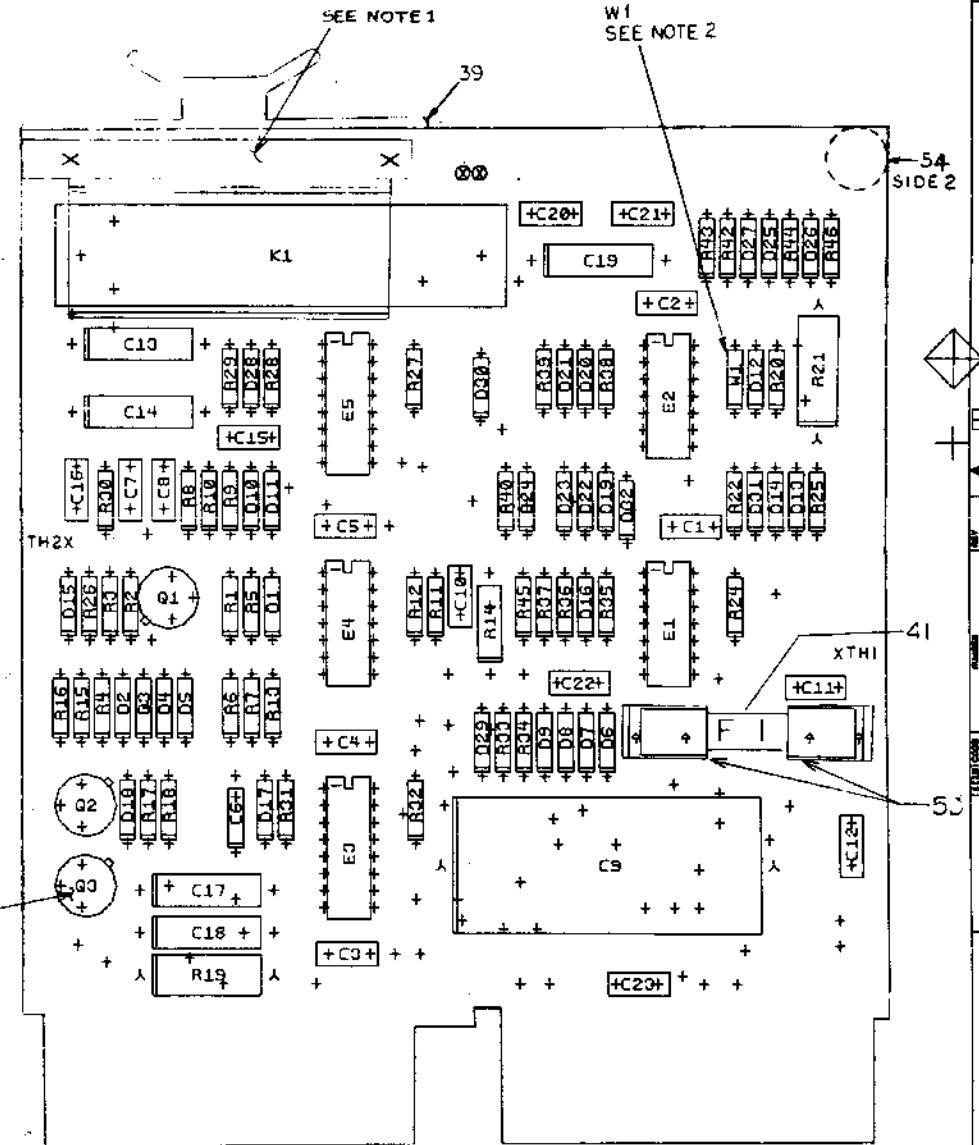
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D/A G8019-0-0 2

1

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COMPONENT SIDE VIEW



NOTES: 1. INSTALL A.V.D. BRACKET (7415122-02) USED TO SECURE RELAY K1 BY USING SCREWS (9026211-01), AND KEP NUTS (9006557-02), WASHERS (9006655-00).

2. POWER JACK W1 IS ONLY REMOVED WHEN 56213 IS AN EXPANDED UNIT.

CHANGE NO	REV	DESCRIPTION	DATE
ML 2/25	E	J. CARTER KEP CHIEF	
	F	D. FRENIER	

ETCH REV. 5-P1	P.C. DESIGN DATA BASE REV. B
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SIGNATURES	DATE	digital
DRN. D.D.	5-15-79	
CHK'D.		
ENG.		
PROJ. ENG.		
PROD.		
SCALE 2X	SIZE CODE	NUMBER
SHT. 1 OF 3	D UA G8019-0-0	REV
NEXT HIGHER ASSY. B-00-G8019-0		

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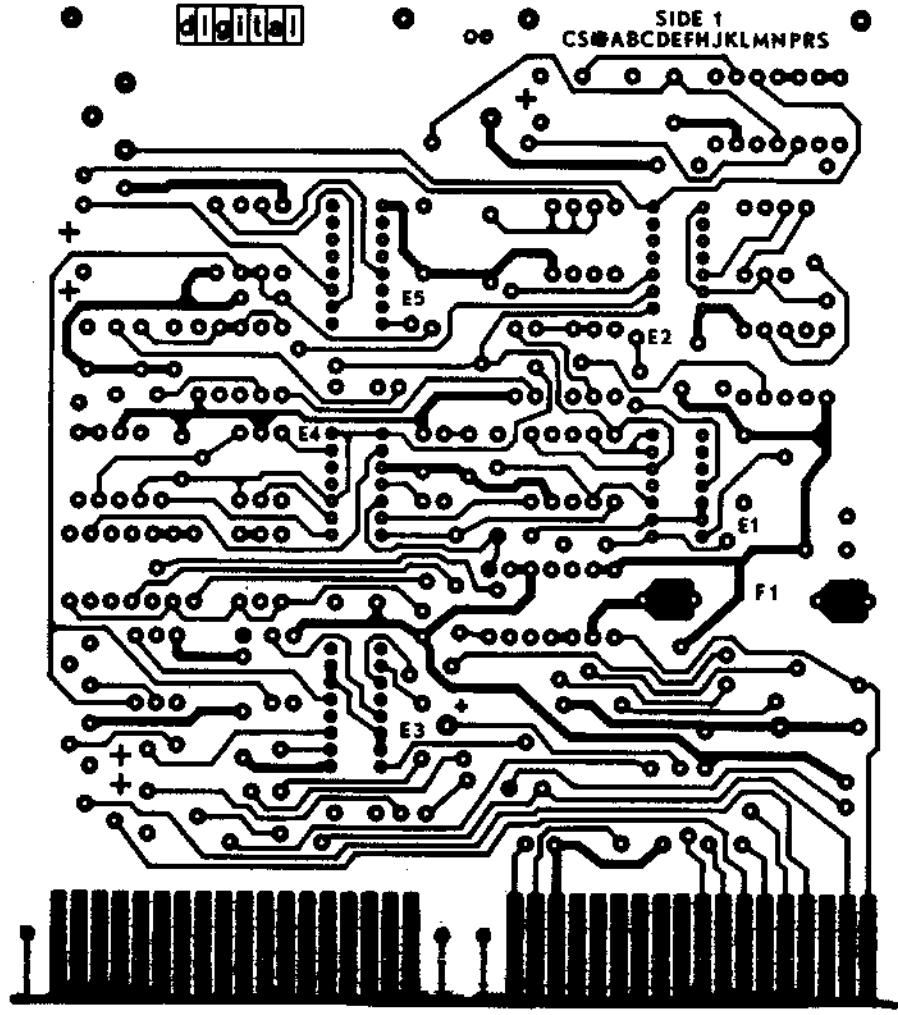
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2

1 MS#

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G8019 5012948B-P1



REVISIONS		
CHK	CHANGE NO	REV.

TITLE	BA8-C POWER DISTRIBUTION BOARD CONTROL	SIZE CODE	D JA G8019-0-0	NUMBER		REV.	F
SCALE	2 to 1	SHEET	2	OF	3	DIST.	

D JA G8019 0-0

D
C
B
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D
C
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A

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

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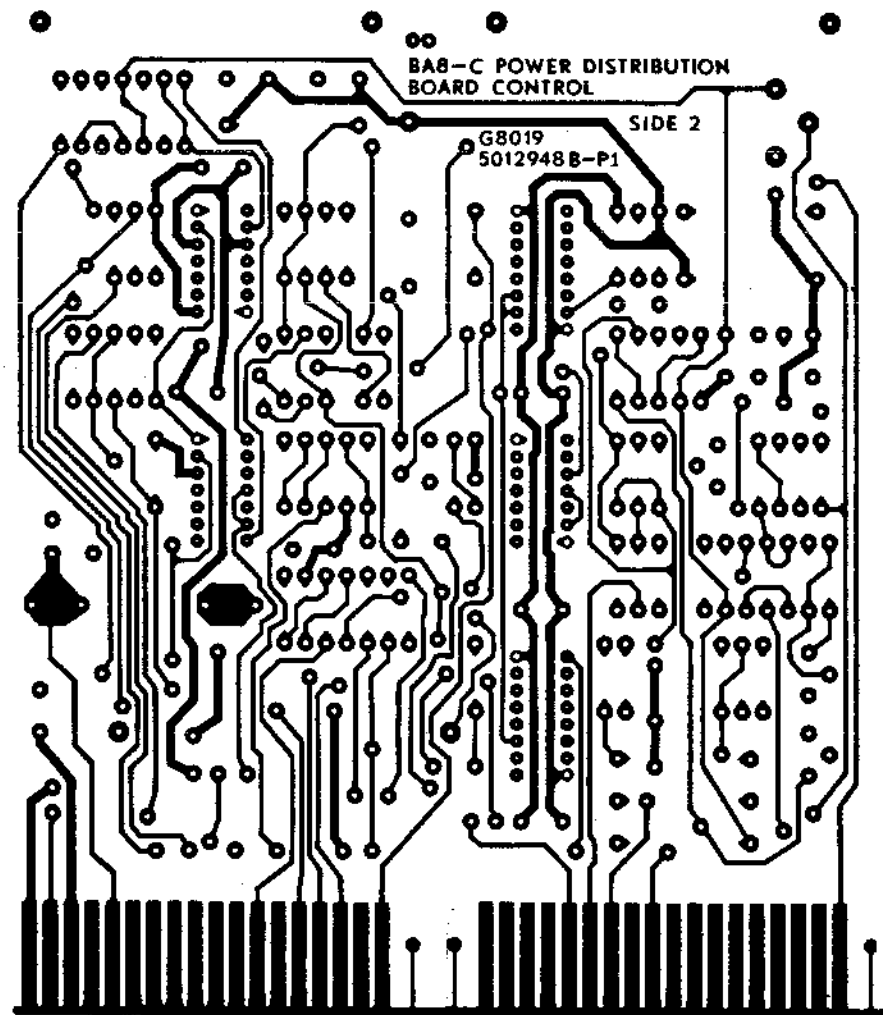
DUA G8019-0-0 2

1

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D
C
B
A

D
C
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A



DUA G8019-0-0

REVISIONS		
CHK	CHANGE NO	REV

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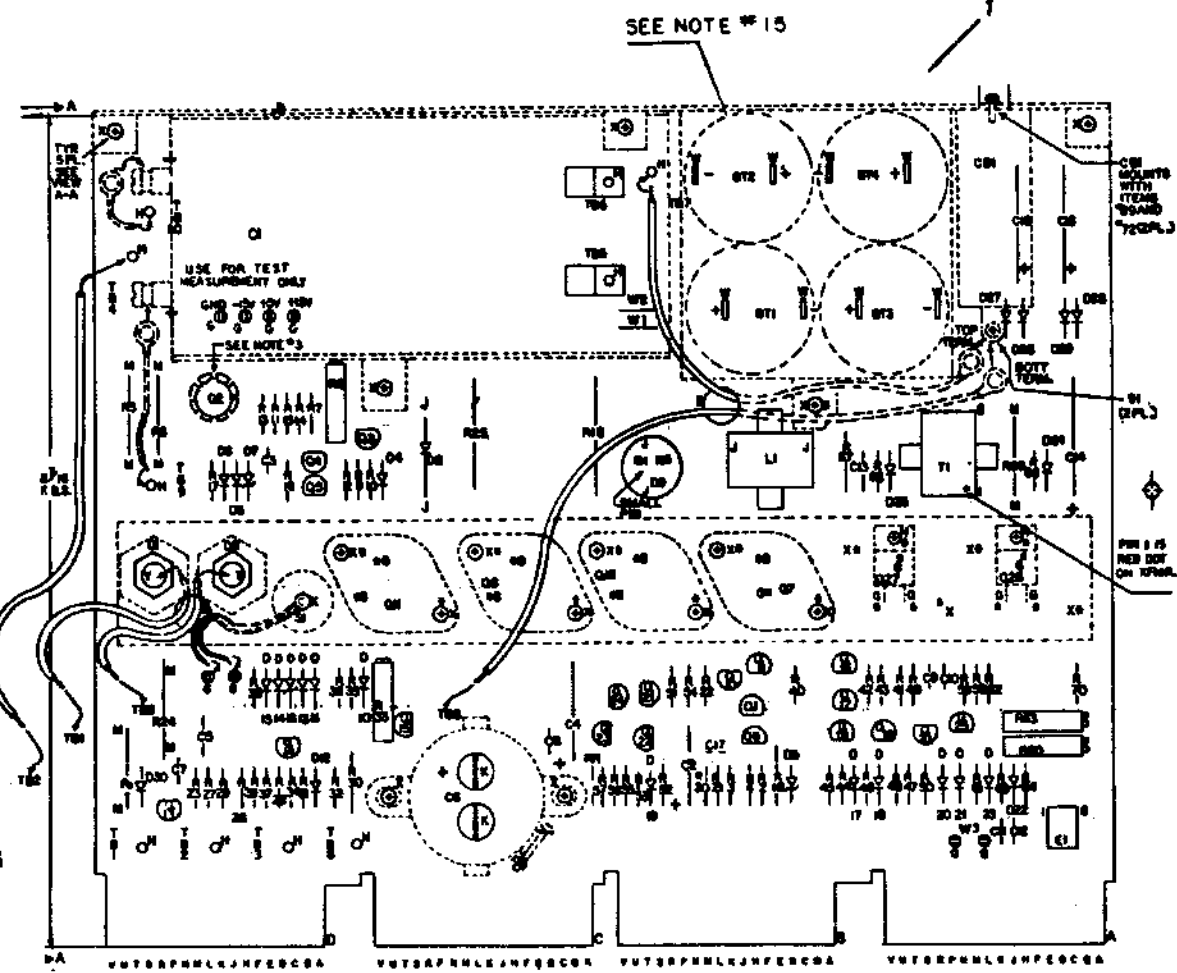
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TITLE	BAB-C POWER DISTRIBUTION BOARD CONTROL	SIZE CODE	DUA G8019-0-0	NUMBER	F	REV.	F
SCALE	2+1	SHEET	3	OF	3	DIST.	

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NOTES:

1. TRANSISTOR DEC 2N5362, 1510196 MAY BE USED AS A SECOND SOURCE FOR ITEM # 62 TRANSISTOR DEC 044H8 1511654.
2. ALL COMPONENTS SHOWN BY A DASHED LINE MOUNT ON SIDE 2.
3. TRANSISTOR PAD MOUNTS UNDER Q8, AND HEAT SINK MOUNTS ON Q8. REFER TO PARTS LIST, ITEM # 25 AND # 77.
4. ITEM # 24 BRKT IS MOUNTED ON BOARD WITH ITEM # 68, 73, AND # 81 (2 PL).
5. Q6, Q7, Q11 AND Q12 ARE MOUNTED WITH ITEM # 73, 78, 81, 92 AND 101.
6. S1 MOUNTS WITH ITEM 73, 81 AND 92 (1 PLACE).
7. Q26 AND Q27 ARE MOUNTED WITH ITEM # 67, # 71, 74, 92 AND 103.
9. PHYSICAL IS MADE IN REVERSE, SIDE 1 IS LIGHT, SIDE 2 IS DARK.
10. INSERT JUMPER W3 FOR 50MHz OPERATION.
11. JUMPERS W1, W2 SHOULD BE INSTALLED AFTER TEST.
12. Q1, Q2, Q3, Q4, Q5, Q9, Q10, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q45, Q46, Q47, Q48, Q49, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q57, Q58, Q59, Q60, Q61, Q62, Q63, Q64, Q65, Q66, Q67, Q68, Q69, Q70, Q71, Q72, Q73, Q74, Q75, Q76, Q77, Q78, Q79, Q80, Q81, Q82, Q83, Q84, Q85, Q86, Q87, Q88, Q89, Q90, Q91, Q92, Q93, Q94, Q95, Q96, Q97, Q98, Q99, Q100, Q101, Q102, Q103, Q104, Q105, Q106, Q107, Q108, Q109, Q110, Q111, Q112, Q113, Q114, Q115, Q116, Q117, Q118, Q119, Q120, Q121, Q122, Q123, Q124, Q125, Q126, Q127, Q128, Q129, Q130, Q131, Q132, Q133, Q134, Q135, Q136, Q137, Q138, Q139, Q140, Q141, Q142, Q143, Q144, Q145, Q146, Q147, Q148, Q149, Q150, Q151, Q152, Q153, Q154, Q155, Q156, Q157, Q158, Q159, Q160, Q161, Q162, Q163, Q164, Q165, Q166, Q167, Q168, Q169, Q170, Q171, Q172, Q173, Q174, Q175, Q176, Q177, Q178, Q179, Q180, Q181, Q182, Q183, Q184, Q185, Q186, Q187, Q188, Q189, Q190, 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16. APPLY THERMAL COMPOUND TO SIDES OF ALL THERMAL INSULATORS AND TO BOTTOM OF THERMOSTAT.

17. BELOW IS LISTED TORQUE VALUES TO BE USED IN ASSEMBLY:

SIZE OF SCREW	SECURING PC BOARD TO CHASSIS	INCH/LB
10-32	SCREWS	14
10-32	SCREWS	14
6-32	SCREWS	14
6-32	SCREWS	14
4-40	SCREWS	10
4-40	NUTS	20
4-40	NUTS	10
6-32	SCREWS	14
6-32	SCREWS	14

NOTE:
TO ACHIEVE TRUE TORQUE READINGS, ALWAYS USE A NUT DRIVER ON ONE SIDE AND A TORQUE DRIVER ON THE OTHER. WHERE A SCREW AND A NUT ASSEMBLY IS INVOLVED, S.C. TOLERANCE; INSPECT TO MINUS (-) 2 IN/16 OF ASSEMBLED TORQUE VALUES.

CAUTION:
OFF SHEET PA DATA BASE PER 68016-MK006

REF	X-Y COORDINATE HOLE LOCATION	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF	ASST/DRILLING HOLE LAYOUT					1
REF	WIRELESS HISTORY					2
1	ETCHED CIRCUIT BOARD					3
2	CS, C10			CAP .1 UF 100V 200 DISC	1000030	4
1	C4			CAP 100 UF 6V 200 START	1000000	5
8	CS, C9, C11, C12			CAP .01 UF 100V 200 DISC	1001010-01	6
3	C14, C15, C16			CAP 100 UF 20V -105 + 70% ELECT	1002170	7
1	C2			CAP 22 UF 50V 10% START	1000030	8
2	C7, C8			CAP .22 UF 50V -20% + 50% CER	1002274-00	9
1	C9			CAP 5000 UF 10V -105 + 75% ELECT	1010704	10
1	C1			CAP .1UF 10V	1011070	11
7	Q6, Q9, Q11, Q12, Q13, Q14, Q15			DIODE 9002	1100110	12
2	Q1, Q2			DIODE 1N1100	1111000	13
10	Q10, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26			DIODE 9072	1100270	14
5	Q4, Q26, Q27, Q28, Q29			DIODE 1N4004	1100700	15
1	Q8			DIODE 90702	1110010	16
2	Q7, Q22			DIODE 1N751A ZENER	1110004	17
2	Q3, Q10			DIODE SCREENED 5.7V 2% ZENER	1117200	18
1	Q1			THERMOSTAT	1211602	19
1				HEAT SINK	1211014	20
1	Q31			CIRCUIT BREAKER 25A	1211070	21
4	Q71, Q72, Q73, Q74			BATTERY D-CELL	1211070	22
1				BRACKET	1211040	23
1				HEAT SINK 1/2" x 3/4" TRANSISTOR MOUNTED	1211040	24
8	R5, R6, R9			RES. 10 1/4W 5%	1300171	25
2	R23, R42			RES. 47 1/4W 5%	1300202	26
1	R1			RES. 100 1/4W 5%	1300232	27
7	R7, R4, R22, R26, R29, R50, R67			RES. 100 1/4W 5%	1300220	28
2	R12, R47			RES. 100 1/4W 5%	1300247	29
2	R27, R43			RES. 100 1/4W 5%	1300250	30
4	R10, R17, R20, R54			RES. 220 1/4W 5%	1300271	31
5	R3, R15, R37, R58, R34			RES. 330 1/4W 5%	1300290	32
13	R11, R13, R28, R21, R30, R40, R41, R48, R52, R55, R56, R59, R60, R70			RES. 1K 1/4W 5%	1300300	33
2	R14, R50			RES. 1.5K 1/4W 5%	1300301	34
8	R23, R44, R46, R49, R51, R53			RES. 2.2K 1/4W 5%	1300430	35
3	R30			RES. 10 1/4W 5%	1301317	36
1	R40			RES. 100 1/4W 5%	1301322	37
1	R2			RES. 62 1/4W 5%	1301477	38
1	R19			RES. 56 5W 5%	1301502	39
2	R10, R52			RES. 511 1/4W 15 WF	1302411	40
1	R24			RES. 90 2W 5%	1302830	41
1	R34			RES. 100 1/4W 15 WF	1302950	42
1	R7			RES. 1.21K 1/4W 15 WF	1302971	43
1	R21			RES. 100 1/4W 15 WF	1303050	44
1	R53			RES. 604 1/4W 15 WF	1303060	45
2	R9, R25			RES. 1.5K 10% 5%	1303340	46
1	R32			RES. 1.00K 1/4W 15 WF	1304030	47
2	R8, R61			RES. 363 1/4W 15 WF	1305125	48
1	R55			RES. 27K 1/4W 5%	1306340	49
1	R9, R33, R59			RES. 100 3/4W 10% PWT 75 PR	1306143-04	50
1	R63			RES. 56 3/4W 10% PWT 75 PR	1306143-00	51
1	R65			RES. 56 3/4W 10% PWT 75 PR	1306143-00	52

72741	4	7
IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTS ARE STATED ABOVE		
IC PIN LOCATIONS		

POPBA

ETCH BOARD REV E

digital EQUIPMENT CORPORATION

TITLE H763 REGULATOR BOARD

B-DD-POPBA-0

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

SEMICONDUCTOR CONVERSION CHART

SCALE SHEET 1 OF 3

DATE MK 1

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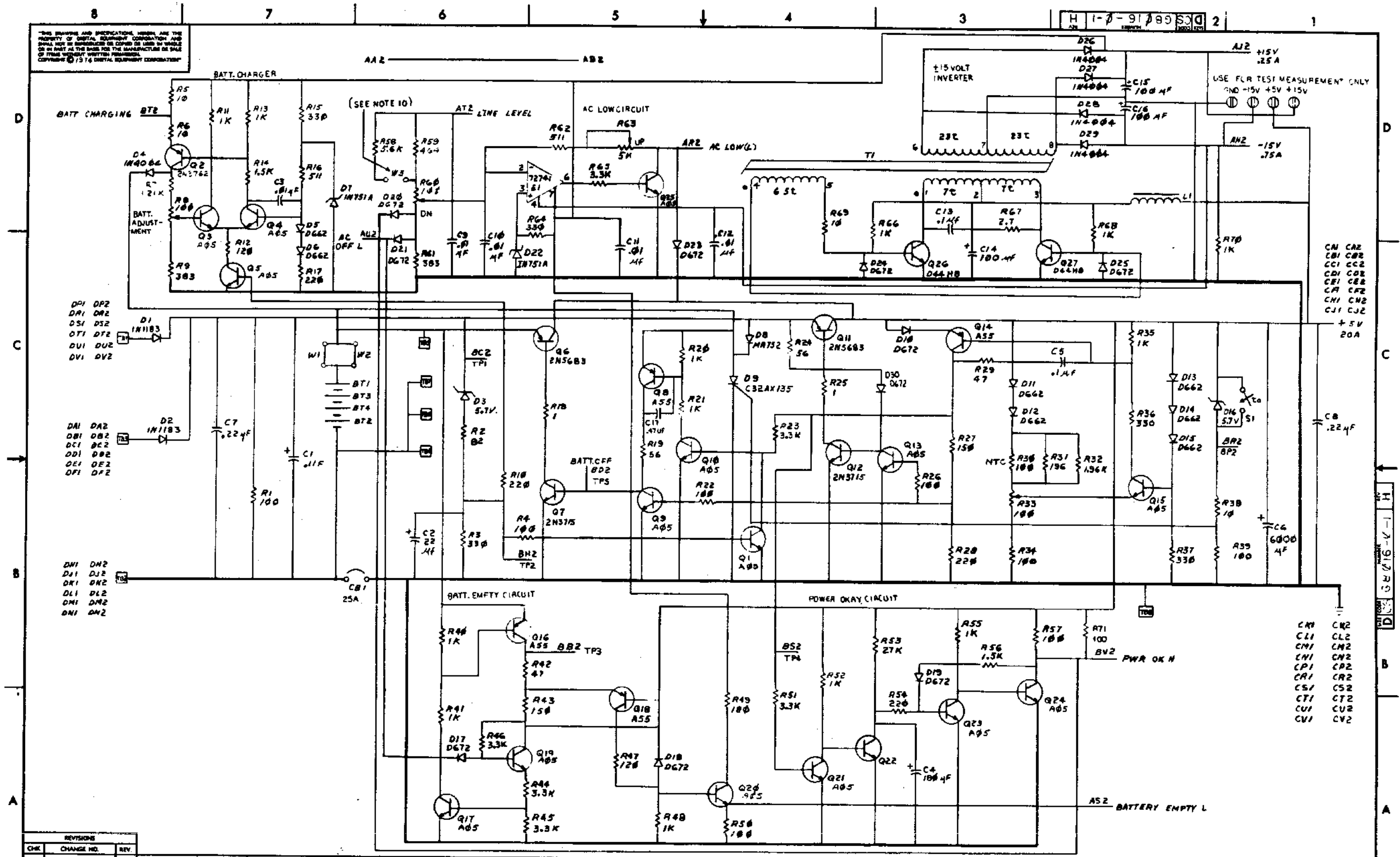
WIRE TABLE				
PART NO.	FROM	TO	TERMINATION	AIR LENGTH
91-07380-22	TB1	D1	SOLDER AT D1 END. SOLDER AT TB1 END	5.00
91-07380-22	TB3	D2	SOLDER AT D2 END. TAB AT TB3 END	5.00
91-07380-00	TB2	TB4	SOLDER AT TB2 END SOLDER AT TB4 END	7.00
91-07380-00	+ TERMINAL OF C1	TB9 HOLE	SOLDER WIRE AT HOLE END TB9. SOLDERLESS CONNECTOR AT C1 END 90-07928	2.50
91-07380-00	- TERMINAL OF C1	TB10 HOLE	SOLDER WIRE AT HOLE END TB10 SOLDERLESS CONNECTOR AT C1 END 90-07926	1.25
91-07380-00	TB7	TOP TERMINAL OF CBI	SOLDER AT TB7 END. SOLDERLESS CONNECTOR AT CBI END 90-07926	7.00
91-07380-00	TB8	BOTTOM TERMINAL OF CBI	SOLDER AT TB8 END. SOLDERLESS CONNECTOR AT CBI END 90-07926	11.25
91-07350-22	S1	SPLIT LUG	SOLDER AT SPLIT LUG END	4.00
	S1	SPLIT LUG	SOLDER AT S1 END	4.00

QTY	REF	DESIGNATION	DESCRIPTION	PART NO.	ITEM
1	R30		RES. 100 1/20 MTC	1311760	57
1	R07		RES. 2.7 1/20 100	1300440	54
2	Q7, Q12		TRANS. DEC 203715	1502000	55
1	Q2		TRANS. 203702	1500640-01	56
10	Q1, Q3, Q4, Q5, Q6, Q10, Q13, Q15, Q17, Q19, Q20, Q21, Q22, Q23, Q24, Q25		TRANS. DEC A05	1510705	57
1	R38		RES. 5.6K, 1/4W, 5%K	1301870	58
4	Q0, Q14, Q18, Q19		TRANS. DEC A55	1510700	59
1	D0		DIODE SCR C32A135	1510000	60
2	Q0, Q11		TRANS. 205003	1510647	61
2	Q20, Q27		TRANS. 04400	1010707-01	62
1	T1		TRANSFORMER	1811750	63
1	L1		CHOKER	1811750	64
1	E1		I.C. DEC 12741	1810200	65
1			BRACKET RES. 0.0.	7411470	66
2			SCREW 4-40 x .50 PH	9000913-1	67
4			SCREW 8-32 x .25 PH	9000020-1	68
2			SCREW 8-32 x .31 PH	9000021-1	69
3			SCREW 8-32 x .70 PH	9000024-1	70
2			KEPHIT 4-40	9000507	71
7			WASHER #8 INTERNAL	9000633	72
8			WASHER #8 FLAT	9000650	73
2			WASHER #10 FLAT	9000772	74
8			SPLIT LUGS	9000735	75
2	TB5, TB6		TAB FAST-ON (OFF SET)	9007112	76
1			TRANS. #10134	9007200	77
8			SCREW 6-32 x .56 PH	9007793-1	78
REF			G6016 REG. BOARD SPEC	G6016-0-E	79
4			SOLDERLESS CONNECTOR	9007920-01	80
11			KEPHIT 8-32	9000105	81
A/R			WIRE #12 AWG	9107300-00	82
A/R			WIRE #12 AWG	9107300-22	83
A/R	03		BUS BARE #22 AWG (SEE NOTE #10)	9107500-01	84
A/R	01, 02		NEEL JUMPER (SEE NOTE #11)	9107500	85
1			SHIELD BATTERY	7411693-0-0	86
3			SPACER #6 .30 L.G.	9006601	87
2	TB5, TB6		EYELET	9009000	88
8	TB1, TB2, TB3, TB4, TB7, TB8, TB9, TB10		EYELET GS4-3	9007036	89
A/R			WIRE #22 AWG	9107350-22	90
2			WASHER #8 INTERNAL	9006634	91
A/R			THERMO COMPOUND	9008208	92
2			SCREW 10-32 x .31	9000070-01	93
2			WASHER #10 INTERNAL	9006635	94
1	C1		CRP .47UF 25V 20% CER.	1010270	95
1			DECAL	A-DC-7413109-00	96
REF			FINAL INSR. PROC. FOR G8016	A-SP-68016-0-9	97
REF			POWER SUPPLY TESTER	B-DD-68016-TA	98
1			PACKAGING INSTRUCTION	A-SP-3700175-0-0	99

REVISIONS		
CHK	CHANGE NO	REV

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H 1-0-91789 2



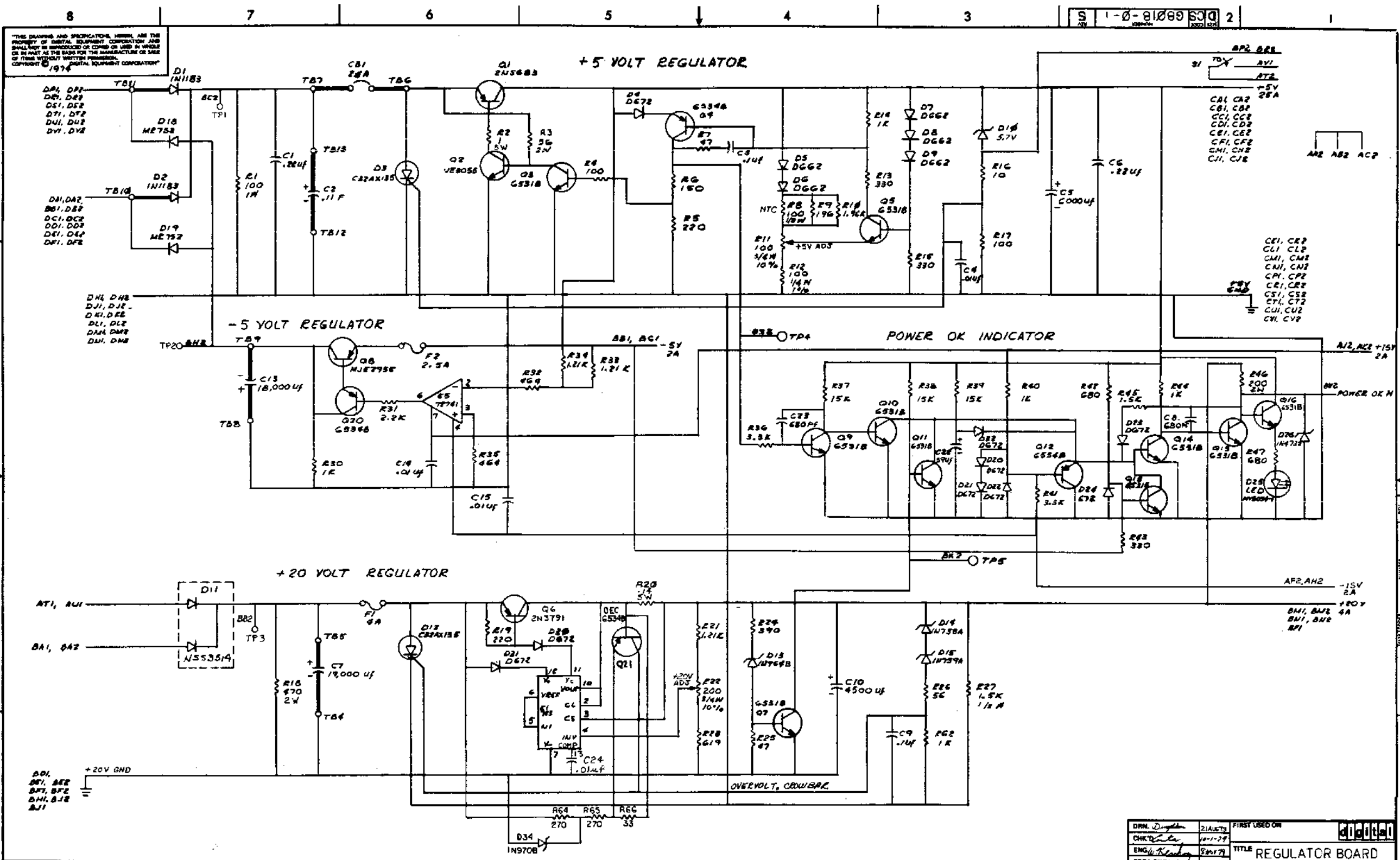
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CG1 CG2
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CM1 CM2
CL1 CL2
CN1 CN2
CO1 CO2
CP1 CP2
CQ1 CQ2
CR1 CR2
CS1 CS2
CT1 CT2
CU1 CU2
CV1 CV2

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE H763
REGULATOR BOARD
SCALE 1:1 SHEET 3 OF 3
D.E.S. 68016-Q-1 H

8 7 6 5 4 3 2 1 MK



REVISIONS		CHK	CHANGE NO.	REV.
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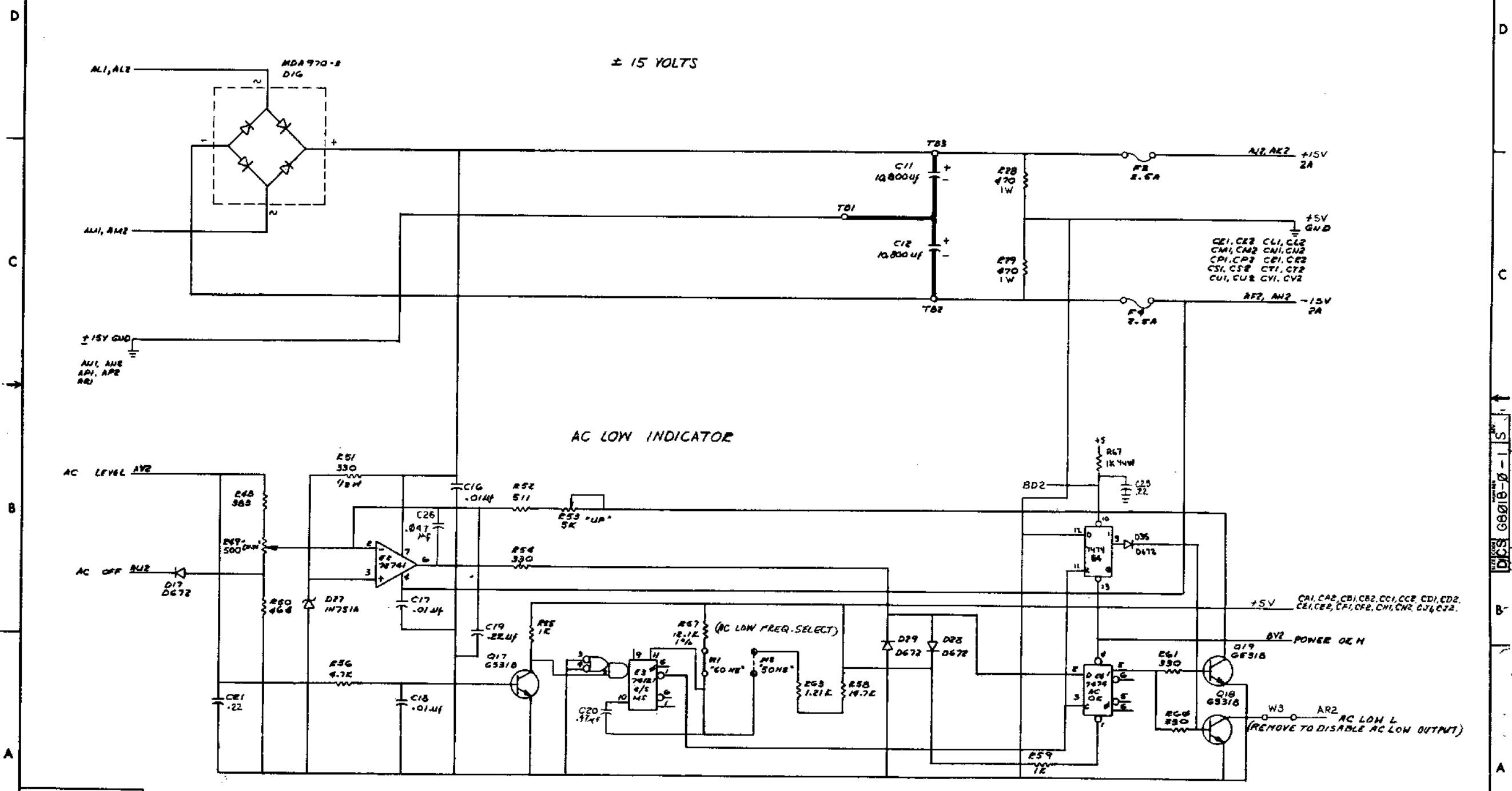
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D. FRENIERE	W. KERCHNER	D. FRENIERE			

DRN	CHK	ENG	PROJ ENGR	PROD	NEXT HIGHER ASSY.
D. FRENIERE	W. KERCHNER	D. FRENIERE			

TITLE	SIZE	CODE	NUMBER	REV.
REGULATOR BOARD 8A CORE	D	CS	G8018-0-1	S

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DCS 66018-0-1 S 2



REVISIONS		
CHK	CHANGE NO.	REV.

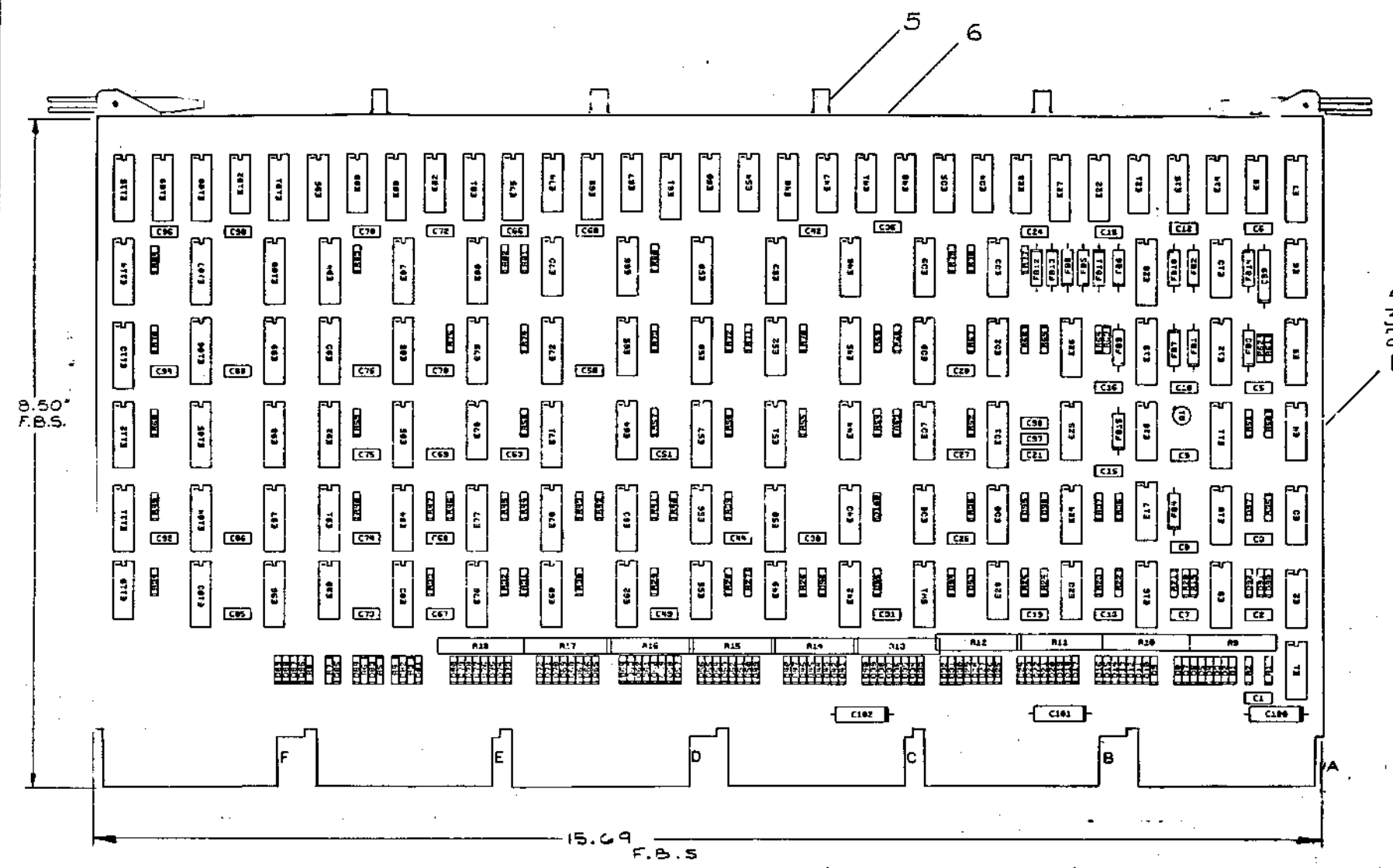
TITLE REGULATOR BOARD
8A CORE
SCALE 1/8" = 1"

SHEET 2 OF 2

DCS 66018-0-1
REV. S11

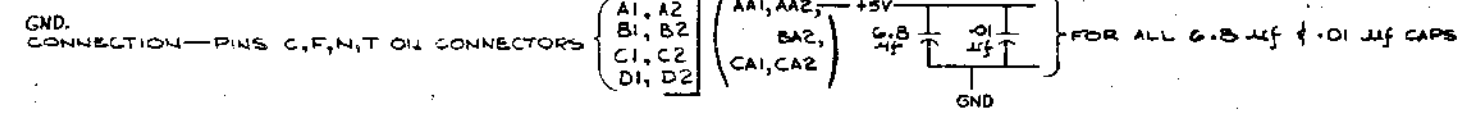
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NOTES:
 1. ALL UNLABELED DIODES ARE DEC TYPE DGG4
 2. +5V, +3VA AND +3VB GENERATION ON SHEET # 8
 3. FOR ETCH CUTS REFER TO DRAWING # 3
 4. DIMENSIONS



REF	X-Y COORDINATE HOLE LOCATION	K-Q-M3315-B-4	ITEM NO.
REF	ASST/DRILLING HOLE LAYOUT	D-AH-M3315-B-5	2
REF	MODULE ECO HISTORY	8-MH-M3315-B-6	3
1	ETCHED CIRCUIT BOARD	5010932	4
1	HEX BOARD HANDLE ASSY	1210711-Z	5
12	EYELETS	9006732	6
3	C100 THRU C102	CAP 8.0uf 35V 10%	7
2	C97, C98	CAP .047uf 18V DISC	8
1	C99	CAP 15uf 20V 10%	9
49	C1 THRU C3, C5 THRU C10, C12, C13, C15, C16, C18, C19, C21, C24, C26, C27, C28, C31, C36, C38, C42, C44, C49, C51, C56, C70, C83, C86 THRU C78, C72 THRU C74, C76, C85, C86, C88, C90, C92, C94, C96	CAP .01uf 100V DISC	10
8	D88 THRU D92, D97	DIODE D882	11
92	D1 THRU D85, D93 THRU D96, D98 THRU D106	DIODE D884	12
1	SW1	DIP SWITCH PACKAGE	13
11	R2, R5, R8, R9, R14, R36, R62 THRU R68	RES 390 1/4W 5%	14
12	R1, R3, R4, R7, R20, R21, R23 THRU R28, R35, R37	RES 470 1/4W 5%	15
45	R22, R27, R29 THRU R34, R39 THRU R49, R52, R53, R55 THRU R60, R67 THRU R84	RES 1K 1/4W 5%	16
1	R28	RES 3.3K 1/4W 5%	17
1	R91	RES 22K 1/4W 5%	18
2	R50, R51	RES 27 1/4W 5%	19
5	R9, R10, R13, R14, R18	RES PACK 390 OHM	20
5	R11, R12, R15, R16, R17	RES PACK 470 OHM	21
2	R38, R54	RES 150 1/4W 5%	22
1	D1	TRANSISTOR DEC 3009B	23
15	F81 THRU F815	FERRITE BEAD CHOKER	24
1	E2	20 MHZ X-TAL OSC	25
8	E1, E10, E17, E26, E29, E46	IC DEC 74500	26
1	E33	IC DEC 7402	27
8	E3, E23, E25, E40, E96, E78, E82, E89	IC DEC 74584	28
3	E47, E65, E74	IC DEC 7408	29
3	E24, E64, E90	IC DEC 74510	30
2	E13, E28	IC DEC 74511	31
1	E80	IC DEC 7412	32
3	E44, E49, E92	IC DEC 7417	33
2	E110, E102	IC DEC 74421	34
1	E54	IC DEC 7430	35
3	E41, E43, E68	IC DEC 7432	36
1	E14	IC DEC 7437	37
2	E18, E32	IC DEC 74540	38
1	E71	IC DEC 7442	39
2	E4, E6	IC DEC 74551	40
4	E8, E15, E21, E34	IC DEC 74574	41
3	E85, E101, E113	IC DEC 7483	42
3	E19, E22, E27	IC DEC 74128	43
1	E7	IC DEC 74123	44
2	E20, E58	IC DEC 745139	45
2	E48, E59	IC DEC 74151	46
1	E45	IC DEC 74153	47

IC TYPE	QTY	LOCATIONS	IC TYPE	QTY	LOCATIONS
IC 74157	8	16	1024 BIT ROM	8	16
74515B	8	16			
74163	8	16			
745175	8	16			
745194	8	16			
580	1	8	7442	8	16
8097	8	16	7483	12	5
8235	8	16	74120	8	16
8234	8	16	74123	8	16
8271	8	16	745157	8	16
74173-1	8	16	74151	8	16
256 BIT ROM	8	16	74153	8	16
IC TYPE	QTY	LOCATIONS	IC TYPE	QTY	LOCATIONS
GND		+5V	GND		+5V



FIRST USED ON OPTION MODEL
PDP8 A

ETCH BOARD REV. E

DATE: 10/1/74
 DATE: 10/1/74
 DATE: 10/1/74
 DATE: 10/1/74
 DATE: 10/1/74

digital

TITLE: **HEX OMNIBUS CPU**

SIZE CODE: DCS
 NUMBER: M8315-0-1
 REV. F

SCALE: 1 OF 10
 SHEET: 1 OF 10

SEMICONDUCTOR CONVERSION CHART

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1	E01	IC DEC 74157	1910090	40
7	E06, E79, E80, E90, E107, E100, E115	IC DEC 748150	1910040	40
3	E75, E93, E94	IC DEC 74183	1911713	36
2	E5, E42	IC DEC 748175	1910067	51
8	E9, E11, E12, E16, E01, E00, E10, E114	IC DEC 748100	1910992	52
1	E30	IC DEC 300	1907405	53
2	E07, E73	IC DEC 0003	1910027	54
4	E77, E04, E104, E105	IC DEC 0007	1911527	55
3	E00, E06, E90	IC DEC 0234	1911315	56
3	E01, E07, E92	IC DEC 0230	1900033	57
1	E31	IC DEC 0271	1909015	58
5	E30, E35, E37, E39, E95	IC DEC 0001	1900705	59
11	E50, E02, E03, E91, E00, E07, E100, E100, E100, E111, E112	IC DEC 74173-1	1911330-01	60
1	E00	256 BIT ROM (A)	23078A1	61
1	E57	256 BIT ROM (B)	23077A1	62
1	E70	256 BIT ROM (C)	23078A1	63
1	E72	256 BIT ROM (D)	23075A1	64
1	E76	256 BIT ROM (E)	23074A1	65
1	E83	256 BIT ROM (H)	23073A1	66
1	E30	256 BIT ROM (J)	23070A1	67
1	E50	1024 BIT ROM (F)	23000A2	68

SWITCH SELECTION CHART
(FOR AUTO RESTART LOCATION)

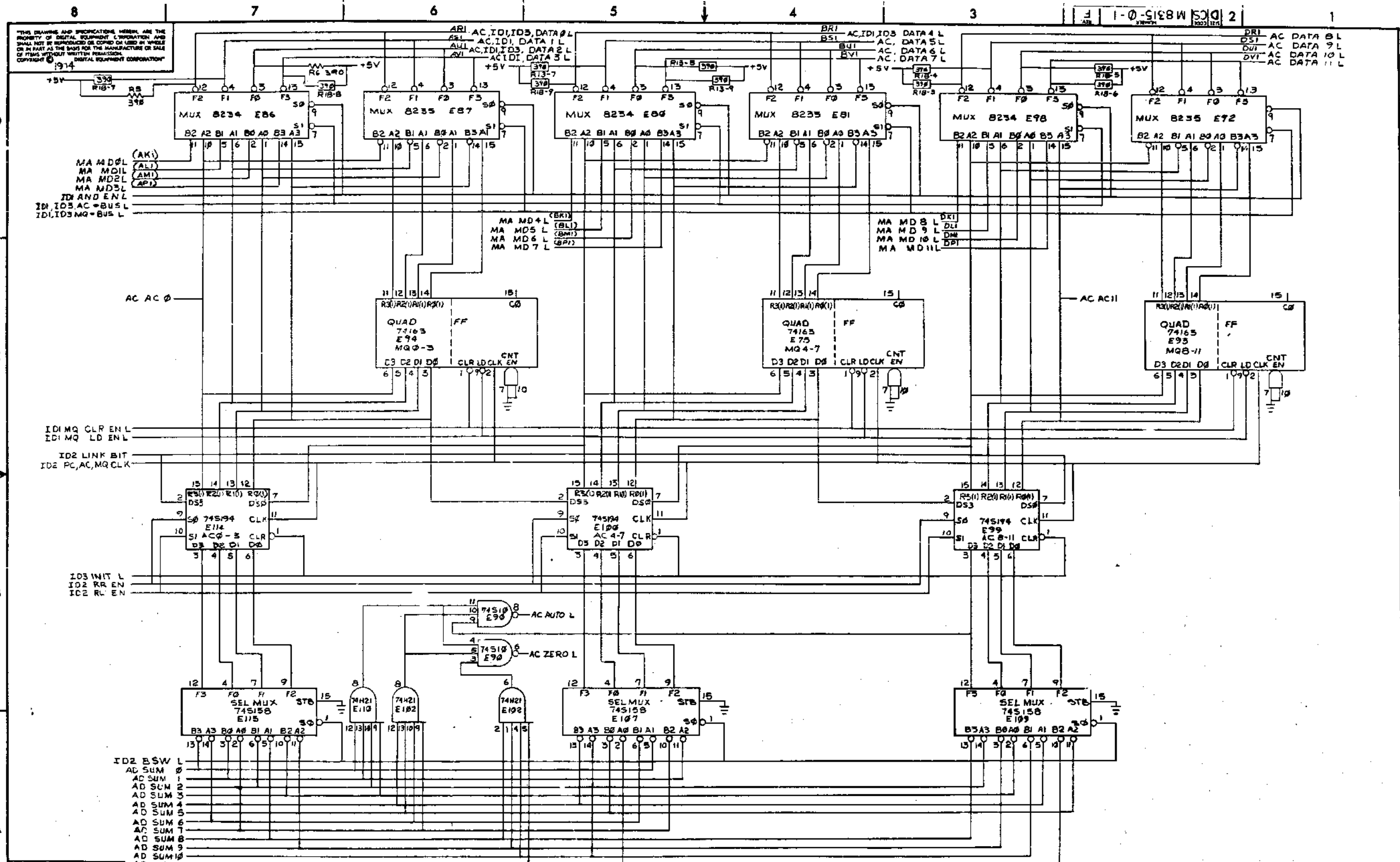
SW1-	1	FIELD 7
	2	4000
	3	2000
	4	1000
	5	400
	6	200
	7	OFF (DISABLES AUTO RESTART)
	8	OFF FOR NORMAL OPERATION

ONLY ONE SWITCH MAY BE CLOSED AT A TIME.

COMPONENT SUBSTITUTION CHART

PART CALLED FOR			SUBSTITUTE PART		
QTY	PART NO	DESC	QTY	PART NO	DESC
1	9901405	IC 300	1	710372	IC 300
			1	710371	IC 300
			1	710370	IC 300
			1	710369	IC 300

REVISIONS		
CHK	CHANGE NO	REV



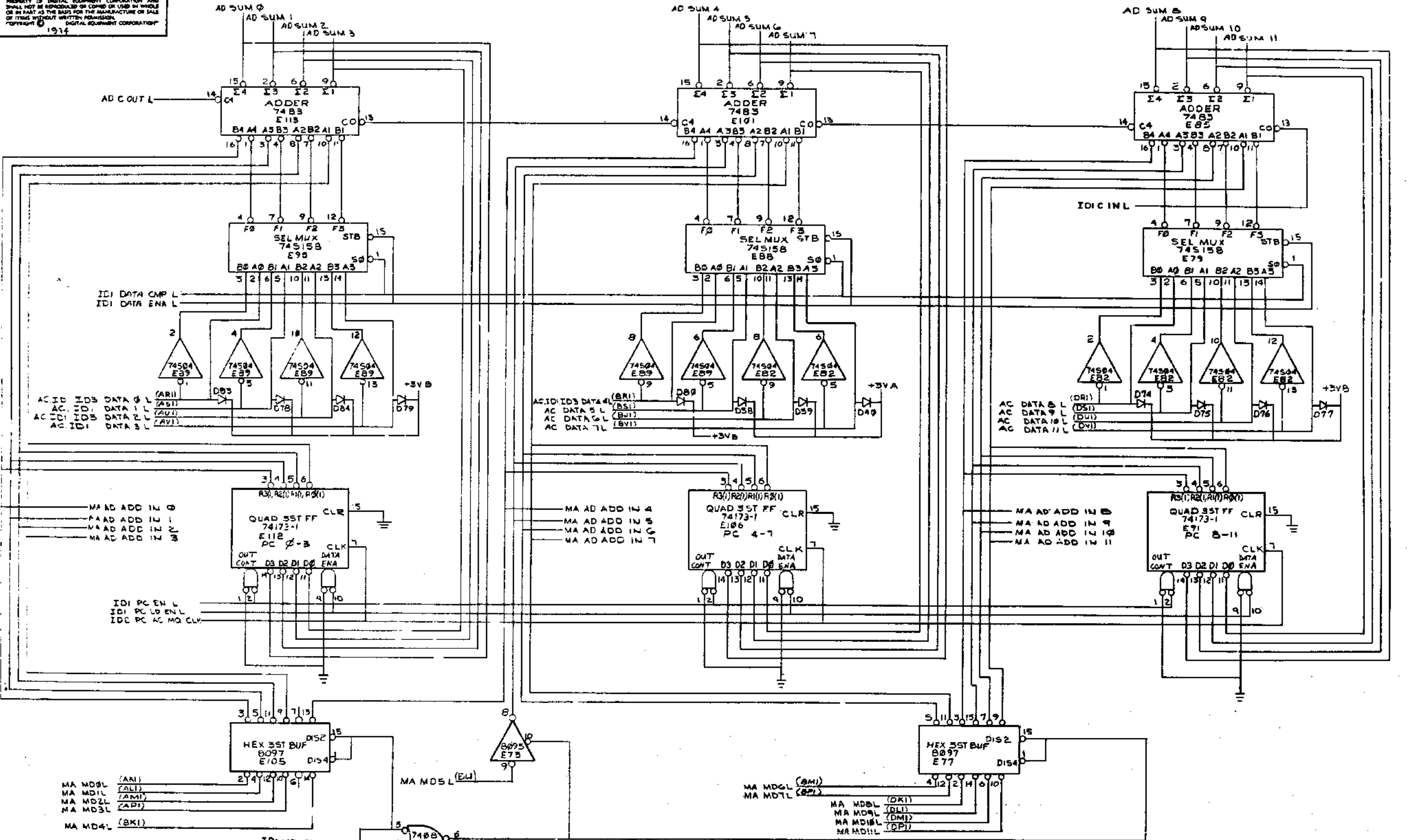
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP8A CPU	SIZE/CODE	(A) DCS M8315-0-1	NUMBER		REV.	F
SCALE		SHEET	3 OF 10	DIST.			

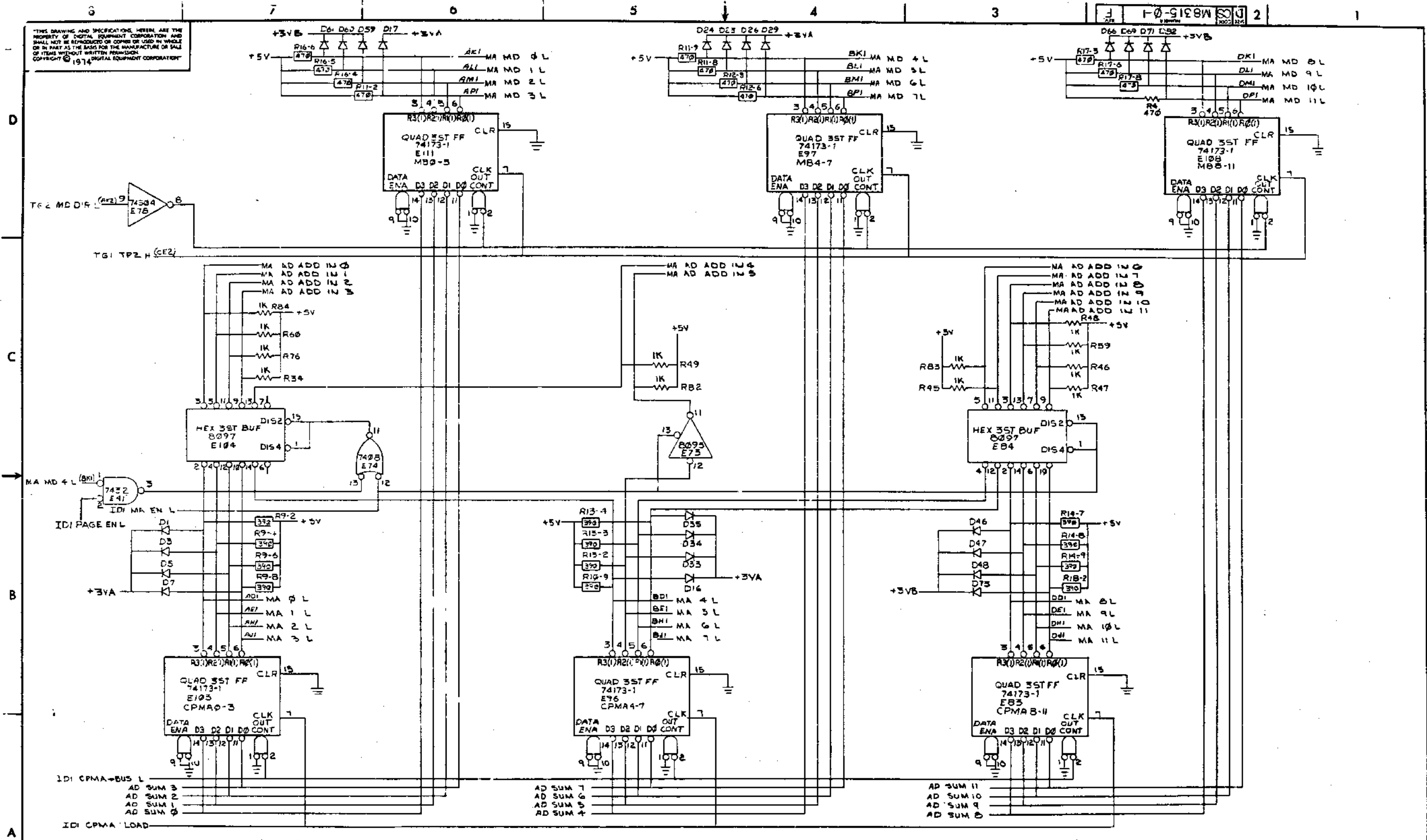
DCS M8315-0-1

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REVISIONS		
CHK	CHANGE NO.	REV.

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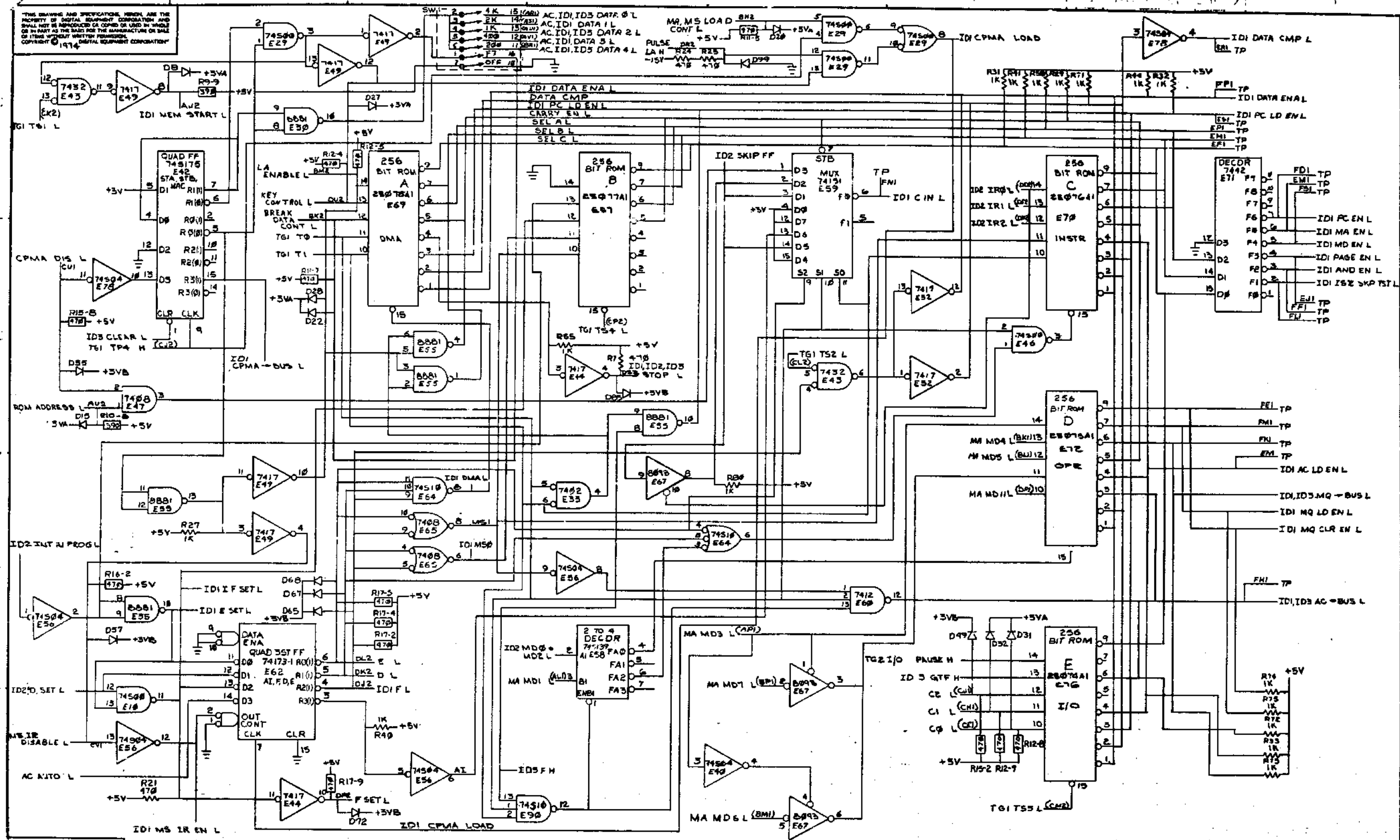


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP8A CPU (MA)	SIZE CODE	DCS	NUMBER	M8315-0-1	REV.	F
SCALE	1/1	SHEET	5	OF	10	DIST	

DCS M8315-0-1

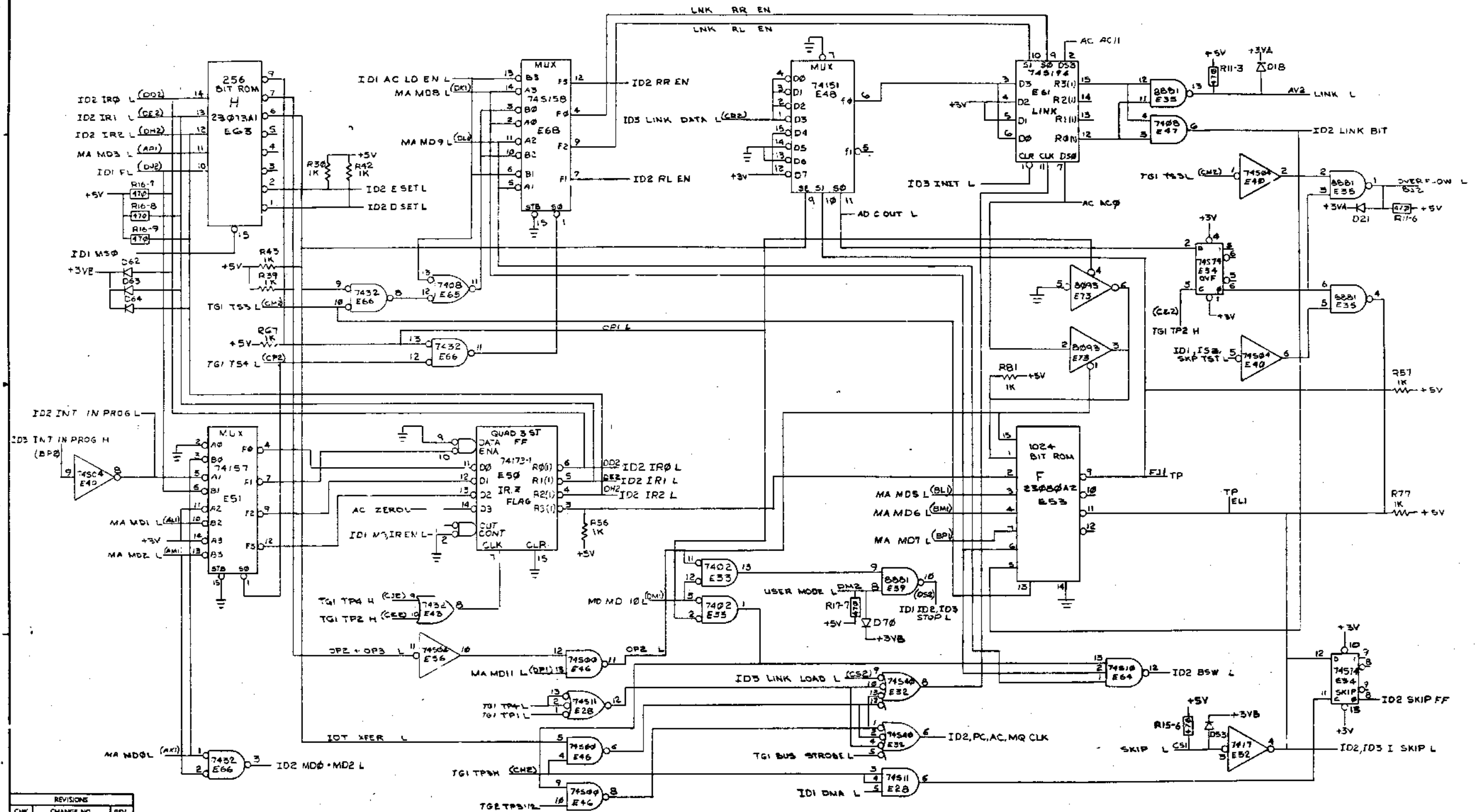
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REV. NO.	CHANGE NO.	REV.

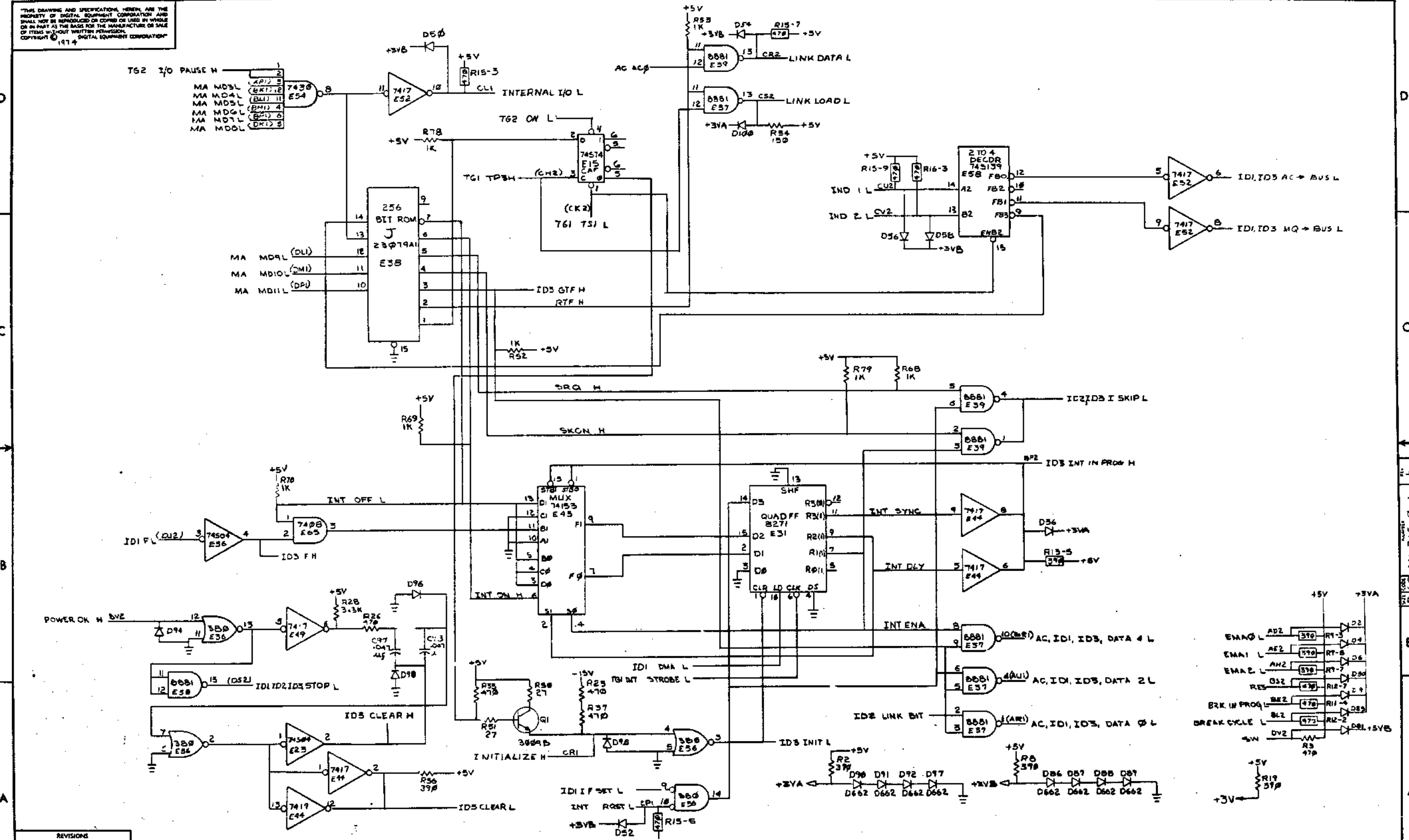
TITLE	SIZE CODE	NUMBER	REV.
EDP8A CPU (DD)	D/CS	M8315-0-1	F
SCALE		SHEET 6 OF 12	DIST.

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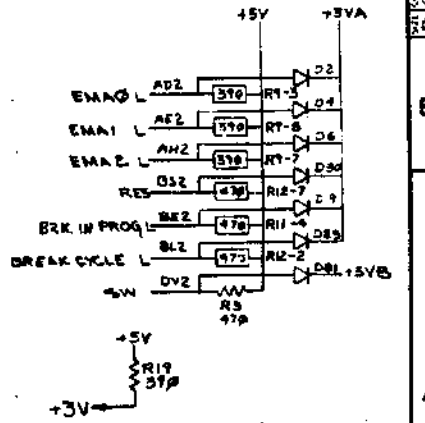


REVISIONS		
CHK	CHANGE NO	REV.

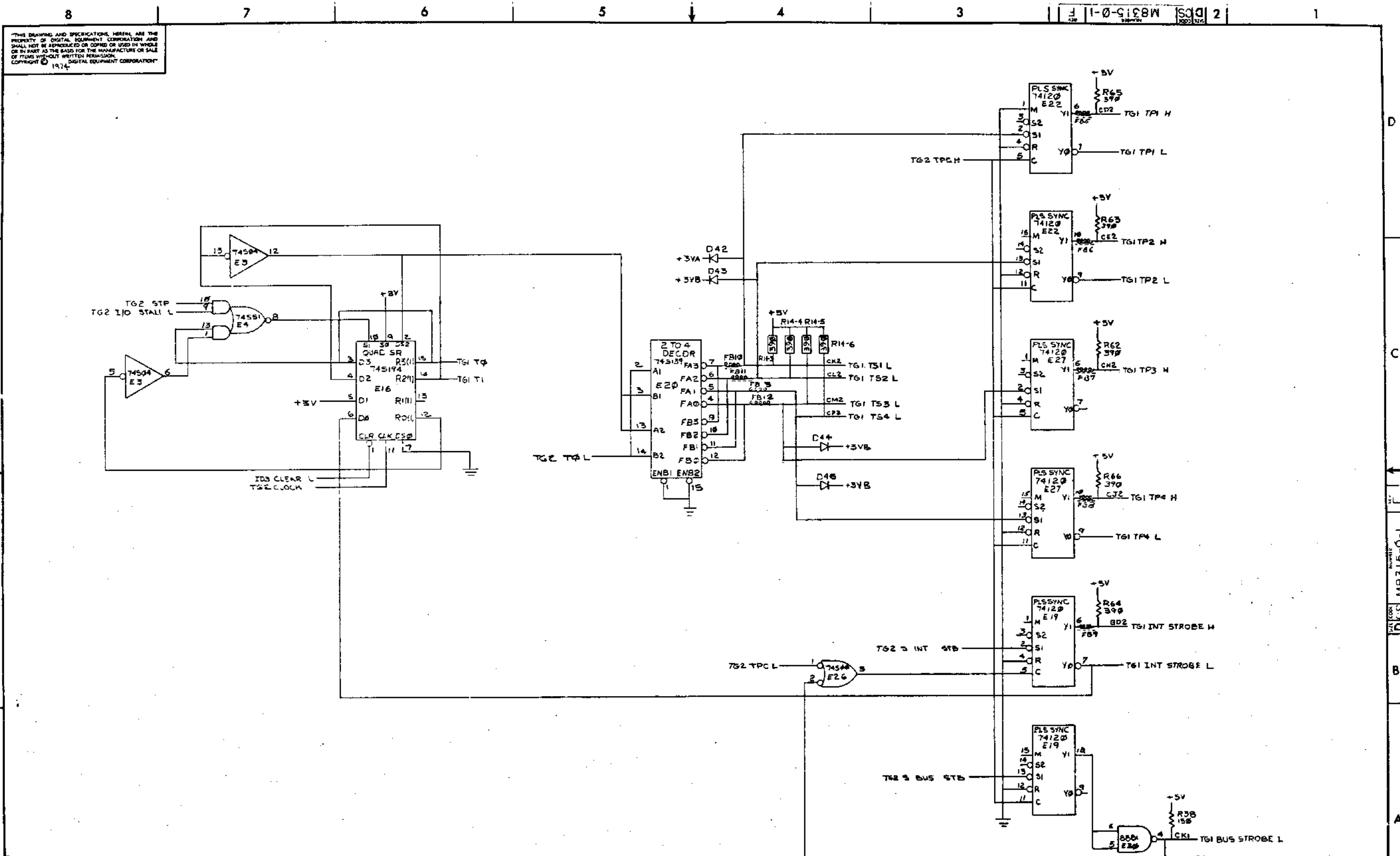
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REVISIONS		
CHK	CHANGE NO.	REV.



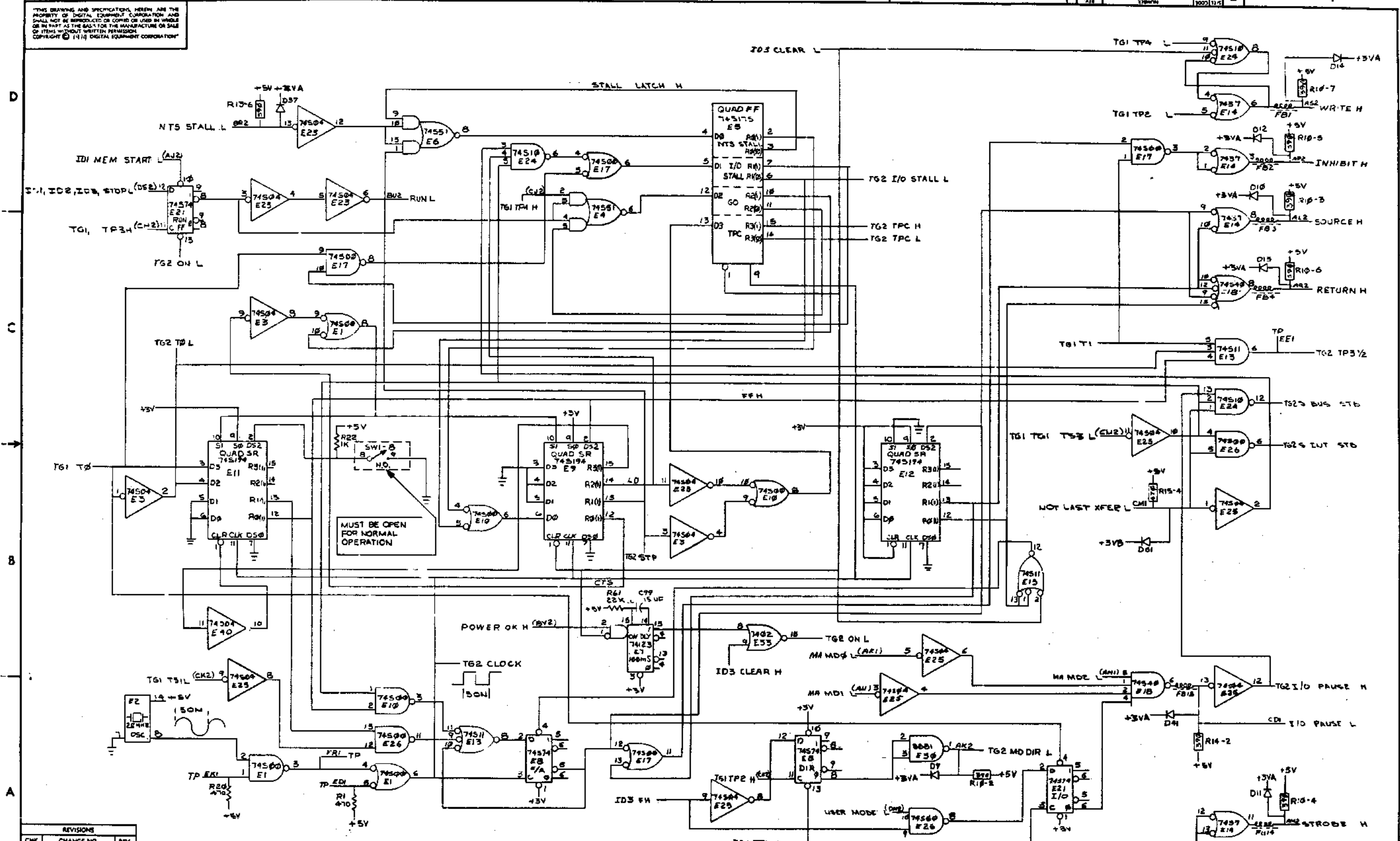
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REVISIONS		
CHK	CHANGE NO.	REV

TITLE	PDP8A CPU (TG1)	SIZE CODE	DCS	NUMBER	M8315-0-1	REV.	F
SCALE	1:1	SHEET	9	OF 10	DIST.		

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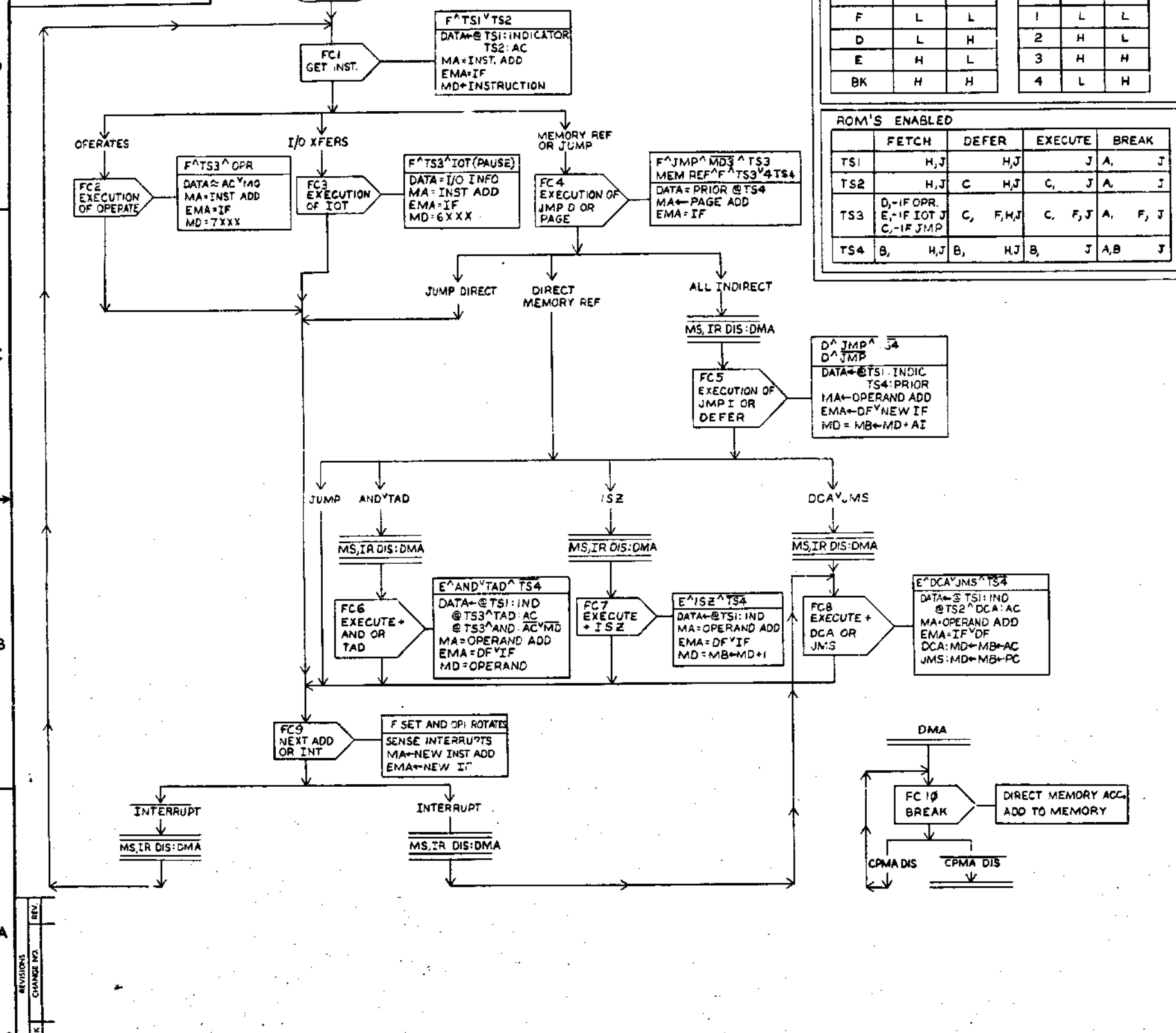


REV.	CHANGE NO.	REV.

TITLE	PDP8A CPU (TG2)	SIZE/DOSE	DCS M8315-0-1	NUMBER	F	REV.	
SCALE		SHEET	10 OF 10	DIST.			

DCS M8315-0-1

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NOTES:
 THIS IS AN INDEX TO THE 8A FLOW CHARTS. THE FLOW CHART NUMBER THAT APPEARS WITHIN THE SYMBOL [FCX] REFERS TO ANOTHER FLOW WHICH DETAILS THE ACTION WHICH IS BRIEFLY DESCRIBED IN THE SYMBOL [].
 OPTION FLOW CHARTS WILL USE THE SAME FCX TIME REFERENCE TO SHOW ITS RELATION TO THE CPU.
 FLOWS WILL BE NUMBERED AS FOLLOWS:
 M8315-FCX CPU FLOW FOR TIME X
 MABCD-FCX OPTION FLOW FOR CPU TIME X

THE FOLLOWING IS A LIST OF MAJOR OMNIBUS SIGNALS AND THE FLOW CHARTS MOST PERTINENT TO THEM

BUS SIGNAL	FLOW CHARTS	MOST IMPORTANT LOGIC PRINTS
IR0-2	FC1	ID2
F, D, E	(FC1, FC4), FC5, FC8	ID1
USER MODE	FC2, FC3	ID2, T62
FSET	FCB	ID1
PULSE LA	FC10	ID1
STOP	FC2, FC10	ID1, ID3, T62
KEY CONTROL	FC10	ID1
SW	SEE M8317 TIMING & FLOW CHARTS	
I/O PAUSE	FC3	T62
C0-2	FC3	ID1
BUS STB	FC3	ID2, T61
NOT LAST XFER	FC3	T62
INT RQST	FC3	ID3
SKIP	FC7, FC8, FC9	ID2
INITIALIZE	FC3	ID3
CPMA DIS	FC4, FC5, FC9	ID1
MSIR DIS	FC10	ID1
LX LD DATA	FC3	ID2, ID3
INDI-2	FC1	ID3
MAMS LD CTRL	FC4, FC9, FC10	ID1
OVERFLOW	FC7	ID2
BK DATA CTRL	FC10	ID1
LA ENABLE	FC1, FC10	ID1
INT IN PROG	FC9	ID2, ID3
RUN	FC2, FC10	T62
PWR OK		ID3
MEM START	FC10	ID1, T62

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8A				
PARTS LIST				
DIMENSIONAL TOLERANCE		DATE	digital	
DIMENSIONS IN INCHES		DATE		
DIMENSIONS IN MILLIMETERS		DATE		
UNLESS OTHERWISE SPECIFIED		DATE		
MILLIMETERS	INCHES	ANGLE	FLOW DIAGRAM M8315 INDEX	
XXX ±0.10	XXX ±0.008	40° 30'		
XX ±0.05	XX ±0.02			
X ±0.2	X ±0.1			
THIRD ANGLE PROJECTION	REMOVE SURFS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	SIZE CODE D FD NUMBER M8315-0-16 REV. SHEET 1 OF 1	
MATERIAL				
FINISH				

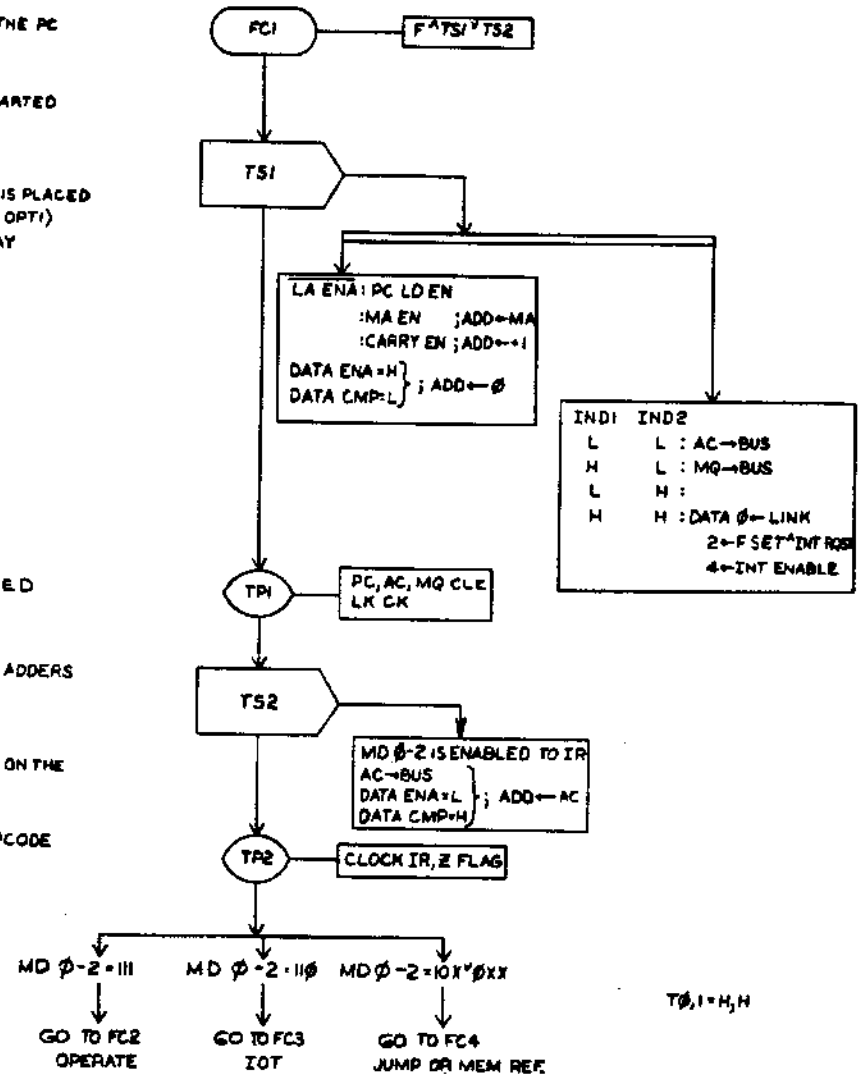
REVISIONS
 CHANGE NO.
 1

M8315-0-16

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21-0-0128W DFD M8315-0-17 2

MA+1 IS ENABLED TO THE PC
 A MEMORY READ IS STARTED (REFER TO TIMING)
 INDICATOR INFORMATION IS PLACED ON THE DATA BUS (REFER TO OPTI) FOR THE PANEL TO DISPLAY
 THE PC IS LOADED
 THE AC IS GATED THROUGH THE ADDERS TO SEE IF IT EQUALS 0
 THE INSTRUCTION WILL APPEAR ON THE MD LINES FROM MEMORY
 THE IR GETS LOADED WITH THE OPCODE AND THE Z FLAG IS ADJUSTED



MS0,1=L,L
 T0,1=L,L
 T0,1=H,L
 T0,1=H,H

THE INSTRUCTION IS DECODED AT THIS POINT AS FOLLOWS:
 MD 0 1 2 3 4 5 6 7 8 9 10 11
 AND 0 0 0
 TAD 0 0 1
 ISE 0 1 0
 DCA 0 1 1
 JMS 1 0 0
 JMP 1 0 1
 IOT 1 1 0
 OPR 1 1 1

BITS 3-11
 ARE NOT
 IMPORTANT AT
 THIS TIME

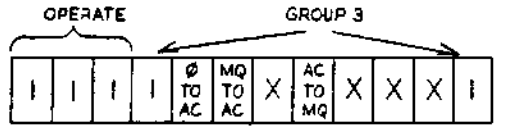
FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8A					
DIMENSIONAL TOLERANCE		DRN 2 Weeks	DATE 11-13-74	PARTS LIST	
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		CHK'D BY [Signature]	DATE 12/1/74	TITLE	
MILLIMETERS		INCHES	ANGLES	FLOW DIAGRAM M8315 FC1	
±.001	±.001	±.001	±.001	DATE 1-24-75	
±.002	±.002	±.002	±.002	DATE 1-24-75	
±.005	±.005	±.005	±.005	DATE 1-24-75	
THIRD ANGLE PROJECTION		NEXT HIGHER ASSY.		NUMBER	
MATERIAL		B-DD-KK8A-0		DFD M8315-0-17	
FINISH		SCALE		SHEET 1 OF 1	

REV. NO. CHANGE NO. CHK

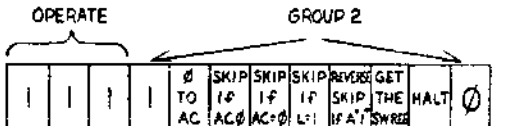
DFD M8315-0-17

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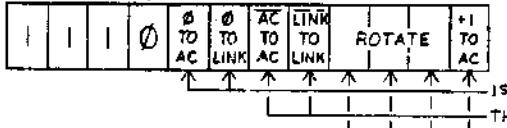
THE INSTRUCTION IS DECODED AT THIS POINT AS FOLLOWS
 THE SEQUENCES OF OPERATION ARE LOGICAL NOT CHRONOLOGICAL
 ALL OP2 & OP3 OCCUR AT TP3
 ALL OP1 EXCEPT ROTATE LEFT OR RIGHT OCCUR AT TP3
 A SINGLE LEFT OR RIGHT ROTATE OCCURS AT TP4
 A DOUBLE LEFT OR RIGHT ROTATE OCCURS AT TP3 1/2 AND 4



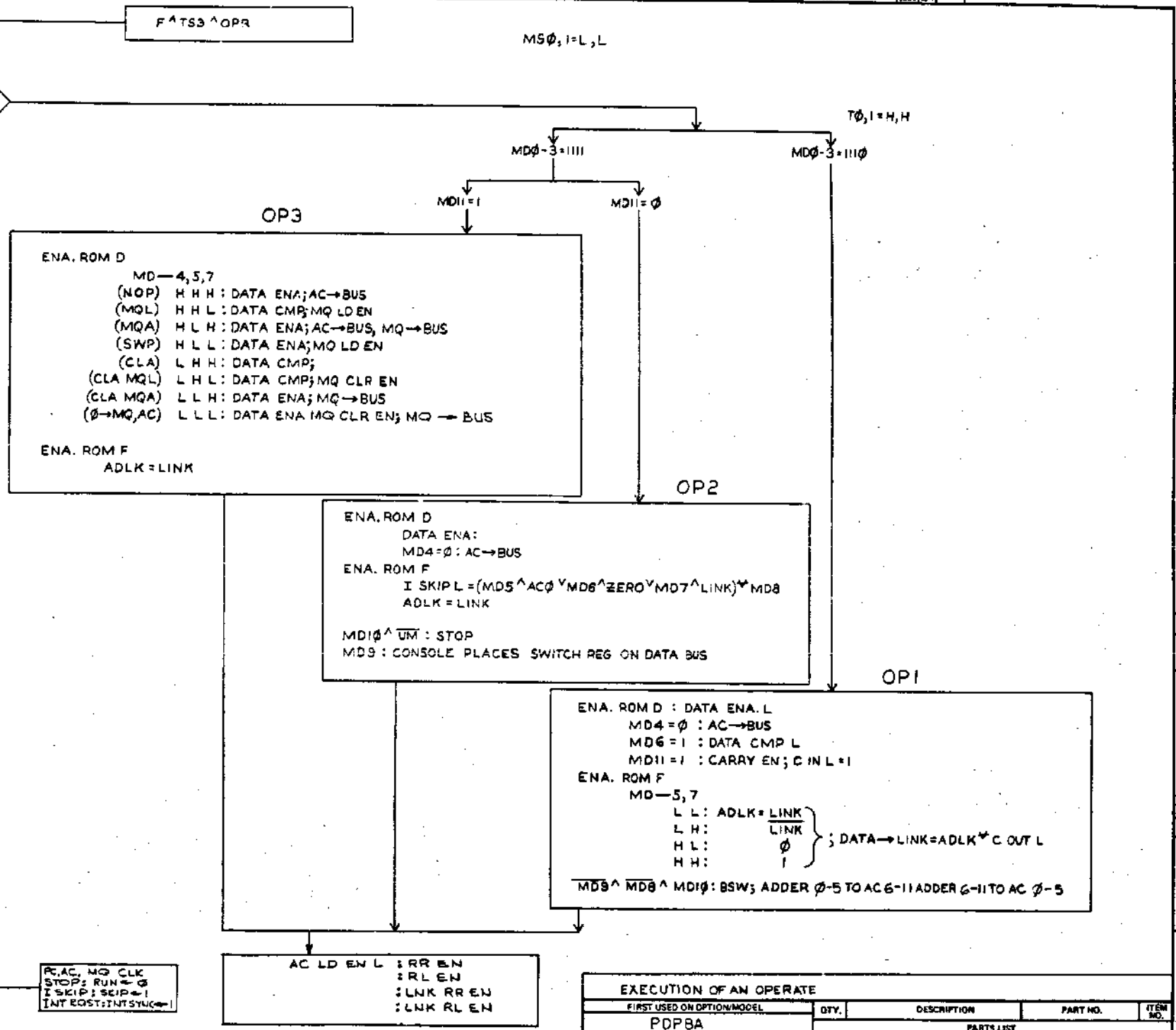
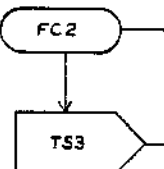
- 0 0 0 NO OPERATION
- 0 0 1 AC GOES TO THE MQ AND THE AC IS CLEARED
- 0 1 0 MQ "ORED" WITH THE AC GOES TO THE AC
- 0 1 1 AC & MQ SWAPS WITH MQ & AC
- 1 0 0 THE AC IS CLEARED
- 1 0 1 BOTH THE AC AND MQ ARE CLEARED
- 1 1 0 THE MQ GOES TO THE AC
- 1 1 1 THE MQ GOES TO THE AC AND THE MQ IS CLEARED



- 1ST MAKE A SKIP DECISION
- THEN REVERSE THEN DECISION IF BIT 8=1
- THEN CLEAR THE AC IF BIT 4=1
- THEN "OR" THE AC WITH THE SWITCHES IF BIT 3=1
- THEN STOP IF BIT 1=1



- 1ST CLEAR THE AC & LINK IF BITS=1
 - THEN COMPLEMENT IF BITS=1
 - THEN INCREMENT THE L, AC IF BIT 11=1
 - THEN ROTATE DEPENDENT UPON 8,9,10 AS FOLLOWS
- MD 8 9 10
- H H H NO ROTATE
 - H H L SWAP AC & SWITCH AC 6-11
 - H L H ROTATE LEFT ONCE
 - H L L ROTATE LEFT TWICE
 - L H H ROTATE RIGHT ONCE
 - L H L ROTATE RIGHT TWICE
 - L L X ILLEGAL
- AC II THESE OCCUR AT F SET TIME



REV.	
CHANGE NO.	
CHK	

EXECUTION OF AN OPERATE			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO. ITEM NO.
PDP8A			
DIMENSIONAL TOLERANCE		UNL. UNLESS OTHERWISE SPECIFIED	DATE
MILLIMETERS	INCHES	ANGLES	DATE
XXK ±0.10	JKK ±0.20	° 30'	DATE
XX ±0.5	JK ±1.0		DATE
X ±2.0	X ±1.0		DATE
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	
MATERIAL	B-DD-KK8A-0	SIZE CODE	NUMBER
FINISH		SCALE	REV.
SHEET 1	OF 1	DIST.	

REV. 1 DFCM 8315 Q-18

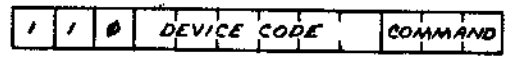
digital

TITLE
 FLOW DIAGRAM
 M8315 FC2

SIZE CODE
 DFD M8315-Q-18

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THE INSTRUCTION AT THIS POINT IS DECODED AS FOLLOWS: ONLY IF "USER MODE IS NEGATED" THUS ALLOWING PAUSE TO BE ASSERTED.



FOR DEVICE CODE 000 THE CPU TAKES CONTROL DEPENDING UPON THE COMMAND AS FOLLOWS:

MD-9 10 11	SKON	ION	IOF	SRQ	*GTF	*RTF	NOP	CAF
0 0 0	0 0 0	0 0 1	0 1 0	0 1 1	1 0 0	1 0 1	1 1 0	1 1 1
	SKIP IF INT ON, TURN IT OFF	TURN INT SYS ON	TURN INT SYS OFF	SKIP IF INT RQST	LINK, INT ON, INT RQST TO AC0, 2, 4	AC0 TO LINK, TURN INT SYS ON	NO OPERATION	GENERATE INITIALIZE

* ALSO SEE OPT 2

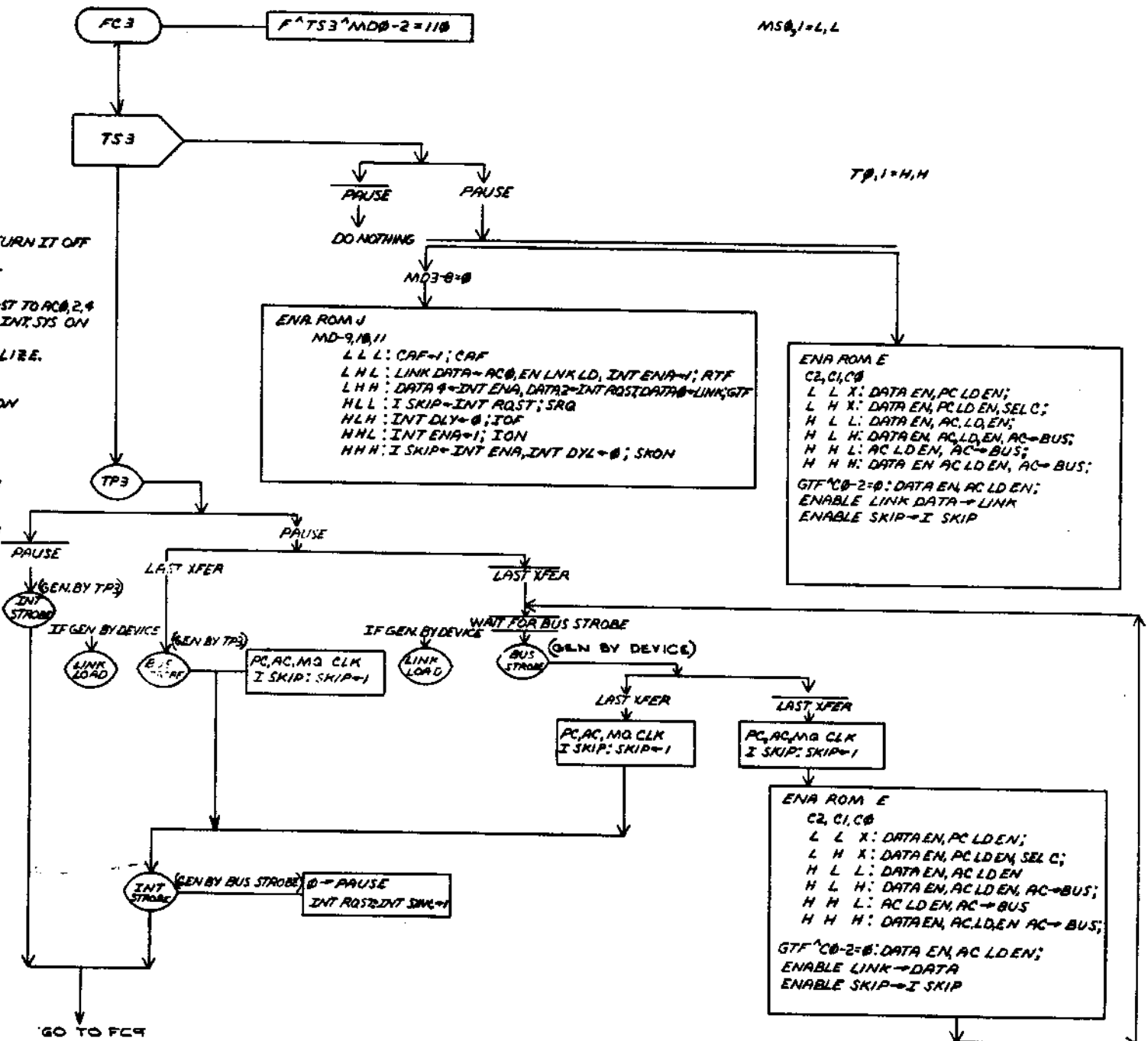
OTHER DEVICES SEND OR RECEIVE DATA DEPENDING UPON THE "C" LINES AS FOLLOWS:

AC+DEV	CO C1 C2	H H H	H H L	H L L	L H H	L L H
RELATIVE JUMP	H H H	THE DEVICE RECEIVES THE AC AT TP3	THE DATA LINES+THE PC GO TO PC AT BUS STB	INPUT OR TO AC	H L H	THE AC "ORED" WITH DATA LINES GOES TO THE AC BUS STB
ABSOLUTE JUMP	H L L	THE DATA LINES GO TO THE PC AT BUS STB	AC+DEV → AC	L H H	THE DEVICE RECEIVES THE AC AT TP3	AND THE AC IS CLEARED
INPUT JAM TO AC	L L H	THE DATA LINES GO TO THE AC BUS STB				

NOTE ALL I/O XFERS TAKE PLACE OVER THE DATA LINES.

IN REALITY ALL XFERS TAKE PLACE ON THE LEADING EDGE OF BUS STB IN ACCORDANCE WITH THE "C" LINES AT THAT TIME. ASSERTING NOT LAST XFER CAUSES THE CPU TO WAIT FOR A BUS STROBE TO DO THE NEXT XFER. THE CPU WILL NOT ADVANCE TO TS4 UNTIL IT SEES A BUS STROBE WITH NOT LAST XFER NEGATED - THIS IN TURN CAUSES INTERRUPT STROBE.

LINK LOAD SHOULD BE GIVEN IN SYNC WITH BUS STROBE AND CAUSES LINK DATA TO GO TO THE LINK.



REV.	1
CHG. NO.	1
DATE	

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8A					
DIMENSIONAL TOLERANCE					
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED					
MILLIMETERS	INCHES	ANGLES			
±0.10	±0.005	90° ±0.1°			
±0.25	±0.010	±0.5°			
±0.50	±0.020	±1.0°			
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		NEXT HIGHER ASSY.	
MATERIAL		FINISH		SCALE	
B-DD-KKBA-0		++		1:1	
SHEET 1 OF 1		DATE		REV.	
		12/1/70		D F D	

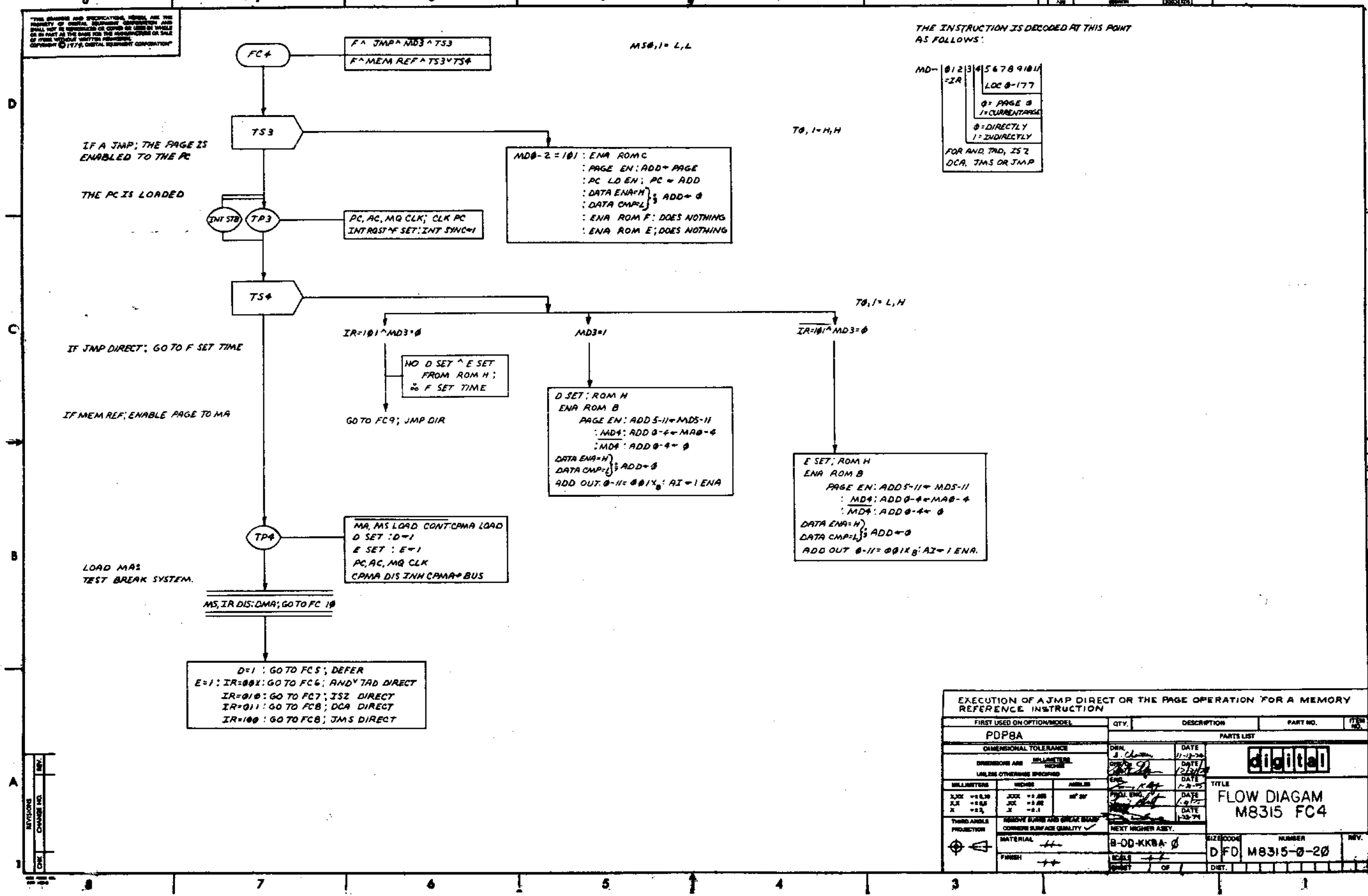
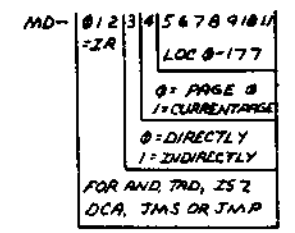
digital
TITLE
FLOW DIAGRAM
M8315 FC3

SIZE CODE
D F D
NUMBER
M8315-0-19
REV.

61-0-5158W 1410 2

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THE INSTRUCTION IS DECODED AT THIS POINT AS FOLLOWS:



EXECUTION OF A JMP DIRECT OR THE PAGE OPERATION FOR A MEMORY REFERENCE INSTRUCTION			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
PDP8A			
DIMENSIONAL TOLERANCE			
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		DATE	11-12-70
MILLIMETERS		DATE	12/1/74
±.00	±.00	DATE	1-2-75
±.01	±.01	DATE	1-9-75
±.02	±.02	DATE	1-23-74
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	
MATERIAL		NEXT HIGHER ASSEMBLY	
FINISH		SIZE CODE	
		NUMBER	
		REV.	
		D F D M8315-0-20	
		DST.	

REV M8315-0-20

digital
 TITLE
 FLOW DIAGRAM
 M8315 FC4

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A MEMORY READ IS STARTED
INDICATOR INFORMATION IS PLACED ON DATA BUS

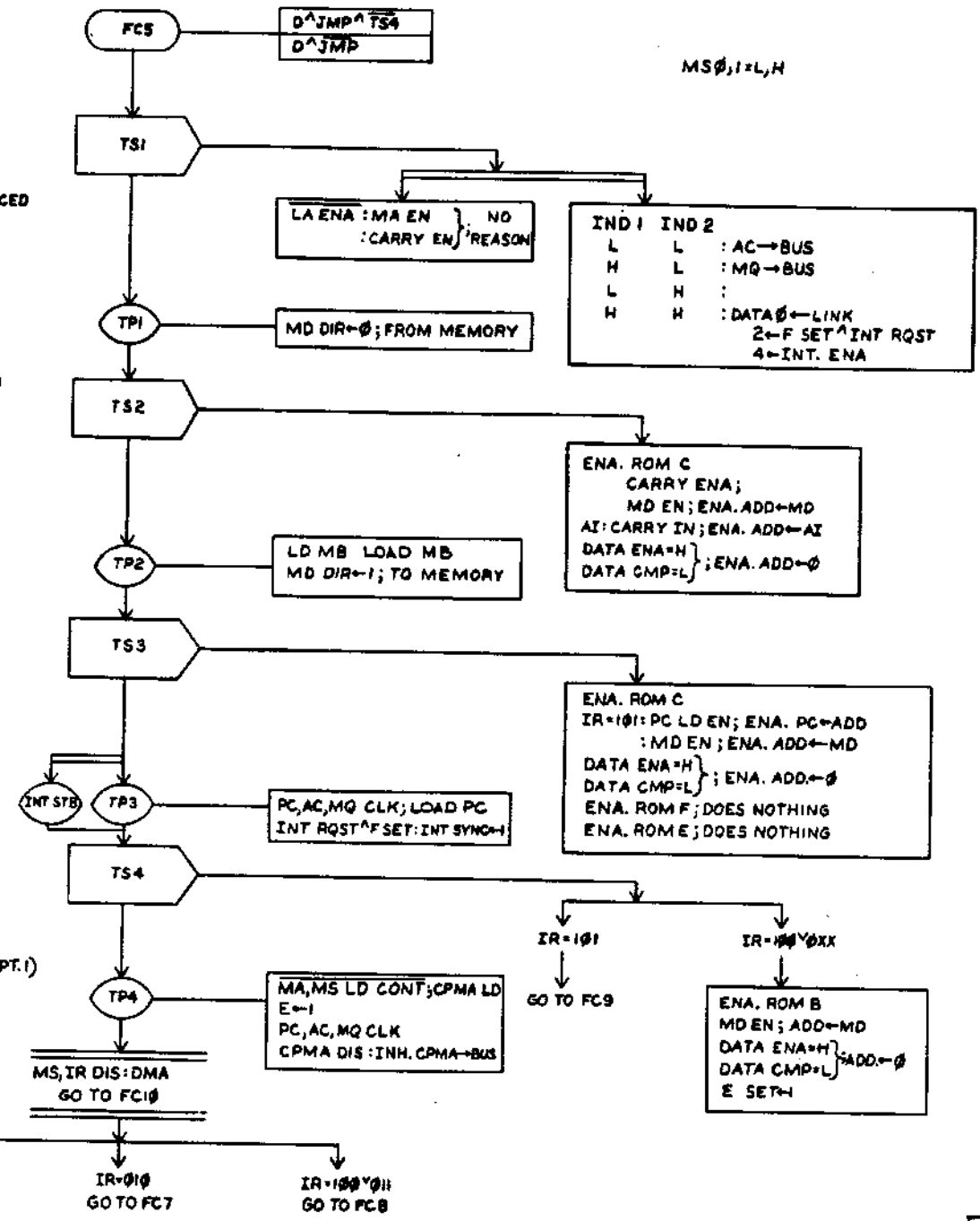
THE ADDRESS WILL APPEAR ON THE MD LINES
MEMORY DATA+AI GOES TO MEMORY BUFFER (AI=ADDRESS 000-0017)

MEMORY BUFFER IS LOADED AND PLACED ON MD LINES

A MEMORY WRITE IS STARTED
IF JMP; ENABLE MD TO THE PC

IF JMP; LOAD THE PC

IF JMP; GO TO F SET TIME
IF JMP; GO TO E SET
MA=MD (PLACES THE OPERAND ADDRESS IN THE MA) (THE EMA LINES MAY HAVE CHANGED-SEE OPT.1)

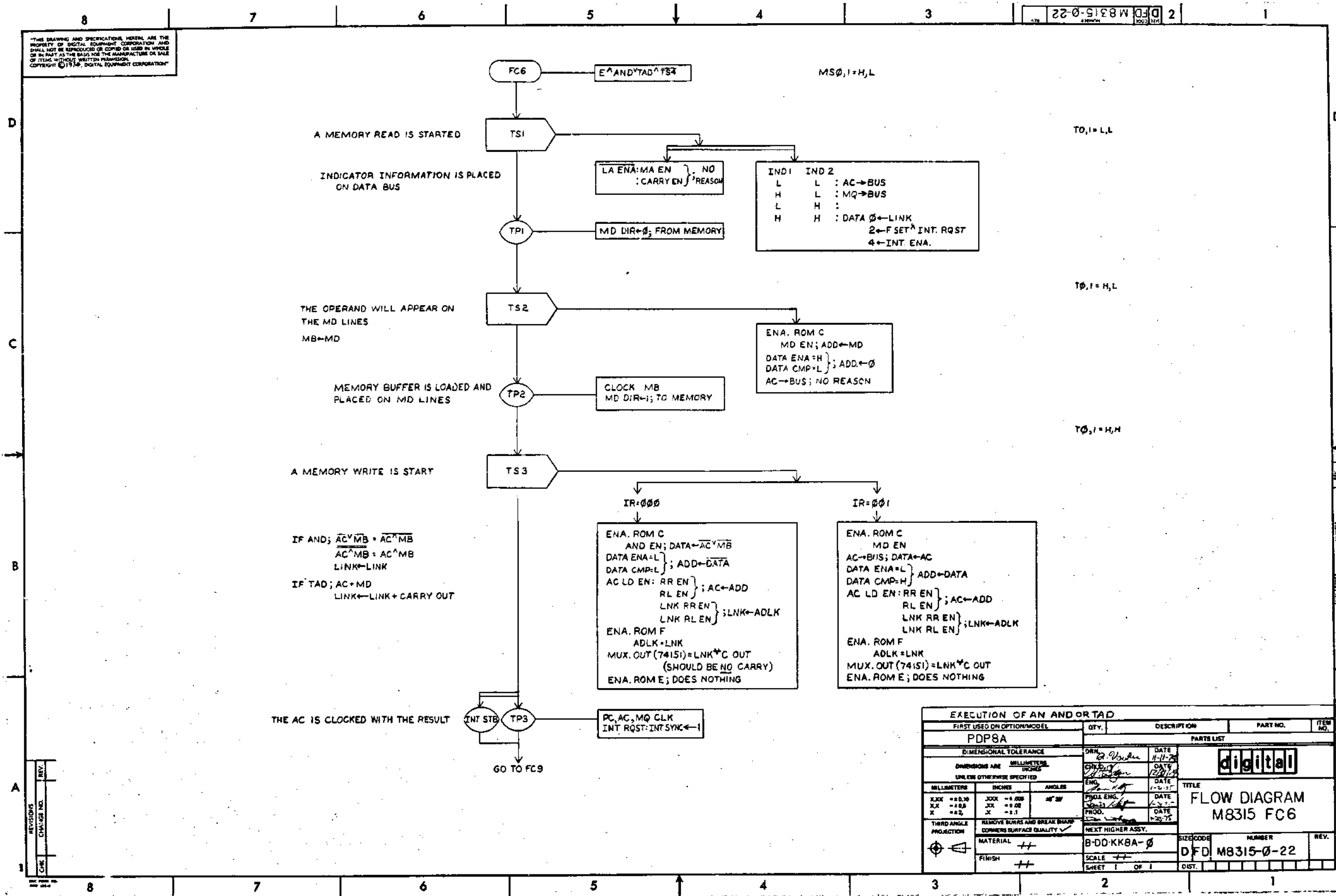


EXECUTION OF A JUMP INDIRECT OR CALCULATING THE INDIRECT ADDRESS FOR AND, TAD, DCA, ISZ OR JMS			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
PDP8A			
PARTS LIST			
DIMENSIONAL TOLERANCE		DATE	DATE
UNLESS OTHERWISE SPECIFIED		DATE	DATE
MILLIMETERS	INCHES	DATE	DATE
±0.25	±0.010	DATE	DATE
±0.13	±0.005	DATE	DATE
±0.075	±0.003	DATE	DATE
THIRD ANGLE PROJECTION		NEXT HIGHER ASSY.	
MATERIAL		DATE	DATE
FINISH		DATE	DATE
B-00-KK8A-0		DATE	DATE
SCALE		DATE	DATE
SHEET		DATE	DATE
OF		DATE	DATE
DST.		DATE	DATE
TITLE		FLOW DIAGRAM MB315 FC5	
NUMBER		DFD MB315-0-21	
REV.			

MB315-0-21

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22-0-22 M8315-0-22



EXECUTION OF AN AND OR TAD			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
PDP8A			
DIMENSIONAL TOLERANCE			
DIMENSIONS ARE MILLIMETERS		INCHES	
UNLESS OTHERWISE SPECIFIED			
MILLIMETERS	INCHES	ANGLES	
XX ±0.25	XX ±0.010	XX °	
XX ±0.5	XX ±0.02		
X ±2	X ±0.1		
THIRD ANGLE PROJECTION	REMOVE SURFS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	
MATERIAL	FINISH	SCALE	
++	++	++	
B-DD-KK8A-0		SIZE CODE	NUMBER
SHEET 1 OF 1		DIST.	

digital

TITLE
FLOW DIAGRAM
M8315 FC6

DATE 4-11-74
DATE 12/1/74
DATE 1-2-75
DATE 1-2-75

SIZE CODE B-DD-KK8A-0
NUMBER DFD M8315-0-22

22-0-22 M8315-0-22

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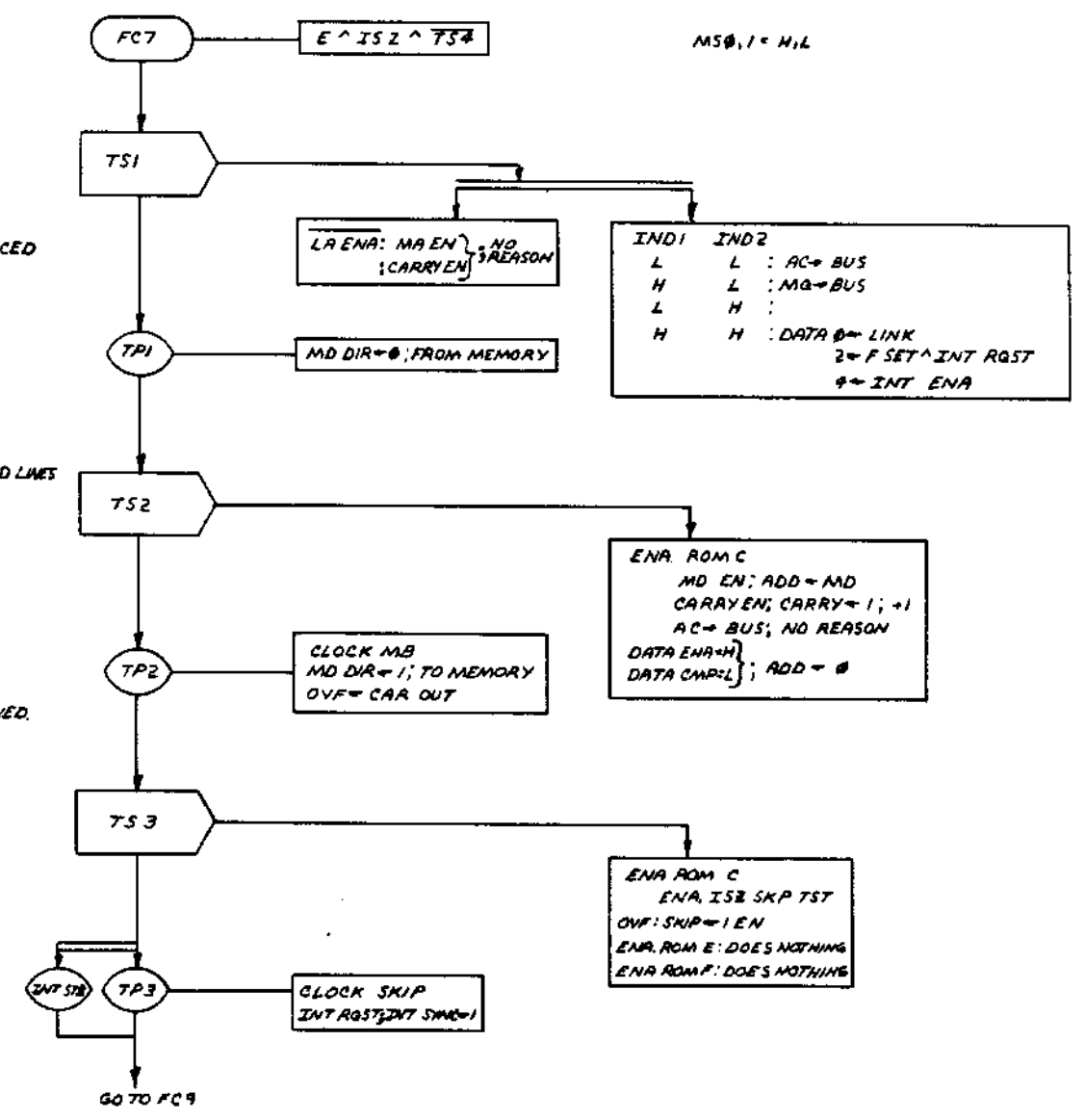
A MEMORY READ IS STARTED

INDICATOR INFORMATION IS PLACED ON DATA BUS

THE OPERAND WILL APPEAR ON THE MD LINES MB ← MD + 1

THE INCREMENTED MD IS SAVED IN THE MB AND PLACED ON THE MD LINES; THE CARRY IS SAVED.

SET SKIP = OVER FLOW

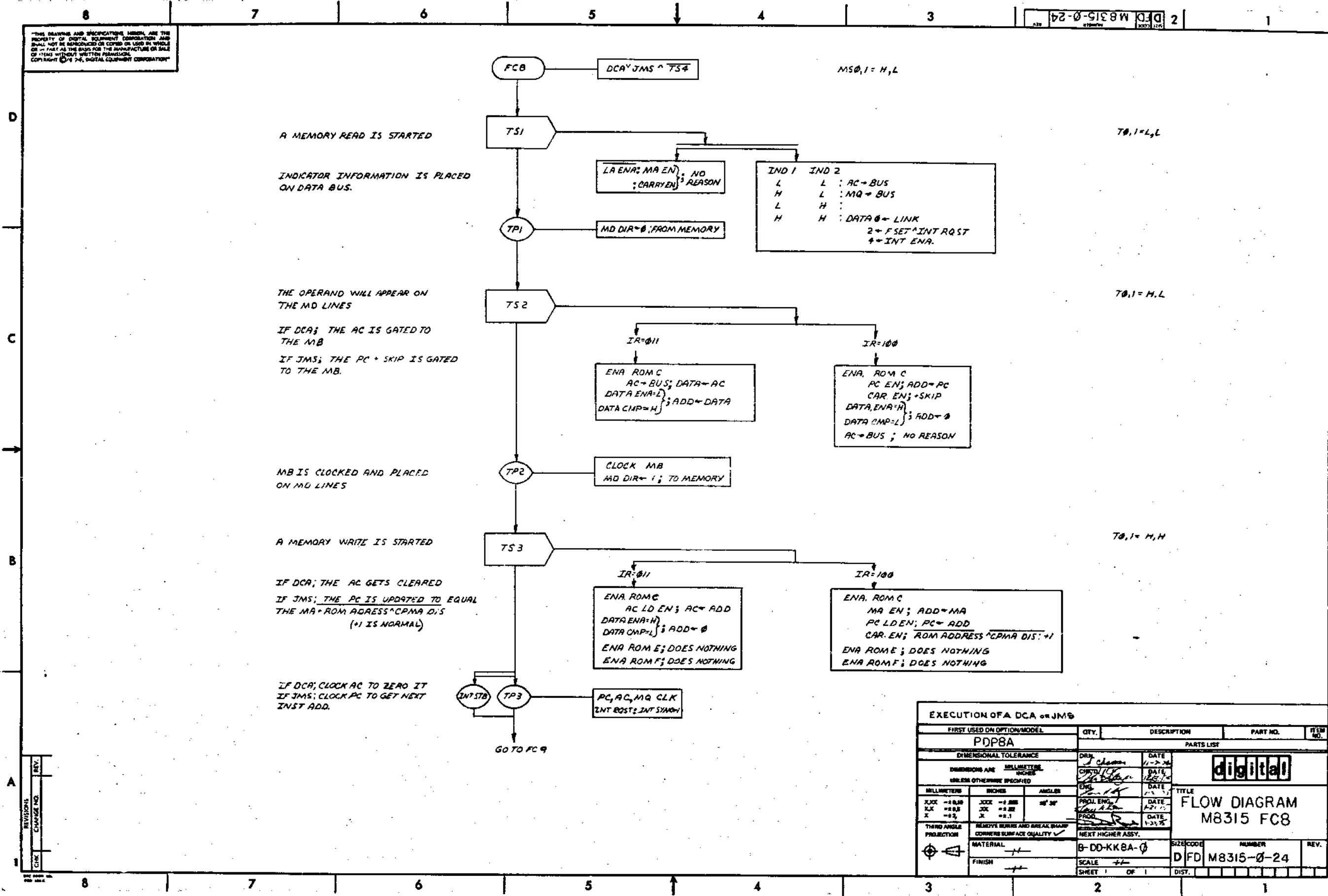


EXECUTION OF AN ISZ			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
POPBA			
PARTS LIST			
DIMENSIONAL TOLERANCE		DRN.	DATE
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		CHKD.	DATE
MILLIMETERS	INCHES	ENG.	DATE
±.012	±.0005	PROJ. ENGR.	DATE
±.025	±.001	PROD.	DATE
±.05	±.002		DATE
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASBY.	
	MATERIAL	B-00-KK8A-0	SIZE CODE
	FINISH		NUMBER
		SCALE	DFD M8315-0-23
		SHEET	DIST.

INVISIONS
 CHANGE NO.
 REV.

DFD M8315-0-23

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EXECUTION OF A DCA or JMS				
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8A				
DIMENSIONAL TOLERANCE				
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		DATE	PARTS LIST	
MILLIMETERS	INCHES	ANGLES		
JXX ±0.100	JXX ±0.001	30° 30'		
KX ±0.05	JX ±0.001			
X ±0.2	X ±0.1			
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	TITLE	
MATERIAL	FINISH	B-DD-KKBA-0	FLOW DIAGRAM M8315 FC8	
		SCALE	SIZE CODE	NUMBER
		SHEET 1 OF 1	D FD	M8315-0-24
			DIST.	

D FD M8315-0-24

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IF NO INTERRUPT, PREPARE TO GET NEXT INSTRUCTION
 PC ← SKIP → MA
 IF INTERRUPT, EXECUTE A JMS TO LOCATION 0

CLOCK THE MA

FC9 F SET TIME MS0,1=X,X

TS4 T0,1=L,H

ENA. ROM B
 INT. IN PROG ^F^D^E : PC EN; ADD ← PC
 : CAR. EN; SKIP; CAR ← 1; ADD ← SKIP
 : F SET ← 1
 INT. IN PROG : NO ENABLES; ADD ← 0
 : JMS → IR ENA.
 : E SET ← 1

IF OPI: ENABLE 74S158 ROTATE MUX;

MD	8	9	
	0	0	NOP
	0	1	RL EN ROTATE LEFT
	1	0	RR EN ROTATE RIGHT
	1	1	RR EN, RL EN LOAD; SHOULD NOT BE USED

TP3 1/2 OPI ^MDI0 : PC, AC, MQ CLK

MA, MS LOAD CONT: CPMA LOAD
 F SET: F ← 1
 E SET: E ← 1
 : IR ← JMS; IR ← 2 = 100
 PC, AC, MQ CLK
 CPMA DIS: INH CPMA → BUS

TP4

MS, IR DIS: DMA
 GO TO FC10

GO TO FC1

GO TO FC8
 AN INTERRUPT HAS BEEN ALLOWED

REV	NO.	DATE

GETTING ADDRESS OF NEXT INSTRUCTION OR ANSWERING INTERRUPT

FIRST USED OR OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
PDP8A			
DIMENSIONAL TOLERANCE		PARTS LIST	
UNLESS OTHERWISE SPECIFIED		DATE	
MILLIMETERS		DATE	
INCHES		DATE	
ANGLES		DATE	
TYPICAL FINISHES		DATE	
MATERIAL		DATE	
FINISH		DATE	
SCALE		DATE	
SHEET		DATE	

TITLE: FLOW DIAGRM M8315 FC9

NUMBER: DFD M8315-0-25

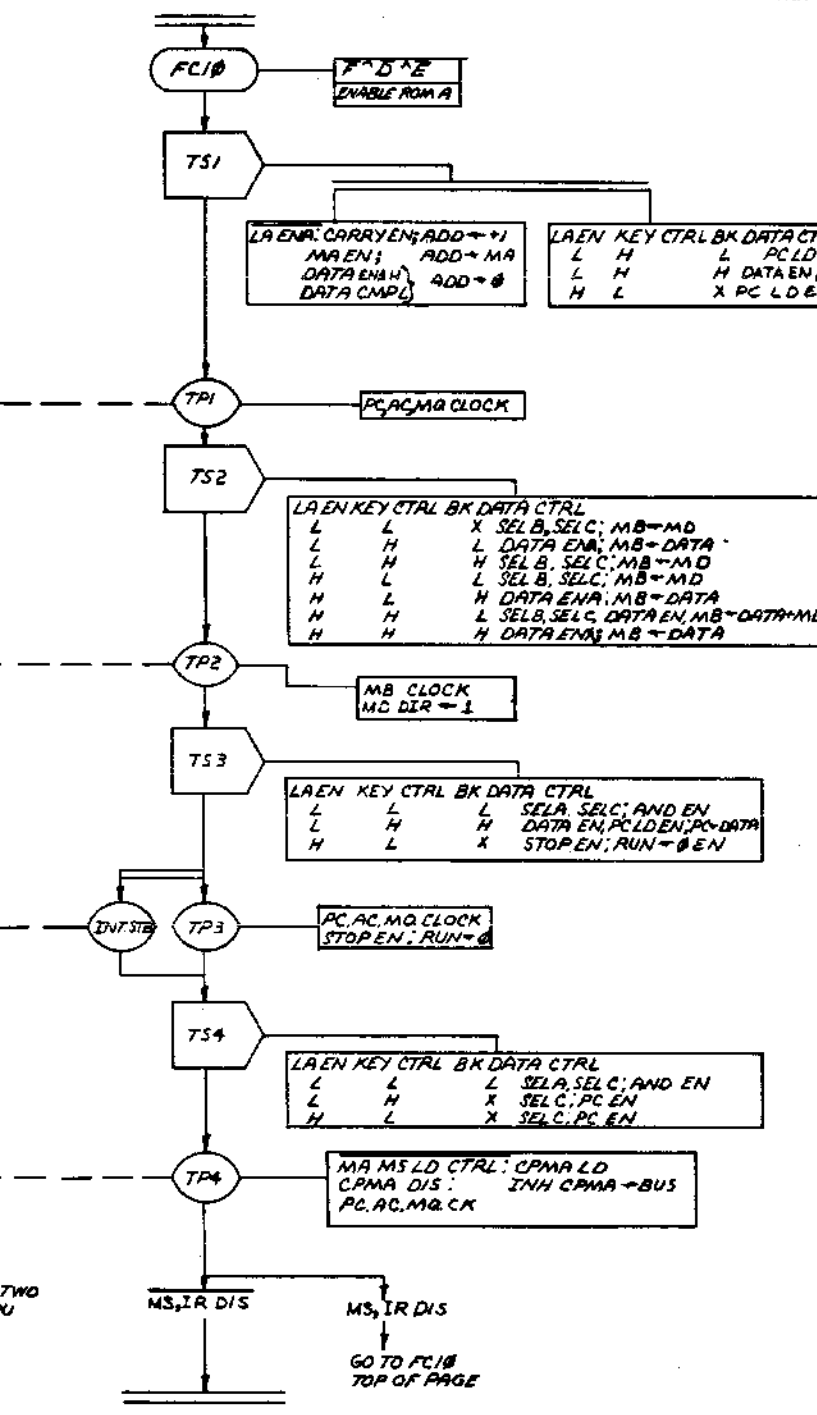
REV.:

DFD M8315-0-25

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THE BREAK CONTROL WORD (LAEN KEY CTRL BK DATA CTRL) IS NORMALLY SET UP AT THE BEGINNING OF THE DMA CYCLE AND REMAINS STABLE FOR THE ENTIRE CYCLE. IT DEFINES OPERATIONS AS FOLLOWS.

	H M H	H H L	H L H	L H H	L H L	L L H	L L L
DATA TO MEM	ADD TO MEM	CON DEPOSIT	CON EXAMINE	LOAD ADD	BOOT DEPOSIT	LOAD FIELD 0	LOAD FIELD 7
THE CONTENTS OF THE DATA LINES GO TO THE MB	THE CONTENTS OF THE MD LINES PLUS THE CONTENTS OF THE DATA LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE DATA LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE MD LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE MD LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE MD LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE MD LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.	THE CONTENTS OF THE MD LINES GO TO THE MB. THE MB IS WRITTEN INTO MEMORY.
		RUN IS SET BY MEM START. THE MA+1 GOES TO THE PC.	RUN IS SET BY MEM START. THE MA+1 GOES TO THE PC.	THE CONTENTS OF THE DATA LINES GO TO THE MA @ PULSE LOAD ADD (USED ONLY WHEN NOT RUNNING). IF RUNNING NO OPERATION AT TS1.	THE MA+1 GOES TO THE PC.		
		RUN IS CLEARED.	RUN IS CLEARED.	THE CONTENTS OF THE DATA LINES GO TO THE PC.			CAUTION: "AND EN" CAUSES THE DATA BUS TO = 7777. THIS DEPENDS UPON THE PC: 0000. THE CONTENTS OF THE DATA LINES GOES TO THE MEMORY EXTENSION CONTROLS IS DF AT TP3.
		THE PC GOES TO THE MA.	THE PC GOES TO THE MA.	THE PC GOES TO THE MA.	THE PC GOES TO THE MA.	AND IF AT TP4.	AND IF AT TP4.



REV.	CHANGE NO.

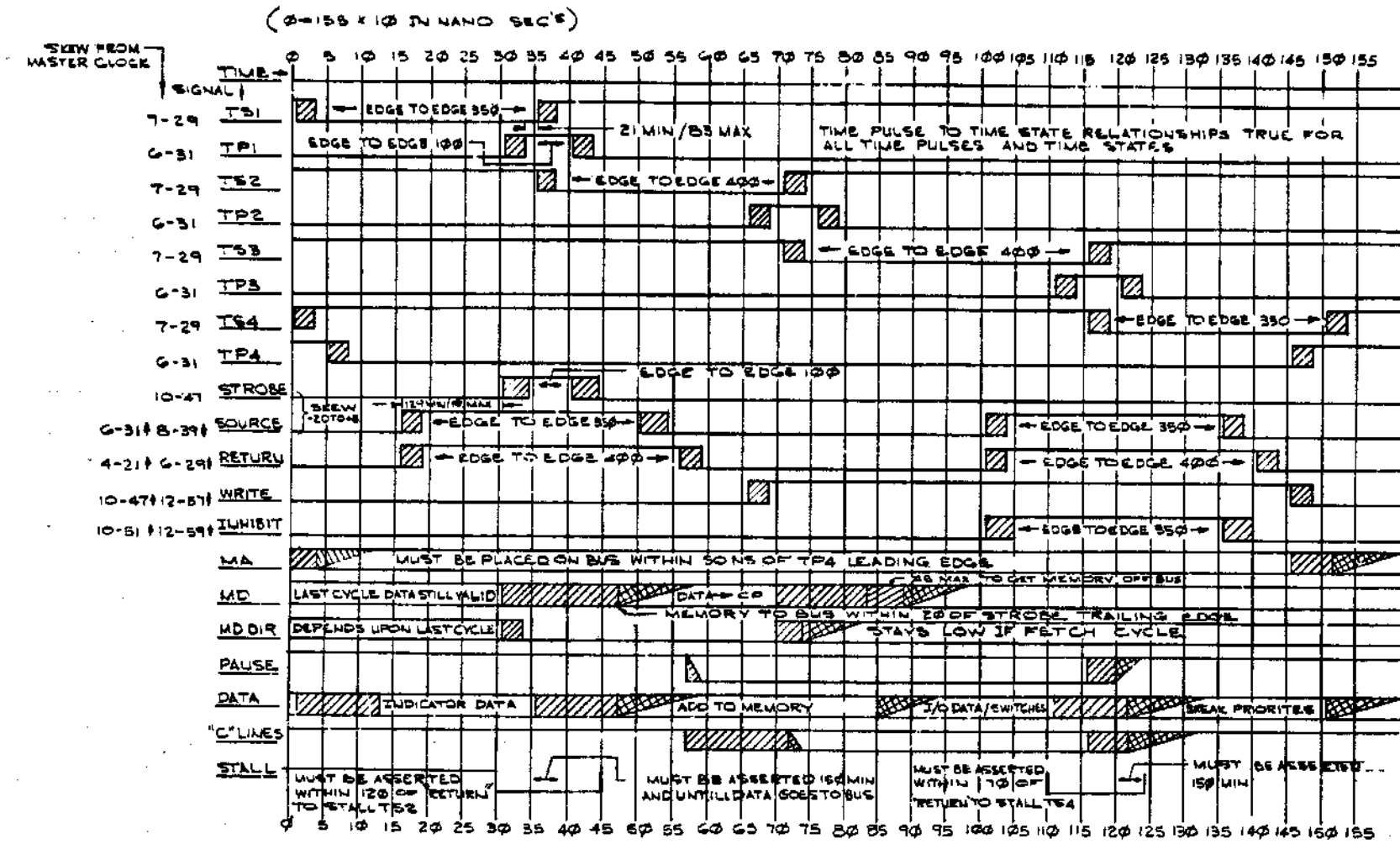
TO DO A TRANSFER OF DATA TO A DEVICE DO AN ADD TO MEM WITH THE DATA LINES EQUAL TO "0" AND TAKE DATA FROM THE MD LINES AT TP3.

SWITCH SELECTED 1ST CYCLE OR 1ST CYCLE
THESE ARE THE 1ST TWO CYCLES DURING A CPU AUTO RESTART

DATA BREAK/CONSOLE OPERATIONS/AUTO RESTART			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
PDP8A			
DIMENSIONAL TOLERANCE			
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		DATE 11-2-74	
MILLIMETERS	INCHES	ANGLES	DATE 12/1/74
KXX = ±0.10	JXX = ±0.08	M° 20'	DATE 1-21-75
XX = ±0.05	X = ±0.1		DATE 1-23-75
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	
MATERIAL	FINISH	SIZE CODE	NUMBER
		B DD KK8A-0	D FD M8315-0-26
SCALE		SHEET	OF
		1	26

DIGITAL EQUIPMENT CORPORATION
D FD M8315-0-26

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 1974



8A DATA PATH FUNCTION TIMING			
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO. ITEM NO.
PDP8A			
DIMENSIONAL TOLERANCE			
DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED		INCHES	
MILLIMETERS	INCHES	ANGLES	
KJX ±0.10 LX ±0.25 X ±0.5	JDX ±0.25 JX ±0.5	90°	
THRO ANGLE PROJECTION	REMOVE BURR AND BREAK SHARP CORNERS SURFACE QUALITY	NEXT HIGHER ASSY.	
MATERIAL	FINISH	B-DD-KK8A-J	SIZE CODE NUMBER REV.
		SCALE	D FD M8315-0-27
		SHEET	DIST.

digital

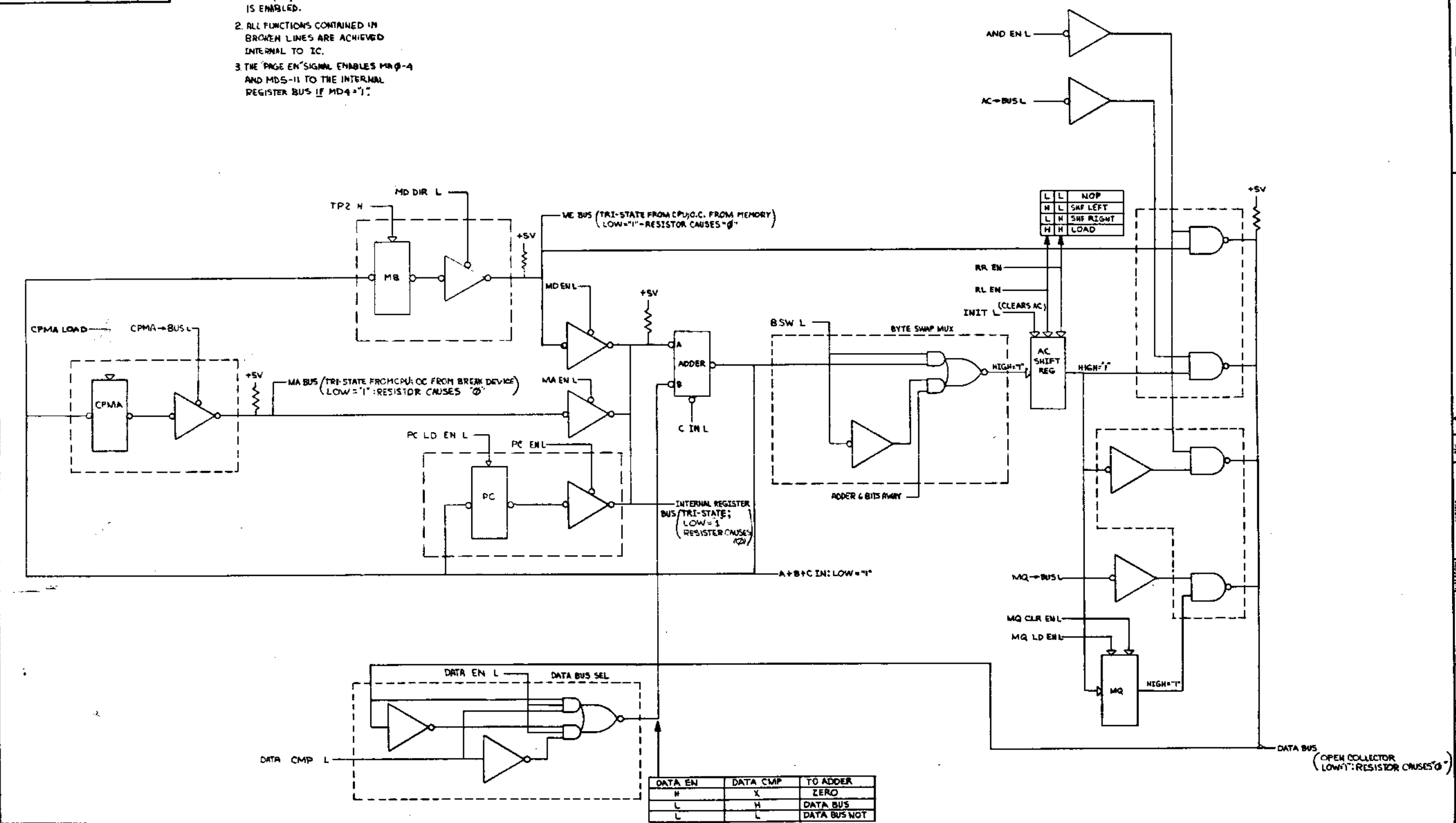
TITLE
 FLOW DIAGRAM
 M8315 BUS TIMING

SIZE CODE NUMBER REV.
 D FD M8315-0-27

REV.
 CHANGE NO.

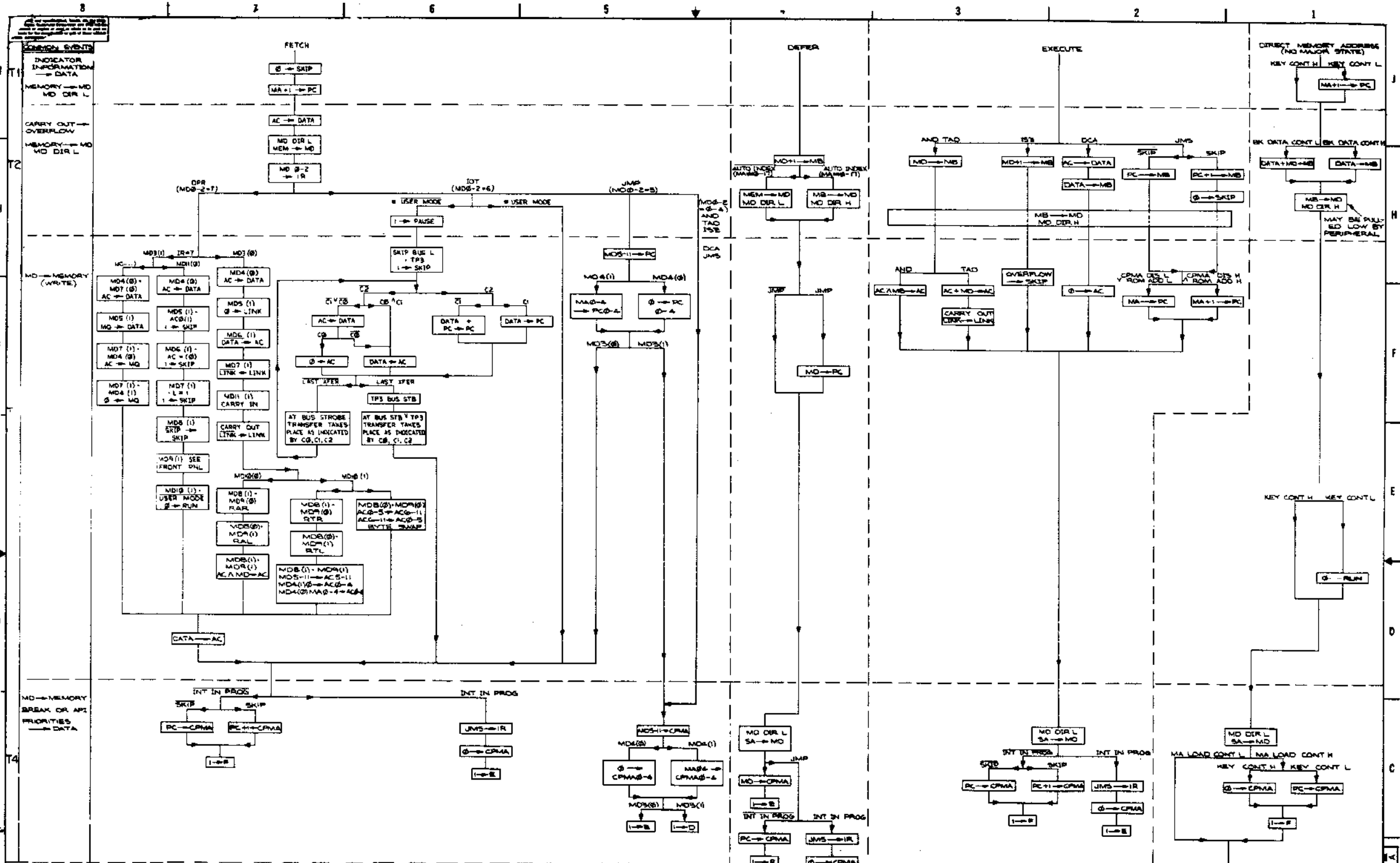
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- NOTES:
1. THE PC, AC AND MQ ARE LOADED BY PC, AC, MQ CLK IF THE LOAD IS ENABLED.
 2. ALL FUNCTIONS CONTAINED IN BROKEN LINES ARE ACHIEVED INTERNAL TO IC.
 3. THE PAGE EN SIGNAL ENABLES MR 0-4 AND MDS-11 TO THE INTERNAL REGISTER BUS IF MD4 = 1.



REVISIONS		
CHK	CHANGE NO.	REV.

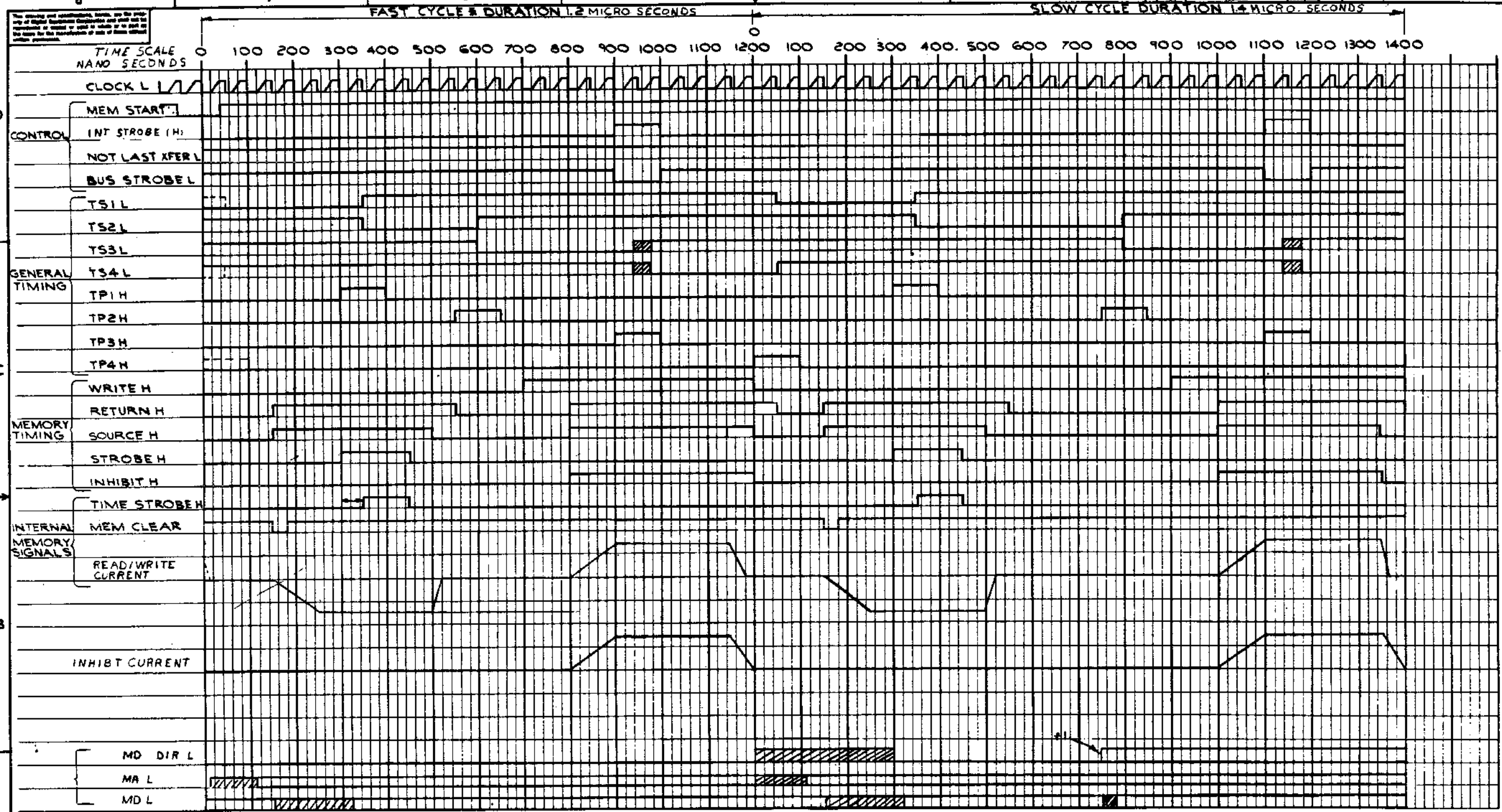
DATA PATH FUNCTIONS			
TITLE	SIZE/DOOR	NUMBER	REV.
FLOW DIAGRAM M8315 BUS TIMING	D F D	M8315-0-27	
SCALE	SHEET 2 OF 2	DIST.	



NOTES:
 * USER MODE IS USED BY THE TIME SHARING OPTION ONLY TO INHIBIT HALT, DSR, LAB, & PAUSE

REV. 11-60-010
 L. H. RYAN
 L. RYAN

PART NO. PDP8/E		PART LIST	
EQUIPMENT CORPORATION		EQUIPMENT CORPORATION	
TITLE PROCESSOR FLOW CHART		TITLE PROCESSOR FLOW CHART	
SCALE A-ML-PDP8E-0		SCALE A-ML-PDP8E-0	
PART NO. PDP8E-0-06 A		PART NO. PDP8E-0-06 A	



THIS PLOT SHOWS AN INITIAL FAST CYCLE
 THE DOTTED LINES INDICATE A REGULAR CYCLE
 *MD DIR GOES LOW ONLY IF F+ [D-AUTO INDEX]

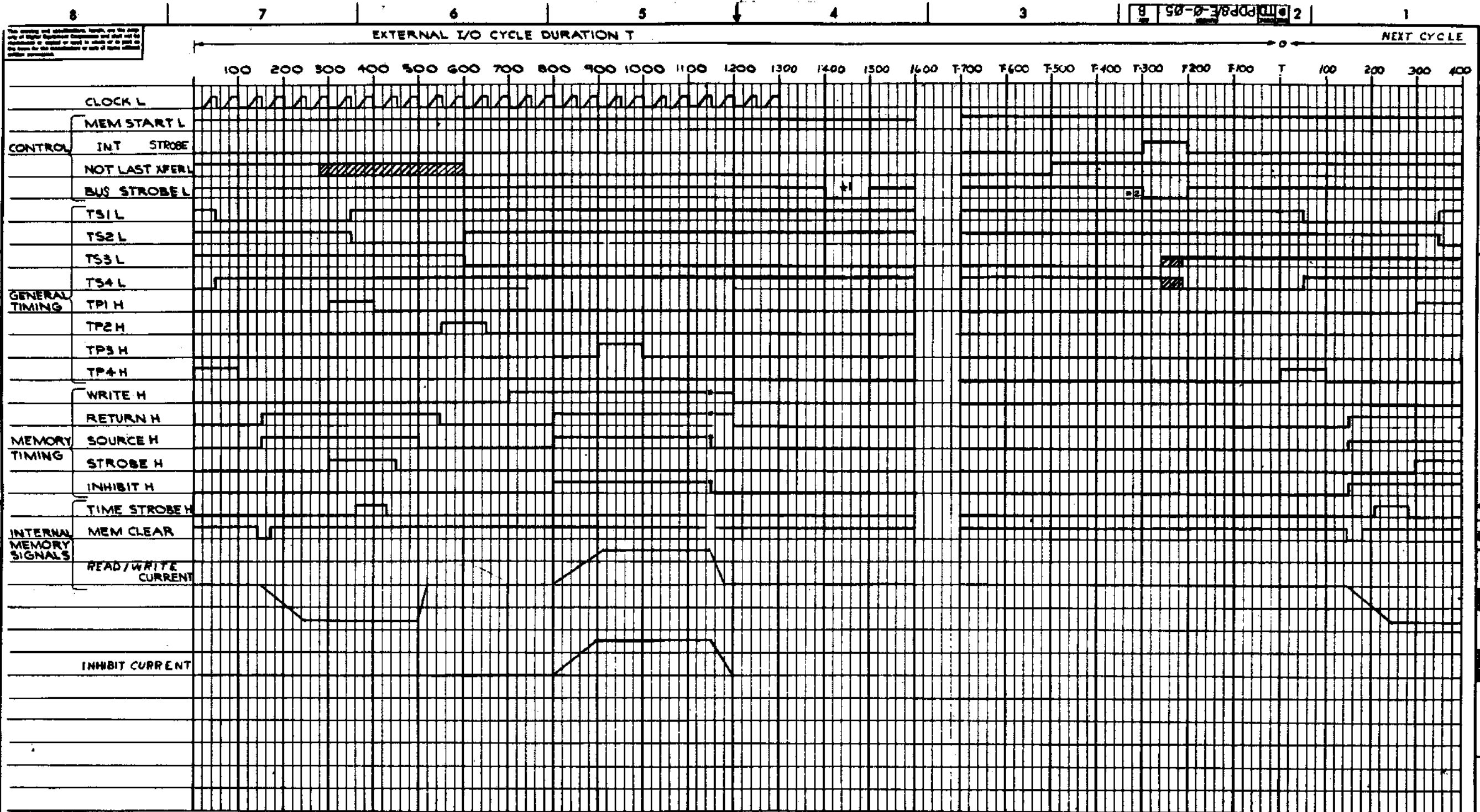
CIRCUIT DELAYS ARE NEGLECTED IN THIS TIMING DIAGRAM

REVISIONS

REV.	DATE	BY	CHK
1			
2			
3			
4			
5			
6			
7			
8			

NA BHT
 BE-00049
 11-10-71
 L. KLOTZ

FIRST USED ON OPT/MOD		QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8/E					
UNLESS OTHERWISE SPECIFIED					
TOLERANCES UNLESS OTHERWISE SPECIFIED					
DIMENSIONS IN INCHES					
DIMENSIONS IN MILLIMETERS					
FRACTIONS TO DECIMALS					
DECIMALS TO FRACTIONS					
FINAL SURFACE QUALITY					
REMOVE BURRS AND SHARP EDGES					
CHANGES					
MATERIAL					
NEXT HIGHER ASSY					
A-ML-PDP8/E-0					
SCALE NONE					
SHEET 1 OF 2					
			PARTS LIST		
digital EQUIPMENT CORPORATION			REVISIONS		
TITLE			NUMBER		
TIMING (PDP8/E)			DITD PDP8/E-0-05		
REV. B					



NOTE: * MEMORY SIGNALS TIME OUT, AS IN A FAST CYCLE
 * 1 GENERATED BY PERIPHERAL TO STROBE DATA
 * 2 GENERATED BY PERIPHERAL TO TERMINATE EXT. I/O CYCLE AND RESUME NORMAL OPERATION.

REV.	DESCRIPTION	DATE	BY
1	INITIAL DESIGN	1-7-71	[Signature]
2	DESIGN CHANGES	1-15-71	[Signature]
3	DESIGN CHANGES	1-15-71	[Signature]
4	DESIGN CHANGES	1-15-71	[Signature]
5	DESIGN CHANGES	1-15-71	[Signature]

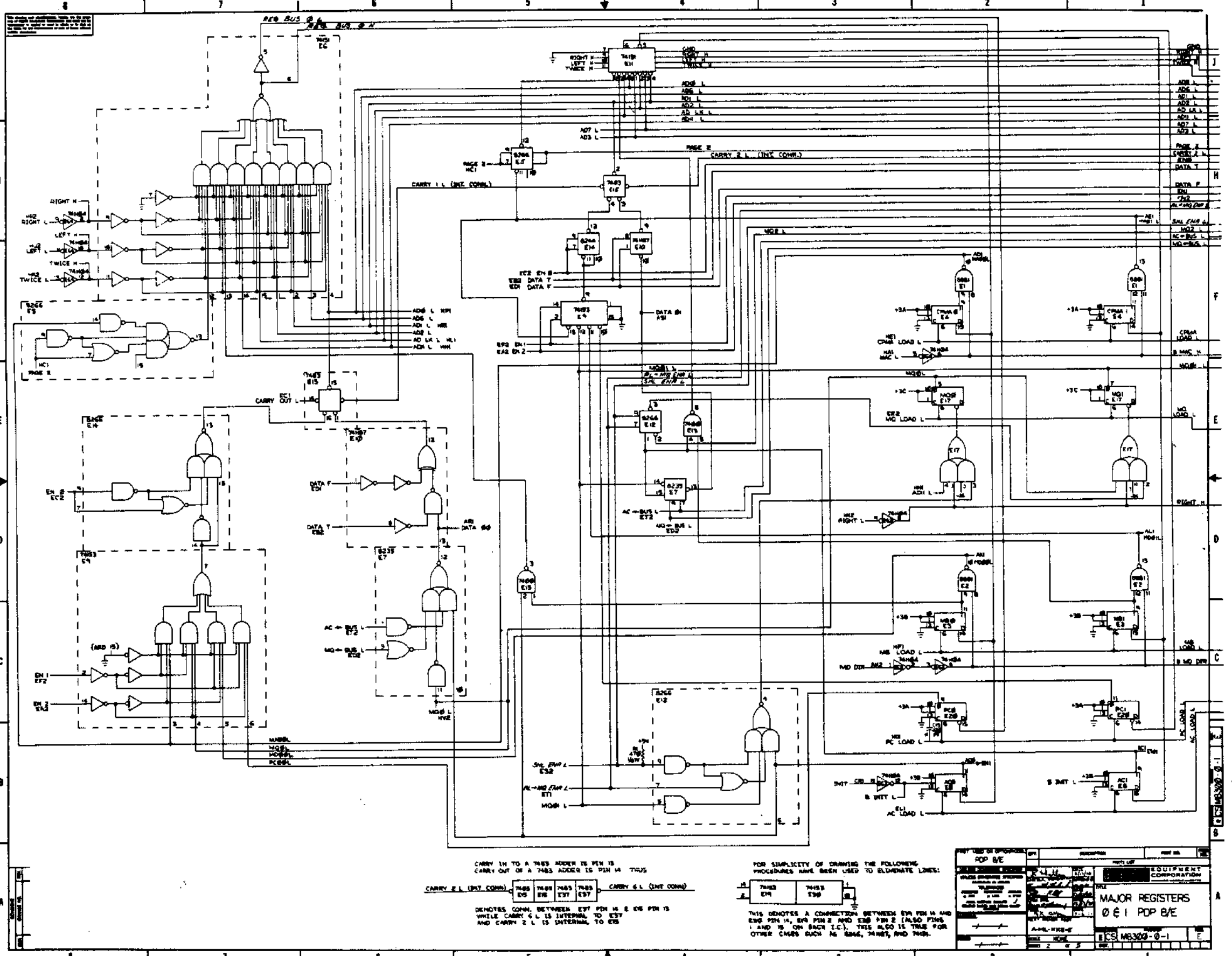
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES	TOLERANCES
FRACTIONS	FRACTIONS
DECIMALS	DECIMALS
± .010	± .010
± .005	± .005
± .002	± .002
± .001	± .001
± .0005	± .0005
± .0002	± .0002
± .0001	± .0001

REV. 2	REV. 1
REV. 1	REV. 2

REV. 2	REV. 1
REV. 1	REV. 2

TIMING
(PDP8/E)

DTD PDP8/E-0-05 B

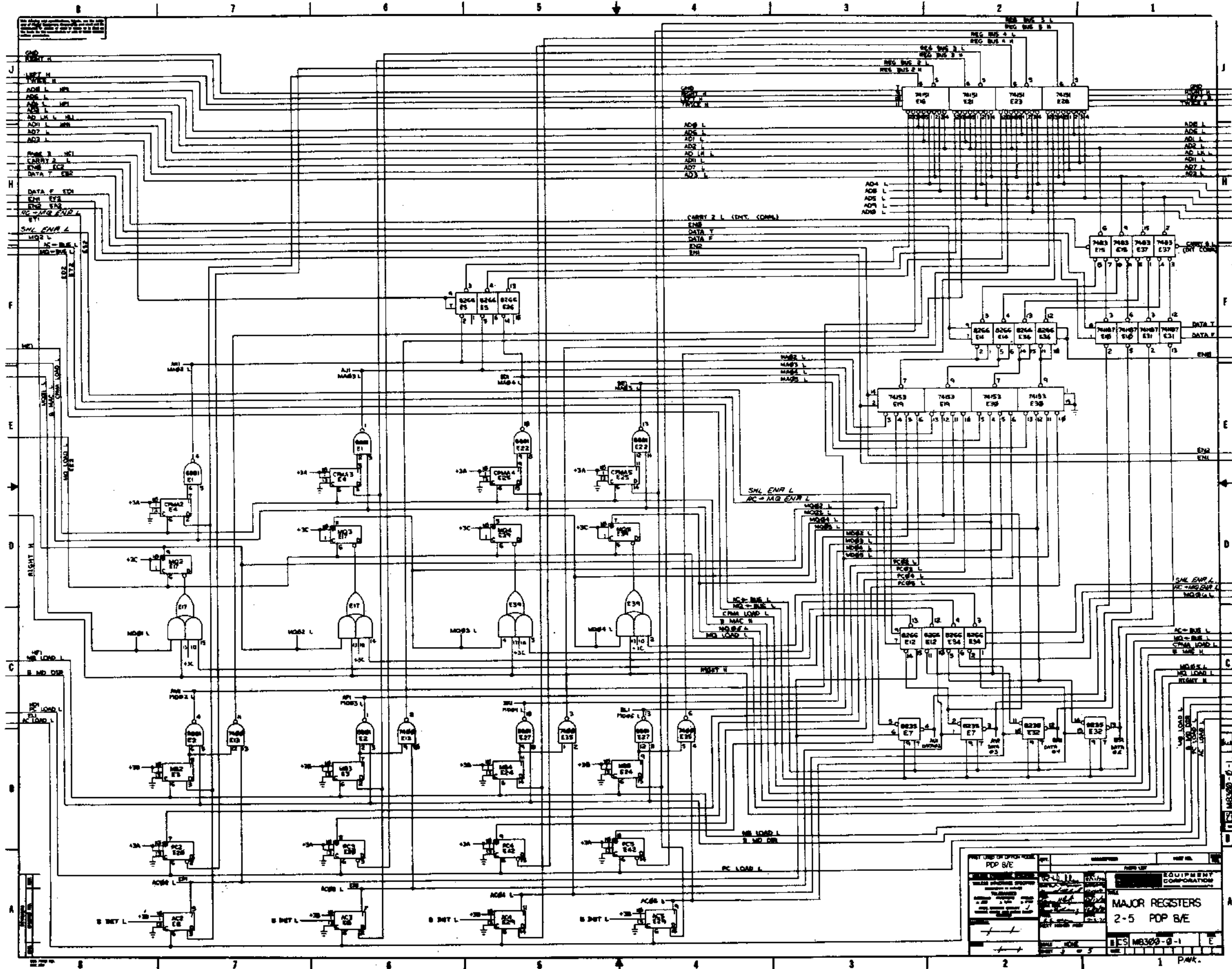


CARRY IN TO A 7493 ADDER IS PIN 15
 CARRY OUT OF A 7493 ADDER IS PIN 14
 CARRY 1 L (INT. CONN.) 7493 7493 7493 7493 CARRY 2 L (INT. CONN.)
 DENOTES CONN. BETWEEN E77 PIN 14 & E76 PIN 15
 WHILE CARRY 2 L IS INTERNAL TO E77
 AND CARRY 1 L IS INTERNAL TO E76

FOR SIMPLICITY OF DRAWING THE FOLLOWING
 PROCEDURES HAVE BEEN USED TO ELIMINATE LINES:

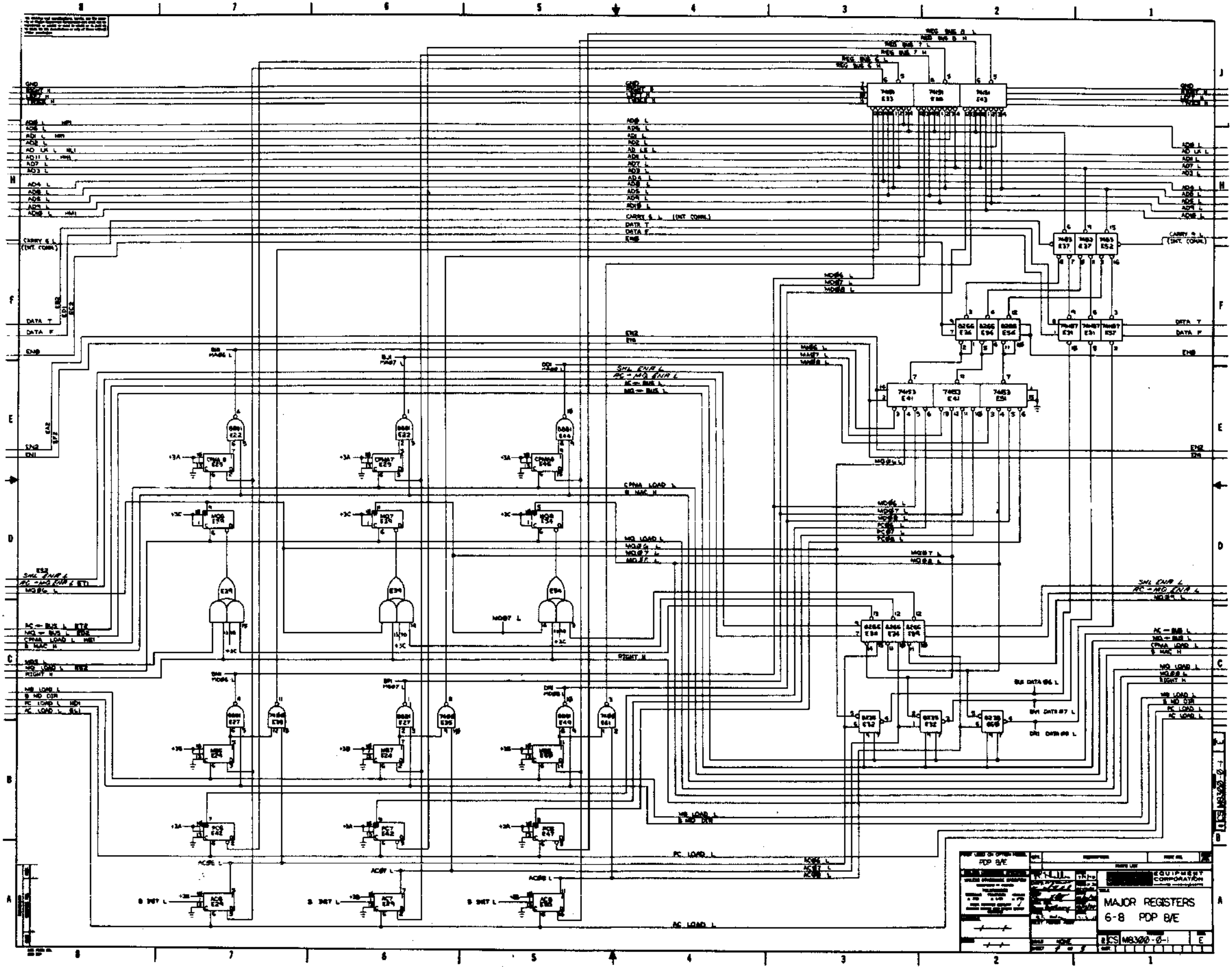
 THIS DENOTES A CONNECTION BETWEEN E74 PIN 14 AND
 E76 PIN 14, E76 PIN 2 AND E76 PIN 2 (ALSO PINS
 1 AND 15 ON EACH I.C.). THIS ALSO IS TRUE FOR
 OTHER CHIPS SUCH AS E66, 7492, AND 7493.

REV. 1	REV. 2	REV. 3	REV. 4	REV. 5	REV. 6	REV. 7	REV. 8	REV. 9	REV. 10
<p>MAJOR REGISTERS 0E1 POP B/E</p> <p>CS 18300-0-1</p>									

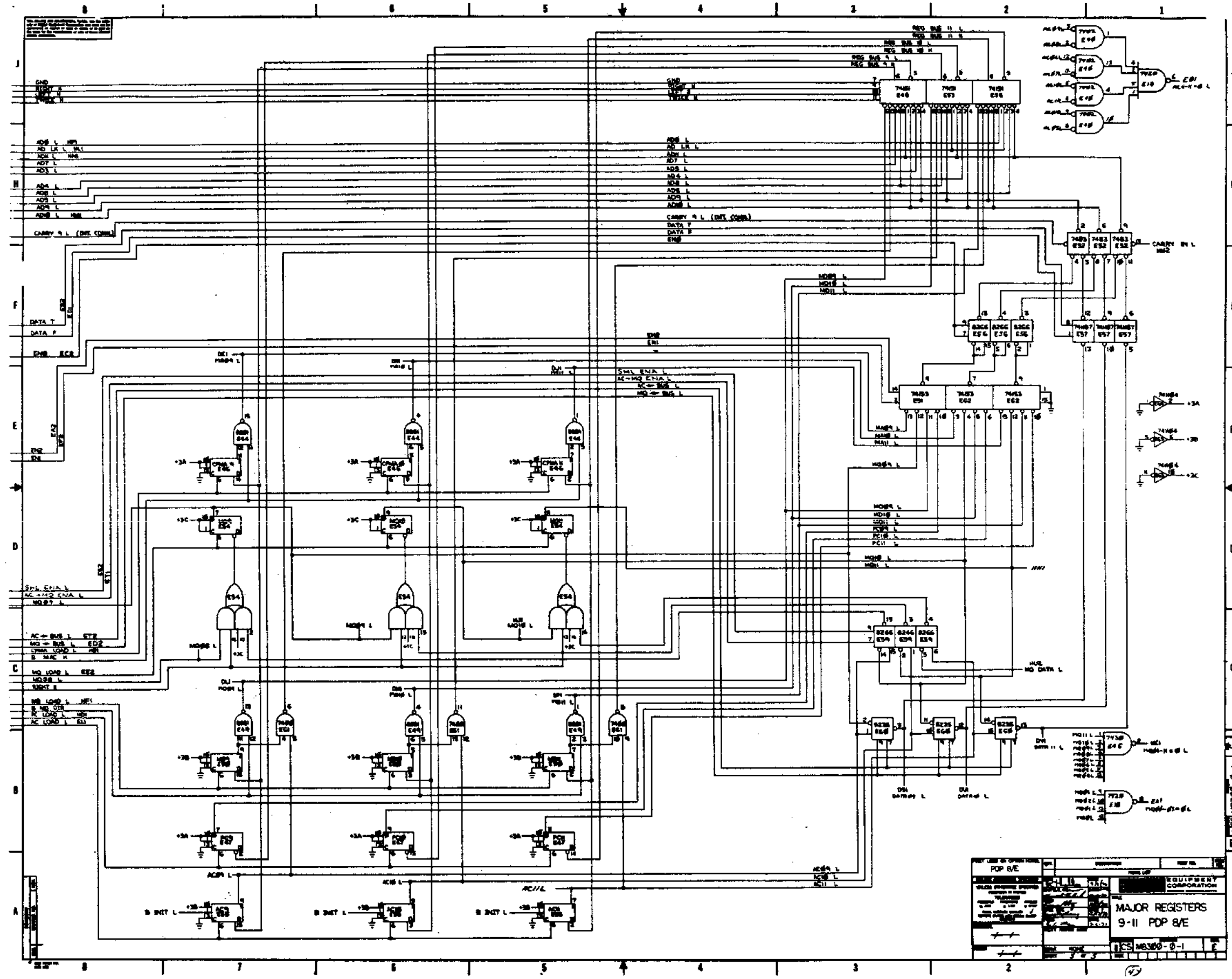


<p>POP 8/E</p> <p>MAJOR REGISTERS</p> <p>2-5 POP 8/E</p>	<p>EQUIPMENT CORPORATION</p> <p>MAJOR REGISTERS</p> <p>2-5 POP 8/E</p>
--	--

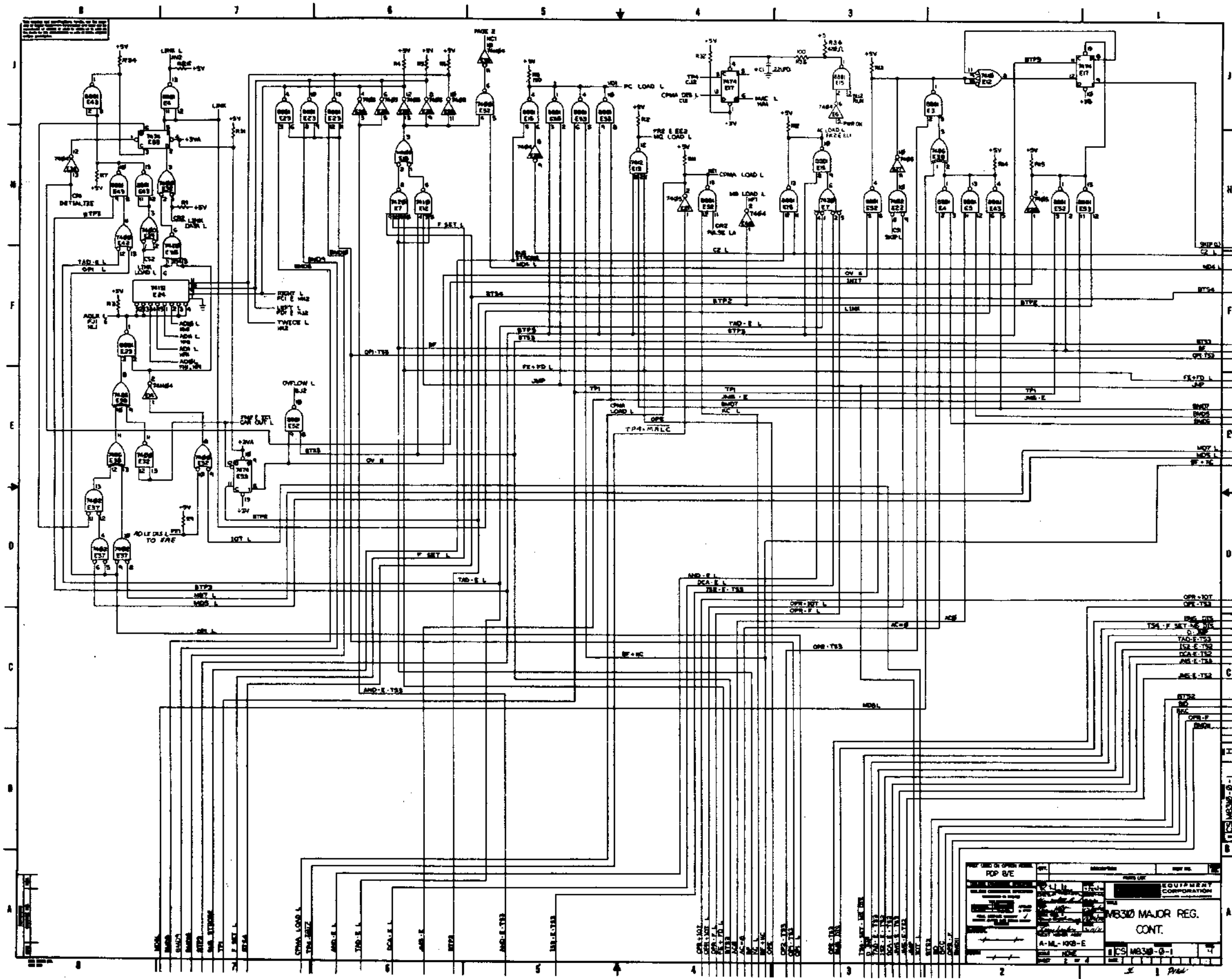
Part Number: BES M8368-8-1



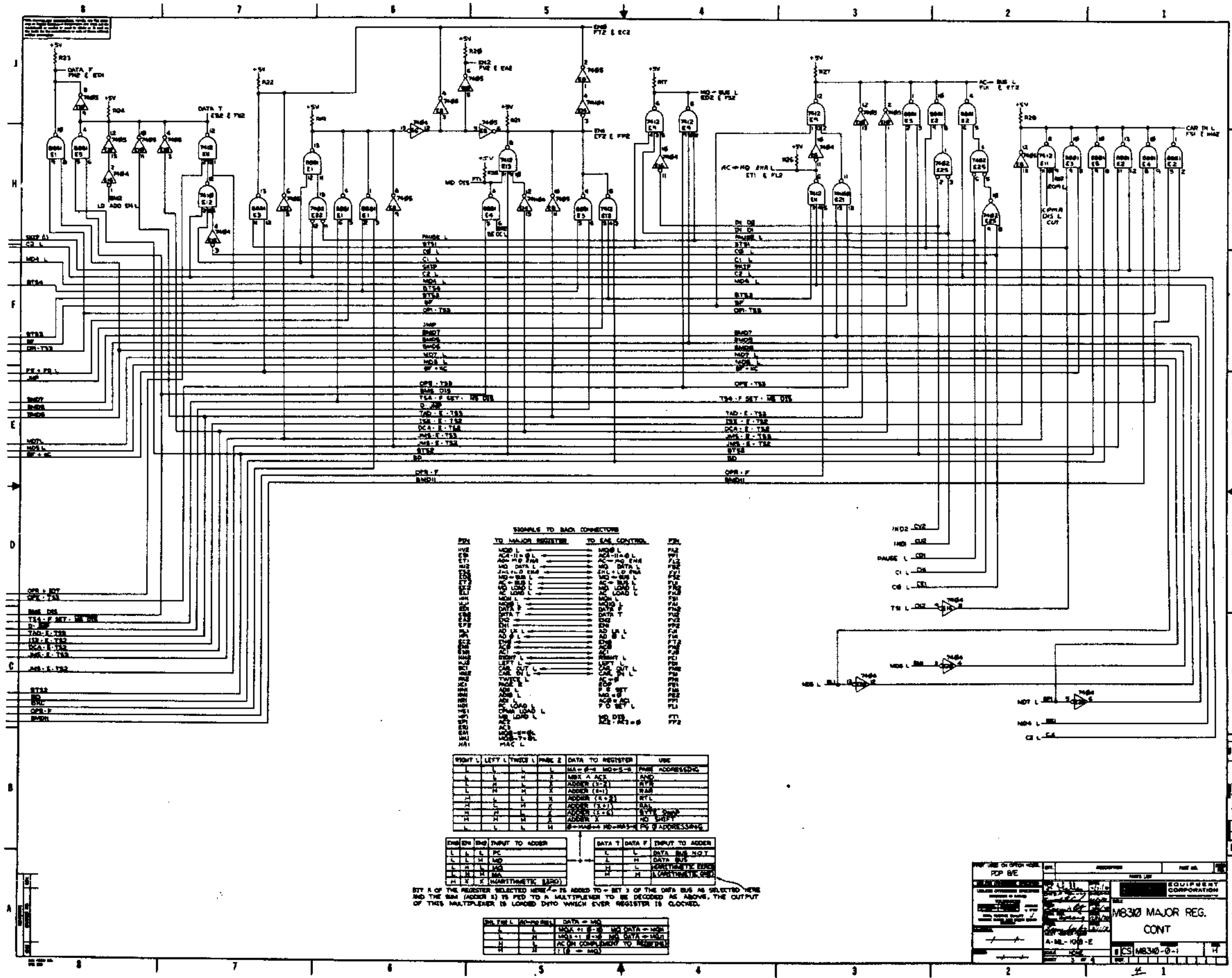
PDP 8/E MAJOR REGISTERS 6-8 PDP 8/E BCS M8300-0-1		EQUIPMENT CORPORATION	
MAJOR REGISTERS 6-8 PDP 8/E		BCS M8300-0-1	



PDP 8/E		EQUIPMENT CORPORATION	
MAJOR REGISTERS		9-11 PDP 8/E	
REV. 10-68		ECS 86300-0-1	



POP 8/E <small>POP 8/E</small>		<small>REV. 1</small> <small>1964</small>
EQUIPMENT CORPORATION <small>10000 W. 10th Ave., Denver, Colorado</small>		<small>10000 W. 10th Ave., Denver, Colorado</small>
MB310 MAJOR REG. CONT.		<small>10000 W. 10th Ave., Denver, Colorado</small>
<small>A-M-1008-E</small>		<small>ICS MB310-0-1</small>



SAMPLE TO EACH CONNECTOR

CPM	TO MAJOR REGISTER	TO CPU CONTROL	CPM
STOP	STOP	STOP	STOP
W	W	W	W
...
NO	NO	NO	NO
...
NO	NO	NO	NO
...

RIGHT 1	LEFT 1	TRICE 1	PAGE 2	DATA TO REGISTER	USE
L	L	L	L	MA - 0 - MD - 0 - 0	PAGE ADDRESSING
L	L	L	L	MAX - A - AC	AND
L	H	L	L	ADDRESS (1-2)	TYPE
L	L	L	L	ADDRESS (3-4)	RTL
L	L	L	L	ADDRESS (5-6)	HAL
L	L	L	L	ADDRESS (7-8)	DATA BUS
L	L	L	L	ADDRESS (9-10)	DATA BUS
L	L	L	L	ADDRESS (11-12)	DATA BUS
L	L	L	L	ADDRESS (13-14)	DATA BUS
L	L	L	L	ADDRESS (15-16)	DATA BUS
L	L	L	L	ADDRESS (17-18)	DATA BUS
L	L	L	L	ADDRESS (19-20)	DATA BUS
L	L	L	L	ADDRESS (21-22)	DATA BUS
L	L	L	L	ADDRESS (23-24)	DATA BUS
L	L	L	L	ADDRESS (25-26)	DATA BUS
L	L	L	L	ADDRESS (27-28)	DATA BUS
L	L	L	L	ADDRESS (29-30)	DATA BUS
L	L	L	L	ADDRESS (31-32)	DATA BUS
L	L	L	L	ADDRESS (33-34)	DATA BUS
L	L	L	L	ADDRESS (35-36)	DATA BUS
L	L	L	L	ADDRESS (37-38)	DATA BUS
L	L	L	L	ADDRESS (39-40)	DATA BUS
L	L	L	L	ADDRESS (41-42)	DATA BUS
L	L	L	L	ADDRESS (43-44)	DATA BUS
L	L	L	L	ADDRESS (45-46)	DATA BUS
L	L	L	L	ADDRESS (47-48)	DATA BUS
L	L	L	L	ADDRESS (49-50)	DATA BUS
L	L	L	L	ADDRESS (51-52)	DATA BUS
L	L	L	L	ADDRESS (53-54)	DATA BUS
L	L	L	L	ADDRESS (55-56)	DATA BUS
L	L	L	L	ADDRESS (57-58)	DATA BUS
L	L	L	L	ADDRESS (59-60)	DATA BUS
L	L	L	L	ADDRESS (61-62)	DATA BUS
L	L	L	L	ADDRESS (63-64)	DATA BUS
L	L	L	L	ADDRESS (65-66)	DATA BUS
L	L	L	L	ADDRESS (67-68)	DATA BUS
L	L	L	L	ADDRESS (69-70)	DATA BUS
L	L	L	L	ADDRESS (71-72)	DATA BUS
L	L	L	L	ADDRESS (73-74)	DATA BUS
L	L	L	L	ADDRESS (75-76)	DATA BUS
L	L	L	L	ADDRESS (77-78)	DATA BUS
L	L	L	L	ADDRESS (79-80)	DATA BUS
L	L	L	L	ADDRESS (81-82)	DATA BUS
L	L	L	L	ADDRESS (83-84)	DATA BUS
L	L	L	L	ADDRESS (85-86)	DATA BUS
L	L	L	L	ADDRESS (87-88)	DATA BUS
L	L	L	L	ADDRESS (89-90)	DATA BUS
L	L	L	L	ADDRESS (91-92)	DATA BUS
L	L	L	L	ADDRESS (93-94)	DATA BUS
L	L	L	L	ADDRESS (95-96)	DATA BUS
L	L	L	L	ADDRESS (97-98)	DATA BUS
L	L	L	L	ADDRESS (99-100)	DATA BUS
L	L	L	L	ADDRESS (101-102)	DATA BUS
L	L	L	L	ADDRESS (103-104)	DATA BUS
L	L	L	L	ADDRESS (105-106)	DATA BUS
L	L	L	L	ADDRESS (107-108)	DATA BUS
L	L	L	L	ADDRESS (109-110)	DATA BUS
L	L	L	L	ADDRESS (111-112)	DATA BUS
L	L	L	L	ADDRESS (113-114)	DATA BUS
L	L	L	L	ADDRESS (115-116)	DATA BUS
L	L	L	L	ADDRESS (117-118)	DATA BUS
L	L	L	L	ADDRESS (119-120)	DATA BUS
L	L	L	L	ADDRESS (121-122)	DATA BUS
L	L	L	L	ADDRESS (123-124)	DATA BUS
L	L	L	L	ADDRESS (125-126)	DATA BUS
L	L	L	L	ADDRESS (127-128)	DATA BUS
L	L	L	L	ADDRESS (129-130)	DATA BUS
L	L	L	L	ADDRESS (131-132)	DATA BUS
L	L	L	L	ADDRESS (133-134)	DATA BUS
L	L	L	L	ADDRESS (135-136)	DATA BUS
L	L	L	L	ADDRESS (137-138)	DATA BUS
L	L	L	L	ADDRESS (139-140)	DATA BUS
L	L	L	L	ADDRESS (141-142)	DATA BUS
L	L	L	L	ADDRESS (143-144)	DATA BUS
L	L	L	L	ADDRESS (145-146)	DATA BUS
L	L	L	L	ADDRESS (147-148)	DATA BUS
L	L	L	L	ADDRESS (149-150)	DATA BUS
L	L	L	L	ADDRESS (151-152)	DATA BUS
L	L	L	L	ADDRESS (153-154)	DATA BUS
L	L	L	L	ADDRESS (155-156)	DATA BUS
L	L	L	L	ADDRESS (157-158)	DATA BUS
L	L	L	L	ADDRESS (159-160)	DATA BUS
L	L	L	L	ADDRESS (161-162)	DATA BUS
L	L	L	L	ADDRESS (163-164)	DATA BUS
L	L	L	L	ADDRESS (165-166)	DATA BUS
L	L	L	L	ADDRESS (167-168)	DATA BUS
L	L	L	L	ADDRESS (169-170)	DATA BUS
L	L	L	L	ADDRESS (171-172)	DATA BUS
L	L	L	L	ADDRESS (173-174)	DATA BUS
L	L	L	L	ADDRESS (175-176)	DATA BUS
L	L	L	L	ADDRESS (177-178)	DATA BUS
L	L	L	L	ADDRESS (179-180)	DATA BUS
L	L	L	L	ADDRESS (181-182)	DATA BUS
L	L	L	L	ADDRESS (183-184)	DATA BUS
L	L	L	L	ADDRESS (185-186)	DATA BUS
L	L	L	L	ADDRESS (187-188)	DATA BUS
L	L	L	L	ADDRESS (189-190)	DATA BUS
L	L	L	L	ADDRESS (191-192)	DATA BUS
L	L	L	L	ADDRESS (193-194)	DATA BUS
L	L	L	L	ADDRESS (195-196)	DATA BUS
L	L	L	L	ADDRESS (197-198)	DATA BUS
L	L	L	L	ADDRESS (199-200)	DATA BUS

BIT 4 OF THE REGISTER SELECTED HERE IS ADDED TO BIT 1 OF THE DATA BUS AS SELECTED AND THE SIGN (ADDRESS) IS FED TO A MULTIPLEXER TO BE DECIDED AS ABOVE. THE OUTPUT OF THIS MULTIPLEXER IS LOADED INTO WHICH EVER REGISTER IS Clocked.

BIT 4 OF REGISTER SELECTED HERE	DATA = 0	DATA = 1
L	NO DATA = 0	NO DATA = 0
L	NO DATA = 1	NO DATA = 0
H	NO DATA = 0	NO DATA = 1
H	NO DATA = 1	NO DATA = 1

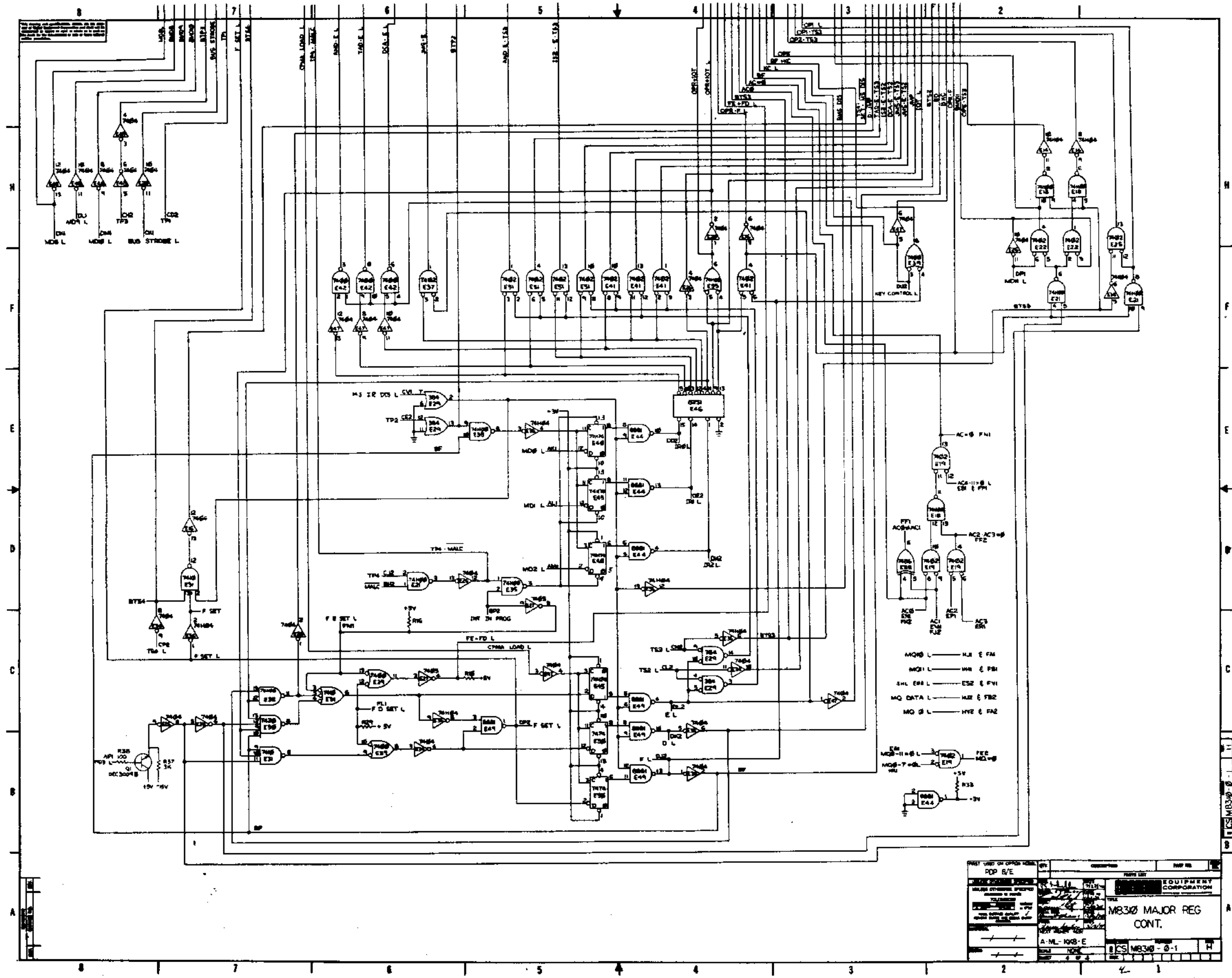
POP DE

EQUIPMENT COMPOSITION

M6310 MAJOR REG. CONT

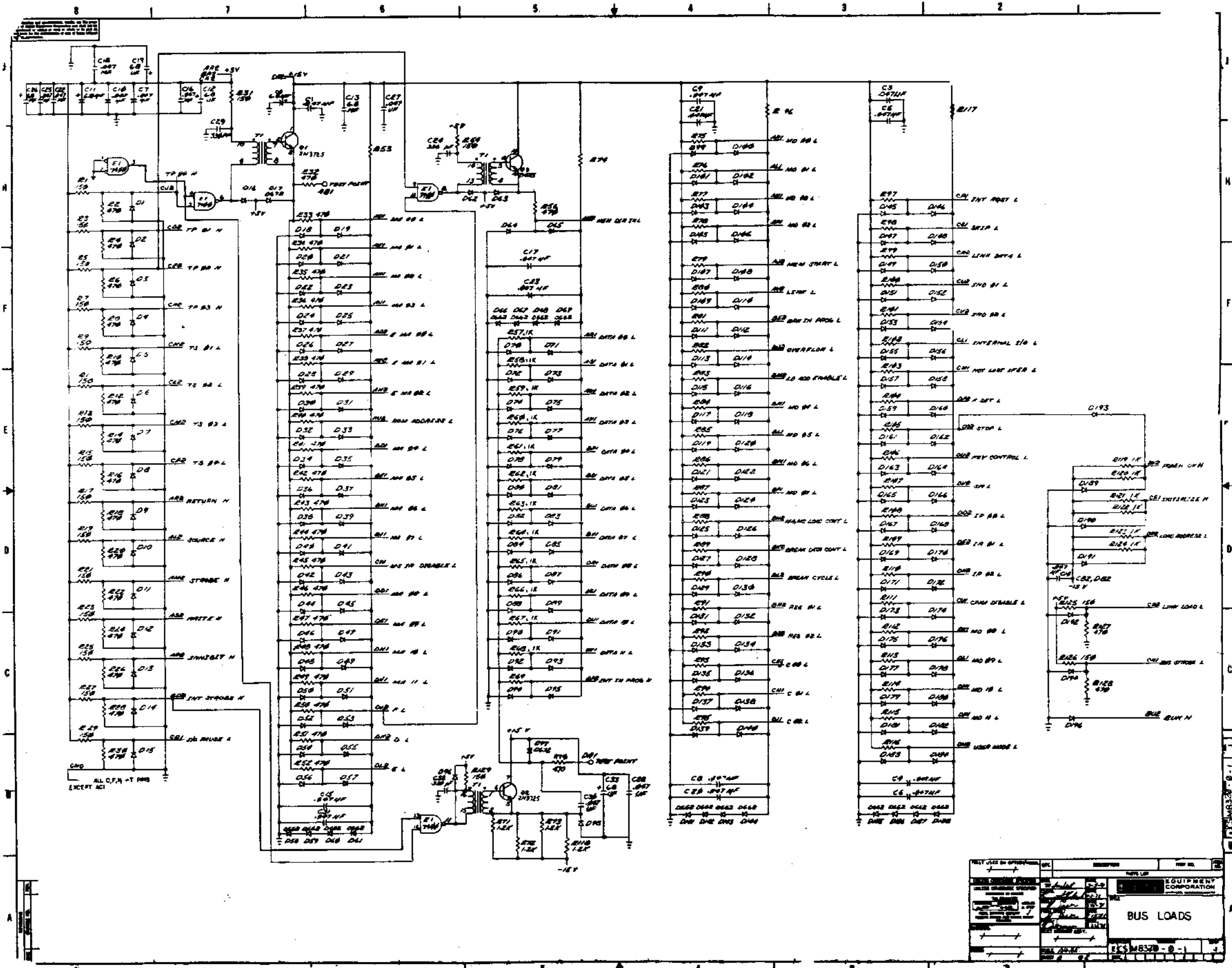
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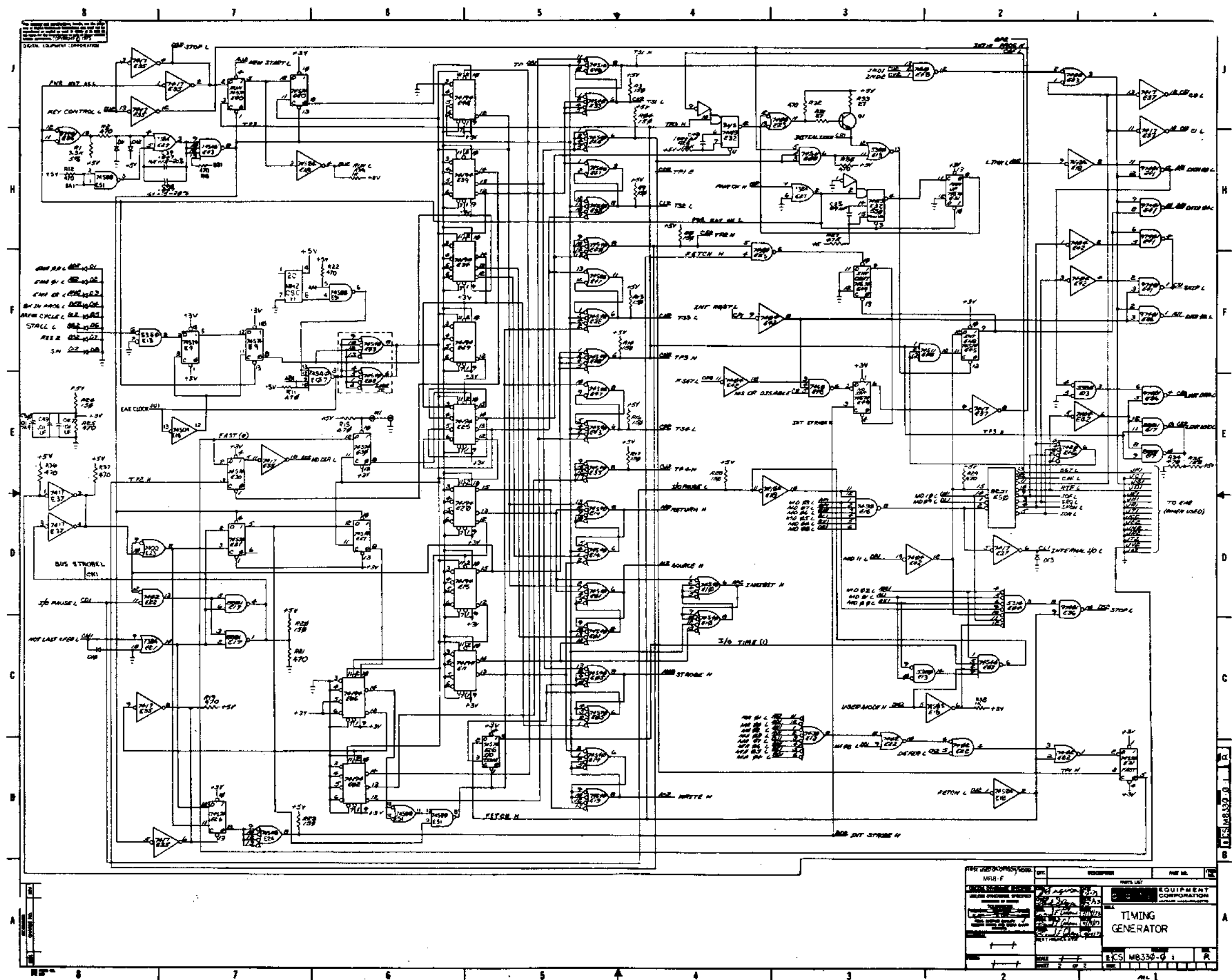
CS M6310-0-1



NOT USED ON OTHER REGS
 POP B/E
 A-ML-1008-E
 EQS M8342-0-1

EQUIPMENT CORPORATION
M8342 MAJOR REG
CONT.
 EQS M8342-0-1





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**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 11/19/74

TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR KM8-A

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG <i>Larry Nash</i>	APPD <i>Carl Chio</i>	SIZE A	CODE SP	NUMBER KM8-A-1	REV
-----------------------	-----------------------	---------------	---------	----------------	-----

DEC 16-(392)-1079-N971
ORA 107

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR KM8-A

I GENERAL

This procedure defines the performance standards required of the KM8A*, option board #2. This procedure refers to both system and add-on acceptance.

NOTE: If KM8A was shipped as part of a PDP-8A system, then proceed to installation procedure.

- * Memory Extension & Time Share
- Bootstrap Loaders
- Power Fail/Auto Restart

II INSPECTION

After removing the KM8A from the packing material, inspect the module for the following:

1. Inventory hardware against shipping list.
2. Inventory software against software list, if ordered.
3. Inventory prints against shipping list, if ordered.
4. Check module for loose or broken components.

III INSTALLATION PROCEDURE

Install the equipment using the following procedure:

1. Set the switches as indicated by the diagnostic write up.

NOTE: Refer to Operator's Handbook for switch setting descriptions.

2. Insure that the PDP-8A power is removed from the Omnibus™.
3. Insert the KM8A into the second or third slot of the Omnibus™.
4. Turn the power back "ON".

IV ACCEPTANCE PROCEDURE

Perform the acceptance procedure defined in Table A. If abnormal indications are encountered, refer to the diagnostic listing for the type of error. Reference the diagnostic write ups and Operator's Manual for instructions for loading diagnostics.

SIZE A	CODE SP	NUMBER KM8-A-1	REV
---------------	---------	----------------	-----

DEC FORM NO DEC 16-(391)-1022-N370
ORA 108

TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR KM8-A

IV ACCEPTANCE PROCEDURE (continued)

Equipment required:

1. PDP-8A with 1K min. R/W Memory
2. Paper Tape Input Device
3. Diagnostic and Listings
4. Programmer's Console (KC8-A & DKC8-A)
5. W987 Quad Extender

NOTE: If the programmer's console and paper tape input device are not available as part of the system being used, they must be supplied in good working order by the customer.

TABLE A

Acceptance of KM8A with 4K of R/W Memory

<u>Program Name</u>	<u>Maindec #</u>	<u>Accept Time</u>	<u>Restrictions</u>
KM8A Option Test #2	08-DJKMA-PB	30 min	4K R/W Memory Min

Acceptance of KM8A with Less than 4K R/W Memory

KM8A Option Test #2 Segment #1 (RIM)	08-DJKMA -PM1	10 min	1K R/W memory min
KM8A Option Test #2 Segment #2 (RIM)	08-DJKMA -PM2	10 min	1K R/W Memory Min
KM8A Option Test #2 Segment #4 (RIM)	08-DJKMA -PM4	10 min	1K R/W Memory Min

SIZE	CODE	NUMBER	REV
A	SP	KM8-A-1	

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BOOTSTRAP/AUTO RESTART FUNCTIONAL SWITCH SETTINGS

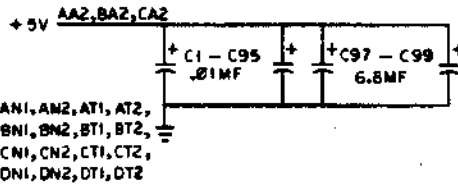
DESIRED FUNCTION	ACTIVATING SIGNAL	SI-4	SI-5	SI-6	SI-7	SI-8	S2-1
BOOTSTRAP ENABLED	"BOOT" SW	*	SPARE	OFF	OFF	ON	N/A
AUTO-RESTART DISABLED	N/A	*		ON	ON	ON	N/A
BOOTSTRAP ENABLED	"BOOT" SW	*		ON	ON	ON	N/A
AUTO-RESTART DISABLED	"AC LOW"	*		ON	ON	OFF	N/A
BOOTSTRAP ENABLED	"AC LOW"	*		ON	OFF	OFF	N/A
AUTO-RESTART DISABLED	N/A	*		ON	OFF	OFF	N/A
BOOTSTRAP ENABLED	"AC LOW" OR "BOOT" SW	*	SPARE	ON	OFF	ON	N/A
AUTO-RESTART DISABLED	N/A	*		ON	OFF	ON	N/A
TIME SHARE DISABLED	N/A	N/A	N/A	N/A	N/A	N/A	ON
TIME SHARE DISABLED	N/A	N/A	N/A	N/A	N/A	N/A	OFF

- NOTES:
- * SI-4 "OFF"-BOOTSTRAP CAN BE ACTIVATED BY "BOOT" SW EITHER IN THE RUN OR "RUN" STATE. SI-4 "ON"-BOOTSTRAP CAN BE ACTIVATED BY "BOOT" SW IN THE RUN STATE.
 - 1. "AC LOW" WILL CAUSE AUTO-RESTART OR BOOTSTRAP DEPENDING ON SWITCH SETTINGS TO OCCUR ONLY IN THE "RUN" OR STOPPED STATE. SI-6, 7, 8 "OFF"-BOOTSTRAP AND AUTO-RESTART DISABLED.
 - 2. E76 AND E81 ARE NOT ON THE YC VARIATION KMB-AD. ALL OTHER PARTS REMAIN THE SAME.
 - 3. IF AUTO-RESTART IS ENABLED, THE AUTO-START FEATURE OF THE CPU (M8315) MUST BE DISABLED.

BOOTSTRAP SELECT SWITCH SETTINGS FOR 158A2/159A2 ROMS

PROGRAM	S2-5	S2-6	S2-7	S2-8	SI-1	SI-2	SI-3	ROM ST ADD	MEM ADD START
HI-LO PTR RDR	ON	ON	ON	OFF	ON	ON	ON	20	7734
RK8E	ON	OFF	ON	OFF	ON	OFF	ON	124	24
RX8E	ON	OFF	OFF	ON	OFF	ON	ON	150	33
RQ8/DF32D	OFF	ON	OFF	ON	OFF	ON	ON	252	7750
TABE	OFF	ON	OFF	OFF	OFF	ON	OFF	272	4000

3. BOOTSTRAP SELECT SWITCHES ARE DEFINED AS FOLLOWS:
- A. ROM ADDRESS RANGE: 0-377
 - B. ON=LOGIC 0 OR LOW; OFF=LOGIC 1 OR HIGH
 - C. ORDER OF SIGNIFICANCE
 - $S_{25} = 2^7 = 200$
 - $S_{26} = 2^6 = 100$
 - $S_{27} = 2^5 = 40$
 - $S_{28} = 2^4 = 20$
 - $S_{11} = 2^3 = 10$
 - $S_{12} = 2^2 = 4$
 - $S_{13} = 2^1 = 2$
- THE LSE OF ADDRESS IS CONTROLLED BY THE BOOTSTRAP/AUTO-RESTART LOGIC



BOOTSTRAP SELECT SWITCH SETTINGS FOR 465A2/469A2 ROMS

PROGRAM	S2-5	S2-6	S2-7	S2-8	SI-1	SI-2	SI-3	ROM ST ADD	MEM ST ADD
HI-LO PTR	ON	ON	ON	OFF	ON	ON	ON	20	7734
RK8E	ON	OFF	ON	OFF	ON	OFF	ON	124	24
RX8E	ON	OFF	OFF	ON	OFF	ON	ON	150	33
RL8A	OFF	ON	OFF	OFF	OFF	ON	OFF	272	1

* RX8E BOOT FOR BOTH RX01 AND RX02

AUTO-RESTART SELECT SWITCH SETTINGS

RESTART ADDRESS	S2-2	S2-3	S2-4
0	OFF	OFF	OFF
200	OFF	ON	OFF
2000	ON	OFF	OFF
4000	ON	ON	OFF

4. AUTO RESTART SELECT SWITCHES ARE DEFINED AS FOLLOWS:
- A. ROM ADDRESS RANGE: 0-16
 - B. ON=LOGIC 1 OR LOW; OFF=LOGIC 0 OR HIGH.
 - C. ORDER OF SIGNIFICANCE
 - $S_{22} = 2^3 = 10$
 - $S_{23} = 2^2 = 4$
 - $S_{24} = 2^1 = 2$
5. TO CONFIGURE MODULE FOR USE WITH KTB-A OPTION, INSTALL JUMPERS AS SHOWN BELOW.

	W1	W2	W3	W4
NORMAL	IN	OUT	CUT	CUT
WITH KTB-A	OUT	IN	IN	IN

PART CALLED FCR				SUBSTITUTE PART			
QTY	PART NO	DESCRIPTION	QTY	PART NO	DESCRIPTION		
96	1001610-01	.01UF DISC	96	1001610-01	.01UF GLASS		
3	1503100	DEC 3009B	3	1503230	DEC 6531		
6	1911330	74173	6	1911711	8TIC		
1	1909704	314	1	1910391	5314		
			1	19C9972	6314		
			1	1910389	7314		
6	19C9705	6661	6	19C9973	97401		
1	23158A2	RCM1 (E76)	1	23463A2	RCM1 (E76)		
1	23159A2	RCM2 (E81)	1	23469A2	RCM2 (E81)		

REVISION HISTORY

REV	DATE	DESCRIPTION
1	07/16/80	INITIAL
2	07/21/80	REVISION
3	08/01/80	REVISION
4	08/01/80	REVISION
5	08/01/80	REVISION

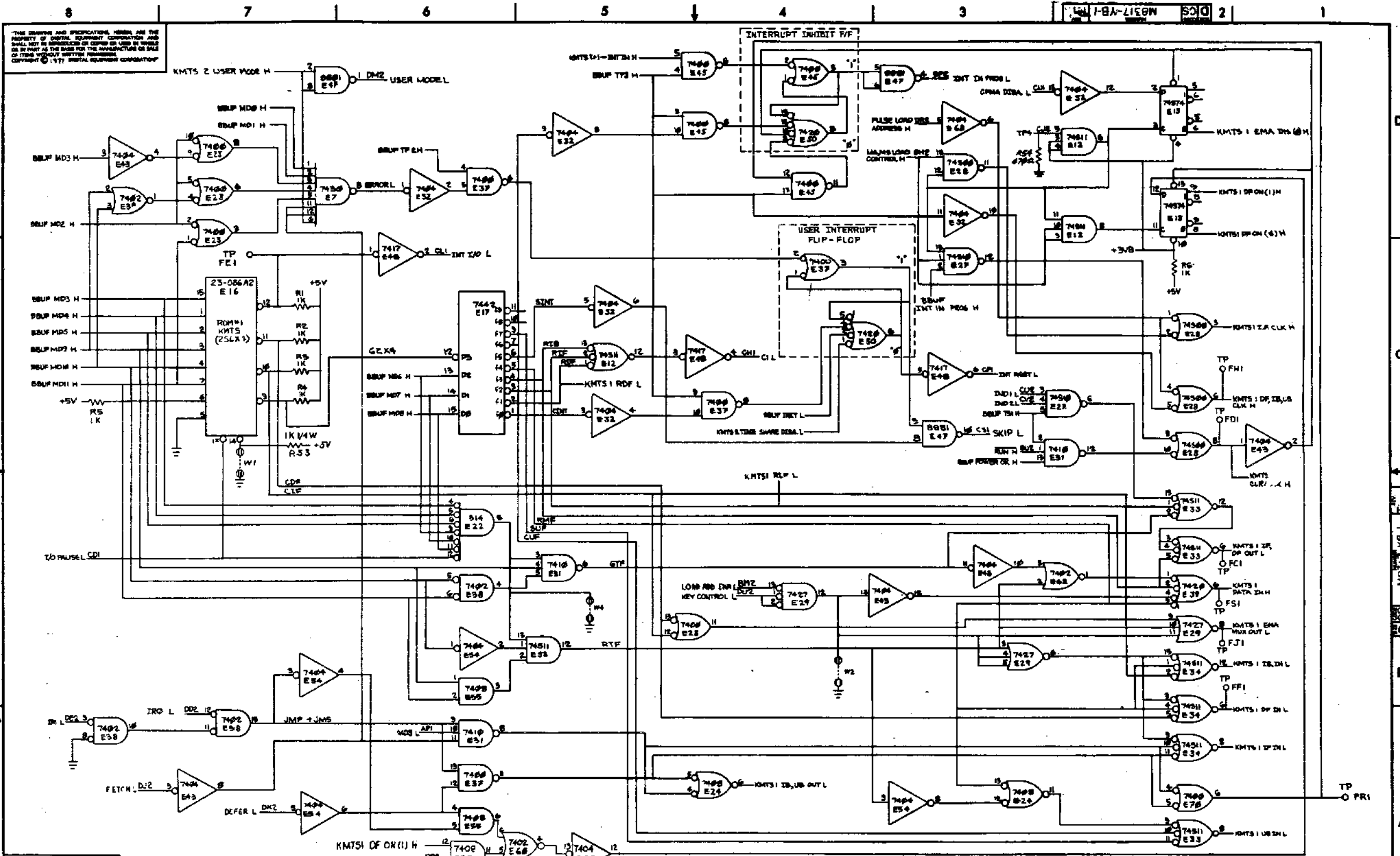
OPTICN BOARD # 2

DOCUMENT NUMBER

CS M8317-YB-1 T

B-DD-M8317-YB

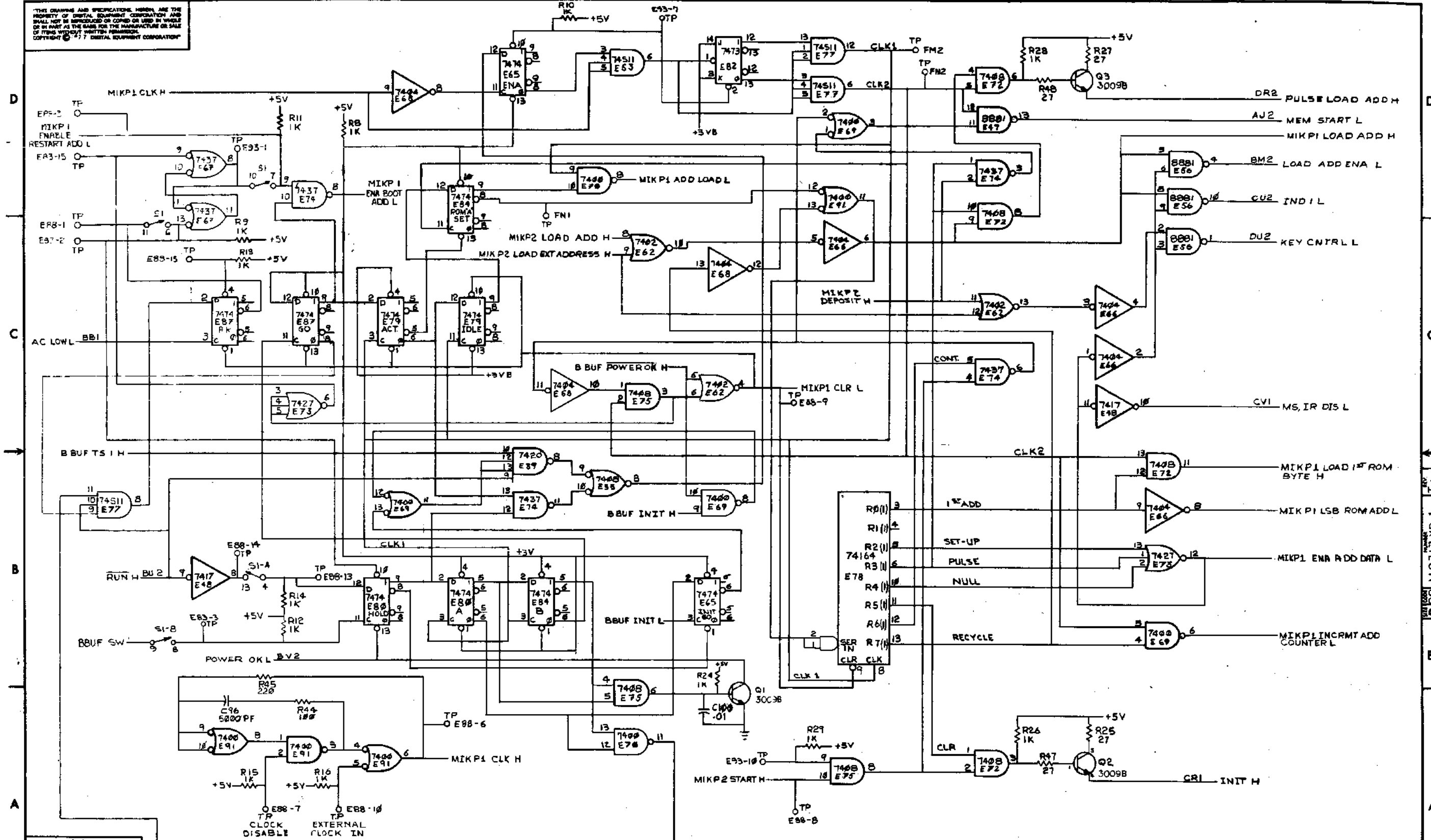
DCS M8317-YB-1



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		MEMBER		REV.	
OPTION BOARD #2		D CS		1	
(KMTS 1)		M8317-YB-1			
SCALE	SHEET	OF	TOTAL		
NONE	2	OF	6		

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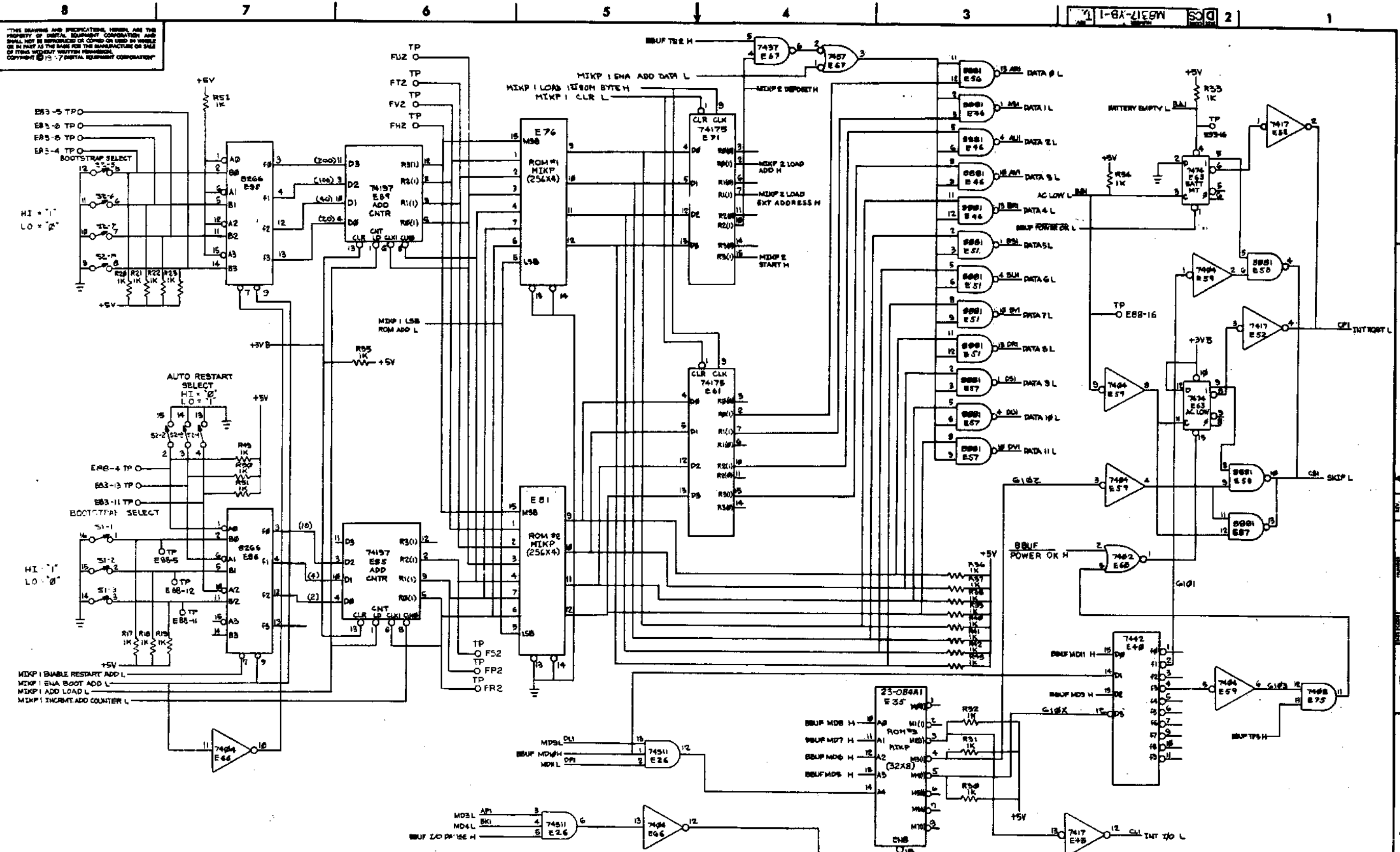


REVISIONS		
CHK	CHANGE NO.	REV.

BOOTSTRAP/AUTORESTART CONTROL

TITLE	OPTION BOARD # 2 (MIKP1)	NUMBER	D CS M8317-YB-1	REV.	1
SCALE	1"	SHEET	4 OF 6	DWT.	

D CS M8317-YB-1



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REVISIONS		
CHK	CHANGE NO.	REV.

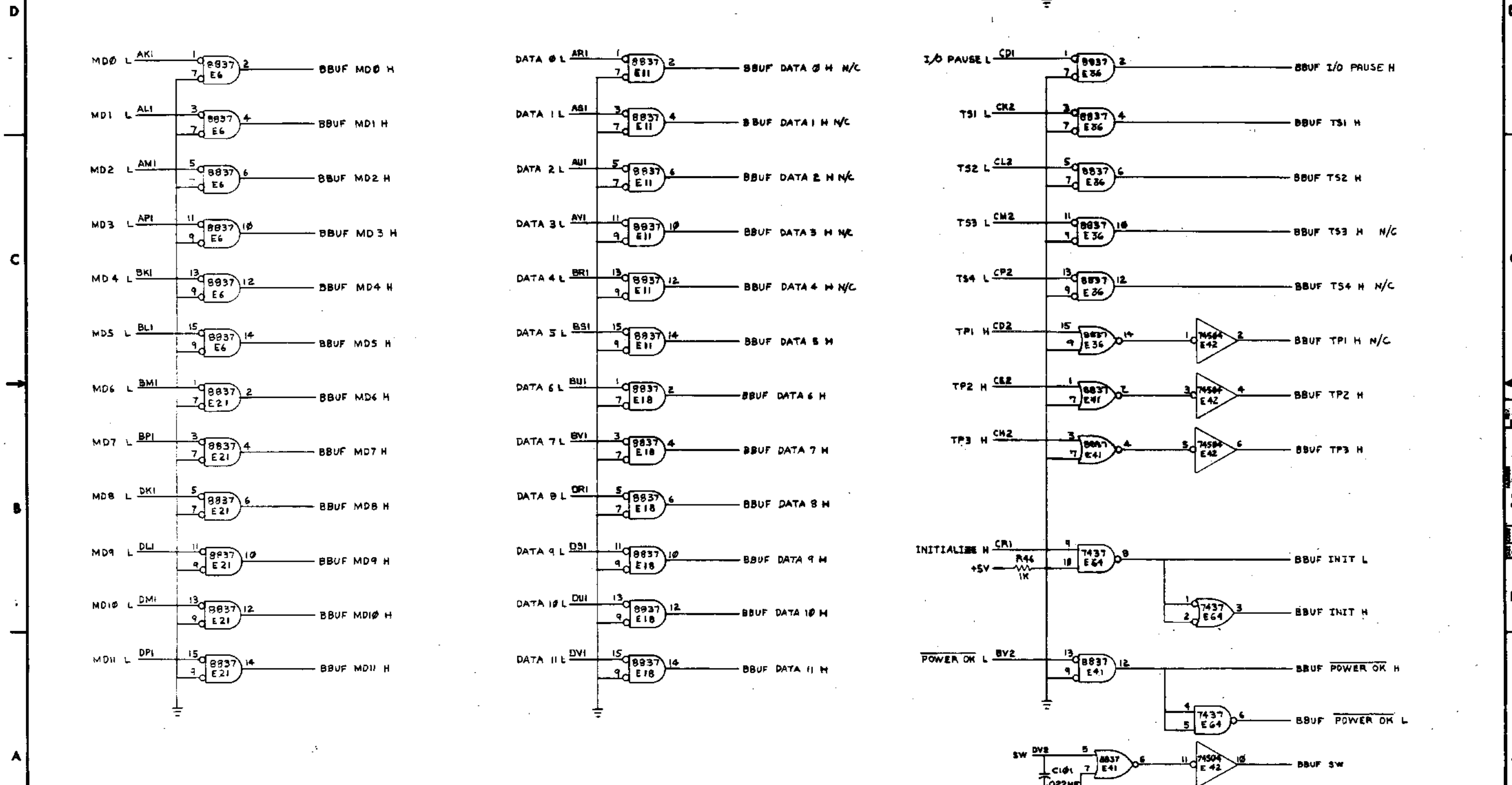
BOOTSTRAP/AUTO-RESTART ROMS AC LOW AND BATTERY EMPTY FLAGS

TITLE	OPTION BOARD #2 (MKP 2)	SIZE/CODE	D CS	NUMBER	M8317-YB-1	REV.	1T
SCALE	NONE	SHEET	5 OF 6	DWT.			

DCS M8317-YB1

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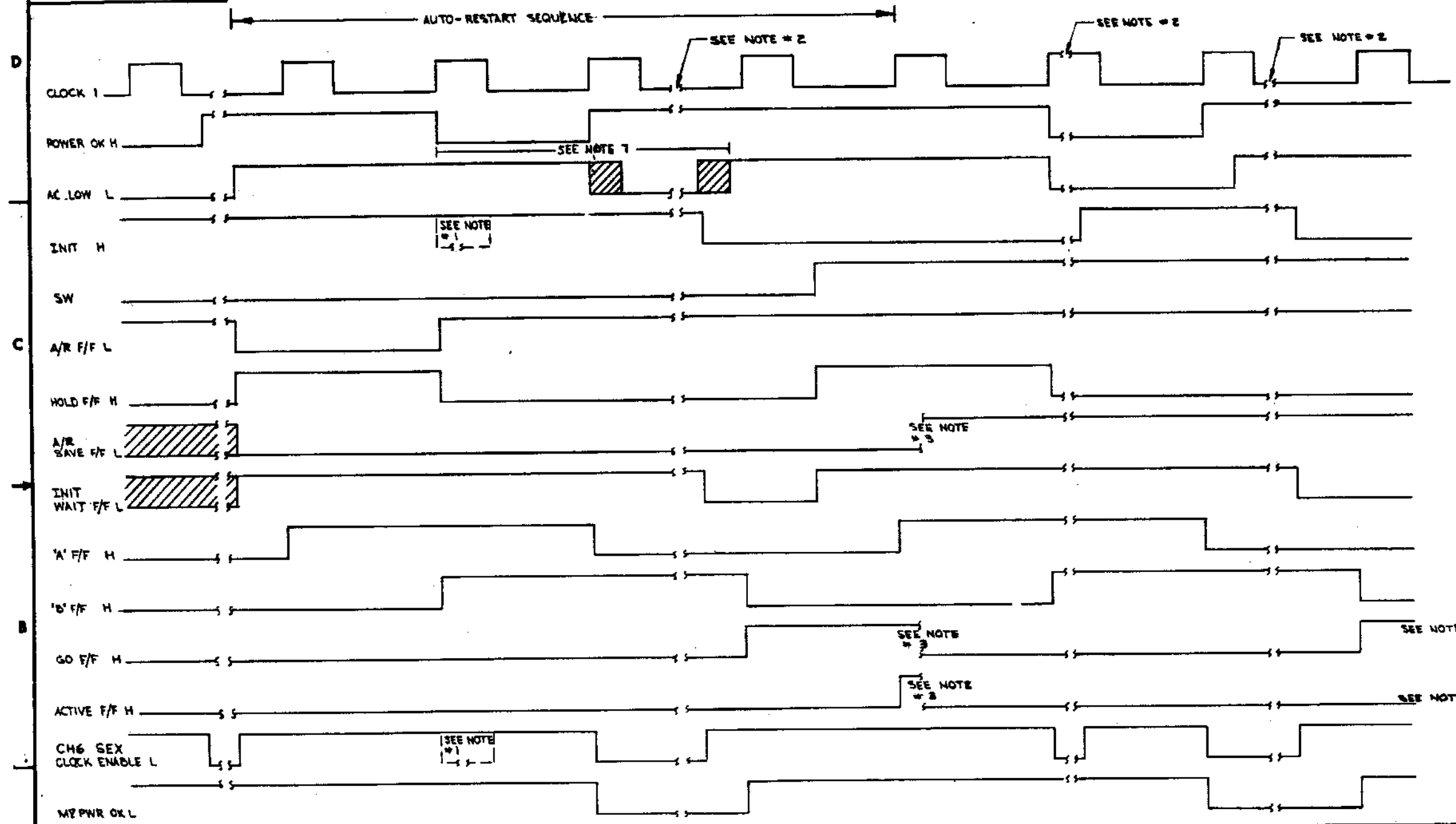
NOTE: SIGNALS WITH N/C HAVE NO CONNECTION



REVISIONS		
CHK	CHANGE NO.	REV.

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1974

- NOTES:**
1. CLOCK ENABLE MAY BE FALSE AT THIS TIME, IF INIT. H IS FALSE. CLOCK ENABLE THEN RETURNS HIGH (ASSERTED) WHEN INTN BECOMES TRUE
 2. THE LOGIC WAITS FOR INITIALIZE TO START OR END BEFORE CONTINUING
 3. THESE FLIP-FLOPS ARE CLEARED AT THE CONCLUSION OF THE AUTO RESTART CYCLE
 4. ACTIVE SETS ON THE NEXT CLOCK PULSE THEN CLEARS AT THE END OF THE CYCLE
 5. GO F/F CLEARS AT THE END OF CYCLE
 6. SEE D-FD-KMB-A FOR DETAILED TIMING DATA AFTER ACTIVE IS SET
 7. THE SWITCHING TIMES FOR AC LOW ARE A FUNCTION OF THE SLEW RATE OF THE CIRCUITS IN THE POWER SUPPLY



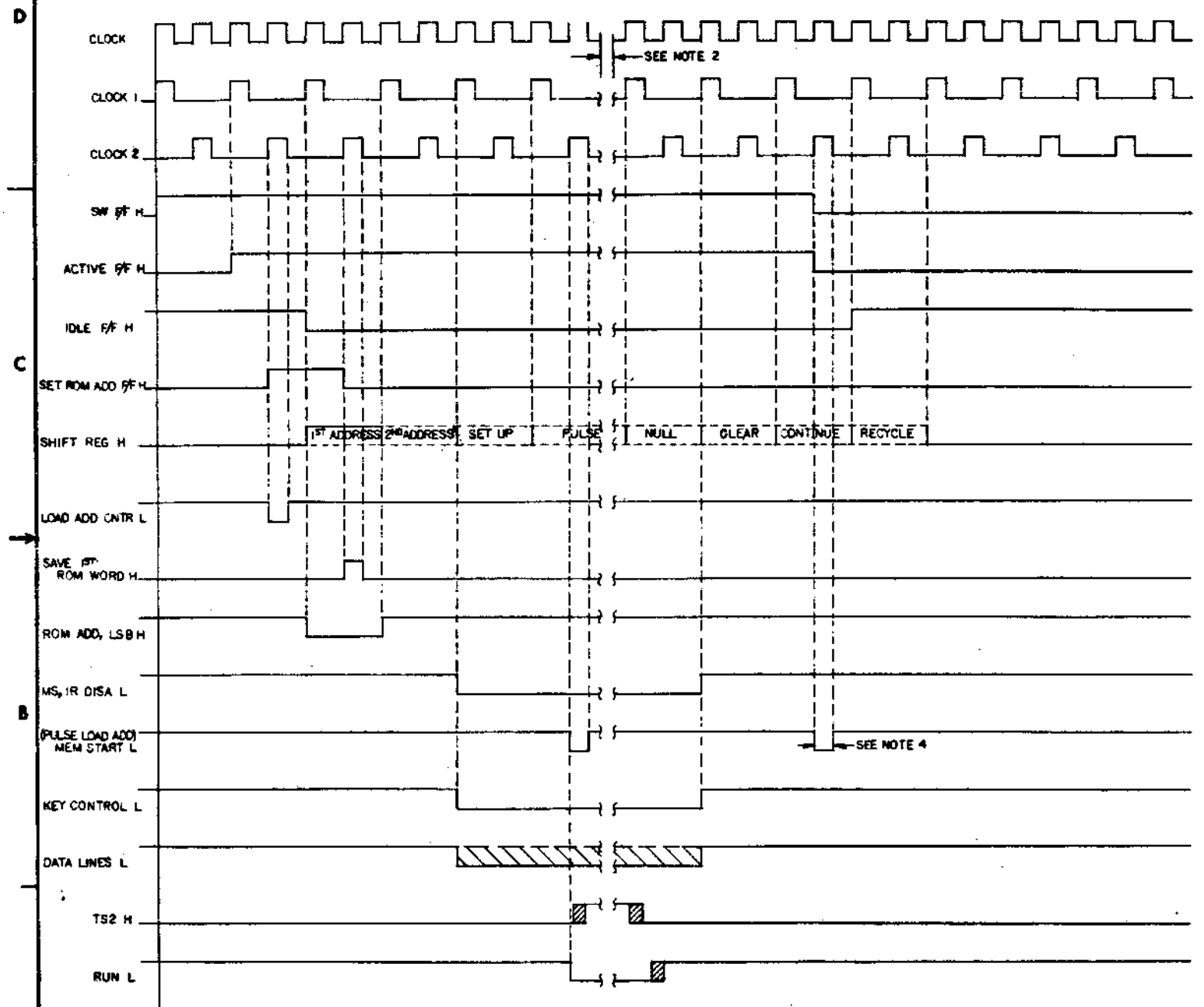
FIRST USED ON OPTION MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8-A					
DIMENSIONAL TOLERANCE		DATE	PARTS LIST		
FINISHES ARE		DATE	digital		
MATERIAL SPECIFICATIONS		DATE	TITLE		
MATERIAL		DATE	AUTO RESTART/ BOOTSTRAP START- UP SEQUENCE		
FINISH		DATE	PART NO.		
		DATE	B-DD-KMB-A		
		DATE	DITD KMB-A-4		
		DATE	SCALE		
		DATE	SHEET 1 OF		

DITD KMB-A-4

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9-V-89K DTD 2

- NOTES:
- ONE 'DEPOSIT' CYCLE IS SHOWN IN DIAGRAM.
 - WHEN 'RUN' IS TRUE (LOW) ALL TIMING IS HELD OFF UNTIL THE NEXT CLOCK PULSE AFTER 'RUN' GOES FALSE (HIGH).
 - FOR THE 'LOAD ADD' CYCLE SIGNALS REMAIN THE SAME AS SHOWN EXCEPT THAT 'PULSE LOAD ADD' REPLACES 'MEM START' AND 'KEY CONTROL' IS NEGATED. FOR 'EXT. LOAD ADD' KEY CONTROL IS TRUE.
 - MEM START APPEARS HERE ONLY FOR THE 'START' FUNCTION. THE EARLIER MEM START IS FOR 'DEPOSITS' ONLY.

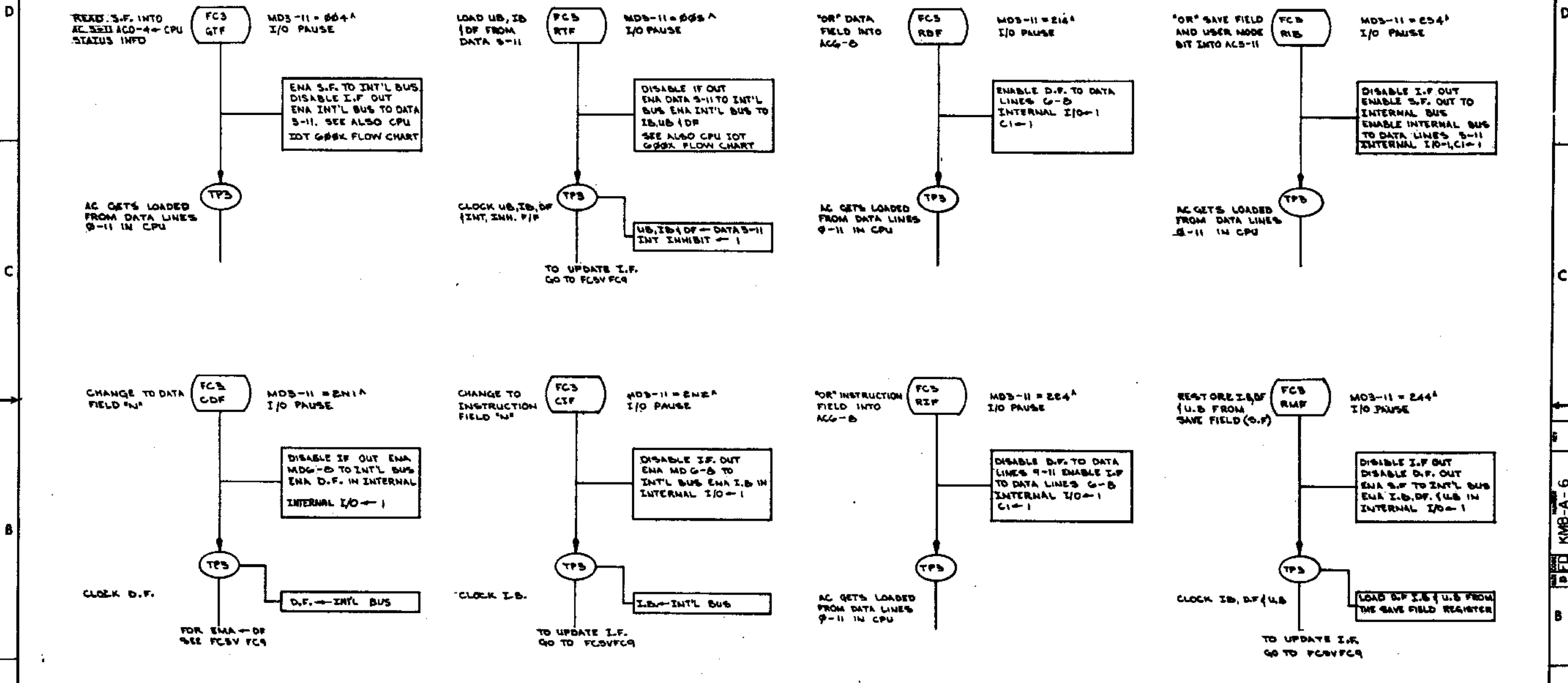


REV.	
CHG	
NO.	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP8-A				
PARTS LIST				
DIMENSIONAL TOLERANCE		DATE	TITLE	
DIMENSIONS ARE IN MILLIMETERS		7-9-74	digital	
UNLESS OTHERWISE SPECIFIED		DATE	BOOTSTRAP	
MILLIMETERS	MICRONS	DATE	TIMING DIAGRAM	
±0.13	±0.25	DATE		
±0.08	±0.25	DATE		
±0.2	±0.1	DATE		
THIRD ANGLE PROJECTION		DATE		
NEEDLE POINT AND BREAK SHOWN		DATE		
CONFORM SURFACE QUALITY		DATE		
MATERIAL	B-00-KMS-A	SCALE	NONE	
FINISH		SHEET	OF 2	
		DWG. NO.	D/TD KMS-A-5	

D/TD KMS-A-5

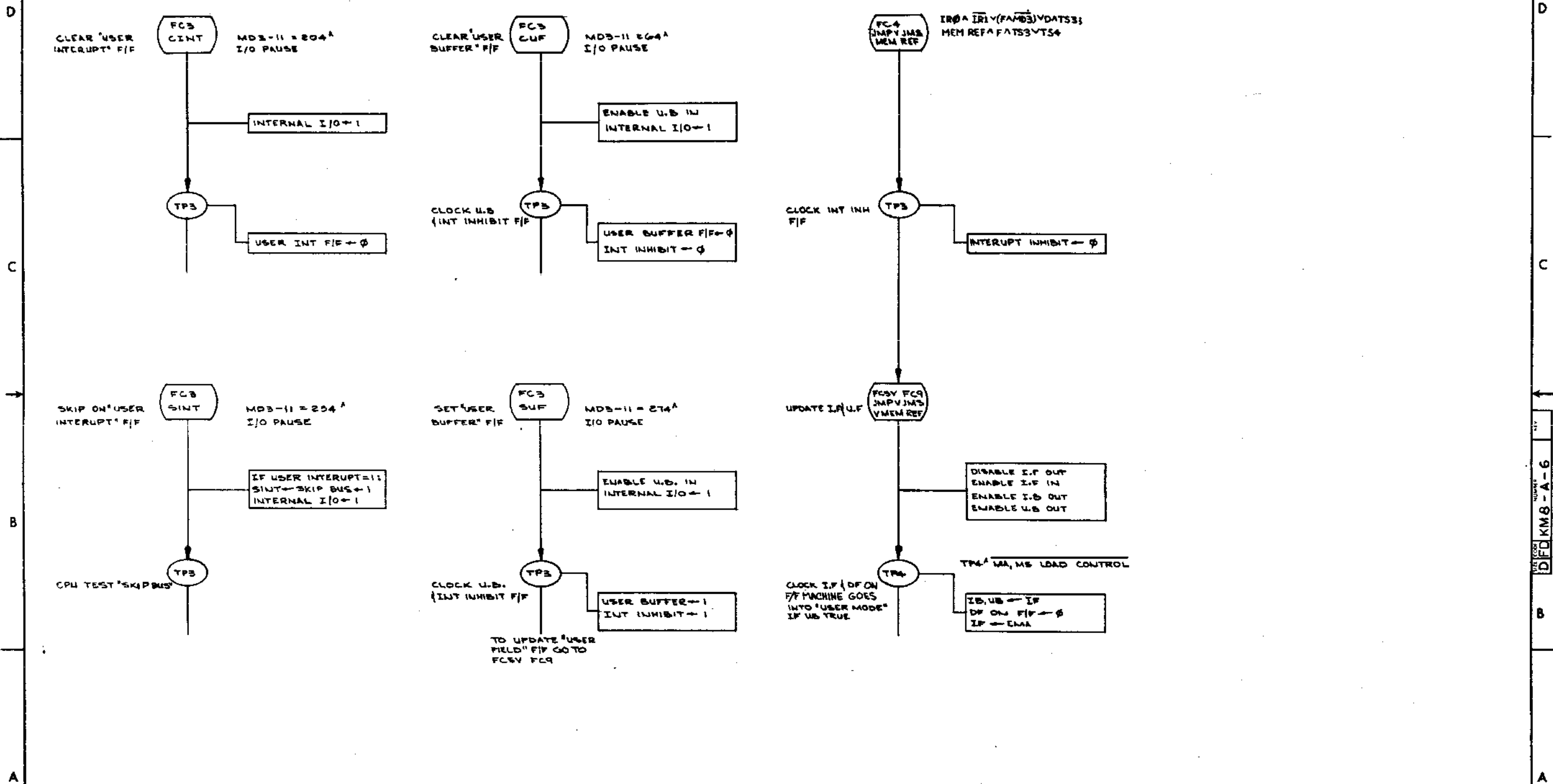
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REVISIONS	REV
CHANGE NO.	
DATE	

FIRST USED ON OPTION MODEL PDP8A	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
digital EQUIPMENT CORPORATION TITLE FLOW CHART FOR OPTION BOARD #2 M8317				
INTERNAL: H FINISH: H NEXT HIGHER ASSY: B-00-KM8-A SCALE: 1:1 SHEET 1 OF 2				
DFD KM8-A-6				

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DFD KM8-A-6

REVISIONS		
CHK	CHANGE NO	REV

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MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 5/8/74

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AD (MB317-YC)

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	E.C.O. CHANGE	00001	L.NARHI	14 MAY 76	<i>L. Narhi</i>	21-MAY
B	E.C.O. CHANGE	00002	L.NARHI	12-14-77	<i>L. Narhi</i>	5-JUN-78

ENG Larry Narhi	APPD <i>Larry Narhi</i>	SIZE A	CODE SP	NUMBER KM8-A-7	REV B
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DEC FORM NO. DRA 107

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KM8-AD (MB317-YC)

1. Introduction

This document describes the organization of the two 256 x 4 ROMs, hereafter called ROM #1 and ROM #2, that control and supply data for the Auto-Restart and Bootstrap portions of Option Board #2.

This information is made available to help users program their own ROMs for their specific Auto-Restart and/or Bootstrap program(s).

2. Organization

The two ROMs are connected as follows: the address lines are connected in parallel; i.e., two corresponding address lines of each ROM are connected together, the outputs are arranged in serial fashion forming an 8 bit word, 4 outputs from each ROM. Because 12 bits are required for data/address information, two sequential addresses must be accessed from the ROMs to form a 16 bit word. Where the first 8 bits are temporarily stored in a register, then the next 8 bits are accessed from the ROMs. At this point the control then decides what to do with 12 of the 16 bits. There are four possible actions that can take place at this time:

- a) Load Address
- b) Load Extended Address, IF AND DF
- c) Deposit
- d) Start

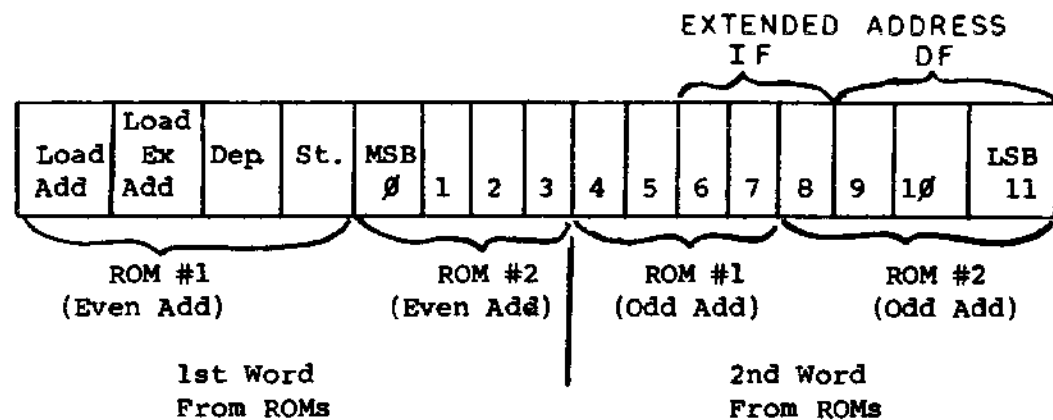
The remaining 4 bits of the 16 actually tell the control which of the four actions are to take place. So the 16 bit word would look like the word in Figure 1.

SIZE A	CODE SP	NUMBER KM8-A-7	REV B
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DEC FORM NO. DEC 16-(381)-1022-N370
DRA 108

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KMB-AD (M8317-YC)

Figure 1



The use of ROMs that have 256 addressable locations allows up to 128 words of ROM storage. These 128 locations may be used for Bootstrap and/or Auto-restart programs. Any Auto-restart or Bootstrap program may be located anywhere in the ROMs so long as the program starts in an even address in the ROM. If it is required that both Bootstrap and Auto-restart programs be accessible at the same time, activated by different signals; of course the Auto-restart program(s) must be located in addresses 0 through 15 in the ROMs. This is due to the addressing limits of the Auto-restart select switches.

3. Auto-Restart/Bootstrap Sequence

The following events should take place when an auto-restart is initiated:

- Load a 12 bit address
- LOAD THE IF AND DF AND START.

The following events should take place when the Bootstrap is initiated:

- Load a 12 bit initial address.
- Load the IF AND DF
- Deposit 12 bit data words repeating as required by length of program to be deposited.
- Load a 12 bit starting address and start.

SIZE	CODE	NUMBER	REV
A	SP	KMB-A-7	B

SHEET 3 OF 6

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KMB-AD (M8317-YC)

The decision to do a Bootstrap or an auto-restart is directed by a set of switches on the module. The Bootstrap may be actuated by the transition of the signal AC Low from a logic low to a logic high or by a similar transition of the SW line on the OMNIBUS.

AN AUTO-RESTART MAY ONLY BE INITIATED BY THE AC LOW SIGNAL. IT SHOULD BE OBVIOUS THAT BOTH THE BOOTSTRAP OR AUTO-RESTART SHOULD NOT BE ACTIVATED BY THE SAME INITIALIZING SIGNAL.

4. ROM Programming Examples

Auto-restart example:

- Load address 0200
- Load field 0, start

Starting at ROM address 004

Bootstrap example:

- Load address 0023
- Load field 7 (BOTH IF AND DF)
- Deposit 2000
- Deposit 6745
- Deposit 0023
- Deposit 7650
- Deposit 5024
- Deposit 6733
- Deposit 5031
- Load address 0024 and start

Starting at ROM address 124.

SIZE	CODE	NUMBER	REV
A	SP	KMB-A-7	B

SHEET 4 OF 6

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KMB-AD (M8317-YC)

Auto-Restart example:

Bit Add	ROM #1				ROM #2			
	4	3	2	1	4	3	2	1
4	1	0	0	0	0	0	0	0
5	1	0	0	0	0	0	0	0
6	0	1	0	1	0	0	0	0
7	0	0	0	0	0	0	0	0

Load Address
 $\phi 2\phi\phi$
 Load Ext. Add ϕ
 and Start

NOTE: Logic one (1) = +3V

Bootstrap example:

Bit Add	ROM #1				ROM #2			
	4	3	2	1	4	3	2	1
124	1	0	0	0	0	0	0	0
125	0	0	0	1	0	0	1	1
126	0	1	0	0	0	0	0	0
127	0	0	1	1	1	1	1	1
130	0	0	1	0	0	1	0	0
131	0	0	0	0	0	0	0	0
132	0	0	1	0	1	1	0	1
133	1	1	1	0	0	1	0	1
134	0	0	1	0	0	0	0	0
135	0	0	0	1	0	0	1	1
136	0	0	1	0	1	1	1	1
137	1	0	1	0	1	0	0	0
140	0	0	1	0	1	0	1	0
141	0	0	0	1	0	1	0	0
142	0	0	1	0	1	1	0	1
143	1	1	0	1	1	0	1	1
144	0	0	1	0	1	0	1	0
145	0	0	0	1	1	0	0	1
146	1	0	0	1	0	0	0	0
147	0	0	0	1	0	1	0	0

Load Add $\phi\phi 23$
 Load Ext Add 7
 Dep $2\phi\phi\phi$
 Dep 6745
 Dep $\phi\phi 23$
 Dep 765 ϕ
 Dep 5 $\phi 24$
 Dep 6733
 Dep 5 $\phi 31$
 Load Add 24 & Start

SIZE A CODE SP NUMBER KMB-A-7 REV B

TITLE ROM PROGRAMMING DIRECTIONS FOR 8A OPTION BOARD #2 KMB-AD (M8317-YC)

5. ROMs

Unprogrammed ROMs should be purchased by the user from Digital Equipment Corporation. The part number for an unprogrammed 256 x 4 ROM is 23-000A2.

SIZE A CODE SP NUMBER KMB-A-7 REV B

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS						
ENGINEERING SPECIFICATION				DATE 11/19/74		
TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR DKC8-A						
REVISIONS						
REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG <i>J. Harlin</i> 12/20/74	APPD <i>Carl Ch...</i>	SIZE A	CODE SP	NUMBER DKC8-A-1	REV
-------------------------------	------------------------	------------------	------------	--------------------	-----

DEC 16-(392)-1079-N371
DRA 107

ENGINEERING SPECIFICATION	CONTINUATION SHEET																					
TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR DKC8-A																						
<p>I GENERAL</p> <p>This procedure defines the performance standard required of the DKC8*, option board #1. This procedure refers to both system acceptance and add-on acceptance.</p> <p>NOTE: If DKC8 was shipped as part of a PDP-8A system, proceed to installation procedure.</p> <p>* Serial Line Unit Real Time Clock Parallel I/O Programmer's Console Logic</p> <p>II INSPECTION</p> <p>After removing the DKC8 from the packing material, inspect the module for the following:</p> <ol style="list-style-type: none"> 1. Inventory hardware against shipping list. 2. Inventory software against software list, if ordered. 3. Inventory prints against shipping list, if ordered. 4. Check hardware for loose or broken components. <p>III INSTALLATION PROCEDURE</p> <p>Install the equipment using the following procedure:</p> <ol style="list-style-type: none"> 1. Set up switches as indicated by the diagnostic write up. <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 20px;">S1-1 thru S1-3</td> <td style="padding-right: 20px;">"ON"</td> <td>9600 baud</td> </tr> <tr> <td>S1-4</td> <td>"ON"</td> <td>Normally "ON"</td> </tr> <tr> <td>S1-5</td> <td>"ON"</td> <td>Real Time Clock Enable</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>S1-6</td> <td>"ON"</td> <td>Normally "ON"</td> </tr> <tr> <td>S1-7</td> <td>"ON"</td> <td>One Stop Bit</td> </tr> <tr> <td>S1-8</td> <td>"OFF"</td> <td>Disable TTY 20 MA Filter</td> </tr> </table> <p>NOTE: Reference Operator's Handbook for switch setting descriptions.</p> <ol style="list-style-type: none"> 2. Insert TTY loop back cable (DEC Part #7008517) on DKC8. 3. Insert parallel I/O cable loop back cable (DEC Part # BC08R-1) on DKC8. 		S1-1 thru S1-3	"ON"	9600 baud	S1-4	"ON"	Normally "ON"	S1-5	"ON"	Real Time Clock Enable				S1-6	"ON"	Normally "ON"	S1-7	"ON"	One Stop Bit	S1-8	"OFF"	Disable TTY 20 MA Filter
S1-1 thru S1-3	"ON"	9600 baud																				
S1-4	"ON"	Normally "ON"																				
S1-5	"ON"	Real Time Clock Enable																				
S1-6	"ON"	Normally "ON"																				
S1-7	"ON"	One Stop Bit																				
S1-8	"OFF"	Disable TTY 20 MA Filter																				

DEC FORM NO DEC 16-(391)-1022-N370
DRA 108

SIZE A	CODE SP	NUMBER DKC8-A-1	REV
------------------	------------	--------------------	-----

TITLE FIELD INSTALLATION AND ACCEPTANCE PROCEDURE FOR DKC8-A

III INSTALLATION PROCEDURE (continued)

4. Insert two programmer's console cables on DKC8.
5. Insure that the 8A Power is removed from the Omnibus™.
6. Insert DKC8 into the second or third slot of the Omnibus™.
7. Turn the power back "ON".
8. Check the operation of the programmer's console.

IV ACCEPTANCE PROCEDURE

Perform the acceptance procedure defined in Table A. If abnormal indications are encountered, refer to the diagnostic listing for type of error. Reference the diagnostic write ups and operator's manual for instructions on loading diagnostics.

Equipment Required:

1. PDP-8A with 1K or more R/W Memory
2. Paper Tape Input Device
3. Programmer's Console (KC8-A)
4. Diagnostic and Listings
5. TTY loop Back Cable
6. Parallel I/O Loop Back Cable
7. W987 Quad Extender

NOTE: If the programmer's console and paper tape input device are not available as part of the system being used, they must be supplied in good working order by the customer.

SIZE	CODE	NUMBER	REV
A	SP	DKC8-A-1	

TITLE FIELD INSTALLATION & ACCEPTANCE PROCEDURE FOR DKC8-A

TABLE A

Acceptance of DKC8 with 4K or More R/W Memory

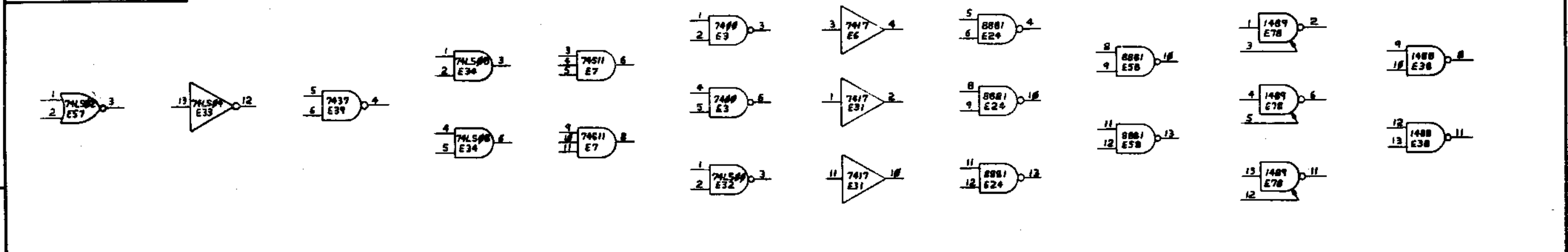
Program Name	Maindec #	Accept Time	Restriction
DKC8-AA Option Test #1	08-DJDKA-PB	30 min	4K R/W Memory

Acceptance of DKC8 with less than 1K of R/W Memory

DKC8-AA Option Test #1 Segment #1 (RIM)	08-DJDKA -PM1	10 min	1K R/W Memory
DKC8-AA Option Test #1 Segment #2 (RIM)	08-DJDKA -PM2	10 min	1K R/W Memory
DKC8-AA Option Test #1 Segment #3 (RIM)	08-DJDKA -PM3	10 min	1K R/W Memory
DKC8-AA Option Test #1 Segment #4 (RIM)	08-DJDKA -PM4	10 min	1K R/W Memory

SIZE	CODE	NUMBER	REV
A	SP	DKC8-A-1	

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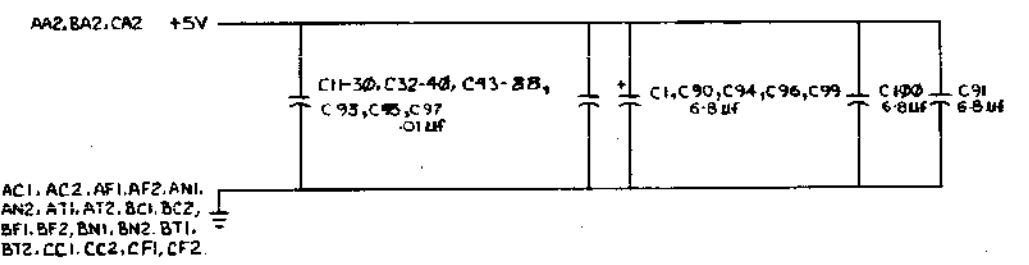
SLU BAUD RATE SELECT CHART

SI-4	SI-3	SI-2	SI-1	BAUD RATE
ON	ON	ON	ON	50 BAUD
ON	ON	ON	OFF	75 BAUD
ON	ON	OFF	ON	110 BAUD
ON	ON	OFF	OFF	134.5 BAUD
ON	OFF	ON	ON	150 BAUD
ON	OFF	ON	OFF	300 BAUD
ON	OFF	OFF	ON	600 BAUD
ON	OFF	OFF	OFF	1200 BAUD
OFF	ON	ON	ON	1800 BAUD
OFF	ON	ON	OFF	2000 BAUD
OFF	ON	OFF	ON	2400 BAUD
OFF	ON	OFF	OFF	3600 BAUD
OFF	OFF	ON	ON	4800 BAUD
OFF	OFF	ON	OFF	7200 BAUD
OFF	OFF	OFF	ON	9600 BAUD
OFF	OFF	OFF	OFF	19.2 K BAUD

* SERIAL LINE WILL NOT RUN AT THIS BAUD RATE. THIS SETTING IS NOT TO BE USED

M8316 SWITCH SETTINGS

- SI-1 } SERIAL LINE BAUD RATE (SEE CHART)
- SI-2 }
- SI-3 }
- SI-4 }
- SI-5 ON= REAL TIME CLOCK ENABLED
OFF= REAL TIME CLOCK DISABLED
- SI-6 ON= TEST SWITCH (ALWAYS ON)
- SI-7 ON= 1 STOP BIT IN SLU CHARACTER
OFF= 2 STOP BITS IN SLU CHARACTER
- SI-8 ON= ASR/KSR 33 DRSS FILTER IN (ACROSS SLU 20 MA REC'V LEADS)
OFF= FILTER OUT
- SI-9 ON= TS1 CLEARS "DATA AVAIL" F/F IN PARALLEL I/O SECTION
OFF= "DATA AVAIL" NOT CLEARED BY TS1



AA2, BA2, CA2 +5V
AC1, AC2, AF1, AF2, AN1, AN2, AT1, AT2, BC1, BC2, BF1, BF2, BN1, BN2, BT1, BT2, CC1, CC2, CF1, CF2

COMPONENT SUBSTITUTION CHART

PART CALLED P/N	DESCRIPTION	SUBSTITUTE PART P/N	DESCRIPTION
1001610-01	0.01uF DISC	1001610-00	0.01uF GLASS
1909705	8881	1909973	97401
		1910392	5380
1911469	8640	1909971	6380
		1910390	7380
		1911113	11380
1912824	74LS74	1905547	7474
1912799	74LS00	1905575	7400
1912807	74LS10	1905576	7410
1912815	74LS30	1905578	7430
1912801	74LS02	1909004	7402
1912803	74LS04	1909686	7404
1912819	74LS42	1910046	7442
1912805	74LS08	1910155	7408
1912853	74LS175	1910651	74175
1912697	74LS174	1910652	74174

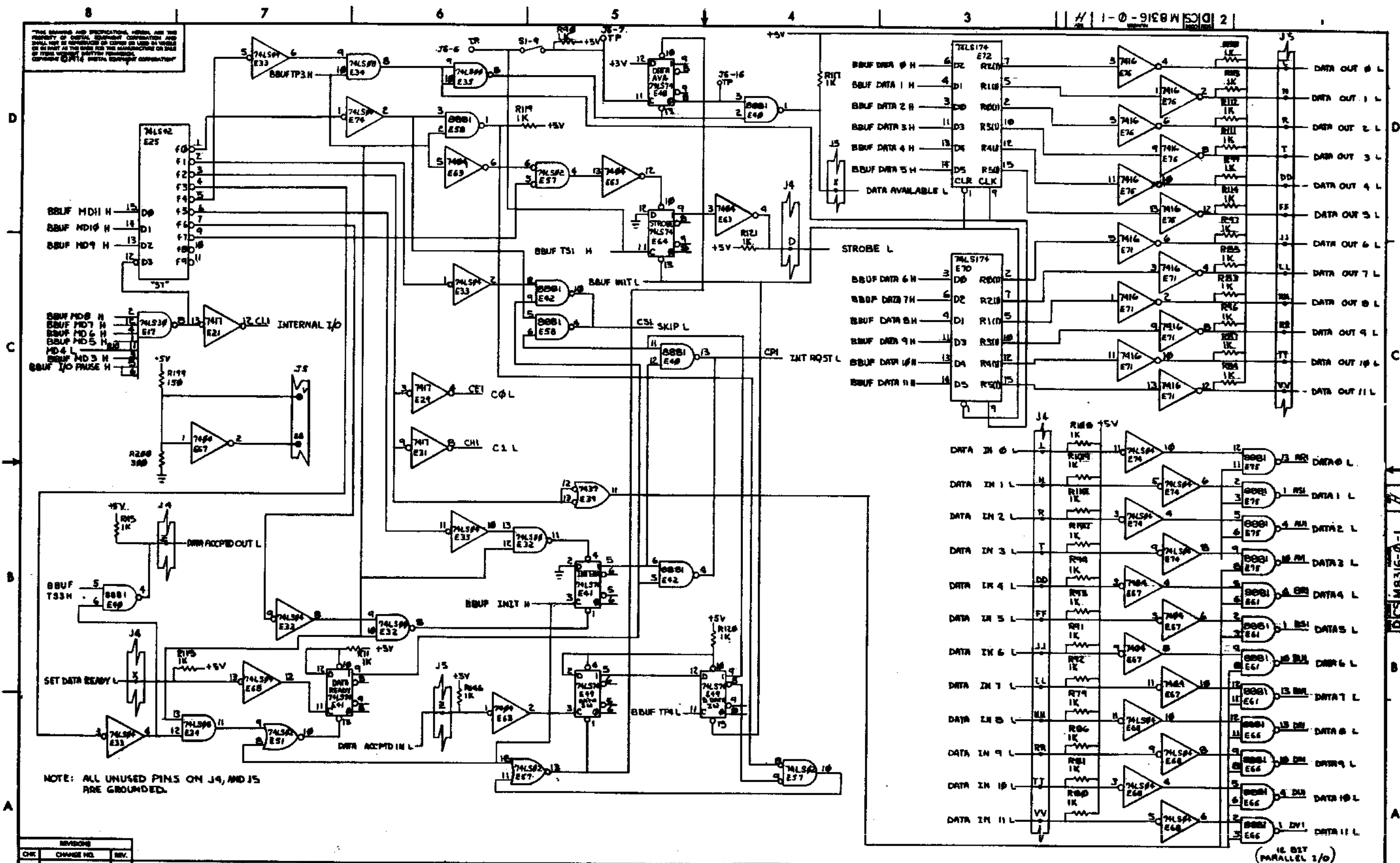
REV. 1	DATE	BY	CHKD.
1			
2			
3			
4			
5			
6			
7			
8			

DRN. Approval: 5-9-76
 CHK'D. Approval: 5-30-76
 ENR. Approval: 7-2-76
 PROJ. ENG. Approval: 7-2-76
 PROD. Approval: 7-2-76
 NEXT HIGHER ASSY.
 C-UP-M8316-0-0
 SCALE: 1:1
 SHEET: 1 OF 1

FIRST USED ON: OKC 8A
 TITLE: OPTION BD #1
 SIZE: 8.5x11
 NUMBER: D CS M8316-0-1
 REV.: H

D CS M8316-0-1

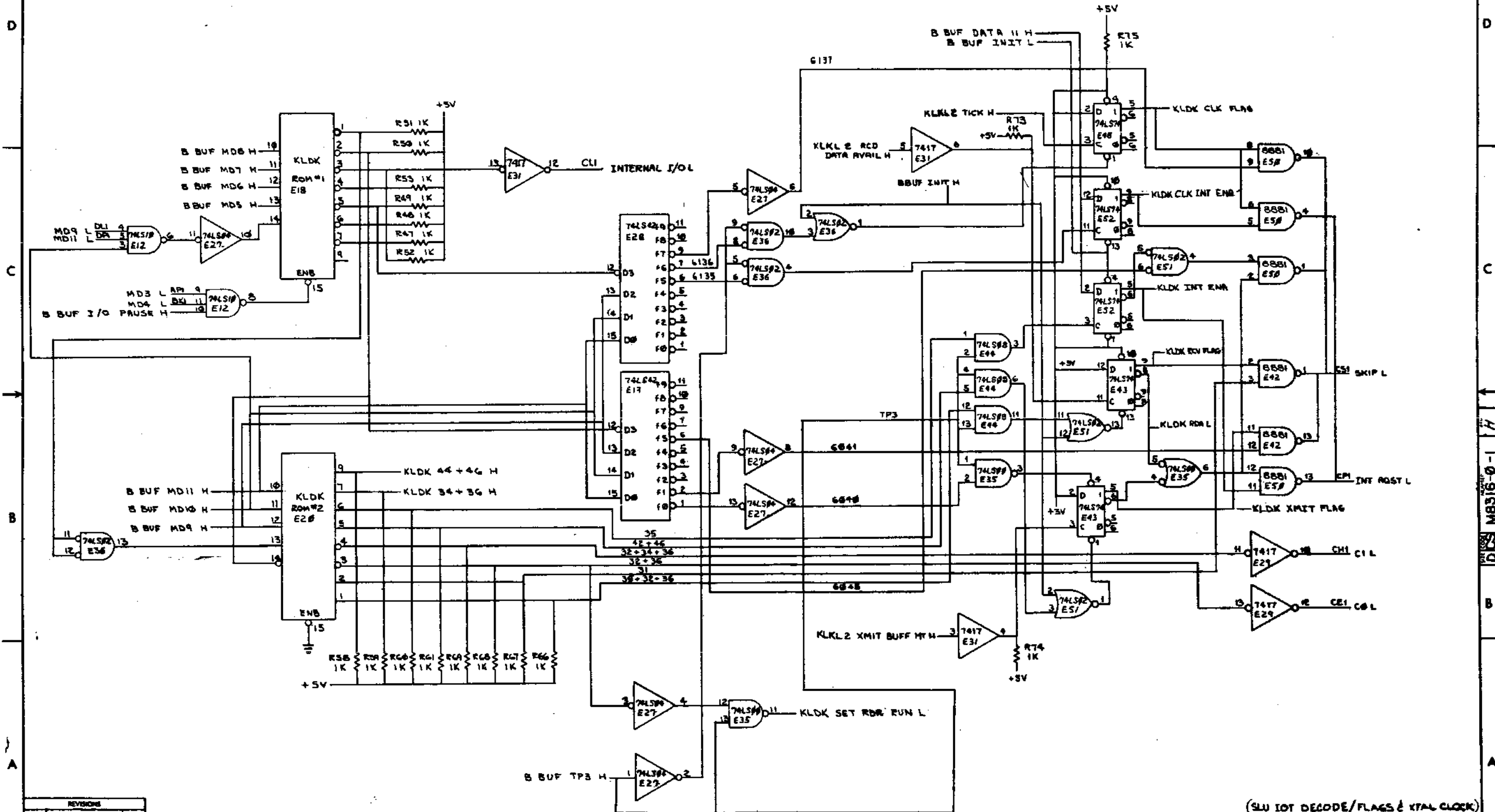
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NOTE: ALL UNUSED PINS ON J4, AND J5 ARE GROUNDED.

REVISIONS		
CHK	CHANGE NO.	REV.

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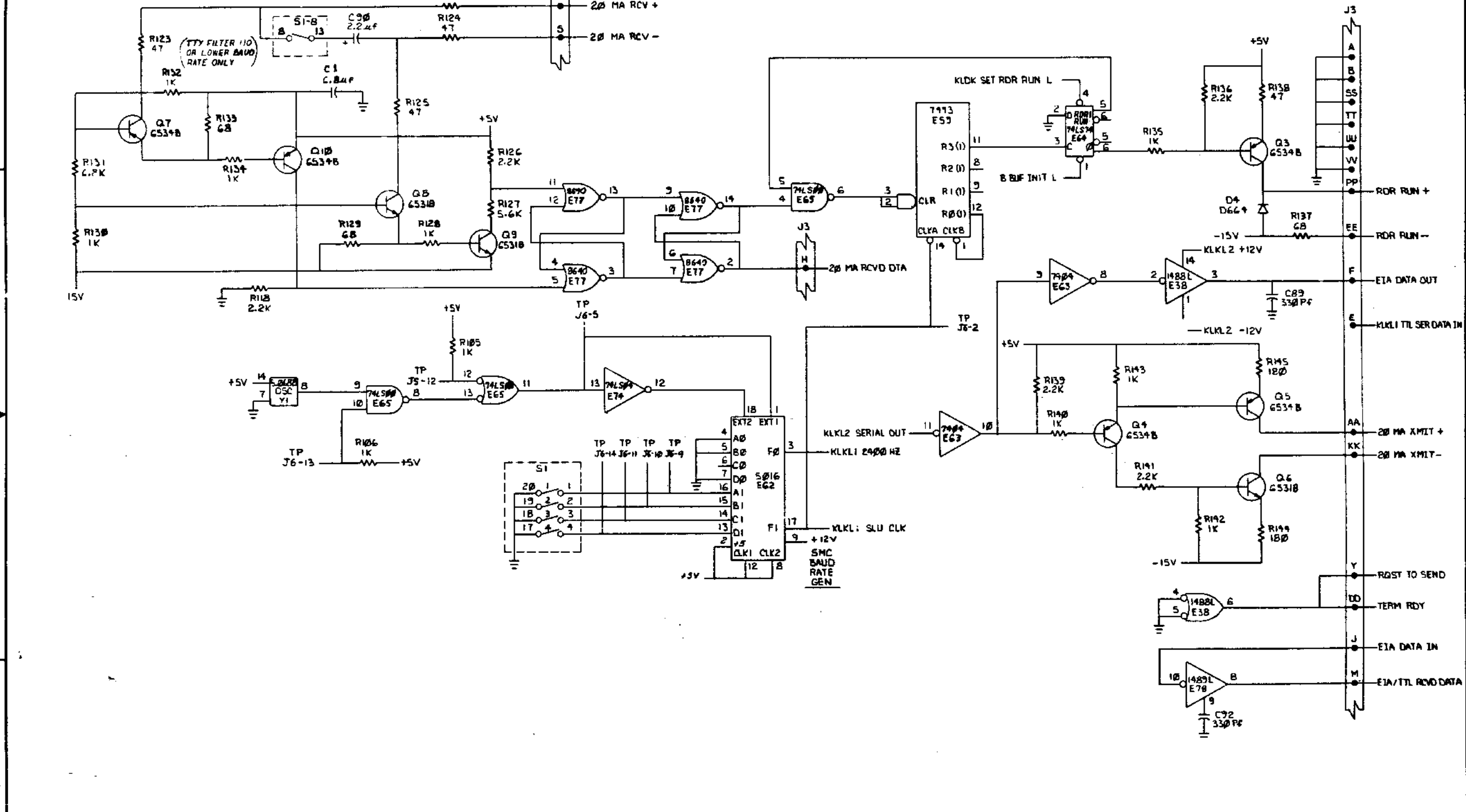
REVISIONS		
CHK	CHANGE NO	REV

(SLU IOT DECODE/FLAGS & XTAL CLOCK)

TITLE	OPTION BD #1 (KLDK)	DWG NO	DCS M8316-0-1	REV.	H
SCALE	1:1	SHEET	3 OF 5	DIST.	

DCS M8316-0-1 H

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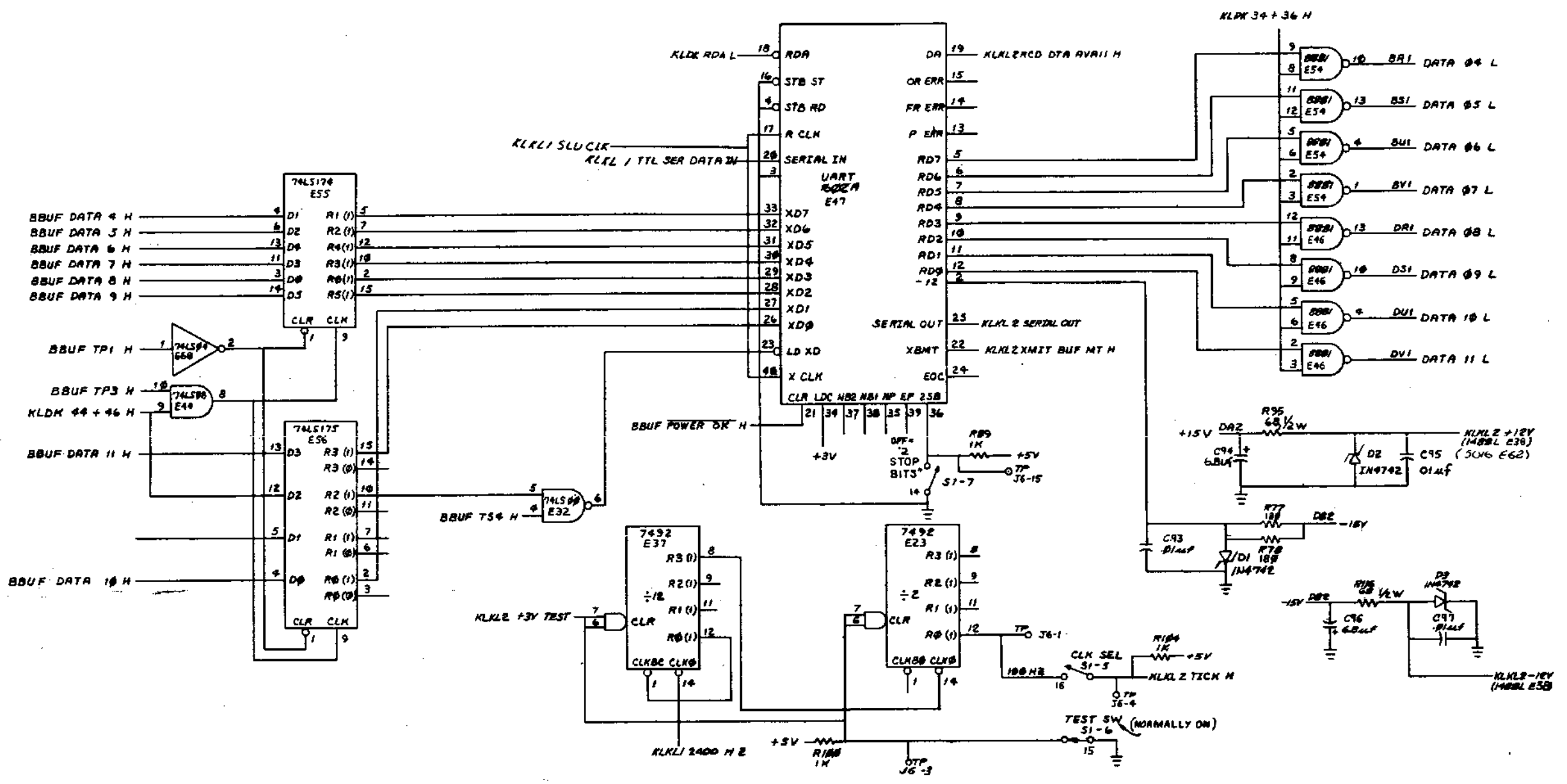
REVISIONS		
CHK	CHANGE	REV.

(BAUD RATE GEN & 20 MA. EIA DRIVERS / RECEIVERS)

TITLE	OPTION BD #1 (KLKLO)	SIZE CODE	DCS	NUMBER	M8316-0-1	REV.	H
SCALE	1:1	SHEET	4	OF	8	UNIT.	

DCS M8316-0-1 H

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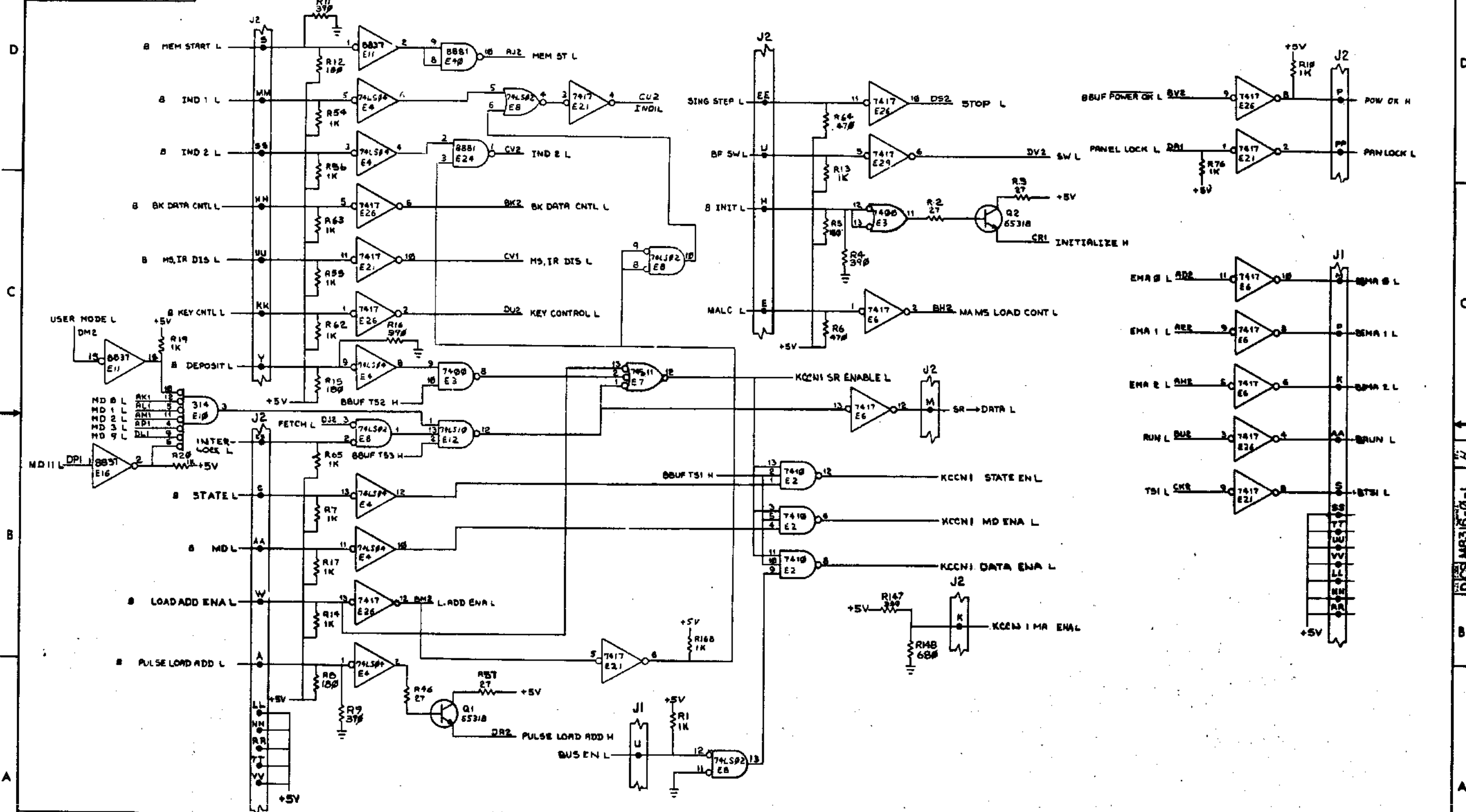
REVISIONS		
CHK	CHANGE NO.	REV

(UART & XTAL CLK FREQ SOURCE)

TITLE	OPTION BD #1 (KLKL 2)	SIZE/CODE	DCS M8316-0-1	NUMBER	H
SCALE		SHEET	5 OF 8	DIST.	

DCS M8316-0-1 17

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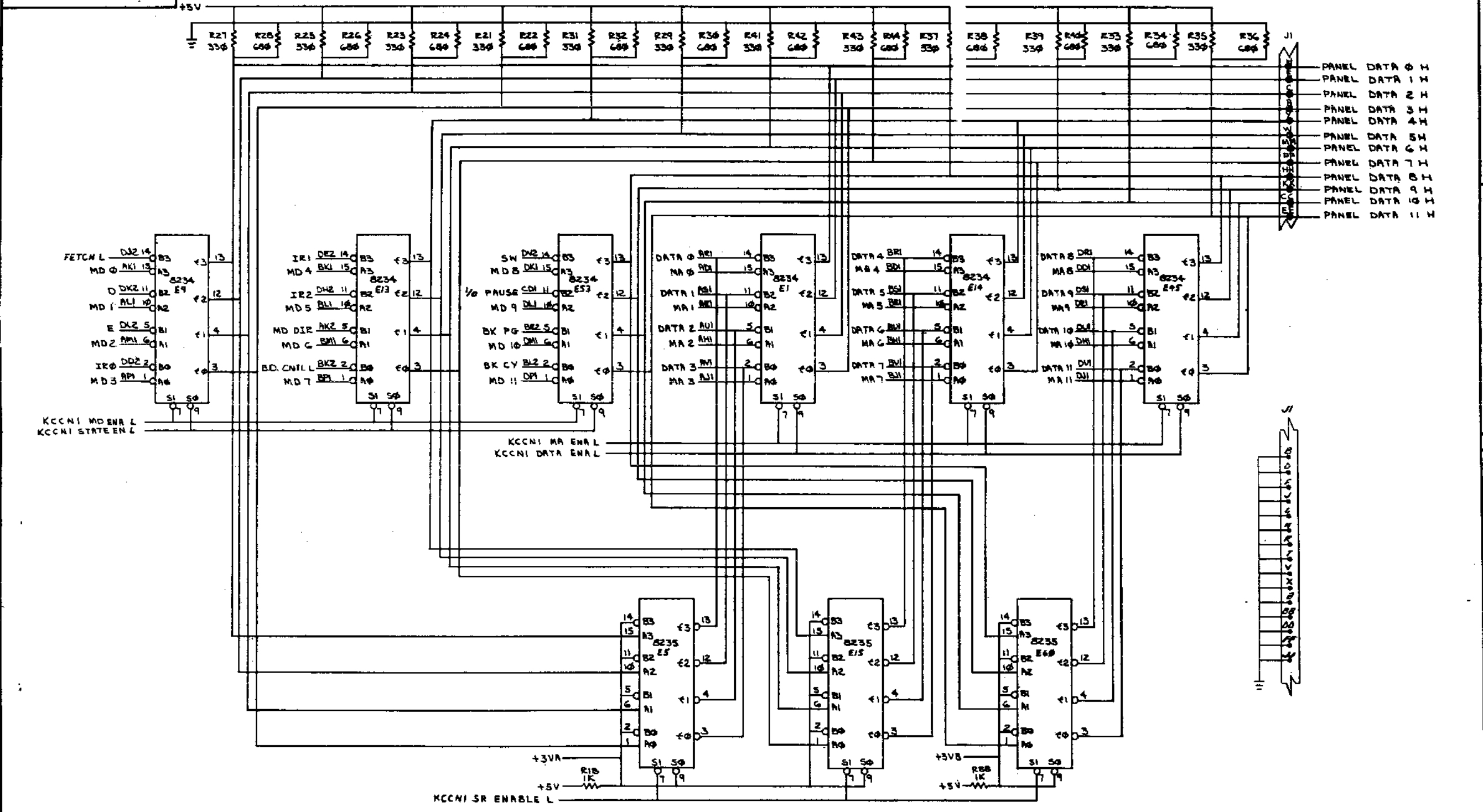


(PROGRAMMER'S PANEL CONTROL)

REVISIONS table with columns for CHK, CHANGE NO, and REV.

Technical drawing header table containing TITLE (OPTION BD #1 (KCCN1)), SIZE CODE (DCS), NUMBER (MB316-0-1), REV. (H), SCALE, SHEET (6 OF 8), and DIST.

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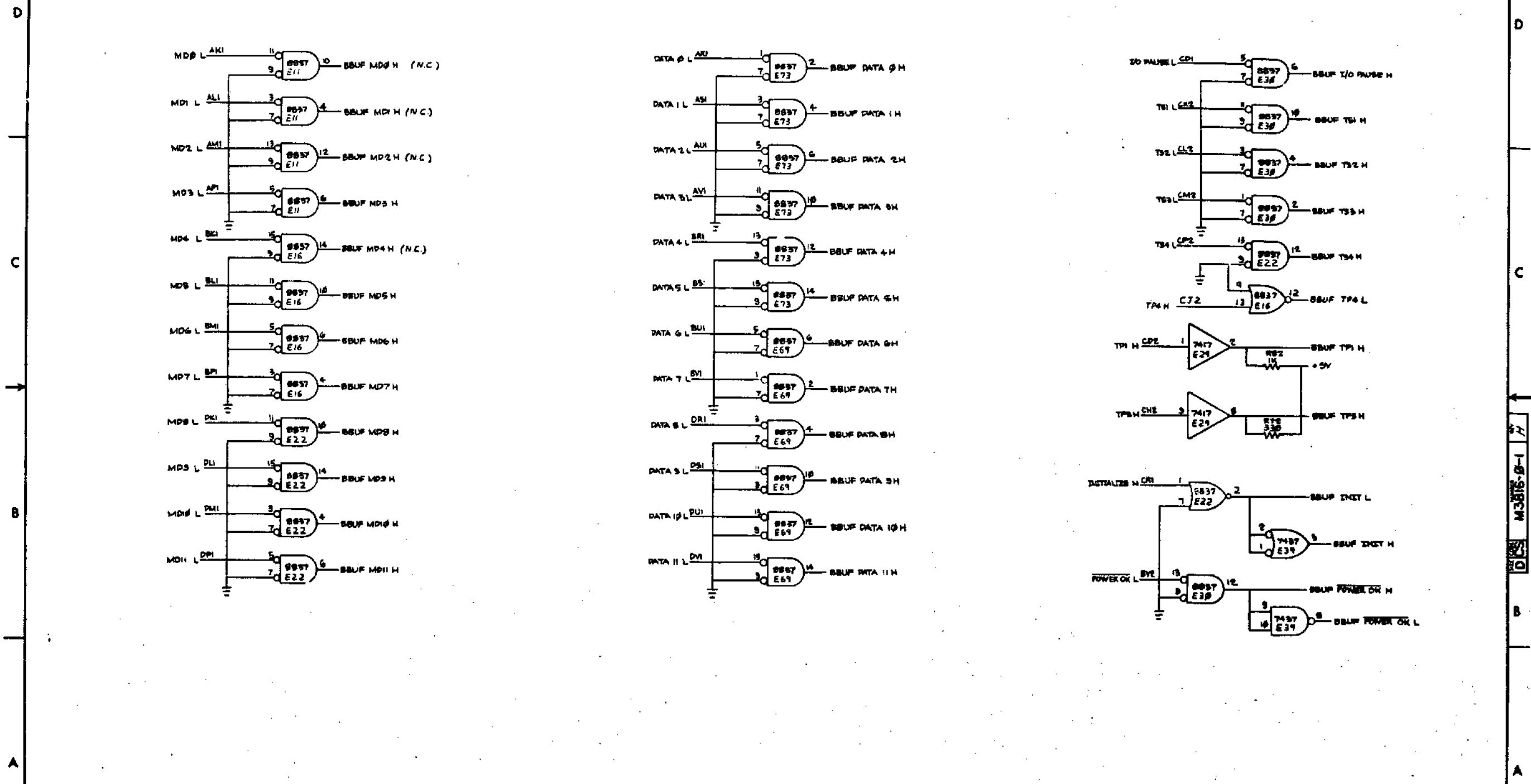


REVISIONS		
CHK	CHANGE NO.	REV.

(PROGRAMMERS PANEL MULTIPLEXERS)

TITLE	OPTION BOARD #1	SIZE CODE	NUMBER	REV.
	(KCCNI)	DCSM8316-0-1	H	
SCALE	1/1	SHEET	7 OF 8	DIST.

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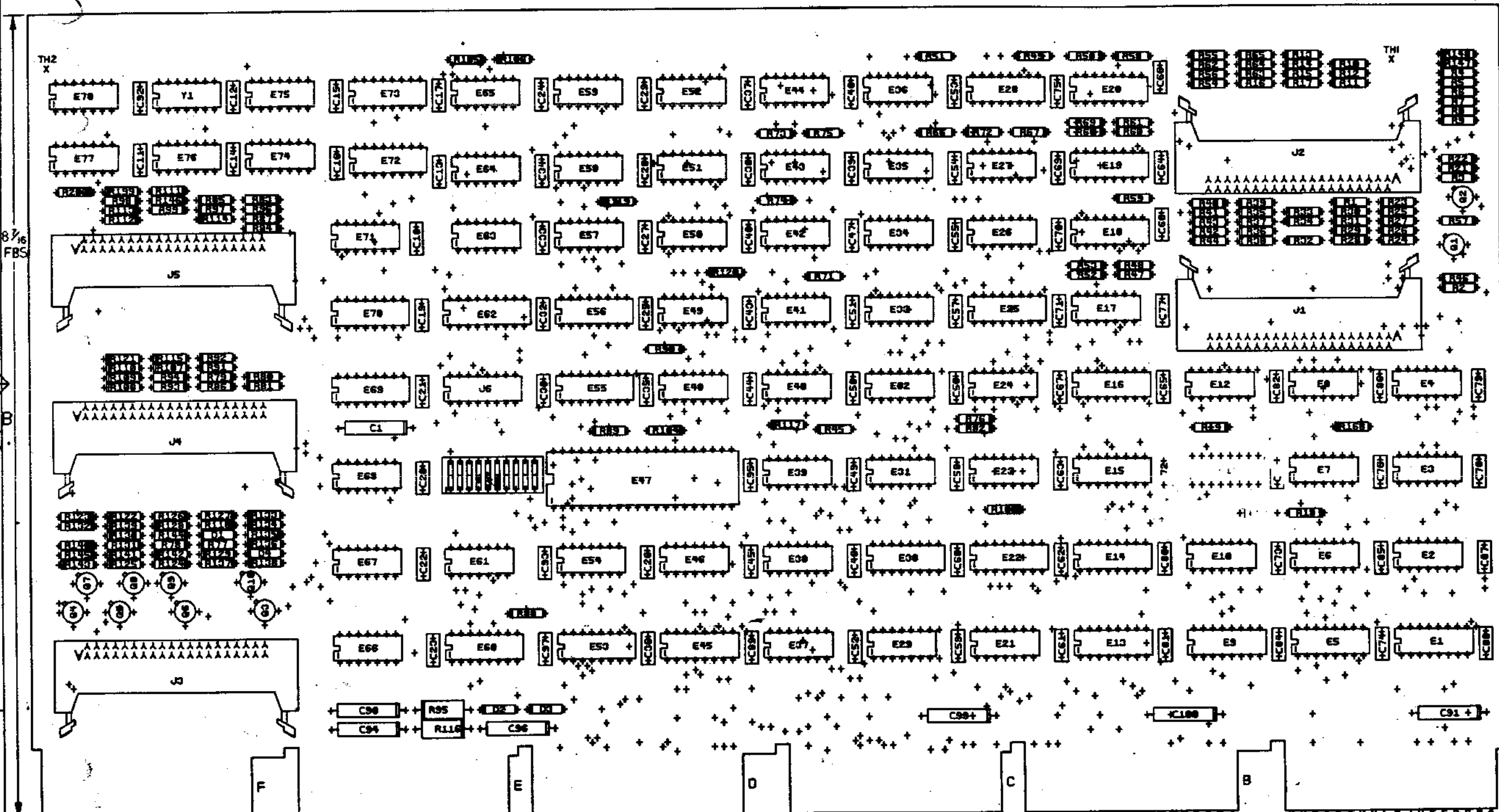


REVISIONS		
CHK	CHANGE NO.	REV.

(BUS BUFFERS)

TITLE	8/A INTERNAL OPTIONS (BUFF)	SHEET NO.	D CS	NUMBER	MB316-B-1	REV.	H
SCALE	1:1	SHEET	8	OF	8	DIST.	

COMPONENT SIDE VIEW



NOTES:

CHANGE NO.	REV.
ORIGINATED	
DATE	
BY	

ETCH REV.	
P.C. DESIGN DATA SHEET REV.	

SIGNATURES	DATE	digital
DRN. <i>[Signature]</i>	6-2-78	
CHK'D. <i>[Signature]</i>	6-2-78	
ENC. <i>[Signature]</i>	7-2-78	
PROJ. ENG. <i>[Signature]</i>	7-2-78	
PROD. <i>[Signature]</i>	7-2-78	
SCALE 2/1		TITLE
SHT. 1 OF 3		OPTION BOARD #1
NEXT NUMBER ASSY. B-00-M8316-0		SIZE CODE NUMBER REV
		D JA M8316-Q-0 *

8

7

6

5

4

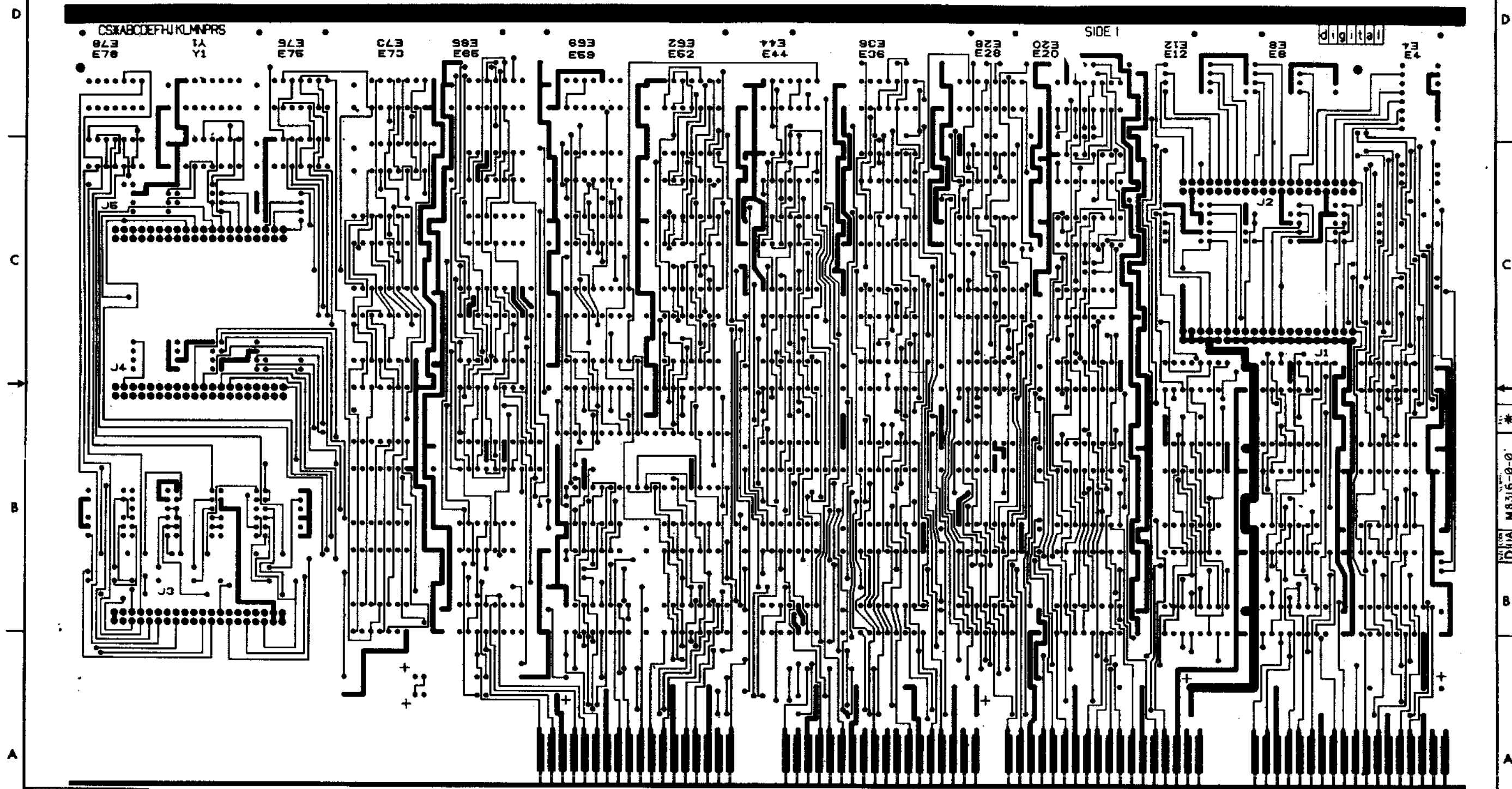
3

* 0-0-91E8W DUA M8316-0-0 2

1

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L1 MS40588 M8316 50109000 P4



REVISIONS		
CHK	CHANGE NO	REV

TITLE	OPTION BOARD *1	SIZE CODE	DUA	NUMBER	M8316-0-0	REV.	*
SCALE	2/1	SHEET	2 OF 3	DIST			

DUA M8316-0-0

8

7

6

5

4

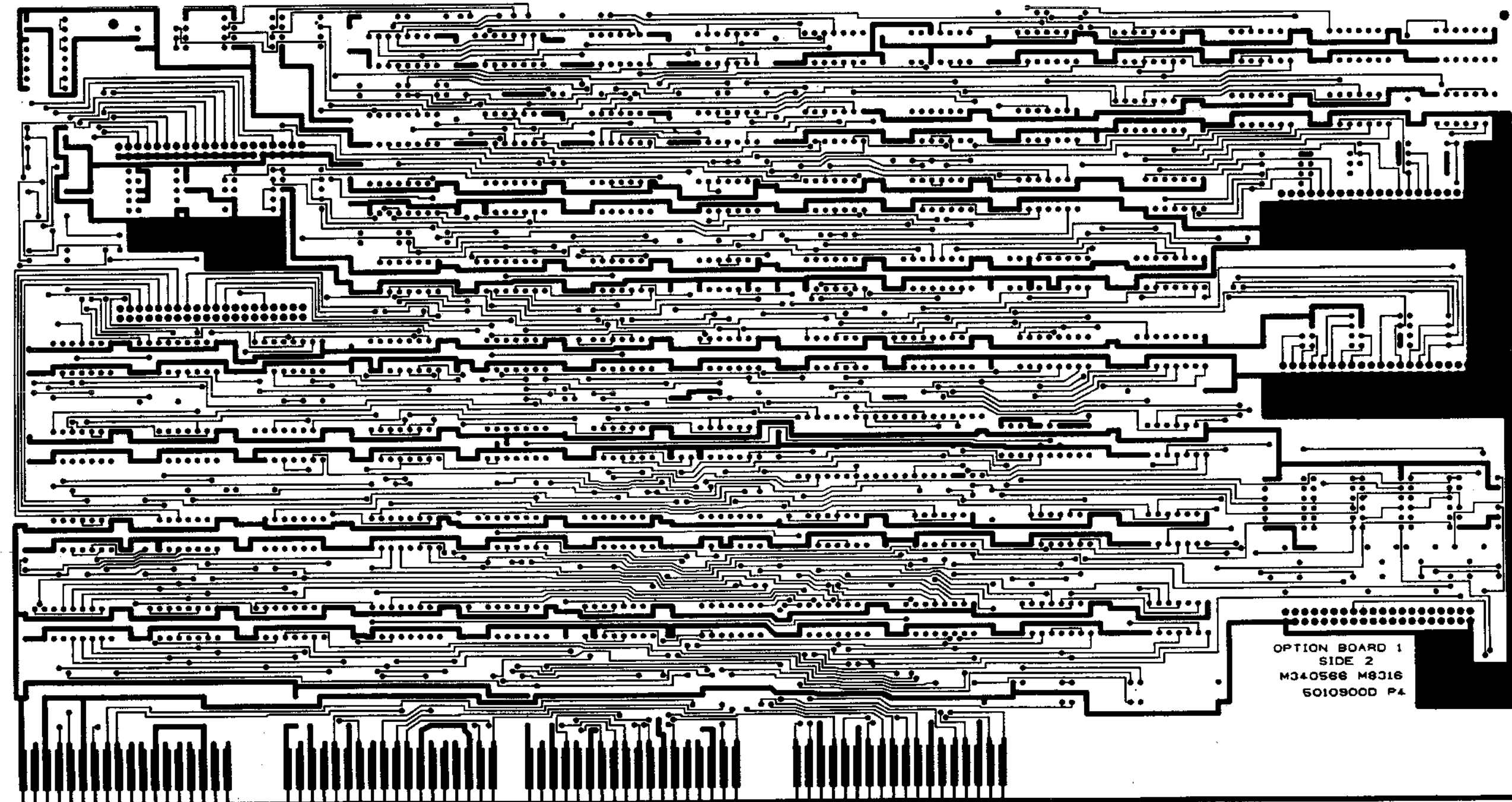
3

2

1

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* 0-0-9186W YN D 2



OPTION BOARD 1
SIDE 2
M340566 M8316
6010900D P4

REVISIONS		
CHK	CHANGE NO	REV.

TITLE	OPTION BOARD *1	SIZE CODE	D JUA	NUMBER	M8316-0-0	REV.	*
SCALE	2/1	SHEET	3 OF 3	DIST.			

D JUA M8316-0-0

DIGITAL EQUIPMENT CORPORATION				QUANTITY / VARIATION												NOTES:		
PARTS LIST																		
MADE BY BOB KOPPENAL		CHECKED <i>B. Koppenal</i>																
DATE 3-31-76		DATE 3-30-76																
ENG <i>P. Bantley</i>		PROD <i>K. Standard</i>																
DATE 7-2-76		DATE 7-2-76																
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION	M8316- ϕ - ϕ														REF DESIGNATION
1	D-MD-5010900-0-0	5010900	ETCHED CIRCUIT BOARD	1														
2		1001610-01	CAP, .01 UF, 100V, 10%	78														C11-C30, C32-C40, C43-C88, C93, C95, C97
3		1000023	CAP, 330 PF, 100V, 5%	2														C89, C92
4		1002431	CAP, 2.2 UF, 35V, 10%	1														C30
5		1005306	CAP, 6.8 UF, 35V, 10%	3														C91, C94, C96, C99-C100, C1
6		1109502	DIODE, IN4742	3														D1-D3
7		1100114	DIODE, D664	1														D4
8		1211164-06	SWITCH PACK (10 POS DIP)	1														S1
9		1211813-02	IC SOCKET (16 PIN)	1														J6
10		1210711-02	HANDLE ASSY	1														
11		1209941-02	CONNECTOR 40 P. RT. ANG. HD	5														J1-J5
12		1209941-03	LATCH LEFT 40 P. RT. ANG. HD	5														
13		1209941-04	LATCH RIGHT 40 P RT. ANG. HD	5														
14		1300202	RES., 47, 1/4W, 5%	5														R122-R125, R138
15		1300219	RES., 68, 1/4W, 5%	3														R129, R133, R137
16		1301424	RES., 680, 1/4W, 5%	13														R22, R24, R26, R28, R30, R32, R34, R36 R38, R40, R42, R44, R46
17		1300417	RES., 2.2K, 1/4W, 5%	5														R118, R126, R136, R139, R141
18		1301874	RES., 5.6K, 1/4W, 5%	1														R127
19		1301423	RES., 6.8K, 1/4W, 5%	1														R131
20		1301522	RES., 27, 1/4W, 5%	4														R2, R3, R46, R57

E.C.O. NO.

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				SHEET 1 OF 4				INSERTION PARTS LIST DATA BASE REV D							

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION												NOTES:
MADE BY BOB KOPPENAL		CHECKED		M8316- ϕ - ϕ												REF DESIGNATION
DATE 3-31-76		DATE														
ENG		PROD														
DATE		DATE														
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION													REF DESIGNATION
21		1301322	RES., 18 ϕ , 1/4W, 5%	8												R5, R8, R12, R15, R77, R78, R144, R145
22		1300295	RES., 33 ϕ , 1/4W, 5%	15												R21, R23, R25, R27, R29, R31, R33, R35, R37, R39, R41, R43, R147, R2 $\phi\phi$, R72
23		1300309	RES., 39 ϕ , 1/4W, 5%	4												R4, R9, R11, R16
24		1300316	RES., 47 ϕ , 1/4W, 5%	2												R6, R64
25		1300365	RES., 1K, 1/4W, 5%	83												R1, R7, R1 ϕ , R13, R14, R17-R20, R45, R47-R56, R71, R58-R63, R65-R69, R73-R76, R79-R81, R82-R94, R117, R96-R1 $\phi\phi$, R104-R115, R119-R121, R128, R13 ϕ , R132, R135, R14 ϕ , R142, R143, R146, R168, R134
26		1309405	RES., 68, 1/2W, 5%	2												R116, R95
27		1300250	RES., 15 ϕ , 1/4W, 5%	1												R199
28		1509338	TRANSISTOR, DEC 6531B	5												Q1, Q2, Q6, Q8, Q9
29		1503409-01	TRANSISTOR, DEC 6534B	5												Q3, Q4, Q5, Q7, Q1 ϕ
30		1811660-02	CRYSTAL OSCILLATOR, 5. ϕ 688 MHZ	1												Y1
31		1912824	IC., 74LS74	6												E41, E43, E52, E64, E48, E49
32		1912799	IC., 74LS $\phi\phi$	3												E32, E35, E65
33		1912807	IC., 74LS1 ϕ	1												E12
34		1912815	IC., 74LS3 ϕ	1												E17
35		1912801	IC., 74LS ϕ 2	4												E8, E36, E51, E57
36		1909053	IC., 7492	2												E23, E37
37		1909054	IC., 7493	1												E59
38		1910537	IC., 74S11	1												E7
39		1912803	IC., 74LS ϕ 4	5												E4, E27, E33, E74, E68,

E.C.O. NO.

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TITLE
OPTION BOARD #1

ASSY NO.
D-UA-M8316- ϕ - ϕ
SHEET 2 OF 4

SIZE CODE NUMBER
B PL M8316- ϕ - ϕ
INSERTION PARTS LIST DATA BASE REV D

REV.
*

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:			
MADE BY BOB KOPPENAL		CHECKED		M8316-β-β													
DATE 4 NOV 76		DATE													SECTION 1		
ENG		PROD													ISSUED SECTION		
DATE		DATE															
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION											REF DESIGNATION			
40		1909705	IC., 8881	10													E4 0 , E24, E54, E42, E46, E5 0 , E66, E61, E75, E58
41		1909928	IC., 7416	2													E71, E76
42		1909929	IC., 7417	5													E6, E26, E31, E29, E21
43		1909935	IC., 8235	3													E5, E15, E6 0
44		1912819	IC., 74LS42	3													E19, E28, E25
45		1912805	IC., 74LS 0 0	2													E34, E44
46		1910322	IC., 1488L	1													E38
47		1910323	IC., 1489L	1													E78
48		1909704	IC., 314A	1													E1 0
49		1911469	IC., 8640	1													E77
50		1910459	IC., 16 0 2A (UART)	1													E47
51		1912853	IC., 74LS175	1													E56
52		1912697	IC., 74LS174	3													E55, E7 0 , E72
53		1910091	IC., 7437	1													E39
54		1911315	IC., 8234	6													E1, E9, E14, E13, E45, E53
55		1911116	IC., 8837	6													E11, E16, E3 0 , E22, E69, E73
56		2112623	IC., 5016 (BAUD RATE GEN.)	1													E62
57		23062A1	ROM #1 KLDK #1, 32 X 8	1													E18
58		23063A1	ROM #2 KLDK #2, 32 X 8	1													E2 0
59		1905575	IC., 7400	1													E3

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	COPYRIGHT © 1976 DIGITAL EQUIPMENT CORPORATION			OPTION BOARD #1			D-UA-M8316-0-0			B PL		M8316-β-β		*
	EN-01140A-16-R276(325) DRB 125						SHEET 3 OF 4			INSERTION PARTS LIST DATA BASE REV D				

DIGITAL EQUIPMENT CORPORATION PARTS LIST				QUANTITY / VARIATION										NOTES:			
MADE BY JACK MASON		CHECKED		SECTION		M8316-0-0											
DATE 13 APRIL 76		DATE		ISSUED SECTION													
ENG DATE		PROD DATE															
ITEM NO.	DRAWING NO.	PART NO.	DESCRIPTION													REF DESIGNATION	
60		1905576	IC, ,7410	1												E2	
61		1909686	IC, ,7404	2												E63, E67	
62		9006732	EYELET	12													

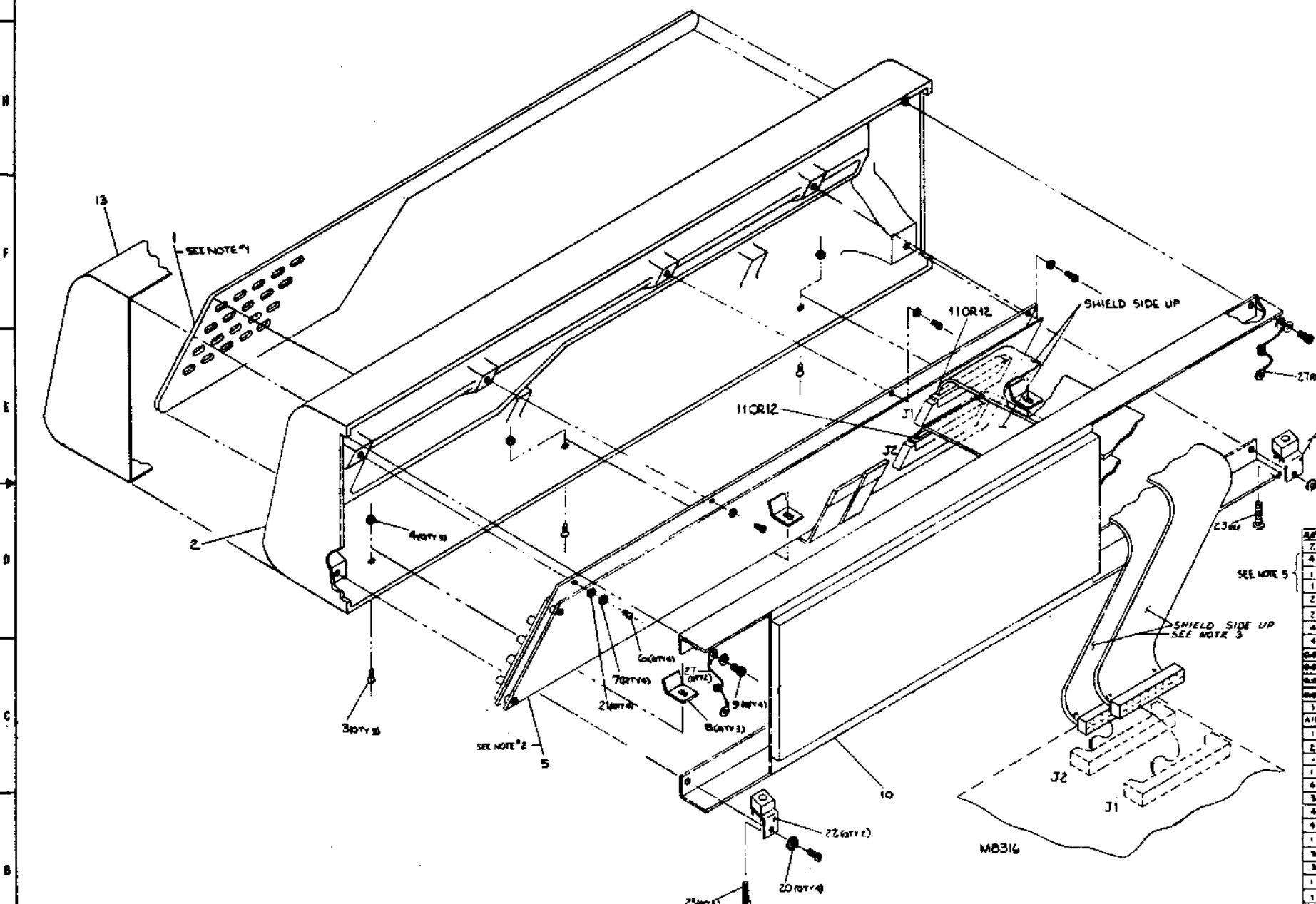
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SHEET 4 OF 4								INSERTION PARTS LIST DATA BASE REV 0					

DO NOT SCALE DRAWING

LEGEND	
PART NO	VARIATION
KCB-AA	PROG'S COMPILER (BEZEL)
KCB-AB	REMOTE PROG'S COMPILER PL

- NOTES:**
- ASSEMBLE ITEM #1 (PANEL) TO ITEM #2 (BEZEL) USING SILASTIC ADHESIVE ITEM #M
 - FOR PROPER ALIGNMENT OF KEYPAD OF MODULE ASSEMBLY (ITEM #3) INTO BEZEL (ITEM #2), DO THE FOLLOWING:
 - PLACE MODULE ASSEMBLY (ITEM #3) INTO BEZEL (ITEM #2)
 - START MOUNTING HARDWARE, ITEMS 6, 7 AND 21 INTO BEZEL.
 - BEFORE TIGHTENING DOWN ITEMS 6, 7 AND 21, PUSH MODULE ASSEMBLY TOWARDS THE TOP OF BEZEL. THE KEYPAD, WHEN VIEWED FROM THE FRONT OF BEZEL, SHOULD JUST TOUCH THE TOP EDGE OF THE KEYPAD CUTOUTS IN BEZEL.
 - TIGHTEN ITEMS 6, 7 AND 21.
 - NOW SECURE MODULE ASSEMBLY BOTTOM TO BEZEL WITH ITEMS 3, 4 AND 8; BEING SURE THAT CLIPS (ITEM #8) ARE PRESSED FIRMLY AGAINST MODULE ASSEMBLY.
 - MATE BC08R CABLES J1 (KCB-A) TO J1 (M8316) J2 (KCB-A) TO J2 (M8316)
 - SEE SHEET 2 FOR INSTRUCTIONS OF MOUNTING BEZEL TO BOX AND CABINET
 - LOOSE SHIP ITEMS 21, 22, 23 WITH ASSY



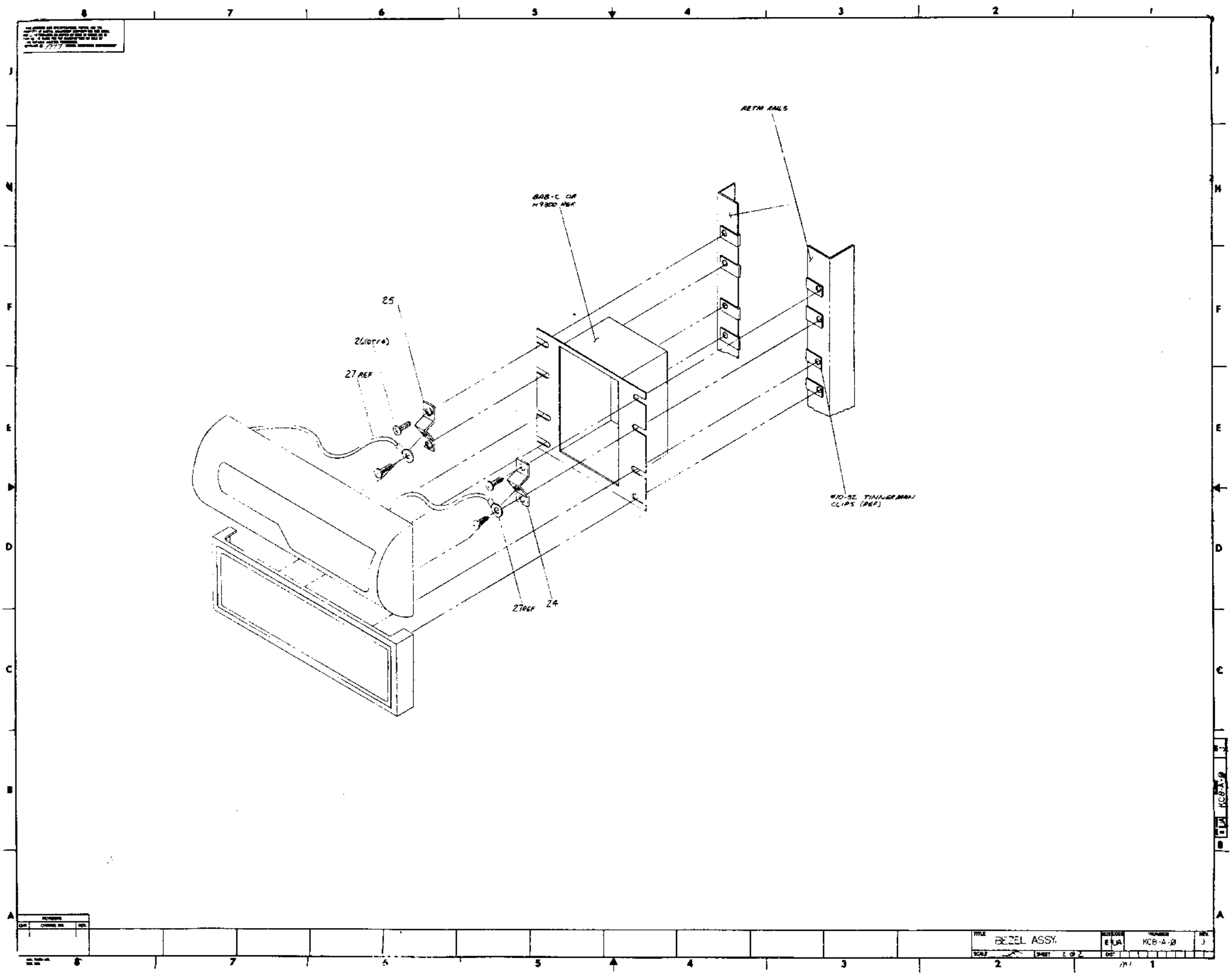
QTY	DESCRIPTION	PART NO
2	CABLE ASSY FLEX	121707-01
4	SCR PH 10-32X.50	9004078-03
1	BRKT CABINET	791704-1
1	BRKT CABINET	791704-2
2	SCR, SOC, HD, D 3/16 X 1/2	9004350-08
2	BRKT, BEZEL	CIA-701524
4	WASHER FLAT	9006453
4	WASH EXT TOOTH LOCK #6	9008151
1	KEYBOARD ASSY	D-AD-701644-04
1	NUT KEYS #4-40	9006897
3	SCR PH 10-32X.50	9006011-2
1	BEZEL (FRONT) OF M8316	CIA-742398-1-0
1	PANEL	CIA-742398-1-0

QTY	DESCRIPTION	PART NO
1	KEYBOARD ASSY	D-AD-701644-04
1	NUT KEYS #4-40	9006897
3	SCR PH 10-32X.50	9006011-2
1	BEZEL (FRONT) OF M8316	CIA-742398-1-0
1	PANEL	CIA-742398-1-0

BEZEL ASSY

KCB-AA

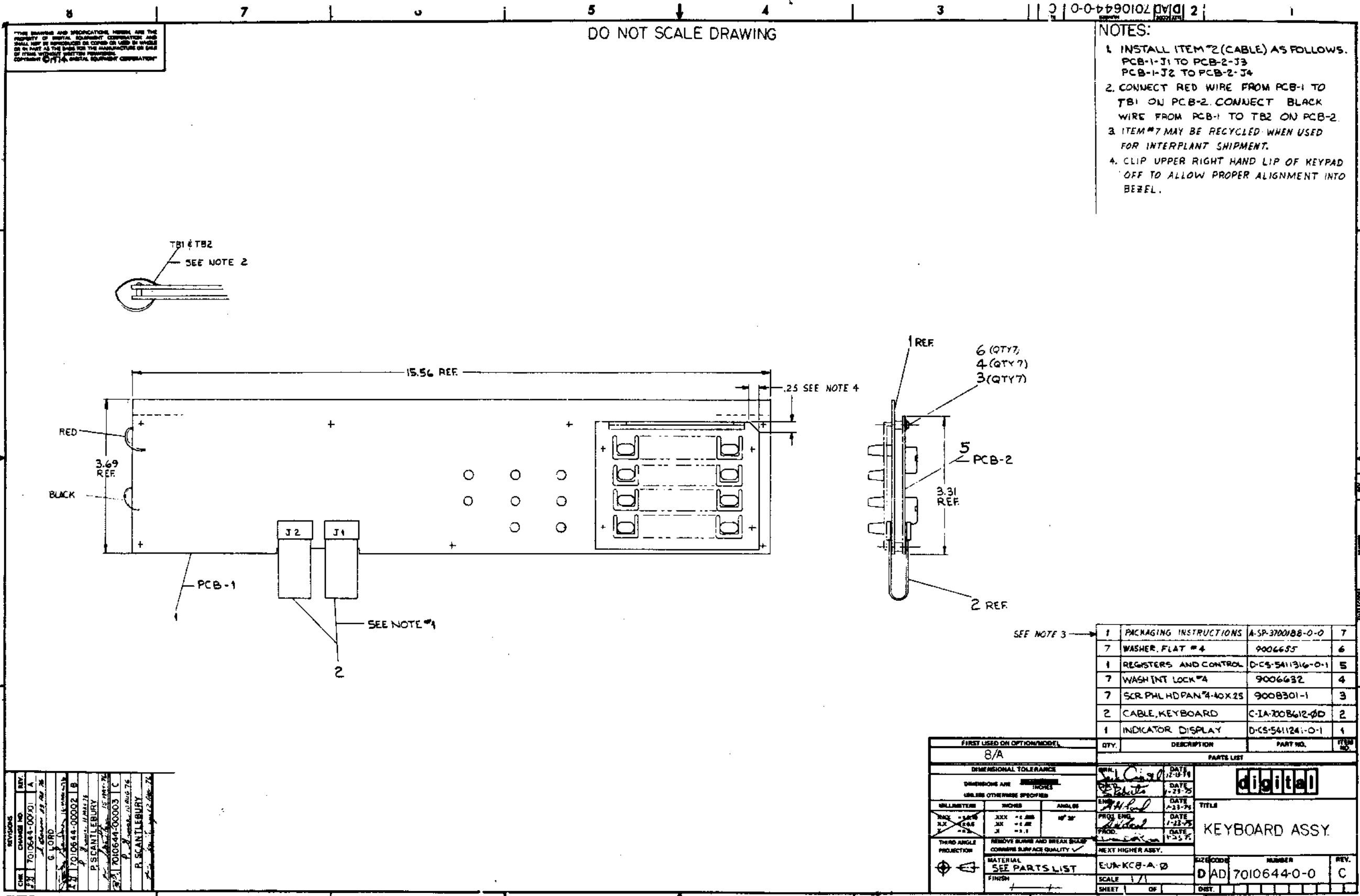
REV. 1



ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES
 DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS
 UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED

REV	DESCRIPTION

TITLE	BEZEL ASSY.	DESIGNED BY	EUA	DATE	KCB-A-0	REV	J
SCALE	1/2" = 1"	DRAWN BY					

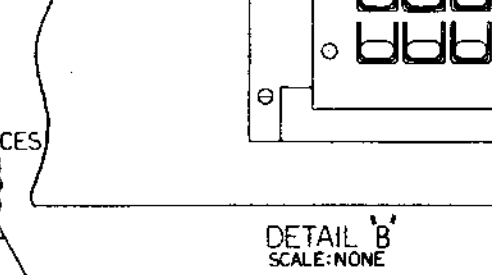
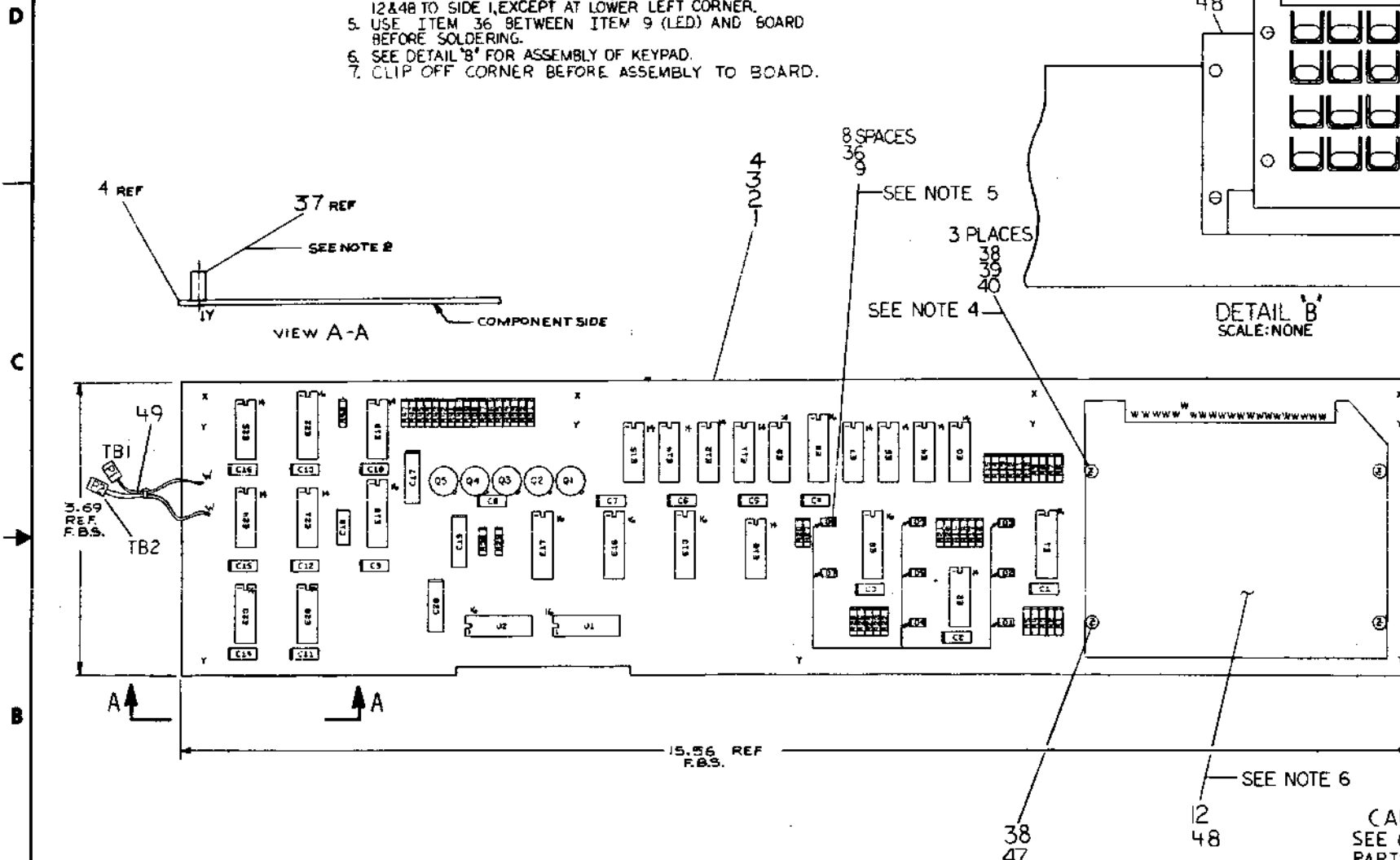


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- NOTES:**
- HAND INSERT KEYPAD AFTER WAVE SOLDERING
 - MOUNT ITEM #37 (INSERTS) IN 7 HOLES, AFTER COMPONENTS HAVE BEEN MOUNTED.
 - DEC PART NUMBER 1210054 MAY BE SUBSTITUTED FOR DEC 1211813-01 ON THIS BOARD.
 - USE #4 HARDWARE ITEMS (38, 39 & 40) TO MOUNT ITEMS 12 & 48 TO SIDE 1, EXCEPT AT LOWER LEFT CORNER.
 - USE ITEM 36 BETWEEN ITEM 9 (LED) AND BOARD BEFORE SOLDERING.
 - SEE DETAIL "B" FOR ASSEMBLY OF KEYPAD.
 - CLIP OFF CORNER BEFORE ASSEMBLY TO BOARD.

WIRE TABLE

ITEM	FROM	WITH	TO	WITH	LENGTH	COLOR
49	TB1	SOLDER	ITEM 1, 2, 3 OR 4		3.0"	RED
	TB2	SOLDER	ITEM 1, 2, 3 OR 4		3.0"	BLK



REF	X-Y COORDINATE HOLE LOCATION	K CD-5411241-B-4	1
REF	ASSY/DRILLING HOLE LAYOUT	0-AM-5411241-B-5	2
REF	MODULE ECD HISTORY	0-AM-5411241-B-6	3
1	ETCHED CIRCUIT BOARD	5011260	4
1	C10	CAPACITOR, .02uf, 100V, 5%	5
18	E1 THRU C18	CAPACITOR, .01uf, 50V, AXIAL	6
1	C17	CAPACITOR, 1.0uf, 35V, 10%	7
2	C19, C20	CAPACITOR, 0.0uf, 35V, 10%	8
0	D1 THRU D6	LED	9
9	E3, E5, E7, E9, E11, E12, E14, E15, E6	14 PIN I.C. SOCKET	10
2	J1, J2	16 PIN I.C. SOCKET	11
1	KEYPAD ASSY.	1211800	12
1	R23	RESISTOR, 220, 1/4W, 5%	13
8	R18 THRU R21, R27, R28	RESISTOR, 330, 1/4W, 5%	14
5	R32, R35, R36, R41, R44	RESISTOR, 470, 1/4W, 5%	15
21	R1 THRU R15, R22 THRU R26, R46	RESISTOR, 1K, 1/4W, 5%	16
1	R40	RESISTOR, 10K, 1/4W, 5%	17
4	R38, R39, R42, R45	RESISTOR, 10, 1/4W, 5%	18
1	R30	RESISTOR, 750, 1/4W, 5%	19
0	R31, R33, R34, R37, R40, R43	RESISTOR, 27, 1/4W, 5%	20
1	R47	RESISTOR, 8.0K, 1/4W, 5%	21
5	D1 THRU D5	TRANSISTOR, MPS405	22
1	E23	I.C. DEC 7474	23
1	E21	I.C. DEC 7420	24
1	E25	I.C. DEC 7400	25
1	E24	I.C. DEC 7493	26
1	E22	I.C. DEC 8251	27
1	E20	I.C. DEC 7404	28
1	E19	I.C. DEC 7411	29
1	E17	I.C. DEC 77145	30
2	E2, E10	I.C. DEC 7400	31
1	E18	I.C. DEC 74123	32
2	E1, E8	I.C. DEC 9318	33
3	E6, E13, E16	I.C. DEC 7447A	34
9	E3, E4, E5, E7, E9, E11, E12, E14, E15	SEG. DISPLAY	35
0	WASHER, SHOULDER	9006516	36
7	INSERTS, PC BOARD	9009113-2	37
2	SCREW PHILIPS 4-40x1/8	9006014-01	38
1	NUT, KEP 4-40	9006457	39
1	WASHER, FLAT .312 X .125 ID X .027	9006655	40
1	BRGER KEY PAD	0-AM-NW3722-0	41
2	WIRE #22 AWG (RED)	9007350-22	42
3	WIRE #22 AWG (BLACK)	9007350-00	43
2	CONN. SOLDERLESS (CRED)	9007370	44
1	SPACER FIBER 4-40, 250X 3/8L6	9007683	45
4	RETAINER, KEYBOARD ASSY.	C-1A-7613711-0-0	46
1	SPACER, HEX NYLON 4-40 X 1/4	900923T	47

DEC I.C. #	QTY	REF
DEC I.C. 9231	8	16
DEC I.C. 7400	10	5
DEC I.C. 74105	6	18
DEC I.C. 7406	6	14
DEC I.C. 9318	6	33
DEC I.C. 74123	6	32
IC TYPE	QTY	+97

IC PIN LOCATIONS

QTY AND BY ARE USUALLY PIN 7 AND 24 RESPECTIVELY EXCEPT AS STATED ABOVE

REVISIONS

NO.	DATE	BY	REVISION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

PARTS LIST

ETCH BOARD REV. 0

digital

INDICATOR DISPLAY

D-AD7010644-0-0

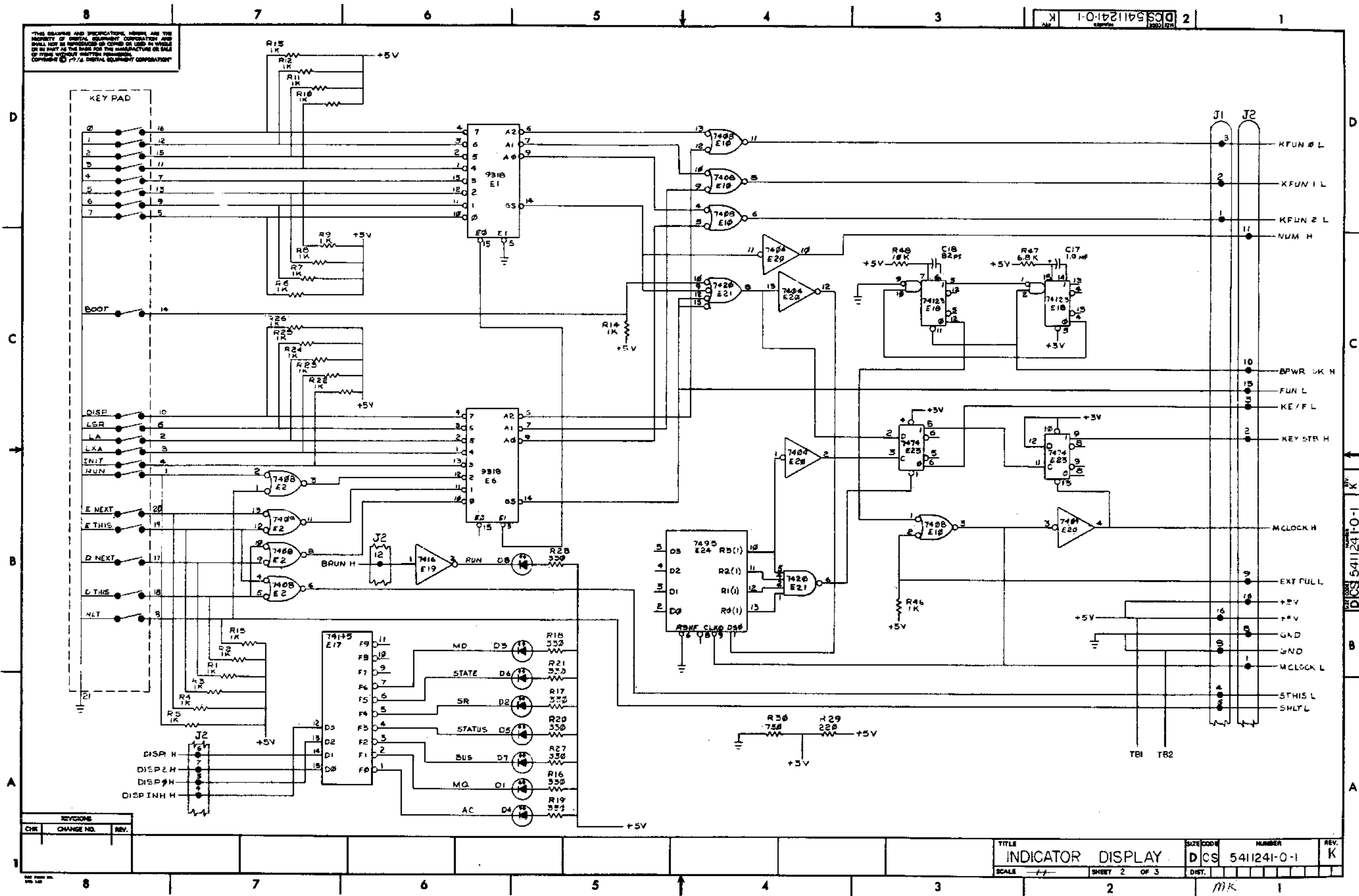
SCALE 1/1

SHEET 1 OF 3

DEC NO. EIA NO.

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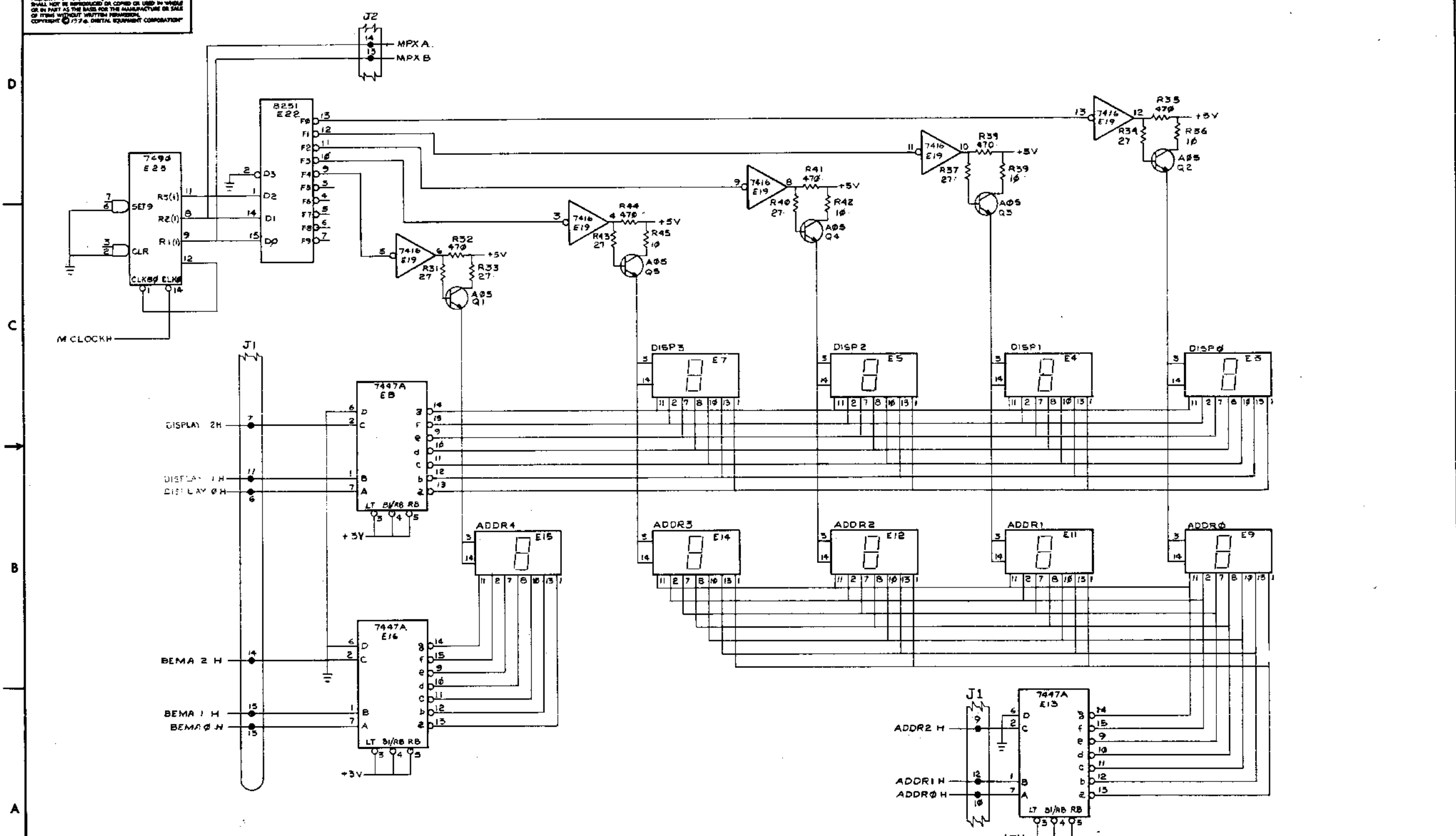
DIGITAL EQUIPMENT CORPORATION
 5411241-0-1 K 2



REV.	CHANGE NO.	DATE

TITLE: INDICATOR DISPLAY
 SIZE CODE: DCS
 NUMBER: 5411241-0-1
 REV: K
 SCALE: 1:1
 SHEET: 2 OF 3
 DIST: MK

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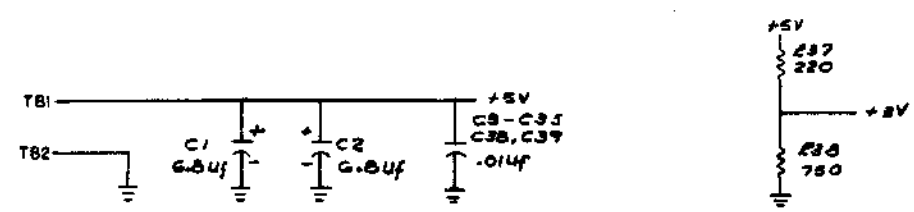
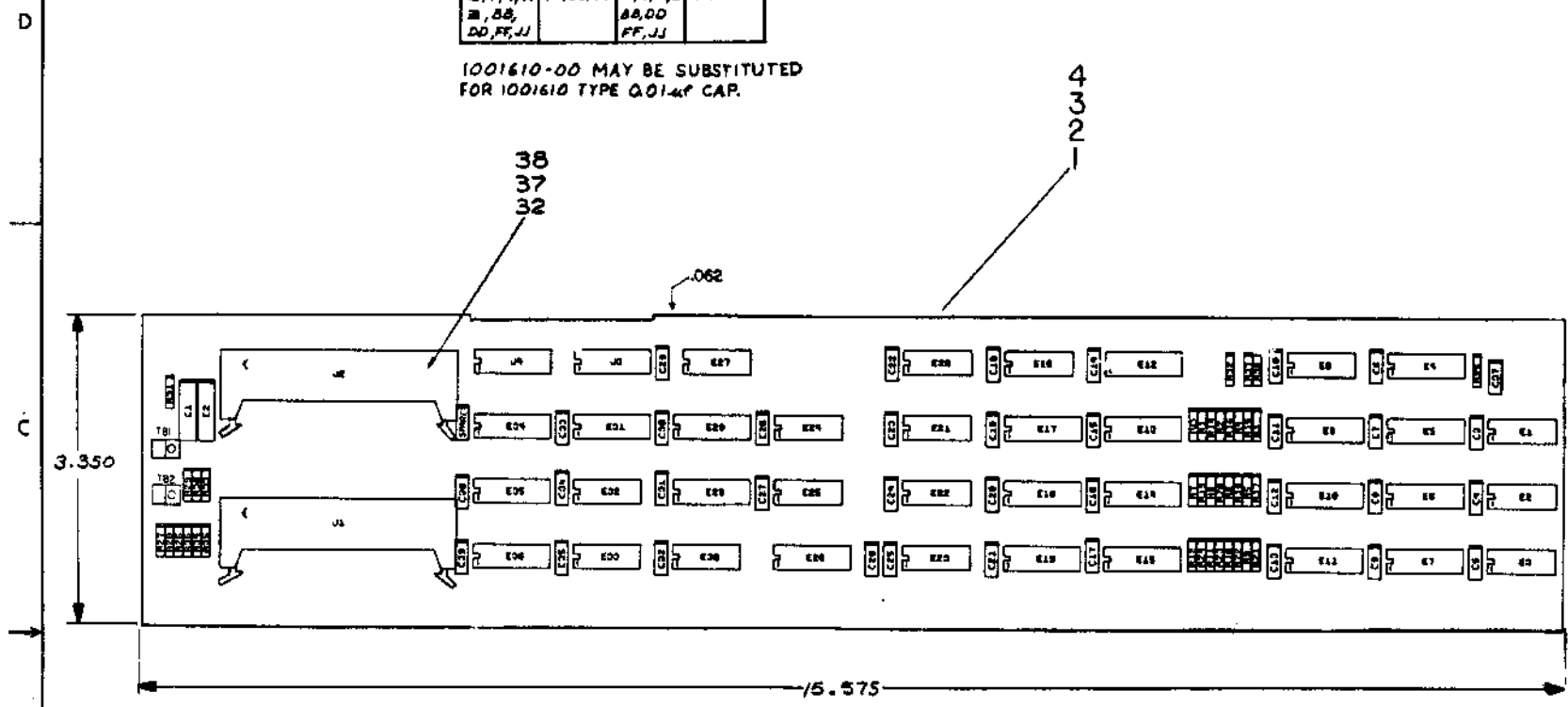
REVISIONS		
CHK	CHANGE NO.	REV.

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NOTES:

J1		J2	
GND	+5V	GND	+5V
B, D, F	LL, NN	G, D, F, J	LL, NN
J, L, N	RR, SS	L, N, R	RR, SS
T, V, X	TT, UU, VV	T, V, X, Z	VV
W, YY	AA, DD	AA, DD	FF, JJ
DD, FF, JJ			

1001610-00 MAY BE SUBSTITUTED FOR 1001610 TYPE 0014F CAP.



IC TYPE	GND	+5V
I.C DEC 74174	8	16
I.C DEC 7475	12	5
I.C DEC 8251	8	16
I.C DEC 8235	8	16
I.C DEC 74153	8	16
I.C DEC 74123	8	16
I.C DEC 74175	8	16
I.C DEC 8097	8	16
I.C TYPE	GND	+5V

GND AND 5V ARE USUALLY PIN 7 AND 16 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.

IC PIN LOCATIONS

SEMICONDUCTOR CONVERSION CHART

DEC NO.	EIA NO.	DEC NO.	EIA NO.
541316-00002	D	541316-00001	C
541316-00003	E	541316-00004	F

REVISIONS

CHK	CHANGE NO.	REV
P. SCANTLEBURY	1	1
G. LORD	2	1
G. LORD	3	1

REF	DESCRIPTION	QTY	PART NO.	ITEM NO.
	X-Y COORDINATE HOLE LOCATION		K-CO-541316-0-4	1
	ASSY/DRILLING HOLE LAYOUT		D-AH-541316-0-5	2
	MODULE ECO HISTORY		B-NH-541316-0-6	3
1	ETCHED CIRCUIT BOARD		5011315	4
1	C37		CAP 5GMMF 100V	5
35	C3-C35, C38, C39		CAP .014F 100V 20%	6
2	C1, C2		CAP 6.8 4F 35V	7
2	E1G, E20		I.C DEC 7474	8
2	E8, E30		I.C DEC 7400	9
2	E22, E33		I.C DEC 7402	10
1	E26		I.C DEC 7475	11
3	E1, E2, E3		I.C DEC 7495	12
2	E29, E35		I.C DEC 8251	13
2	E24, E27		I.C DEC 7404	14
1	E23		I.C DEC 7416	15
3	E9, E10, E11		I.C DEC 8235	16
3	E17, E18, E19		I.C DEC 74153	17
1	E32		I.C DEC 7408	18
1	E4		I.C DEC 74123	19
3	E5, E6, E7		I.C DEC 74175	20
5	E12, E13, E14, E15, E36		I.C DEC 74174	21
2	E21, E25		I.C DEC 7427	22
3	E28, E31, E34		I.C DEC 8097	23
12	R5-R16		RES 330 1/4W 5%	24
1	R17		RES 220 1/4W 5%	25
2	R27, R30		RES 390 1/4W 5%	26
7	R28, R31-R36		RES 1K 1/4W 5%	27
2	R26, R29		RES 180 1/4W 5%	28
1	R38		RES 750 1/4W 5%	29
1	R25		RES 6.8K 1/4W 5%	30
12	R1-R4, R17-R24		RES 600 1/4W 5%	31
2	J1, J2		CONN 40 PIN	32
2	J3, J4		SOCKET I.C 16 PIN	33
NR			WIRE, #30AWG, GREEN	34
2	TB1, TB2		TAB FASTON (OFFSET)	35
2	TB1, TB2		EYELET	36
2			LATCH, LEFT 40 P. RT. ANG. HD.	37
2			LATCH, RIGHT 40 P. RT. ANG. HD.	38

digital EQUIPMENT CORPORATION

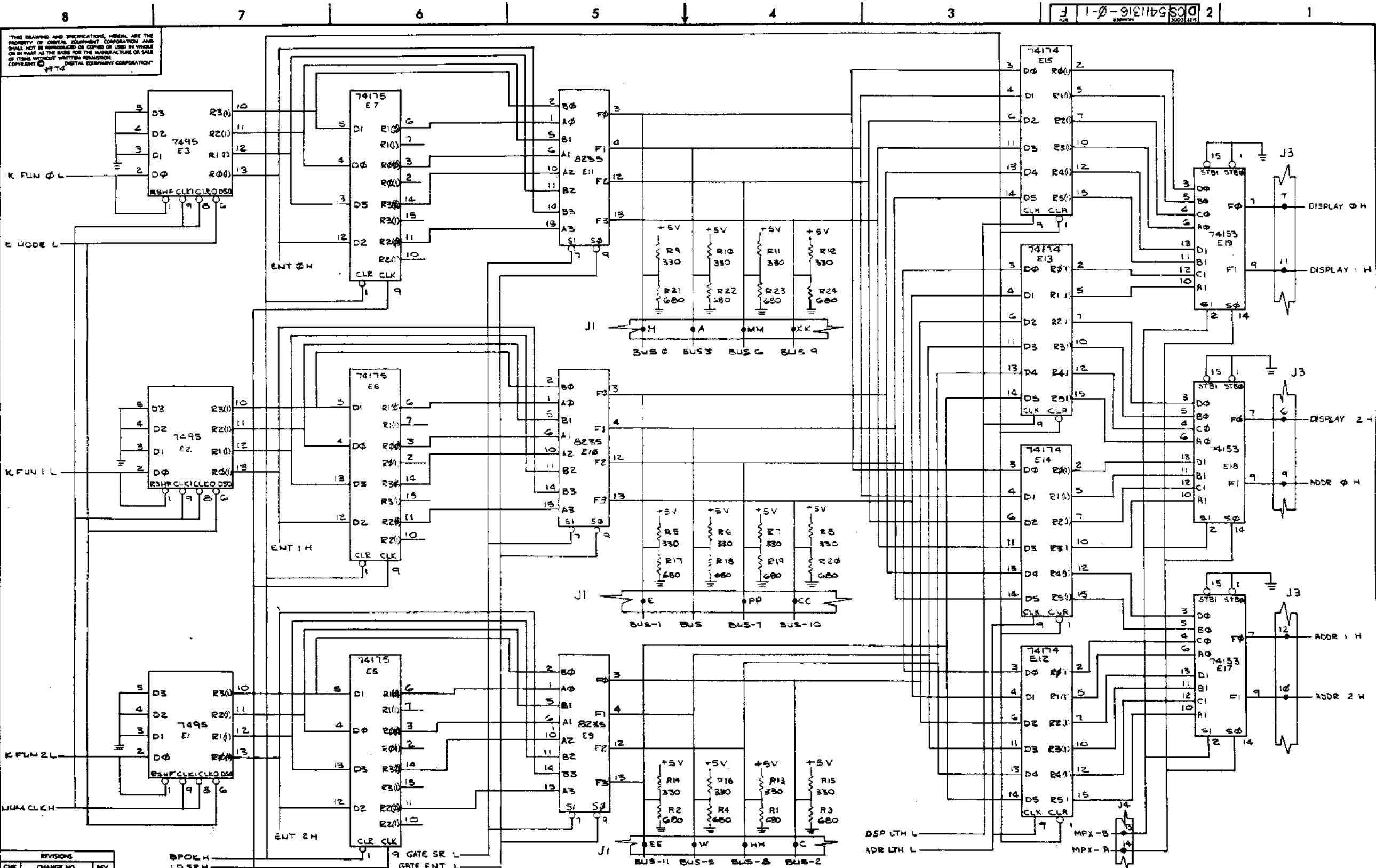
REGISTERS & CONTROL

DATE: 12/01/72
 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DRAWN BY: [Signature]
 PRODUCTION BY: [Signature]

SCALE: 1 OF 3

SIZE CODE: DCS 541316-0-1

REV. F

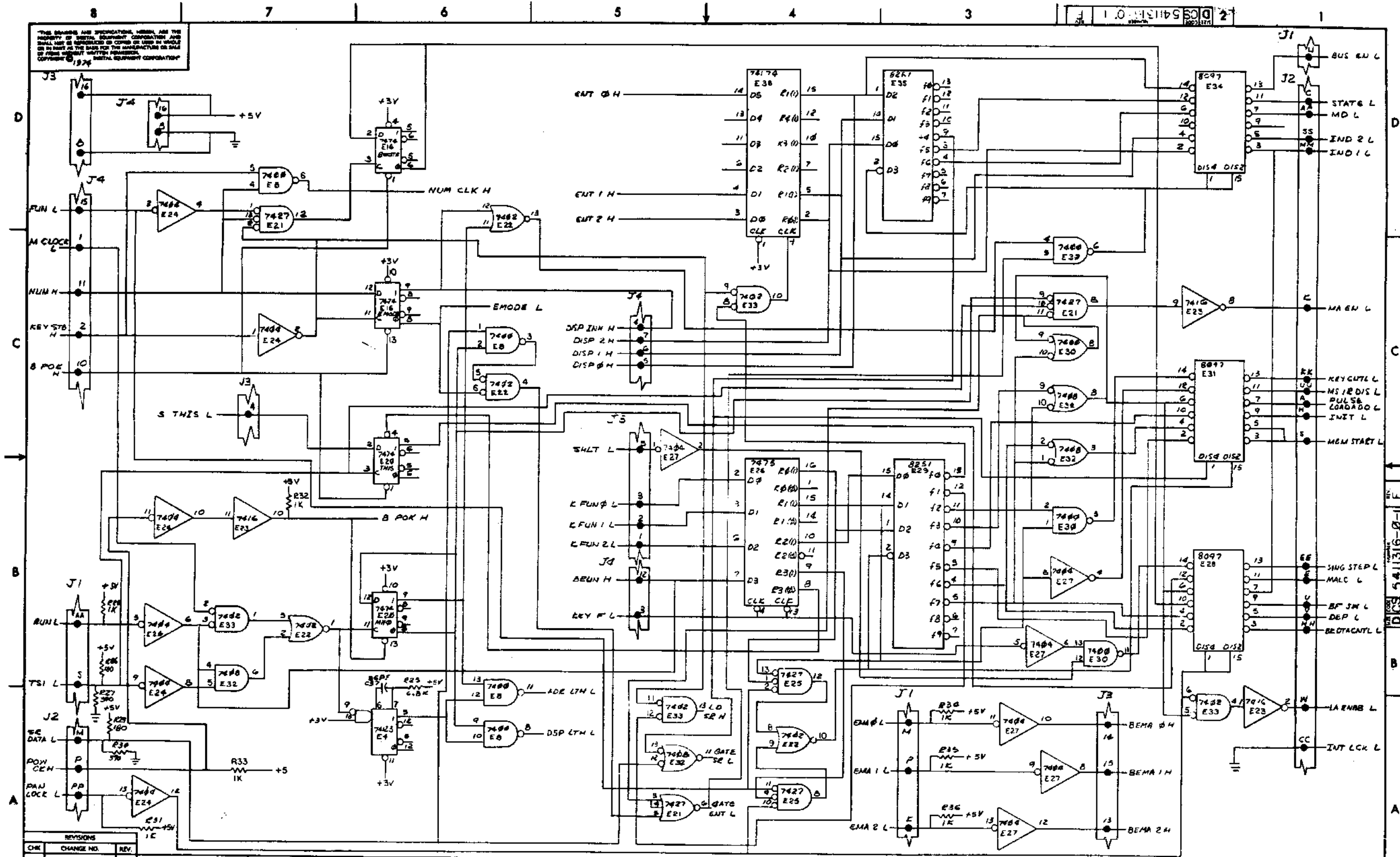


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE CODE	NUMBER	REV.
REGISTERS & CONTROL	DCS 5411316-0-1	F	F
SCALE	SHEET 2 OF 3	DIST.	

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DCS 5411316-01



REV.	CHANGE NO.	CHK.

TITLE	REGISTER CONTROL	SIZE CODE	DCS 5411316-01	NUMBER	1	REV.	F
SCALE		SHEET	5 OF 3	DIST.			

DIGITAL EQUIPMENT CORPORATION		MAYNARD, MASSACHUSETTS		DATE 22 MARCH 78		
ENGINEERING SPECIFICATION						
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE						
REVISIONS						
REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ECO CHANGE	00001A	TSHUDY	4-78	<i>[Signature]</i>	5-2-78
B	ECO CHANGE	ML002	PCARDNER	12-78	<i>[Signature]</i>	12-78
ENG <i>[Signature]</i>		APPD	<i>R.B. Regan</i>			
EX-10 11-8002-1001		SIZE	CODE	NUMBER	REV	
		A	SP	KT8A-3	B	
		M/C		SHEET 1 OF 12		

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
I General			
This document will define the hardware requirements and tests to be performed to: #1) install, #2) configure and #3) accept a KT8-AA system or KT8-AB add-on to an existing system.			
Because the KT8-A Memory Management options has several possible hardware configurations, the Hardware Rules/Restrictions (appendix A), General Configuration Guide (appendix B), and Configuration Examples (appendix C) should be referenced before installing this option.			
A. If the KT8-AA was shipped as part of a system, refer only to the Acceptance procedure.			
B. If the KT8-AB is an add-on installation to upgrade an existing system, then refer to the Installation and Acceptance Procedures.			
II Hardware			
This section defines the required hardware to install and accept a KT8-A and also defines the three hardware designations of the KT8-A option.			
A. The KT can be installed and accepted on any 8A/42B or 62B machine.			
B. The KCPA Programmer's Console is not required, as the KT diagnostics have a console package.			
C. Program loading media is via: Paper tape, Floppy, or RK05.			
D. The Three designations of the KT are as follows:			
1. KT8A-A - the KT Memory Management option shipped as part of a system configured by a DEC Manufacturing facility.			
2. KT8A-B - the required hardware to upgrade an 8A/42B or 8A/62B system. The KM8-AC (M8317YB or YC) is part of this option.			
		SIZE	CODE
		A	SP
		NUMBER	REV
		KT8A-3	B
		SHEET 2 OF 12	

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
III Installation			
Before proceeding with your installation refer to Appendix A and B to familiarize yourself with the rules and configurations. Also refer to the configuration example that most represents your particular installation.			
1. Install all memory in the system, refer to Configuration guide (appendix B).			
2. Install the KT8-AB in any vacant OMNIBUS slot with an "E" connector.			
3. If the system is comprised of two (2) BA8C boxes and memory will be located in each box then install the M9828 terminator module, in any available "E" connector of the box not containing the KT8-A (M8416). Now connect the cable (78-11411-1J) between the two barg connectors of the M8416 and M9828.			
		SIZE	CODE
		A	SP
		NUMBER	REV
		KT8A-3	B
		SHEET 3 OF 12	

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
IV Acceptance			
The time to accept a KT8-A configuration depends upon the amount of memory installed.			
1. Load and run the KT8-A Memory Management Diagnostic, Maindec 88-DJKTA-A, for five min. with NO errors.			
2. Load and run the Extended Address Test Maindec 88-DHKMC-C, for one pass with NO errors.			
3. Load and run the Extended Memory Data and Checkerboard Test, Maindec 88-DHKMA-D, for one pass with NO errors.			
4. To insure system integrity, load and build a DEC/X8 program using version 2, which will exercise up to 128K of memory. It is important that the program is build using the latest DEC/X8 modules.			
NOTE: Reference should be made to the latest write-up for DEC/X8 (version 2) as further parameters must be inputted to support break devices.			
		SIZE	CODE
		A	SP
		NUMBER	REV
		KT8A-3	B
		SHEET 4 OF 12	

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

APPENDIX A

BARDWARE RULES/RESTRICTIONS

- Any OMNIBUS CPU (KX8A or KX8F) using a BABC box (28 slot box) is acceptable.
- The KTS-A system can only be configured using any combination of M88AB (16K core) and MS8C (16K or 32K MOS) memories.
NOTE: M88AA, M88A, MS8A, M88E, M88EJ and M88F memories cannot be used to configure a KT8A system.
- If the system is made up of M88AB core memories (16K), then they must be modified per ECO M88AB #7, refer to table 1 for instructions.
- If the system is made up of MS8C type memories (16K or 32K MOS), then refer to Table 2 for switch configuration.
- The PDP/8E chassis cannot be used as part of a KT8-A system.
- If Power Fail/Auto Restart and/or Bootstraps are required as part of the system, then a K8B-AC (M8317YE or YC) must be used with the Memory Extension and Timeshare option disabled via the jumper. configuration in table 3.

NOTE: The M8317 and M8317YA are incompatible with the KT8A system.

DEC FORM NO EN-01022-1 (4-77) (381)
ORA 108

SIZE	CODE	NUMBER	REV
A	SP	KT8A-3	B
			OF 12

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

TABLE 1 M88-AB 16K CORE MEMORY CONNECTIONS

MEMORY		CONNECTIONS	
I BANK	I FIELD	I WIRE	I JUMPER
0	0-3 (0-16K)	AB1 to EB2	1-3, 3-4 in
	4-7 (16-32)	AB1 to EB2	2-4, 3-4 in
1	0-3 (32-48)	AB1 to ED2	1-3, 3-4 in
	4-7 (48-64)	AB1 to ED2	2-4, 3-4 in
2	0-3 (64-88)	AB1 to EL2	1-3, 3-4 in
	4-7 (88-96)	AB1 to EL2	2-4, 3-4 in
3	0-3 (96-112)	AB1 to ER2	1-3, 3-4 in
	4-7 (112-128)	AB1 to ER2	2-4, 3-4 in

TABLE 2A MS8-CA 16K MOS MEMORY SWITCH SETTINGS

MEMORY		SWITCHES SET TO "OFF"	
I BANK	I FIELD	I	I
0	0-3 (0-16K)	S1-1	
	4-7 (16-32K)	S1-2	
1	0-3 (32-48K)	S1-3	
	4-7 (48-64K)	S1-4	
2	0-3 (64-88K)	S1-5	
	4-7 (88-96K)	S1-6	
3	0-3 (96-112)	S1-7	
	4-7 (112-128)	S1-8	

DEC FORM NO EN-01022-1 (4-77) (381)
ORA 108

SIZE	CODE	NUMBER	REV
A	SP	KT8A-3	B
			OF 12

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

TABLE 2B MS8-CB 32K MOS MEMORY SWITCH SETTING

MEMORY		SWITCHES SET TO "OFF"	
I BANK	I FIELD	I	I
0	0-7 (0-32K)	S1-1 and S1-2	
1	0-7 (32-64K)	S1-3 and S1-4	
2	0-7 (64-96K)	S1-5 and S1-6	
3	0-7 (96-128)	S1-7 and S1-8	

TABLE 3 JUMPER CONFIGURATION TO DISABLE MEMORY EXTENSION AND TIMESHARE

JUMPERS

W1	OUT
W2	IN
W3	IN
W4	IN

DEC FORM NO EN-01022-1 (4-77) (381)
ORA 108

SIZE	CODE	NUMBER	REV
A	SP	KT8A-3	B
			OF 12

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

APPENDIX B

General Configuration Rules

- All memories must be physically located in the OMNIBUS where an "B" connector is present.
- Remembering the above rule, place the memories as far away as possible from the CPU.
- Direct Memory Address interfaces can only be located between the CPU and the first memory element. With one exception, in a two box system (2 BABC's) where memory is located in both boxes a DMA interface may be located in any vacant slot of the box containing the CPU.
- Programmed I/O interfaces may be located in any vacant slot of the system.
- When memories are located in two BABC chassis then the KTS-EX option must be used to extend the memory management option bank bits. The M929 terminator card must be located in an "E" connector of the BABC not containing the M8416. The 79-11411-1J cable is then connected between the M929 and the M8416.

DEC FORM NO EN-01022-1 (4-77) (381)
ORA 108

SIZE	CODE	NUMBER	REV
A	SP	KT8A-3	B
			OF 12

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
APPENDIX C			
Configuration Examples			
Because the KT8-A is limited to use in the B88C chassis (2B slot box) there are only four possible configurations.			
1. The entire system located in one B88C with a KM8A CPU as shown below.			
SLOT OPTION	DEFINITION	SIZE CODE	REV
1	KM8A CPU (M8315)	A	B
2	DKC8A OPTION ONE (M8316), IF REQUIRED	SP	
3	KM8-AC OPTION TWO (M8317B or YC), IF REQUIRED		
4	KT8-A MEMORY MANAGEMENT OPTION (M8416)		
5	DMA DEVICES CONFIGURED FROM THIS POINT TOWARD MEMORY		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	MEMORY CONFIGURED FROM THIS POINT TOWARD THE CPU		
12	ONLY I/O INTERFACES		
13	-----		
14	-----		
15	-----		
16	-----		
17	-----		
18	-----		
19	-----		
20	-----		

DEC FORM NO. EN-1022 (1-6-75) (181)
DRA.108

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
2. The entire system located in one B88C with a KM8F CPU as shown below.			
SLOT OPTION	DEFINITION	SIZE CODE	REV
1	KK8F TERMINATOR, M8328	A	B
2	DKC8A OPTION ONE (M8316), IF REQUIRED	SP	
3	KM8-AC OPTION TWO (M8317B or YC), IF REQUIRED		
4	KT8-A MEMORY MANAGEMENT OPTION (M8416)		
5	MEMORY CONFIGURED FROM THIS POINT TOWARD CPU		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	-----		
12	-----		
13	-----		
14	-----		
15	-----		
16	-----		
17	DMA AND I/O INTERFACES CONFIGURED FROM THIS POINT TOWARD MEMORY		
18	KK8F CPU, M8318		
19	KK8F CPU, M8388		
20	KK8F CPU, M8338		

DEC FORM NO. EN-1022 (1-6-75) (181)
DRA.108

ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
3. The KT8-A system made up of two B88C boxes with the KM8F CPU in one box and all the memory located in the other box as shown below.			
SLOT OPTION	DEFINITION	SIZE CODE	REV
1	KK8F TERMINATOR, M8328	A	B
2	ANY I/O INTERFACE	SP	
3	ANY I/O INTERFACE		
4	KT8-A MEMORY MANAGEMENT OPTION (M8416)		
5	MEMORY CONFIGURED FROM THIS POINT TOWARD THE CPU		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	LAST POSSIBLE MEMORY IN THIS CONFIGURATION		
12	ANY DMA OR I/O INTERFACES		
13	-----		
14	-----		
15	-----		
16	-----		
17	-----		
18	-----		
19	BC88H-3 OMNIBUS EXPANDER CABLES		
20	(BOTTOM B88C)		
1	BC88H-3 OMNIBUS EXPANDER CABLES		
2	DKC8A OPTION ONE (M8316), IF REQUIRED		
3	KM8-AC OPTION TWO (M8317B or YC), IF REQUIRED		
4	-----		
5	-----		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	-----		
12	-----		
13	-----		
14	-----		
15	-----		
16	-----		
17	DMA AND I/O INTERFACES CONFIGURED FROM THIS POINT TOWARD MEMORY		
18	KK8F CPU, M8318		
19	KK8F CPU, M8388		
20	KK8F CPU, M8338		

DEC FORM NO. EN-1022 (1-6-75) (181)
DRA.108

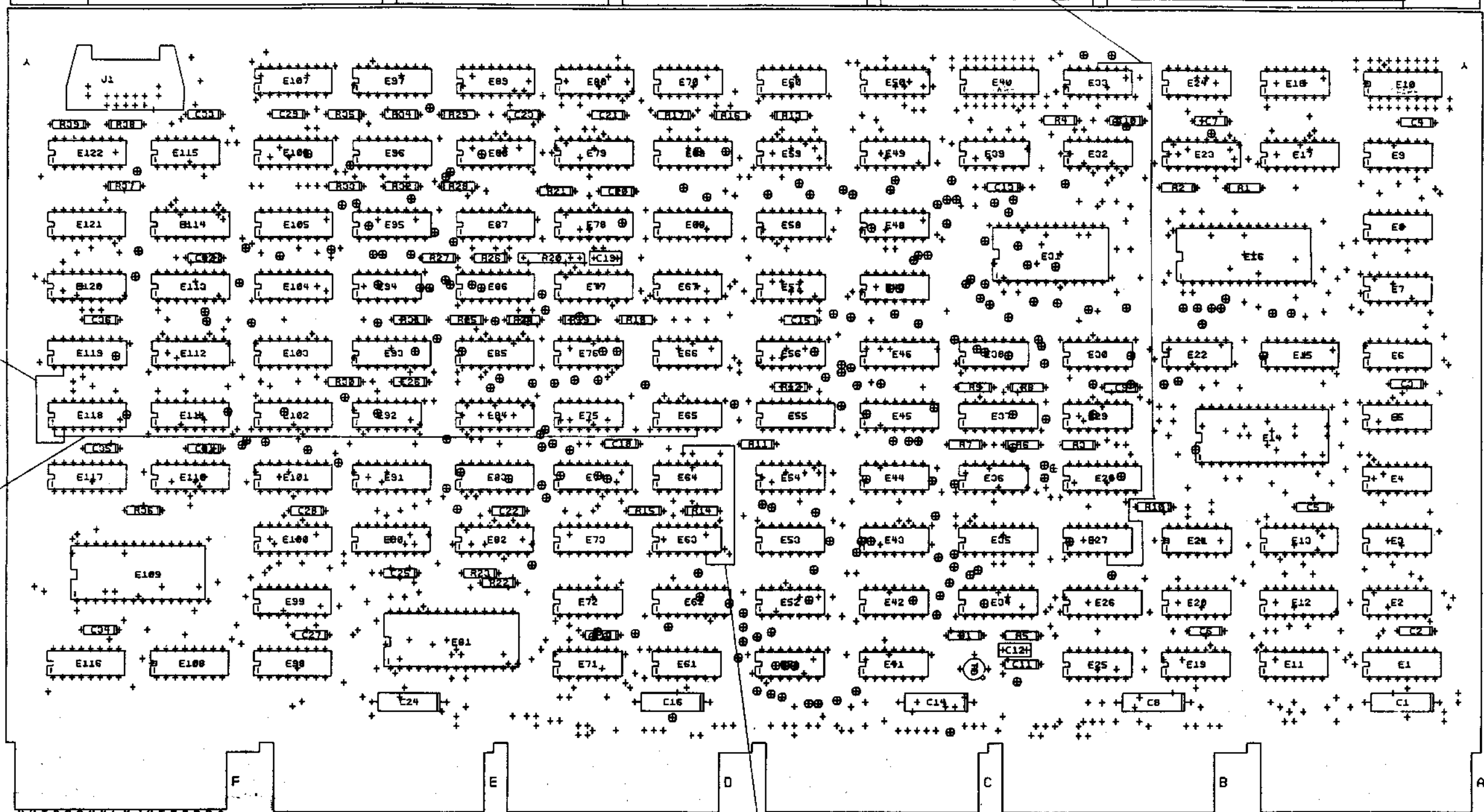
ENGINEERING SPECIFICATION		CONTINUATION SHEET	
TITLE KT8A FIELD INSTALLATION AND ACCEPTANCE PROCEDURE			
4. The KT8-A system made up of two B88C boxes with a KM8F in one box and memories located in both boxes as shown below:			
SLOT OPTION	DEFINITION	SIZE CODE	REV
1	KK8F TERMINATOR, M8328	A	B
2	ANY I/O INTERFACE	SP	
3	ANY I/O INTERFACE		
4	M8028 KT8A TERMINATOR, LOCATE IN SLOT "E" OF OMNIBUS MEMORY CONFIGURED FROM THIS POINT TOWARD CPU		
5	-----		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	MEMORY		
12	LAST MEMORY ELEMENT IN THIS B88C		
13	ANY I/O INTERFACES		
14	-----		
15	-----		
16	-----		
17	-----		
18	-----		
19	ANY I/O INTERFACES		
20	BC88H-3 OMNIBUS EXPANDER CABLES		
	(BOTTOM B88C)		
1	BC88H-3 OMNIBUS EXPANDER CABLES		
2	DKC8A OPTION ONE (M8316), IF REQUIRED		
3	KM8-AC OPTION TWO (M8317B or YC), IF REQUIRED		
4	KT8-A MEMORY MANAGEMENT OPTION, M8416		
5	MEMORY CONFIGURED FROM THIS POINT TOWARD THE CPU		
6	-----		
7	-----		
8	-----		
9	-----		
10	-----		
11	-----		
12	-----		
13	-----		
14	-----		
15	-----		
16	-----		
17	DMA AND I/O INTERFACES CONFIGURED FROM THIS POINT TOWARD MEMORY		
18	KK8F CPU, M8318		
19	KK8F CPU, M8388		
20	KK8F CPU, M8338		

DEC FORM NO. EN-1022 (1-6-75) (181)
DRA.108

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2-1

COMPONENT SIDE VIEW



NOTES: MODULE REWORK AT RELEASE
ETCH CUT - SIDE 2 - 0-1 BETWEEN
DA2 & 2 FEEDTHRU'S NEAR C16

CHANGE NO	REV	DATE	BY	CHKD
1	1	11/14/63	SKLIEN	
2	1	11/14/63	SKLIEN	
3	1	11/14/63	SKLIEN	
4	1	11/14/63	SKLIEN	
5	1	11/14/63	SKLIEN	

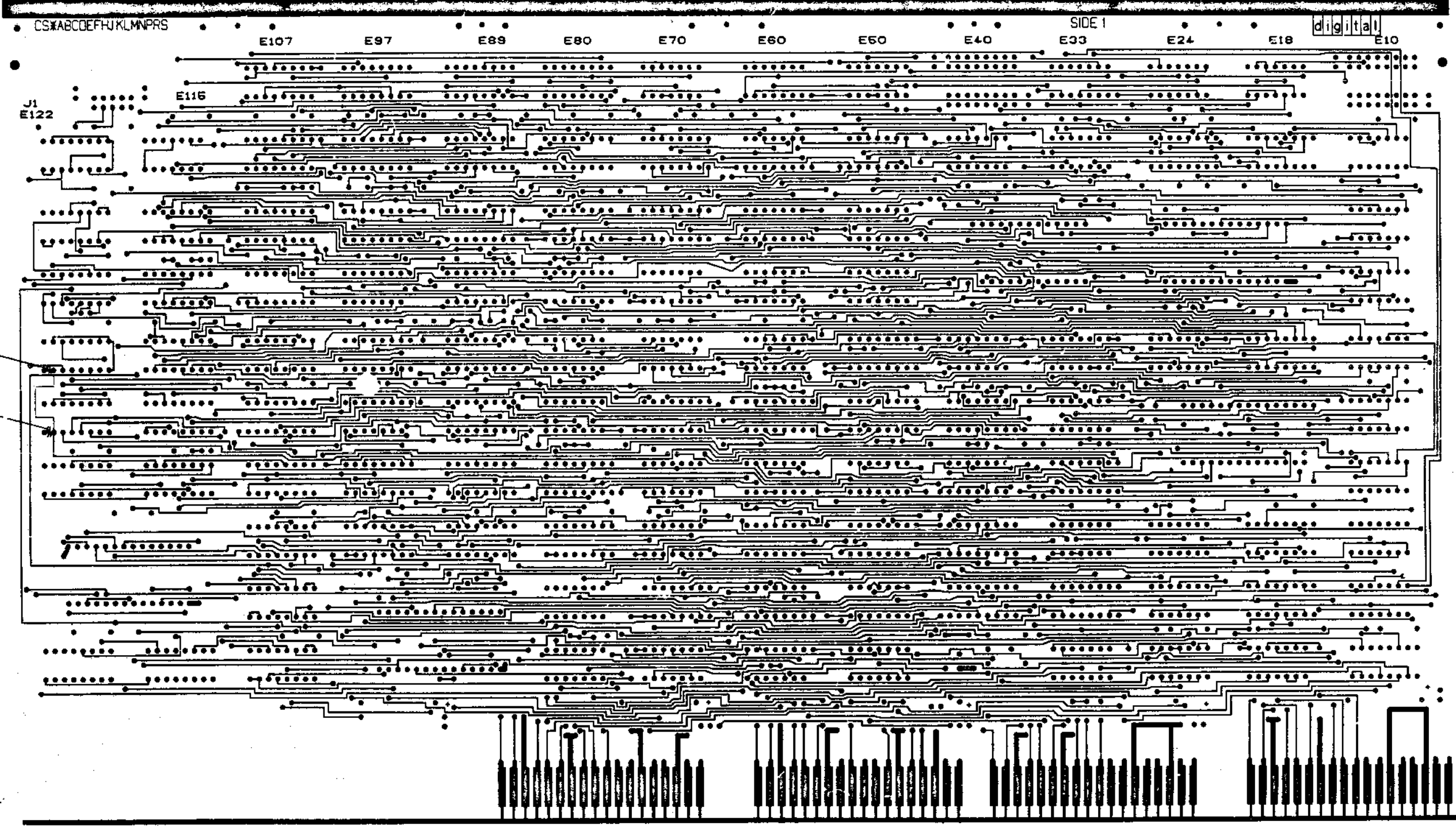
REV.	DATE	BY	CHKD
ETOH REV.			
P.C. DESIGN DATA BRK REV.			

SIGNATURES	DATE
DRN. <i>Bob K...</i>	11/14/63
CHK'D. <i>Bob K...</i>	11/14/63
ENG. <i>R. B...</i>	11/14/63
PROJ. ENG. <i>R. B...</i>	11/14/63
PROD. <i>R. B...</i>	11/14/63

digital	
TITLE FDP8 MEMORY MANAGEMENT BOARD	
SIZE CODE	NUMBER
D UA	M8416-0-0
REV	
	0

1-6

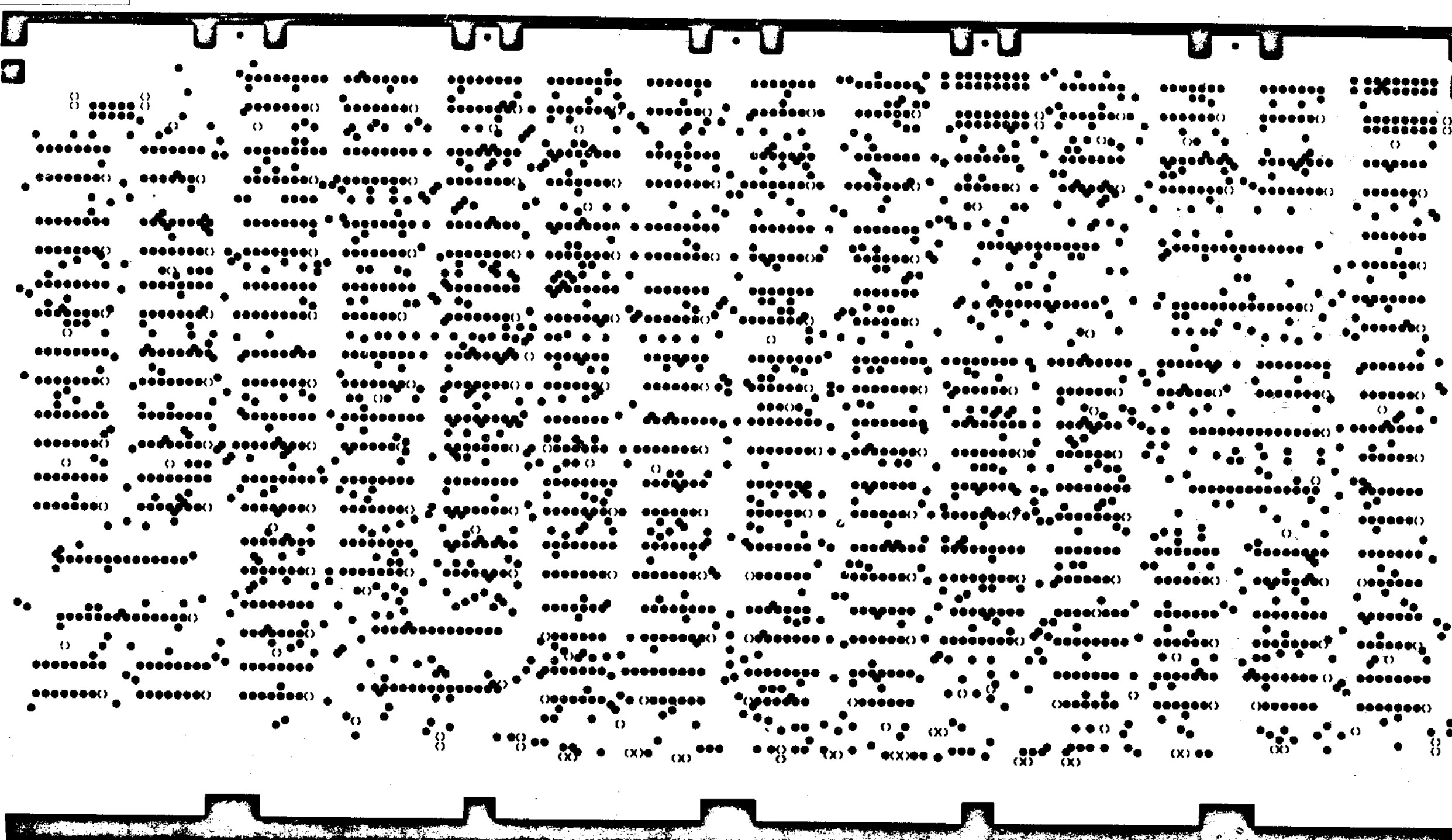
10/6



VIEWED FROM SIDE 1

REV-SIG-PL		
CHG	CHANGE NO	BY

TITLE	MANAGEMENT HOUSE	PROJ CODE	DUA	SYMBOL	M8416-4-D	REV	D
SCALE	1:1	SHEET	2	OF	6	DIST	

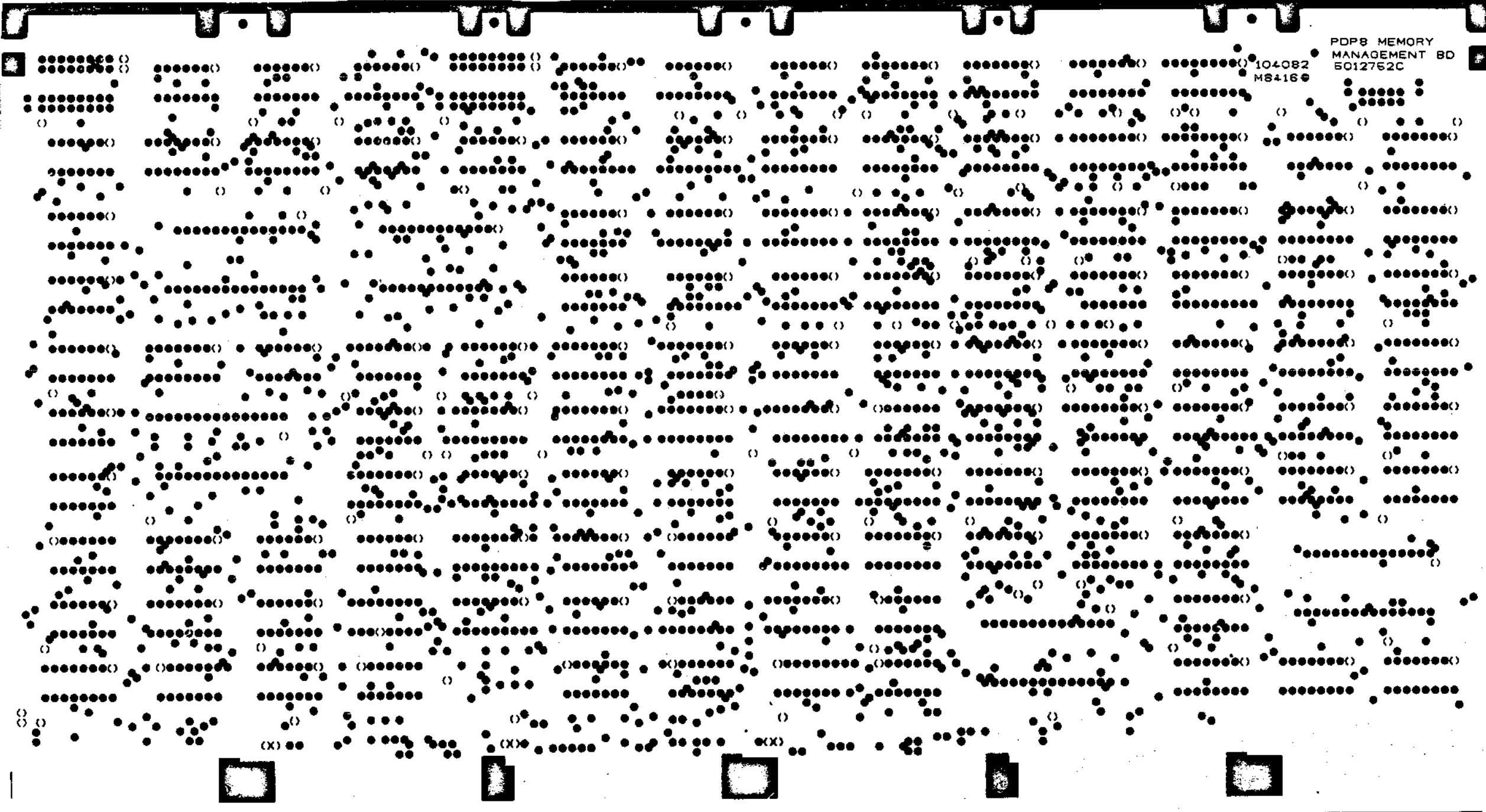


VIEWED FROM SIDE 1

REVISIONS	
NO.	DESCRIPTION

TITLE	DESIGNED BY	CHECKED BY	DATE
MATERIAL B...			
SCALE	SHEET 3	OF 6	

DUA M8416-0-0 D



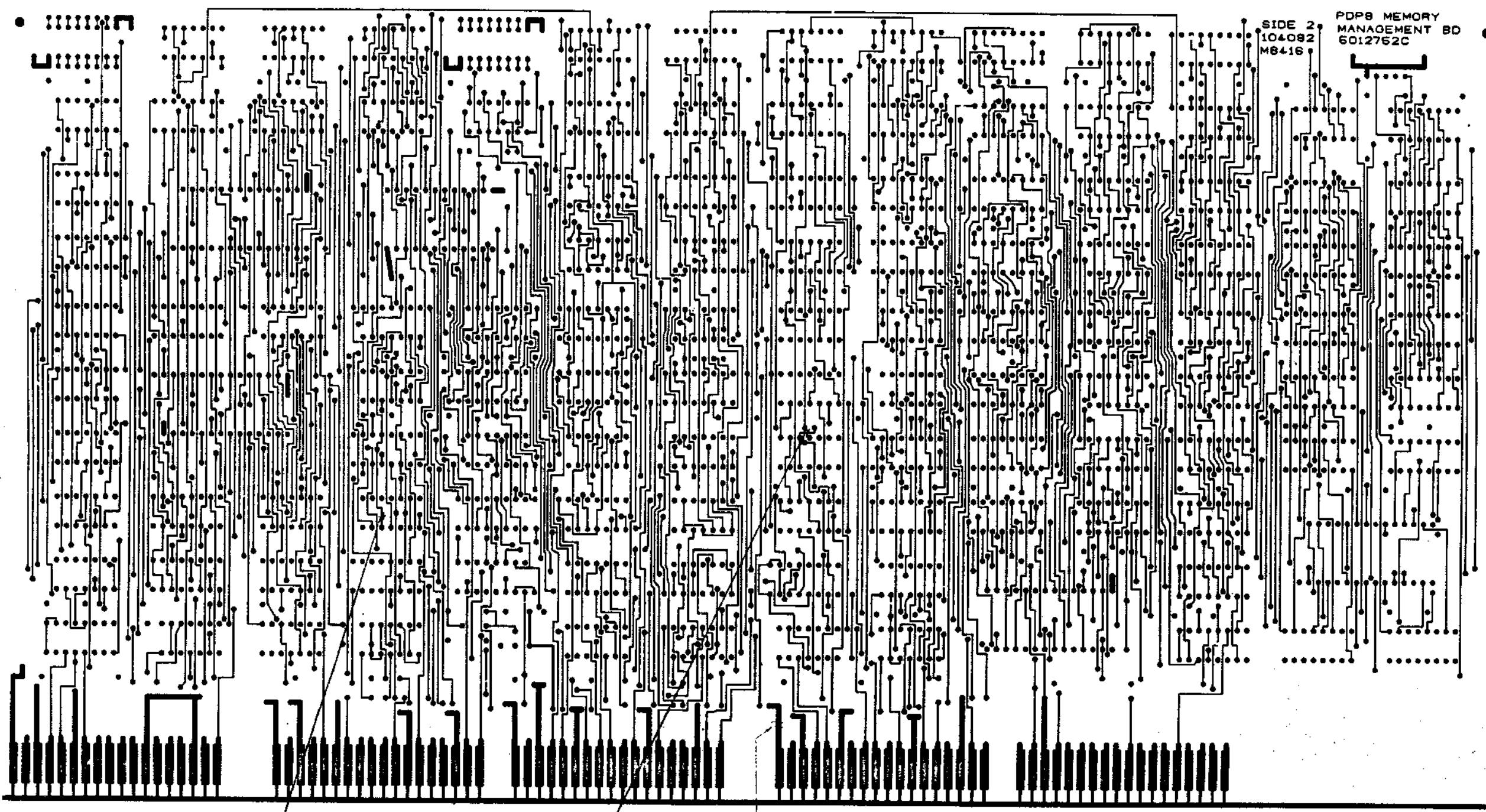
PDP8 MEMORY
MANAGEMENT BD
6012762C

104082
M8416

VIEWED FR. M. SIDE Z

REV. 1	DATE	BY	CHKD	APP'D	TITLE	DEPT.	PROJECT	NO.	REV.
					MANAGEMENT BOARD				
					SCALE	SHEET	4	6	

DUA M8416 - 40



SIDE 2
104092
M8416

PDP8 MEMORY
MANAGEMENT BD
6012762C

W/PAED FR. M. SIDE 2

2-2

1-3

0-4

REV.	CHANGE NO.	DATE

TITLE	SIZE CODE	NUMBER	REV.
PDP8 MEMORY MANAGEMENT BOARD	DUA	M8416	-0-0 D
SCALE	SHEET	OF	
	5	6	

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REWORK INSTRUCTIONS

E.C.O. #1

- ETCH CUTS SIDE 1
 1-1: BETWEEN E118 PIN1 & E118 PIN2
 1-2: BETWEEN E119 PIN1 & E119 PIN2

- ETCH CUTS SIDE 2
 1-3: BETWEEN E64 PIN10 & FEEDTHRU ABOVE AND BETWEEN E64 PINS 11, 12

WIRE ADDS SIDE 1

- 1-4: FROM E118 PIN2 TO E119 PIN2
 1-5: FROM E118 PIN1 TO E65 PINS 5-7
 1-6: FROM E65 PIN6 TO FEED THRU THAT WAS CUT FROM E64-10

E.C.O. #2:

ETCH CUTS SIDE 2

- 2-1: E27-5

WIRE ADDS SIDE 1

- 2-2: E33-11 TO E27-5

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP 8 MEMORY MANAGEMENT BOARD	SIZE CODE	D UA	NUMBER	M8416-0-C	REV.	D
SCALE	1:1	SHEET	6 OF 6	DIST.			

8 7 6 5 4 3 2 1

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	REFERENCE DESIGNATOR
1	D-MD-5012752-0-0	5012752-00	M8416	1	
2		1000016-00	100.0 MCF 100V 5%200PPM DM155	2	C12,C19
3		1005306-00	6.0MFD 35V 10% S.TANT	5	C1,C8,C14,C16,C24
4		1012784-00	.047 MFD 50V -20+80 CFR	20	C2-C7,C9,C10,C11,C13,C15,C17,C18,C20-C23, C25-C29,C31-C36
5		1110603-00	IN 5711 TM=100PS PIV=70V HMB	1	D1
6		1209941-05	HEADER,100 10POS RT ANGLE	1	J1
7		1210711-02	HANDLE,MODULE,HEX	1	
8		1300316-00	470 1/4W 5% CC	1	R5
9		1300365-00	1 K 1/4W 5% CC	25	R1,R2,R3,R6-R10,R12,R14,R16,R17,R22-R29, R31-R35
10		1300479-00	10 K 1/4W 5% CC	12	R4,R11,R13,R15,R18,R19,R21,R30,R36-R39
11		1302941-00	14.7 K 1/4W 1% PN550-F 100PPM	1	R20
12		1501999-00	DEC3009A NPN 300MW SI 20 25 M	1	Q1
13		1909701-00	74154 1 OF 16,BINA	1	E31
14		1909705-00	DEC 8081 NAND GATE-QUAD 2TN 0	4	E4,E8,E19,E42
15		1909934-00	8266 MUX 1 OF 2 (QUAD)	2	E69,E79
16		1910393-00	DEC 7384 OR GATE-QUAD 2TN,UTI	4	E52,E53,E72,E75
17		1910537-00	74811 AND GATE-TRIPLE 3INP	1	E27
18		1910544-00	74874 FF-D DUAL,EDGE TRIGG	3	E32,E63,E65
19		1911330-01	74173N FF-D QUAD,TRI-STATE	11	E1,E62,E73,E90,E97,E98,E99,E110,E119,E121, E122
20		1911469-00	DEC 8640 RECIVER,BUS,QUAD,U	7	E3,E11,E25,E41,E51,E61,E71
21		1911527-00	8097 BUFFER GATE-HEX 2INP	10	E37,E55,E83,E94,E91,E100,E101,E104,E105, E107
22		1911579-00	8641 TRANSCIEVER,BUS,QUA	3	E12,E13,E45
23		1911676-00	748139 DECODER-DUAL TWO-IMP	1	E120
24		1912388-00	74802 NOR GATE-QUAD 2IN,PO	1	E64
25		1912649-00	LS75 LATCH 4BIT,BISTABLE	1	E26
26		1912661-00	748189 MEMORY READ/WRITE	1	E82

REVISION HISTORY		SECTION 1 OF 1	RESP. ENG.: R. REGAN	DATE: 27-OCT-77	DIGITAL					
ENG	ECO NUMBER	REV	SECTION, VARIATION INDEX	MADE BY: TED KELLEY	DATE: 29-AUG-77	TITLE	PARTS LIST			
J.A.	00001	IC	1.00			POP8 MEMORY MANAGEMENT BOARD				
A.T.	M8416-ML002	ID	2.							
			3.	CHECKED: N. GELARDRES	DATE:					
			4.							
			5.							
			6.	DRN. ENG.: R. REGAN	DATE: 14-NOV-77		SIZE: CODE: DOCUMENT NUMBER: REV			
			7.							
			8.							
			9.	PROD.: MELVIN SCHENKE	DATE: 14-NOV-77		K PL M8416-0-DBP			
			10.							
			11.							
			12.	ASSEMBLY NUMBER: D-UA-M8416-0-0			PART NUMBER: M8416	EDIT 36		

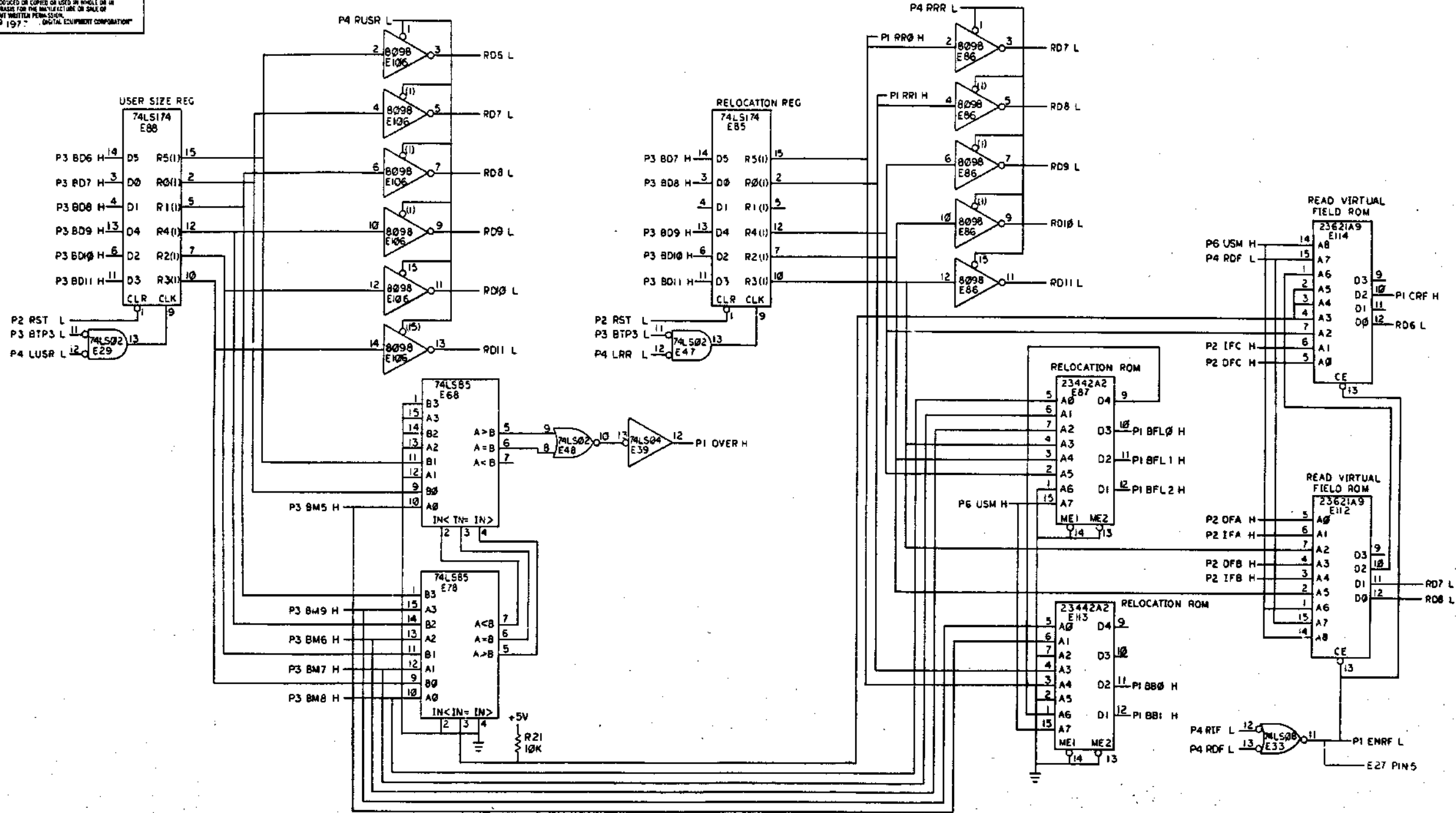
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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	REFERENCE DESIGNATOR
27	27		1912697-00	LS174 FF-D HEX W/CLEAR	5	E15,E17,E85,E88,E103
28	28		1912796-00	74148 EXCODER,PRIORITY,8 T	1	E89
29	29		1912799-00	LS004 NAND-GATE-QUAD 2IN,P	8	E6,E18,E50,E54,E57,E66,E70,E94
30	30		1912800-00	LS01 NAND-GATE-QUAD 2IN,P	1	E20
31	31		1912801-00	LS02 NOR-GATE-QUAD 2IN	3	E29,E47,E48
32	32		1912803-00	LS04 INVERTER GATE-HEX 11	8	E2,E5,E7,E22,E39,E44,E58,E115
33	33		1912805-00	LS08 AND GATE-QUAD 2IN,PU	2	E33,E67
34	34		1912807-00	LS10 NAND GATE-TRIPLE 3IN	5	E21,E24,E49,E56,E92
35	35		1912810-00	LS20 NAND GATE-DUAL 4IN	3	E9,E36,E43
36	36		1912815-00	LS30 NAND GATE-SINGLE 8IN	1	E30
37	37		1912817-00	LS37 NAND GATE-QUAD 2IN,P	1	E38
38	38		1912819-00	LS42 DECODER,BCD-DECIMAL	1	E34
39	39		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	3	E59,E60,E76
40	40		1912828-00	LS85 COMPARATOR,4BIT MAGN	2	E68,E78
41	41		1912853-00	LS175 FF-D QUAD	8	E35,E46,E93,E102,E108,E110,E116,E117
42	42		1912858-00	LS221 ONE SHOT-DUAL,SCHMIT	1	E77
43	43		1912859-00	LS258 MUX 1 OF 2 (DUAL)	1	E23
44	44		1914087-00	8098 BUFFER GATE-HEX 2IN,	4	E86,E95,E96,E106
45	45		23711A1-00	A1-07	1	E80
46	46		23440A2-00	A2-05	1	E28
47	47		23441A2-00	A2-05	1	E74
48	48		23442A2-00	A2-05	2	E87,E113
49	49		23621A9-00	A9-01	3	E111,E112,E114
50	50		23007C6-00	C6-01	1	E14
51	51		23008C6-00	C6-01	1	E16
52	52		23009C6-00	C6-01	1	E81
53	53		23010C6-00	C6-01	1	E109
54	54		9000024-01	EYFLFT, ROLLED FLANGE, .121 OD X	12	
55	55		9105740-55	WIRE(WRAP)30AWG UL1423	A/R	

56 NOTE: LINE 18: PARTS SUBSTITUTION LIST
 57 NOTE: ITEM #18 1910544-01 74574 FF-D DUAL (60 VERSION) QTY 3
 58 NOTE: ITEM #18 1910950-00 74574 FF-D DUAL (45 VERSION) QTY 3

D	I	G	I	T	A	L	TITLE	PPPR MEMORY MANAGEMENT BOARD	SECTION 1 OF 1	SIZE	CODE	DOCUMENT NUMBER	R
										K	PL	M8416-U-DBP	D

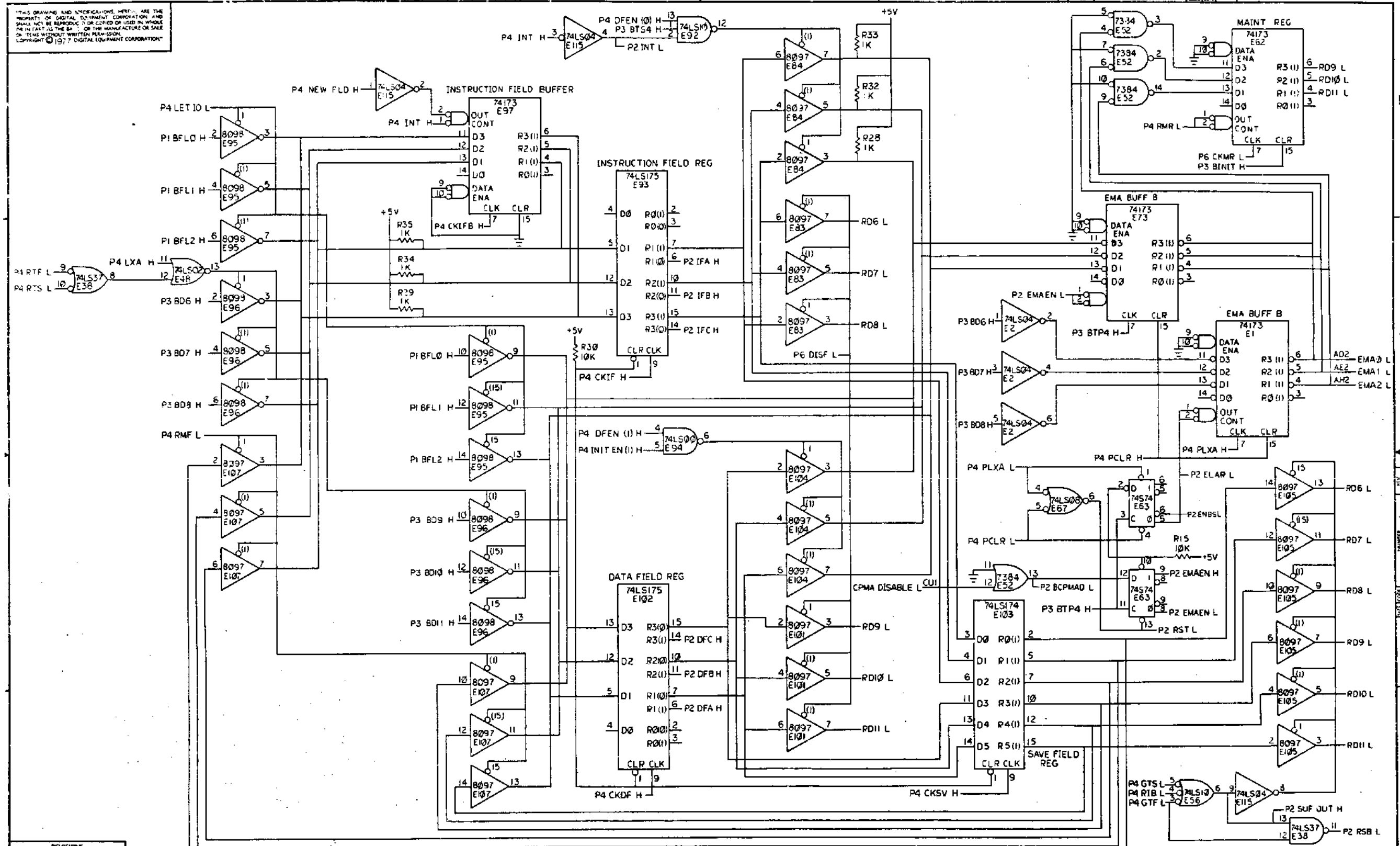
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REV	REV	REV
C	D	
1A	1B	1C
1D	1E	1F
1G	1H	1I
1J	1K	1L
1M	1N	1O
1P	1Q	1R
1S	1T	1U
1V	1W	1X
1Y	1Z	

DRN. YESLA	11-4-77	FIRST USED ON	KT8-A
CHKD. [Signature]	12-7-77	TITLE	PDP8 MEMORY MANAGEMENT BOARD
PROJ. ENG. [Signature]	12-7-77	NUMBER	M8416-0-1
PROD. [Signature]	12-7-77	REV.	D
NEXT HIGHER ASSY.		(P1)	
D-UA-M8416-0-0	SIZE CODE	D CS	
SCALE	DIST.		
SHEET 1	OF 7		

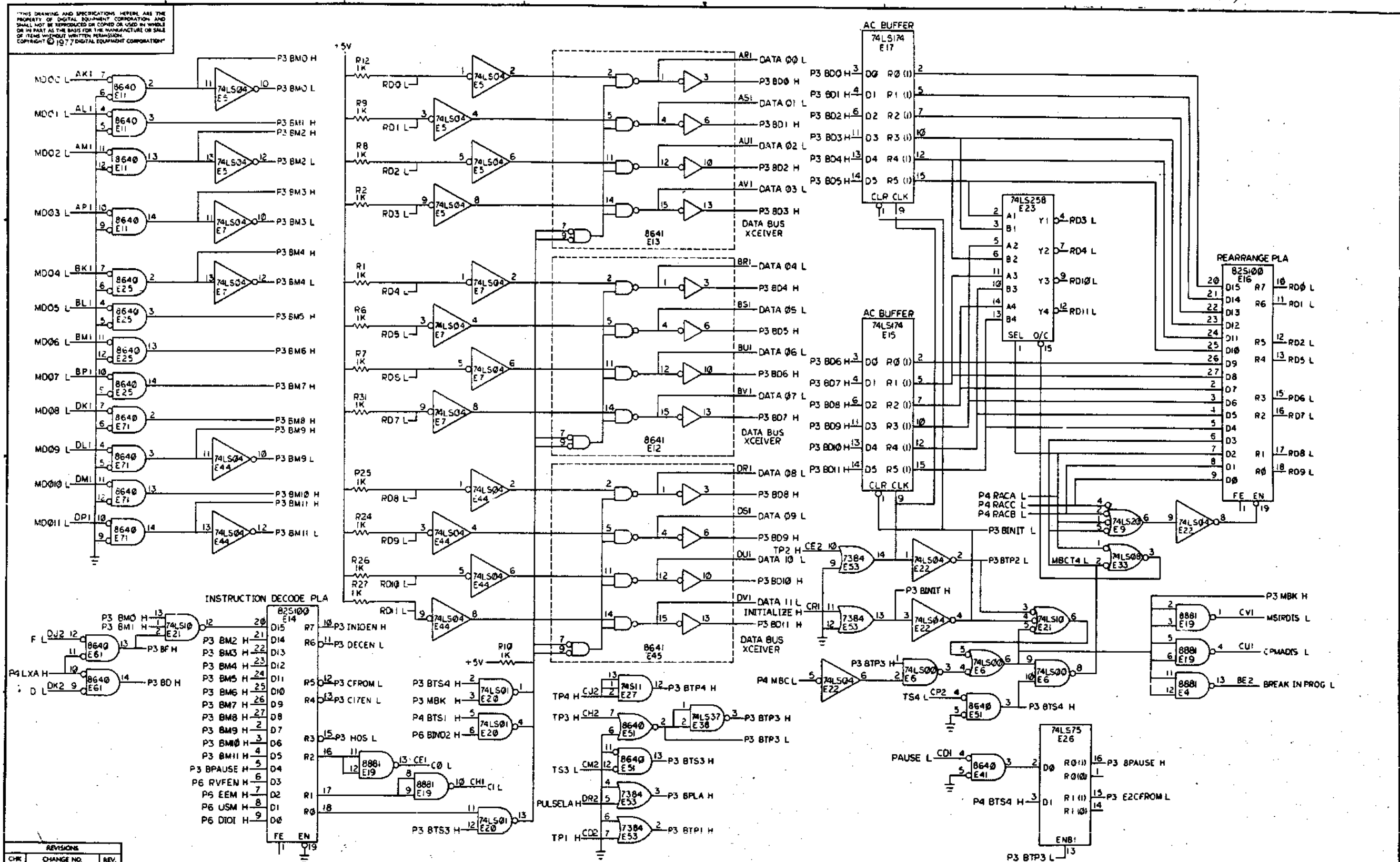
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		POP8 MEMORY MANAGEMENT BOARD (P2)		SIZE/CODE	NUMBER	REV.
SCALE		SHEET 2 OF 7		DCS	M8416-0-1	0

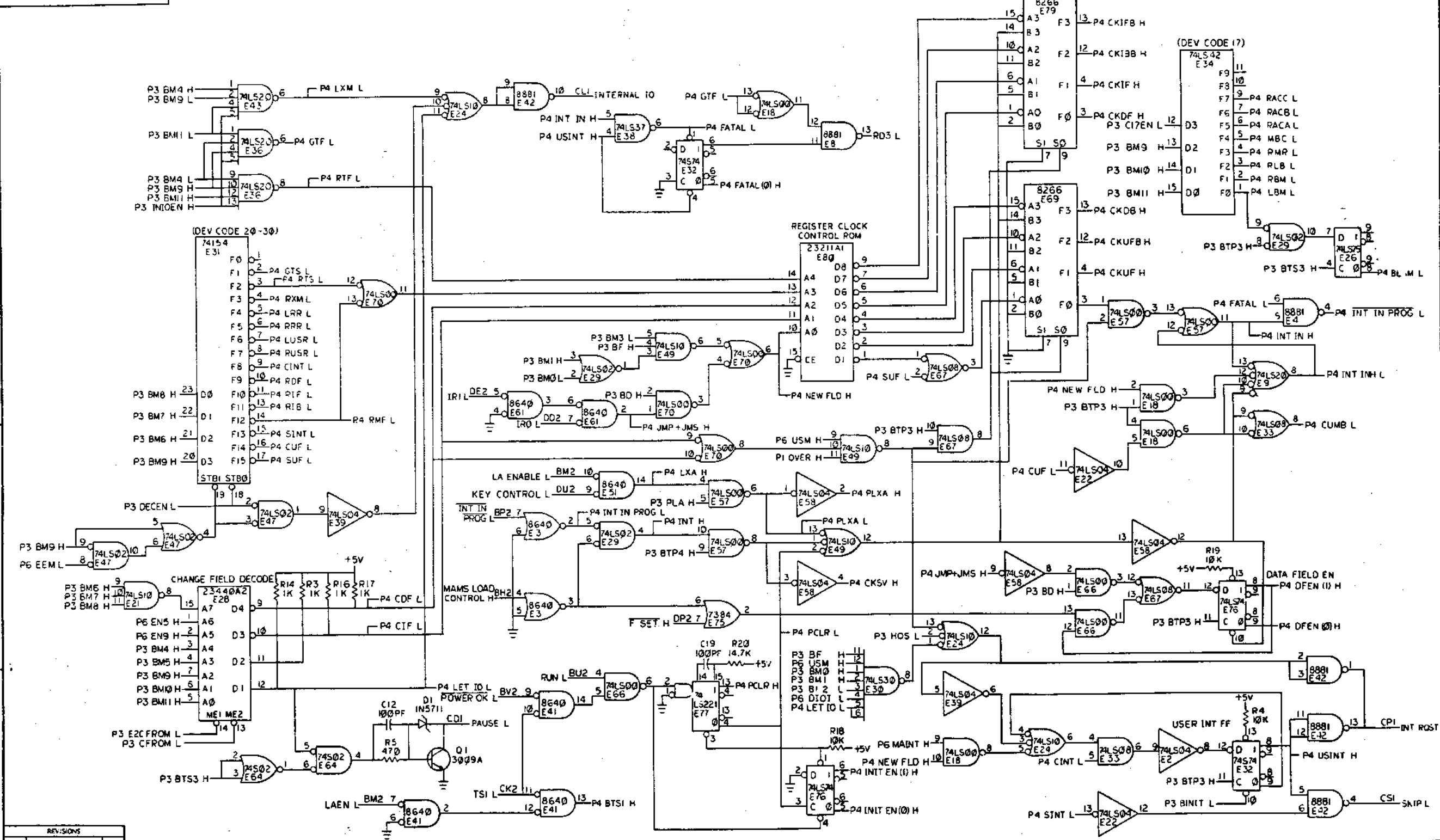
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REV. NO.	CHANGE NO.	REV.

TITLE	PDP8 MEMORY MANAGEMENT BOARD (P3)	SIZE/COOD	D/CS	NUMBER	M8416-0-1	REV.	0
SCALE		SHEET	3 OF 7	DIST.			

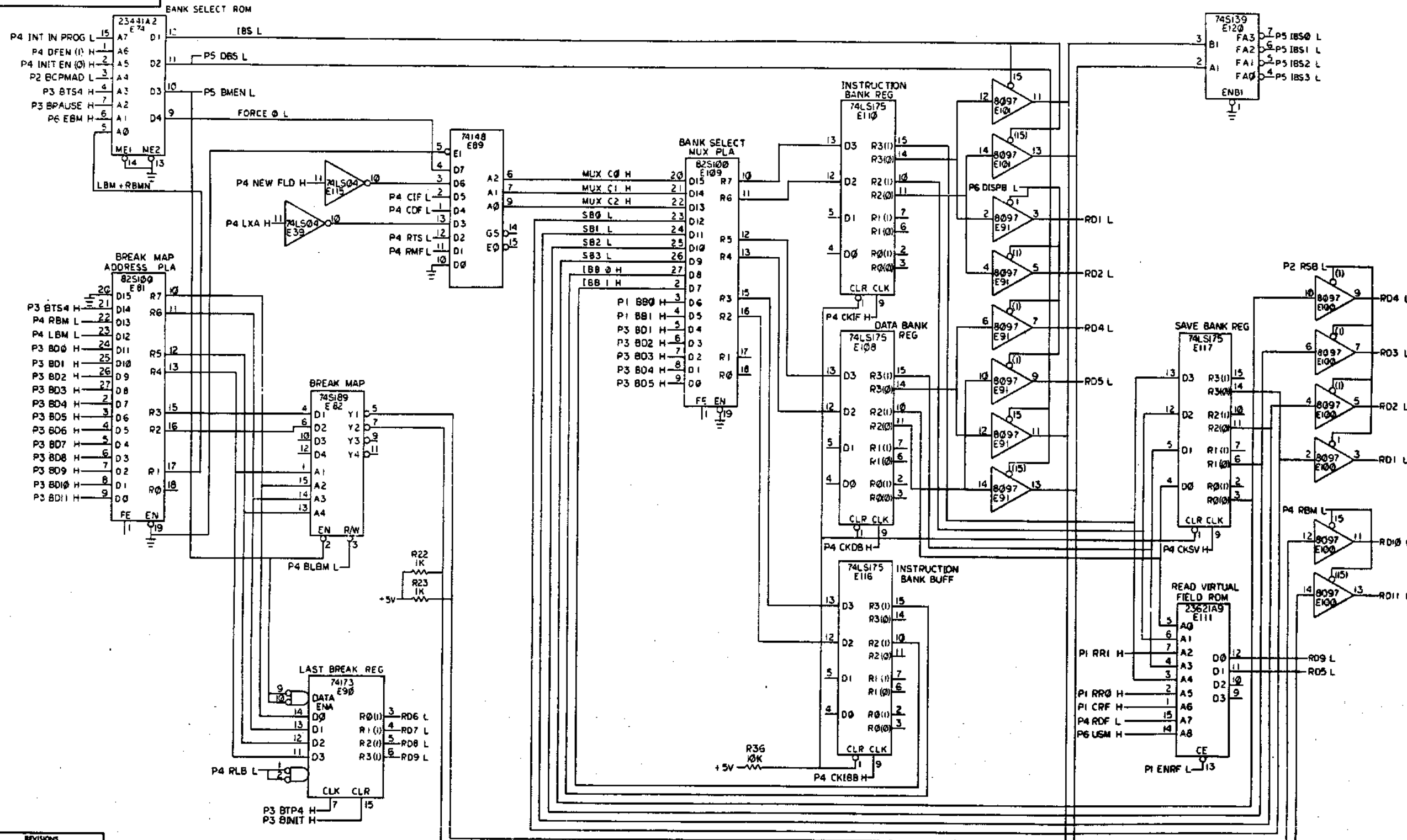
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REVISIONS		
CHK	CHANGE NO.	REV.

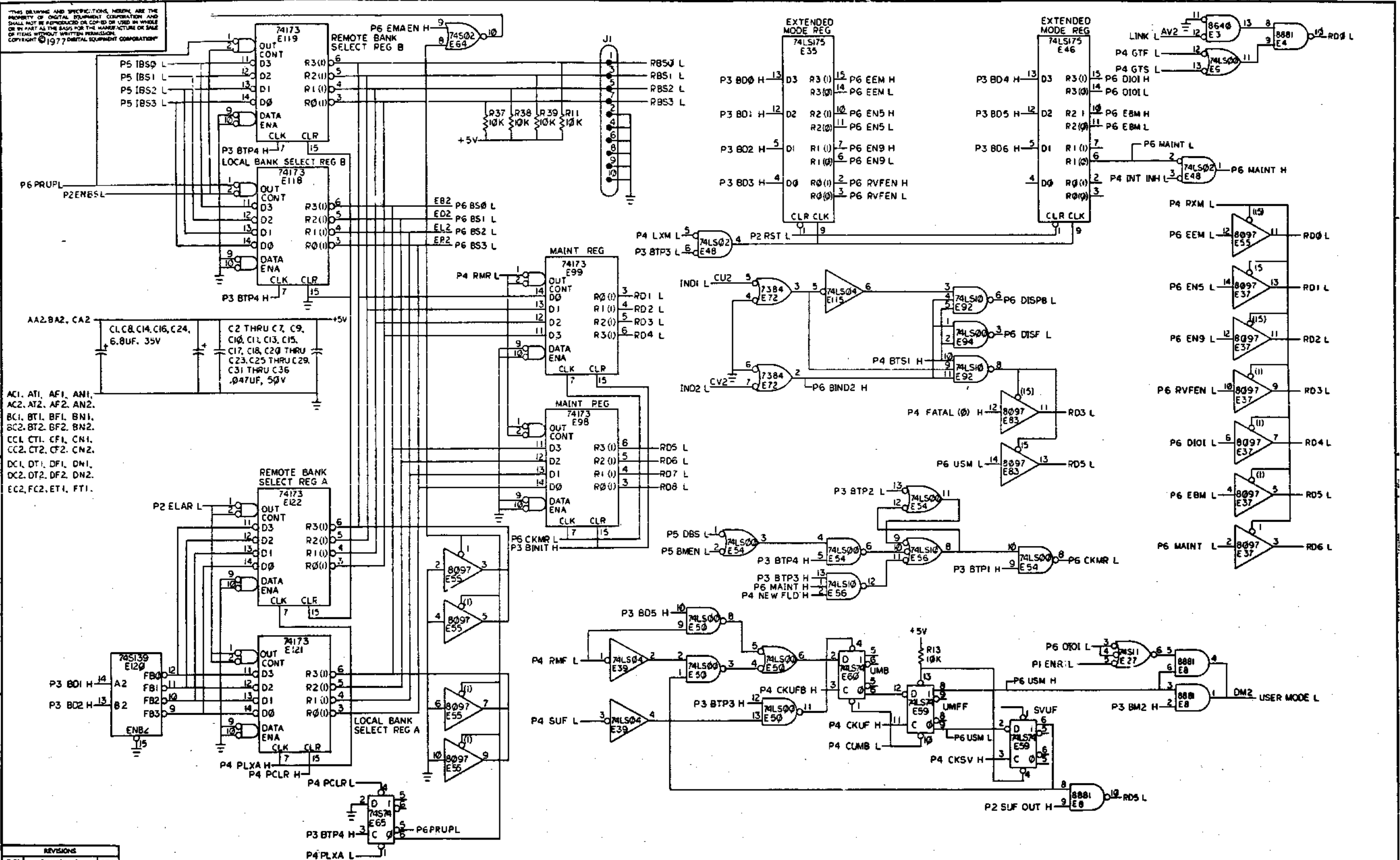
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SCALE		SHEET	4 OF 7	DIST.			

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REV.	CHANGE NO.	REV.

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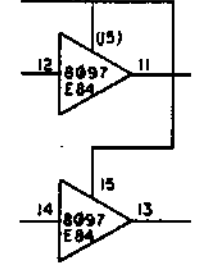
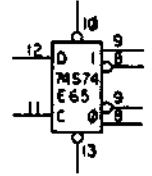
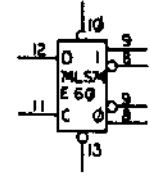
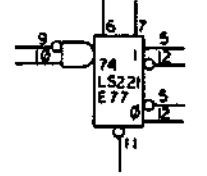
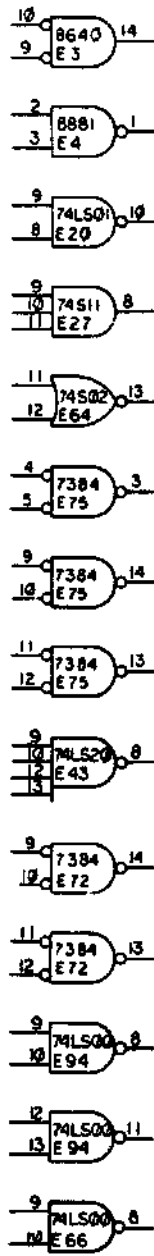


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CHK	CHANGE NO.	REV.

TITLE	PDP8 MEMORY MANAGEMENT BOARD (PG)	SIZE/CODE	DCS	NUMBER	M8416-0-1	REV.	D
SCALE	SHEET 6 OF 7		DIST.				

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SPARES



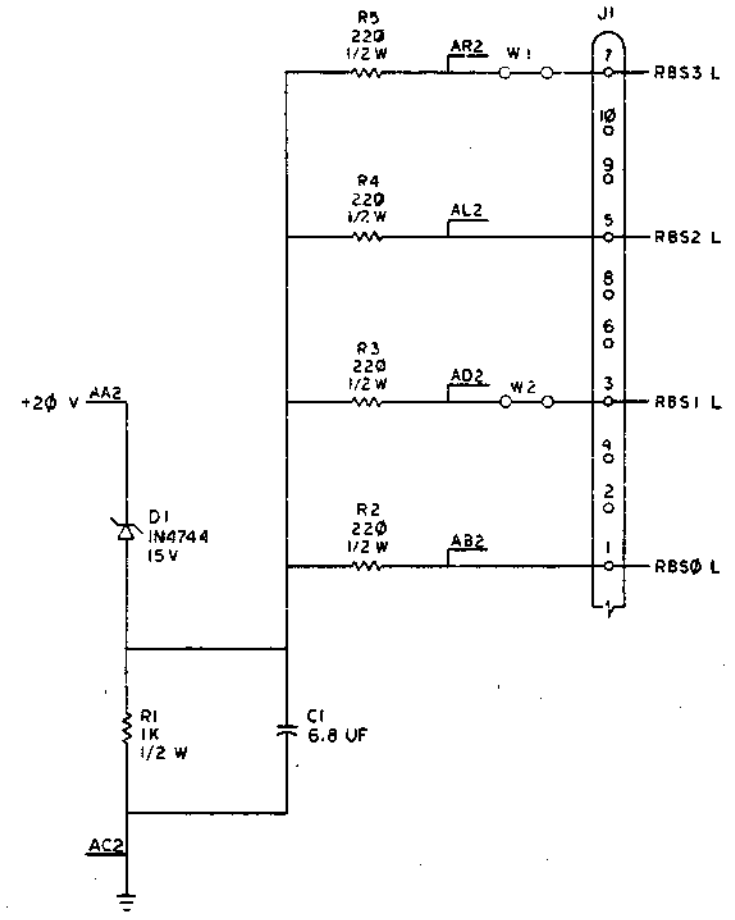
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE PDP8 MEMORY MANAGEMENT BOARD		SIZE CODE D CS	NUMBER M8416-0-1	REV. D
SCALE	SHEET 7 OF 7	DIST.		

8 7 6 5 4 3 2 1

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1-0-0205W 2



REV.	
CHANGE NO.	
CHK	

DRN.	11-9-77	FIRST USED ON	KT8-A
CHK.	12-7-77	TITLE	KT8-A TERMINATOR
ENG.	12-7-77		
PROD. ENGR.	12-7-77		
PROD.	12-7-77		
NEXT HIGHER ASSY.		SIZE	CODE
D-1A-M9020-0-0		D	CS
SCALE		NUMBER	M9020-0-1
SHEET 1 OF 1		DIST.	

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**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 14 JUNE 77

TITLE MS8C Field Installation and Acceptance Procedure

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENG <i>Bill Eads</i> 8/24/77	APPD <i>[Signature]</i> 8/25/77	SIZE A	CODE SP	NUMBER MS8-C-3	REV
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DEC 16-(392)-1079A-R873
ORA 107A

SHEET 1 OF 3

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE MS8C Field Installation and Acceptance Procedure

I. General

This procedure defines the performance standards required of the MS8CA and MS8CB Memories. The MS8C can be installed in any PDP8A series computers. The Memory may be an add-on to PDP8E systems if a BA8C expander is used.

II. Inspection Add-on

After removing the M8417 from the packing material, inspect the module for the following:

1. Loose or broken components.
2. Inventory against shipping lists.

III. Installation

1. Switch/Field Selection

MS8-CA (1) One switch(only) must be off.
MS8-CB (2) Two switch(only) must be off.

Set-up switch as defined in the following table. Switches off are the enable.

	Address	Bank	Field
S1-1	0-16K	0	0-3
S1-2	16-32K	0	4-7
*S1-3	32-48K	1	0-3
*S1-4	48-64K	1	4-7
*S1-5	64-80K	2	0-3
*S1-6	80-96K	2	4-7
*S1-7	96-112K	3	0-3
*S1-8	112-128K	3	4-7

*NOTE: KT8A must be installed for these settings. Refer to the KT8A Installation and Acceptance Procedures for KT8A systems acceptance.

2. Install

Ensure power to PDP8A is off.
Insert the M8417 into slot 4 of the PDP8A.
If two memories are to be installed, install the second in slot 5.

IV. Acceptance

Perform the acceptance test as indicated in the following table. If problems are encountered, refer to the diagnostic listings for the type of error and for information on how to read the error printouts.

SIZE A	CODE SP	NUMBER MS8-C-3	REV
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DEC FORM NO DEC 16-(381)-1022-N370
ORA 108

SHEET 2 OF 3

TITLE MS8C Field Installation and Acceptance Procedure

Equipment Required:

1. 03,04 Console Terminal
2. PDP8A with MS8C Memory
- *3. Input device, either paper tape or OS8.
4. Diagnostics and listings.

*Programmers console is required to make Switch register settings on the paper tape version of the diagnostic.

<u>Program Name</u>	<u>Maindec #</u>	<u>Accept Time</u>
Extended Memory Address Test	08-DHKMA	30 Minutes
Extended Memory Checkerboard	08-DHKMC	30 Minutes

No Errors are Acceptable.

SIZE A	CODE SP	NUMBER MS8-C-3	REV
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M8417-AA (16K)
X = SWITCH OPEN OR OFF

	E62-1	E62-2	E62-3	E62-4	E62-5	E62-6	E62-7	E62-8
0-16	X							
16-32		X						
32-48			X					
48-64				X				
64-80					X			
80-96						X		
96-112							X	
112-128								X

M8417-BA (32K)
X = SWITCH OPEN OR OFF

	E62-1	E62-2	E62-3	E62-4	E62-5	E62-6	E62-7	E62-8
0-32	X	X						
16-48			X					
32-64				X	X			
48-80					X	X		
64-96						X	X	
80-112							X	X
96-128								X

- NOTES:
- MODULE DESIGNATION: M8417-AA = M8417-AB, -AC, -AD, -AE, ETC.
16K MOS MEMORY
REFERENCE DESIGNATIONS NOT USED:
E101 E201 E301 E401
E103 E203 E303 E403
E105 E205 E305 E405
E107 E207 E307 E407
E109 E209 E309 E409
E111 E211 E311 E411
E113 E213 E313 E413
E115 E215 E315 E415
E117 E217 E317 E417
E119 E219 E319 E419
E121 E221 E321 E421
E123 E223 E323 E423
 - MODULE DESIGNATION: M8417-BA = M8417-BB, -BC, -BD, -BE, ETC.
32K MOS MEMORY
 - ALL 8837'S HAVE PINS 7 & 9 GROUNDED.
 - TIMING RESISTORS R87 AND R92 MAY BE REMOVED AT MODULE TEST FOR TIMING ADJUSTMENTS.
 - TIMING RESISTORS R80, R100, R140 MAY BE INSTALLED AT MODULE TEST FOR TIMING ADJUSTMENTS.

JUMPER CONFIGURATIONS

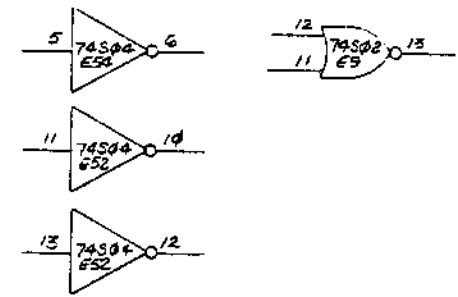
JUMPER	M8417-AA (16K)	M8417-BA (32K)
W2	X	X
W3	X	X
W4	X	X
W5	X	X
W10	X	
W11	X	X

ALL JUMPERS ARE MACHINE INSERTABLE.
THESE JUMPERS ARE REMOVED:
W1, W5, W6, W7, W8, W12, W13, W14, W15, W16
X = JUMPER INSTALLATION

IC PIN LOCATIONS

IC TYPE	GND	+5	-5	+12
555	1	5		
7493	10	5		
74LS75	12	5		
8640	1	8		
75107B	7	14	13	
MK4027	16	9	7	8
OTHER 16 PIN IC'S	8	16		
OTHER 14 PIN IC'S	7	14		
75451	4	8		

SPARES

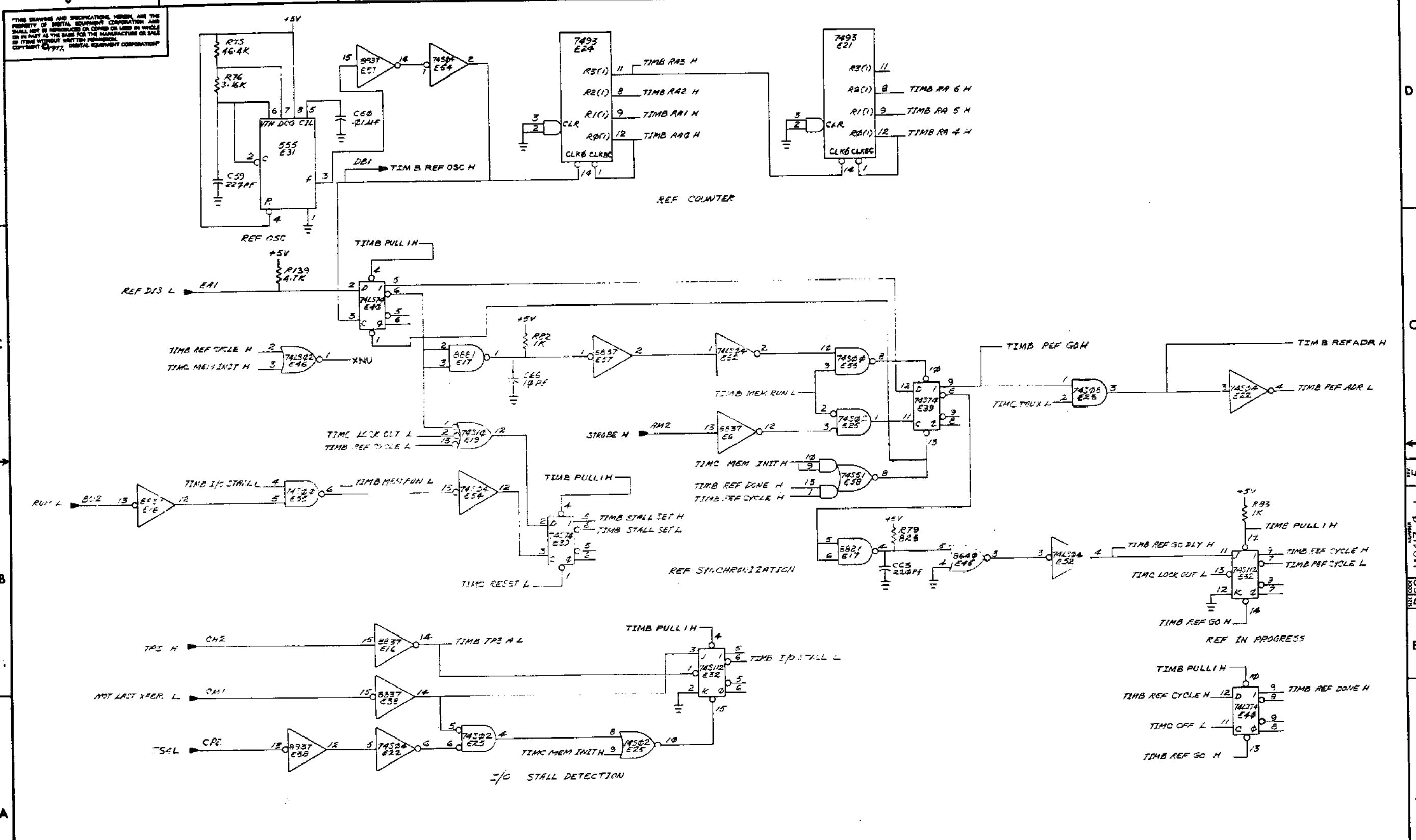


R80	3.16K 1/4W 1% MF	15-03045-00
R100	604Ω 1/4W 1% MF	13-13155-00
R140	1.21K 1/4W 1% MF	13-02571-00

REV.	DATE	BY	CHK'D
1	11/17/77	J. STEGEMAN	J. STEGEMAN
2	11/17/77	J. STEGEMAN	J. STEGEMAN
3	11/17/77	J. STEGEMAN	J. STEGEMAN
4	11/17/77	J. STEGEMAN	J. STEGEMAN
5	11/17/77	J. STEGEMAN	J. STEGEMAN
6	11/17/77	J. STEGEMAN	J. STEGEMAN
7	11/17/77	J. STEGEMAN	J. STEGEMAN
8	11/17/77	J. STEGEMAN	J. STEGEMAN

DRAWN: M. SELL	DATE: 11/20/77	FIRST USED ON: MS8-C
CHK'D: J. STEGEMAN	DATE: 11/17/77	TITLE: PDF8 MOS MEMORY
ENG: J. STEGEMAN	DATE: 11/17/77	SCALE: NCNE
PROJ. ENG: J. STEGEMAN	DATE: 11/17/77	SHEET: 1 OF 14
PROD: J. STEGEMAN	DATE: 11/17/77	SIZE CODE: D
NEXT HIGHER ASSY: B-DD-M8417-0	NUMBER: M8417-0-1	REV: F
SCALE: NCNE	DIST: 2 ml	

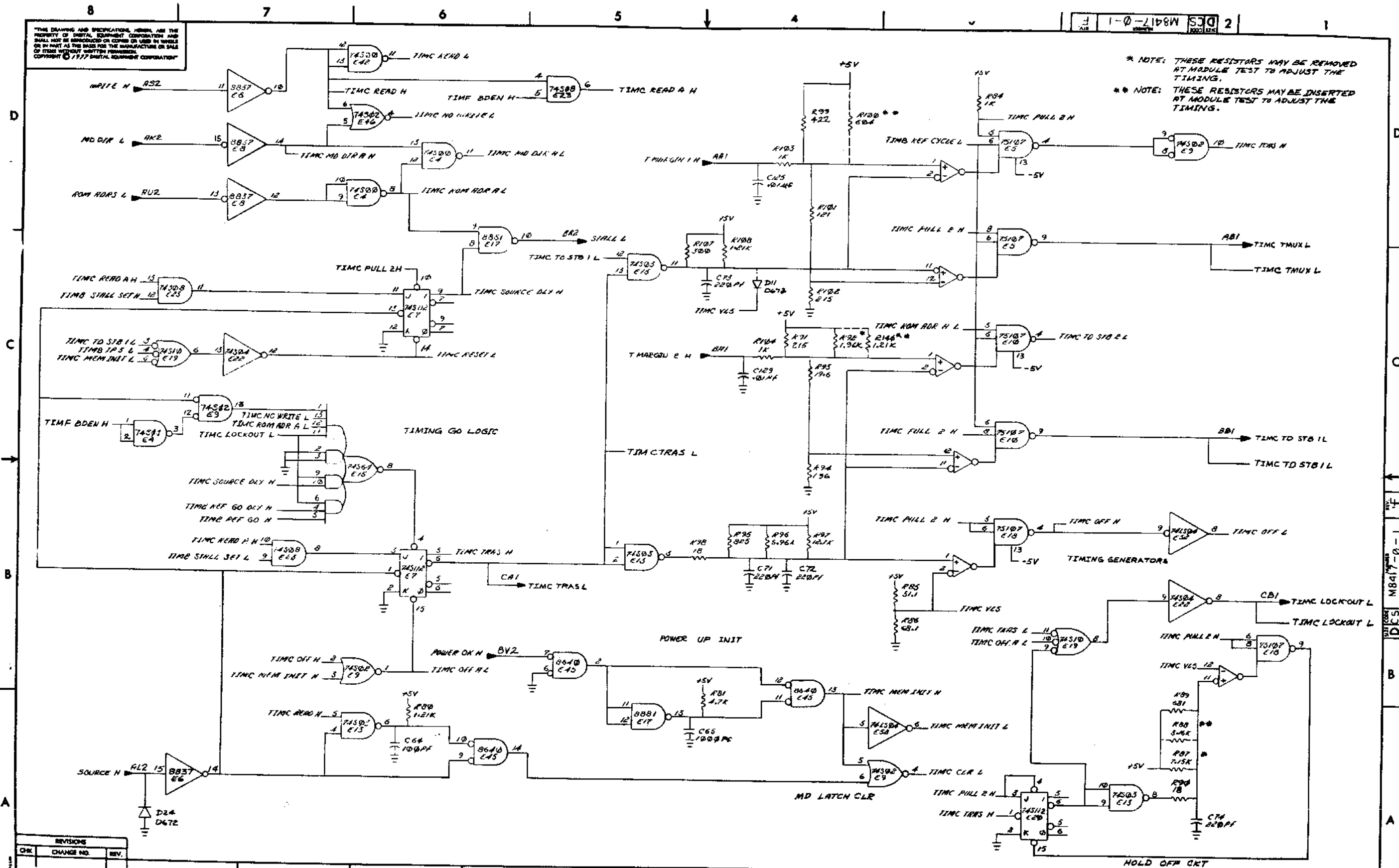
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REVISIONS			TITLE	SIZE CODE	NUMBER	REV.
CHK	CHANGE NO.	REV.	PDP8 MOS MEMORY (TIM B)	DCS	M8417-0-1	F
			SCALE N:NE	SHEET 2 OF 14	DIST.	

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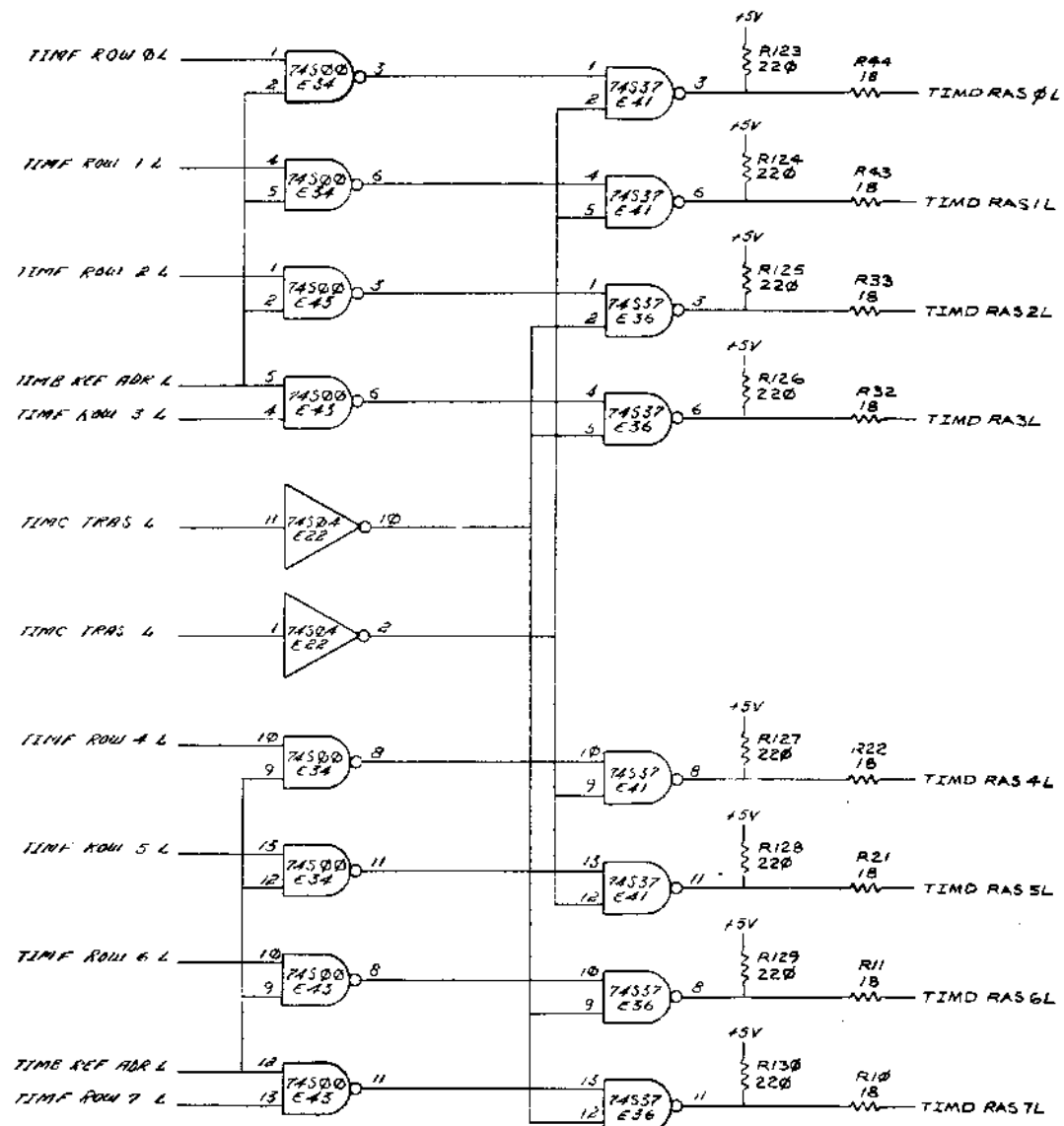
* NOTE: THESE RESISTORS MAY BE REMOVED AT MODULE TEST TO ADJUST THE TIMING.
 ** NOTE: THESE RESISTORS MAY BE INSERTED AT MODULE TEST TO ADJUST THE TIMING.



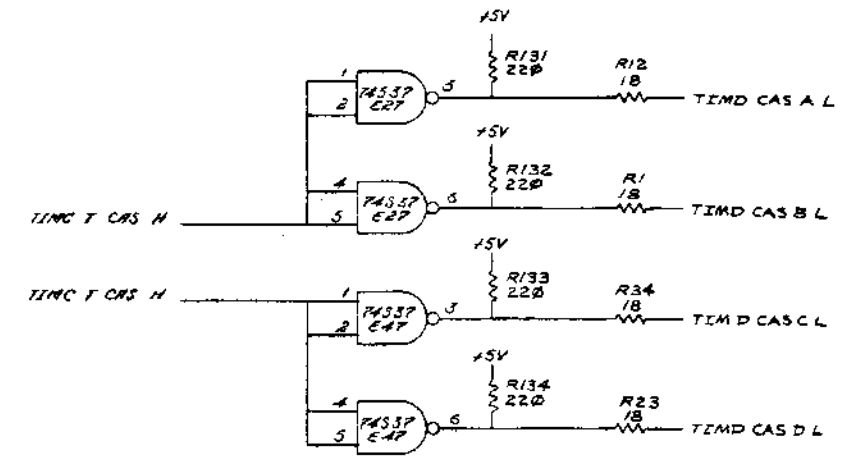
REV.	CHANGE NO.	REV.

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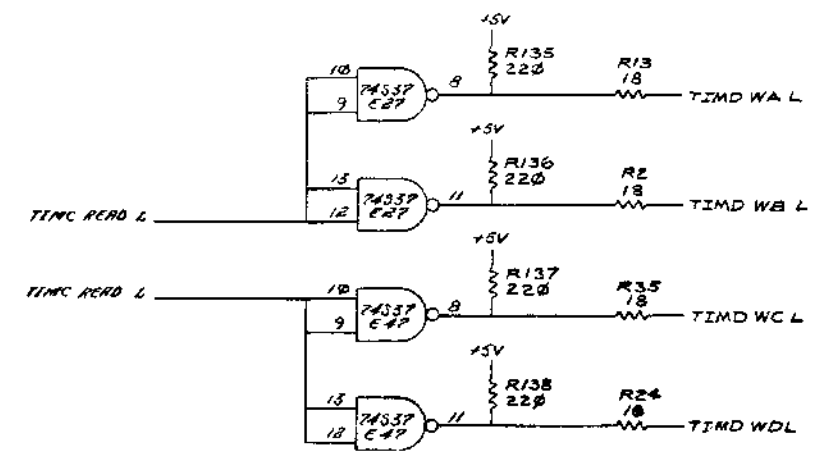
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RAS DRIVERS & SELECT



CAS DRIVERS



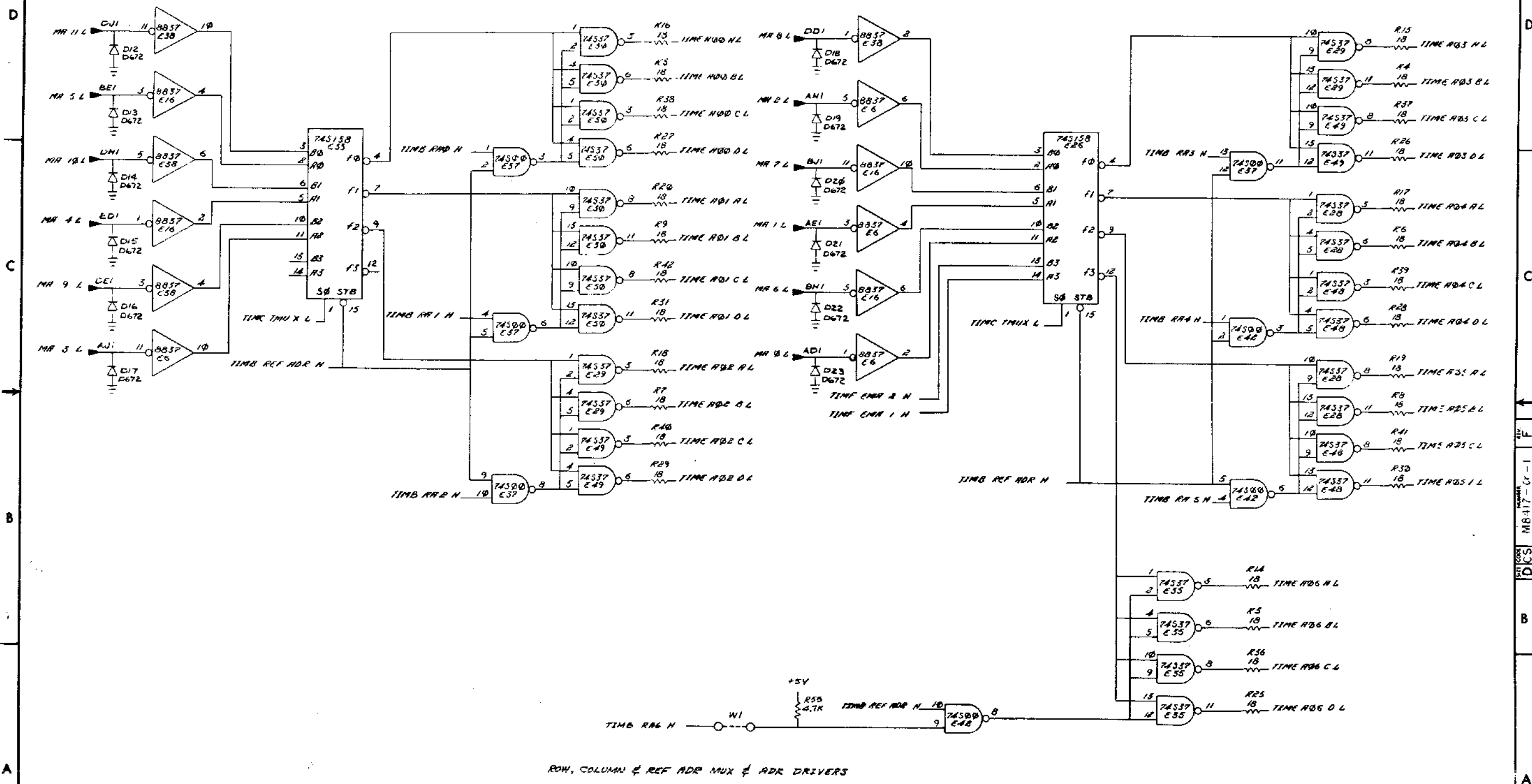
WRITE ENABLE DRIVERS

REVISIONS		
CHK	CHANGE NO.	REV.

8	7	6	5	4	3	2	1		
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SCALE: NONE							SHEET: 4 OF 14	DIST.	

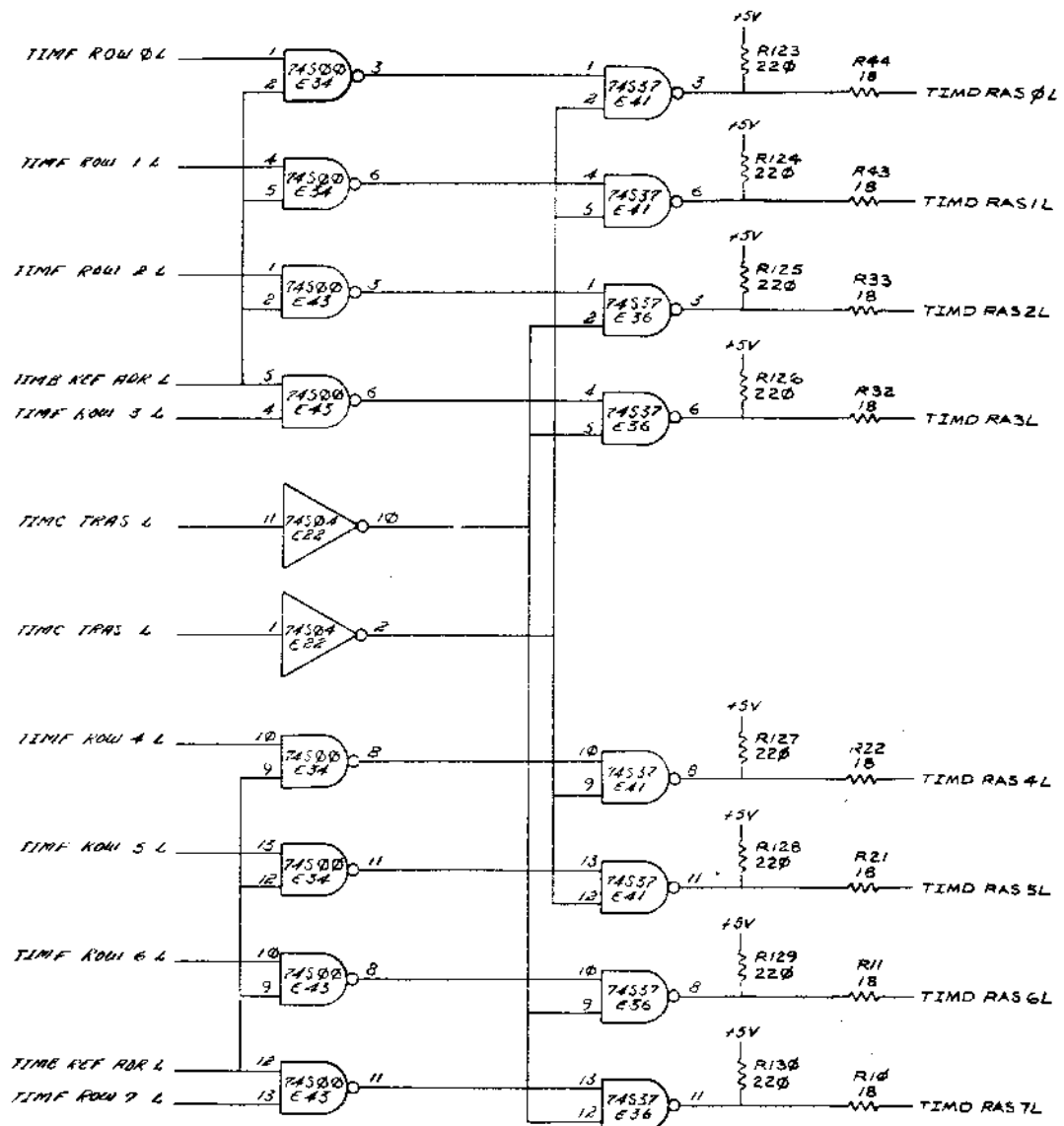
REV. 1
M8417-0-1

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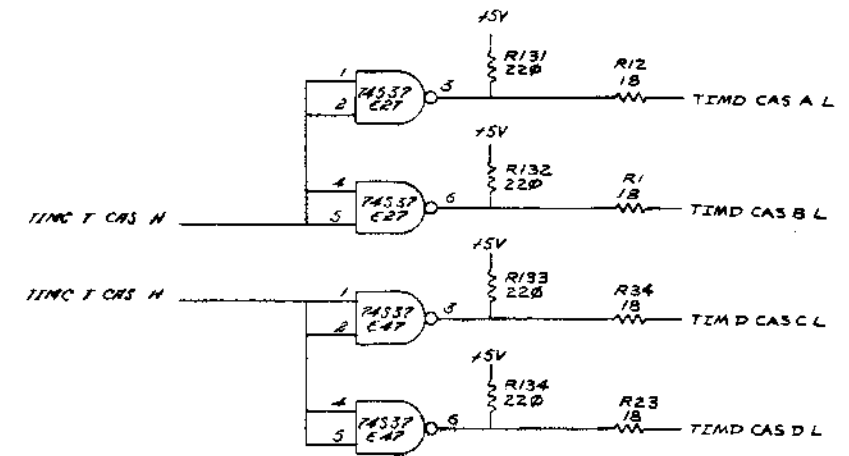


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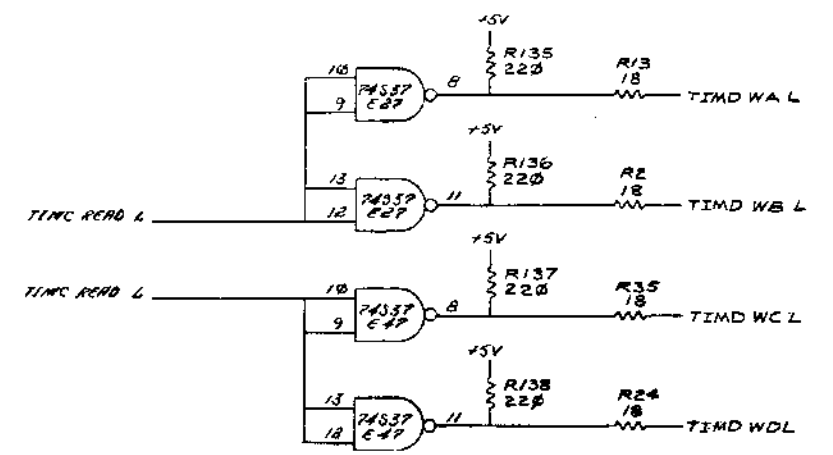
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RAS DRIVERS & SELECT



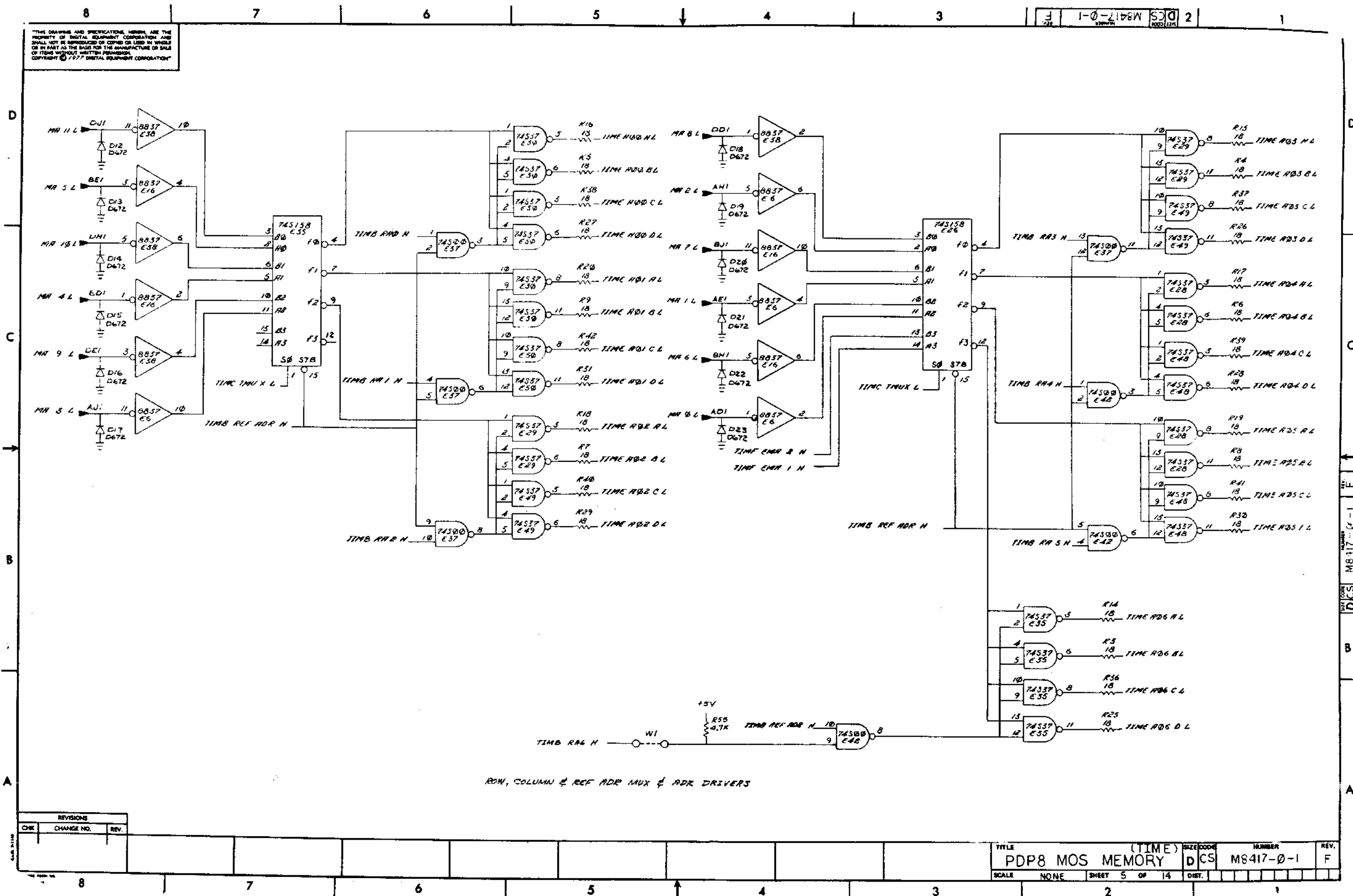
CAS DRIVERS



WRITE ENABLE DRIVERS

REVISIONS		
CHK	CHANGE NO.	REV.

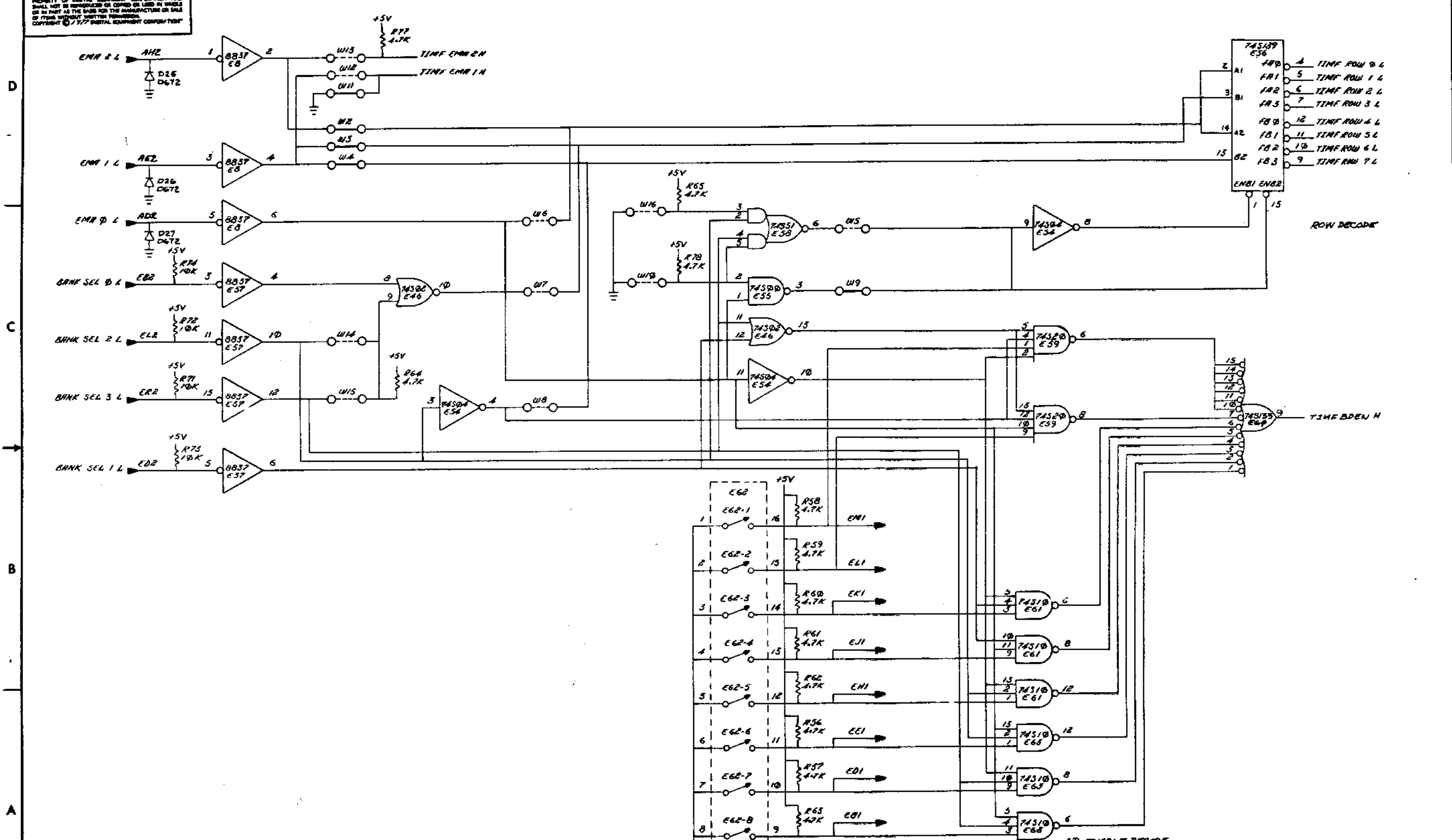
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ROW, COLUMN & REF ADR MUX & ADR DRIVERS

REVISIONS		
CHK	CHANGE NO.	REV.

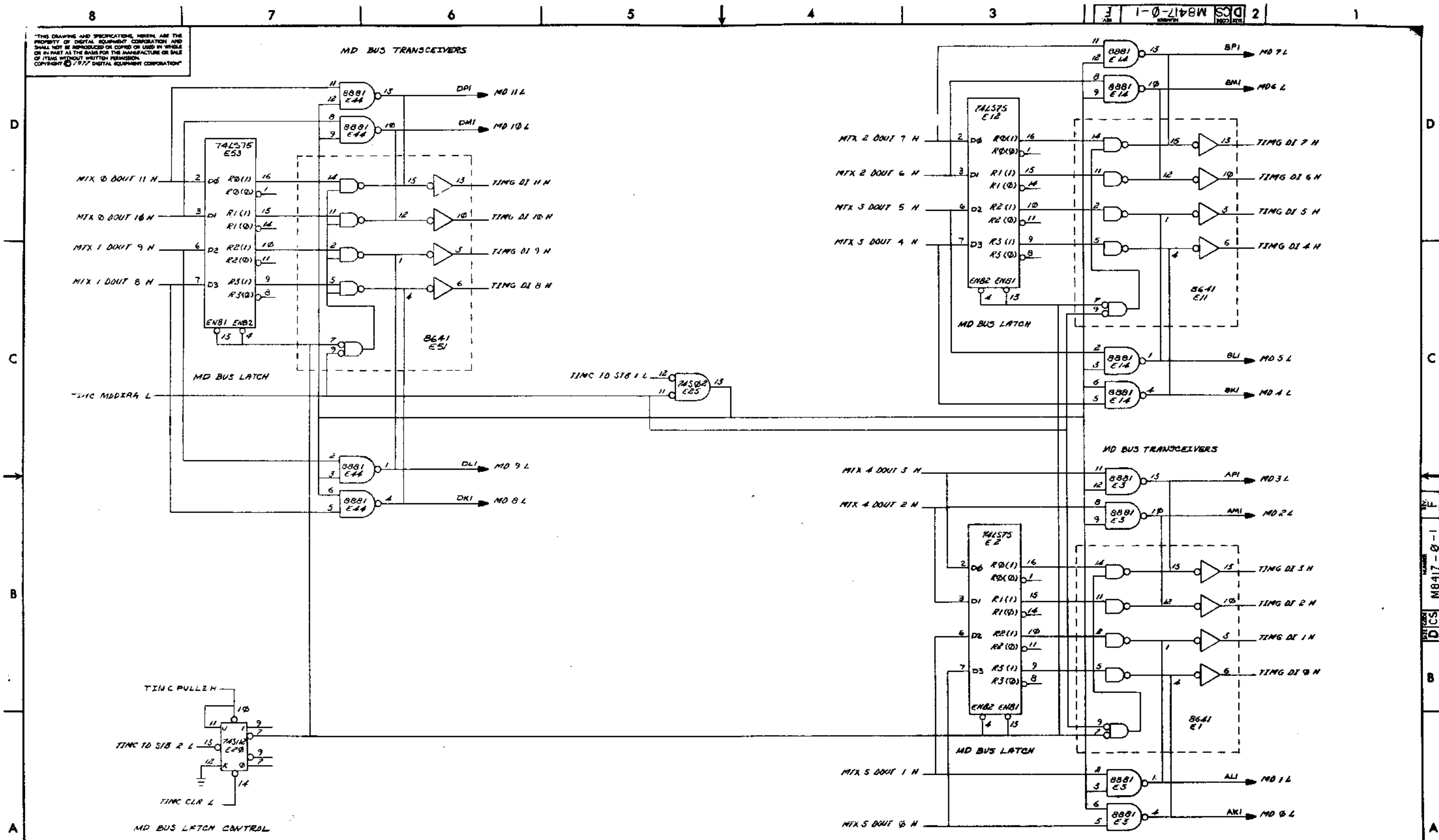
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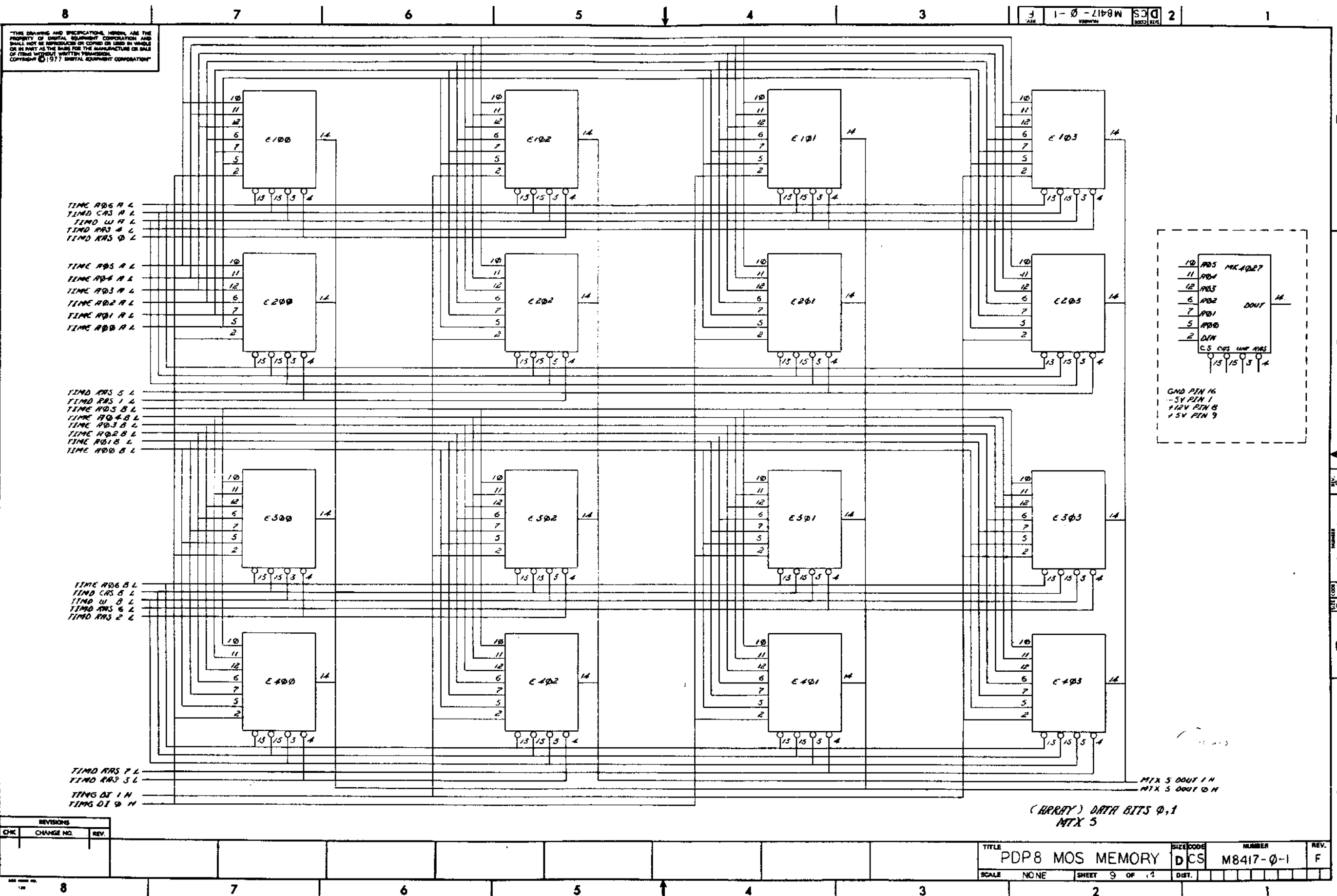
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CHK	CHANGE NO.	REV.	PDP8 MOS MEMORY (TIMF)		DCS	M8417-0-1	E	
			SCALE	NONE	SHEET	6 OF 14	DWT.	

DCS M8417-0-1

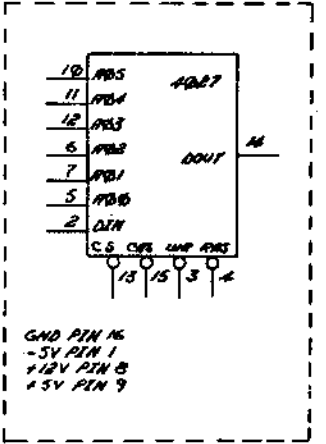
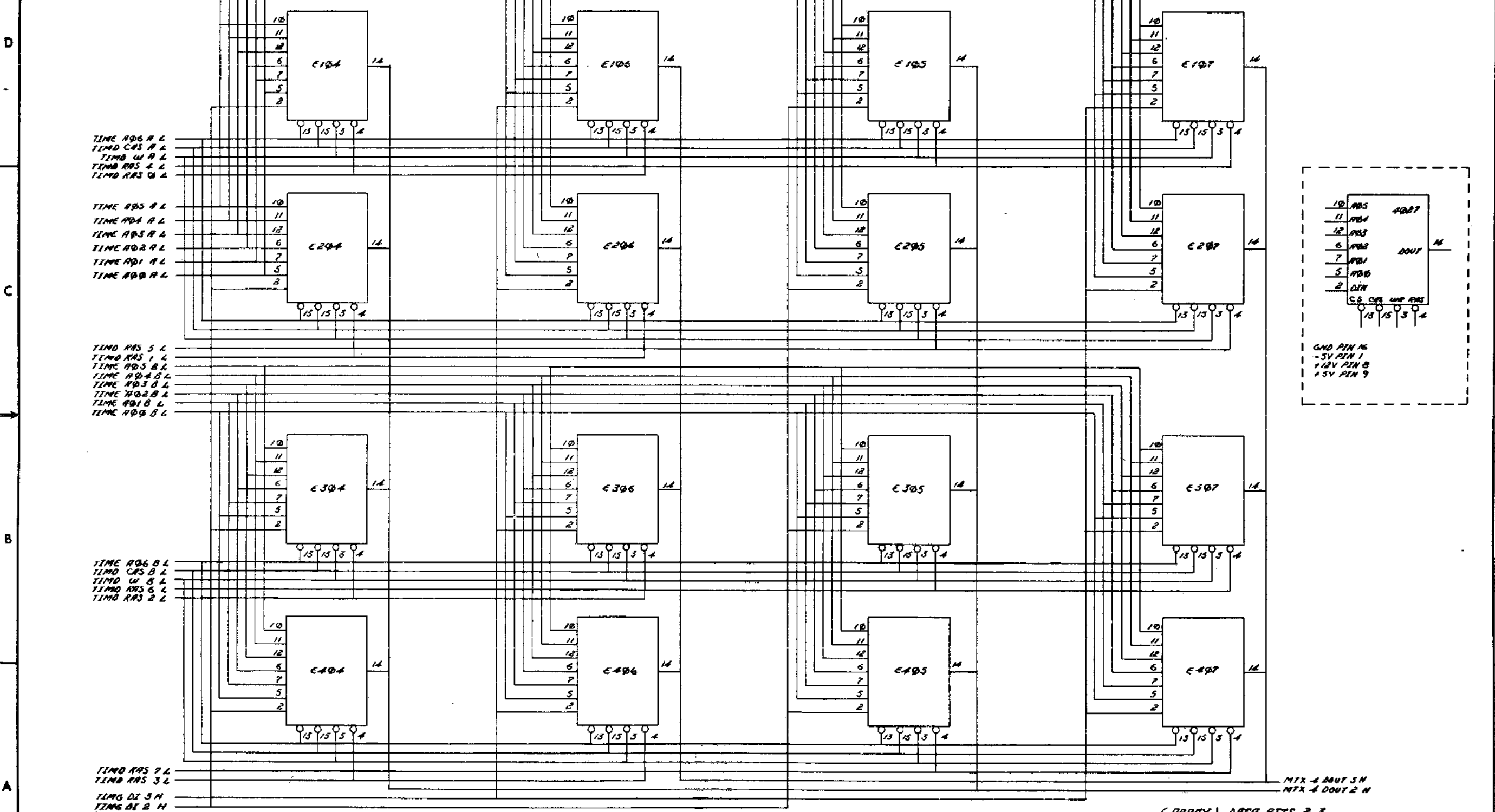
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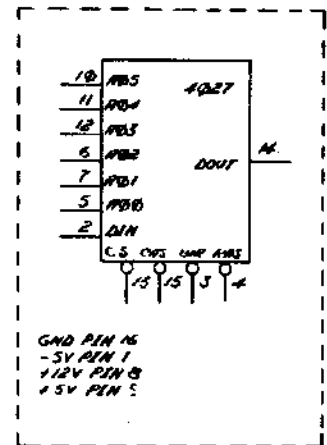
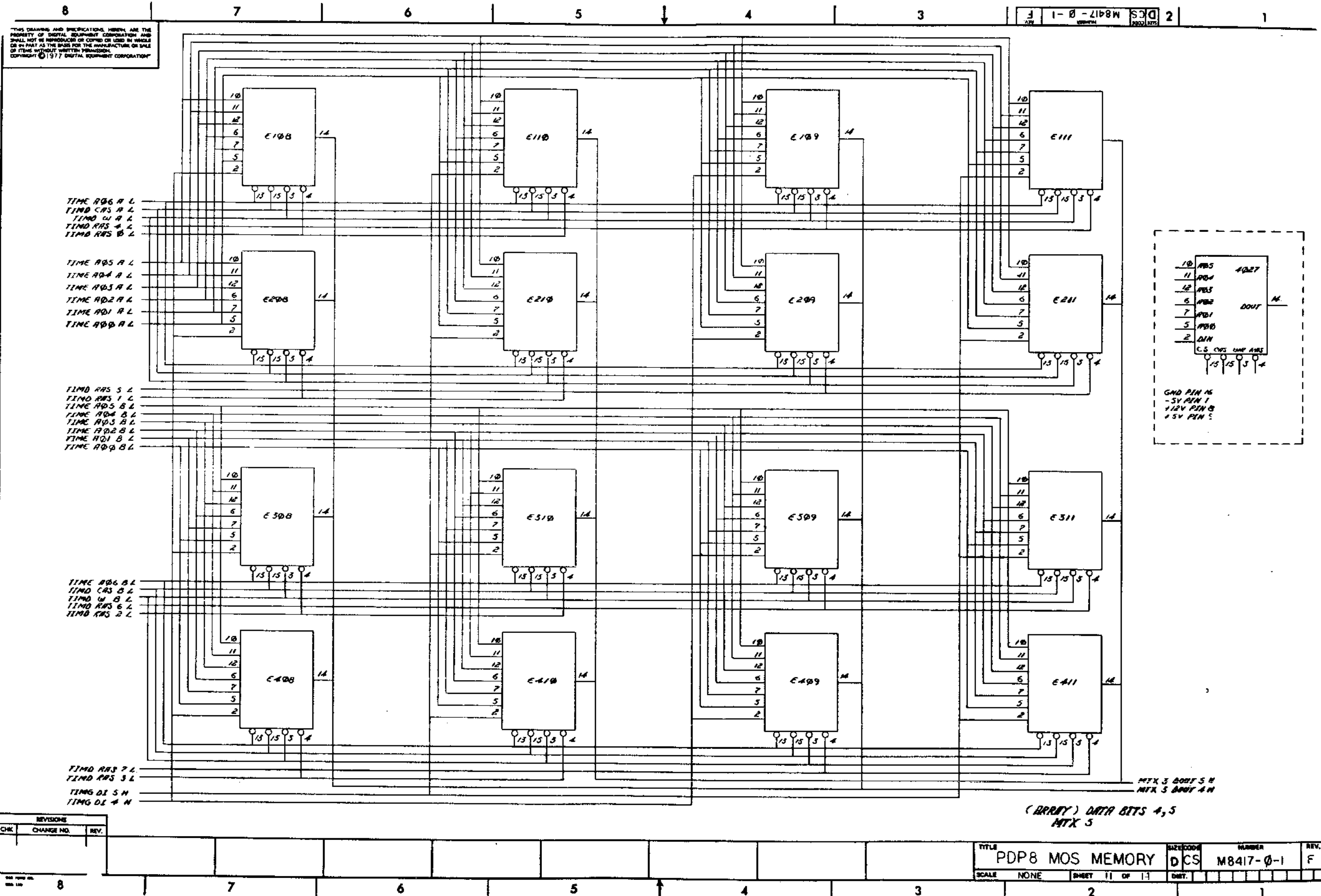


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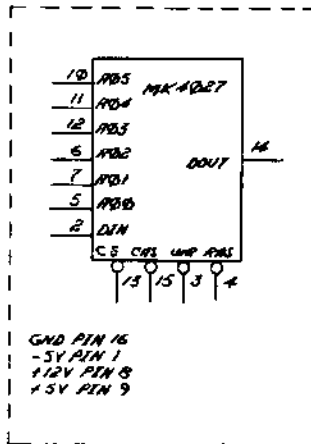
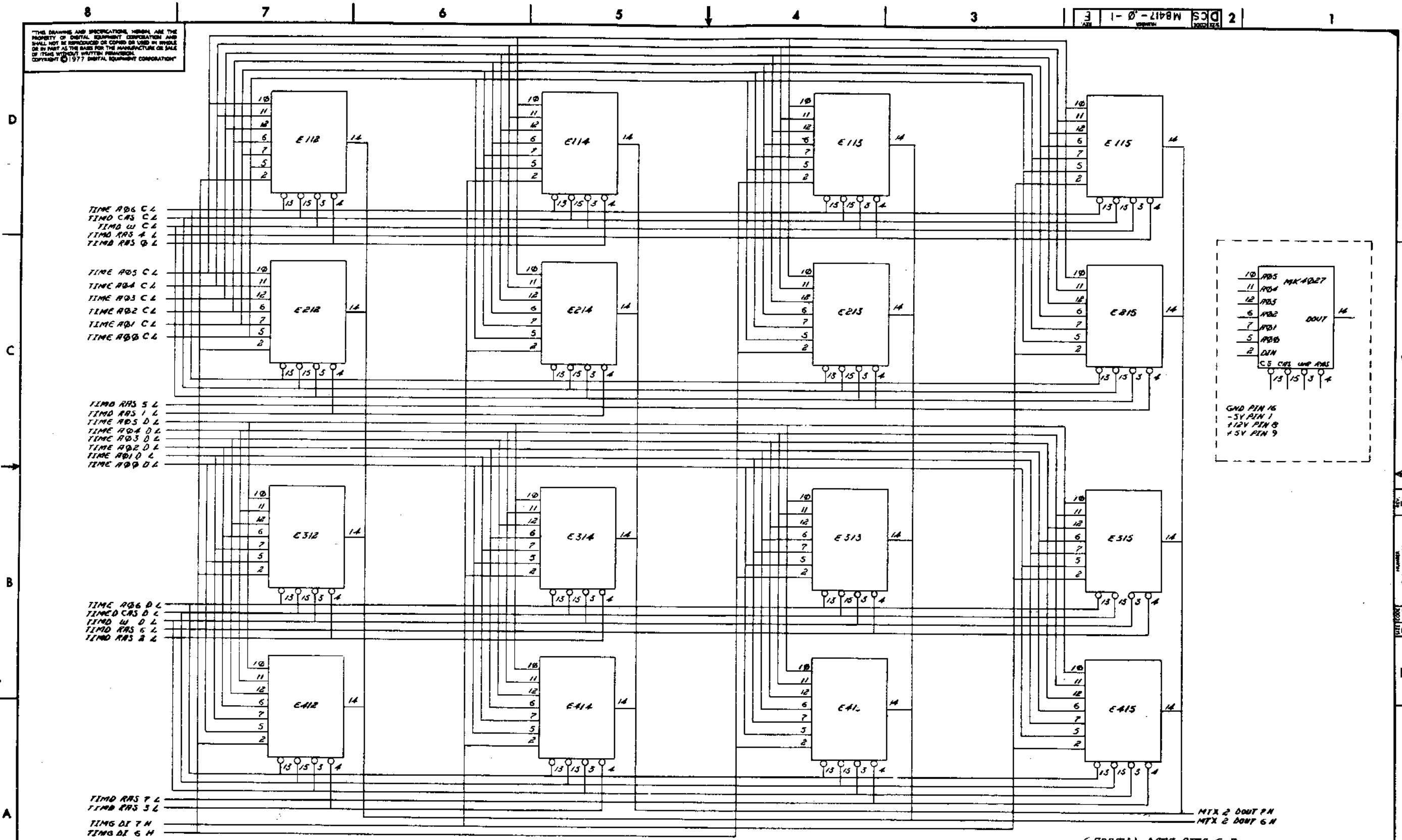
GND PIN 16
-5V PIN 1
+12V PIN 8
+5V PIN 5

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP8 MOS MEMORY	SIZE CODE	DCS	NUMBER	M8417-0-1	REV.	F
SCALE	NONE	SHEET	11 OF 13	DWT.			

DCS M8417-0-1
 DCS M8417-0-1
 DCS M8417-0-1

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REVISIONS		
CHK	CHANGE NO.	REV.

8

7

6

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4

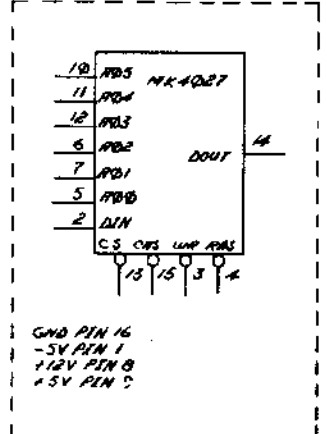
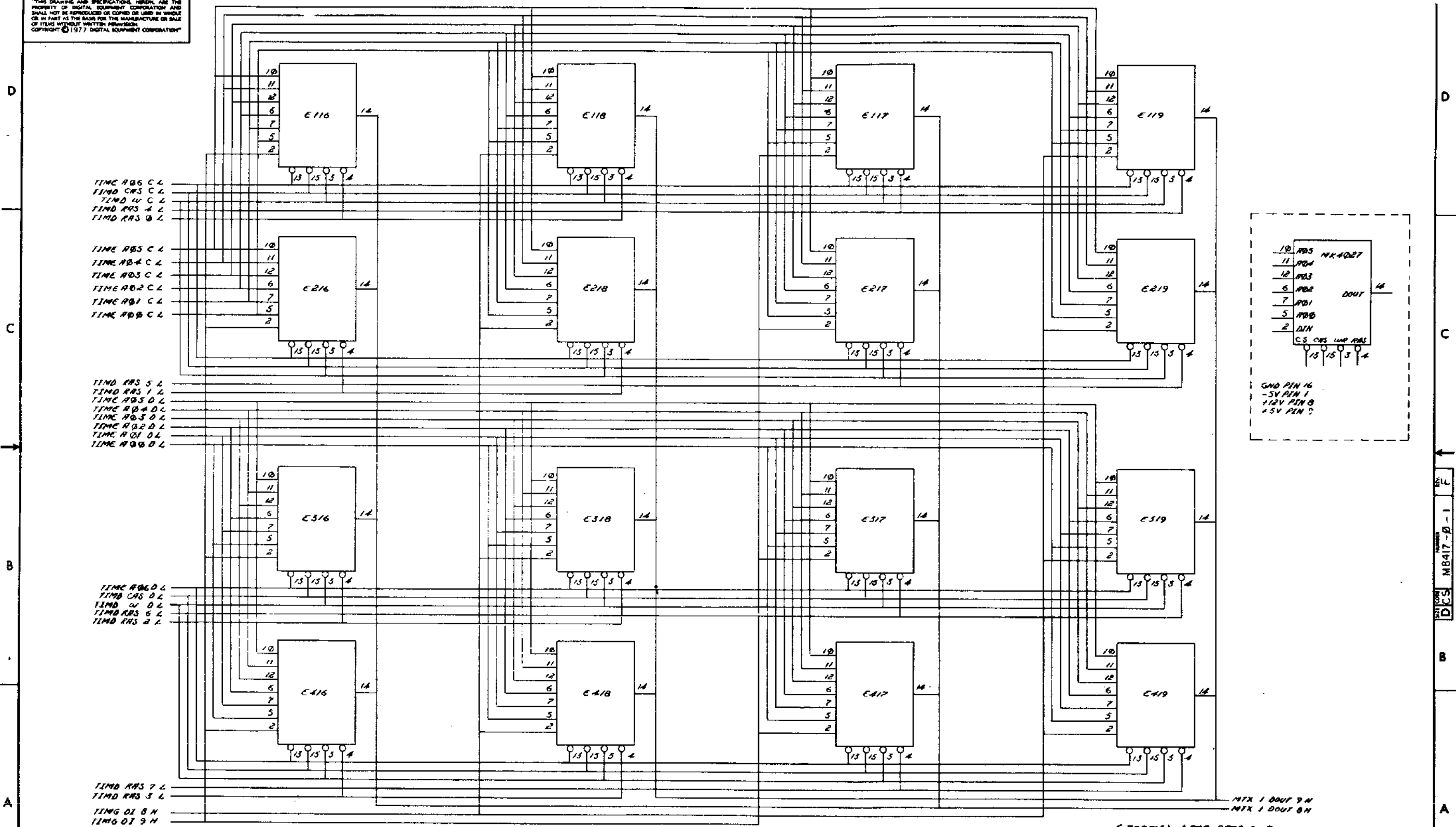
3

DCS M8417-0-1

2

1

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(ARRAY) DATA BITS 8,9
MTX 1

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP8 MOS MEMORY	SIZE CODE	DCS	NUMBER	M8417-0-1	REV.	F
SCALE	NONE	SHEET	13 OF 14	DET.			

8

7

6

5

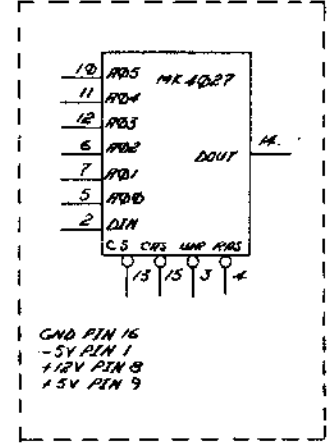
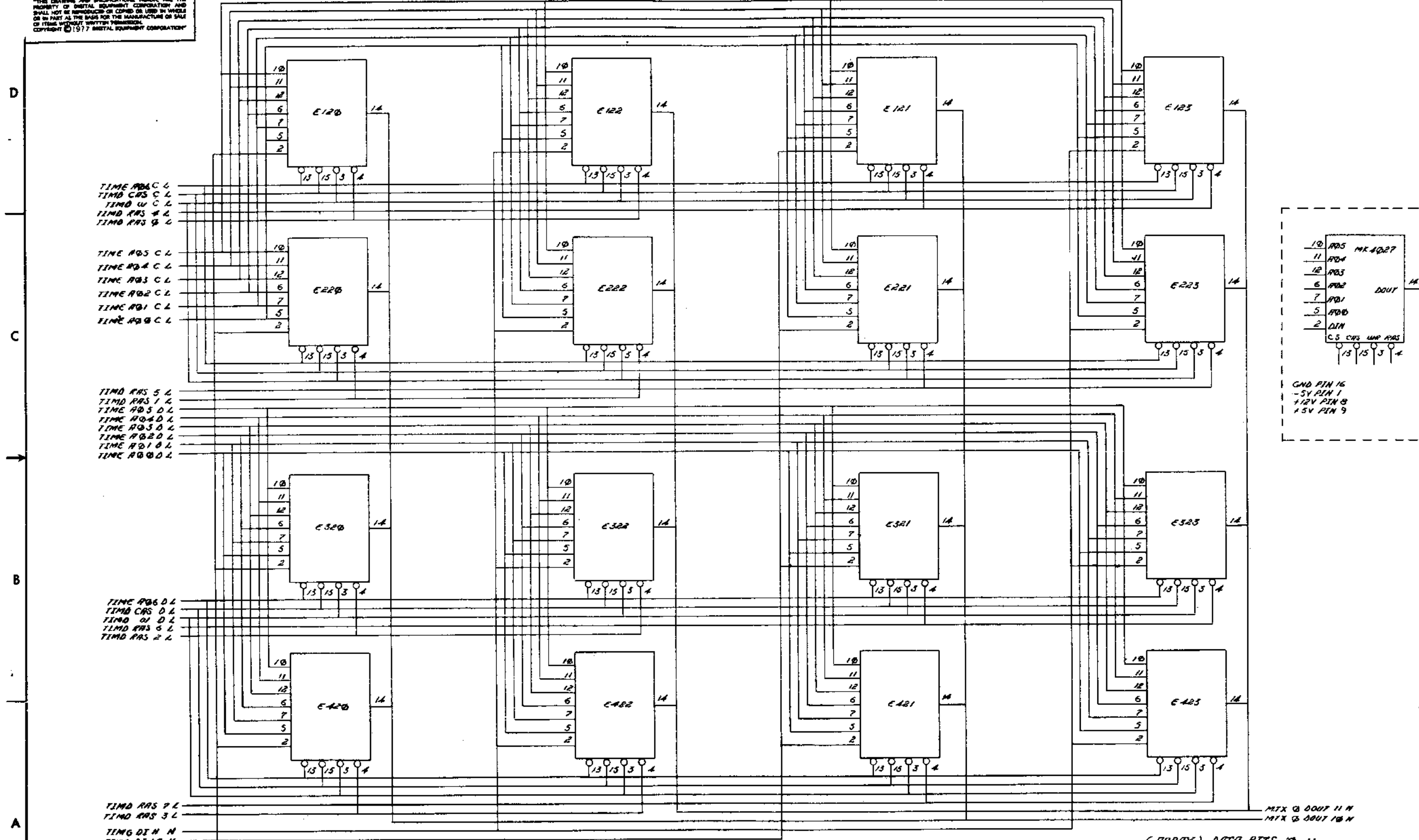
4

3

2

1

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REVISIONS		
CHK	CHANGE NO.	REV.

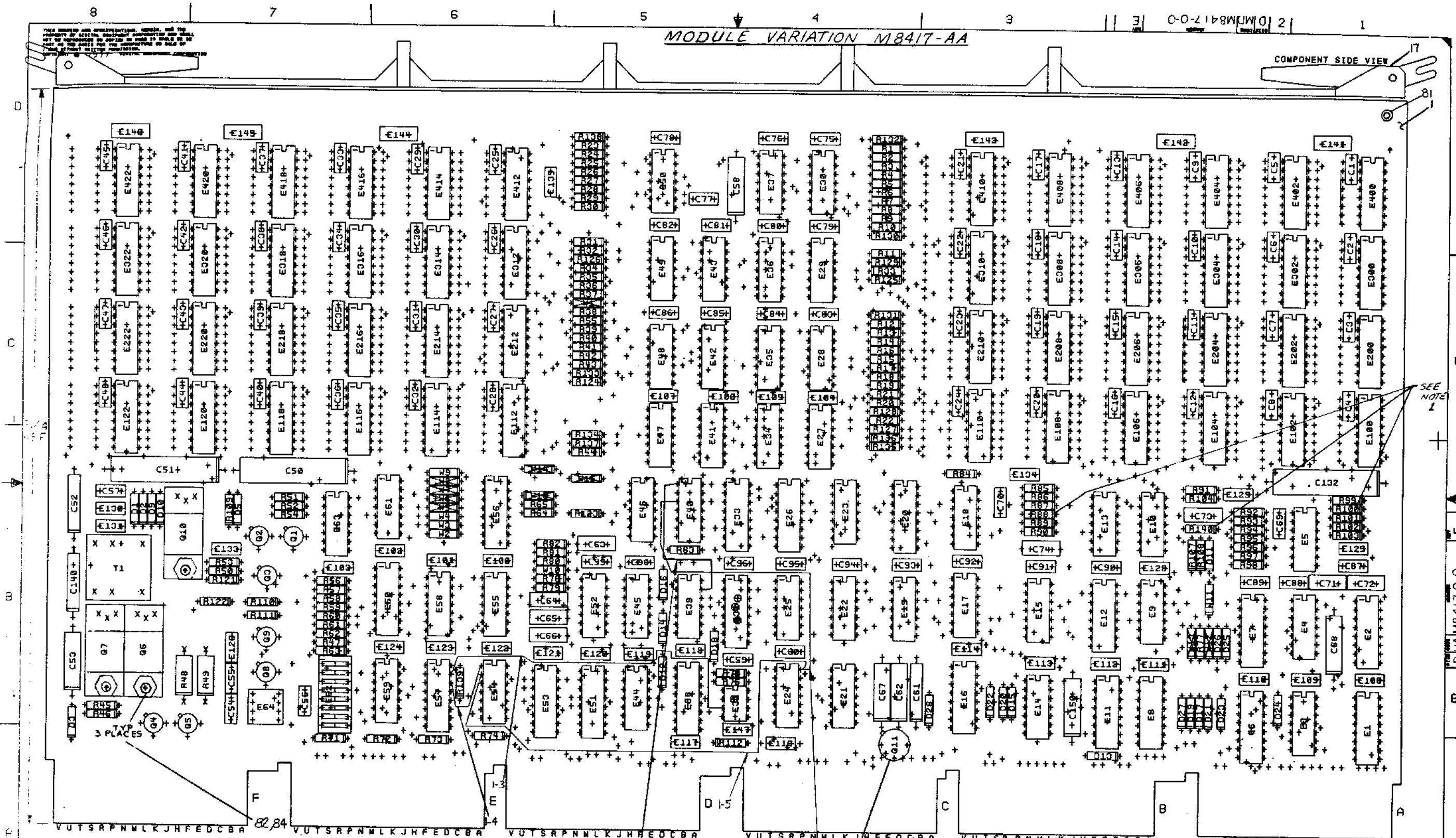
TITLE	PDP8 MOS MEMORY	SIZE CODE	DCS	NUMBER	M8417-0-1	REV.	F
SCALE	NONE	SHEET	14	OF	14	DIST.	

(ARRAY) DATA BITS 10, 11
MTX 0

MTX 0 0007 11 H
MTX 0 0007 10 H

MODULE VARIATION M8417-AA

COMPONENT SIDE VIEW



NOTES: 1. R100, R140 & R88 WILL NOT BE INSTALLED AT ASSEMBLY, BUT AT MEMORY TEST, IF NEEDED.
 2. M8417-AA = M8417-PA, AC ETC. (EXCEPT MEMORY).

CHANGE NO	REV	BY	DATE
001	A	J. STEIGEMAN	5-19-72
002	B	J. STEIGEMAN	7-17-72
003	C	J. STEIGEMAN	7-27-72
004	D	J. STEIGEMAN	7-27-72
005	E	J. STEIGEMAN	7-27-72
006	F	J. STEIGEMAN	7-27-72

3-2
 FOR PARTS LIST, SEE B-PL-M8417-0-0

ETCH REV. B
P.C. DESIGN DATA REV. 01

SIGNATURES	DATE
DRN. <i>[Signature]</i>	5-19-72
CHK. D. <i>[Signature]</i>	7-17-72
ENG. J. <i>[Signature]</i>	7-27-72
PROJ. ENG. <i>[Signature]</i>	7-27-72
PROD. <i>[Signature]</i>	7-27-72

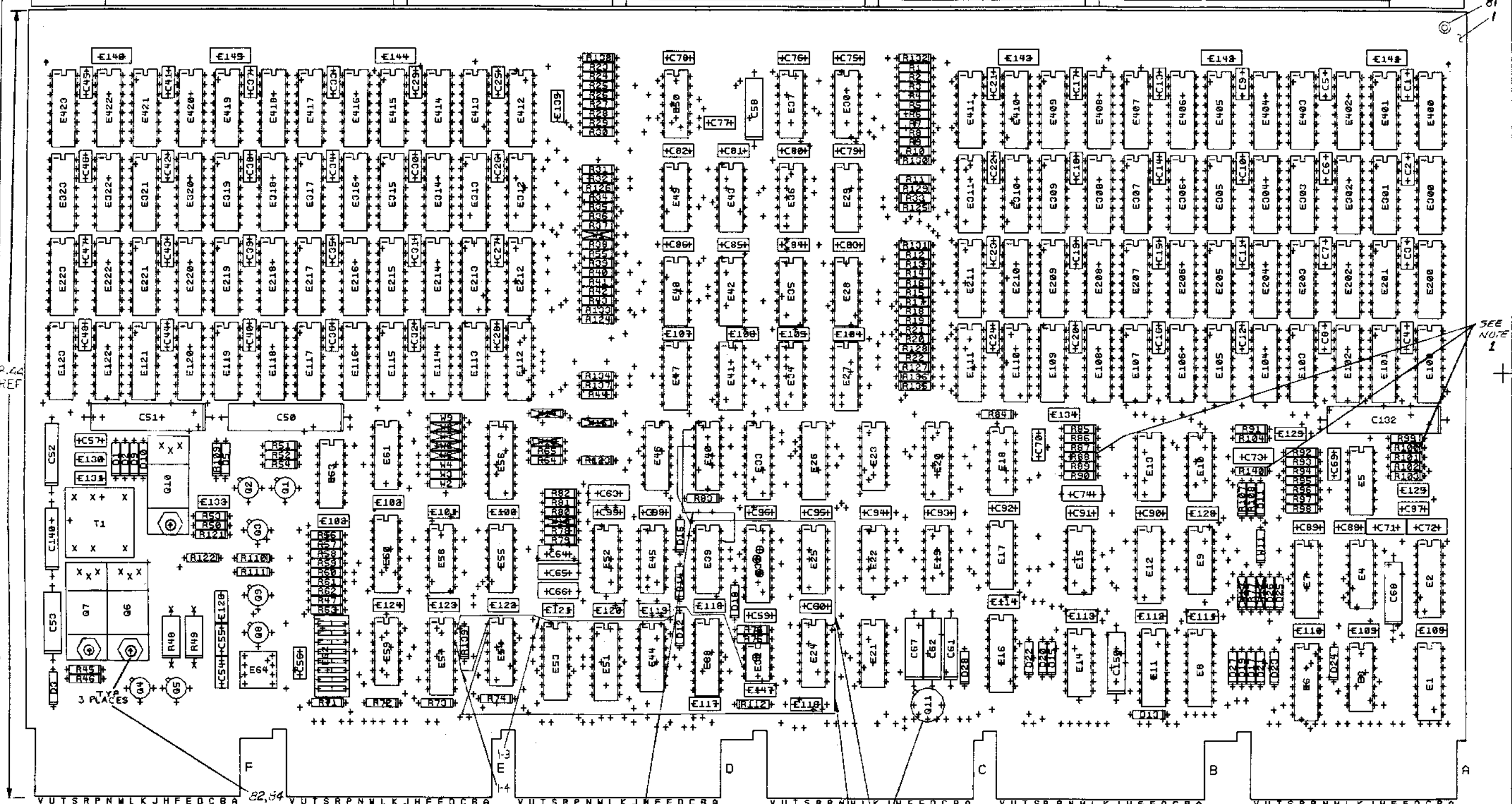
TITLE: PDP 8 MOS MEMORY
 SIZE CODE: UA M8417-0-0
 NUMBER: 1
 REV: E

SEE NOTE 1

DJAM8417-0-0

MODULE VARIATION M8417-BA

COMPONENT SIDE VIEW



NOTES: 1. R100, R140 & R88 WILL NOT BE INSTALLED AT ASSEMBLY, BUT AT MEMORY TEST, IF NEEDED.
 2. M8417-BA = M8417-BB, B2, C12 (32KX12 BIT MEMORY).

CHANGE NO	REV

3-2
 FOR PARTS LIST
 SEE B-PL-M8417-0-0

ETCH REV. B
P.C. DESIGN DATA BASE REV. B1

SIGNATURES	DATE	TITLE	SIZE	CODE	NUMBER	REV
DRN. <i>[Signature]</i>	5-18-77	PDP 8 MOS MEMORY	0	JA	M8417-0-0	E
CHK. D. <i>[Signature]</i>	5-19-77					
ENG. <i>[Signature]</i>	7-2-77					
PROJ. ENG. <i>[Signature]</i>	7-2-77					
PROD. <i>[Signature]</i>	7-8-77					

8

7

6

5

4

3

3 0-2-1-0 2

1

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS IN PARENTHESES ARE THE MANUFACTURER'S TOLERANCE.
 DIMENSIONS IN SQUARES ARE THE MANUFACTURER'S TOLERANCE.

L1

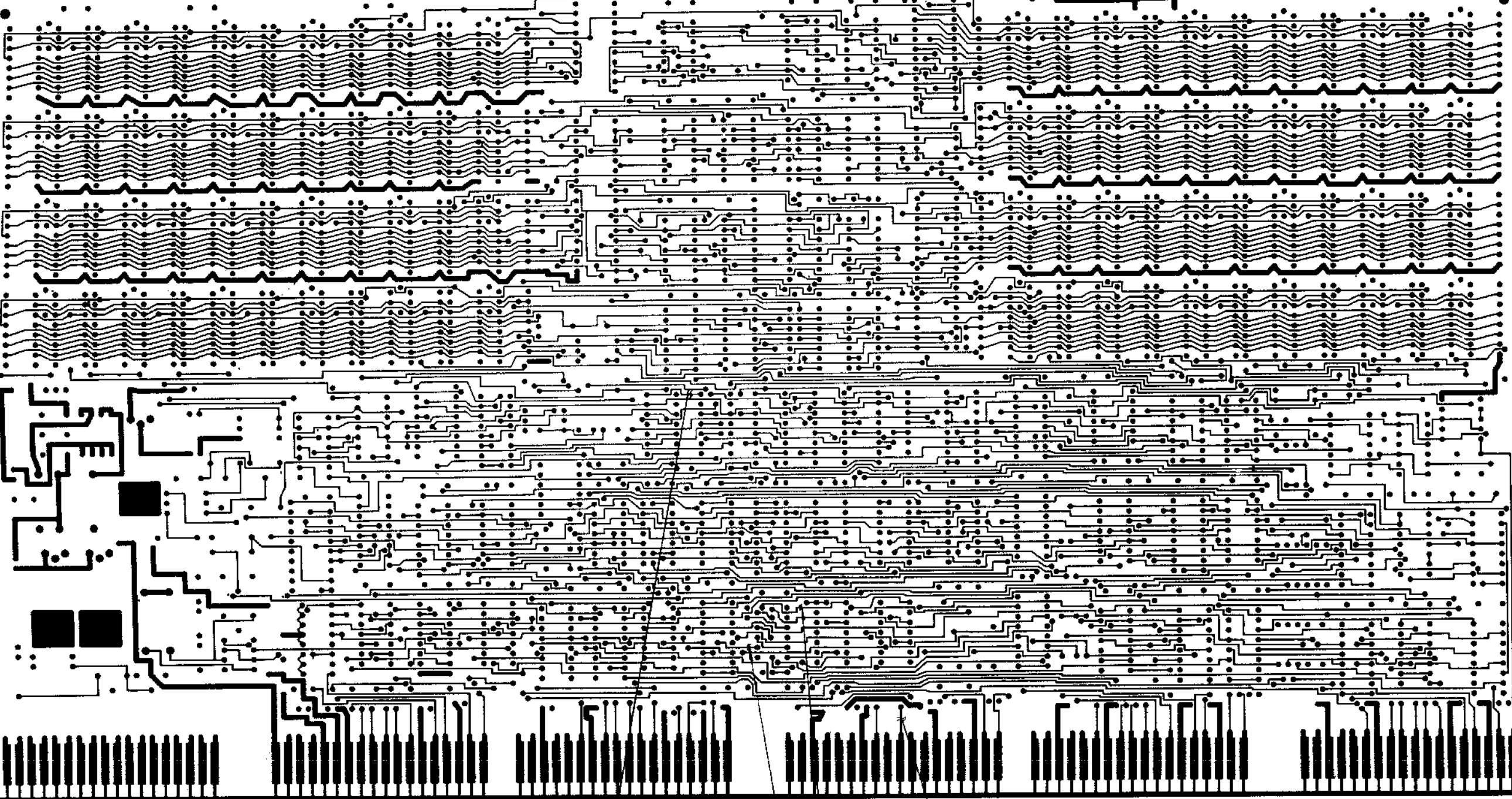
M8417

LAYER 1
50127018

SIDE 1

digital

CSXABCDEFGHIJKLMNPRS
 E420 E422E421 E420 E419 E418 E417 E416 E415 E414 E413 E412 E50 E37 E30 E411 E410 E409 E408 E407 E406 E405 E404 E403 E402 E401 E400



A

3-1 1-1 1-2 2-1

CHK	CHRY	END	REV	TITLE	SIZE	CODE	NUMBER	REV
				PDP8 M105 MEMORY	D	UA	M8417-0-0	E
				SCALE	SHEET	3 OF 3	DIST.	
						2 ML		

8

7

6

5

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3

2 ML

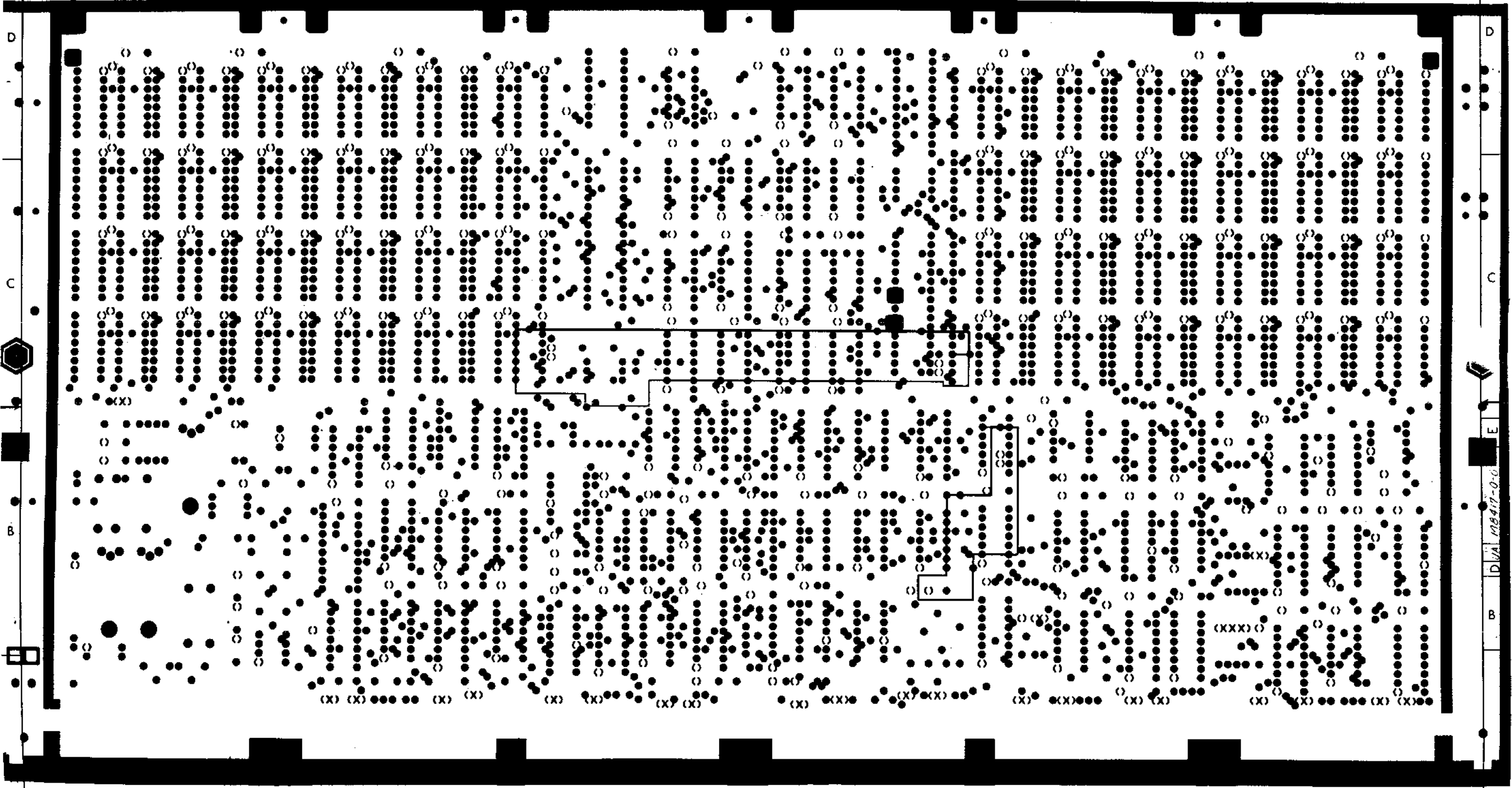
1

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LAYER 12

M8417 60127018

L2 M8417B



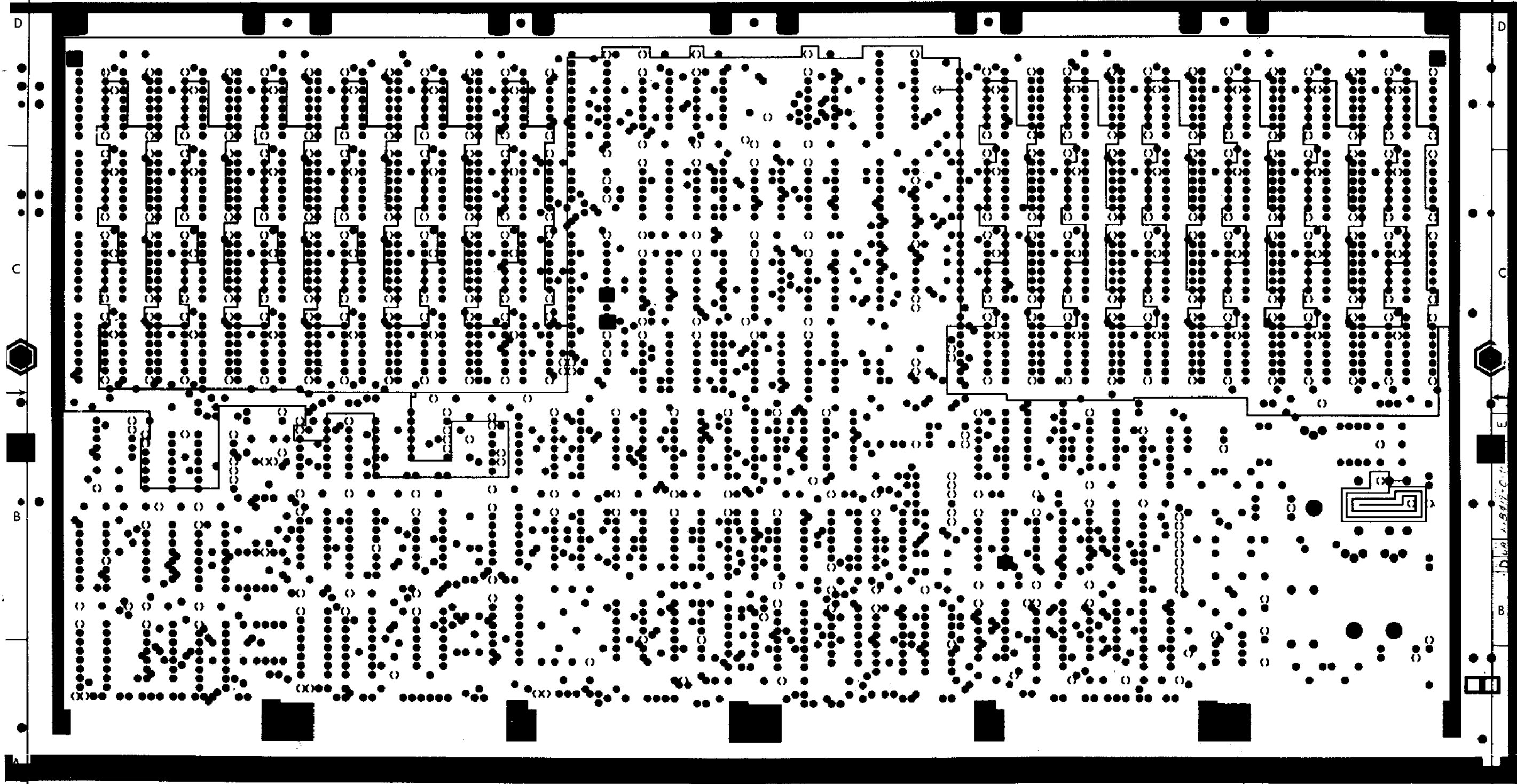
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PDP 8 MOS MEMORY	SIZE CODE	DUA	NUMBER	M8417-0-0	REV.	E
SCALE	2/1	SHEET	4 OF 5	DIST.			

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E 834A J

M8417B L3



REVISIONS		
CHK	CHANGE NO	REV

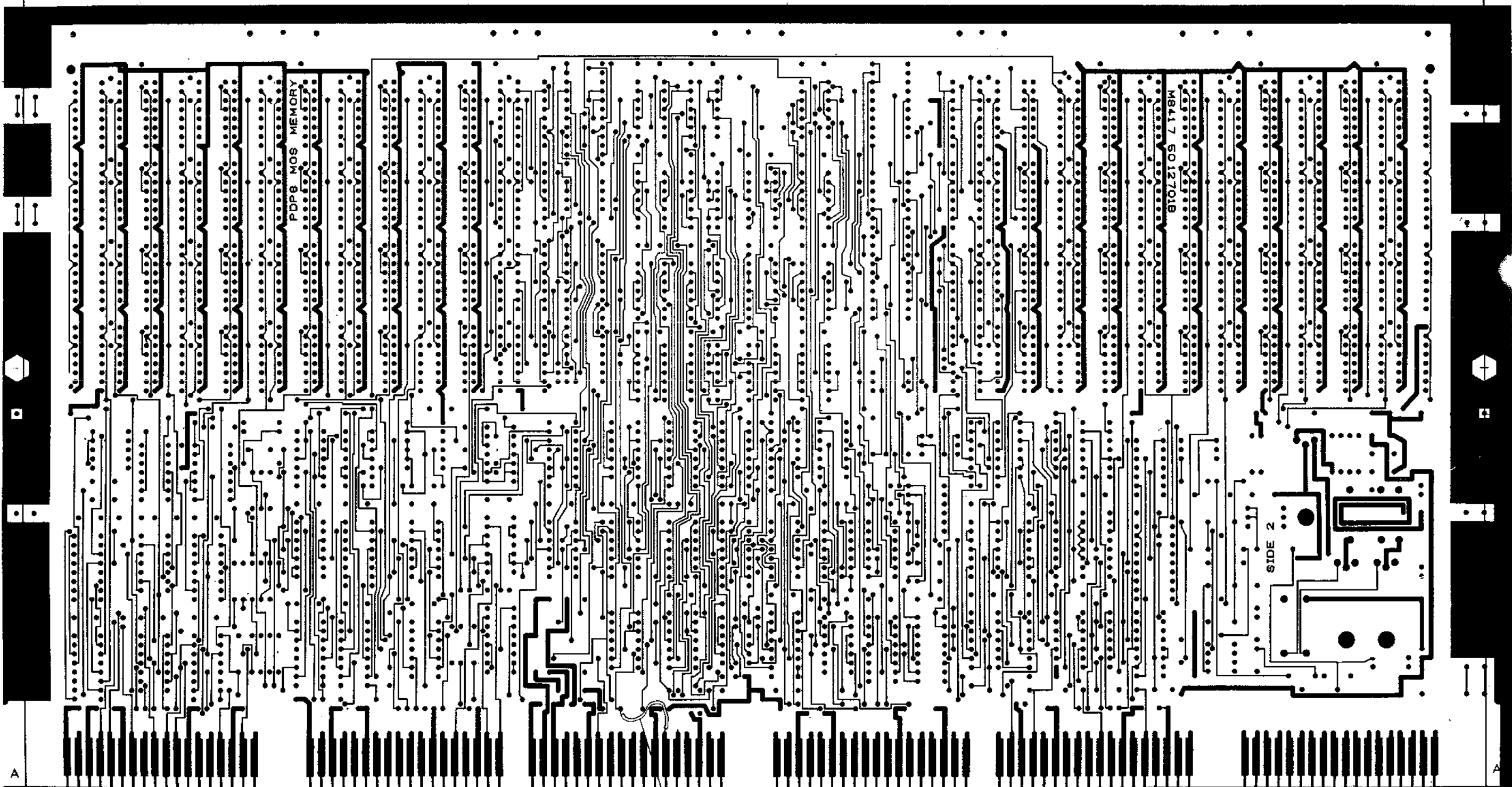
TITLE	PDP8 MOS MEMORY	SIZE CODE	D UA	NUMBER	MB417-0-0	REV	E
SCALE	2/1	SHEET	5 OF 8	DIST.			

ML

FOR GENERAL INFORMATION SEE THE DRAWING AT THE
 BOTTOM LEFT CORNER OF THIS SHEET FOR THE
 LOCATION OF THE MANUFACTURER'S MARKS
 AND THE MANUFACTURER'S PART NUMBER
 AND THE MANUFACTURER'S PART NUMBER
 AND THE MANUFACTURER'S PART NUMBER
 AND THE MANUFACTURER'S PART NUMBER

4 R3YA J

L4

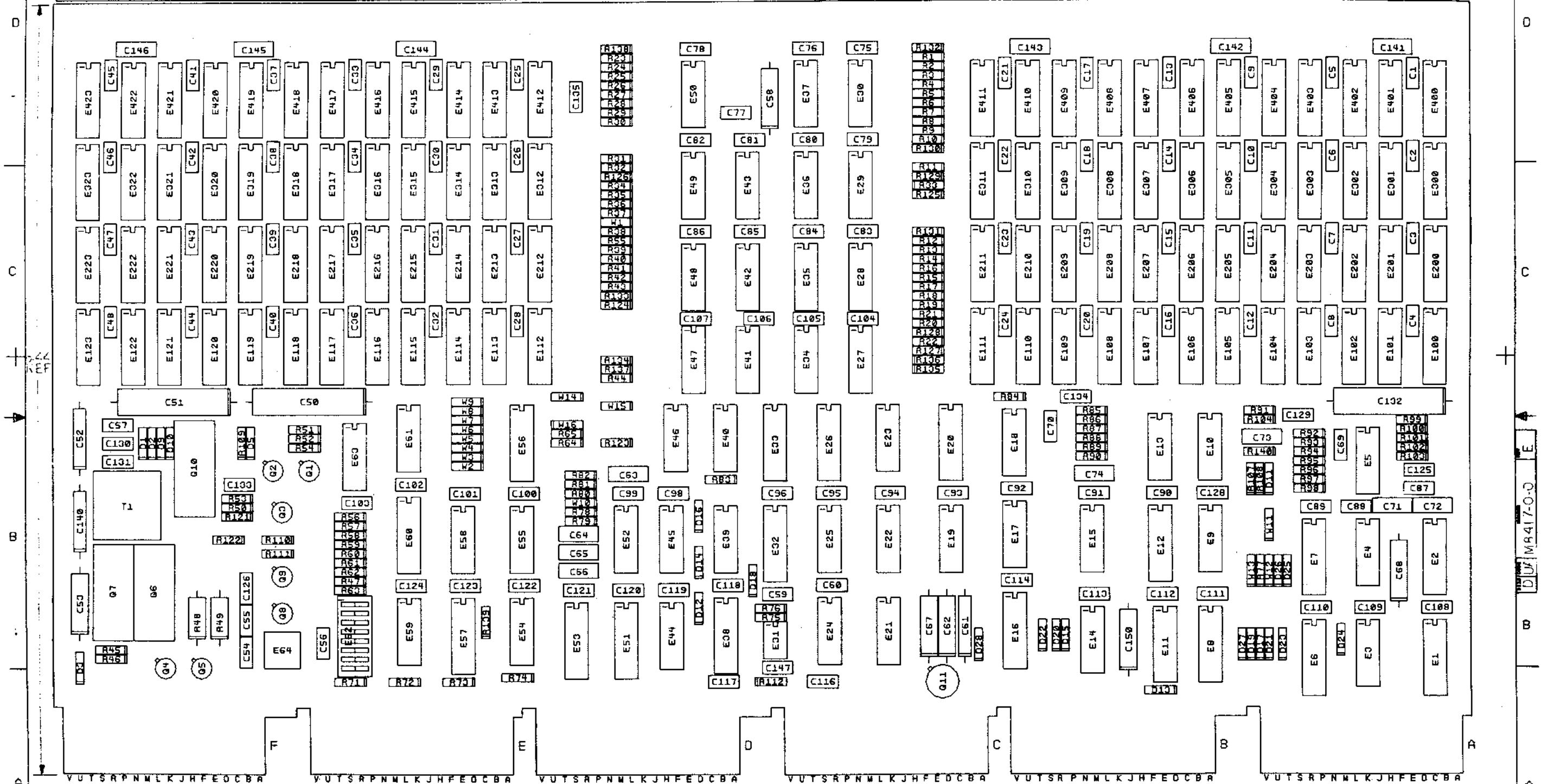


CHK	CHANGE NO	REV

2-2

TITLE	PDP-8 MOS MEMORY	SIZE CODE	D UA	NUMBER	M8412-0-0	REV.	E
SCALE	2/1	SHEET	6	OF	8	DIST.	

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NOTES:

CHANGE NO. REV.

DWG - REF ONLY

SIGNATURES		DATE	digital
DRN. <i>[Signature]</i>		5-18-77	
CHK'D. <i>[Signature]</i>		5-18-77	TITLE POP 8 MOS MEMORY
ENG. <i>[Signature]</i>		7/8/77	
PROJ. ENG. <i>[Signature]</i>		7/8/77	
PROD. <i>[Signature]</i>		7-8-77	
SCALE 2:1		SIZE CODE	NUMBER 0 IUA M8417-0-0
SHT. 7 OF 8		REV E	
NEXT HIGHER ASSY. B-117-0-0			

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REWORK INSTRUCTIONS

ECO #1

- ETCH CUTS SIDE 1:
 1-1 CUT ETCH TO FREE E31-3
 1-2 CUT ETCH TO FREE E31-3
 WIRE ADDS SIDE 1:
 1-3 WIRE E31-3 TO E57-15
 1-4 WIRE E57-14 TO E54-1
 1-5 WIRE E54-2 TO E24-14
 1-6 WIRE E24-14 TO E40-3

ECO #2

- ETCH CUTS SIDE 1:
 2-1 CUT ETCH BETWEEN PIN CK1 FEED THRU
 WIRE ADDS SIDE 2:
 2-2 WIRE PIN CP2 TO FEEDTHRU ABOVE
 CK2 PER PROCEDURE IN MODULE REWORK
 SPECIFICATION A-SP-7663265-0-0

ECO #3

- ETCH CUTS SIDE 1:
 3-1 CUT ETCH TO FREE E40-1
 WIRE ADDS SIDE 1:
 3-2 FROM E40-1 TO E39-13.

REVISIONS		
CHK	CHANGE NO.	REV.

DJA M8417-0-0
 REV. E

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR
					AB	AD	AC	AE	
1	1	D-UA-M8417-0-0		UNIT ASSY	REF	REF	REF	REF	
2	2	D-UA-M8417-0-0		UNIT ASSY	REF	-	-	-	
3	3		5012701-00	ETCH BOARD (M8418)	1	1	1	1	
4	4		1000006-00	10.0 MMF 100V 5%200PPM MICA	1	1	1	1	C66
5	5		1000016-00	100.0 MMF 100V 5%200PPM MICA	1	1	1	1	C64
6	6		1000042-00	1000.0 MMF 100V 5%200PPM MICA	1	1	1	1	C65
7	7		1001610-01	.01 MFD50/100V +80-20% DISC	53	53	53	53	C60, C75-C96, C98-C114, C116-C125, C128, C129, C147
8	8		1005306-00	6.8MFD 35V 10% S.TANT	8	8	8	8	C53, C58, C67, C61, C62, C63, C140, C150
9	9		1010274-00	.22 MFD 50V +80-20% Z5U CER	60	60	60	60	C1-C48, C57, C69, C70, C133-C135, C141-C146
10	10		1010279-00	.47 MFD 25V 20% CER	6	6	6	6	C54-C56, C126, C130, C131
11	11		1012084-01	8 MFD 25V +75-10% AL EL	1	1	1	1	C52
12	12		1012121-00	220.0 MMF 100V 1%200PPM MICA	6	6	6	6	C59, C63, C71-C74
13	13		1012219-00	47 MFD 30V +75-10% AL EL	3	3	3	3	C50, C51, C132
14	14		1101938-00	1N 4370A VZ= 2.4 5% .40W	1	1	1	1	D3
15	15		1104860-00	1N 746A VZ= 3.3 5%	1	1	1	1	D5
16	16		1105275-00	D 672 TR= 15NS PIV= 60V SI	21	21	21	21	D1, D2, D9-D27
17	17		1109943-00	1N 4733A VZ= 5.1 5% 1W Y	1	1	1	1	D28
18	18		1211164-04	SW DIP 1P 1A 8POS	1	1	1	1	E62
19	19		1210711-02	/REPLACED BY 12-16988-02	1	1	1	1	
20	20		1300250-00	150.0 .25 W 5.0 % CC	1	1	1	1	R47
21	21		1300271-00	220.0 .25 W 5.0 % CC	16	16	16	16	R123-R138
22	22		1300316-00	470.0 .25 W 5.0 % CC	2	2	2	2	R46, R51
23	23		1300365-00	1.0 K .25 W 5.0 % CC	9	9	9	9	R45, R50, R53, R54, R82-R84, R103, R104
24	24		1300447-00	4.70 K .25 W 5.0 % CC	15	15	15	15	R55-R65, R77, R78, R81, R139
25	25		1300479-00	10.0 K .25 W 5.0 % CC	6	6	6	6	R71-R74, R121, R122
26	26		1302124-00	18.0 .25 W 5.0 % CC	46	46	46	46	R1-R44, R90, R98

REVISION HISTORY		BASIC PART NO: M8417		DRN:	L. METZGER	DATE:	30-MAY-78	D I G I T A L			
ENG	ECO NUMBER	REV	SECTION A OF C	CHK'D:	P. BOSSMAN	DATE:	30-MAY-78	TITLE			
E.R.	CJ003	D	SECTION VARIATION INDEX					PARTS LIST			
J.S.	M8417-ML004	E	[A] AB, AD, AC, AE					PDP8 MOS MEMORY			
J.S.	M8417-ML005	F	[B] BB, BC, BD, BE								
J.S.	M8417-ML006	H	[C] AF, BF								
			[D]								
			[E]								
			[F]					DOCUMENT NUMBER			
			[H]					SIZE CODE NUMBER REV			
			[J]					K	PL	M8417-0-DBP	H
			[K]								
			[L]								
			[M]								
			[N]								
				ASSEMBLY NUMBER:	D-UA-M8417-0-0	TOP DOCUMENT NUMBER:	M58-C	FILE NAME:	ZD189H.PLS	EDIT #	6

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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR					
					AB	AD	AC	AE						
27	27		1302377-00	39.0	.25	W	5.0	%	CC	5	5	5	5	R52,R109-R112
28	28		1302859-00	5.76 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R96
29	29		1302871-00	1.21 K	.25	W	1.0	%	RN550-F10	2	2	2	2	R80,R108
30	30		1302872-00	681.0	.25	W	1.0	%	RN550-F10	1	1	1	1	R89
31	31		1302956-00	196.0	.25	W	1.0	%	RN550-F10	1	1	1	1	R94
32	32		1302957-00	121.0	.25	W	1.0	%	RN550-F10	1	1	1	1	R101
33	33		1303045-00	3.16 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R76
34	34		1303067-00	422.0	.25	W	1.0	%	RN550-F10	1	1	1	1	R99
35	35		1303110-00	19.60	.25	W	1.0	%	RN550-F10	1	1	1	1	R93
36	36		1303226-00	68.10	.25	W	1.0	%	RN550-F10	1	1	1	1	R86
37	37		1303311-00	46.40 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R75
38	38		1303313-00	12.10 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R97
39	39		1304725-00	380.0	.25	W	1.0	%	RN550-F10	1	1	1	1	R107
40	40	SEE NOTE 90	1304833-00	1.96 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R92
41	41		1305122-00	51.10	.25	W	1.0	%	RN550-F10	1	1	1	1	R85
42	42		1305123-00	215.0	.25	W	1.0	%	RN550-F10	2	2	2	2	R91,R102
43	43		1305143-00	825.0	.25	W	1.0	%	RN550-F10	2	2	2	2	R95,R79
44	44	SEE NOTE 90	1305253-00	7.15 K	.25	W	1.0	%	RN550-F10	1	1	1	1	R87
45	45		1309405-00	68.0	.50	W	5.0	%	CC	2	2	2	2	R48,R49
46	46		1503100-00	DEC3009B	NPN	200MA	SI	20	25	2	2	2	2	Q1-Q5,Q8,Q9
47	47		1510171-00	D	44C3	NPN	30WT	SI	30	20	Y	2	2	Q6,Q7
48	48		1614234-00	XFMR	CONVERTER	RATIO	1:3	300UH		1	1	1	1	T1
49	49		1909054-00	7493	COUNTER	ASYNCH	UP	BI		2	2	2	2	E21,E24
50	50		1909705-00	DEC	8881	NAND	GATE-QUAD	2IN 0		4	4	4	4	E3,E14,E17,E44
51	51		1910268-01	DEC	75107B	-01	RECEIVER	LINE DUA		3	3	3	3	E5,E10,E18
52	52		1910406-00	75451	DRIVER	PERIPH	DUAL			1	1	1	1	E64
53	53		1910532-00	74500	NAND	GATE-QUAD	2IN	0		6	6	6	6	E4,E34,E37,E42,E43,E55
54	54		1910533-00	74503	NAND	GATE-QUAD	2IN	0		1	1	1	1	E13
55	55		1910534-00	74504	INVERTER	GATE-HEX	1I			2	2	2	2	E22,E54
56	56		1910536-00	74510	NAND	GATE-TRIPLE	3IN			3	3	3	3	E19,E61,E63
57	57		1910539-00	74520	NAND	GATE-DUAL	4INPU			1	1	1	1	E59
58	58		1910542-00	74564	A-0-I	GATE	4-2-3-2			1	1	1	1	E15
59	59		1910544-01	74574	60GG-D	DUAL	EDGE TRIG			1	1	1	1	E39
60	60		1910545-00	745112	FF-JK	DUAL	EDGE TRIG			3	3	3	3	E7,E20,E32
61	61		1910549-00	745158	MUX	1 OF 2	(QUAD)			2	2	2	2	E26,E33
62	62		1911116-00	DEC	8837	RECEIVER	BUS	HEX UN		5	5	5	5	E6,E8,E16,E36,E57
63	63		1911469-00	DEC	8640	RECEIVER	BUS	QUAD U		1	1	1	1	E45
64	64		1911579-00	8641	TRANSCEIVER	BUS	QUA			3	3	3	3	E1,E11,E51
65	65		1911676-00	745139	DECODER	DUAL	TWO-INP			1	1	1	1	E56
66	66		1911712-00	74551	AND-OR	GATE-INVERT	D			1	1	1	1	E58
67	67		1911944-00	555CN	TIMER	FUNCT	BLOCK			1	1	1	1	E31
68	68		1911983-00	745133	NAND	GATE-POSITIVE	1			1	1	1	1	E60
69	69	SEE NOTE 93	1912048-06	DEC	7812	VOLT	REG	FIX +12V		1	1	1	1	Q10
70	70		1912388-00	74502	NOR	GATE-QUAD	2IN,PO			3	3	3	3	E9,E25,E46
71	71		1912389-00	74508	AND	GATE-QUAD	2IN,PO			1	1	1	1	E23
72	72		1912541-00	79M05	VOLT	REG	FIX -5V			1	1	1	1	Q11
73	73		1912649-00	LS75	LATCH	4BIT	BISTABLE			3	3	3	3	E2,E12,E53
74	74		1912746-00	DEC	74537	NAND	GATE-QUAD	2IN		11	11	11	11	E27-E30,E35,E36,E41,E47-E50

D	I	G	I	T	A	L	TITLE	PDP8 MOS MEMORY	SECTION A	OF C	SIZE	CODE	DOCUMENT NUMBER	REV
											K	PL	M8417-0-DBP	H

AUTOMATED BY PRTLST.2D(16)

PARTS LIST

SHEET A3 OF A4

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR
					AB	AD	AC	AE	
75	75		1912803-00	74LS04 INVERTER GATE HEX	1	1	1	1	E52
76	76		1912824-00	LS74 FF-0 DUAL EDGE TRIGG	1	1	1	1	E40
77	77		2113735-01	4K MOS RAM 200NS 1	48	-	-	-	E100, E102, E104, E106, E108, E110, E112, E114, E116, E118, E120, E122, E200, E202, E204, E206, E208, E210, E212, E214, E216, E218, E220, E222, E300, E302, E304, E306, E308, E310, E312, E314, E316, E318, E320, E322, E400, E402, E404, E406, E408, E410, E412, E414, E416, E418, E420, E422
78	78		2114114-01	4K MOS RAM 200NS 1	-	-	48	-	E100, E102, E104, E106, E108, E110, E112, E114, E116, E118, E120, E122, E200, E202, E204, E206, E208, E210, E212, E214, E216, E218, E220, E222, E300, E302, E304, E306, E308, E310, E312, E314, E316, E318, E320, E322, E400, E402, E404, E406, E408, E410, E412, E414, E416, E418, E420, E422
79	79		2113914-01	4K MOS RAM 200NS 1	-	48	-	-	E100, E102, E104, E106, E108, E110, E112, E114, E116, E118, E200, E210, E212, E214, E216, E218, E220, E222, E300, E302, E304, E306, E308, E310, E312, E314, E316, E318, E320, E322, E400, E402, E404, E406, E408, E410, E412, E414, E416, E418, E420, E422
80	80	SEE NOTE 91	2114475-01	4K MOS RAM 200NS 1	-	-	-	48	E100, E102, E104, E106, E108, E110, E112, E114, E116, E118, E120, E122, E200, E202, E204, E206, E208, E210, E212, E214, E216, E218, E220, E222, E300, E302, E304, E306, E308, E310, E312, E314, E316, E318, E320, E322, E400, E402, E404, E406, E408, E410, E412, E414, E416, E418, E420, E422
81	81		9009024-01	EYELET, ROLL FLANGE .12100X .192	12	12	12	12	
82	82	USE WITH Q6, Q7, Q10	9006557-00	NUT, KEF 4-40X 1/4 AF	3	3	3	3	
83	83	USE WITH Q11	9007254-00	TRANSIPADS #10146	1	1	1	1	
84	84	USE WITH Q6, Q7, Q10	9008301-01	SCREW, PAN, PHIL 4-40X 1/4 SS	3	3	3	3	
85	85		9009185-00	JUMPER, WIRE, INSULATED, BLACK B	6	6	6	-	W2, W3, W4, W9, W10, W11
			CONT		-	-	-	5	W2, W3, W4, W9, W11
86	86		9105740-55	WIRE(WRAP)30AWG UL1423	A/R	A/R	A/R	A/R	
87	87		2113789-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	

88 NOTE: M8417-AA=M8417-AB, AC, AD, AE, AF, (16KX12)

D	I	G	I	T	A	L	TITLE	SECTION	OF	SIZE	CODE	DOCUMENT NUMBER	REV
							PDP8 MOS MEMORY	A	C	K	PL	M8417-D-DBP	H

AUTOMATED BY PRTLST.2D(16)

PARTS LIST

SHEET A4 OF A4

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR
				AB	AD	AC	AE	

89 NOTE: M8417-BA=M8417-BB,BC,BD,BE,BF(32KX12)
 90 NOTE: USED ON:OPTION/MODEL MS8-CA,MS8-CB
 91 NOTE: R87,R92 MAY BE REMOVED AT MODULE TEST IF NEEDED.
 92 NOTE: MIXING OF MOS RAMS IS NOT PERMITTED.
 93 NOTE: REF ITEM #69 19-12048-05 ACCEPTABLE SUBSTITUTE FOR 19-12048-06.
 94 NOTE: -----

D	I	G	I	T	A	L	TITLE	PDP8 MOS MEMORY	SECTION A OF C	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8417-0-DBP	H

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR
					BB	BC	BD	BE	
1	1	D-UA-M8417-0-0		UNIT ASSY	REF	REF	REF	REF	
2	2	D-UA-M8417-0-0		*** THIS ITEM IS NOT USED ***	-	-	-	-	
3	3		5012701-00	ETCH BOARD (M8418)	1	1	1	1	
4	4		1000006-00	10.0 MMF 100V 5%200PPM MICA	1	1	1	1	C66
5	5		1000016-00	100.0 MMF 100V 5%200PPM MICA	1	1	1	1	C64
6	6		1000042-00	1000.0 MMF 100V 5%200PPM MICA	1	1	1	1	C65
7	7		1001610-01	.01 MFD50/100V +80-20% DISC	53	53	53	53	C60, C75-C96, C98-C114, C116-C125, C128, C129, C147
8	8		1005306-00	6.8MFD 35V 10% S.TANT	8	8	8	8	C53, C58, C67, C61, C62, C68, C140, C150
9	9		1010274-00	.22 MFD 50V +80-20% Z5U CER	60	60	60	60	C1-C48, C57, C59, C70, C133-C135, C141-C146
10	10		1010279-00	.47 MFD 25V 20% CER	6	6	6	6	C54-C56, C126, C130, C131
11	11		1012084-01	8 MFD 25V +75-10% AL EL	1	1	1	1	C52
12	12		1012121-00	220.0 MMF 100V 1%200PPM MICA	6	6	6	6	C59, C63, C71-C74
13	13		1012219-00	47 MFD 30V +75-10% AL EL	3	3	3	3	C50, C51, C132
14	14		1101938-00	1N 4370A VZ= 2.4 5% .40W	1	1	1	1	D3
15	15		1104860-00	1N 746A VZ= 3.3 5%	1	1	1	1	D5
16	16		1105275-00	0.672 TR= 15NS PIV= 60V SI	21	21	21	21	D1, D2, D9-D27
17	17		1109943-00	1N 4733A VZ= 5.1 5% 1W Y	1	1	1	1	D28
18	18		1211164-04	SW,DIP 1P 1A 8POS	1	1	1	1	E62
19	19		1210711-02	/REPLACED BY 12-16988-02	1	1	1	1	
20	20		1300250-00	150.0 .25 W 5.0 % CC	1	1	1	1	R47
21	21		1300271-00	220.0 .25 W 5.0 % CC	16	16	16	16	R123-R138
22	22		1300316-00	470.0 .25 W 5.0 % CC	2	2	2	2	R46, R51
23	23		1300365-00	1.0 K .25 W 5.0 % CC	9	9	9	9	R45, R50, R53, R54, R82-R84, R103, R104
24	24		1300447-00	4.70 K .25 W 5.0 % CC	15	15	15	15	R55-R65, R77, R78, R81, R139
25	25		1300479-00	10.0 K .25 W 5.0 % CC	6	6	6	6	R71-R74, R121, R122
26	26		1302124-00	18.0 .25 W 5.0 % CC	46	46	46	46	R1-R44, R90, R98

REVISION HISTORY		BASIC PART NO: M8417		DRN: L. METZGER		DATE: 30-MAY-78		D I G I T A L	
ENG	ECO NUMBER	REV	SECTION B OF C	CHK'D:	P. BOSSMAN	DATE:	30-MAY-78	TITLE	PARTS LIST
E.R.	C3003	D	SECTION VARIATION INDEX	CHK'D:	P. BOSSMAN <td>DATE:</td> <td>30-MAY-78 <td>TITLE</td> <td>PDP8 MOS MEMORY </td></td>	DATE:	30-MAY-78 <td>TITLE</td> <td>PDP8 MOS MEMORY </td>	TITLE	PDP8 MOS MEMORY
J.S.	M8417-ML004	E	[A] AB, AD, AC, AE	DES. ENG:	J. STEGEMAN <td>DATE:</td> <td>30-MAY-78 <td>DOCUMENT NUMBER</td> <td></td> </td>	DATE:	30-MAY-78 <td>DOCUMENT NUMBER</td> <td></td>	DOCUMENT NUMBER	
J.S.	M8417-ML005	F	[B] BB, BC, BD, BE	RESP. ENG.:	J. STEGEMAN <td>DATE:</td> <td>30-MAY-78 <td>SIZE: CODE: NUMBER</td> <td>REV</td> </td>	DATE:	30-MAY-78 <td>SIZE: CODE: NUMBER</td> <td>REV</td>	SIZE: CODE: NUMBER	REV
J.S.	M8417-ML006	H	[C] AF, BF	MFG. ENG.:	C. TANNER <td>DATE:</td> <td>30-MAY-78</td> <td>K PL M8417-0-DBP</td> <td>H</td>	DATE:	30-MAY-78	K PL M8417-0-DBP	H
				ASSEMBLY NUMBER:	D-UA-M8417-0-0	TOP DOCUMENT NUMBER:	MS8-C	FILE NAME:	Z0189H.PLS
								EDIT #:	6

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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR					
					BB	BC	BD	BE						
27	27		1302377-00	39.0	.25	W	5.0	%	CC	5	5	5	5	R52,R109-R112
28	28		1302859-00	5.76 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R96
29	29		1302871-00	1.21 K	.25	W	1.0	%	RN55D-F10	2	2	2	2	R80,R108
30	30		1302872-00	681.0	.25	W	1.0	%	RN55D-F10	1	1	1	1	R89
31	31		1302956-00	196.0	.25	W	1.0	%	RN55D-F10	1	1	1	1	R94
32	32		1302957-00	121.0	.25	W	1.0	%	RN55D-F10	1	1	1	1	R101
33	33		1303045-00	3.16 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R76
34	34		1303067-00	422.0	.25	W	1.0	%	RN55D-F10	1	1	1	1	R99
35	35		1303110-00	19.60	.25	W	1.0	%	RN55D-F10	1	1	1	1	R93
36	36		1303226-00	68.10	.25	W	1.0	%	RN55D-F10	1	1	1	1	R86
37	37		1303311-00	46.40 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R75
38	38		1303313-00	12.10 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R97
39	39		1304725-00	300.0	.25	W	1.0	%	RN55D-F10	1	1	1	1	R107
40	40	SEE NOTE 90	1304833-00	1.96 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R92
41	41		1305122-00	51.10	.25	W	1.0	%	RN55D-F10	1	1	1	1	R85
42	42		1305123-00	215.0	.25	W	1.0	%	RN55D-F10	2	2	2	2	R91,R102
43	43		1305143-00	825.0	.25	W	1.0	%	RN55D-F10	2	2	2	2	R95,R79
44	44	SEE NOTE 90	1305253-00	7.15 K	.25	W	1.0	%	RN55D-F10	1	1	1	1	R87
45	45		1309405-00	68.0	.50	W	5.0	%	CC	2	2	2	2	R48,R49
46	46		1503100-00	DEC3009B	NPN	200MW	SI	20	25	2	7	2	7	Q1-Q5,Q8,Q9
47	47		1510171-00	D	44C3	NPN	30WT	SI	30	20	2	2	2	Q6,Q7
48	48		1614234-00	XFMR	CONVERTER	RATIO	1:3	300VH		1	1	1	1	T1
49	49		1909054-00	7493	COUNTER	ASYNCH	UP	BI		2	2	2	2	E21,E24
50	50		1909705-00	DEC	8881	NAND	GATE-QUAD	2IN	0	4	4	4	4	E3,E14,E17,E44
51	51		1910268-01	DEC	751078-01	RECEIVER	LINE	DUAL		3	3	3	3	E5,E10,E18
52	52		1910406-00	75451	DRIVER	PERIPH	DUAL			1	1	1	1	E64
53	53		1910532-00	74500	NAND	GATE-QUAD	2IN	0		6	6	6	6	E4,E34,E37,E42,E43,E55
54	54		1910533-00	74503	NAND	GATE-QUAD	2IN	0		1	1	1	1	E13
55	55		1910534-00	74504	INVERTER	GATE-HEX	1I			2	2	2	2	E22,E54
56	56		1910536-00	74510	NAND	GATE-TRIPLE	3IN			3	3	3	3	E19,E51,E63
57	57		1910539-00	74520	NAND	GATE-DUAL	4INPU			1	1	1	1	E59
58	58		1910542-00	74564	A-0-1	GATE	4-2-3-2			1	1	1	1	E15
59	59		1910544-01	74574	60GG-0	DUAL	EDGE	TRIG		1	1	1	1	E39
60	60		1910545-00	745112	FF-JK	DUAL	EDGE	TRIG		3	3	3	3	E7,E20,E32
61	61		1910549-00	745158	MUX	1 OF 2	(QUAD)			2	2	2	2	E26,E33
62	62		1911116-00	DEC	8837	RECEIVER	BUS	HEX	UN	5	5	5	5	E6,E8,E16,E38,E57
63	63		1911469-00	DEC	8640	RECEIVER	BUS	QUAD	U	1	1	1	1	E45
64	64		1911579-00	8641	TRANSCEIVER	BUS	QUA			3	3	3	3	E1,E11,E51
65	65		1911676-00	745139	DECODER	DUAL	TWO-INP			1	1	1	1	E56
66	66		1911712-00	74551	AND-OR	GATE-INVERT	0			1	1	1	1	E58
67	67		1911944-00	555CN	TIMER	FUNCT	BLOCK			1	1	1	1	E31
68	68		1911983-00	745133	NAND	GATE-POSITIVE	1			1	1	1	1	E60
69	69	SEE NOTE 93	1912048-06	DEC	7812	VOLT	REG	FIX	+12V	1	1	1	1	Q10
70	70		1912388-00	74502	NOR	GATE-QUAD	2IN	PO		3	3	3	3	E9,E25,E46
71	71		1912389-00	74508	AND	GATE-QUAD	2IN	PO		1	1	1	1	E23
72	72		1912541-00	79M05	VOLT	REG	FIX	-5V		1	1	1	1	Q11
73	73		1912649-00	L575	LATCH	4BIT	BISTABLE			3	3	3	3	E2,E12,E53
74	74		1912746-00	DEC	74537	NAND	GATE-QUAD	2IN		11	11	11	11	E27-E30,E35,E36,E41,E47-E50

D	I	G	I	T	A	L	TITLE	PDP8 MOS MEMORY	SECTION B OF C	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8417-0-DBP	H

AUTOMATED BY PRTLST.2D(16)

PARTS LIST

SHEET 83 OF 83

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION				REFERENCE DESIGNATOR
					88	BC	BD	BE	
75	75		1912803-00	74LS04 INVERTER GATE HEX	1	1	1	1	E52
76	76		1912824-00	LS74 FF-D DUAL EDGE TRIGG	1	1	1	1	E40
77	77		2113735-01	4K MOS RAM 200NS 1	96	-	-	-	E100-E123, E200-E223, E300-E323, E400-E423
78	78		2114114-01	4K MOS RAM 200NS 1	-	96	-	-	E100-E123, E200-E223, E300-E323, E400-E423
79	79		2113914-01	4K MOS RAM 200NS 1	-	-	96	-	E100-E123, E200-E223, E300-E323, E400-E423
80	80	SEE NOTE 91	2114475-01	4K MOS RAM 200NS 1	-	-	-	96	E100-E123, E200-E223, E300-E323, E400-E423
81	81		9009024-01	EYELET ROLL FLANGE .12100X .192	12	12	12	12	
82	82	USE WITH Q6, Q7, Q10	9006557-00	NUT, KEP 4-40X 1/4 AF	3	3	3	3	
83	83	USE WITH Q11	9007254-00	TRANSIPADS #10146	1	1	1	1	
84	84	USE WITH Q5, Q7, Q10	9008301-01	SCREW PAN, PHIL 4-40X 1/4 SS	3	3	3	3	
85	85		9009185-00	JUMPER WIRE, INSULATED, BLACK B	5	5	5	5	W2, W3, W4, W9, W11
86	86		9105740-55	WIRE(WRAP)30AWG UL1423	A/R	A/R	A/R	A/R	
87	87		2113789-01	*** THIS ITEM IS NOT USED ***	-	-	-	-	

- 88 NOTE: M8417-AA=M8417-AB, AC, AD, AE, AF, (16KX12)
 89 NOTE: M8417-BA=M8417-BB, BC, BD, BE, BF(32KX12)
 90 NOTE: USED ON: OPTION/MODEL M58-CA, M58-CB
 91 NOTE: R67, R92 MAY BE REMOVED AT MODULE TEST IF NEEDED.
 92 NOTE: MIXING OF MOS RAMS IS NOT PERMITTED.
 93 NOTE: REF ITEM #59 19-12048-05 ACCEPTABLE SUBSTITUTE FOR 19-12048-06.
 94 NOTE: -----

D	I	G	I	T	A	L	TITLE	PDP8 MOS MEMORY	SECTION B OF C	SIZE! CODE!	DOCUMENT NUMBER	REV
										K PL	M8417-0-DBP	H

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	VARIATION	REFERENCE DESIGNATOR
					AF	BF		
1	1	D-UA-M8417-0-0		UNIT ASSY	REF	REF		
		D-UA-M8417-0-0		UNIT ASSY	REF	REF		
			5012701-00	ETCH BOARD (M8418)	1	1		
			1000006-00	10.0 MMF 100V 5%200PPM MICA	1	1		C66
			1000016-00	100.0 MMF 100V 5%200PPM MICA	1	1		C64
			1000042-00	1000.0 MMF 100V 5%200PPM MICA	1	1		C65
			1001610-01	.01 MFDSO/100V +80-20% DISC	53	53		C60, C75-C96, C98-C114, C116-C125, C128, C129, C147
							CONT	C53, C58, C67, C61, C62, C68, C140, C150
8	8		1005306-00	6.8MFD 35V 10% S.TANT	8	8		
							CONT	C1-C48, C57, C69, C70, C133-C135, C141-C146
9	9		1010274-00	.22 MFD 50V +80-20% Z5U CER	60	60		
							CONT	C54-C56, C126, C130, C131
10	10		1010279-00	.47 MFD 25V 20% CER	6	6		
11	11		1012084-01	8 MFD 25V +75-10% AL EL	1	1		C52
12	12		1012121-00	220.0 MMF 100V 1%200PPM MICA	6	6		C59, C63, C71-C74
13	13		1012219-00	47 MFD 30V +75-10% AL EL	3	3		C50, C51, C132
14	14		1101938-00	1N 4370A VZ= 2.4 5% .40W	1	1		D3
15	15		1104860-00	1N 746A VZ= 3.3 5%	1	1		D5
16	16		1105275-00	D 672 TR= 15NS PIV= 60V SI	21	21		D1, D2, D9-D27
17	17		1109943-00	1N 4733A VZ= 5.1 5% 1W Y	1	1		O28
18	18		1211164-04	SW DIP 1P 1A 8POS	1	1		E62
19	19		1210711-02	/REPLACED BY 12-16988-02	1	1		
20	20		1300250-00	150.0 .25 W 5.0 % CC	1	1		R47
21	21		1300271-00	220.0 .25 W 5.0 % CC	16	16		R123-R138
22	22		1300316-00	470.0 .25 W 5.0 % CC	2	2		R46, R51
23	23		1300365-00	1.0 K .25 W 5.0 % CC	9	9		R45, R50, R53, R54, R82-R84, R103, R104
							CONT	R55-R65, R77, R78, R81, R139
24	24		1300447-00	4.70 K .25 W 5.0 % CC	15	15		R71-R74, R121, R122
25	25		1300479-00	10.0 K .25 W 5.0 % CC	6	6		R1-R44, R90, R98
26	26		1302124-00	18.0 .25 W 5.0 % CC	46	46		

REVISION HISTORY		BASIC PART NO: M8417		DRN: L. METZGER		DATE: 30-MAY-78		D I G I T A L	
ENG	ECO NUMBER	REV	SECTION C OF C	CHK'D:	P. BOSSMAN	DATE:	30-MAY-78	TITLE	PARTS LIST
E.R.	00003	D	SECTION VARIATION INDEX	DES. ENG.:	J. STEGEMAN	DATE:	30-MAY-78	DOCUMENT NUMBER	
J.S.	M8417-M1004	E	[A] AB, AD, AC, AE	RESP. ENG.:	J. STEGEMAN	DATE:	30-MAY-78	SIZE	CODE
J.S.	M8417-M1005	F	[B] BB, BC, BD, BE	MFG. ENG.:	C. TANNER	DATE:	30-MAY-78	NUMBER	REV
J.S.	M8417-M1006	H	[C] AF, BF	ASSEMBLY NUMBER:	D-UA-M8417-0-0	TOP DOCUMENT NUMBER:	M58-C	FILE NAME:	EDIT #
			[D]					Z0189H.PLS	6
			[E]						
			[F]						
			[G]						
			[H]						
			[I]						
			[J]						
			[K]						
			[L]						
			[M]						
			[N]						

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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER VARIATION	REFERENCE DESIGNATOR
					AF	BF	
27	27		1302377-00	39.0	.25	W 5.0 %	CC R52,R109-R112
28	28		1302859-00	5.76 K	.25	W 1.0 %	RN550-F10 R96
29	29		1302871-00	1.21 K	.25	W 1.0 %	RN550-F10 R80,R108
30	30		1302872-00	681.0	.25	W 1.0 %	RN550-F1 R89
31	31		1302956-00	196.0	.25	W 1.0 %	RN550-F10 R94
32	32		1302957-00	121.0	.25	W 1.0 %	RN550-F10 R101
33	33		1303045-00	3.16 K	.25	W 1.0 %	RN550-F10 R76
34	34		1303067-00	422.0	.25	W 1.0 %	RN550-F10 R99
35	35		1303110-00	19.60	.25	W 1.0 %	RN550-F10 R93
36	36		1303226-00	68.10	.25	W 1.0 %	RN550-F10 R86
37	37		1303311-00	46.40 K	.25	W 1.0 %	RN550-F10 R75
38	38		1303313-00	12.10 K	.25	W 1.0 %	RN550-F10 R97
39	39		1304725-00	300.0	.25	W 1.0 %	RN550-F10 R107
40	40	SEE NOTE 90	1304833-00	1.96 K	.25	W 1.0 %	RN550-F10 R92
41	41		1305122-00	51.10	.25	W 1.0 %	RN550-F10 R85
42	42		1305123-00	215.0	.25	W 1.0 %	RN550-F10 R91,R102
43	43		1305143-00	825.0	.25	W 1.0 %	RN550-F10 R95,R79
44	44	SEE NOTE 90	1305253-00	7.15 K	.25	W 1.0 %	RN550-F10 R87
45	45		1309405-00	68.0	.50	W 5.0 %	CC R48,R49
46	46		1503100-00	DEC30098			NPN 200MV SI 20 25 Q1-Q5,Q8,Q9
47	47		1510171-00	D 44C3			NPN 30WT SI 30 20 Y Q6,Q7
48	48		1614234-00	XFMR,			CONVERTER, RATIO 1:3 300UH T1
49	49		1909054-00	7493			COUNTER, ASYNCH UP, BI E21,E24
50	50		1909705-00	DEC 8881			NAND GATE-QUAD 2IN 0 E3,E14,E17,E44
51	51		1910268-01	DEC 75107B-01			RECEIVER, LINE, DUA E5,E10,E18
52	52		1910406-00	7451			DRIVER, PERIPH, DUAL, E64
53	53		1910532-00	74500			NAND GATE-QUAD 2IN 0 E4,E34,E37,E42,E43,E55
54	54		1910533-00	74503			NAND GATE-QUAD 2IN 0 E13
55	55		1910534-00	74504			INVERTER GATE-HEX 1I E22,E54
56	56		1910536-00	74510			NAND GATE-TRIPLE 3IN E19,E61,E63
57	57		1910539-00	74520			NAND GATE-DUAL 4INPU E59
58	58		1910542-00	74564			A-0-1 GATE 4-2-3-2 E15
59	59		1910544-01	74574-60			GG-D DUAL, EDGE TRIG E39
60	60		1910545-00	745112			FF-JK DUAL, EDGE TRIG E7,E20,E32
61	61		1910549-00	745158			MUX 1 OF 2 (QUAD) E26,E33
62	62		1911116-00	DEC 8837			RECEIVER, BUS, HEX, UN E6,E8,E16,E38,E57
63	63		1911469-00	DEC 8640			RECEIVER, BUS, QUAD, U E45
64	64		1911579-00	8641			TRANSCEIVER, BUS, QUA E1,E11,E51
65	65		1911676-00	745139			DECODER-DUAL TWO-INP E56
66	66		1911712-00	74551			AND-OR GATE-INVERT D E58
67	67		1911944-00	555CN			TIMER, FUNCT. BLOCK E31
68	68		1911983-00	745133			NAND GATE-POSITIVE 1 E60
69	69	SEE NOTE 93	1912048-06	DEC 7812			VOLT REG, FIX +12V Q10
70	70		1912388-00	74502			NOR GATE-QUAD 2IN, PO E9,E25,E46
71	71		1912389-00	74508			AND GATE-QUAD 2IN, PO E23
72	72		1912541-00	79M05			VOLT REG, FIX -5V Q11
73	73		1912649-00	LS75			LATCH 4BIT, BISTABLE E2,E12,E53
74	74		1912746-00	DEC 74537			NAND GATE-QUAD 2IN E27-E30,E35,E36,E41,E47-E50

D	I	G	I	T	A	L	TITLE	POP8 MOS MEMORY	SECTION C OF C	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8417-D-DBP	H

AUTOMATED BY PRTLST.20(16)

PARTS LIST

SHEET C3 OF C3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	VARIATION	REFERENCE DESIGNATOR
					AF	BF		
75	75		1912803-00	74LS04 INVERTER GATE, HEX	1	1		E52
76	76		1912824-00	LS74 FF-D DUAL, EDGE TRIGG	1	1		E40
77	77		2113735-01	*** THIS ITEM IS NOT USED ***	-	-		
78	78		2114114-01	*** THIS ITEM IS NOT USED ***	-	-		
79	79		2113914-01	*** THIS ITEM IS NOT USED ***	-	-		
80	80	SEE NOTE 91	2114475-01	*** THIS ITEM IS NOT USED ***	-	-		
81	81		9900024-01	EYELET ROLL FLANGE .12100X .192	12	12		
82	82	USE WITH Q6, Q7, Q10	9006557-00	NUT, KEP 4-40X 1/4 AF	3	3		
83	83	USE WITH Q11	9007254-00	TRANSIPADS #10146	1	1		
84	84	USE WITH Q6, Q7, Q10	9008301-01	SCREW, PAN, PHIL 4-40X 1/4 SS	3	3		
85	85		9009185-00	JUMPER, WIRE, INSULATED, BLACK B	6	6		W2, W3, W4, W9, W10, W11
86	86		9105740-55	WIRE (WRAP) 30AWG ULI423	A/R	A/R		
87	87		2113789-01	4K MOS RAM 200NS 1	48	-		
			CONT		-	96		
								CONT E100, E102, E104, E106, E108, E110, E112, E114, E116, E118, E120, E122, E200, E202, E204, E206, E208, E210, E212, E214, E216, E218, E220, E222, E300, E302, E304, E306, E308, E310, E312, E314, E316, E318, E320, E322, E400, E402, E404, E406, E408, E410, E412, E414, E416, E418, E420, E422, E100-E123, E200-E223, E300-E323, E400-E423

- 88 NOTE: M8417-AA=M8417-AB, AC, AD, AE, AF. (16KX12)
- 89 NOTE: M8417-BA=M8417-BB, BC, BD, BE, BF (32KX12)
- 90 NOTE: USED ON: OPTION/MODEL MS8-CA, MS8-CB
- 91 NOTE: R87, R92 MAY BE REMOVED AT MODULE TEST IF NEEDED.
- 92 NOTE: MIXING OF MOS RAMS IS NOT PERMITTED.
- 93 NOTE: REF ITEM #69 19-12048-05 ACCEPTABLE SUBSTITUTE FOR 19-12048-06.
- 94 NOTE: -----

D	I	G	I	T	A	L	TITLE	PDP8 MOS MEMORY	SECTION C OF C	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8417-0-DBP	H

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE

MR8-F FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

5. Acceptance

- 5.1 The MR8-FB is shipped with Prom Internal test Maindec-08-DHMRE programmed in the Prom chips.
- 5.2 Turn PDP8E, 8M, 8F, or 8A, power on.
- 5.3 If the MR8-FB is an add-on and an M8330-YB was installed, run all basic 8E diagnostics and EAE diagnostics if applicable.
- 5.4 Toggle "SW" or "BOOT" switch. The Prom Internal Test should be running. Refer to MAINDEC-08-DHMRE writeup if there are any errors. With the switch register = 0000 the test will halt in approx. 3 min. Repeat the test 4 times.
- 5.5 If no errors have occurred the MR8-FB is ready to be erased and reprogrammed by the customer.

Sheet 3 of 3

SIZE
ACODE
SPNUMBER
MR8-F-2REV
B

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QTY	QTY	QTY	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
12				SEE Y VARIATION CHART	I.C. DEC 74200 (3188)	1810010-2	56
4				EB, E19, E30, E30	I.C. DEC 74157	1810005	57
1				.C82	CAP 500PF 180V 5%	1000025	58
1				.R40	RES. 10K PGT 3/4 W 10%	1309143-10	59
1					HEAT SINK: TRANSISTOR	1210001	61
REF					X-Y COORDINATE HOLE LOCATION	K-CO-M8349-0-4	62
REF					ASSY/DRILLING HOLE LAYOUT	D-AH-M8349-0-5	63
REF					ECO MODULE HISTORY	B-MH-M8349-0-6	64
1					ETCH CIRCUIT BOARD	5010426	65

M8349-YA
M8349-YC
M8349-YD

Y VARIATION CHART

COMPONENTS	M8349 YA	M8349 YC	M8349 YD	M8349
I.C. DEC 1702A	E26, E50	E26, E32, E38, E42, E50, E55	E26, E32, E50	E20, E26, E32, E38, E42, E50, E55
I.C. DEC 5384	E4, E24, E51	E4, E24, E51	E4, E24, E51	E4, E10, E24, E27, E43, E51
JUMPER YA1 SEE NOTE 6	IN	IN	IN	OUT
JUMPER YA2	IN	IN	IN	OUT
I.C. DEC 74151	0	0	0	E16
I.C. DEC 74200	0	0	0	E2, E7, E11, E15, E19, E23, E25, E28, E33, E37, E46, E48

* DIODE & JUMPER SETTINGS FOR ADDRESS DEFINITIONS

MEMORY FIELD SELECT	DIODE					
	D3	E4	D5	D6	E9	D10
0	1	-	1	-	-	1
1	-	1	1	-	-	1
2	1	-	1	-	1	-
3	-	1	1	-	1	-
4	1	-	-	1	-	1
5	-	1	-	1	-	1
6	1	-	-	1	1	-
7	-	1	-	1	1	-

FIRST MEMORY ADDRESS	DIODE			
	D7	D8	D11	D12
0000	-	1	-	1
2000	1	-	-	1
4000	-	1	1	-
6000	1	-	1	-

STARTING MEMORY ADDRESS	JUMPERS BELOW		
	R1	R2	R3
0000	1	1	1
0200	1	1	-
2000	1	-	1
2200	1	-	-
4000	-	1	1
4200	-	1	-
6000	-	-	1
6200	-	-	-

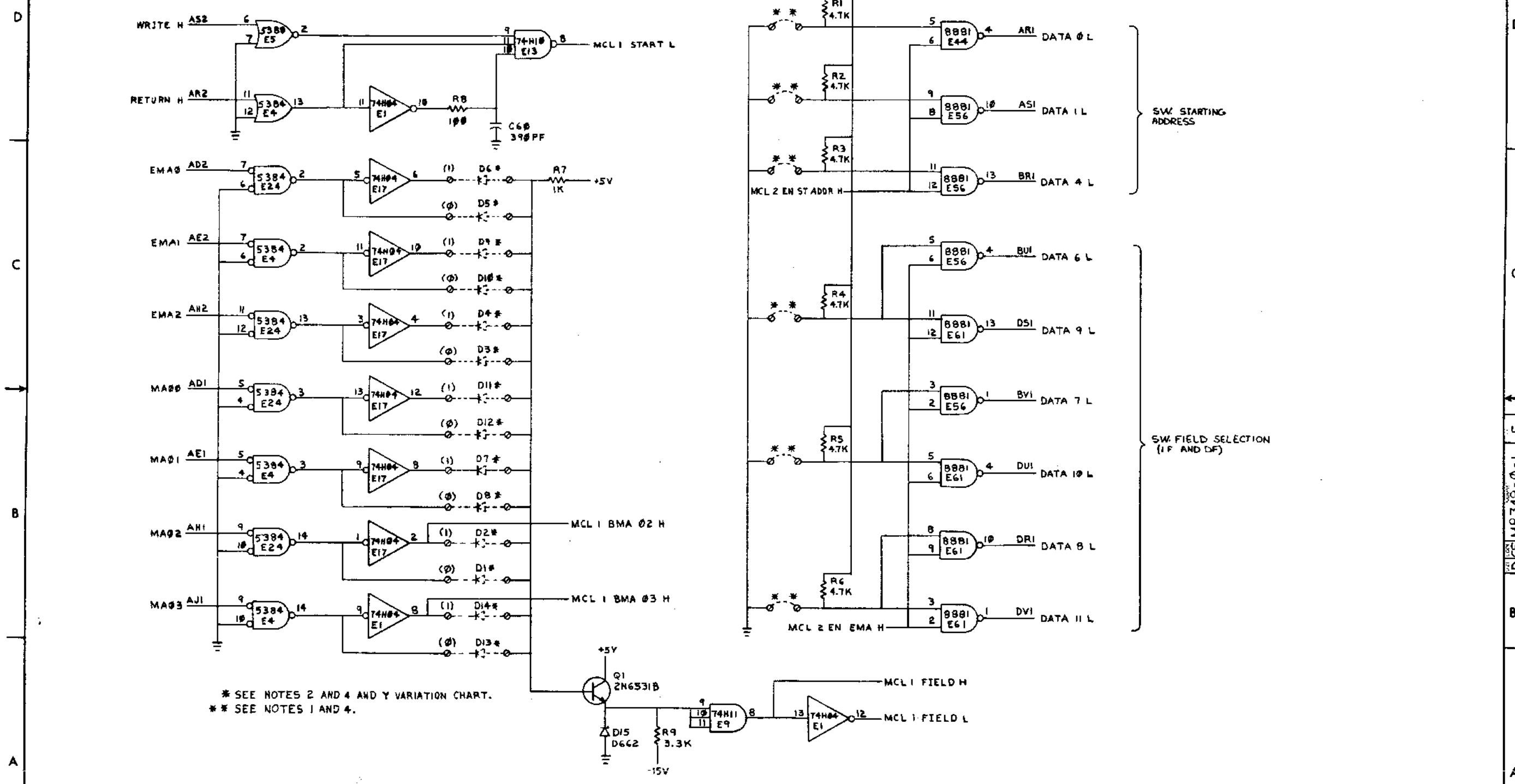
* 1 = DIODE OR JUMPER IN
- = DIODE OR JUMPER OUT

SW OR BOOT FIELD SELECT	JUMPER BELOW		
	R4	R5	R6
0	1	1	1
1	1	1	-
2	1	-	1
3	1	-	-
4	-	1	1
5	-	1	-
6	-	-	1
7	-	-	-

REVISIONS		
CHK	CHANGE NO.	REV.

DCS M8349-0-1 F

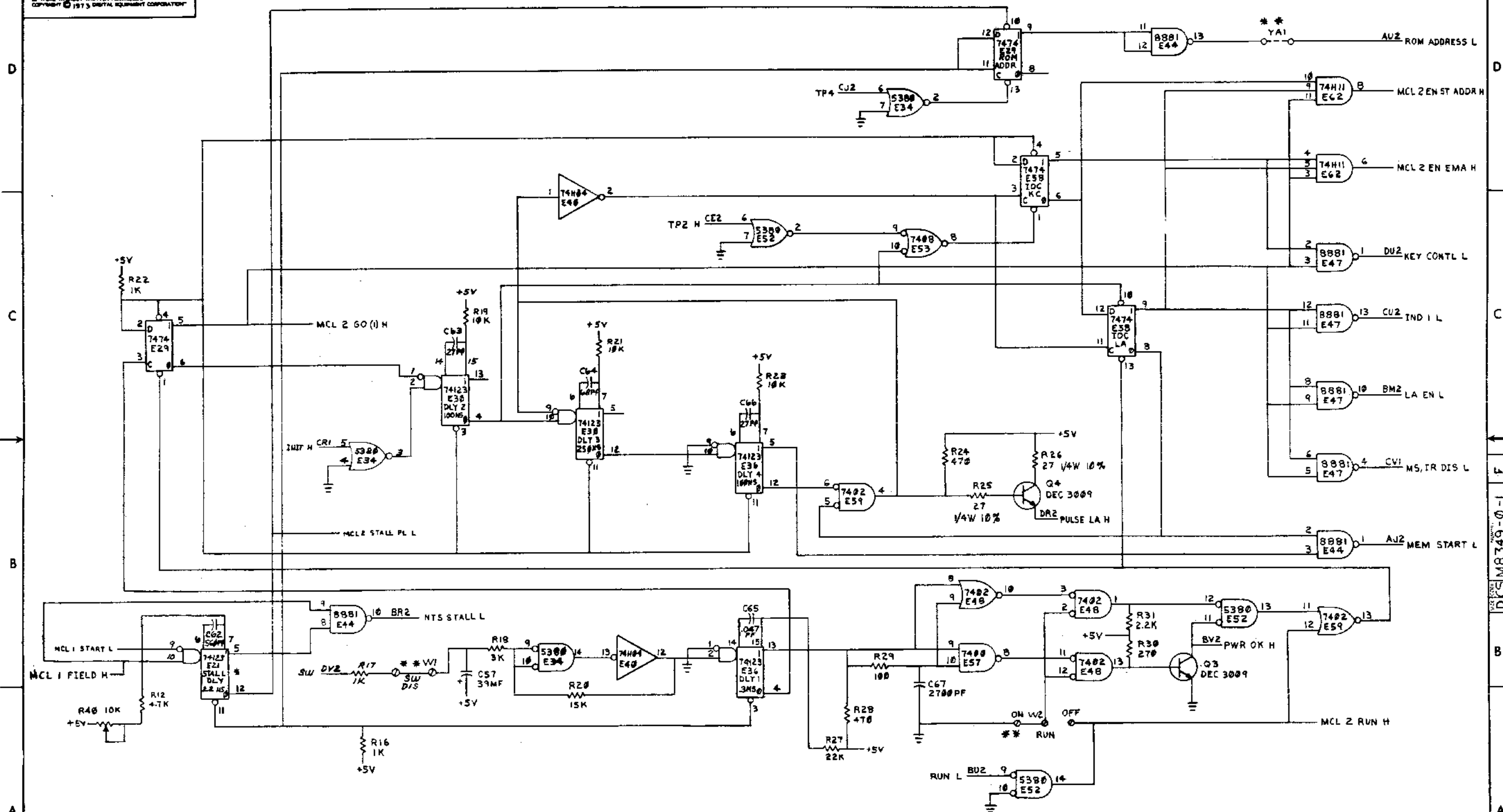
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* SEE NOTES 2 AND 4 AND Y VARIATION CHART.
 ** SEE NOTES 1 AND 4.

REVISIONS		
CHK	CHANGE NO	REV.

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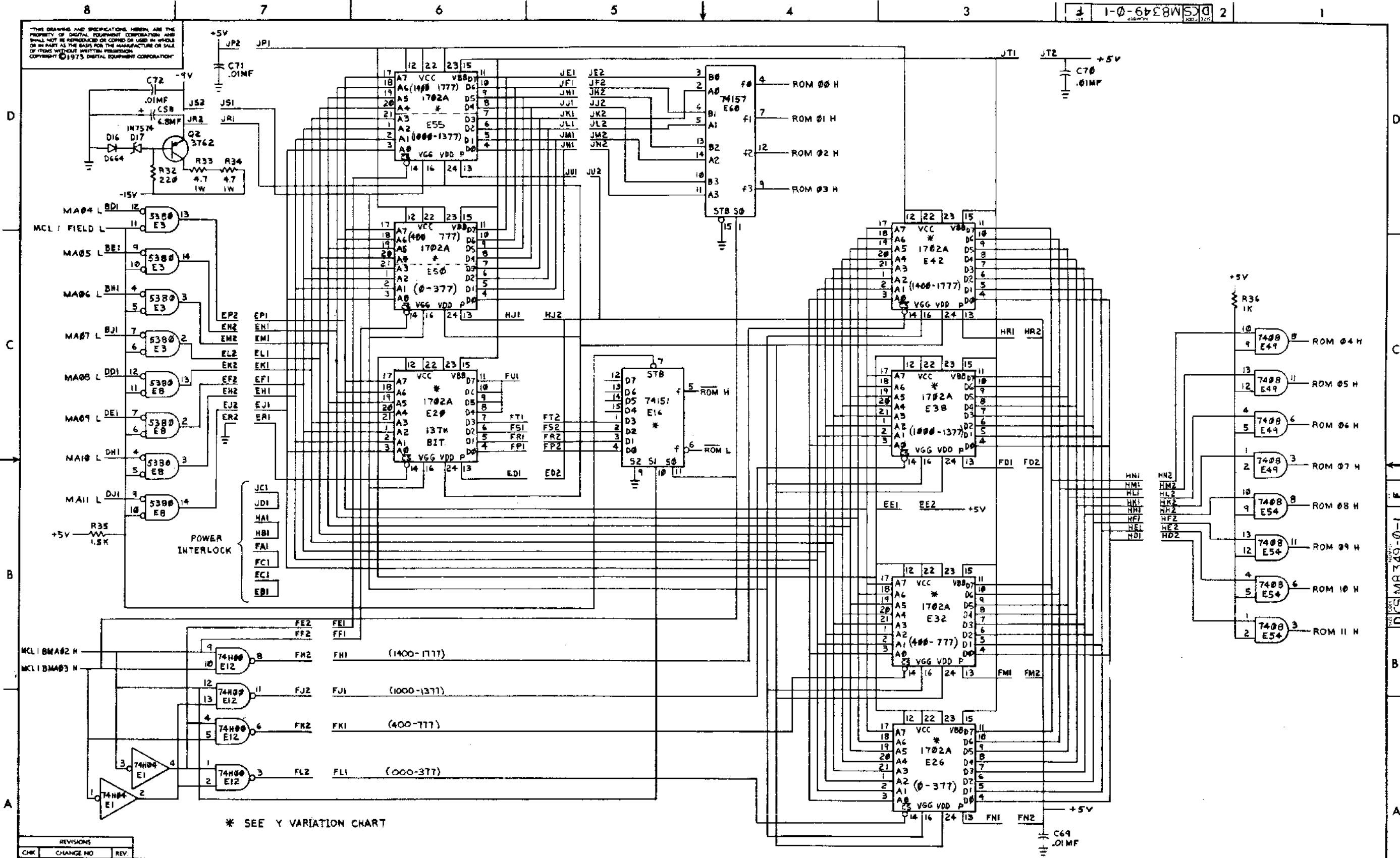


* SEE NOTE 3
 ** SEE NOTE 4

REVISIONS		
CHK	CHANGE NO	REV.

TITLE	PROM 1K (MCL2)	SIZE CODE	DCS	NUMBER	M8349-0-1	REV.	F
SCALE	+	SHEET	4	OF	7	DIST.	

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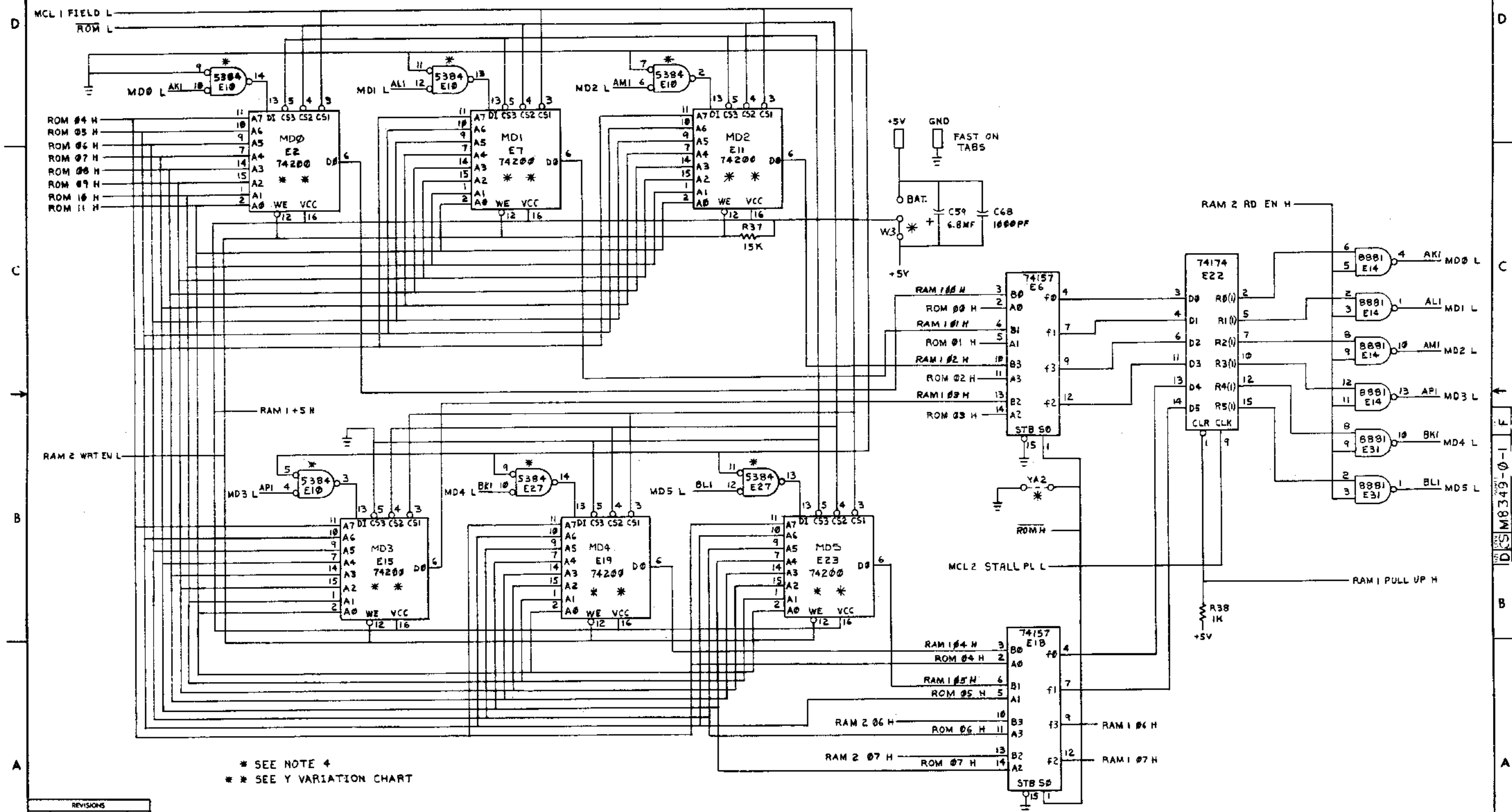


* SEE Y VARIATION CHART

REVISIONS		
CHK	CHANGE NO	REV.

TITLE	PROM 1K (ROM)	SIZE CODE	DCS	NUMBER	M8349-0-1	REV.	F
SCALE	1:1	SHEET	5	OF	7	DIST.	

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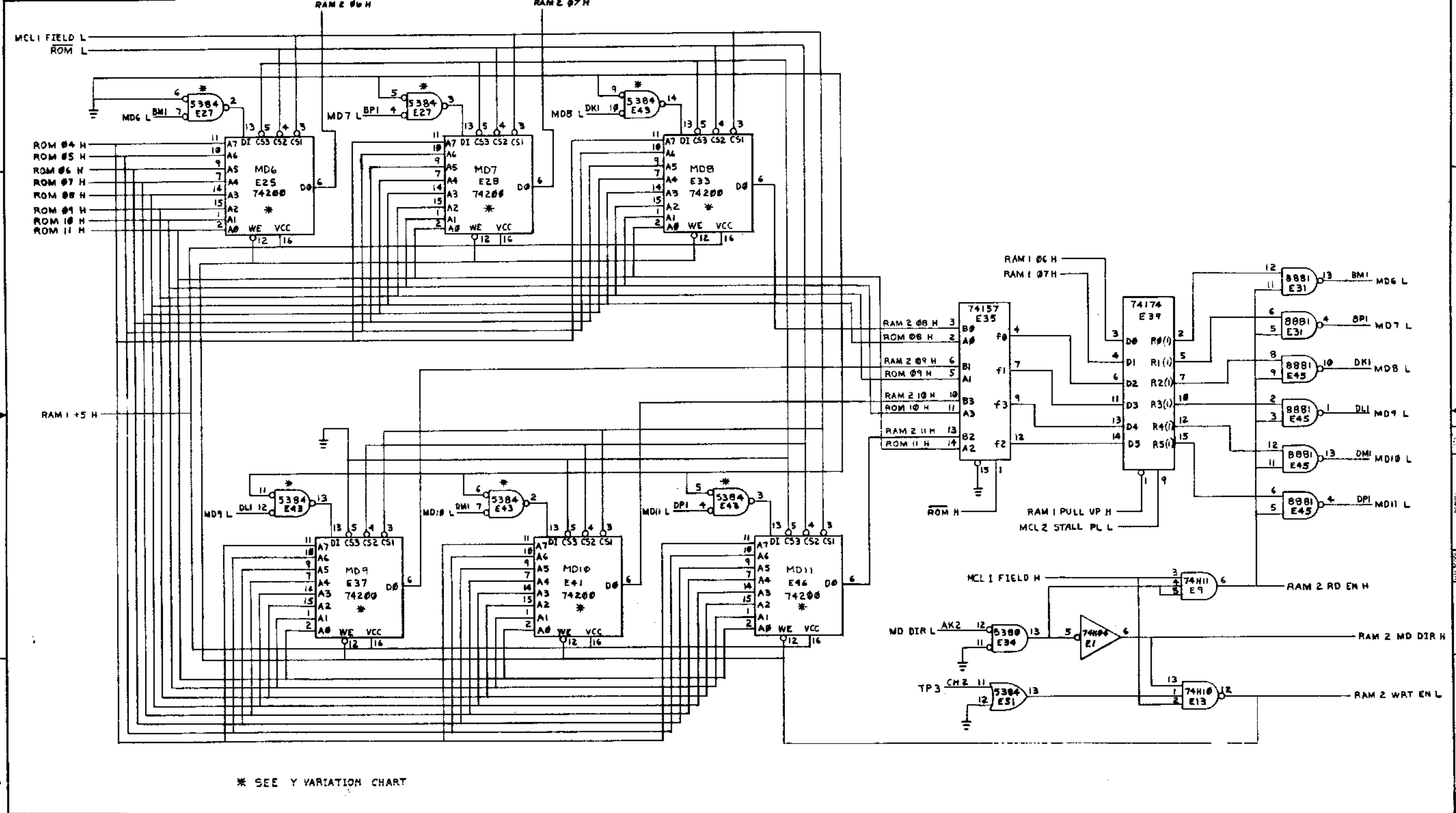


* SEE NOTE 4
 ** SEE Y VARIATION CHART

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	PROM 1K (RAM 1)	SIZE CODE	DCS	NUMBER	M8349-0-1	REV.	F
SCALE		SHEET	6 OF 7	DIST.			

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* SEE Y VARIATION CHART

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	PROM 1K (RAM 2)	SIZE CODE	DCS	NUMBER	M8349-0-1	REV.	1
SCALE	1:1	SHEET	7	OF	7	DIST	

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
ENGINEERING SPECIFICATION		DATE 11/19/74	
TITLE MSB-A FIELD INSTALLATION & ACCEPTANCE PROCEDURE			
REVISIONS			
REV	DESCRIPTION	CHG NO	ORIG
DATE	APPRO BY	DATE	DATE

ENG *John* *10/20/74* APP *CC*
 DEC FORM NO. 108
 DRA 108

ENGINEERING SPECIFICATION				CONTINUATION SHEET																																																																																																				
TITLE MSB-A FIELD INSTALLATION & ACCEPTANCE PROCEDURE																																																																																																								
<p>I GENERAL</p> <p>This procedure defines the performance standards required of an MS8A RAM memory.</p> <p>NOTE: If MS8A was shipped as part of a PDP-8A system, proceed to installation procedure.</p> <p>*MSRAA (M8311YA) 1K Semiconductor Random Access Memory MSBAB (M8311YB) 2K Semiconductor Random Access Memory MSBAD (M8311YD) 4K Semiconductor Random Access Memory</p> <p>II INSPECTION</p> <p>After removing the MS8A from racking material, inspect the module for the following:</p> <ol style="list-style-type: none"> 1. Check for loose or broken components. 2. Inventory software against software list, if ordered. 3. Inventory prints against shipping list, if ordered. 4. Inventory hardware against shipping list. <p>III INSTALLATION PROCEDURE</p> <p>Install the equipment using the following procedure:</p> <ol style="list-style-type: none"> 1. Set up switches as indicated below for the particular variation being accepted. <table border="1"> <thead> <tr> <th>M8311YA 1K</th> <th>M8311YB 2K</th> <th>M8311YD 4K</th> <th>M8311 YA</th> <th>M8311 YB</th> <th>M8311 YD</th> <th>SIZE CODE</th> <th>NUMBER</th> <th>REV</th> </tr> </thead> <tbody> <tr> <td>S1-1</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-2</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-3</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-4</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-5</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-6</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-7</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-8</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-9</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> <tr> <td>S1-10</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>A</td> <td>MSB-A-1</td> <td>3</td> </tr> </tbody> </table> <p>NOTE: Reference Operator's Handbook for complete description of switch settings.</p>						M8311YA 1K	M8311YB 2K	M8311YD 4K	M8311 YA	M8311 YB	M8311 YD	SIZE CODE	NUMBER	REV	S1-1	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-2	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-3	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-4	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-5	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-6	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3	S1-7	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3	S1-8	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3	S1-9	ON	ON	ON	ON	ON	A	MSB-A-1	3	S1-10	ON	ON	ON	ON	ON	A	MSB-A-1	3
M8311YA 1K	M8311YB 2K	M8311YD 4K	M8311 YA	M8311 YB	M8311 YD	SIZE CODE	NUMBER	REV																																																																																																
S1-1	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-2	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-3	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-4	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-5	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-6	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3																																																																																																
S1-7	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3																																																																																																
S1-8	OFF	OFF	OFF	OFF	OFF	A	MSB-A-1	3																																																																																																
S1-9	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																
S1-10	ON	ON	ON	ON	ON	A	MSB-A-1	3																																																																																																

ENGINEERING SPECIFICATION				CONTINUATION SHEET																					
TITLE MSB-A FIELD INSTALLATION & ACCEPTANCE PROCEDURE																									
<p>III INSTALLATION PROCEDURE (continued)</p> <ol style="list-style-type: none"> 2. Insure that the PDP-8A power is removed from the Omnibus TM. 3. Insert the MS8A into the last slot vacant in the Omnibus TM. 4. Turn power on. <p>IV ACCEPTANCE PROCEDURE</p> <p>Perform the Acceptance Test as indicated in Table B. If problems are encountered, refer to the diagnostic listing for type of error. Reference Operator's Manual and Diagnostic Write-up for instructions on loading diagnostic.</p> <p>Equipment required:</p> <ol style="list-style-type: none"> 1. PDP-8A with MS8A R/W Memory 2. Programmer's Console 3. Paper Tape Input Device 4. Diagnostic and Listings <p>NOTE: If the Programmer's console and paper tape input device are not available as part of the system being used, they must be supplied in good working order by the customer.</p>																									
<p>Table B</p> <p>Acceptance of MS8A: YA or YB</p> <table border="1"> <thead> <tr> <th>Program Name</th> <th>Maindec #</th> <th>Accept Time</th> <th>Restrictions</th> </tr> </thead> <tbody> <tr> <td>1-4K MOS Memory Test (RM)</td> <td>08-DJMSA-PM</td> <td>30 min</td> <td>1K or 2K MS8A R/W Memory</td> </tr> <tr> <td colspan="4">Acceptance of MS8A: YD</td> </tr> <tr> <td>1-4K MOS Memory Test</td> <td>08-DJMSA-PM</td> <td>15 min.</td> <td>4K MS8A R/W Memory</td> </tr> <tr> <td>4-32K Memory Test</td> <td>08-DJMSA-PB</td> <td>15 min.</td> <td>4K MS8A R/W Memory</td> </tr> </tbody> </table>						Program Name	Maindec #	Accept Time	Restrictions	1-4K MOS Memory Test (RM)	08-DJMSA-PM	30 min	1K or 2K MS8A R/W Memory	Acceptance of MS8A: YD				1-4K MOS Memory Test	08-DJMSA-PM	15 min.	4K MS8A R/W Memory	4-32K Memory Test	08-DJMSA-PB	15 min.	4K MS8A R/W Memory
Program Name	Maindec #	Accept Time	Restrictions																						
1-4K MOS Memory Test (RM)	08-DJMSA-PM	30 min	1K or 2K MS8A R/W Memory																						
Acceptance of MS8A: YD																									
1-4K MOS Memory Test	08-DJMSA-PM	15 min.	4K MS8A R/W Memory																						
4-32K Memory Test	08-DJMSA-PB	15 min.	4K MS8A R/W Memory																						

DEC FORM NO. 108 DEC 16-1981-1022-N370
DRA 108

SHEET 3 OF 3

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D C S M 8311-0-1 2

MB311-YA
MB311-YB
MB311-YC
MB311-YD
MB311-YE
MB311-YF
MB311-YH
MB311-YJ

QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	REF DESIGNATION	DESCRIPTION	PART NO	REV. NO
-	-	-	-	24	-	-	-	-	-	E30, E31, E35, E36, E39, E40, E45, E46, E49, E50, E54, E55, E58, E59, E63, E64, E67, E68, E73, E74, E77, E78, E82, E83	IC DEC 2102-1	2111318-0-1	24
-	-	-	12	-	-	-	-	-	-	E31, E36, E40, E46, E50, E55, E58, E64, E68, E74, E78, E83	HANDLE FLIP CHIP MAGENTA	9008337-08	25
3	3	3	3	3	3	3	3	3	3		EYELET GS4-7	9008750	26
1	1	1	1	1	1	1	1	1	1	E8	IC DEC 8223 OR EQUIVALENT	2308341	27
5	5	5	5	5	5	5	5	5	5	W1-W5	INSULATED JUMPER	9008185	28
3	3	3	3	3	3	3	3	3	3	C84, C85, C86	CAP 6.8 MF 35V 10% TAPT	1C05366	29
14	14	14	14	14	14	14	14	14	14	R21-R29, R32-R35, R38	RES. 3.3K 1/4W 5%	1300439	30
3	3	3	3	3	3	3	3	3	3	R44	SPACER (CABLE CLAMP)	1202784	31
1	1	1	1	1	1	1	1	1	1	R44	RES. 398 1/4W 5%	1300388	32
1	1	1	1	1	1	1	1	1	1	E25	CRYSTAL OSCILLATOR 18 MHZ	1811680-01	33

SWITCH DEFINITIONS

SWI	DEFINITION	DESCRIPTION
SWI-1	EMA2	FIELD SELECTION 'ON' IS 0
SWI-2	EMA1	
SWI-3	EMA0	
SWI-4	SEL0	STARTING ADDRESS SELECT 'ON' IS 0
SWI-5	SEL1	
SWI-6	4K	MEMORY SIZE SELECT CORRECT SIZE - 'ON' OTHERS - 'OFF'
SWI-7	3K	
SWI-8	2K	
SWI-9	1K	
SWI-10		USED FOR TEST ONLY, ALWAYS 'ON'

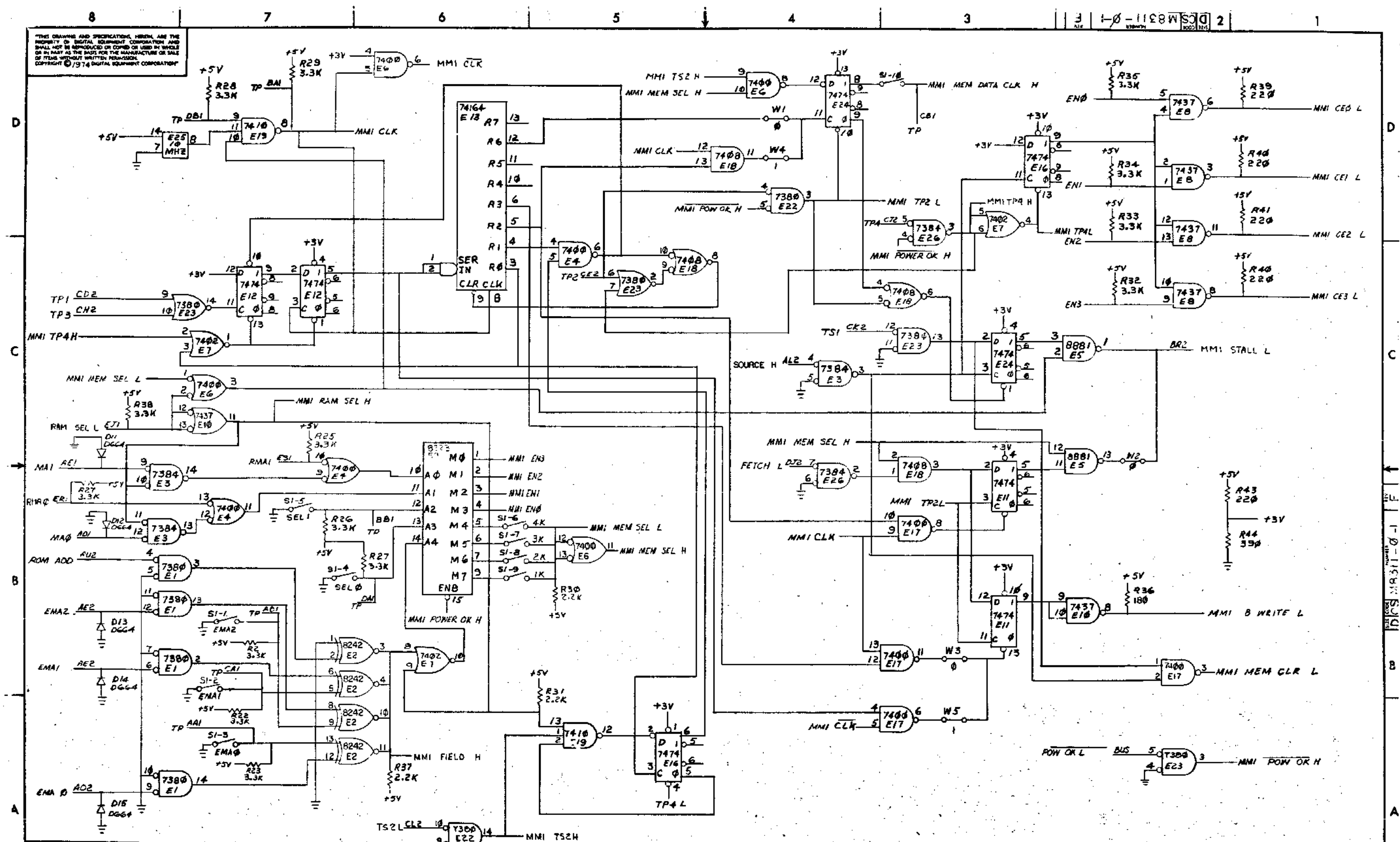
JUMPER CONFIGURATION

YA, YB, YC AND YD -- W1, W2, W3 ARE IN	W4 AND W5 ARE OUT
YE, YF, YH AND YJ -- W4 AND W5 ARE IN	W1, W2 AND W3 ARE OUT

REVISIONS		
CHK	CHANGE NO	REV

TITLE	4K X 12 MOS MEMORY	SIZE CODE	D C S M 8311-0-1	NUMBER		REV.	F
SCALE	NONE	SHEET	2 OF 6	DIST.			

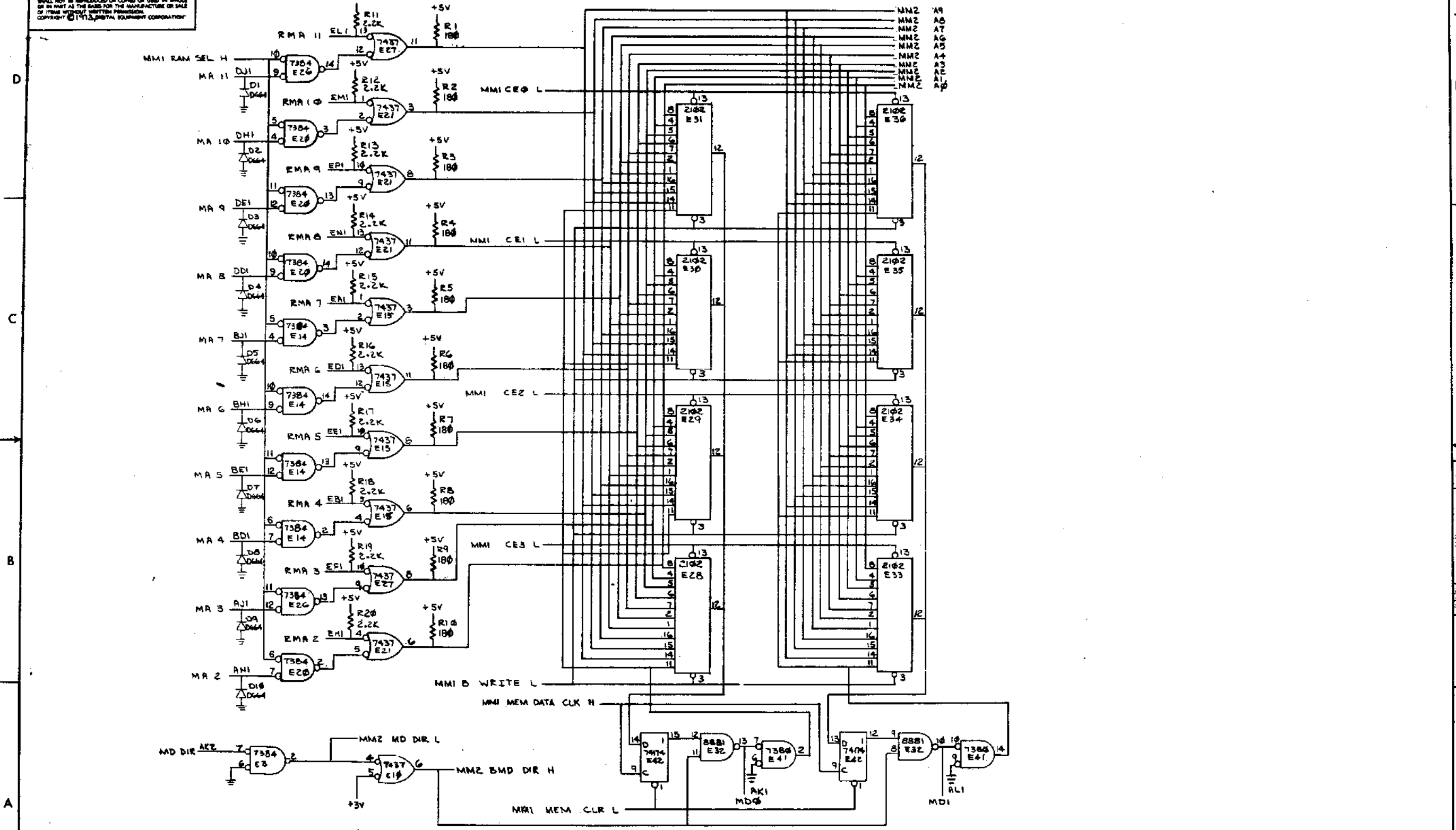
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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	4K X 12 MOS MEMORY (10,11)	SIZE CODE	DCS	NUMBER	M8311-0-1	REV.	F
SCALE		SHEET	3	OF	6	DIST.	

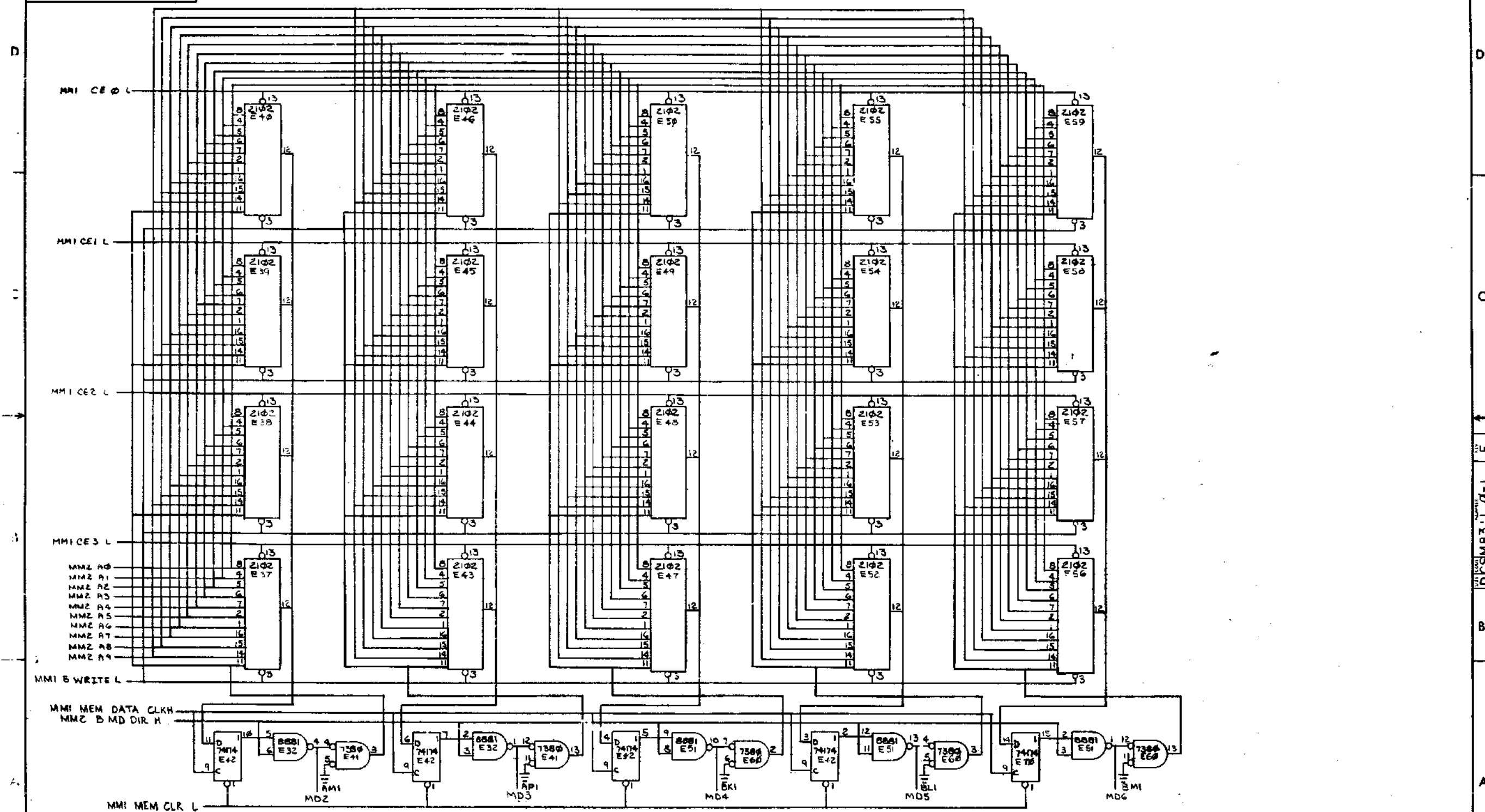
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REVISIONS		
CHR	CHANGE NO.	REV.

TITLE	4 K X 12 MOS MEMORY (MMZ)	SIZE CODE	DCS	NUMBER	M8311-0-1	REV.	F
SCALE	1/1	SHEET	4	OF	6	DIST.	

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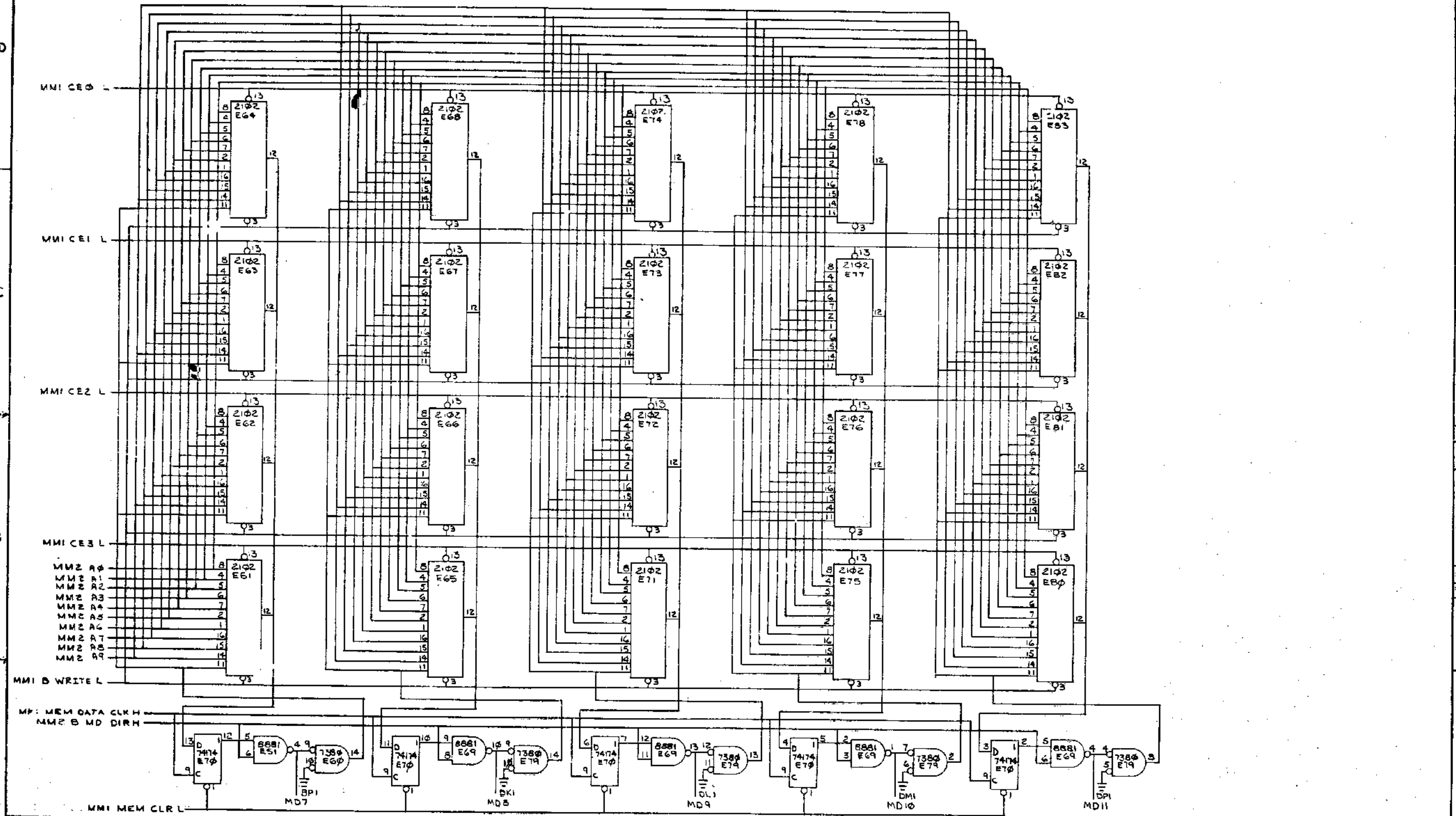


DCS M8311-0-1

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	4K X 12 MOS MEMORY (MM3)	SIZE CODE	NUMBER	REV.
SCALE	NONE	SHEET	5 OF 6	F
DIST.				

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REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	4K X 12 MOS MEMORY (MN4)	SIZE CODE	NUMBER	REV.
SCALE	NONE	SHEET	6 OF 6	F
DIST				