

FIELD MAINTENANCE PRINT SET

TABLE OF CONTENTS

[illegible]

Digital Equipment Corporation

REVISIONS	REV.		USED ON OPTION/MODEL		DRN.	DATE	digital										
	CHG. NO.		11/84-AA	11/84-DC	D. HEALY	10/1/75											TITLE:
			11/84-AB	11/84-DD	CHK'D	DATE											
			11/84-AC	11/84-EC	D. HEALY	10/1/75											
			11/84-AD	11/84-ED													
			11/84-BA		PROJ. ENG.	DATE											
			11/84-BB		<i>g. h. t.</i>	10/22/75											
	DATE		11/84-BC		FIELD SERV.	DATE	SIZE	CODE	NUMBER				REV.				
11/84-BD						B	TC	MS11-E-1									
SHEET 1 OF 1					DIST.												

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NOTES:

1. DEC PART NO. 1001810-00 IS AN ACCEPTABLE
REPLACEMENT FOR DEC PART NO. 1001810-01 (ITEM 14).
VARIATIONS YA THRU YJ ITEM 21: DI DIODE, ZENER IN757A, 9.1V 5% (1109990-00)
ITEM 26: RES 270, 1/4 W 5% CC (1301972-00)
VARIATIONS BA THRU BJ DI DIODE, ZENER IN751A, 5.1V 5% (1109940-00)
DI 560Ω, 1/4W 5% CC (1301890-00)
VARIATIONS YA THRU YJ ITEM 65: 4K16PIN MOSRAM V88 = -9V (21-11749-00)
VARIATIONS BA THRU BJ ITEM 65: 4K16PIN MOSRAM V88 = -5V (21-12726-00)

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RJ	BH	BF	BE	BD	RC	BB	BA
M7847-YJ-1	M7847-YH-1	M7847-YF-1	M7847-YE-1	M7847-YD-1	M7847-YC-1	M7847-YB-1	M7847-YA-1

M7	M7	M7	M2	M7	M7	M7	M7	PARTS LIST			
QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	1	1	1	1	1	1	1	E111	DIP SWITCH	1211164-04	66
6	6	6	6	6	6	6	6		SPLIT LUGS	9006735-00	67
1	1	1	1	1	1	1	1		HANDLE,ASSY	1210711-02	68
12	12	12	12	12	12	12	12		EYELET	9006732-00	69
2	2	2	2	2	2	2	2		NUT, KEP #4-40	9006557-00	70
2	2	2	2	2	2	2	2		SCR, PPH, #4-40 X .31	9006010-01	71
A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R		THERMAL COMPOUND	9008268-00	72
A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R		WIRE,*22 AWG BUS	9107560-01	73
A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R		WIRE,*30 AWG WIRE WRAP	9105740-55	74

REVISIONS		
CHK	CHANGE NO.	REV.

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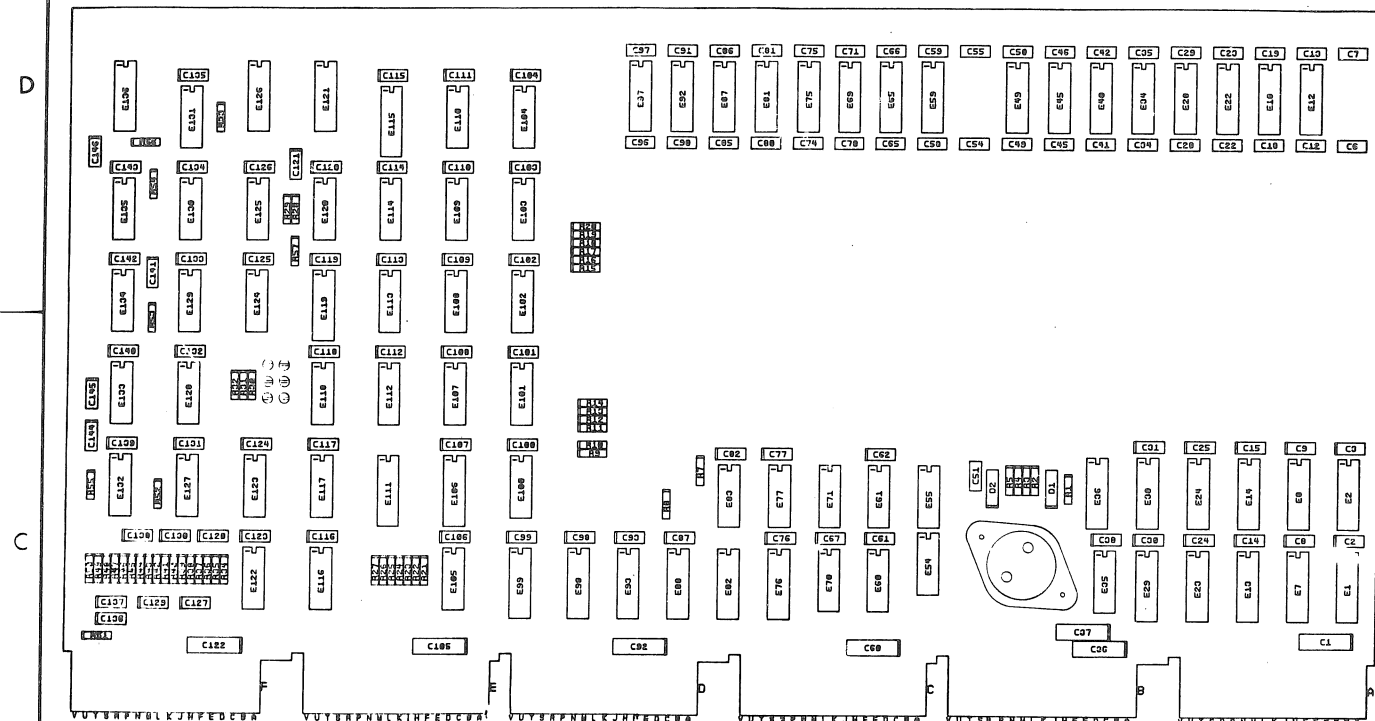
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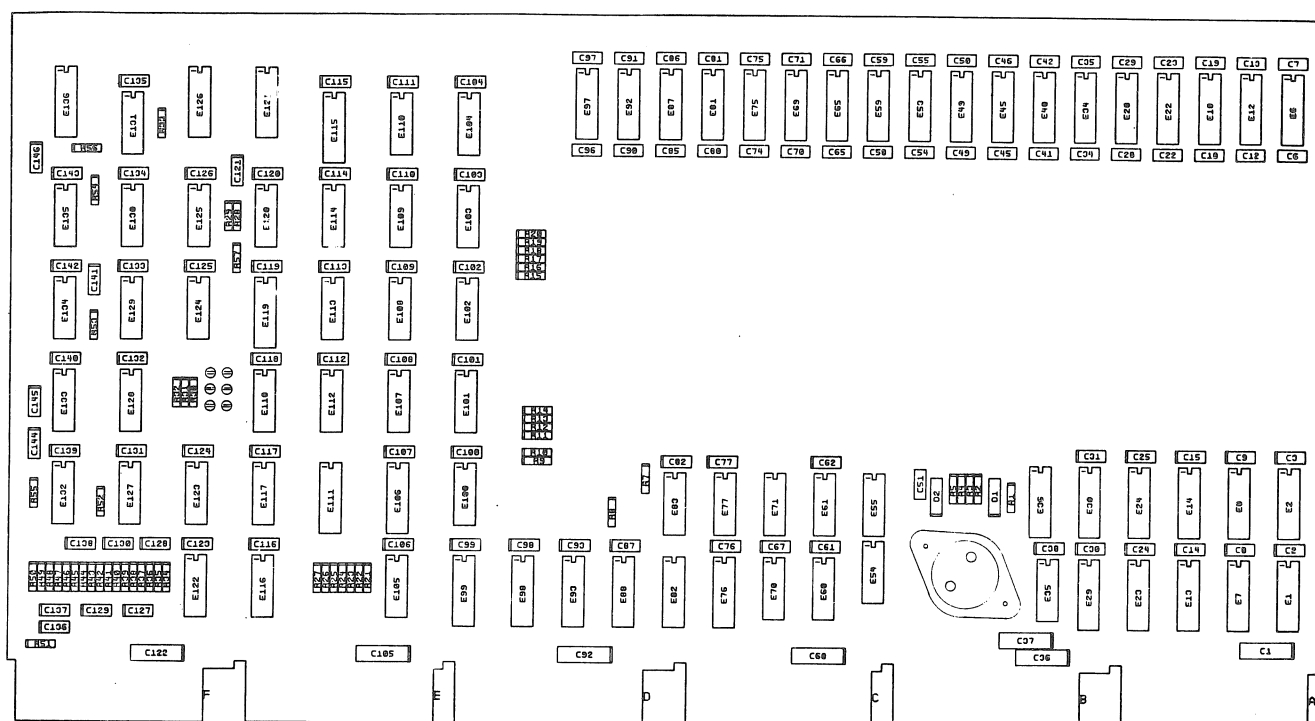
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NOTE:
THESE OVERLAYS ONLY TO INDICATE POSITIONS
FOR 4K MOS MEMORY IC'S & .22UF CAPS.

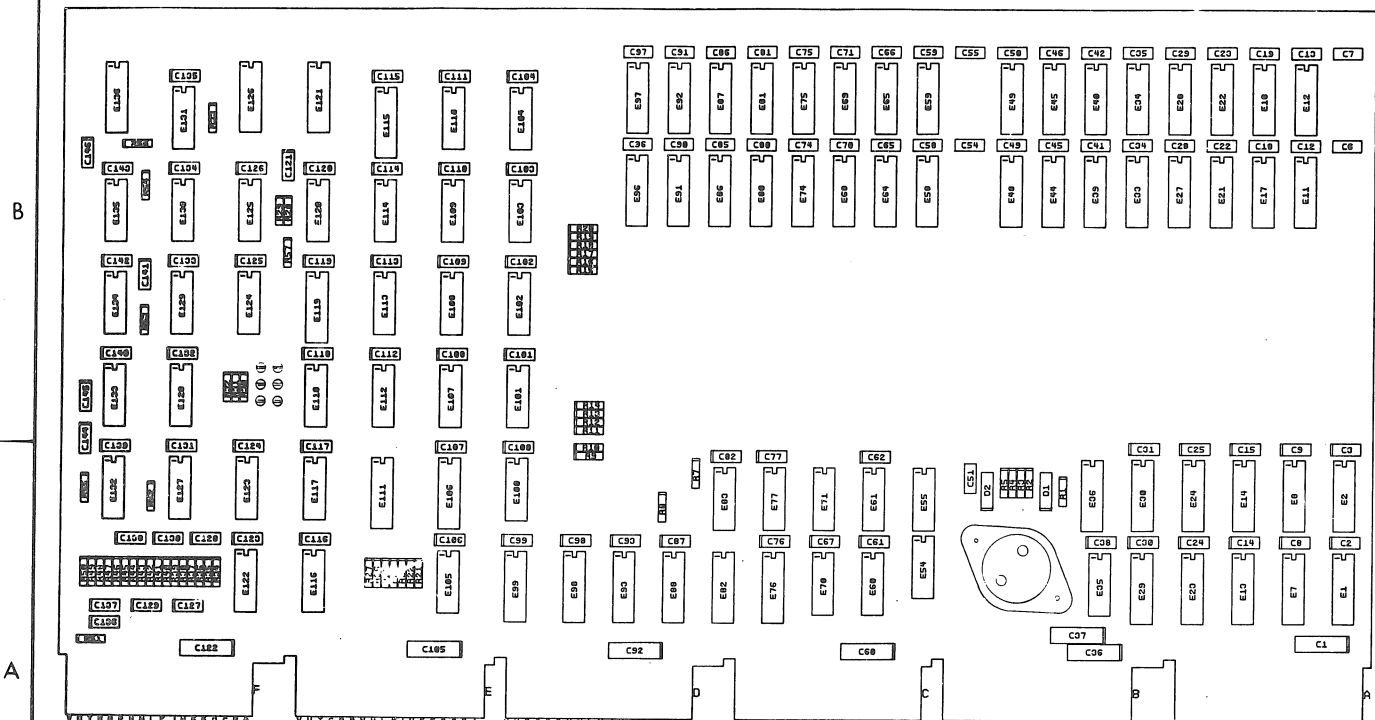
DCS M7847-0-1
REV. F



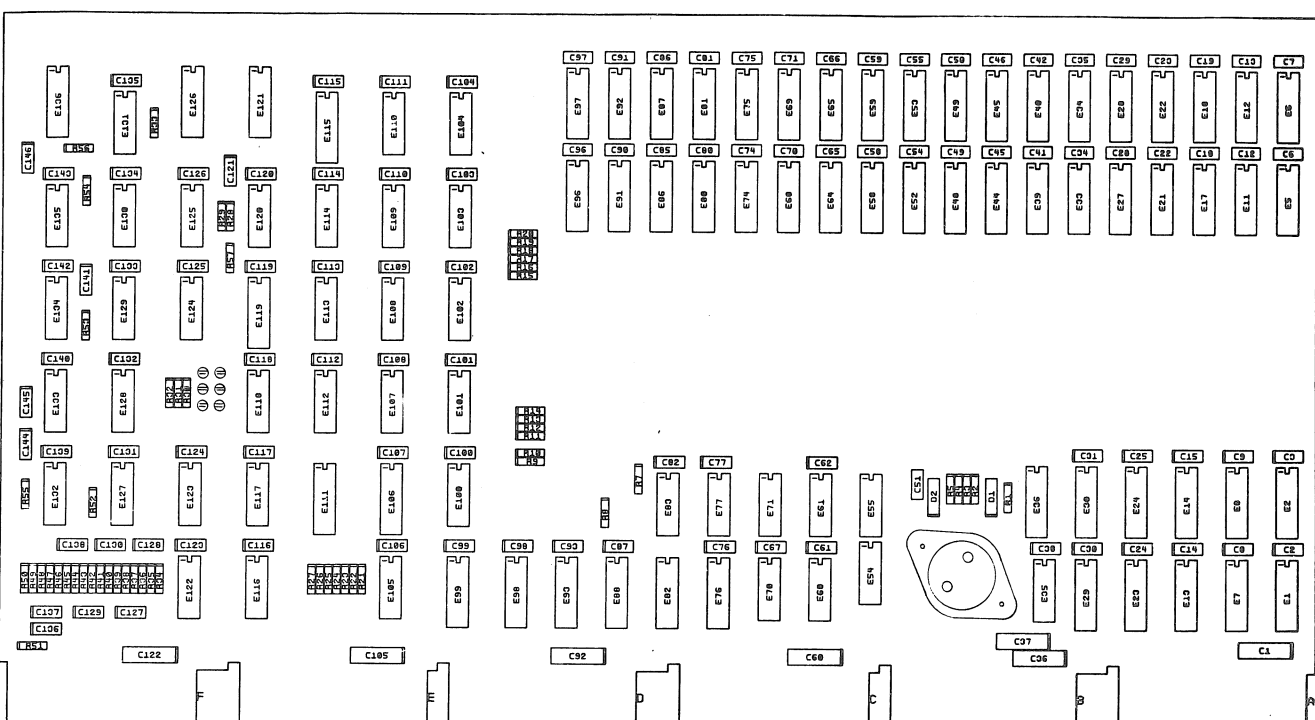
-YA & -BA



-YB & -BB



-YC & -BC



-YD & -BD

REVISIONS		
CHK	CHANGE NO.	REV.

DCS FORM NO. 137

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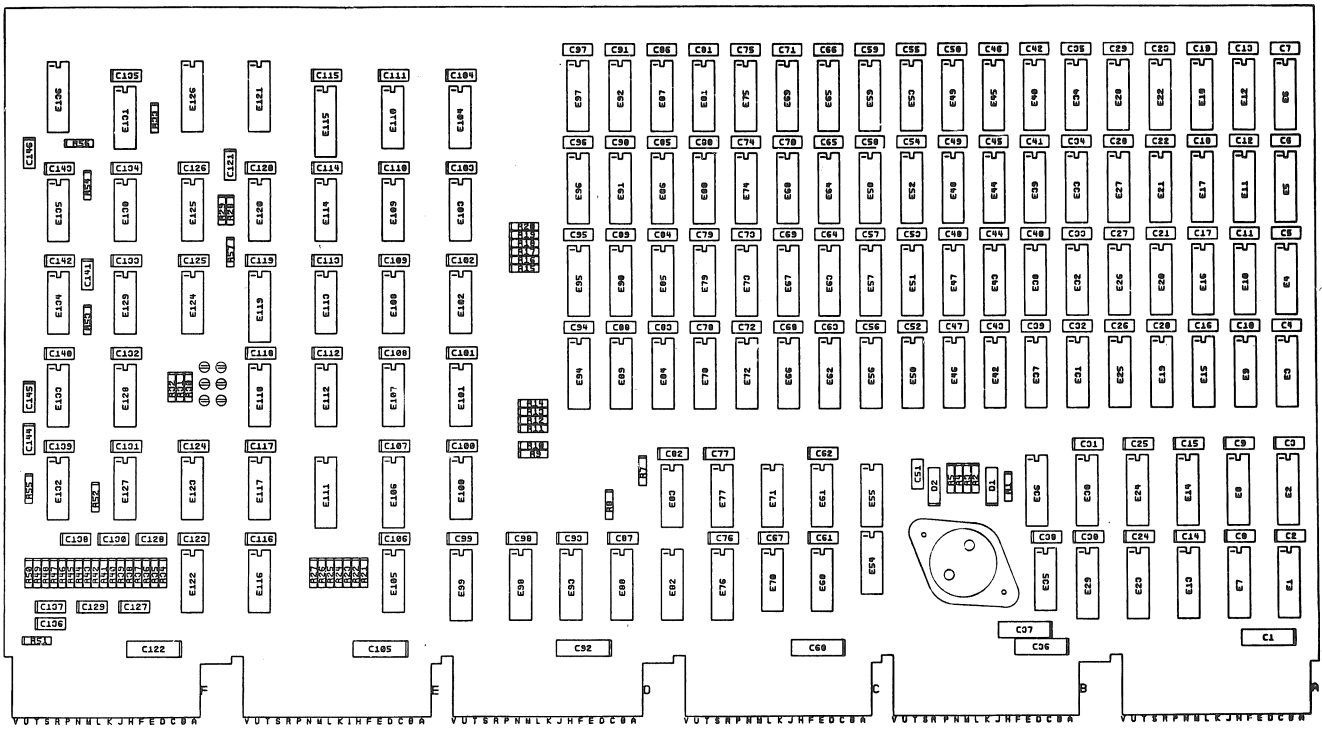
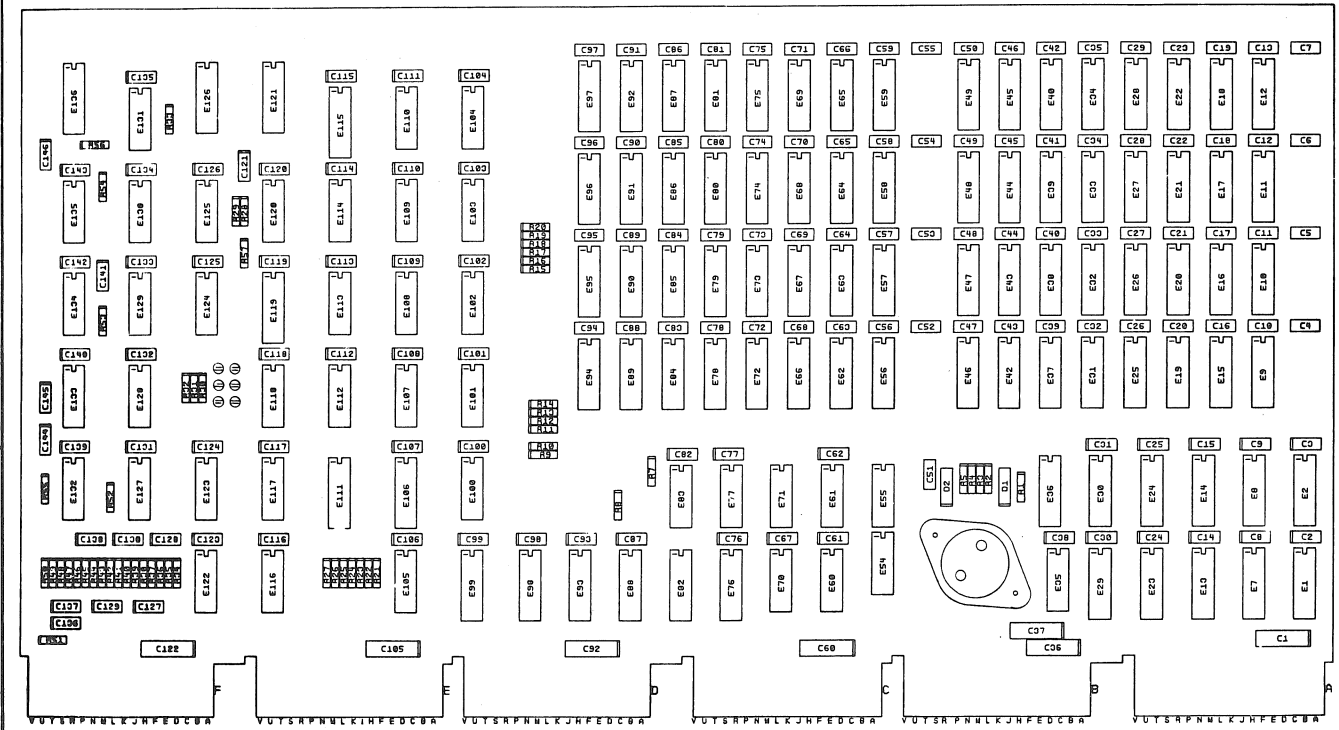
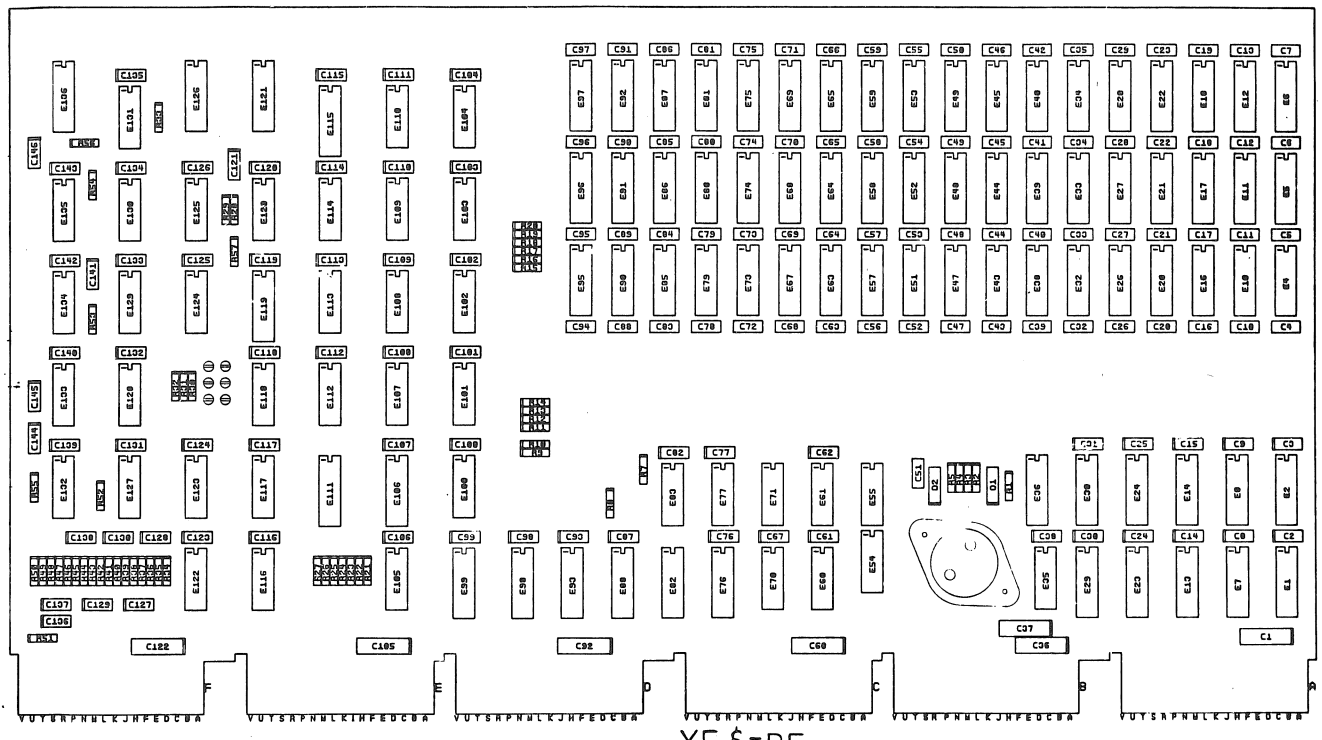
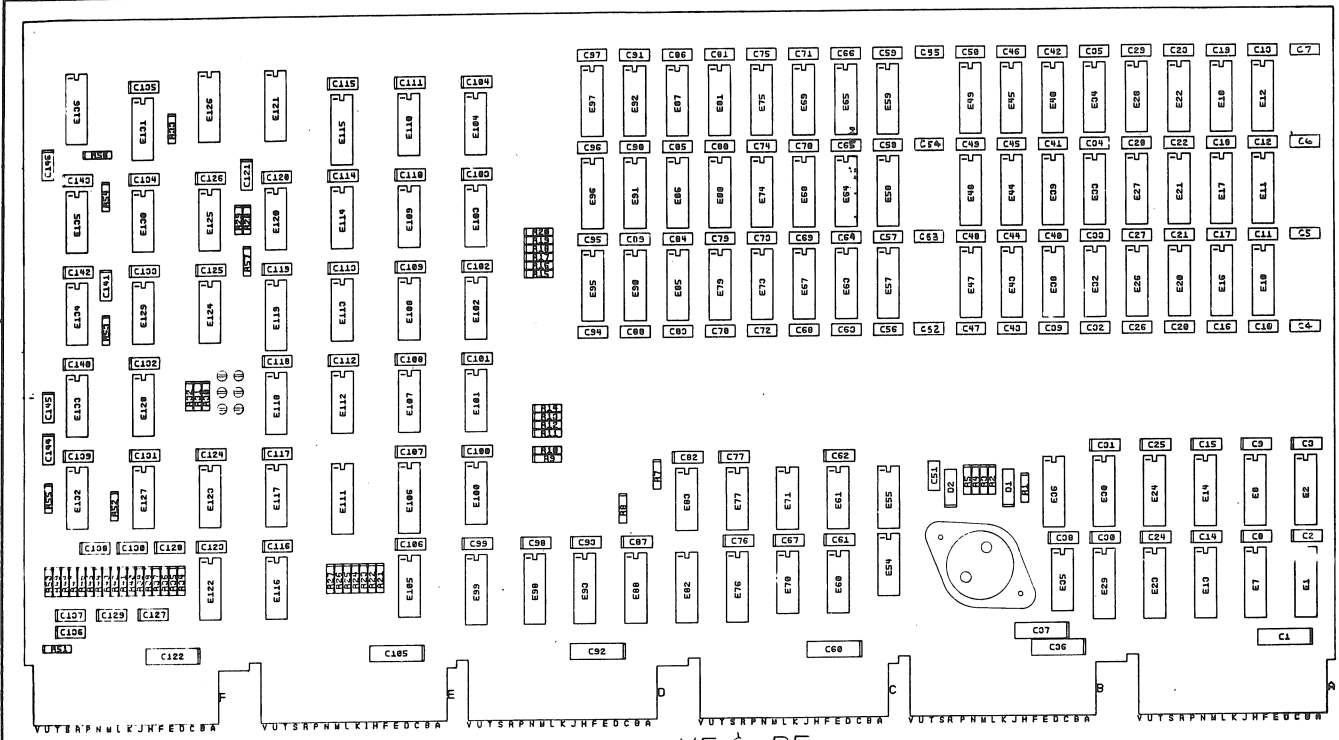
2

1

TITLE		SIZE CODE	NUMBER	REV.
UNIBUS MOS MEMORY		DCS	M7847-0-1	F
SCALE	SHEET 4 OF 16	DIST.		

NOTE:
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FOR 4K MOS MEMORY IC'S AND .22UF CAPS.

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REVISIONS		
CHK	CHANGE NO.	REV.

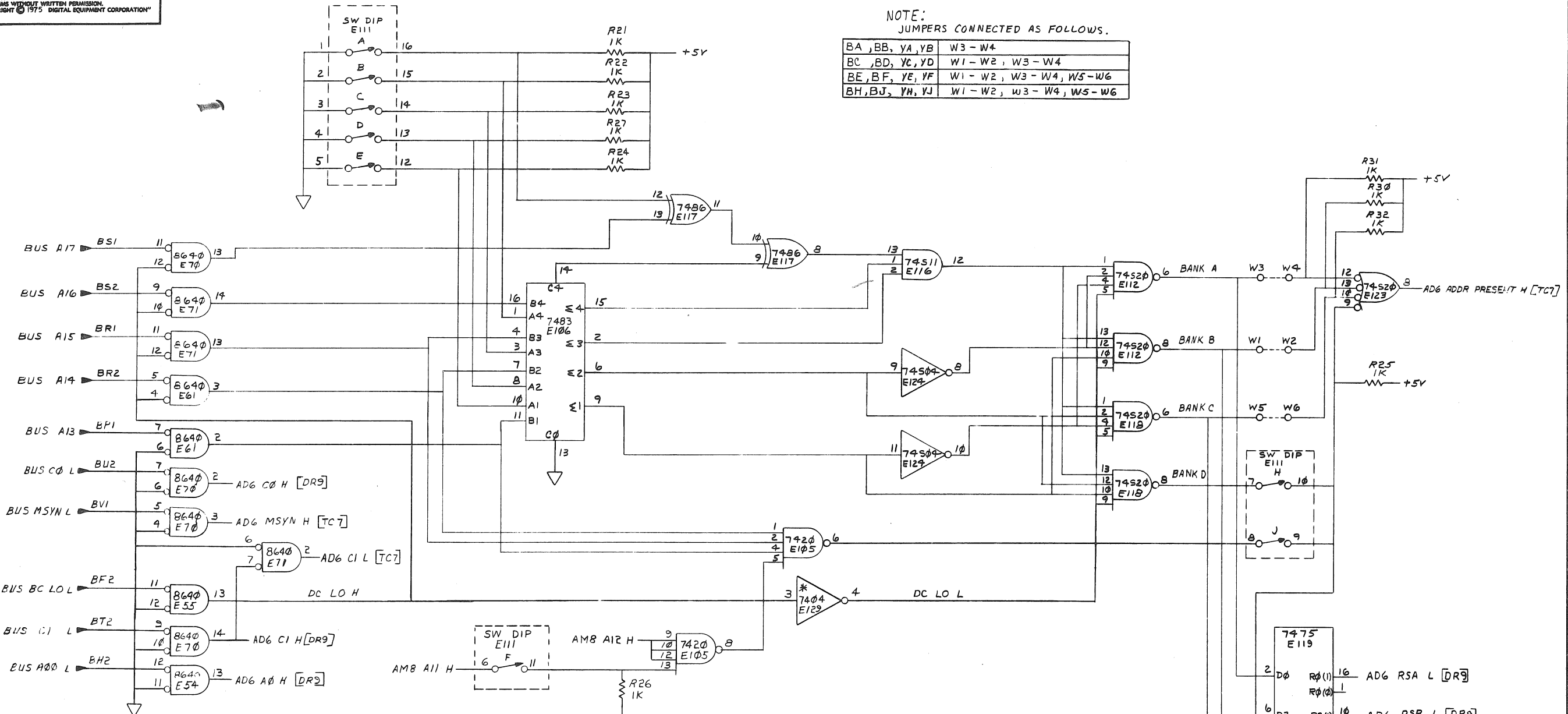
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UNIBUS MOS MEMORY		DCS	M7847-0-1	
SCALE		SHEET 5	OF 16	F
		DIST.		

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DCS M7847-0-1

NOTE:
JUMPERS CONNECTED AS FOLLOWS.

BA, BB, YA, YB	W3 - W4
BC, BD, YC, YD	W1 - W2, W3 - W4
BE, BF, YE, YF	W1 - W2, W3 - W4, W5 - W6
BH, BJ, YH, YJ	W1 - W2, W3 - W4, W5 - W6



ASSY VARIATION	F	H	J
EA, BB, YA, YB, YC, YD, BC, BD, BE, BF, YE, YF	OFF	OFF	OFF
BH, BJ, YH, YJ, NORMAL OPERATION	OFF	ON	OFF
BH, BJ, YH, YJ * 2K I/O PAGE	OFF	OFF	ON
BH, BJ, YH, YJ * 3K I/O PAGE	ON	OFF	OFF

* A-E MUST BE SET FOR
STARTING ADDRESS OF
100 000.

STARTING ADDRESS	SWITCH					STARTING ADDRESS	SWITCH					STARTING ADDRESS	SWITCH					STARTING ADDRESS	SWITCH				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
0	1	1	1	0	0	200,000	1	0	1	0	0	400,000	0	1	1	0	0	600,000	0	0	1	0	0
20,000	1	1	0	1	1	220,000	1	0	0	1	1	420,000	0	1	0	1	1	620,000	0	0	0	1	1
40,000	1	1	0	1	0	240,000	1	0	0	1	0	440,000	0	1	0	1	0	640,000	0	0	0	1	0
60,000	1	1	0	0	1	260,000	1	0	0	0	1	460,000	0	1	0	0	1	660,000	0	0	0	0	1
100,000	1	1	0	0	0	300,000	1	0	0	0	0	500,000	0	1	0	0	0	700,000	0	0	0	0	0
120,000	1	0	1	1	1	320,000	0	1	1	1	1	520,000	0	0	1	1	1	720,000	1	1	1	1	1
140,000	1	0	1	1	0	340,000	0	1	1	1	0	540,000	0	0	1	1	0	740,000	1	1	1	1	0
160,000	1	0	1	0	1	360,000	0	1	1	0	1	560,000	0	0	1	0	1						

0 = ON
1 = OFF

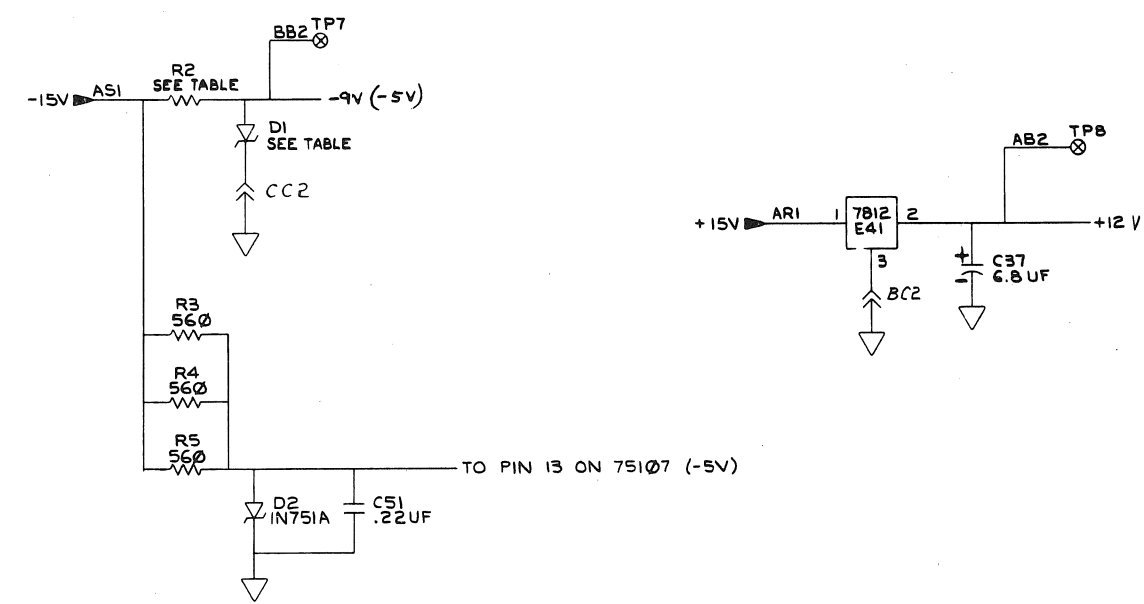
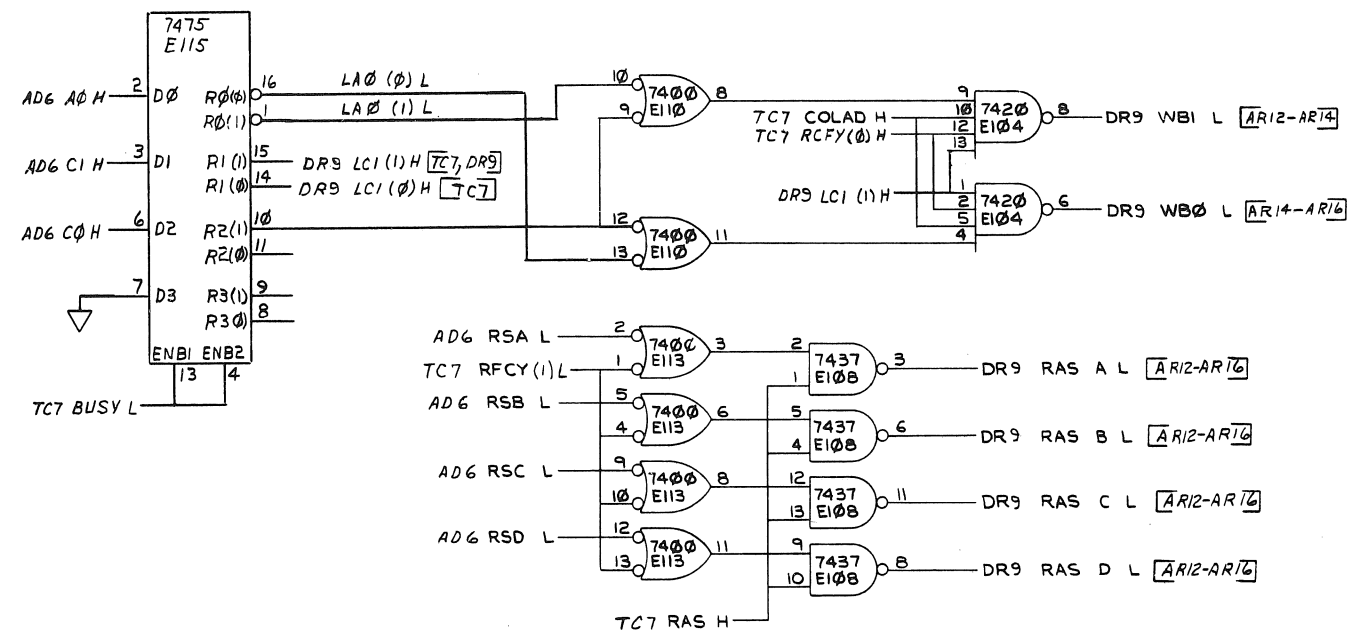
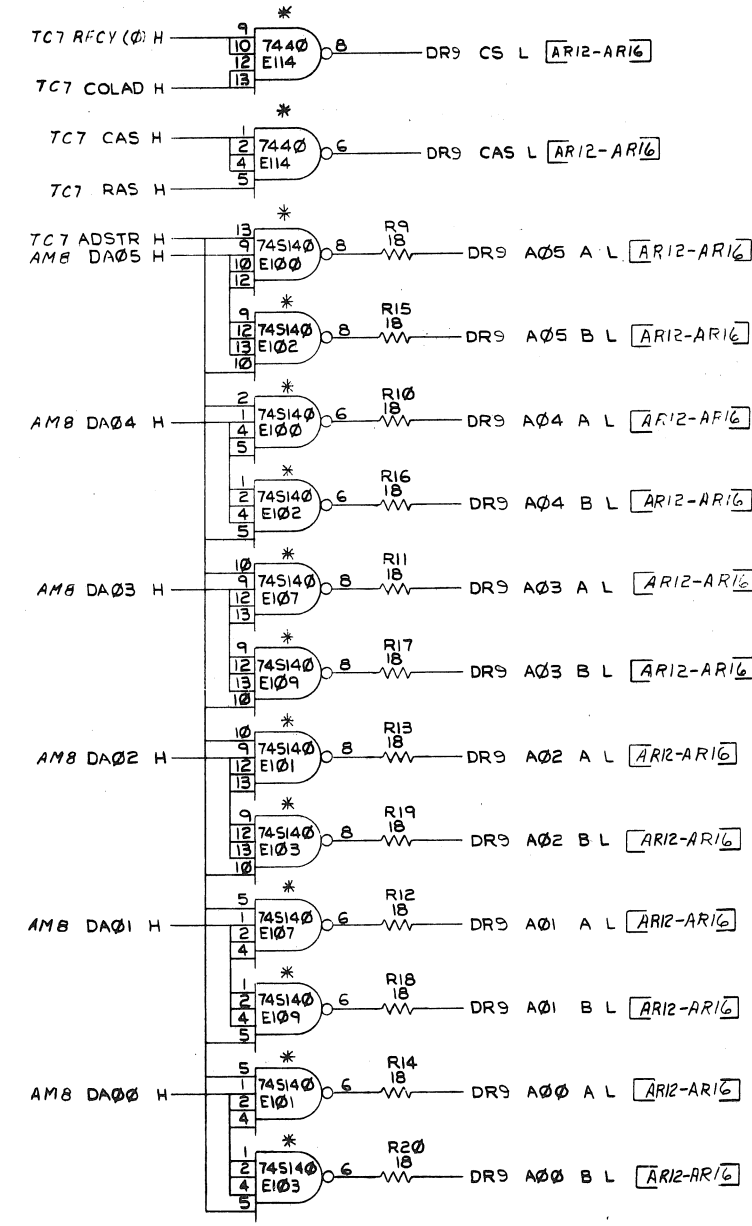
REVISIONS		
CHK	CHANGE NO.	REV.

(ADDRESS DECODE)

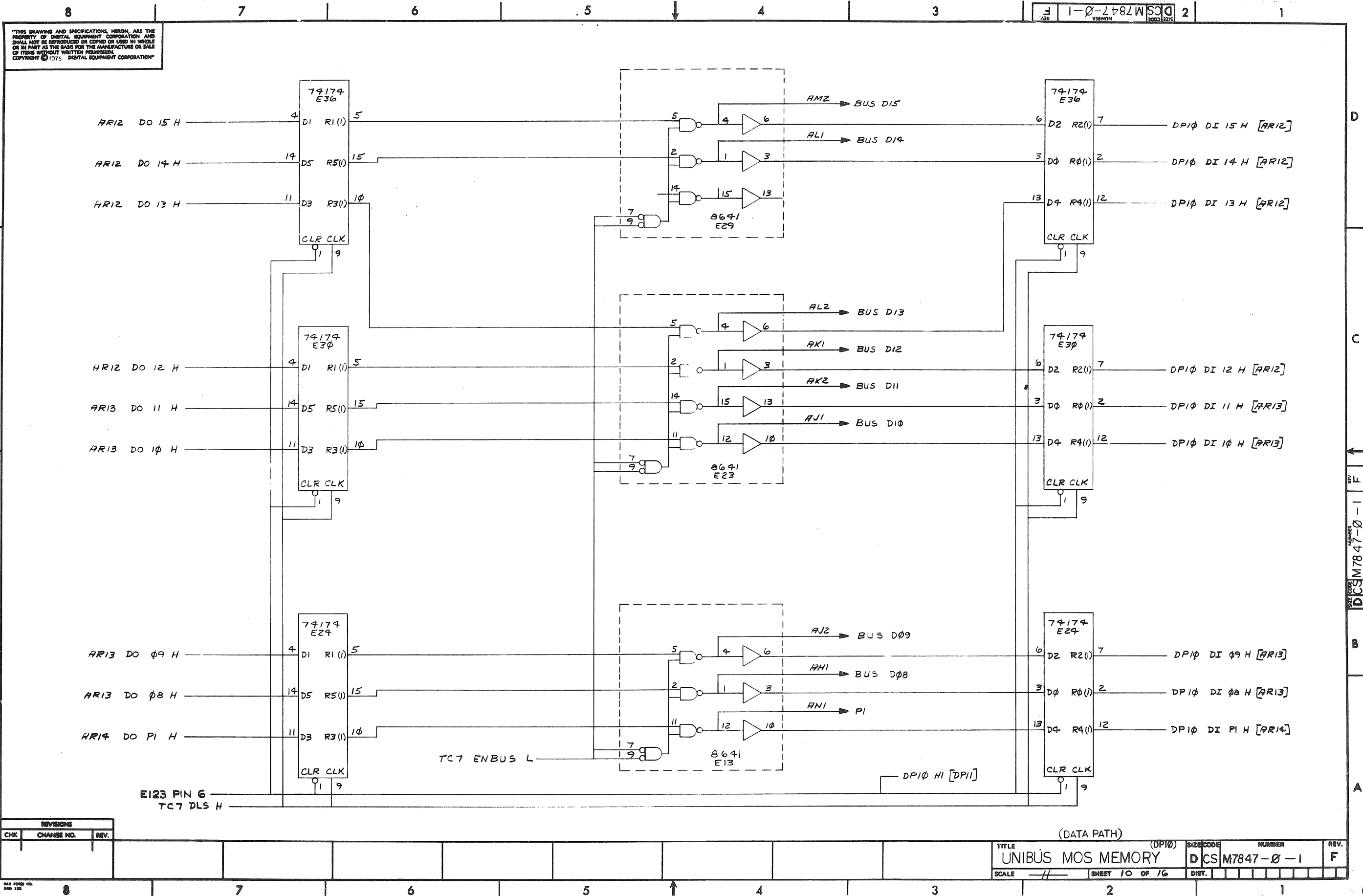
TITLE	UNIBUS MOS MEMORY (AD6)	SIZE CODE	DCS	NUMBER	M7847-0-1	REV.	F
SCALE	1/1	SHEET	6 OF 16	DIST.			



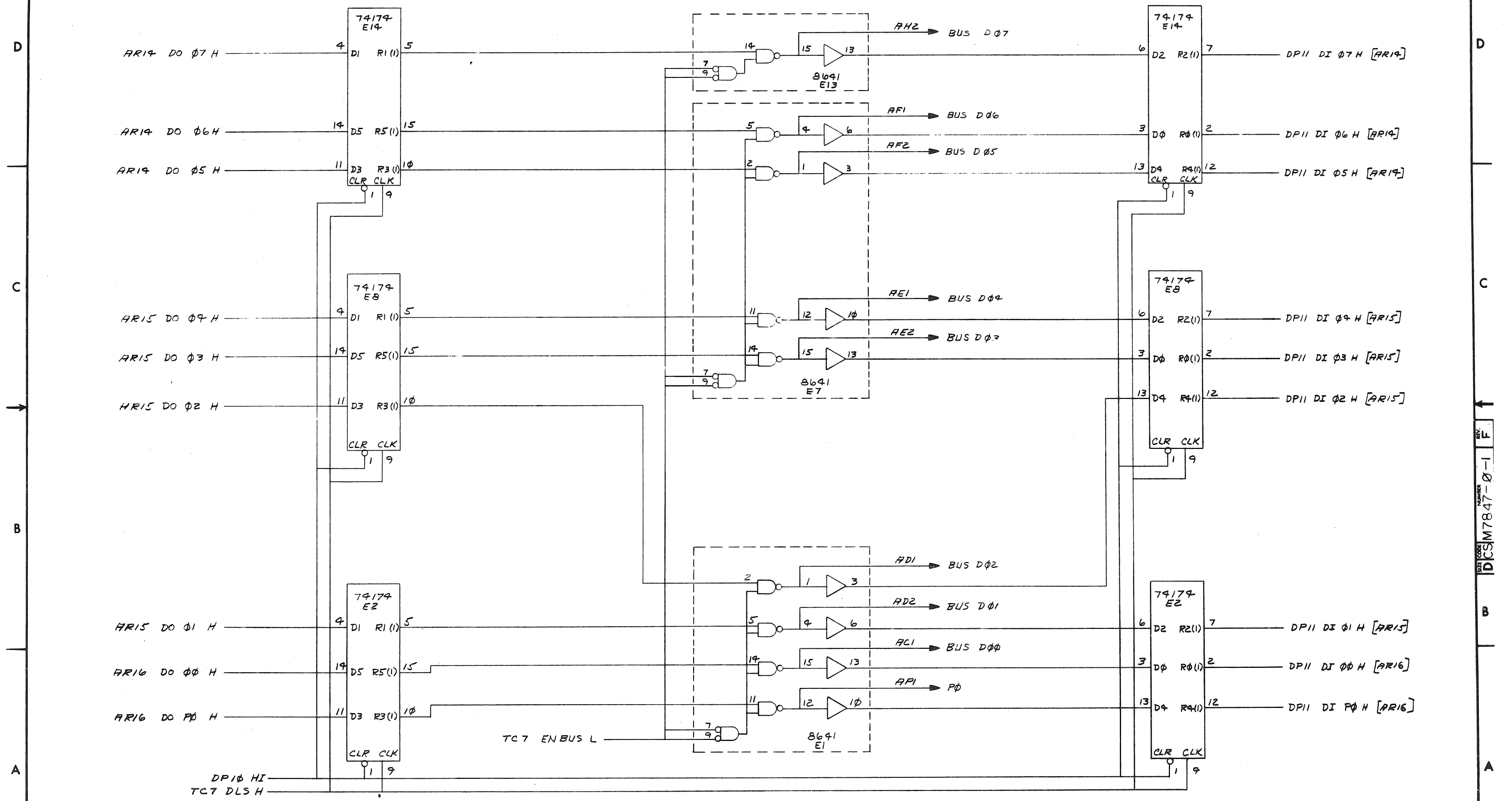
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variation	R2 VALUE	D1 VALUE
YA, YB, YC, YD YE, YF, YH, YJ	270	IN 757 A 9V
BA, BB, BC, BD, BE, BF BH, BJ	560Ω	IN 751 A 5V



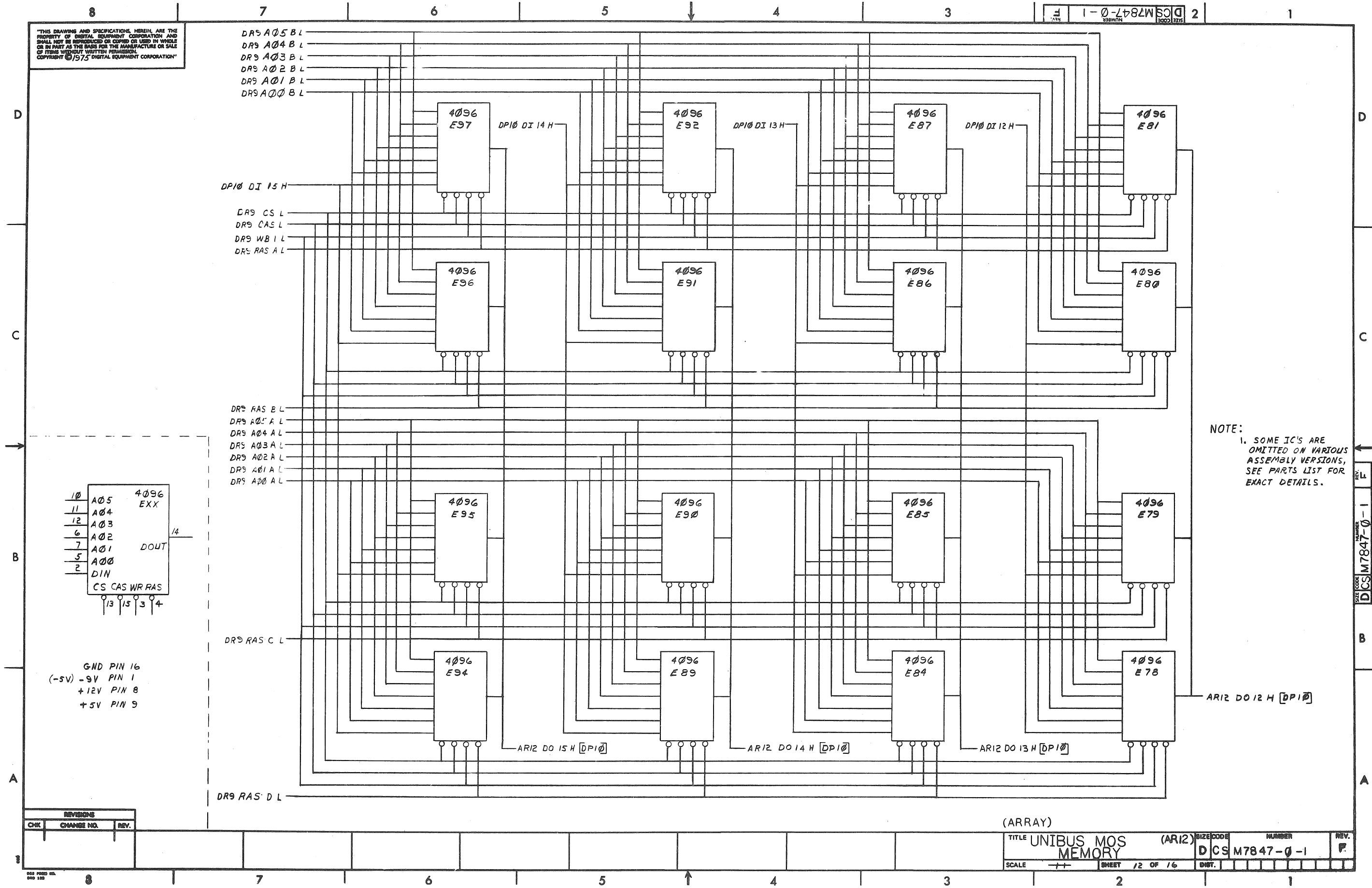
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REVISIONS		
CHK	CHANGE NO.	REV.

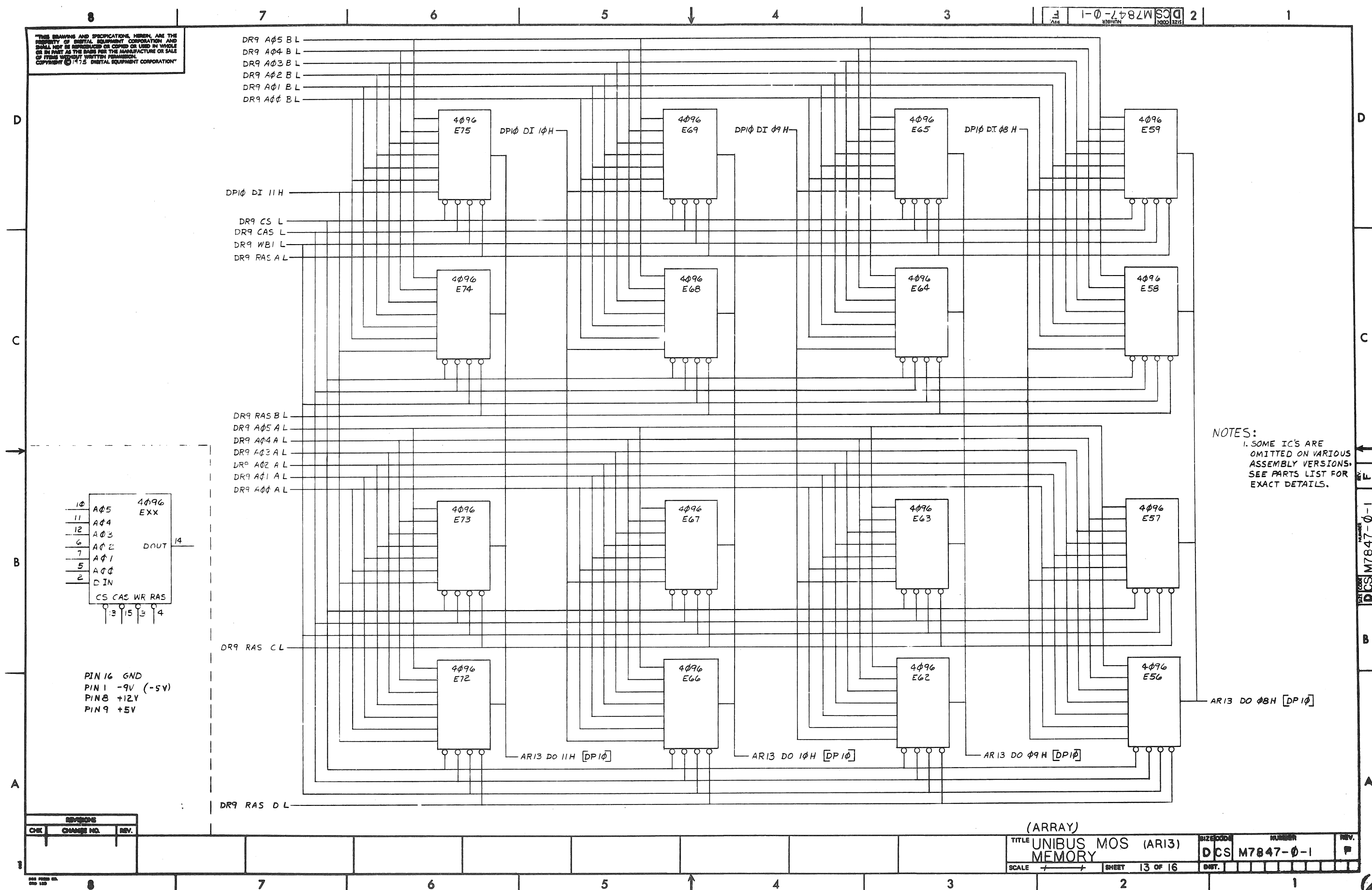
TITLE	UNIBUS MOS MEMORY	SIZE CODE	(DPI)	NUMBER	DCS M7847-0-1	REV.	F
SCALE	11	SHEET	11	OF	16	DIST.	

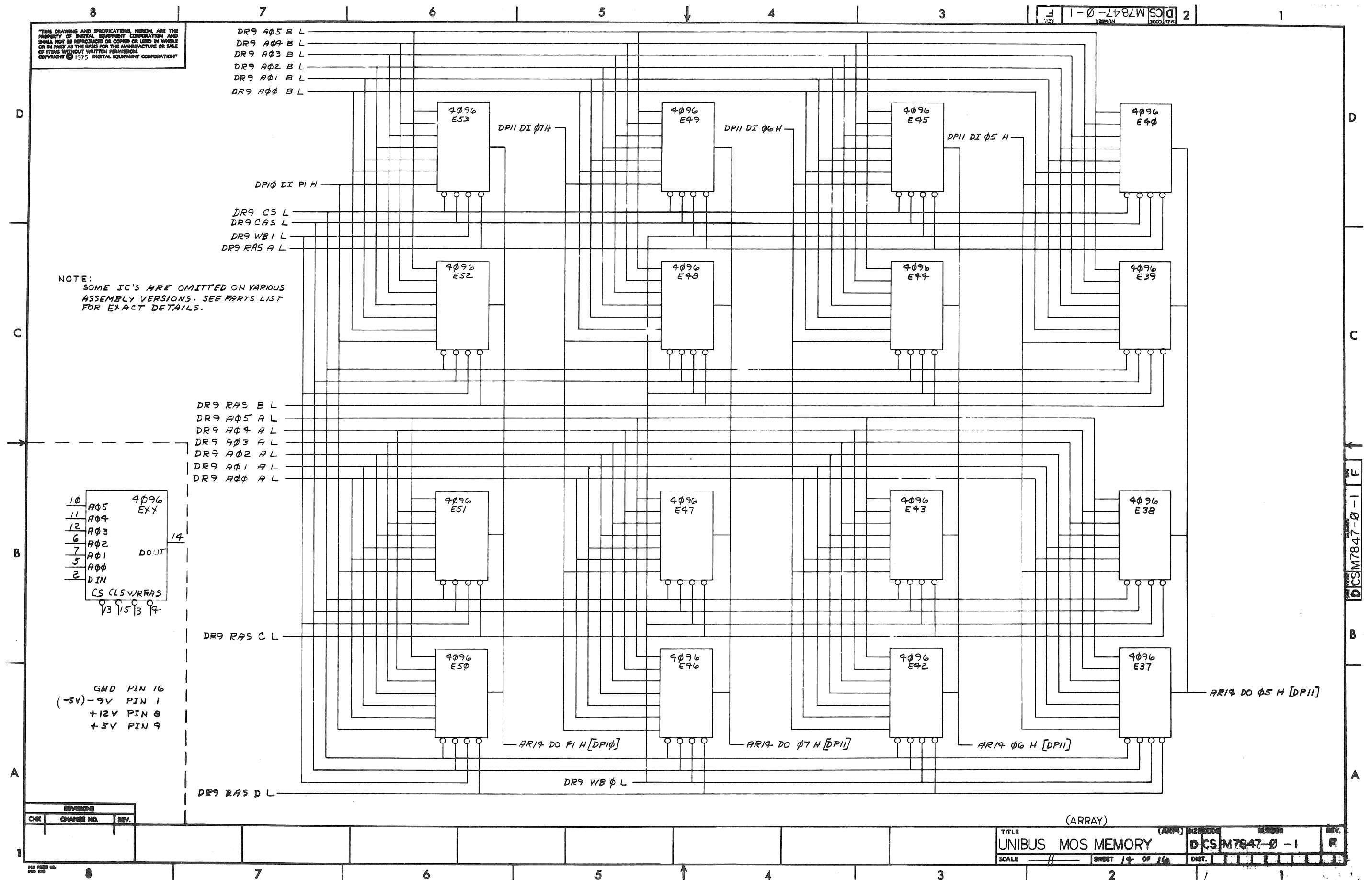
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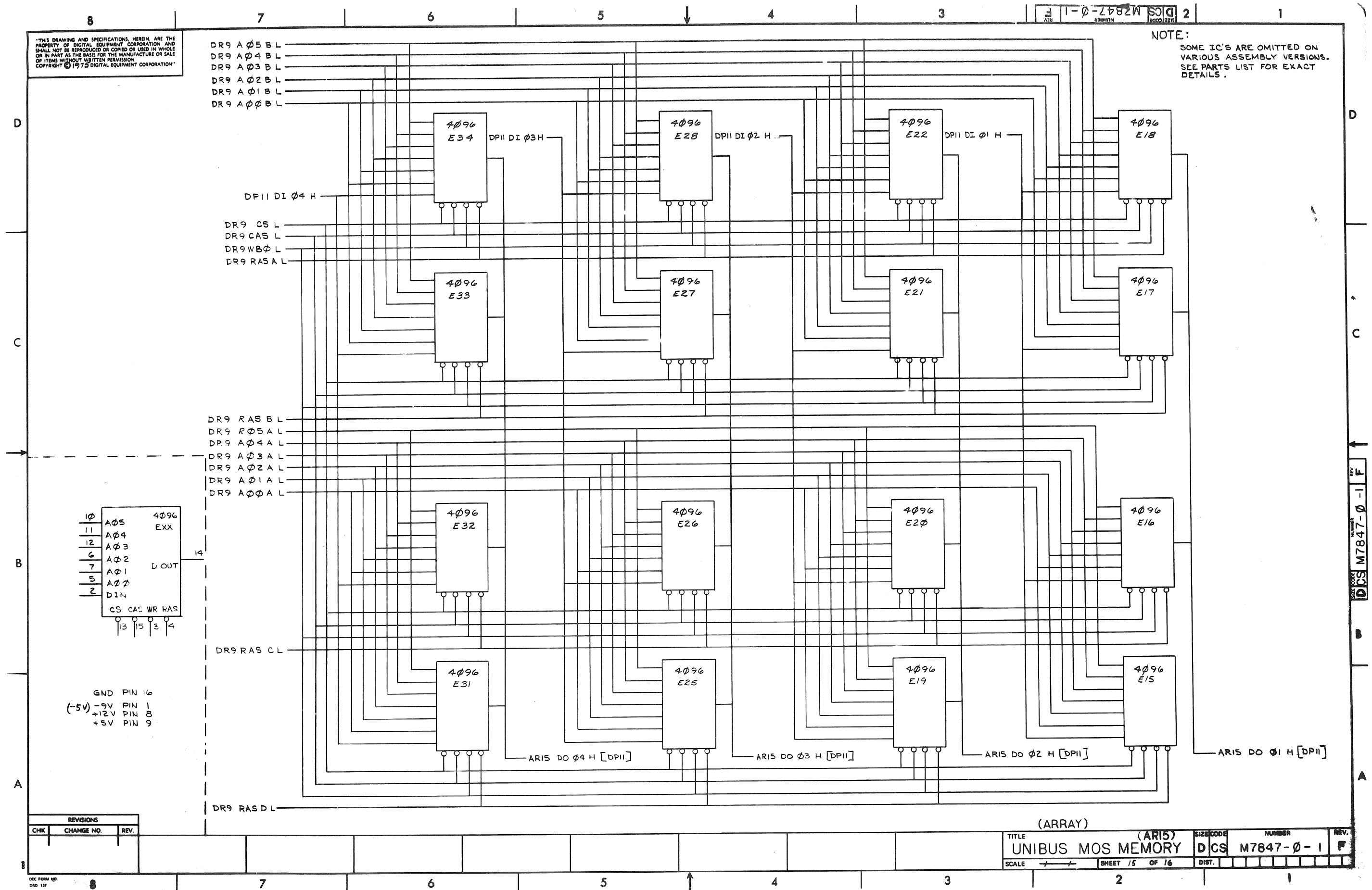


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE UNIBUS MOS MEMORY (ARRAY)		SIZE CODE (AR12)	NUMBER DCS M7847-0-1	REV. F
SCALE	SHEET 12 OF 16	DIST.		







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DR9 A05 B L
DR9 A04 B L
DR9 A03 B L
DR9 A02 B L
DR9 A01 B L
DR9 A00 B L

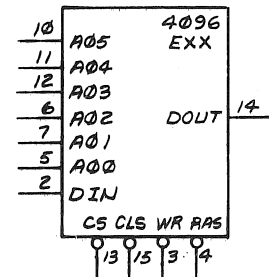
DP11 DI P0 H

DR9 CS L
DR9 CAS L
DR9 WB0 L
DR9 RAS A L

DR9 RAS B L
DR9 A05 A L
DR9 A04 A L
DR9 A03 A L
DR9 A02 A L
DR9 A01 A L
DR9 A00 A L

DR9 RAS C L

DR9 RAS D L



GND PIN 16
(-5V)-9V PIN 1
+12V PIN 3
+5V PIN 9

4096
E12

DP11 DI 00 H

4096
E6

4096
E11

4096
E5

4096
E10

4096
E4

4096
E9

4096
E3

AR16 DO P0 H [DP11]

AR16 DO 00 H [DP11]

NOTE:
SOME IC'S ARE OMITTED ON
VARIOUS ASSEMBLY VERSIONS.
SEE PARTS LIST FOR
EXACT DETAILS.

(ARRAY)

TITLE (AR16)
UNIBUS MOS MEMORY

SIZE CODE DCS
NUMBER M7847-0-1

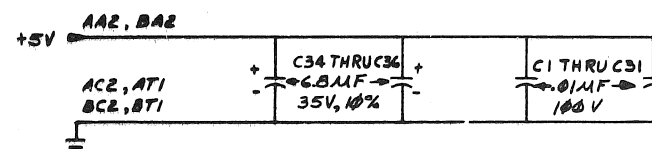
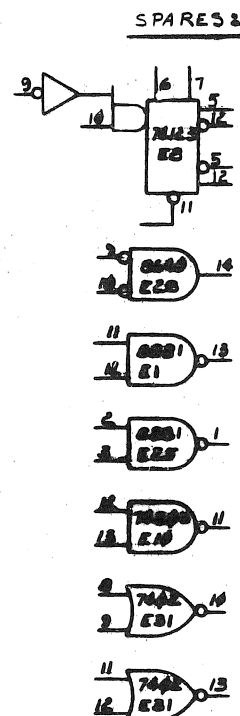
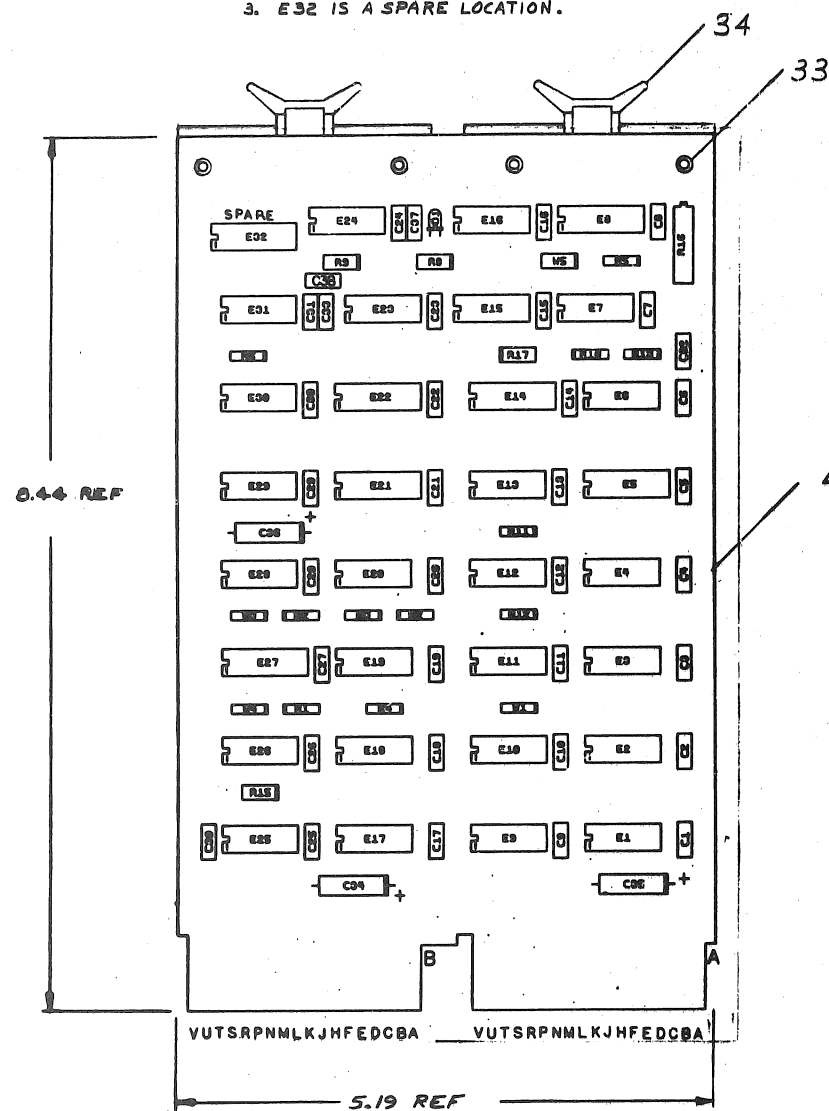
REV. F

SCALE 1/16 OF 1/6

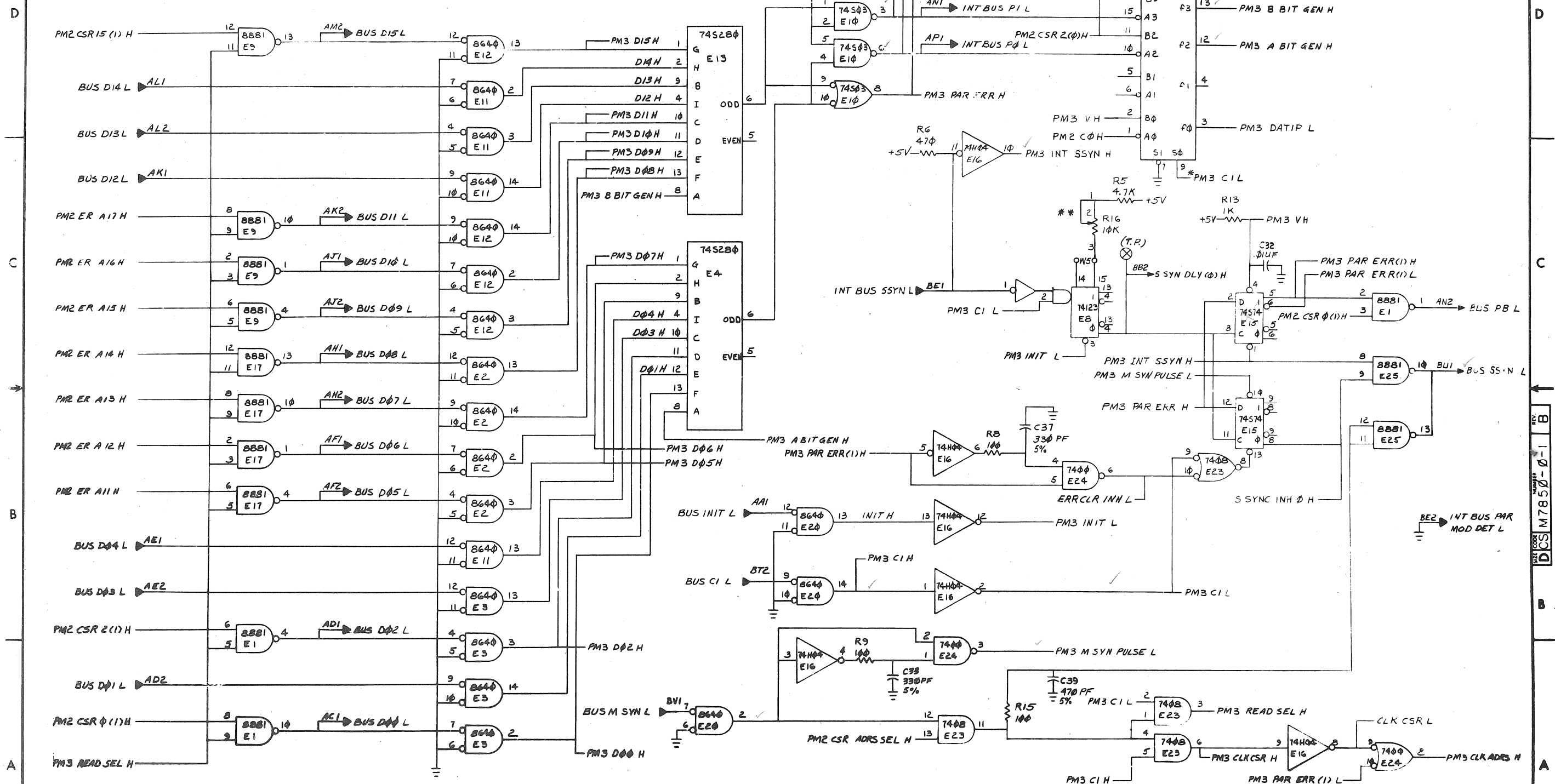
SHEET 16 OF 16

DIST.

1. ALL RESISTORS 1/4 W, 5% UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 100V, 20% UNLESS OTHERWISE NOTED.
2. JUMPER CONTROL OPERATIONS AS FOLLOWS:
W1 THRU W4 SELECT CSR ADDRESS, W5 CAPACITOR
FOR S SYN DLY, NOT USED.
3. E32 IS A SPARE LOCATION.



8		1-0-098-W		SD 2		1	
REF		CIRCUIT SCHEMATIC		D-CS-M7850-0-1		REF	
REF		X-Y COORDINATE HOLE LOCATION		K-CO-M7850-0-4		1	
REF		ASSY/DRILLING HOLE LAYOUT		D-AH-M7850-0-5		2	
REF		MODULE ECO HISTORY		B-MH-M7850-0-6		3	
1		ETCHED CIRCUIT BOARD		5010651-00		4	
1	C39	CAP 470 PF, 100V, 5% (DM)		1000024-00		5	
2	C33, C37	CAP 330 PF, 100V, 5% (DM)		1000023-00		6	
32	C1 THRU C32	CAP .01 MF, 100 V, 20% DISC		1001610-01		7	
3	C34, C35, C36	CAP 6.8 MF, 35V, 10% STANT		1005306-00		8	
1	D1	DIODE, L.E.D.		1110324-00		9	
5	R1 THRU R5	RES 4.7K 1/4W 5%		1300447-00		10	
3	R8, R9, R15	RES 100 1/4W 5%		1300229-00		11	
5	R6, R10, R11, R12, R17	RES 470 1/4W 5%		1300316-00		12	
1	R13	RES 1K 1/4W 5%		1300365-00		13	
1	R16	RES 10K 3/4W 20% (1% PREP)		1309143-10		14	
1	E24	I.C. 7400		1905575-00		15	
1	E30	I.C. 7430		1905578-00		16	
1	E31	I.C. 7402		1909004-00		17	
1	E19	I.C. 314A		1909704-00		18	
1	E23	I.C. 7408		1910155-00		19	
4	E1, E9, E17, E25	I.C. 8881		1909705-00		20	
1	E16	I.C. 74H04		1909931-00		21	
1	E27	I.C. 7485		1910224-00		22	
1	E8	I.C. 74123		1910436-00		23	
1	E10	I.C. 74503		1910533-00		24	
1	E15	I.C. 74574		1910544-00		25	
1	E21	I.C. 74174		1910652-00		26	
2	E5, E22	I.C. 74157		1910655-00		27	
9	E2, E3, E11, E12, E18 E20, E26, E28, E29	I.C. 8640		1911469-00		28	
2	E4, E13	I.C. 745280		1911773-00		29	
1	E14	I.C. 8266		1909934-00		30	
2	E6, E7	I.C. 7474		1905547-00		31	
4	W1 THRU W4	INSULATED JUMPER		9009185-00		32	
4		EYELET		9006732-00		33	
2		HANDLE, FLIP-CHIP (MAGENTA)		9008337-0		34	
QTY	REF. DESIGNATION		DESCRIPTION		PART NO.		ITEM NO.
PARTS LIST							
ETCH BOARD REV. 8							
DRN. H. LUFKIN DATE 2-5-75 CHG'D. H. Lufkin DATE 2/17/78 BY: J. M. Minter DATE 2/15/78 PROJ. ENG. H. Lufkin DATE 2/15/78 DES. H. Hill DATE 2/15/78 NEXT HIGHER ASSY				TITLE PARITY MODULE		SER. CODE NUMBER DCS M7850-0-1	
DEC NO. 21A NO.		SCALE 1 OF 3		REV. B		CONVERSION CHART	



NOTES:

- * B INPUTS SELECTED WHEN SEL IS LOW (※)
- ※※ SET R16 TO 110 NSEC. ± 10% FROM SIGNAL ON PIN BE1 GOING LOW TO SIGNAL ON PIN BE2 GOING HIGH. (@ 1.5V LEVEL) (※※)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE	CODE	NUMBER		REV.
PARITY MODULE (PM3)		D	CS	M7850-0-1		B
SCALE	$\frac{1}{2}$	SHEET	3 OF 3		DIST.	