

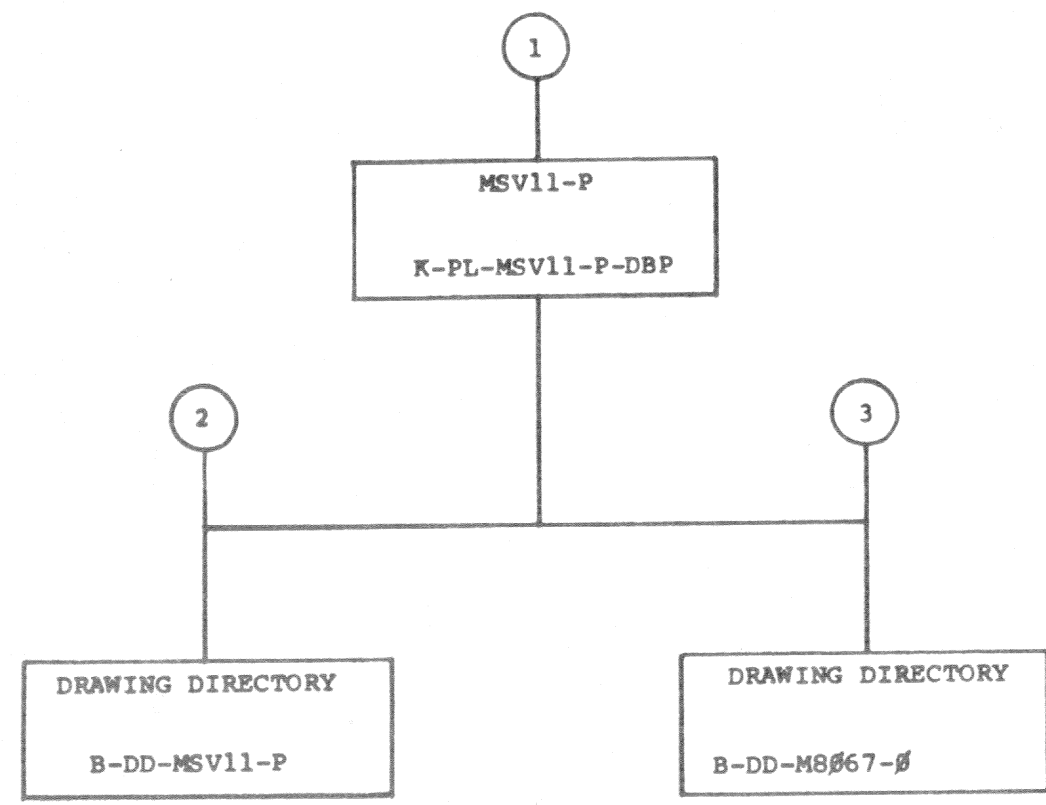








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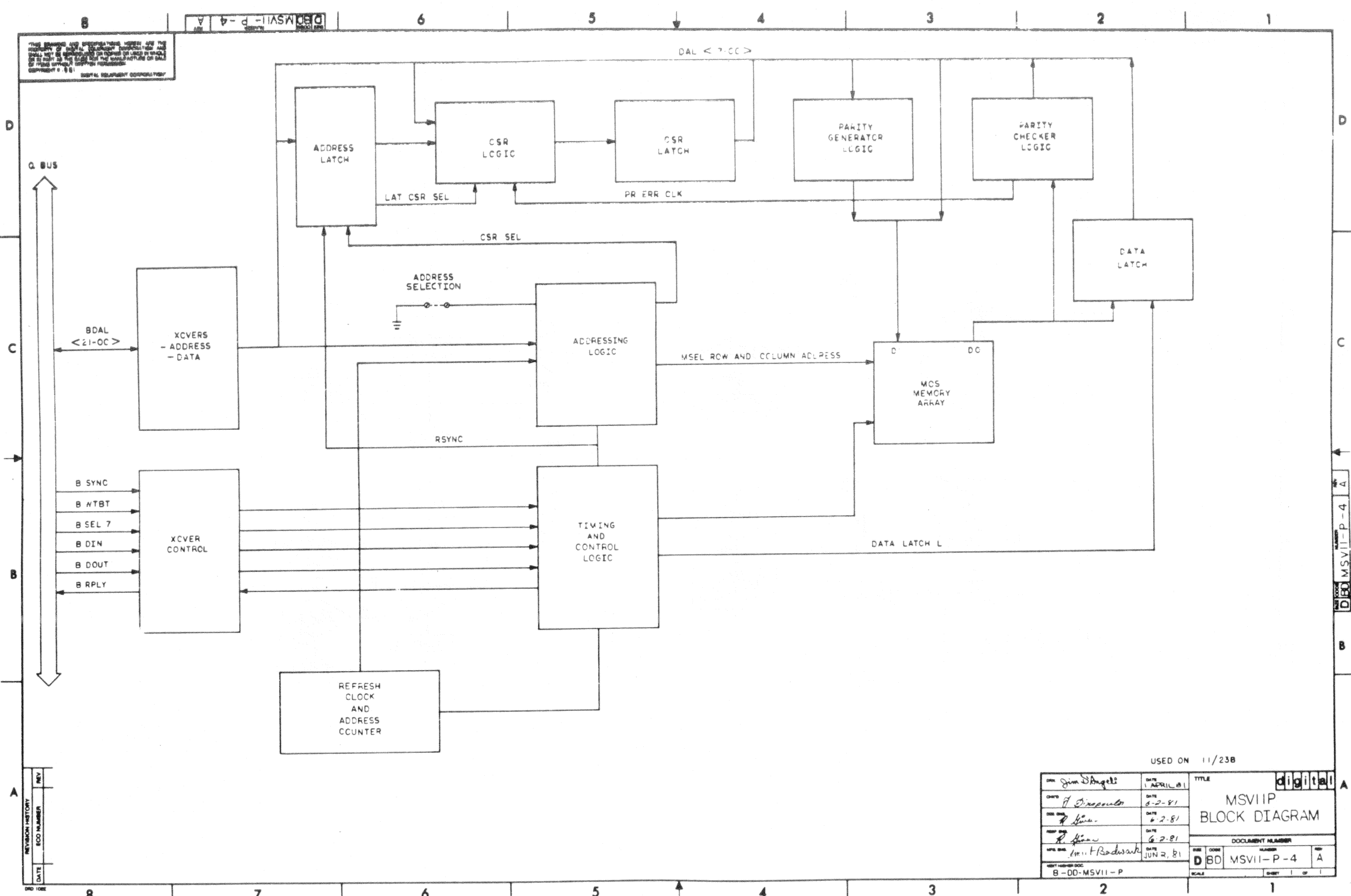
TITLE DRAWING DIRECTORY MSV11-P Q-BUS MOS MEMORY SYSTEM	SHEET 2 OF 3	SIZE CODE <b>B DD</b>	NUMBER MSV11-P	REV A
--	--------------	--------------------------	-------------------	----------



LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY PER VARIATION		
					PF	PK	PL
1	1	D-UA-M8067-0-0	M8067-KA	MSV11-FK: 256KB MOS MEM WITH FAR	1	1	1
2	2	D-RD-MSV11-P-4		BLOCK DIAGRAM	REF	REF	REF
3	3	D-FD-MSV11-P-5		FLOW DIAGRAM	REF	REF	REF
4	4	A-SP-MSV11-P-3		SYSTEM SPECIFICATION	REF	REF	REF
5	5	D-TD-MSV11-P-6		TIMING DIAGRAM	REF	REF	REF
6	6	B-PL-MSV11-P-7		SHIPPING LIST	REF	REF	REF
7	7		M8067-LA	MSV11-PL: 512KB MOS MEM WITH FAR	1	1	1

REVISION HISTORY			BASIC PART NO: MSV11		D I G I T A L	
ENG	ECO NUMBER	REV	SECTION A OF A	DRN: J. D'ANGELI	DATE: 17-APR-81	TITLE PARTS LIST
---	INITIAL	A	SECTION, VARIATION INDEX	CHK'D: F. HALLIDAY	DATE: 22-APR-81	MSV11-P (256K X 18) Q-BUS MOS MEMORY ASSY
RG	MSV11-P-ML001	B	[A] PF,PK,PL	DES.ENG.: RON GIVEN	DATE: 02-JUN-81	DOCUMENT NUMBER
			[B]	RESP.ENG.: RON GIVEN	DATE: 02-JUN-81	SIZE CODE NUMBER REV
			[C]	MFG.ENG.: AMRIT BADWAIK	DATE: 02-JUN-81	K PL MSV11-P-DBP B
			[D]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	FILE NAME: EDIT #
			[E]	#B-DD-MSV11-P	#R-DD-MSV11-P	Z2533B.PLS 14
			[F]	THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1982, DIGITAL EQUIPMENT CORPORATION		

ML2



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REVISION HISTORY

REV	DATE	ECO NUMBER

USED ON 11/23B

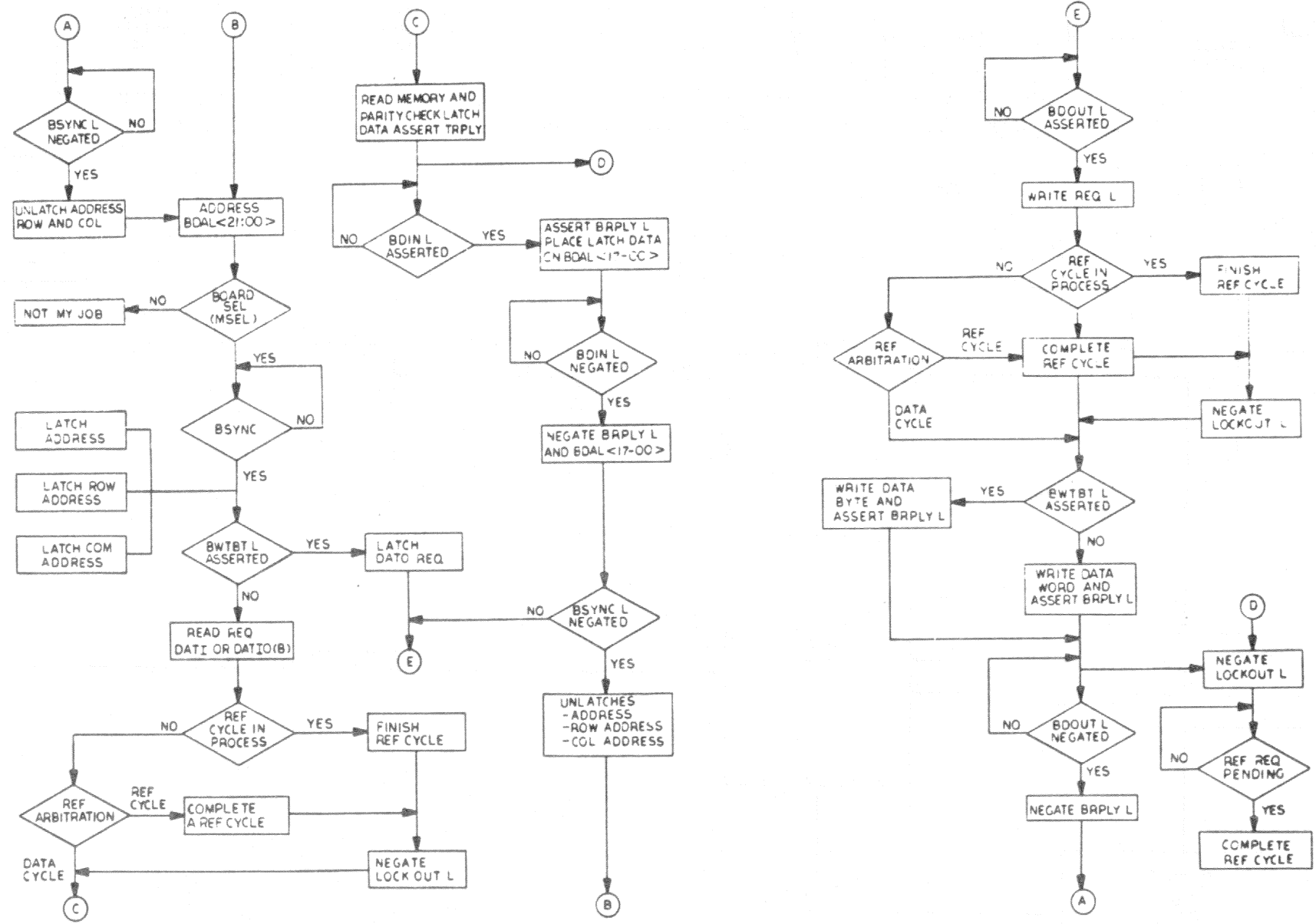
REV	DATE	TITLE
1	APRIL 81	MSVII-P-4 BLOCK DIAGRAM
2	6-2-81	
3	6-2-81	
4	6-2-81	
5	JUN 2, 81	

DOCUMENT NUMBER: B-00-MSVII-P

REV	CODE	NUMBER	REV
D	BD	MSVII-P-4	A

SCALE: \_\_\_\_\_ SHEET: \_\_\_\_\_ OF: \_\_\_\_\_

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USED ON 11/23B

DESIGNED BY <i>Ray Senoo</i>	DATE APRIL 81	TITLE MSVII-P-5 A
DRAWN BY <i>J. Brasolis</i>	DATE 6-2-81	MSVII-P-5 A
CHECKED BY <i>R. Kwan</i>	DATE 6-2-81	MSVII-P-5 A
APPROVED BY <i>R. Kwan</i>	DATE 6-2-81	MSVII-P-5 A
DESIGNED BY <i>Amrit Radsook</i>	DATE JUN 2, '81	MSVII-P-5 A
B-DD-MSVII-P		MSVII-P-5 A

DFDMSVII-P-5 A

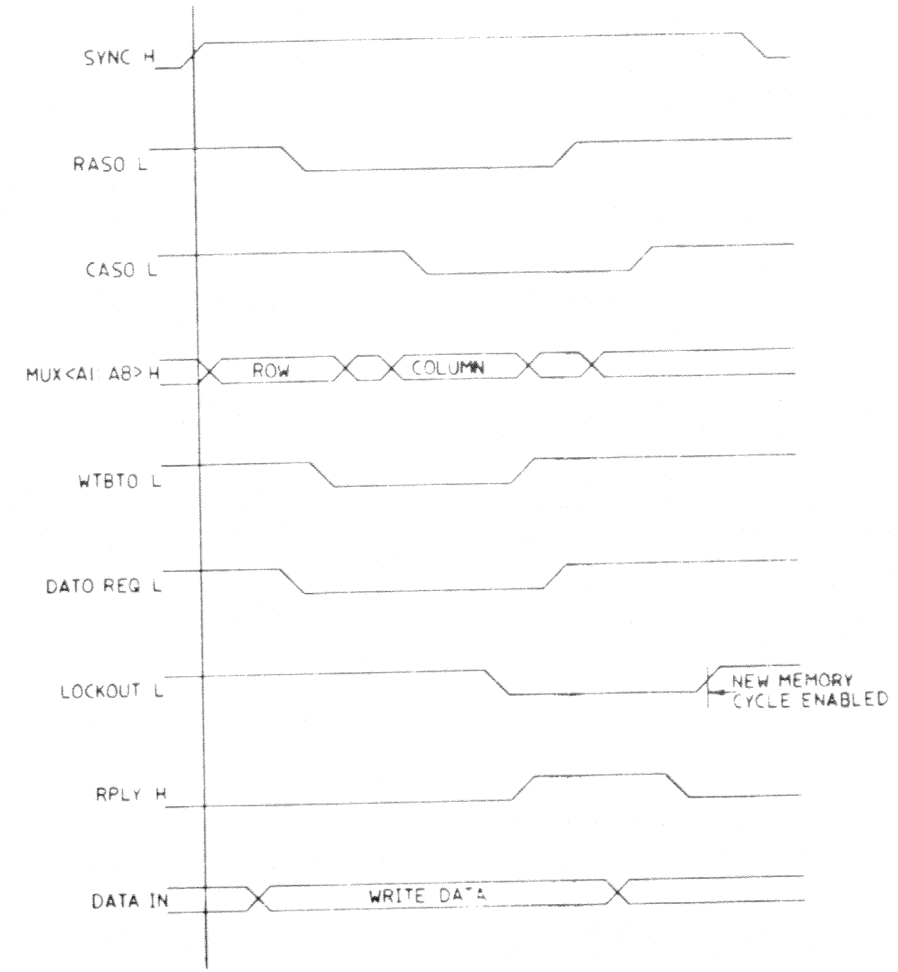
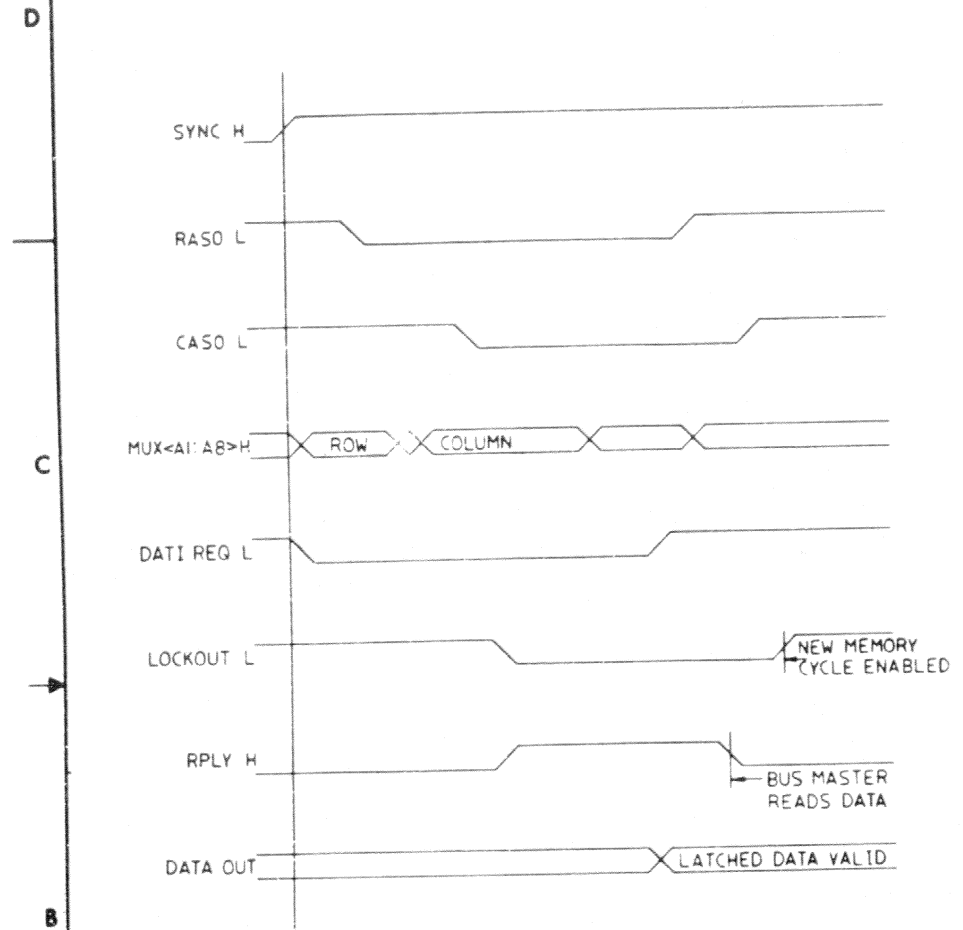
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9-d-11ASW  
 82202878

NOTES:  
 1. SIGNALS SHOWN ARE FUNCTIONS, NOT ACTUAL CIRCUIT SCHEMATIC SIGNAL NAMES.

DATI CYCLE

DATO CYCLE

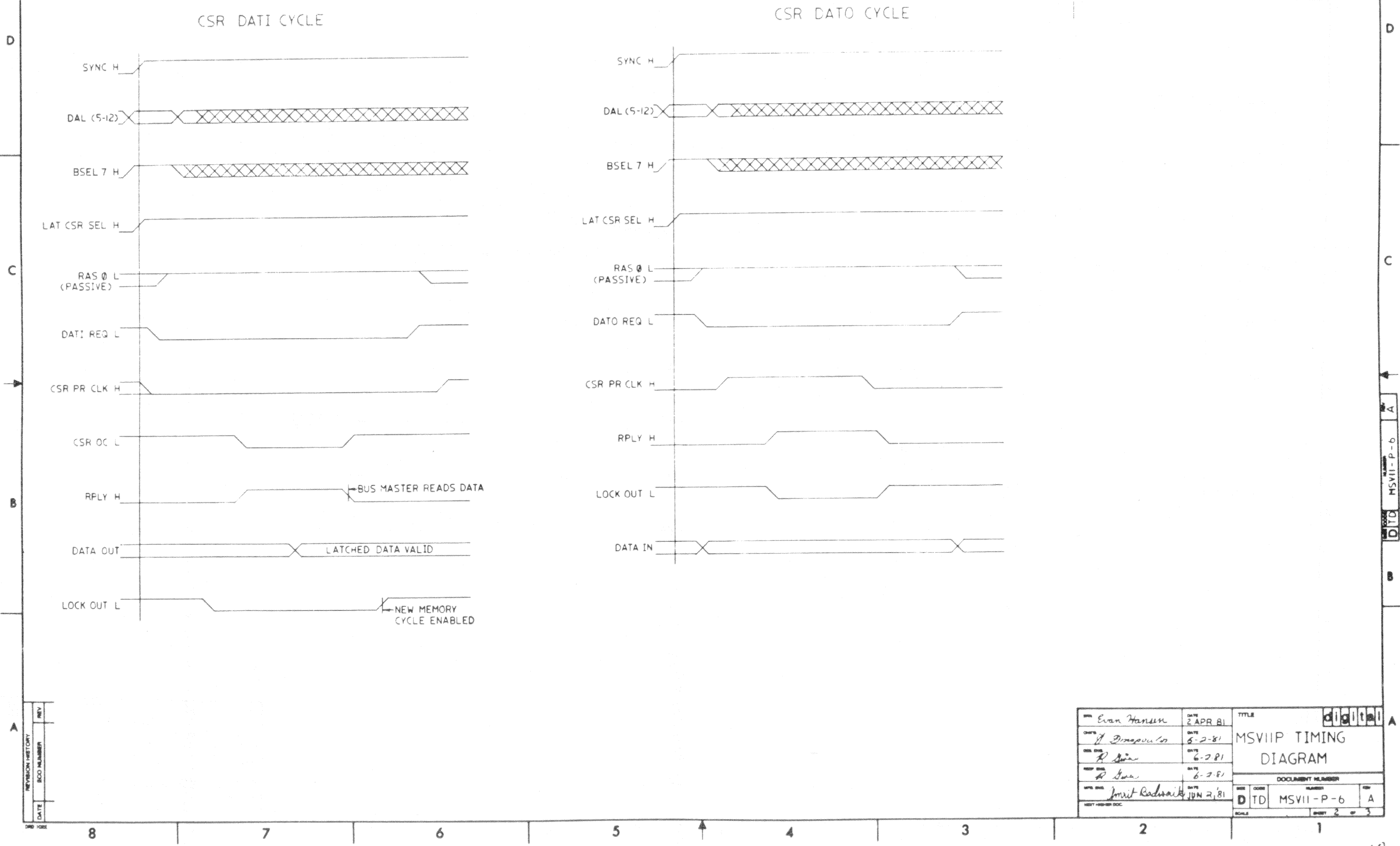


REV	
DATE	
ECO NUMBER	
REVISION HISTORY	

DESIGNED BY C. J. Hansen	DATE 2 APR 81	TITLE MSVII-P-6 TIMING DIAGRAM
CHECKED BY V. Srinivasan	DATE 6-2-81	DOCUMENT NUMBER MSVII-P-6 A
DESIGNED BY R. Khan	DATE 6-2-81	
DESIGNED BY R. Khan	DATE 6-2-81	SCALE
DESIGNED BY Anant Badwani	DATE JUN 2, 81	SHEET 1

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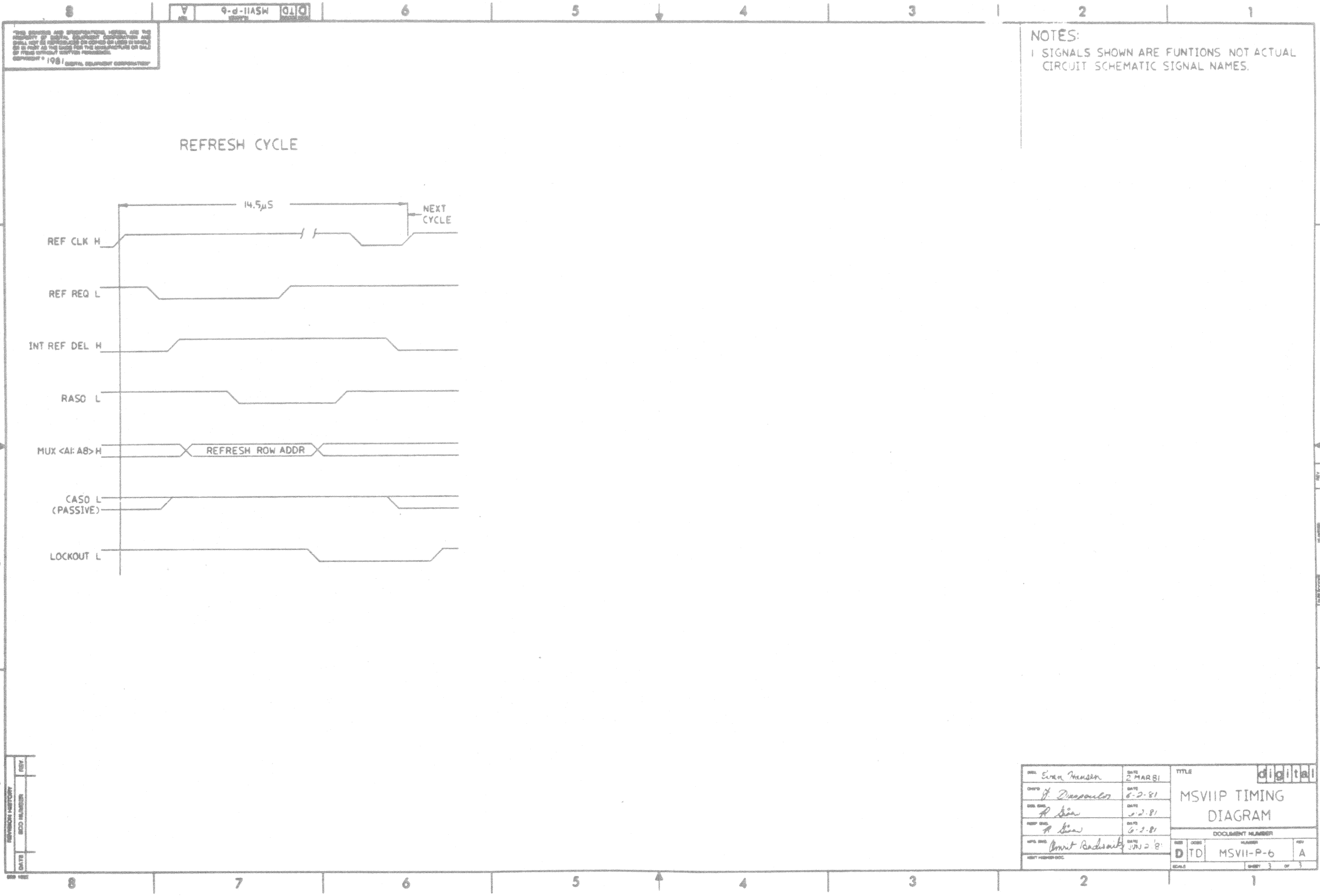
NOTES:  
1. SIGNALS SHOWN ARE FUNCTIONS, NOT ACTUAL CIRCUIT SCHEMATIC SIGNAL NAMES.



REV	DATE	DESCRIPTION

DESIGNED BY Evan Hansen	DATE 2 APR 81	TITLE MSVII P TIMING DIAGRAM
CHECKED BY D. Dingus	DATE 6-2-81	DOCUMENT NUMBER MSVII-P-6 A
APPROVED BY R. Lee	DATE 6-2-81	
DATE 10/2/81	SCALE 100%	SHEET 2 OF 3





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**NOTES:**  
1 SIGNALS SHOWN ARE FUNCTIONS NOT ACTUAL CIRCUIT SCHEMATIC SIGNAL NAMES.

REV	
DATE	
BY	
CHKD	
DATE	
BY	

DESIGNED BY <i>Evan Hansen</i>	DATE 2 MAR 81	TITLE <b>digital</b> MSVII P TIMING DIAGRAM
CHECKED BY <i>H. Dussoules</i>	DATE 6-2-81	
DESIGNED BY <i>H. bin</i>	DATE 5-2-81	DOCUMENT NUMBER MSVII-P-6 A
CHECKED BY <i>H. bin</i>	DATE 6-1-81	
APPROVED BY <i>Ornit Radtsky</i>	DATE 3/12/81	SCALE SHEET 3 OF 3





AUTOMATED BY PRTLST.3P(44)

PARTS LIST

SHEET A1 OF A3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	LC	LF	VARIATION	REFERENCE DESIGNATOR
		D-CS-M8067-0-1		CIRCUIT SCHEMATIC	REF	REF	REF	REF		
		D-UA-M8067-0-0		UNIT ASSY	REF	REF	REF	REF		
		B-DD-M8067-0-0		DRAWING DIRECTORY	REF	REF	REF	REF		
		D-MD-5014500-0-0		DRILL & ETCH DWG	REF	REF	REF	REF		
		D-EC-5014500-0-0		ETCH CUT DWG	REF	REF	REF	REF		
			5014500-00	ETCH BOARD	1	1	1	1		
			1012121-00	220.0 MMF 100V 1%200PPM MICA	2	2	2	2		C17, C28
			1017472-00	10 MFD 35V +50-10% AL EL	4	4	4	4		C179-C182
			1016681-00	.47 MFD 50V +80-20% CER	150	150	150	150		C1-C7, C9, C14-C16, C22-C27
									CONT	C30-C98, C100, C102, C104, C106,
									CONT	C108, C110, C112, C114-C130, C132,
									CONT	C134, C136, C138, C140, C142, C144,
									CONT	C146-C178
										D3
										D4
			1110324-00	LED 1MCD@10MA PIV=3	1	1	1	1		
			1114384-00	LED 10SMW 35MA GREEN	1	1	1	1		
			1105275-00	*** THIS ITEM IS NOT USED ***	-	-	-	-		
			1213113-01	HANDLE, MODULE	1	1	1	1		R4, R5, R8, R9, R11, R12, R22
			1312930-00	5.10 K .25W 5.0% CC	7	7	7	7		
			1303110-00	19.60 .25W 1.0% RN55D-F10	1	1	1	1		R14, R15, R16, R24
			1304858-00	348.0 .25W 1.0% RN55D-F10	3	3	3	3		
			1303225-00	68.10 .25W 1.0% RN55D-F10	1	1	1	1		
			1302858-00	100.0 .25W 1.0% RN55D-F10	1	1	1	1		
			1300365-00	1.0 K .25W 5.0% CC	1	1	1	1		
			1305419-00	31.60 K .25W 1.0% RN55D-F10	1	1	1	1		
			1309412-00	18.20 K .25W 1.0% RN55D-F10	1	1	1	1		
			1300295-00	*** THIS ITEM IS NOT USED ***	-	-	-	-		
			1300247-00	120.0 .25W 5.0% CC	1	1	1	1		R7
			1300316-00	470.0 .25W 5.0% CC	4	4	4	4		R10, R13, R26, R42
			1314637-00	R NETWORK 3-22 1.0% 6PIN	4	4	4	4		R34, R35, R40, R41
			1302124-00	*** THIS ITEM IS NOT USED ***	-	-	-	-		

REVISION HISTORY		BASIC PART NO: M8067		DRN: R.GIVEN		DATE: 11-JUN-80		D I G I T A L	
ENG:	ECO NUMBER	REV	SECTION A OF A	CHK'D:	P.BOSSMAN	DATE:	15-OCT-80	TITLE PARTS LIST	
	INITIAL	A	SECTION VARIATION INDEX					Q-BUS MOS MEMORY	
			[A] LC,LF,LH						
			[B]						
			[C]	DES.ENG: R.GIVEN		DATE: 11-JUN-80			
			[D]						
			[E]	RESP.ENG.: R.GIVEN		DATE: 15-OCT-80		DOCUMENT NUMBER	
			[F]						
			[H]					SIZE: CODE: NUMBER REV	
			[J]	MFG.ENG.: AMRIT BADWAIK		DATE: 15-OCT-80		K PL M8067-LA-DBP A	
			[K]						
			[L]	ASSEMBLY NUMBER:		TOP DOCUMENT NUMBER:		FILE NAME: EDIT #	
			[M]	D-UA-M8067-0-0		#B-DD-M8067-0		22008A.PLS 21	
			[N]						

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AUTOMATED BY PRTLST.3P(44)

PARIS LIST

SHEET A2 OF A3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	VARIATION	REFERENCE DESIGNATOR
					LC	LF	LH	
			1315339-00	R NETWORK 4-5K 5.0 % SPIN	3	3	3	R17, R19, R20
			1314636-00	R NETWORK 2-5K 5.0 % 4PIN	1	1	1	R18
			1317989-00	R NETWORK 2-27 3-360 SPIN	4	4	4	R27, R28, R36, R43
			1301969-00	22.0 .25 W 5.0 % CC	6	6	6	R29-R32, R37, R38
			1300271-00	*** THIS ITEM IS NOT USED ***	-	-	-	
			1505321-00	DEC4258 PNP 200MW SI 12 30 M	2	2	2	Q2 Q3
			1617533-00	DELAY= 250NS STAPS 14PIN DIP	1	1	1	E39
			1911579-00	8641 TRANSCEIVER BUS, QUA	6	6	6	E1, E20, E46, E52, E56, E62
			1911469-00	DEC 8640 RECEIVER, BUS, QUAD, U	3	3	3	E18, E24, E40
			1911944-00	5555CN TIMER, FUNCT. BLOCK	1	1	1	E7
			1910532-00	74500 NAND GATE-QUAD 2IN	2	2	2	E21, E67
			1912388-00	74502 NOR GATE-QUAD 2IN, PO	2	2	2	E13, E29
			1910533-00	74503 NAND GATE-QUAD 2IN, 0	1	1	1	E20
			1910534-00	74504 INVERTER GATE-HEX 1I	3	3	3	E11, E14, E25
			1913803-00	74LS04 INVERTER GATE, HEX	1	1	1	E41
			1912389-00	74508 AND GATE-QUAD 2IN, PO	2	2	2	E22, E51
			1910536-00	74510 NAND GATE-TRIPLE 3IN	2	2	2	E23, E34, E45
			1913340-00	74532 OR GATE-QUAD 2IN	2	2	2	E19
			1911712-00	74551 AND-OR GATE-INVERT D	1	1	1	E61
			1910542-00	74564 A-O-I GATE 4-2-3-2	4	4	4	E9, E17, E33
			1910544-00	74574 FF-D DUAL, EDGE TRIGG	5	5	5	E4, E15, E18, E26, E55
			1910544-01	74574-60GG-D DUAL, EDGE TRIG	1	1	1	E6
			1910545-00	745112 FF-JK DUAL, EDGE TRIG	1	1	1	E5
			1911983-00	745133 NAND GATE-POSITIVE 1	1	1	1	E35
			1913840-00	LS136 X-OR GATE-QUAD 2IN, 0	1	1	1	E2
			1911676-00	745139 DECODER-DUAL TWO-INP	1	1	1	E61
			1910546-00	745140 NAND GATE-DUAL 4INPU	5	5	5	E8, E72
			1913853-00	LS175 FF-D QUAD	2	2	2	E3, E27
			1913939-00	LS191 COUNTER, SYNCHR, UP/D	1	1	1	E44
			1911573-00	745280 PARITY GEN/CHKR, 9BIT	4	4	4	E47, E53, E57, E63
			1912867-00	LS298 MUX 1 OF 4 2IN W/S	2	2	2	E10, E16
			1913670-00	745373 LATCH, 8BIT TRASP TR	2	2	2	E28, E36, E48, E54, E58, E64
			1913670-01	DM 745373N LATCH, 8BIT TRANS	6	6	6	E59, E60, E65, E66, E49, E60
			1914451-00	74LS393 COUNTER, BINARY, 4BIT	1	1	1	E43
			1912541-00	*** THIS ITEM IS NOT USED ***	-	-	-	
			2113825-01	*** THIS ITEM IS NOT USED ***	-	-	-	
			2114408-01	*** THIS ITEM IS NOT USED ***	-	-	-	
			2114567-01	*** THIS ITEM IS NOT USED ***	-	-	-	
			2115724-01	*** THIS ITEM IS NOT USED ***	-	-	-	
			23578A2-00	A2-05	1	1	1	E38
			23771F1-00	*** THIS ITEM IS NOT USED ***	-	-	-	
			23816F1-00	*** THIS ITEM IS NOT USED ***	-	-	-	
			23794F1-00	F1-01	1	1	1	E37
			9009185-00	JUMPER, WIRE, INSULATED, BLACK B	8	8	8	W1, W2, W4-W6, W9, W13, W15
			9007201-00	TRANSIPADS #10253	1	1	1	
			9000024-01	EYELET, ROLL FLANGE .12100X .192	8	8	8	
			9009149-01	PIN, STAKING, P.C. BOARD .025 SQU	43	43	43	
				*** THIS ITEM IS NOT USED ***	-	-	-	

USED UNDER Z1

BLANK

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							Q-BUS MOS MEMORY		K	PL	M8067-LA-DBP	A

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION			REFERENCE DESIGNATOR
				LC	LF	LH	
75	75	2118467-01	8264-20 RAM 64K X1,200NS 1	72	-	-	E73-E144
76	76	2118470-01	4864-1 MOS RAM 64K X1,200	-	72	-	E73-E144
77	77	2118472-01	4164-2 MOS RAM 64K X1,200	-	-	72	E73-E144
78	78	9105740-55	WIRE(WRAP)30AWG UL1423	A/R	A/R	A/R	

79 NOTE: M8067-LA IS A PRIMARY VARIATION OF 256K X 18 BIT SYSTEM (NOT A MODULE TYPE).  
 80 NOTE: M8067-LC IS A MODULE TYPE USING FUJITSU 64K MOS DEVICES.  
 81 NOTE: M8067-LF IS A MODULE TYPE USING HITACHI 64K MOS DEVICES.  
 82 NOTE: M8067-LH IS A MODULE TYPE USING NEC 64K MOS DEVICES.

D	I	G	I	T	A	L	TITLE	Q-BUS MOS MEMORY	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8067-LA-DBP	A





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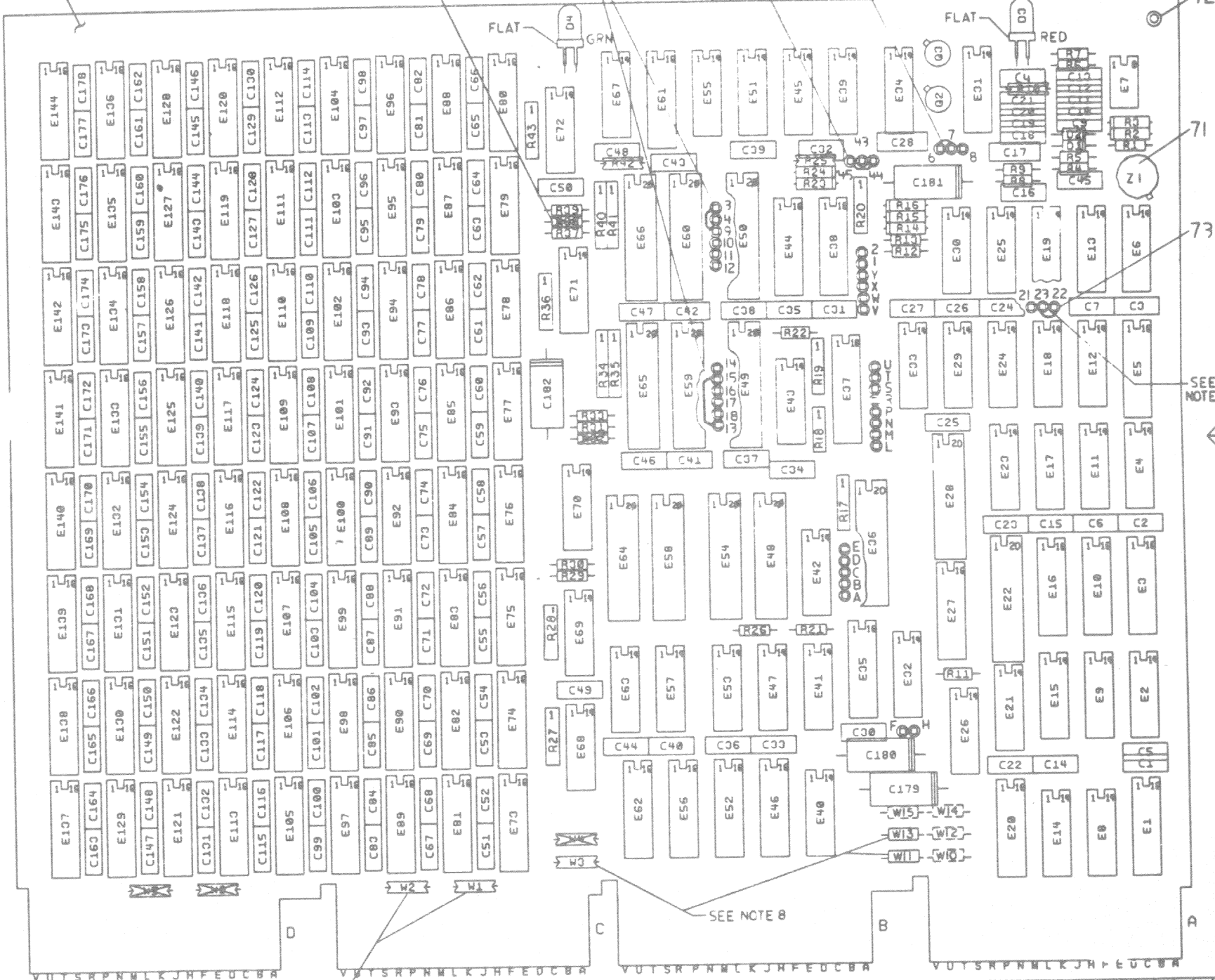
MODULE VARIATION M8067-FA

COMPONENT SIDE VIEW

NOTES:

- WIRE WRAP PIN
- R32 AND R38 ARE NOT INSTALLED IN THE FA VARIATION
- | TIME SELECTION                  | JUMPER CONFIG. | VARIATION  |
|---------------------------------|----------------|------------|
| MOS RAMS WITH 150NS ACCESS TIME | 43 TO 44       | FA, KA, LA |
| MOS RAMS WITH 200NS ACCESS TIME | 45 TO 44       | FA, KA, LA |
- | WRITE WRONG PARITY              | JUMPER CONFIG. | VARIATION  |
|---------------------------------|----------------|------------|
| ENABLING TO WRITE WRONG PARITY  | 6 TO 7         | FA, KA, LA |
| DISABLING TO WRITE WRONG PARITY | 8 TO 7         | FA, KA, LA |
- | BLOCK MODE SELECTION          | JUMPER CONFIG. | VARIATION  |
|-------------------------------|----------------|------------|
| ENABLING BLOCK MODE FUNCTION  | 22 TO 23       | FA, KA, LA |
| DISABLING BLOCK MODE FUNCTION | 21 TO 23       | FA, KA, LA |
- | 16K OR 64K MOS RAM CHIP SELECTION | JUMPER CONFIG.                          | VARIATION |
|-----------------------------------|---|-----------|
| FOR 16K MOS RAM CHIPS             | 3 TO 9 AND 13 TO 15                     | FA        |
| FOR 64K MOS RAM CHIPS             | 3 TO 9 13 TO 15<br>4 TO 10 AND 14 TO 16 | KA, LA    |
- | BUS GRANT CONTINUITY | JUMPER CONFIG. |     | VARIATION  |
|----------------------|----------------|-----|------------|
| FOR Q/Q OR Q22/Q22   | W1             | W2  | FA, KA, LA |
|                      | IN             | IN  |            |
| FOR Q/CD OR Q22/CD   | OUT            | OUT |            |
- | 16K MOS RAM MULTIPLE VOLTAGE DEVICES | JUMPER CONFIGURATION |     |     |     |     | VARIATION |
|--------------------------------------|----------------------|-----|-----|-----|-----|-----------|
| NON-BATTERY BACK UP                  | W3                   | W11 | W13 | W10 | W12 | FA        |
|                                      | IN                   | IN  | IN  | OUT | OUT |           |
| BATTERY BACK UP                      | IN                   | OUT | OUT | IN  | IN  |           |

9. M8067-FA (64K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 16K MULTIPLE-VOLTAGE MOS RAMS.  
 M8067-KA (128K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE-VOLTAGE MOS RAMS.  
 M8067-LA (256K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE VOLTAGE MOS RAMS.



NOTES:

STEP	Y AXIS	STEP	TIMES
1	1	1	1
2	2	2	2

CHANGE NO	REV

SIGNATURES		DATE
DRN.	<i>[Signature]</i>	
CHK		
MECH. ENG.		
PROJ. ENG.		
PROD.		
SCALE 2/1	SIZE CODE	NUMBER
SMT. 2 OF 6	D UA	M8067-0-0
NEXT HIGHER ASSY. B-DD-M8067-0	REV	A

digital

TITLE Q BUS MOS MEMORY

1 WO#





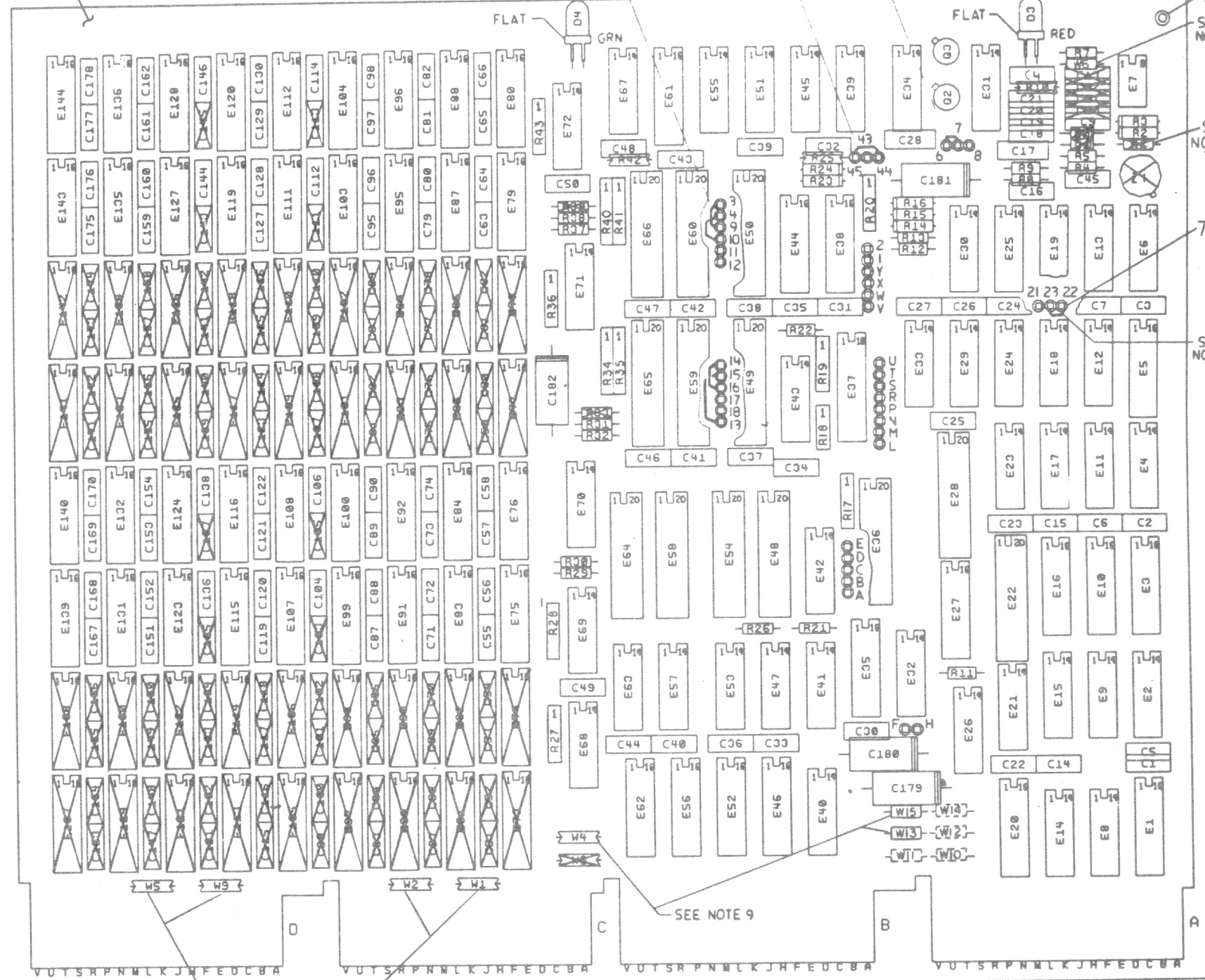
MODULE VARIATION M8067- KA

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- NOTES:
- WIRE WRAP PIN
  - R6 IS REPLACED WITH A JUMPER (W6) IN THE KA AND LA VARIATIONS.
  - THE FOLLOWING COMPONENTS ARE NOT INSTALLED IN THE KA VARIATION: R1, D1, D2, Z1, C10-C13, C18-C21, C51-C54, C59-C62, C67-C70, C75-C78, C83-C86, C91-C94, C99-C103, C105, C107-C111, C113, C115-C118, C123-C126, C131-C135, C137, C139-C143, C145, C147-C150, C155-C158, C163-C166, C171-C174. E73, E74, E77, E78, E81, E82, E85, E86, E89, E90, E93, E94, E97, E98, E101, E102, E105, E106, E109, E110, E113, E114, E117, E118, E121, E122, E125, E126, E129, E130, E133, E134, E137, E138, E141 AND E142. ALSO DO NOT INSTALL R33 & R39.

4. TIME SELECTION	JUMPER CONFIG.		VARIATION							
	MOS RAMS WITH 150NS ACCESS TIME	43 TO 44		FA, KA, LA						
	MOS RAMS WITH 200NS ACCESS TIME	45 TO 44	FA, KA, LA							
5. WRITE WRONG PARITY	JUMPER CONFIG.		VARIATION							
	ENABLING TO WRITE WRONG PARITY	6 TO 7		FA, KA, LA						
	DISABLING TO WRITE WRONG PARITY	8 TO 7		FA, KA, LA						
6. BLOCK MODE SELECTION	JUMPER CONFIG.		VARIATION							
	ENABLING BLOCK MODE FUNCTION	22 TO 23		FA, KA, LA						
	DISABLING BLOCK MODE FUNCTION	21 TO 21	FA, KA, LA							
7. 16K OR 64K MOS RAM CHIP SELECTION	JUMPER CONFIG.		VARIATION							
	FOR 16K MOS RAM CHIPS	3 TO 9 AND 13 TO 15		FA						
	FOR 64K MOS RAM CHIPS	3 TO 9 13 TO 15 4 TO 10 AND 14 TO 16		KA, LA						
8. BUS GRANT CONTINUITY	JUMPER CONFIG.		VARIATION							
	FOR Q/Q OR Q22/Q22	W1 IN W2 IN		FA, KA, LA						
	FOR Q/CD OR Q22/CD	OUT OUT								
	9. 64K MOS RAM SINGLE VOLTAGE DEVICES	JUMPER CONFIGURATION							VARIATION	
NON-BATTERY BACK UP		W4 IN	W5 IN	W9 IN	W13 IN	W15 IN	W12 OUT	W14 OUT		KA, LA
BATTERY BACK UP		IN	IN	IN	OUT	OUT	IN	IN		

10. M8067-FA (64K X 18BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 16K MULTIPLE-VOLTAGE MOS RAMS  
 M8067-KA (128K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE-VOLTAGE MOS RAMS  
 M8067-LA (256K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE VOLTAGE MOS RAMS



NOTES:

STEP	Y AXIS	STEP	TIMES
REPEAT	X AXIS	STEP	TIMES

CHECK CHANGE NO	REV

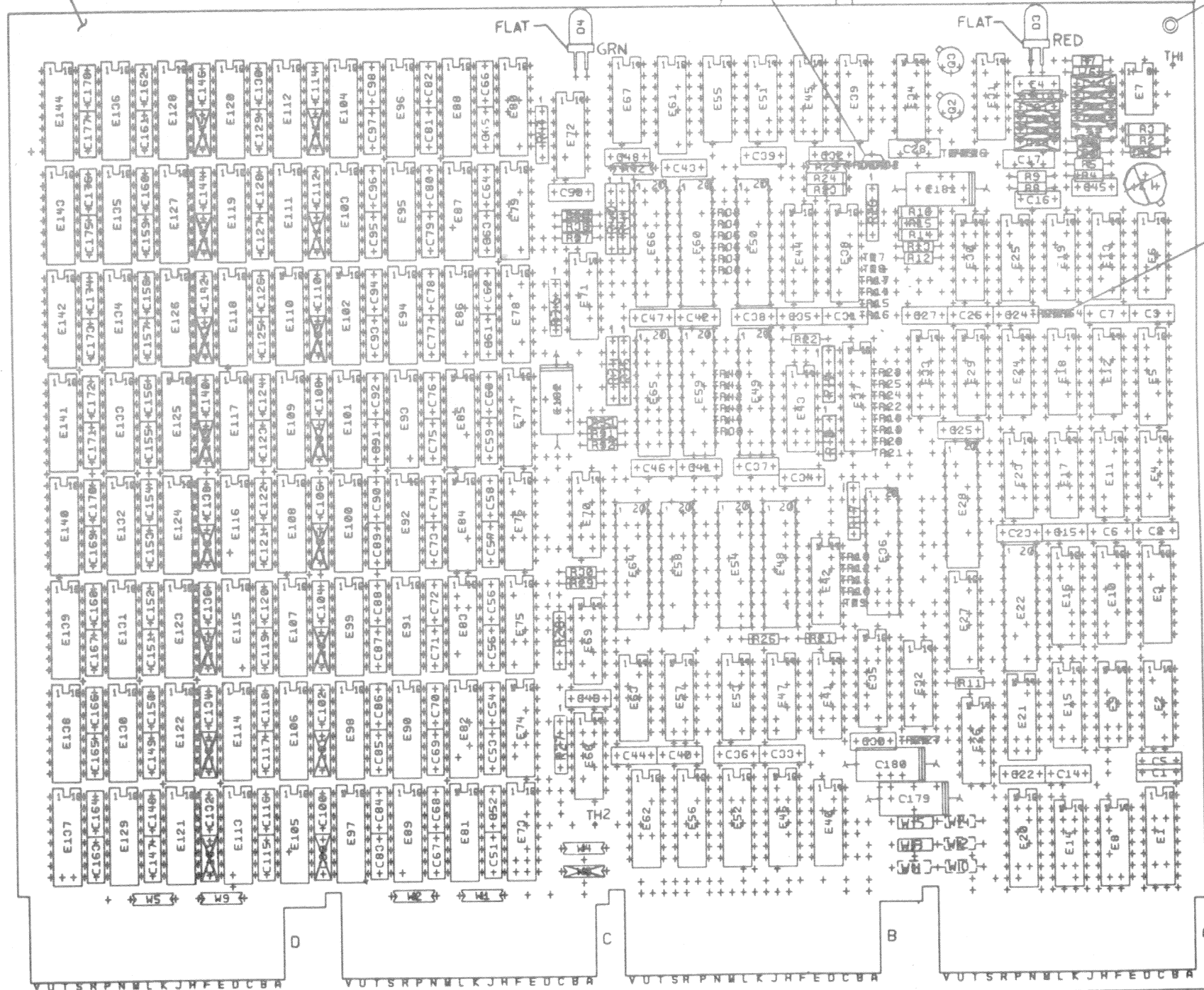
ETCH REV.	C
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SIGNATURES	DATE
DRN. <i>H. Carter</i>	
CHK'D	
MECH. ENG.	
PROJ. ENG.	
PROD.	
SCALE 2/1	
SMT. 4 OF 6	
NEXT HIGHER ASSY. B-DD-M8067-0	

digital	
TITLE Q BUS MOS MEMORY	
SIZE CODE	NUMBER
D UA M8067-0-0	REV A

MODULE VARIATION M8067-LA

COMPONENT SIDE VIEW



SEE SHEET 6 FOR NOTES THAT PERTAIN TO LA VARIATION ASSEMBLY.

NOTES: SEE SHEET 6 FOR NOTES THAT PERTAIN TO LA VARIATION ASSEMBLY.

STEP 6	Y AXIS	STEP	TIMES
REPEAT	X AXIS	STEP	TIMES

CHG	NO	REV

ETCH REV. C

SIGNATURES	DATE
DRN.	
CHK'D.	
MECH. ENG.	
PROJ. ENG.	
BRDD.	
SCALE 2/1	
SHT. 5 OF 6	
NEXT HIGHER ASSY. B-DD-M8067-0	

digital
TITLE Q BUS MOS MEMORY
SIZE CODE NUMBER REV
0 UA M8067-0-0 A



MODULE VARIATION M8067-LA

NOTES:

1. WIRE WRAP PIN
2. R6 IS REPLACED WITH A JUMPER (W6) IN KA AND LA VARIATIONS
3. THE FOLLOWING COMPONENTS ARE NOT IN THE LA VERSION:  
R1, D1, D2, Z1, C10-C13, C18-C21, C99, C101, C103, C105, C107, C109, C111, C113, C131, C133, C135, C137, C139, C141, C143, C145  
ALSO DO NOT INSTALL R33 & R39.

4. TIME SELECTION	JUMPER CONFIG.	VARIATION
MOS RAMS WITH 150NS ACCESS TIME	43 TO 44	FA, KA, LA
MOS RAMS WITH 200NS ACCESS TIME	45 TO 44	FA, KA, LA

5. WRITE WRONG PARITY	JUMPER CONFIG.	VARIATION
ENABLING TO WRITE WRONG PARITY	6 TO 7	FA, KA, LA
DISABLING TO WRITE WRONG PARITY	8 TO 7	FA, KA, LA

6. BLOCK MODE SELECTION	JUMPER CONFIG.	VARIATION
ENABLING BLOCK MODE FUNCTION	22 TO 23	FA, KA, LA
DISABLING BLOCK MODE FUNCTION	21 TO 23	FA, KA, LA

7. 16K OR 64K MOS RAM CHIP SELECTION	JUMPER CONFIG.	VARIATION
FOR 16K MOS RAM CHIPS	3 TO 9 AND 13 TO 15	FA
FOR 64K MOS RAM CHIPS	3 TO 9, 13 TO 15 4 TO 10 AND 14 TO 16	KA, LA

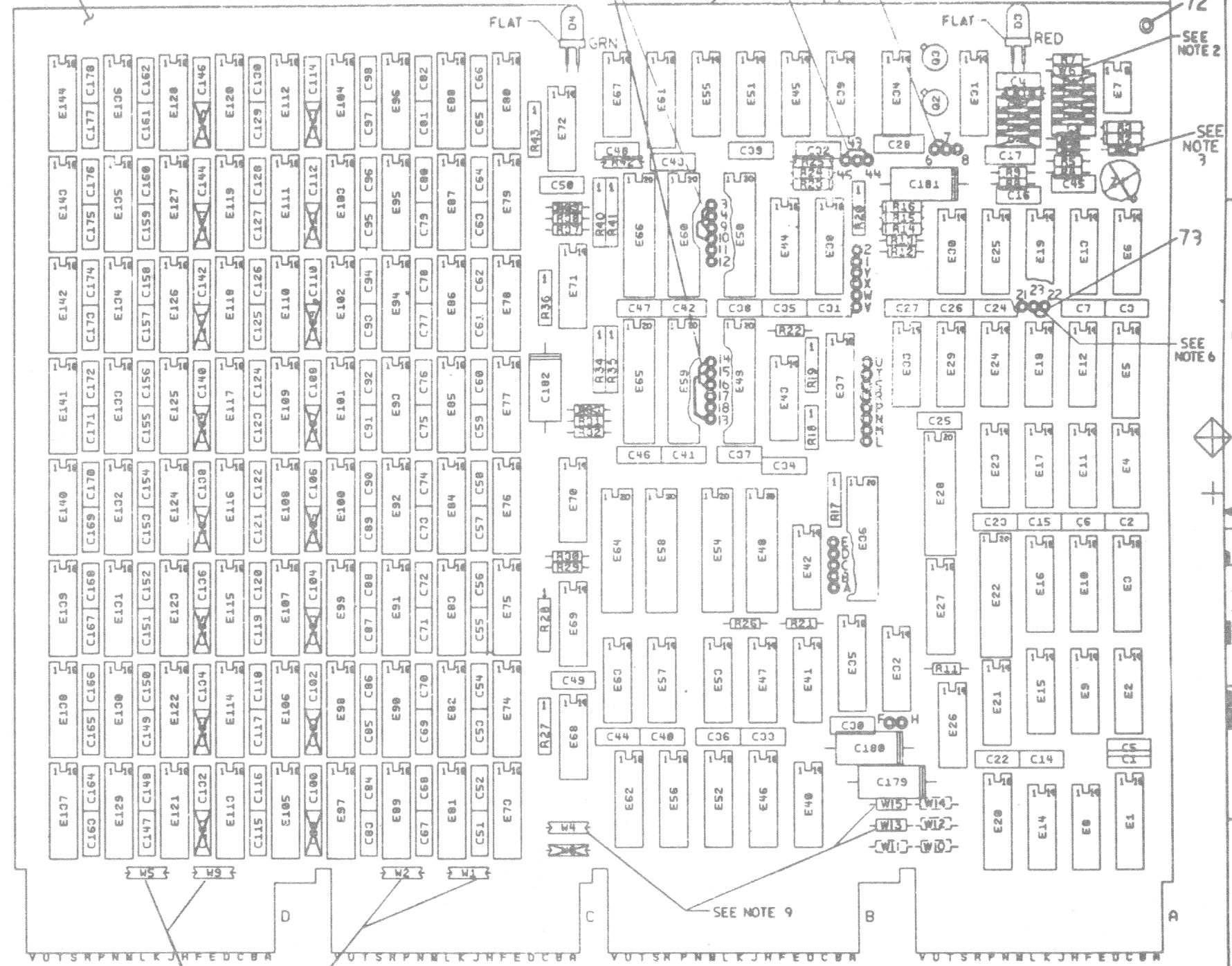
8. BUS GRANT CONTINUITY	JUMPER CONFIG.	VARIATION
FOR Q/Q OR Q22/Q22	W1 W2 IN IN	FA, KA, LA
FOR Q/CD OR Q22/CD	OUT OUT	

9. 64K MOS RAM SINGLE VOLTAGE DEVICES	JUMPER CONFIGURATION	VARIATION
NON-BATTERY BACK UP	W4 W5 W9 W13 W15 W12 W14 IN IN IN IN IN OUT OUT	KA, LA
BATTERY BACK UP	IN IN OUT OUT OUT IN IN	

10. M8067-FA (64K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 16K MULTIPLE-VOLTAGE MOS RAMS.  
M8067-KA (128K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE-VOLTAGE MOS RAMS.  
M8067-LA (256K X 18 BIT) IS A PRIMARY VARIATION (NOT A MODULE TYPE) USING 64K SINGLE VOLTAGE MOS RAMS.

NOTES:

STEP 6	→ Y AXIS	STEP	TIMES
REPORT	→ X AXIS	STEP	TIMES

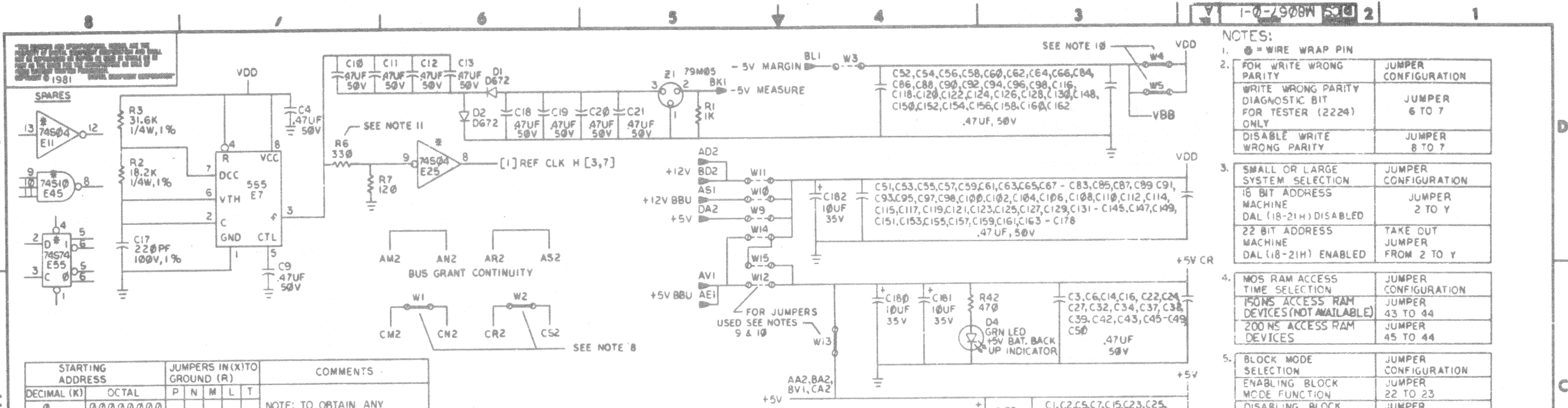


SEE NOTE 9

SEE NOTE 8

ETCH REV. (
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SIGNATURES	DATE	digital
DRM. <i>[Signature]</i>		
CHK. B.		TITLE Q BUS
MECH. ENG.		MOS MEMORY
PROJ. ENG.		SIZE CODE NUMBER
PROD.		D UA M8067-0-0
SCALE 2/1		REV. A
SMT. 6 OF 6		
NEXT NUMBER PEST. B-DD-M8067-0		



STARTING ADDRESS	JUMPERS IN (X) TO GROUND (R)						COMMENTS	
	DECIMAL (K)	OCTAL	P	N	M	L		T
0	00000000							NOTE: TO OBTAIN ANY STARTING ADDRESS ON 8KW BOUNDARIES FROM 0-248K, WIREWRAP DAISEY CHAIN FASHION FROM PIN 'R' WHICH IS GROUND TO EACH SUCCESSIVE PIN LABELED WITH 'X' FOR THAT ADDRESS.
8	00040000						X	
16	00100000						X	
24	00140000						X X	
32	00200000						X	
40	00240000						X X	
48	00300000						X X	
56	00340000						X X X	
64	00400000		X				X	
72	00440000		X				X	
80	00500000		X	X			X X	
88	00540000		X	X	X		X X	
96	00600000		X	X	X		X X X	
104	00640000		X	X	X		X	
112	00700000		X	X	X	X	X	
120	00740000		X	X	X	X	X	
128	01000000	X					X	
136	01040000	X					X	
144	01100000	X					X X	
156	01140000	X					X X	
160	01200000	X					X	
168	01240000	X	X				X	
176	01300000	X	X	X			X	
184	01340000	X	X	X	X		X	
192	01400000	X	X				X	
200	01440000	X	X				X	
208	01500000	X	X				X	
216	01540000	X	X	X			X X	
224	01600000	X	X	X			X	
232	01640000	X	X	X	X		X	
240	01700000	X	X	X	X		X	
248	01740000	X	X	X	X		X	

22 BIT CSR ADDRESS	18 BIT CSR ADDRESS	JUMPERS IN (X) TO GROUND (E)				COMMENTS
		D	C	B	A	
17772100	772100					NOTE: TO OBTAIN ANY ONE OF 16 CSR ADDRESSES, WIREWRAP DAISEY CHAIN FASHION FROM PIN 'E' WHICH IS GROUND TO EACH SUCCESSIVE PIN LABELED WITH 'X' FOR THAT ADDRESS.
17772102	102				X	
17772104	104				X X	
17772106	106				X X	
17772110	110			X	X	
17772112	112			X	X	
17772114	114			X	X	
17772116	116			X	X	
17772120	120	X				
17772122	122	X			X	
17772124	124	X			X X	
17772126	126	X			X X	
17772130	130	X	X			
17772132	132	X	X		X	
17772134	134	X	X		X	
17772136	772136	X	X	X	X	

PARTIAL STARTING ADDRESS RANGE	OCTAL	JUMPERS IN (X) TO GROUND (Y)			COMMENTS
		X	W	V	
000-248	00000000-0174 0000				NOTE: A PARTIAL STARTING ADDRESS ON INCREMENTAL 256K BOUNDARIES, FROM 0-248KW, MAY BE OBTAINED BY WIREWRAP DAISEY CHAIN FASHION FROM PIN 'Y' WHICH IS GROUND TO EACH SUCCESSIVE PIN LABELED 'X' FOR THAT ADDRESS.
256-504	02000000-0374 0000			X	
512-760	04000000-0574 0000			X	
768-1016	06000000-0774 0000			X X	
1024-1272	10000000-1174 0000			X	
1280-1528	12000000-1374 0000			X	
1536-1784	14000000-1574 0000			X X	
1792-2040	16000000-1774 0000			X X X	

IC TYPE	+5V GND	+12V -5V
1K X 4 PROM	16	9
256 X 4 PROM	16	8
555 (VDD IS +5V OR +12V)	4,8	1 4,8
8640	8	1
8641	16	8
74500, 74502, 74503, 74504, 74508, 74510, 74532, 74564, 74574, 74551, 745140, 74LS393, 74LS136, 74LS280	14	7
745112, 745133, 745139, 74LS191, 74LS175, 74LS298	16	8
74LS373	20	10
16K RAM (3 VOLTAGE)	9	16 8 1
64K RAM (1 VOLTAGE)	1,8	16

12. R1, R33, R39, D1, D2, Z1, C10 C11 - C13 AND C18 - C21 ARE DELETED IN KA AND LA VARIATION.  
 \*\* = W15 MAY BE REMOVED IF VOLTAGE VARIATION OF MOS RAM'S VIA DA2 (W9) IS DESIRED.  
 \* = INDICATES BATTERY BACK UP.

13. SIGNAL NAMES WILL BE REFERENCED AS FOLLOWS:  
 [X] SIGNAL NAME [Y/Z]  
 NUMBER OF CONNECTION POINTS ON DESTINATION SHEET, DESTINATION SHEET NUMBER, SOURCE SHEET NUMBER.

- NOTES:
- WIRE WRAP PIN
  - FOR WRITE WRONG PARITY JUMPER CONFIGURATION
  - WRITE WRONG PARITY DIAGNOSTIC BIT FOR TESTER (2224) ONLY JUMPER 6 TO 7
  - DISABLE WRITE WRONG PARITY JUMPER 8 TO 7
  - SMALL OR LARGE SYSTEM SELECTION JUMPER CONFIGURATION
  - 18 BIT ADDRESS MACHINE DAL (18-21H) DISABLED JUMPER 2 TO Y
  - 22 BIT ADDRESS MACHINE DAL (18-21H) ENABLED TAKE OUT JUMPER FROM 2 TO Y
  - MOS RAM ACCESS TIME SELECTION JUMPER CONFIGURATION
  - 150NS ACCESS RAM DEVICES (NOT AVAILABLE) JUMPER 43 TO 44
  - 200NS ACCESS RAM DEVICES JUMPER 45 TO 44
  - BLOCK MODE SELECTION JUMPER CONFIGURATION
  - ENABLING BLOCK MODE FUNCTION JUMPER 22 TO 23
  - DISABLING BLOCK MODE FUNCTION JUMPER 21 TO 23
  - TO FORCE STARTING ADDRESS TO 16K JUMPER CONFIGURATION
  - ENABLING STARTING ADDRESS TO 16K JUMPER F TO H
  - DISABLING STARTING ADDRESS TO 16K TAKE OUT JUMPER FROM F TO H
  - 16K OR 64K MOS RAM CHIP'S SELECTION JUMPER CONFIGURATION
  - FOR 16K MOS RAM CHIPS JUMPER 3 TO 9 AND 13 TO 15
  - FOR 64K MOS RAM CHIPS JUMPER 3 TO 9, 13 TO 15, 4 TO 10 & 14 TO 16
  - BUS GRANT CONTINUITY JUMPER CONFIGURATION
  - FOR Q/Q OR Q22/Q22 MACHINES W1 W2 IN IN
  - FOR Q/CD OR Q22/CD MACHINES OUT OUT
  - 16K MOS RAM MULTIPLE VOLTAGE DEVICES JUMPER CONFIGURATION
  - NON-BATTERY BACK UP W3 W11 W13 W10 W12 IN IN IN OUT OUT
  - BATTERY BACK UP IN OUT OUT IN IN
  - 64K MOS RAM SINGLE VOLTAGE DEVICES JUMPER CONFIGURATION
  - NON-BATTERY BACK UP W4 W5 W9 W13 W15 W12 W14 IN IN IN IN IN OUT OUT
  - BATTERY BACK UP IN IN OUT OUT OUT IN IN
  - RG IS REPLACED WITH A JUMPER (W6) IN KA AND LA VARIATION.

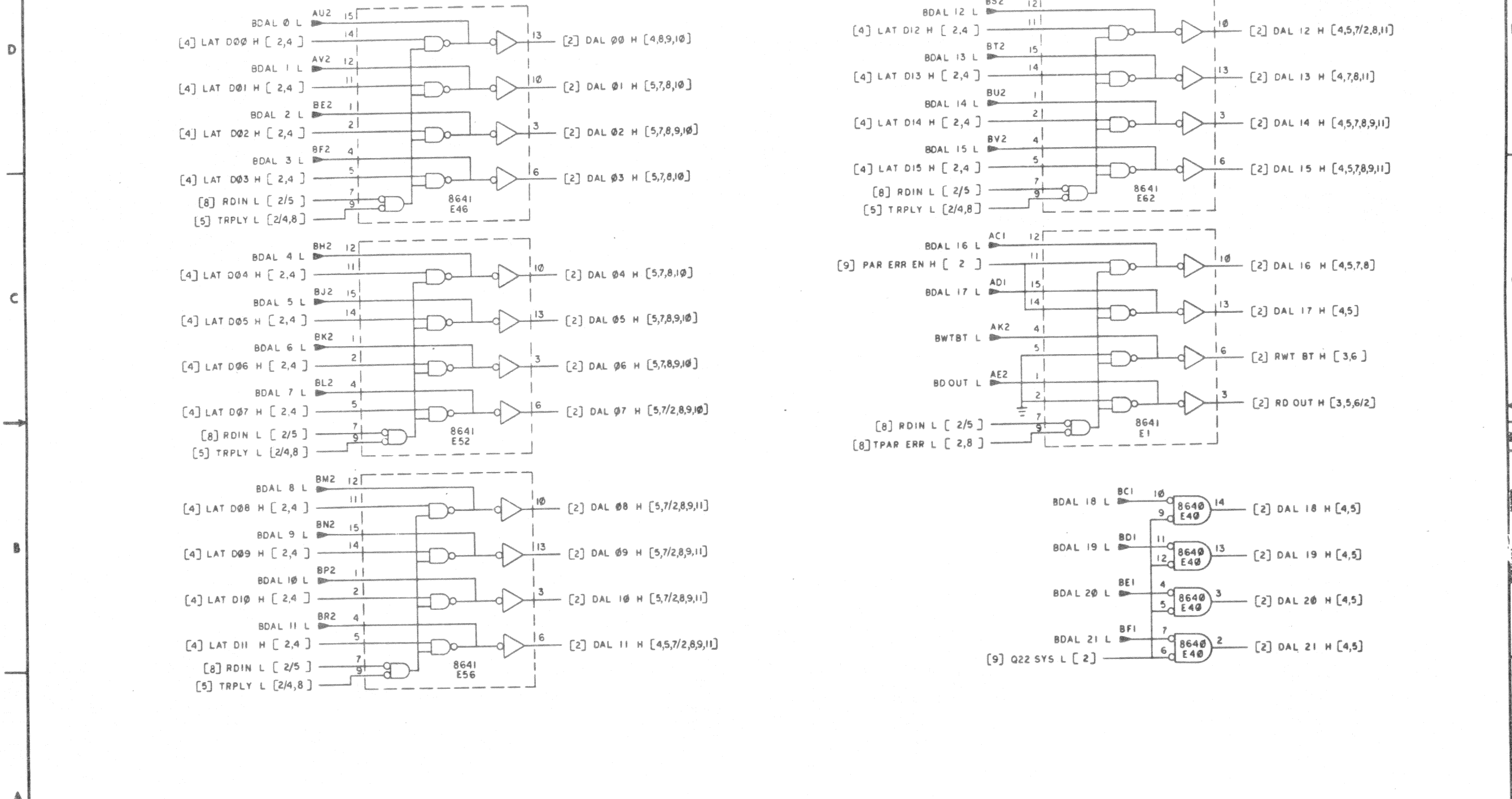
MSVII-P

Q-BUS MOS MEMORY

SCALE: D CS M8067-0-1 A

SHEET 1 OF 11

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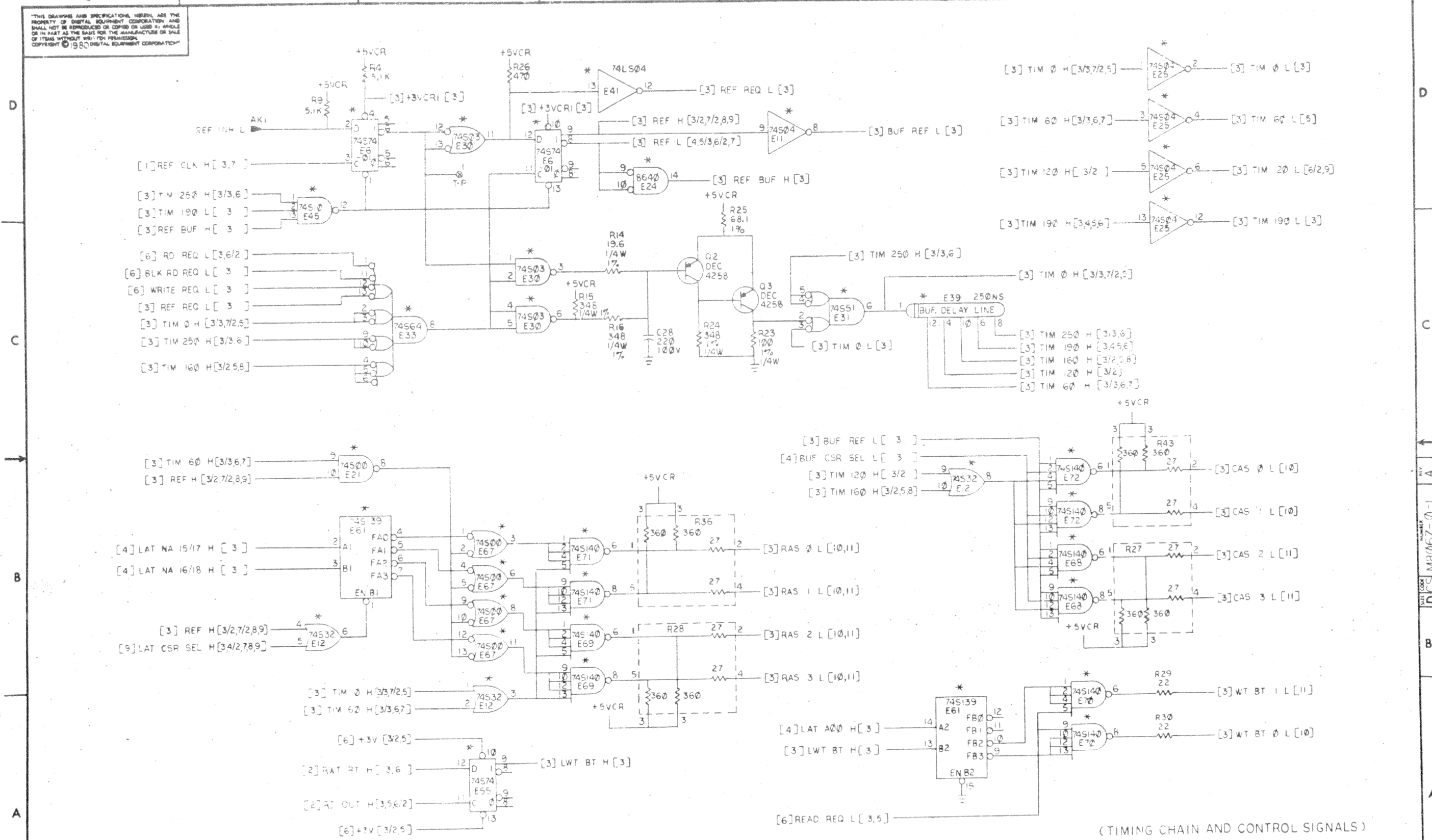


(DATA-ADDRESS DRIVERS AND RECEIVERS)

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	Q-BUS MOS MEMORY	DESIGN CODE	DCS M8067-0-1	NUMBER	2	REV.	A
SCALE	1:1	SHEET	2 OF 11	DIST.			

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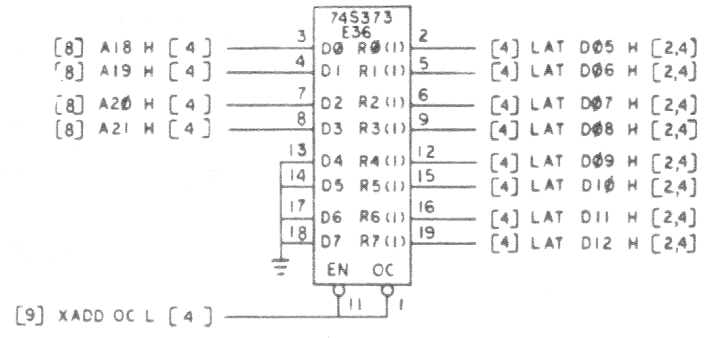
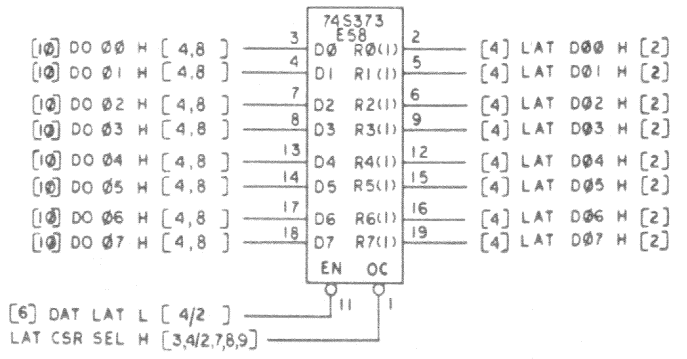
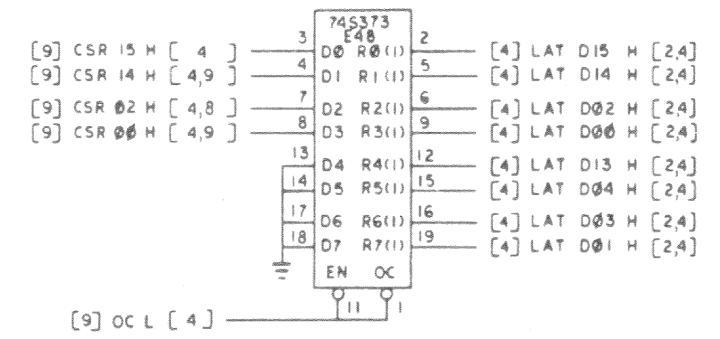
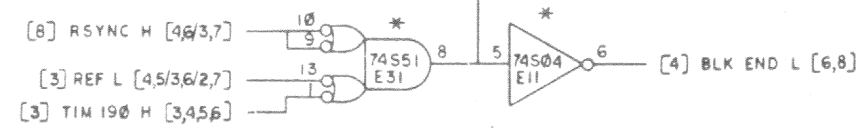
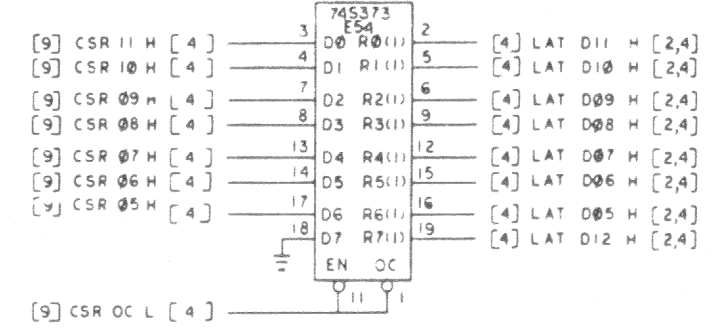
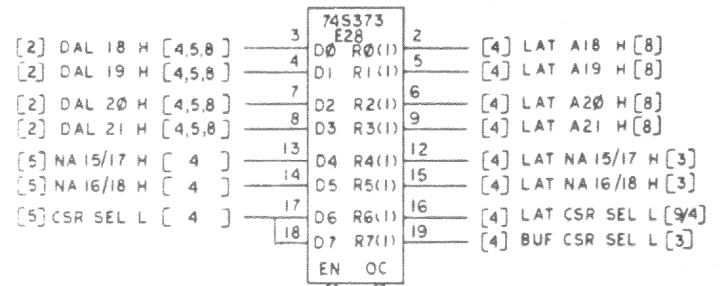
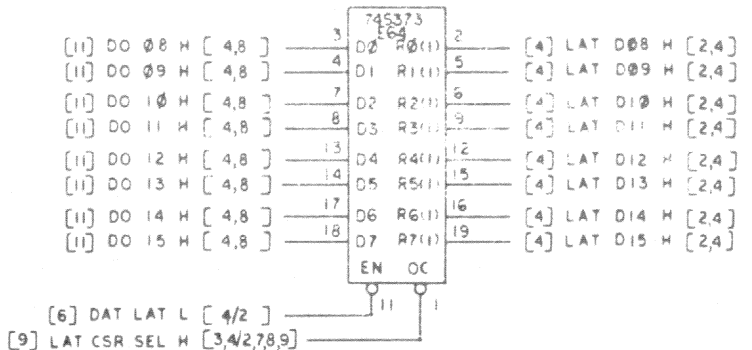
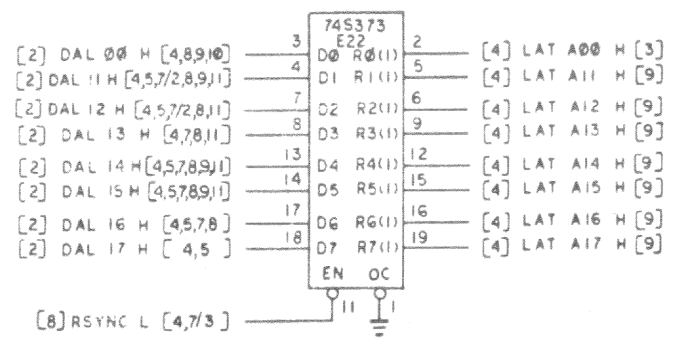


(TIMING CHAIN AND CONTROL SIGNALS)

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	Q-BUS MCS MEMORY	SIZE CODE	DCS	NUMBER	M8067-0-1	REV.	A
SCALE		SHEET	3 OF 11	DIST.			

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(DATA-ADDRESS AND CSR DATA-ADDRESS LATCHES)

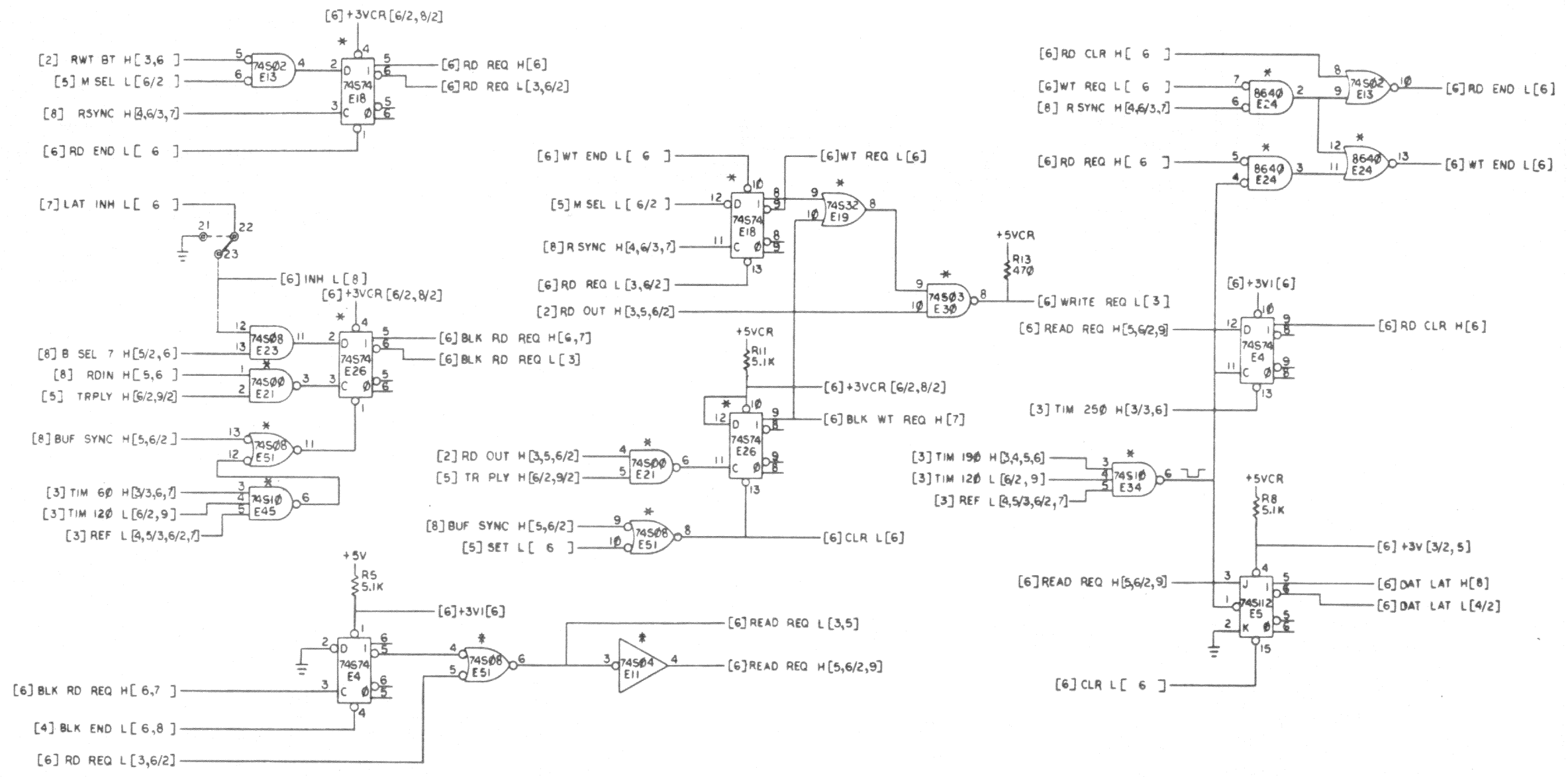
REVISIONS		
OK	CHANGE NO.	REV.

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SCALE	1:1	SHEET	4 OF 11	DET.			



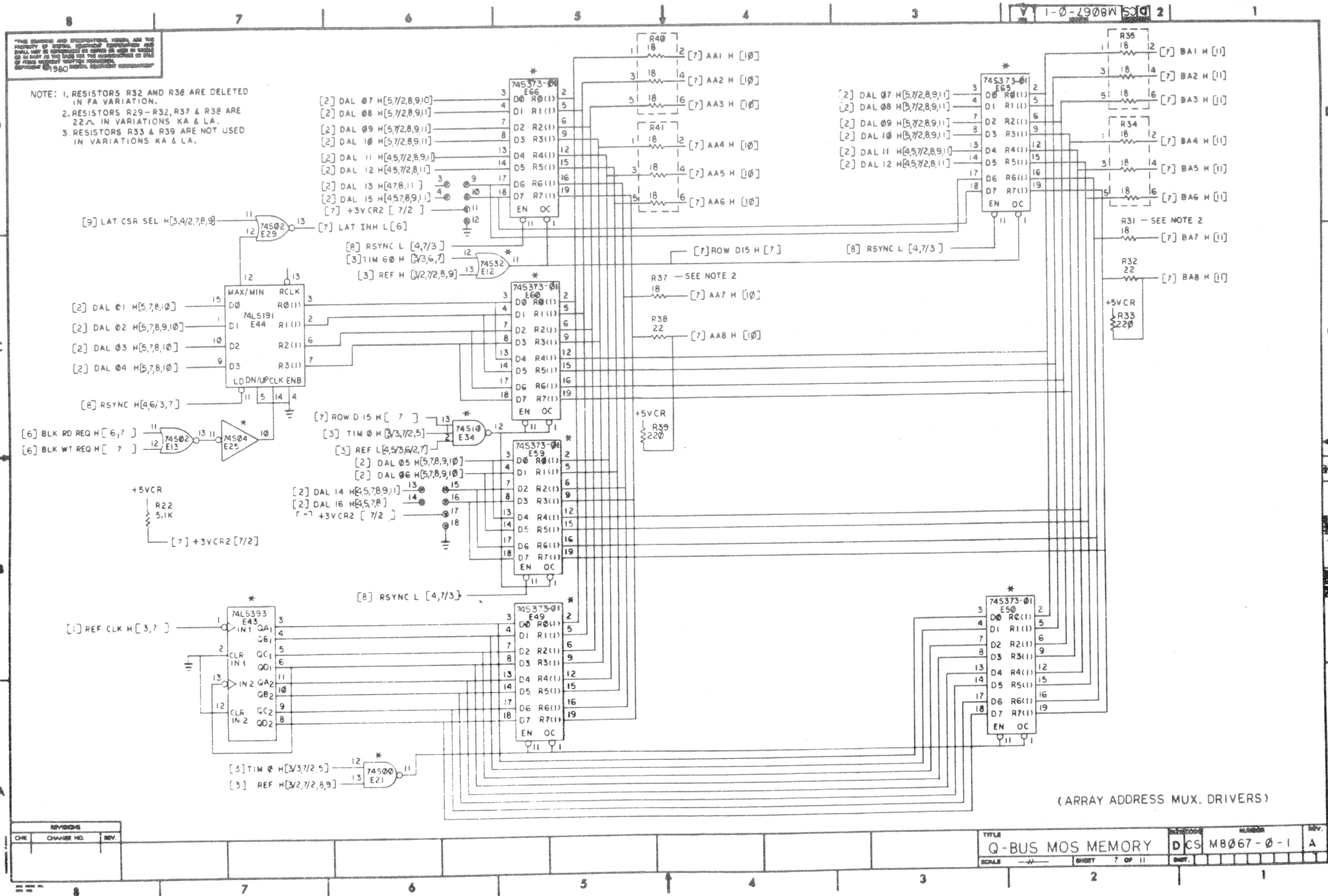


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(R/W AND BLOCK MODE CYCLE)

REVISIONS		
CHK	CHANGE NO.	REV.

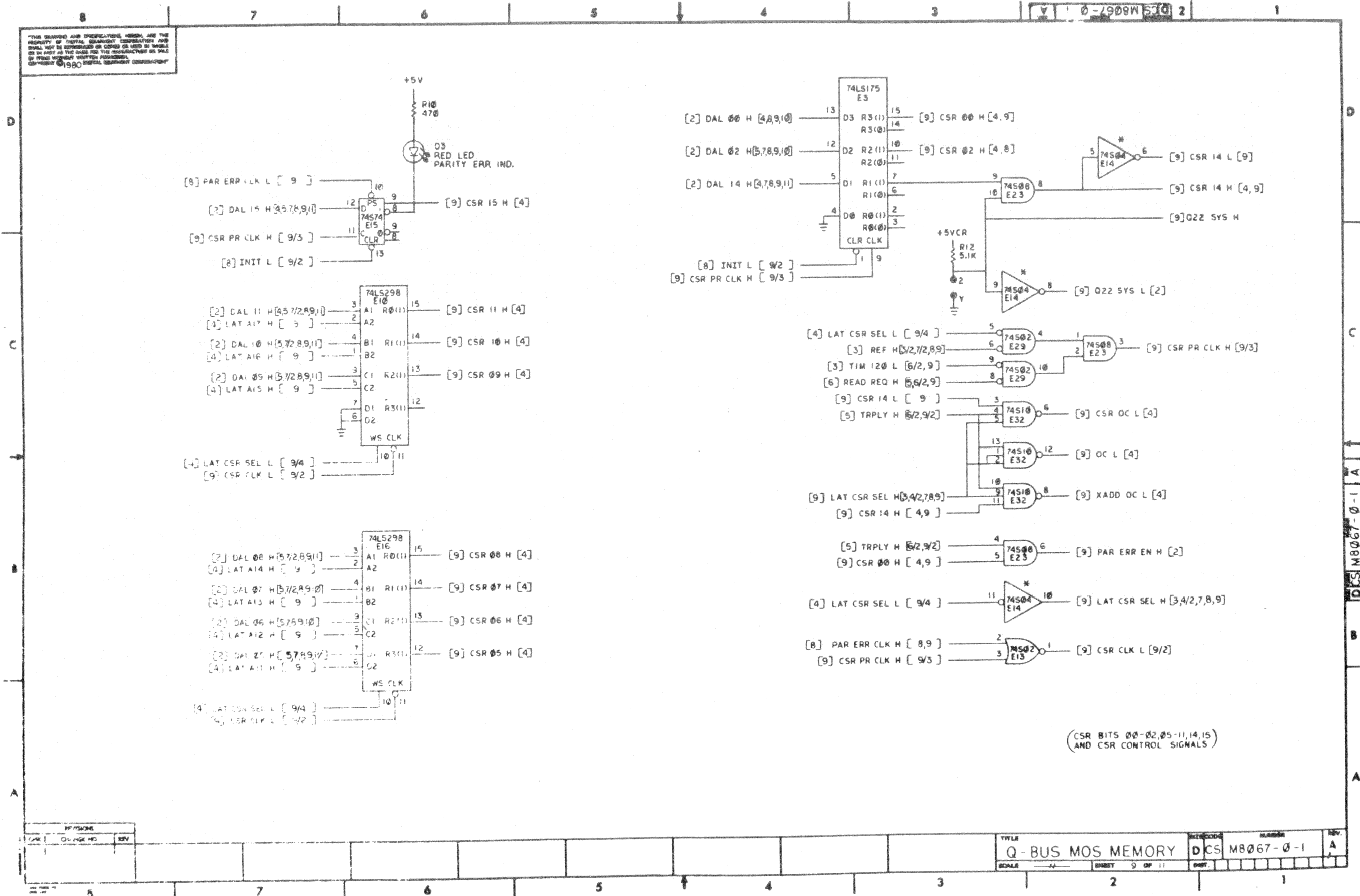


REVISIONS			TITLE		PART NUMBER		REV.
CHK.	CHANGE NO.	REV.	Q-BUS MOS MEMORY		DCS M8067-0-1		A
			SCALE		SHEET	7 OF 11	



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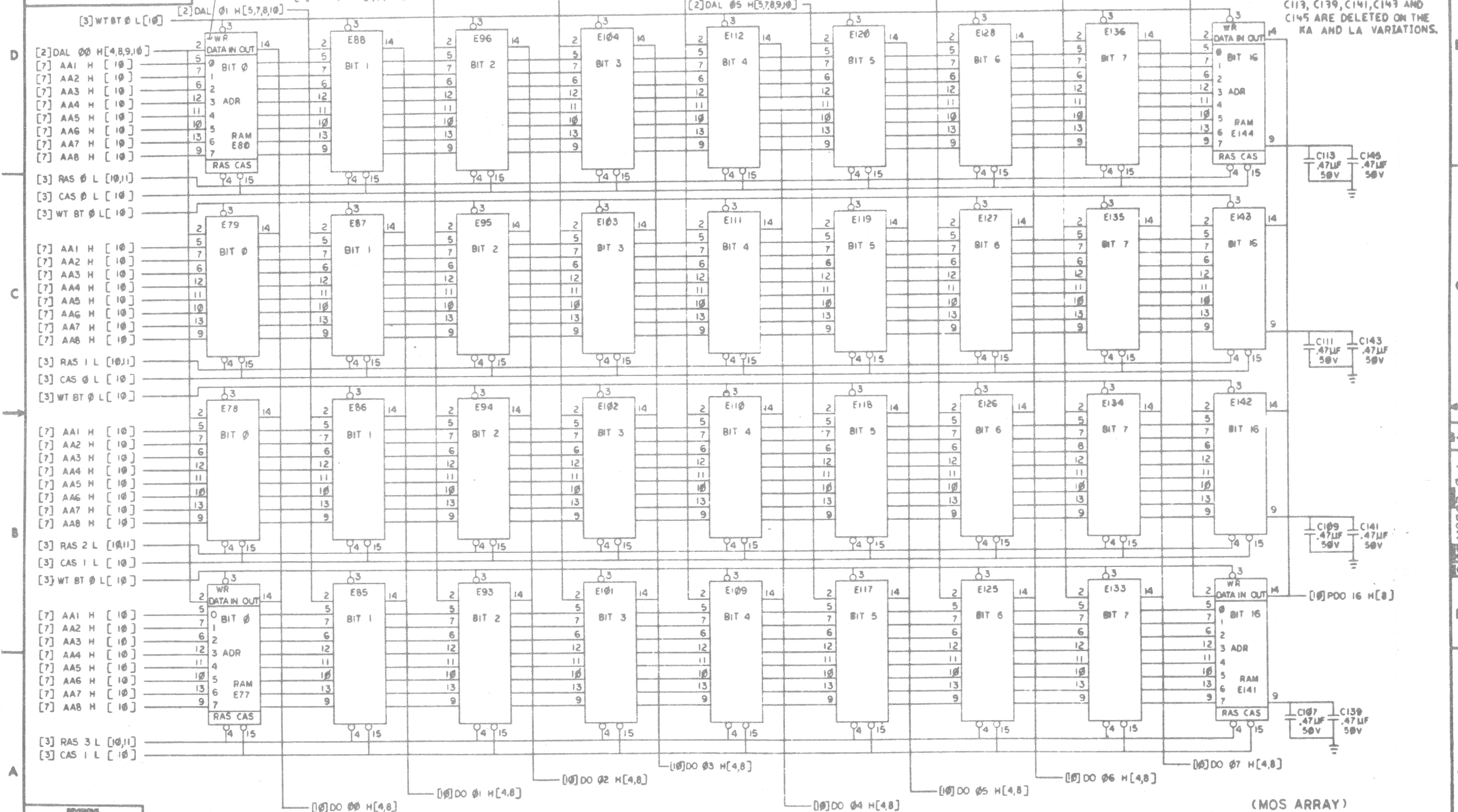
(CSR BITS 00-02,05-11,14,15)  
 AND CSR CONTROL SIGNALS)

REV	DATE	BY	CHKD	APPV	TITLE	PROJECT	NUMBER	REV
					Q-BUS MOS MEMORY	DCS	M8067-0-1	A
					SCALE	SHEET	9 OF 11	

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TYPICAL 36 PLACES

NOTES: 1. THE VOLTAGE FOR ALL MOS RAMS ARE BATTERY BACKUP.  
2. CAPACITORS C107, C109, C111, C113, C139, C141, C143 AND C145 ARE DELETED ON THE KA AND LA VARIATIONS.



(MOS ARRAY)

REV.	CHANGE NO.	REV.

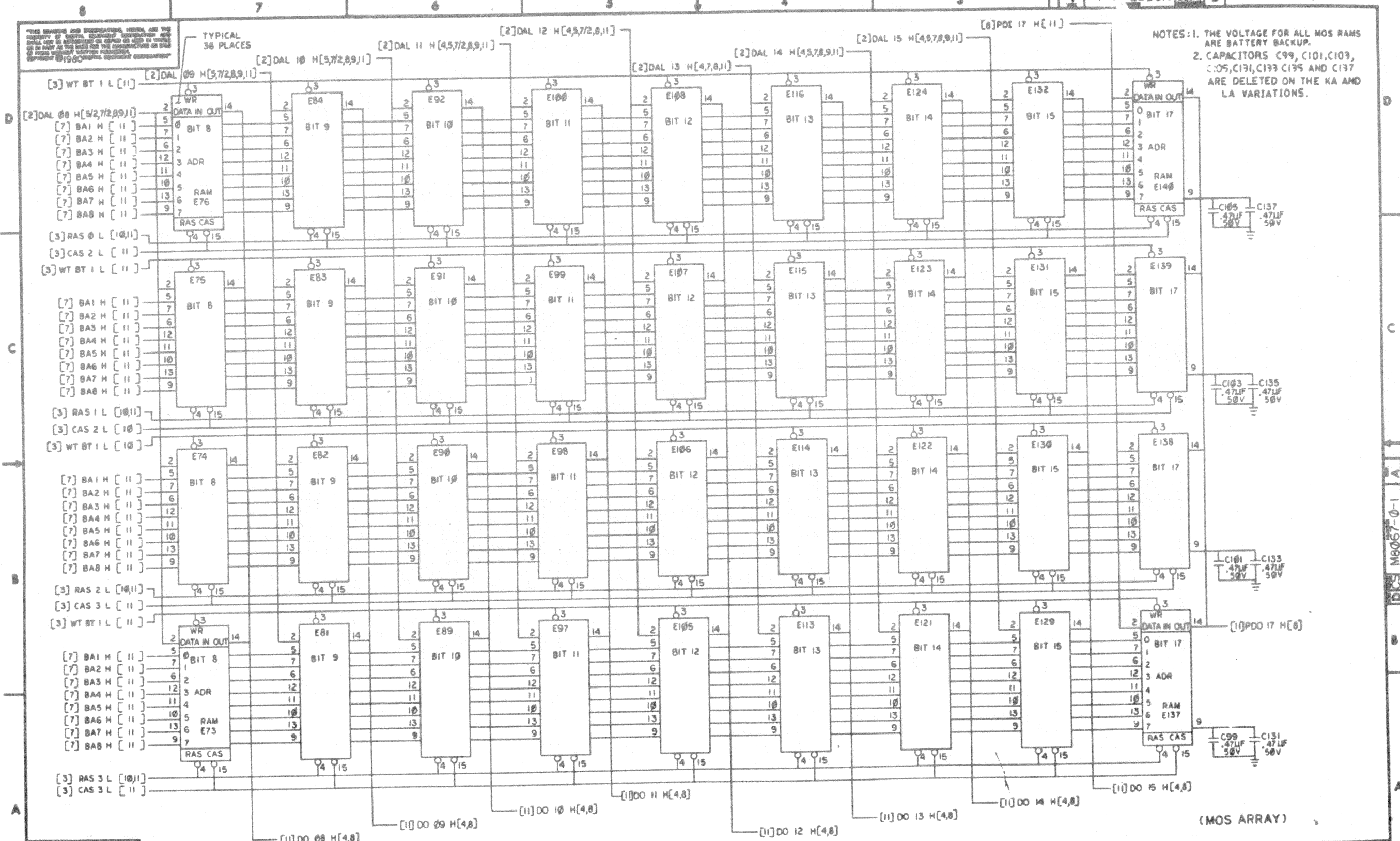
TITLE	Q-BUS MOS MEMORY	REV.	A
DATE		DESIGN NO.	DCS M8067-0-1
		OF	11



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TYPICAL 36 PLACES

NOTES: 1. THE VOLTAGE FOR ALL MOS RAMS ARE BATTERY BACKUP.  
2. CAPACITORS C99, C101, C103, C105, C131, C133, C135 AND C137 ARE DELETED ON THE KA AND LA VARIATIONS.



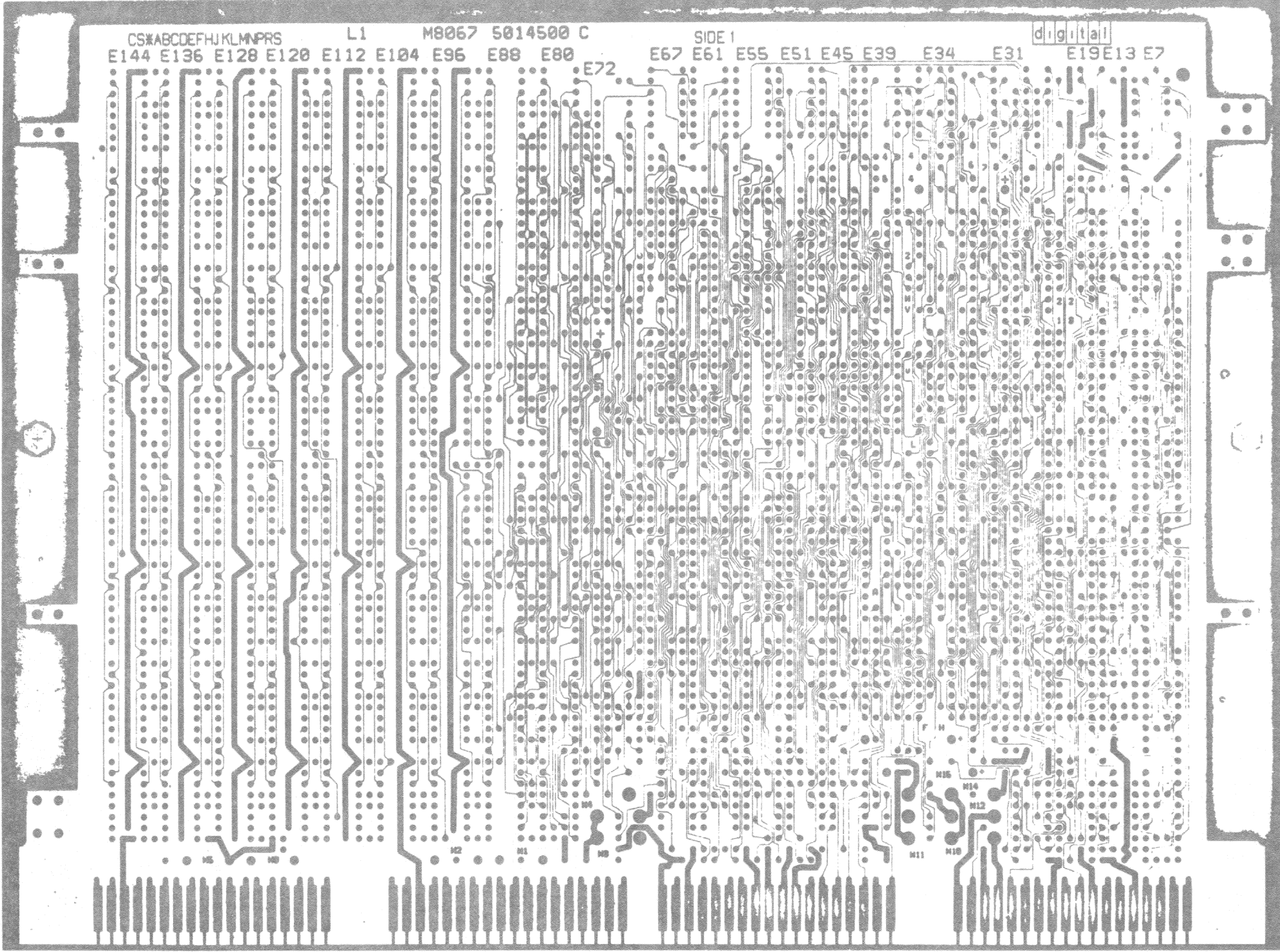
REVISIONS		
REV.	CHANGE NO.	REV.

TITLE	Q-BUS MOS MEMORY	DRAWN	D.C.S. M8067-0-1	REV.	A
SCALE		ORIENT			

LAYER 1

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CS\*ABCDEFGHIJKLMNPRS L1 M8067 5014500 C SIDE 1 digital  
E144 E136 E128 E120 E112 E104 E96 E88 E80 E72 E67 E61 E55 E51 E45 E39 E34 E31 E19E13 E7



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

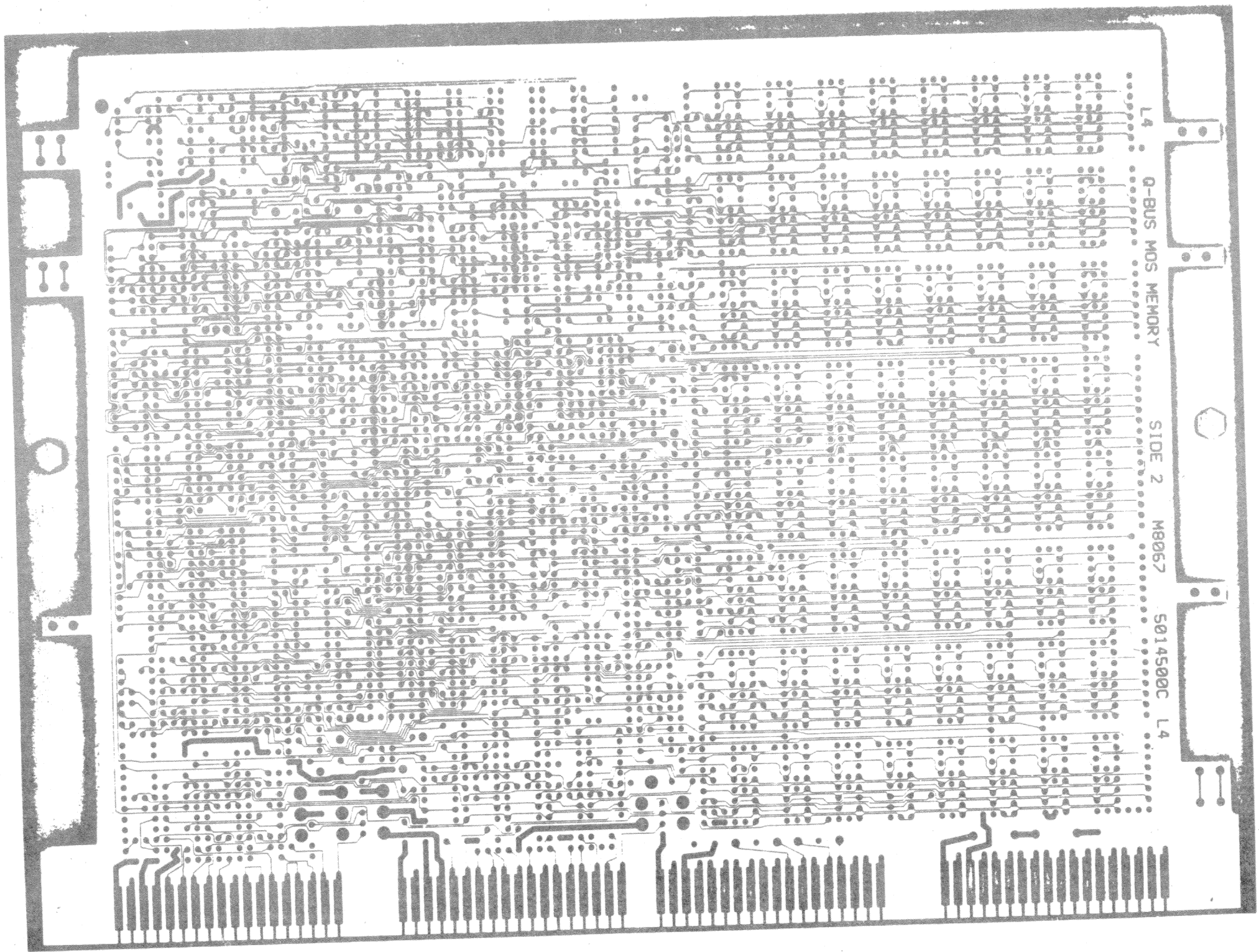
CHANGE NO	REV

SIGNATURES		DATE	digital
DRN. <i>U. Mangan</i>		25 Feb 64	
CHK. D. <i>P. Johnson</i>		25 Feb 64	
ENG. <i>A. Hines</i>		6-2-64	
PROJ. ENG. <i>R. D. ...</i>		6-2-64	
PROD. <i>Unit ...</i>		JUN 2 64	TITLE
ETCH CUT DRAWING			REV
SCALE 2:1	SIZE CODE	NUMBER	
SHT. 1 OF 2	0 EC	5014500-0-0	A
ETCH REV C FIRST USED ON M8067			



LAYER 4

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D  
C  
B  
A

D  
C  
B  
A

DEC 5014500-0-0 A

REV	DATE	BY	CHKD

TITLE	SCALE	SHEET	OF	SIZE	CODE	NUMBER	REV
ETCH CUT DRAWING	2:1	2	2	D	EC	5014500-0-0	A

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER FB	PER FC	VARIATION FH	REFERENCE DESIGNATOR
		D-CS-M8067-0-1		CIRCUIT SCHEMATIC	REF				
		D-UA-M8067-0-0		UNIT ASSY	REF				
		B-DD-M8067-0-0		DRAWING DIRECTORY	REF				
		D-MD-5014500-0-0		DRILL & ETCH DWG	REF				
		D-EC-5014500-0-0		ETCH CUT DWG	REF				
			5014500-00	ETCH BOARD	1				
			1012121-00	220.0 MHF 100V 1X200PPM MICA	2				C17, C28
			1017472-00	10 MFD 35V +50-10% AL EL	4				C179-C182
			1016681-00	.47 MFD 50V +80-20% CER	174	174	174		C1-C7, C9-C16, C18-C27, C30-C178
			1110334-00	LED 1MCD 10MA PIV=3	1				D3
			1114384-00	LED 105MW 35MA GREEN	1				D4
			1105275-00	D 672 TR= 15NS PIV= 60V SI	2				D1, D2
			1213113-01	HANDLE MODULE	7				
			1312930-00	5.10 K	1				R4, R5, R8, R9, R11, R12, R22
			1303110-00	19.60 .25W W 5.0 %	1				R14
			1304858-00	348.0 .25W W 1.0 % RN55D-F10	3				R15, R16, R24
			1303226-00	68.10 .25W W 1.0 % RN55D-F10	1				R25
			1302858-00	100.0 .25W W 1.0 % RN55D-F10	1				R23
			1300365-00	1.0 K .25W W 5.0 %	2				R1, R21
			1305419-00	31.60 K .25W W 1.0 % RN55D-F10	1				R3
			1309412-00	18.20 K .25W W 1.0 % RN55D-F10	1				R2
			1300245-00	330.0 .25W W 5.0 %	1				R6
			1300247-00	120.0 .25W W 5.0 %	1				R7
			1300246-00	470.0 .25W W 5.0 %	4				R10, R13, R26, R42
			1316187-00	R NETWORK 3-18 5.0 % 6PIN	4				R34, R35, R40, R41
			1302324-00	18.0 .25W W 5.0 %	2				R31, R37
			1315339-00	R NETWORK 4-5K 5.0 % 5PIN	3				R17, R19, R20
			1314636-00	R NETWORK 2-5K 5.0 % 4PIN	1				R18
			1317989-00	R NETWORK 2-27 3-360 5PIN	4				R27, R28, R36, R43
			1301969-00	22.0 .25W W 5.0 %	2				R29, R30

REVISION HISTORY		BASIC PART NO: M8067		DRN: R.GIVEN	DATE: 11-JUN-80	D I G I T A L	
ENG	ECO NUMBER	REV	SECTION A OF A	CHK'D: P.BOSSMAN	DATE: 15-OCT-80	TITLE PARTS LIST	
	INITIAL	A	SECTION VARIATION INDEX	DES.ENG: R.GIVEN	DATE: 11-JUN-80	DOCUMENT NUMBER	
			(A) FB, FC, FH	RESP.ENG.: R.GIVEN	DATE: 15-OCT-80	SIZE: CODE: NUMBER	REV
			(B)	MFG.ENG.: AMRIT BADWAIK	DATE: 15-OCT-80	K PL M8067-FA-DBP	A
			(C)	ASSEMBLY NUMBER: D-UA-M8067-0-0	TOP DOCUMENT NUMBER: B-DD-M8067-0	FILE NAME: Z1140A.PLS	EDIT # 21
			(D)	"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1981. DIGITAL EQUIPMENT CORPORATION"			
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LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	VARIATION	REFERENCE DESIGNATOR
					FB	FC	PH	
66				DEC				E52, E56, E62
67				74181				E52, E56, E62
68				74181				E52, E56, E62
69				74181				E52, E56, E62
70				74181				E52, E56, E62
71				74181				E52, E56, E62
72				74181				E52, E56, E62
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231				74181				E52, E56, E62

AUTOMATED BY PRTLST.3P(44)

PARTS LIST

SHEET A3 OF A3

LINE ITEM DOCUMENT NUMBER

PART NUMBER

DESCRIPTION

QTY PER VARIATION  
FB FC FH

REFERENCE DESIGNATOR

77 NOTE: 1. M8067-FA IS A PRIMARY VARIATION OF 64K X 18 BIT SYSTEM (NOT A MODULE TYPE).  
78 NOTE: M8067-FB IS A MODULE TYPE USING MOSTEK 16K MOS DEVICES.  
79 NOTE: M8067-FC IS A MODULE TYPE USING FUJITSU 16K MOS DEVICES.  
80 NOTE: M8067-FH IS A MODULE TYPE USING NEC 16K MOS DEVICES.

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							Q-BUS MOS MEMORY		K	PL	M8067-FA-DBP	A







LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER	VARIATION	REFERENCE DESIGNATOR
					KC	KF	KH	
25	25		1314637-00	R NETWORK 3-22 1.0 % 6PIN	4	4	4	R34,R35,R40,R41
26	26		1302124-00	*** THIS ITEM IS NOT USED ***	-	-	-	
27	27		1315339-00	R NETWORK 4-5K 5.0 % 5PIN	3	3	3	R17,R19,R20
28	28		1314636-00	R NETWORK 2-5K 5.0 % 4PIN	1	1	1	R18
29	29		1317989-00	R NETWORK 2-27 3-360 5PIN	4	4	4	R27,R28,R36,R43
30	30		1301969-00	22.0 .25 W 5.0 % CC	6	6	6	R29-R32,R37,R38
31	31		1300271-00	*** THIS ITEM IS NOT USED ***	-	-	-	
32	32		1505321-00	DEC4258 PNP 200MW SI 12 30 M	2	2	2	Q2,Q3
33	33		1617533-00	DELAY= 250NS, STAPS 14PIN DIP	1	1	1	E39
34	34		1911579-00	8641 TRANSCEIVER BUS, QUA	6	6	6	E1,E20,E46,E52,E56,E62
35	35		1911469-00	DEC 8640 RECEIVER, BUS, QUAD, U	3	3	3	E8,E24,E40
36	36		1911944-00	555CN TIMER, FUNCT. BLOCK	1	1	1	E7
37	37		1910532-00	74500 NAND GATE-QUAD 2IN	2	2	2	E21,E67
38	38		1912388-00	74502 NOR GATE-QUAD 2IN, PO	2	2	2	E13,E29
39	39		1910533-00	74503 NAND GATE-QUAD 2IN, 0	1	1	1	E30
40	40		1910534-00	74504 INVERTER GATE-HEX II	3	3	3	E11,E14,E25
41	41		1912803-00	74LS04 INVERTER GATE, HEX	1	1	1	E41
42	42		1912389-00	74508 AND GATE-QUAD 2IN, PO	2	2	2	E23,E51
43	43		1910536-00	74510 NAND GATE-TRIPLE 3IN	3	3	3	E32,E34,E45
44	44		1913340-00	74532 OR GATE-QUAD 2IN	2	2	2	E12,E19
45	45		1911712-00	74551 AND-OR GATE-INVERT D	1	1	1	E31
46	46		1910542-00	74564 A-0-I GATE 4-2-3-2	4	4	4	E2,E9,E17,E33
47	47		1910544-00	74574 FF-D DUAL, EDGE TRIGG	5	5	5	E4,E15,E18,E26,E55
48	48		1910544-01	74574-60GG-D DUAL, EDGE TRIG	1	1	1	E5
49	49		1910545-00	745112 FF-JK DUAL, EDGE TRIG	1	1	1	E5
50	50		1911983-00	745133 NAND GATE-POSITIVE 1	1	1	1	E35
51	51		1912840-00	LS136 X-OR GATE-QUAD 2IN, 0	1	1	1	E42
52	52		1911676-00	745139 DECODER-DUAL TWO-INP	1	1	1	E61
53	53		1910546-00	745140 NAND GATE-DUAL 4INPU	5	5	5	E68-E72
54	54		1912853-00	LS175 FF-D QUAD	2	2	2	E3,E27
55	55		1913939-00	LS191 COUNTER, SYNCHR. UP/D	1	1	1	E44
56	56		1911573-00	745280 PARITY GEN/CHKR, 9BIT	4	4	4	E47,E53,E57,E63
57	57		1912867-00	LS298 MUX 1 OF 4, 2IN W/S	2	2	2	E10,E16
58	58		1913670-00	745373 LATCH 8BIT TRASP TR	7	7	7	E22,E28,E36,E48,E54,E58,E64
59	59		1913670-01	DM 745373M LATCH 8BIT TRANS	6	6	6	E59,E60,E65,E66,E49,E50
60	60		1914451-00	74LS393 COUNTER, BINARY, 4BIT	1	1	1	E43
61	61		1912541-00	*** THIS ITEM IS NOT USED ***	-	-	-	
62	62		2113825-01	*** THIS ITEM IS NOT USED ***	-	-	-	
63	63		2114408-01	*** THIS ITEM IS NOT USED ***	-	-	-	
64	64		2114567-01	*** THIS ITEM IS NOT USED ***	-	-	-	
65	65		2115724-01	*** THIS ITEM IS NOT USED ***	-	-	-	
66	66		23578A2-00	A2-05	1	1	1	E38
67	67		23771F1-00	*** THIS ITEM IS NOT USED ***	-	-	-	
68	68		23816F1-00	F1-01	1	1	1	E37
69	69		23794F1-00	*** THIS ITEM IS NOT USED ***	-	-	-	
70	70		9009185-00	JUMPER, WIRE, INSULATED, BLACK B	8	8	8	W1,W2,W4-W6,W9,W13,W15
71	71	USED UNDER Z1	9007201-00	*** THIS ITEM IS NOT USED ***	-	-	-	
72	72		9000024-01	EYELET, ROLL FLANGE .1210DX .192	8	8	8	

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							Q-BUS MOS MEMORY		K	PL	M8067-KA-DBP	A

AUTOMATED BY PRTLST.3P(44)

PARTS LIST

SHEET A3 OF A3

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION			REFERENCE DESIGNATOR	
				KC	KF	KH		
73	73	9009149-01	PIN, STAKING, P.C. BOARD .025 SQU	43	43	43	F75, F76, F79, F80, F83, F84, F87, F88, F91, F92, F95, F96, F99, F100, F103, F104, F107, F108, F111, F112, F115, F116, F119, F120, F123, F124, F127, F128, F131, F132, F135, F136, F139, F140, F143, F144	
74	74	2118467-01	8264-20 RAM 64K X1,200NS 1	36	-	-		
								CONT
								CONT
75	75	2118470-01	4864-1 MOS RAM 64K X1,200	-	36	-	F75, F76, F79, F80, F83, F84, F87, F88, F91, F92, F95, F96, F99, F100, F103, F104, F107, F108, F111, F112, F115, F116, F119, F120, F123, F124, F127, F128, F131, F132, F135, F136, F139, F140, F143, F144	
								CONT
								CONT
								CONT
76	76	2118472-01	4164-2 MOS RAM 64K X1,200	-	-	36	F75, F76, F79, F80, F83, F84, F87, F88, F91, F92, F95, F96, F99, F100, F103, F104, F107, F108, F111, F112, F115, F116, F119, F120, F123, F124, F127, F128, F131, F132, F135, F136, F139, F140, F143, F144	
								CONT
								CONT
								CONT
77	77	9105740-55	WIRE(WRAP)30AWG	UL1423	A/R	A/R	A/R	

78 NOTE: M8067-KA IS A PRIMARY VARIATION OF 128K X 18 BIT SYSTEM (NOT A MODULE TYPE).  
 79 NOTE: M8067-KC IS A MODULE TYPE USING FUJITSU 64K MOS DEVICES.  
 80 NOTE: M8067-KF IS A MODULE TYPE USING HITACHI 64K MOS DEVICES.  
 81 NOTE: M8067-KH IS A MODULE TYPE USING NEC 64K MOS DEVICES.

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							Q-BUS MOS MEMORY		K	PL	M8067-KA-DBP	A

