

NOTES (UNLESS OTHERWISE SPECIFIED):

QTY	MAD PART NO.	CODE IDENT	MFG PART NO./ MIL SPEC	NOMENCLATURE OR DESCRIPTION	REFERENCE DESIGNATION	ITEM NO.
PARTS LIST						
MATERIAL						
FINISH						
APPLICATION						
THIRD ANGLE PROJECTION						
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND ARE IN ACCORDANCE WITH ANSI Y14.5						
TOLERANCES DEC .1 DEC .05 DEC .025 DEC .015 DEC .01 FRACTIONS ANGLES 1/2						
MAD COMPUTER INC. SAN JOSE, CA.		SCHEMATIC DIAGRAM SAMPO CRT MON-324				
SIZE: D	FORM NO: 310019	DWG NO:	REV: B	SHEET 1 OF 1		

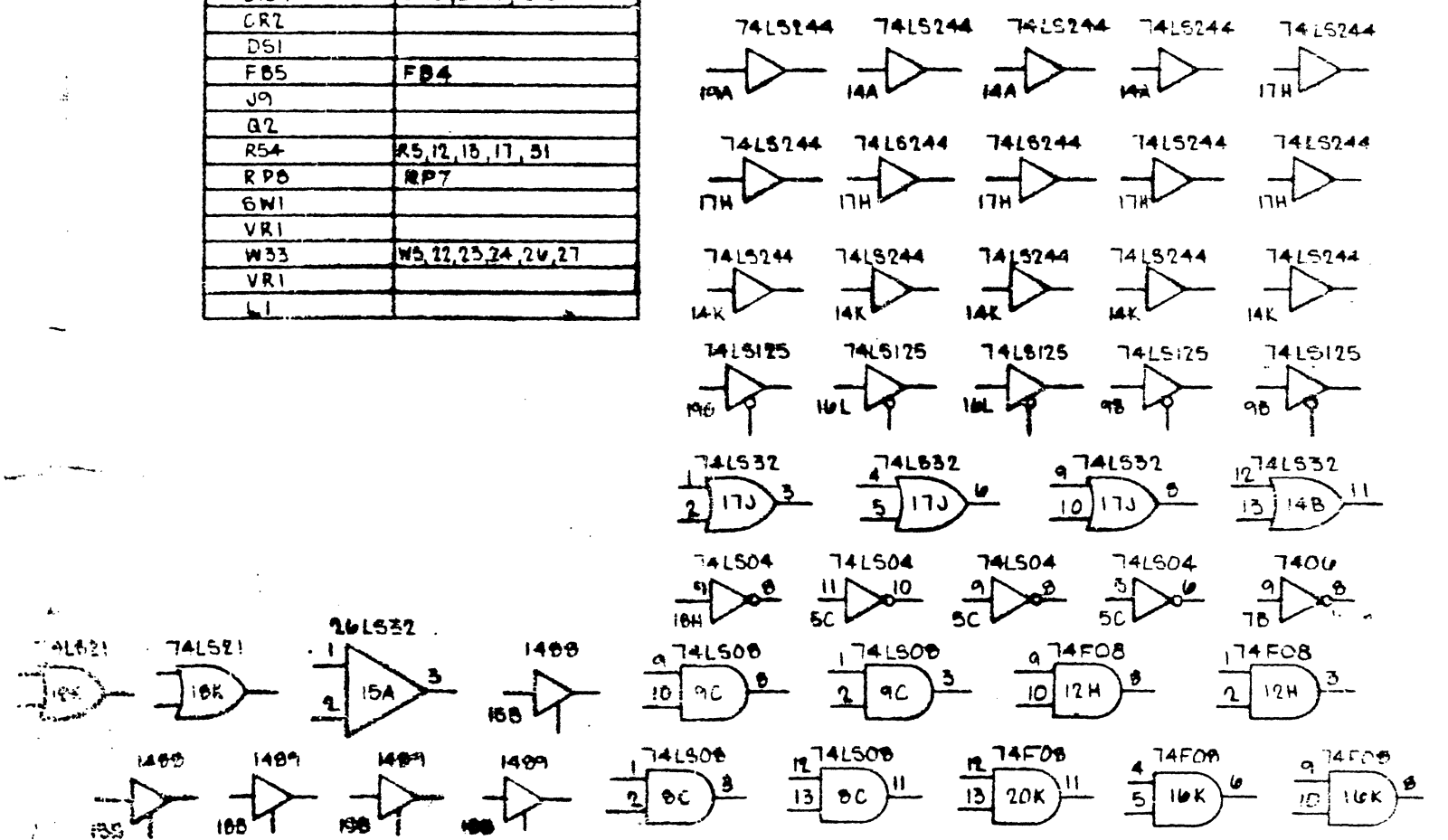
REV	DESCRIPTION	DATE	APPROVED
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80186 CPU. REV D

REFERENCE DESIGNATION	DEVICE TYPE	VCC	GND	-5VDC	+12VDC	-12VDC
10K, 20K, 12H	I.C. 74F00	14	7			
15L, 17L	I.C. 74F82	14	7			
12J, 12K	I.C. 74S150	10	0			
16AA, 19J	I.C. 74LS00	14	7			
19H	I.C. 74LS02	14	7			
5C, 10H, 18H	I.C. 74LS04	14	7			
8C, 9C	I.C. 74LS09	14	7			
10K	I.C. 74LS10	14	7			
08	I.C. 74LS14	14	7			
18K	I.C. 74LS21	14	7			
14B, 17J	I.C. 74LS32	14	7			
3C, 20H	I.C. 74LS74	14	7			
10L	I.C. 74LS92	5	10			
9B, 16L, 19G, 21K	I.C. 74LS125	14	7			
10J	I.C. 74LS130	10	0			
4A	I.C. 74LS139	10	0			
14L, 15K	I.C. 74LS155	10	0			
7A	I.C. 74LS174	10	0			
20J	I.C. 74LS175	10	0			
1A, 3A, 0A	I.C. 74LS240	20	10			
15C	I.C. 74LS243	14	7			
7A, 14A, 14E, 14J, 14K, 17H, 21J	I.C. 74LS244	20	10			
12A, 12B, 12C, 13A	I.C. 74LS245	20	10			
18F	I.C. 74HC273	20	10			
11B, 11C	I.C. 74F280	14	7			
21H	I.C. 74LS322	20	10			
13C, 13D, 13E, 14D	I.C. 74LS373	20	10			
11A	I.C. 74LS374	20	10			
7C	I.C. 74LS393	14	7			
14C	I.C. 74LS670	10	0			
17B	I.C. 20LS31	10	0			
15A, 17A	I.C. 20LS32	10	0			
15B, 10B, 19A	I.C. 1400	7		14	1	
10A, 10A, 10B, 18AA	I.C. 1409	14	7			
7B	I.C. 7406	14	7			
5A	I.C. 7407	14	7			
15E	I.C. 0257	5, 31	20			
18D	I.C. 0250	40	20			
17G	I.C. 0254	24	12			
21G	I.C. 0255	20	7			
14G	I.C. 0259	28	14			
1B	I.C. 0272	40	20			
17D	I.C. 0274	40	20			
15G	I.C. 0208	20	10			
1C	I.C. 9229	20	10			
18E	I.C. MSM50321	10	0			
12E	I.C. 80186	9, 43	26, 60			
19L	I.C. MC1472	1, 5, 8	4			
13J, 13L	I.C. 2704	1, 20	14			
15J	I.C. PGM RDMLP	20	10			
15J	I.C. PGM RDMLP	20	10			
13B, 15H	I.C. 74F74	14	7			

REFERENCE DESIGNATION	
LAST USED	NOT USED
C161	C113, C114, C137
CR2	
DS1	
FB5	FB4
J9	
Q2	
R54	R5, 12, 13, 17, 31
RP0	RP7
SW1	
VRI	
W33	W5, 22, 23, 24, 26, 27
VRI	
LI	

SPARE GATE DEVICE



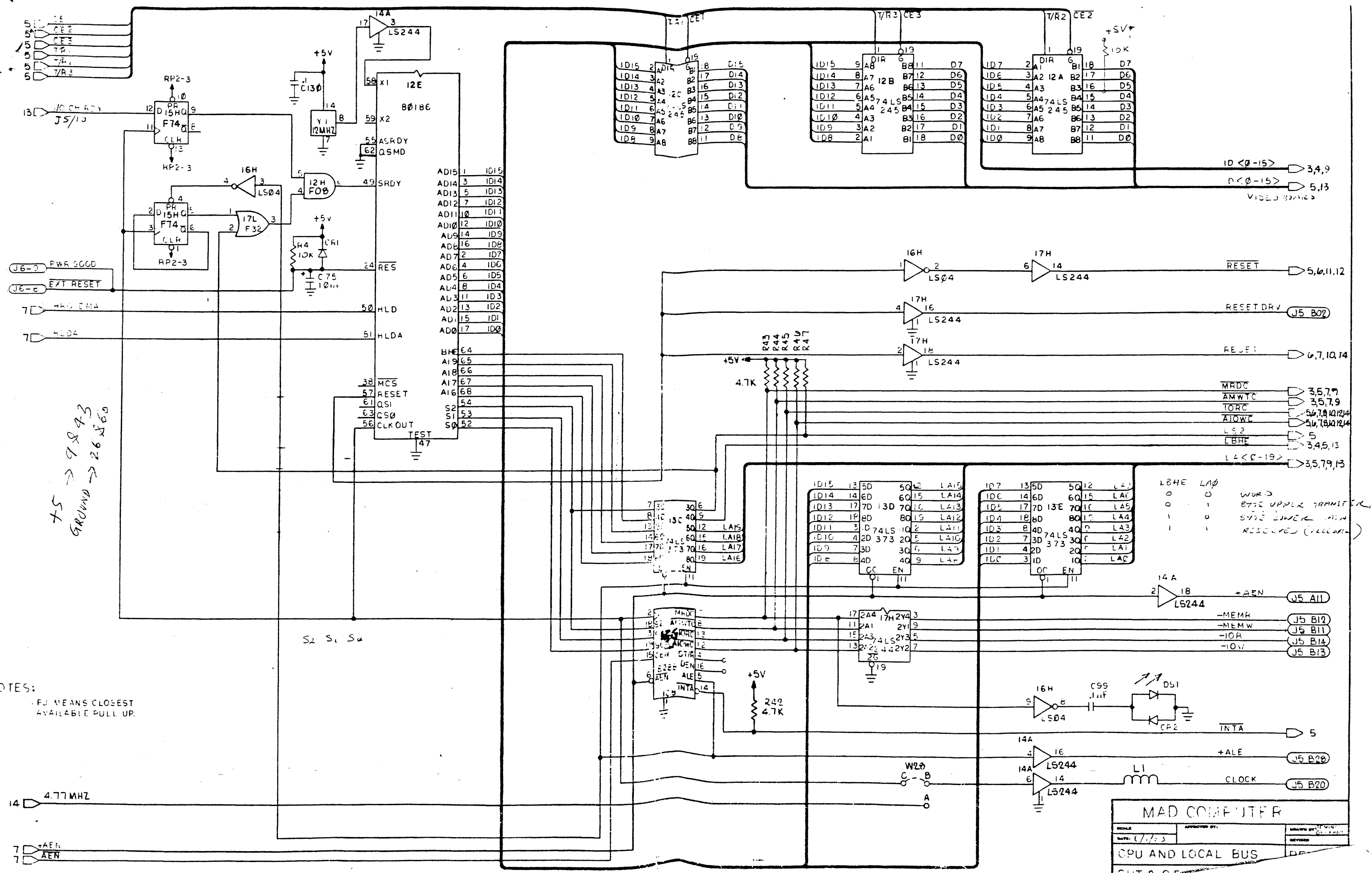
QTY	PKG PART NO.	CODE IDENT	MFG PART NO. / MFR SPEC	NOMENCLATURE OR DESCRIPTION	REFERENCE DESIGNATION	ITEM NO.

PARTS LIST	
350009	MAD-1

THIRD ANGLE PROJECTION	TOLERANCES UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES OR ACCORDING TO ASSEMBLY DRAWING	TELEPHONES DEC 81 DEC 81

MAD COMPUTER INC. SAN JOSE, CA.
MAD 1
D 34410

3. CAPACITANCE VALUES ARE IN MICROFARADS.
 4. RESISTANCE VALUES ARE AS SHOWN.
 5. RESISTORS ARE 1/4 W. 5%.
 2. APPLICABLE STANDARDS: ANSI Y32.2-75 AND Y32.14-73.
 PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. FOR COMPLETE DESIGNATION



5 1 CE
5 2 CE2
5 3 CE3
5 4 T/R1
5 5 T/R3

J6-3 FWR GOOD
J6-2 EXT RESET
7 HAD BMA
7 HLDA

TS → 9843
GROUND → 26860

NOTES:
FJ MEANS CLOSEST AVAILABLE PULL UP.

14 4.77MHZ
7 +AEN
7 AEN

AD15 1 ID15
AD14 3 ID14
AD13 5 ID13
AD12 7 ID12
AD11 10 ID11
AD10 12 ID10
AD9 14 ID9
AD8 16 ID8
AD7 2 ID7
AD6 4 ID6
AD5 6 ID5
AD4 8 ID4
AD3 11 ID3
AD2 13 ID2
AD1 15 ID1
AD0 17 ID0
BH 64
A19 65
A18 66
A17 67
A16 68
S2 54
S1 53
S0 52
TEST 47

ID15 2 A18
ID14 3 A17
ID13 4 A16
ID12 5 A15
ID11 6 A14
ID10 7 A13
ID9 8 A12
ID8 9 A11
ID7 10 A10
ID6 11 A9
ID5 12 A8
ID4 13 A7
ID3 14 A6
ID2 15 A5
ID1 16 A4
ID0 17 A3

ID15 9 A8
ID14 8 A7
ID13 7 A6
ID12 6 A5
ID11 5 A4
ID10 4 A3
ID9 3 A2
ID8 2 A1
ID7 10 A10
ID6 11 A9
ID5 12 A8
ID4 13 A7
ID3 14 A6
ID2 15 A5
ID1 16 A4
ID0 17 A3

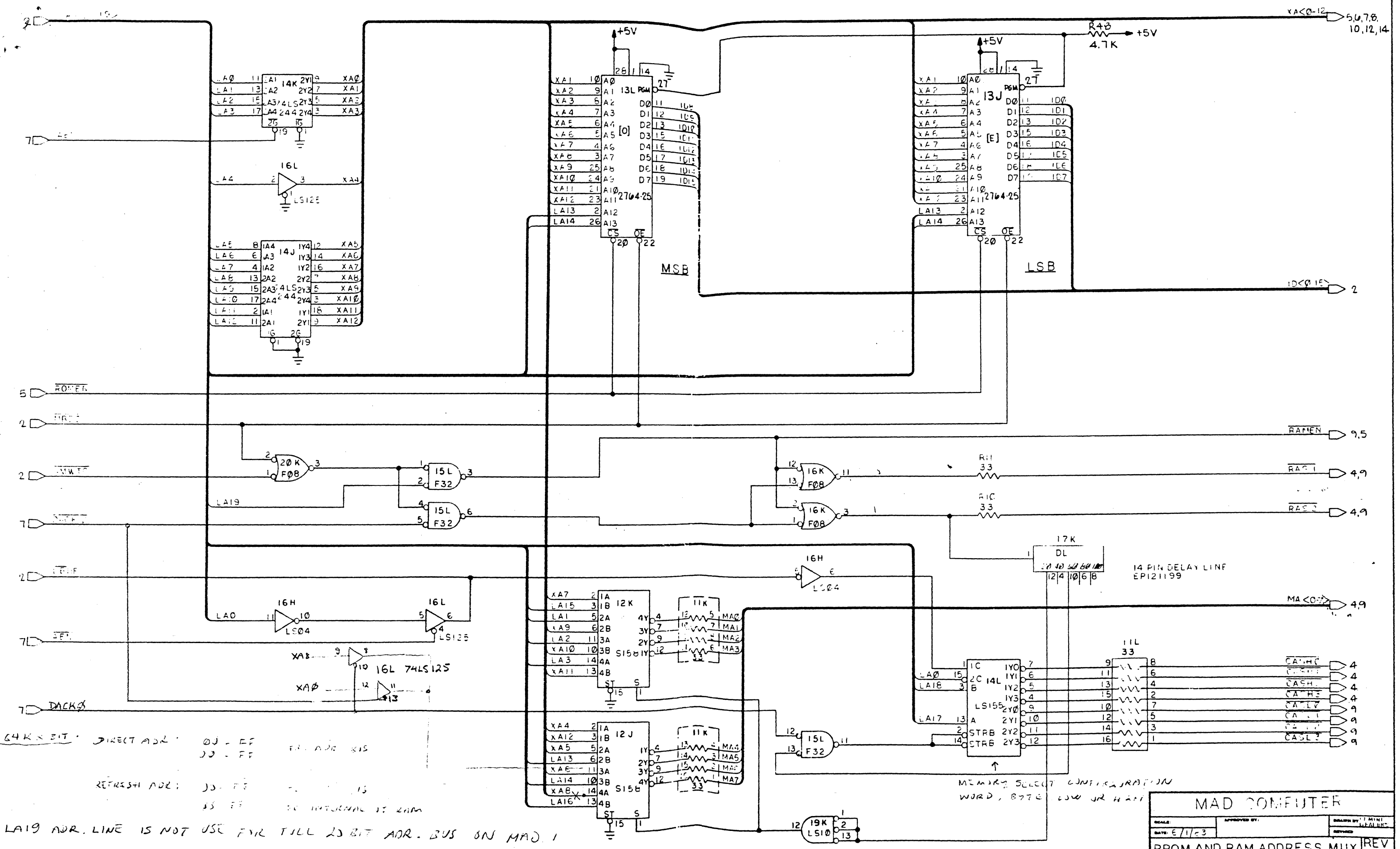
ID7 2 A1
ID6 3 A2
ID5 4 A3
ID4 5 A4
ID3 6 A5
ID2 7 A6
ID1 8 A7
ID0 9 A8
ID7 10 A10
ID6 11 A9
ID5 12 A8
ID4 13 A7
ID3 14 A6
ID2 15 A5
ID1 16 A4
ID0 17 A3

ID <0-15> 3,4,9
D <0-15> 5,13
VIDEO 3,4,9,13

RESET 5,6,11,12
RESET DRV J5 B02
RESET 6,7,10,14
MADC 3,5,7,9
AMWTC 3,5,7,9
TORC 5,7,9,10,12,14
ATOWC 5,7,9,10,12,14
LS2 5
CBHE 3,4,5,13
LA <0-19> 3,5,7,9,13

18HE	LA0	WORD
0	0	BYTE UPPER TRANSFER
0	1	BYTE LOWER TRANSFER
1	0	BYTE LOWER DATA
1	1	RESERVED (ILLGAL)

MAD COMPUTER
SCALE: _____ APPROVED BY: _____ DRAWN BY: _____
DATE: 6/1/73
CPU AND LOCAL BUS
SHT 2 OF 5



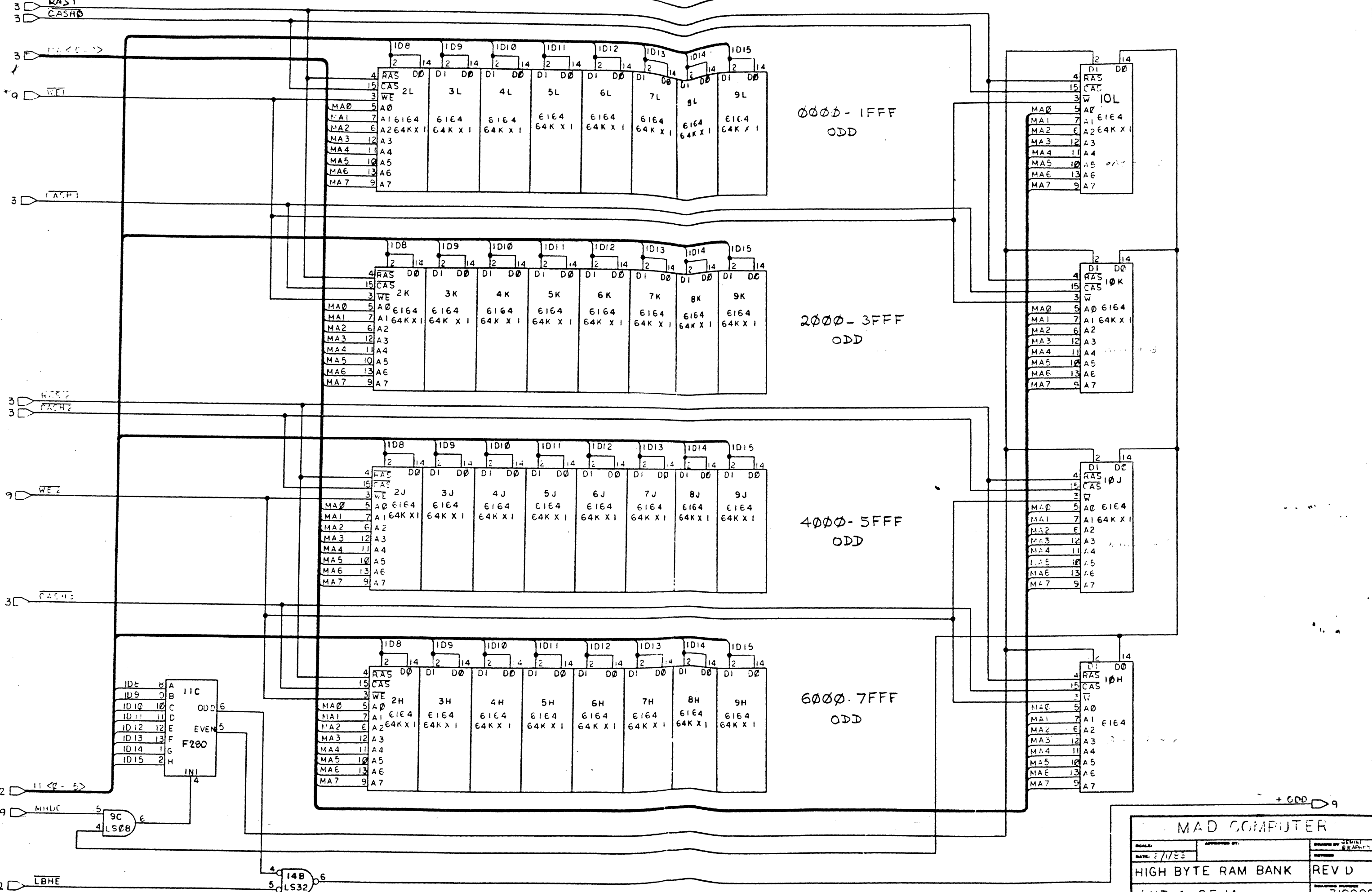
64K X BIT DIRECT ADR: 0J - FF
 33 - FF

REFRESH ADR: 33 - FF
 33 - FF

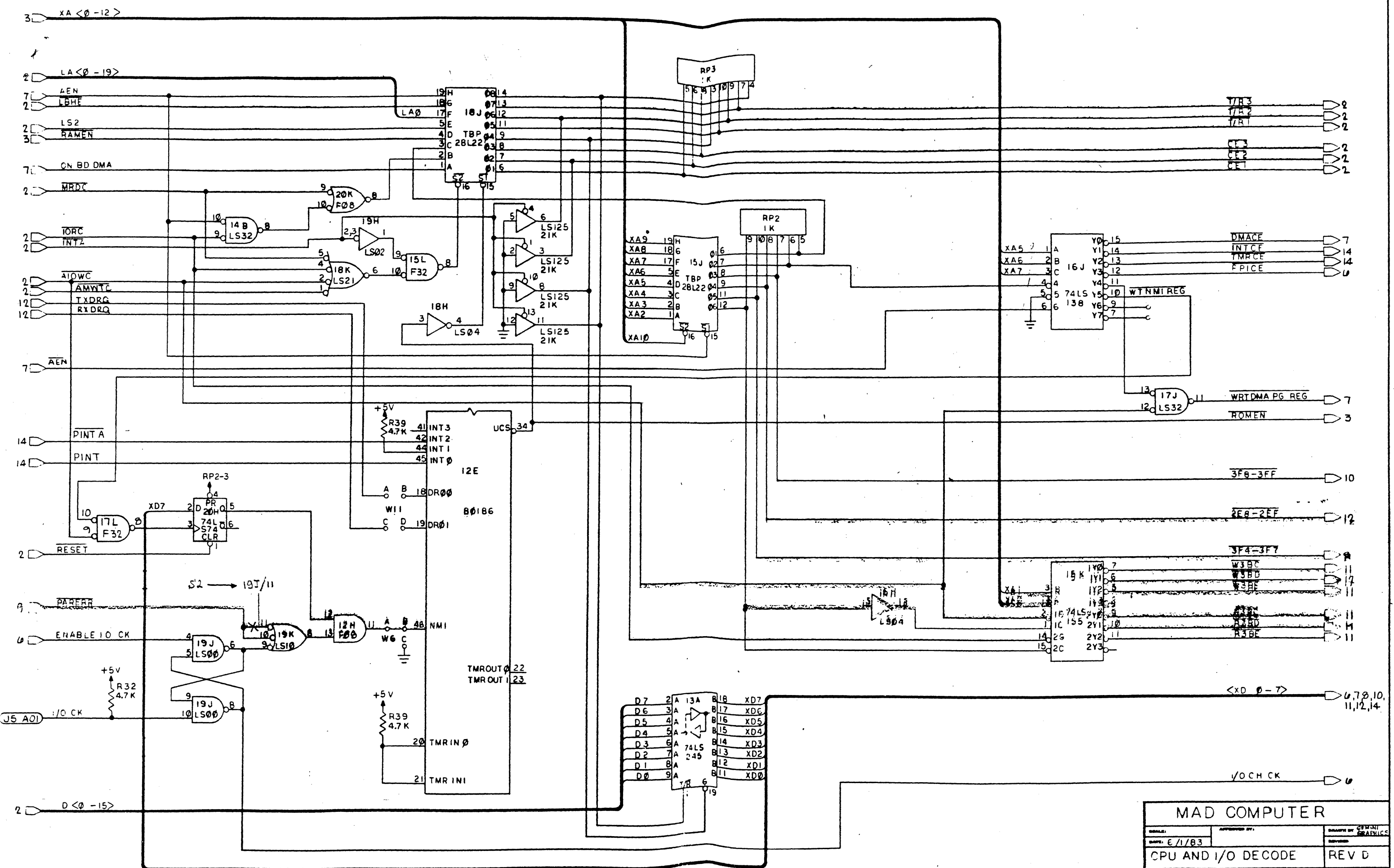
LA19 ADR. LINE IS NOT USE FOR TILL 20 BIT ADR. BUS ON MAD.1

MEMORY SELECT CONFIGURATION
 WORD, BYTE LOW OR HIGH

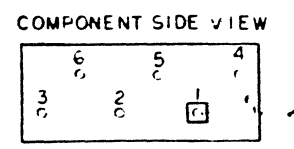
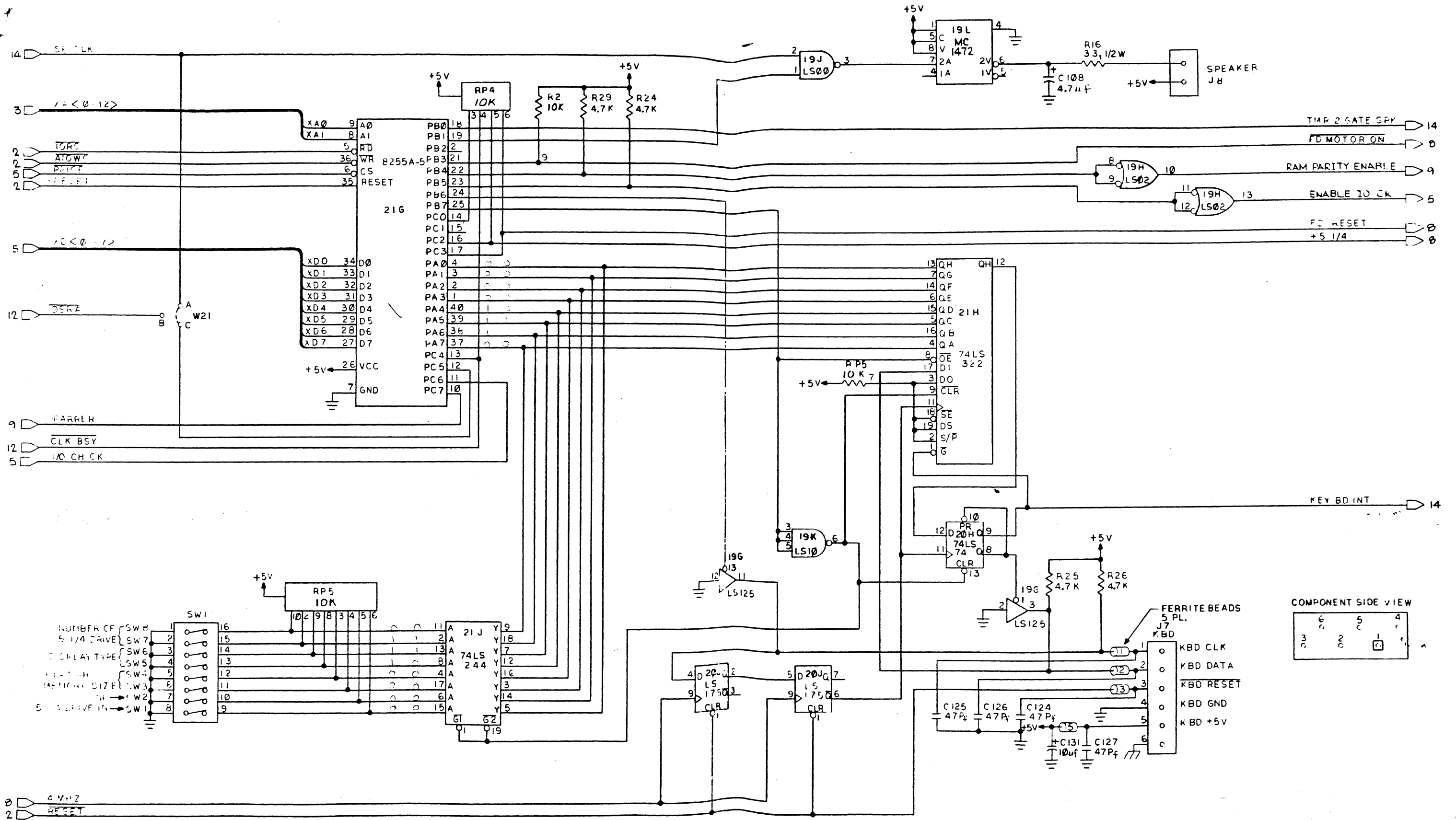
MAD COMPUTER	
SCALE	APPROVED BY:
DATE: 6/1/83	DESIGNED BY: J. MINT
PROM AND RAM ADDRESS MUX	
SHT 3 OF 14	REV D
	310002

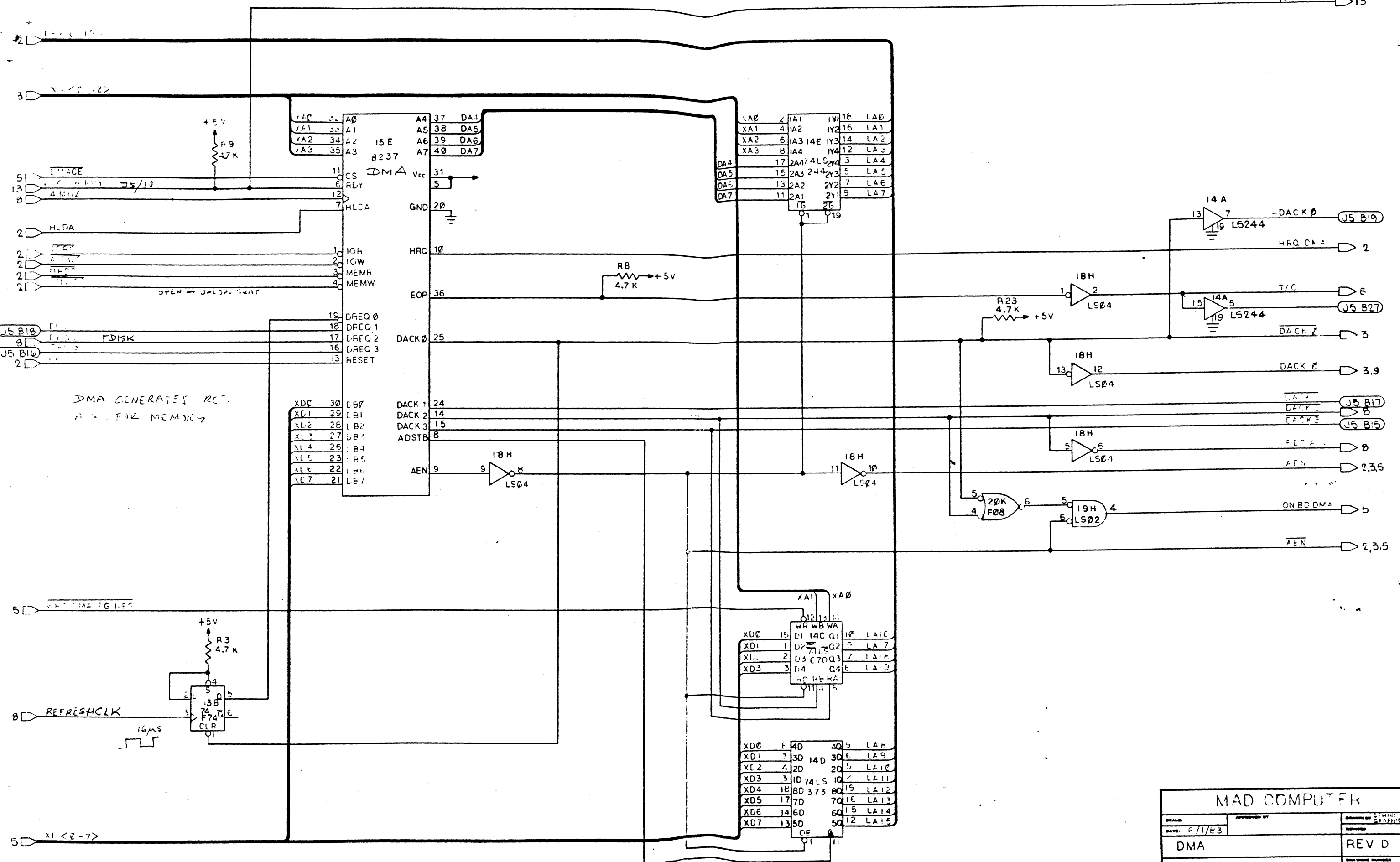


MAD COMPUTER		
SCALE:	APPROVED BY:	DESIGNED BY: JESTER
DATE: 8/1/83		REVISED BY: G. RAY
HIGH BYTE RAM BANK		REV D
SHT 4 CF 14		MANUFACTURE NUMBER: 310002



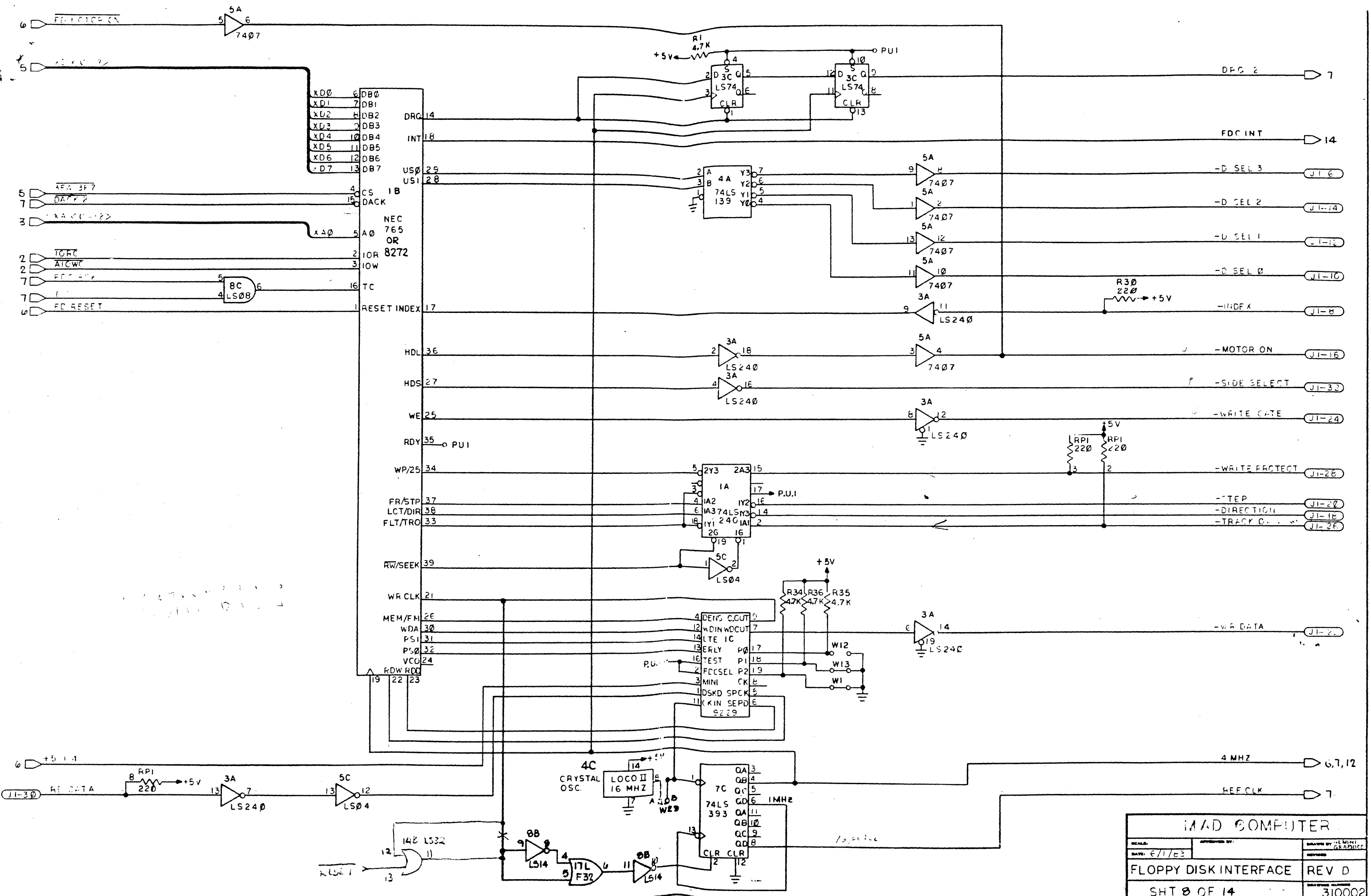
MAD COMPUTER		
DESIGNED BY: DATE: E/1/83	APPROVED BY:	DESIGNED BY GEMINI GRAFICS REVISION:
CPU AND I/O DECODE		REV D
SHT 5 OF 14		310002



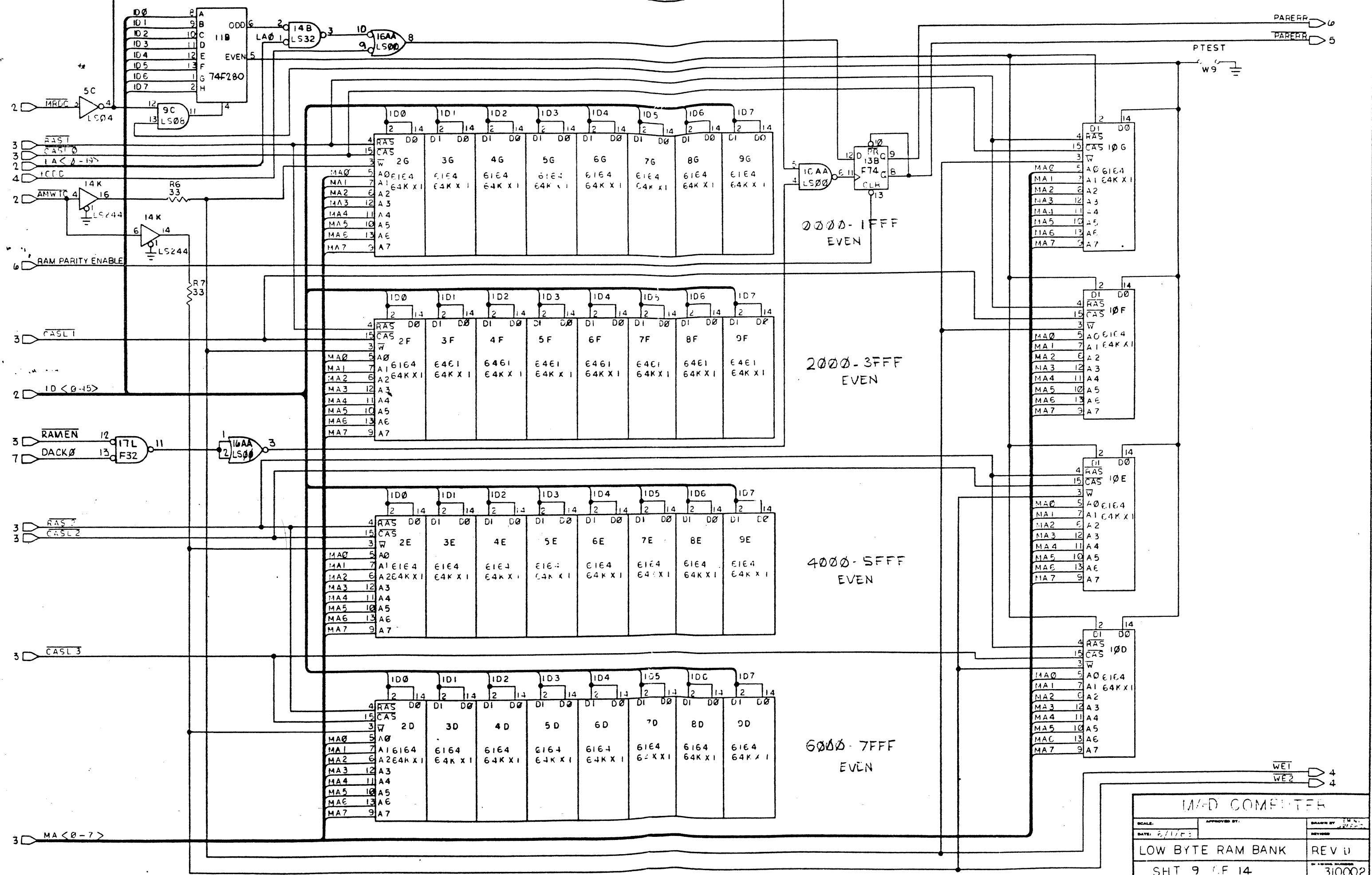


DMA GENERATES REQ. FOR MEMORY

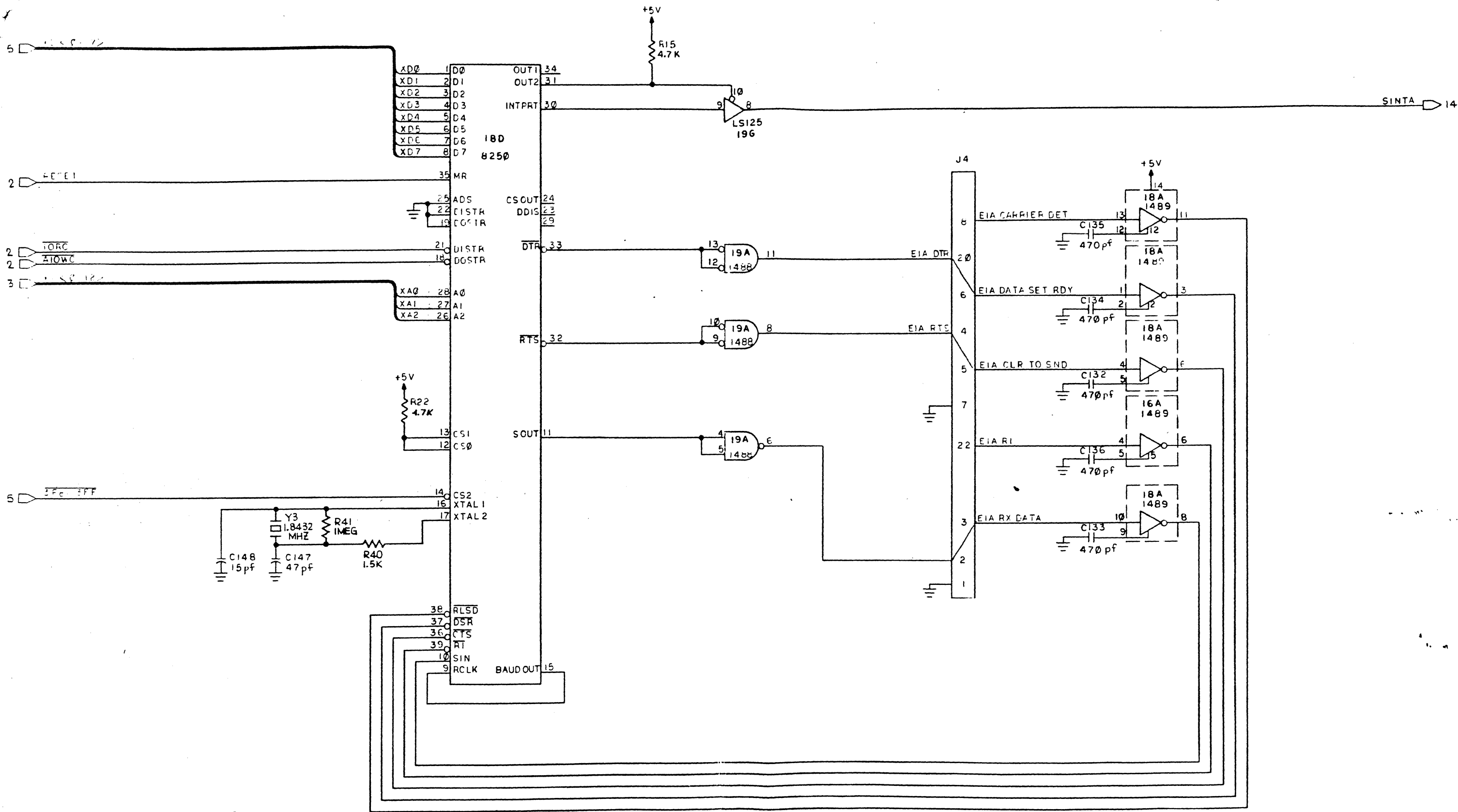
MAD COMPUTER		
DESIGNER:	APPROVED BY:	DATE OF CHANGES:
DATE: 8/11/83		REVISION:
DMA		REV D
SHEET 7 OF 14		DATA NUMBER 310002



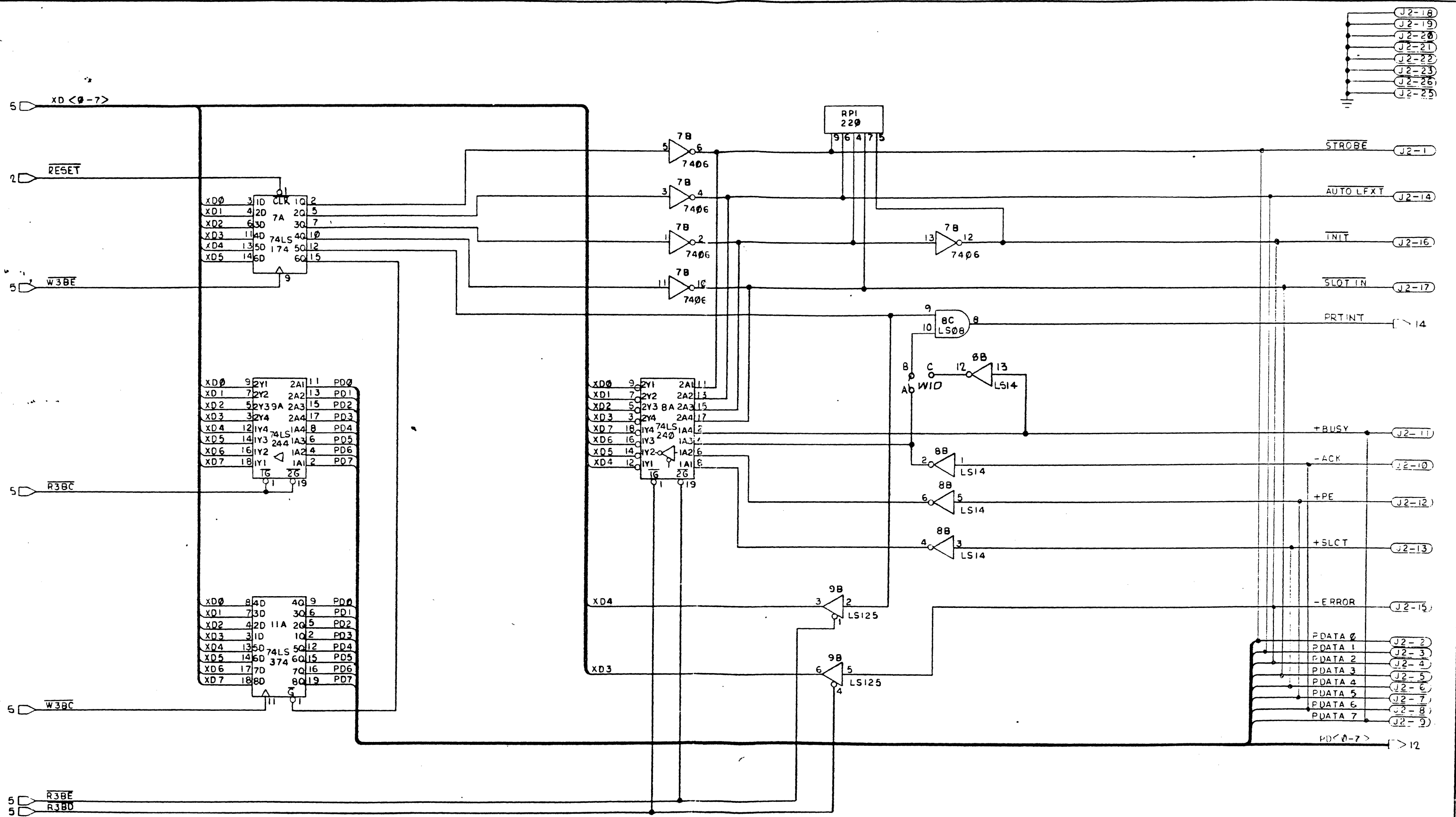
IAD COMPUTER		
SCALE:	APPROVED BY:	DRAWN BY: J. L. MINI
DATE: 6/1/83	REVISED:	REVISED:
FLOPPY DISK INTERFACE		REV D
SHT 8 OF 14		DRAWING NUMBER: 310002

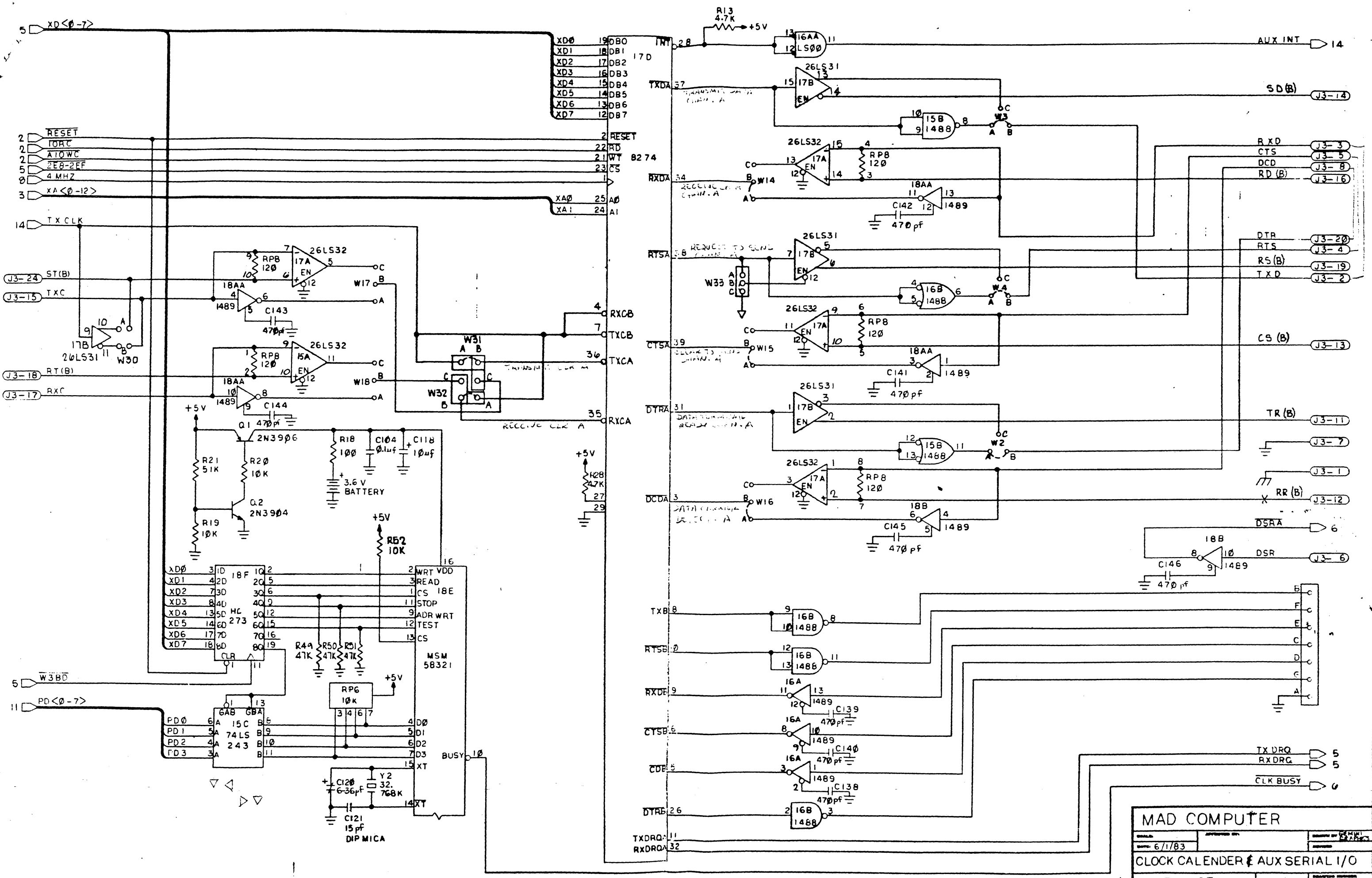


M4-D COMPUTER		
SCALE:	APPROVED BY:	DRAWN BY: T.M.D.
DATE: 6/1/83		REVISED:
LOW BYTE RAM BANK		REV D
SHT 9 OF 14		31000?

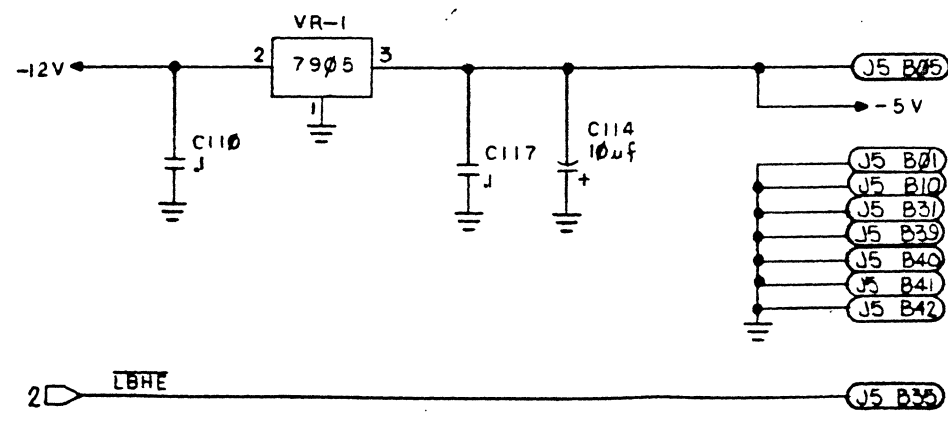
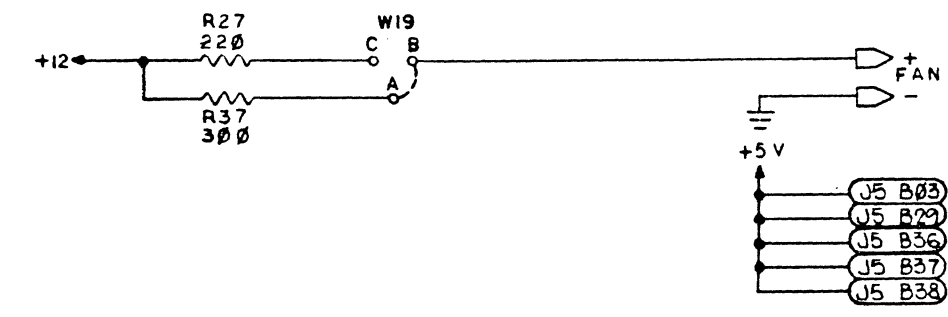
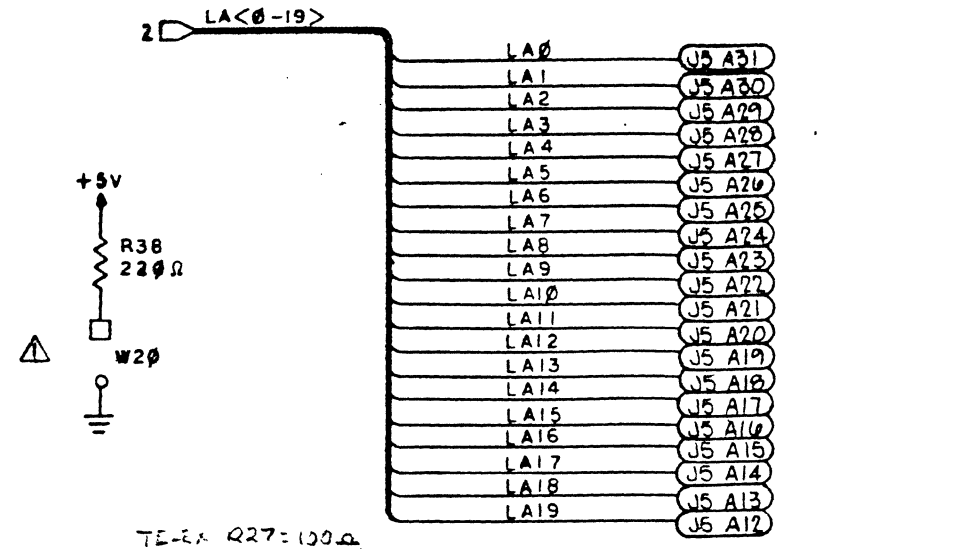
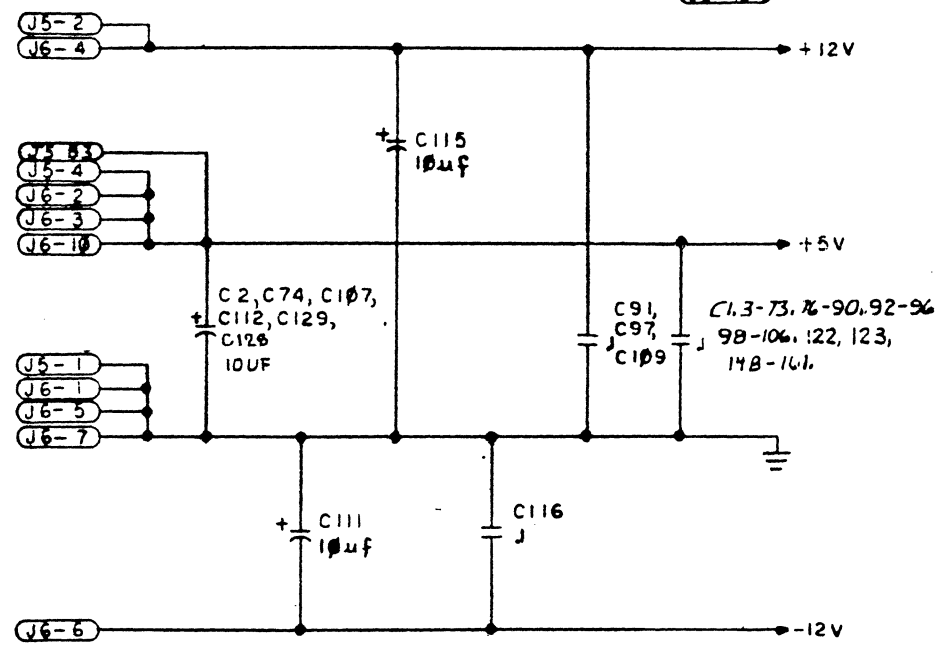
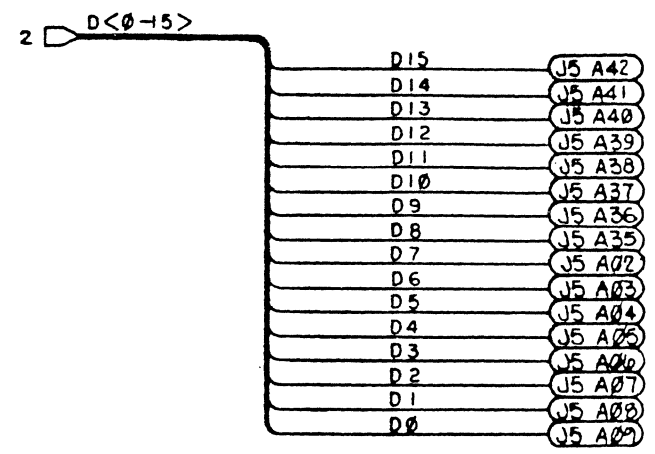
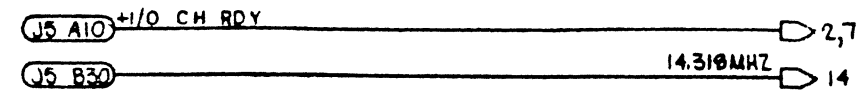
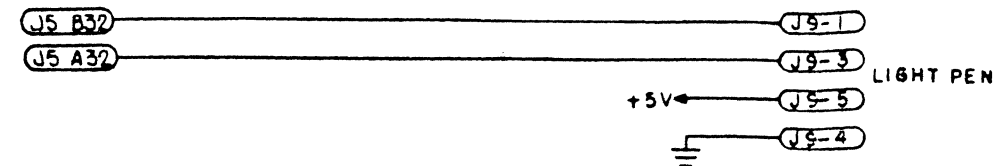


MAD COM TECH		
DATE: 6/1/83	APPROVED BY:	DESIGNED BY: [Signature]
SERIAL I/O		REV D
SHT 10 OF 14		310002





MAD COMPUTER		
DATE: 6/1/83	DESIGNED BY:	REVISED BY:
CLOCK CALENDER & AUX SERIAL I/O		
SHT 12 OF 14	REV D	310002



NOTES:
 ⚠ 2 PIN HEADER NEAR LOC 7L AT BOARD EDGE.

M AD COMPUTER		
DATE	APPROVED BY	DESIGNED BY
6/1/83		SEWELL
SHT 13 OF 14		REV D
310002		

