

WRITE
COLUMN

		1	2	3	4
1	U 1	TMS 4045-30NL (2114-3)	22		
2	U 2	TMS 4045-30NL (2114-3)	22		
3	U 3	2532 (25L32) (28 PIN SOCKET)	22		
4	U 4	2532 (25L32) (28 PIN SOCKET)	22		
5	U 5	MK3880N Z80 CPU (40 PIN SOCKET)	21		
6	U 6	MPD 765C (40 PIN SOCKET)	31		
7	U 7	7438	31		
8	U 8	NE527	10	NET OPT	
9	U 9	AM 27\$29	16	NET OPT	
10	U 10	AM 27\$29	16	NET OPT	
11	U 11	AM 27\$29	16	NET OPT	
12	U 12	74L\$138	22		
13	U 13	74L\$74	25		
14	U 14	74L\$74	24, 31		
15	U 15	74L\$244	21, 28		
16	U 16	74L\$240	19, 31		
17	U 17	74L\$240	31		
18	U 18	74L\$175	31		
19	U 19	74L\$153	31		
20	U 20	7438	31		
21	U 21	7406	10, 25		
22	U 22	74L\$273	16	NET OPT	
23	U 23	74L\$374	16	NET OPT	
24	U 24	74L\$374	16	NET OPT	
25	U 25	74L\$82	24, 29		
26	U 26	74L\$08	23, 24, 25		
27	U 27	74L\$175	28		
28	U 28	74L\$125	21, 28, 29		
29	U 29	74L\$02	21, 24, 25		
30	U 30	MK3880N (Z80) DMA (40 PIN SOCKET)	24		
31	U 31				
32	U 32	74L\$161	31		
33	U 33	HEADER	21, 25, 31	(SEE PRQ-HA-0573-B)	
34	U 34	74L\$32 (7427)	23		
35	U 35				
36	U 36	74L\$02	6, 24, 39		
37	U 37	74\$51	39		
38	U 38	74\$36	10, 11	NET OPT	
39	U 39	74L\$138	23		
40	U 40	74L\$138	23		

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Three Rivers Computer

PRQ-PCB-108-F

11/6/80

WRITE
MIN
C

			(PINS) PAGE #				
1	U41	898-1-R10K (4116-002-103) DIP		(5)24	(8)27	(10,11,12,13,14)21	(15)24
2	U42	75189 (1489)	25				
3	U43	75189 (1489)	25				
4	U44	74L\$157	31				
5	U45	75115	1				
6	U46	74\$112	6				
7	U47	74\$112	6				
8	U48						
9	U49						
10	U50	DM 85 \$68N	39				
11	U51	74L\$74	34				
12	U52	74L\$164	34				
13	U53	74L\$169	13		NET OPT		
14	U54	74\$225	14		NET OPT		
15	U55	AM 25L\$2521	13		NET OPT		
16	U56	74L\$164	13		NET OPT		
17	U57	74L\$74	4,30				
18	U58	74\$225	2				
19	U59	74\$240	2,3,24,25,29				
20	U60	74L\$74	6,29				
21	U61	74L\$74	36				
22	U62	74L\$74	36				
23	U63	74L\$175	35				
24	U64	74\$08	35,36				
25	U65	74L\$164	34				
26	U66	74L\$20	34				
27	U67	SPARE					
28	U68	74L\$166	13		NET OPT		
29	U69	74L\$169	13		NET OPT		
30	U70	9401	13		NET OPT		
31	U71	MC 3417	20				
32	U72	74L\$00	3,21,30,31				
33	U73	MK 3882 28P CTC (28 PIN SOCKET)	25				
34	U74	MK 3884 28P 51P (40 PIN SOCKET)	25				
35	U75						
36	U76	75114	1				
37	U77	74L\$27 (7427)	3,6				
38	U78	74L\$153	3				
39	U79	74L\$08	1,5				
40	U80	74L\$74	6				

4/3

Three Rivers Computer
 101 - E MAIN ST
 WYOMING, WY 83001
 PHONE 307-778-0425 FAX 307-778-0426

PRQ-PCB-IOB-F

WRITE
COLUMN

		1	2	3	4
1	U 81	74 \$374	2		
2	U 82	74L \$74	36		
3	U 83	74L \$148	35		
4	U 84	74 \$153	34		
5	U 85	74L \$139	34		
6	U 86	74L \$00	34		
7	U 87	74L \$153	13	NET OPT	
8	U 88	74L \$151	17	NET OPT	
9	U 89	74L \$10	26, 29		
10	U 90	74L \$153	1		
11	U 91	9401	1		
12	U 92	74 \$04	3, 4, 6		
13	U 93	9406	3		
14	U 94	9406	3		
15	U 95	74L \$00	35		
16	U 96	74L \$74	35		
17	U 97	74L \$04	34		
18	U 98	74L \$74	14, 15	NET OPT	
19	U 99	74L \$08	10, 12, 13	NET OPT	
20	U 100	74 \$10	2, 4		
21	U 101	74L \$161	15	NET OPT	
22	U 102	74L \$74	17	NET OPT	
23	U 103	74L \$374	28		
24	U 104	9708	26		
25	U 105	74L \$374	26		
26	U 106	74L \$374	29		
27	U 107	74L \$374	27		
28	U 108	74L \$374	30		
29	U 109	74L \$374	30		
30	U 110	74L \$374	6		
31	U 111	7406	6, 21, 31		
32	U 112	74L \$244	1		
33	U 113	74 \$139	3, 4		
34	U 114	HMI-7649-B5546 (Am 27 \$29)	3		
35	U 115	HMI-7649-B5546 (Am 27 \$29)	3		
36	U 116	HMI-7649-B5546 (Am 27 \$29)	3		
37	U 117	74L \$139	35		
38	U 118	74L \$74	35		
39	U 119				
40	U 122	SPARE			



Three Rivers Computer
 12/31/82
 PRQ-PCB-IOB-F
 3 of 11

PRQ-PCB-IOB-F

COLUMN WRITE

		1	2	3	4
1	U121	74L\$157	13,15	NET OPT	
2	U122	74\$00	11,18		
3	U123	74L\$151	27		
4	U124	75188 (1488)	25		
5	U125	74L\$04	23,27		
6	U126	82\$129(82\$131)(174\$287) (16 PIN SOCKET)	29		
7	U127	9914 (40 PIN SOCKET)	27		
8	U128	74L\$14	1,7		
9	U129	74L\$244	7		
10	U130	74\$157	1		
11	U131	74L\$174	7		
12	U132	74L\$374	4		
13	U133	74L\$273	2		
14	U134	SPARE			
15	U135	74L\$283	3		
16	U136	74\$08	34		
17	U137	74L\$74	15	NET OPT	
18	U138	74L\$04	11,12,15,30		
19	U139	74L\$221	11,25		
20	U140	74L\$74	11	NET OPT	
21	U141	74L\$08	12,15		
22	U142	SPARE			
23	U143	SPARE			
24	U144	CD 4051	26		
25	U145	74L\$74	29		
26	U146	74L\$04	11,12,15,18	NET OPT	
27	U147	SPARE			
28	U148	74L\$175	2		
29	U149	7406	1,2		
30	U150	74L\$08	4,6		
31	U151	SPARE			
32	U152	74\$00	36,37		
33	U153	74\$32	15,31,37,38		
34	U154	74\$00	37,38		
35	U155	74\$32	3,12,15		
36	U156	74\$86	12		
37	U157	74\$74	11	NET OPT	
38	U158	AM261D2 (96\$02)	11	NET OPT	
39	U159	74L\$32	18	NET OPT	
40	U160	74L\$27	15,18	NET OPT	



COLUMN WRITE

			1	2	3	4
1	U161	74\$32	3,13,15,17			
2	U162	74L\$273	15			
3	U163	74\$112	12		NET OPT	
4	U164	9403	18		NET OPT	
5	U165	9403	18		NET OPT	
6	U166	9403	18		NET OPT	
7	U167	9403	18		NET OPT	
8	U168					
9	U169	74\$74	3,28			
10	U170	74\$174	29			
11	U171	74\$138	30			
12	U172	75161	27			
13	U173	HMI-7649-B5546 (AM 25529)	4			
14	U174	74L\$166	4			
15	U175	74L\$670	4			
16	U176	74L\$670	4			
17	U177	74\$283	37			
18	U178	74\$158	37			
19	U179	74\$158	37			
20	U180	74\$189	38			
21	U181	74\$189	38			
22	U182	74\$374	5			
23	U183	74L\$74	12		NET OPT	
24	U184	74L\$21	5			
25	U185	74L\$32 (7427)	5			
26	U186	74L\$374	14		NET OPT	
27	U187	74\$04	4,7,29,39			
28	U188	74L\$244	11,12,14,15,17,29			
29	U189	74\$138	30			
30	U190	75160	27			
31	U191	AM25L\$2521	4			
32	U192	74L\$164	4			
33	U193	74L\$670	4			
34	U194	74L\$670	4			
35	U195	74\$283	37			
36	U196	74\$189	37			
37	U197	74\$189	37			
38	U198	74\$374	37			
39	U199	74\$189	38			
40	U200	74\$374	5			



	Three Rivers Computer	
	PCB-F PART LIST	PRQ-108-F
	RAC	(AM-25529) 5 of 11

REV. 2 11/21/81 CIV

COLUMN WRITE

	1	2	3	4
1	U201	74LS165	12	NET OPT
2	U202	9403 (24 PIN SOCKET)	5	
3	U203	9403 (24 PIN SOCKET)	5	
4	U204	9403 (24 PIN SOCKET)	5	
5	U205	9403 (24 PIN SOCKET)	5	
6	U206	SPARE		
7	U207	LM380	20	
8	U208			
9	U209			
10	U210			
11	U211	74LS124	19	
12	U212	74LS112	↑	
13	U213	MC1741SCPI (LF351)		
14	U214	74LS161		
15	U215	74LS157		
16	U216	74LS221		
17	U217	74LS221	19	
18				
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Three Rivers Computer

108-F PART LIST REV 0 - 108-F

ISSUED BY: RAC

DATE: 11/6/89

PAGE 6 OF 11

WRITE
COLUMN

	1	2	3	4
		(PINS)	PAGE	#
1				
2	R1	750-85-R220/330 SIP (764-S-R220/330)	(2,3,4,5,6)7	(7)1
3	R2	785-1-RIK (4310R-101-102) SIP	(2,3,4)6	(5)2 (6)1 (7,8,9,10)2
4	R3	785-1-RIK (4310R-101-102) SIP	(3)3	(4)1 (5)3 (6)4 (7)31 (8)28
5	R4	785-1-RIK (4310R-101-102) SIP	(3)15	(4)14 (5)13 (6)12 (7)11
6	R5	785-1-R330 (4310R-101-331) SIP	(2,3)19	(4,5,6,7,8)31
7	R6			
8	R7	785-1-RIK (4310R-101-102) SIP	(2)37	(3)36 (4)34 (5)25
9	R8	20K	11	NET OPT
10	R9	470Ω	11	↑
11	R10	470Ω	10	
12	R11	68Ω 1WATT	10	
13	R12	680Ω	10	
14	R13	130Ω	10	
15	R14	130Ω	10	
16	R15	47Ω	10	
17	R16	220Ω 1/2 WATT	10	
18	R17	220Ω	10	
19	R18	2.2K	10	
20	R19	1K	10	
21	R20	100Ω	10	
22	R21	22K	10	
23	R22	3.3K	10	
24	R23	47Ω	10	
25	R24	1K	10	
26	R25	RN55D1002F (10K1%)	10	
27	R26	RN55D2001F (2K1%)	10	
28	R27	4.7K	10	
29	R28	100Ω	10	
30	R29	330Ω	10	NET OPT
31	R30	100K	20	
32	R31	39K	20	
33	R32	4.7K	20	
34	R33	22K	20	
35	R34	12K	20	
36	R35			
37	R36	27K	25	
38	R37			
39	R38			
40	R39			
	R40	10K	23	

NOTE:
ALL RESISTORS EXCEPT
THOSE SPECIFIED HAVE
PART NO. RC076F

Three Rivers COMPUTER
 100-5 PART LIST PRQ-100-5
 RAC PRQ-70-407C 7 of 11

COLUMN WRITE

			1	2	3	4
1	R41	10K	23			
2	R42	10K	23			
3	R43	10K	23			
4	R44	RN55D1401F	1.40K 1% 26			
5	R45	RN55D1001F	1.00K 1% 26			
6	R46	RN55D1002F	10.00K 1% 26			
7	R47	RN55D2001F	2.00K 1% 26			
8	R48	RN55D3011F	3.01K 1% 26			
9	R49	RN55D2001F	2.00K 1% 26			
10	R50	100K	26			
11	R51	1.5K	11	NET OPT		
12	R52	1K	20			
13	R53	10K	20			
14	R54	200Ω	19			
15	R55	300Ω	19			
16	R56					
17	R57	5.1K	19			
18	R58	5.1K	19			
19	R59	13K	19			
20	R60	1K	19			
21	R61	1K	19			
22	R62	9.1K	19			
23	R63	4.7K KLUGE	26			
24	R64	9.1K	19			
25	R65	510Ω	19			
26	R66	100K	19			
27	R67	3.9K	19			
28	R68	100K	19			
29	R69	3.3K	19			
30	R70	100Ω	19			
31	R71	6.2K	19			
32	R72	RC20GF330J (33Ω 1/2W)	19			
33	R73 - R76	1.2KΩ	see U33			
34	R77 - R79	130Ω	see U33			
35	TRIM	89PR10K	19			
36	C1	5PF	11	NET OPT		
37	C2	.001μF	11	NET OPT		
38	C3	.001μF	11	NET OPT		
39	C4	UK16-103	.01μF DISK	10	NET OPT	
40	C5	UK16-103	.01μF DISK	10	NET OPT	

NOTE
ALL RESISTORS
EXCEPT THOSE
SPECIFIED ARE
RC076F

3

COLUMN WRITE

	1	2	3	4
1	C 6	UK16-103	.01uF/16V DISK	10
2	C 7	202A200225M1	2.2uF	10
3	C 8		.001uF 10%	10
4	C 9		27pf 10%	10
5	C 10	UK16-103	.01uF (disk)	10
6	C 11	UK16-103	.01uF (disk)	10
7	C 12	202A200225M1	2.2uF	10
8	C 13		100 pF	10
9	C 14	202A200225M1	2.2uF	20
10	C 15	CW20C563K	.056uF	20
11	C 16	↑	.056uF	20
12	C 17	↓	.056uF	20
13	C 18	CW20C563K	.056uF	20
14	C 19	CW15C153K	.015uF	20
15	C 20	TE1135.5	.140uF 12V	20
16	C 21	202A200225M1	2.2 uF	20
17	C 22	UK16-103	.01uF/16V	23
18	C 23	↑	.01uF/16V	23
19	C 24		.01uF/16V	23
20	C 25	↓	.01uF/16V	23
21	C 26	UK16-103	.01uF/16V	26
22	C 27	202A200225M1	2.2uF (disk)	28
23	C 28	202A200225M1	2.2uF (disk)	20
24	C 29			
25	C 30	UK16-104	.1uF/10V	
26	C 31	UK16-103	.01uF/16V	19
27	C 32	UK16-103	.01uF/16V	19
28	C 33	UK16-103	.01uF/16V	19
29	C 34	202A200225M1	2.2 uF	20
30	C 35			
31	C 36	UK16-103	.01uF/16V	25
32	C 37	DD502	.005uF	19
33	C 38	CD15FD20N03	200 pF	19
34	C 39	UK16-103	.01uF/16V	19
35	C 40	UK16-104	.1uF/10V	19
36	C 41	DD502	.005uF	19
37	C 42	DD221	220 pF	19
38	C 43	DD100	10 pF	19
39	C 44	DD221	220 pF	19
40	C 45	202A200225M1	2.2uF	19

NET OPT

↑

NET OPT

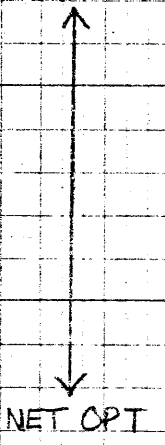


Three Rivers Computer	
DATE: 11/6/80	REV: 4
PROJECT: PRQ-PCB-IOB-F	REV: 4
DATE: 11/6/80	REV: 4

COLUMN WRITE

1 2 3 4

1	C 46	202A200225M1	2.2uF	19		
2	C 47	202A200225M1	2.2uF	19		
3	C 48	202A200225M1	2.2uF	19		
4						
5	202A200225M1 TOTAL INCLUDING TOTAL					
6	SILMAN 2.2/20V THOSE ALREADY LISTED		40			
7	CY15C103M CRL. .01 CERAMIC CAPS.		63			
8						
9	X 1	K1100A-10MHZ	CRYSTAL OSCILL	15	NET OPT	
10	X 2	K1100A-8.0MHZ	CRYSTAL OSCILL	31	(14 PIN SOCKET)	
11	X 3	K1100A-2.4576MHZ	CRYSTAL OSCILL	21	(14 PIN SOCKET)	
12						
13	DN 1	IN 4148		10	NET OPT	
14	DN 2	IN 4148		10		
15						
16	DS 1	A25810		10		
17	DS 2	A25810		10		
18	DS 3	A25810		10		
19	DS 4	A25810		10		
20						
21	Q 1	MP5 6534		10		
22	Q 2	MP5 6534		10		
23	Q 3	MP5 6531		10	NET OPT	
24	Q 7	AD 580 JH		26		
25	Q 8	78L05 ACZ		19		
26	Q 9	79L05 ACZ (LM320LZ-5.0)		19		
27						
28	L 1	150uH		10	NET OPT	
29	L 2	4.7uH		10	NET OPT	
30	L 3	WEE-56uH(LM320LZ-5.0)	56uH	20		
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PRQ-PCB-IOB-F

WRITE
COLUMN

	1	2	3	4
	HARDWARE			
	↓			
1	107-BLK BLACK EJECTOR	1		
2	107-RED RED EJECTOR	1		
3	3202 NYLON WASHERS	16		
4	G5410 STIMPSON RIVETS	8		
5	519AG11D or 819AG11D SOCKET	2	X2, X3	
6	516AG37D or 816AG11D SOCKET	1	U126	
7	520AG37D or 820AG11D SOCKET	4	U114, 115, 116, 173	
8	524AG66D or 824AG68D SOCKET	4	U202, 203, 204, 205	
9	528AG37D or 828AG11D SOCKET	3	U3, 4, 73	
10	540AG37D	5	U5, 6, 30, 74, 127	
11	PRQ-HDW-STF-A	2		
12				
13	PRQ-PCB-IOB-F	1		
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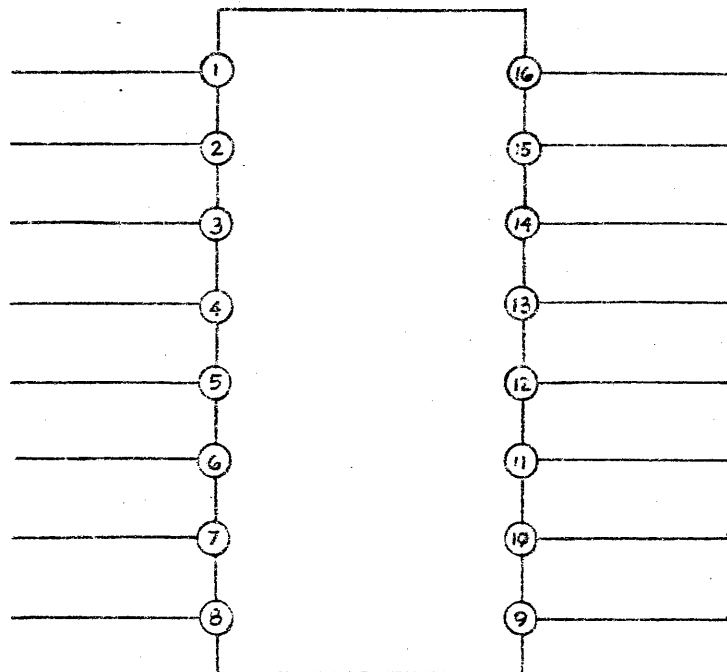
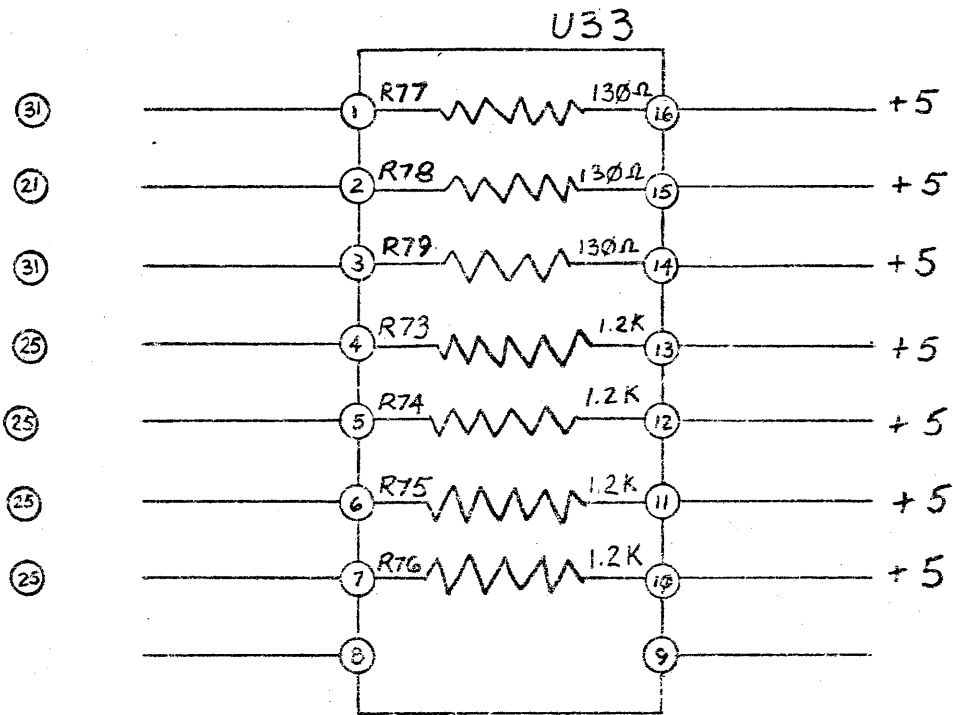


Three Rivers Computer
 IOB-F PARTS LIST PRQ-IOB-F
 MAC 128-PL-0431 G 11 11

PRQ-PCB-IOB-F
SUBASSEMBLY DIRECTORY

<u>DRAWING NUMBER</u>	<u>DESCRIPTION</u>
PRQ-MD-0230-E	Card Outline
PRQ-PL-0421-E	I/O Parts List
0422-G	"
0423-F	"
0424-D	"
0425-F	"
0426-D	"
0427-C	"
0428-D	"
0429-D	"
0430-E	"
0431-C	"
0432-C	Gate Utilization
0433-B	Gate Utilization
PRQ-SC-0434-B	Table of Contents
0435-C	Disk Data Port
0436-C	Head Select
0437-C	Data Sequencer
0438-D	Header Match
0439-C	Memory Bus Interface
0440-E	Disc Arm Control
0441-C	Disc Status Inputs
0442-B	Rigid Disk Int. Connection
0443-B	Block Diagram
0444-B	Net Analog
0445-C	Data Demodulator
0446-C	Data Modulator
0447-C	Header Match
0448-B	Net Address - Latch
0449-C	Clock Generator
0450-B	Net Einite State Machine
0451-B	Overrun Detector
0452-C	Net Fifos
0453-D	PLL
0454-B	CVSD
PRQ-SC-0455-D	I/O Z80 Layout
0456-B	I/O CPU Memory
0457-C	I/O Peripheral Decoder
0458-D	DMA Channel
0459-D	RS232 Interface
0460-C	Touch Pad Interface
0461-B	GPIO Interface
0462-C	Keyboard Interface
0463-D	Interrupt Vector Select

<u>DRAWING NO.</u>	<u>DESCRIPTION</u>
PRQ-SC-0464-B	I/O Address Decode
0465-F	Floppy Control
0466-B	Floppy Disc Int. Connector
0467-B	Block Diagram
0468-B	Channel Selector
0469-B	" "
0470-C	" "
0471-D	Address Counter
0472-B	High Address Latch
0473-B	Address Count Select
PRQ-SD-0474-E	Subassembly Directory
0475-E	" "
PRQ-SK1-0476-A	PRQ-SK1-IOB-F
PRQ-HA-0573-A	Header Assembly



INPUT OUTPUT

GATE UTILIZATION

1,2 -- 3,4

<u>QUAD</u> <u>74S00 POS. NAND</u>	<u>U122</u>
1,2 - 3	11
4,5 - 6	30
9,10 - 8	
12,13 - 11	18

<u>QUAD</u> <u>74LS00 POS. NAND</u>	<u>U86</u>
1,2 - 3	
4,5 - 6	34
9,10 - 8	34
12-13 - 11	34

<u>QUAD</u> <u>74S02 POS. NOR</u>	<u>U36</u>
2,3 - 1	24
5,6 - 4	39
8,9 - 10	
11,12 - 13	

<u>DUAL DIFF.</u> <u>DS75114 LINE DRIVERS</u>	<u>U76</u>
5,6,7 - 1,2,3,4	
9,10,11 - 12,13,14,15	1

<u>HEX.</u> <u>74S04 INV.</u>	<u>U187</u>	<u>U125</u>	<u>U97</u>
1 - 2	29	27	34
3 - 4	29	27	34
5 - 6			34
8 - 9	39	23	34
10 - 11	7		
12 - 13	1		34

<u>HEX.</u> <u>INV.</u> <u>7406 BUFF.</u>	<u>U21</u>
1 - 2	10
3 - 4	10
5 - 6	10
9 - 8	10
11 - 10	25
13 - 12	

<u>QUAD</u> <u>74LS08 POS. AND</u>	<u>U150</u>	<u>U99</u>	<u>U141</u>
1,2 - 3	6	13	12
4,5 - 6		10	15
9,10 - 8	4		15
12,13 - 11		12	

<u>QUAD</u> <u>74S08 POS. AND</u>	<u>U151</u>
1,2 - 3	34
4,5 - 6	34
9,10 - 8	
12,13 - 11	



TRIPLE
3 IN
74LS10 POS. NAND U89

1,2,13 - 12
3,4,5 - 6 29
9,10,11 - 8 26

74LS32 U34

1,2 - 3 23
4,5 - 6 23
8,9 - 10
11,12 - 13

QUAD
74S86 EXC. OR U38 U156

1,2 - 3 10 12
4,5 - 6 11 12
9,10 - 8 11
12,13 - 11

DUAL
74S112 FLIP-FLOP U47

1,2,3,4,5,6,15 1
7,9,10,11,12,13,14

OCTAL BUFF
74S240 INV. 3ST OUT U59 U16

2 - 18 3 31
4 - 16 2 31
6 - 14 25 31
8 - 12 25 31
11 - 9 19
13 - 7 29 31
15 - 5 24 31
17 - 3 3

OCTAL BUFF
74LS244 NONINV. 3ST U112

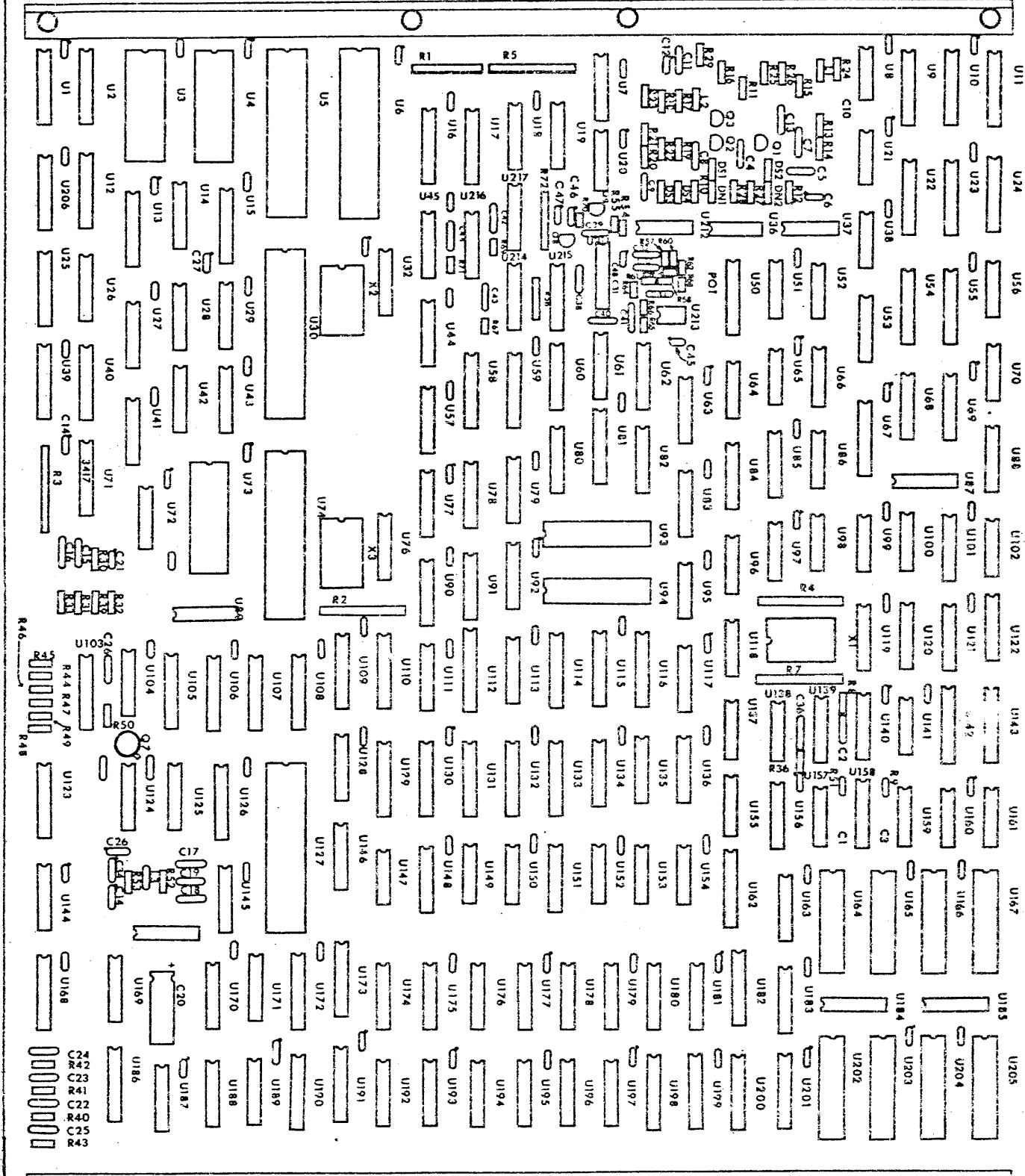
1 (3ST)
2 - 18
4 - 16
6 - 14
8 - 12
11 - 9
13 - 7 1
15 - 5
17 - 3
19 (3ST) 1

UNUSED PULLUPS	
<u>RESISTOR PACKAGES</u>	
<u>SIP</u>	<u>MANUFAC. #</u>
R1-PINS 8,9,10	750-85-R220/330
R2-PIN 6	4310R-101-102
R3-PINS 9,10	4310R-101-102
R4-PINS 2,8,9,10	4310R-101-102
R5-PINS 9,10	785-1-R330
R7-PINS 6,7,8,9,10	4310R-101-102
<u>DIP</u>	
U41-PINS 6,7,9	898-1-R10K

PERQ I/O SCHEMATIC INDEX

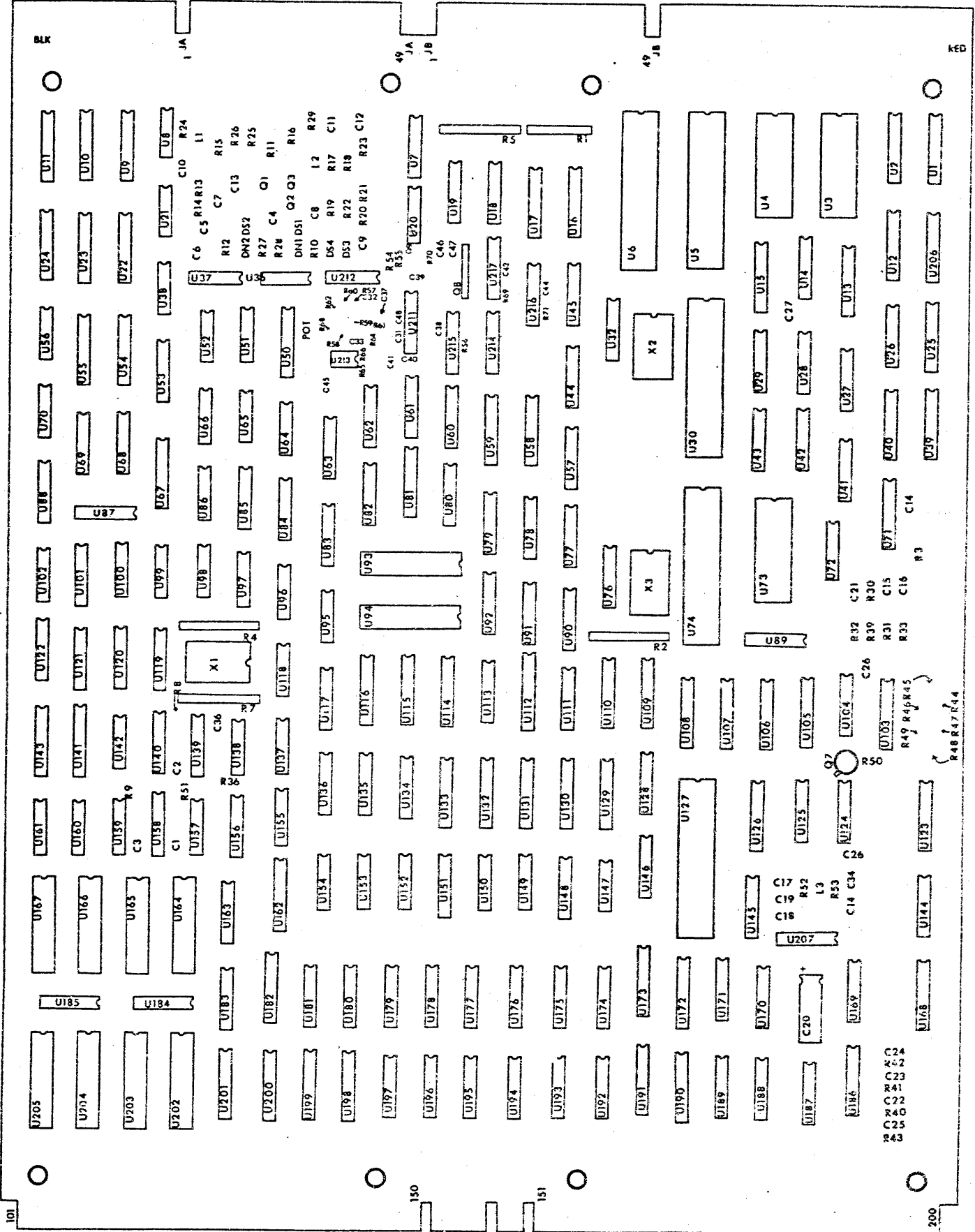
	TITLE	PAGE
A. DISC SECTION		
	Disc Data Port	1
	Head Select	2
	Data Sequencer	3
	Header Match	4
	Memory Bus Interface	5
	Disc Arm. Control	6
	Disc Status Inputs	7
	Rigid Disc Int. Connection	8
	Block Diagram	9
B. NET SECTION		
	Net Analog	10
	Data Demodulator	11
	Data Mod-you-lata (Modulator)	12
	Header Match	13
	Net Address-latch	14
	Clock Generator	15
	Net Finite State Machine	16
	Overrun Detector	17
	Net FIFOs	18
C. Z-80 SECTION		
	PLL	19
	CVSD	20
	I/O Z-80 Layout	21
	I/O CPU Memory	22
	I/O Peripheral Decoder	23
	DMA Channel	24
	RS 232 Interface	25
	Touch Pad Interface	26
	GPIB Interface	27
	Keyboard Interface	28
	Interrupt Vector Select	29
	I/O Address Decode	30
	Floppy Control	31
	Floppy Disc Int. Conn.	32
	Block Diagram	33
D. DMA SECTION		
	Channel Selector	34, 35, 36
	Address Counter	37
	High Address Latch	38
	Address Count Select	39

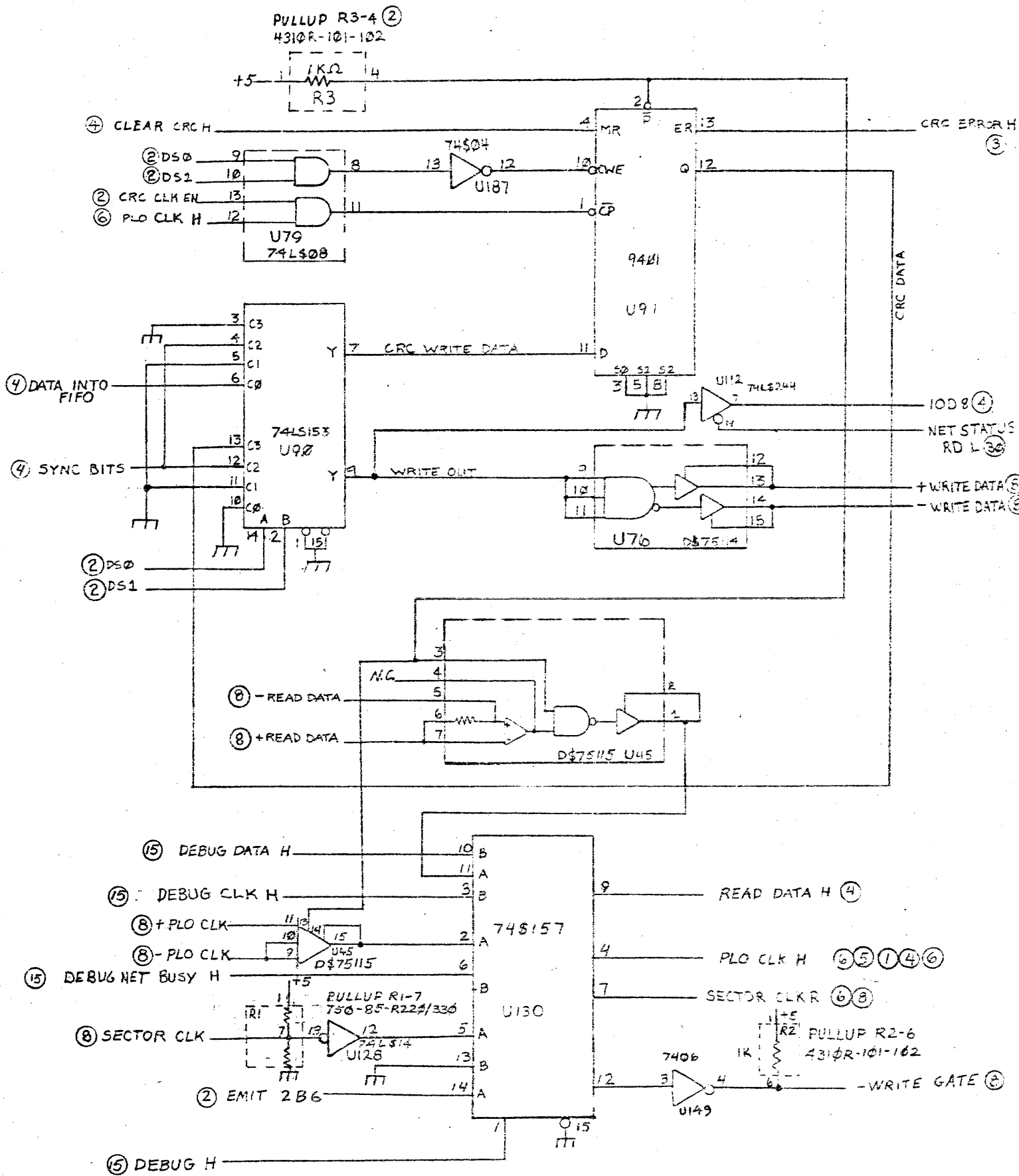
31K JA2 JA30 JA30 JA30 JA30



100 50 51 PRO-SK1-108-F

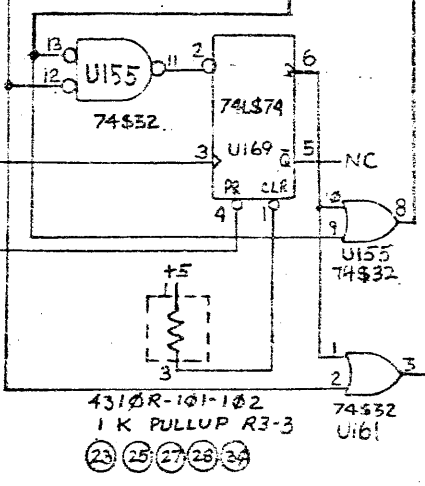
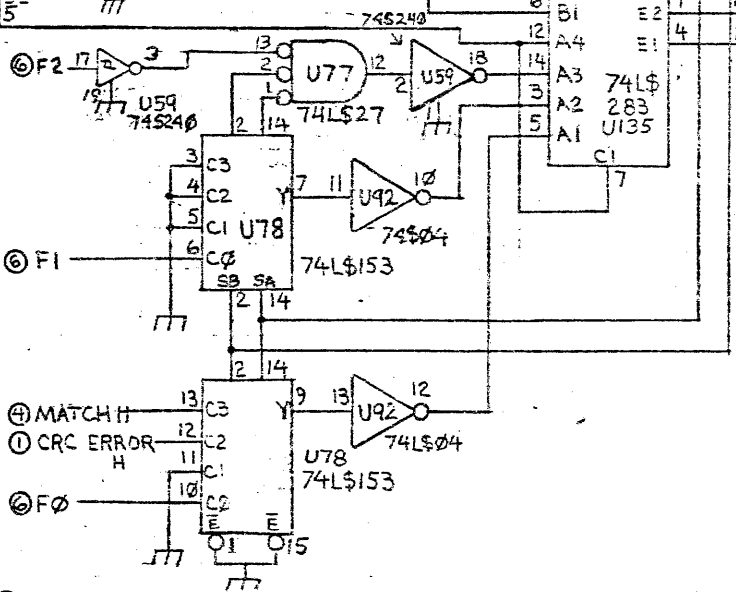
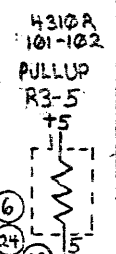
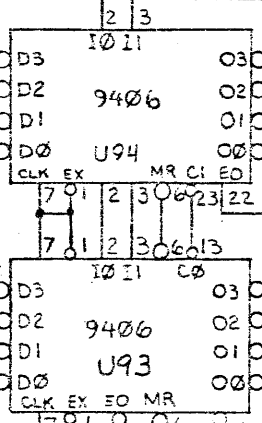
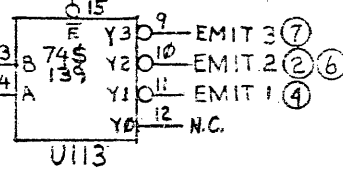
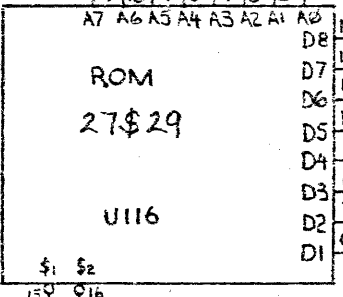
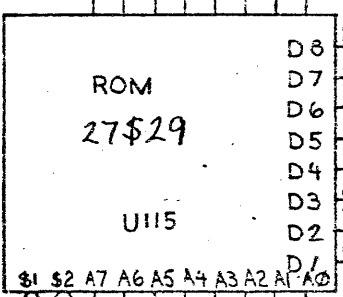
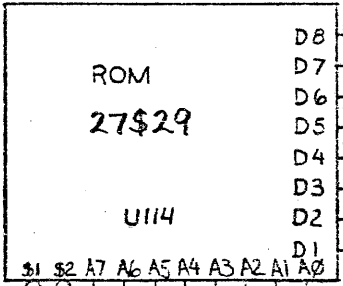
Three Rivers Computer	
PRO-SK1-108-F	IOB-F
PRO-SK-0476-A	1 - 2



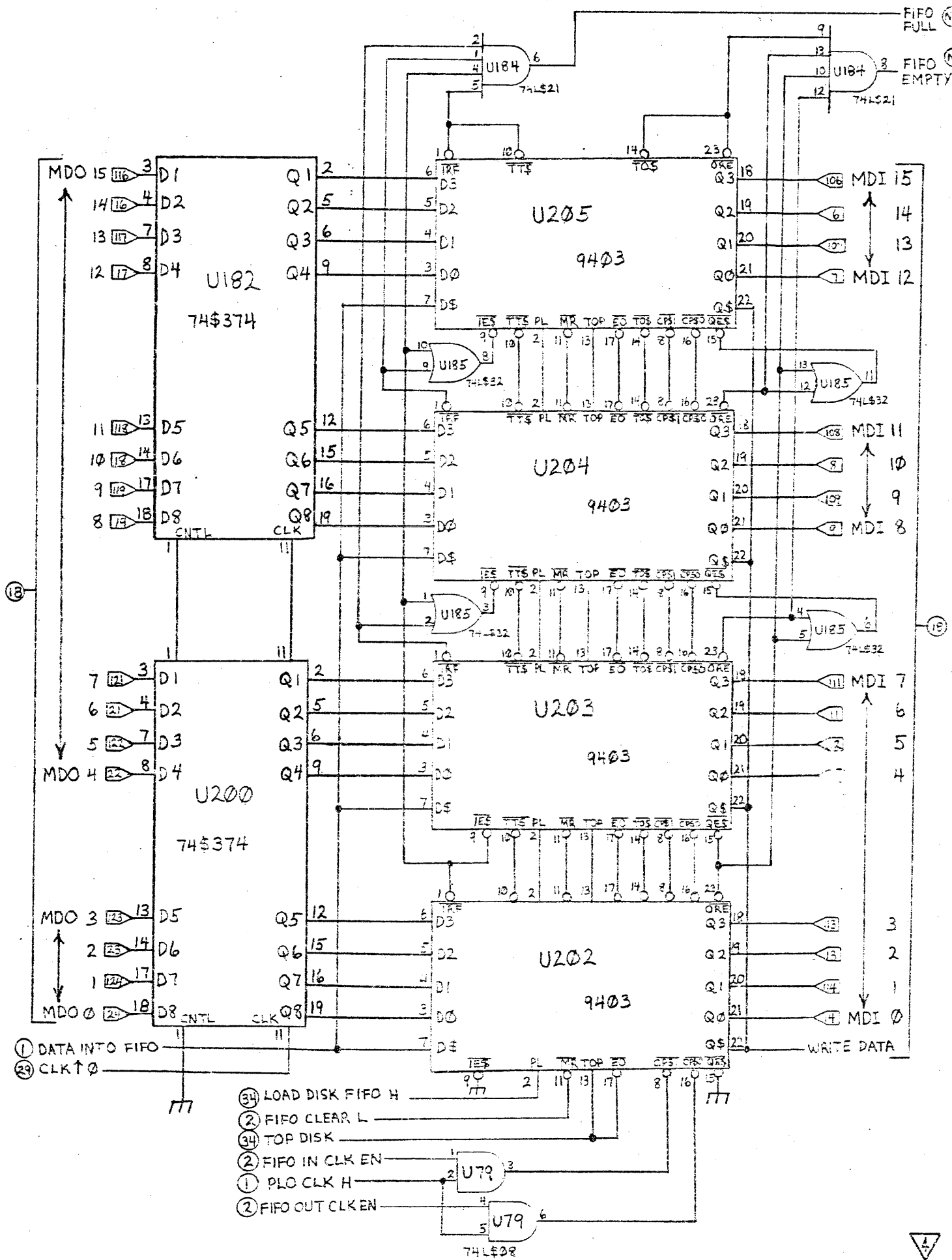


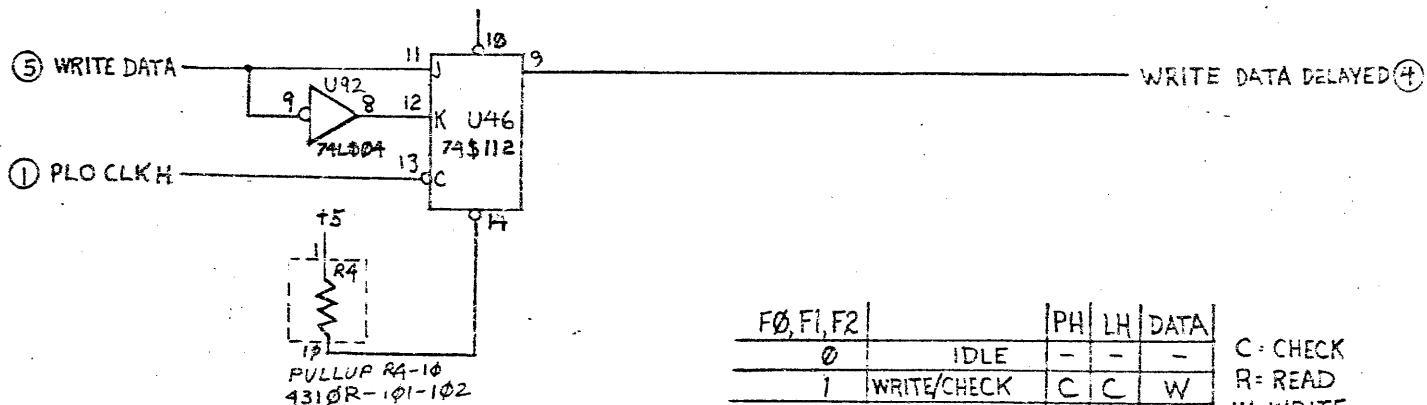
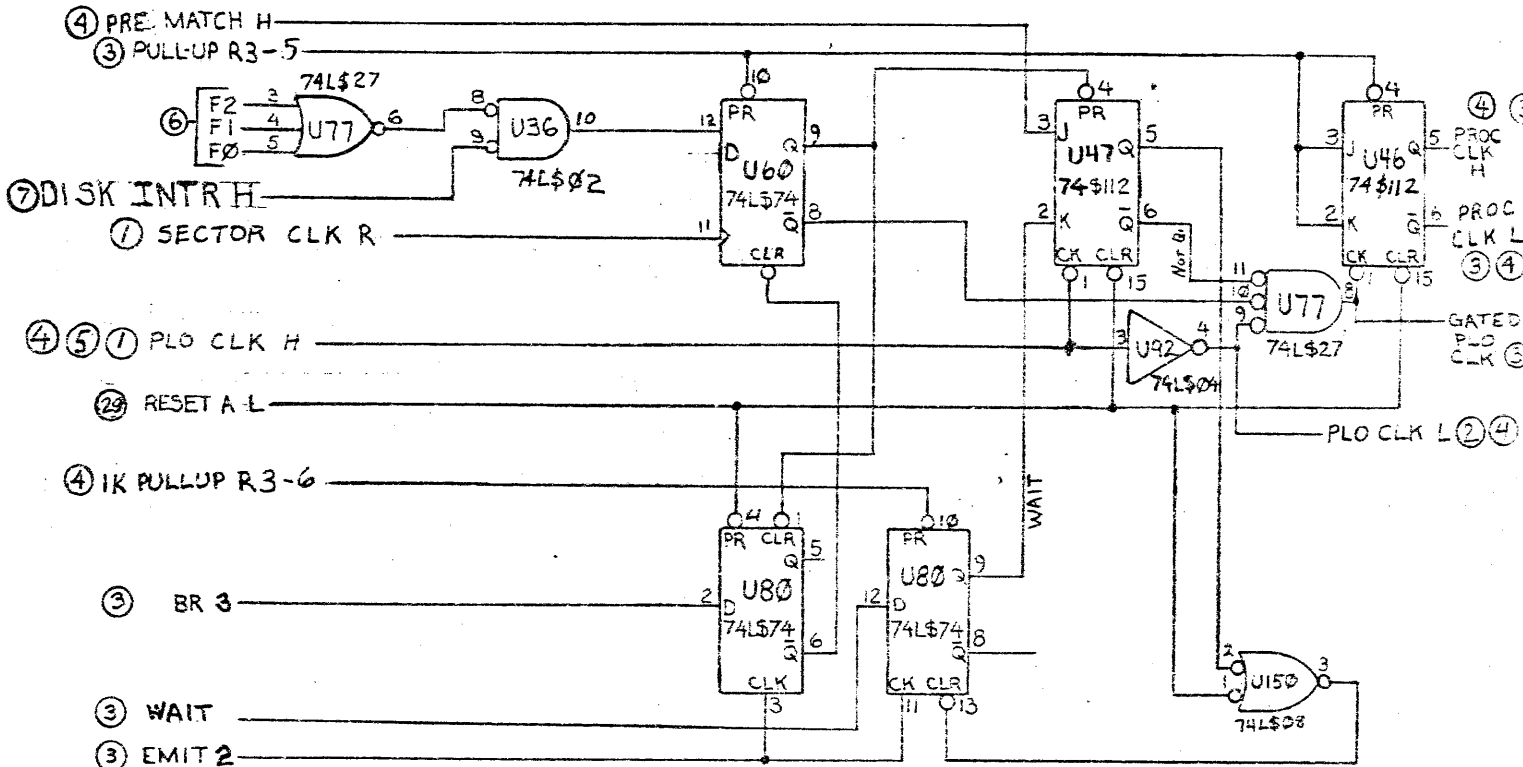
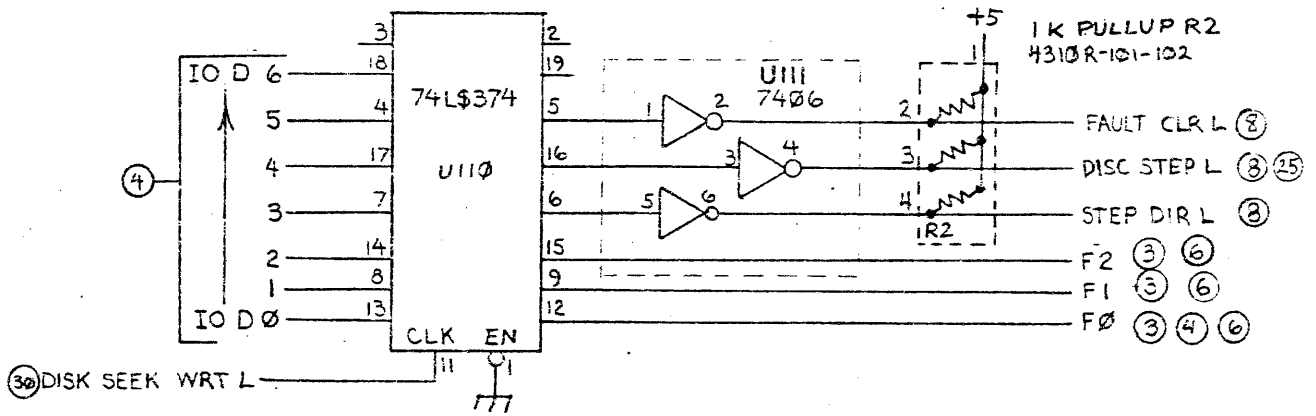
⑥ PROC CLK H
GATED PLO CLK

U72
74LS00

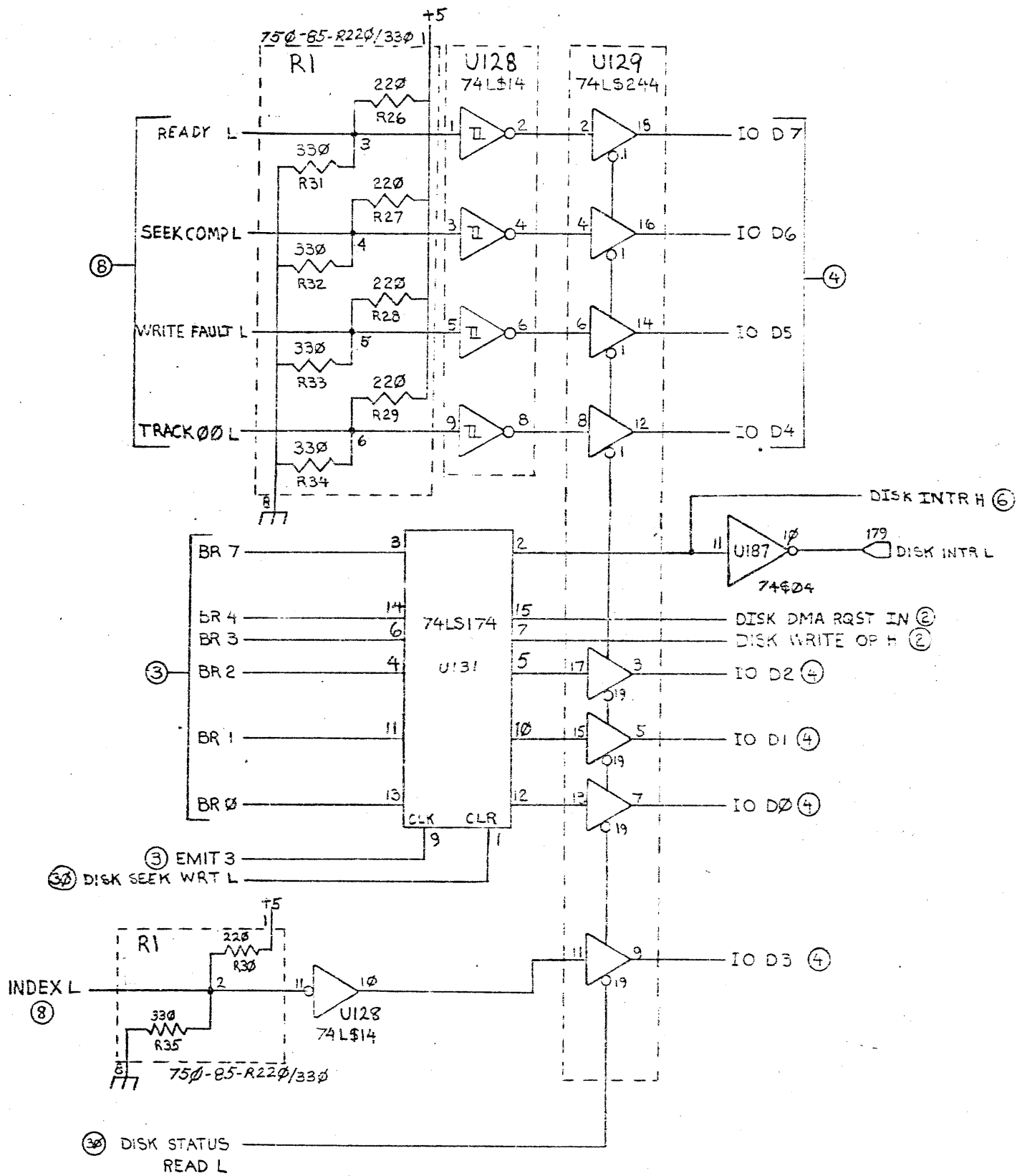


⑥ PROC CLK L
②⑨ RESET B L



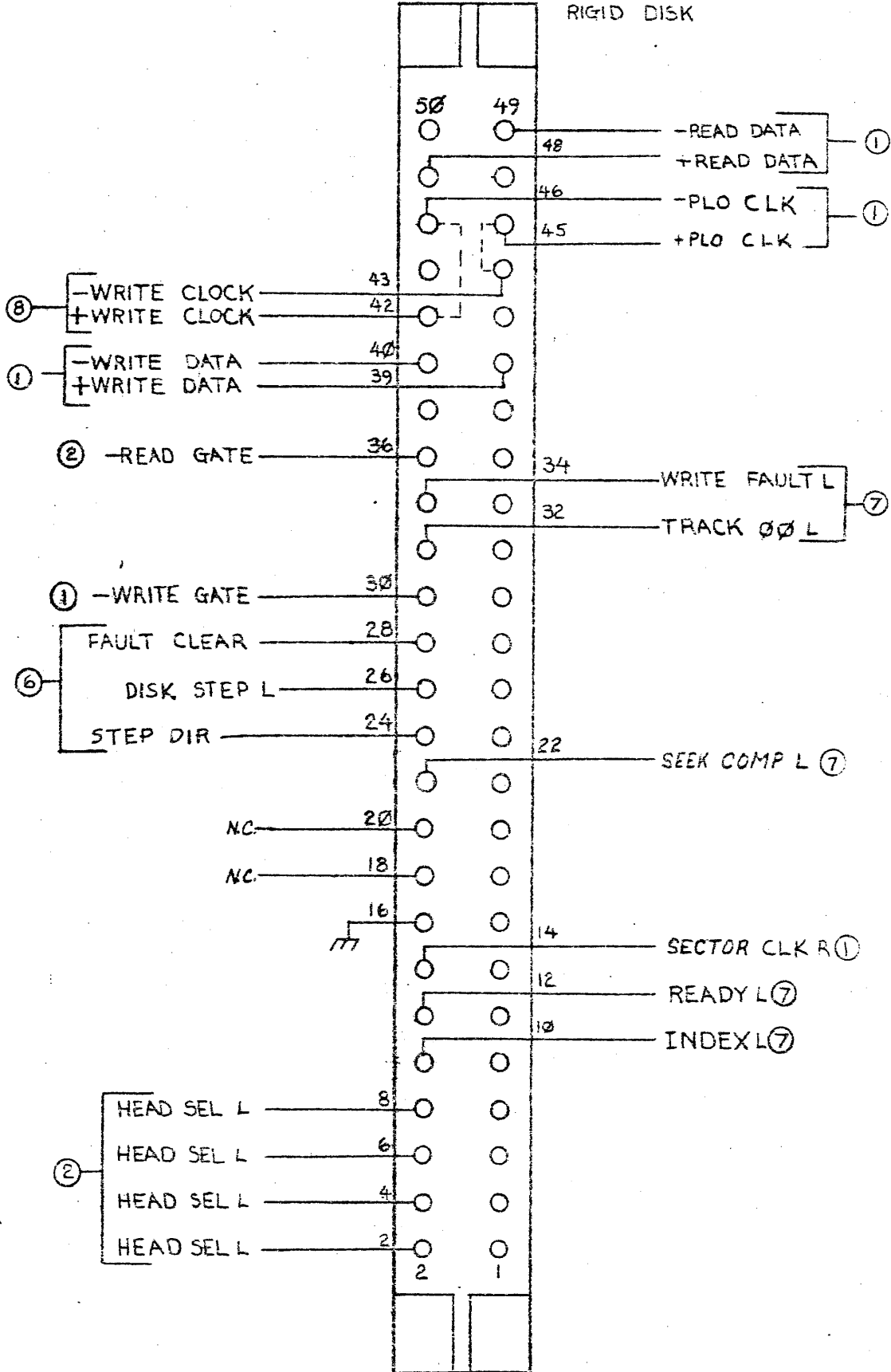


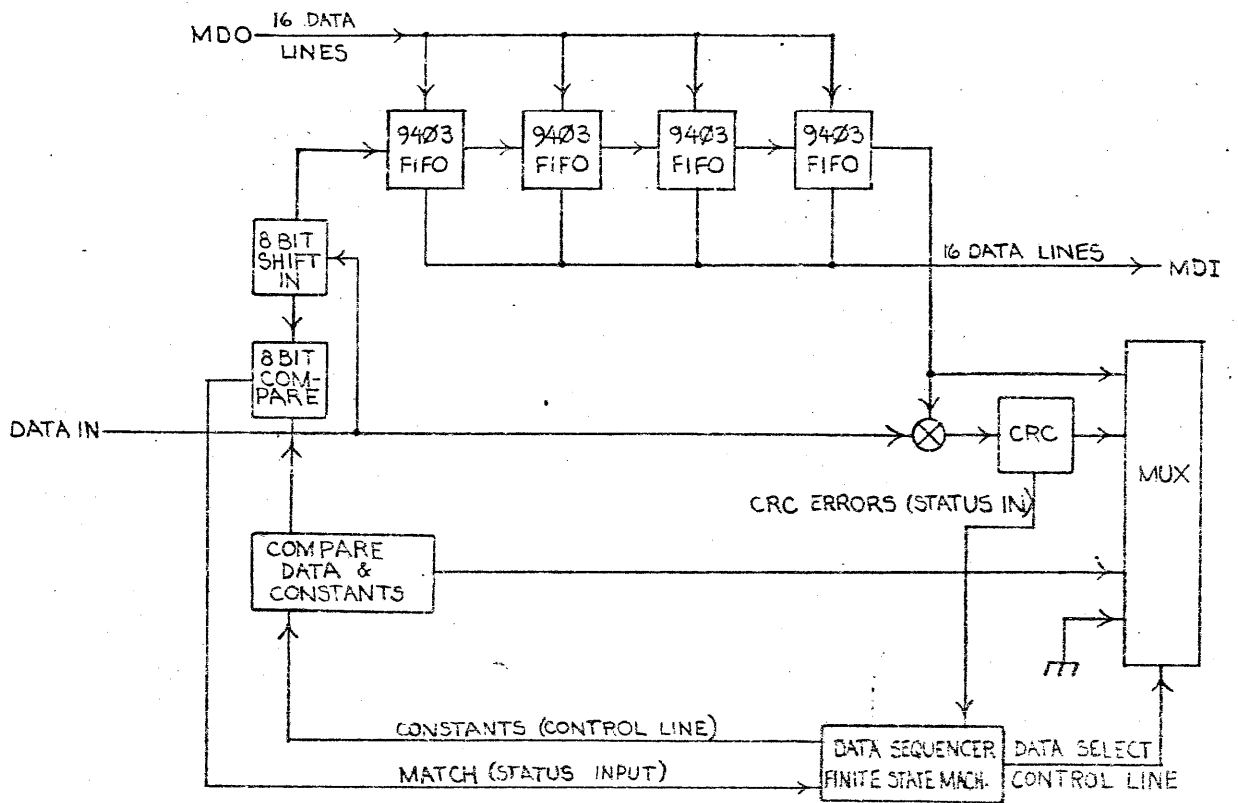
F0, F1, F2		PH	LH	DATA	
0	IDLE	-	-	-	C = CHECK
1	WRITE/CHECK	C	C	W	R = READ
2	WRITE/WRITE LH	C	W	W	W = WRITE
3	FORMAT WRITE	W	W	W	
4	READ/CHECK	C	C	R	
5	FORMAT READ	R	R	R	

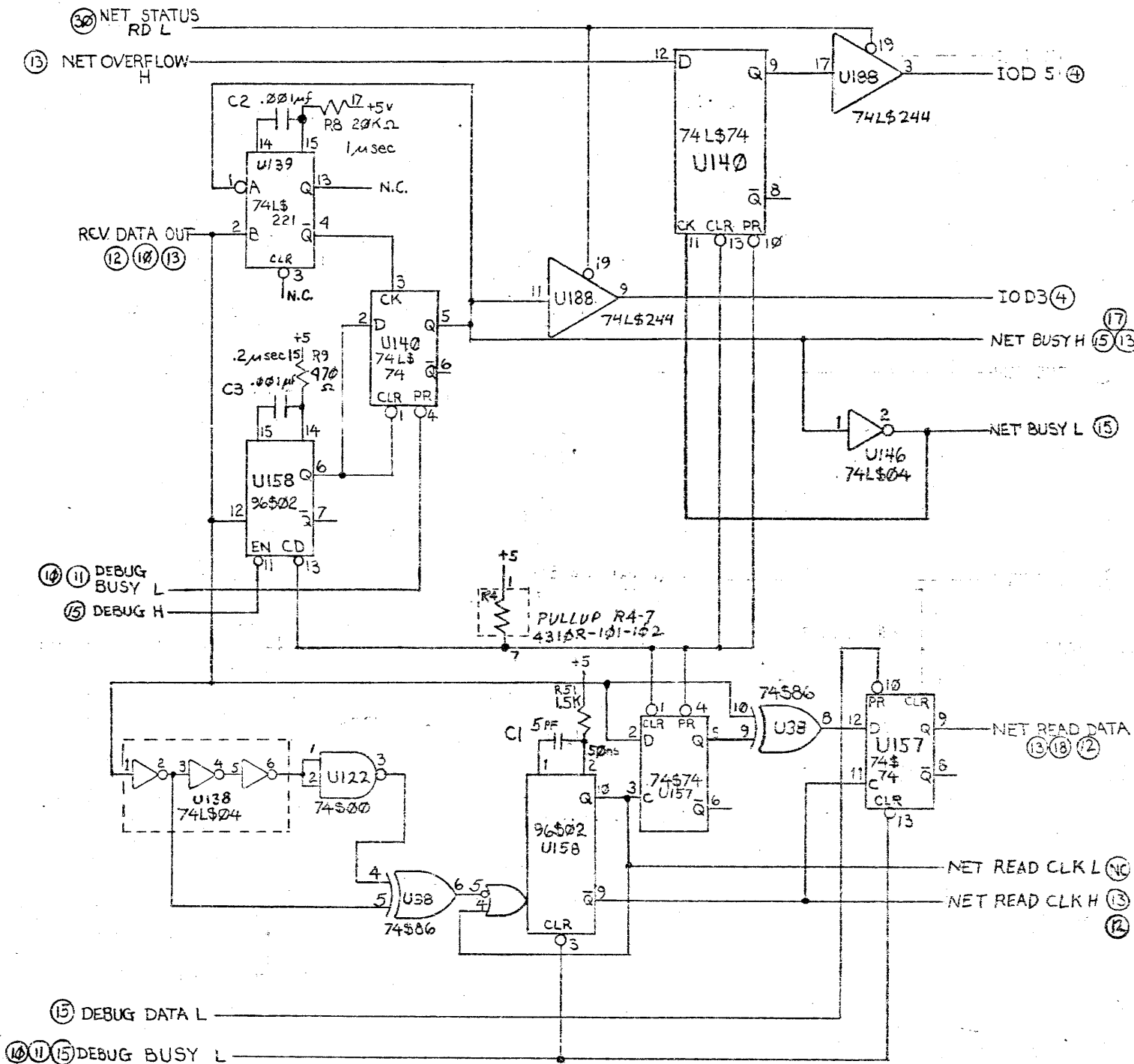


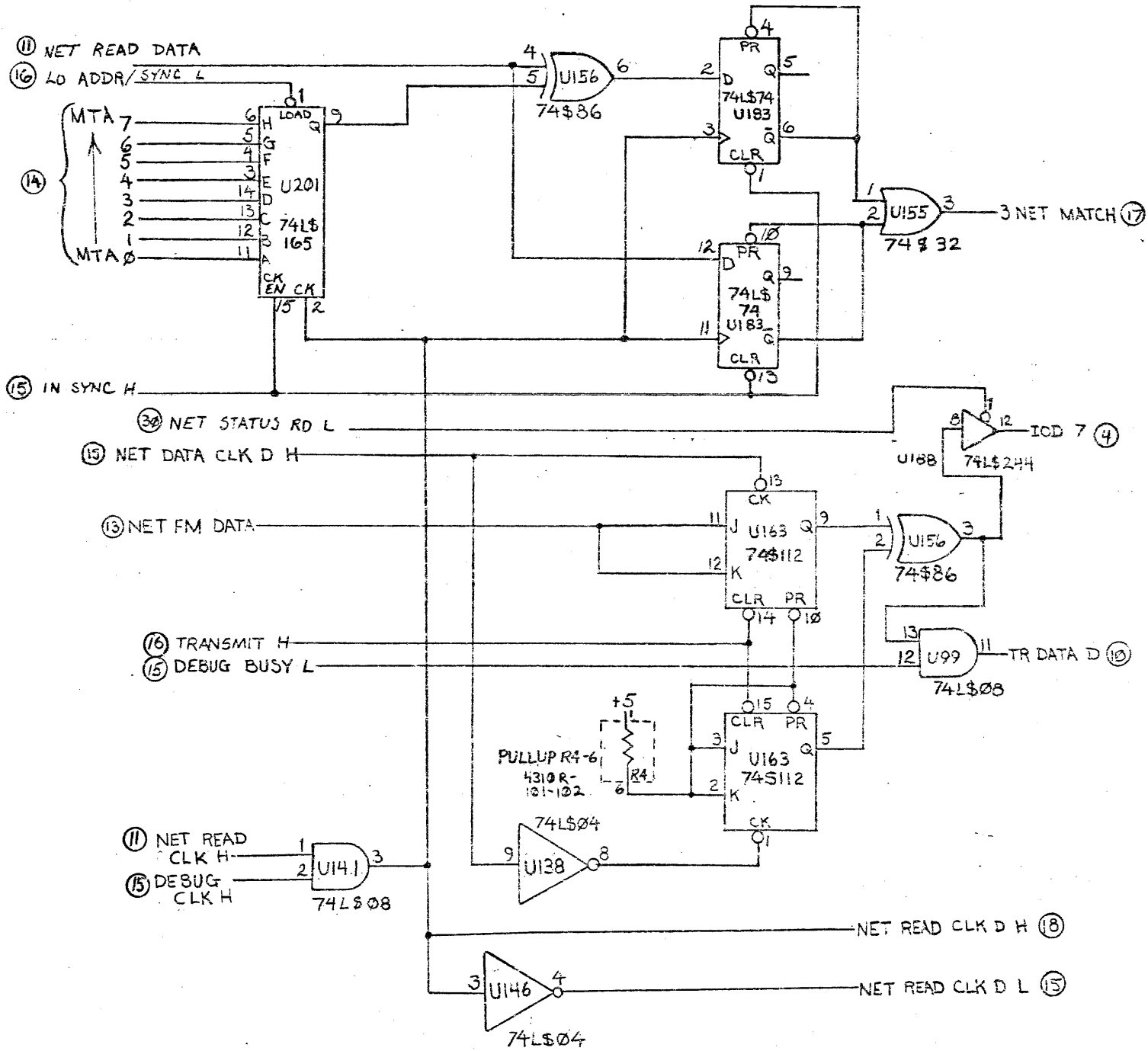
JB

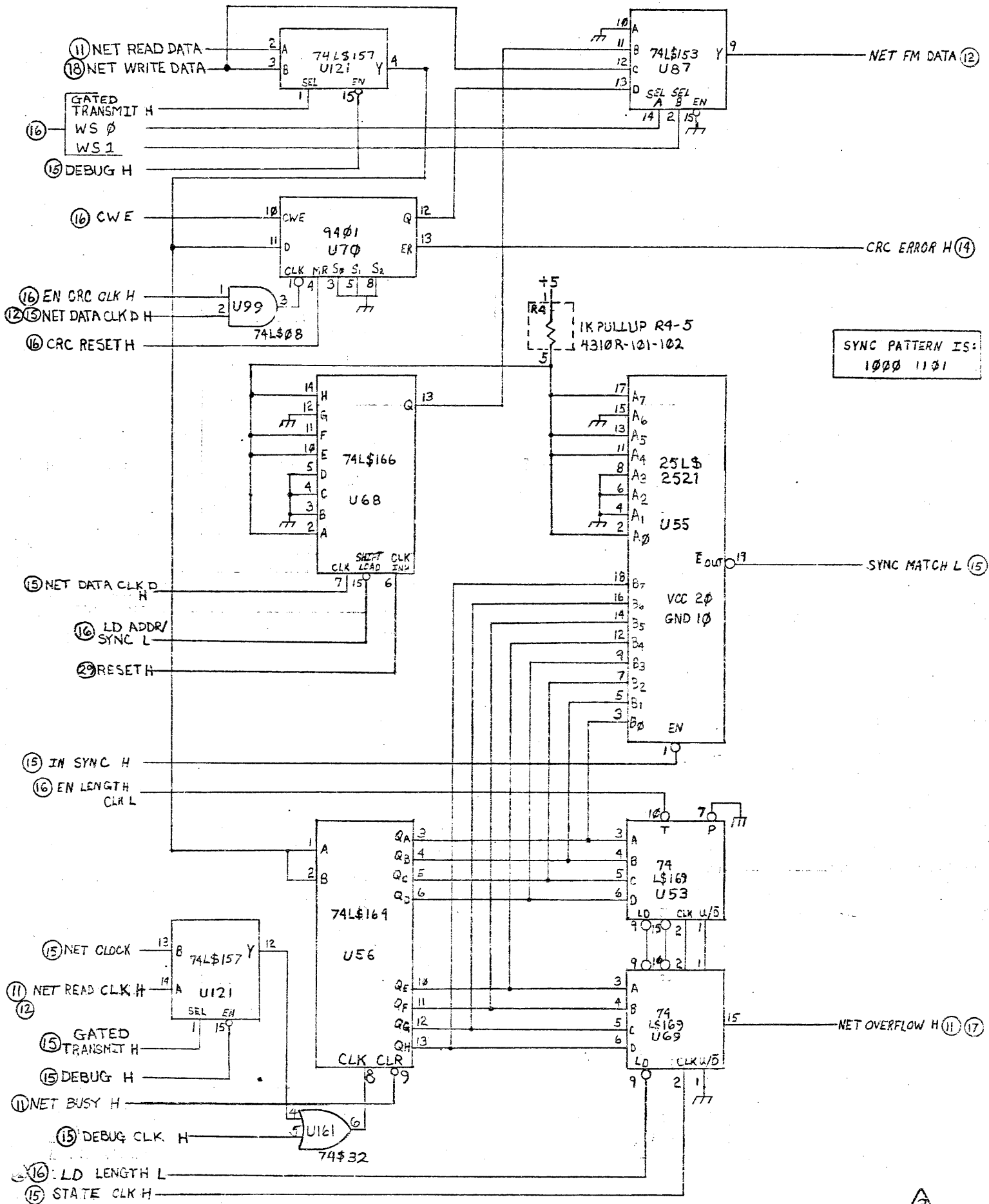
RIGID DISK

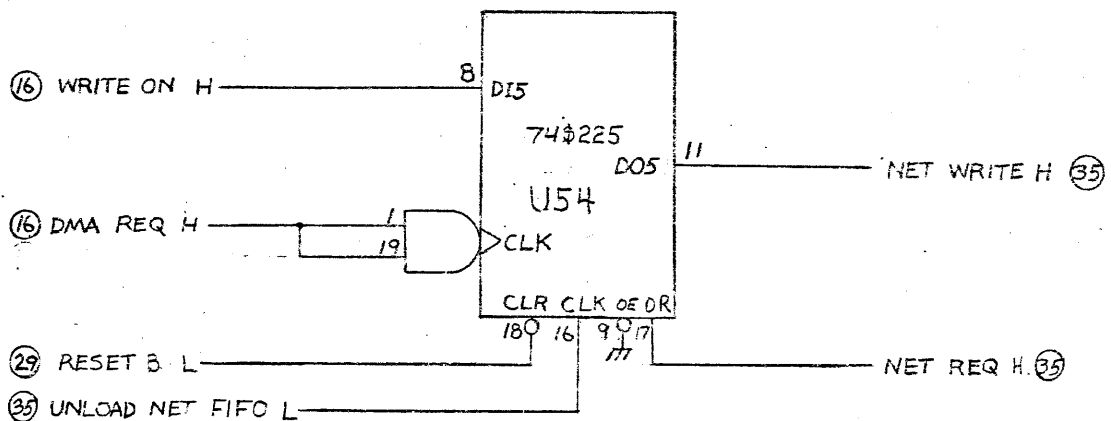
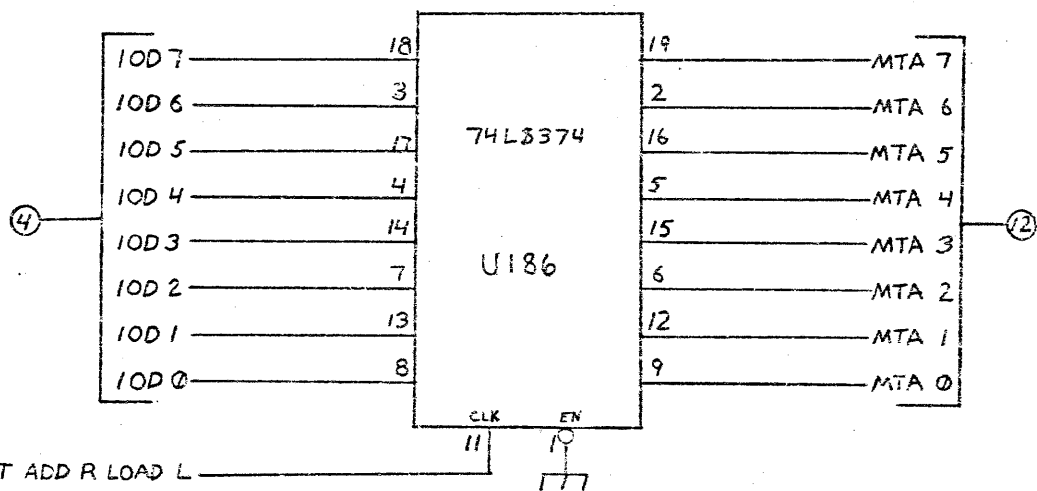
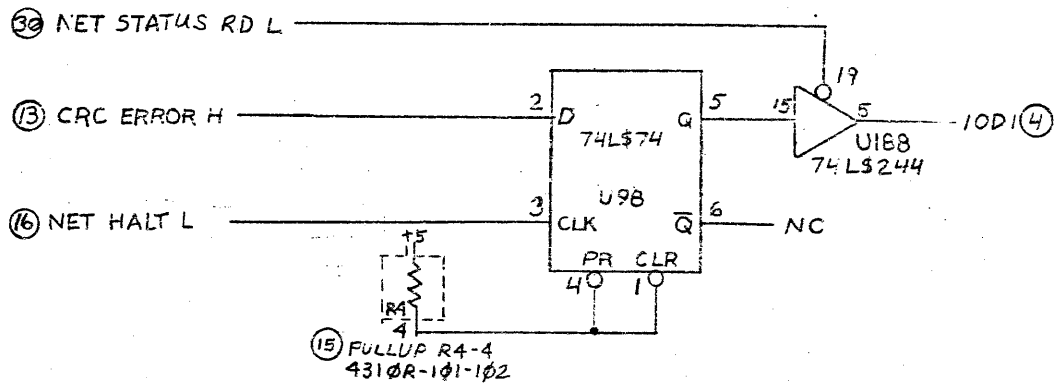


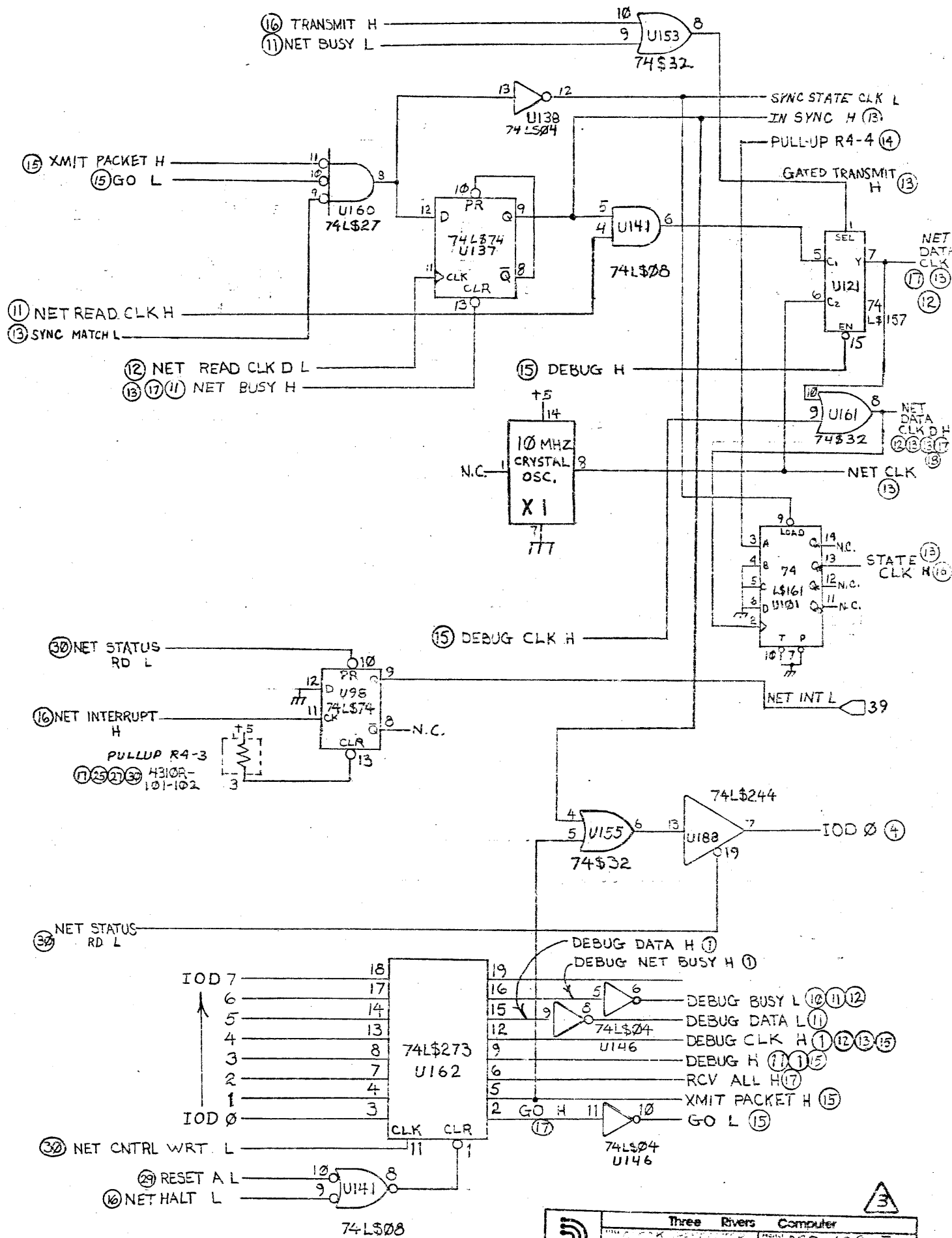


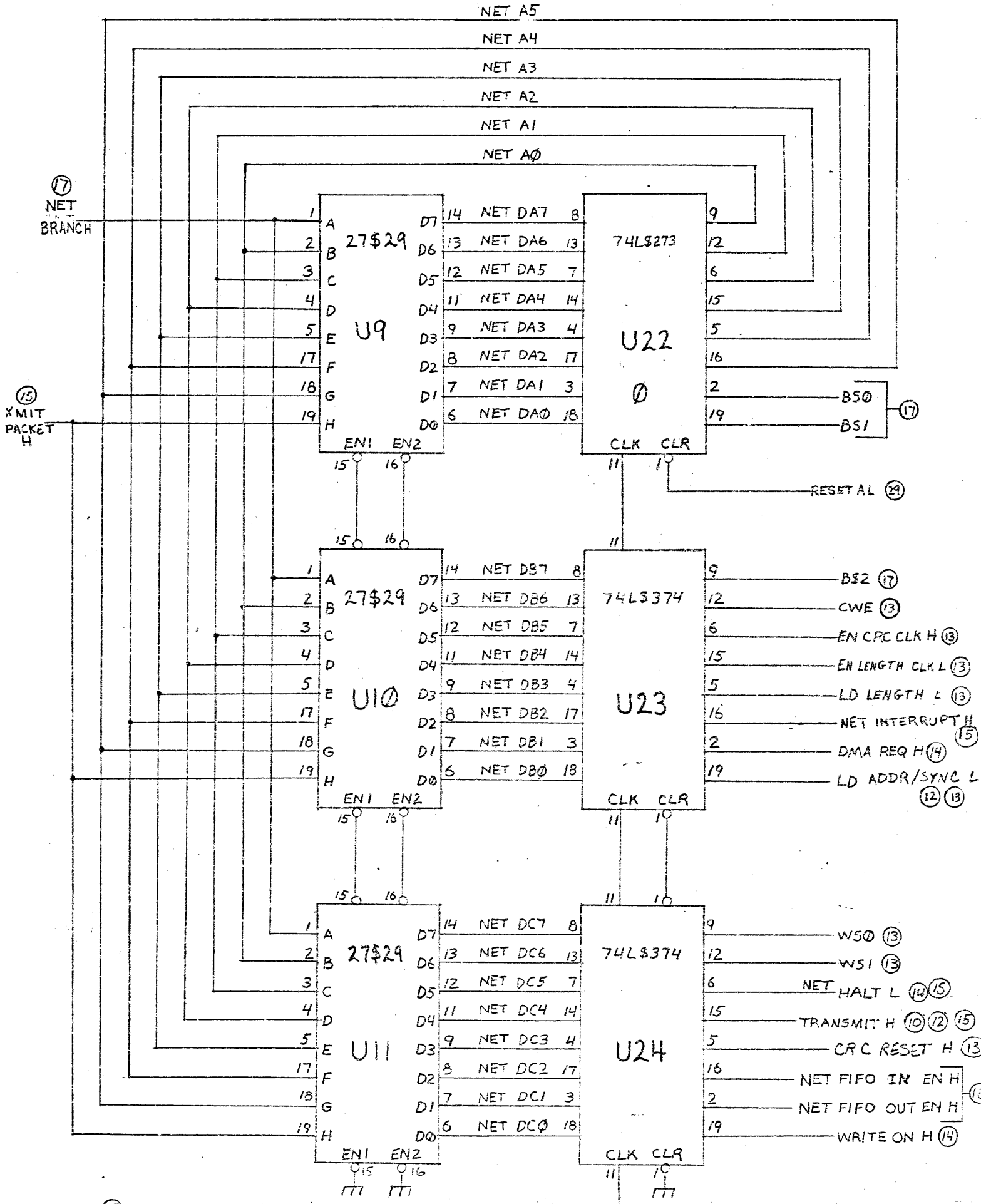




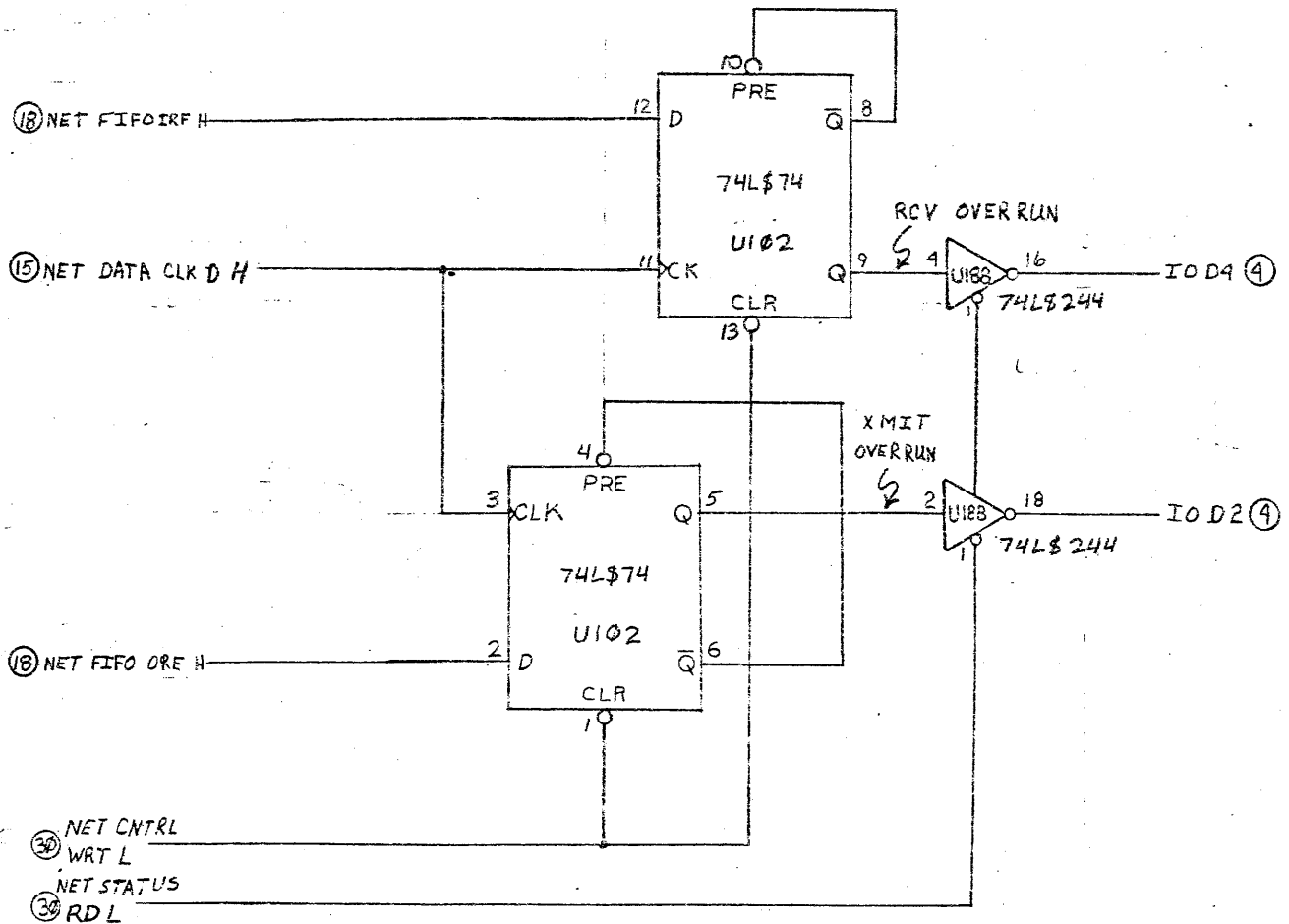
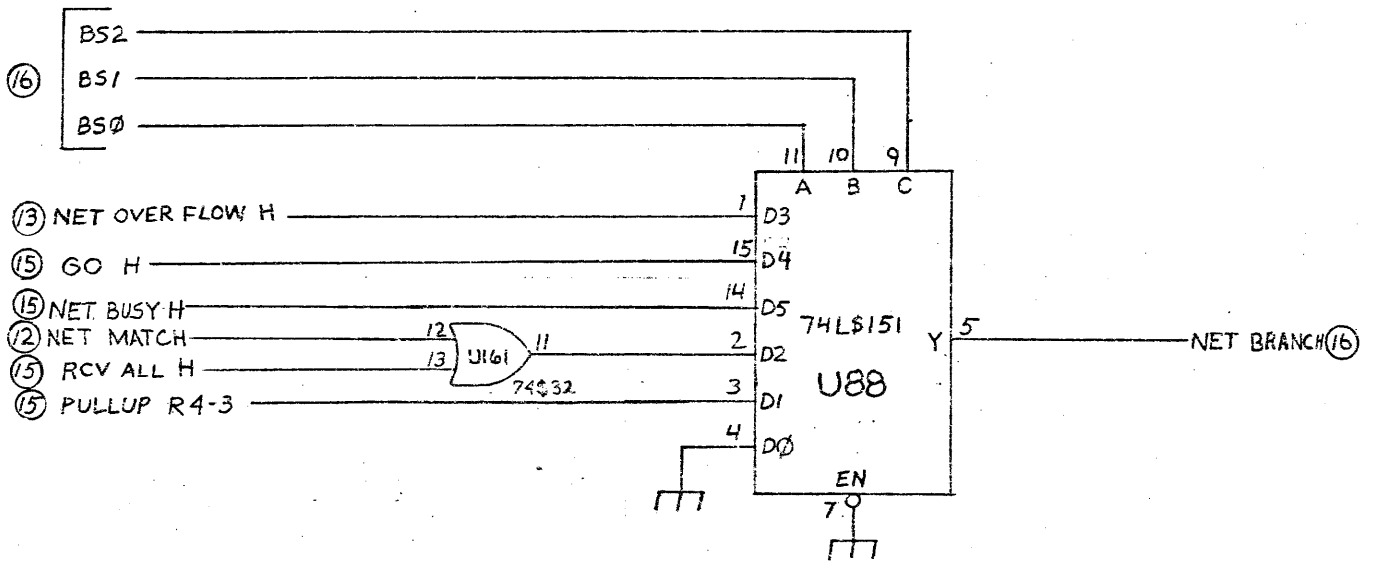


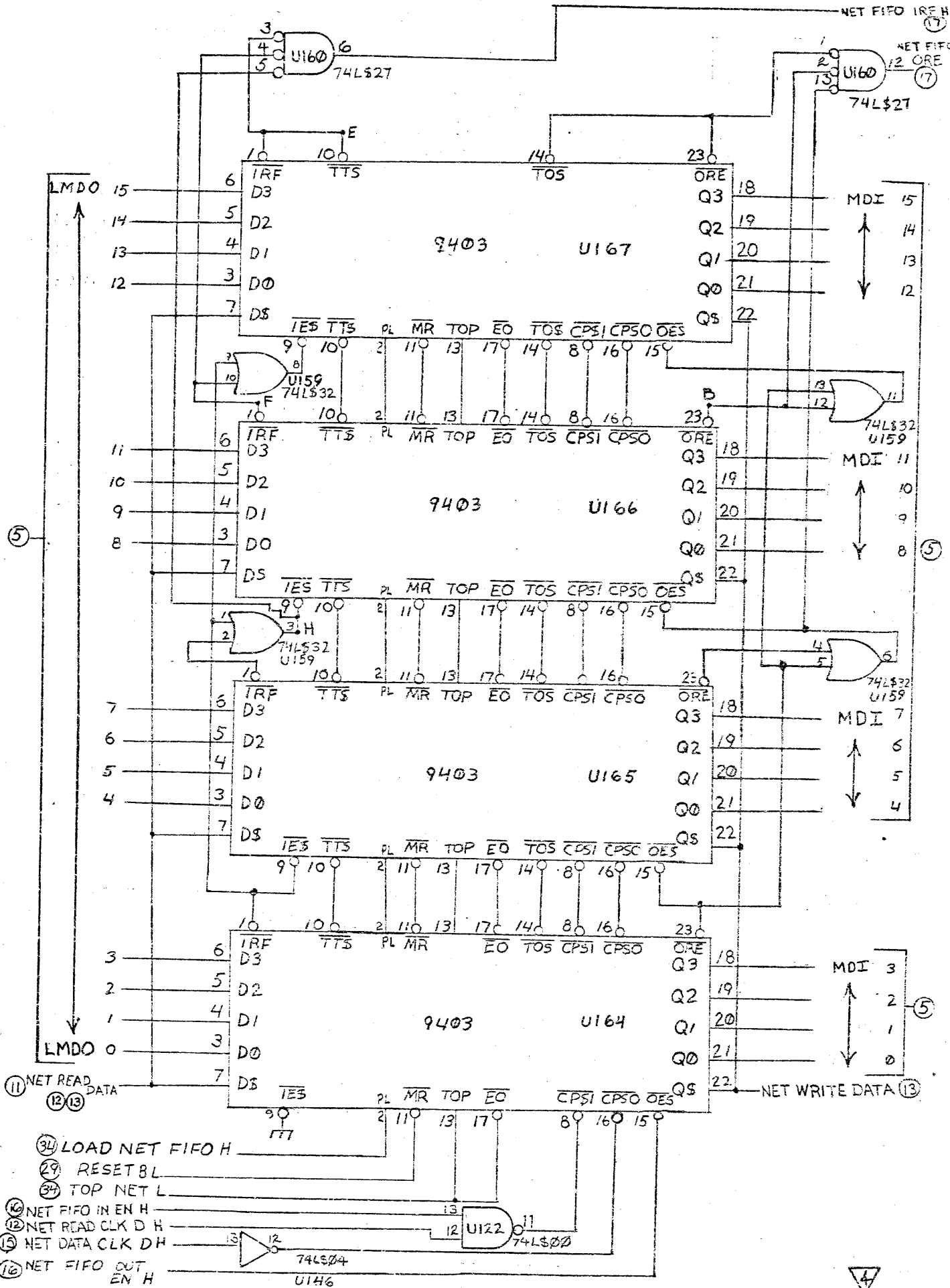






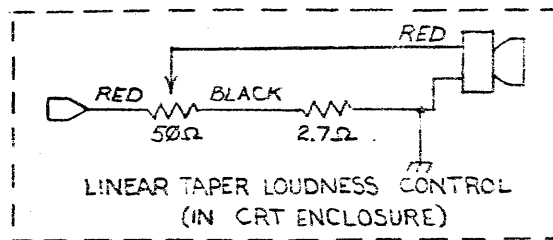
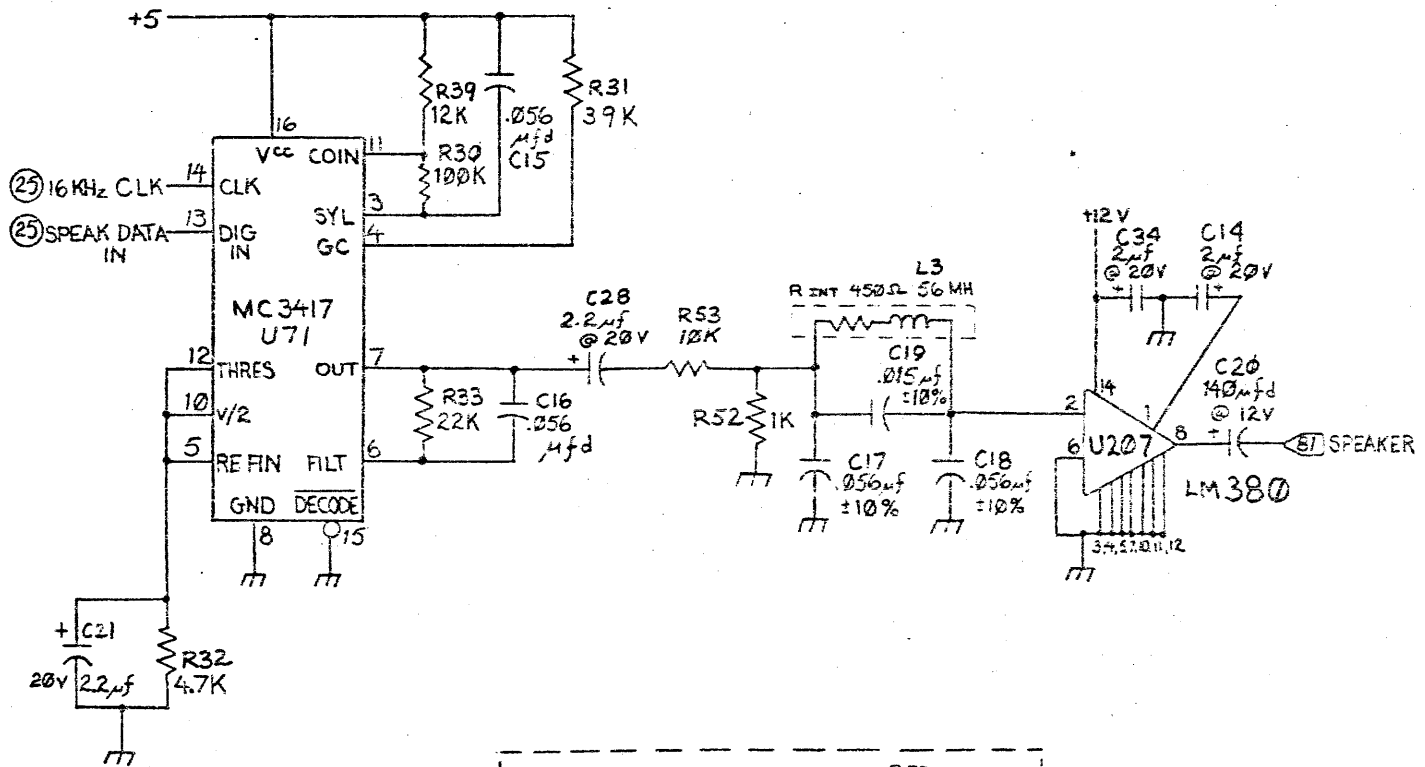
(15) STATE CLK H

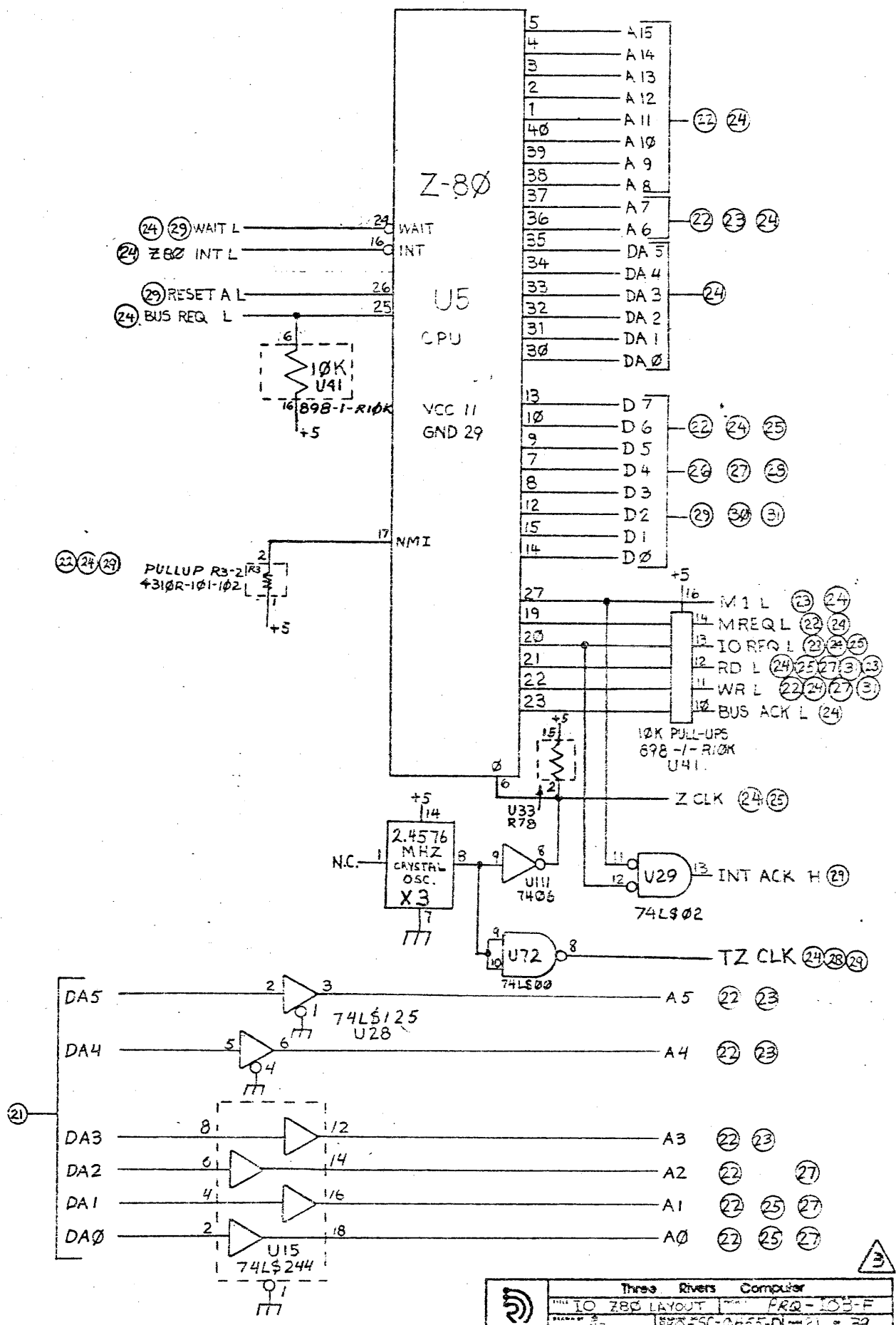




⑪ NET READ DATA
⑫ NET READ CLK D H
⑬ NET DATA CLK D H

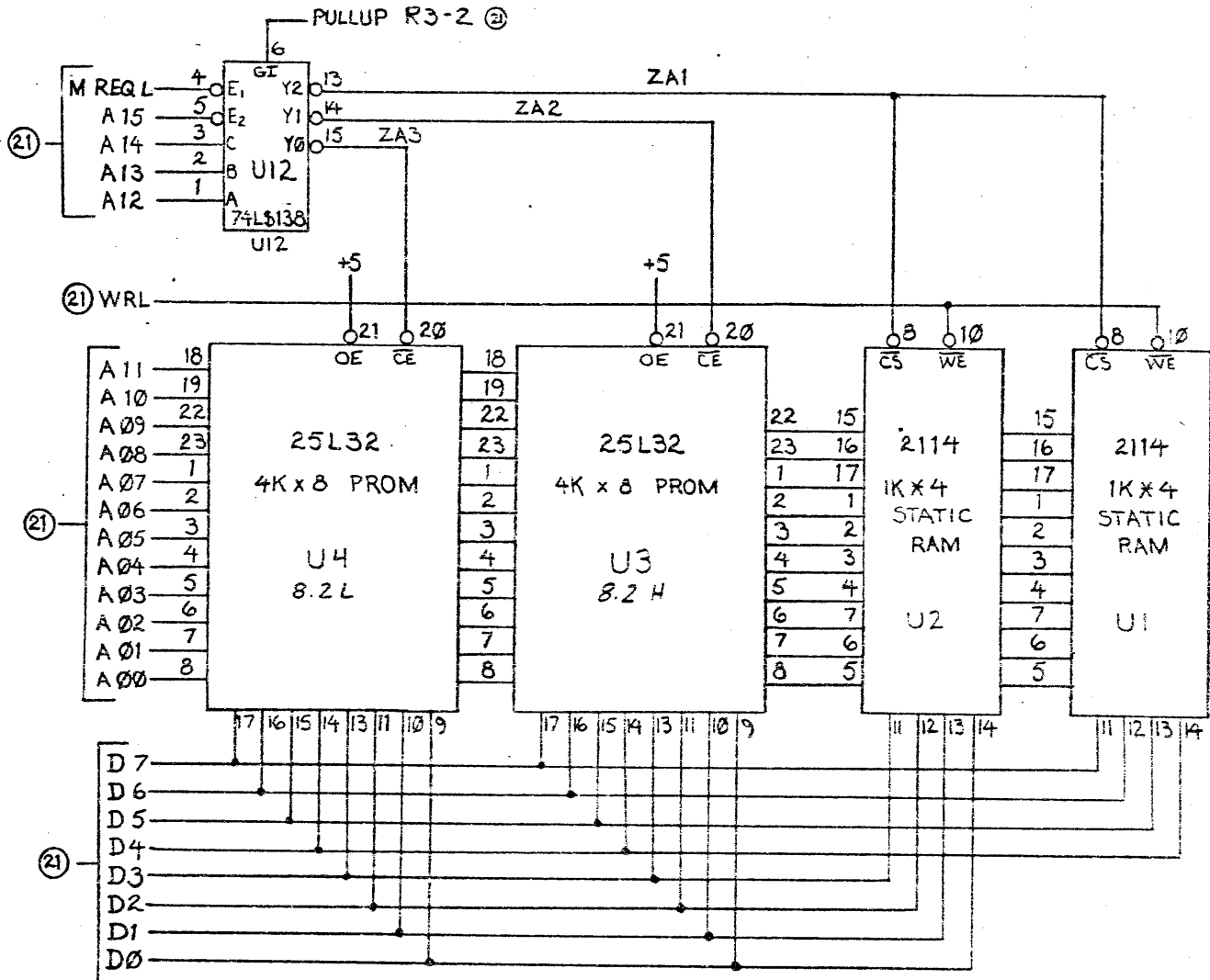
⑭ NET FIFO IN EN H
⑮ NET FIFO OUT EN H
⑯ LOAD NET FIFO H
⑰ RESET B L
⑱ TOP NET L





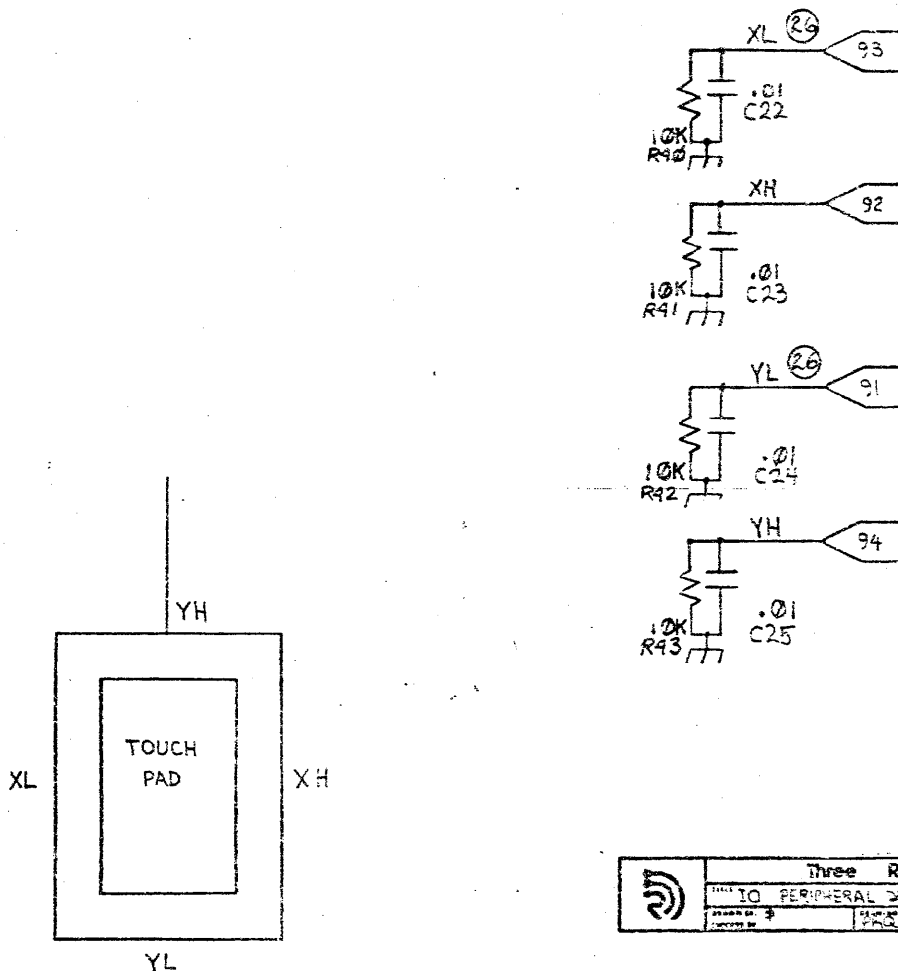
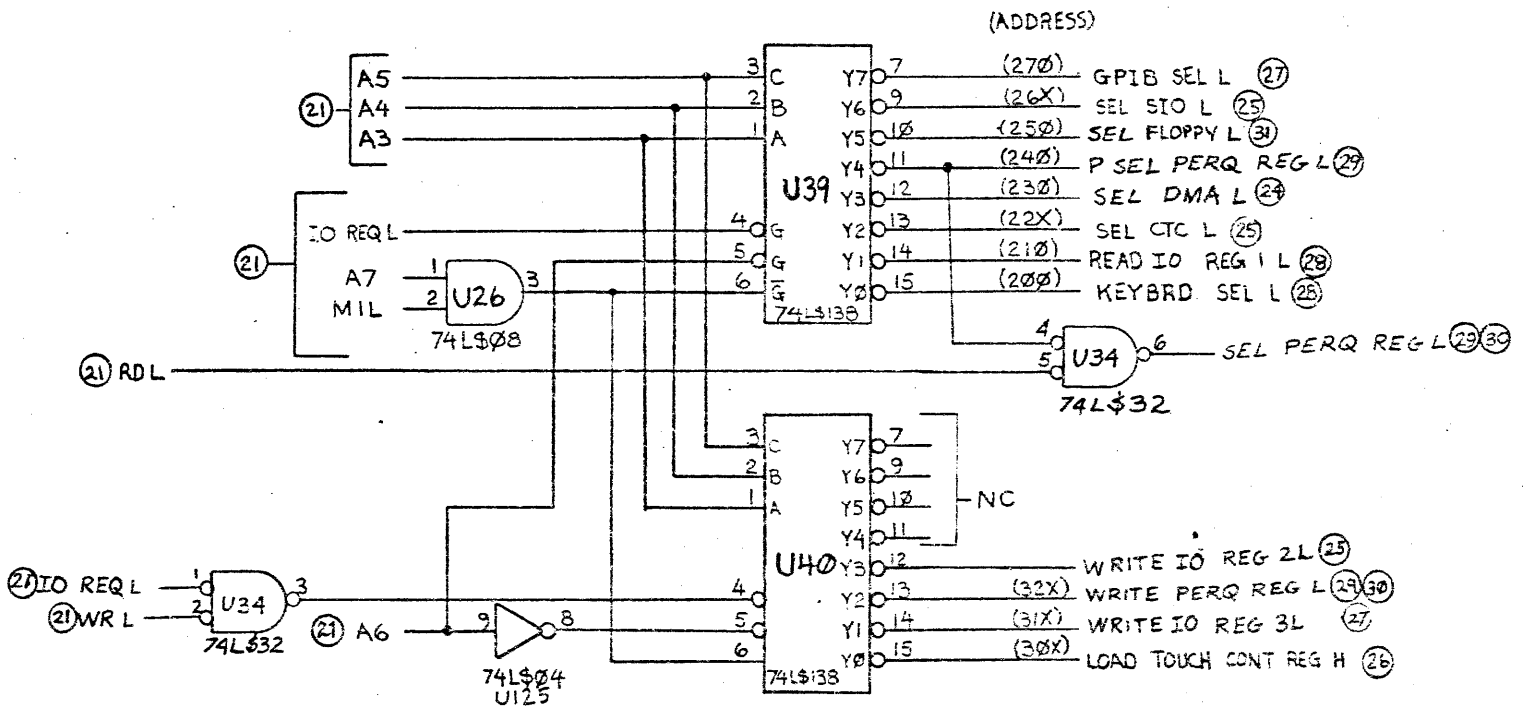
Three Rivers Computer	
THIS IS TO Z80 LAYOUT	FRQ-105-F
REVISION 02	FRQ-50-0455-D-21-39

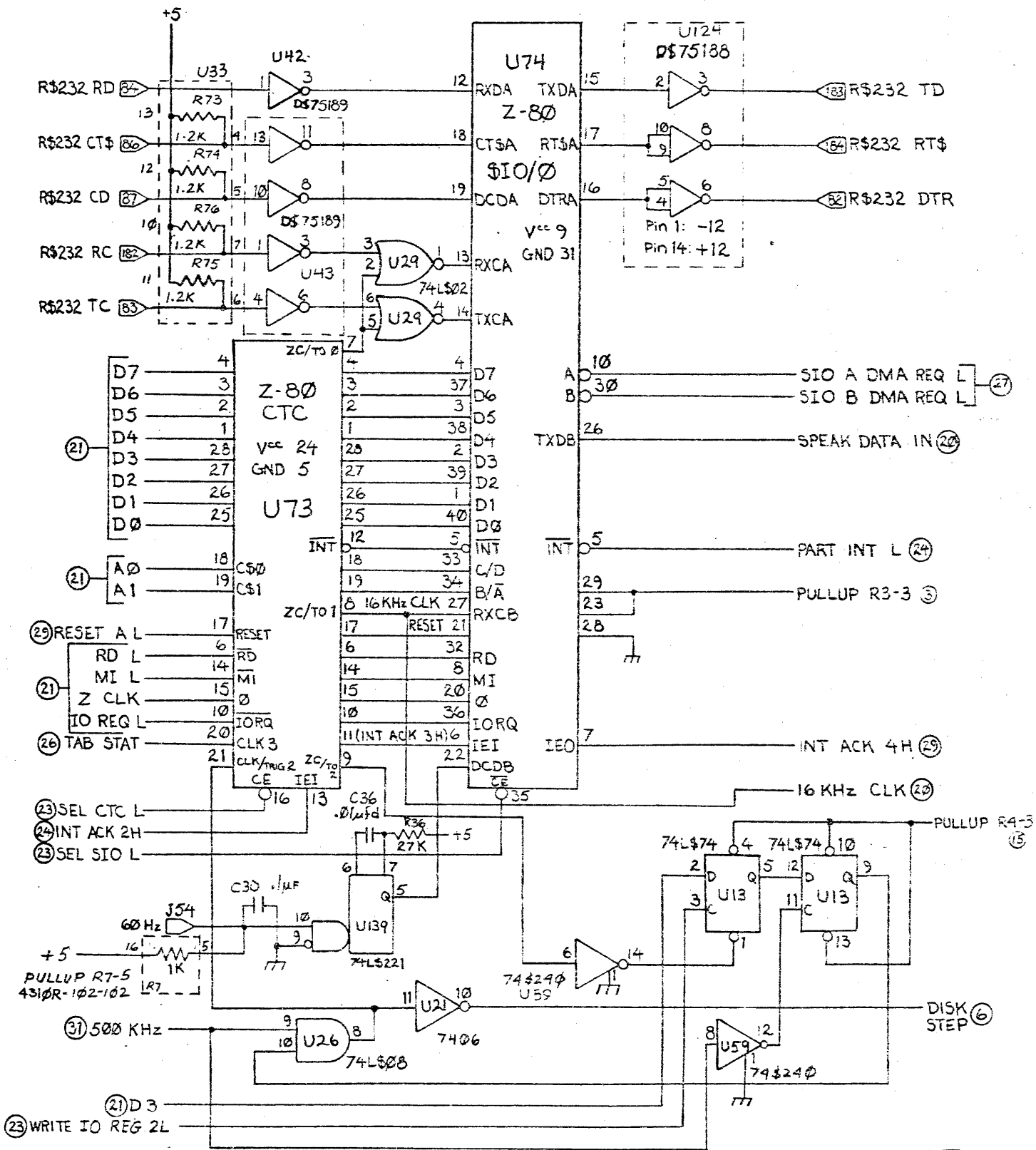
REV C 1/14/81 BAC

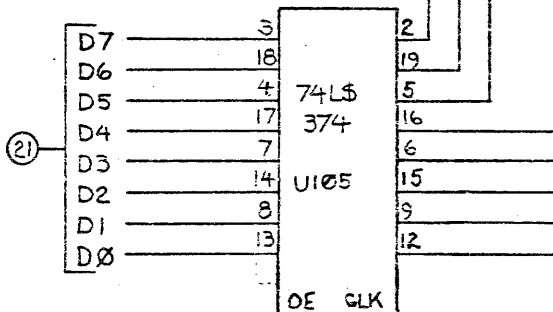
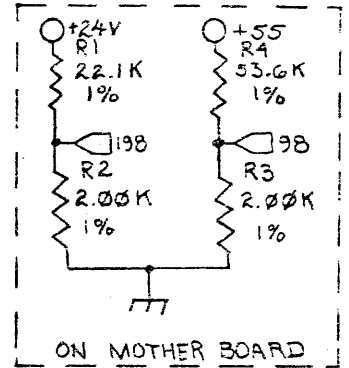
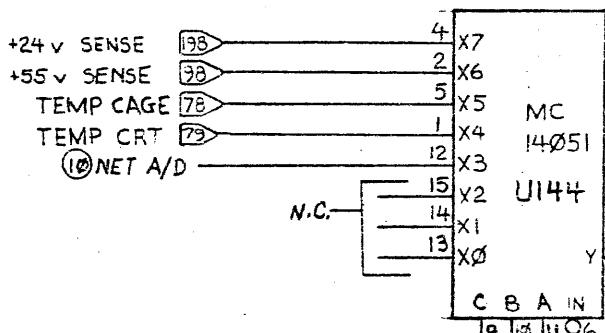


EPROM DIFFERENCES

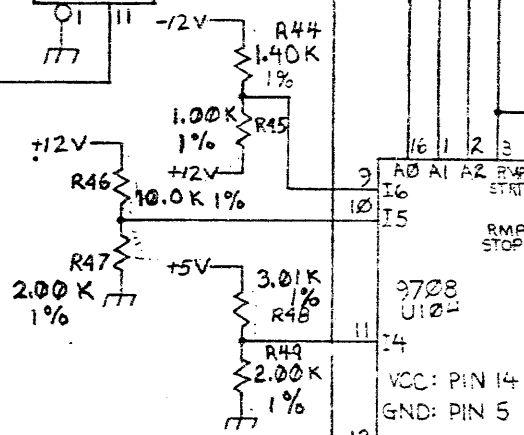
	T I	INTEL
21	+5	A11
20	\overline{CE}	O Enb
18	A11	Chip Enb



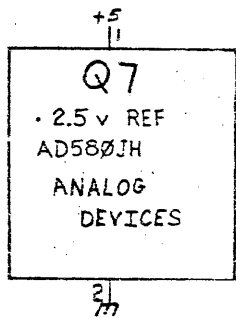




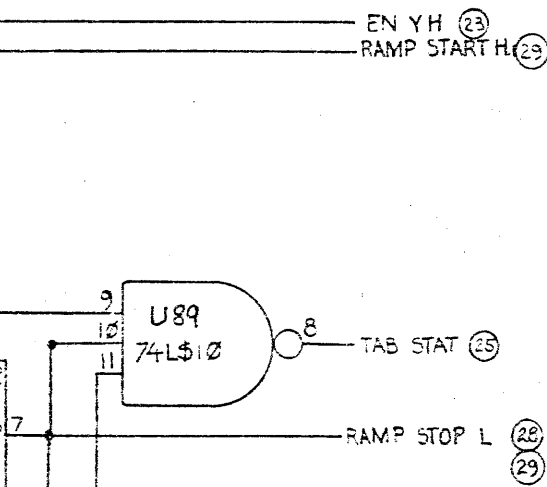
(21) LOAD TOUCH
(22) CONT REG L

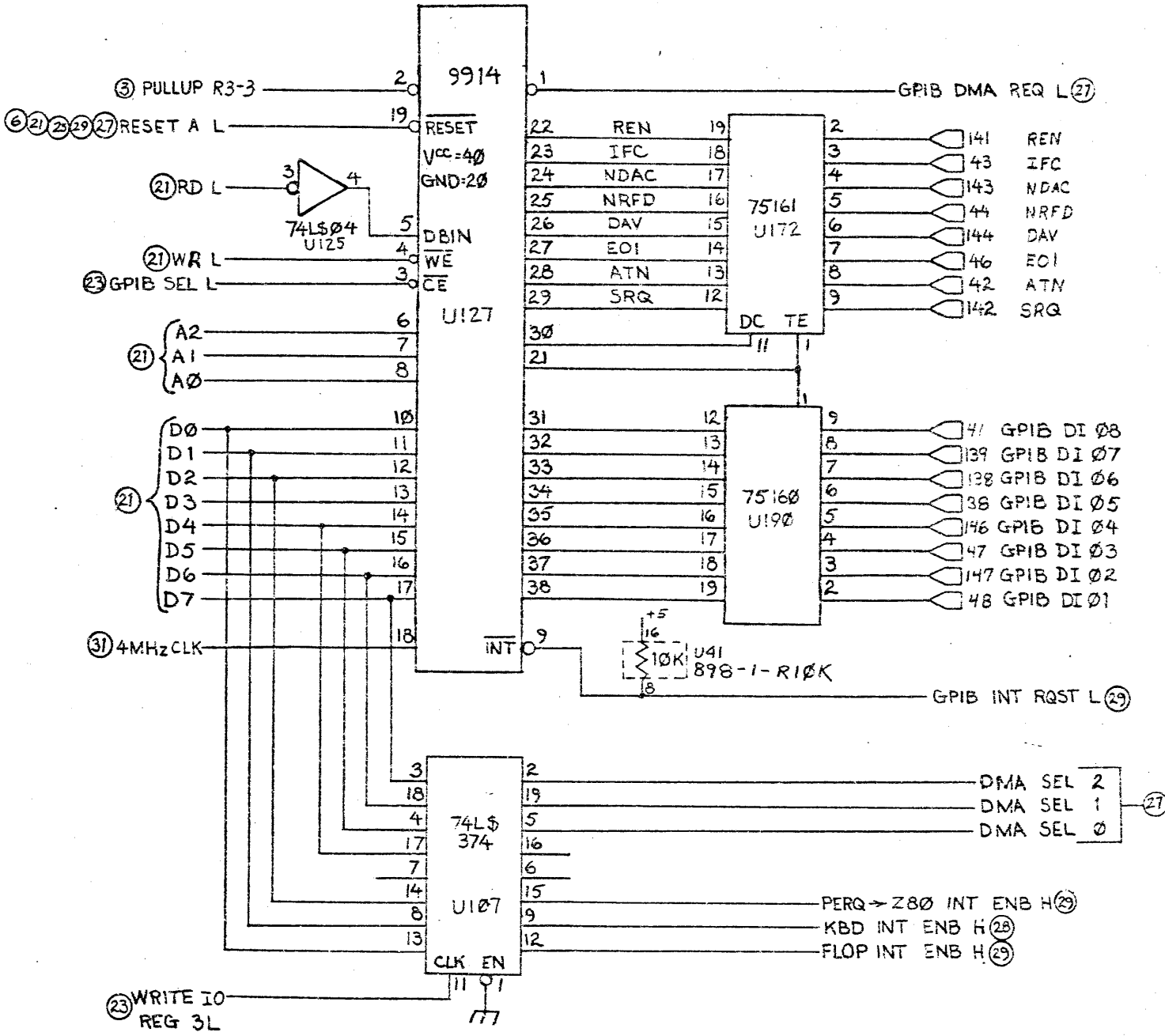
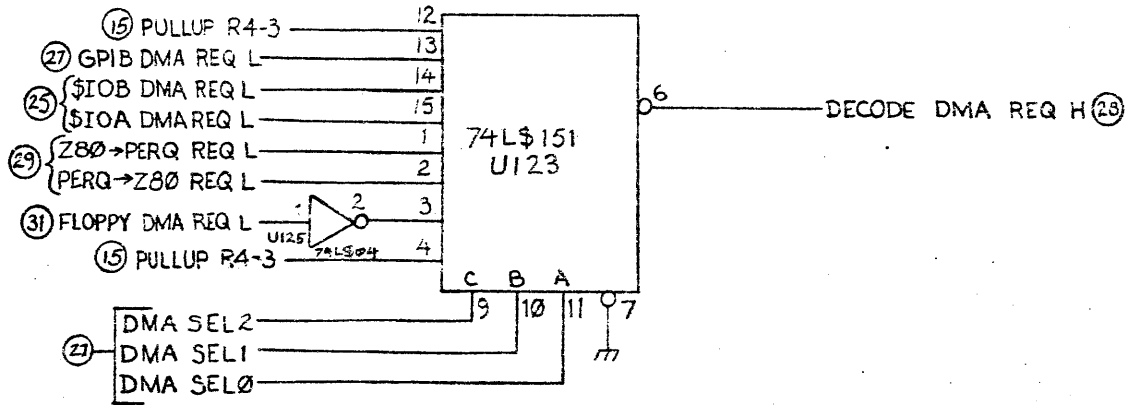


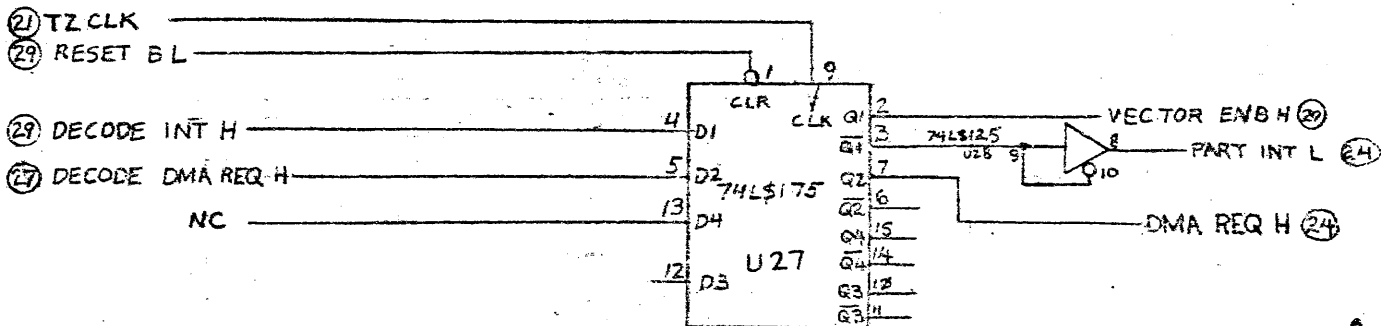
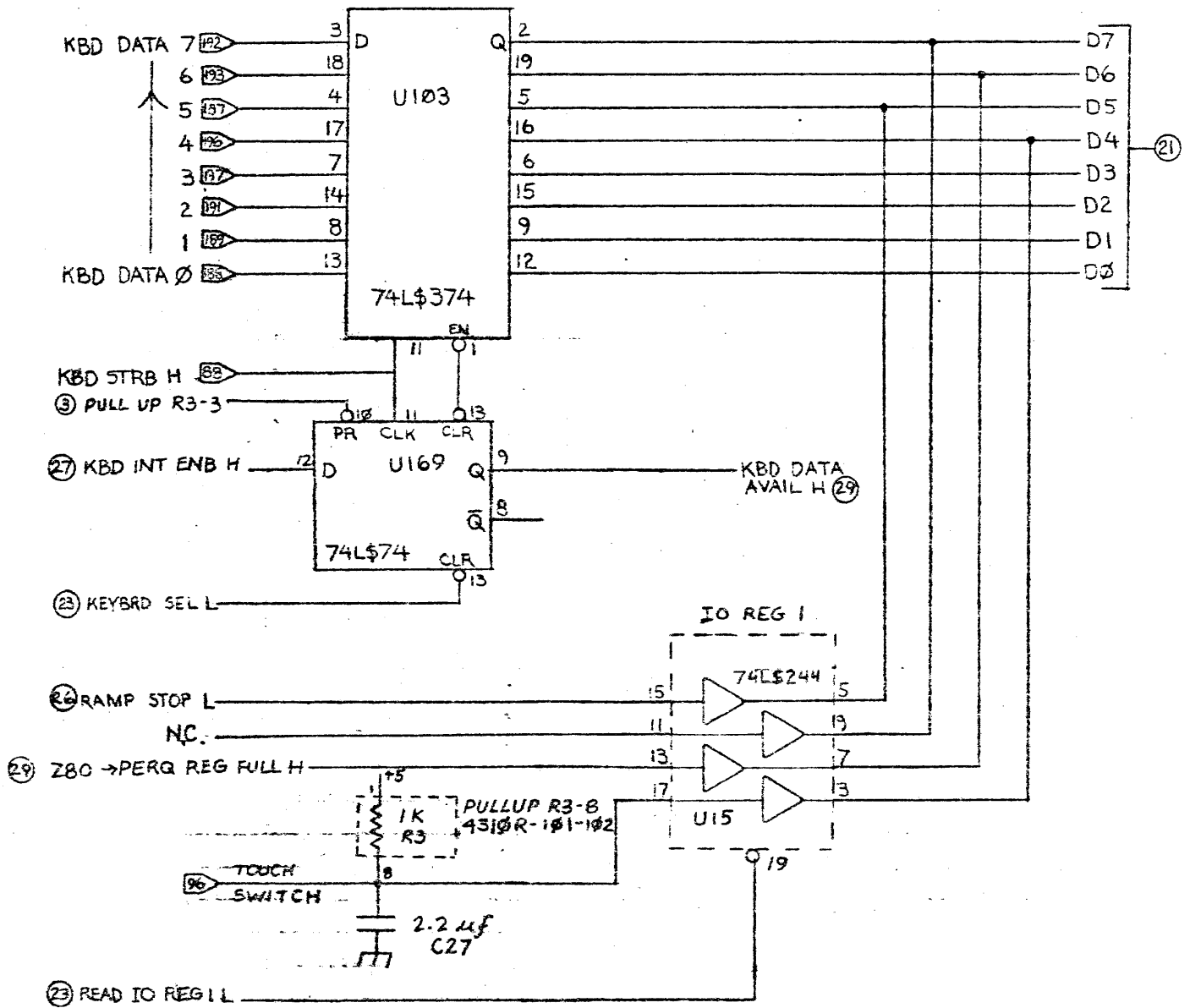
(23) X L (93)
(23) Y L (91)



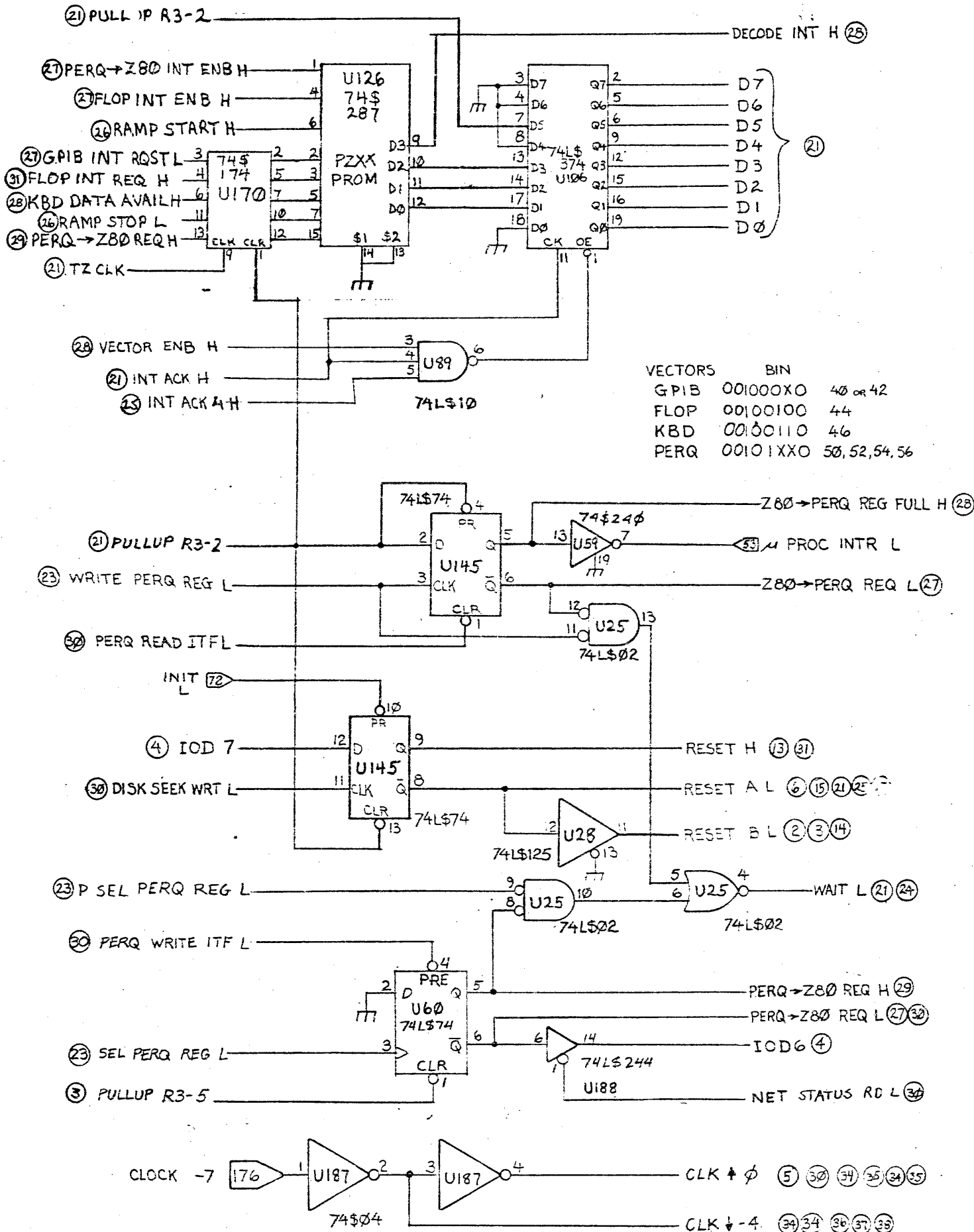
(31) 500 KHZ



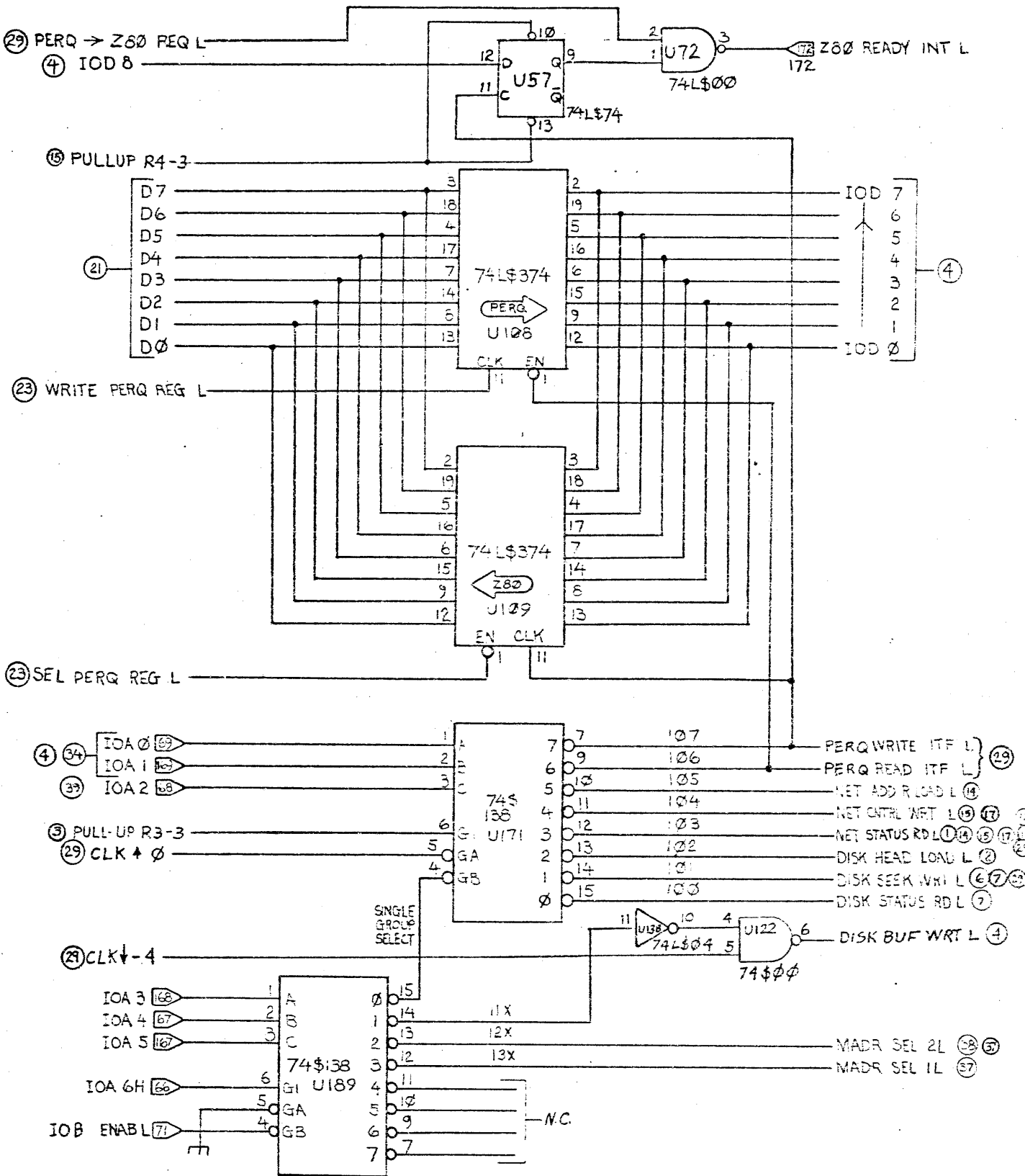




REVC 11/81 RAC

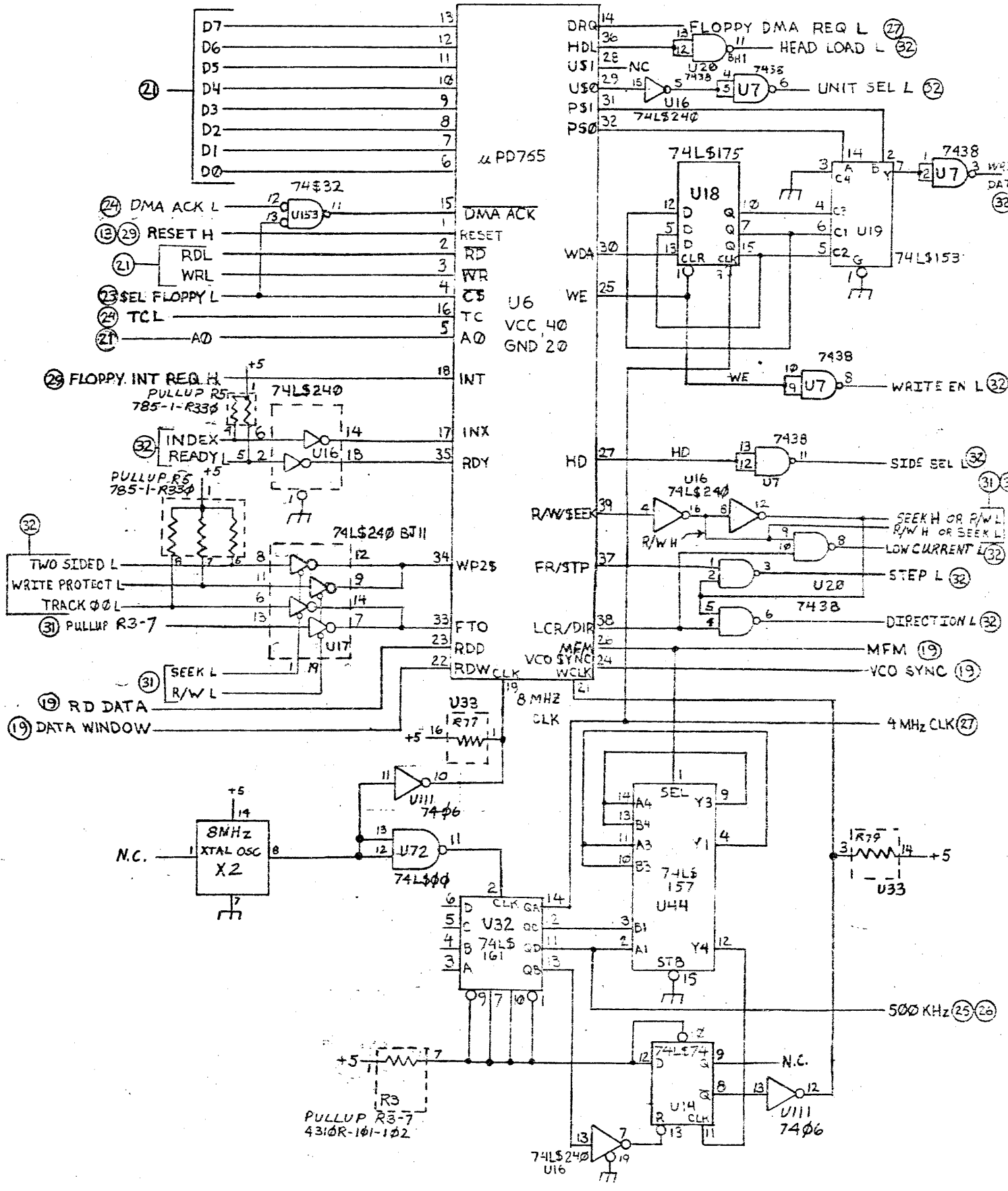


NOTE: CHIP U187
SHOULD BE LOCATED
AS CLOSE TO PIN 176
AS POSSIBLE.



I/O ADDRESS FIELD DECODING

I/O ADR (8)	ADDRESSED FUNCTION
<100 : 107>	SINGLE GROUP SELECTION
<110 : 117>	DISK BUFF WRITE
<120 : 127>	MADR SEL 1
<130 : 137>	MADR SEL 2



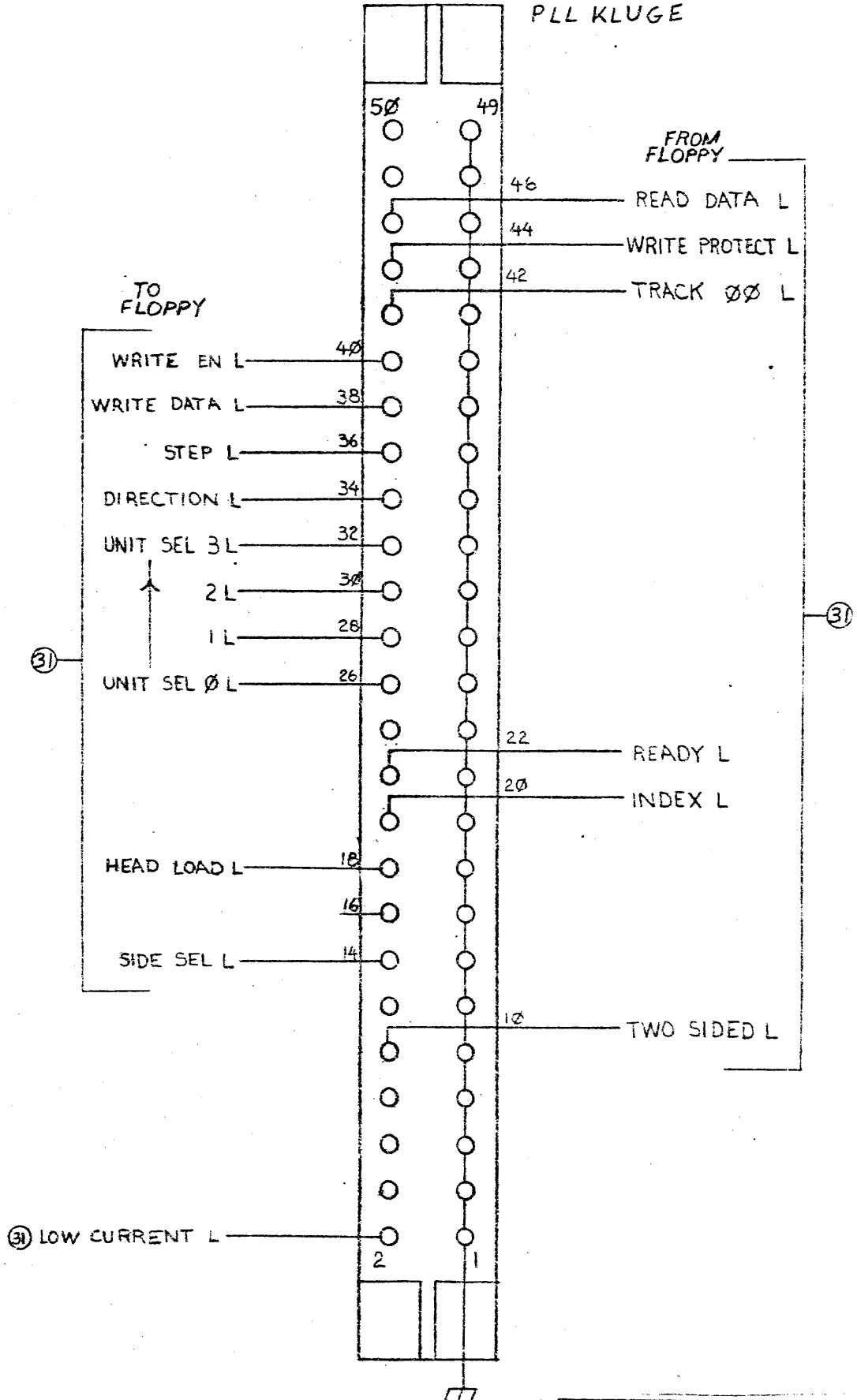
REV D 11/20/80 DIV
 REV C 10/11/80 DIV

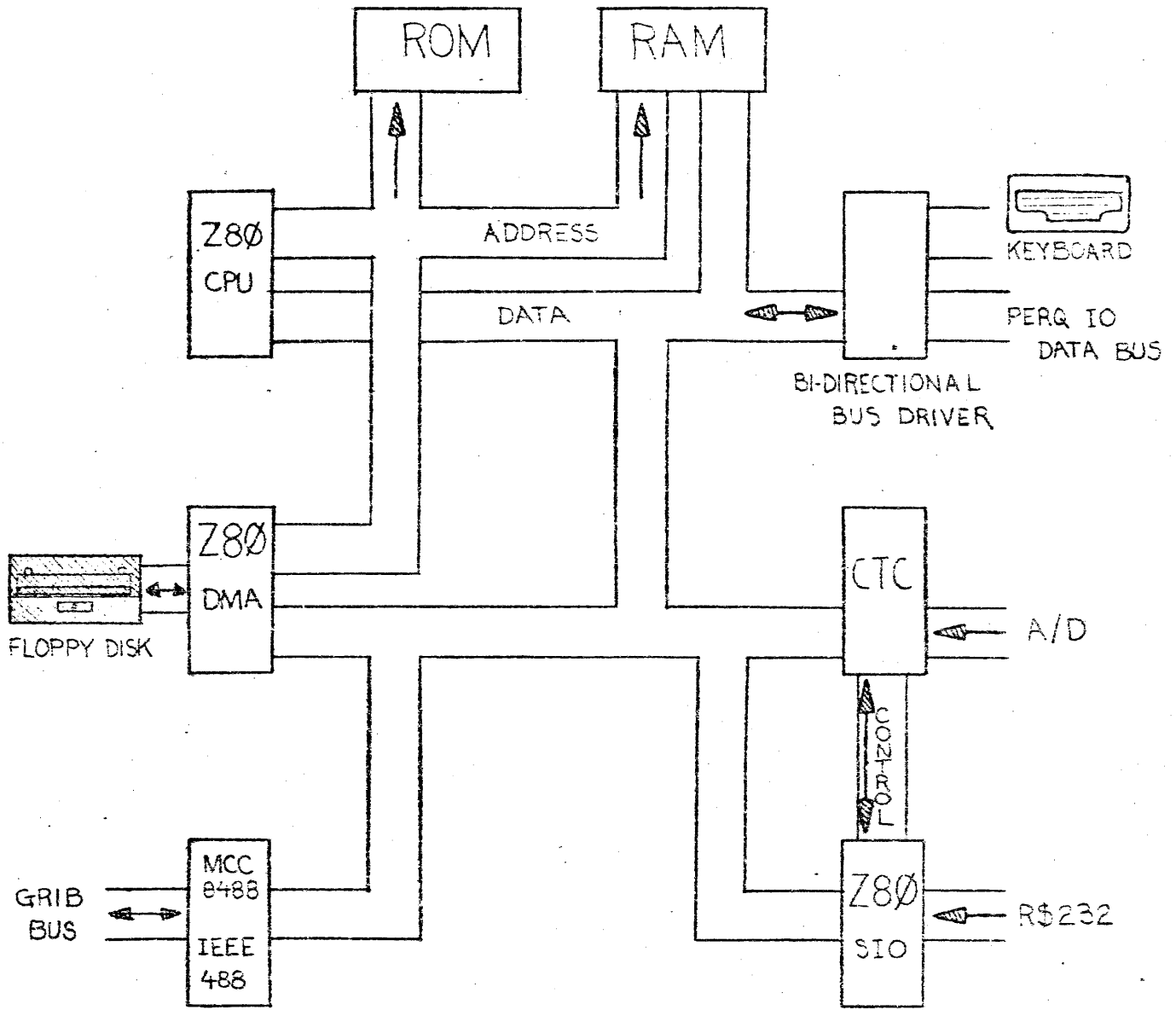
Three Rivers Computer	
FLOPPY CONT.	PRQ-108-F
REV J5	REV SC-0765-F REV 31 = 23

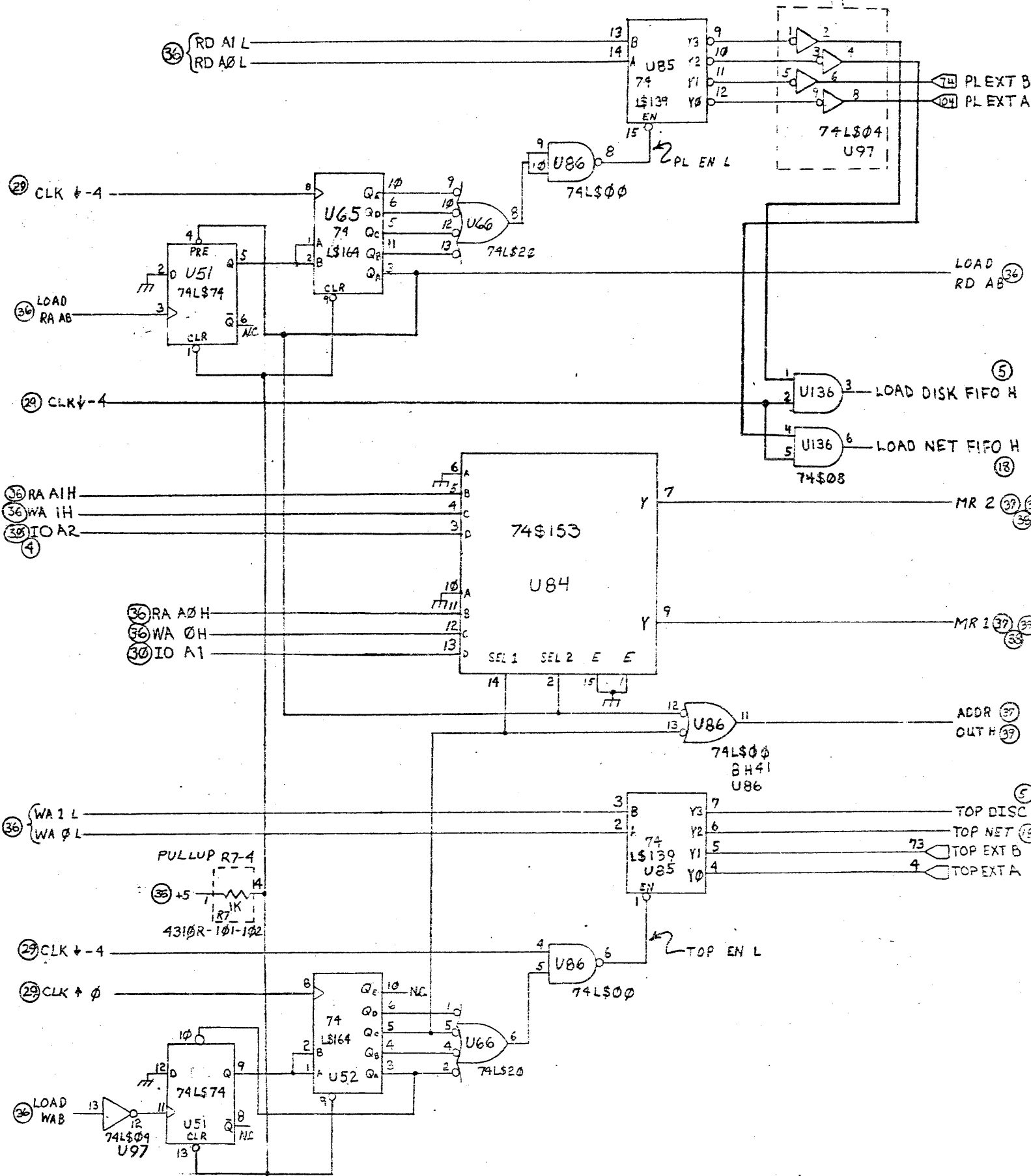


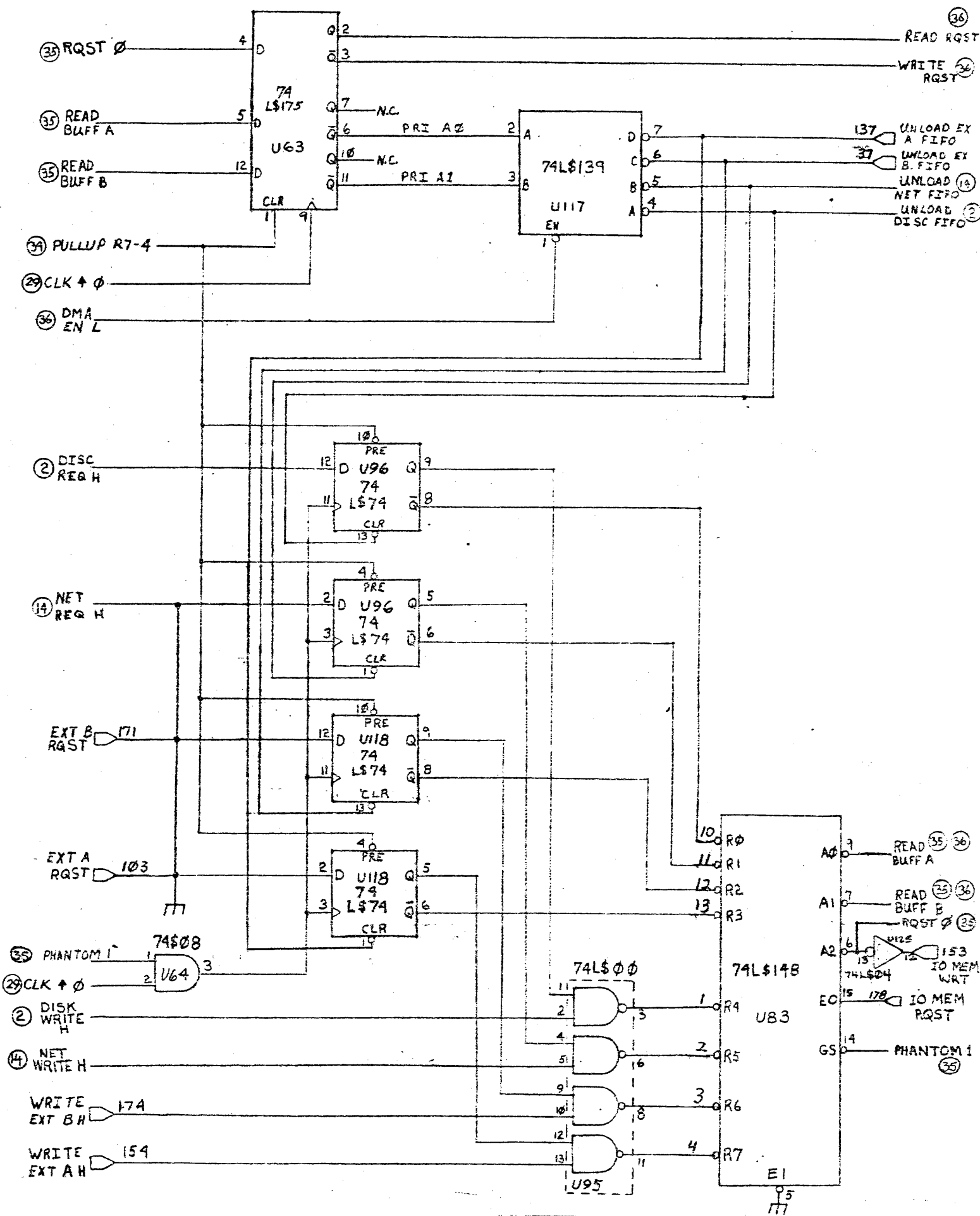
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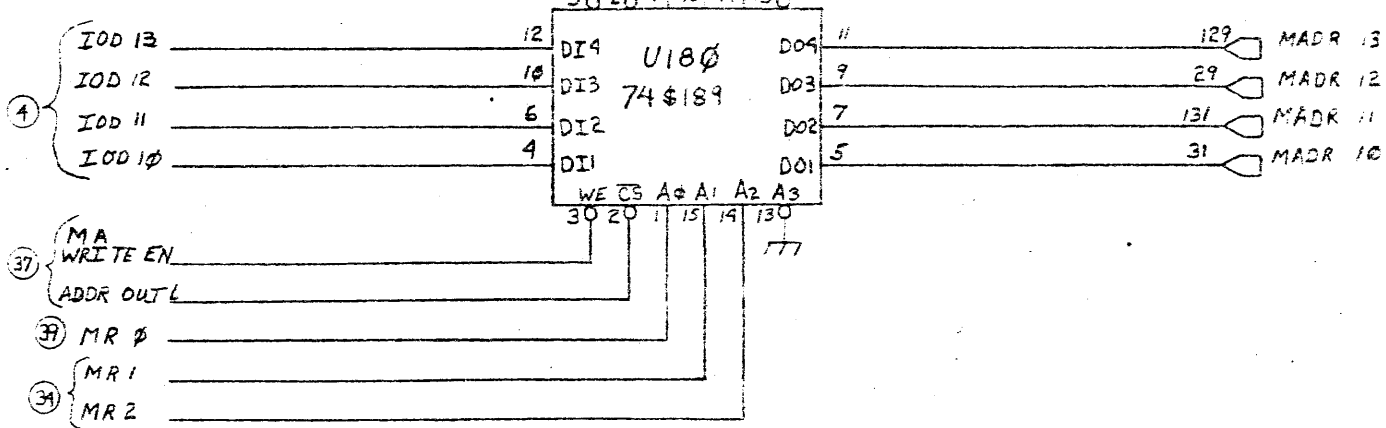
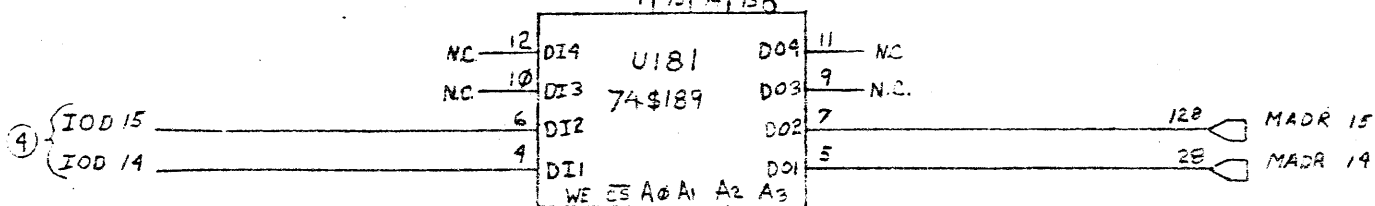
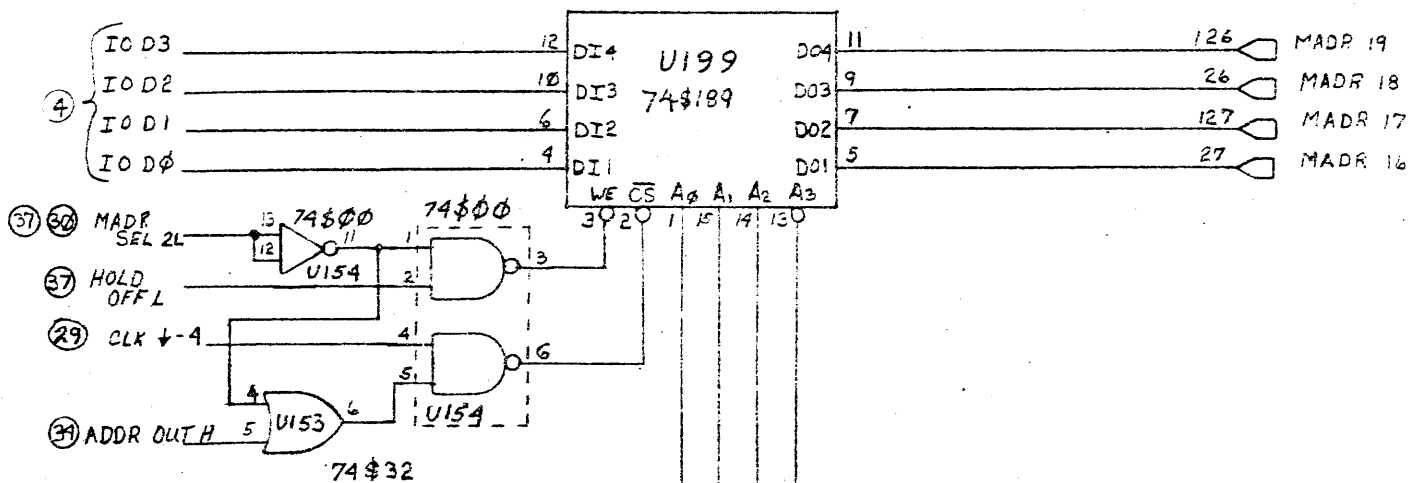
PLL KLUGE

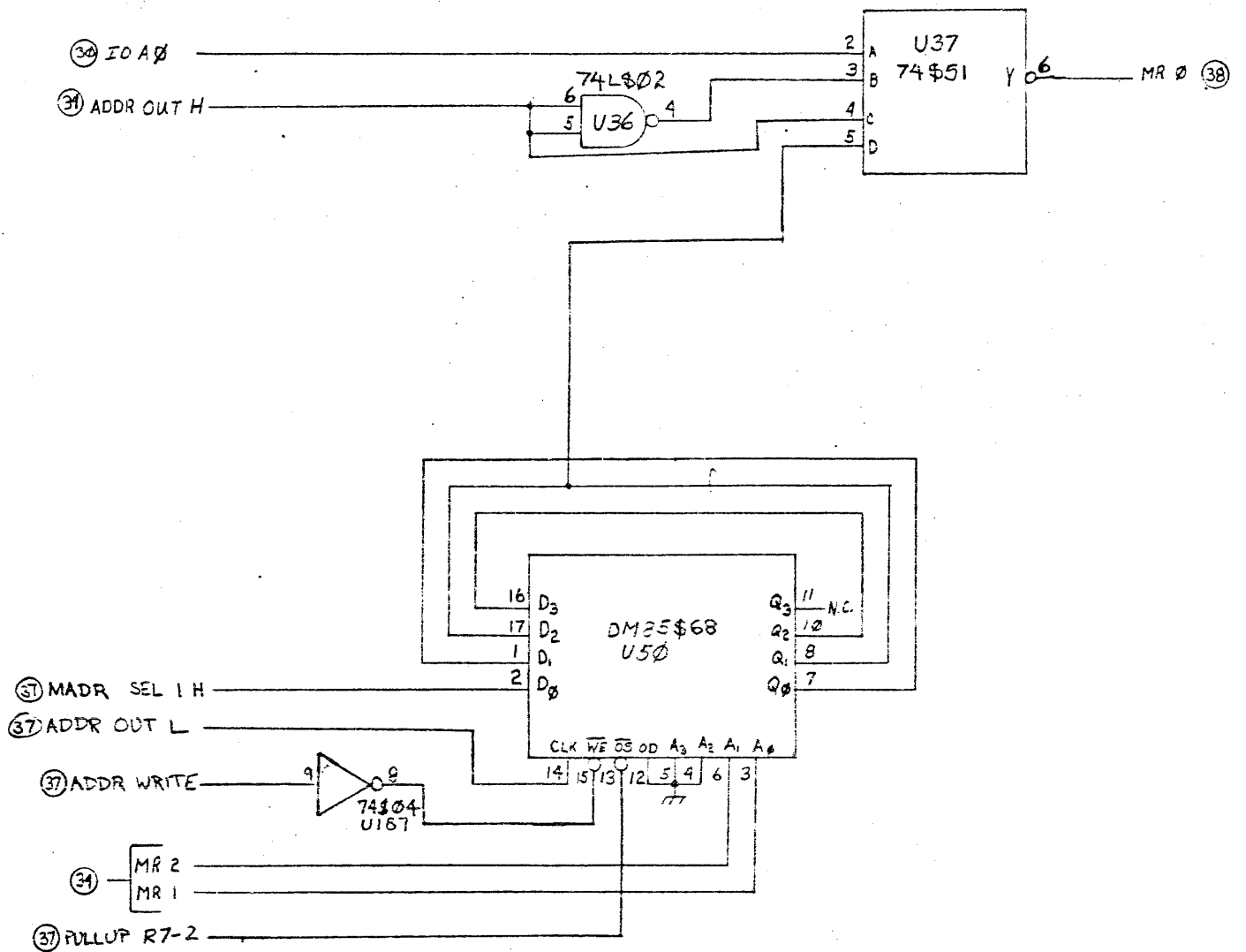












REV 8 DIV 1/12/82