PRQ-PCB-IOB-G

COLUMN WRITE ®

			PAGE NO.
1	U1	TMS 4045-30NL (2114-3)	22
2	U2	TMS 4045-30NL (2114-3)	22
3	U3	2532 (25L32) (28 PIN SOCKET)	22
4	U4	2532 (25L32) (28 PIN SOCKET)	22
5	U5	MK3820N Z80CPU (40 PIN SOCKET)	21
6	U6	μPD765c (40 PIN SOCKET)	31
7	U7	7438	31
8	U8	SPARE	
9	U9	SPARE	
10	U10	SPARE	
11	U11	SPARE	
12	U12	74LS138	22
13	U13	74LS74	25
14	U14	74LS74	24,31
15	U15	74LS244	21,28
16	U16	74LS240	19,31
17	U17	74LS240	31
18	U18	74LS175	31
19	U19	74LS153	31
20	U20	7438	31
21	U21	7426	10,25
22	U22	SPARE	
23	U23	SPARE	
24	U24	SPARE	
25	U25	74LS02	24,29
26	U26	74LS08	23,24,25
27	U27	74LS175	28
28	U28	74LS125	21,28,29
29	U29	74LS02	21,24,25
30	U30	MK3883N Z80 DMA (40 PIN SOCKET)	24
31	U31	SPARE	
32	U32	74LS161	31
33	U33	BOURNS 4306R-151-151 (PIN 1 OF SIP AT U33-1)	21,31
34	U34	74LS32 (7427)	23
35	U35	SPARE	
36	U36	74LS02	6,24,39
37	U37	74S51	39
38	U38	SPARE	
39	U39	74LS138	23
40	U40	74LS138	23

COLUMN WRITE ®

			1	2	3	4
			(PINS)	PAGE #		
1	U41	898-1-R10K (4116-002-103) DIP		(5)24		(8)27
2	U42	75189 (1489)	25			
3	U43	75189 (1489)	25			
4	U44	74LS157	31			
5	U45	75115	1			
6	U46	74S112	6			
7	U47	74S112	6			
8	U48	SPARE				
9	U49	SPARE				
10	U50	DM 85S68N	39			
11	U51	74LS74	34			
12	U52	74LS164	34			
13	U53	SPARE				
14	U54	SPARE				
15	U55	SPARE				
16	U56	SPARE				
17	U57	74LS74	4, 30			
18	U58	74S225	2			
19	U59	74S240	2, 3, 24, 25, 29			
20	U60	74LS74	6, 29			
21	U61	74LS74	36			
22	U62	74LS74	36			
23	U63	74LS175	35			
24	U64	74S08	35, 36			
25	U65	74LS164	34			
26	U66	74LS20	34			
27	U67	SPARE				
28	U68	SPARE				
29	U69	SPARE				
30	U70	SPARE				
31	U71	MC3417	20			
32	U72	74LS00	3, 21, 30, 31			
33	U73	MK3882 Z80 CTC (28 PIN SOCKET)	25			
34	U74	MK3884 Z80 SIO (40 PIN SOCKET)	25			
35	U75	SPARE				
36	U76	75114	1			
37	U77	74LS27 (7427)	3, 6			
38	U78	74LS153	3			
39	U79	74LS08	1, 5			
40	U80	74LS74	6			

COLUMN WRITE ®

1	U81	74$374	2	
2	U82	74L$74	36	
3	U83	74L$148	35	
4	U84	74$153	34	
5	U85	74L$139	34	
6	U86	74L$00	34	
7	U87	SPARE		
8	U88	SPARE		
9	U89	74L$10	26, 29	
10	U90	74L$153	1	
11	U91	9401	1	
12	U92	74$04	3, 4, 6	
13	U93	9406	3	
14	U94	9406	3	
15	U95	74L$00	35	
16	U96	74L$74	35	
17	U97	74L$04	34	
18	U98	SPARE		
19	U99	SPARE		
20	U100	74$10	2, 4	
21	U101	SPARE		
22	U102	SPARE		
23	U103	74L$374	28	
24	U104	9708	26	
25	U105	74L$374	26	
26	U106	74L$374	29	
27	U107	74L$374	27	
28	U108	74L$374	30	
29	U109	74L$374	30	
30	U110	74L$374	6	
31	U111	7406	6, 21, 31	
32	U112	74L$244	1	
33	U113	74$139	3, 4	
34	U114	AM27$29 (HMI-7649-5) (TI 74S472) (TBP18S42)	3	
35	U115	AM27$29 " "	3	
36	U116	AM27$29 " "	3	
37	U117	74L$139	35	
38	U118	74L$74	35	
39	U119	SPARE		
40	U120	SPARE		

COLUMN WRITE ®

U121	SPARE		
U122	74$00	30	
U123	74LS151	27	
U124	75188	25	
U125	74LS04	23,27,35	
U126	82S129 (82S131) (TI 74S287) (16 PIN SOCKET)	29	
U127	9914 (40 PIN SOCKET)	27	
U128	74LS14	1,7	
U129	74LS244	7	
U130	74S157	1	
U131	74LS174	7	
U132	74LS374	4	
U133	74LS273	2	
U134	HEADER	25,26,35	
U135	74LS283	3	
U136	74S08	34	
U137	SPARE		
U138	74LS04	30	
U139	74LS221	25	
U140	SPARE		
U141	SPARE		
U142	SPARE		
U143	SPARE		
U144	CD4051	26	
U145	74LS74	29	
U146	SPARE		
U147	SPARE		
U148	74LS175	2	
U149	7406	1,2	
U150	74LS08	4,6	
U151	SPARE		
U152	74$00	36,37	
U153	74S32	31,37,38	
U154	74S00	37,38	
U155	74S32	3	
U156	SPARE		
U157	SPARE		
U158	SPARE		
U159	SPARE		
U160	SPARE		

U161	74$32	3	
U162	74L$273	1	
U163	SPARE		
U164	SPARE		
U165	SPARE		
U166	SPARE		
U167	SPARE		
U168	SPARE		
U169	74$74	3, 28	
U170	74$174	29	
U171	74$138	30	
U172	75161	27	
U173	AM27$29 (HMI-7649-5) (T174$472) (TBP12542)	4	
U174	74L$166	4	
U175	74L$670	4	
U176	74L$670	4	
U177	74$283	37	
U178	74$158	37	
U179	74$158	37	
U180	74$189	38	
U181	74$189	38	
U182	74$374	5	
U183	SPARE		
U184	SPARE		
U185	74L$32 (7427)	5	
U186	SPARE		
U187	74$04	4, 7, 29, 39	
U188	74L$244	29	
U189	74$138	30	
U190	75160	27	
U191	AM25L$2521	4	
U192	74L$164	4	
U193	74L$670	4	
U194	74L$670	4	
U195	74$283	37	
U196	74$189	37	
U197	74$189	37	
U198	74$374	37	
U199	74$189	38	
U200	74$374	5	

1	U201	SPARE	
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	74S124	19
12	U212	74LS112	19
13	U213	MC1741SCP1	19
14	U214	74LS161	19
15	U215	74LS157	19
16	U216	74LS221	19
17	U217	74LS221	19

				(PINS) PAGE NO.
26	R1	780-85-R220/330 (764-5-R220/330)	SIP	(2,3,4,5,6) 7 (7) 1
27	R2	785-1-R1K (4310R-101-102)	SIP	(2,3,4) 6 (5) 2 (6) 1 (7,8,9,10) 2
28	R3	785-1-R1K (4310R-101-102)	SIP	(3) 3 (4) 1 (5) 3 (6) 4 (7) 31 (8) 28
29	R4	785-1-R1K (4310R-101-102)	SIP	(3) 25 (10) 6
30	R5	785-1-R330 (4310R-101-331	SIP	(2,3) 19 (4,5,6,7,8) 31
31	R6	SIP INSTALLED AT U33		(2) 21 (3,4) 31
32	R7	785-1-R1K (4310R-101-102)	SIP	(2) 37 (3) 36 (4) 34 (5) 25
33	R8			
34	R9			
35	R10			
36	R11			
37	R12			
38	R13			
39	R14			
40	R15			

COLUMN WRITE ®

1	R16			
2	R17			
3	R18			
4	R19			
5	R20			
6	R21			
7	R22			
8	R23			
9	R24			
10	R25			
11	R26			
12	R27			
13	R28			
14	R29			
15	R30	100K	20	
16	R31	39K	20	
17	R32	4.7K	20	
18	R33	22K	20	
19	R34			
20	R35	470Ω	35	
21	R36	27K	25	
22	R37	470Ω	35	
23	R38	470Ω	35	
24	R39	12K	20	
25	R40	1.2K	25	
26	R41	1.2K	25	
27	R42	1.2K	25	
28	R43	1.2K	25	
29	R44	RN55D1401F	1.40K 1% 26	
30	R45	RN55D1001F	1.00K 1% 26	
31	R46	RN55D1002F	10.00K 1% 26	
32	R47	RN55D2001F	2.00K 1% 26	
33	R48	RN55D3011F	3.01K 1% 26	
34	R49	RN55D2001F	2.00K 1% 26	
35	R50	100K	26	
36	R51			
37	R52	1K	20	
38	R53	10K	20	
39	R54	200Ω	19	
40	R55	300Ω	19	

COLUMN WRITE ®

1	R56	7K	19
2	R57	5.1K	19
3	R58	5.1K	19
4	R59	13K	19
5	R60	1K	19
6	R61	1K	19
7	R62	9.1K	19
8	R63	4.7K	19
9	R64	9.1K	19
10	R65	510Ω	19
11	R66	100K	19
12	R67	3.9K	19
13	R68	100K	19
14	R69	3.3K	19
15	R70	100Ω	19
16	R71	6.2K	19
17	R72	RC20GF330J (33Ω 1/2W)	19
18	R73	89PR10K (TRIM)	19
19			
20			
21			
22			
23			
24			
25			
26	C1		
27	C2		
28	C3		
29	C4		
30	C5		
31	C6		
32	C7		
33	C8		
34	C9		
35	C10		
36	C11		
37	C12		
38	C13		
39	C14	202A200225M1 2.2 MF 20	
40	C15	CW20C563K .056 MF 20	

1	C16	CW20C563K	.056MF	20
2	C17	CW20C563K	.056MF	20
3	C18	CW20C563K	.056MF	20
4	C19	CW15C153K	.015MF	20
5	C20	TE1135.5	.140MF/12V	20
6	C21	202A200225M1	2.2MF	20
7	C22			
8	C23			
9	C24			
10	C25			
11	C26	UK16-103	.01MF/16V	26
12	C27	202A200225M1	2.2MF (DISK)	28
13	C28	202A200225M1	2.2MF (DISK)	20
14	C29			
15	C30	UK10-104	.1MF/10V	25
16	C31	UK16-103	.01MF/16V	19
17	C32	UK16-103	.01MF/16V	19
18	C33	UK16-103	.01MF/16V	19
19	C34	202A200225M1	2.2MF (DISK)	20
20	C35			
21	C36	UK16-103	.01MF/16V	25
22	C37	DD502	.005MF	19
23	C38	CD15FD201J03	200PF	19
24	C39	UK16-103	.01MF/16V	19
25	C40	UK10-104	.1MF/10V	19
26	C41	DD502	.005MF	19
27	C42	DD221	220PF	19
28	C43	DD100	10 PF	19
29	C44	DD221	220 PF	19
30	C45	202A200225M1	2.2MF (DISK)	19
31	C46	↑		19
32	C47	↓		19
33	C48	202A200225M1	2.2MF (DISK	19
34				
35	(TOTALS INCLUDING THOSE			
36	ALREADY LISTED)			
37				
38	SILMAN	202A200225M	2.2MF/20V	40
39				
40	CY15C103M	.01MF	CERAMIC	63

X2	K1100A-8.0MHZ CRYSTAL OSC.	31
X3	K1100A-2.4576 MHZ CRYSTAL OSC.	21
Q7	AD 580 JH	26
Q8	78M05	19
Q9	79L05 ACZ (LM320LZ-5.0)	19
L3	WEE-56MH (LM3020LZ-5.0)	20

DWG NO.	TITLE	PG		NO.
SC-A-00107-01-A	Disc Data Port	1	of	39
" 02-A	Head Select	2	of	39
" 03-A	Data Sequencer	3	"	
" 04-A	Header Match	4	"	
" 05-A	Mem. Bus Interf	5	"	
" 06-A	Disk Arm Control	6	"	
" 07-A	Disk Status Inputs	7	"	
" 08-A	Rigid Disk Int. Conn	8	"	
SC-A-00107-09-A	Block Diagram	9	of	39

SEE NOTE BELOW

SC-A-00107-19-A	PLL	19	of	39
" 20-A	CVSD	20	"	
" 21-A	IO Z80 Layout	21	"	
" 22-A	IO CPU Memory	22	"	
" 23-A	IO Peripheral Decoder	23	"	
" 24-A	DMA Channel	24	"	
" 25-A	RS232 Interface	25	"	
" 26-A	Touch Pad Int.	26	"	
" 27-A	GPIB Interface	27	"	
" 28-A	Keyboard Interface	28	"	
" 29-A	Int Vector Select	29	"	
" 30-A	IOA Decode	30	"	
" 31-A	Floppy Cont.	31	"	
" 32-A	Floppy Disk Int. Conn	32	"	
" 33-A	Block Diagram	33	"	
" 34-A	Channel Selector	34	"	
" 35-A	Channel Selector	35	"	
" 36-A	Channel Selector	36	"	
" 37-A	Address Counter	37	"	
" 38-A	High Addr Latch	38	"	
SC-A-00107-39-A	Address Count Select	39	of	39

NOTE:

The Network option has been deleted on IOB-G. This option was shown on pages 10 thru 18 of IOB-F. The remaining page no. are the same so that IOB-F and IOB-G can be easily cross referenced.

LEGEND:
Input Output
1,2-3

IOB-G GATE UTILIZATION

INV. 7406 BUFF.	U21
1-2	6
3-4	6
5-6	
9-8	
11-10	25
13-12	

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

POS. 74S00 NAND	U122
1,2-3	
4,5-6	
9,10-8	30
12,13-11	

POS. 74LS02 NOR	U36
2,3-1	24
5,6-4	39
8,9-10	6
11,12-13	

74LS04 INV.	U92	U97	U125	U138
1-2		34	27	
3-4	6	34	27	
5-6	4	34		
9-8	6	34	23	
11-10	3		37	30
13-12	3	34	35	

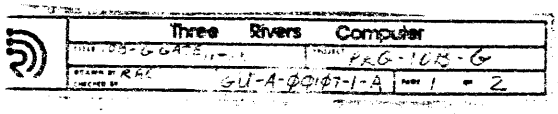
POS. 74LS08 AND	U150
1,2-3	6
4,5-6	
9,10-8	4
12,13-11	

POS. 74S08 AND	U136
1,2-3	34
4,5-6	34
9,10-8	
12,13-11	

POS. 74LS10 NAND	U89
1,2,13-12	
3,4,5-6	29
9,10,11-8	26

74LS32 POS. OR	U34
1,2-3	23
4,5-6	23
9,10-8	
12,13-11	

74S32 POS. OR	U153	U155	U161
1,2-3	37		3
4,5-6	38		
9,10-8		3	
12,13-11	31	3	

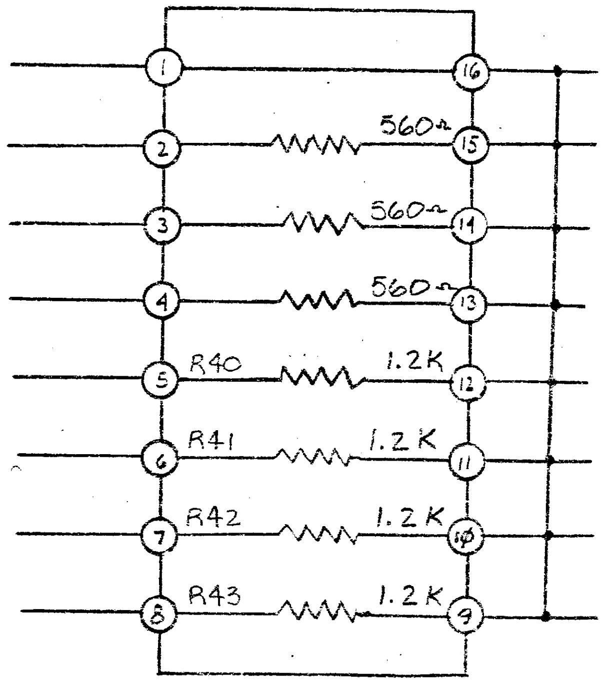


IOB-G GATE UTILIZATION

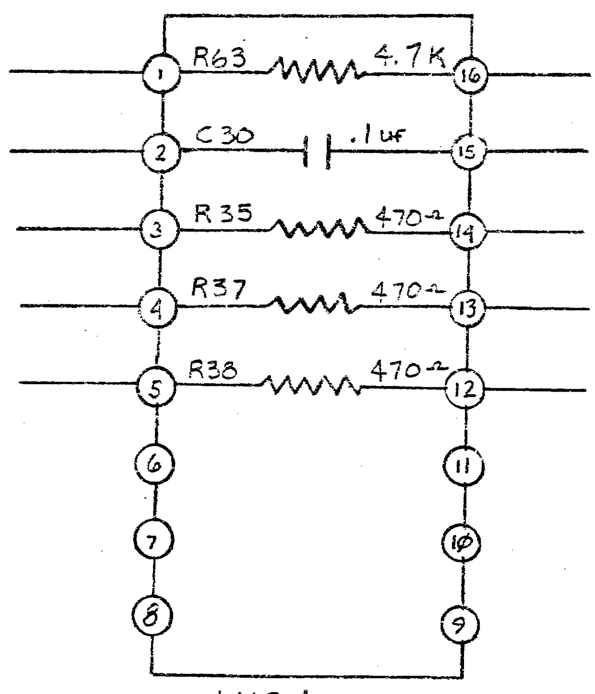
Unused Pullups - Resistor Packages

SIP	MANUFAC. NO.
R1 - Pins 8,9,10	750-85-R220/330
R3 - Pins 9,10	4310R-101-102
R4 - Pins 2,4,5,6,7,8,9	4310R-101-102
R5 - Pins 9,10	785-1-4330
R6 - Pins 5,6	4306R-101-151
R7 - Pins 6,7,8,9,10	4310R-101-102

DIP	
U41 - Pins 7,9	898-1-R10K

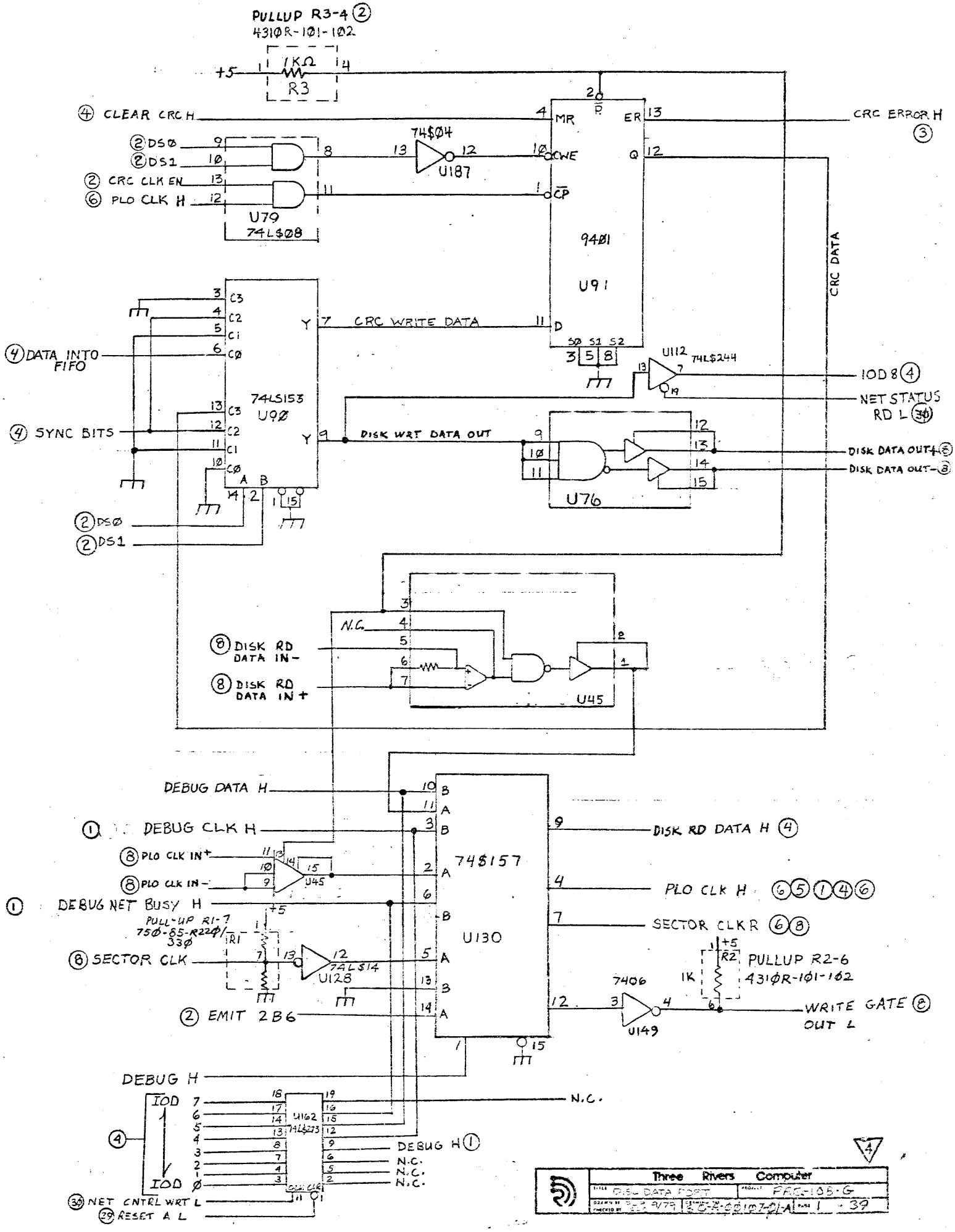


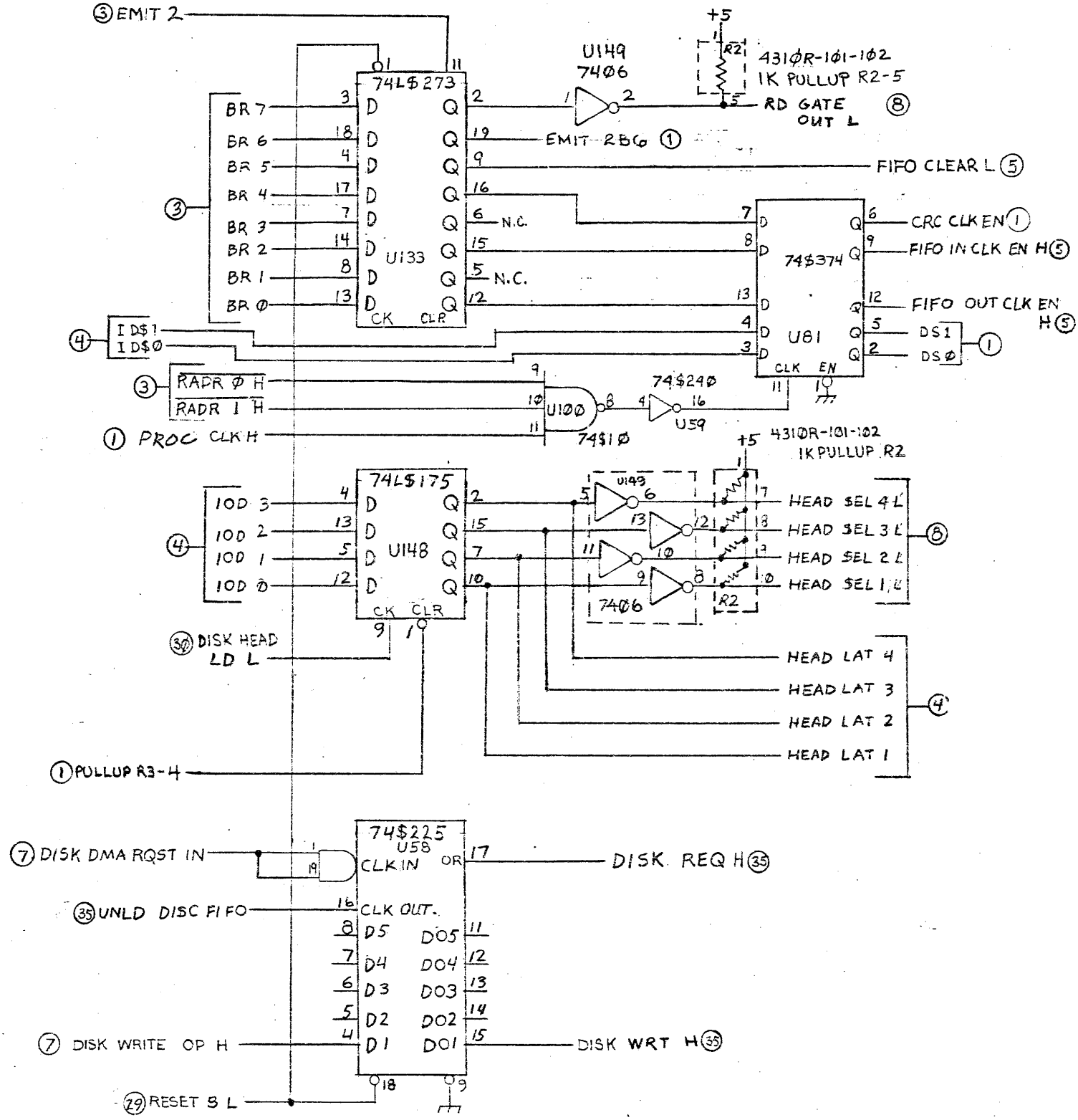
U33



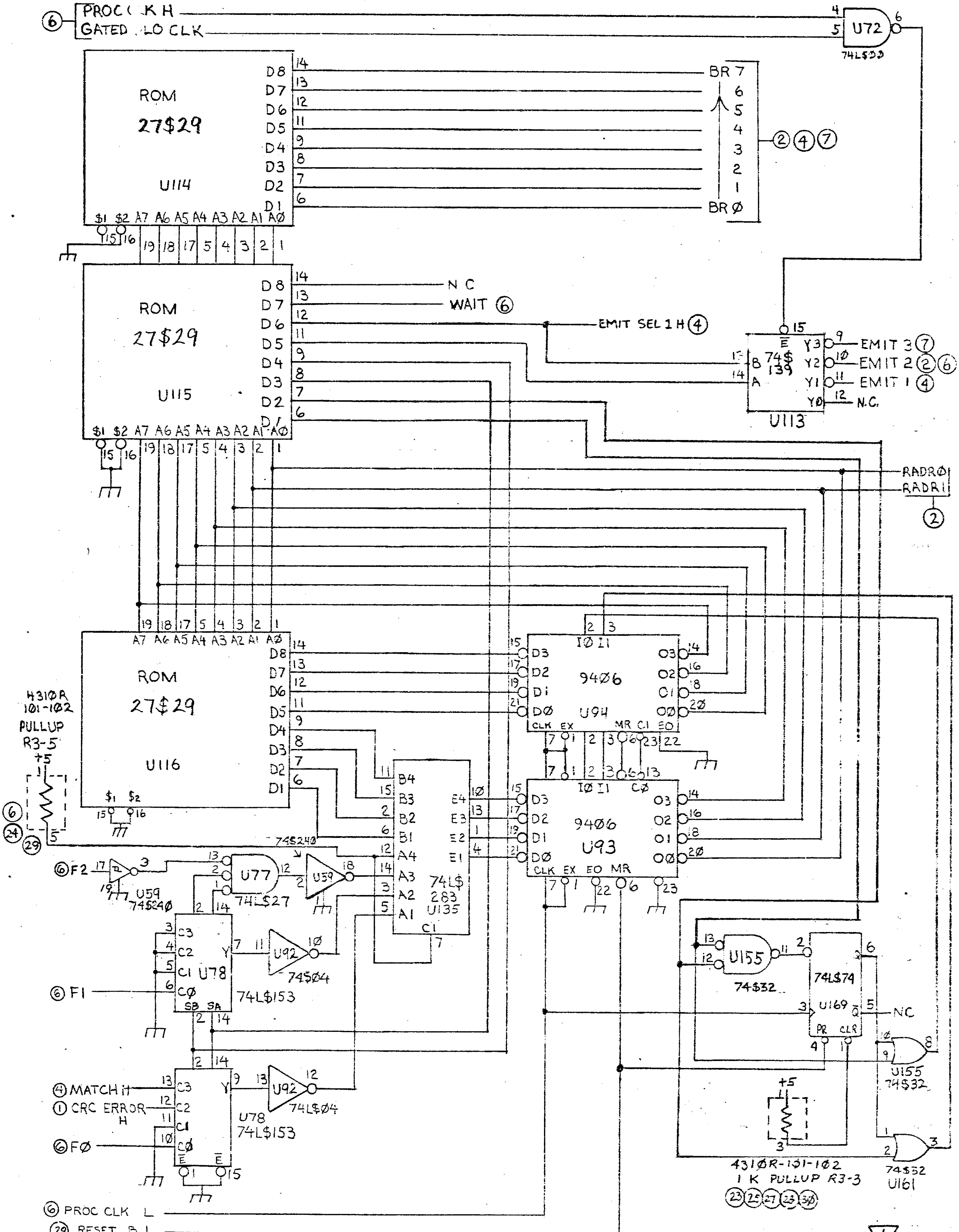
U134

Three Rivers Computer	
[illegible]	PRQ-105-G
DIV 8/25/ [illegible]	1 of 1


PULLUP R3-4 (2)
4310R-101-102
+5
1KΩ
R3
(4) CLEAR CRC H
(2) DS0
(2) DS1
(2) CRC CLK EN
(6) PLO CLK H
U79
74LS08
74S04
U187
9401
U91
MR
ER
CWE
CP
CRC ERROR H (3)
Q
CRC DATA
CRC WRITE DATA
(4) DATA INTO FIFO
(4) SYNC BITS
74LS153
U90
DISK WRT DATA OUT
U112 74LS244
IOD 8 (4)
NET STATUS RD L (34)
DISK DATA OUT+ (8)
DISK DATA OUT- (8)
U76
(2) DS0
(2) DS1
N.C.
(8) DISK RD DATA IN-
(8) DISK RD DATA IN+
U45
DEBUG DATA H
(1) DEBUG CLK H
(8) PLO CLK IN+
(8) PLO CLK IN-
(1) DEBUG NET BUSY H
PULL-UP R1-7
750-65-R220/330
R1
(8) SECTOR CLK
74LS14
U128
(2) EMIT 2B6
74S157
U130
DISK RD DATA H (4)
PLO CLK H (6)(5)(1)(4)(6)
SECTOR CLK R (6)(8)
PULLUP R2-6
431ØR-101-102
R2
7406
U149
WRITE GATE (8)
OUT L
DEBUG H
IOD
(4)
U162
74LS273
DEBUG H (1)
N.C.
(36) NET CNTRL WRT L
(29) RESET A L
Three Rivers Computer
DISK DATA PORT
PCC-105-G
1 - 39



Three Rivers Computer	
HEAD SELECT	PRQ-108-G
	SC-A-QQ107-42-A 2 39

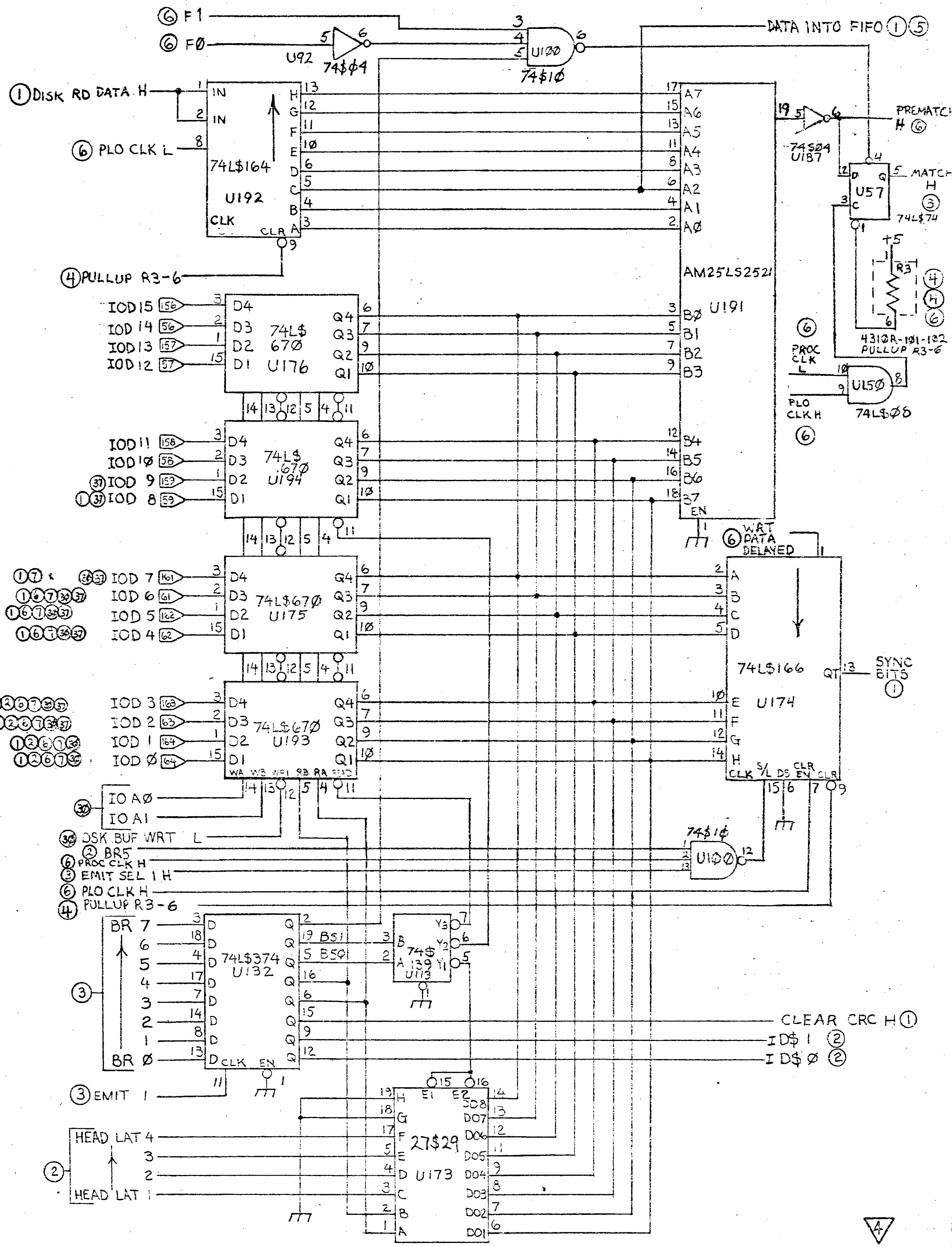


Three Rivers Computer

PROJECT PRQ-IOB-G

S2-A-00.07-05-A

PAGE 3-39



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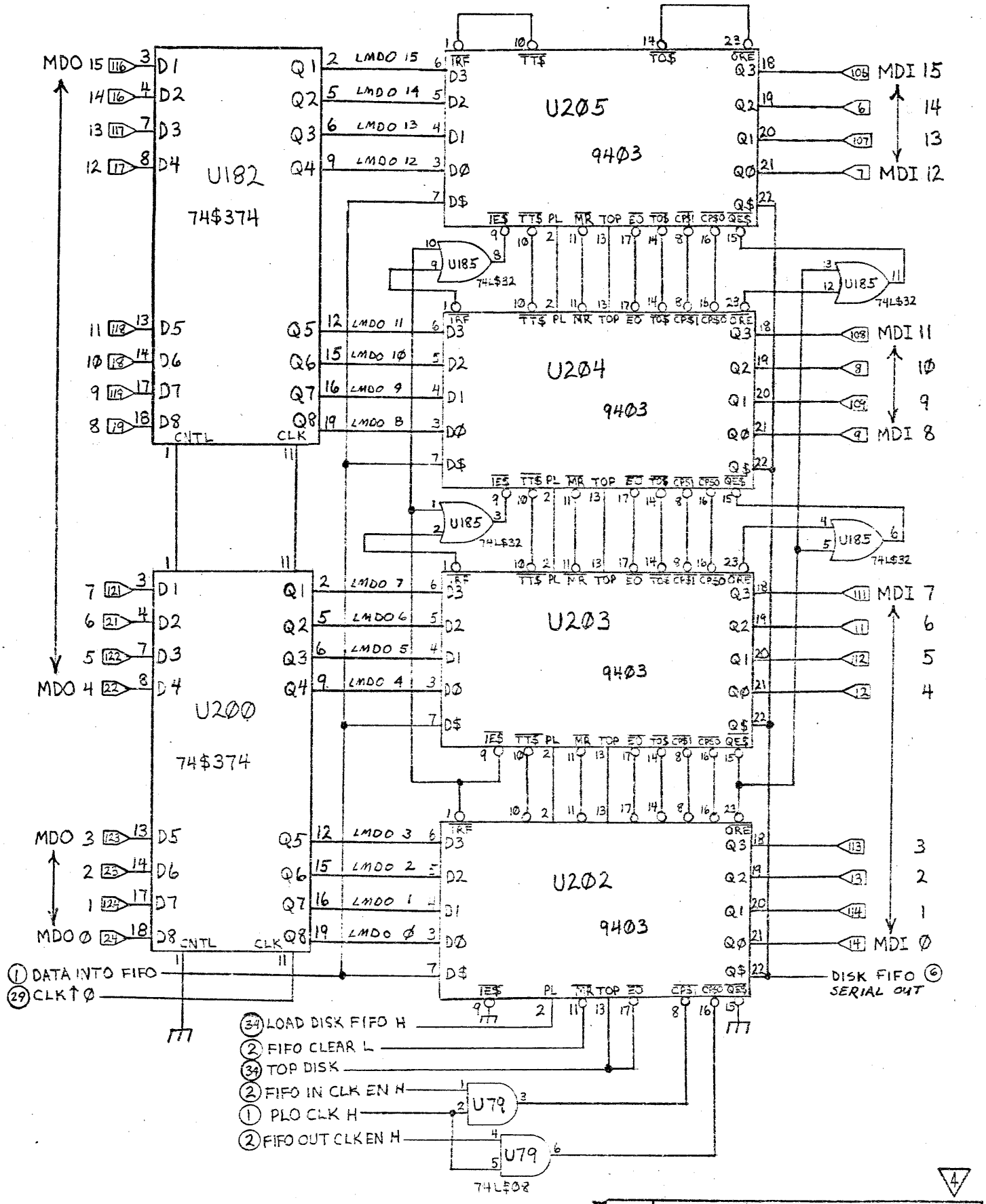
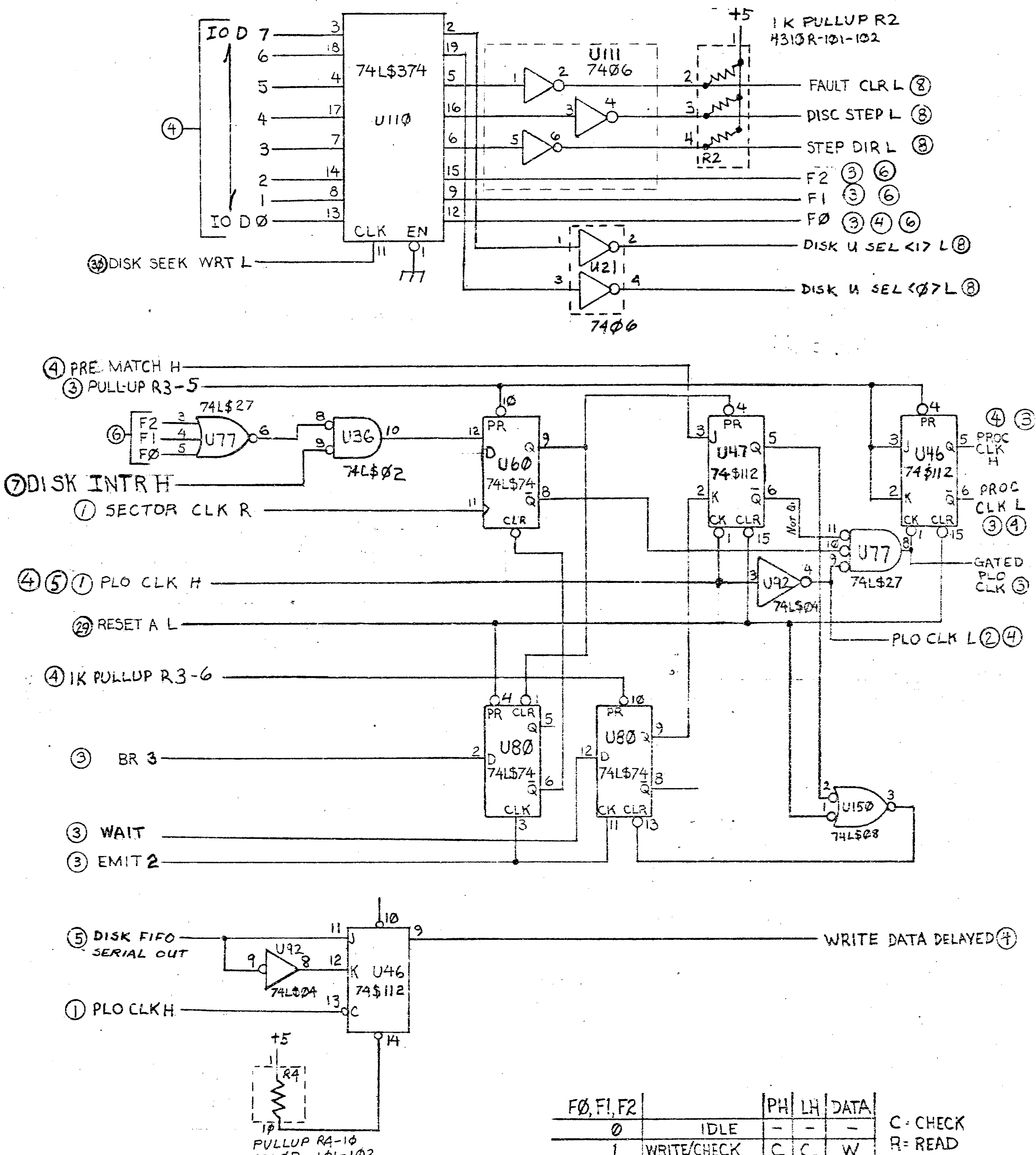
HEADER MATCH | PERQ-10B-G

RAC | 3C-A-00107-04-A | 4 of 39


U182
74$374
U200
74$374
U205
9403
U204
9403
U203
9403
U202
9403
U185
74L$32
U79
74L$08
MDO 15
MDO 4
MDO 3
MDO Ø
MDI 15
MDI 12
MDI 11
MDI 8
MDI 7
MDI Ø
LMDO 15
LMDO 14
LMDO 13
LMDO 12
LMDO 11
LMDO 1Ø
LMDO 9
LMDO B
LMDO 7
LMDO 6
LMDO 5
LMDO 4
LMDO 3
LMDO 2
LMDO 1
LMDO Ø
CNTL
CLK
TRF
ORE
TT$
TO$
IE$
PL
MR
TOP
EO
CPS1
CPS0
QE$
(1) DATA INTO FIFO
(29) CLK↑Ø
(34) LOAD DISK FIFO H
(2) FIFO CLEAR L
(34) TOP DISK
(2) FIFO IN CLK EN H
(1) PLO CLK H
(2) FIFO OUT CLK EN H
DISK FIFO (6)
SERIAL OUT
Three Rivers Computer
4

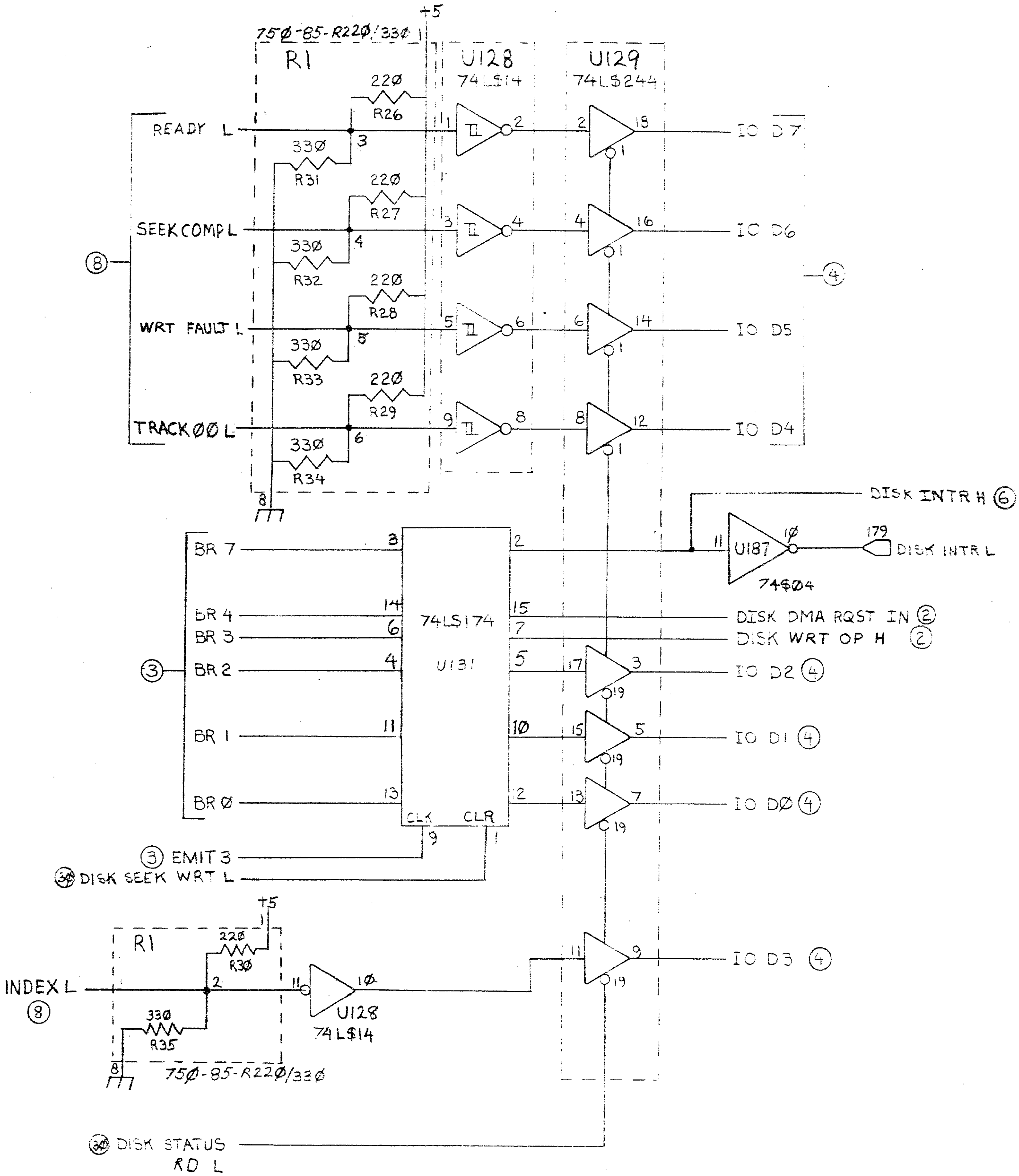


FØ, F1, F2		PH	LH	DATA
Ø	IDLE	–	–	–
1	WRITE/CHECK	C	C	W
2	WRITE/WRITE LH	C	W	W
3	FORMAT WRITE	W	W	W
4	READ/CHECK	C	C	R
5	FORMAT READ	R	R	R

C = CHECK
R = READ
W = WRITE

4

Three Rivers Computer
DISK ARM CONTROL | PRQ-1Ø8-G
SC-A-ØØ1Ø7-Ø64 | 6 - 39



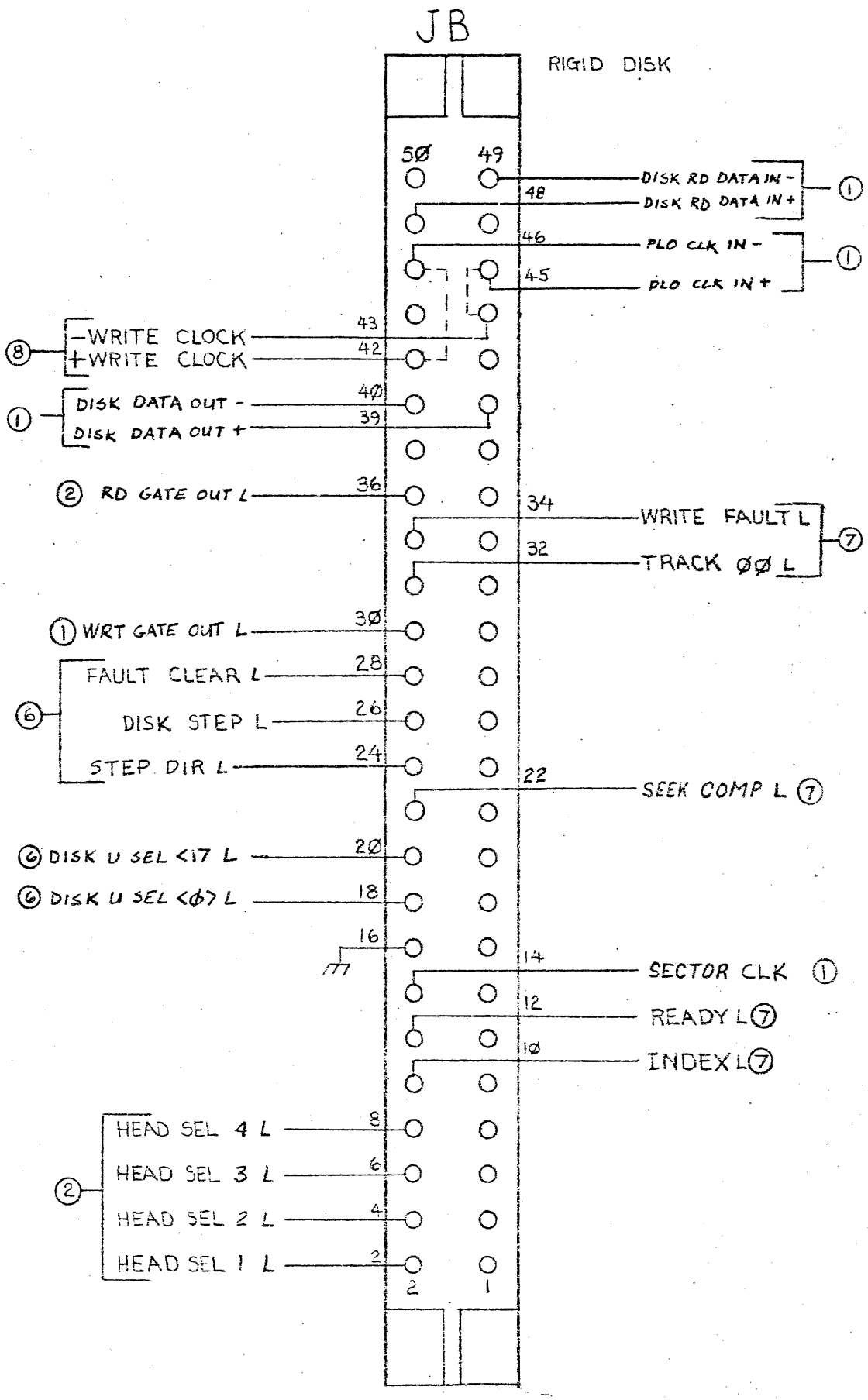
Three Rivers Computer

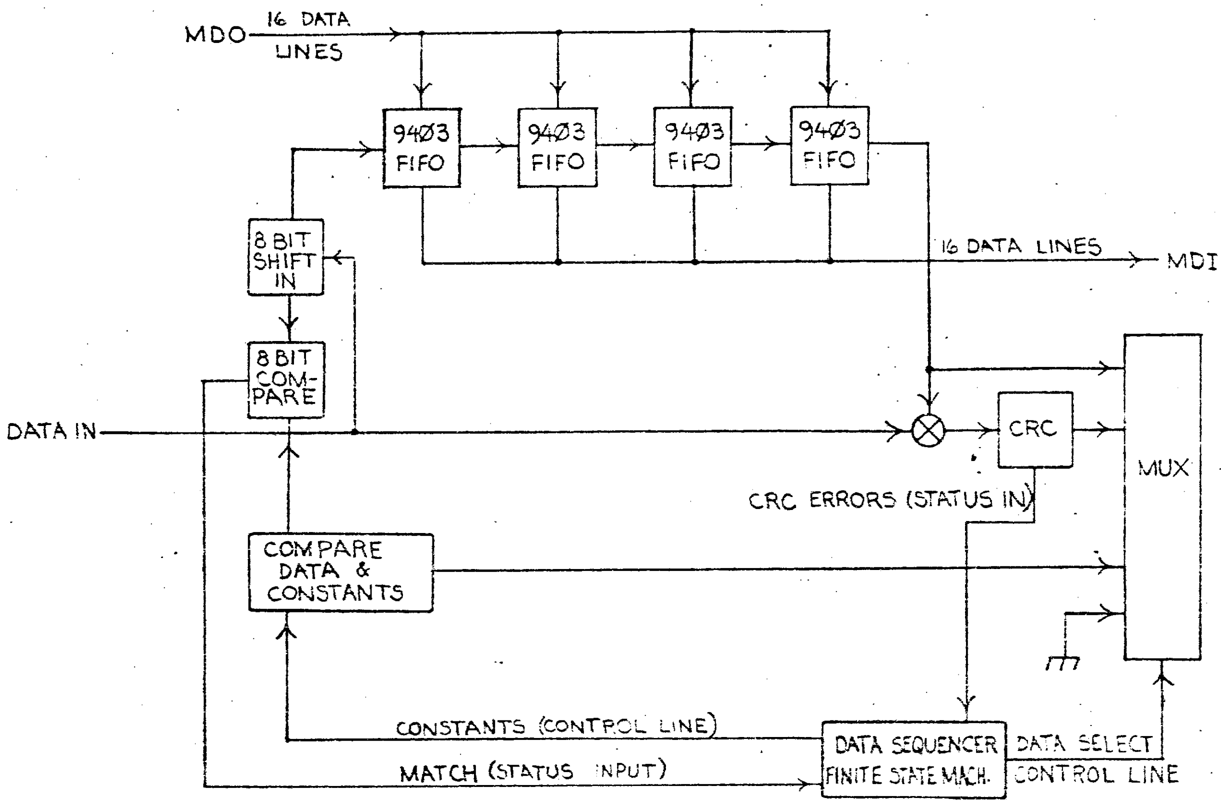
DISK STATUS INPUTS

PRG-10B-G

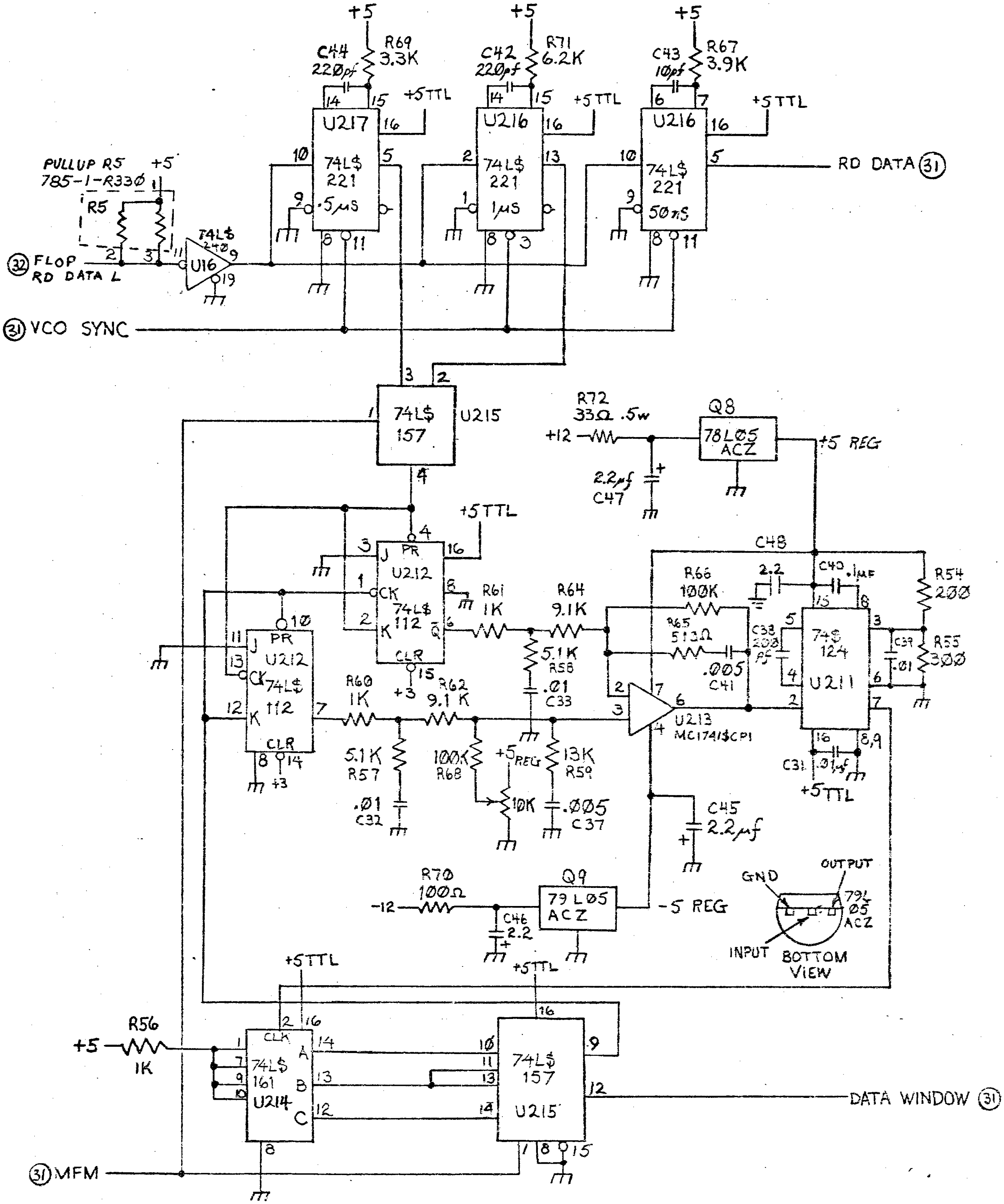
32-A-00107-07-A

7 of 39


JB
RIGID DISK
50
49
DISK RD DATA IN -
48
DISK RD DATA IN +
1
46
PLO CLK IN -
45
PLO CLK IN +
1
43
-WRITE CLOCK
8
42
+WRITE CLOCK
40
DISK DATA OUT -
1
39
DISK DATA OUT +
2 RD GATE OUT L
36
34
WRITE FAULT L
7
32
TRACK ØØ L
1 WRT GATE OUT L
30
28
FAULT CLEAR L
6
26
DISK STEP L
24
STEP DIR L
22
SEEK COMP L 7
6 DISK U SEL <17 L
20
6 DISK U SEL <Ø> L
18
16
14
SECTOR CLK 1
12
READY L 7
10
INDEX L 7
HEAD SEL 4 L
8
HEAD SEL 3 L
2
6
HEAD SEL 2 L
4
HEAD SEL 1 L
2
2
1

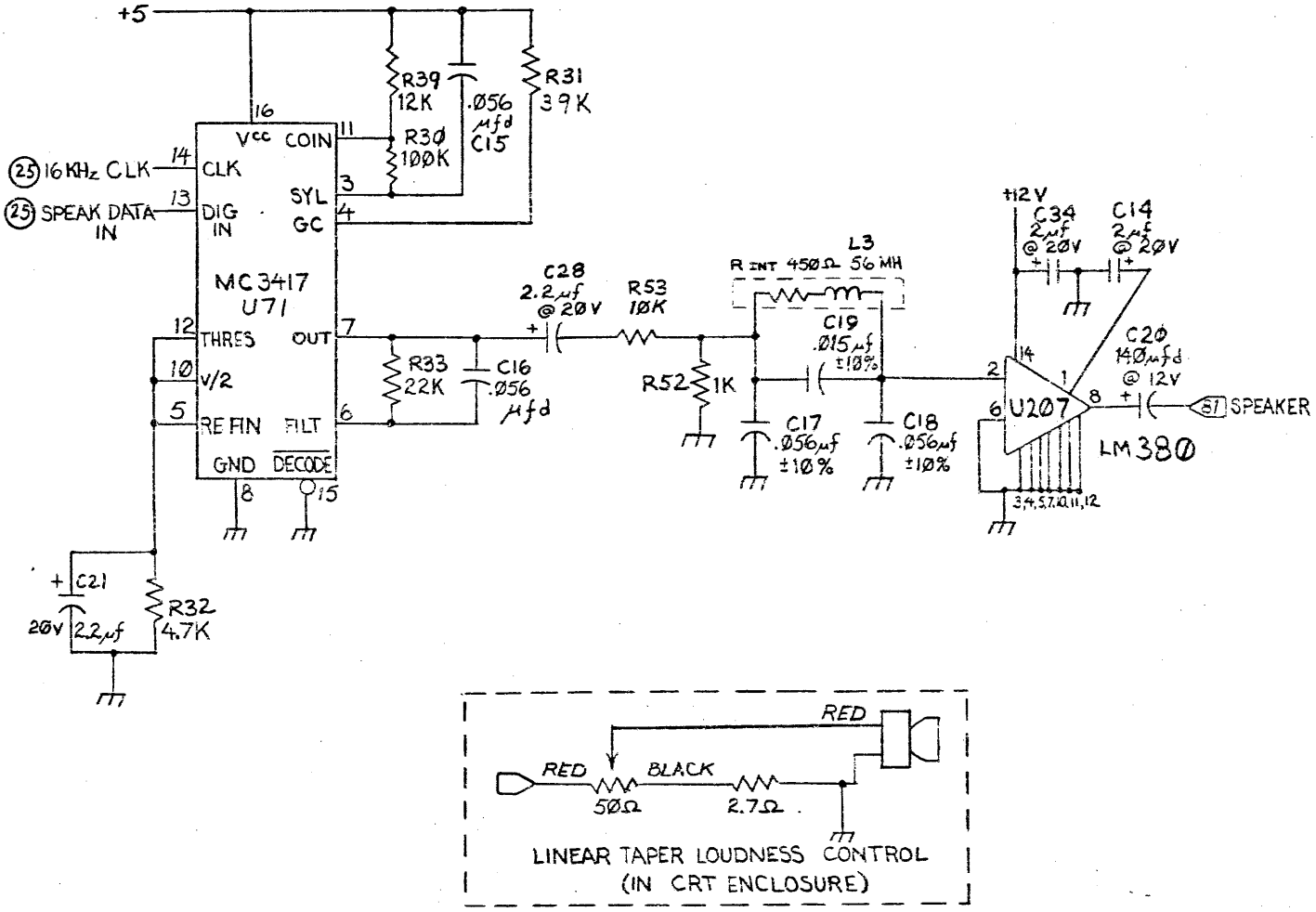


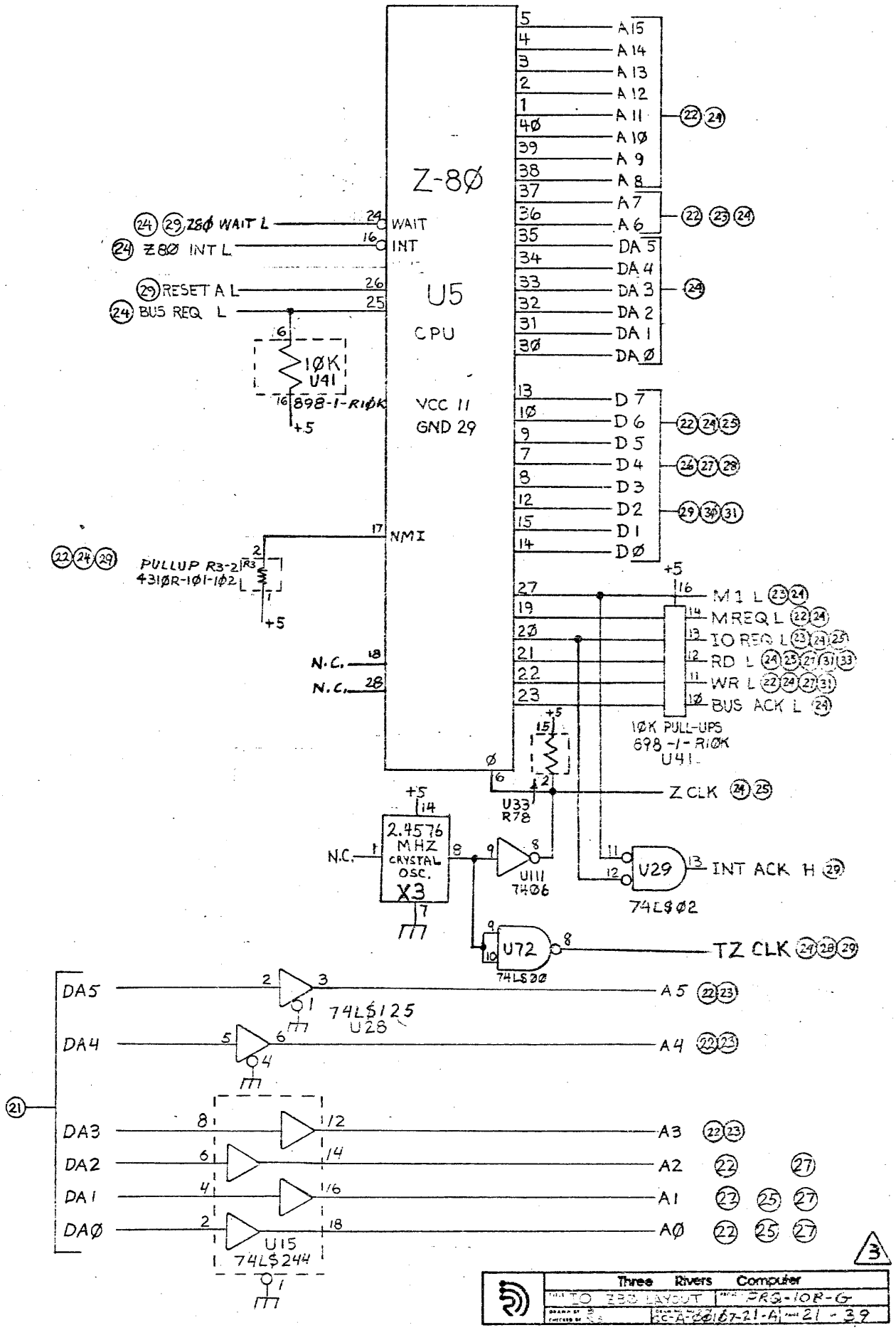
Three Rivers Computer	
BLOCK DIAGRAM	PRQ-ICB-G
3/9/9	SC-A-00107-02-A 9 - 39



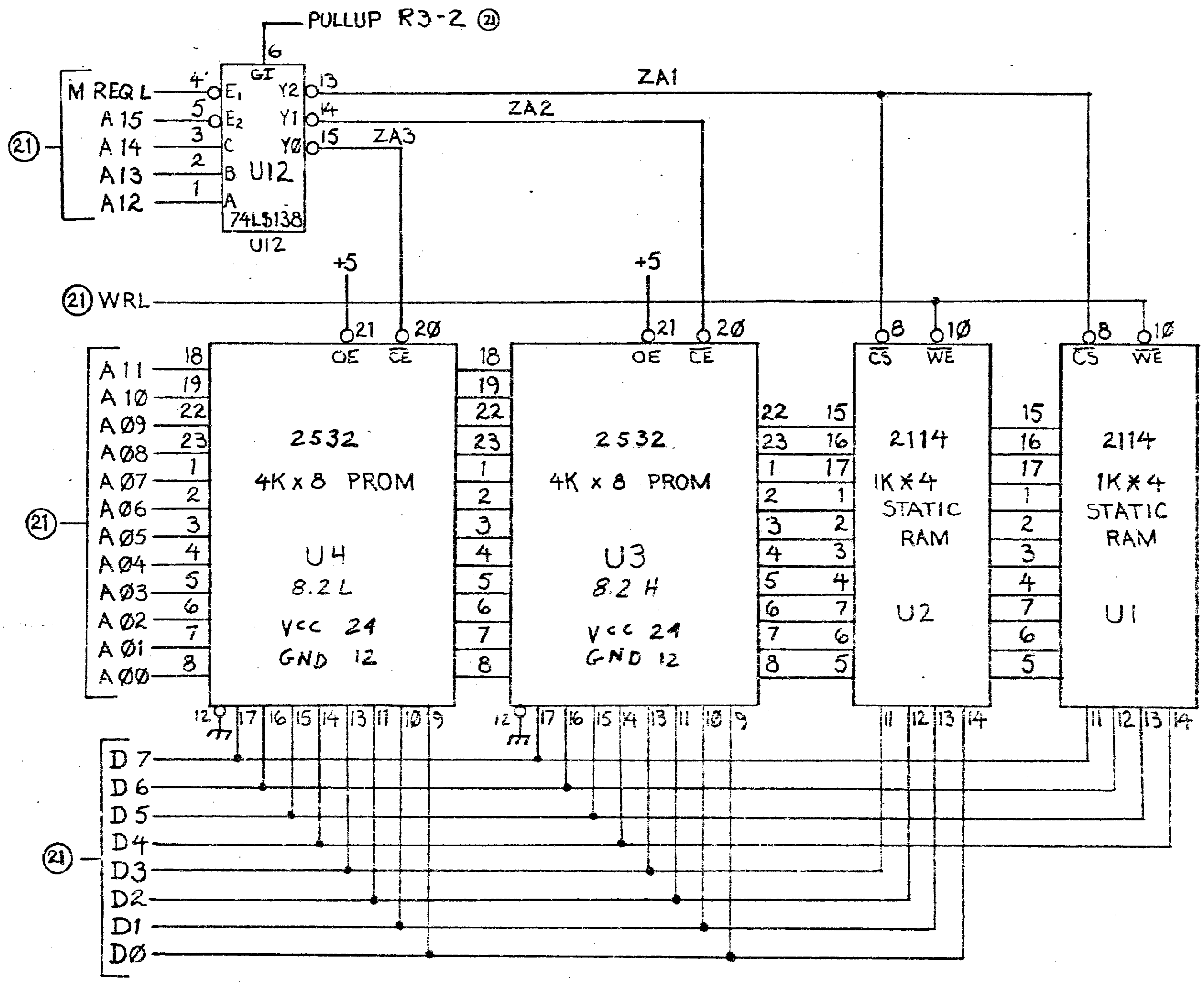
REV. B 5/27/80

Three Rivers Computer	
TITLE: PLL	


+5
R39 12K
.056 µfd C15
R31 39K
R30 100K
16
Vcc
COIN
11
3
4
14
CLK
13
DIG IN
SYL
GC
25 16 KHz CLK
25 SPEAK DATA IN
MC3417
U71
12
THRES
OUT
7
10
V/2
5
REFIN
FILT
6
GND
DECODE
8
15
C28 2.2µf @ 20V
R53 10K
R33 22K
C16 .056 µfd
R52 1K
L3
R INT 450Ω 56 MH
C19 .015µf ±10%
C17 .056µf ±10%
C18 .056µf ±10%
+12V
C34 2µf @ 20V
C14 2µf @ 20V
C20 140µfd @ 12V
2
14
1
6
8
U207
LM380
3,4,5,7,10,11,12
S1 SPEAKER
C21 20V 2.2µf
R32 4.7K
RED
RED
BLACK
50Ω
2.7Ω
LINEAR TAPER LOUDNESS CONTROL
(IN CRT ENCLOSURE)



REV C 1/14/81 RAC



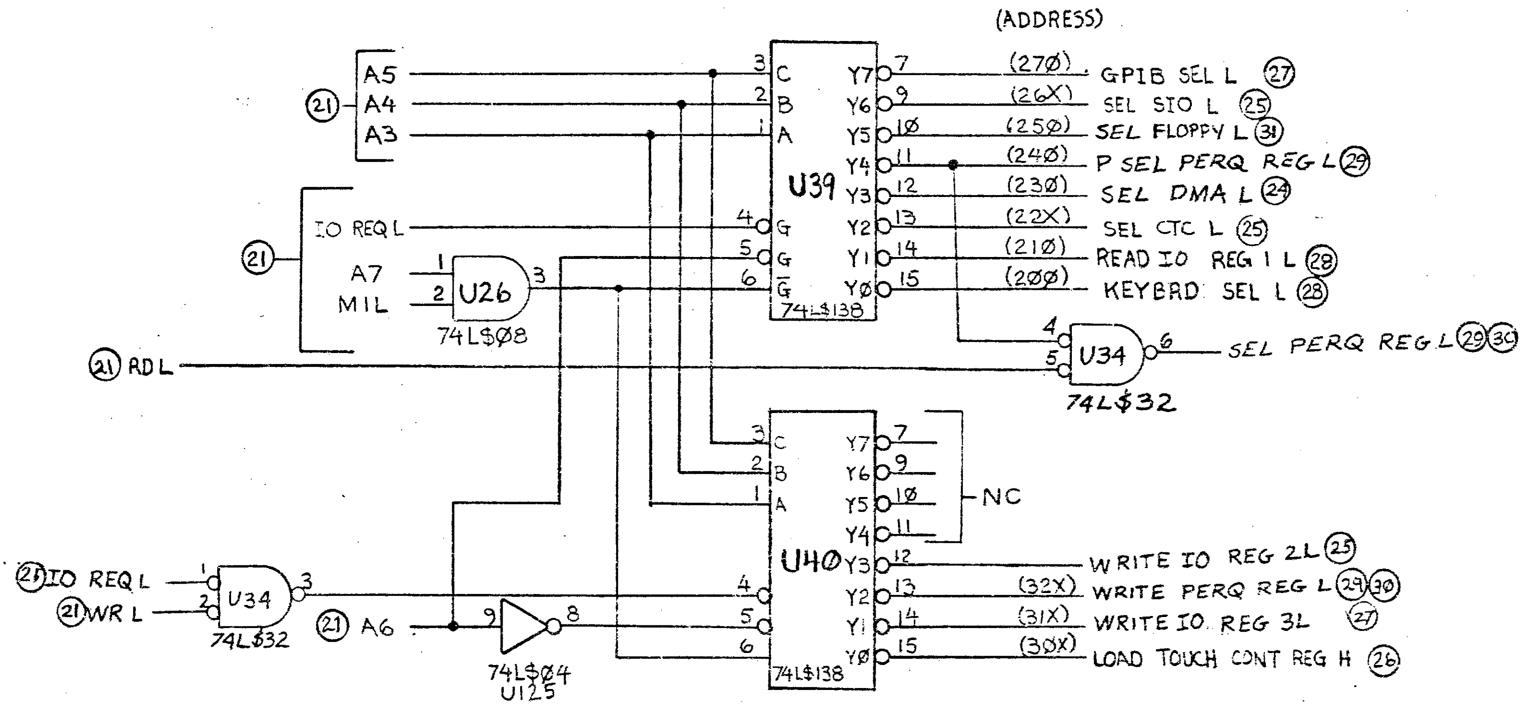
EPROM DIFFERENCES

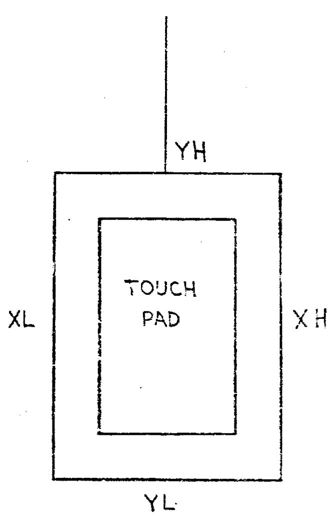
	TI	INTEL
21	+5	A11
2Ø	$\overline{CE}$	O Enb
18	A11	Chip Enb

Three Rivers Computer

IO CPU MEMORY | PRQ-10P-C

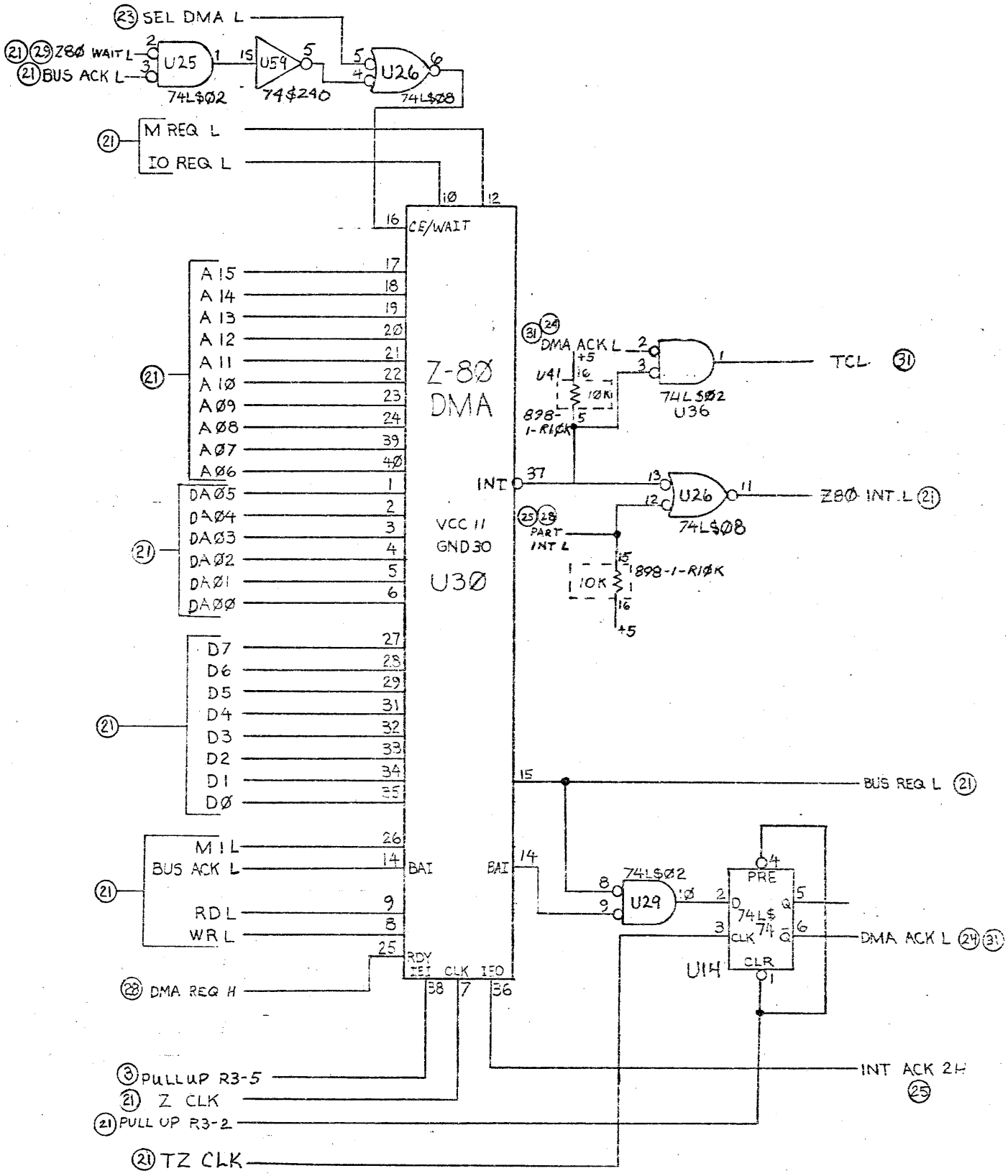
SC-A-ØØ167-22-A | 22 - 39





4

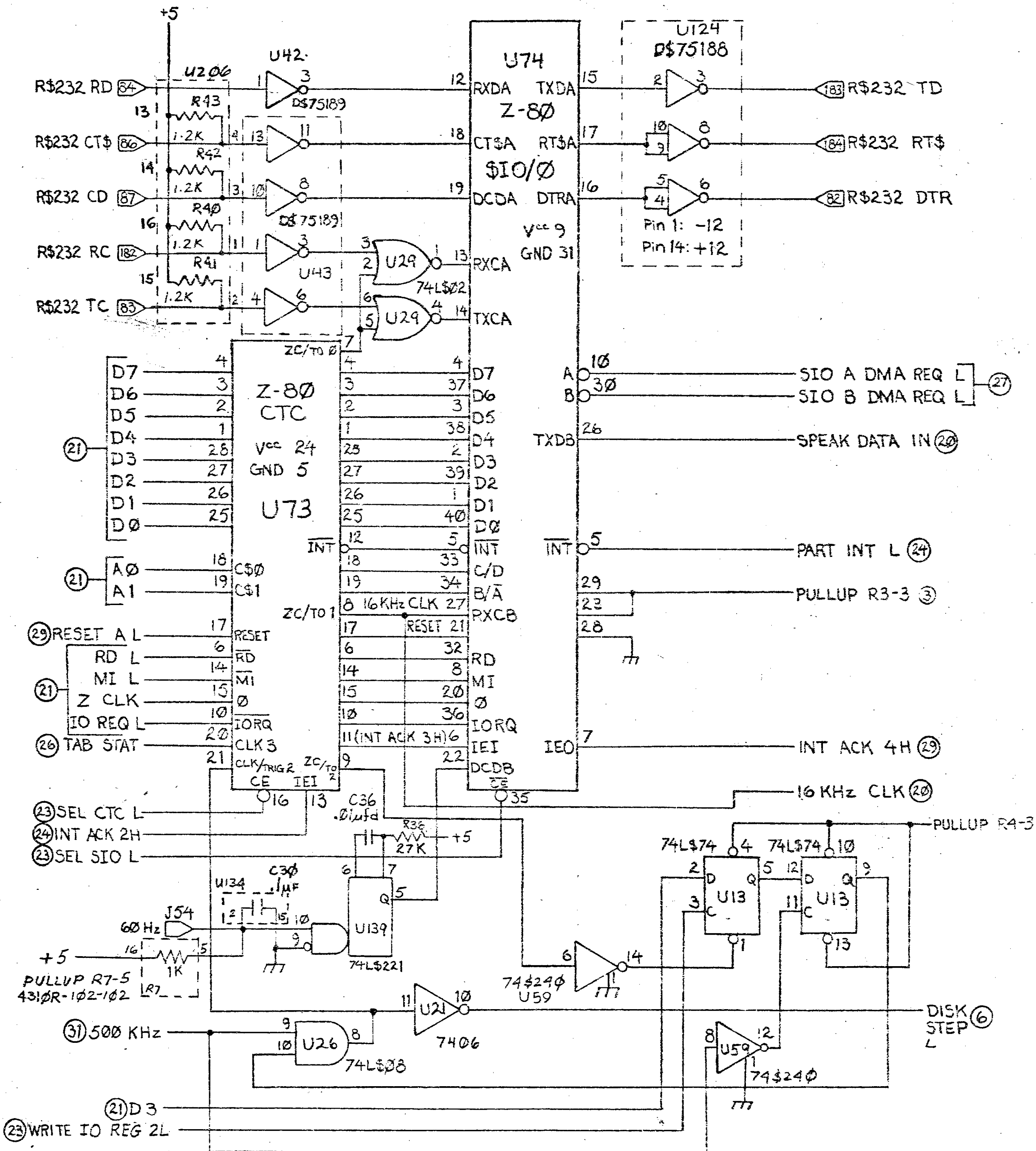
Three Rivers Computer		
TITLE: IO PERIPHERAL DECODE	PROJECT: PRQ-IOREG	
DRAWN BY / CHECKED BY	80-A-00107-23-A	23-39



4/3

Three Rivers Computer

REV C 1/14/81 RAC

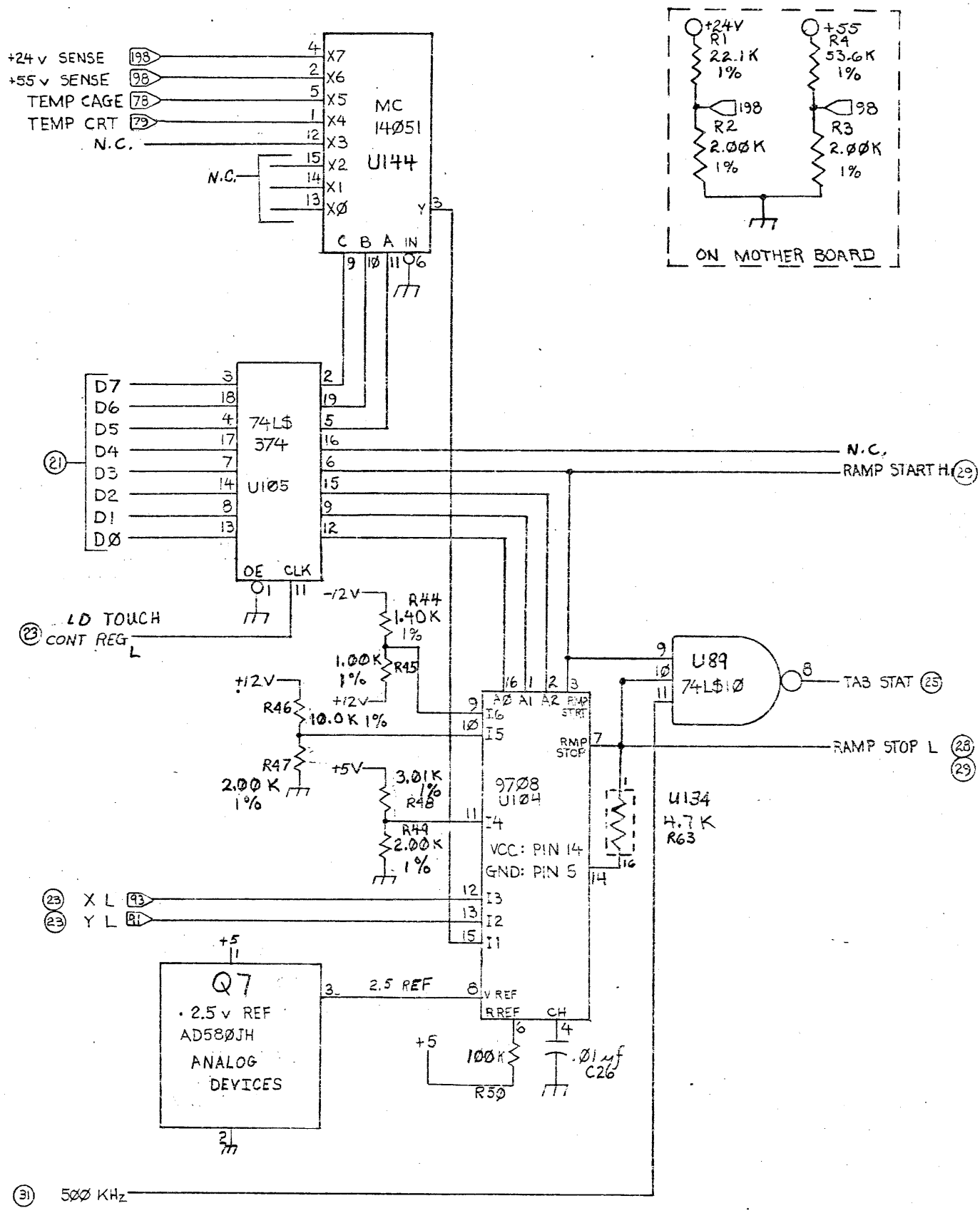


4

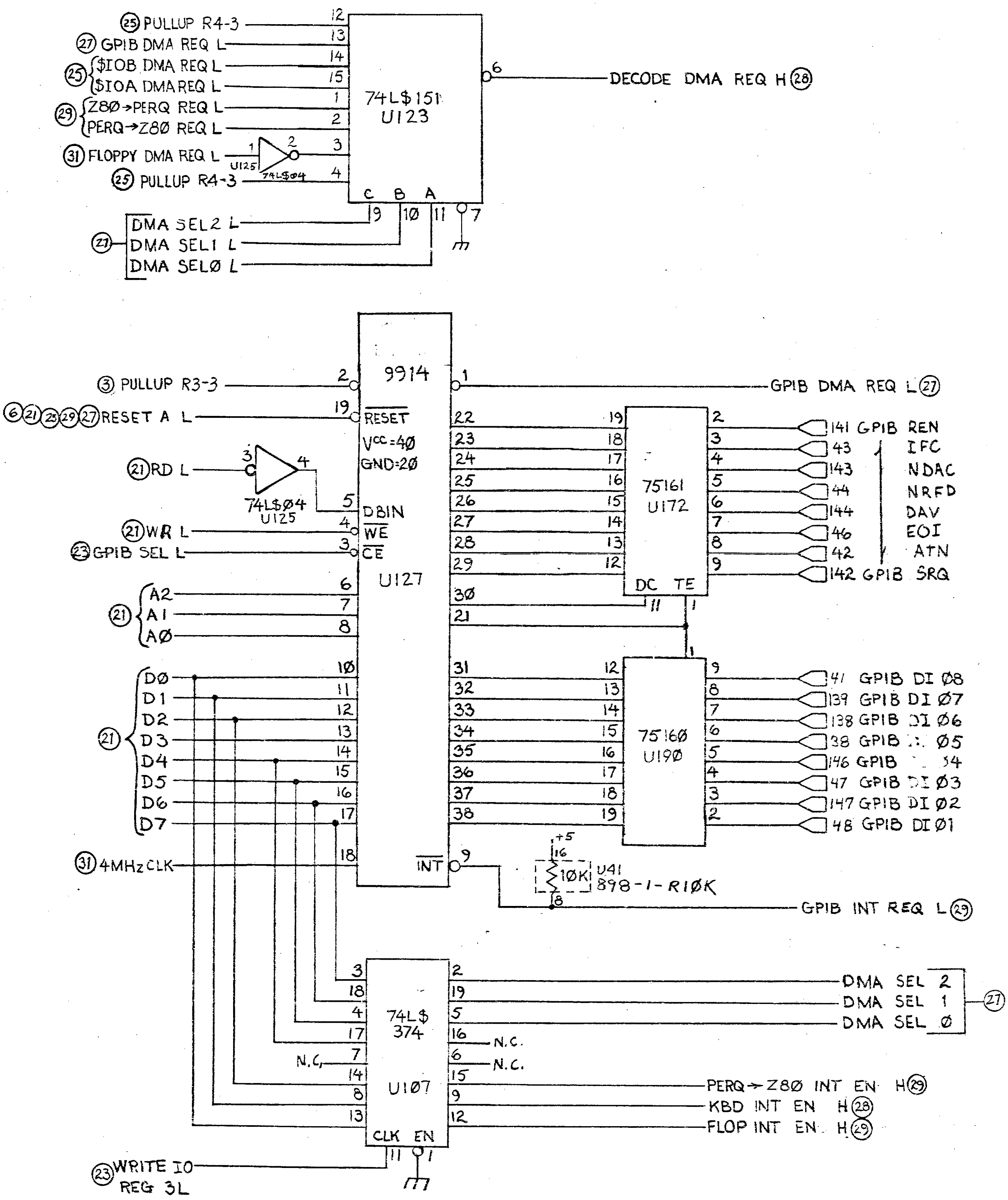
Three Rivers Computer

RS232 INTERFACE | PERQ-IOB-C

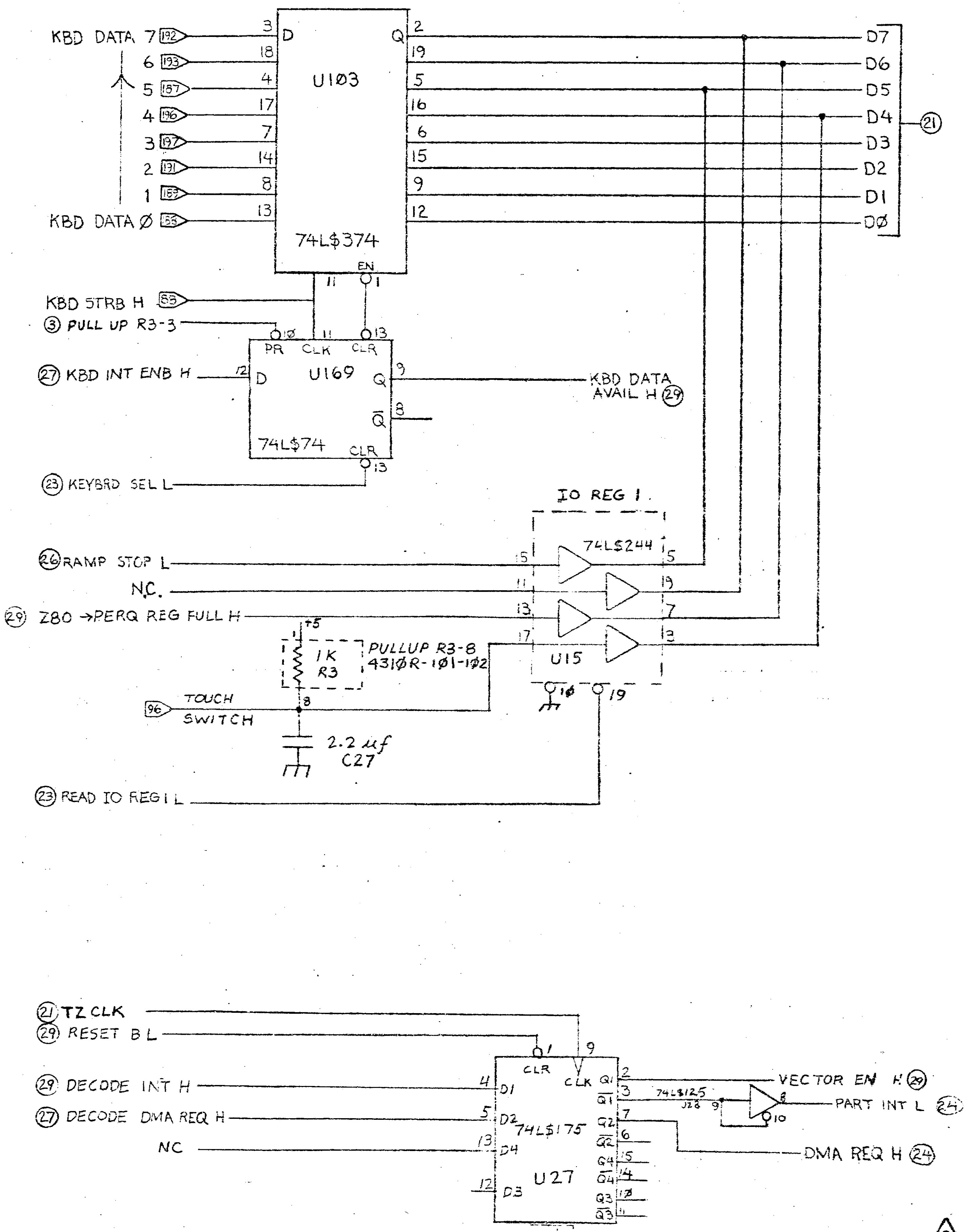
02-A-02-01-25A | 25 39



Three Rivers Computer



	Three Rivers Computer	
GPIB INTERFACE	PRG-10B-G	
SB 1-2-80	SCHA-00107-27A	27 39



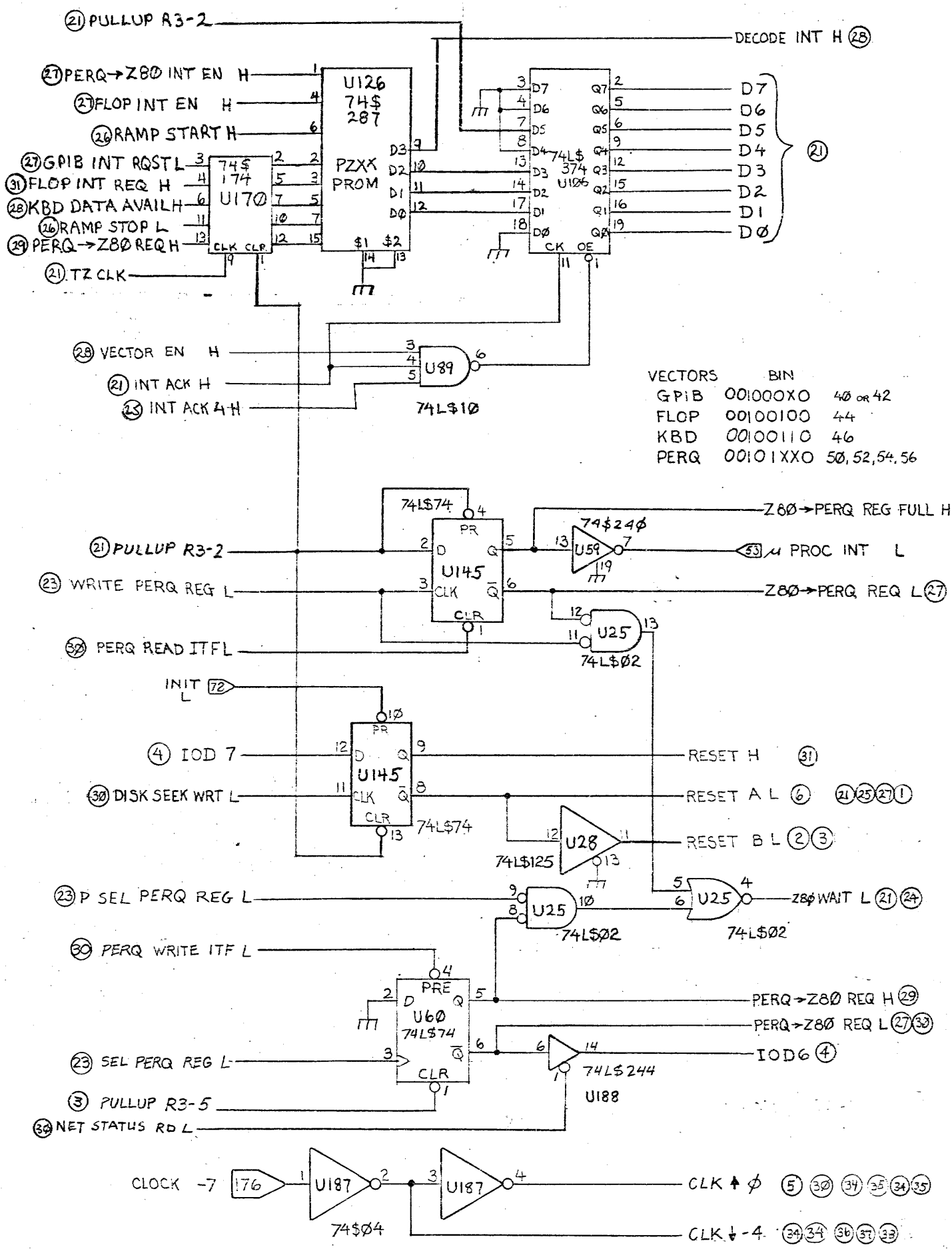
Three Rivers Computer

PRQ-IOB-G

32-A-00147-28-A

28-39

REV C 11/4/81 RAC

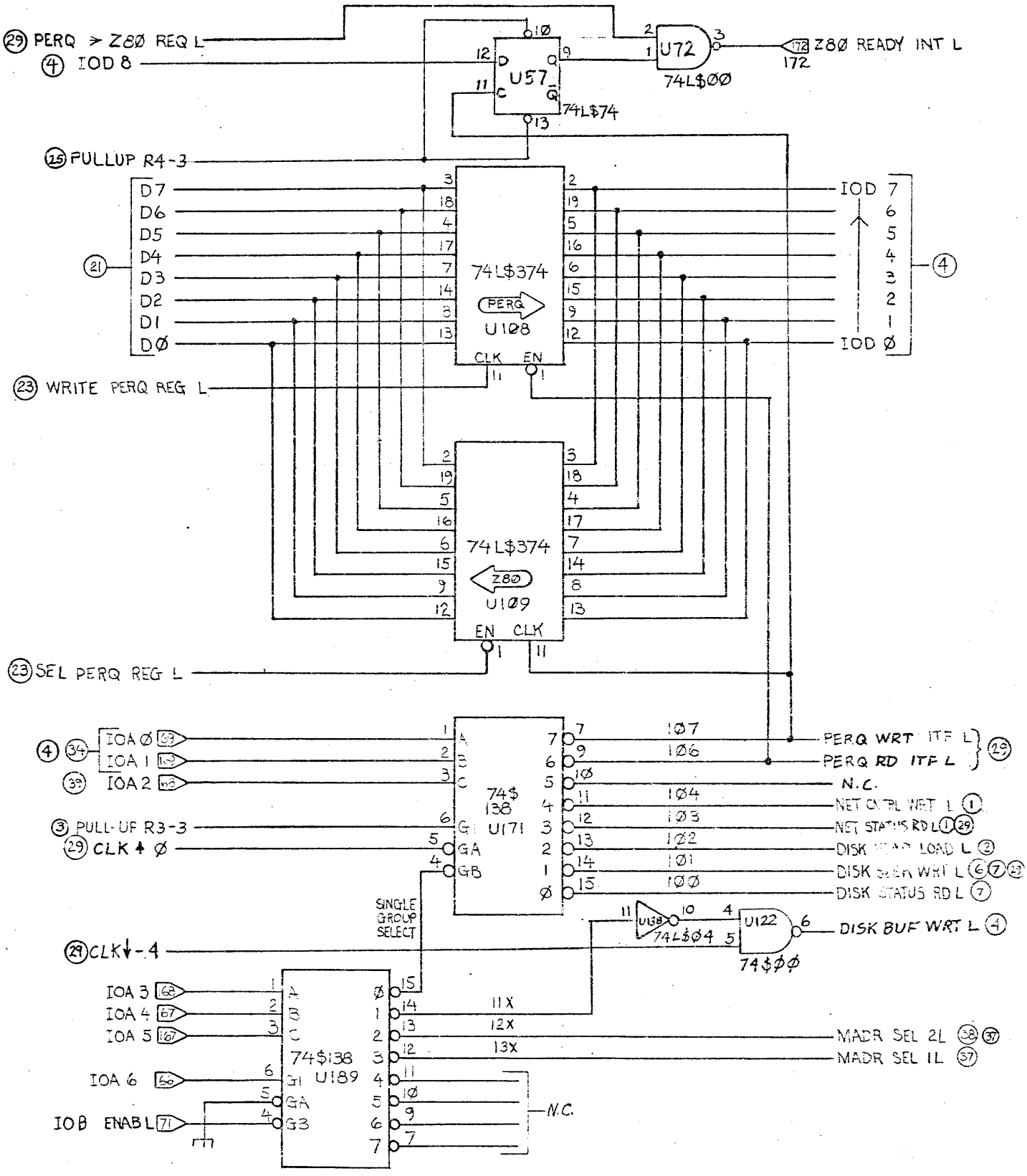


NOTE: CHIP U187
SHOULD BE LOCATED
AS CLOSE TO PIN 176
AS POSSIBLE.

4/3

Three Rivers Computer	
IOP VECTOR SELECT	PAGE 29 39

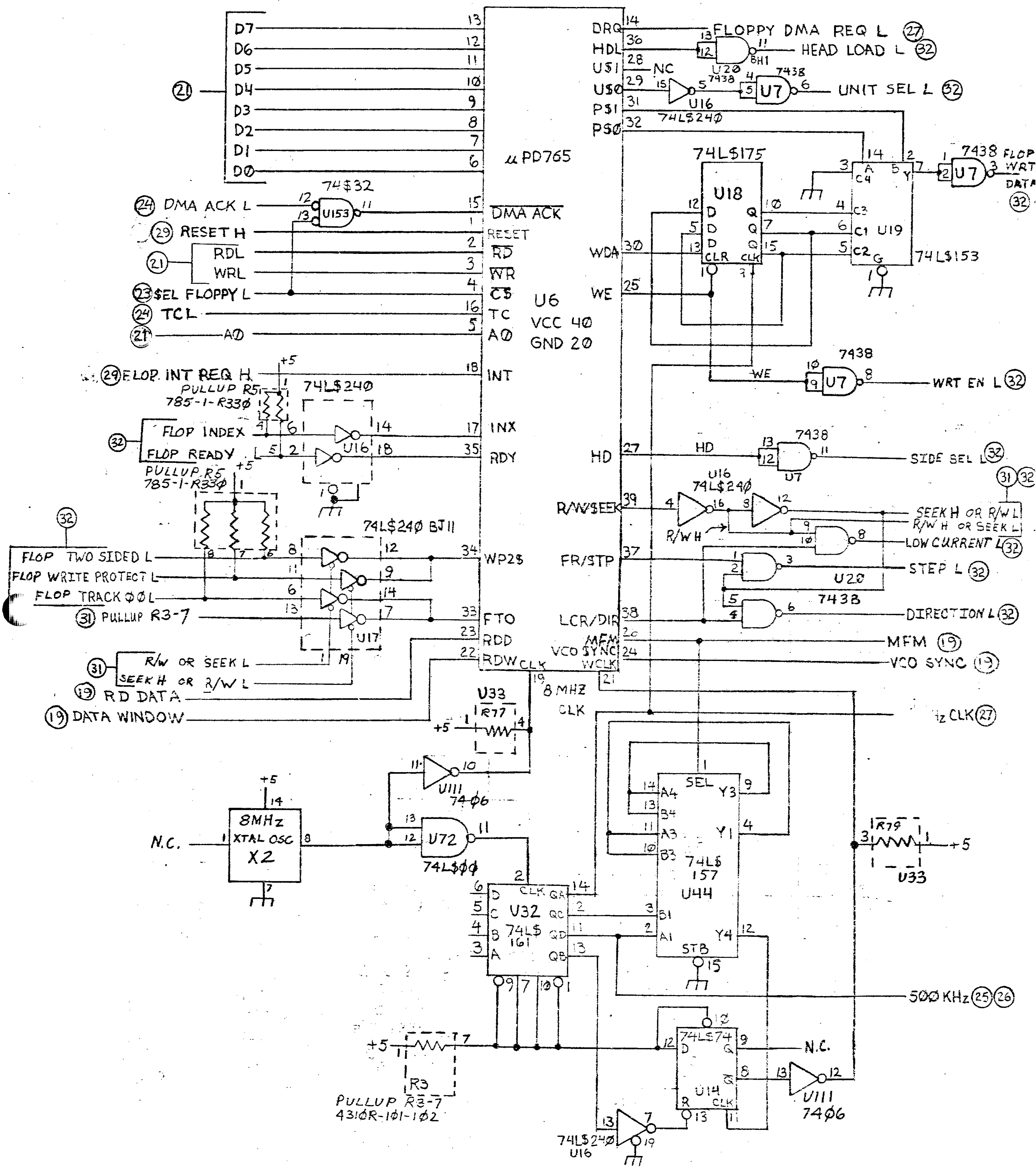
REV C 1/14/81 RAC



I/O ADDRESS FIELD DECODING

I/O ADR (8)	ADDRESSED FUNCTION
<1ØØ : 1Ø7>	SINGLE GROUP SELECTION
<11Ø : 117>	DISK BUFF WRITE
<12Ø : 127>	MADR SEL 1
<13Ø : 137>	MADR SEL 2

Tivoe Rivers Computer



D7
D6
D5
D4
D3
D2
D1
D0
μPD765
U6
VCC 40
GND 20
DRQ
HDL
US1
US0
PS1
PS0
FLOPPY DMA REQ L
HEAD LOAD L
NC
UNIT SEL L
U20
7438
U7
U16
74LS240
74LS175
U18
74LS153
U19
FLOP WRT DATA
74S32
U153
DMA ACK L
DMA ACK
RESET H
RESET
RDL
WRL
RD
WR
SEL FLOPPY L
CS
TCL
TC
A0
WDA
WE
ELOP. INT REQ H
INT
WRT EN L
PULLUP R5
785-1-R330
FLOP INDEX
FLOP READY
INX
RDY
HD
SIDE SEL L
R/W/SEEK
SEEK H OR R/W L
R/W H OR SEEK L
LOW CURRENT L
R/W H
FLOP TWO SIDED L
FLOP WRITE PROTECT L
FLOP TRACK 00 L
PULLUP R3-7
74LS240 BJ11
WP2S
FR/STP
STEP L
FTO
LCR/DIR
DIRECTION L
U17
RDD
MFM
VCO SYNC
RDW
WCLK
CLK
R/W OR SEEK L
SEEK H OR R/W L
RD DATA
DATA WINDOW
8 MHZ CLK
U33
R77
U111
7406
8MHz XTAL OSC X2
N.C.
U72
74LS00
U32
74LS 161
SEL
74LS 157
U44
STB
R79
500 KHz
74LS74
U14
R3
PULLUP R3-7
4310R-101-102
74LS240
U16

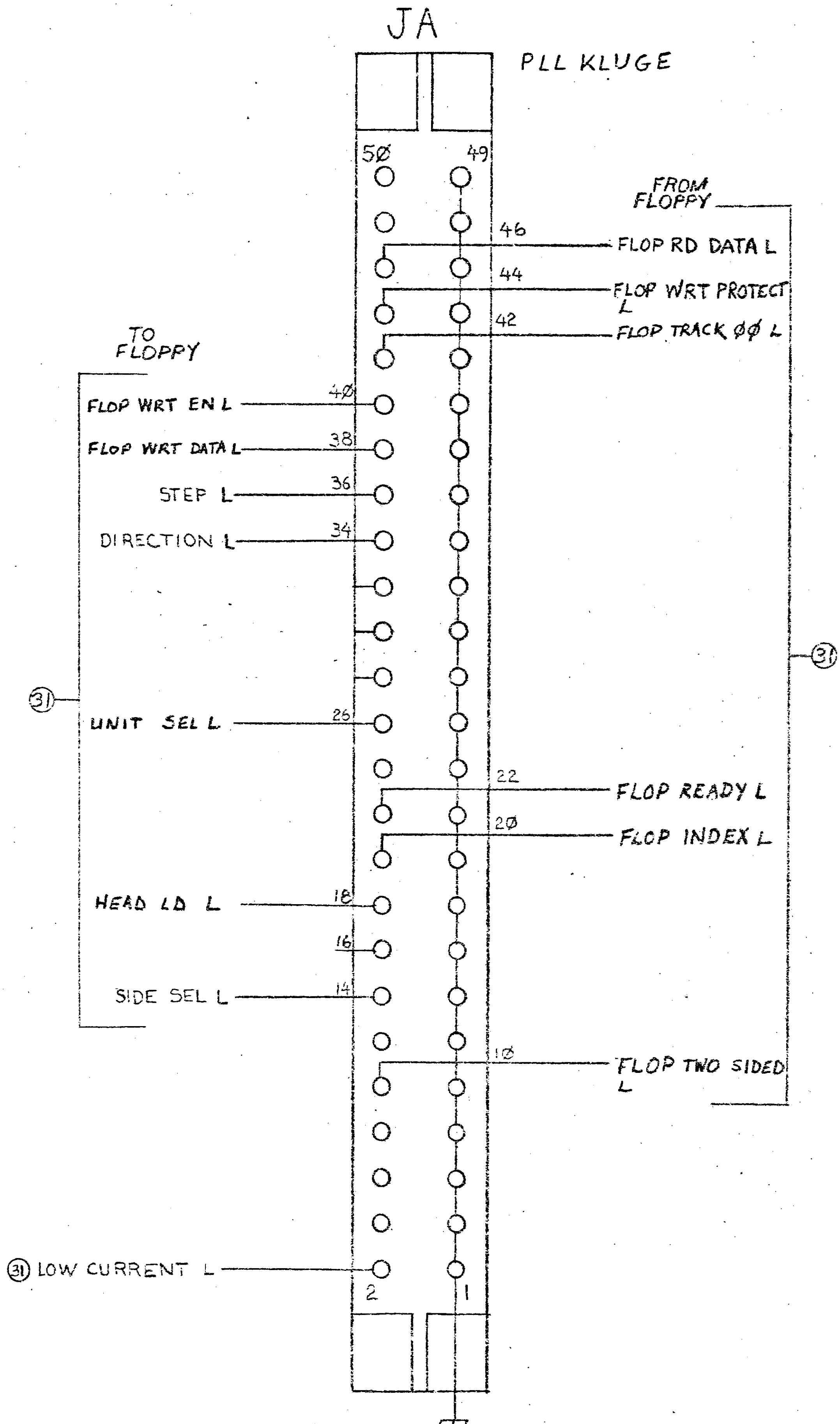
REV D 1/20/80 DIV
REV C 10/11/80 DIV

Three Rivers Computer

FLOPPY CONT. PRQ-103-G

JS 30-A-001073-A 31 · 39

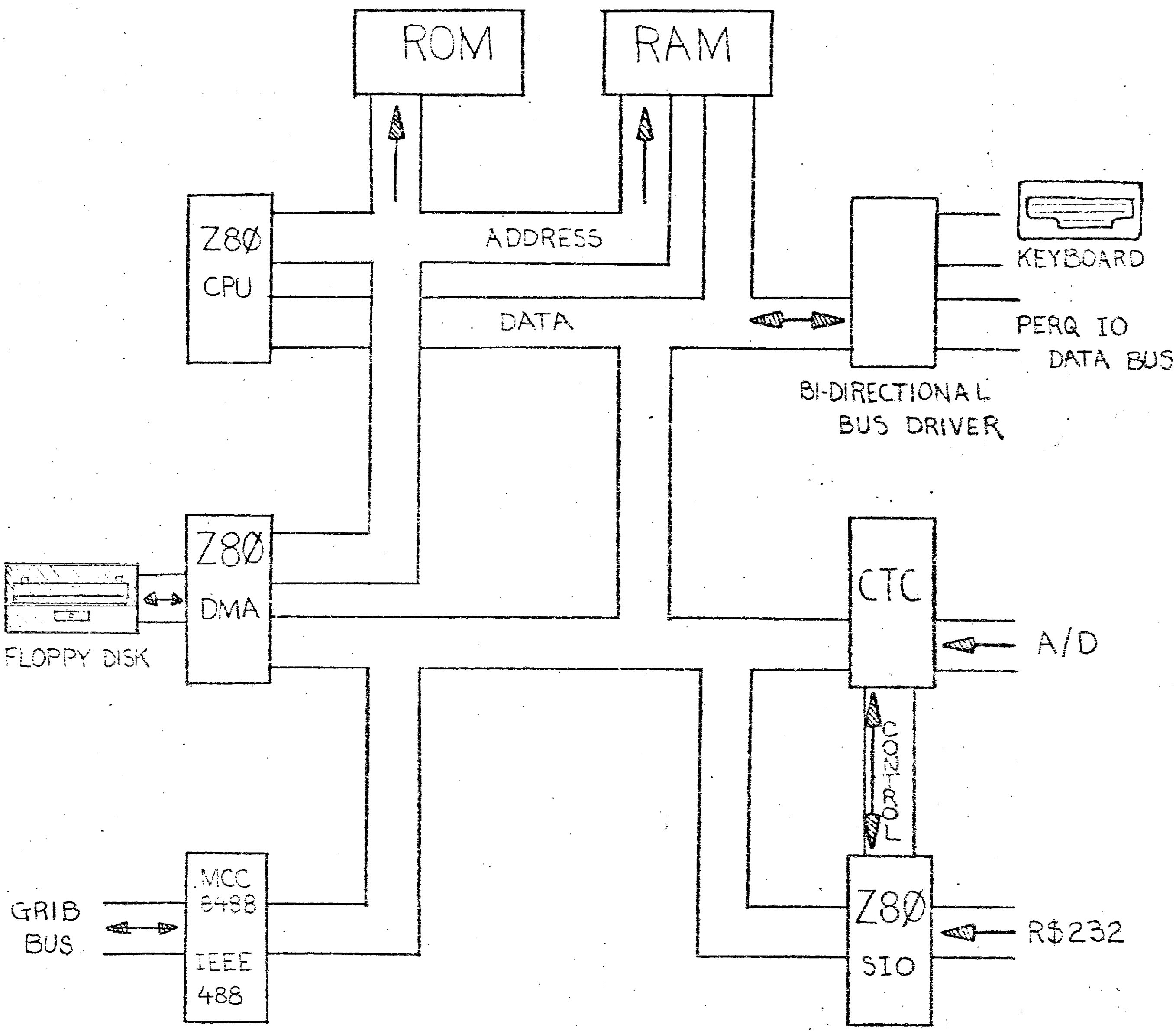
4/3



Three Rivers Computer

FLOP DISK INT CONN | FRG-206-G

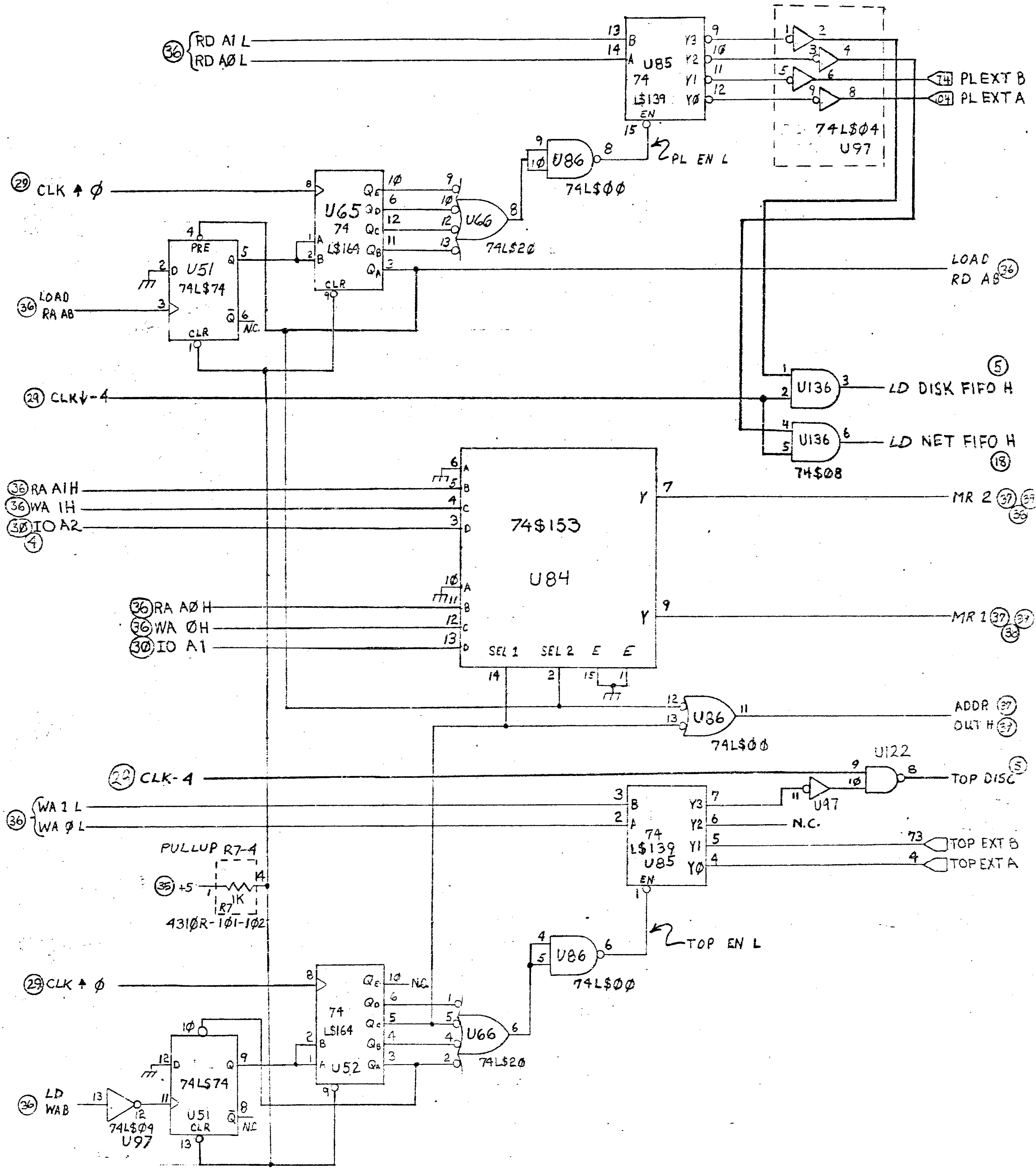
32PA-00 17-32-A | 32 39



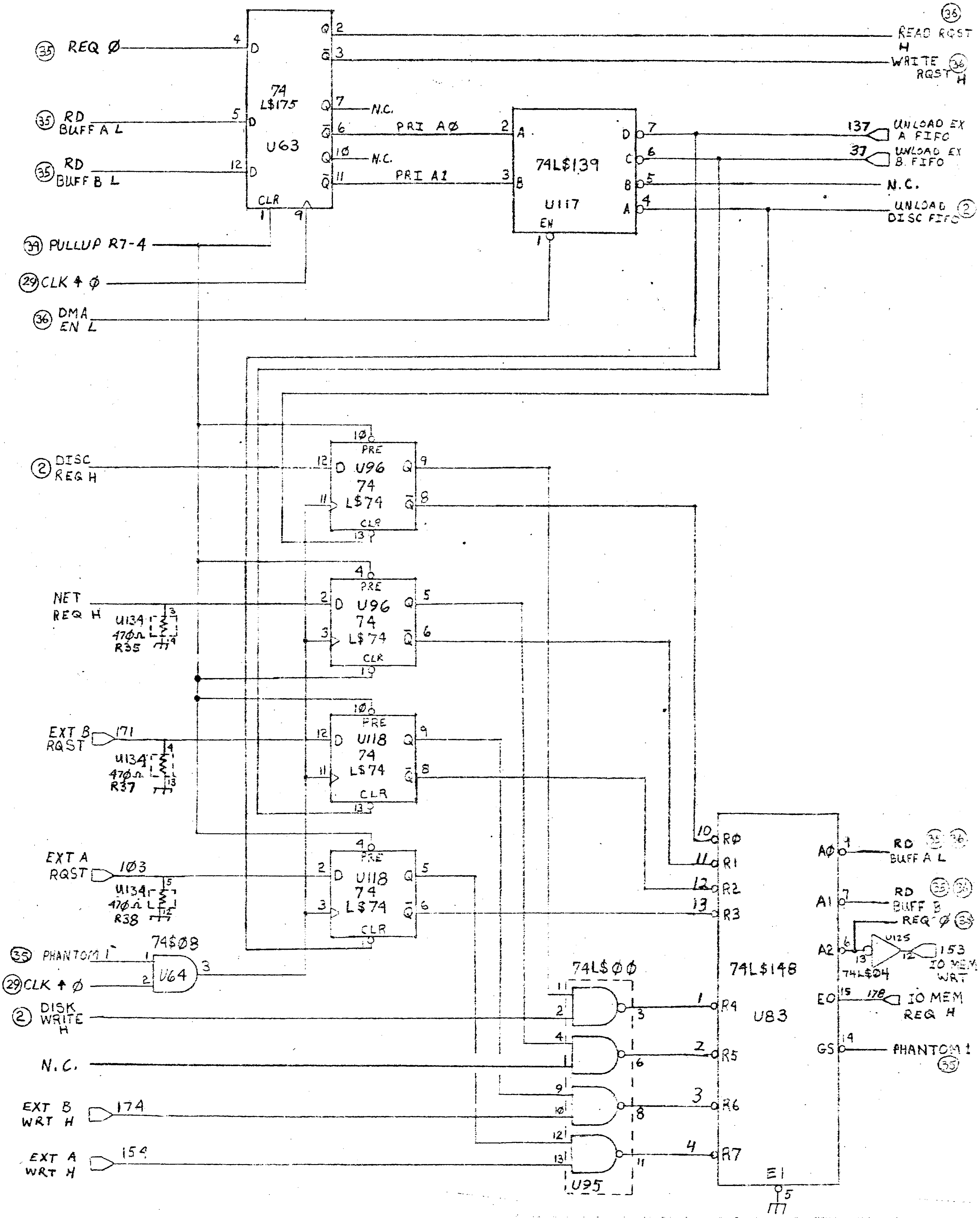
Three Rivers Computer

TITLE BLOCK DIAGRAM

PAGE 33-32



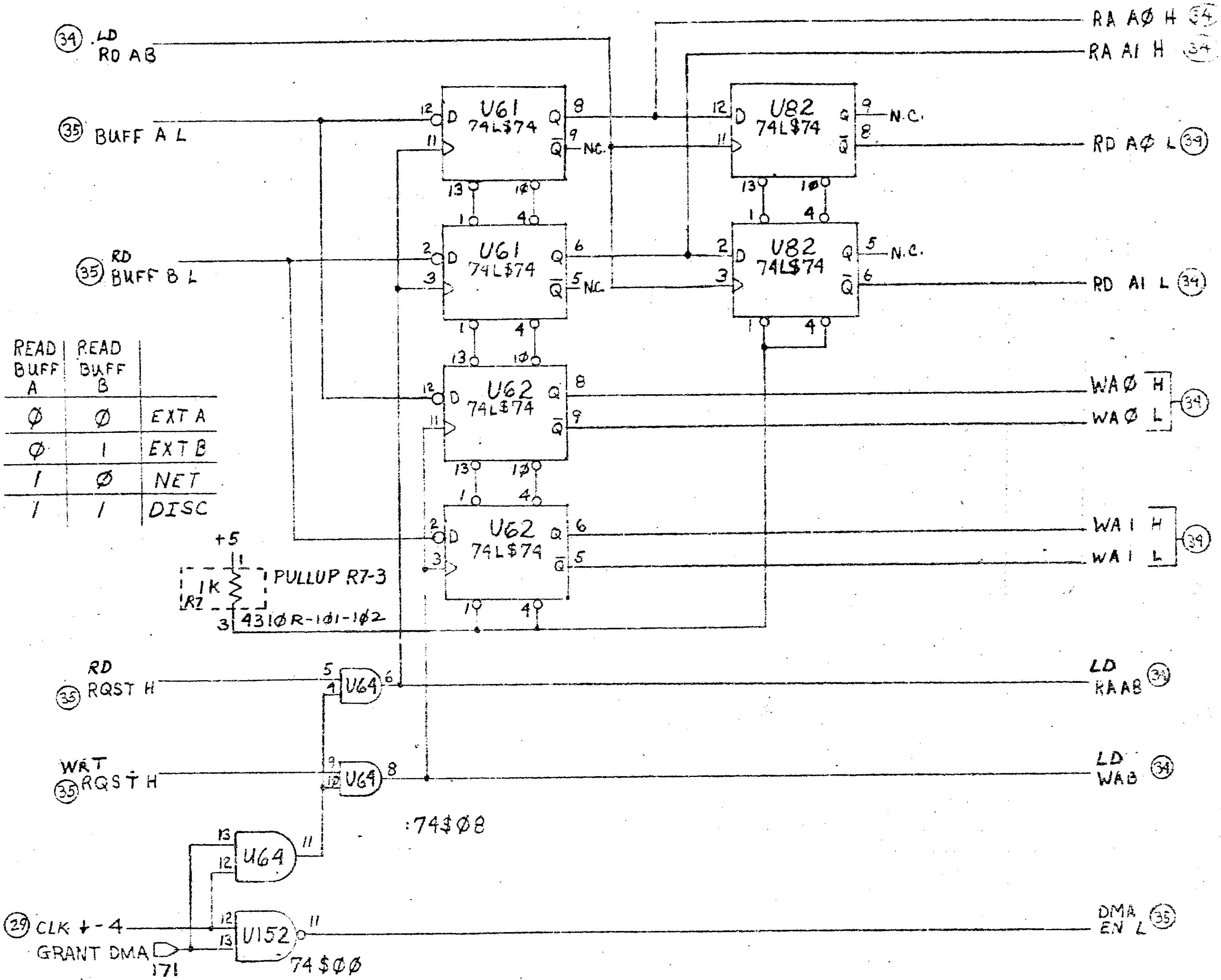
Three Rivers Computer	
TITLE CHANNEL SELECTOR	PROJECT PRQ-10B-G
DRAWN BY / CHECKED BY 8/79	1C-A-00107-34A
PAGE 34-39	



REQ Ø
RD BUFF A L
RD BUFF B L
PULLUP R7-4
CLK 4 Ø
DMA EN L
74 L$175
U63
CLR
N.C.
PRI AØ
PRI A1
74L$139
U117
EN
READ RQST H
WRITE RQST H
UNLOAD EX A FIFO
UNLOAD EX B FIFO
UNLOAD DISC FIFO
DISC REQ H
NET REQ H
EXT B RQST
EXT A RQST
U96
U118
74 L$74
PRE
U134
47Øn
R35
R37
R38
PHANTOM 1
74$Ø8
U64
CLK 4 Ø
DISK WRITE H
N.C.
EXT B WRT H
EXT A WRT H
74L$ØØ
U95
74L$148
U83
RD BUFF A L
RD BUFF B
REQ Ø
U125
74L$Ø4
IO MEM WRT
IO MEM REQ H
PHANTOM 1

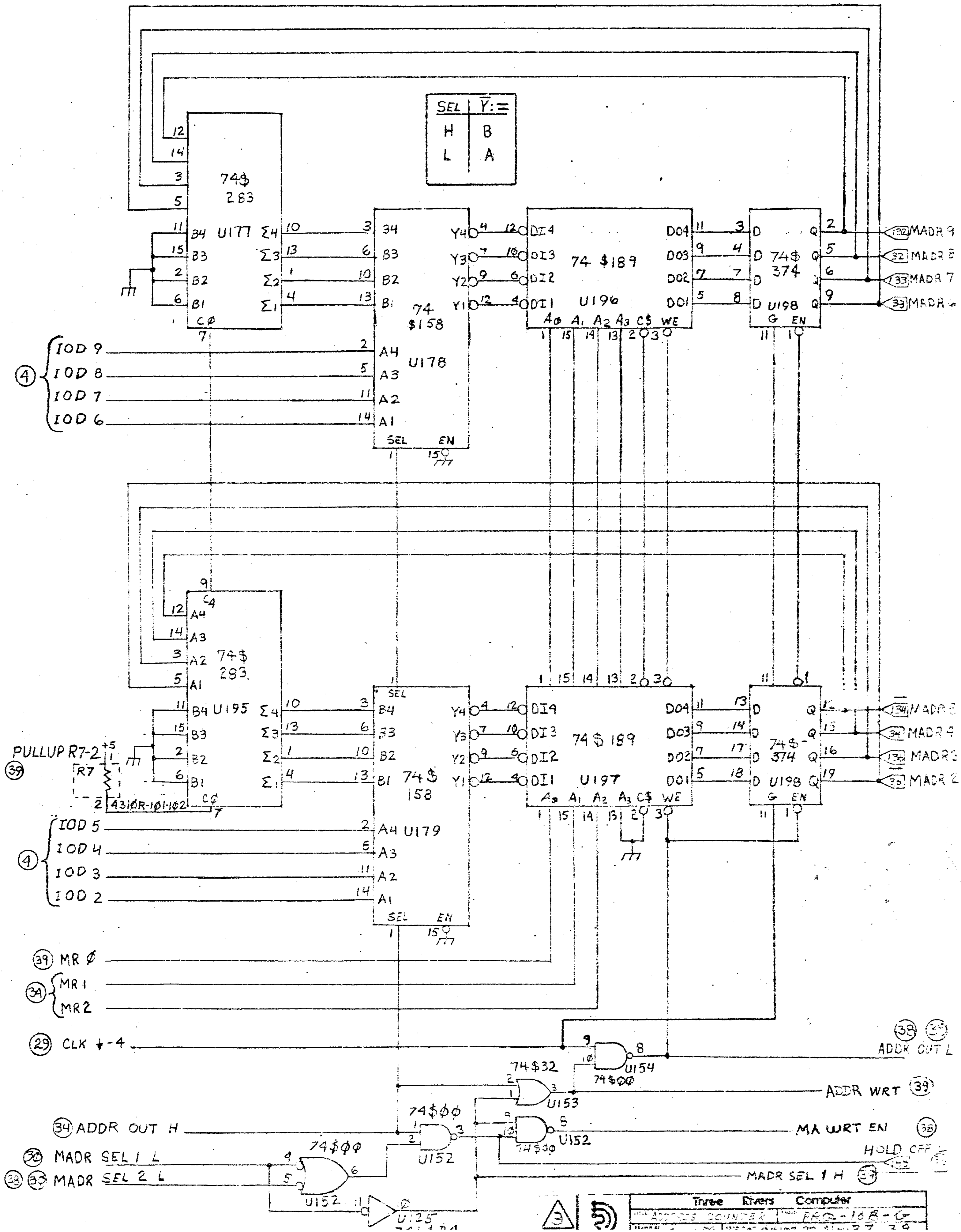
Three Rivers Computer

35 - 39

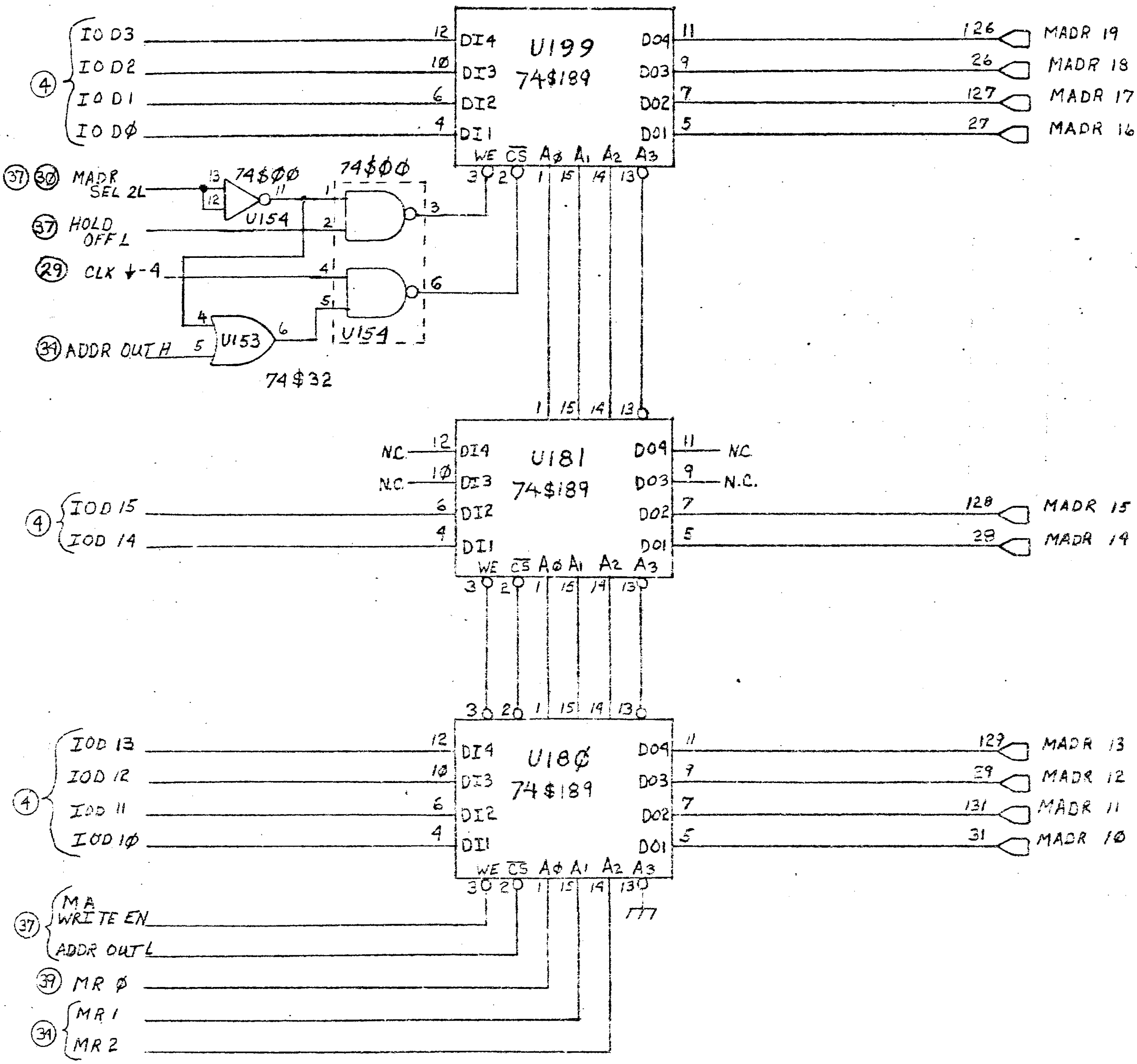


4

Three Rivers Computer	
CHANNEL SELECTOR	PRQ-10B-C
3.79	SC-A-00147-36-A 36 37



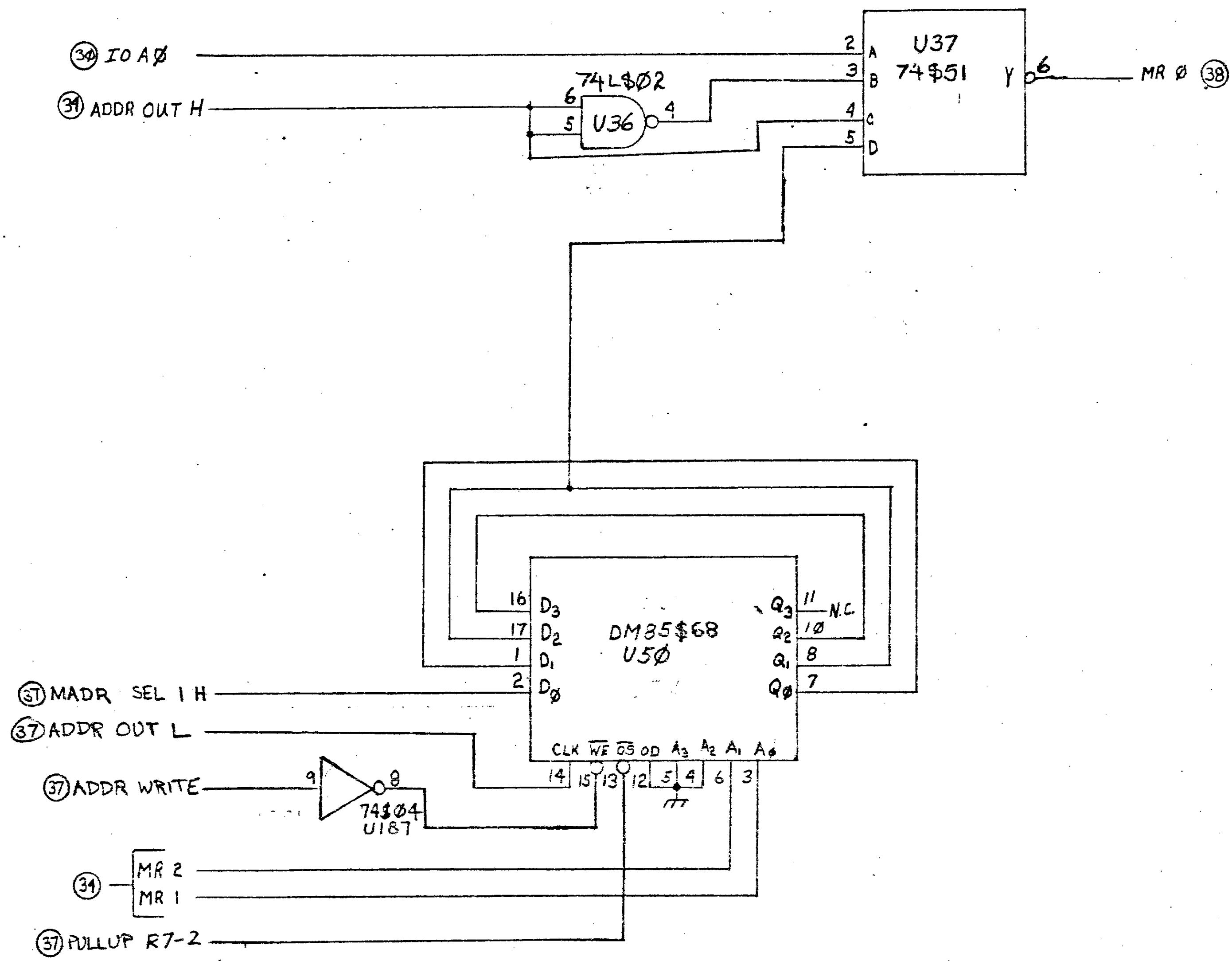
SEL | Y :=
H | B
L | A
74$ 283
U177
74 $158
U178
74 $189
U196
74$ 374
U198
MADR 9
MADR 8
MADR 7
MADR 6
IOD 9
IOD 8
IOD 7
IOD 6
74$ 283
U195
74$ 158
U179
74 $ 189
U197
74$ 374
U198
MADR 5
MADR 4
MADR 3
MADR 2
PULLUP R7-2
R7
4310R-101-102
IOD 5
IOD 4
IOD 3
IOD 2
MR Ø
MR 1
MR 2
CLK ↓-4
ADDR OUT L
74$32
U153
74$00
U154
ADDR WRT
74$00
U152
ADDR OUT H
MA WRT EN
HOLD OFF L
MADR SEL 1 L
MADR SEL 2 L
MADR SEL 1 H
U125
Three Rivers Computer
ADDRESS COUNTER



Three Rivers Computer

HIGH ADDR LATCH

9/79



Three Rivers Computer

ADDR COUNT SELECT | PRQ-1OP-G

9/77 | 39-39

REV B DW 1/21/82