

HP Integrator

Logic PCB Interconnection Pins

LHS of machine

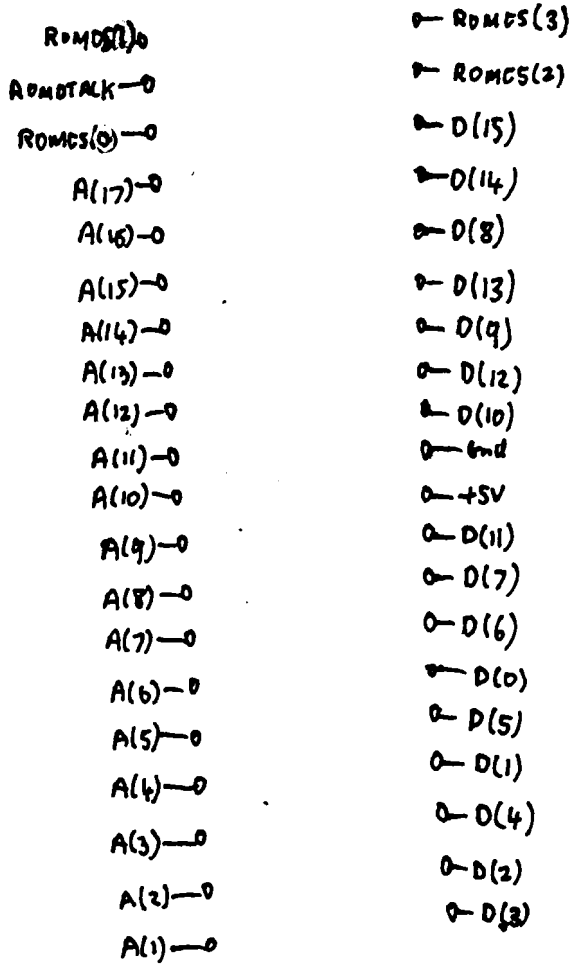


- \overline{RD}
- \overline{WR}
- \overline{FDCCS}
- \overline{DispCS}
- \overline{HPILCS}
- \overline{RTCCS}
- \overline{HPIBCS}
- \overline{SPKCS}
- \overline{Rst}
- $\overline{IRQ1}$
- $\overline{IRQ3}$
- $\overline{IRQ4}$
- $\overline{IRQ5}$
- $\overline{IRQ6}$
- $IOA(1)$
- $IOA(2)$
- $IOA(3)$
- $IOA(4)$
- $IOA(5)$
- \overline{IORct}
- $IOO(0)$
- $IOO(1)$
- $IOO(2)$
- $IOO(3)$
- $IOO(4)$
- $IOO(5)$
- $IOO(6)$
- $IOO(7)$

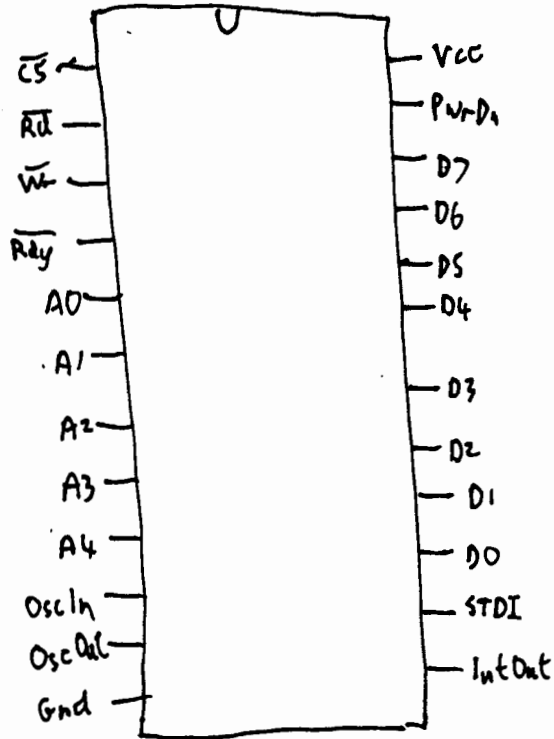
HP Integrat

ROM Module Connections

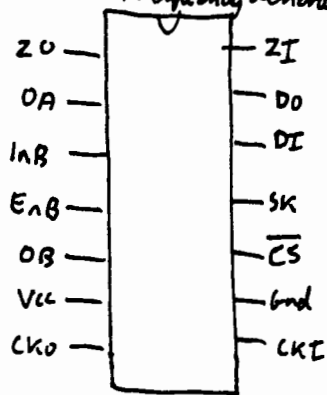
Top ←
↑
LHS of Machine



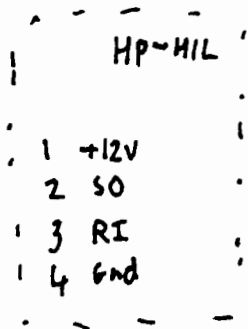
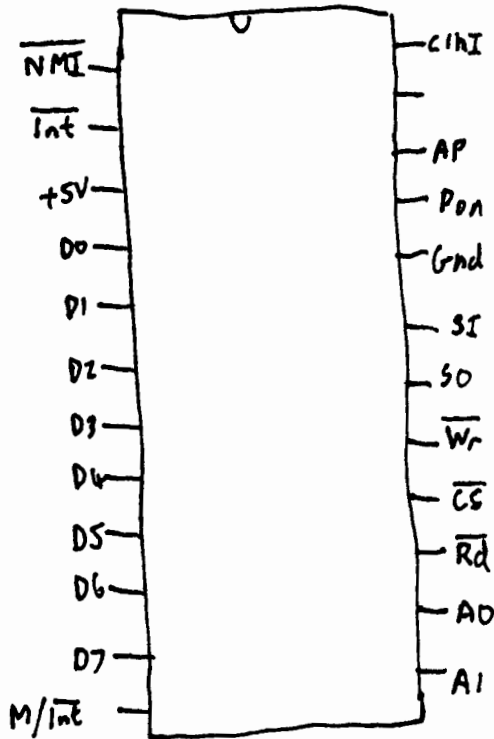
82167
Real Time Clock



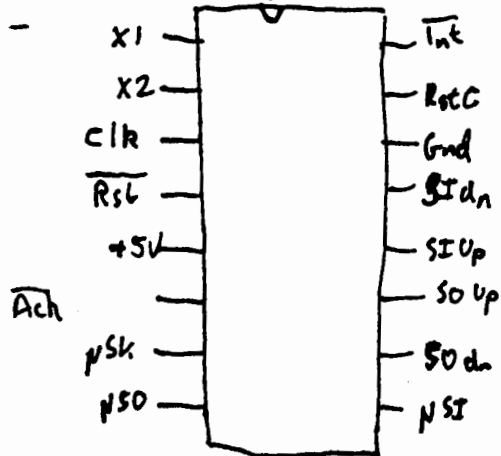
COP452
Frequency Generator and Counter



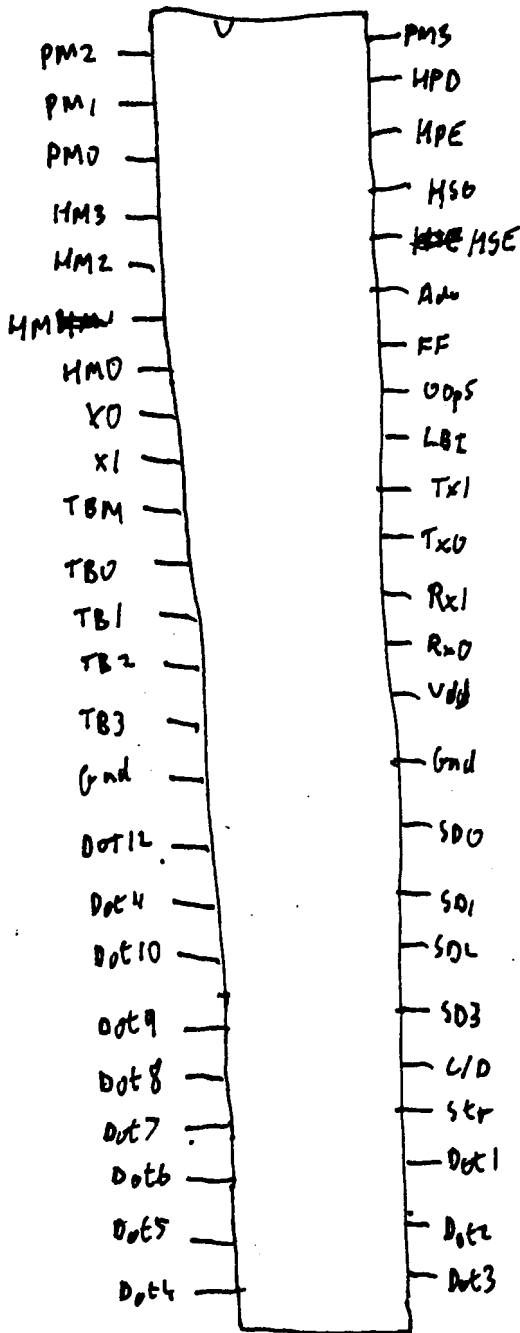
HP-HIL Most
IRD2



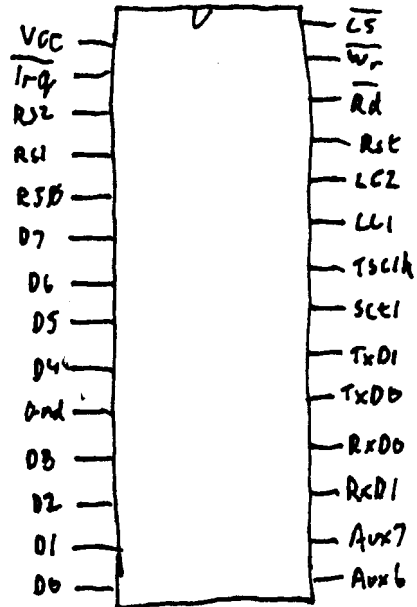
HP-HIL Slave
IRC8
ILP7



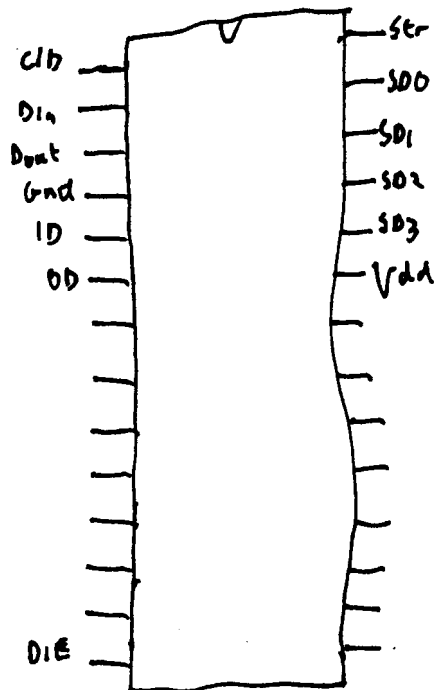
Thinkjet Printer CPU
1LJ7



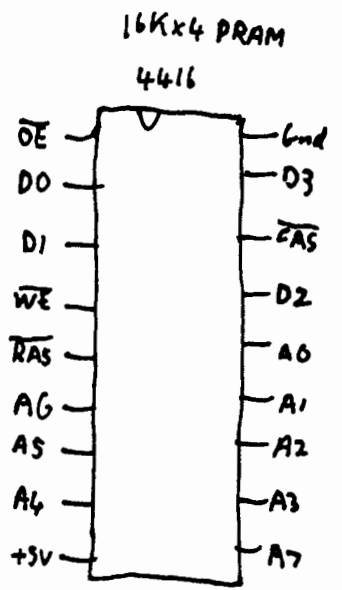
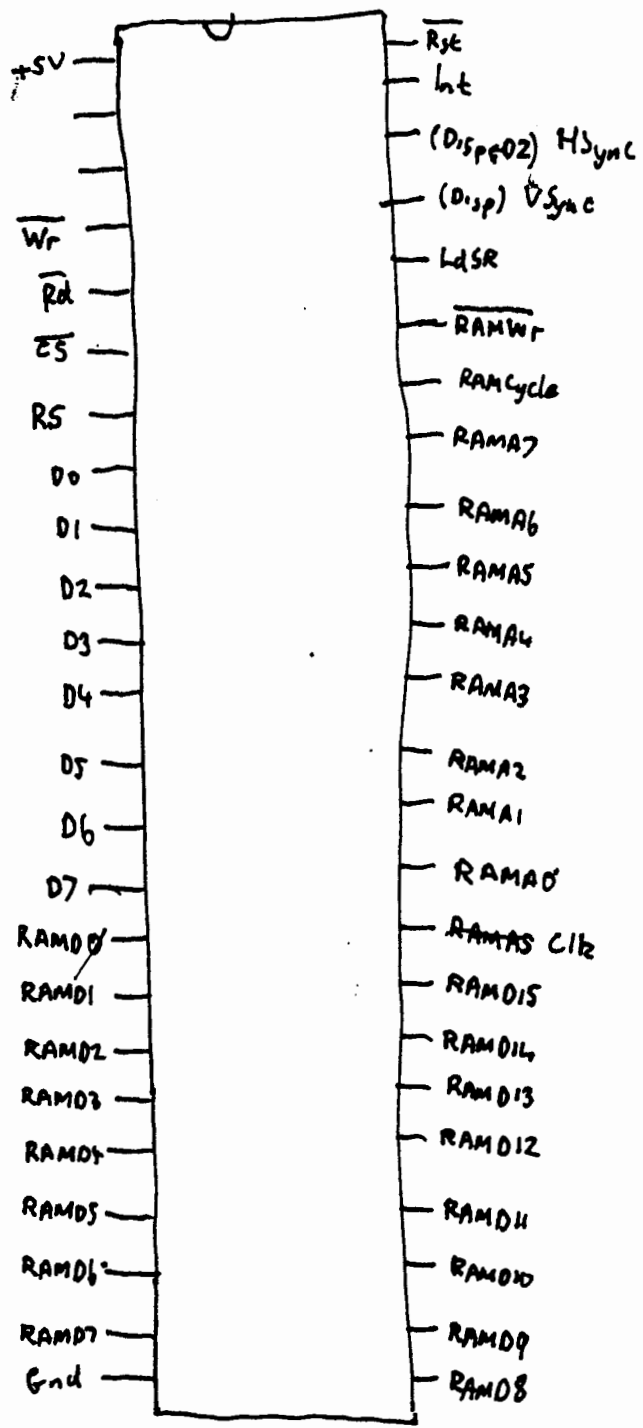
1L83 HPIL Interface

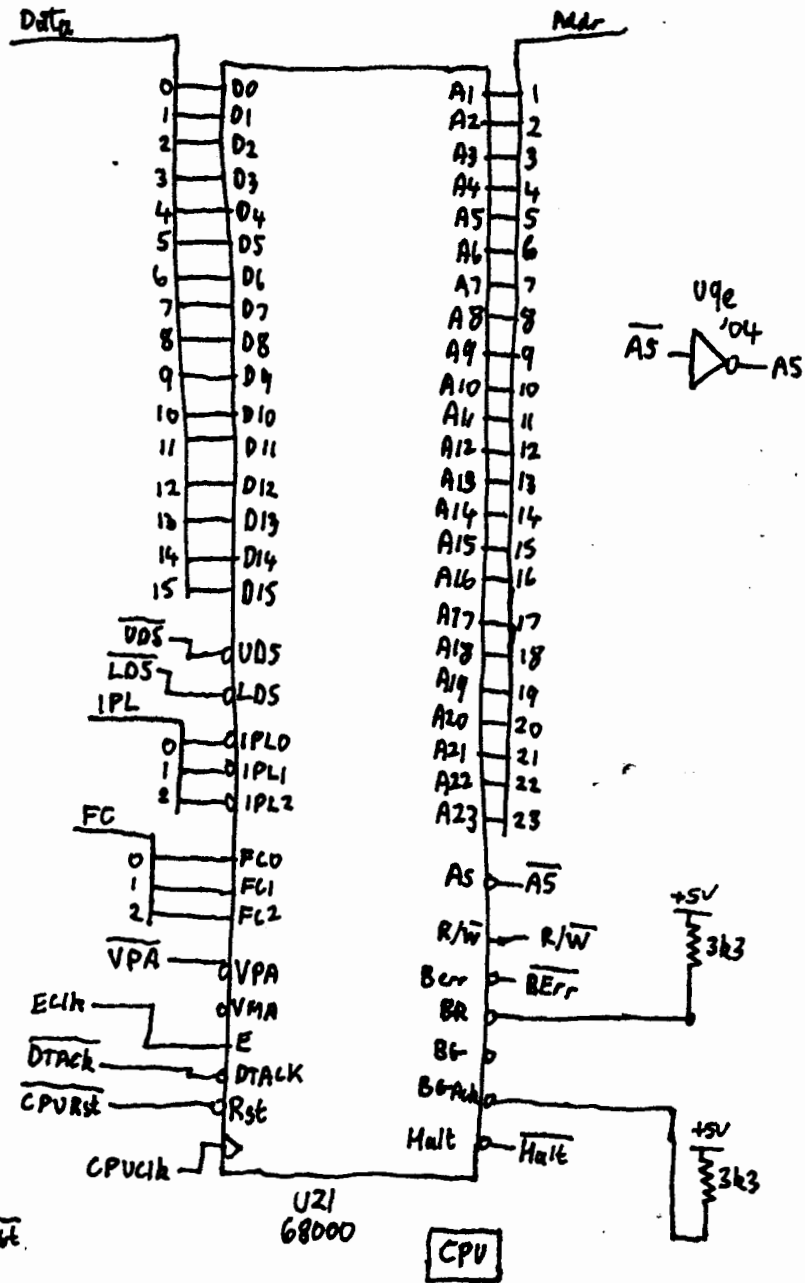
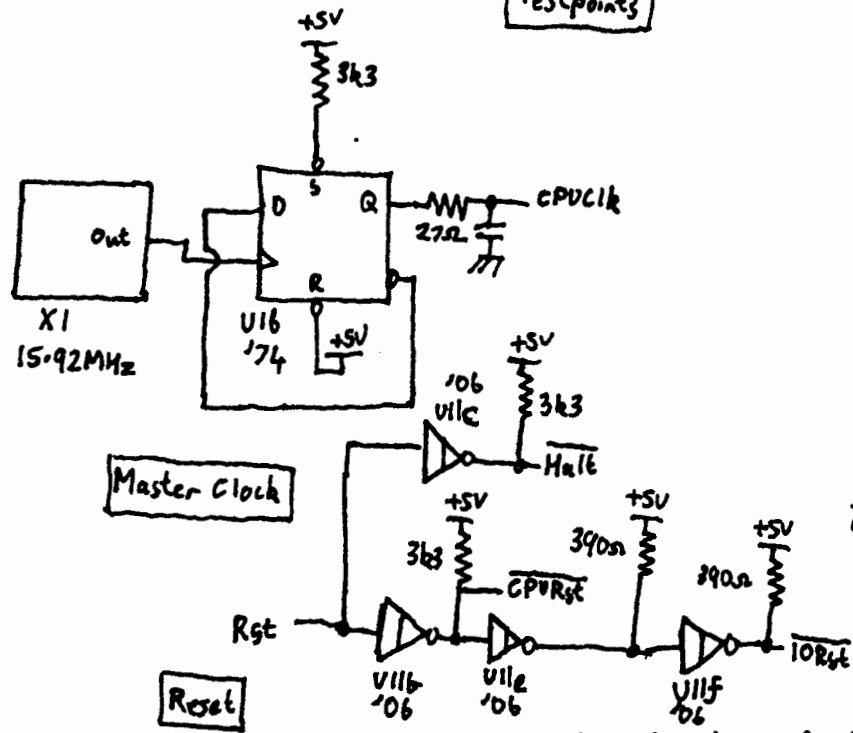
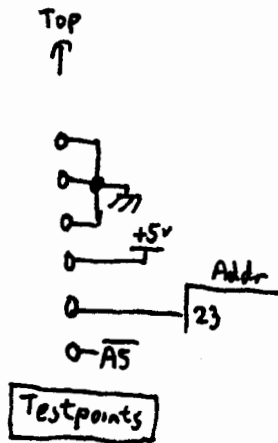
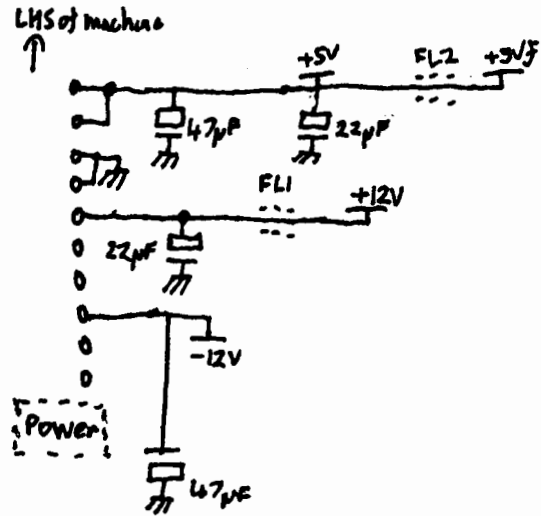


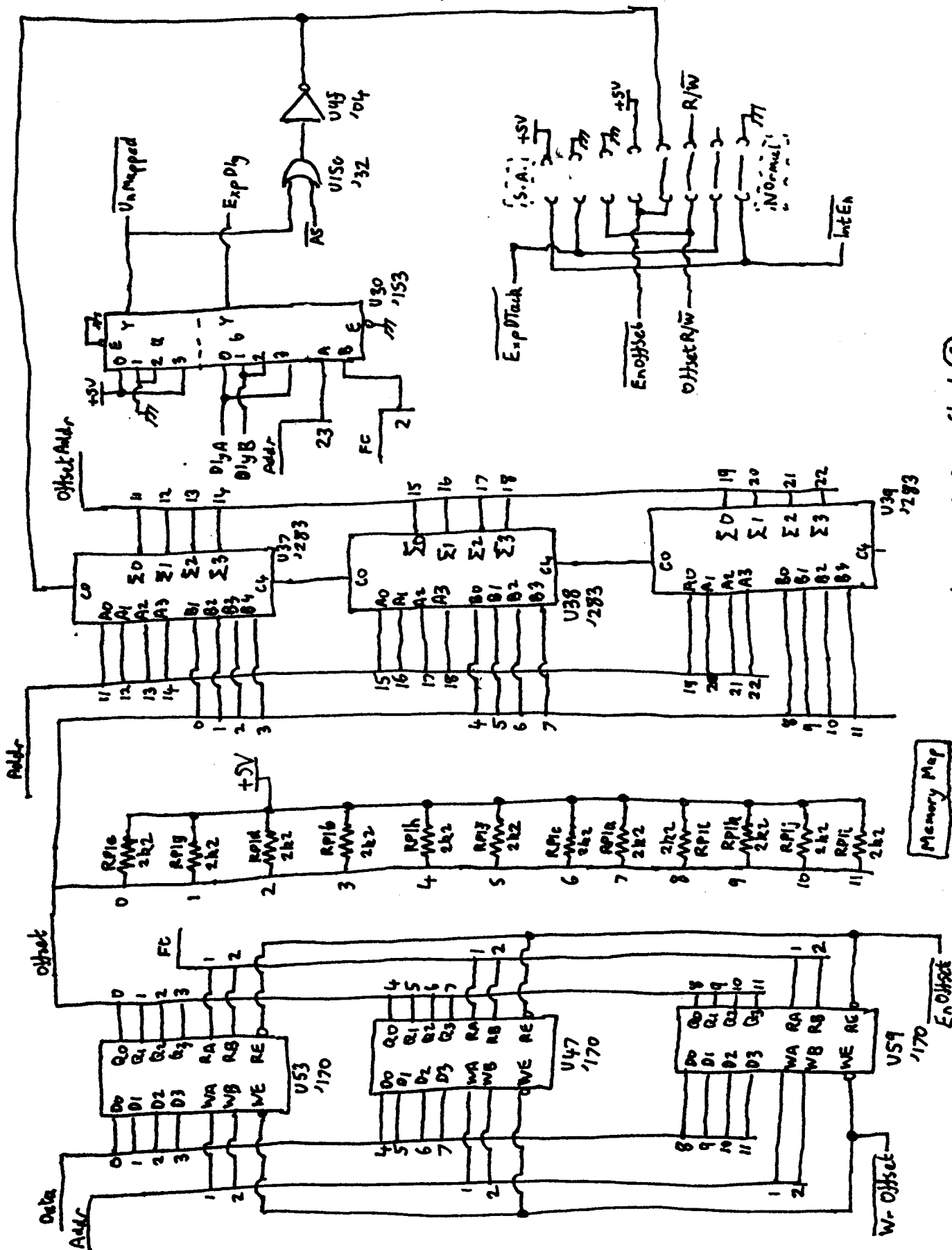
1L67 Saturn ROM
1L68 Saturn RAM



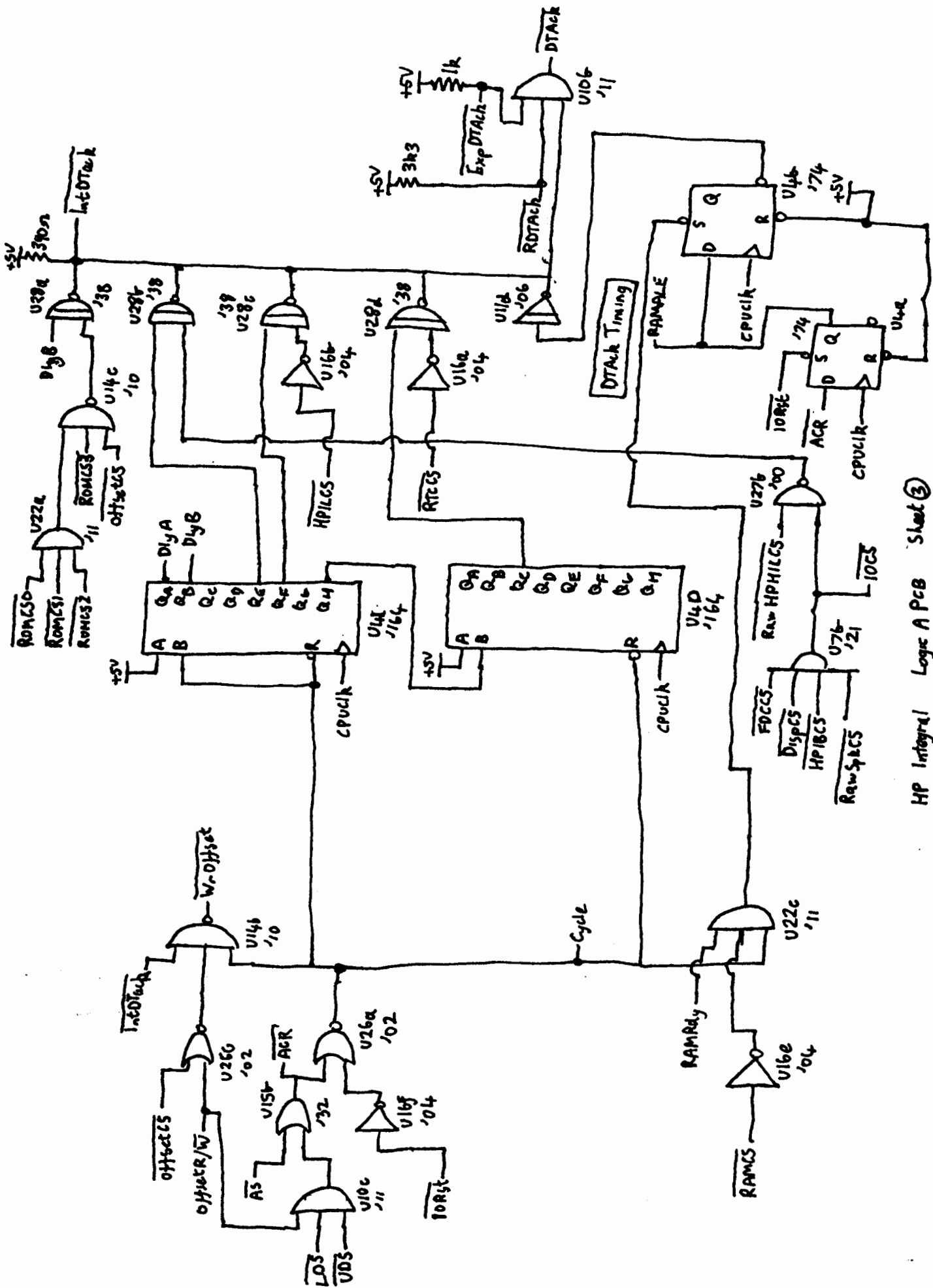
HP Integral
 Display Controller
 1LL3-0005

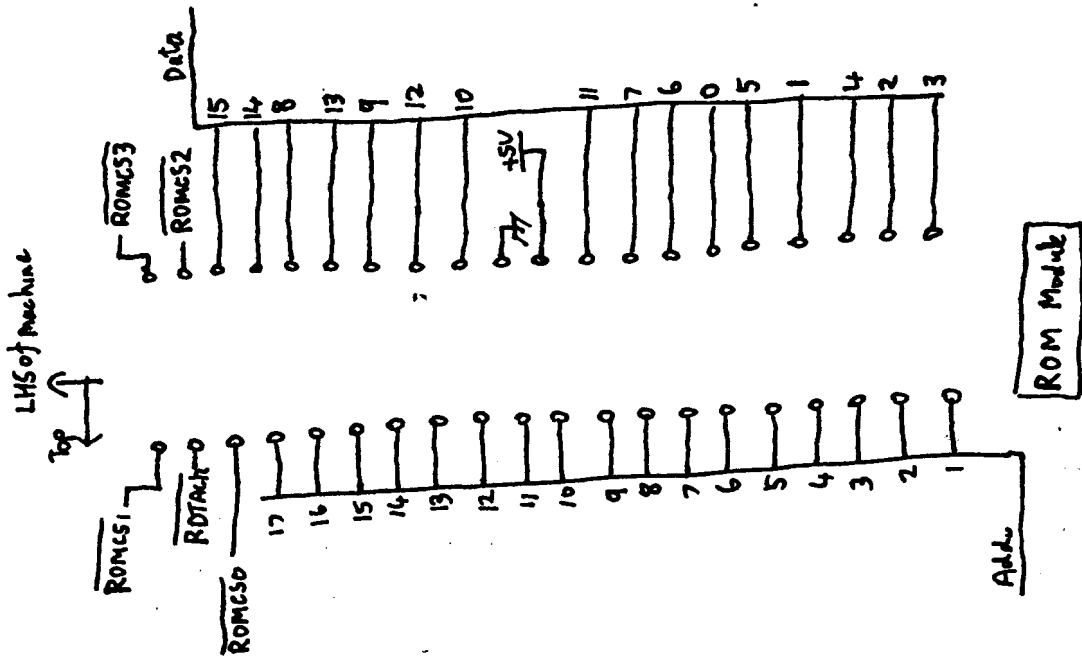
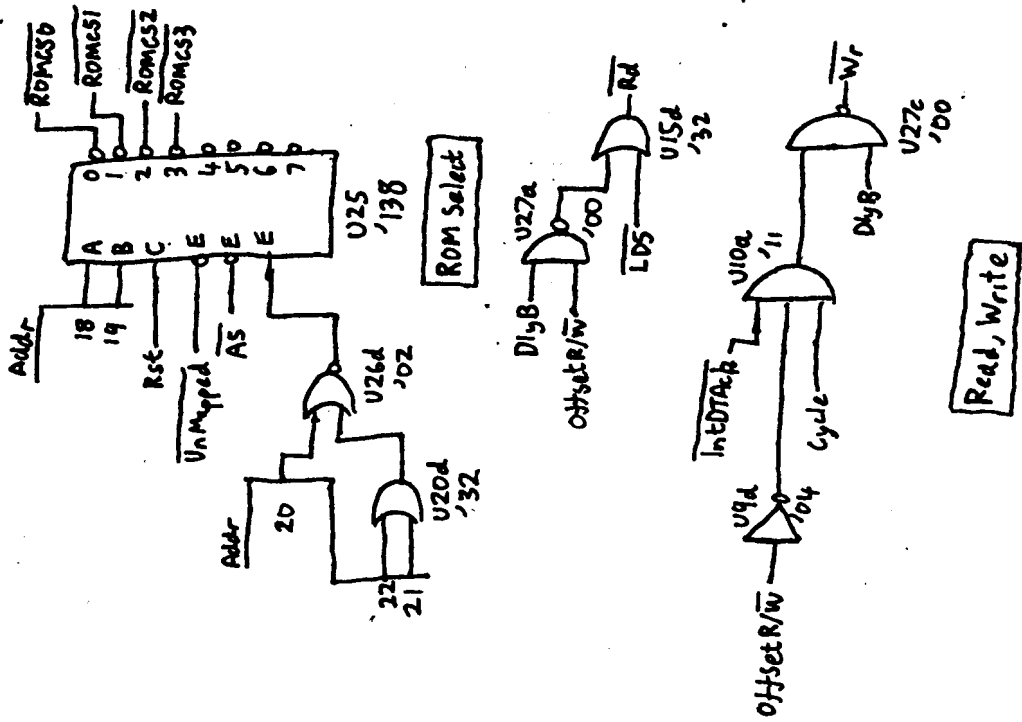


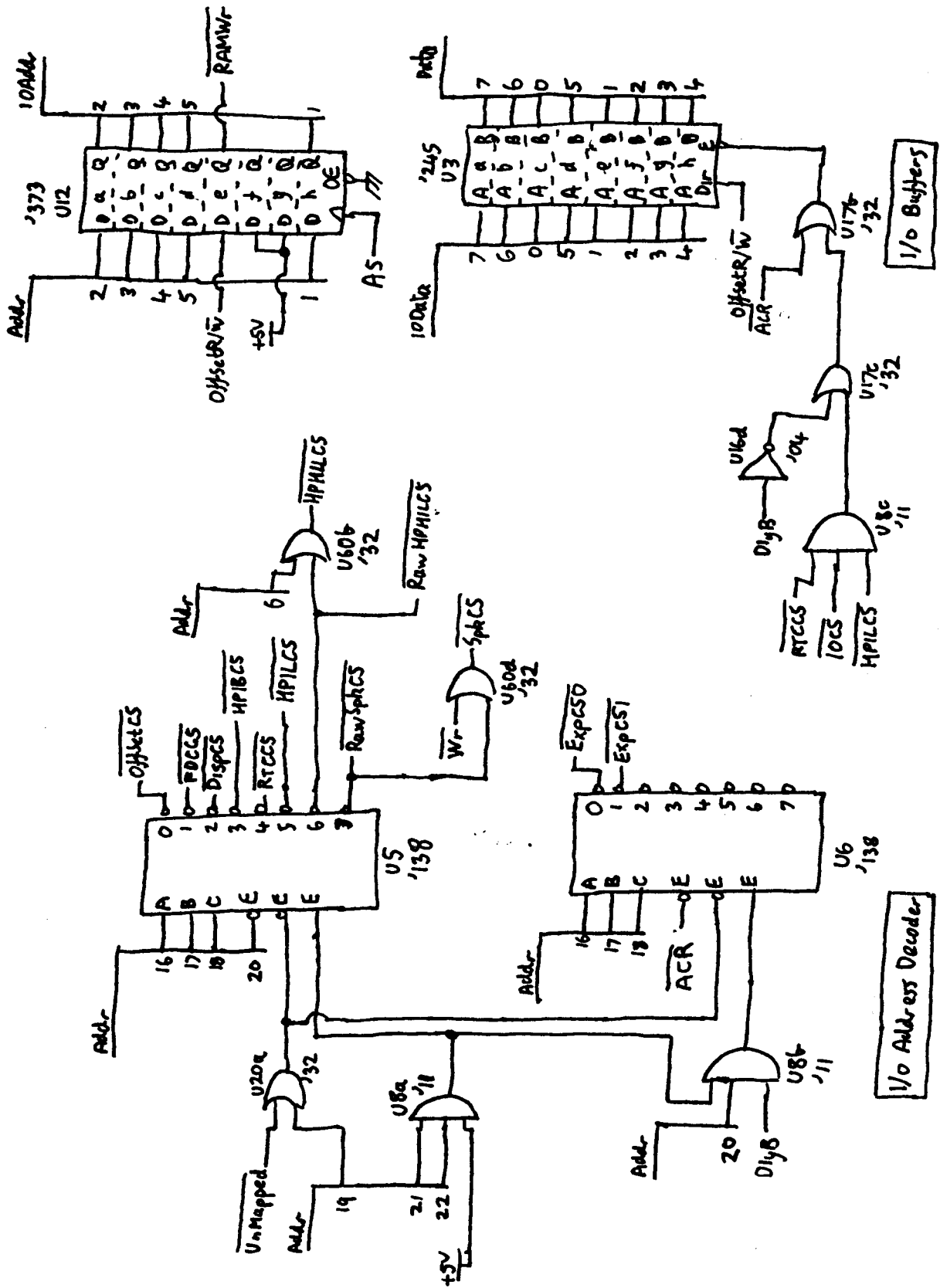




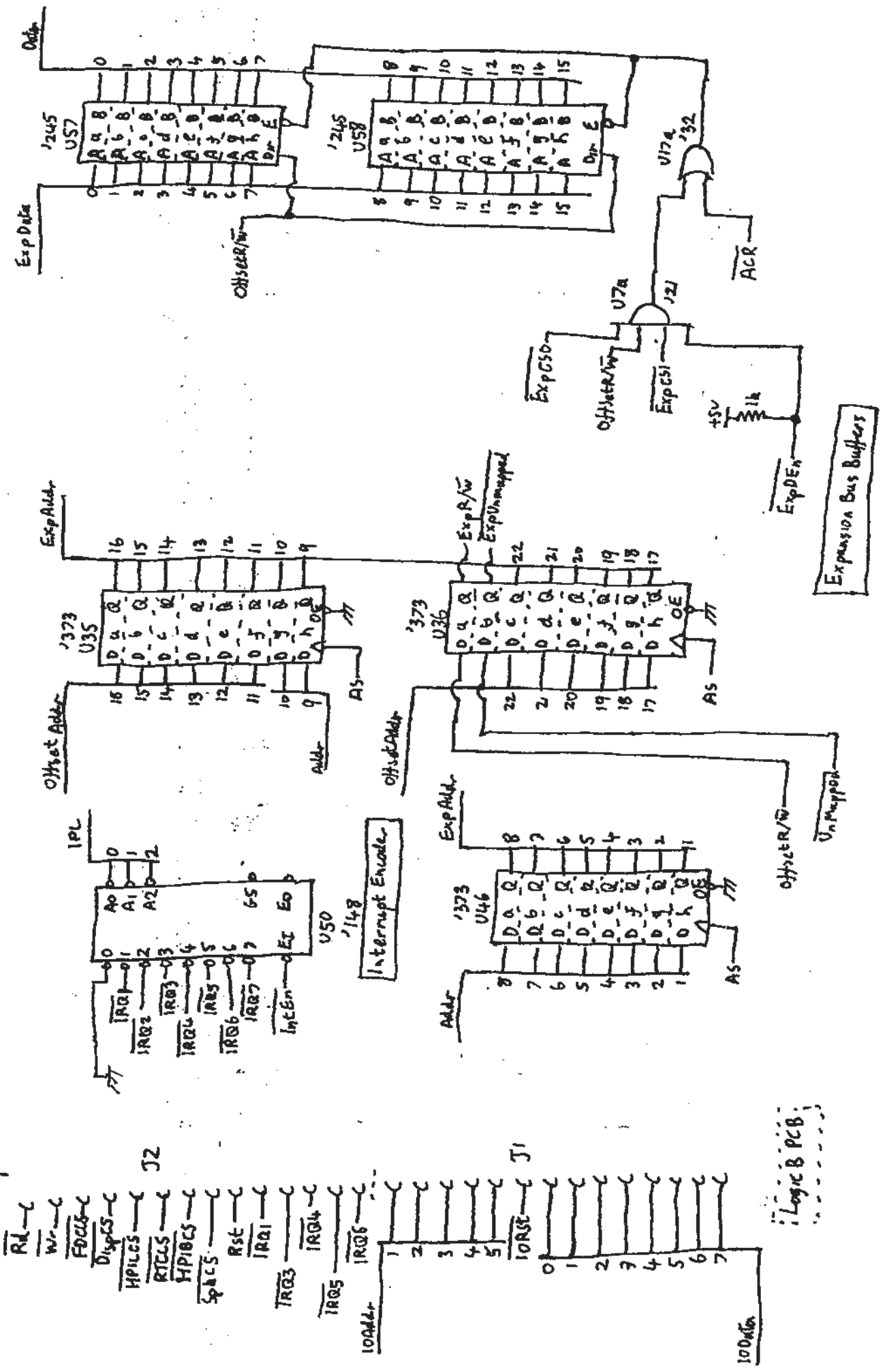
Memory Map







HP Integral Logic A PCB Sheet 5

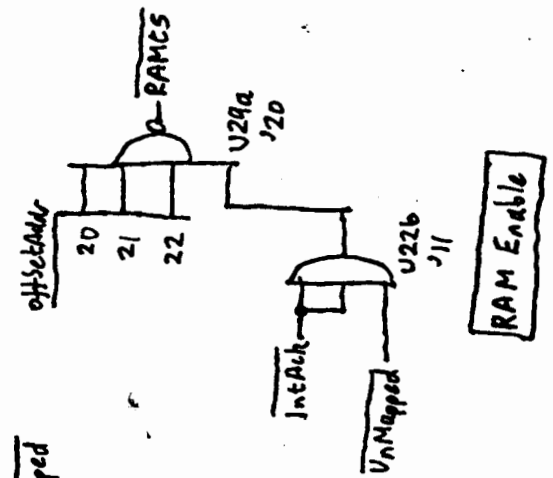
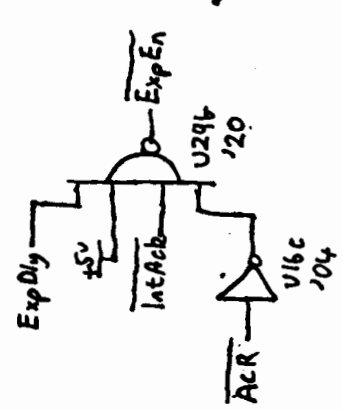
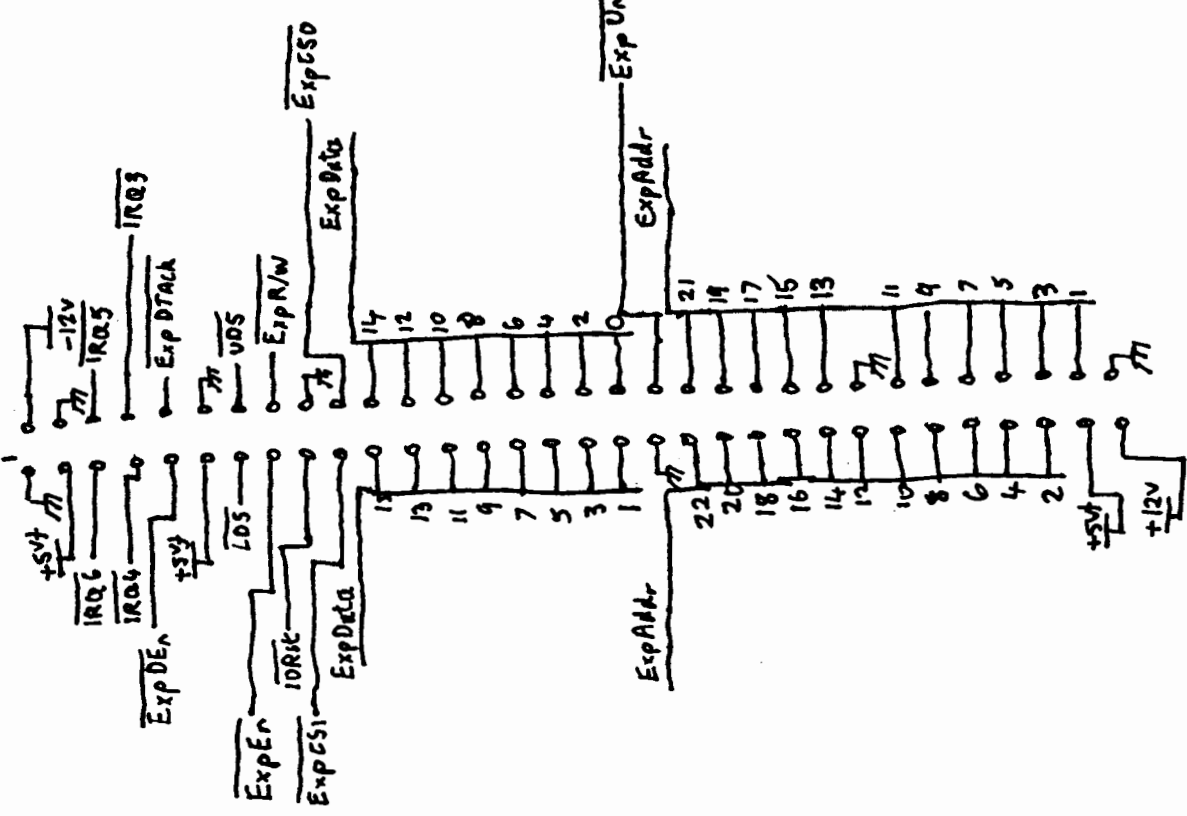
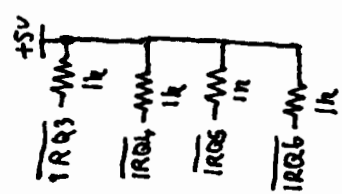
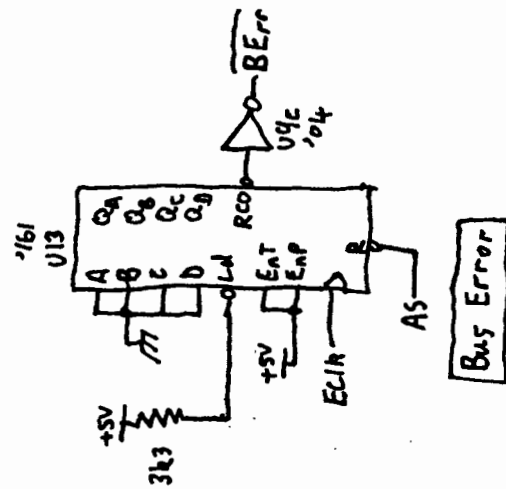
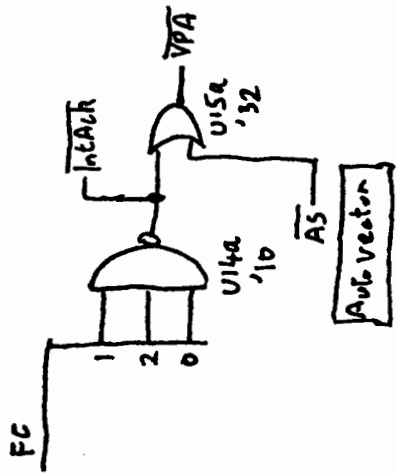


Expansion Bus Buffers

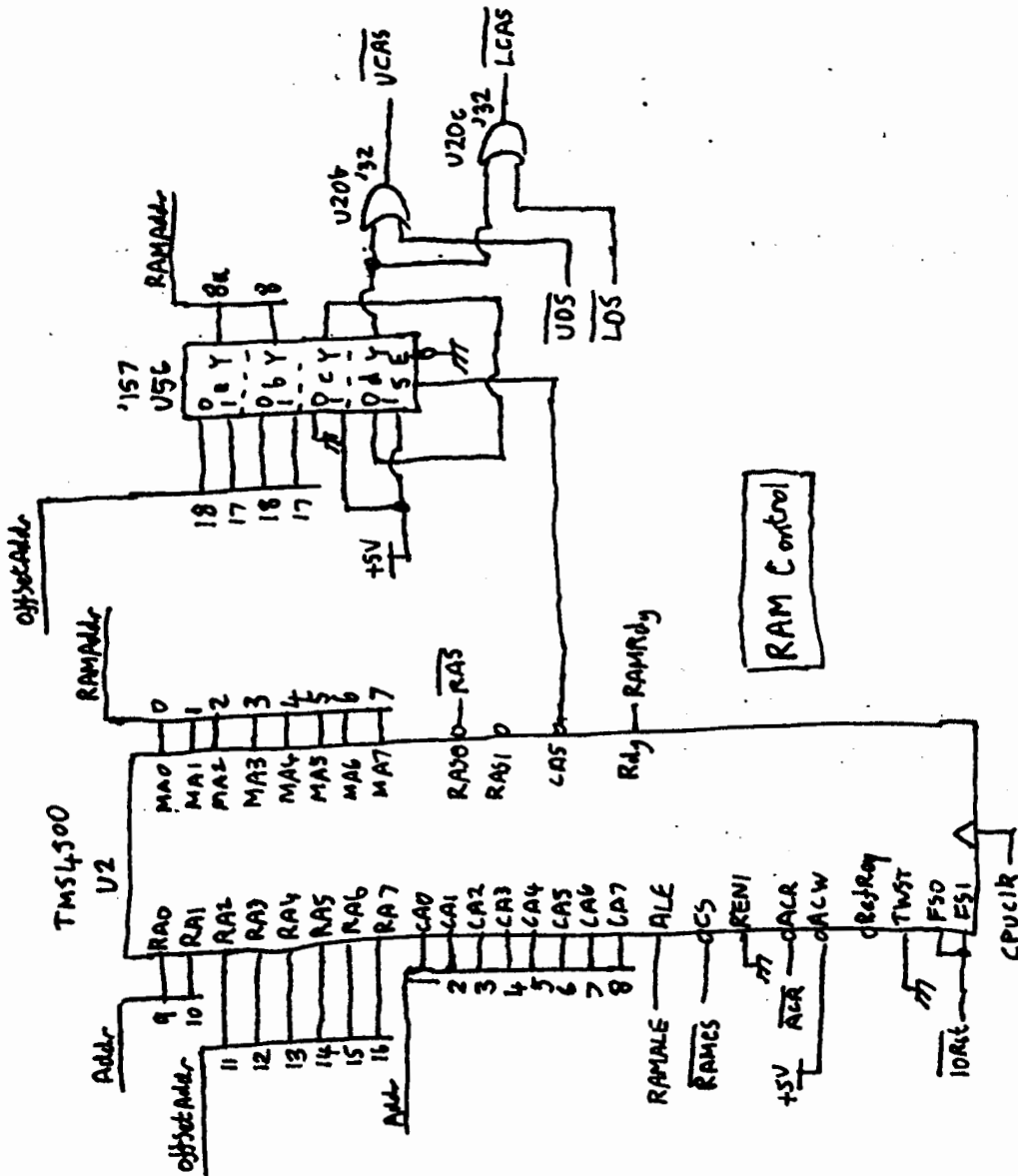
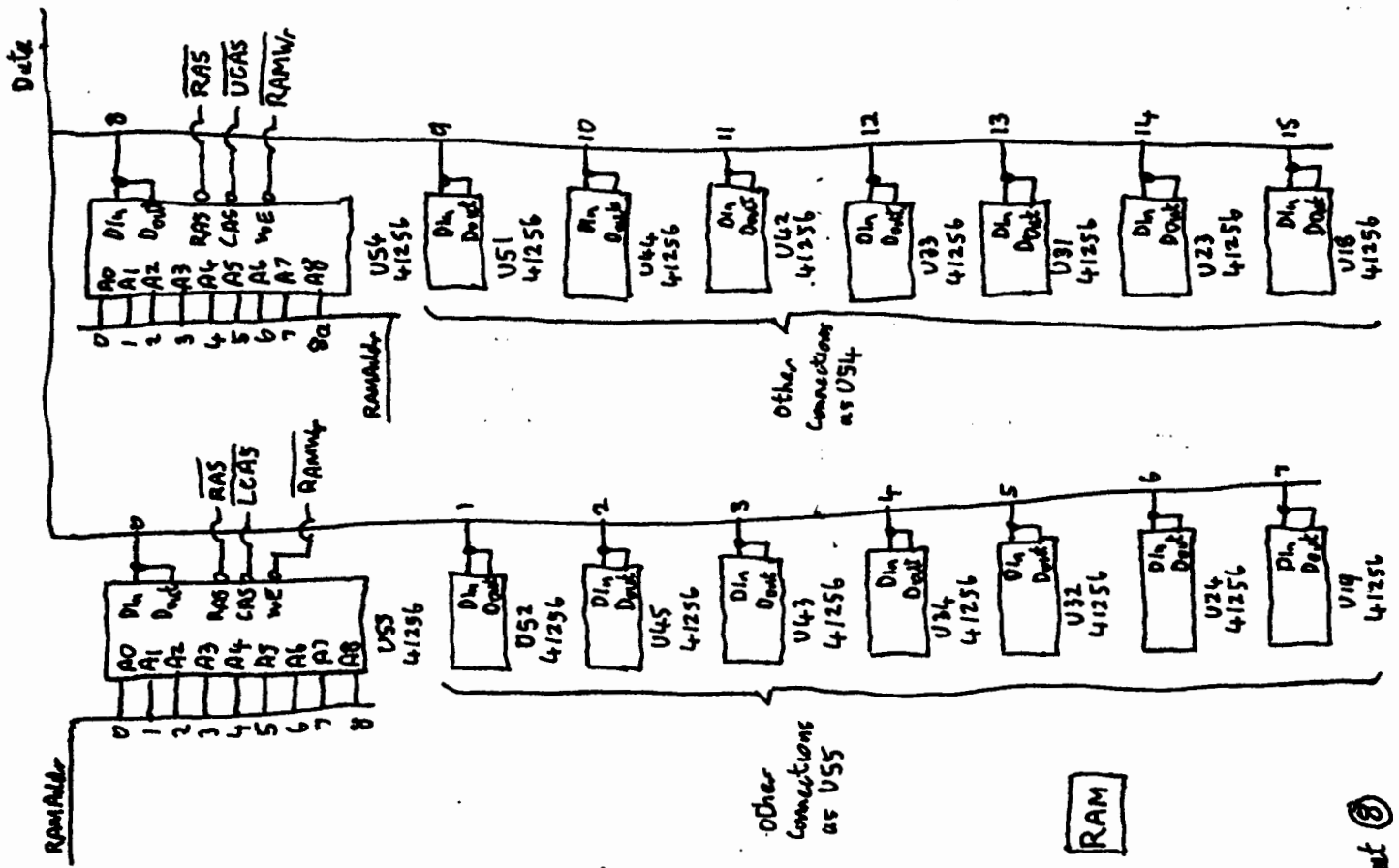
Logic B PCB

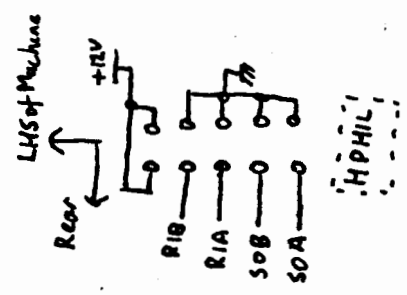
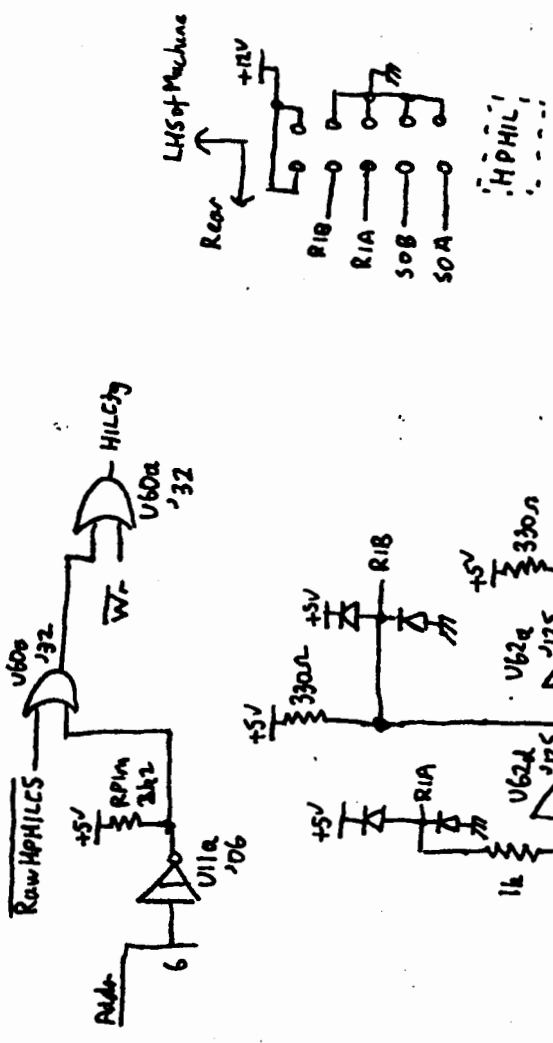
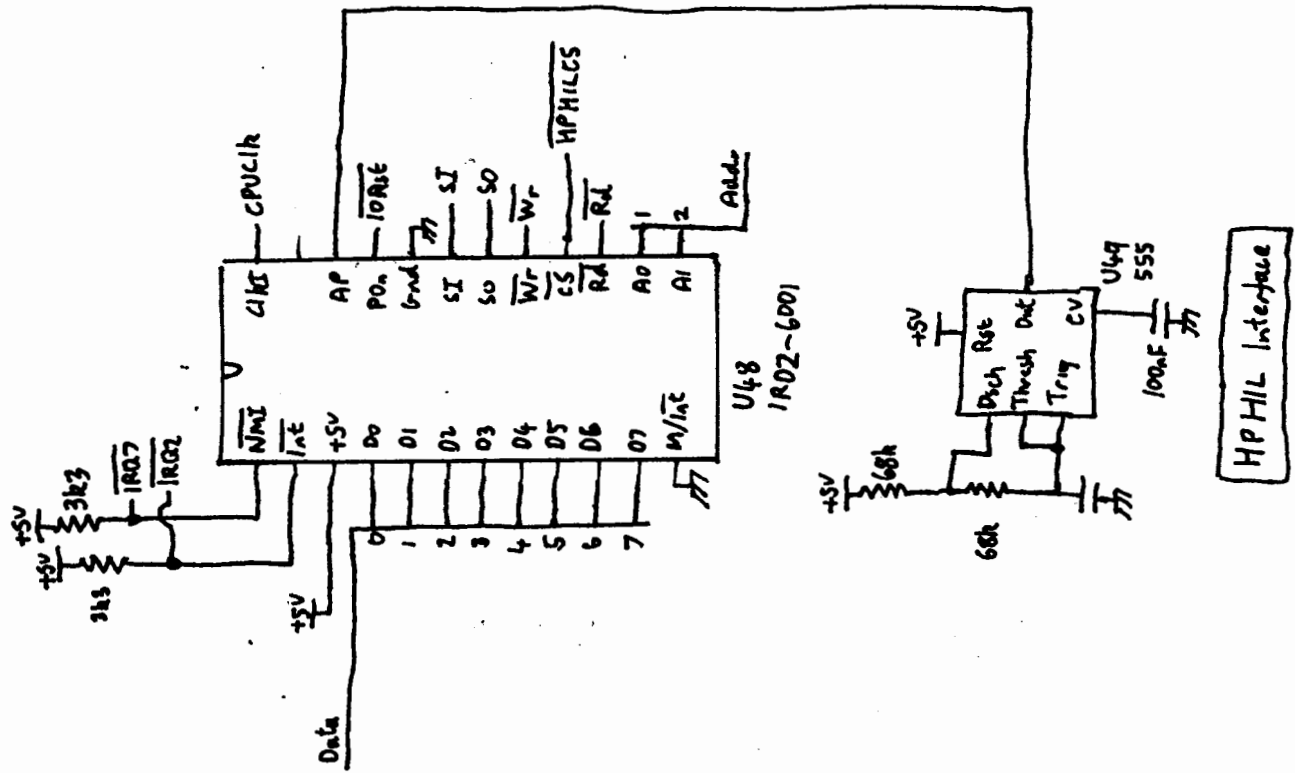
LHS of Machine

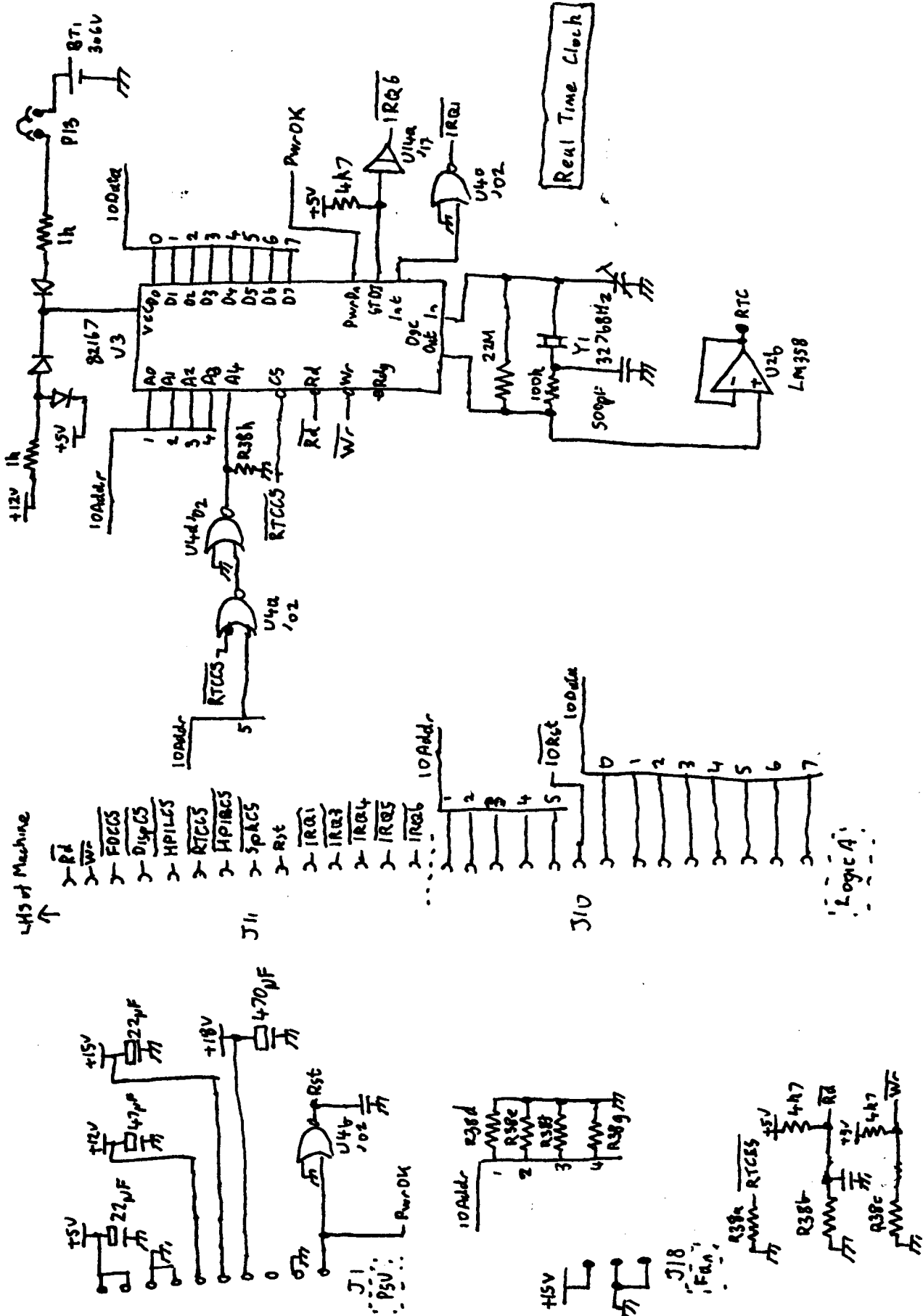
Rear

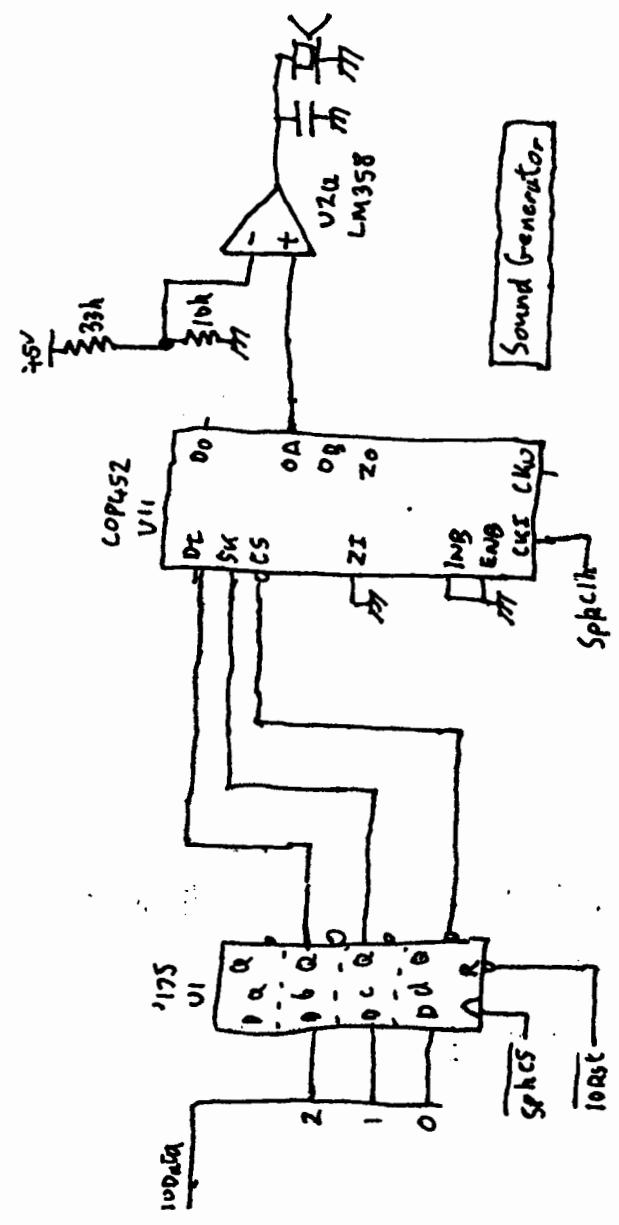
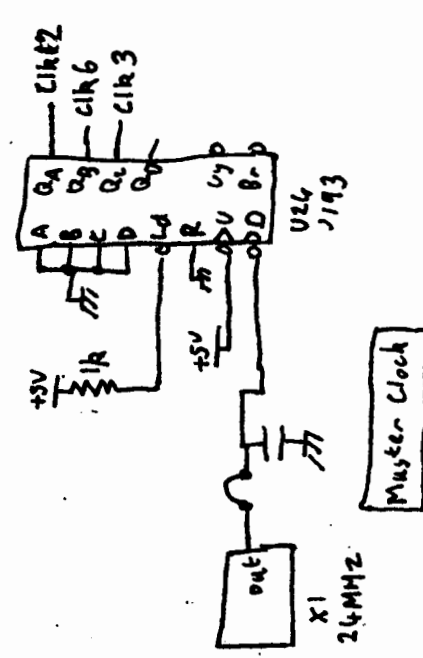
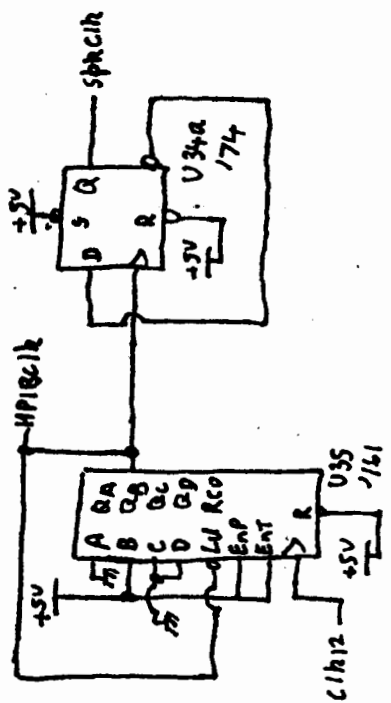


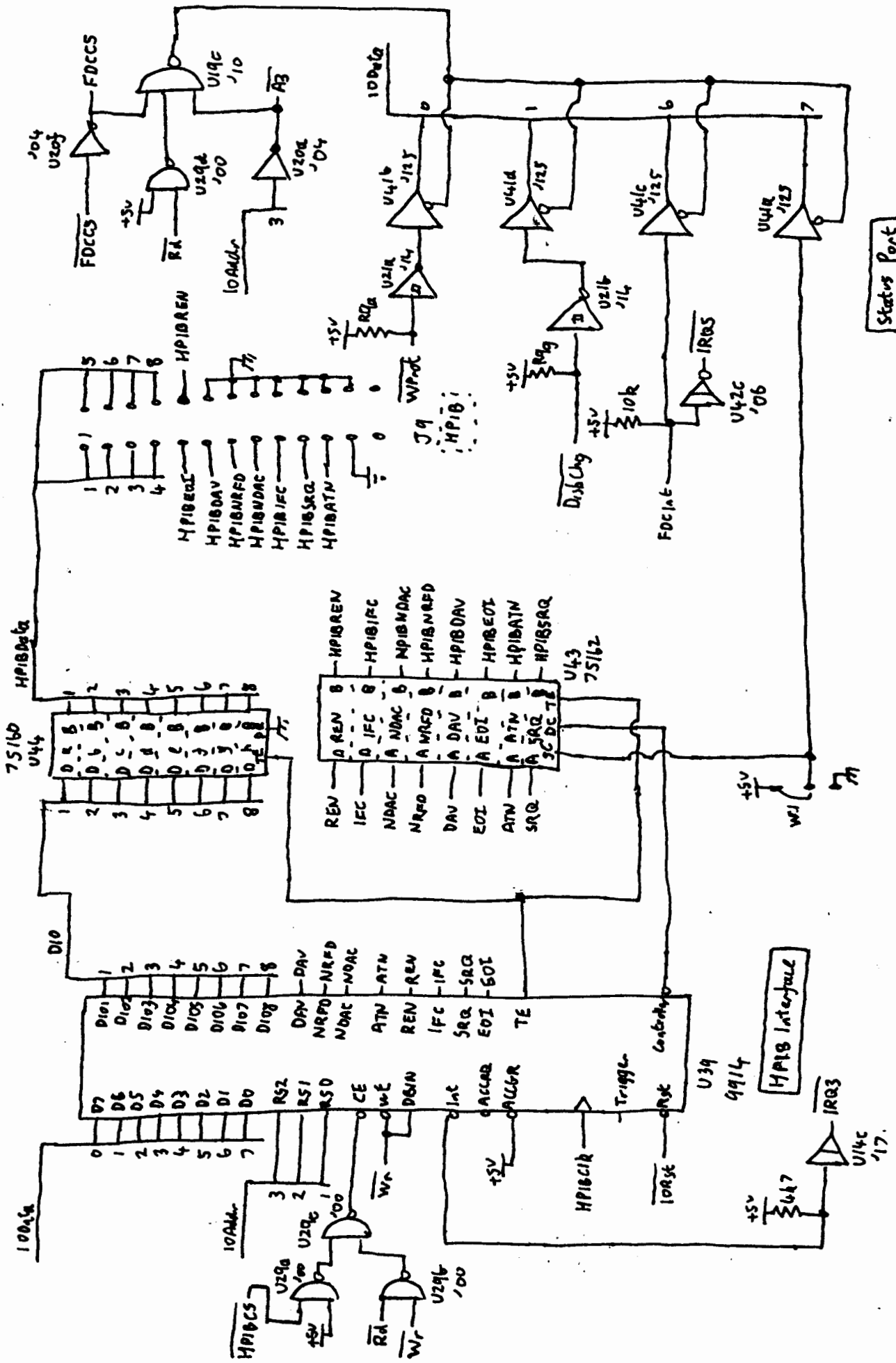
Expansion Bus











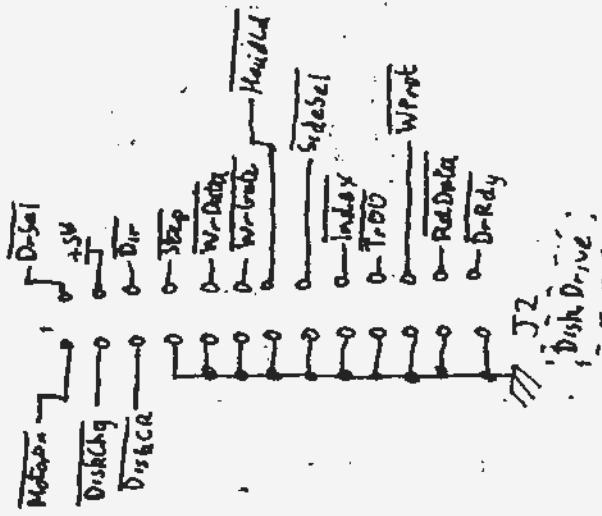
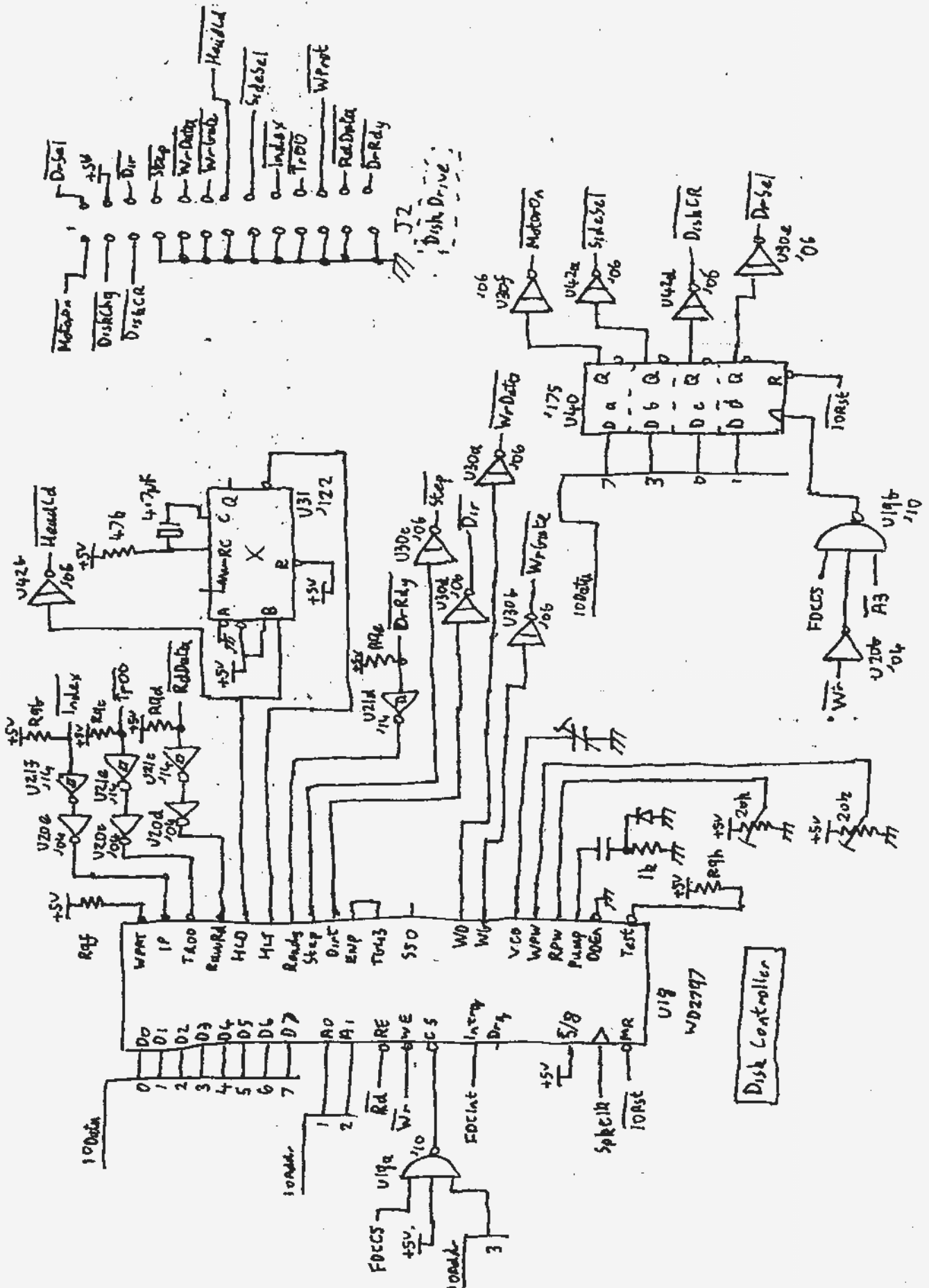
00095-60149

Sheet 3

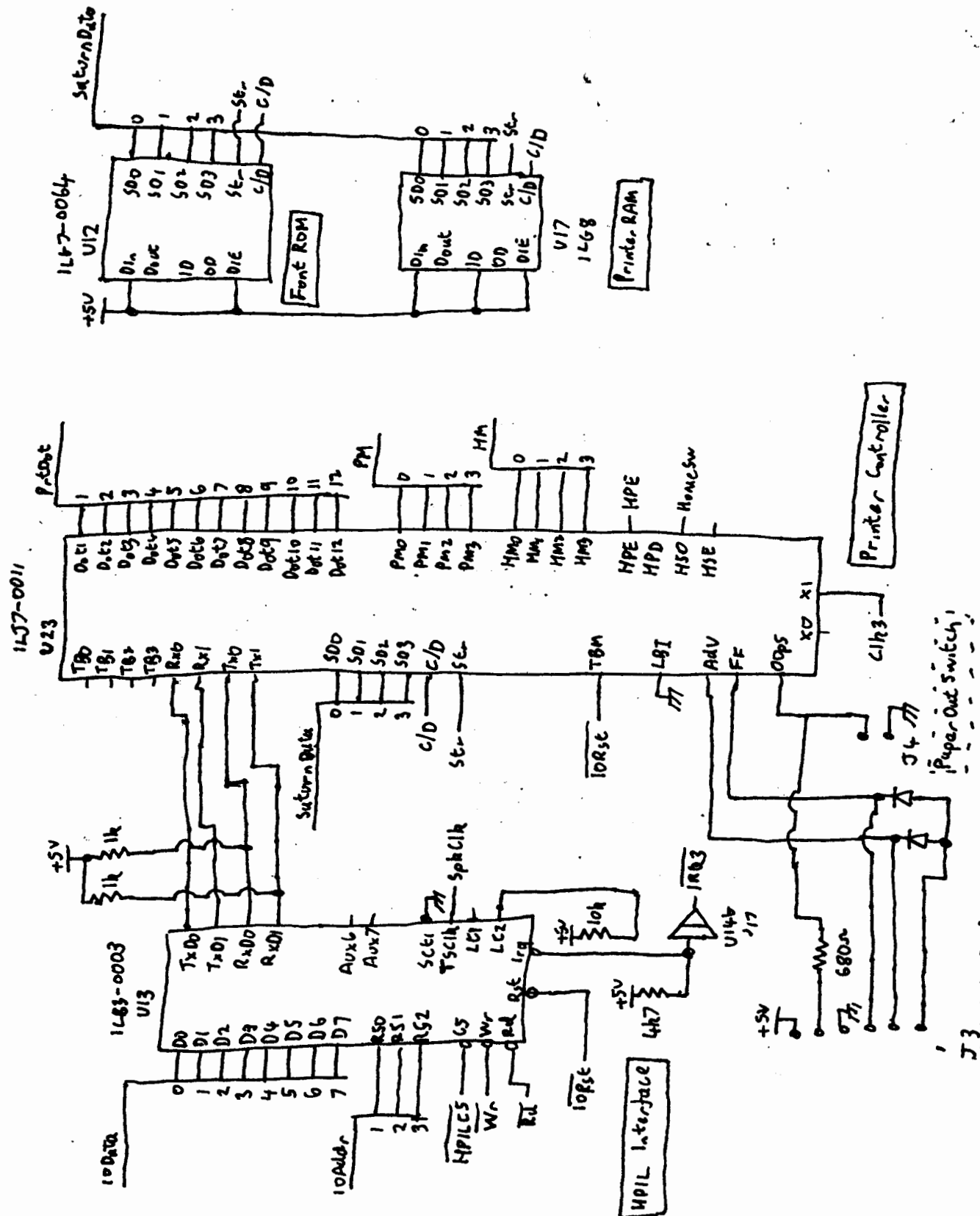
HP Integral Logic B PCB

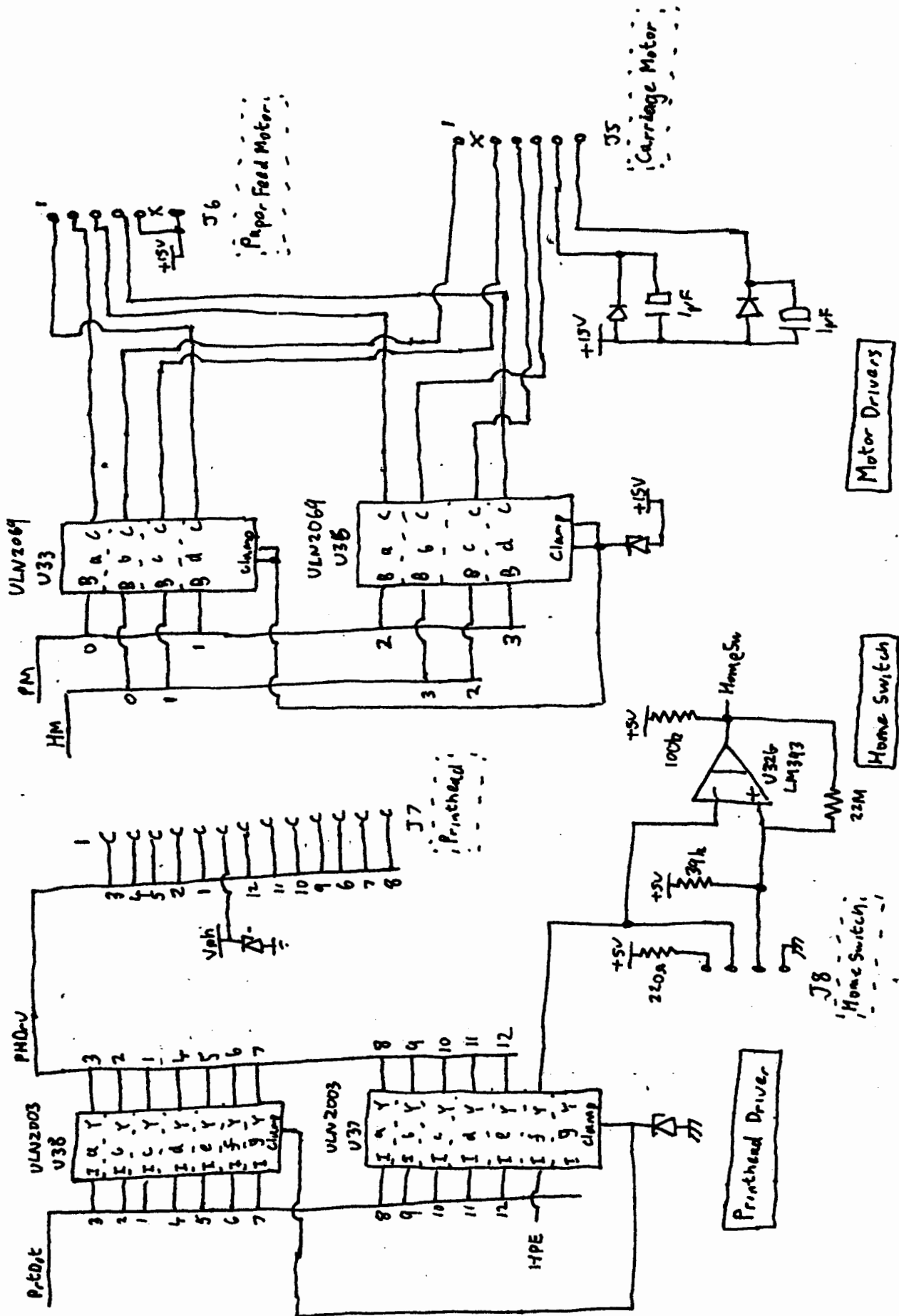
Status Port

HP1B Interface



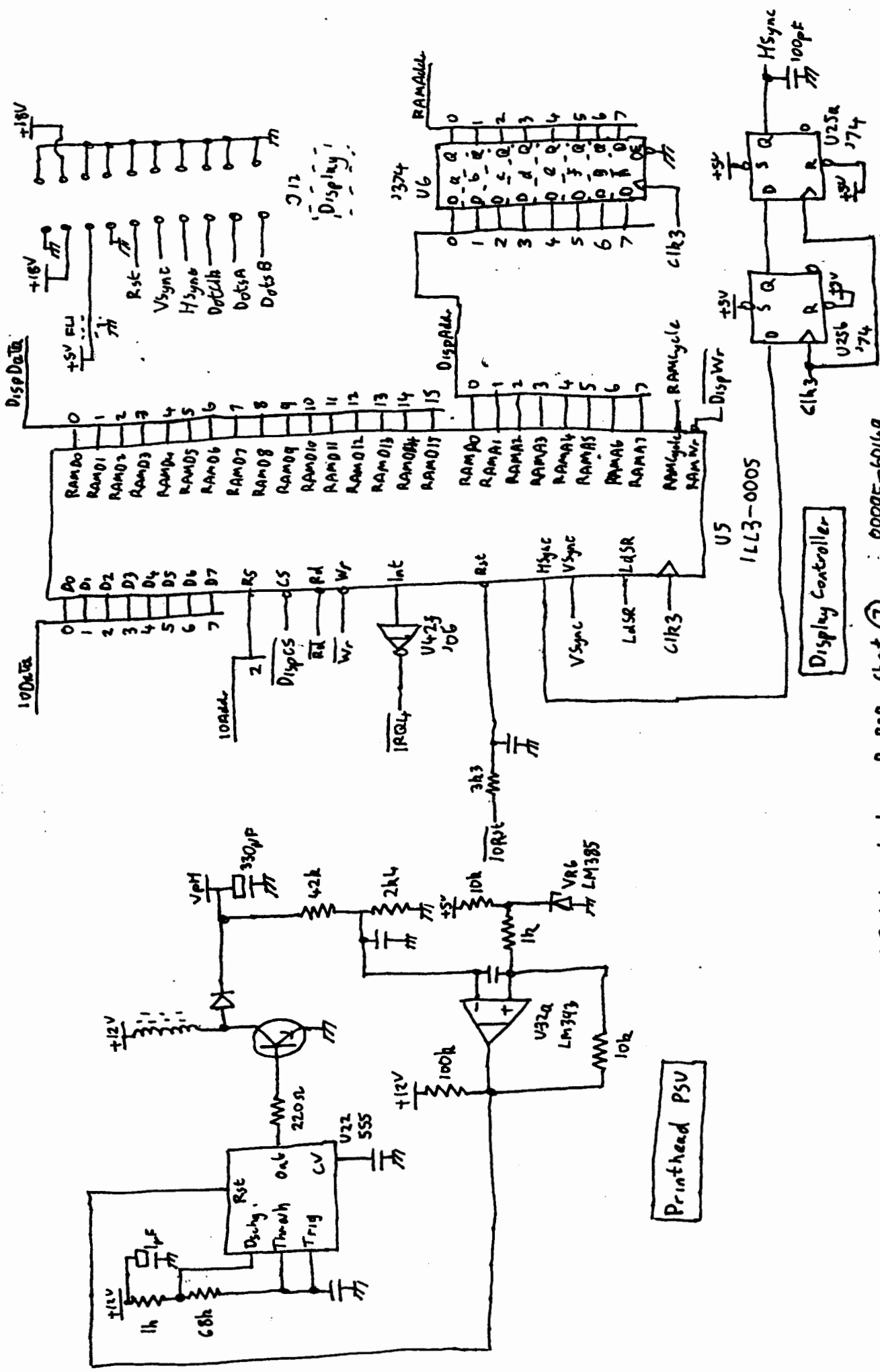
Disk Controller



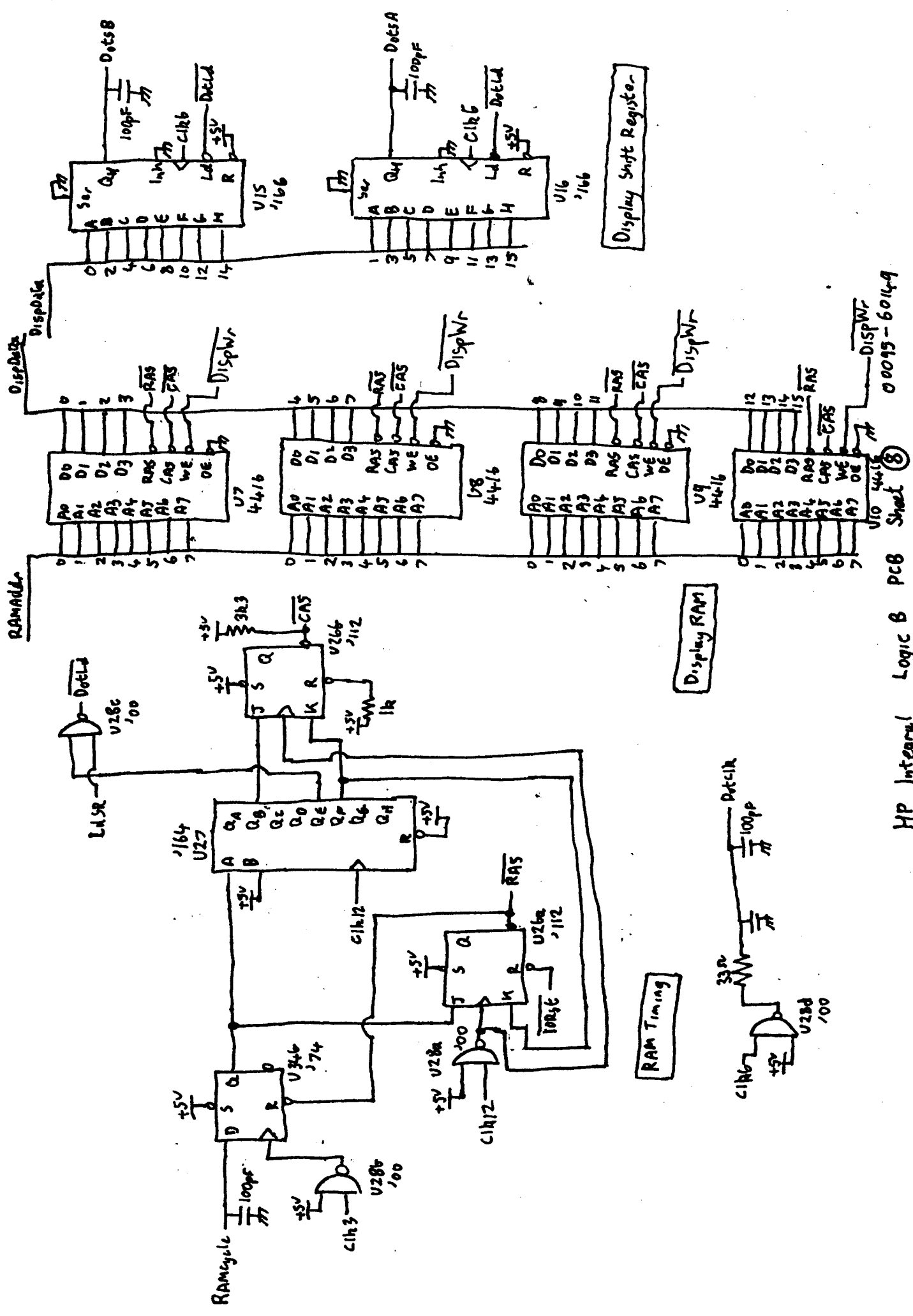


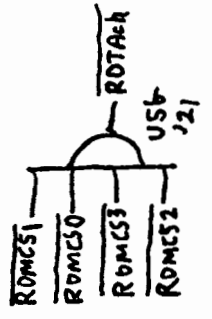
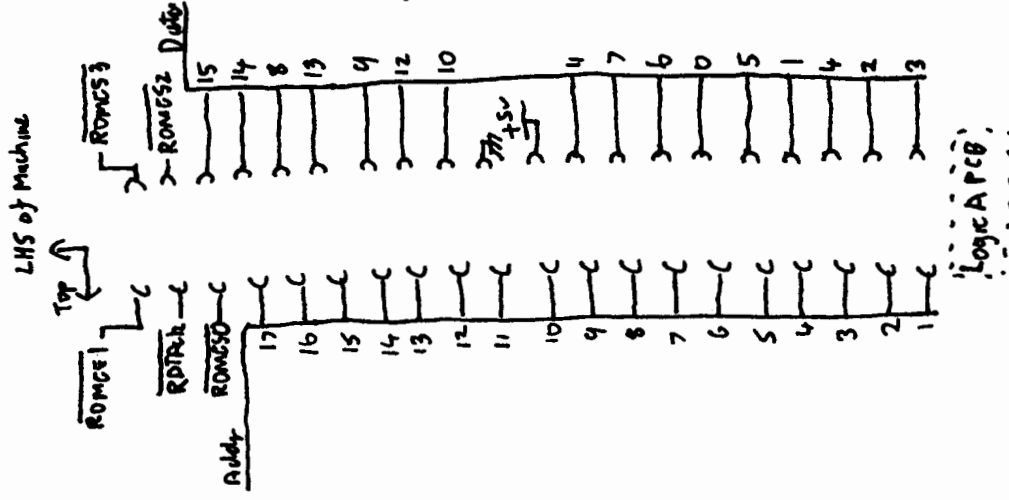
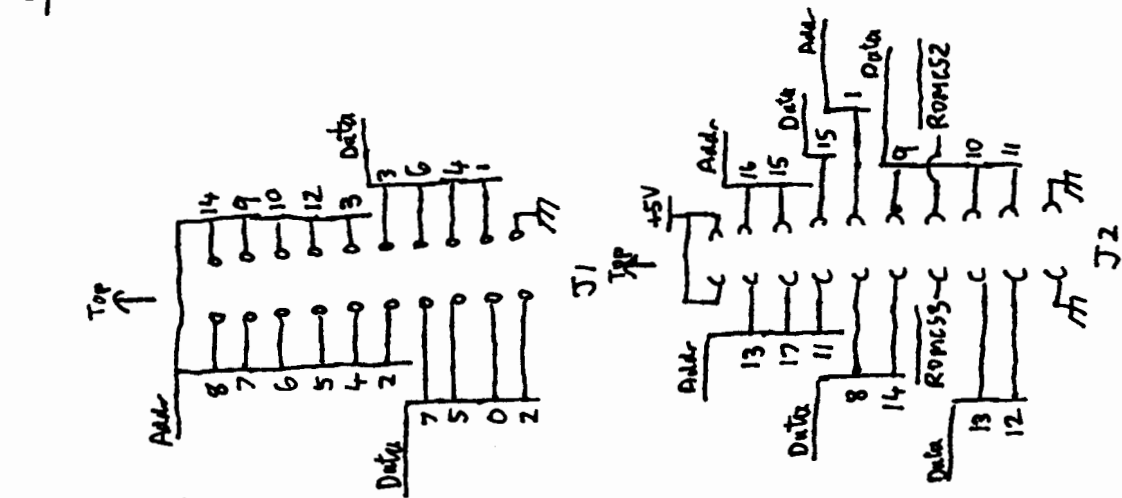
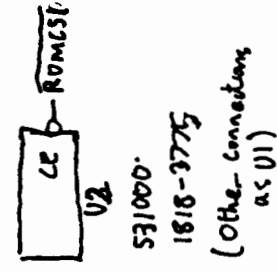
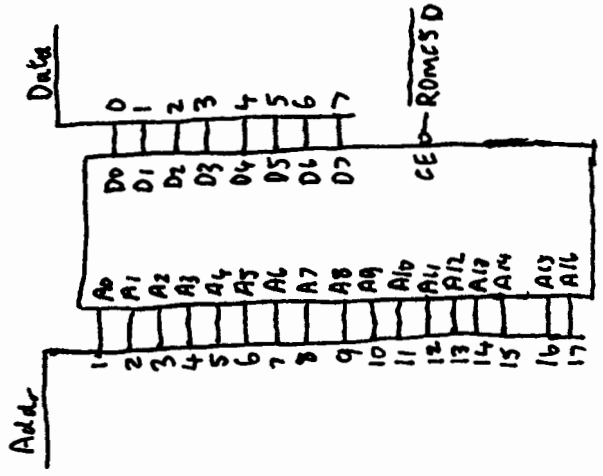
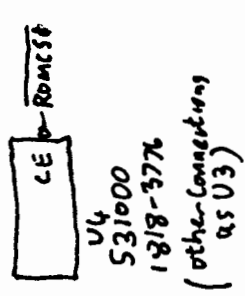
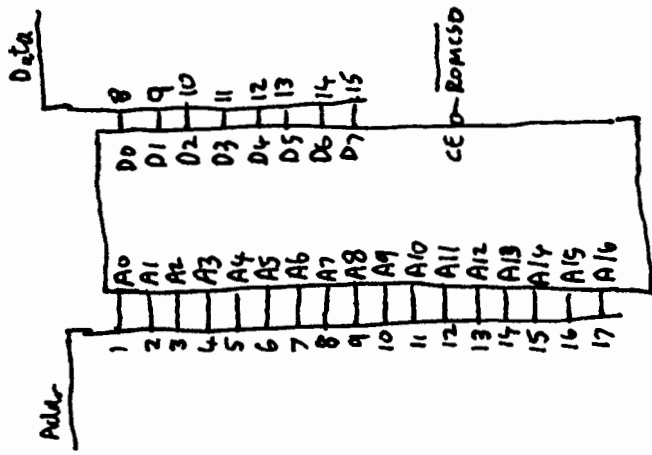
00095-60149

HP Integral, Logic B PCB Sheet 6



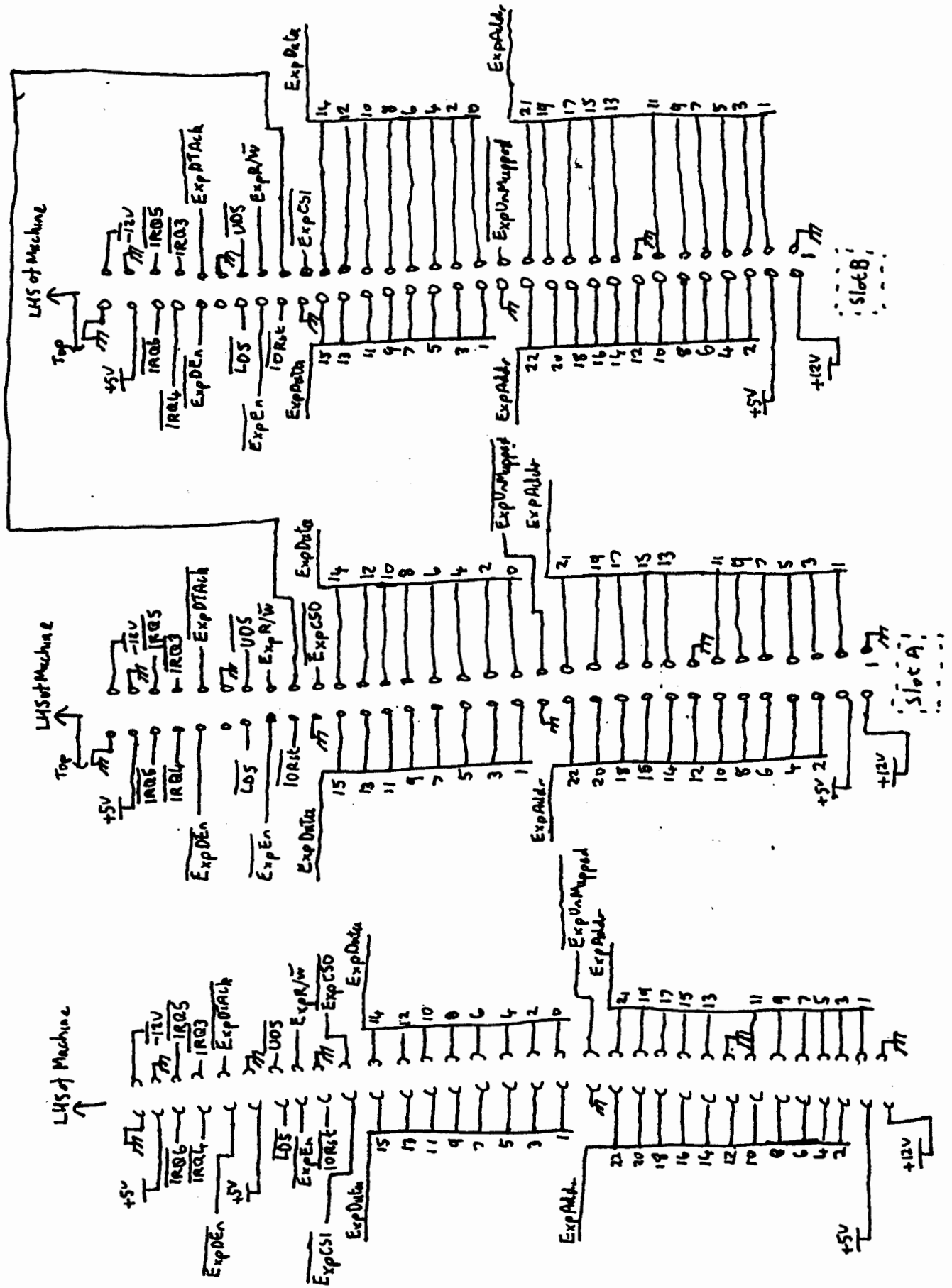
HF Integral Logic B PCB sheet ⑦ : 00095-60149





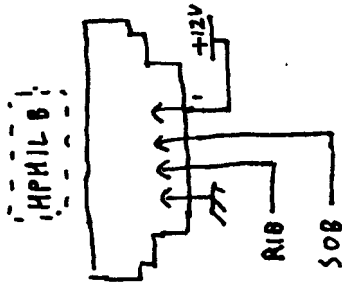
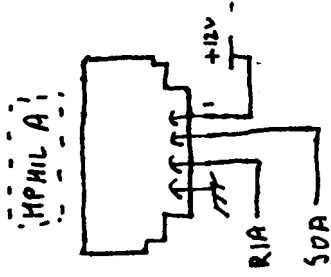
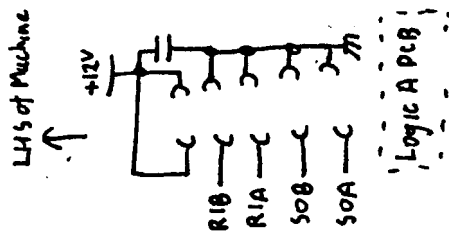
82991-60001

HP Integral ROM Module



00095 - 60004

HP Integral Expansion Backplane



PSU

+5V1 — Br — C
+5V2 — Br — C
Gnd1 — Bk — C
Gnd2 — Bk — C
+12V — Or — C
+15V — R — C
+12V — Pu — C
Gnd3 — Gn — C
PwrOK — Y — C
+18V — W — C

Logic A

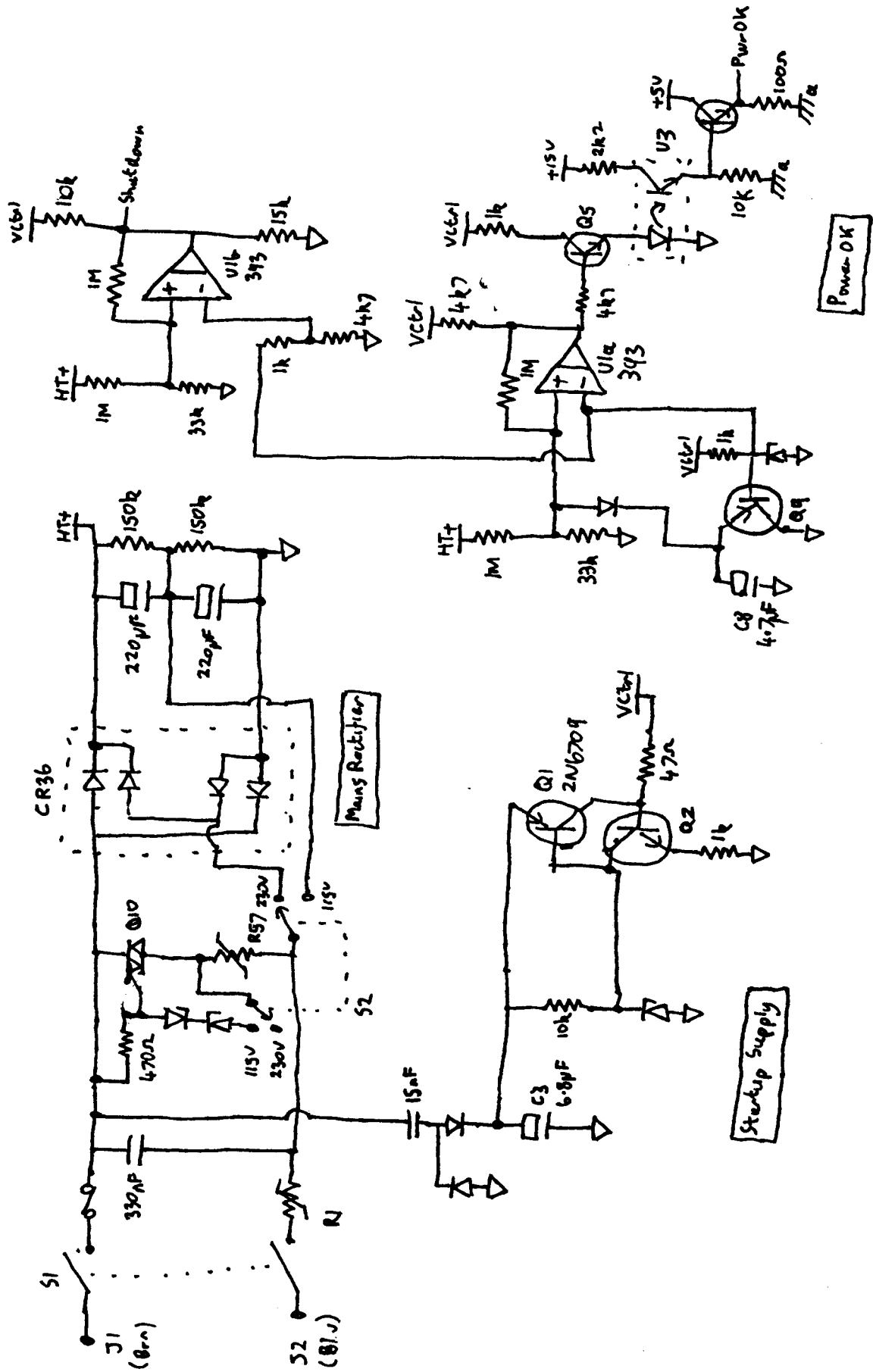
+5V1 — Br — C
+5V2 — Br — C
Gnd1 — Bk — C
Gnd2 — Bk — C
+12V — Or — C
+15V — R — C
+18V — W — C
-12V — Pu — C
Gnd3 — Gn — C
PwrOK — Y — C

Logic B

+5V1 — Br — C
+5V2 — Br — C
Gnd1 — Bk — C
Gnd2 — Bk — C
+12V — Or — C
+15V — R — C
+18V — W — C
-12V — Pu — C
Gnd3 — Gn — C
PwrOK — Y — C

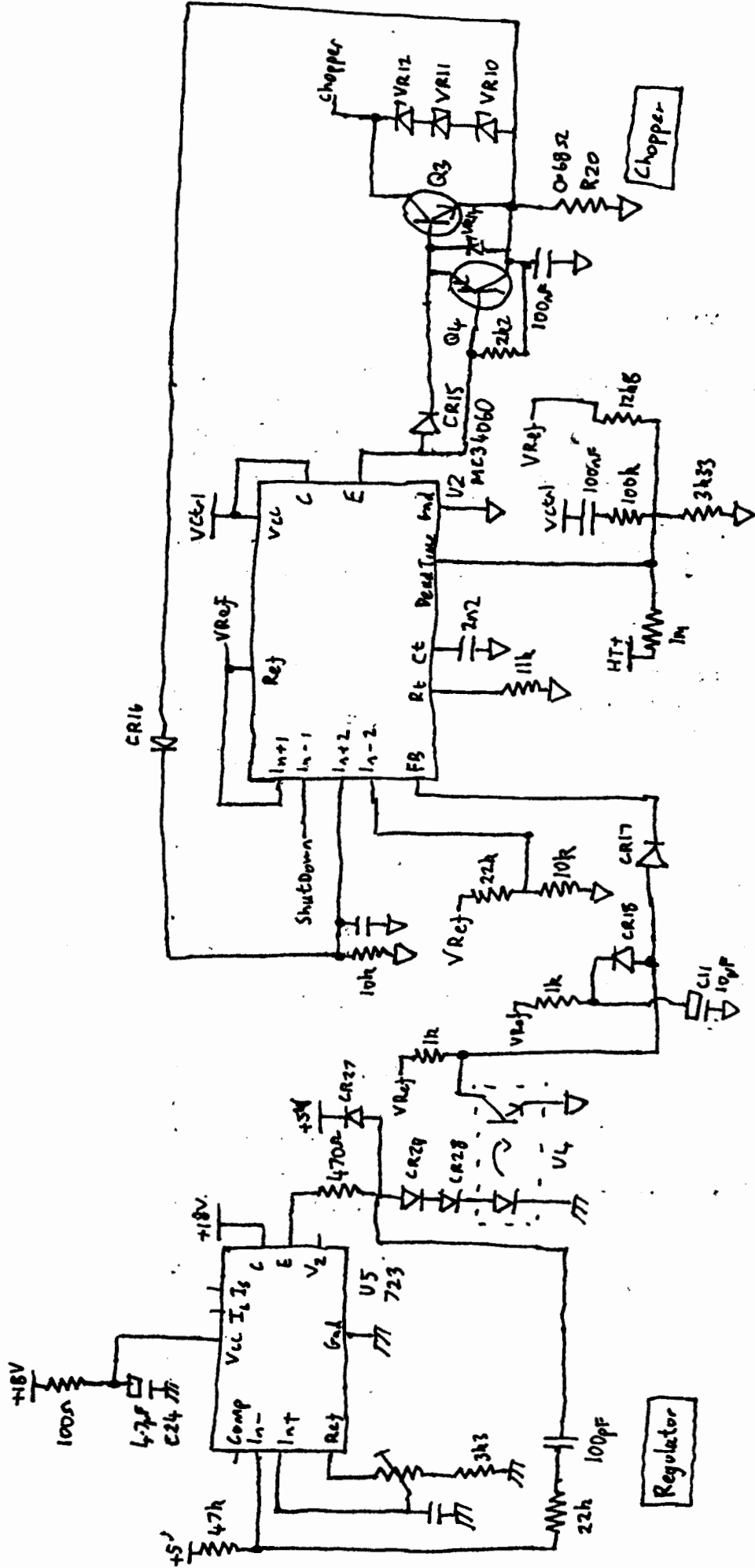
Floppy Drive

+5V2 — Br — C
Gnd1 — Bk — C
Gnd2 — Bk — C
+12V — Or — C



00095 - 60003

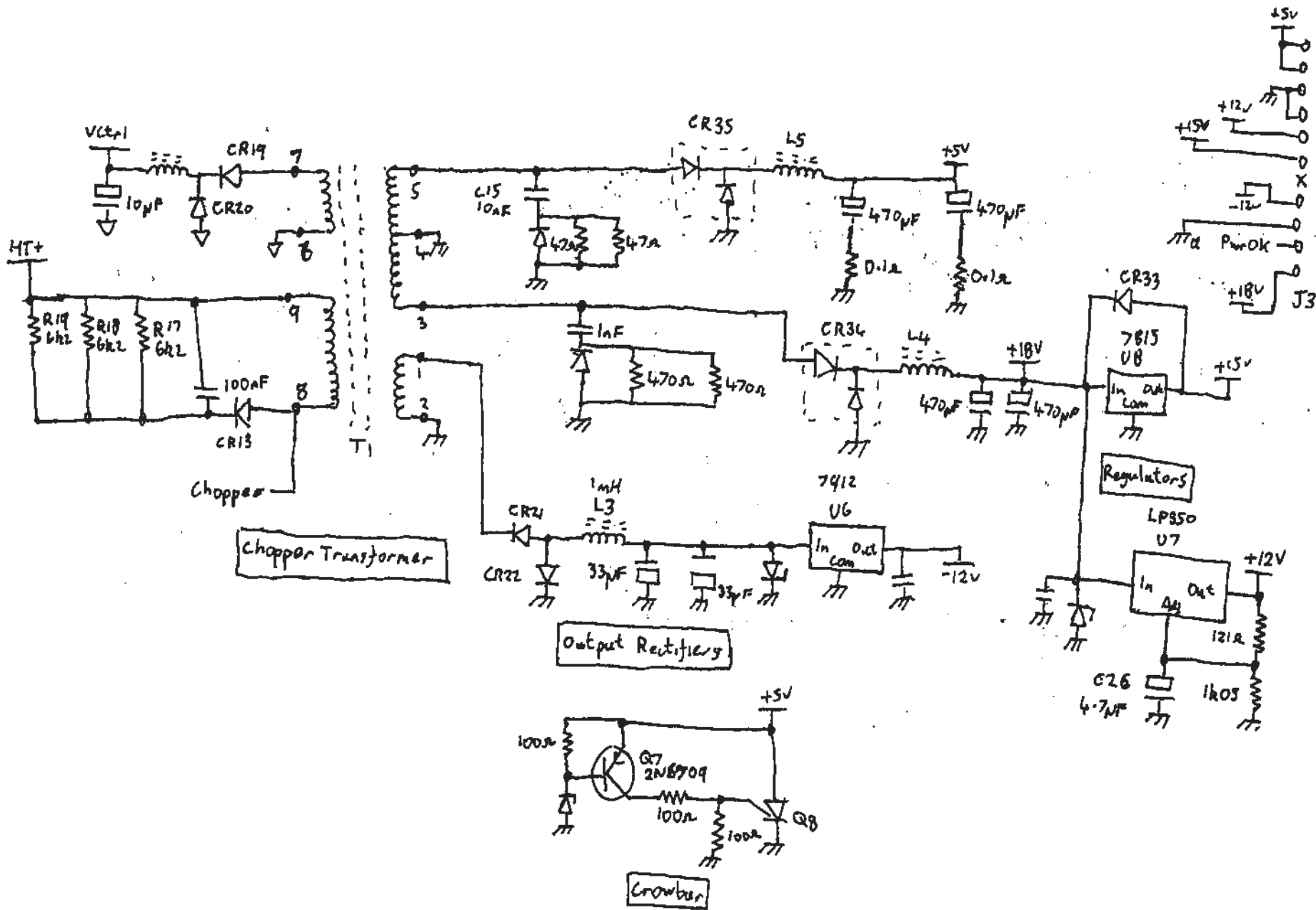
HP Integrated PSU PCB sheet ①



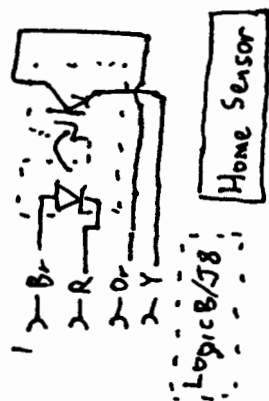
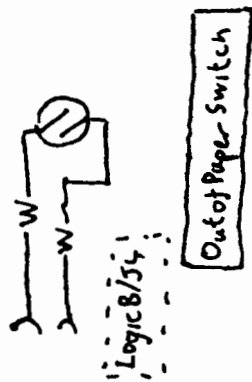
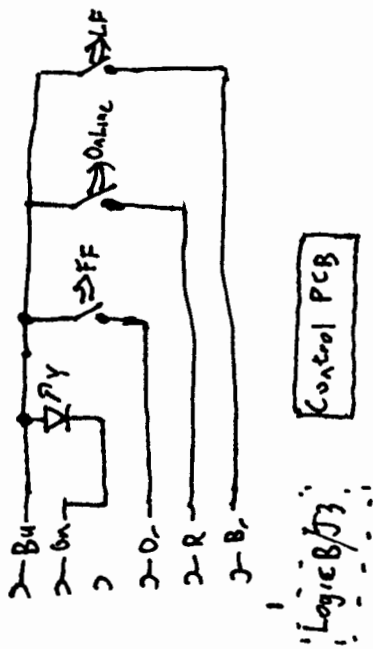
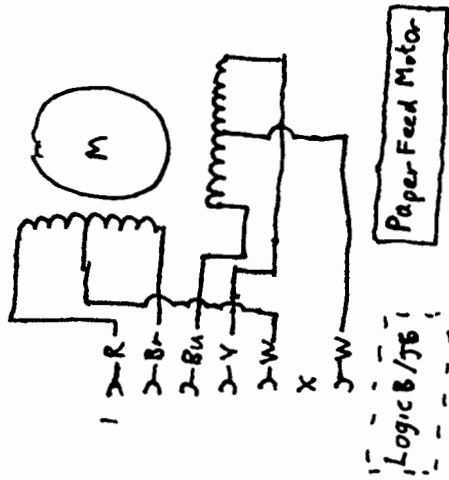
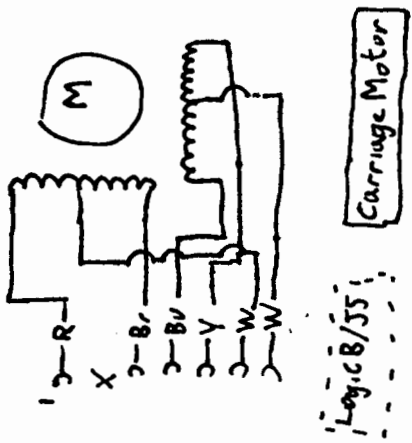
Chopper Control

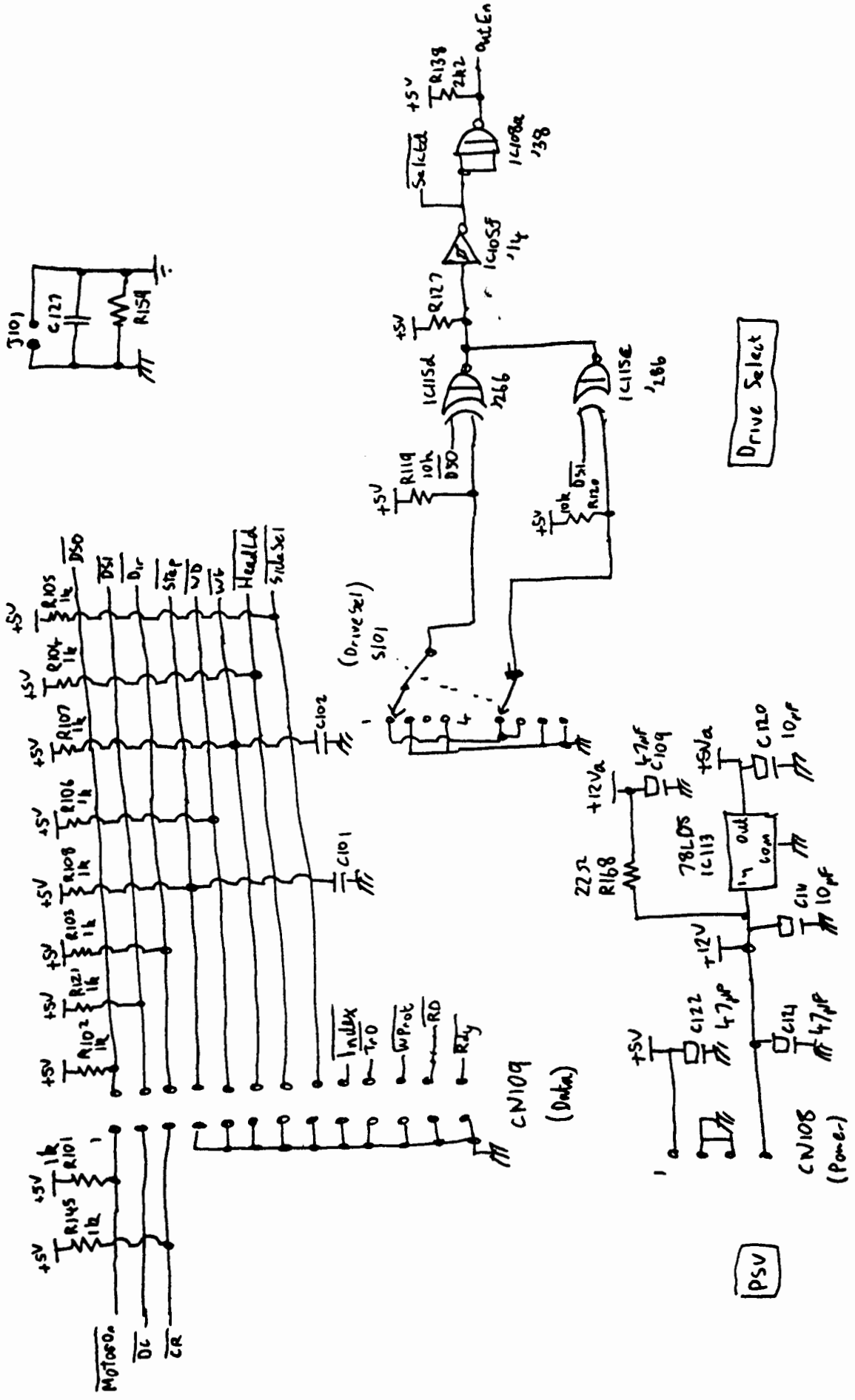
Regulator

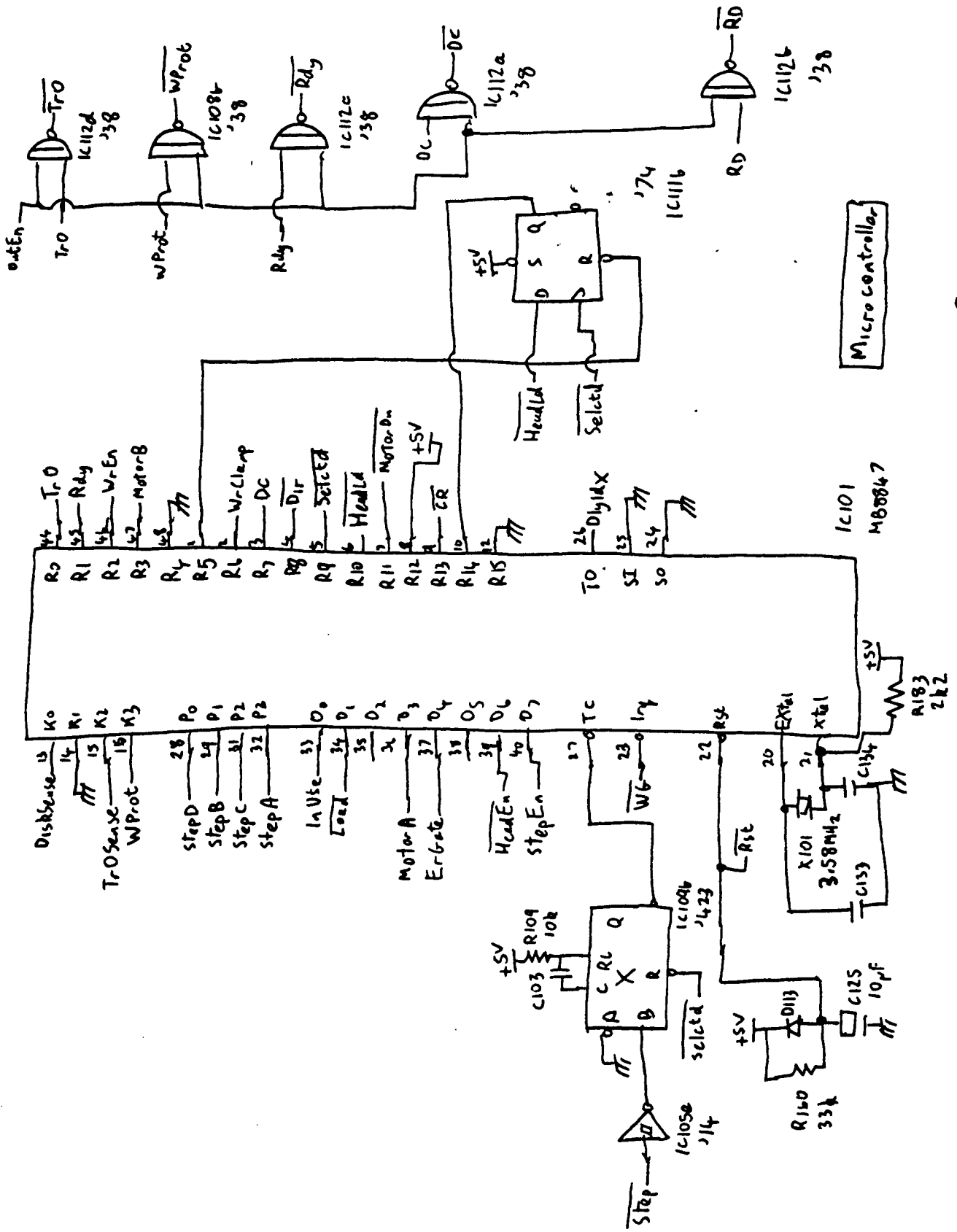
Chopper



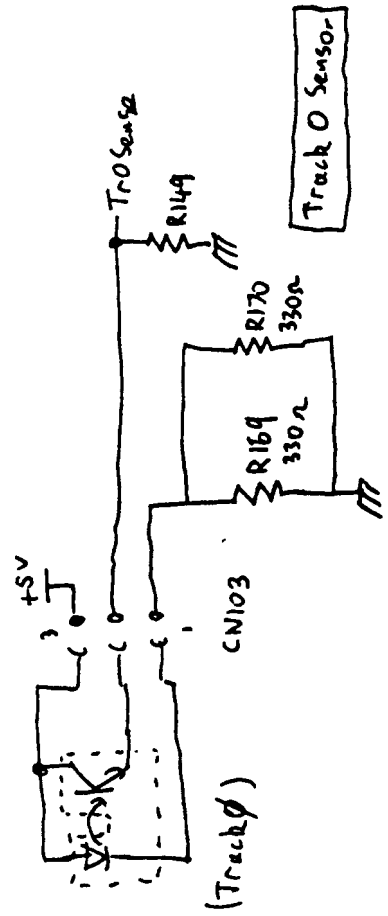
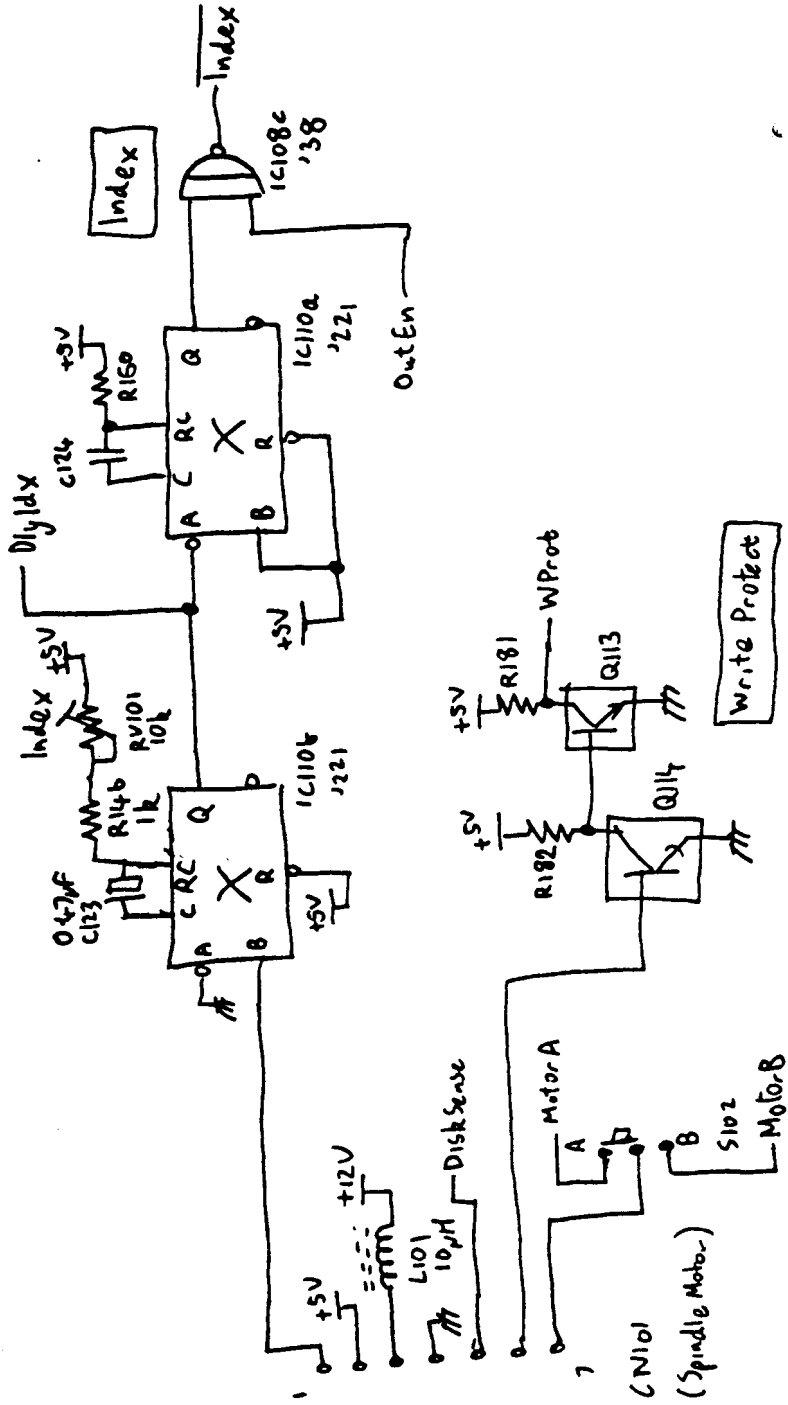
HP Integral PSU PCB Sheet ③

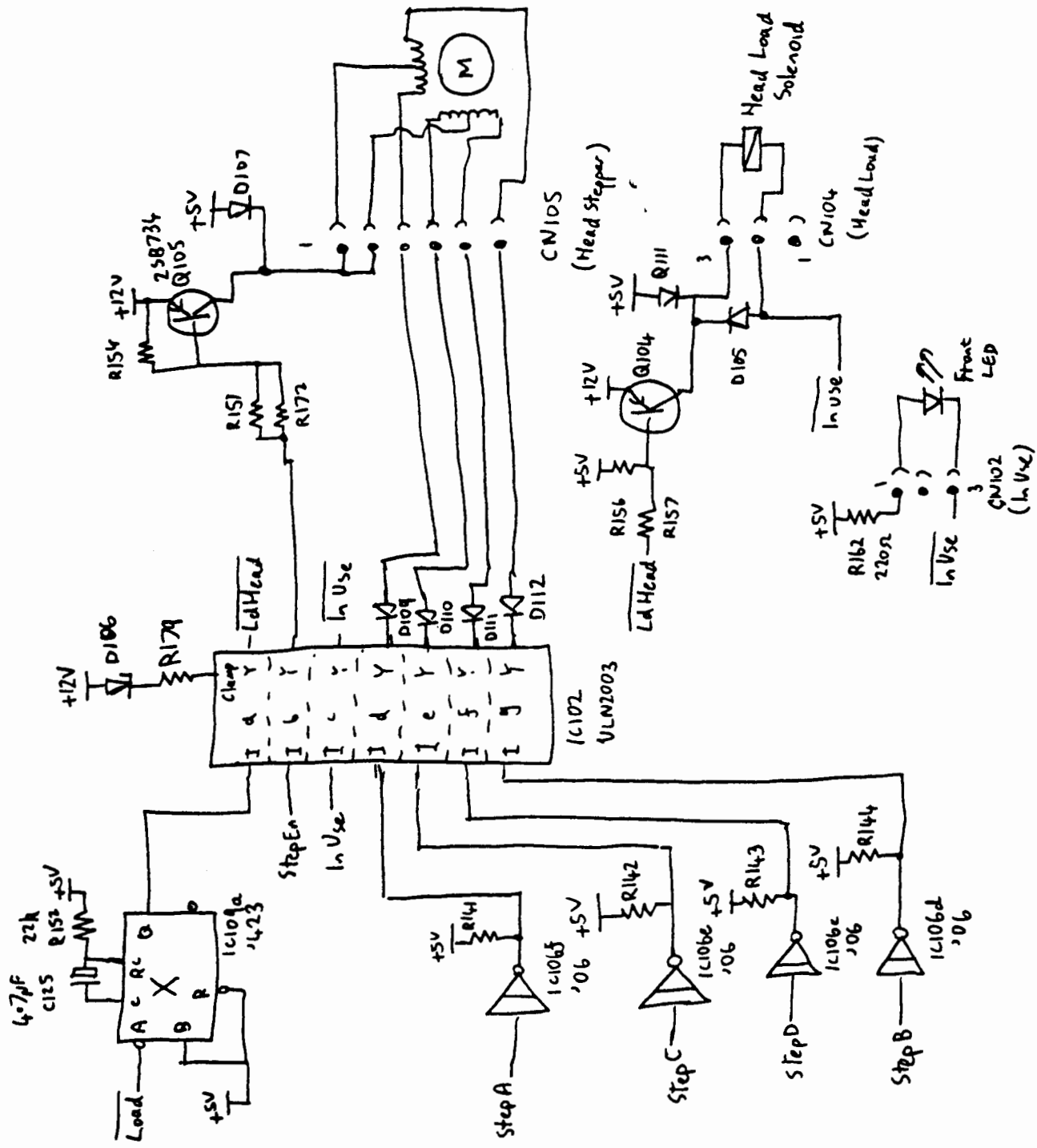


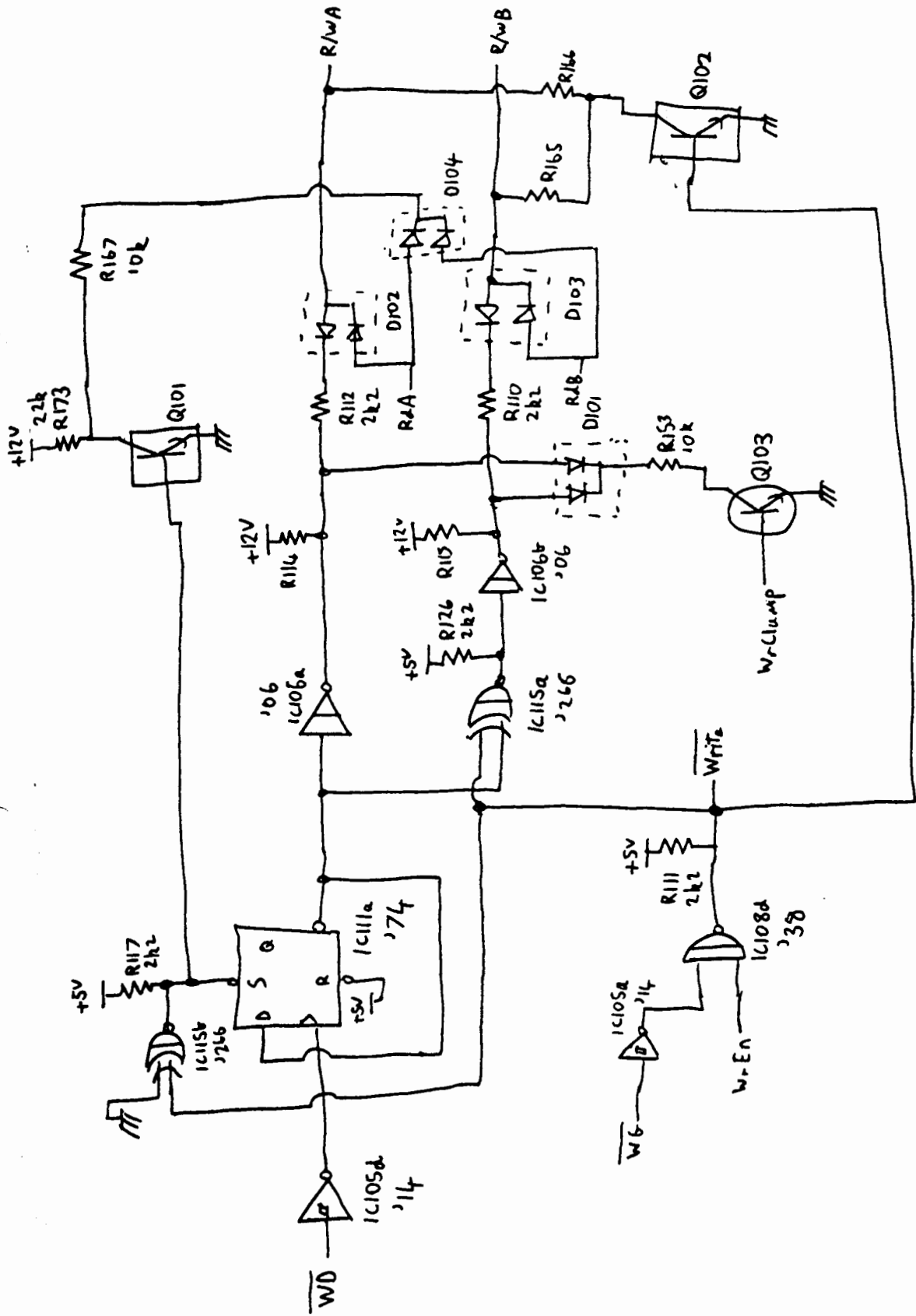




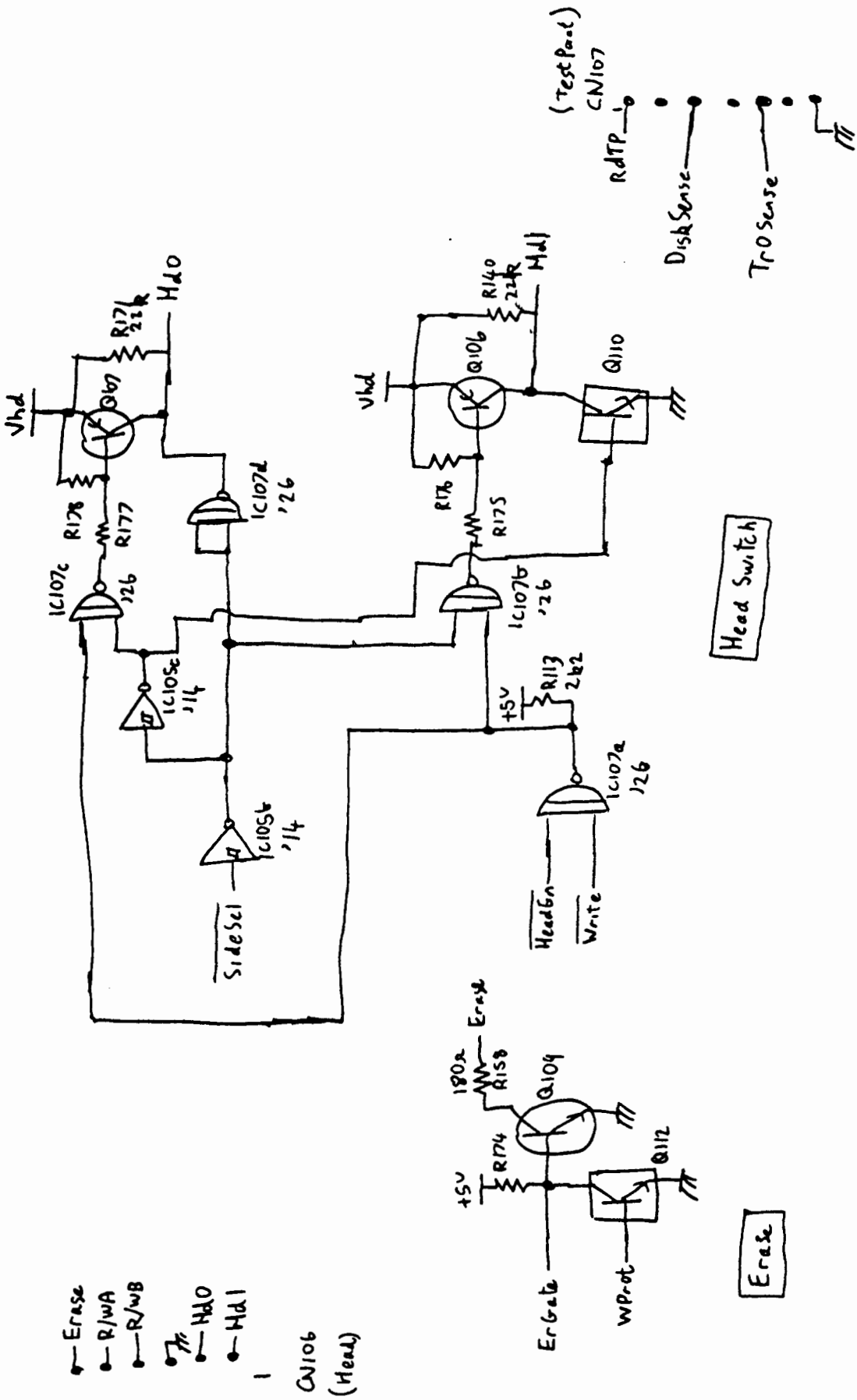
Sony Floppy Drive Logic Board FC9 Slant ②

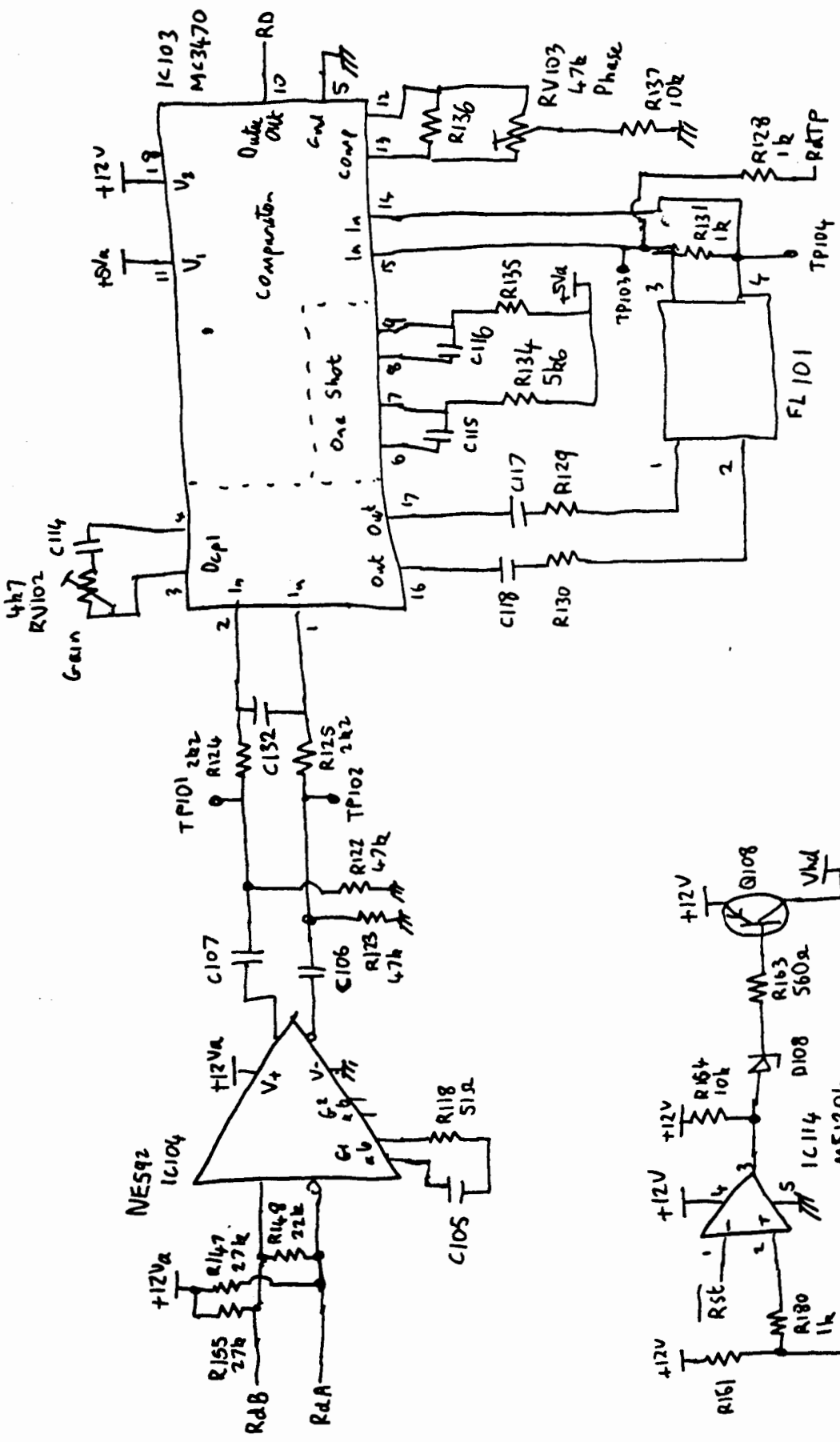




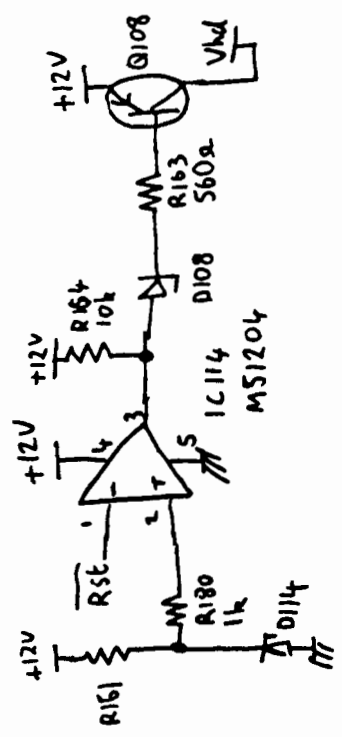


Write

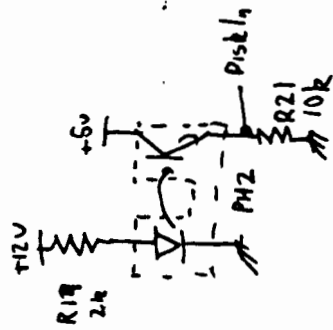
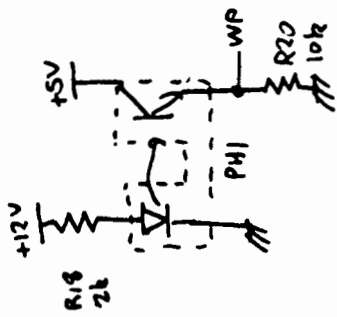




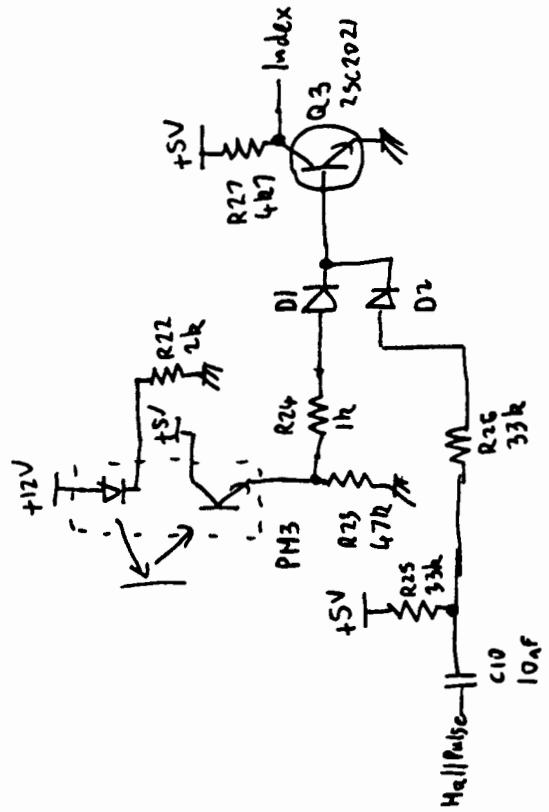
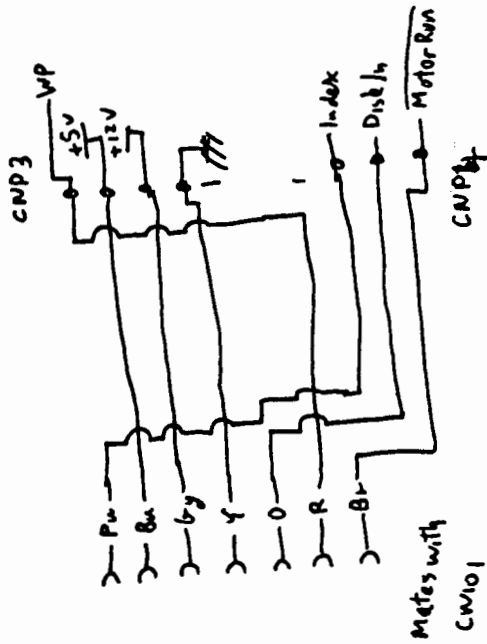
Read



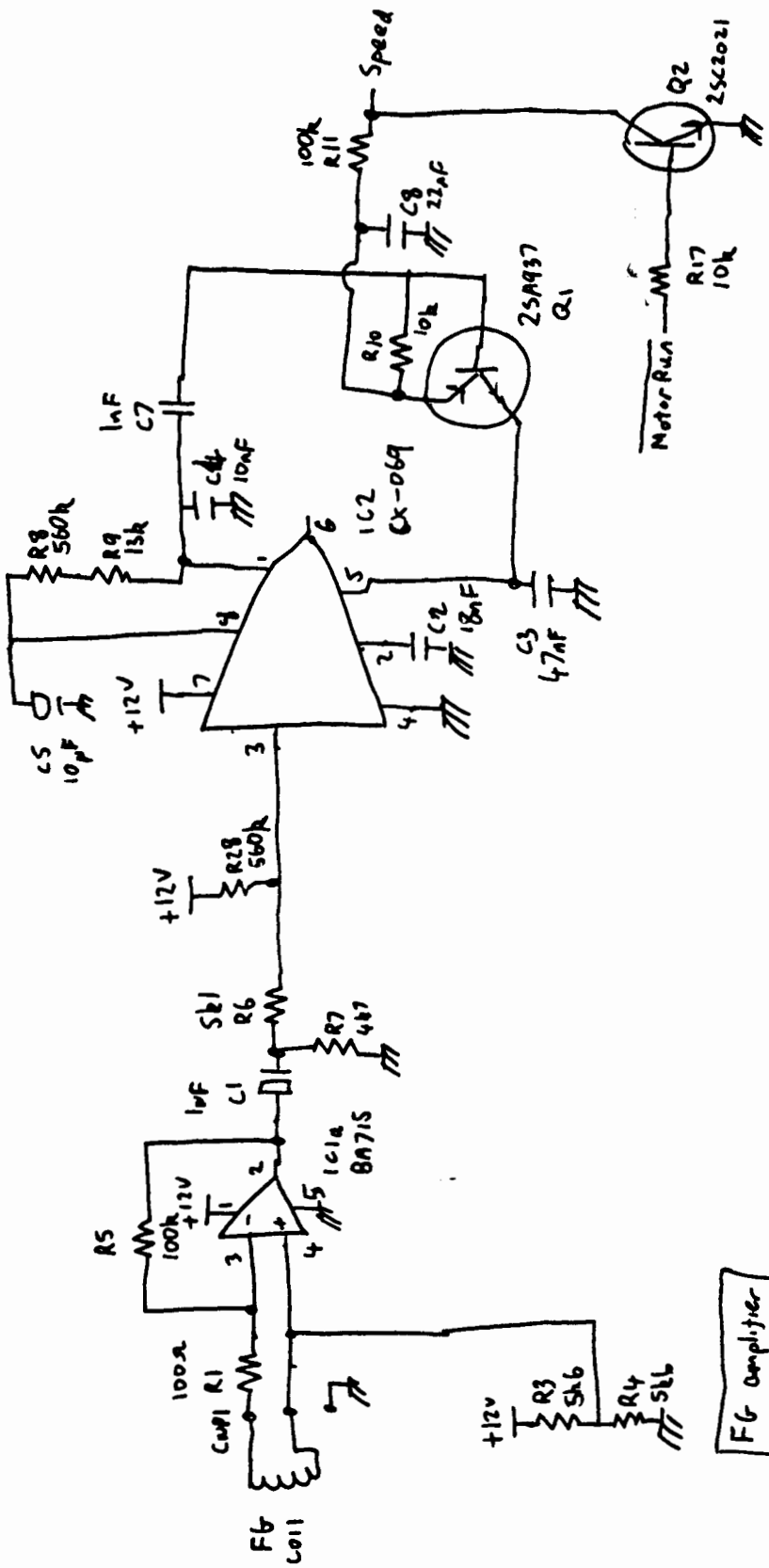
Power Ok



Sensors



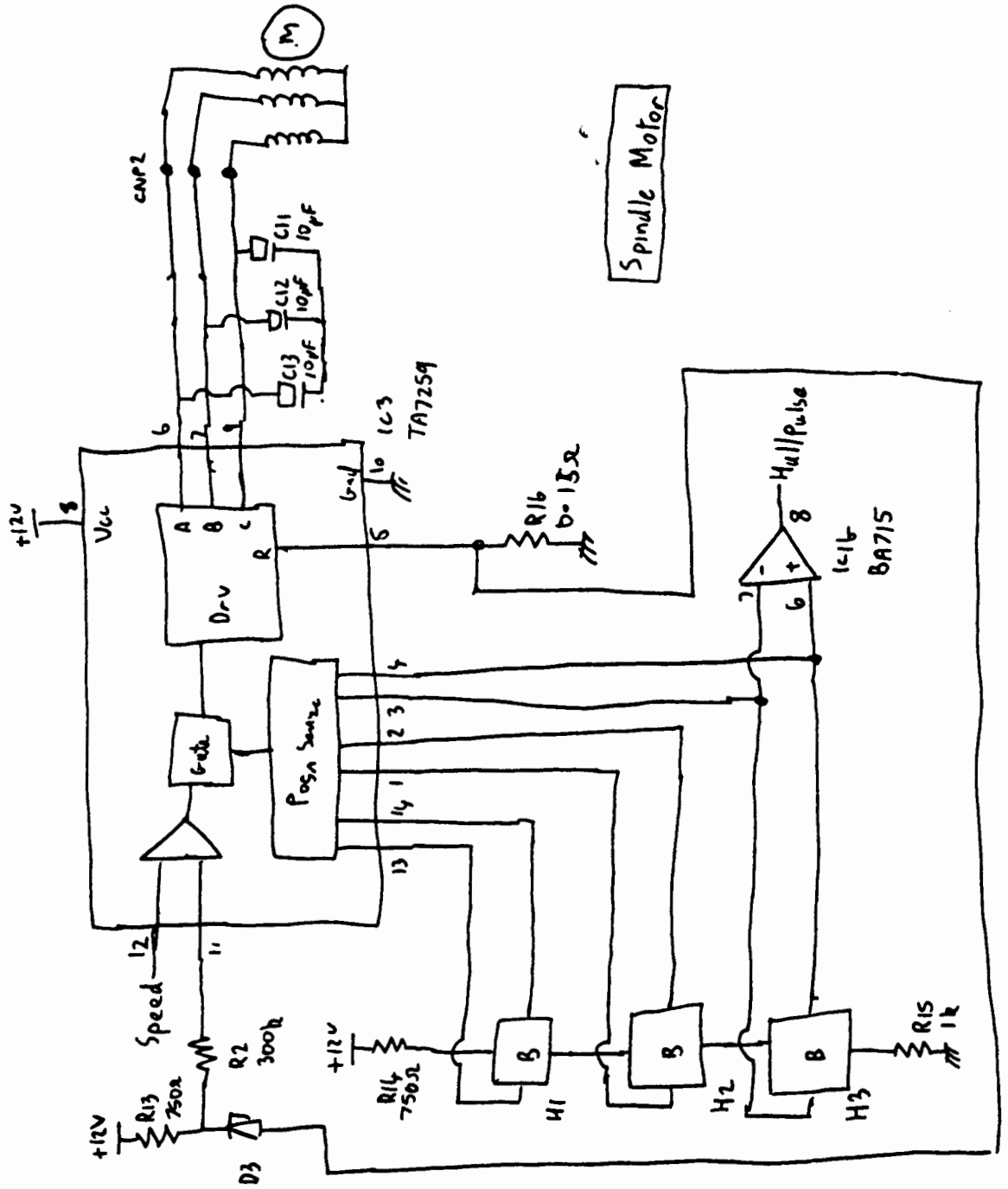
Sony Floppy Drive Spindle Motor Sheet ①



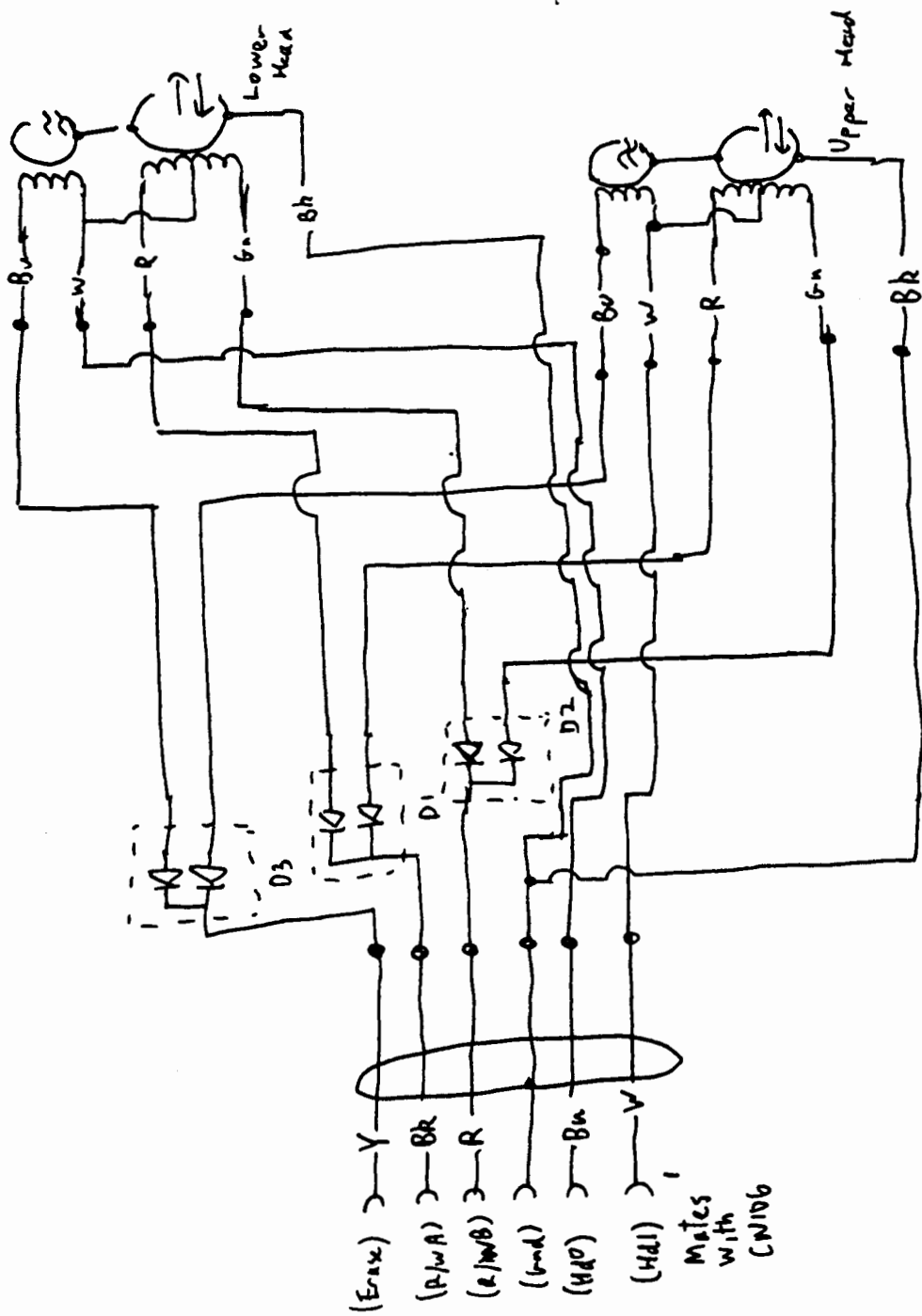
Spindle Speed

FG amplifier

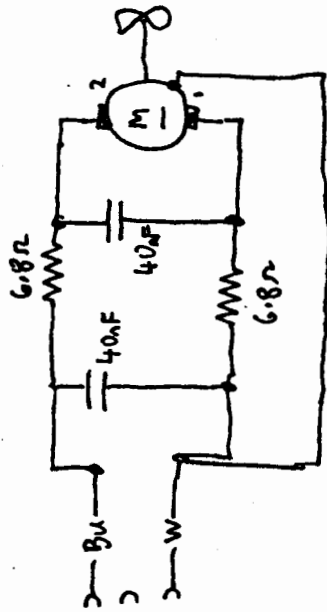
Sony Floppy Drive Spindle Motor sket 2



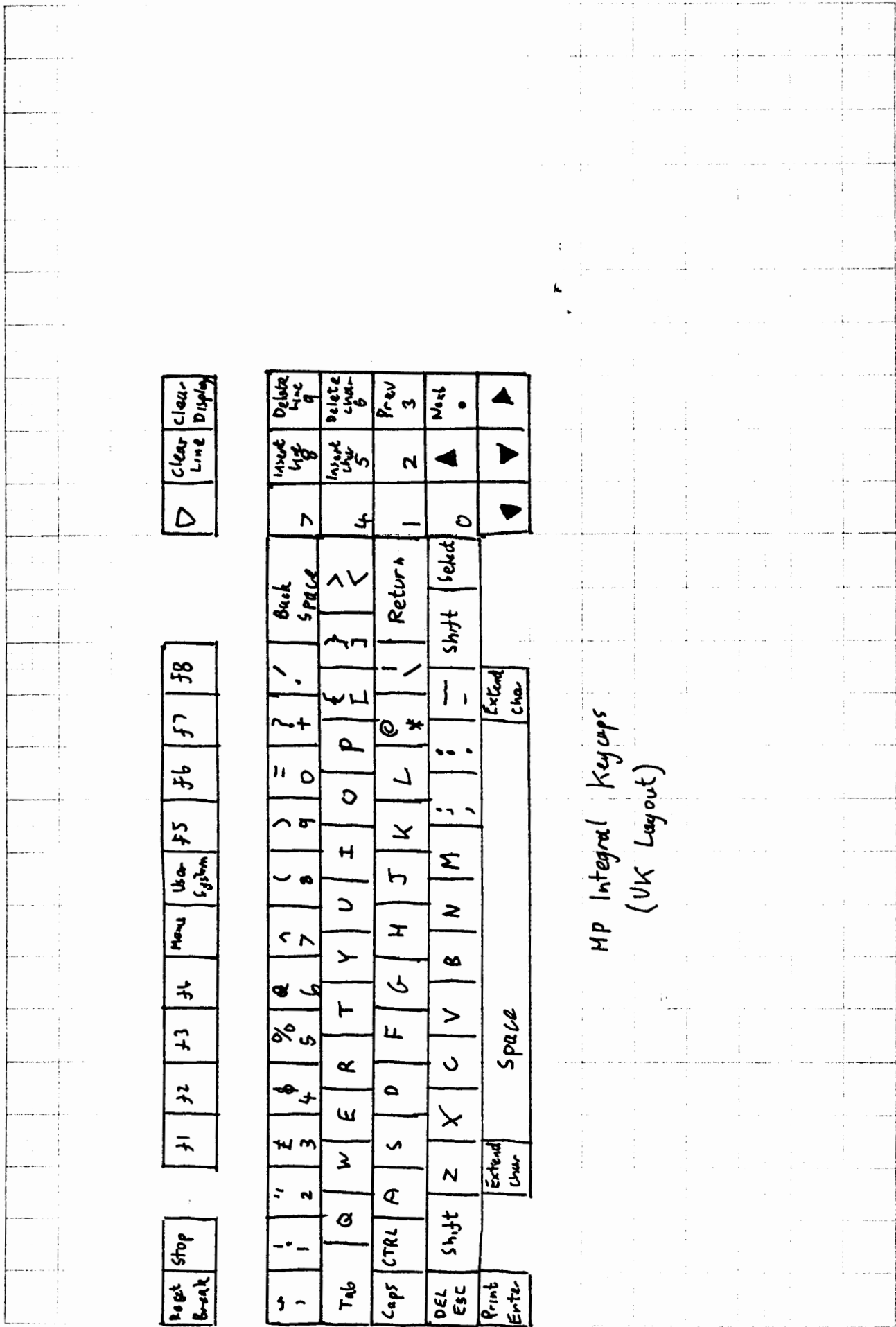
Sony Floppy Drive Spindle Motor Sheet ③



Sony Floppy Drive Double-Sided Head



HP Integral Fan Motor



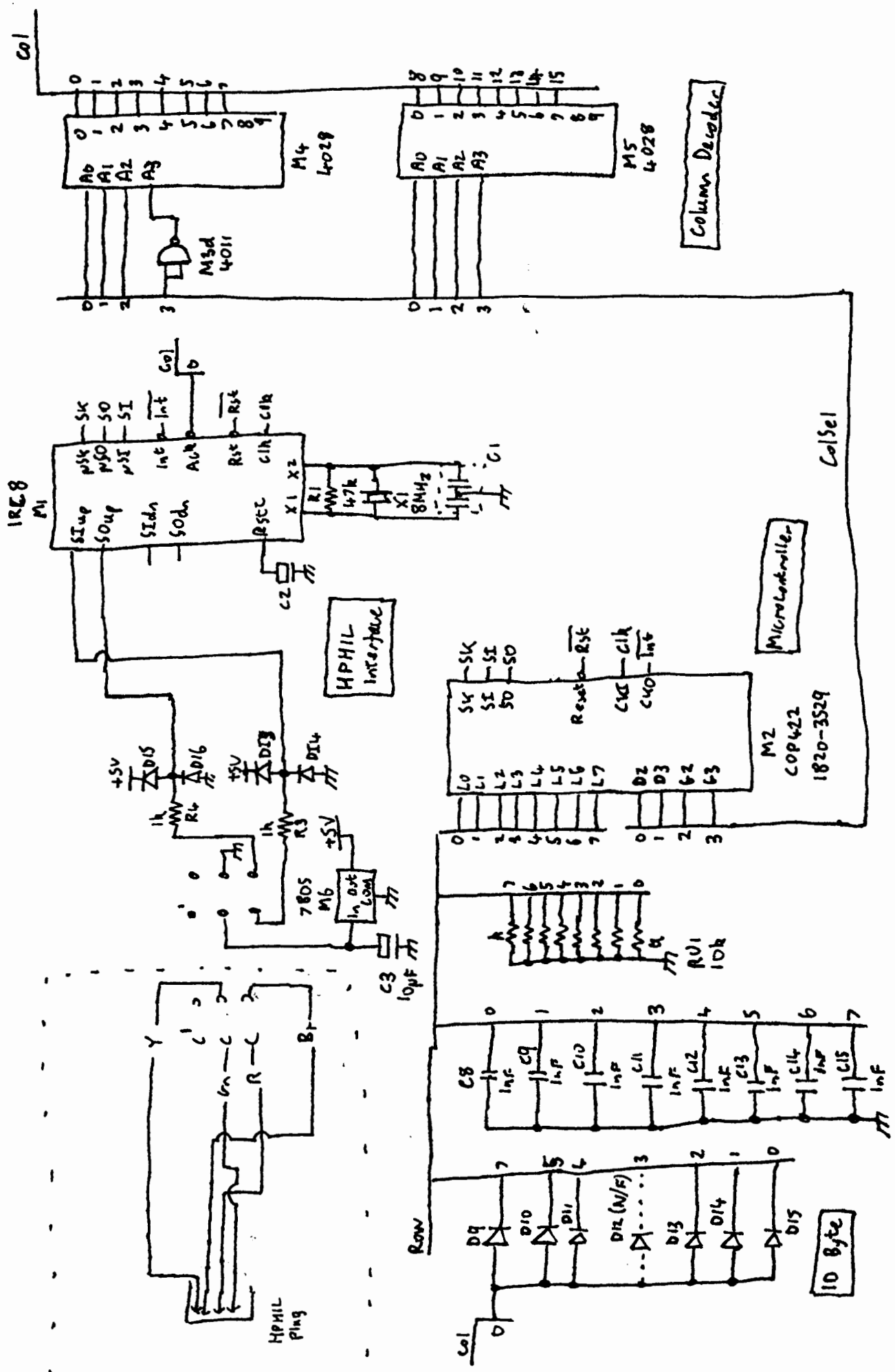
Rest Break	Stop
------------	------

f1	f2	f3	f4	Menu	Use System	f5	f6	f7	f8
----	----	----	----	------	------------	----	----	----	----

Clear Line	Clear Display
------------	---------------

↑	!	"	#	\$	%	&	'	()	=	{	}	!	.	>	Delete line 9
,	1	2	3	4	5	6	7	8	9	0	[]	/	.	>	Delete char 6
Tab	Q	W	E	R	T	Y	U	I	O	P	{	}	<	>	4	Insert char 5
Caps	Ctrl	A	S	D	F	G	H	J	K	L	@	*		\	1	Prev 3
DEL ESC	Shift	Z	X	C	V	B	N	M	;	:	—	—	—	—	0	Next .
Print Enter	Extend Char	SPACE										Extend Char	◀	▶		

MP Integral Keycaps
(UK Layout)

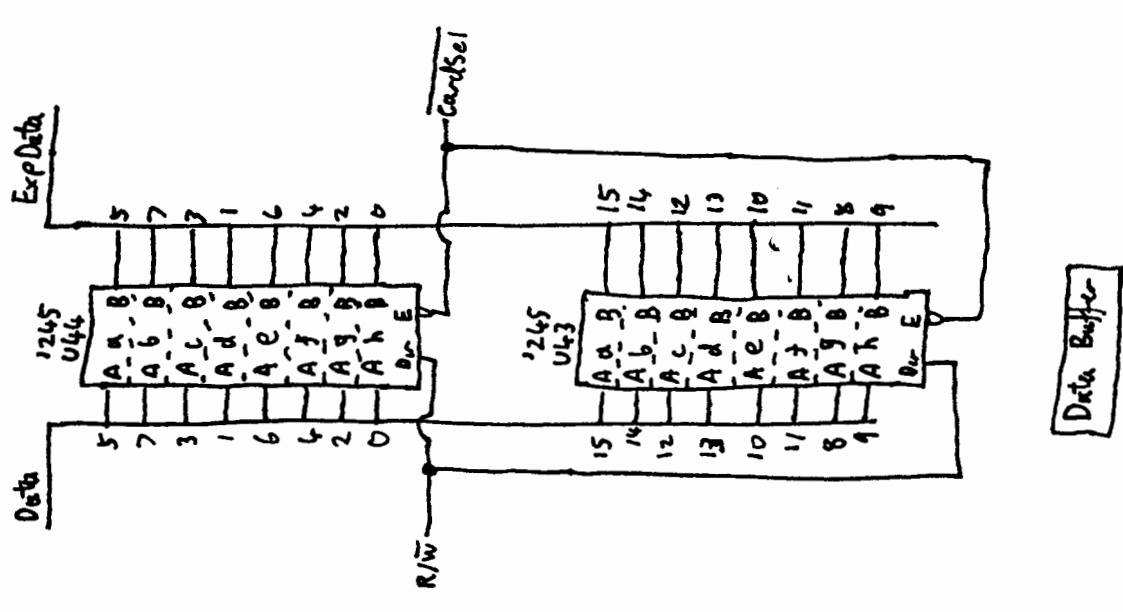
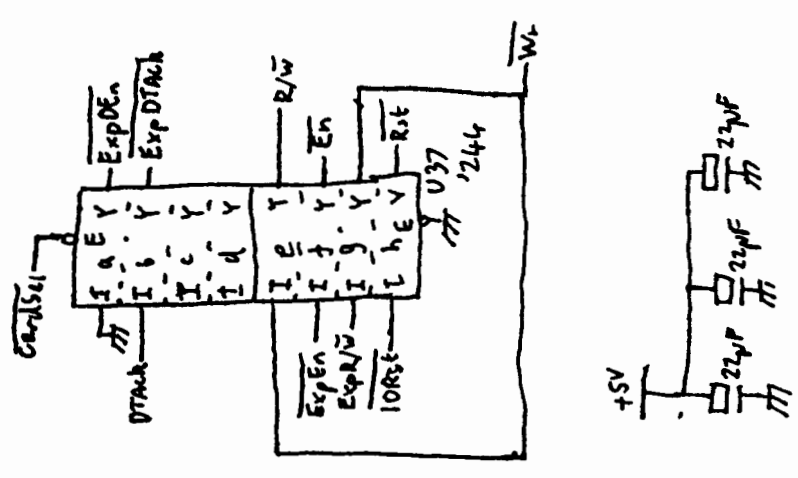
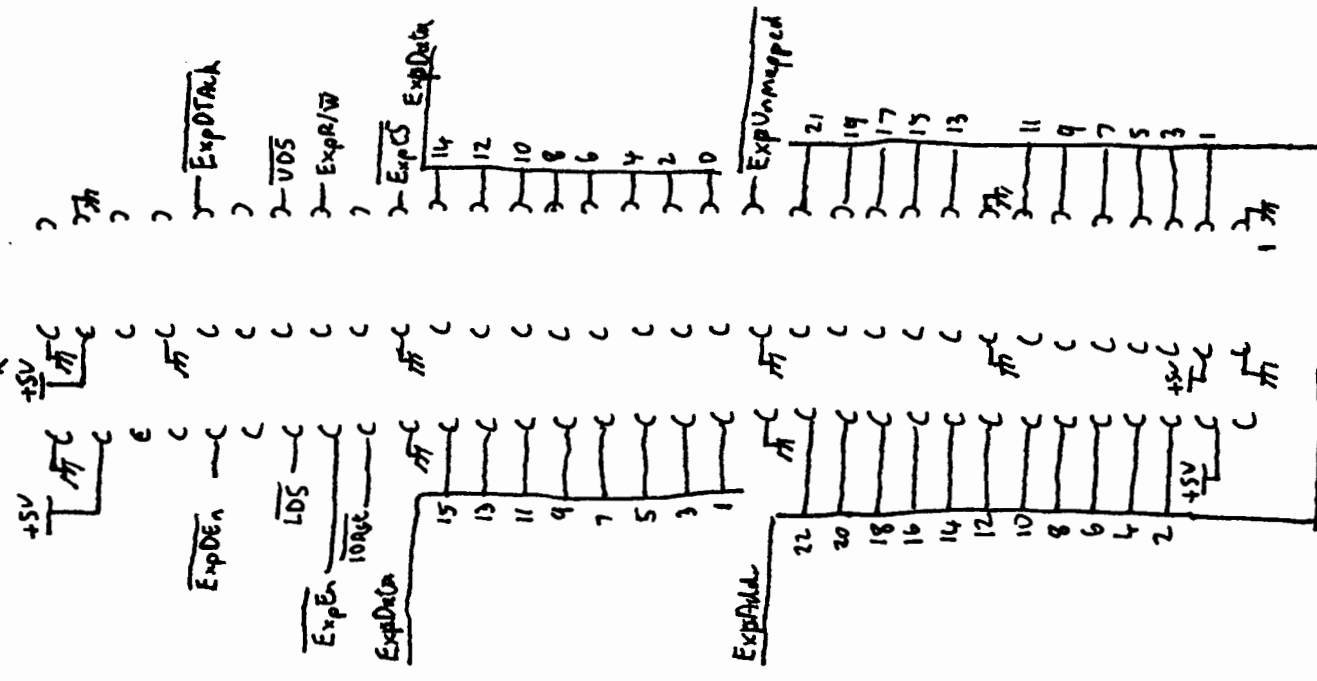


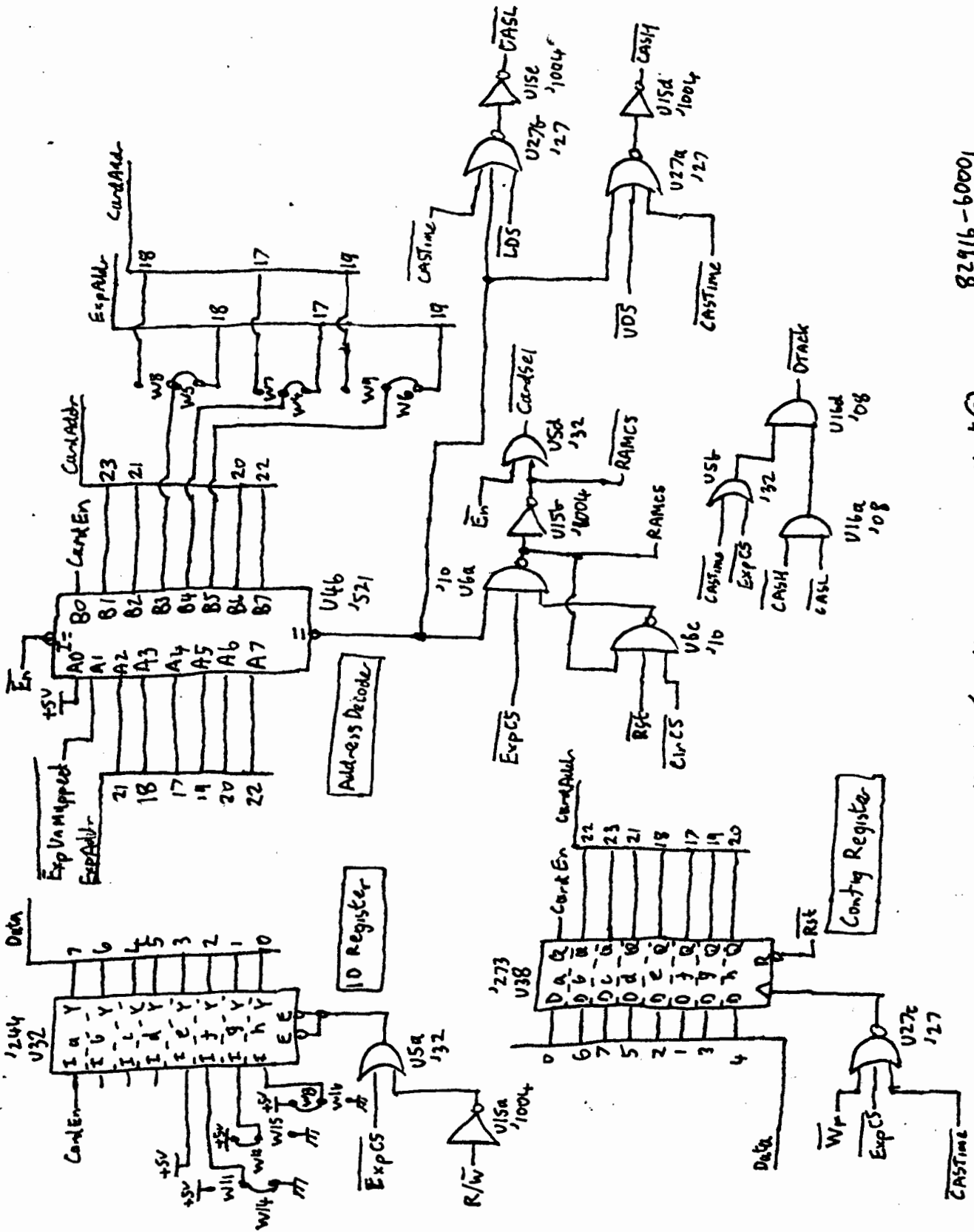


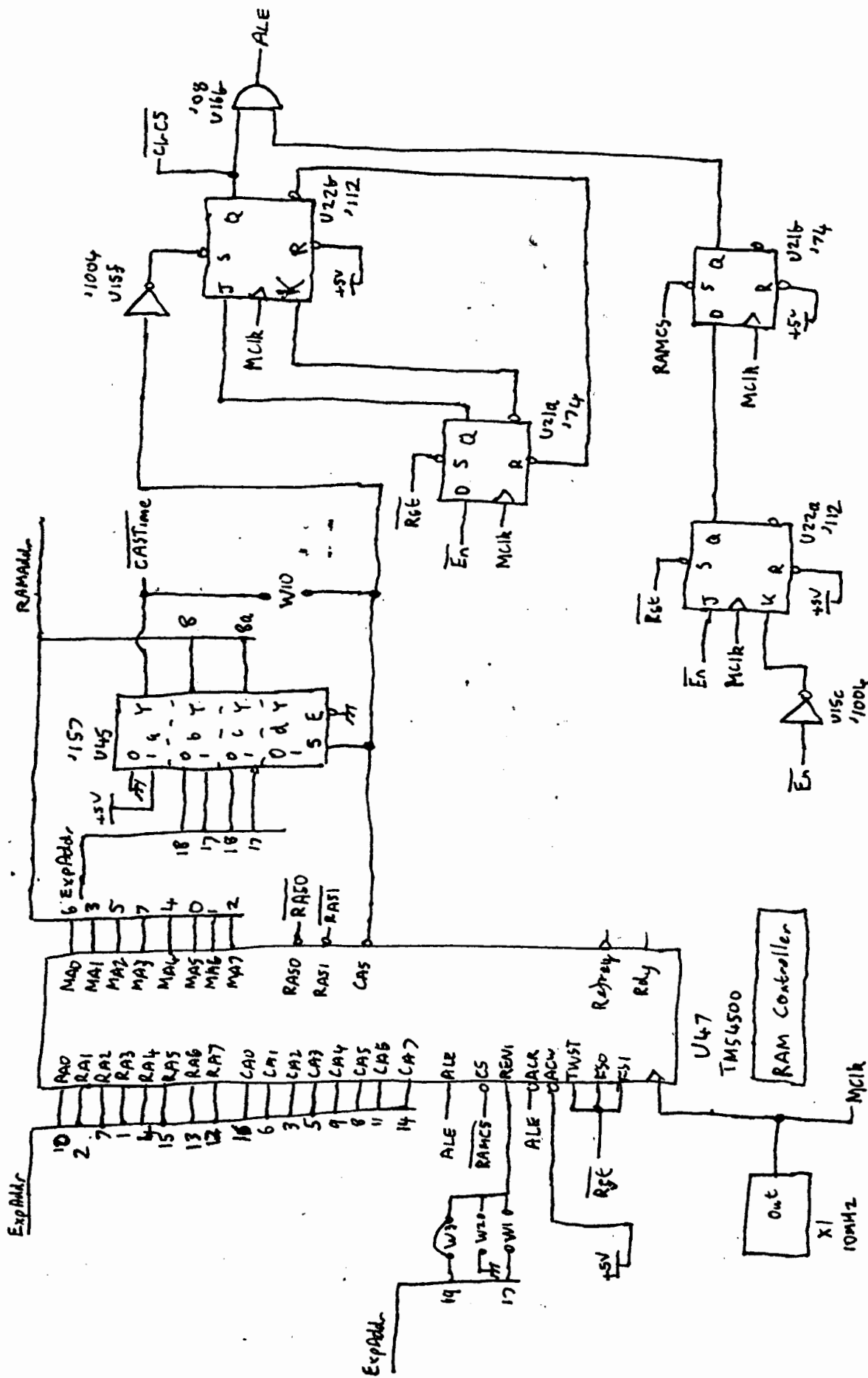
Key Matrix (UK Layout)

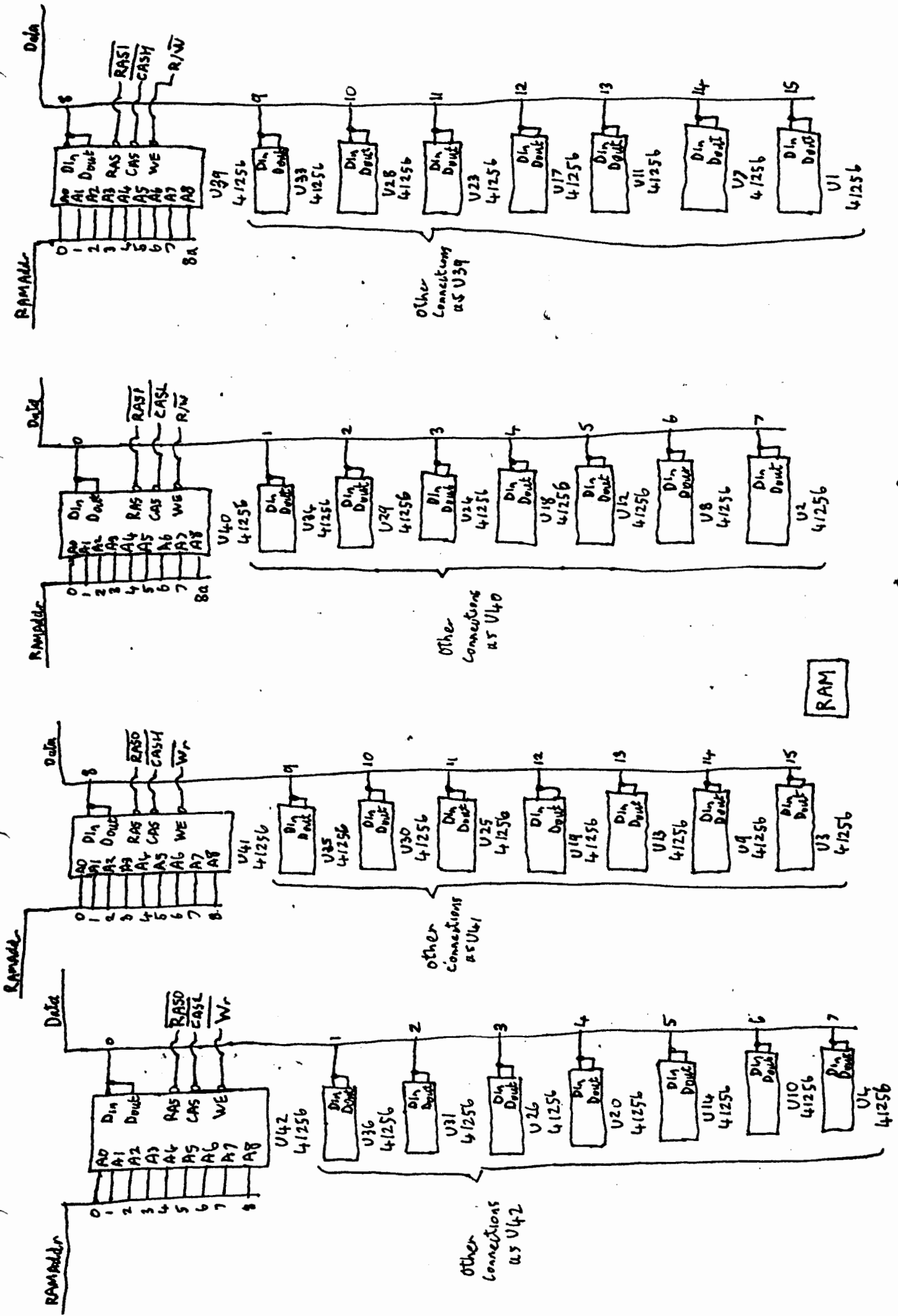
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	Menu	User System	f4	f5	f6	f7	f8	f9	f10	f11	f12	f13	f14	f15	f16	f17
	Insert Line N8	Delete Line N9	Back Space	Return	select	▲	▲	▲	▲	Reset	CTRL	Shift (L)	Shift (R)	Extend Char (L)	Extend Char (R)	Next No.
	Print Enter	stop	clear Line	clear Display												
	Deliber Char N6	B	V	C	X	Z										
	H	G	F	D	S	A										
	U	Y	T	R	E	W										
	^	7	6	5	4	3	2	1								
Col	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

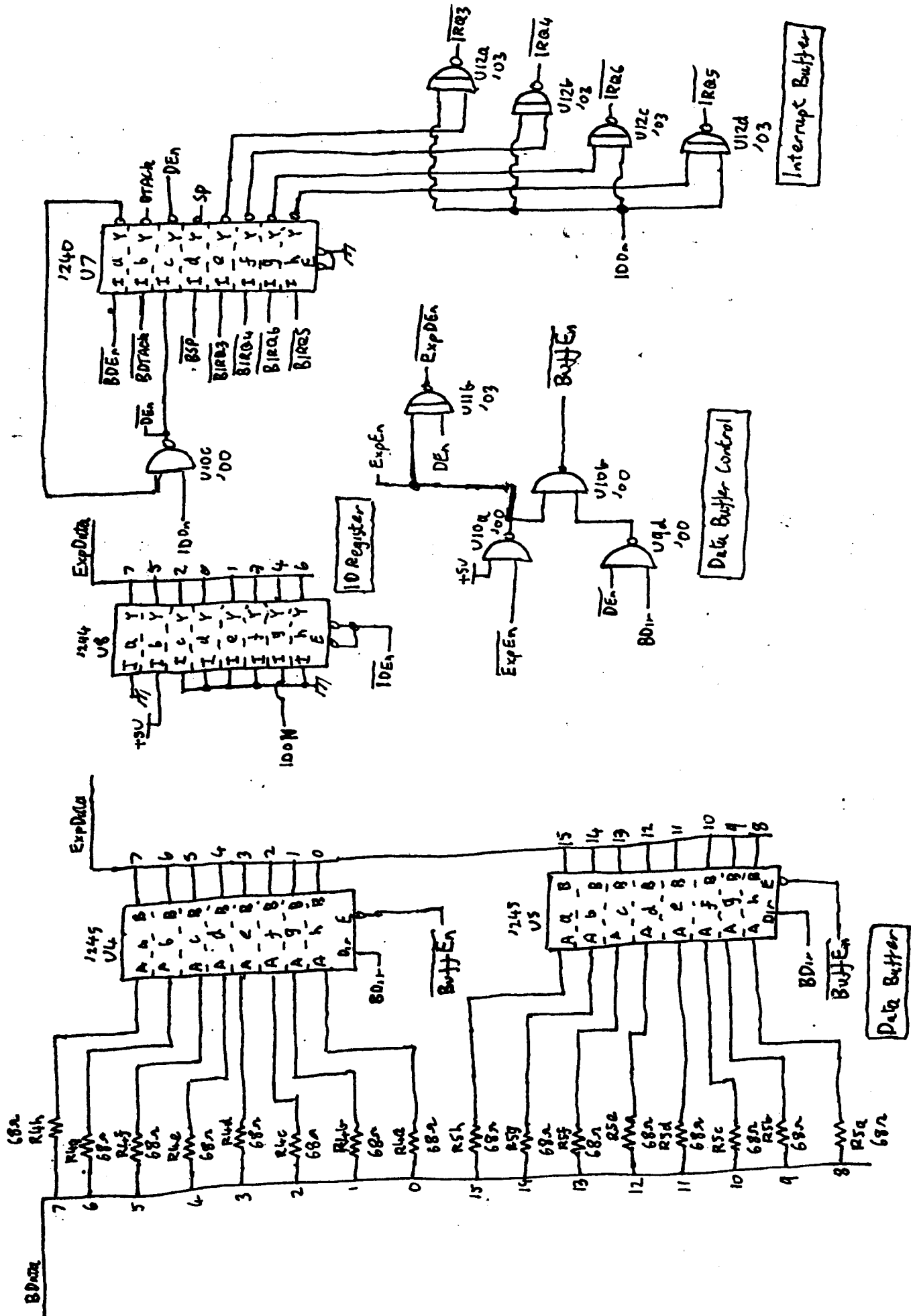
LHS of Machine



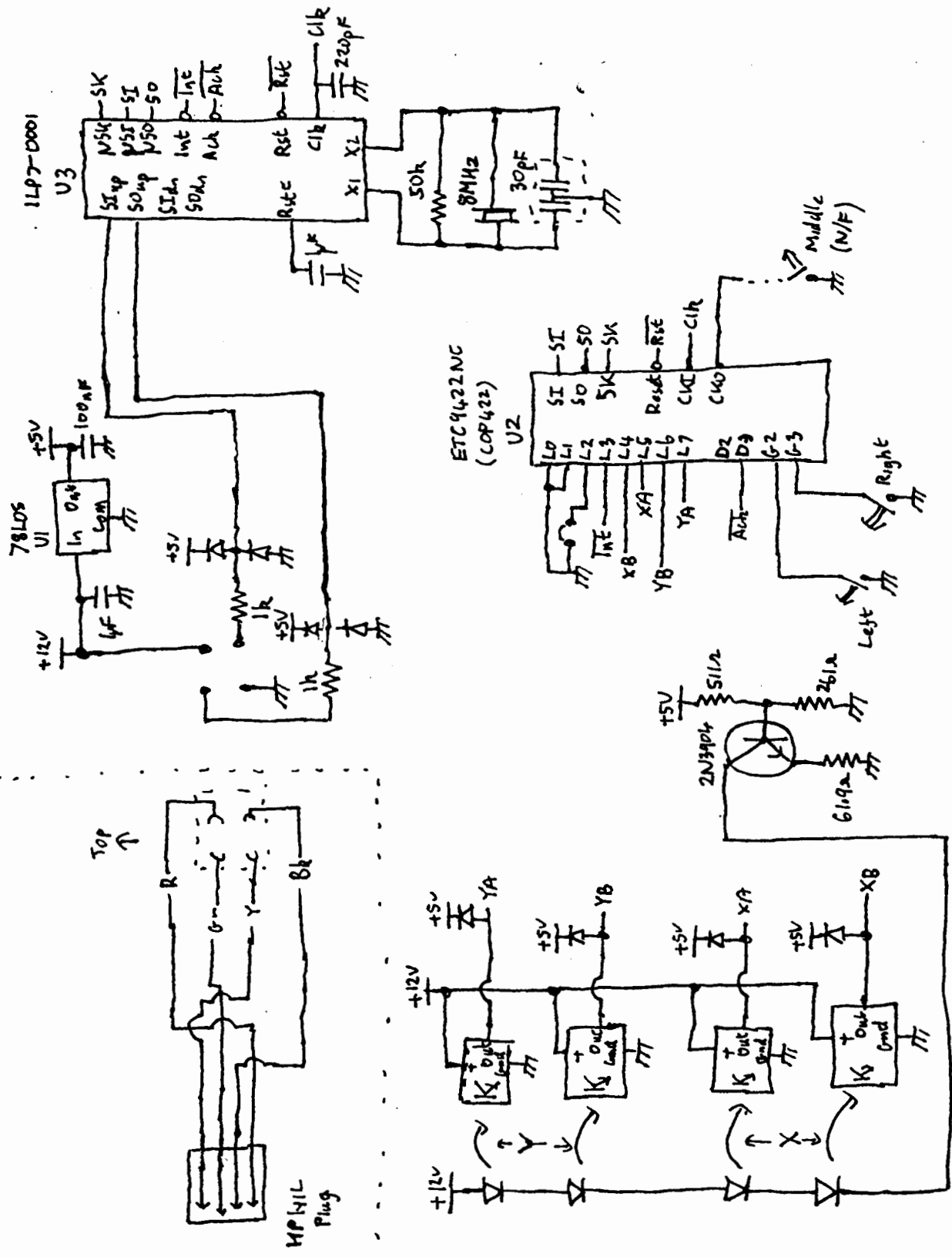






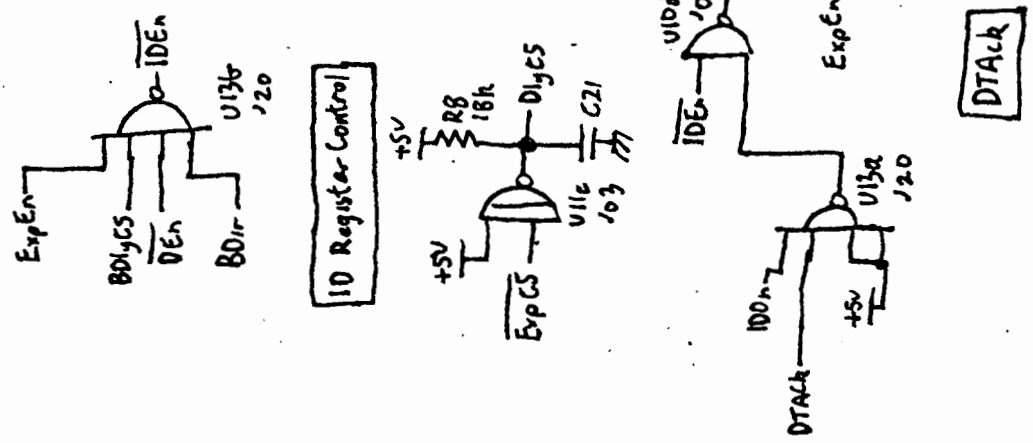
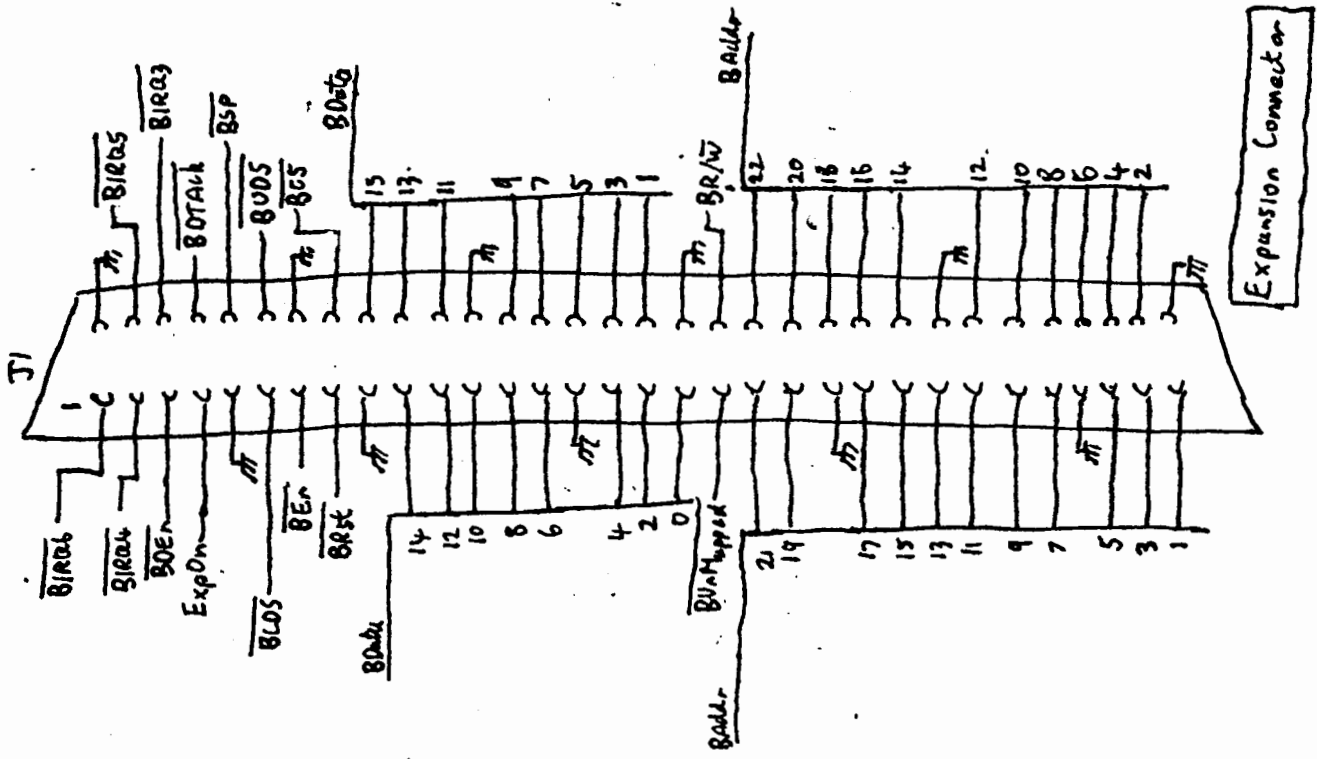


U



46060-80005

HP 46060 HP HIL Mouse



Display

Gnd 1 0 Gnd
V+ 0 V+ > 18V
+SV 0 Gnd
Gnd 0 Gnd
Rst 0 Gnd
VSync 0 Gnd
HSync 0 Gnd
DotClk- 0 Gnd
DotsA 0 Gnd
DotsB 0

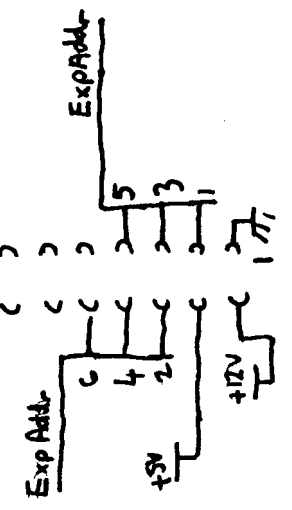
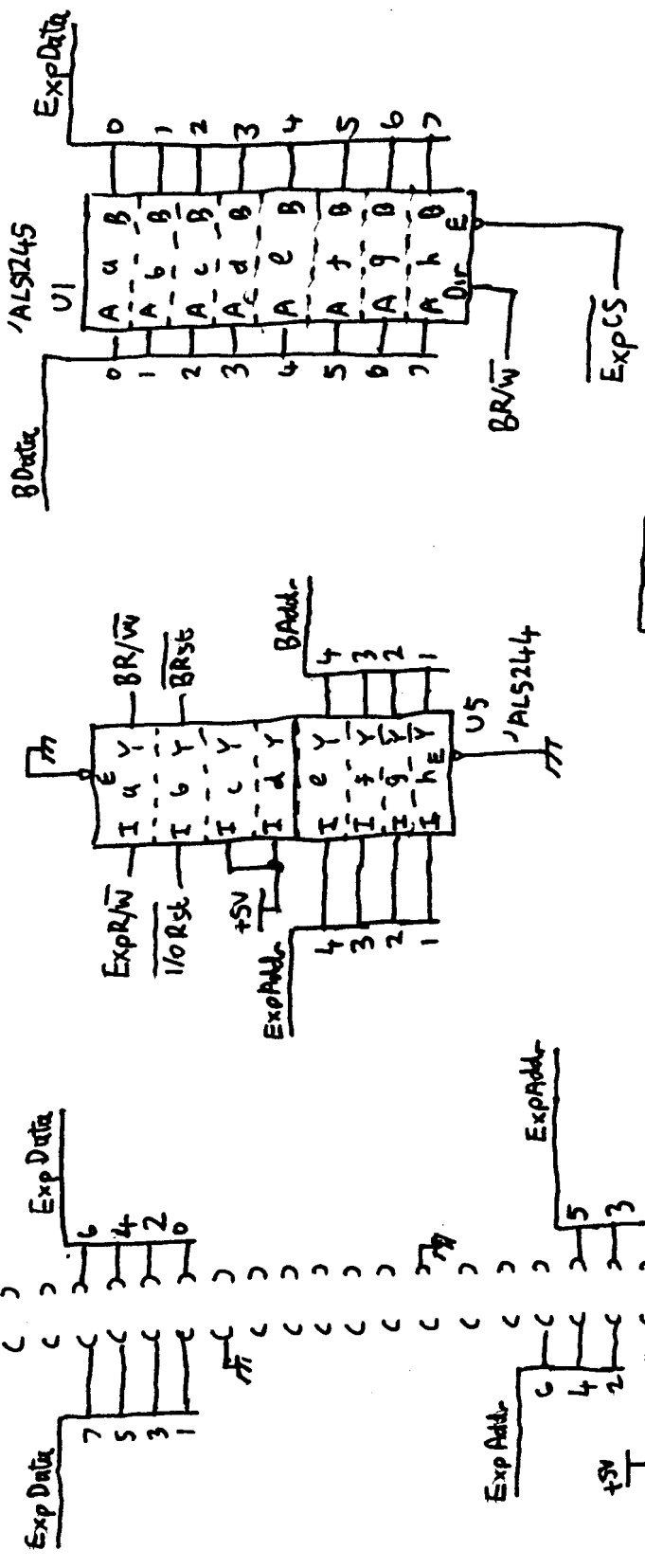
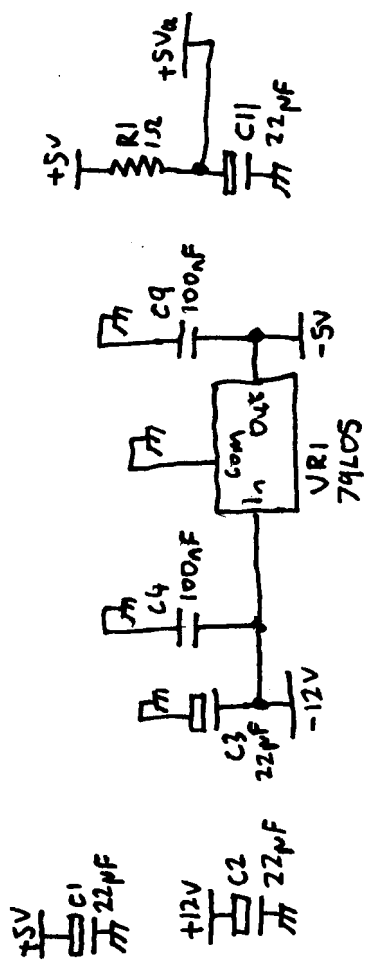
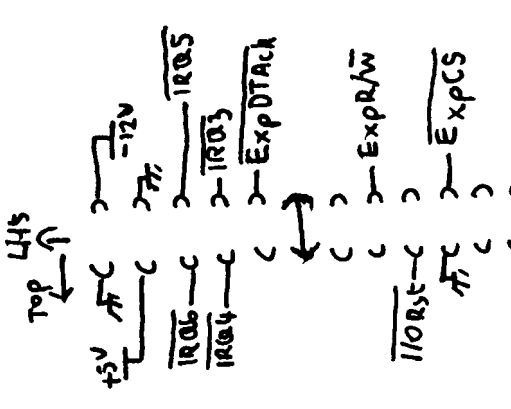
PSU

0 Br +5
0 Br +5
0 Bk Gnd
0 Bk Gnd
0 Or +12
0 R +15
X
0 Pv -12
0 Gnd Gnd
0 Y PwrOK
0 W +18

HP-HIL

+12 0 0 +12
RIB 0 0 Gnd
RIA 0 0 Gnd
SOB 0 0 Gnd
SOA 0 0 Gnd

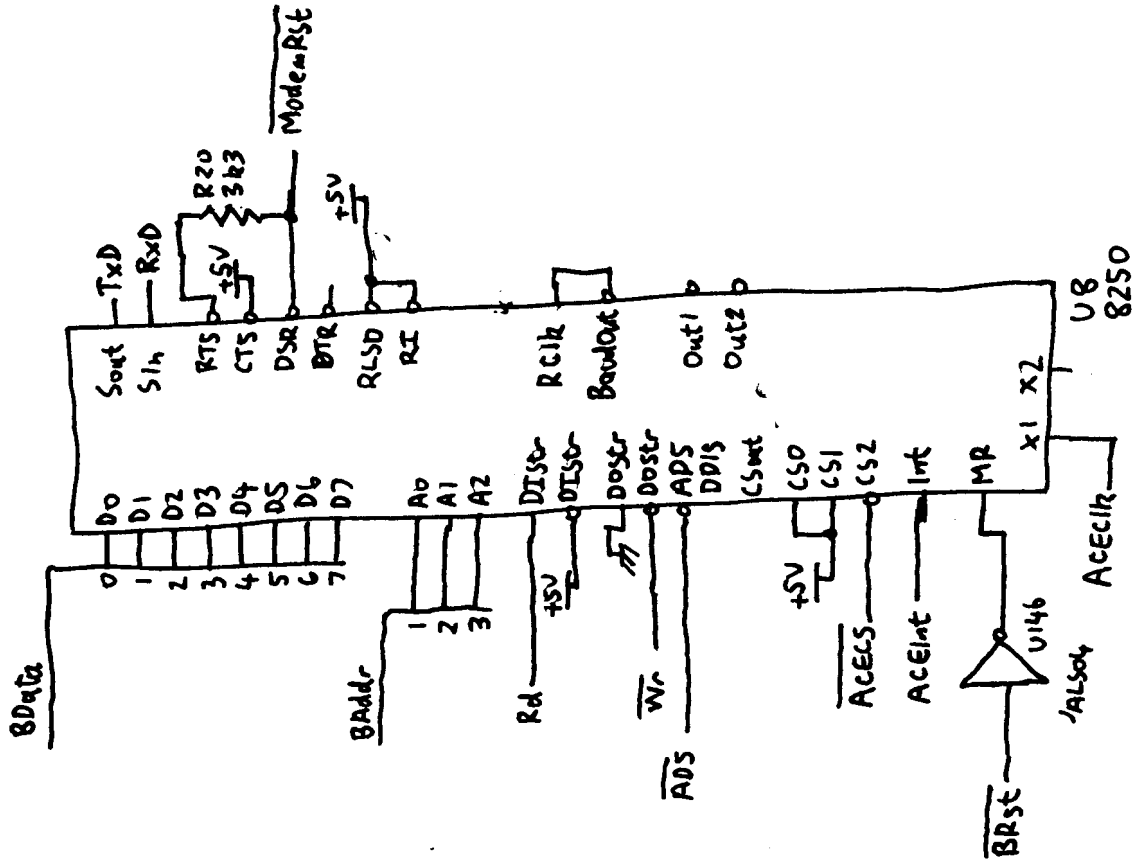
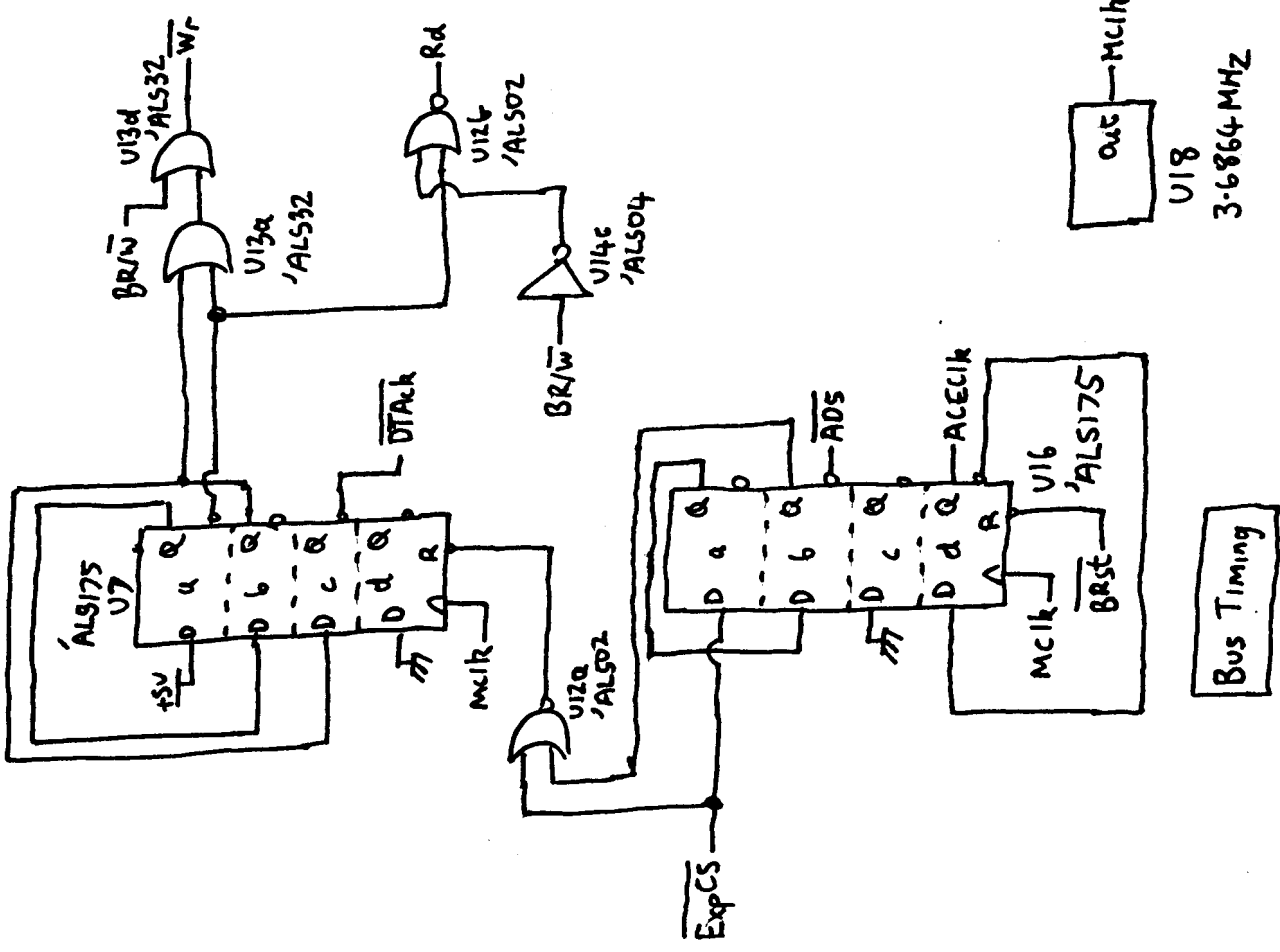
0 Br +5
0 Br +5
0 Bk Gnd
0 Bk Gnd
0 Or +12
0 R +15
0 W +18
0 Pv -12
0 Gnd Gnd
0 Y PwrOK



P1

82915 - 60001

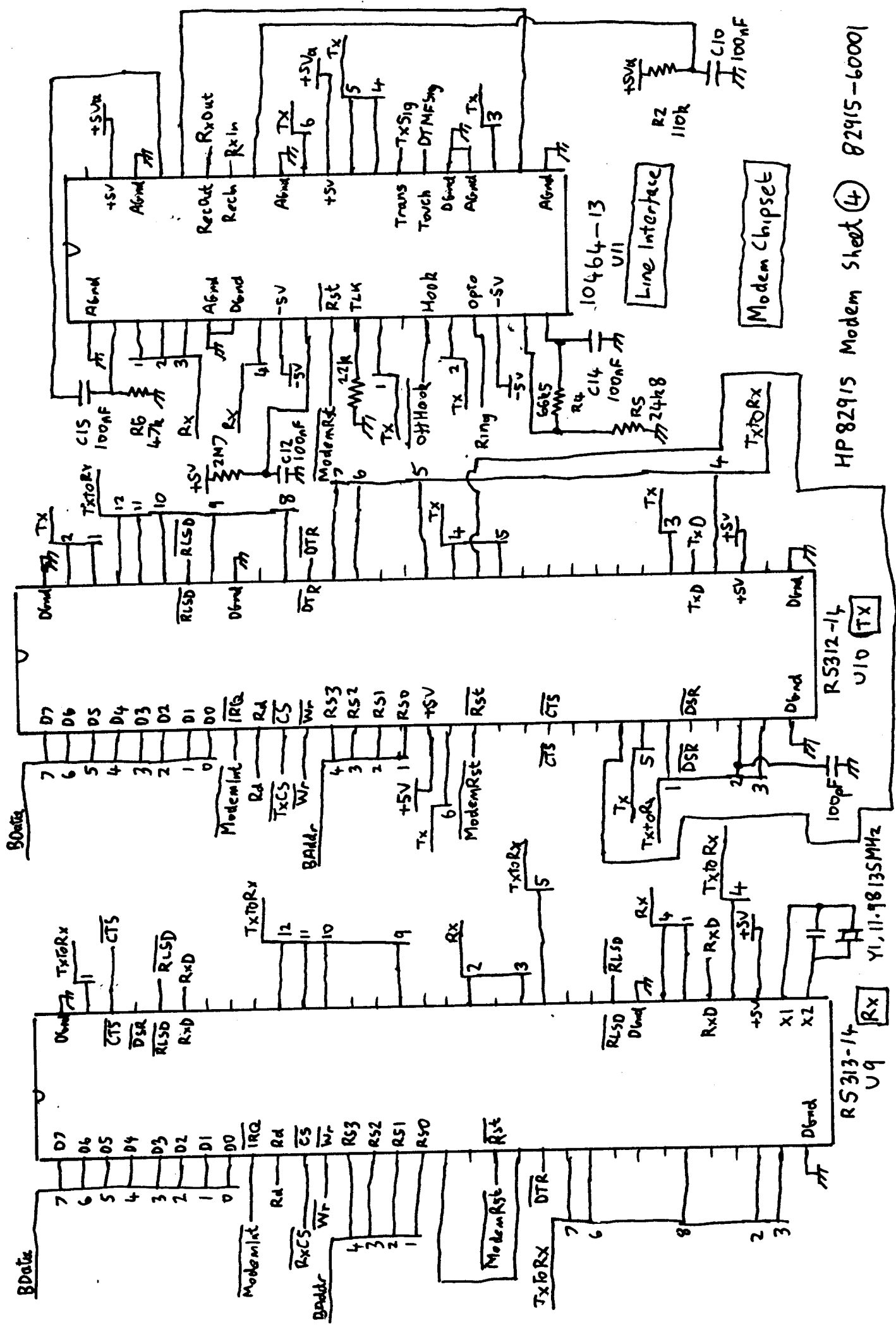
HP 82915 Modem Sheet ①



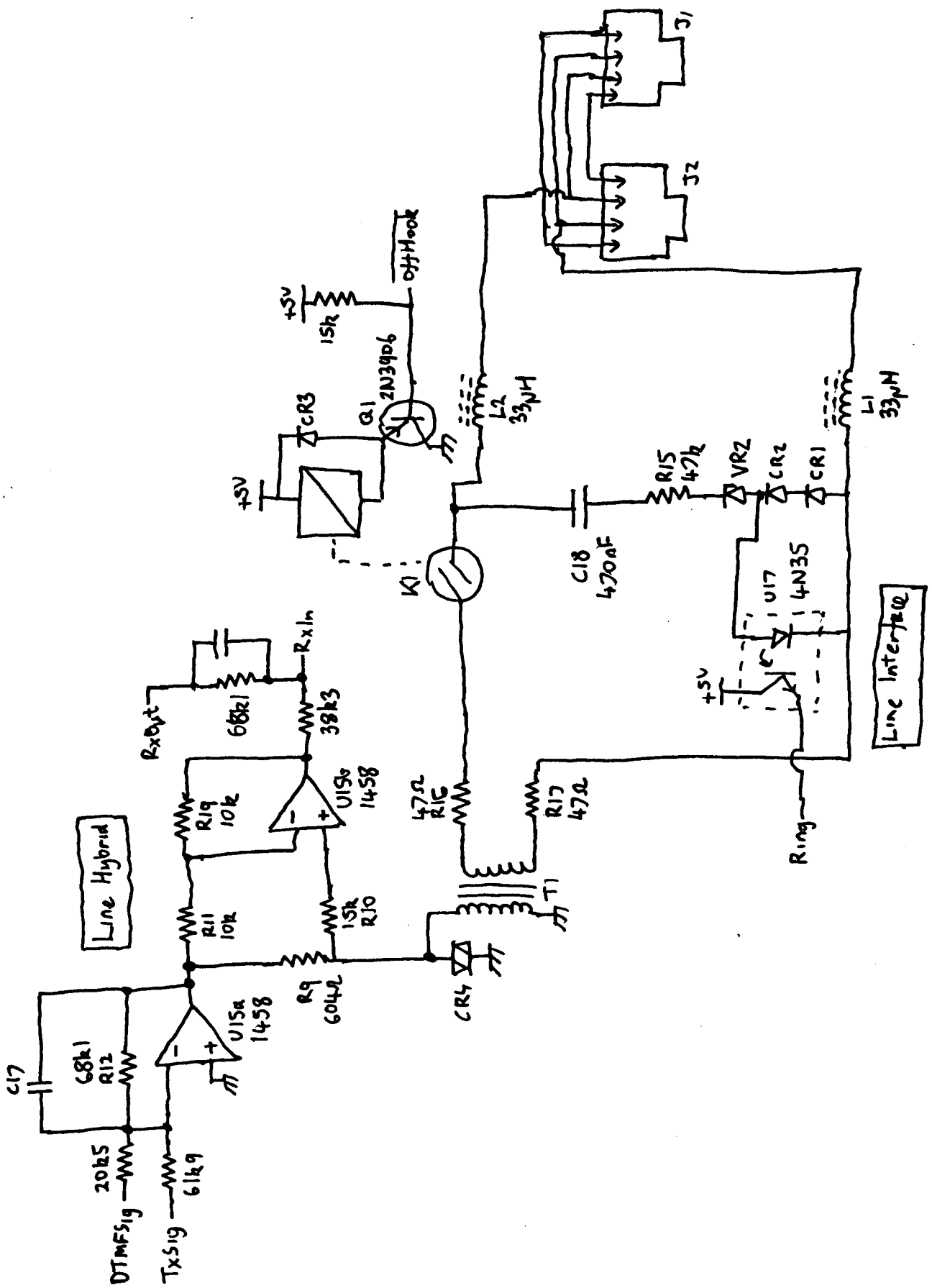
82915-60001

Sheet ③

HP 82915 Modem



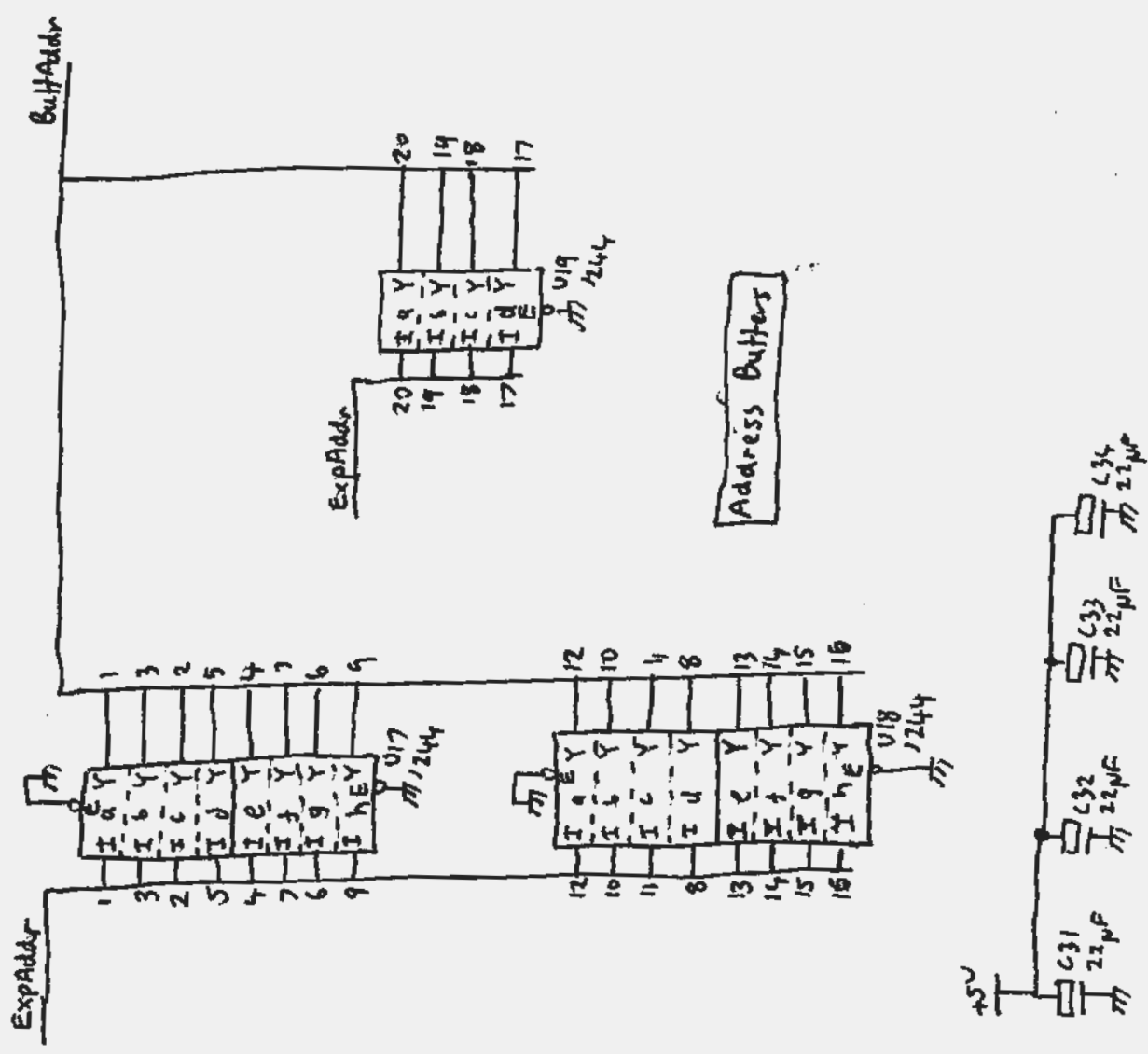
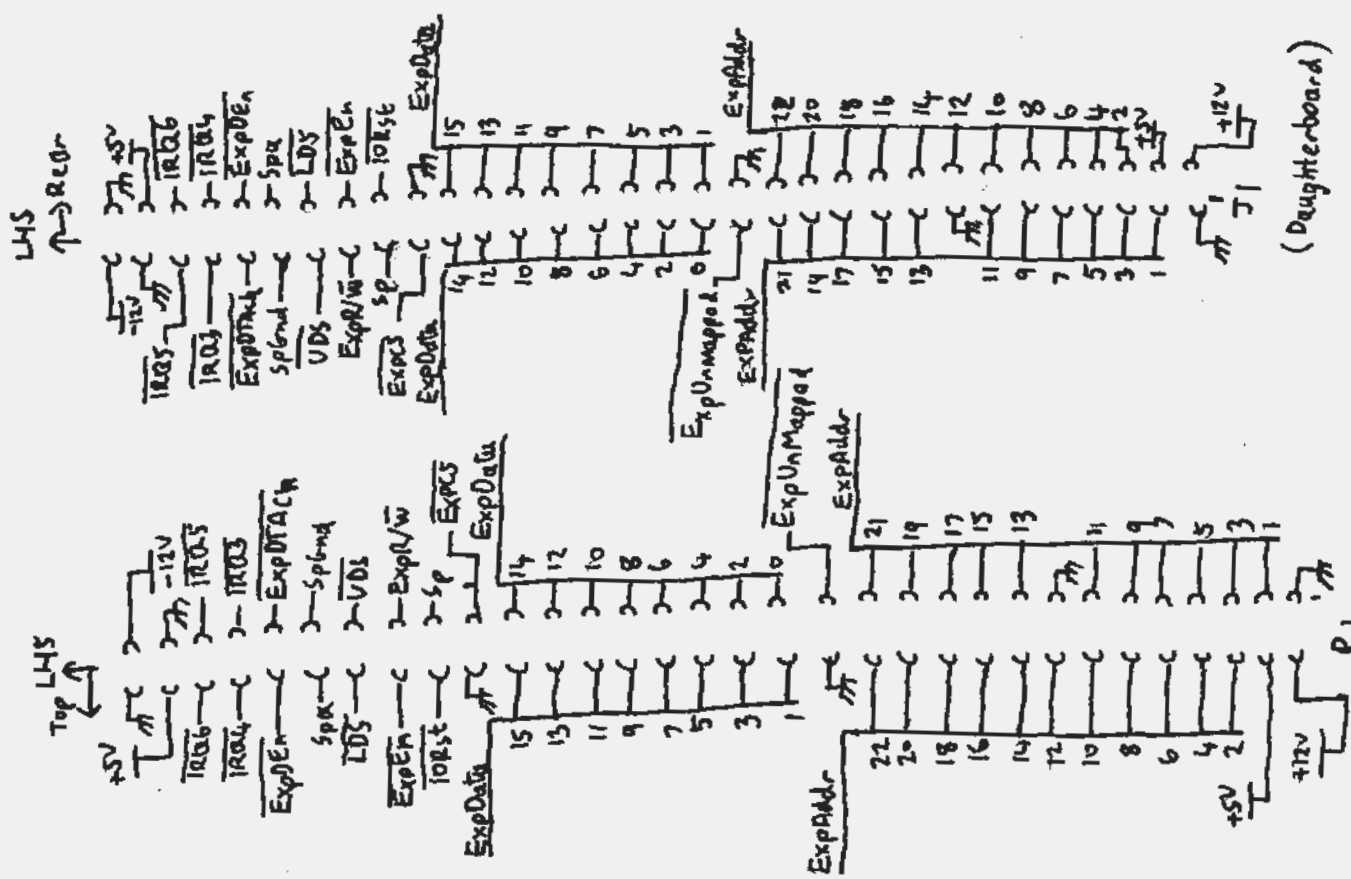
HP 82915 Modem sheet (4) 82915-60001



82915-60001

HP 82915 Modem sheet 5

Line Interlock



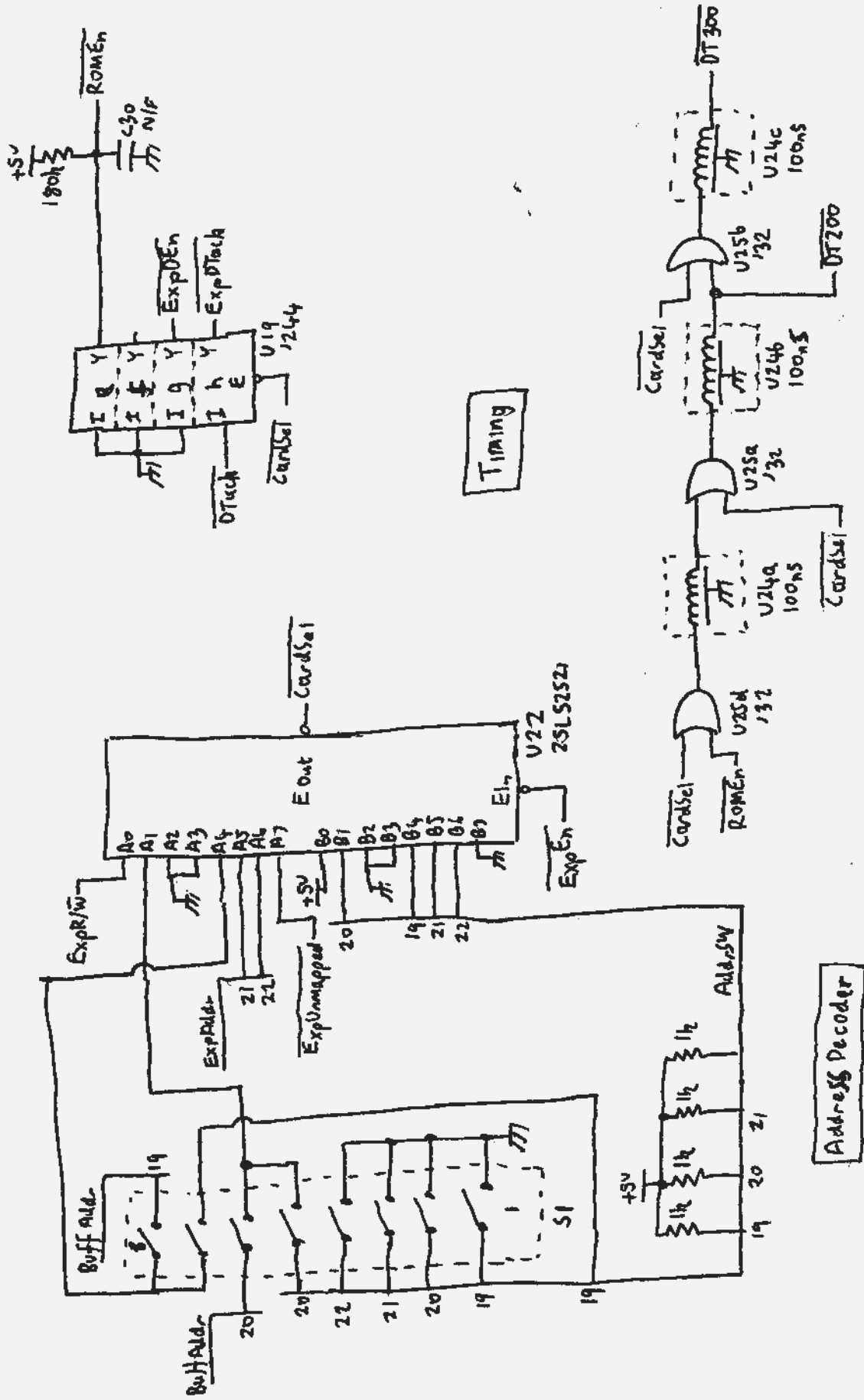
82971-60001

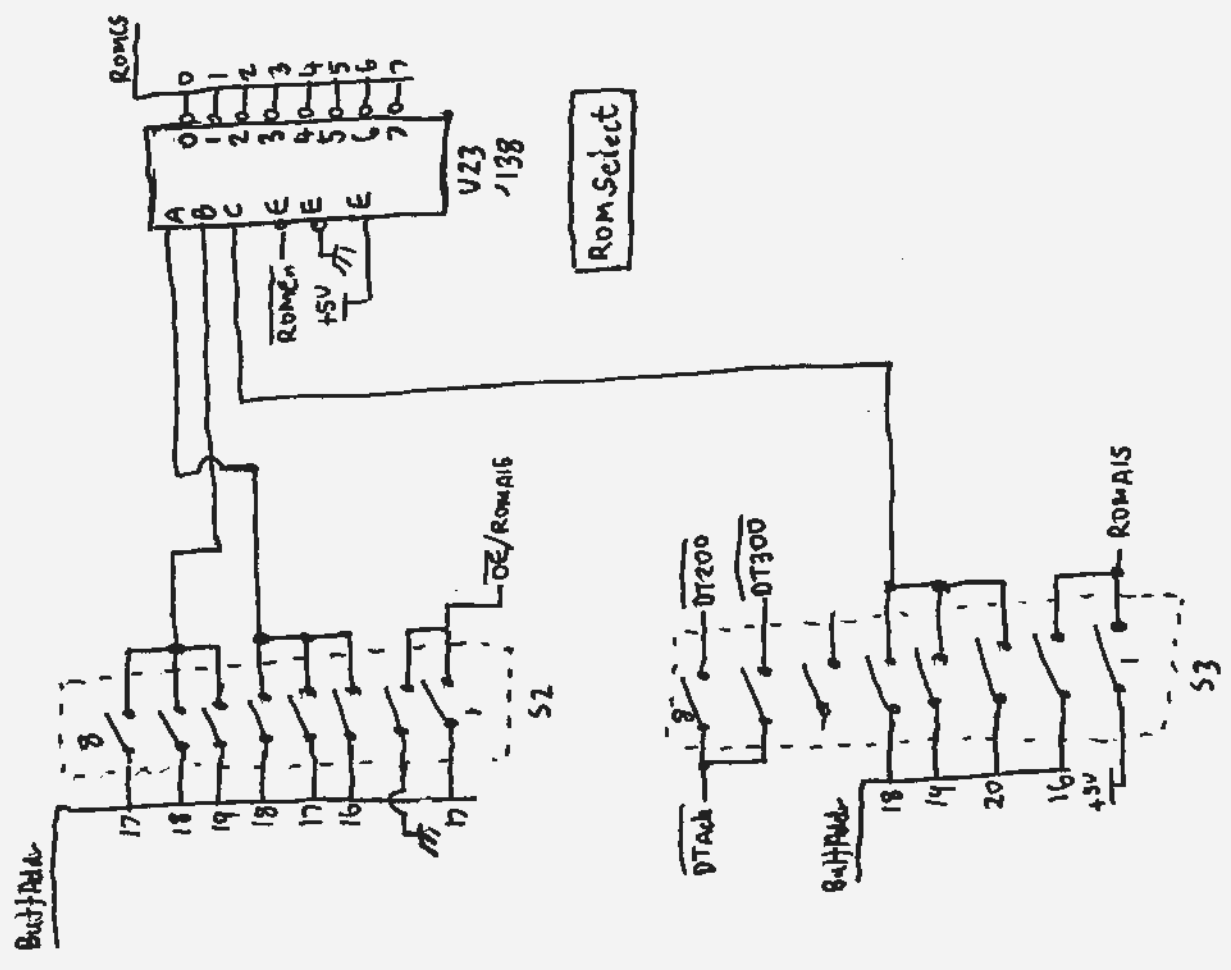
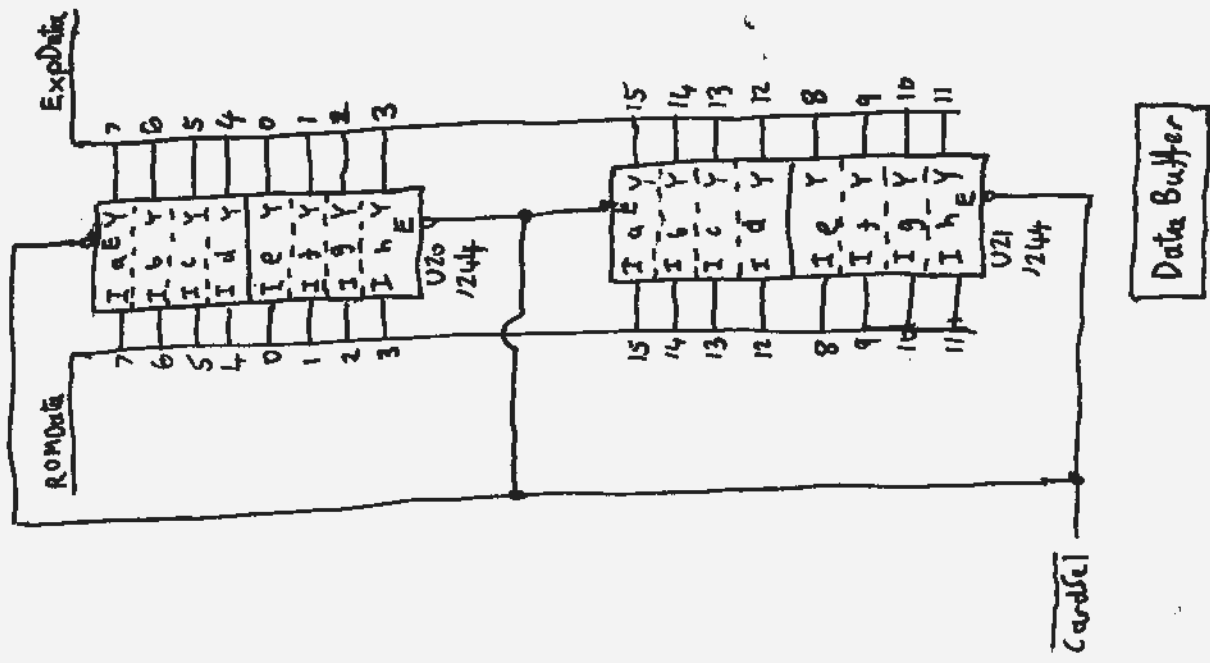
Module Sheet 1

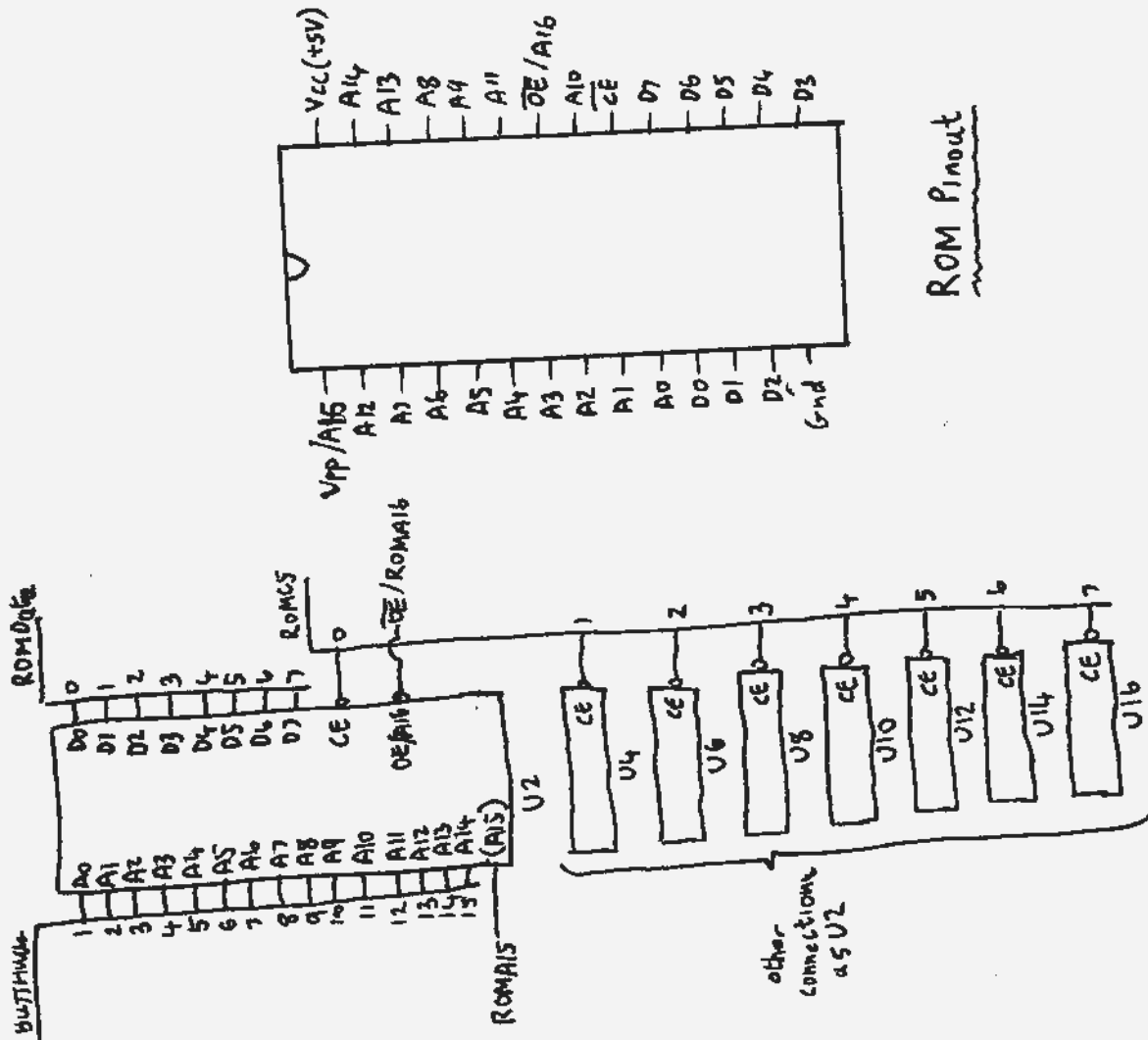
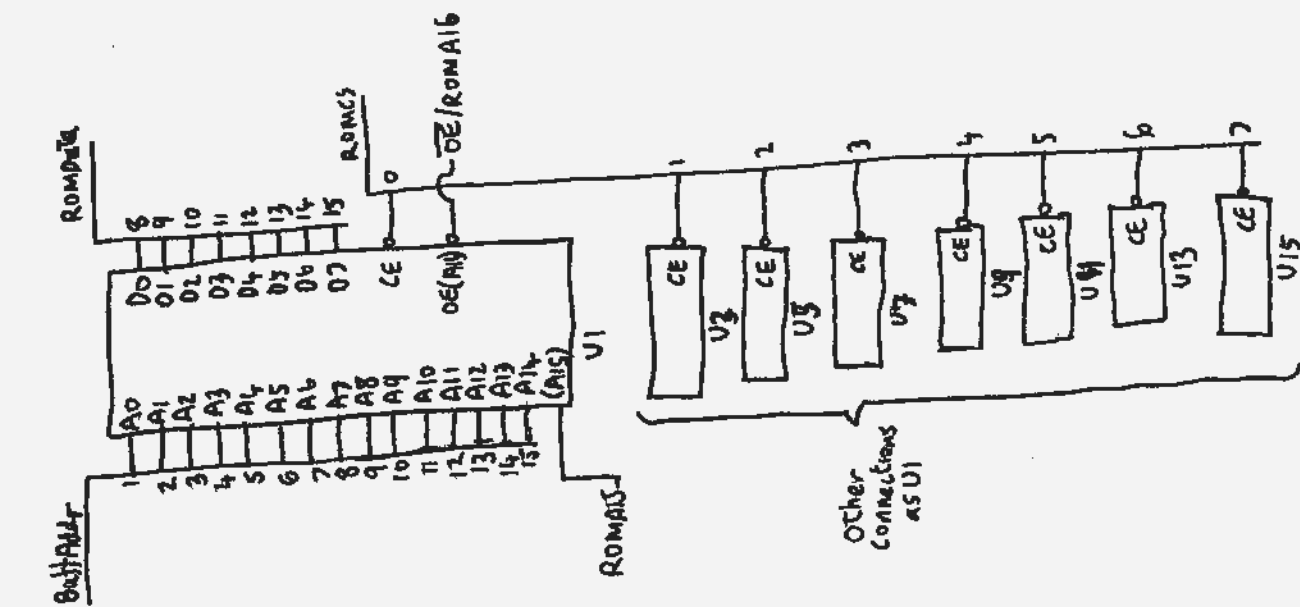
HP 82971 ROM/EPROM

(Expansion Slot)

(Daughterboard)







ROM Pinout

ROM