

HP87

AMS
↑

- 1
- 2 -12V
- 2 Gnd
- 2 Gnd
- 2 Gnd
- 2 Gnd
- 2 Gnd
- 2 Gnd
- 2 Gnd
- 2 +12VL
- 2 +12VL
- 2 -5V
- 2 +5V
- 2 +5V
- 2 +5V
- 2 +5V
- 2 +5V
- 2 +6V
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12VH
- 2 Vln
- 2 Vid bias
- 2 PSUSync

PSU → Logic1

- 2 Ø2
- 2 Gnd
- 2 Ø1
- 2 Gnd
- 2 B0
- 2 Gnd
- 2 B2
- 2 Gnd
- 2 B4
- 2 Gnd
- 2 B6
- 2 Gnd
- 2 Rd
- 2 Wr
- 2 Gnd
- 2 TRL
- 2 Gnd
- 2 KeyPRIL
- 2 +5V
- 2 Pwo
- 2 +5V
- 2 +6V
- 2 -12V
- 2 Spkr

- 1
- 2 Gnd
- 2 Ø2i
- 2 Gnd
- 2 Ø12
- 2 Gnd
- 2 B1
- 2 Gnd
- 2 B3
- 2 Gnd
- 2 B5
- 2 Gnd
- 2 B7
- 2 Gnd
- 2 LMA
- 2 Gnd
- 2 Hx16
- 2 +5V
- 2 +5V
- 2 +5V
- 2 Rdy
- 2 -5V
- 2 +12VL
- 2 +12VL
- 2 +12VL

Logic1 → Logic2

- 1
- 2 -5V
- 2 +5V
- 2 +6V
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 +12UH
- 2 Video
- 2 Vert
- 2 Horiz

Logic1 → Video

CHS
↑

HP87

TOP
↑

- ↳ R0
- ↳ R1
- ↳ R2
- ↳ R3
- ↳ R4
- ↳ R5
- ↳ R6
- ↳ R7
- ↳ R8
- ↳ R9
- ↳ Gnd

- ↳ C5
- ↳ C6
- ↳ C7
- ↳ KC
- ↳ C4
- ↳ C3
- ↳ C2
- ↳ C1
- ↳ C0
- ↳ KCL
- ↳ KS

- ↳ Gnd
- ↳ φ21
- ↳ Gnd
- ↳ φ12
- ↳ Gnd
- ↳ B1X
- ↳ Gnd
- ↳ B3X
- ↳ Gnd
- ↳ B5X
- ↳ Gnd
- ↳ B7X
- ↳ Gnd
- ↳ LMAX
- ↳ Gnd
- ↳ MUX
- ↳ RC
- ↳ +5V
- ↳ ROMDIS
- ↳ +5V
- ↳ Rdy
- ↳ +6V
- ↳ -12V
- ↳ +12VL

- ↳ φ2
- ↳ Gnd
- ↳ φ1
- ↳ Gnd
- ↳ BOX
- ↳ Gnd
- ↳ B2X
- ↳ Gnd
- ↳ B4X
- ↳ Gnd
- ↳ B6X
- ↳ Gnd
- ↳ R1X
- ↳ LMX
- ↳ Gnd
- ↳ TRCX
- ↳ Gnd
- ↳ TRANSPRIL
- ↳ +5V
- ↳ PWD
- ↳ +5V
- ↳ -5V
- ↳ +12VL
- ↳ Spkr

Logic 1 → Keyboard

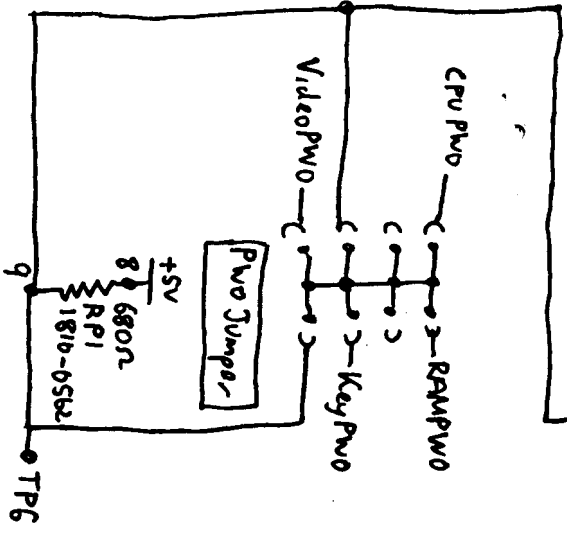
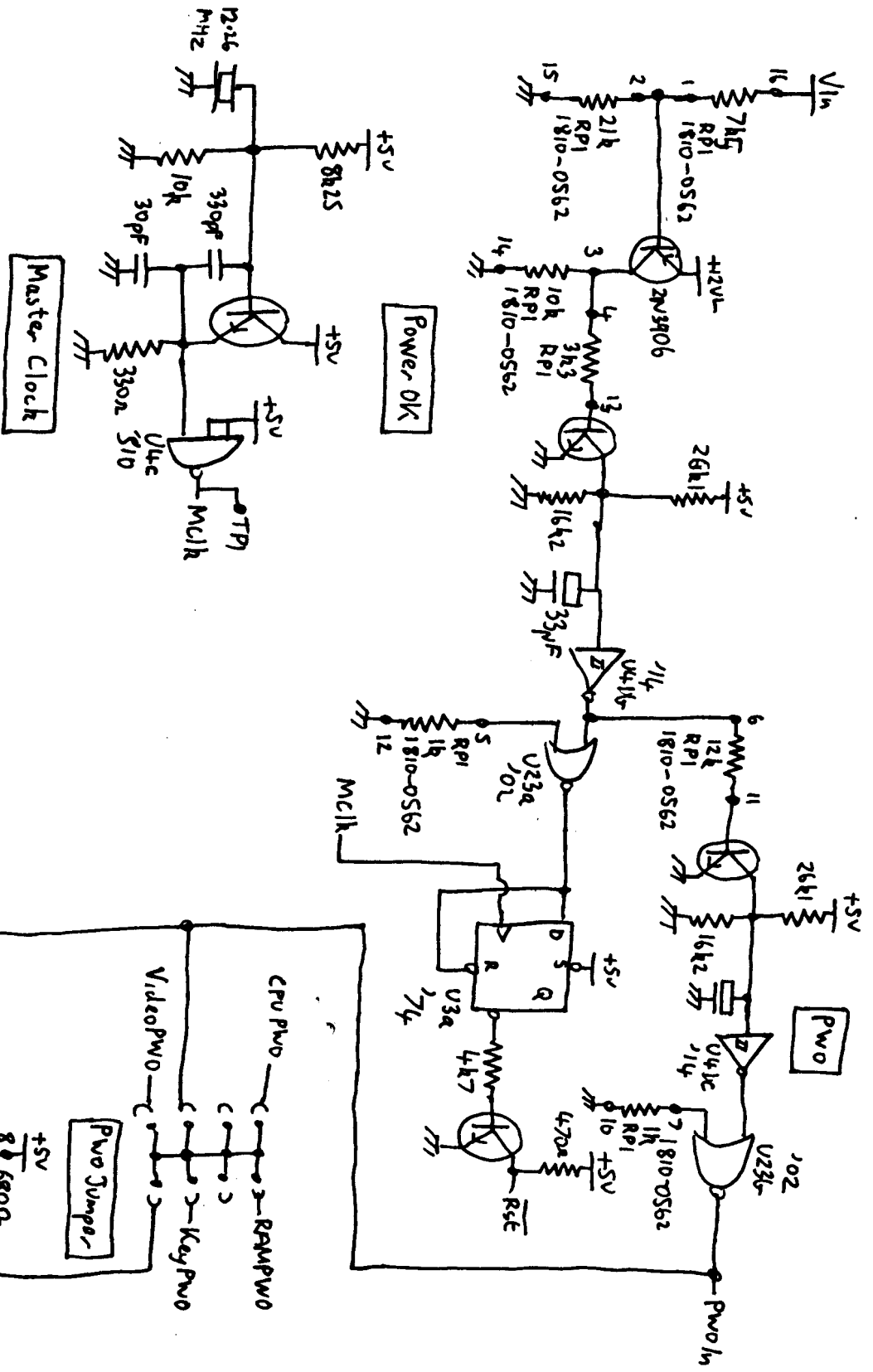
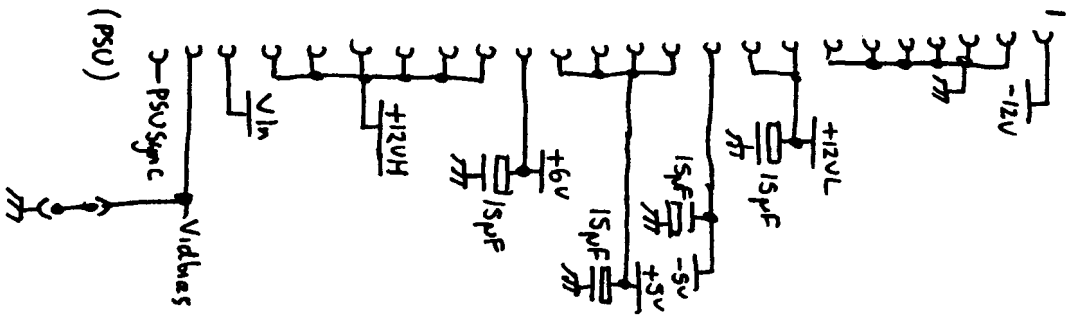
TOP
↑

Logic 2 → I/O Backplane

- | | |
|-------------|--------|
| ↳ SySctl | ↳ ATN |
| ↳ MPiBAddr | ↳ Gnd |
| ↳ MPiBAddr3 | ↳ SRQ |
| ↳ MPiBAddr2 | ↳ Gnd |
| ↳ MPiBAddr1 | ↳ IFC |
| ↳ MPiBAddr0 | ↳ Gnd |
| ↳ SC2 | ↳ NDAC |
| ↳ SC1 | ↳ Gnd |
| ↳ SC0 | ↳ NRFD |
| ↳ D108 | ↳ Gnd |
| ↳ D107 | ↳ DAV |
| ↳ D106 | ↳ Gnd |
| ↳ D105 | ↳ EOI |
| ↳ D104 | ↳ Gnd |
| ↳ D103 | ↳ REN |
| ↳ D102 | ↳ Gnd |
| ↳ D101 | ↳ PPOL |

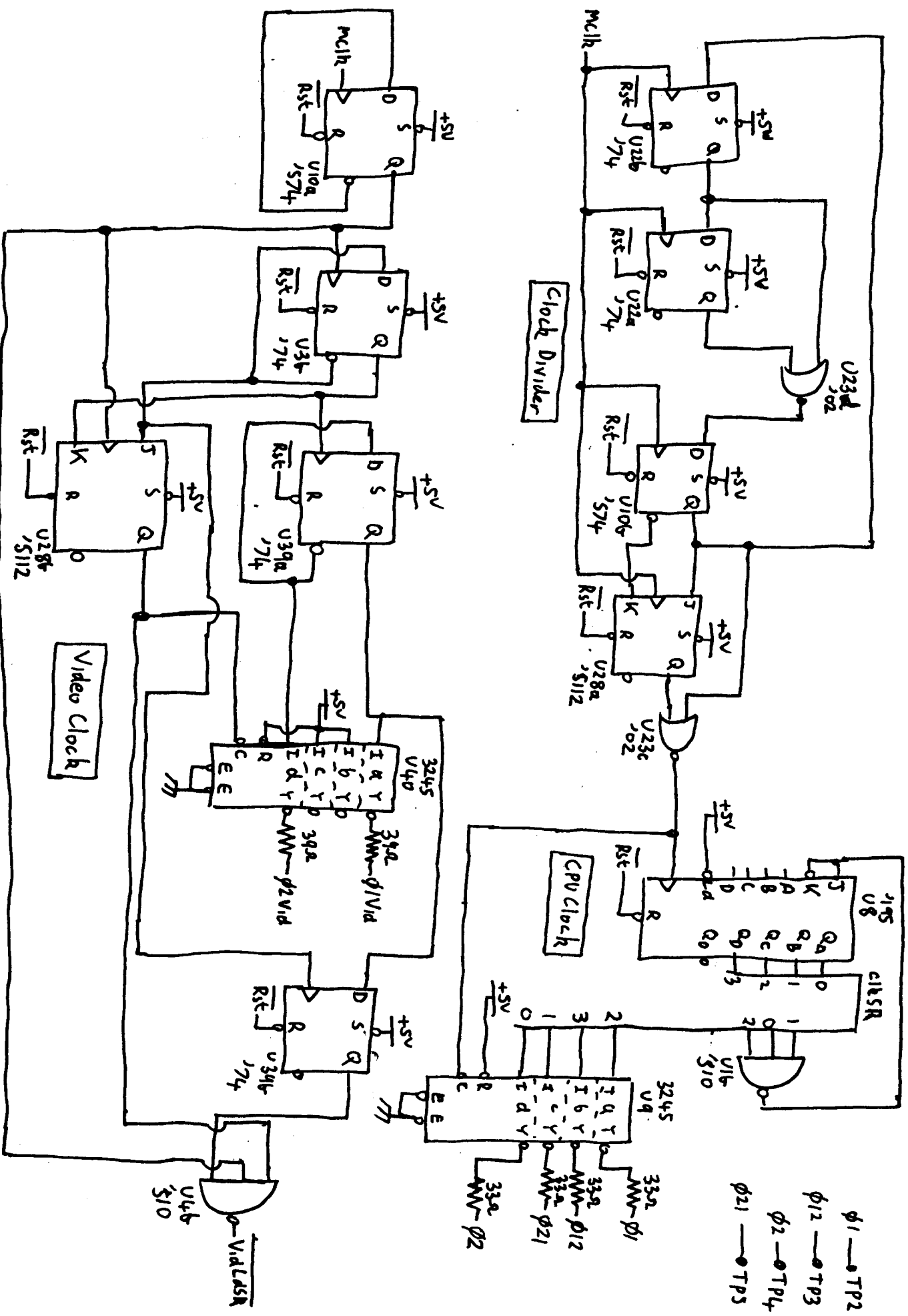
Logic 2 → MPiB

RHS
↑

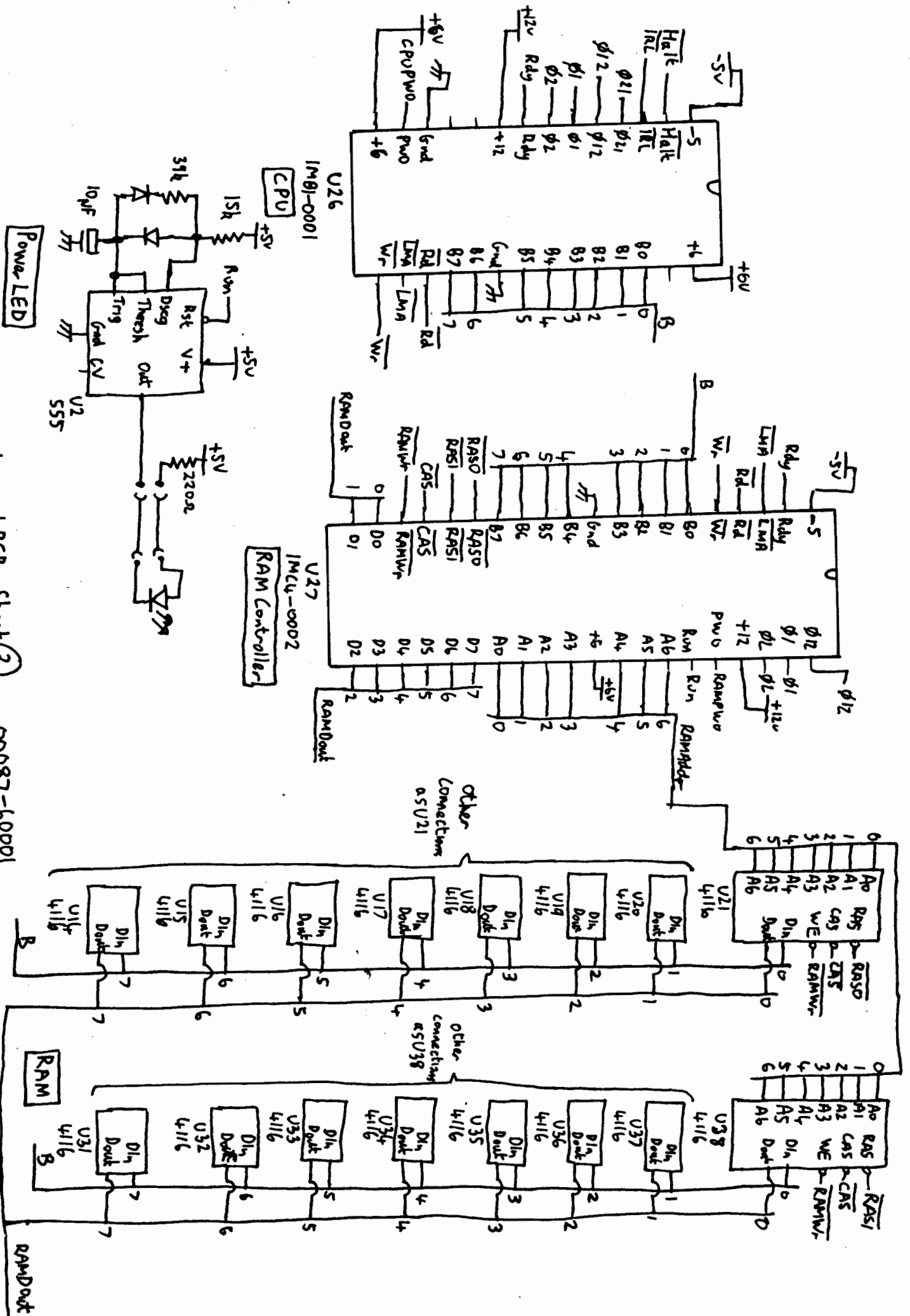


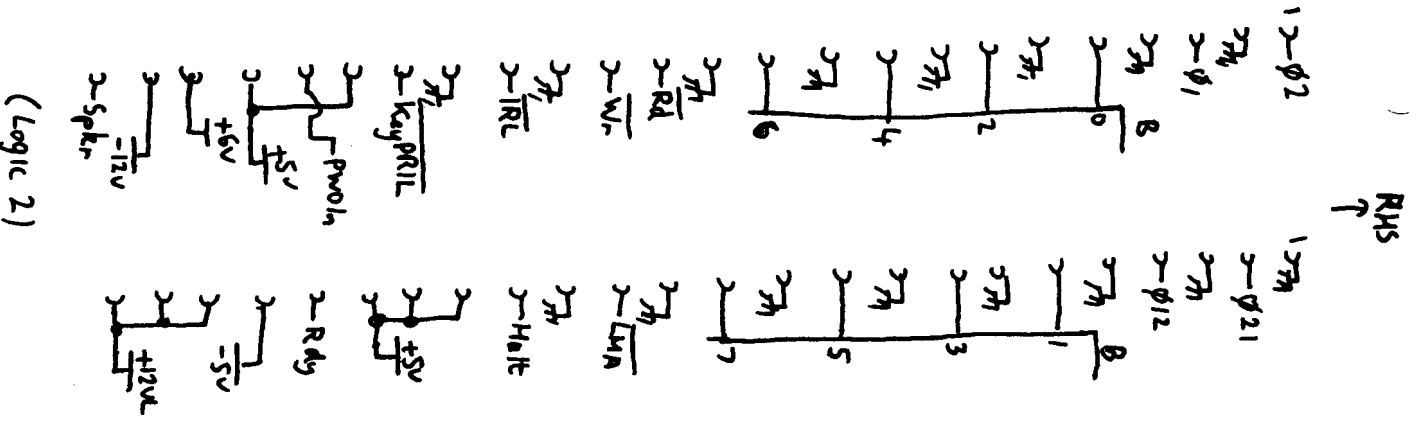
HP87 Logic PCB sheet ①

00087-60001

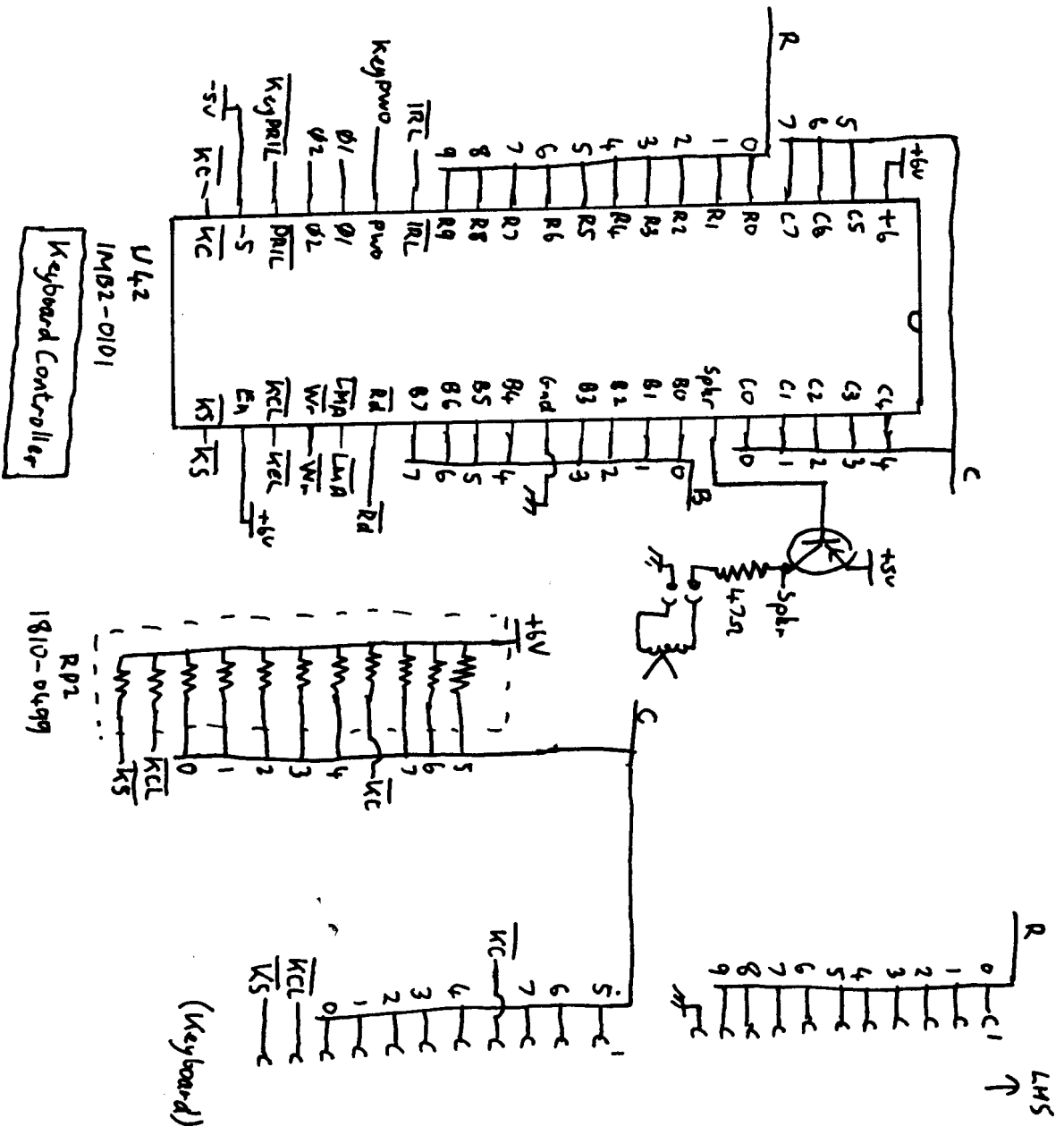


- φ1 —● TP2
- φ12 —● TP3
- φ2 —● TP4
- φ21 —● TP5



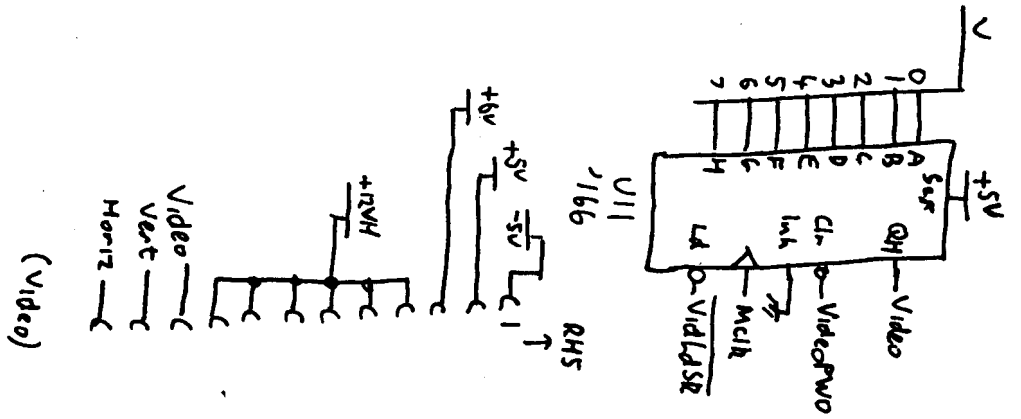
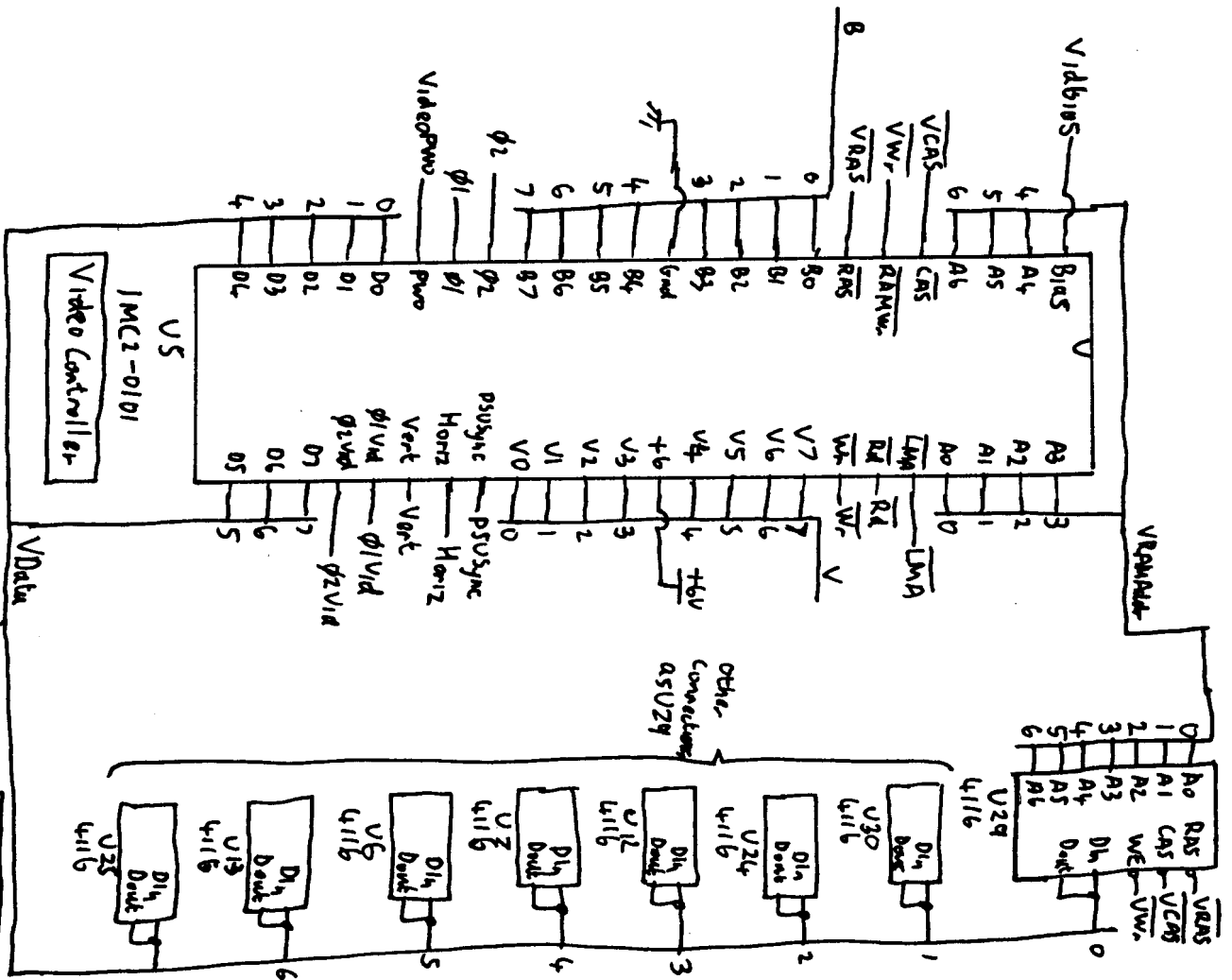


(Logic 2)

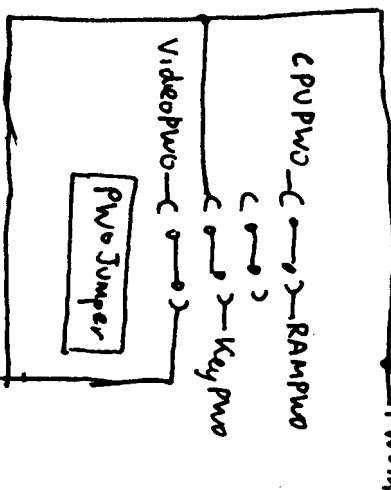
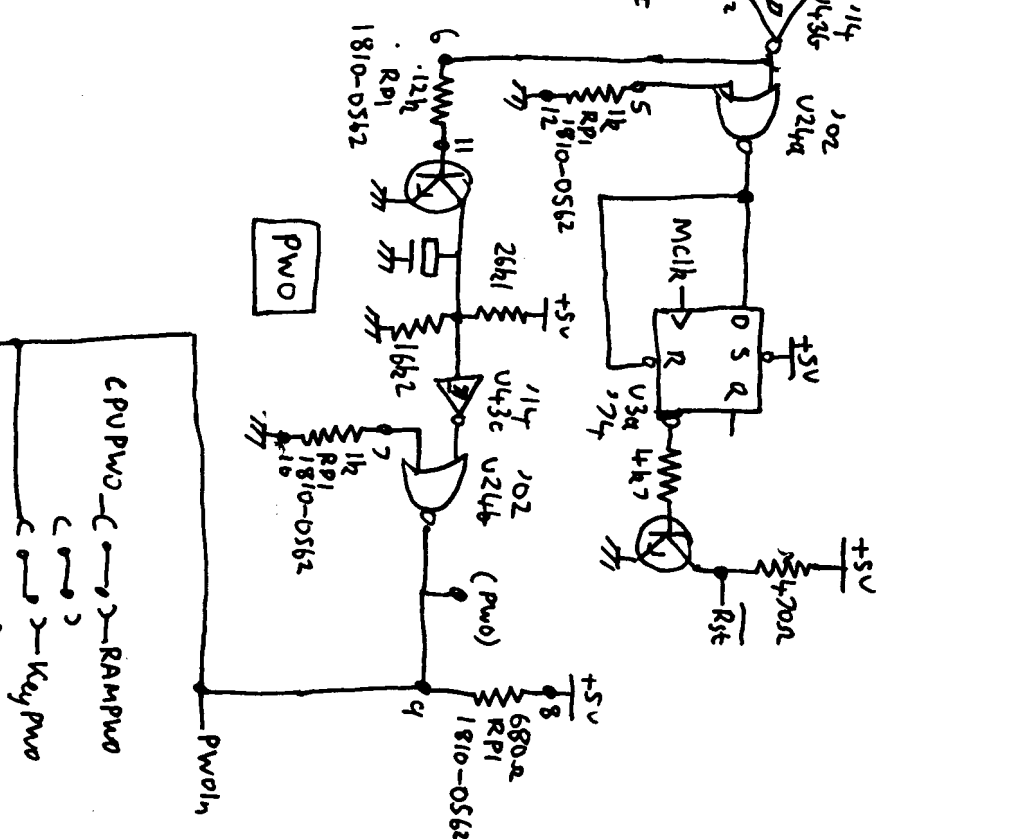
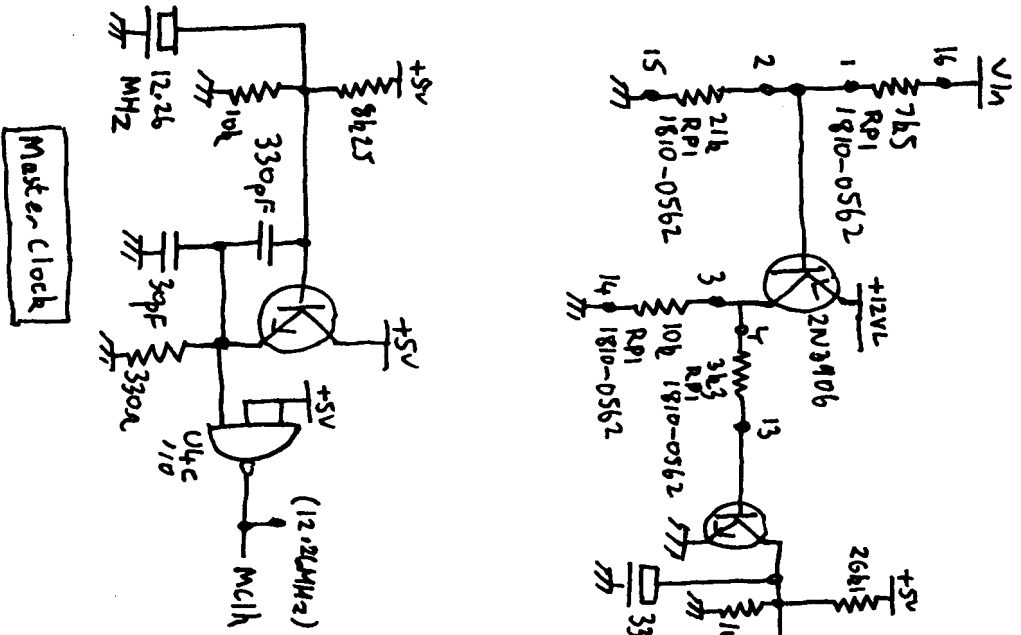
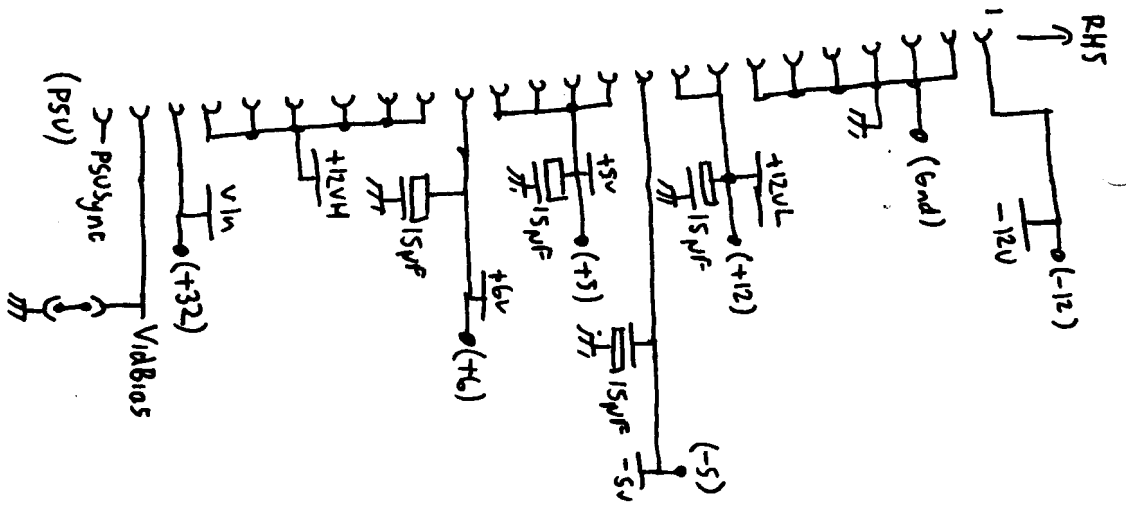


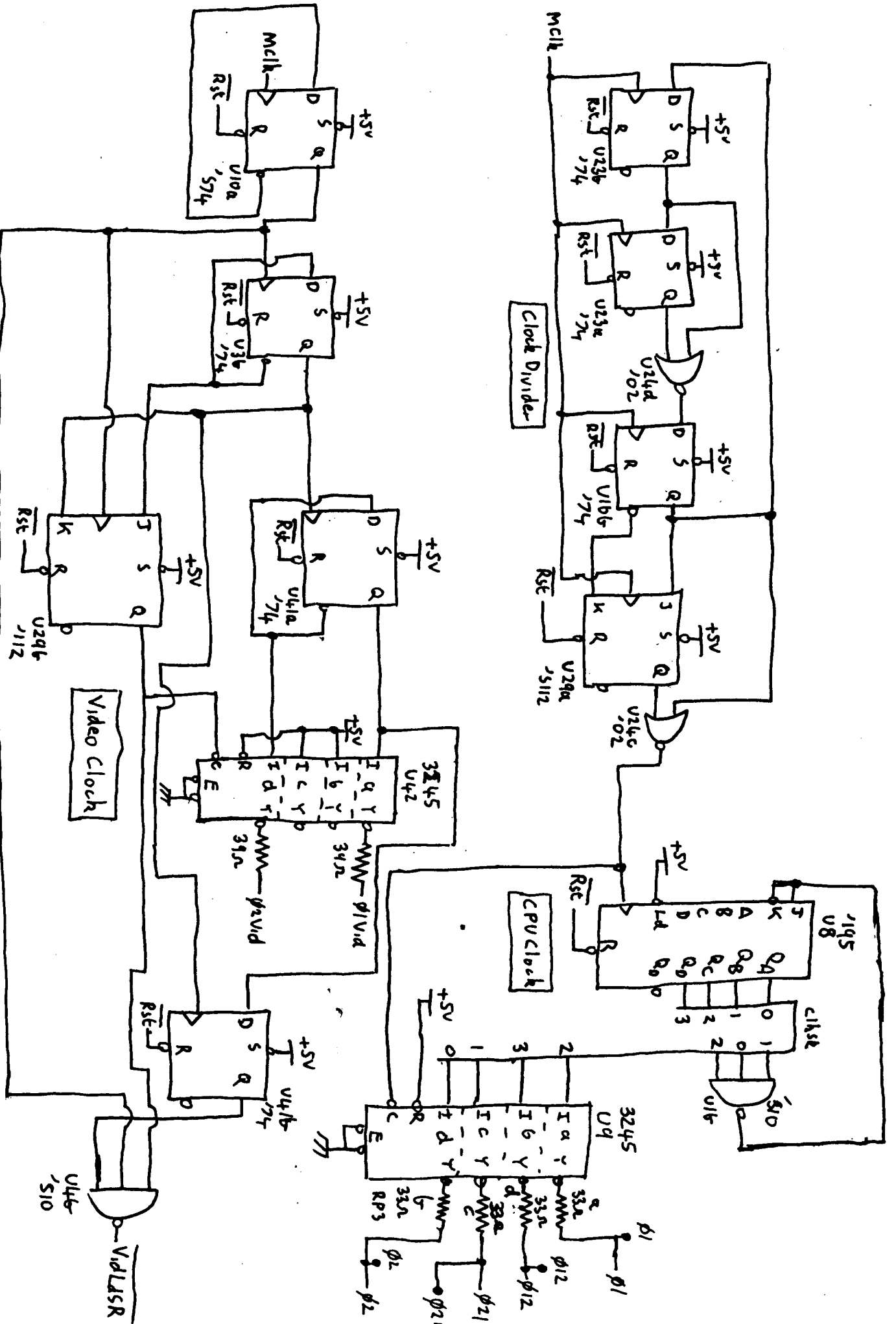
HP87 Logic 1 PCB Sheet (4) 00087-60001

HP87 Logic 1 PCB Skat 5



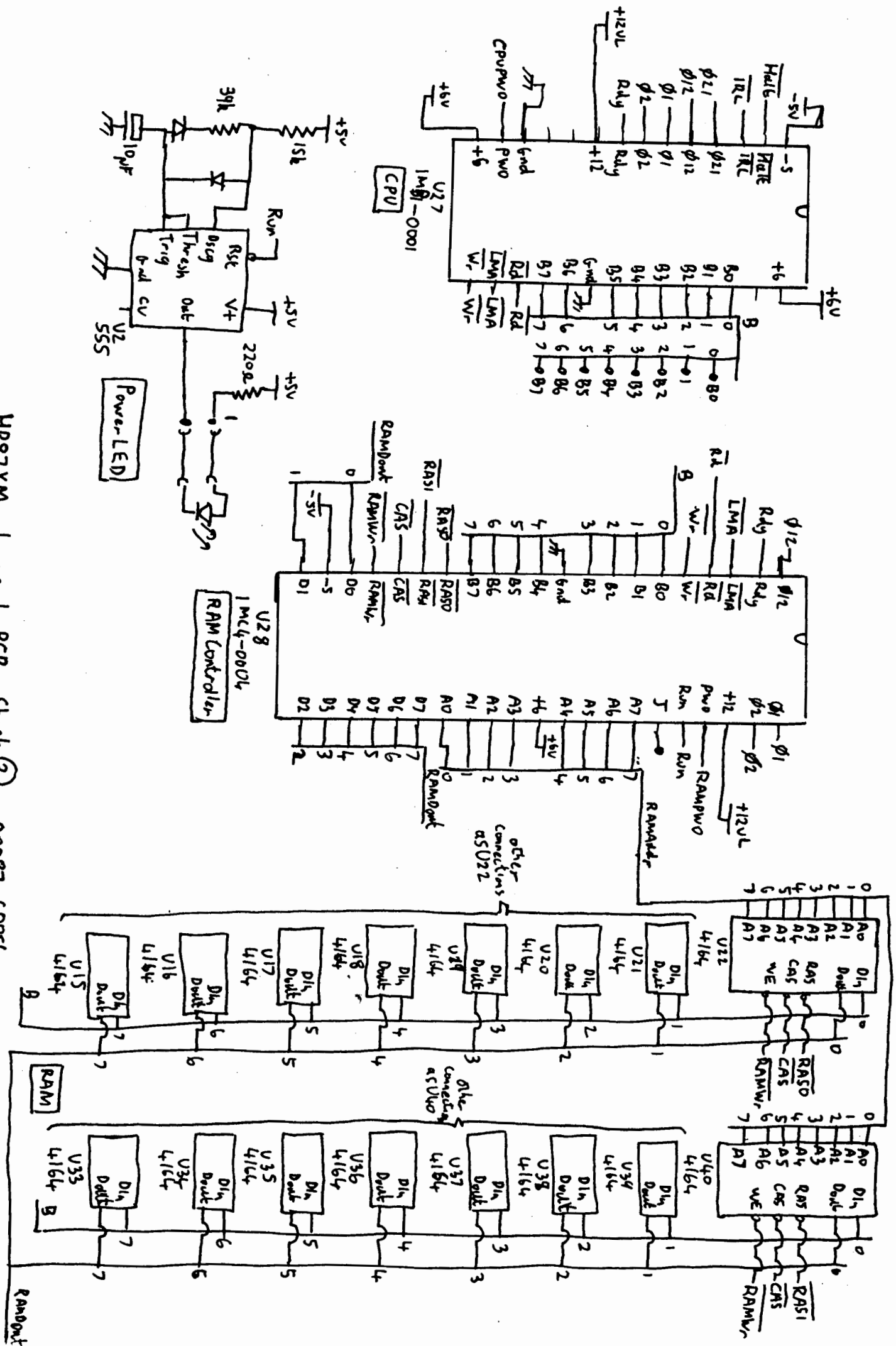
00087-60001





HP87XM Logic 1 PCB sheet 3

00087-60056



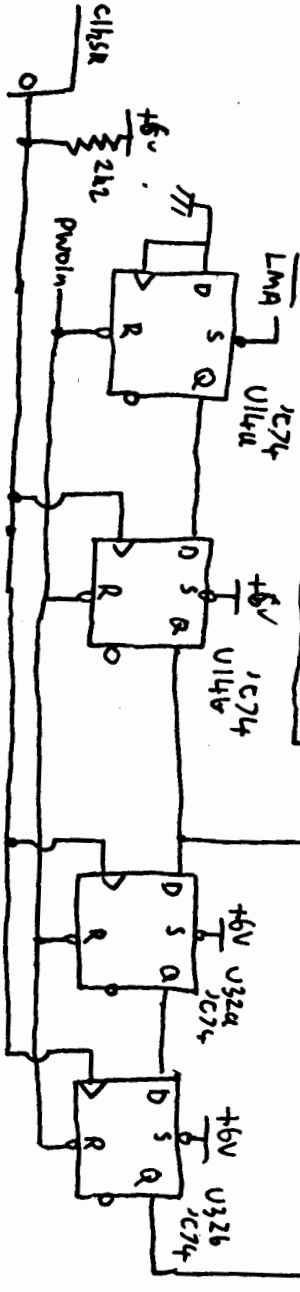
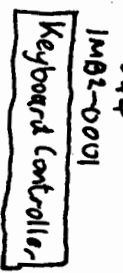
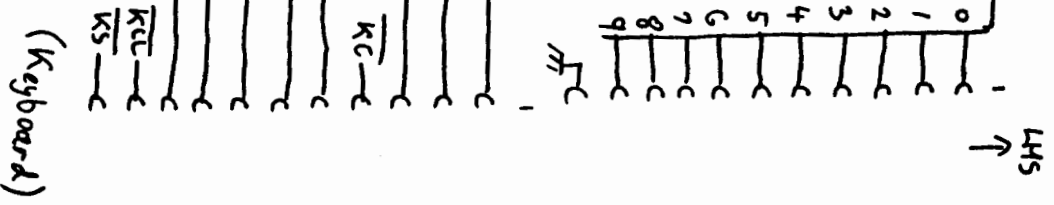
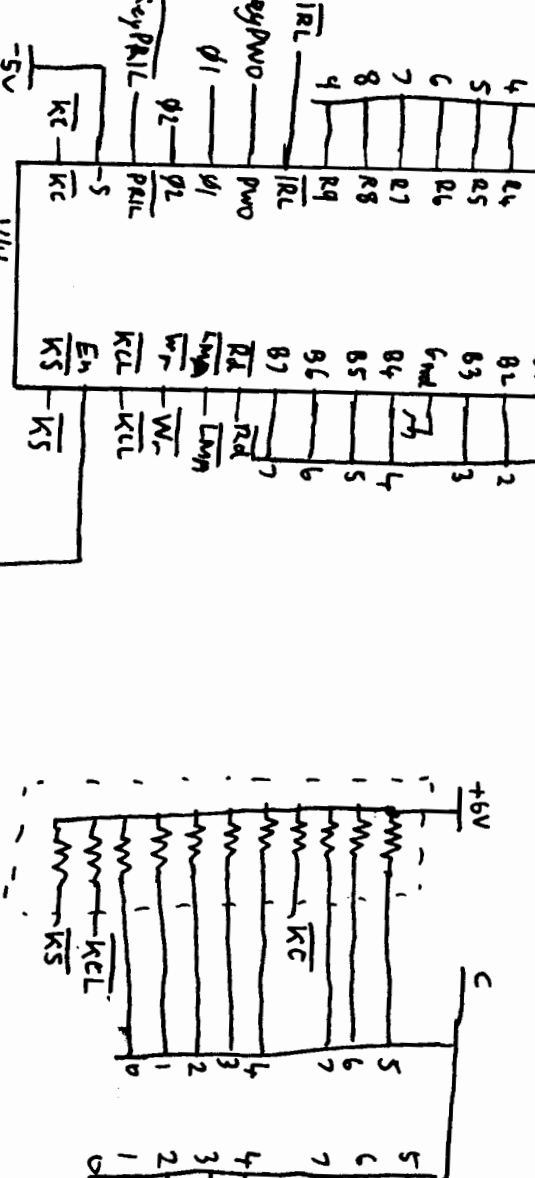
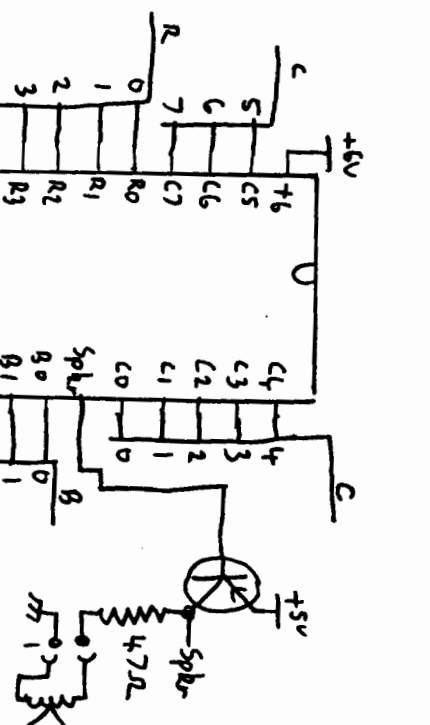
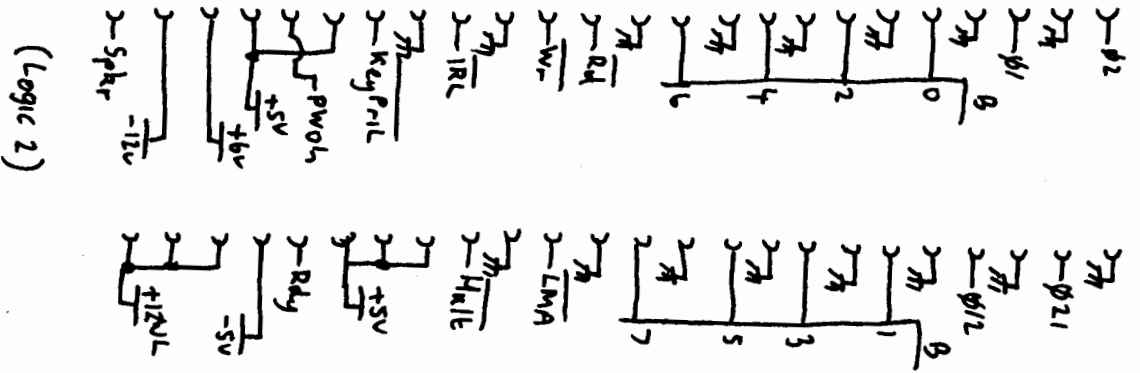
RAM

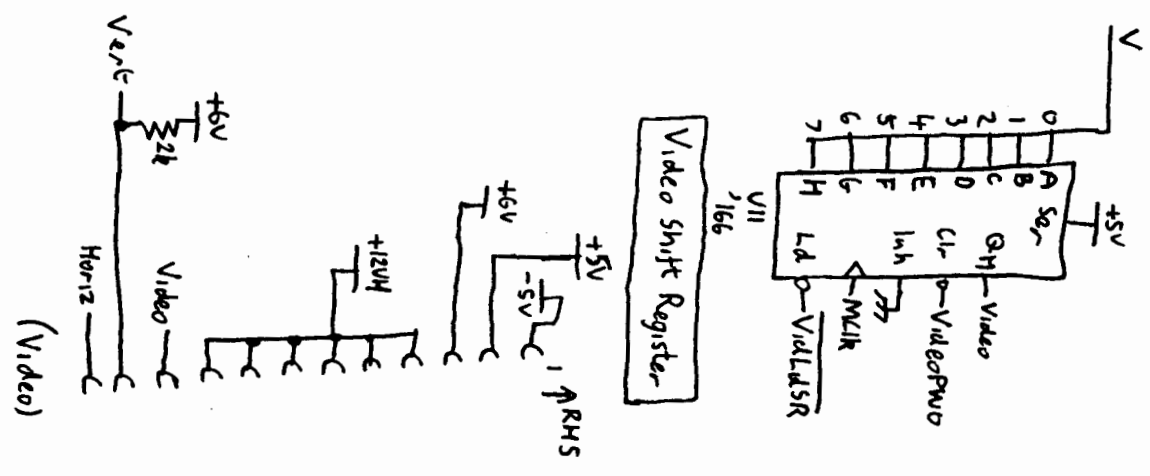
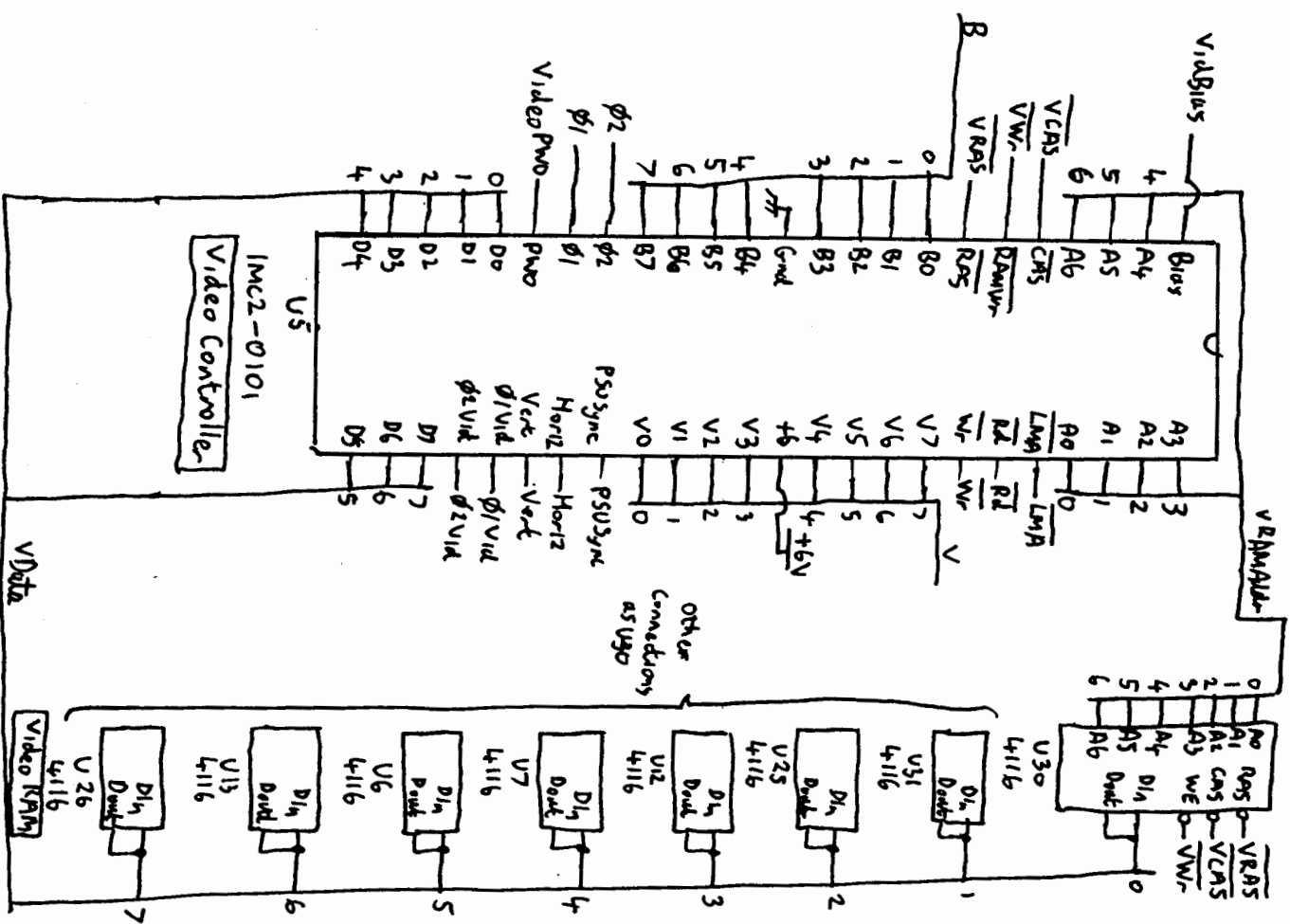
RAM

CPU

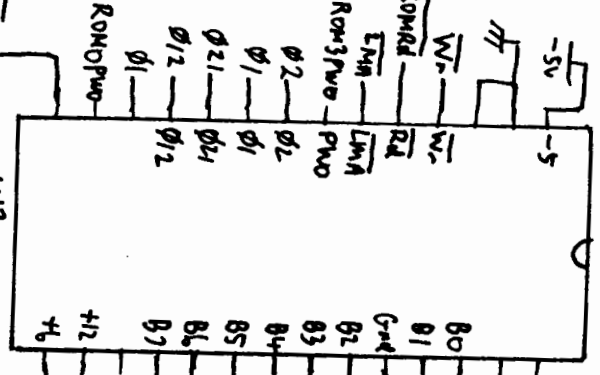
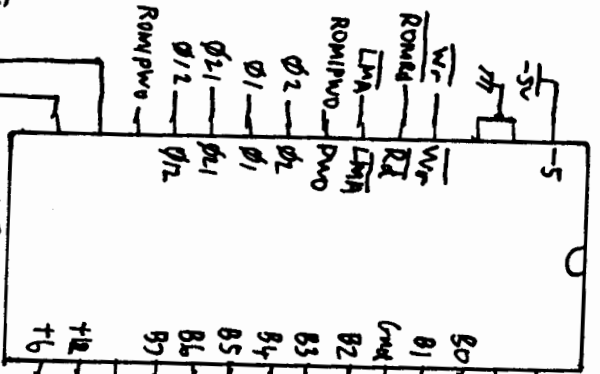
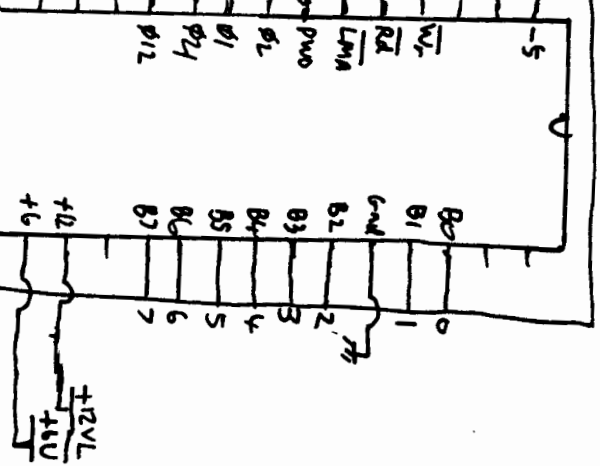
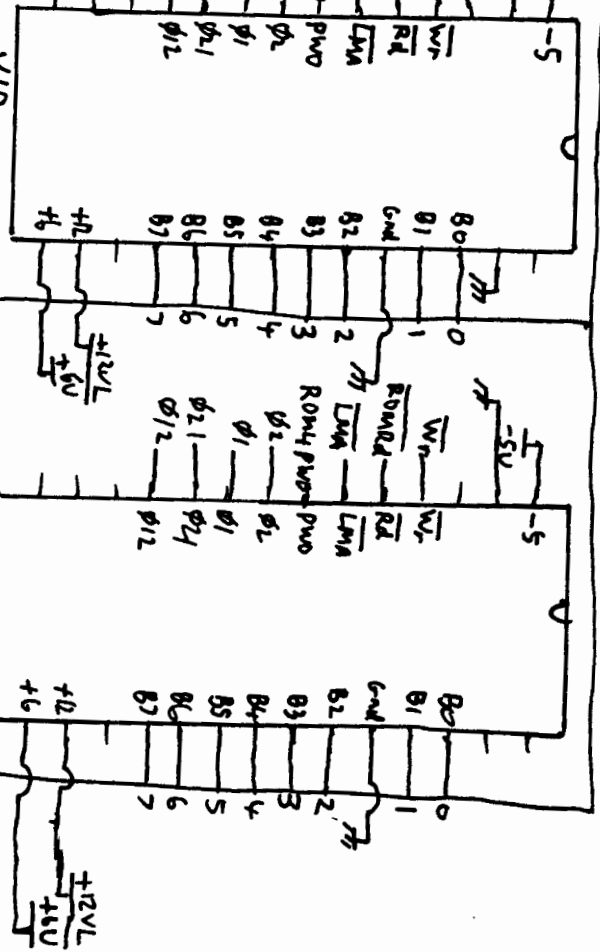
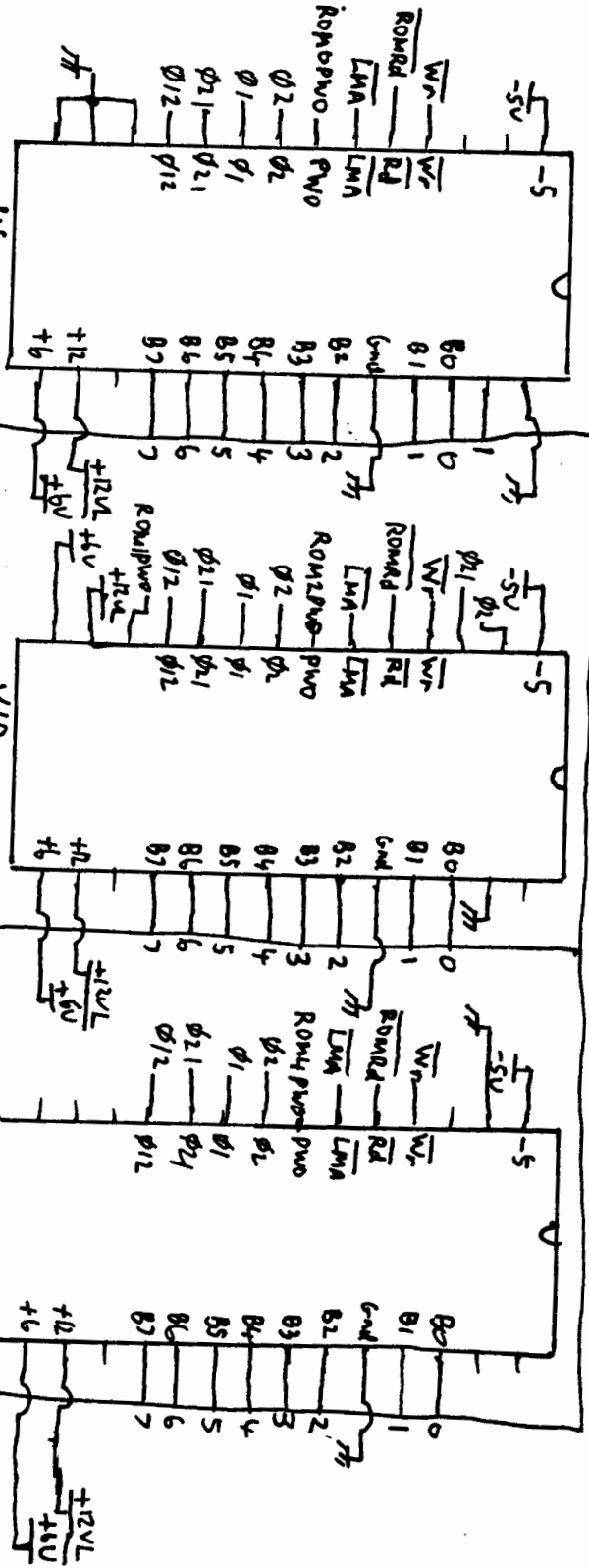
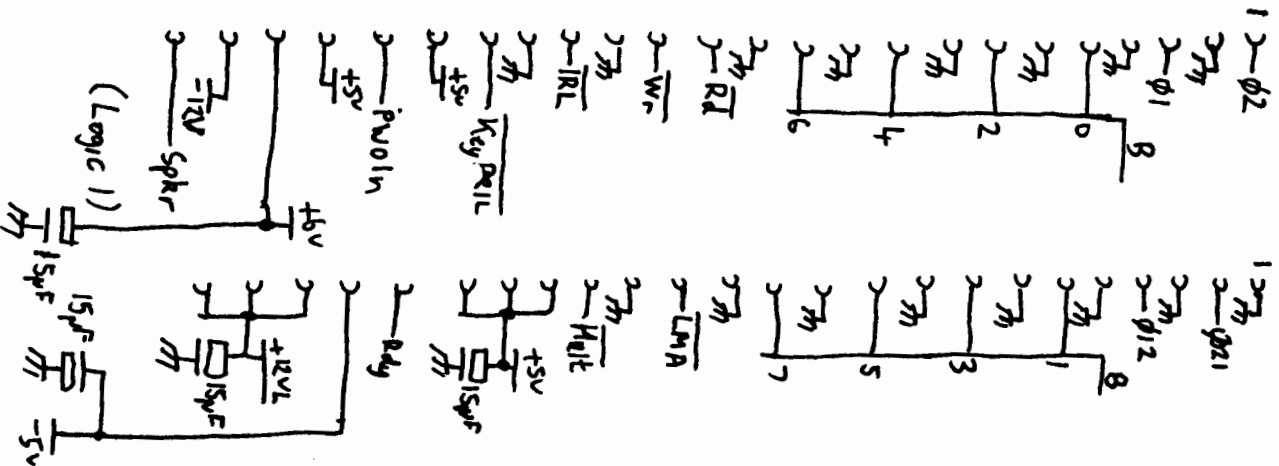
Power-LED

RAM Controller



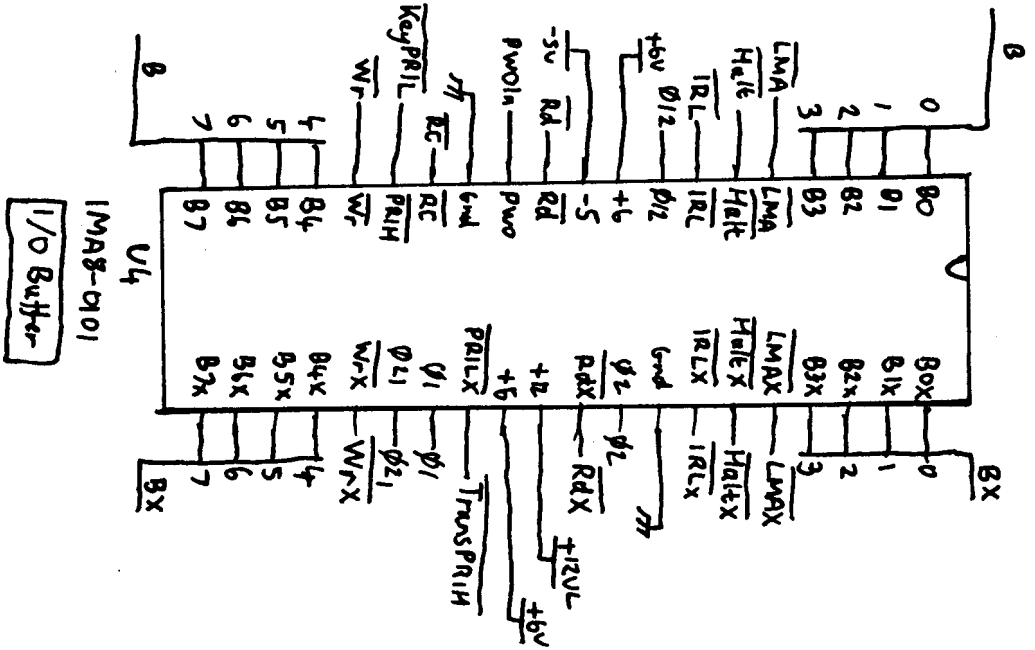
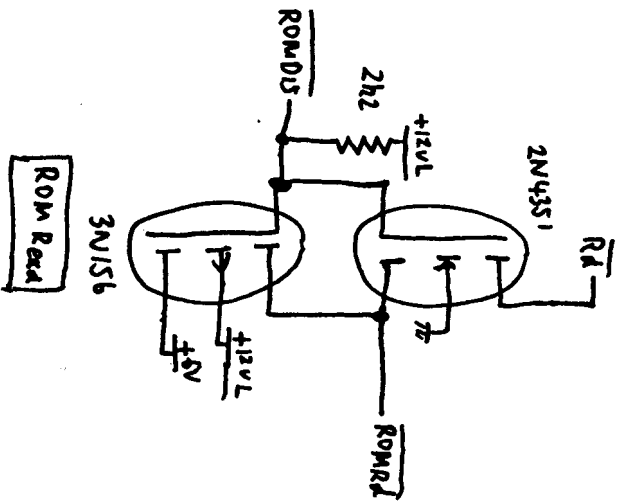
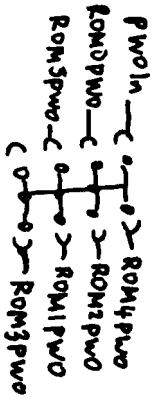


TOP
Rear

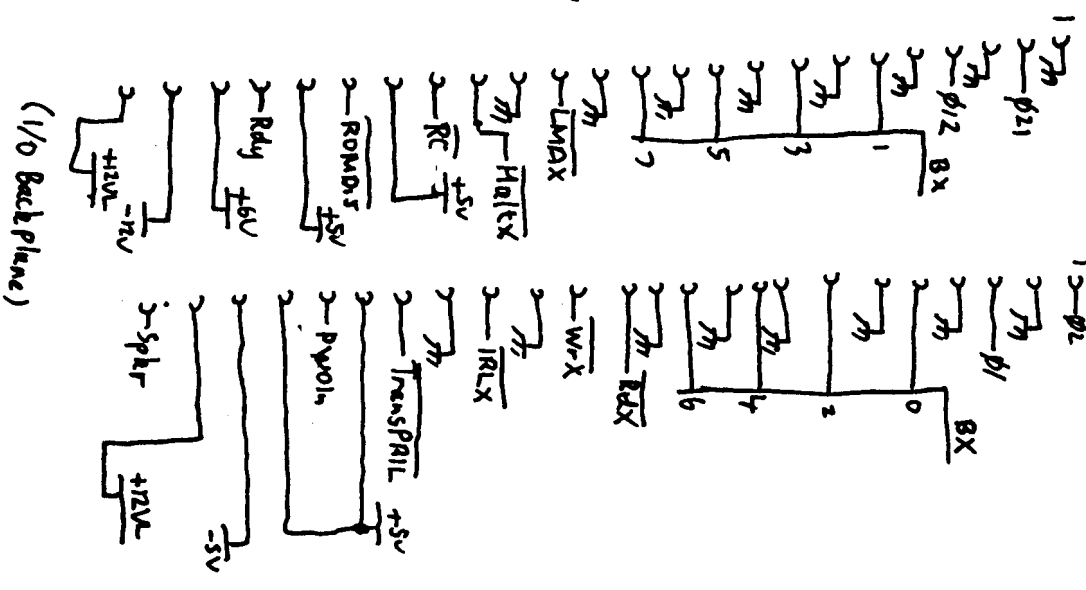


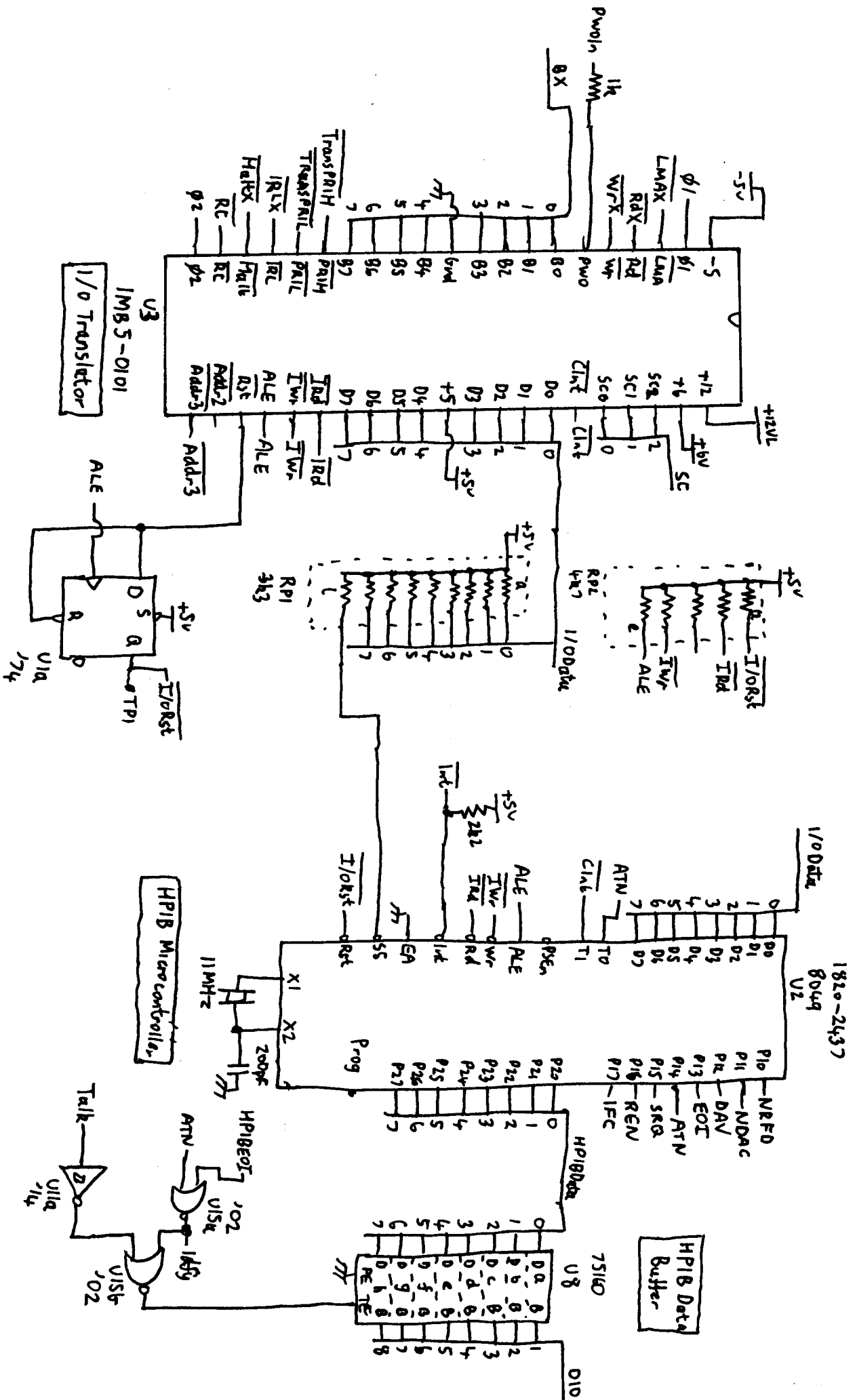
HP87 Logic 2 PCB Sheet ① 00087-60002

ROM

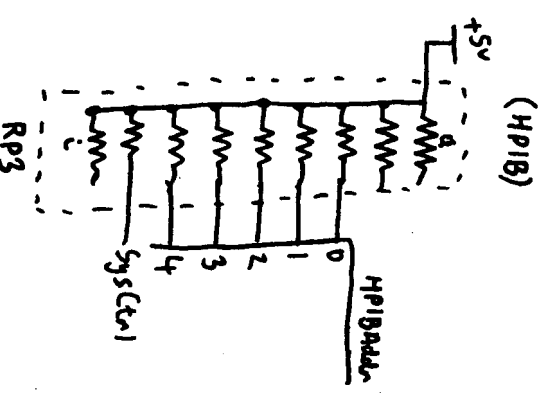
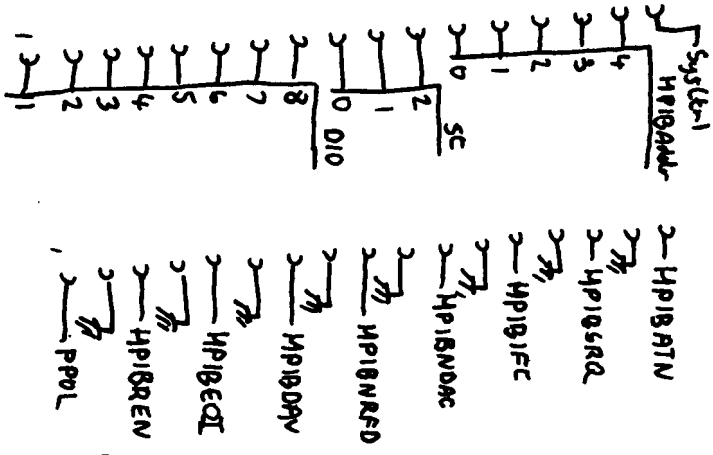


Top → Rear

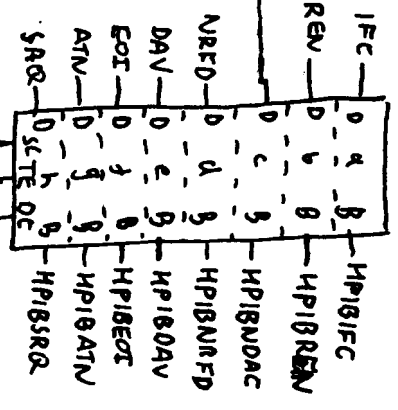




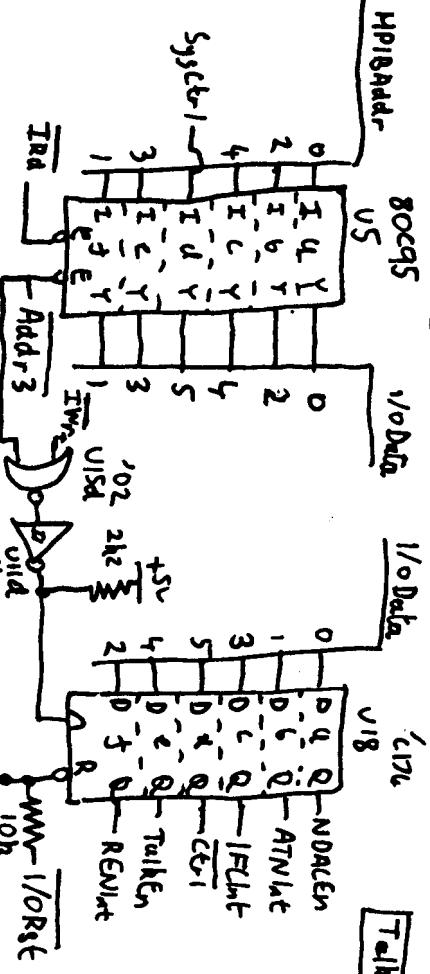
Top
 ↓ Rear



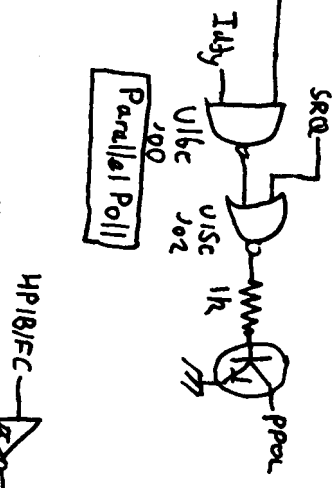
HP18 Control Buffer



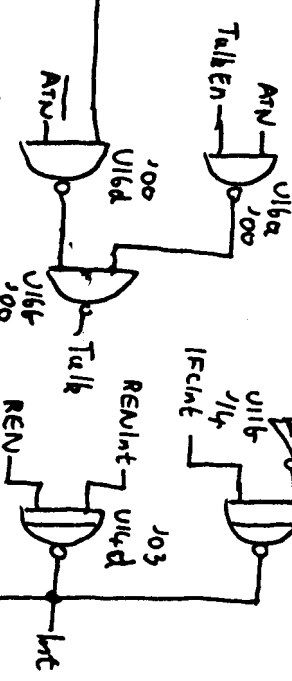
Config Switch Buffer



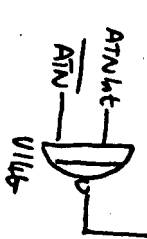
Parallel Poll



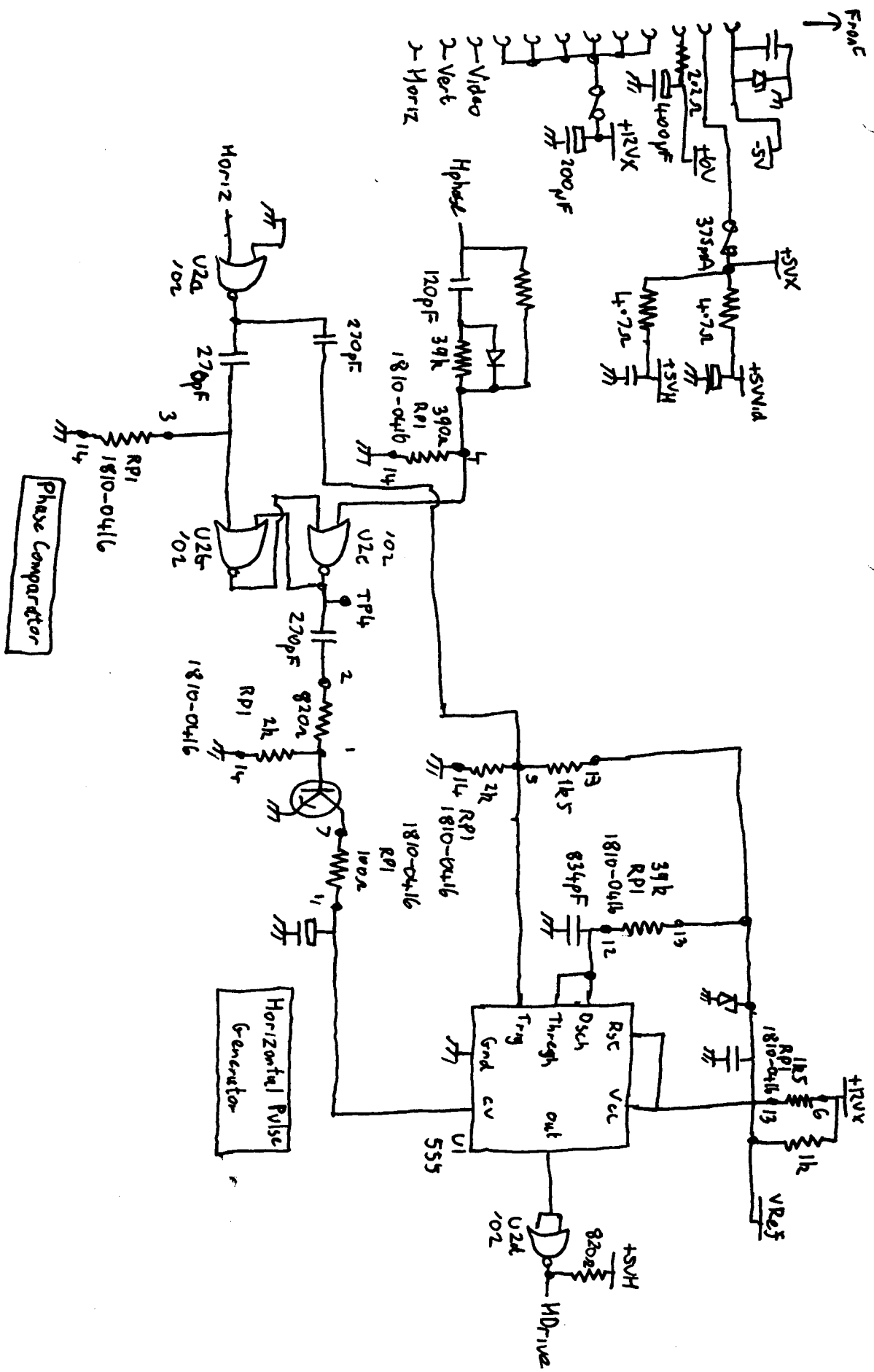
Talk Control

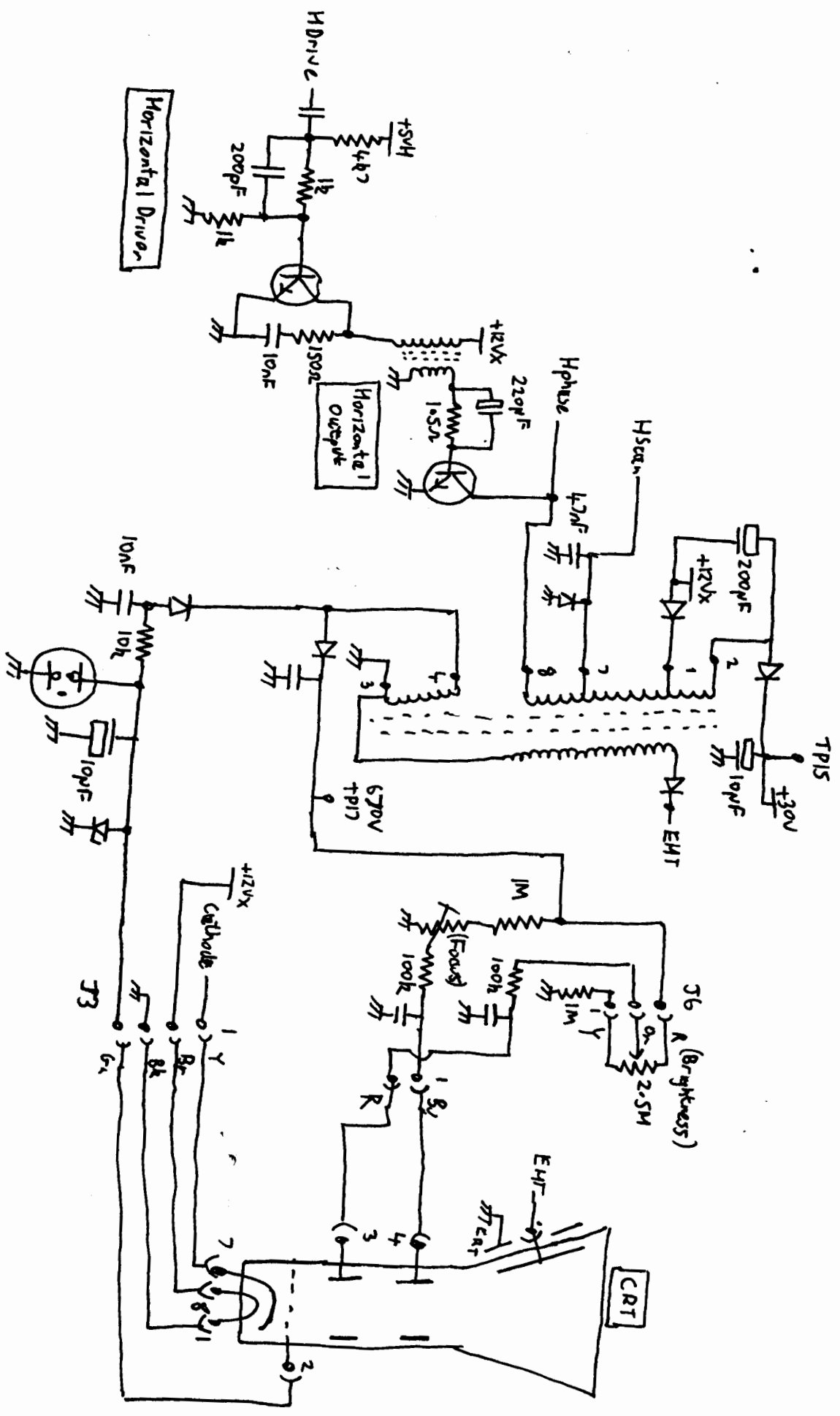


HP18 Interrupt

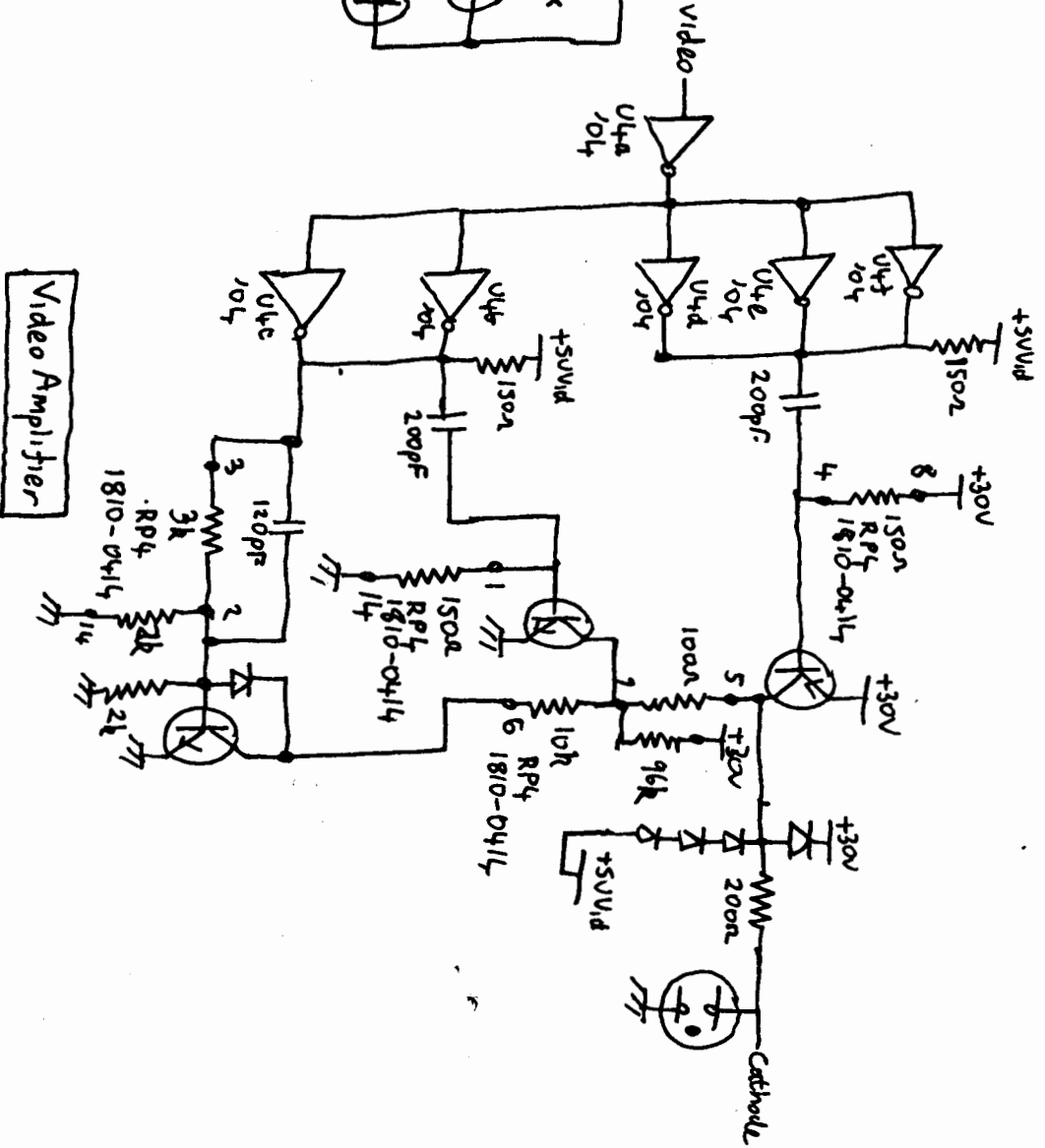
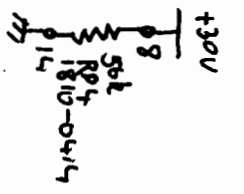
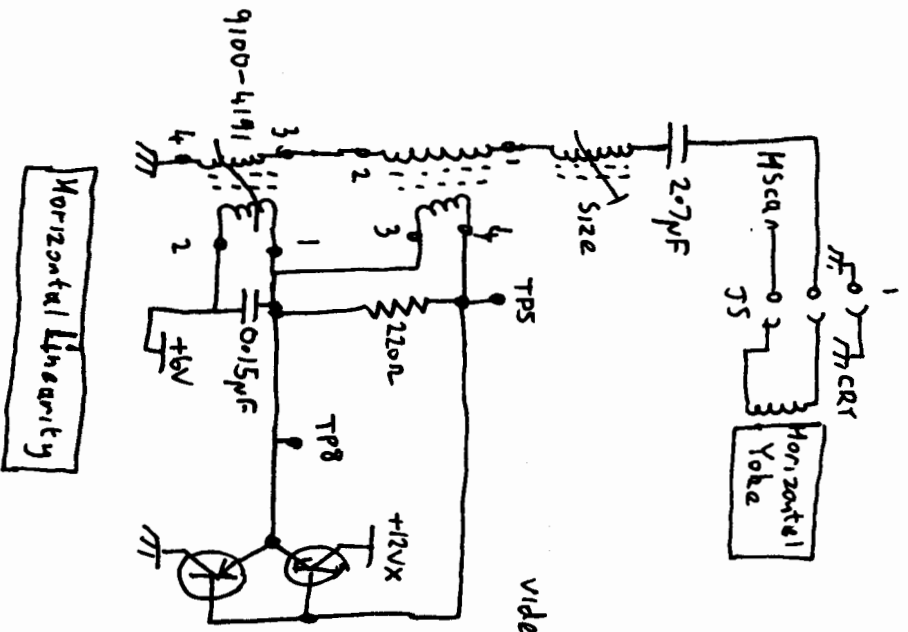


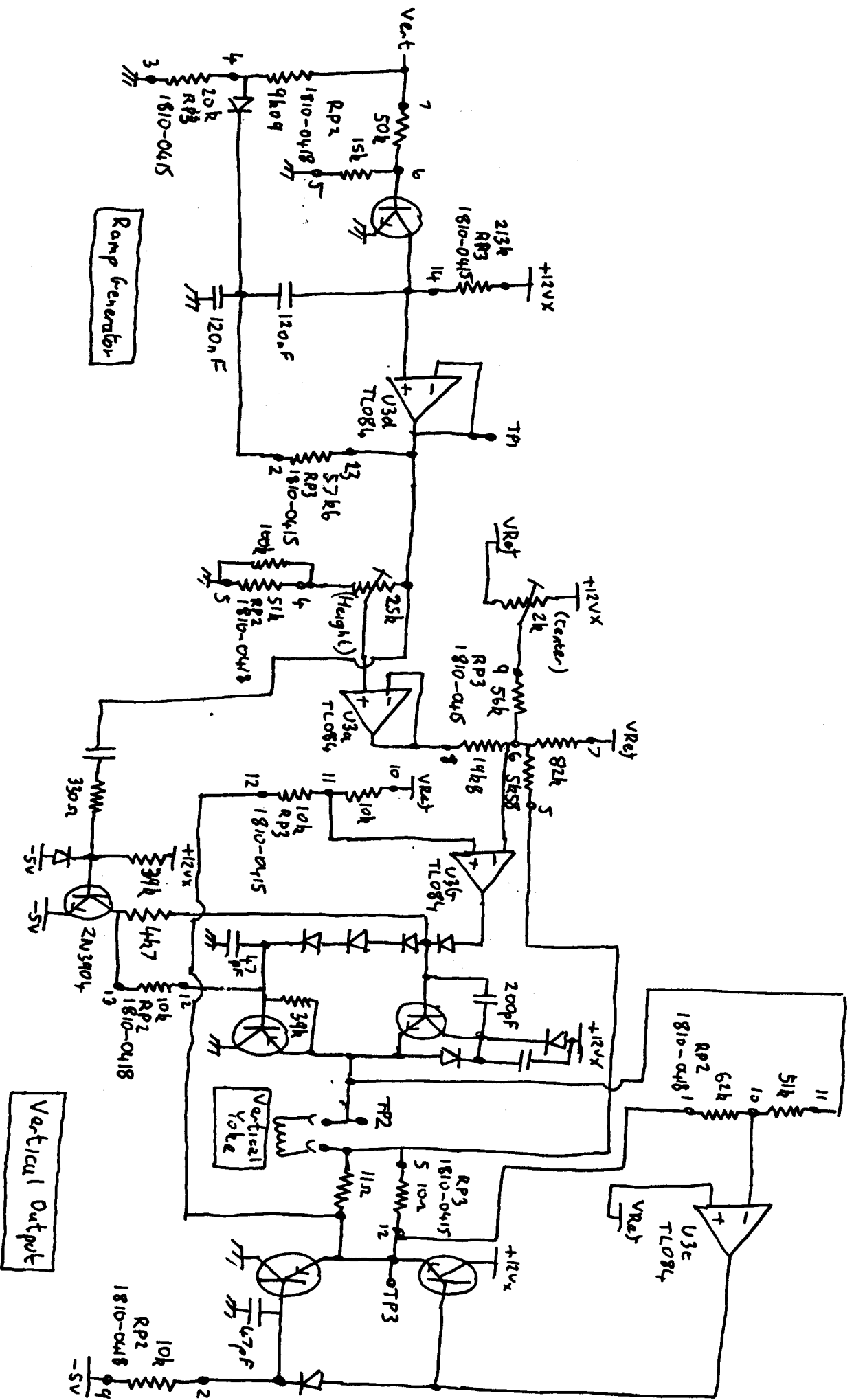
HP87 Logic 2 PCB Sheet (4) 00087-60002





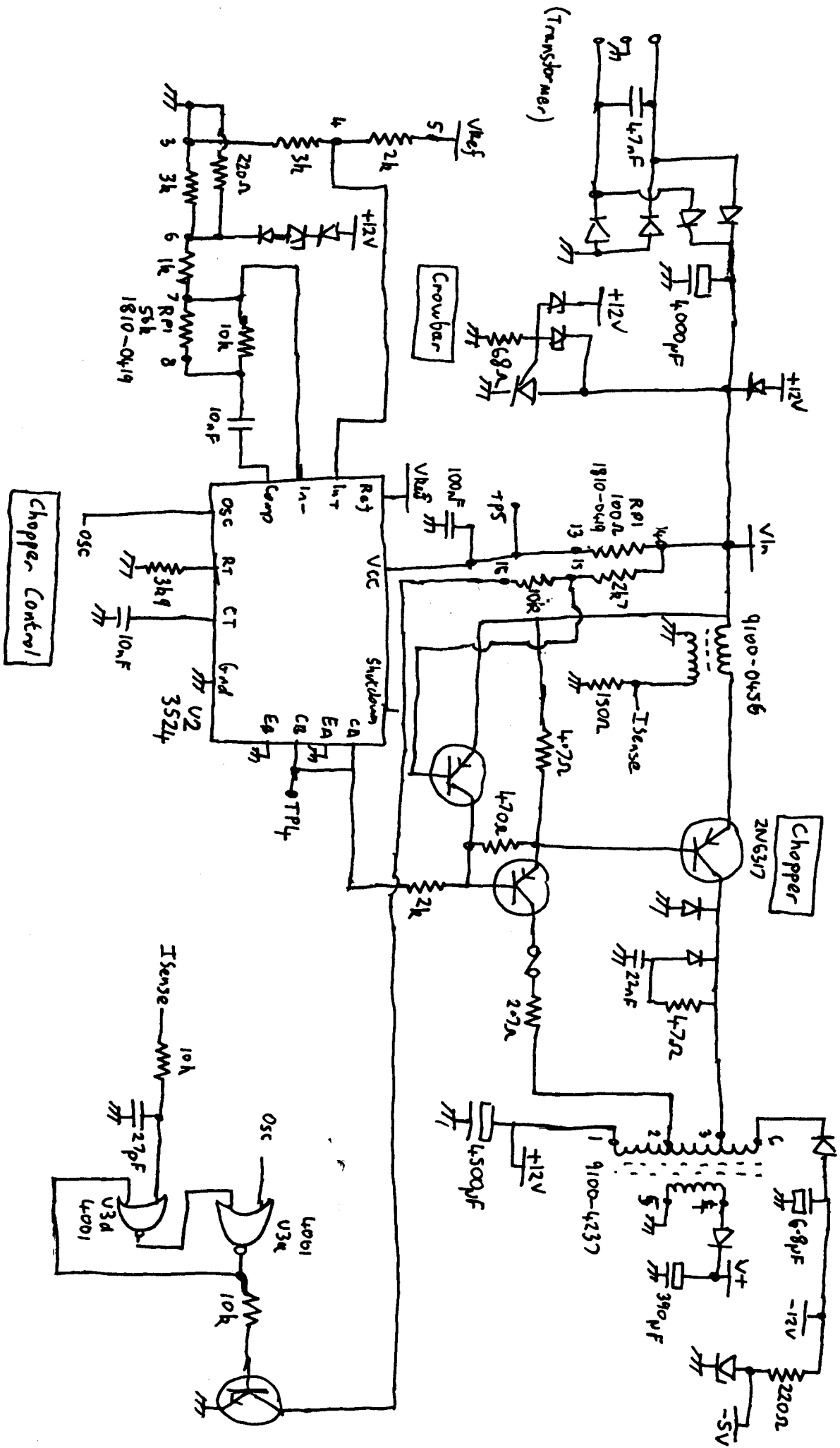
HP87 Video PCB Sheet ② 00087-69003





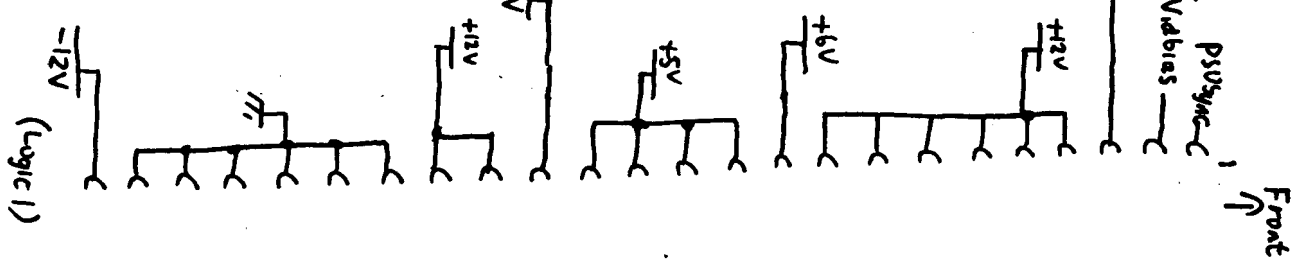
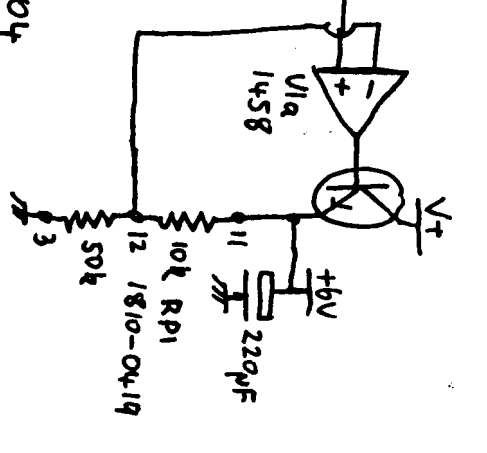
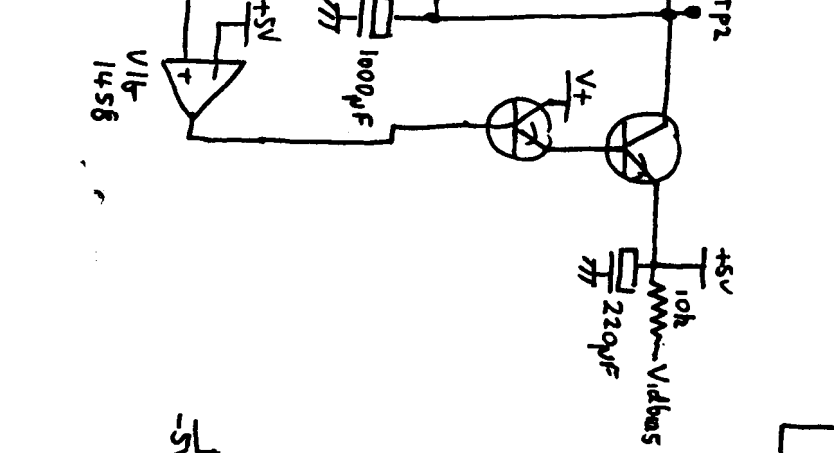
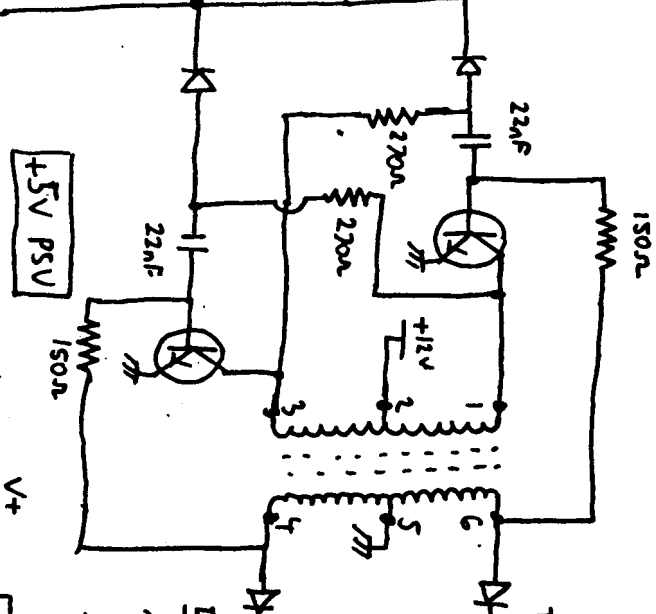
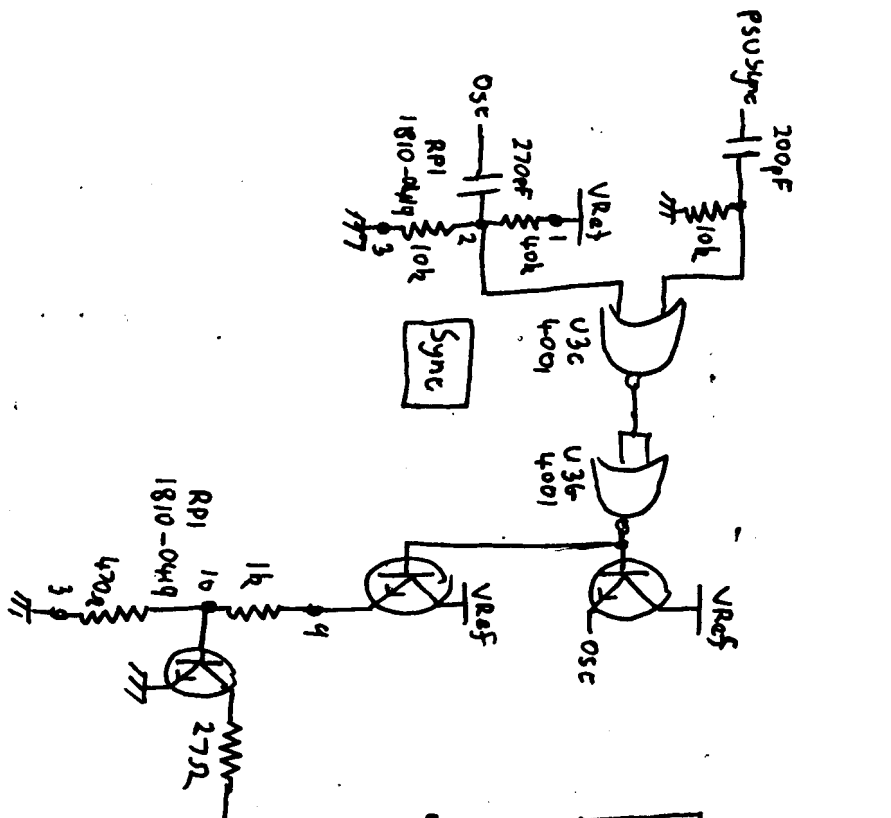
HP87 Video PCB Sheet 4

00087-69003



HP87 PSU PCB Sheet ①

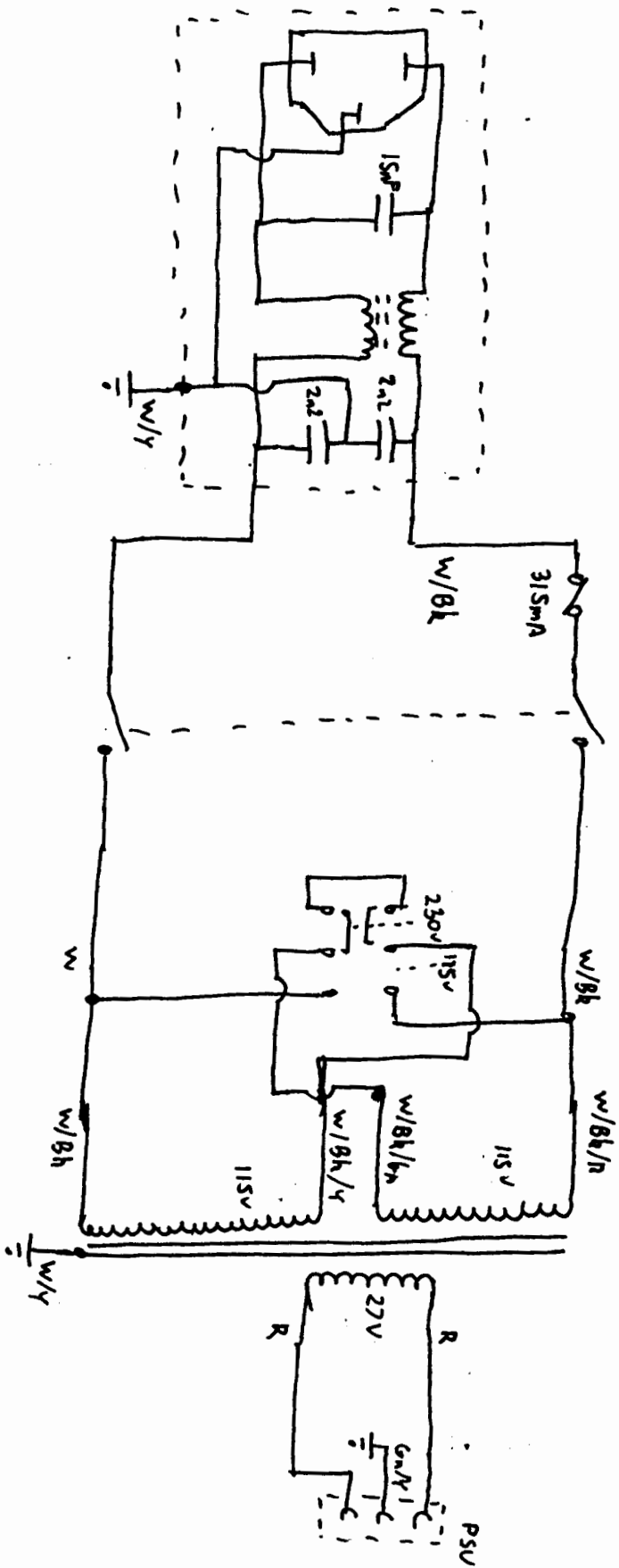
00087-60004



HP87 PSU PCB Sheet ②

00087-60004

Front



HP87 Transformer Wiring

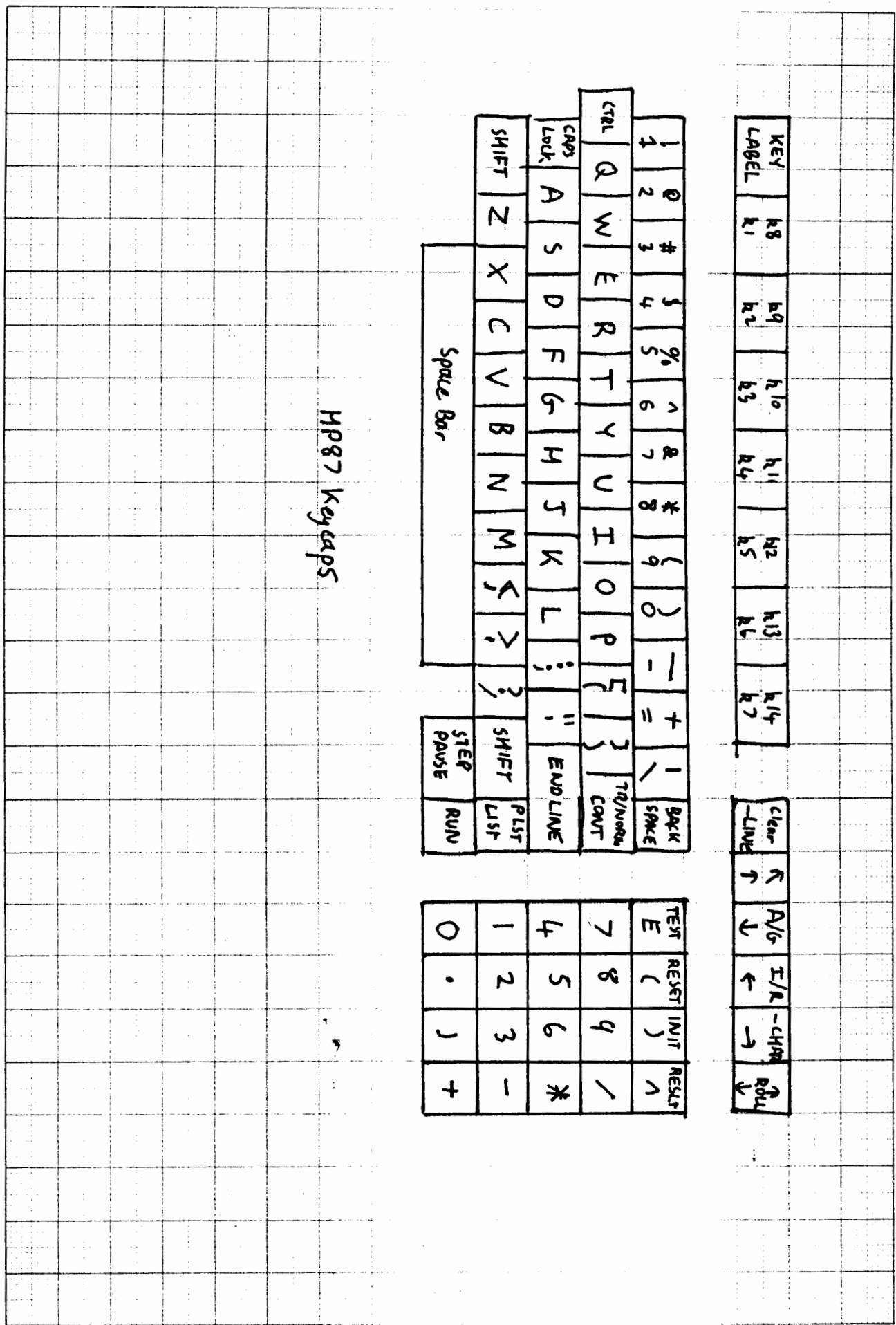
KEY LABEL	k8	k9	k10	k11	k12	k13	k14
	k1	k2	k3	k4	k5	k6	k7

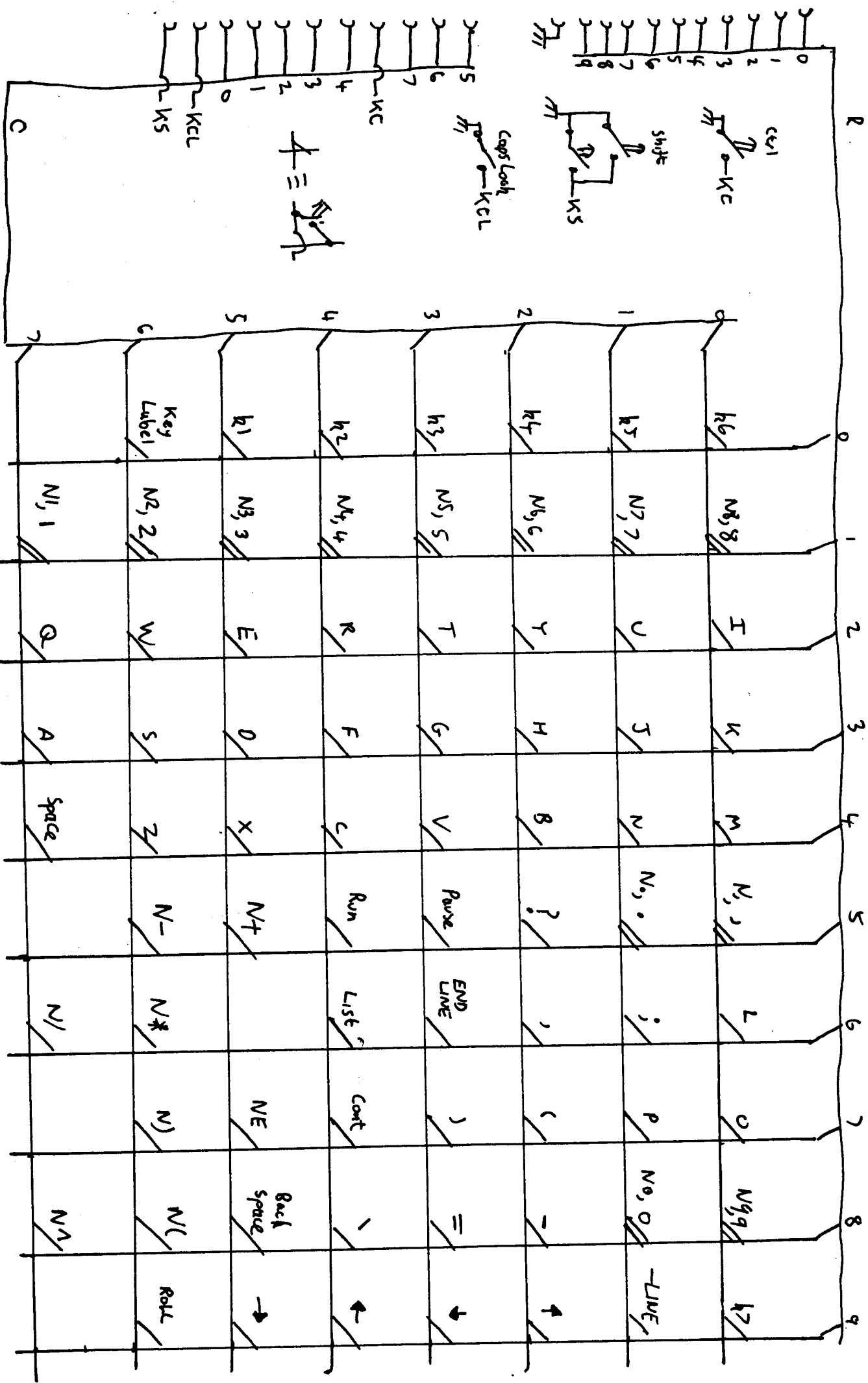
Clear LINE	↶	A/G	E/R	-CHG	↷
	↑	↓	←	→	↵

1	2	3	4	5	6	7	8	9	0	-	+	1	BACK SPACE	
!@#	QWERTYUIOP	ASDFGHJKL	;/	"	END LINE	SHIFT	PLST LIST	TR/NORM COUNT						
CTRL	QWERTYUIOP	ASDFGHJKL	;/	"	END LINE	SHIFT	PLST LIST							
CAPS Lock	A	S	D	F	G	H	J	K	L	;	"	END LINE		
SHIFT	Z	X	C	V	B	N	M	;	>	?	SHIFT	PLST LIST		
	Space Bar												STEP PAUSE	RUN

TEXT	RESET	INIT	RESLT
E	()	✓
7	8	9	✓
4	5	6	*
1	2	3	-
0	.)	+

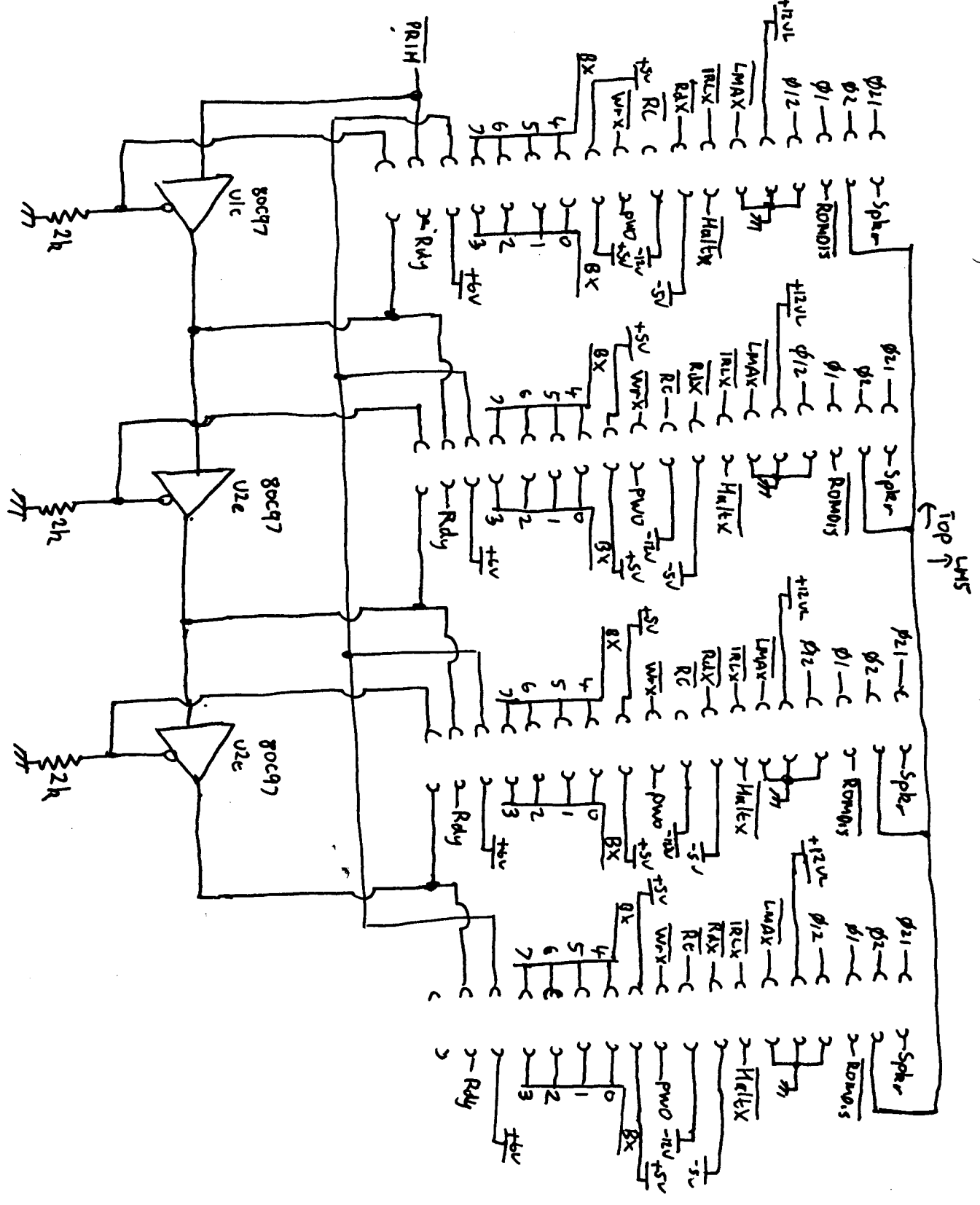
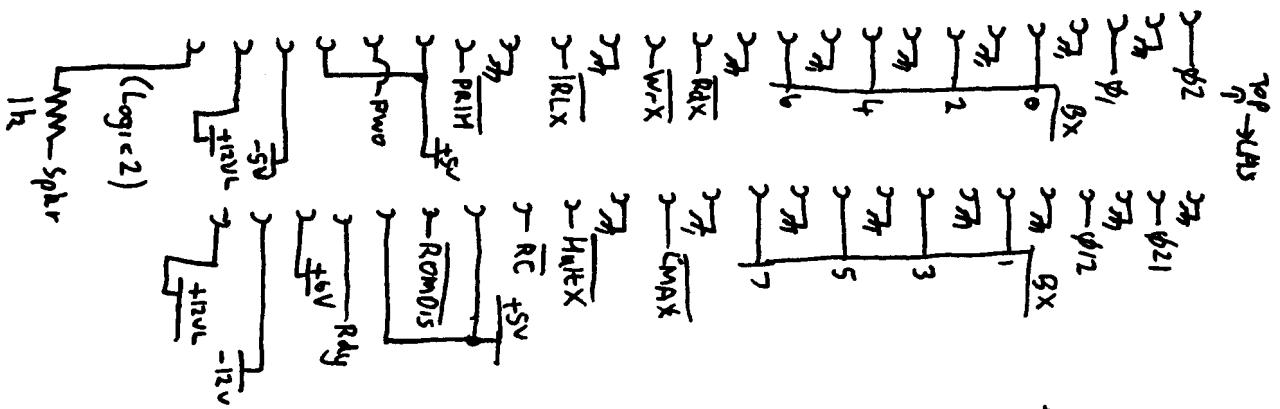
HP87 Keycaps





HP87 Keyboard

00087-60005



HP87 I/O Backplane

00087-60006

Top
 ↓ → D145

