

Processor  
Gn/R  
98780-66552

Interface  
O/R  
98780-66532

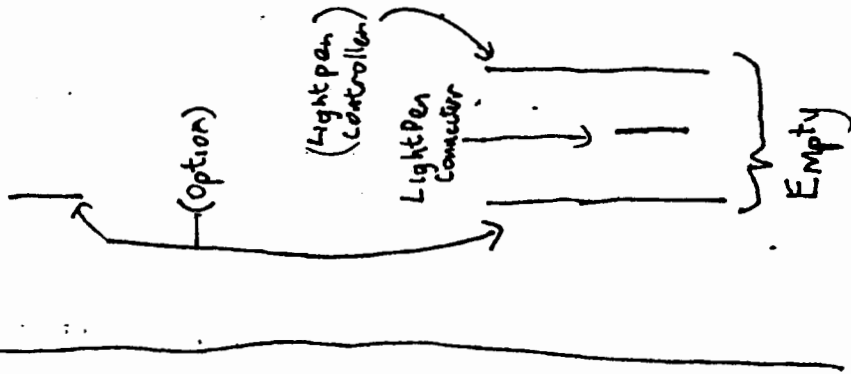
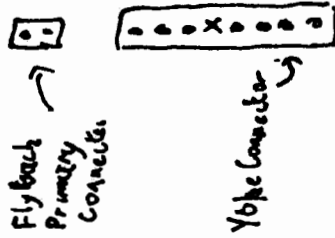
Text  
R/B  
98780-66521

Deflection  
B-14  
98780-66514

Video  
98780-66511

HEATSINK PCB  
98780-66513

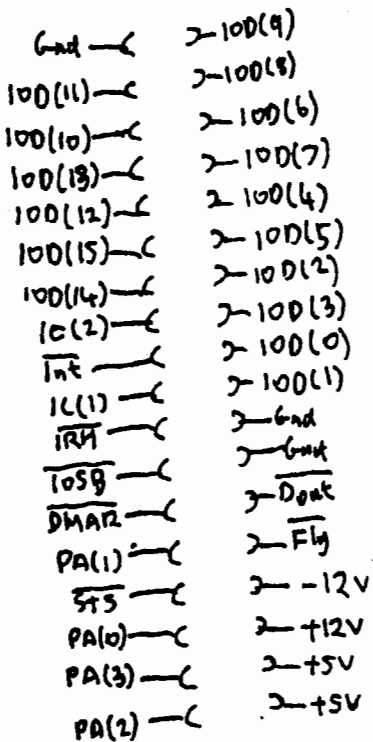
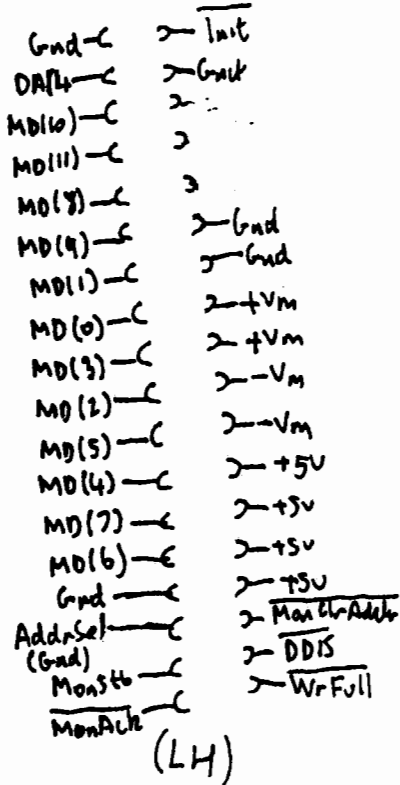
Flyback  
Transformer



HP98780A

# HP98780A Monitor

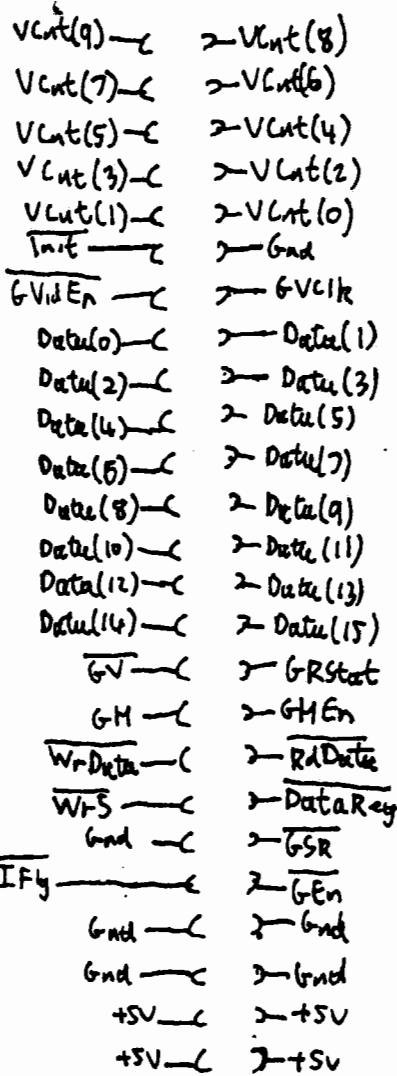
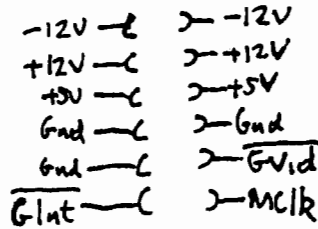
Front  
 ↑  
 LHS ←



(RH)

9845 connectors

Front  
 ↑ → LHS



Processor  
 98780-6652

# HP98780 Monitor

-12V-C 2 -12V  
 +12V-C 2 +12V  
 +5V-C 2 +5V  
 Gnd-C 2 Gnd  
 OptVid(0)-C 2 OptVid(3)  
 OptVid(1)-C 2 OptVid(2)

Front  
 ↑  
 → LMS

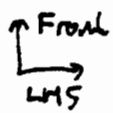
VCnt(9)-C 2 VCnt(8)  
 VCnt(7)-C 2 VCnt(6)  
 VCnt(5)-C 2 VCnt(4)  
 VCnt(3)-C 2 VCnt(2)  
 VCnt(1)-C 2 VCnt(0)  
 Init-C 2 Gnd  
 GVideo-C 2 Gnd  
 Data(0)-C 2 Data(1)  
 Data(2)-C 2 Data(3)  
 Data(4)-C 2 Data(5)  
 Data(6)-C 2 Data(7)  
 Data(8)-C 2 Data(9)  
 Data(10)-C 2 Data(11)  
 Data(12)-C 2 Data(13)  
 Data(14)-C 2 Data(15)  
 GV-C 2 VClk  
 GH-C 2 GMEn  
 WrData-C 2 RdData  
 WrS-C 2 DataReg  
 Gnd-C 2 OptionsR  
 IFig-C 2 OptionsEn  
 +5V-C 2 Gnd  
 +5V-C 2 Video(2)  
 +5V-C 2 Video(1)  
 MClk-C 2 Video(0)

VCnt(7)-C 2 VCnt(8)  
 VCnt(5)-C 2 VCnt(6)  
 VCnt(3)-C 2 VCnt(4)  
 VCnt(1)-C 2 VCnt(2)  
 Init-C 2 VCnt(0)  
 GVideo-C 2 GVClk  
 Gnd-C 2 Gnd  
 Data(0)-C 2 Data(1)  
 Data(2)-C 2 Data(3)  
 Data(4)-C 2 Data(5)  
 Data(6)-C 2 Data(7)  
 Data(8)-C 2 Data(9)  
 Data(10)-C 2 Data(11)  
 Data(12)-C 2 Data(13)  
 Data(14)-C 2 Data(15)  
 WrData-C 2 LPVid  
 RdData-C 2 LPBst  
 LPSR-C 2 Gnd  
 WrS-C 2 +Vm  
 LP(3)-C 2 -Vm  
 LP(4)-C 2 Gnd  
 LP(5)-C 2 +5V  
 LP(6)-C 2 +5V  
 LP(7)-C 2 +5V  
 Gnd-C 2 MClk

Option

Light Pen Controller

98780 Monitor



- sw(7) — C —> sw(6)
- sw(5) — C —> sw(4)
- sw(3) — C —> sw(2)
- sw(1) — C —> sw(0)
- Gnd — C —> Gnd
- 10D(9) — C —> 10D(11)
- 10D(8) — C —> 10D(10)
- 10D(6) — C —> 10D(13)
- 10D(7) — C —> 10D(12)
- 10D(4) — C —> 10D(15)
- 10D(3) — C —> 10D(14)
- 10D(2) — C —> IC(2)
- 10D(3) — C —> InE
- 10D(0) — C —> IC(1)
- 10D(10) — C —> IRH
- Gnd — C —> 105B
- Gnd — C —> DMAR
- Dout — C —> PA(1)
- Fig — C —> 3FS
- +5V — C —> PA(0)
- OptVid(3) — C —> PA(3)
- OptVid(2) — C —> PA(2)
- OptVid(1) — C —> Gnd
- OptVid(0) — C —> Gnd
- Gnd — C —> G-Vid
- Gnd — C —> Mclk

- Gnd — C —> Gnd
- +5V — C —> +5V
- +5V — C —> +5V
- InE — C —> DA14
- MD(10) — C —> MD(11)
- MD(8) — C —> MD(9)
- Gnd — C —> Gnd
- MD(1) — C —> MD(0)
- MD(3) — C —> MD(2)
- MD(5) — C —> MD(4)
- MD(7) — C —> MD(6)
- Gnd — C —> Gnd
- MonChAddr — C —> N/C - AddrSel
- DDIS — C —> MonStb
- WrFull — C —> MonAck

- +5V — C —> Mclk
- Vcnt(9) — C —> Gnd
- Vcnt(7) — C —> Vcnt(8)
- Vcnt(5) — C —> Vcnt(6)
- Vcnt(3) — C —> Vcnt(4)
- Vcnt(1) — C —> Vcnt(2)
- G-Vclk — C —> Vcnt(0)
- G-V — C —> Vclk
- G-H — C —> Gnd
- G-HEn — C —> VSync
- Gnd — C —> Gnd
- TxtVid — C —> HSync
- +5V — C —> +5V
- Gnd — C —> +5V
- Mclk — C —> Gnd

- Vcnt(8) — C —> BVid(3)
- GRstat — C —> BVid(2)
- Vclk — C —> BVid(1)
- Gnd — C —> BVid(0)
- +5V — C —> +5V
- InE — C —> AddrSel
- Gnd — C —> VdrvGnd
- Data(0) — C —> Data(1)
- Data(2) — C —> Data(3)
- Data(4) — C —> Data(5)
- Data(6) — C —> Data(7)
- Data(8) — C —> Data(9)
- Data(10) — C —> Data(11)
- Data(12) — C —> Data(13)
- Data(14) — C —> Data(15)
- LPVid — C —> LPSR
- LPBrt — C —> IFB
- WrData — C —> WrS
- RdData — C —> OptSR
- OptSR — C —> OptionEn
- Gnd — C —> Gnd
- Video(2) — C —> TxtVid
- Video(1) — C —> +5V
- Video(0) — C —> +5V

DataReg

Text

98780-66521



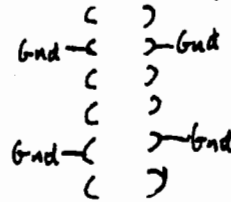
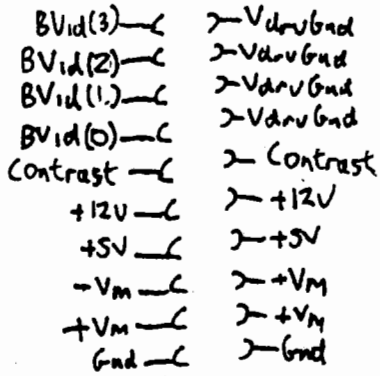
- sw(0)
- sw(1)
- sw(2)
- sw(3)
- sw(4)
- sw(5)
- sw(6)
- sw(7)
- Gnd
- Gnd

Key Switch

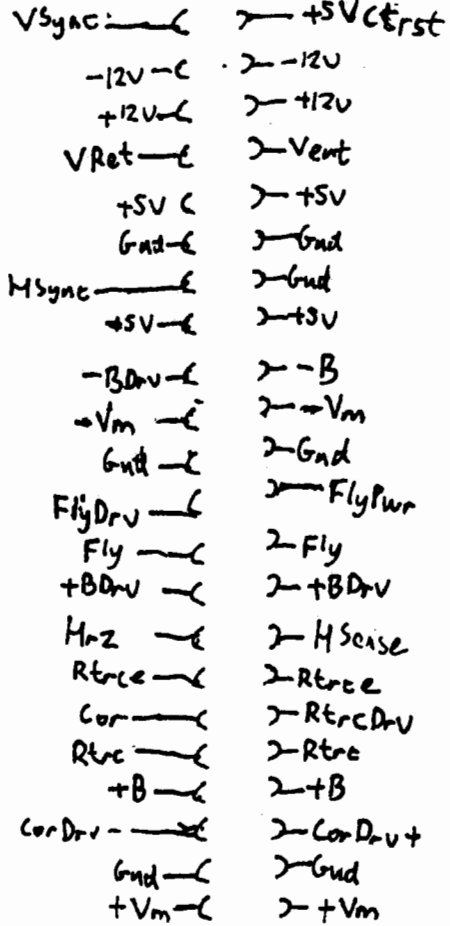
Interface 98780-66532

98780 Monitor

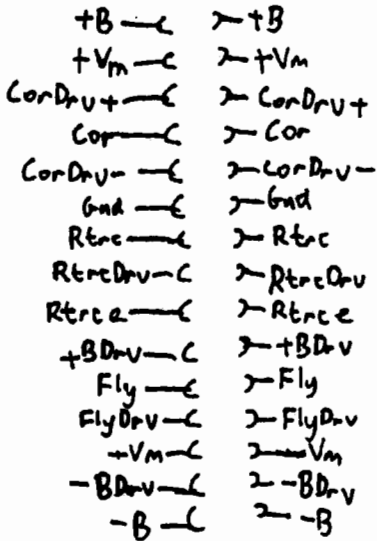
Front  
↑  
LHS



Video  
98780-66511

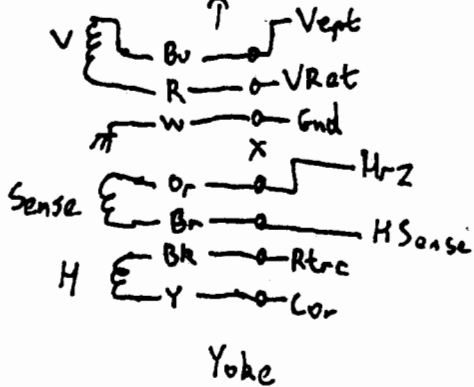


LHS  
Front  
↑



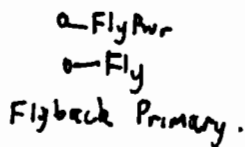
Heatsink  
98780-66513

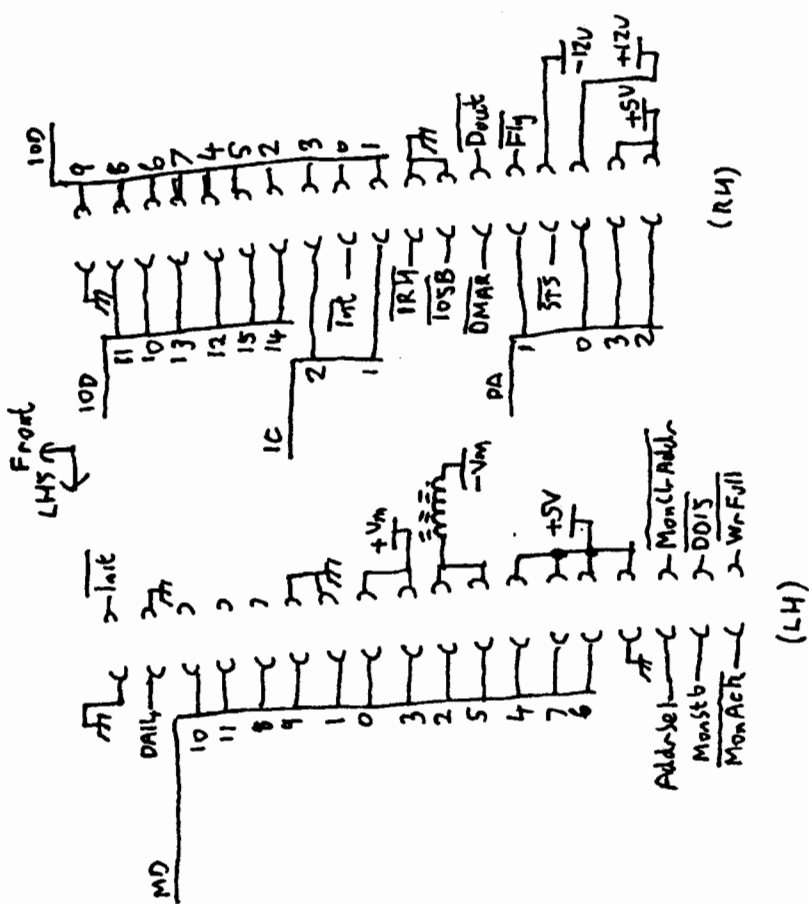
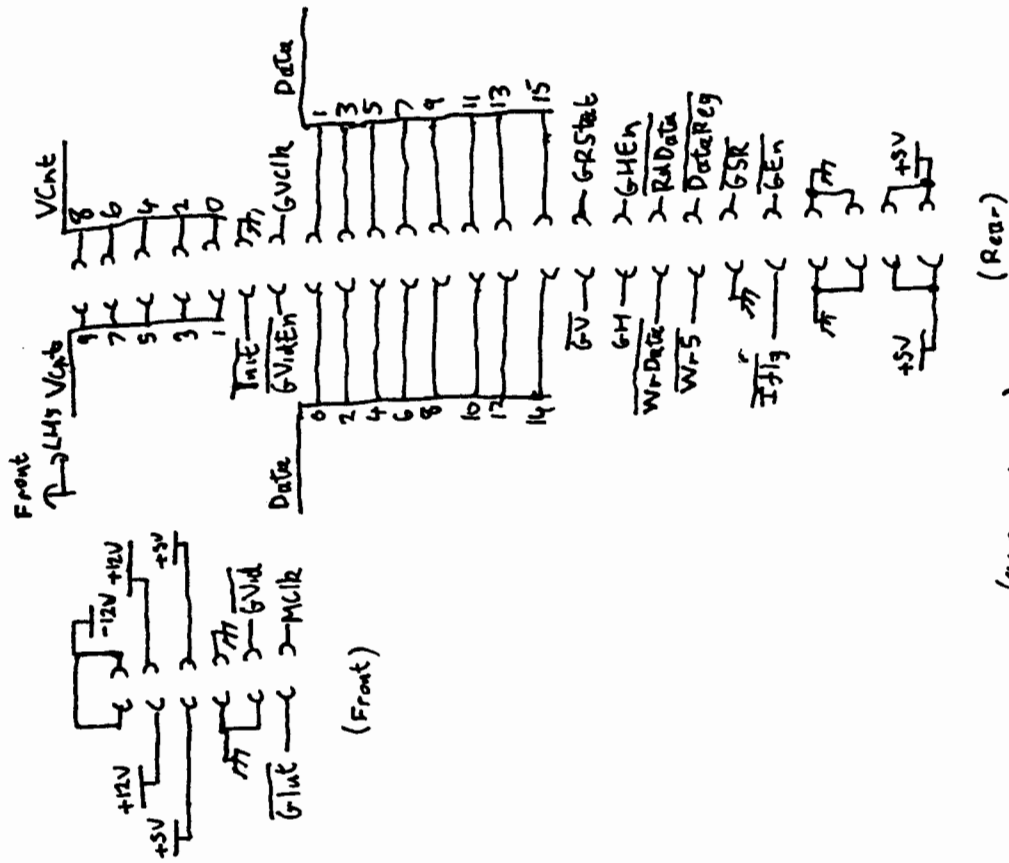
Front  
↑



Deflection  
98780-66514

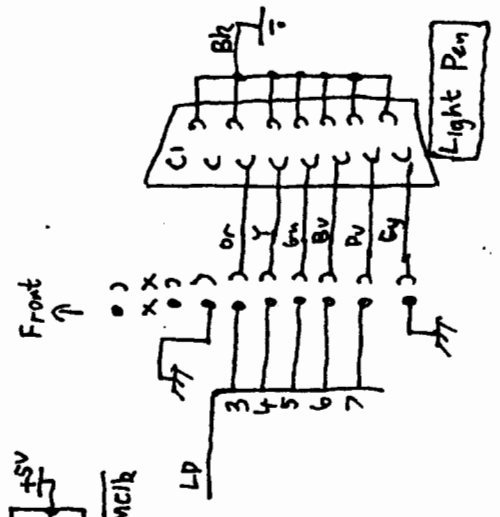
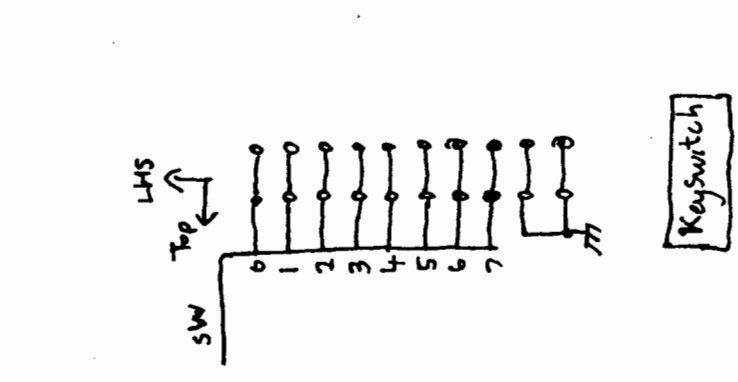
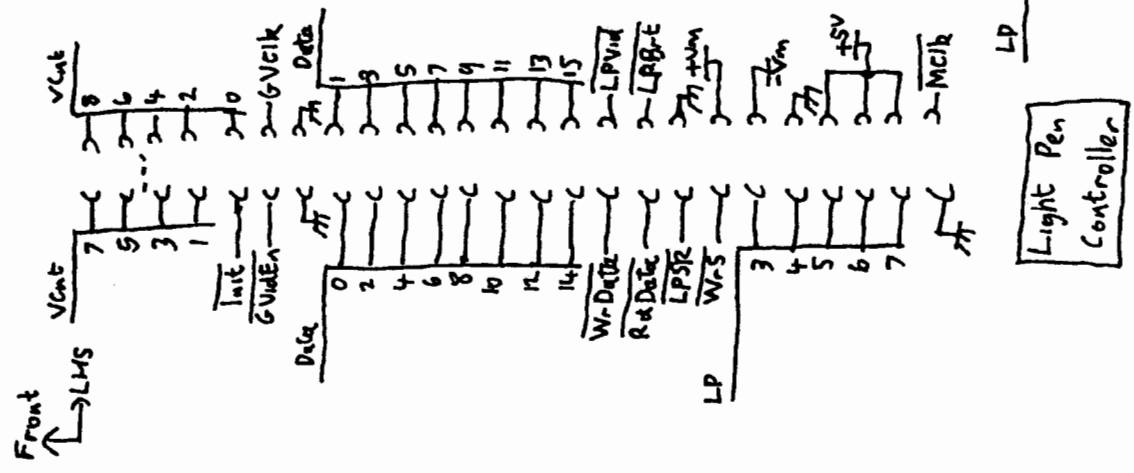
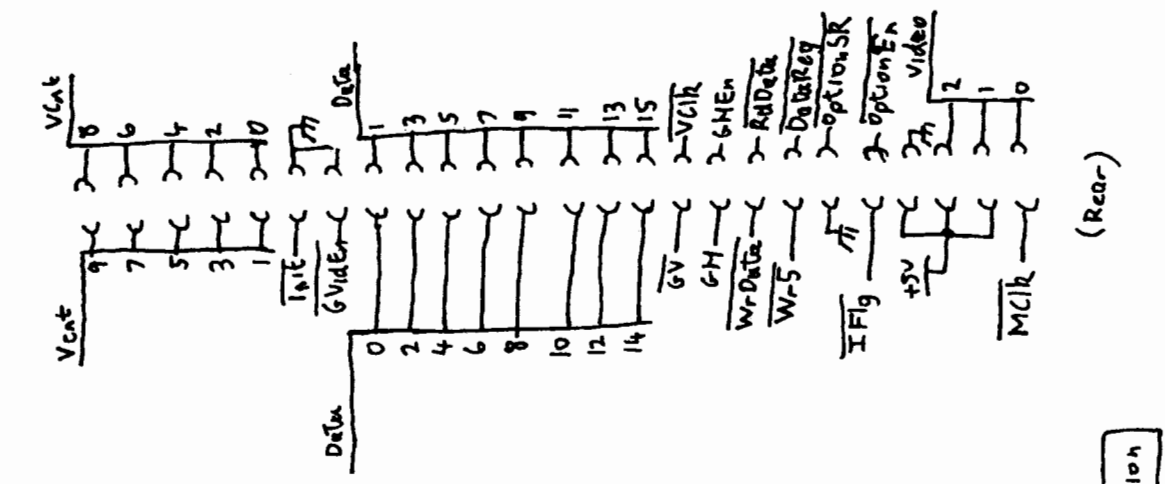
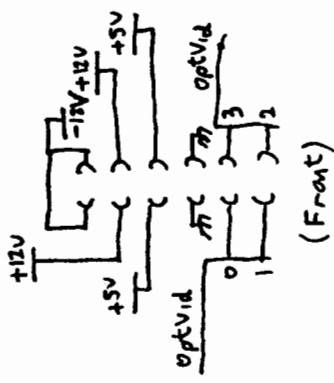
Front  
↑





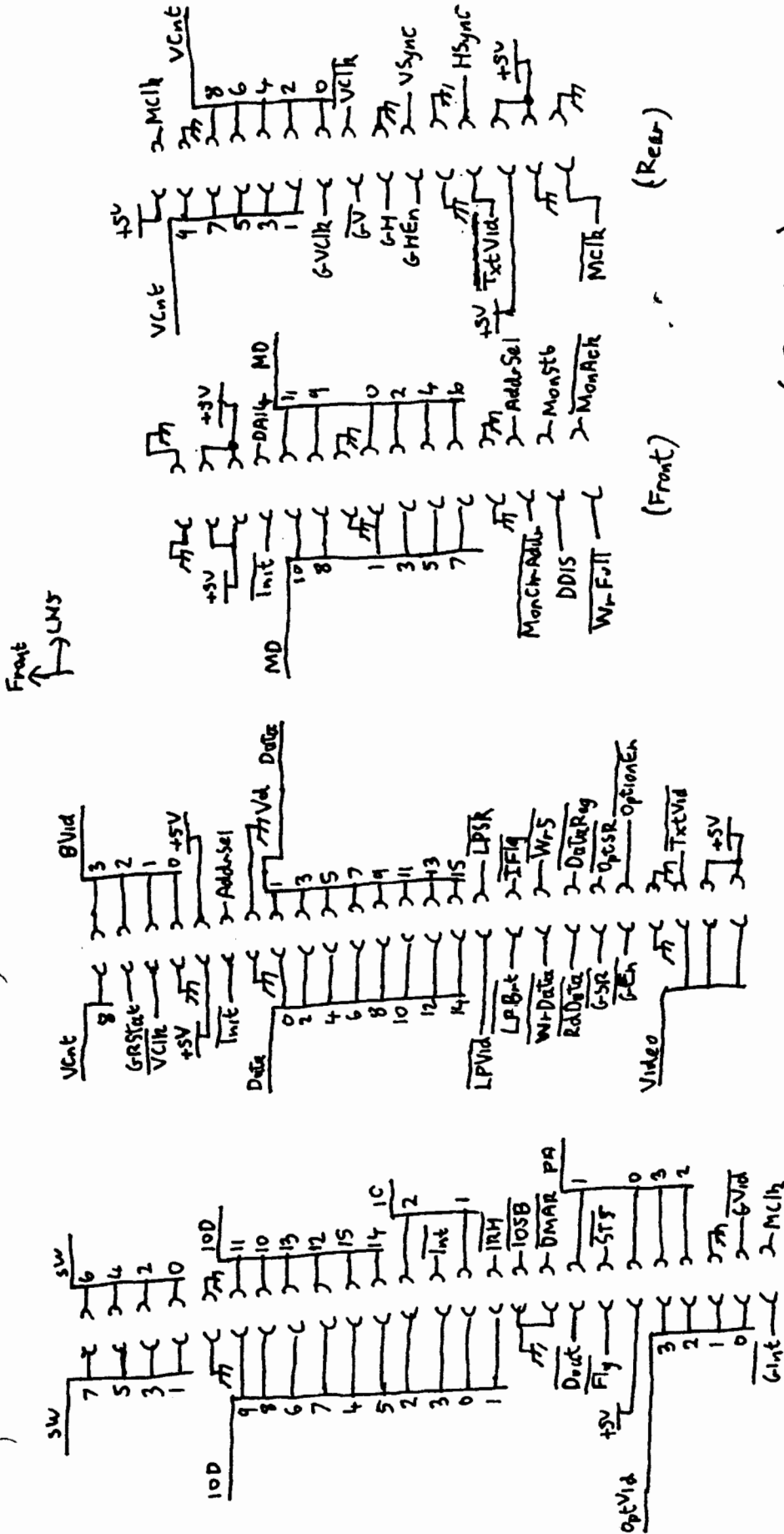
98780-66504

HP98780 Backplane sheet ①

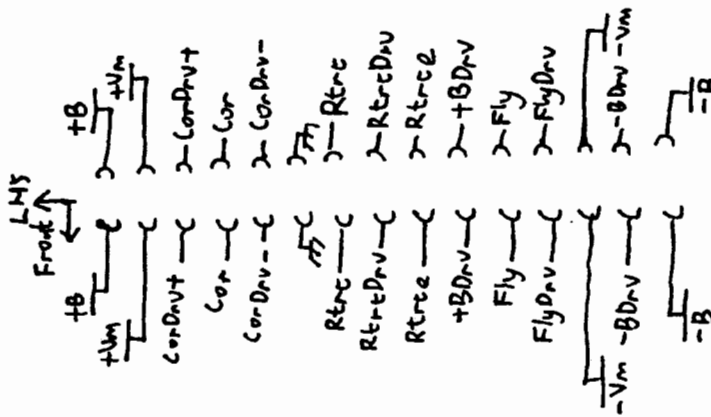


Option

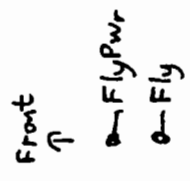
(Rear)



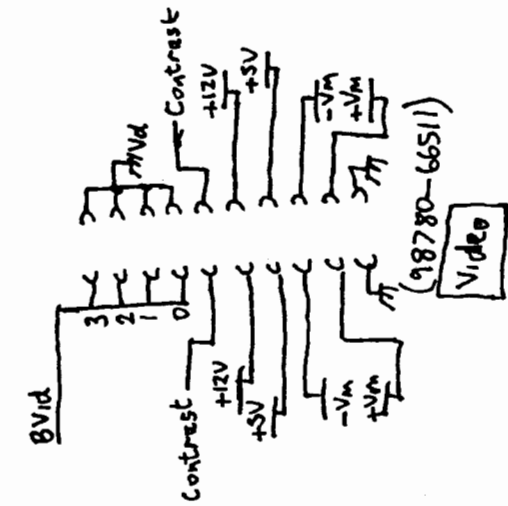




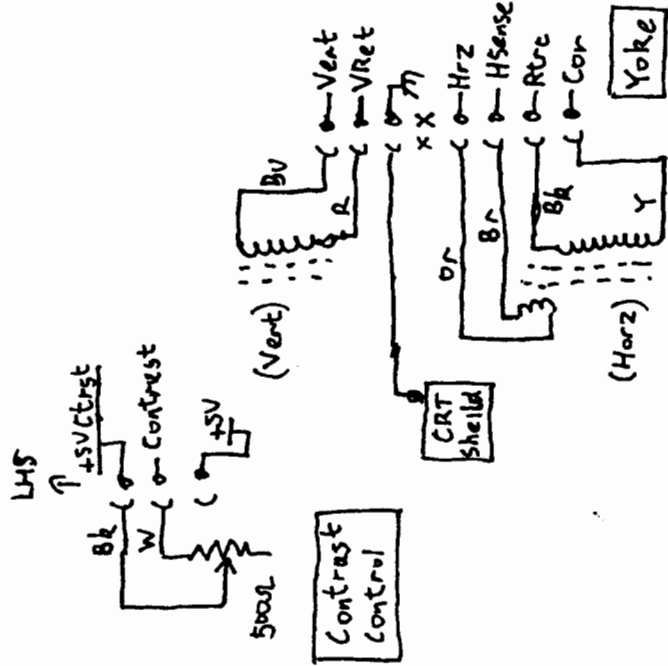
(98780-66513)  
HeatSink



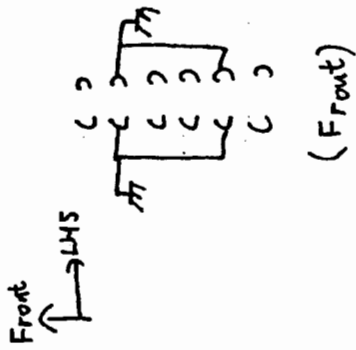
Flyback Transformer  
Primary



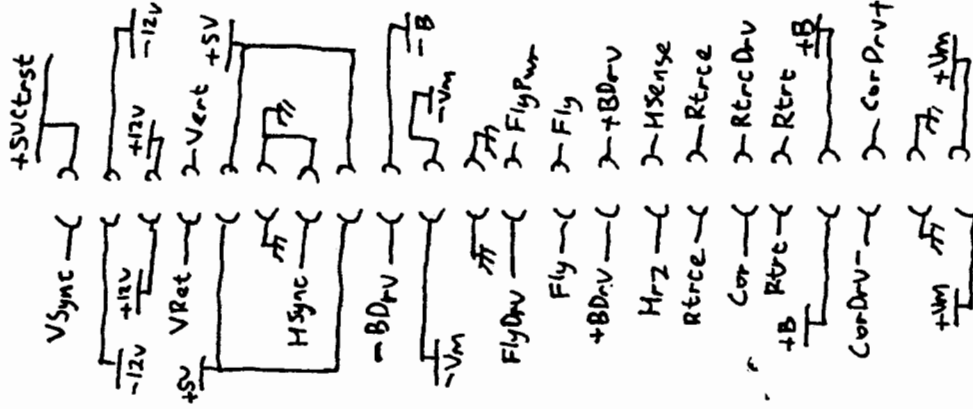
(98780-66511)  
Video



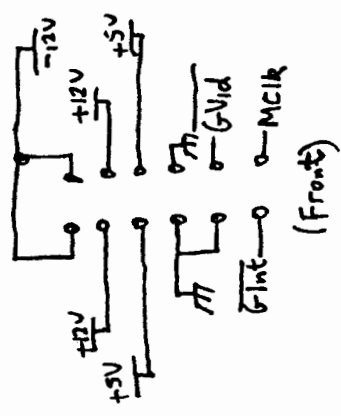
Contrast  
Control



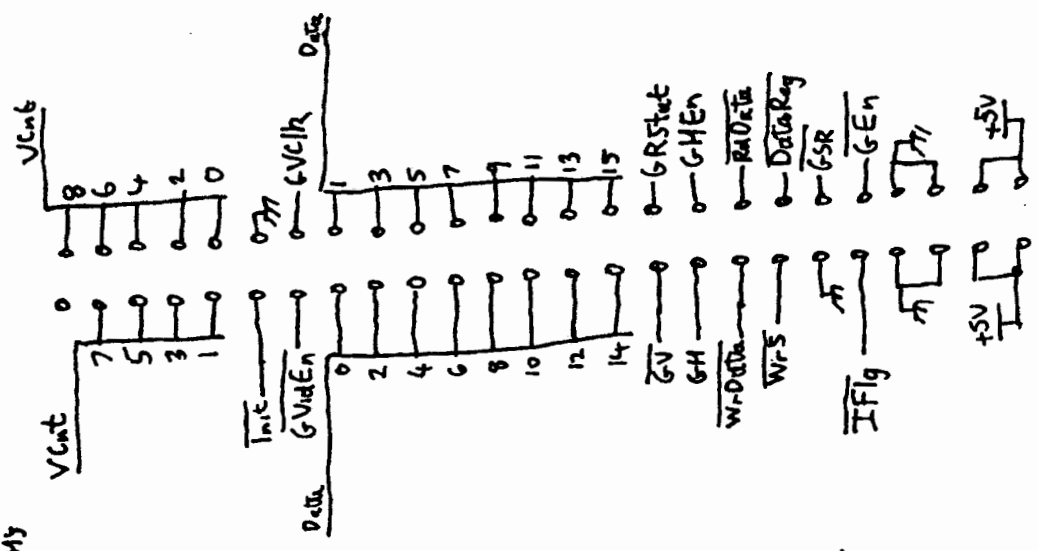
(98780-66514)  
Deflection



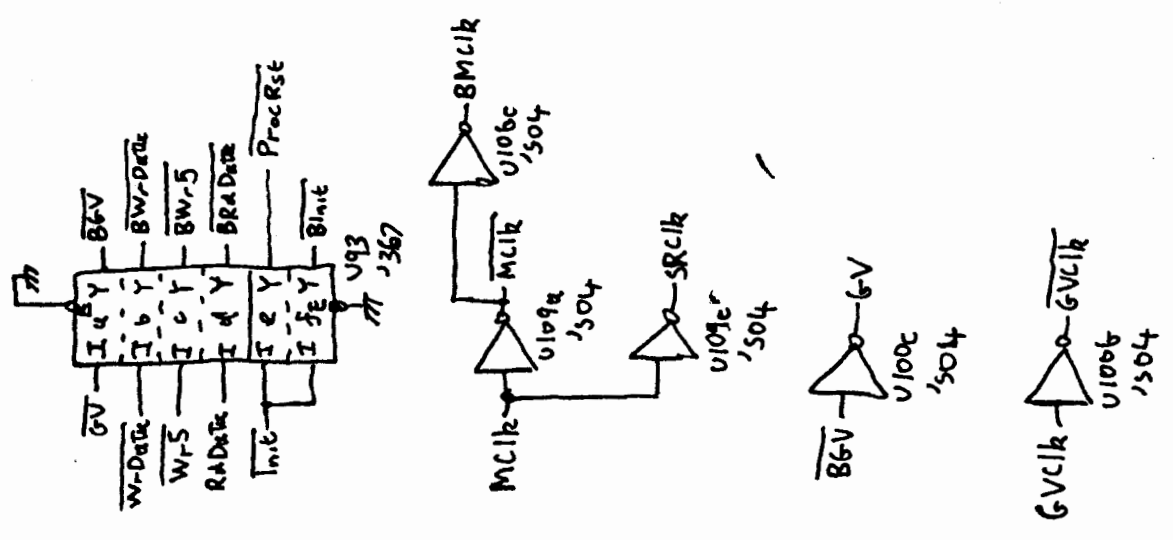
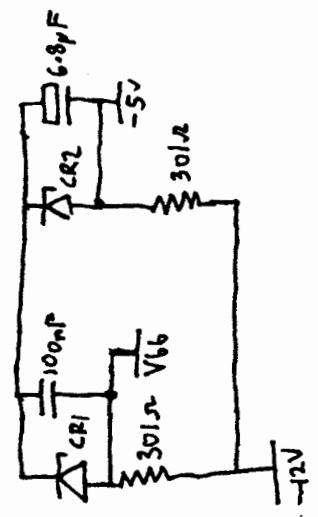
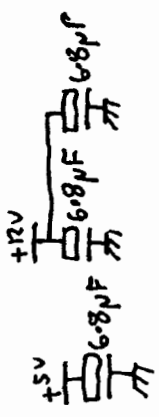
Front  
↑ → LM3

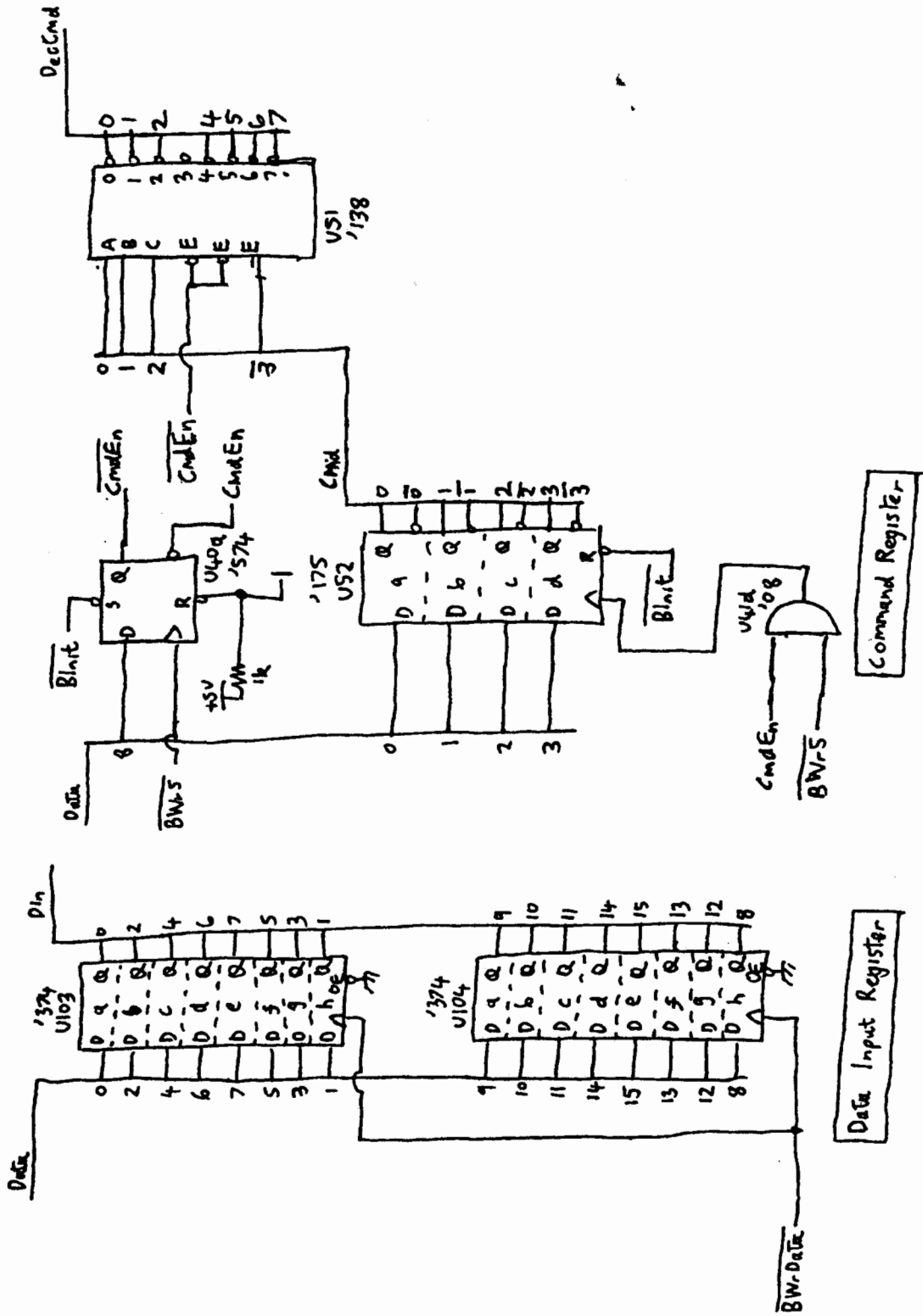


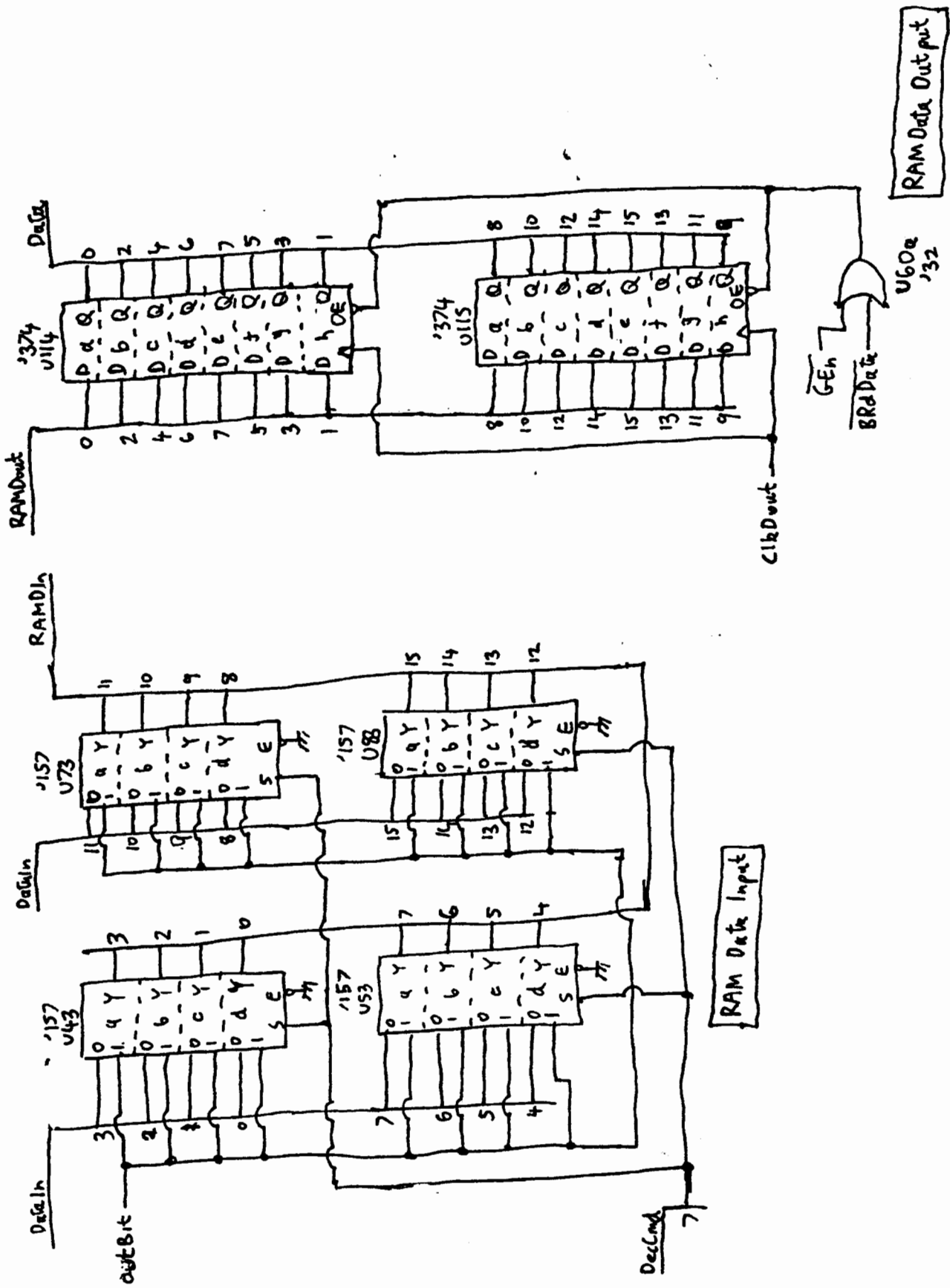
(Front)

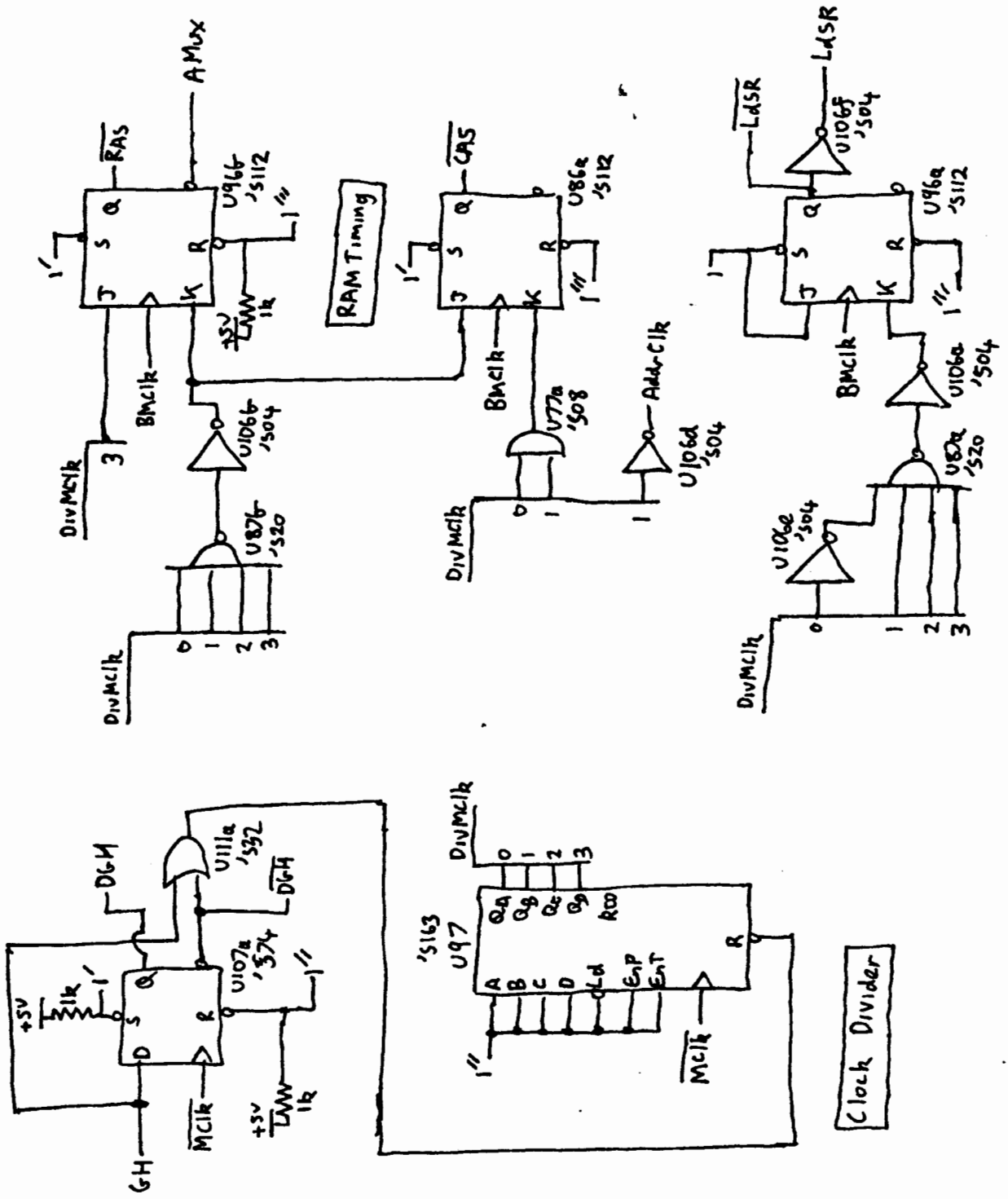


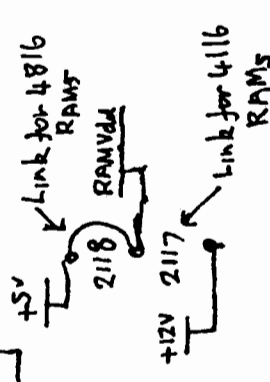
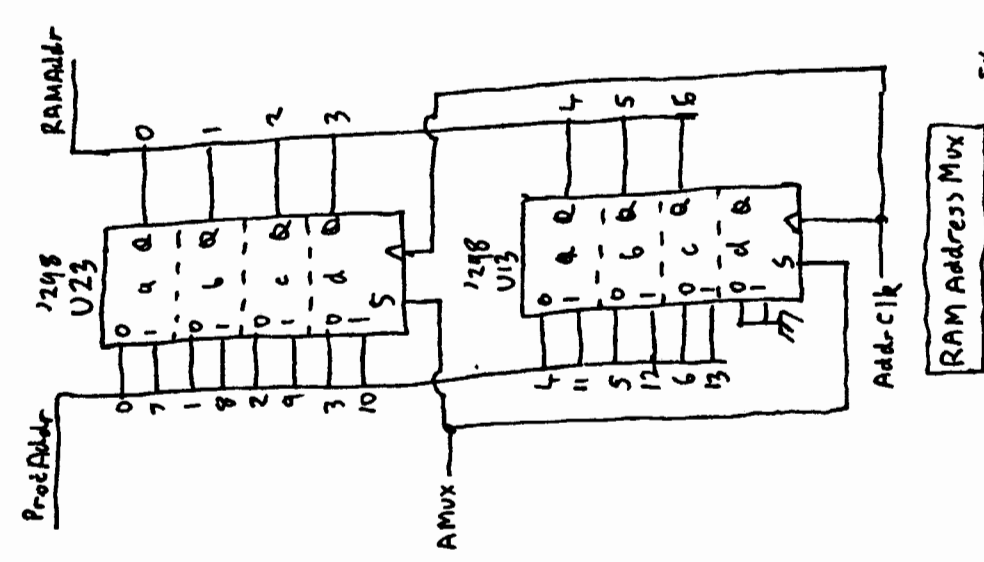
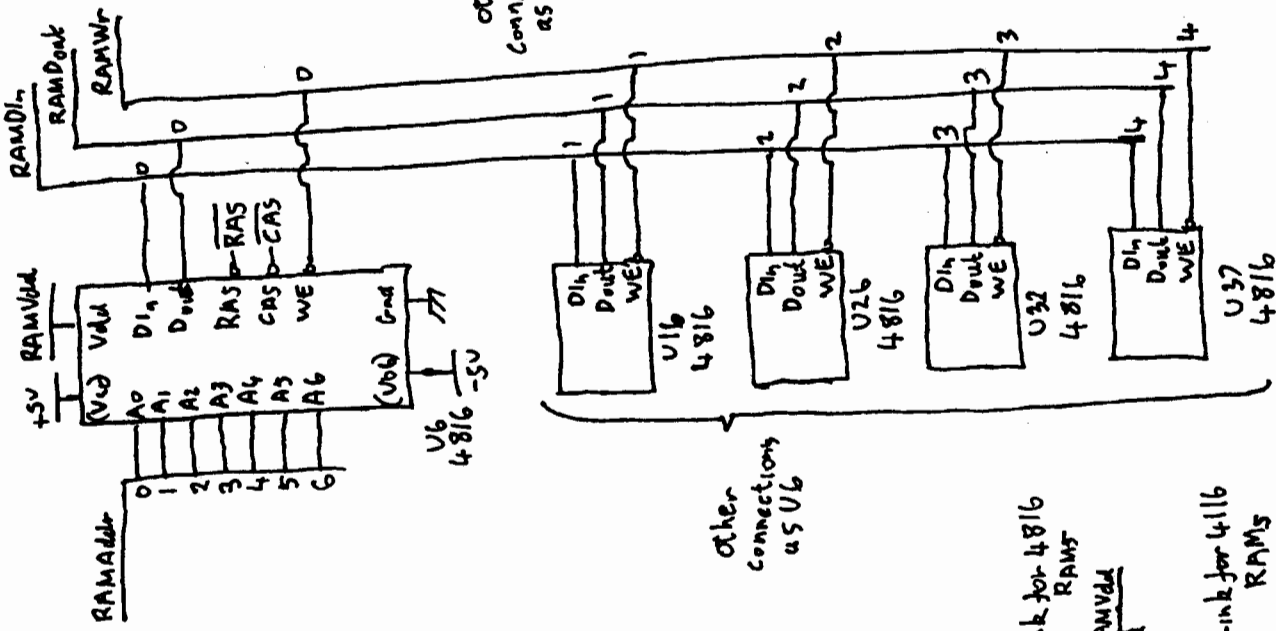
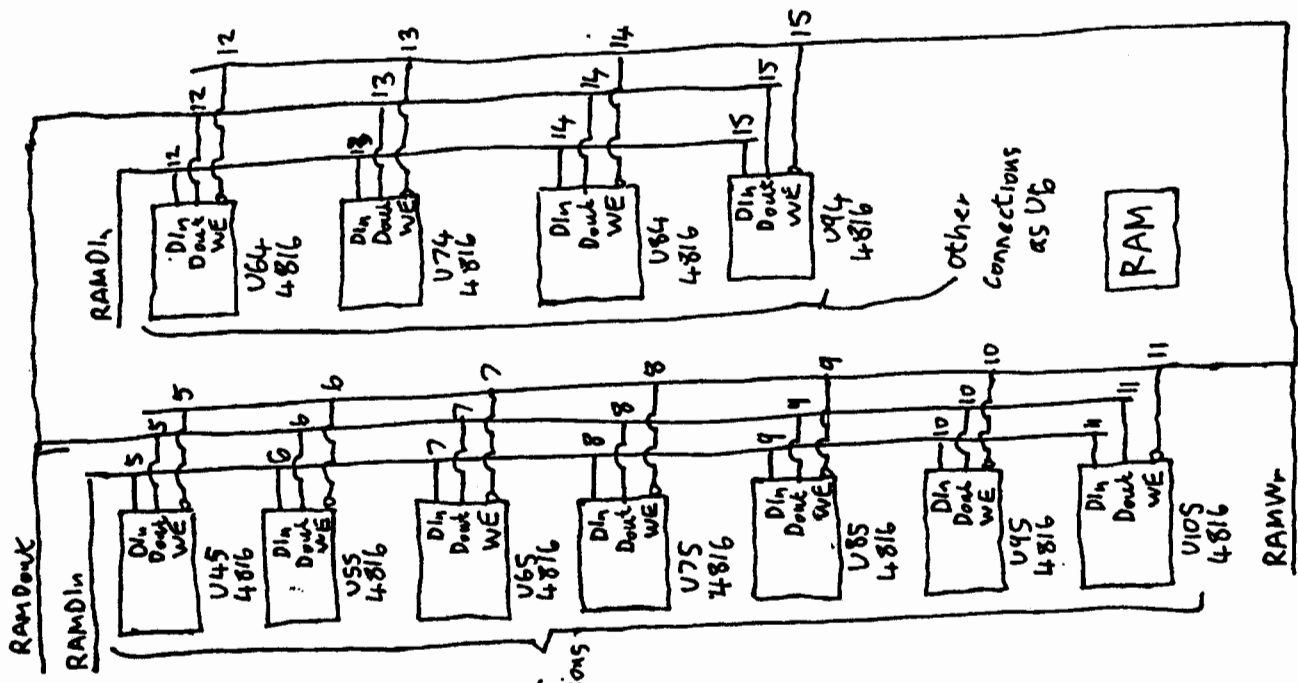
(Rear)





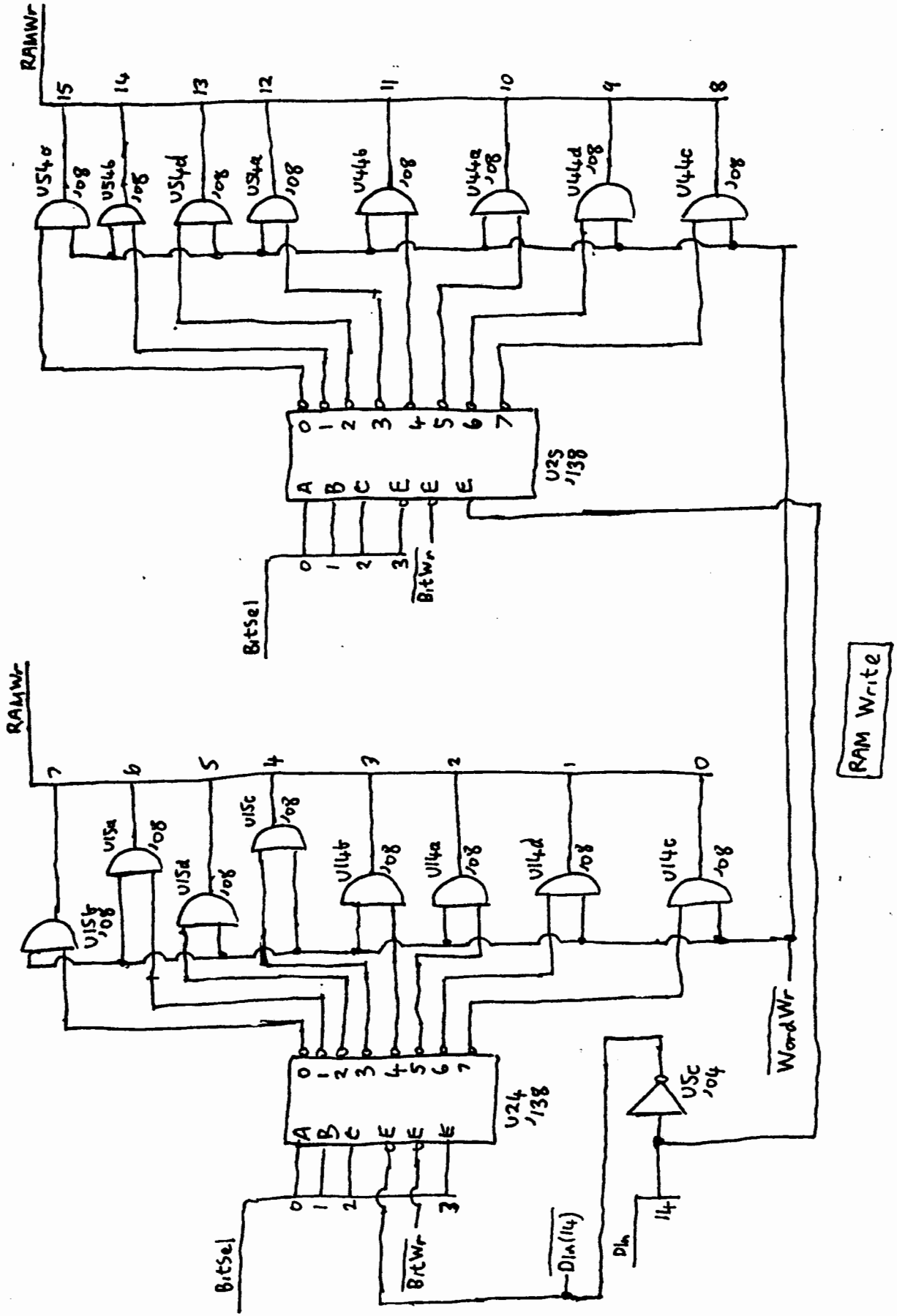


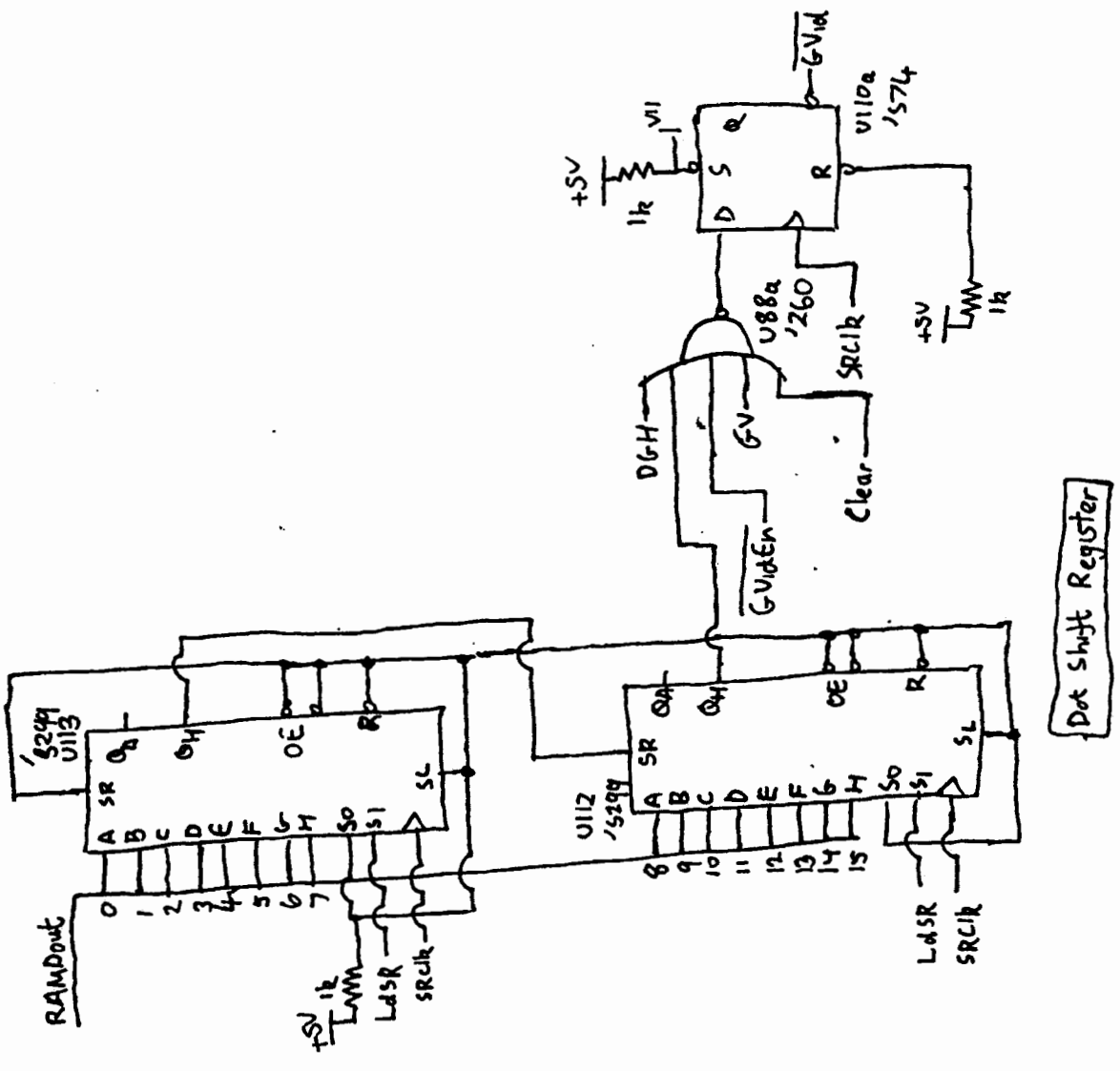
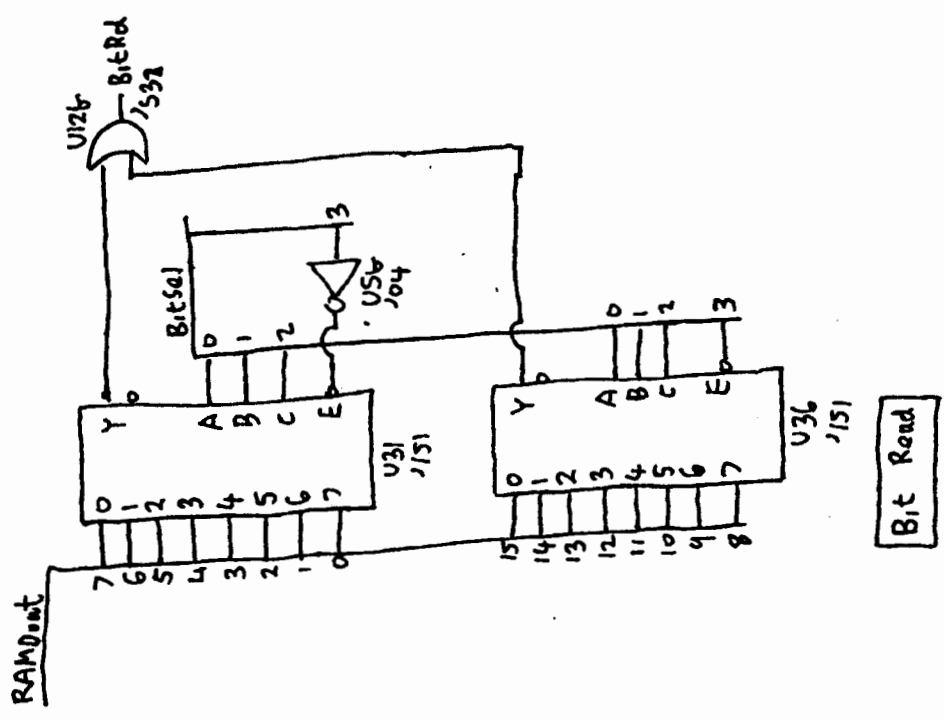




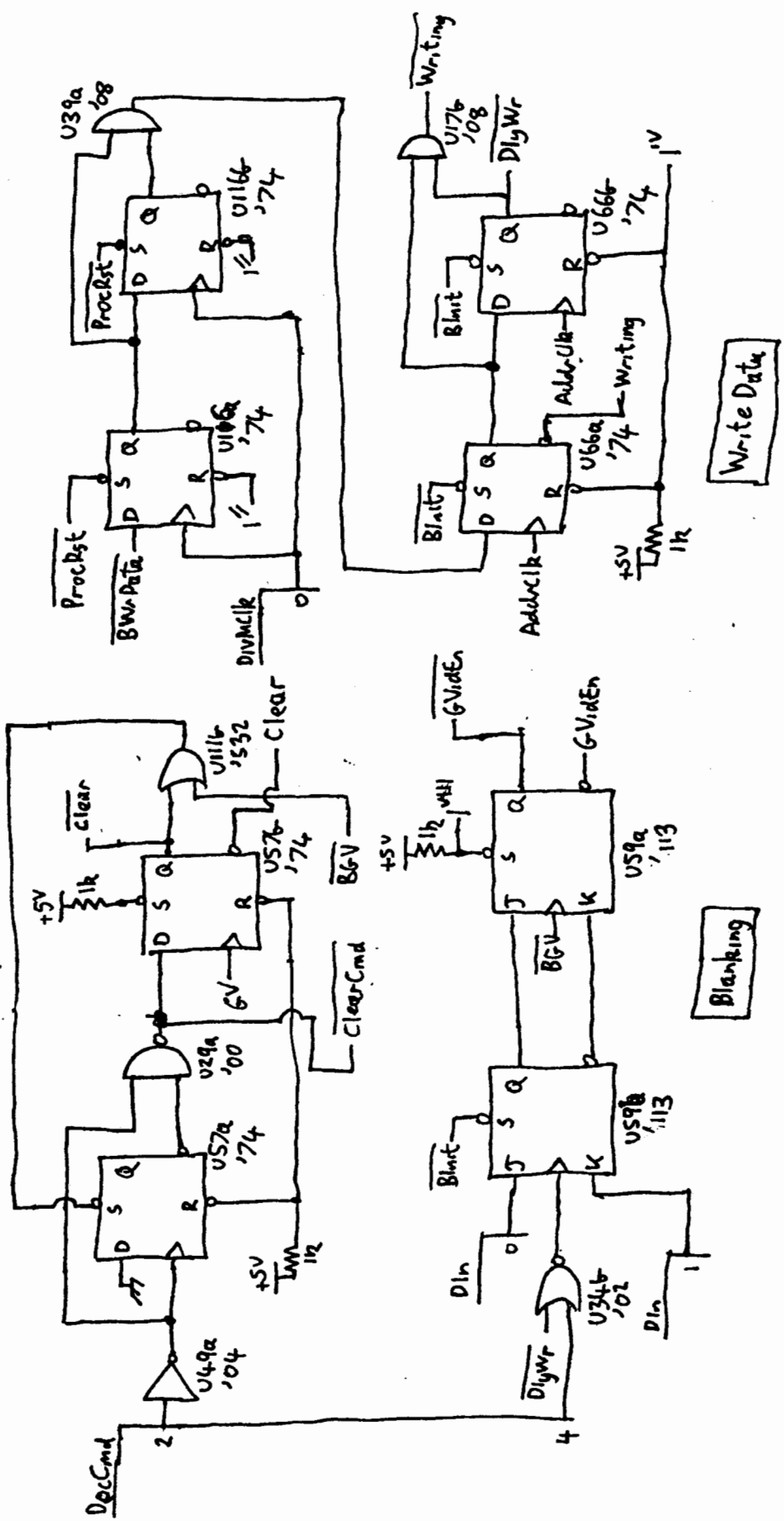
98780-66552 (6m/R)

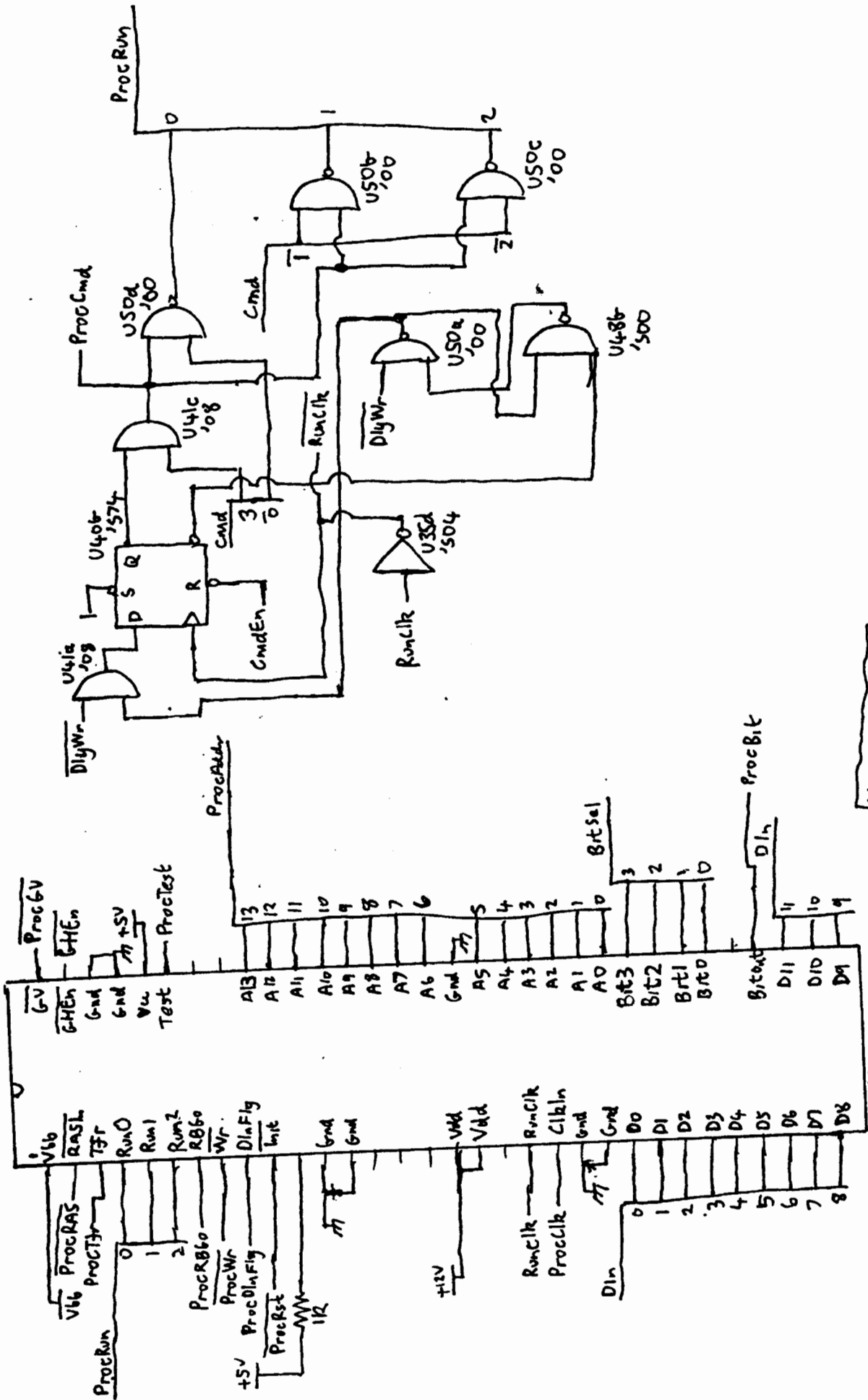
HP98780 Processor PCB Sheet 5







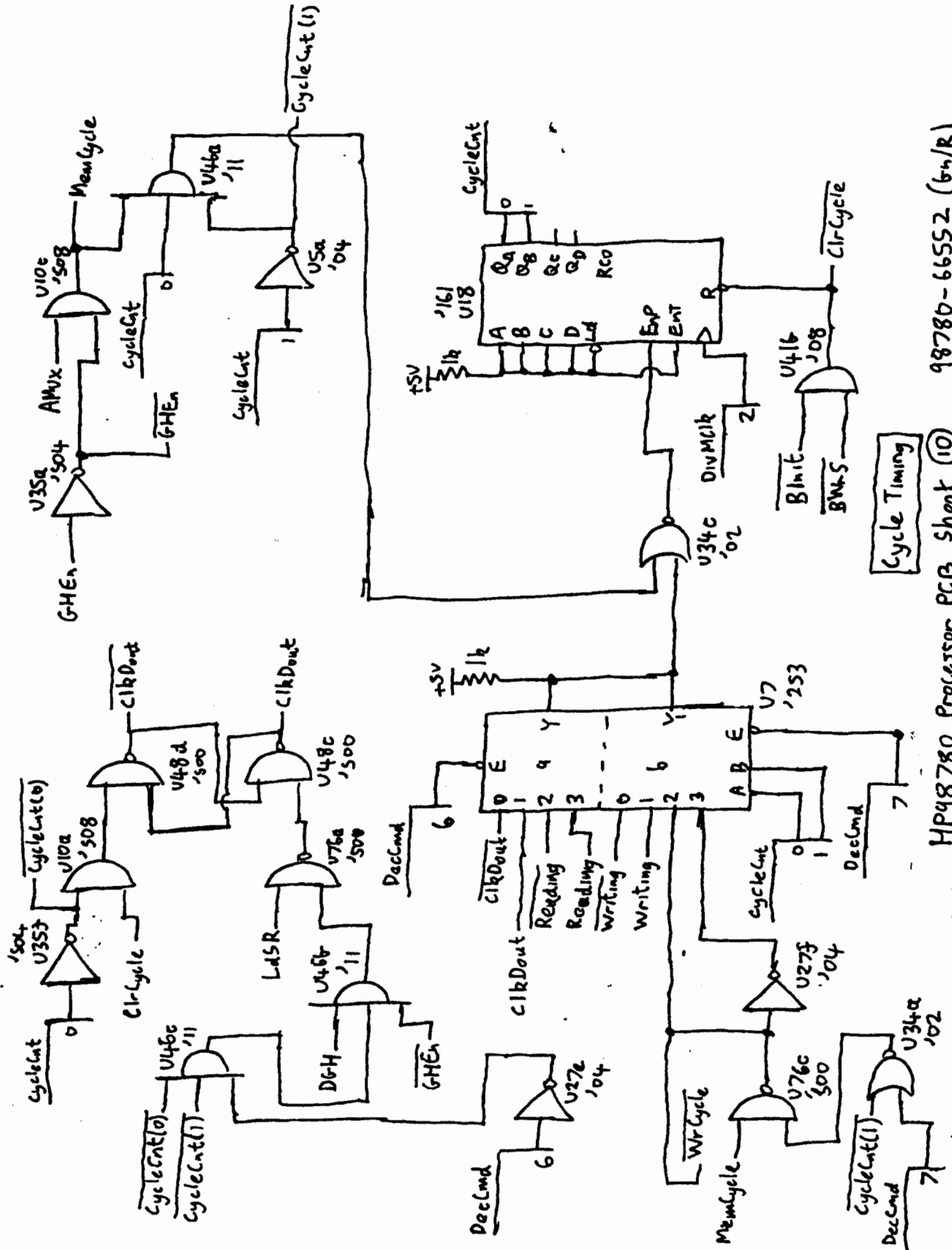




Vector Generator

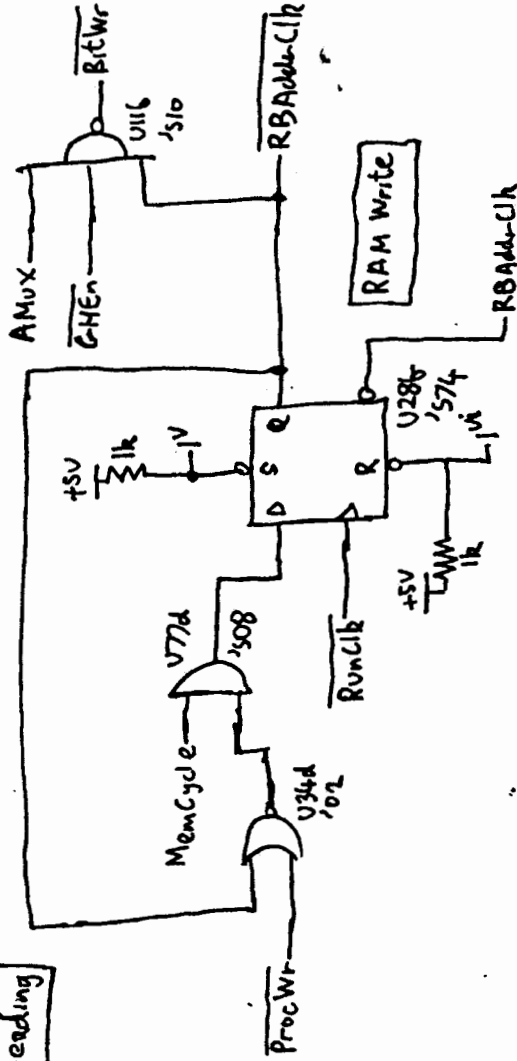
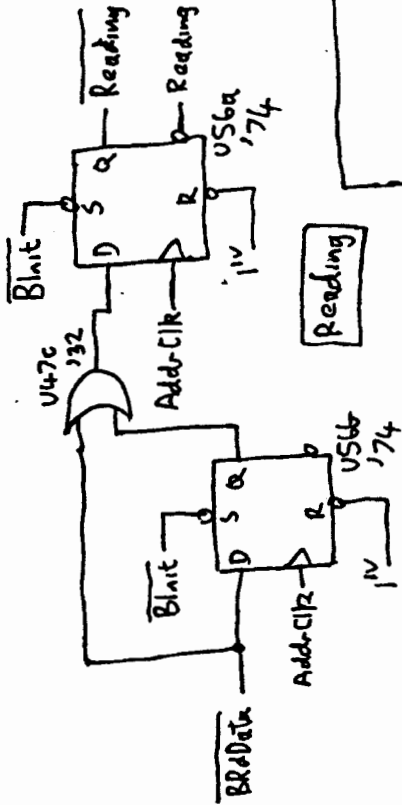
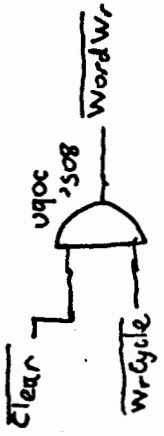
HP 98780 Processor PCB Sheet (A) 98780-6652 (Gn/R)

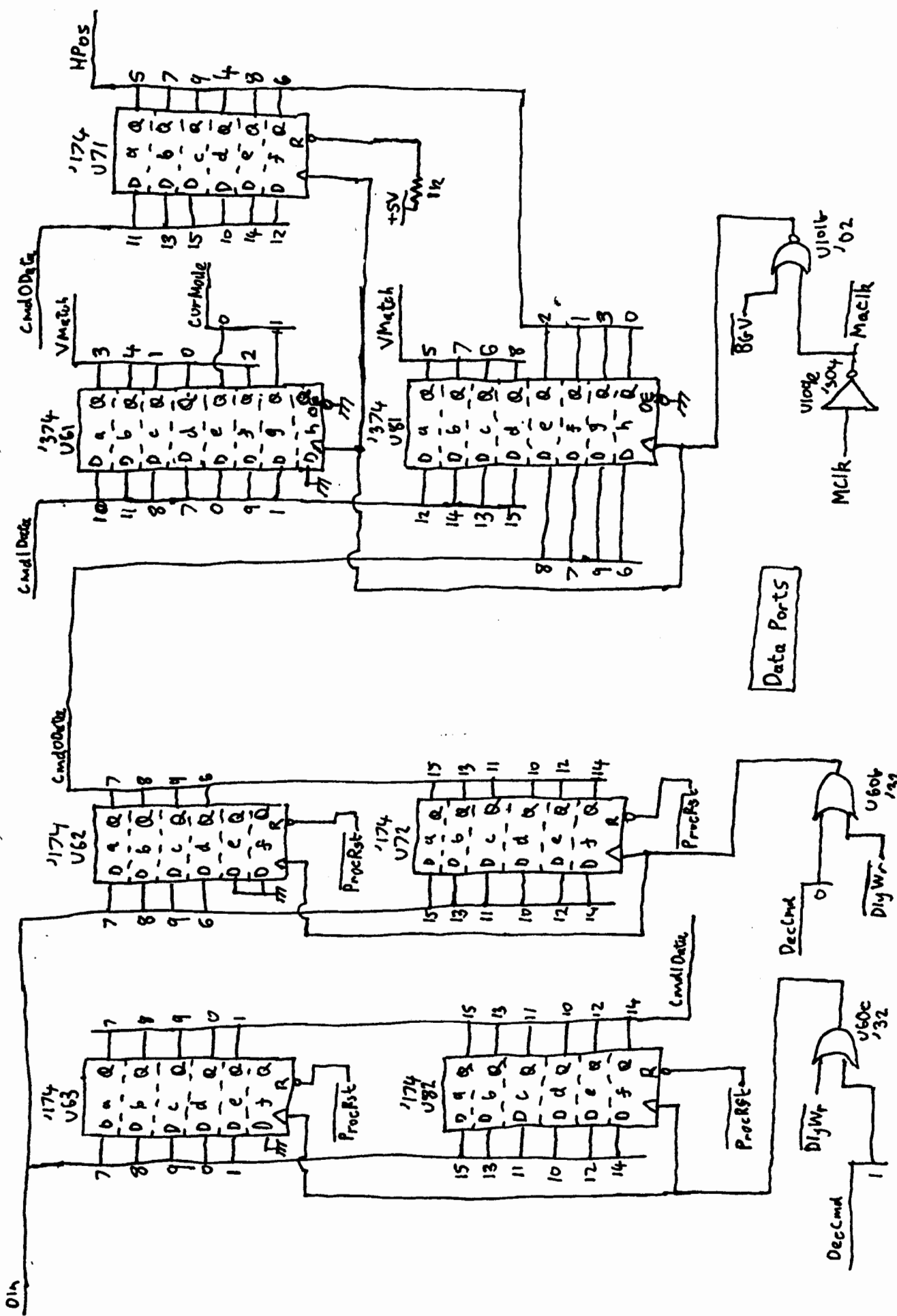
U30  
5061-4214



HP48780 Processor PCB Sheet 10 98780-66552 (64/R)

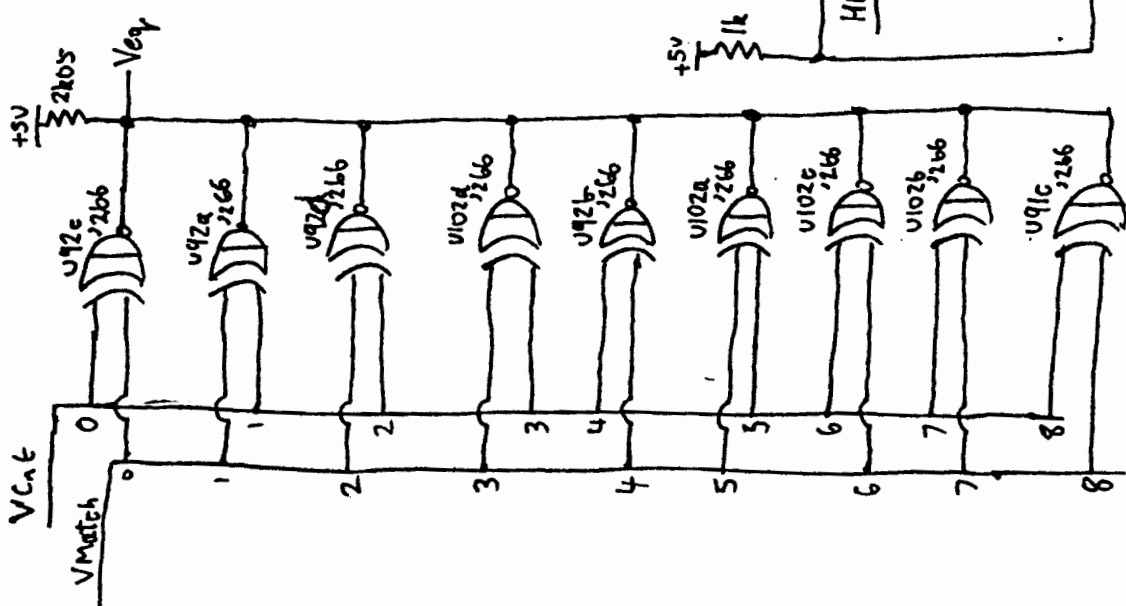
Cycle Timing



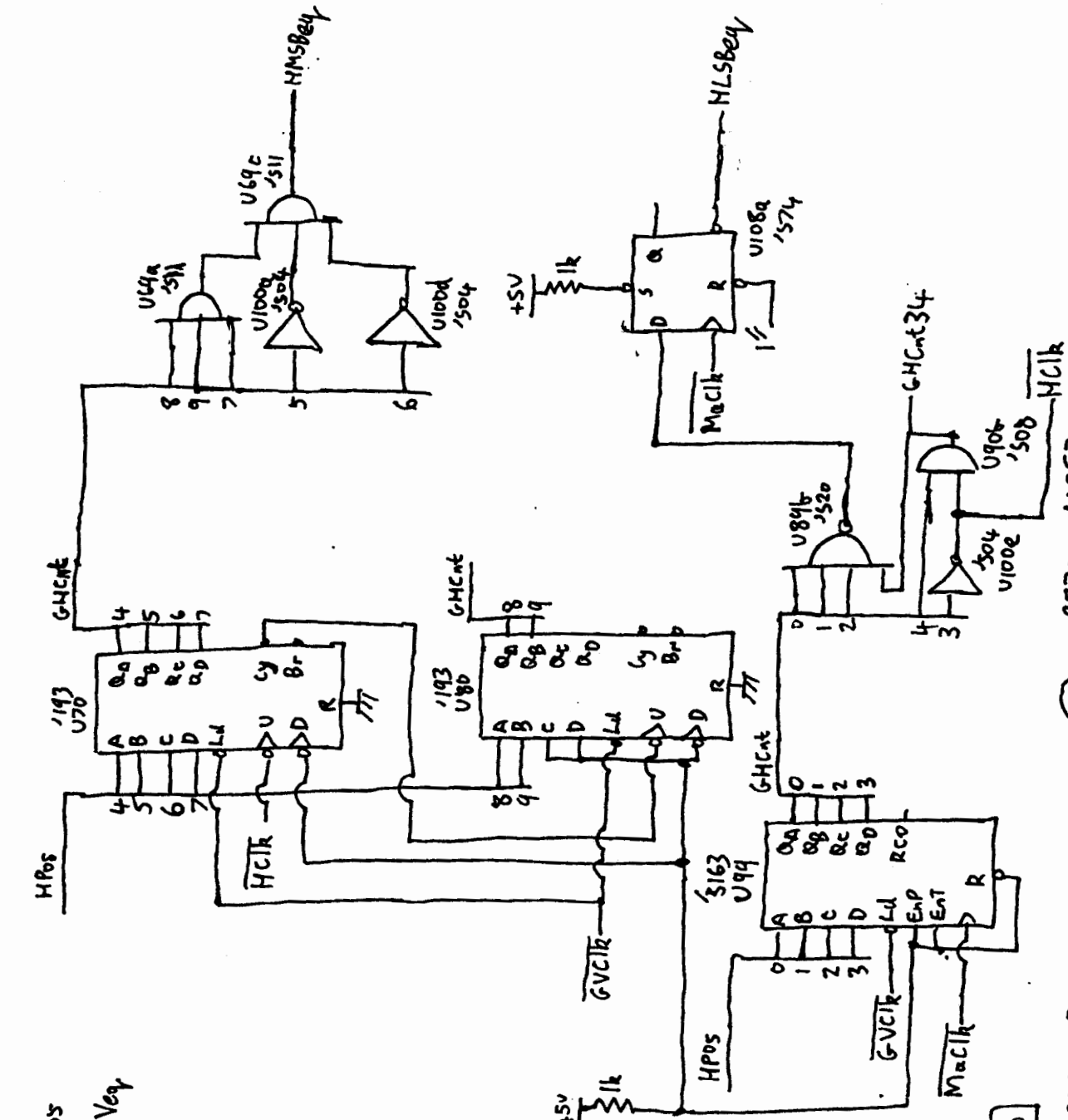


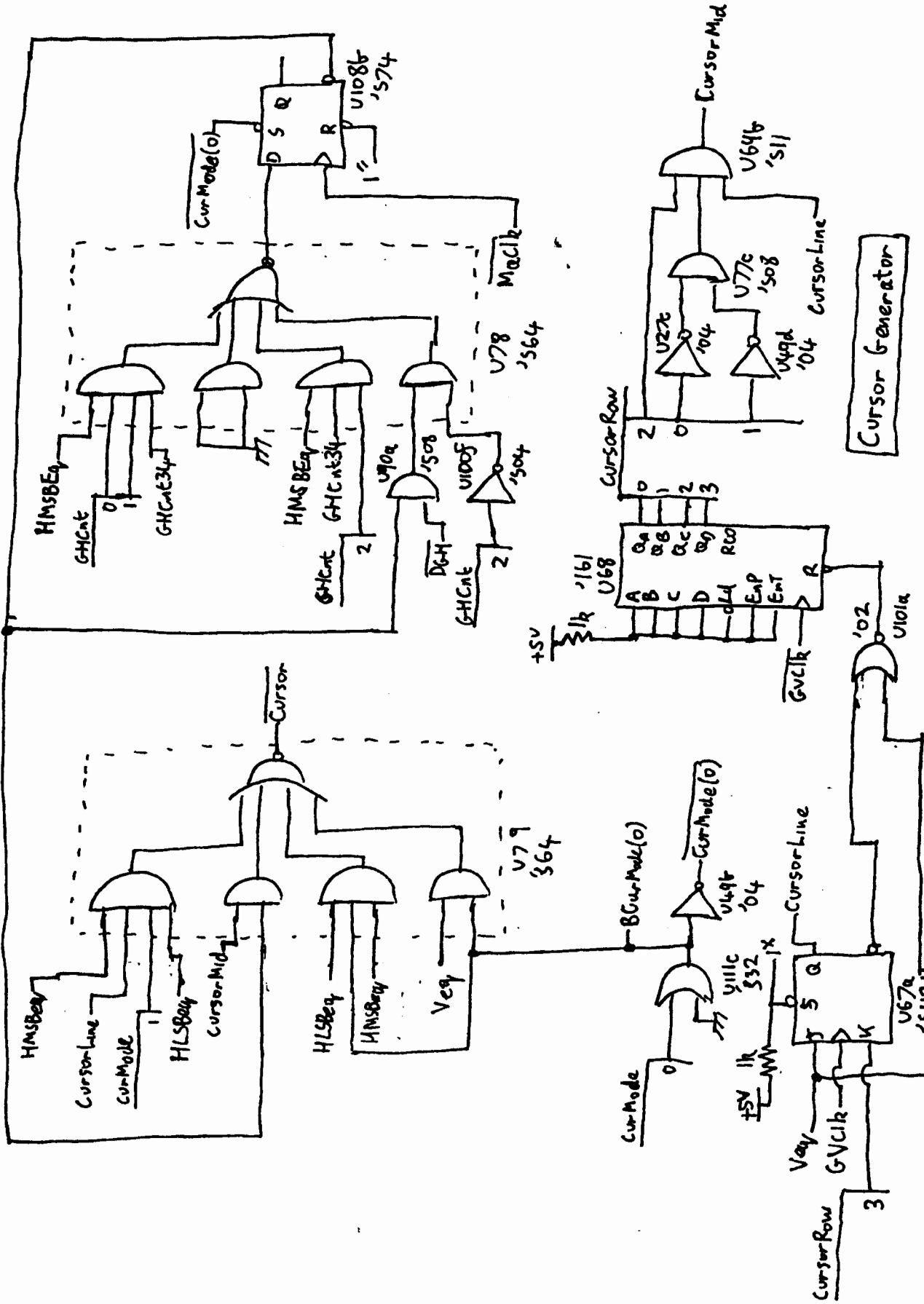
Data Ports

HP98780 Processor PCB Sheet (2) 98780-6652 (6w/R)



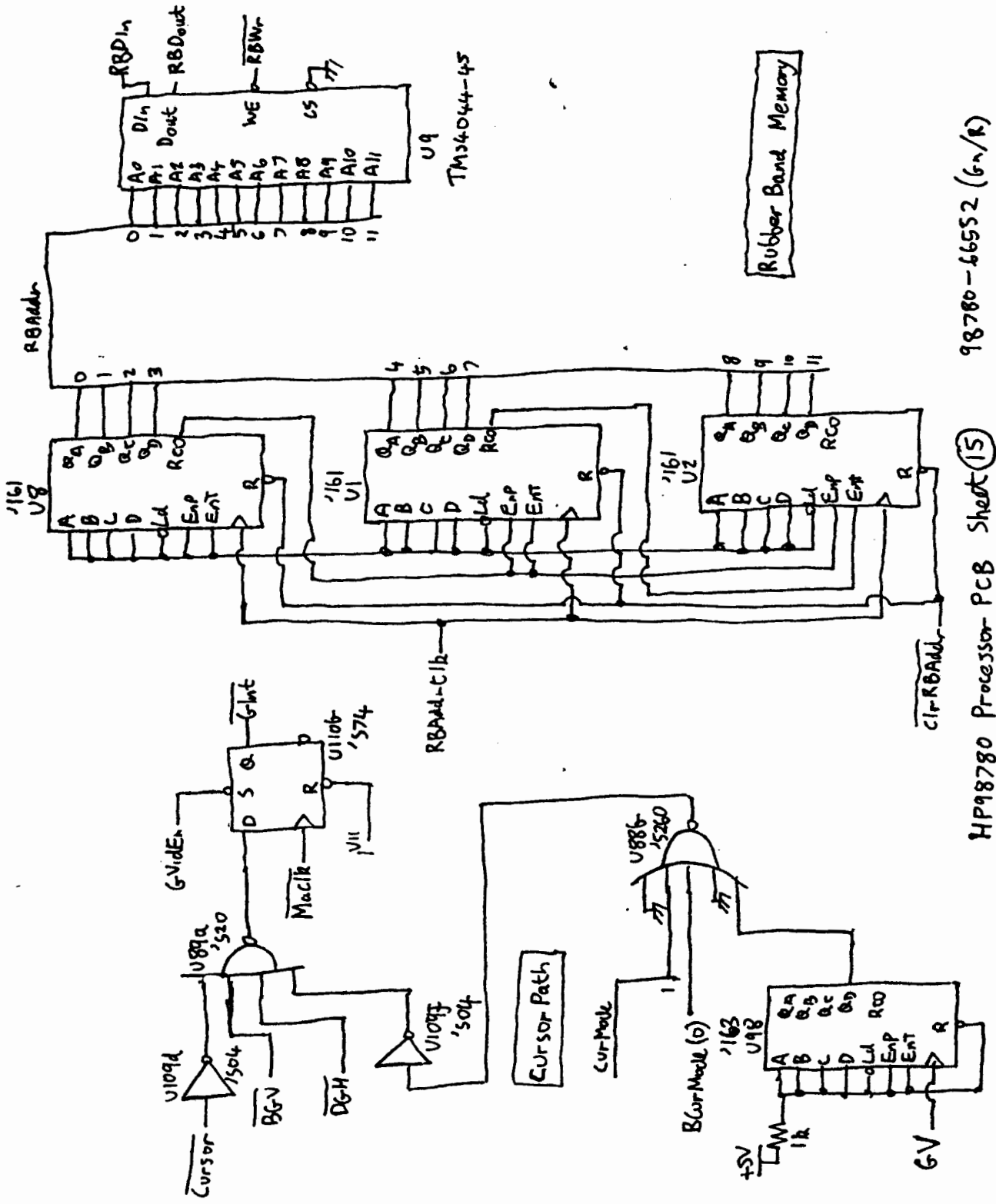
Cursor Position





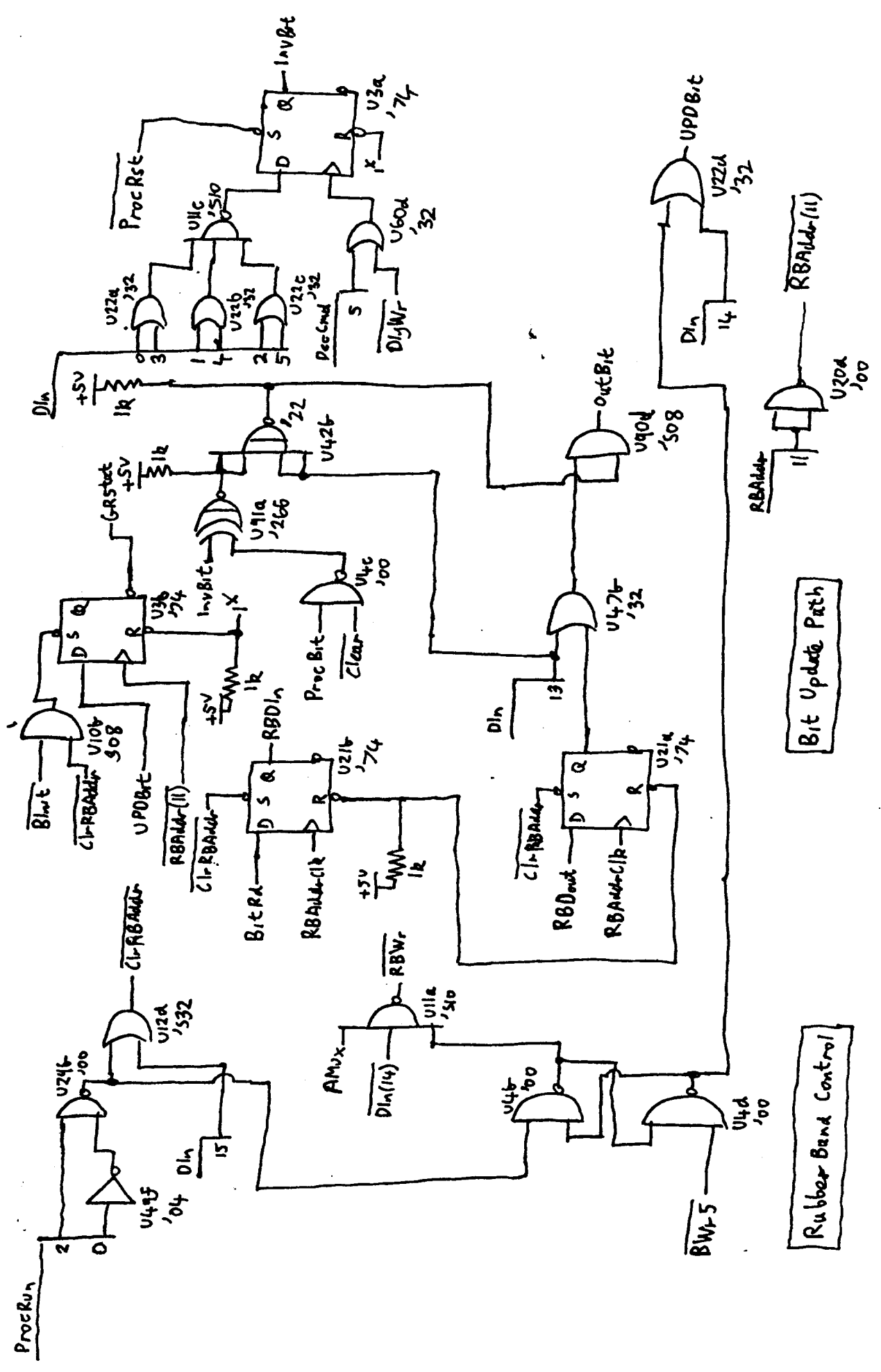
98780-66552 (Gn/R)

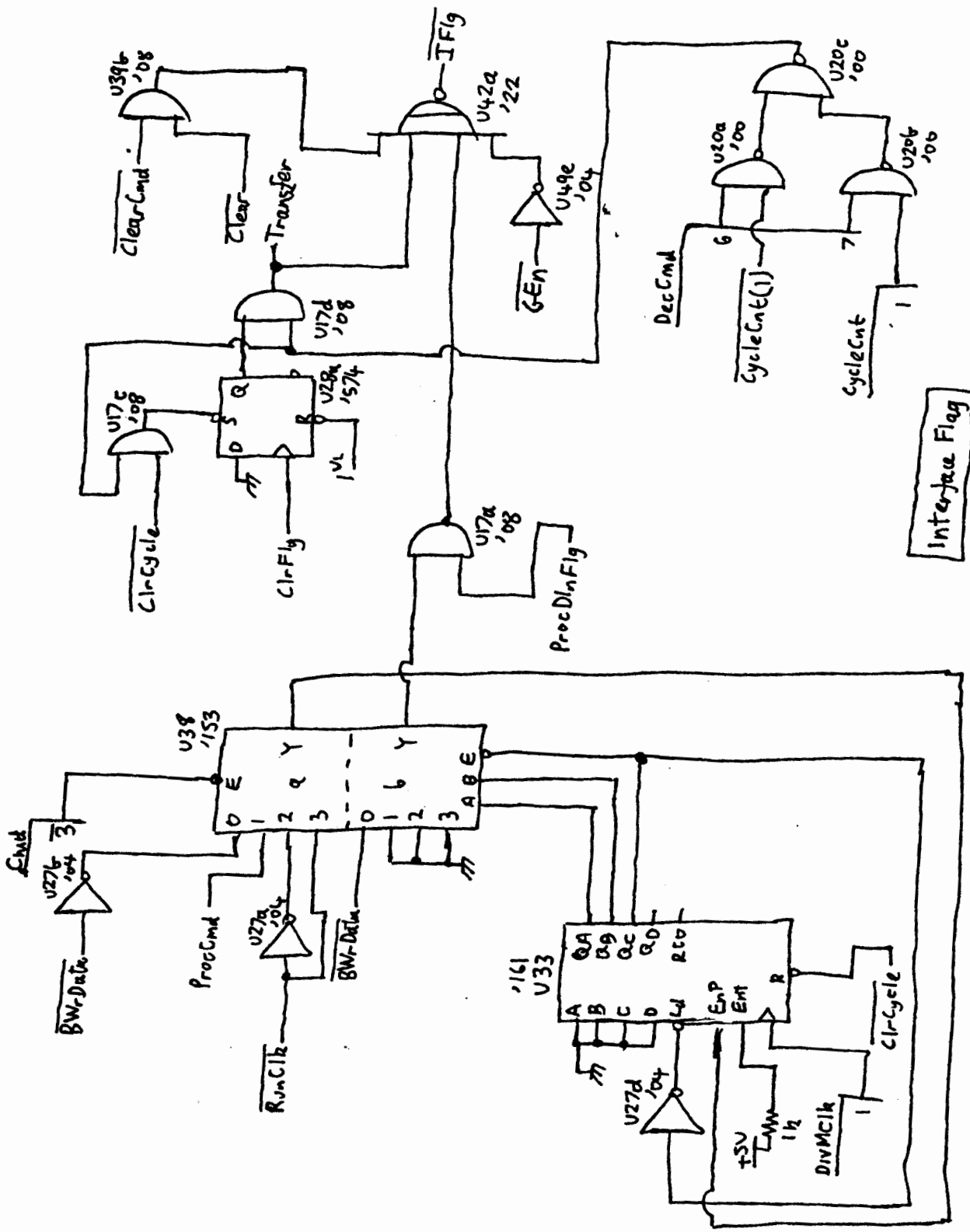
HP98780 Processor PCB Sheet (14)

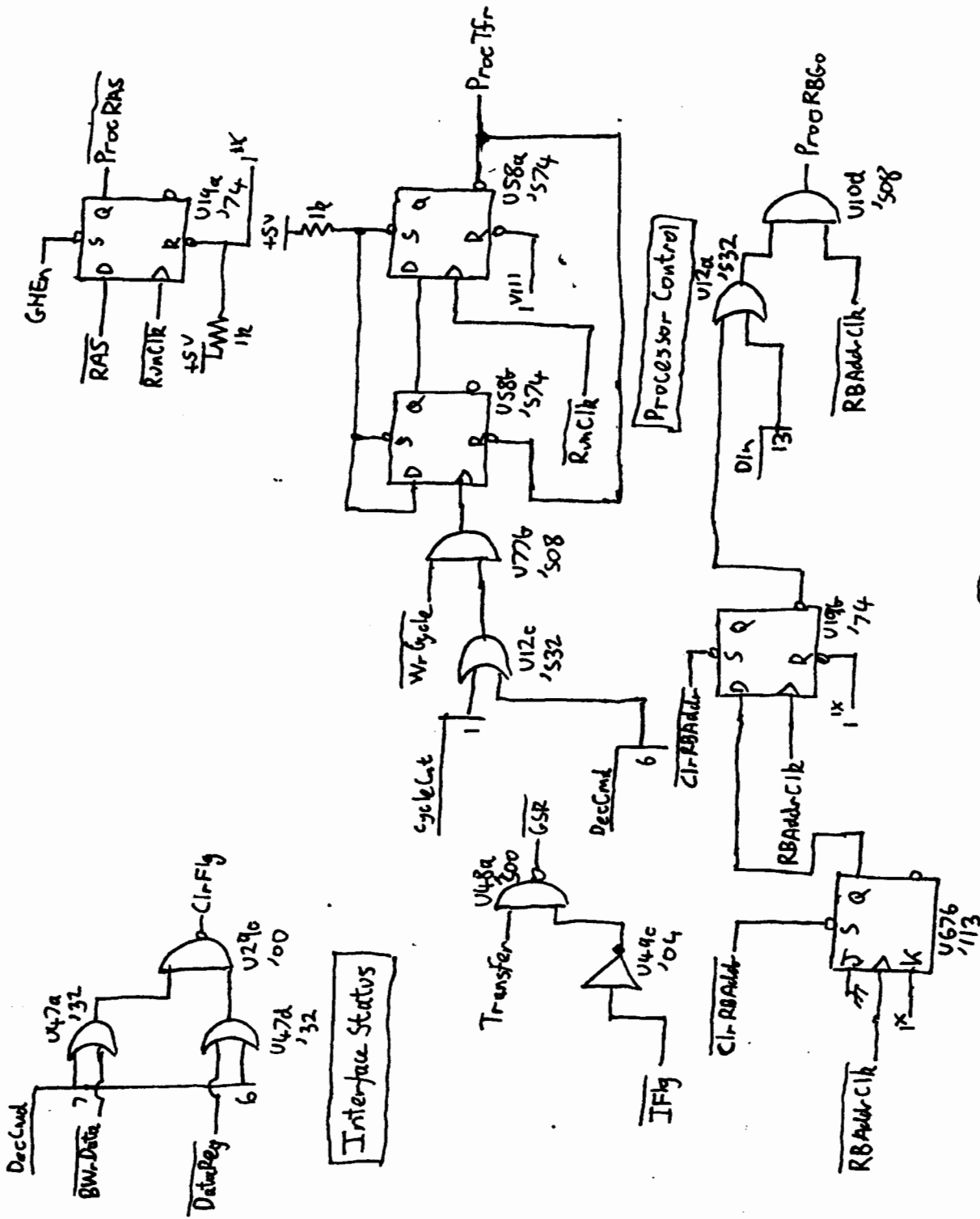


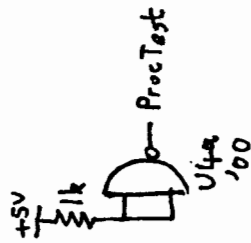
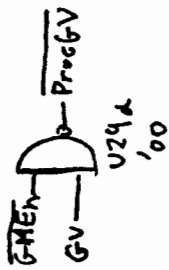
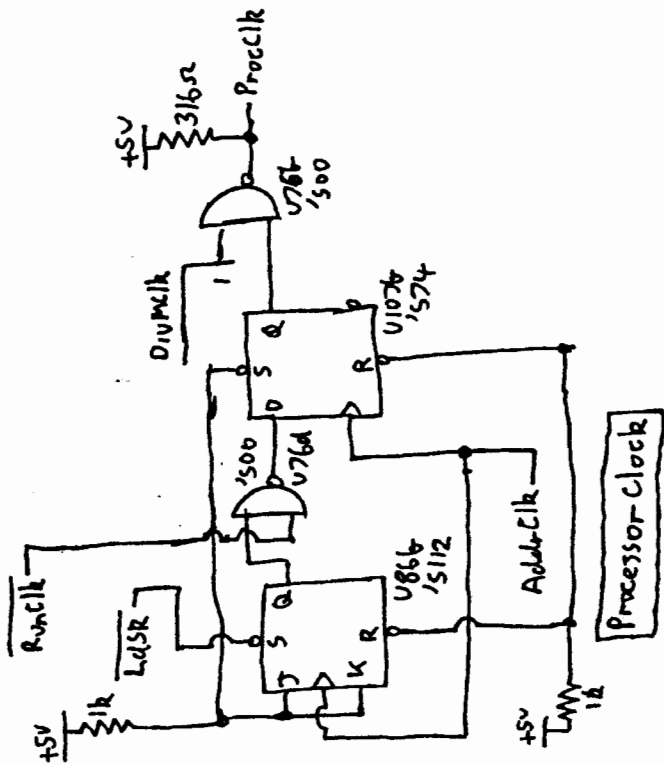
HP98780 Processor PCB Sheet 15 98780-6652 (Gn/R)





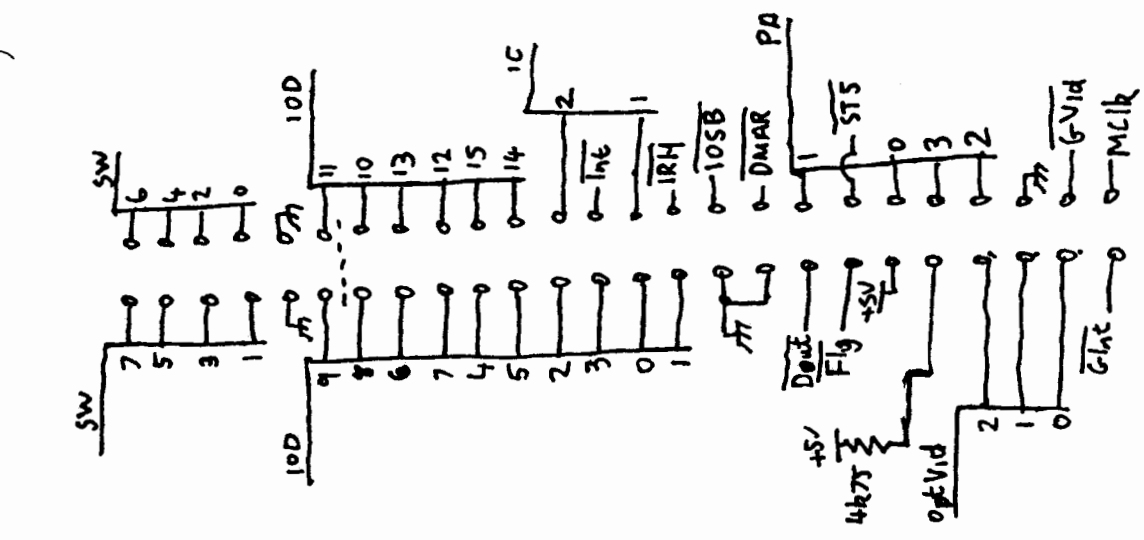






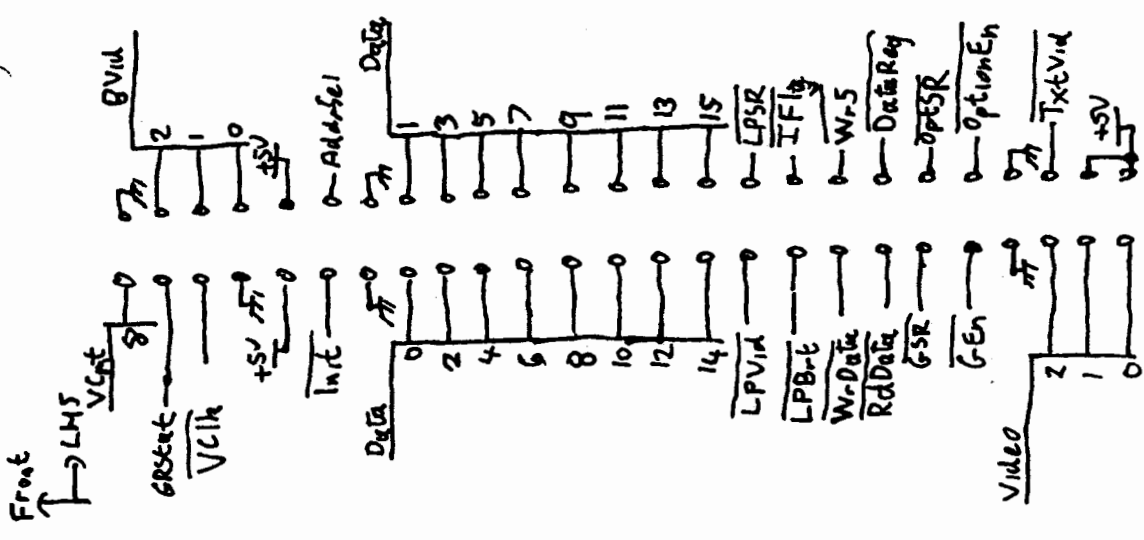
98780-6652 (6m/R)

HP98780 Processor PCB Sheet 19

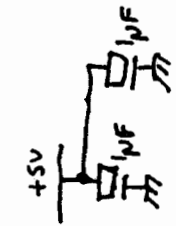
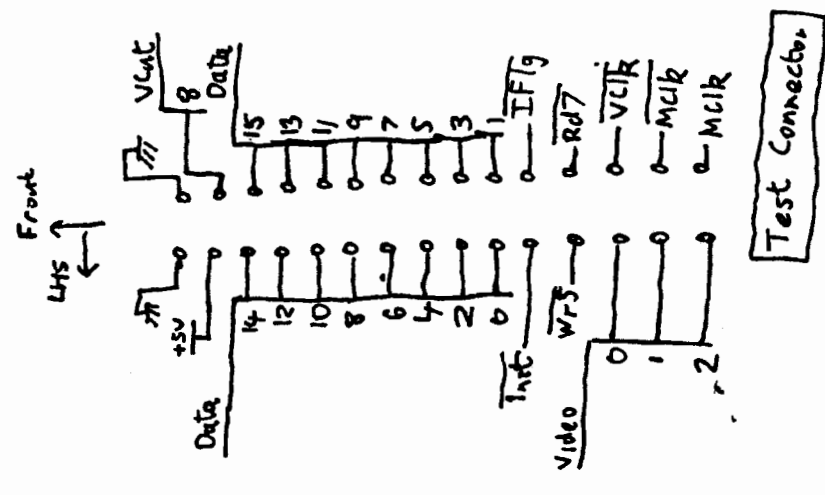


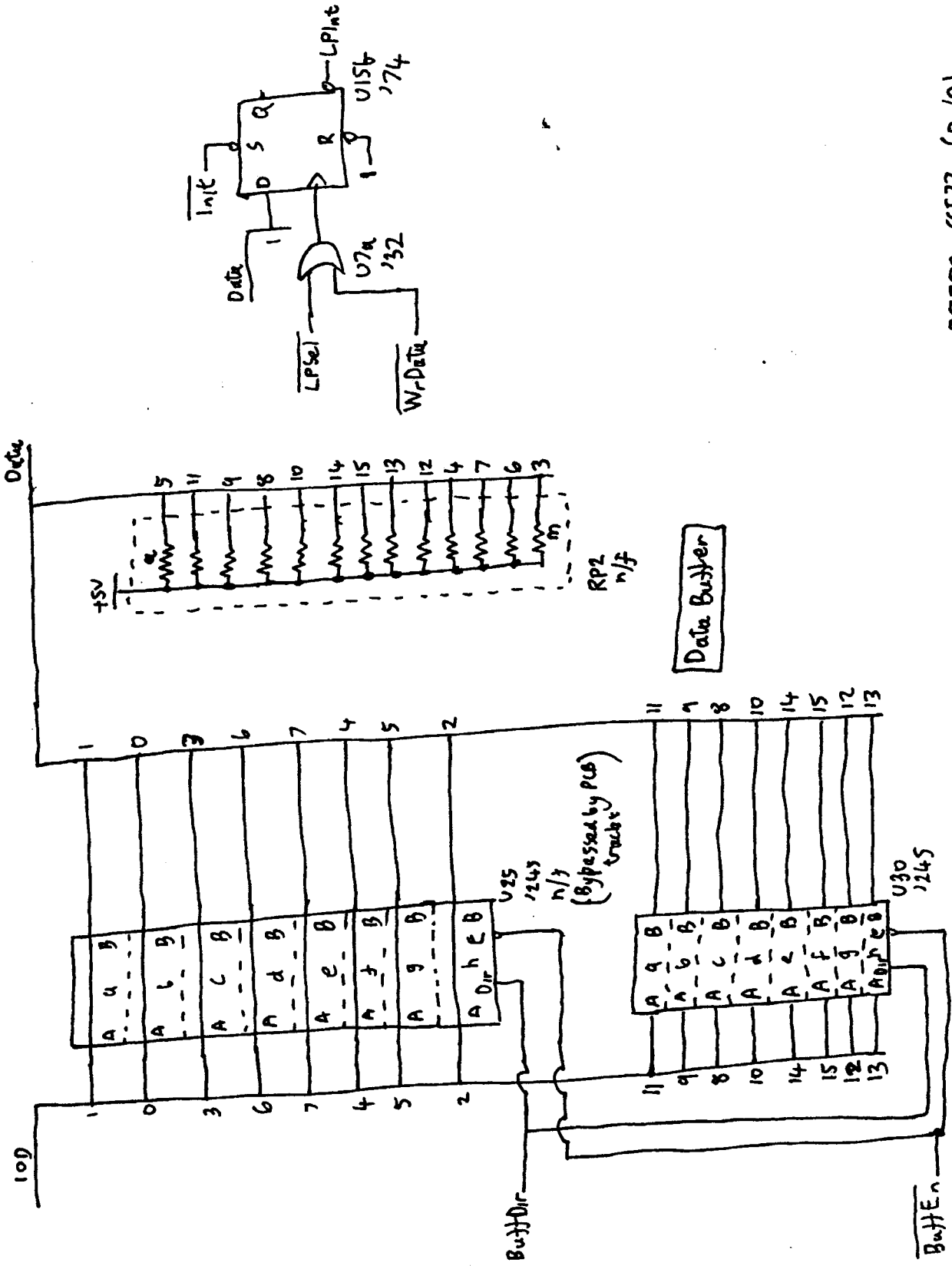
(Front)

Backplane Connectors



(Rear)

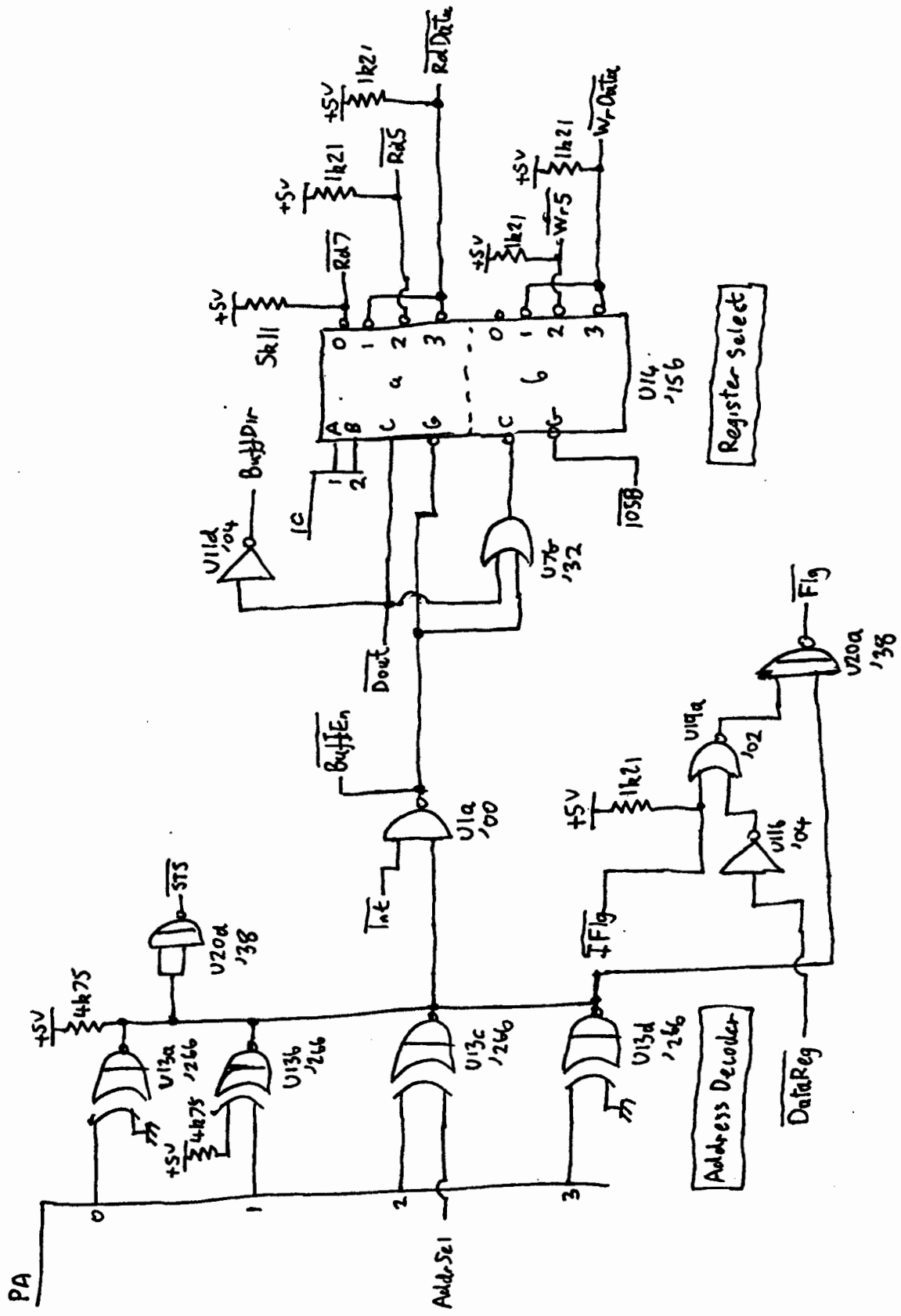


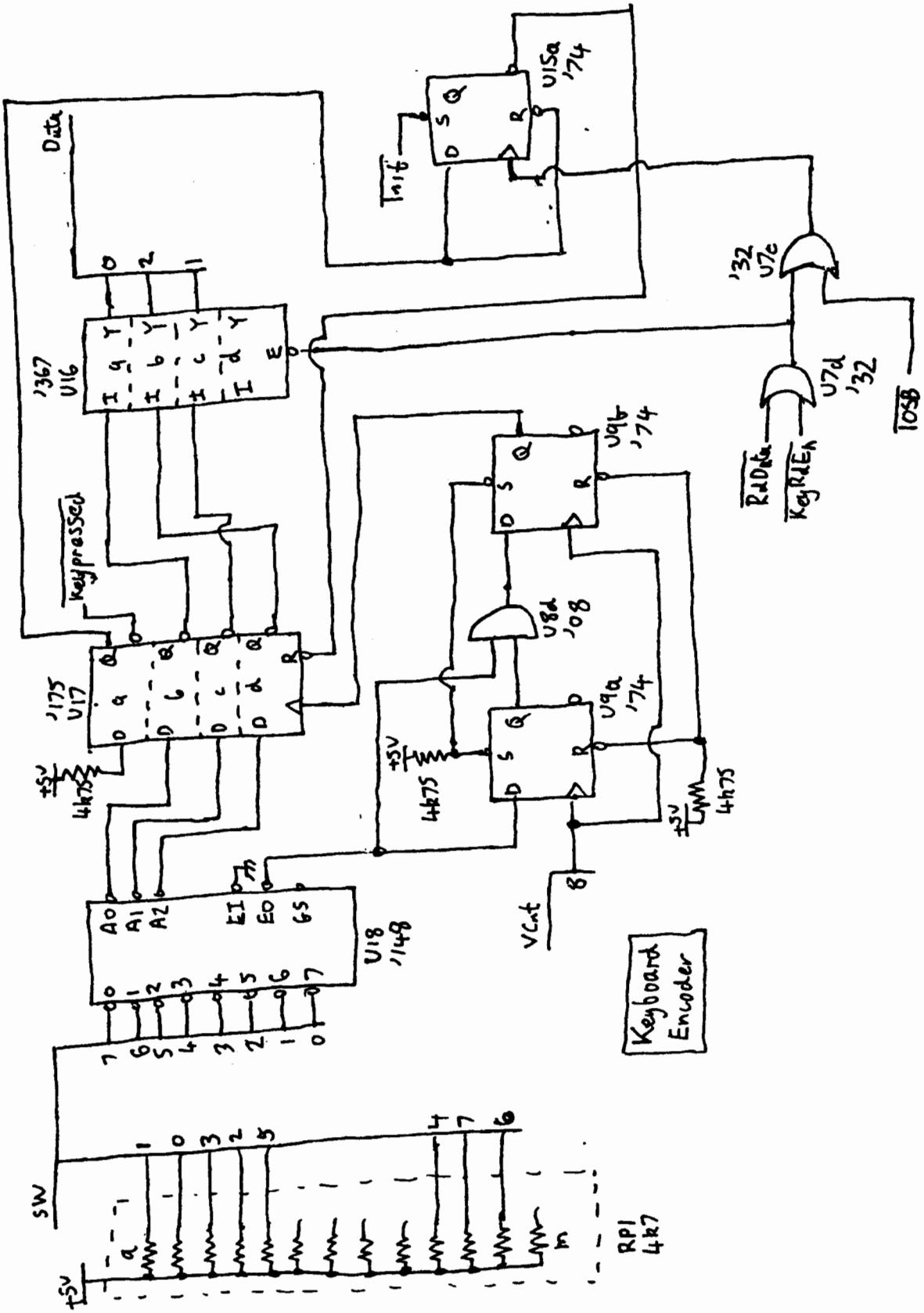


98780-66S32 (0r/R)

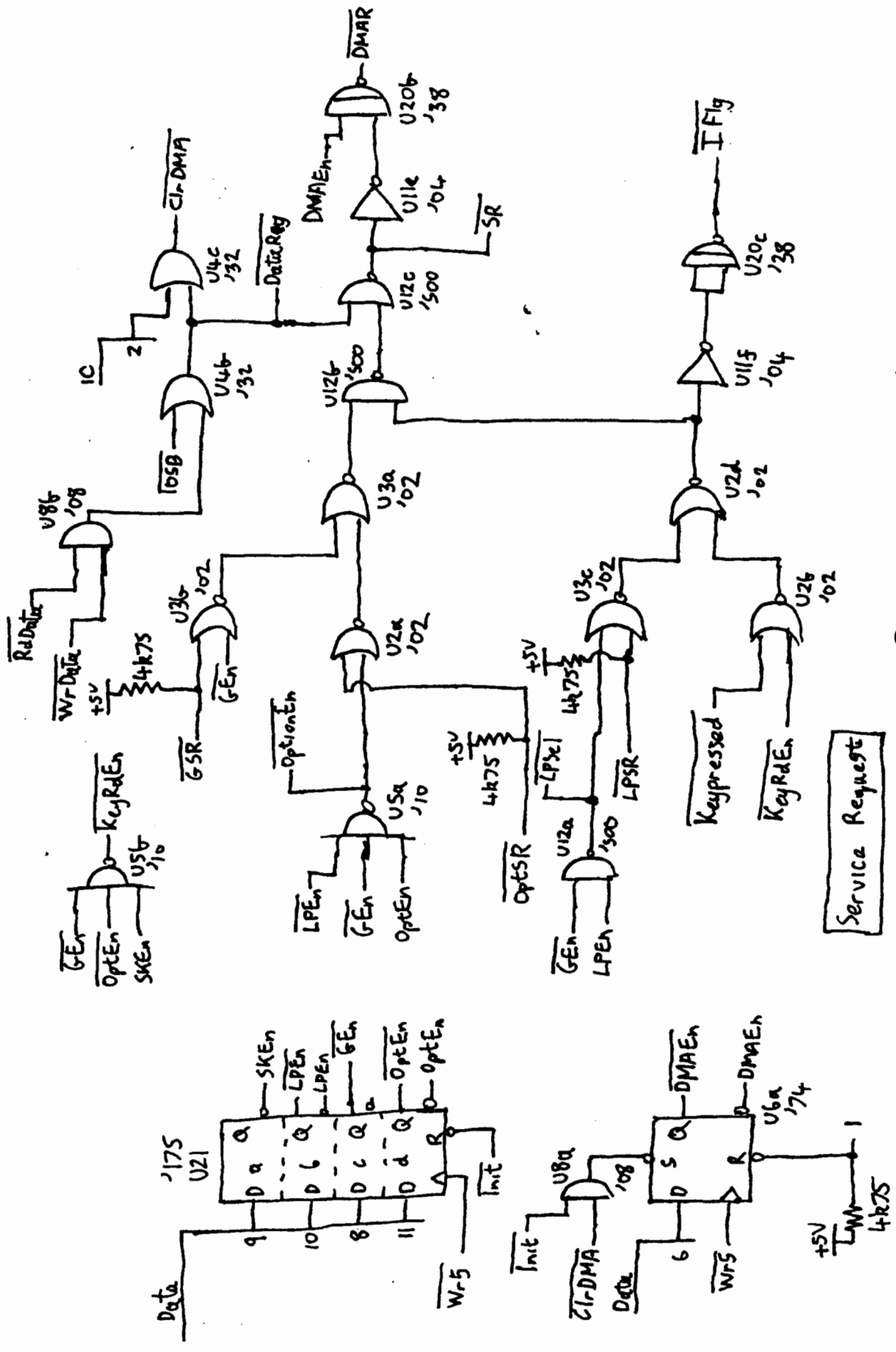
Sheet ②

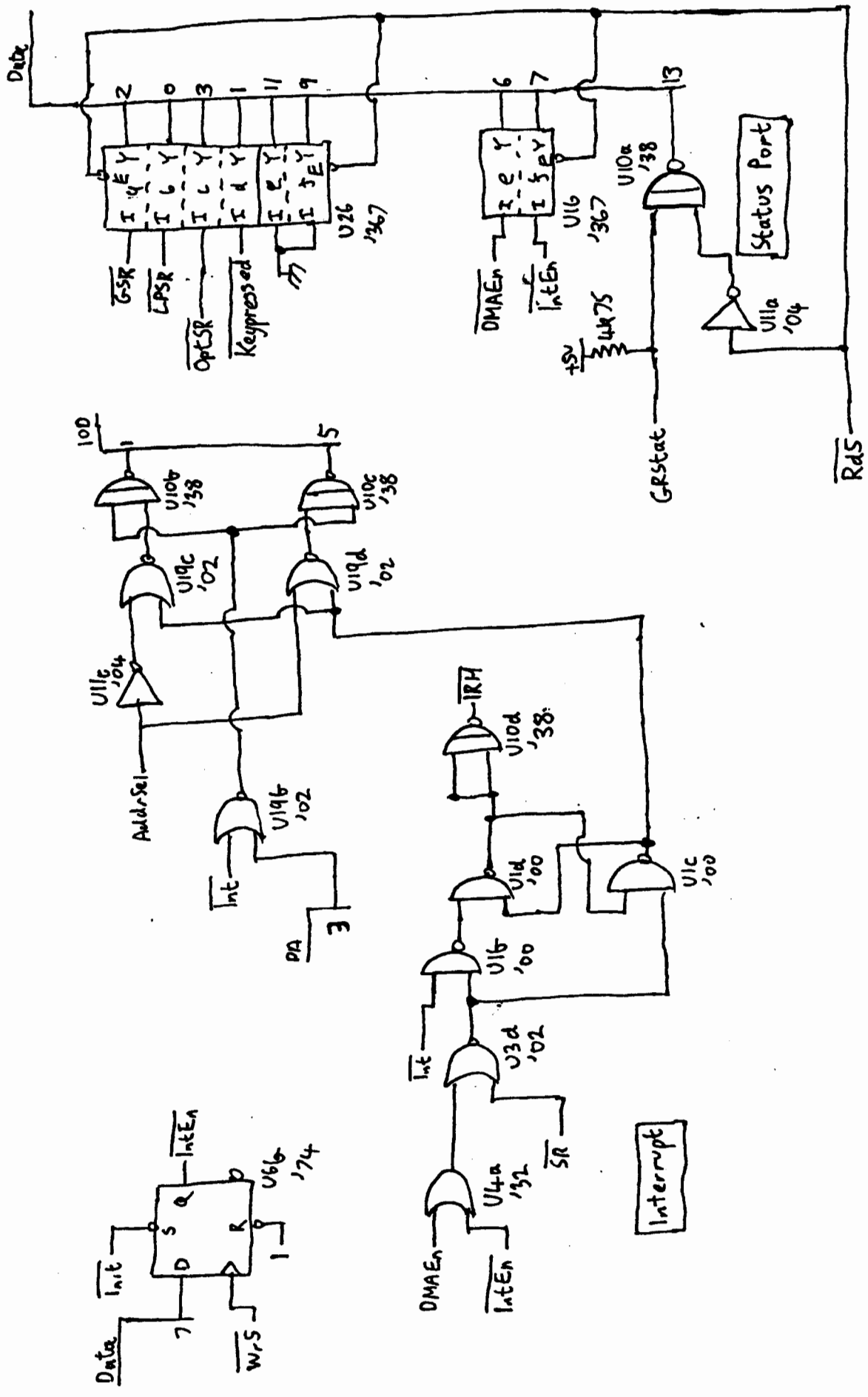
HP 98780 Interface PCB





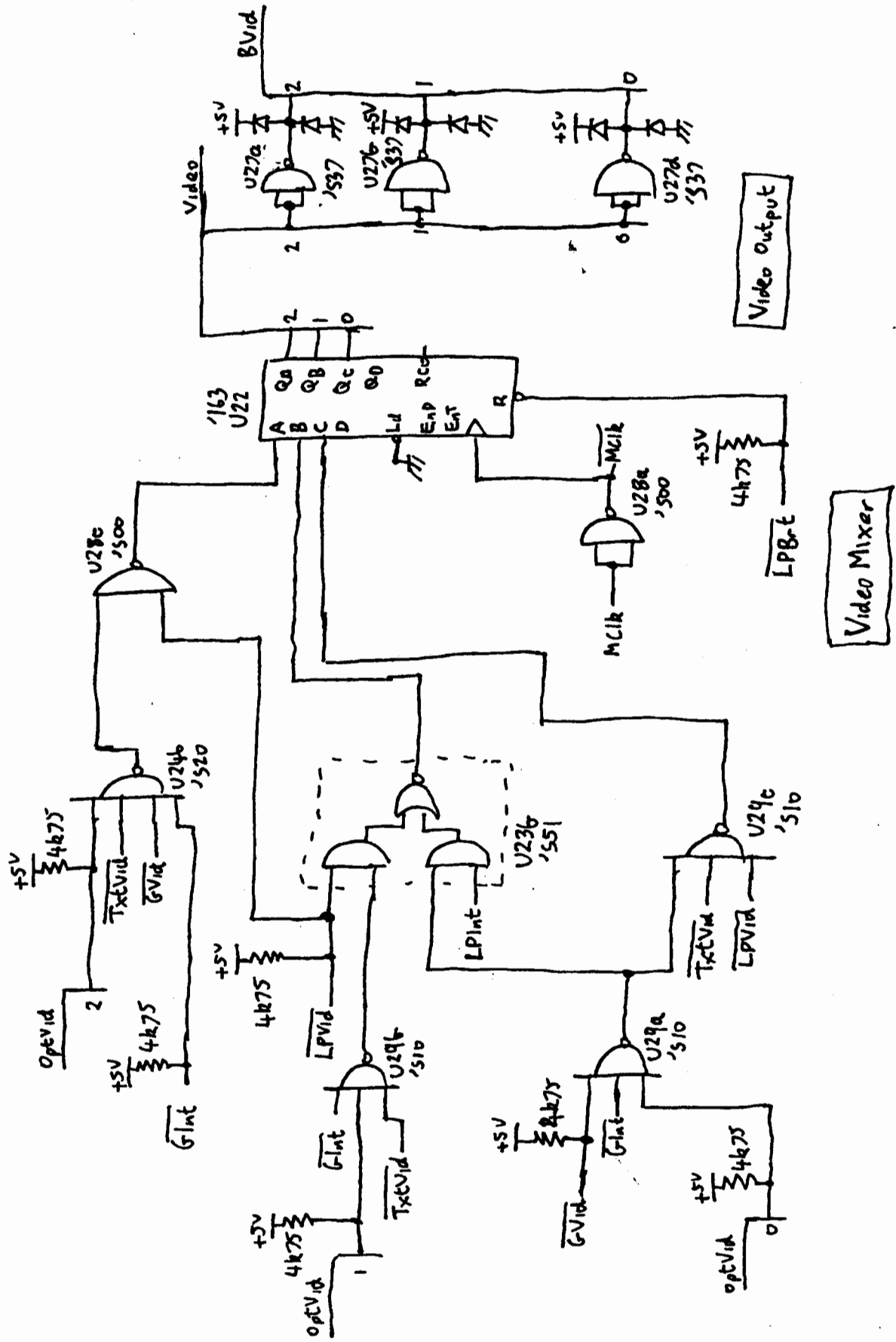


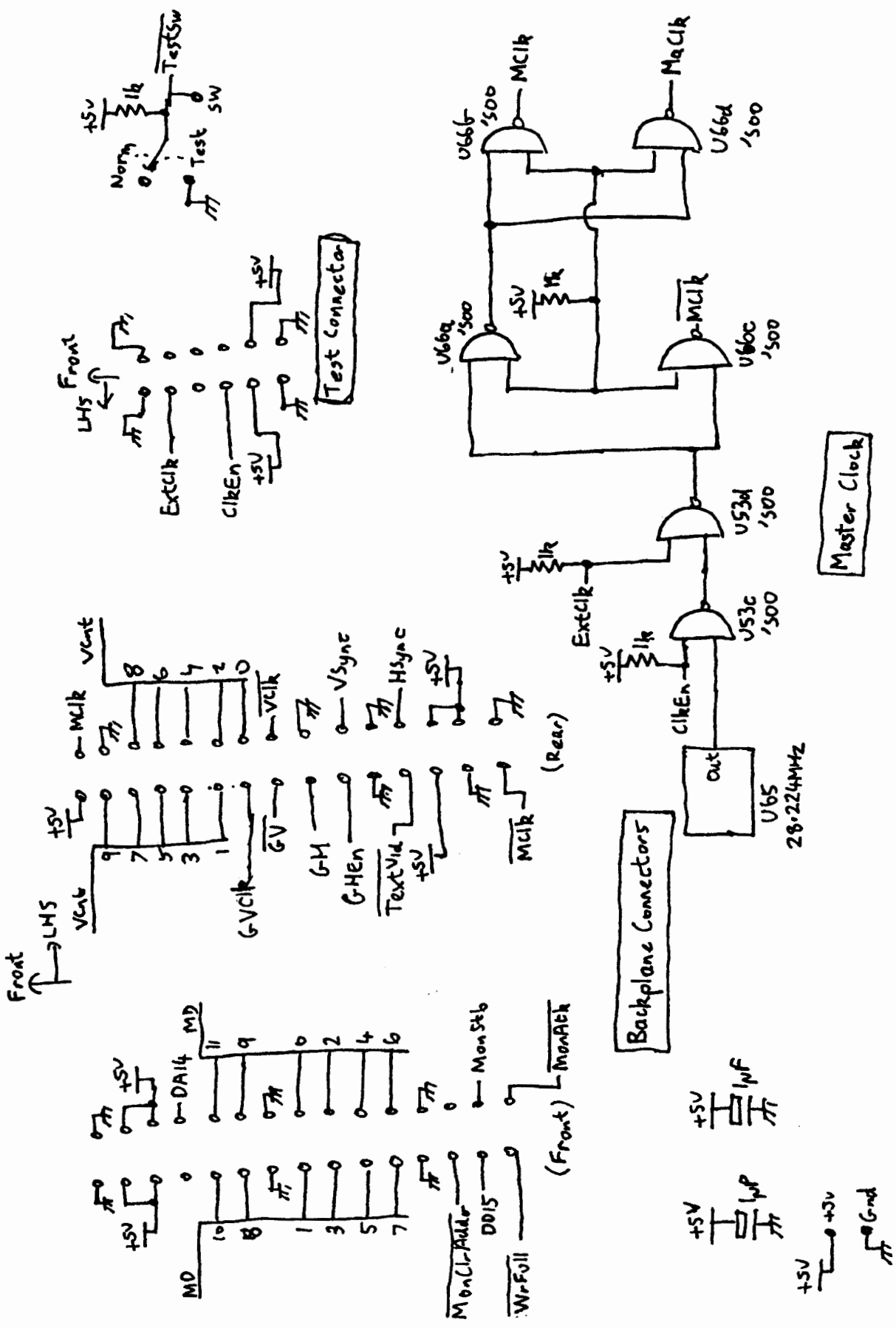


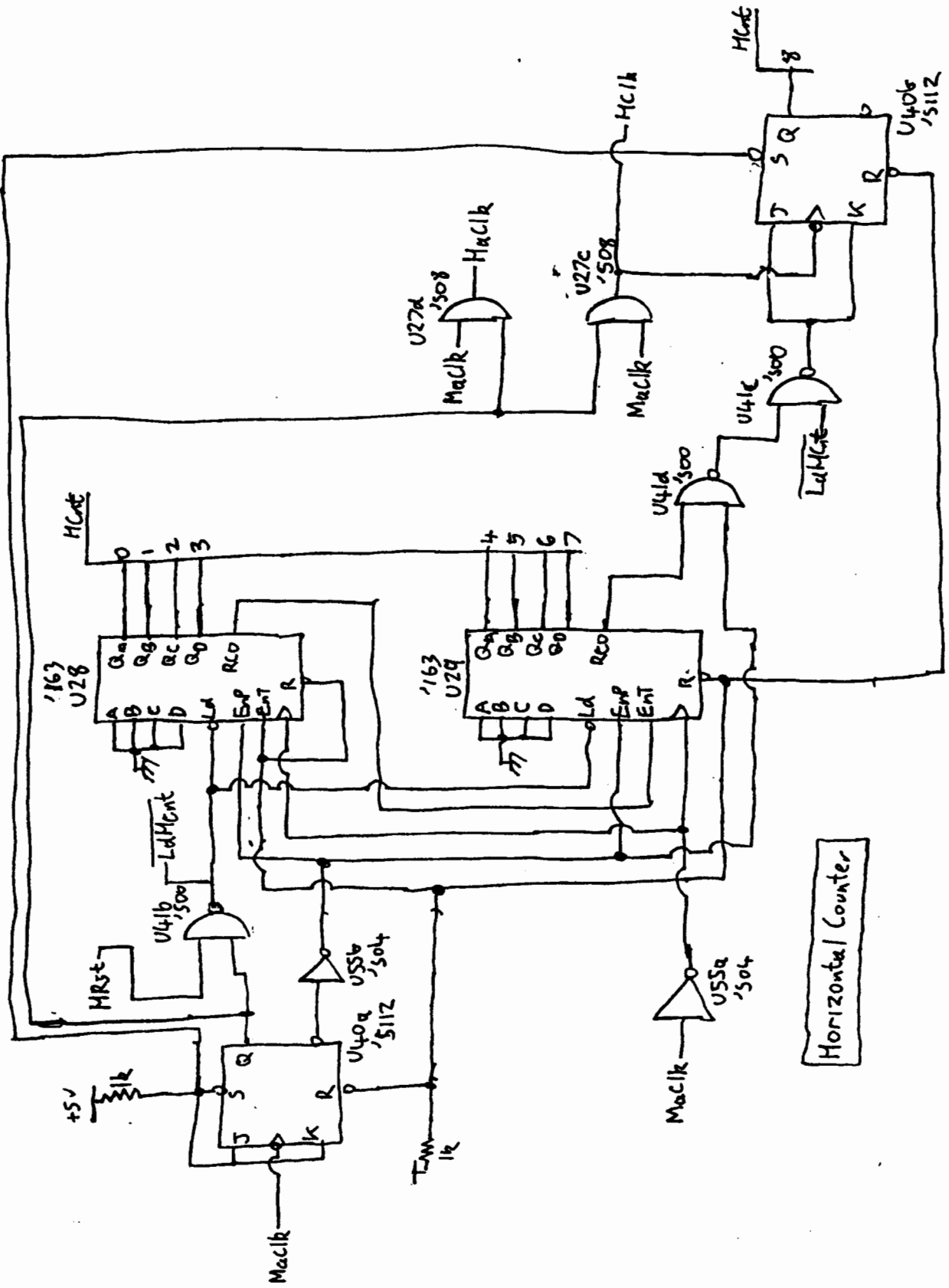


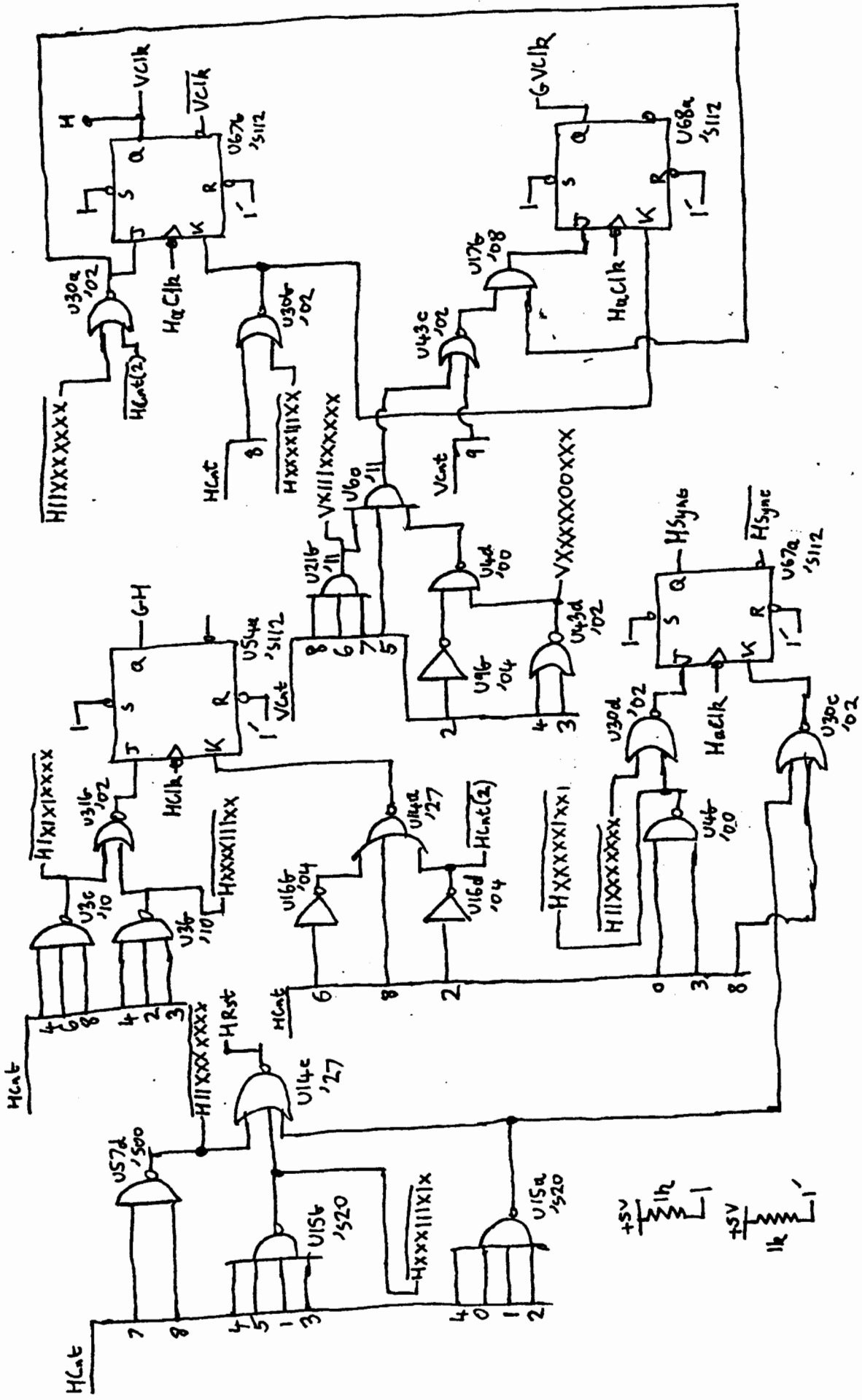
98780-66532 (or/R)

HP98780 Interface PCB Sheet 6





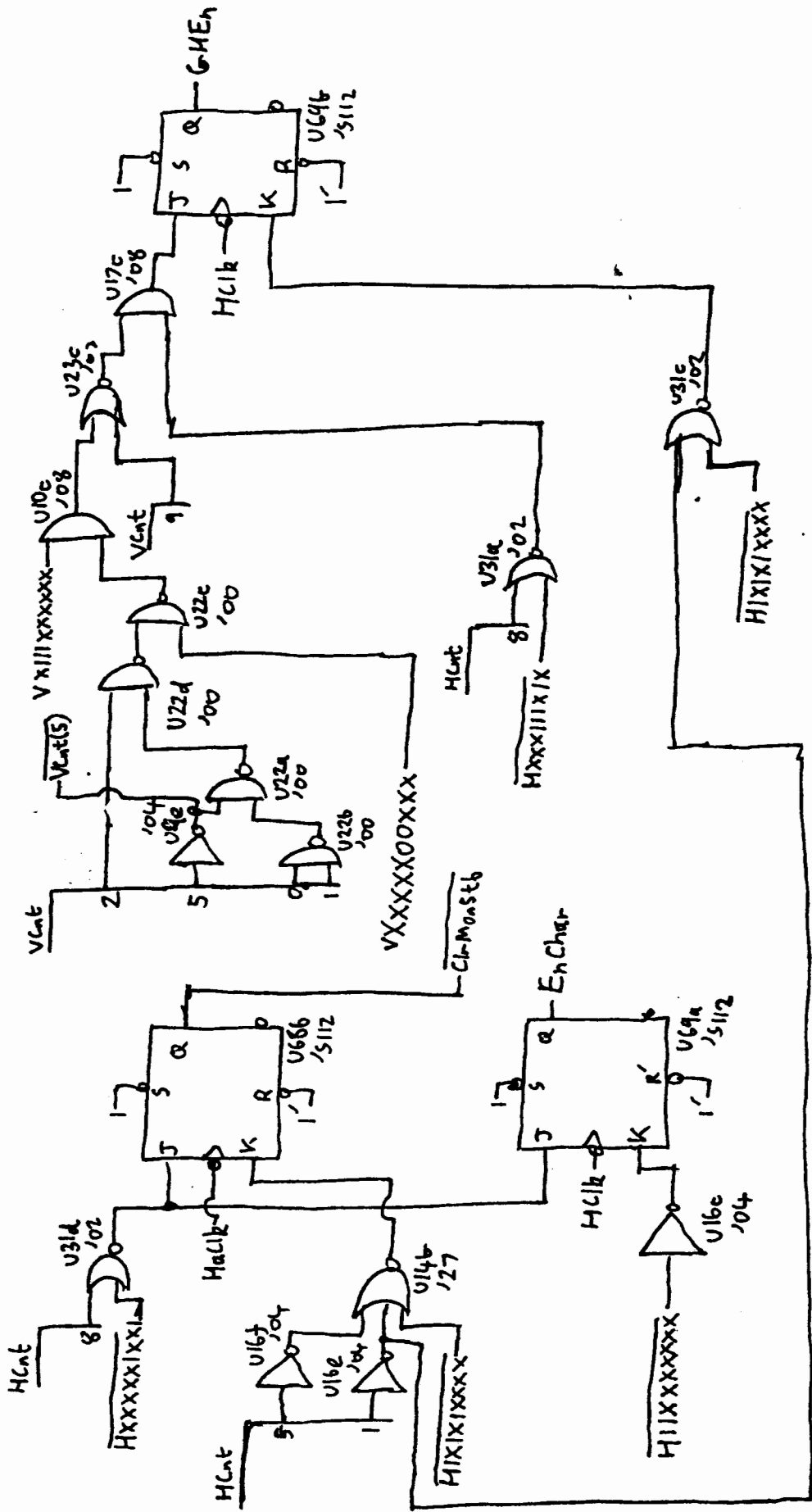




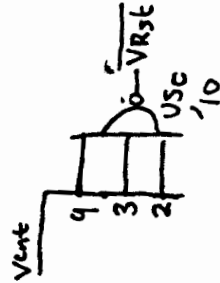
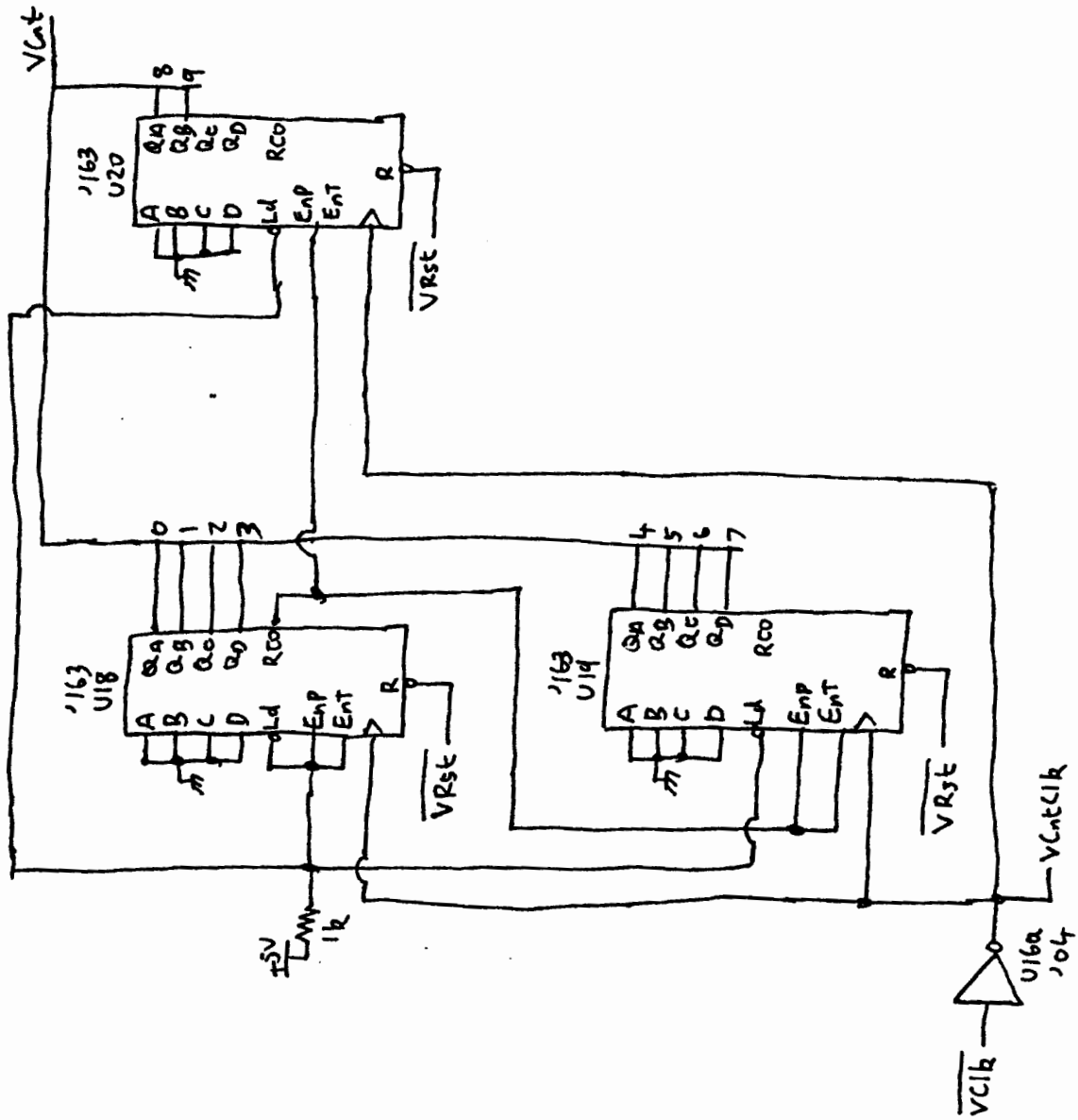
Horizontal Timing

98780-66521 (R/R)

HP98780 Text PCB Sheet ③

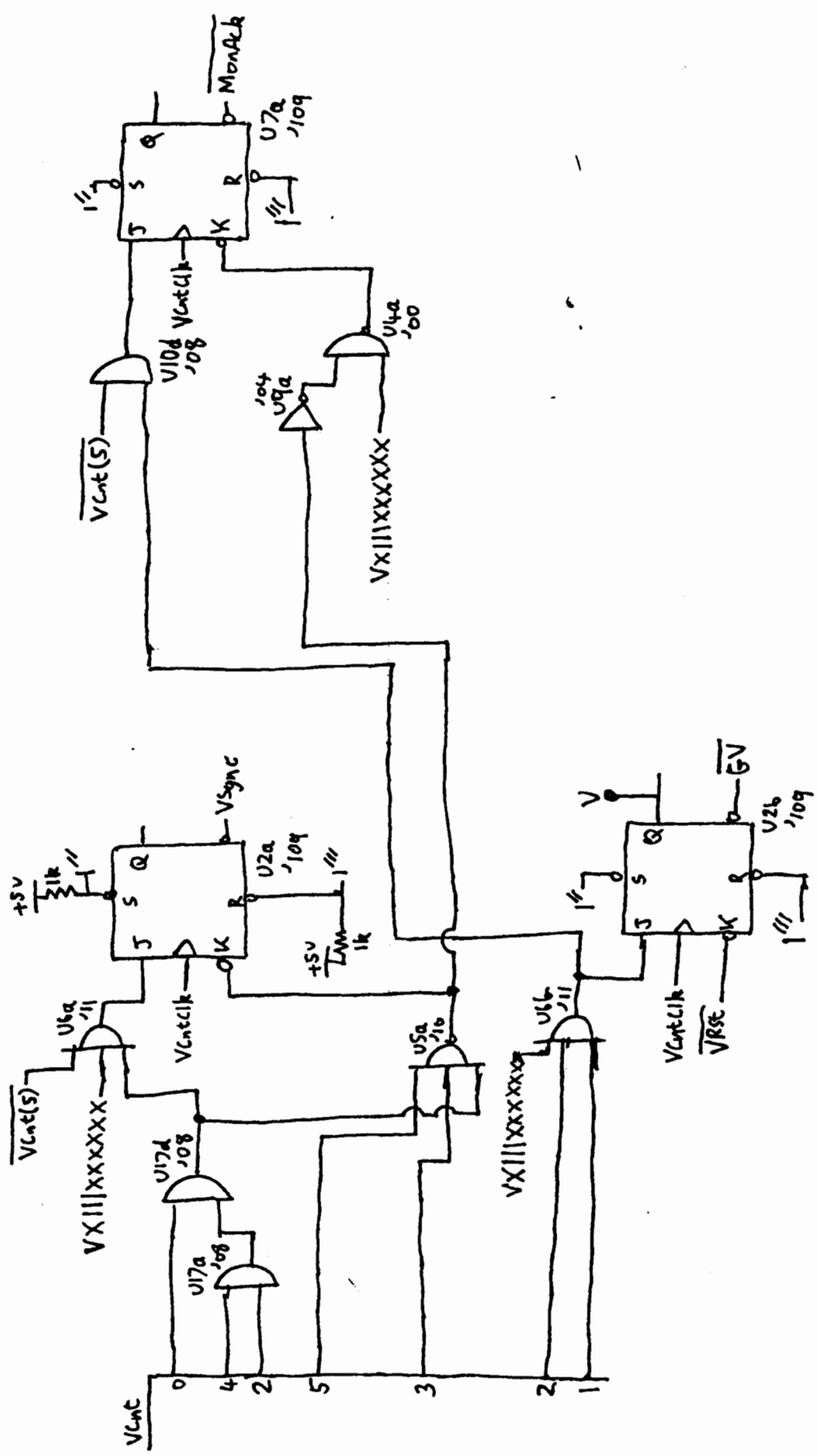


Horizontal Timing

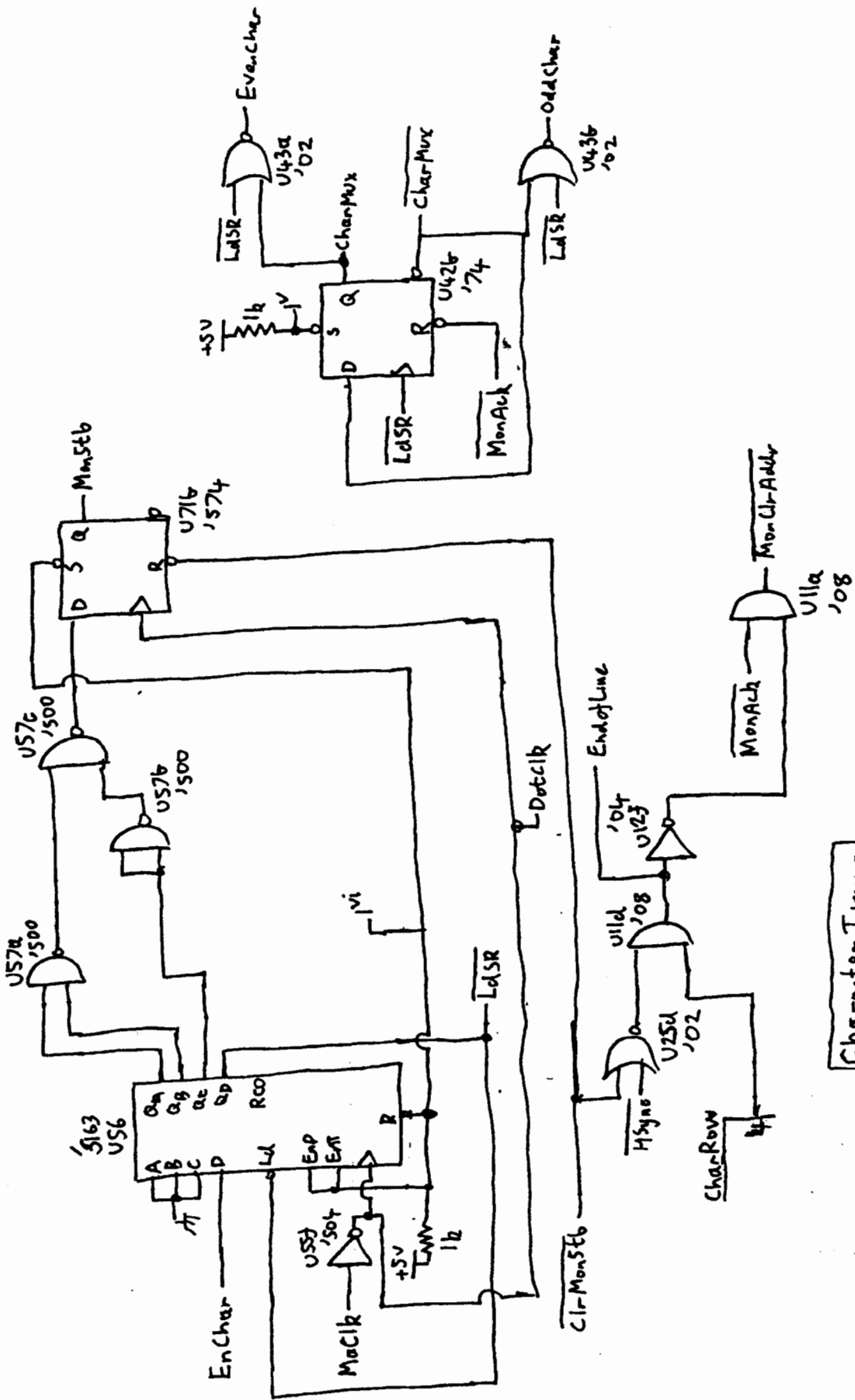


Vertical Counter





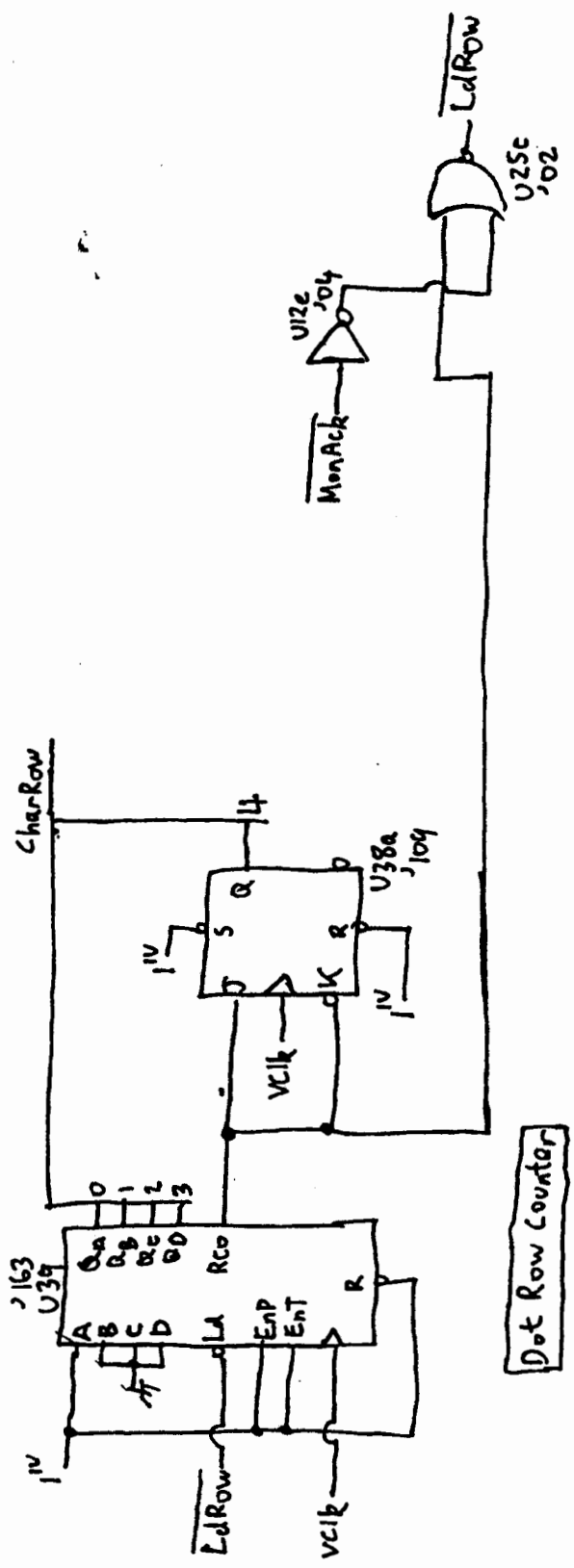
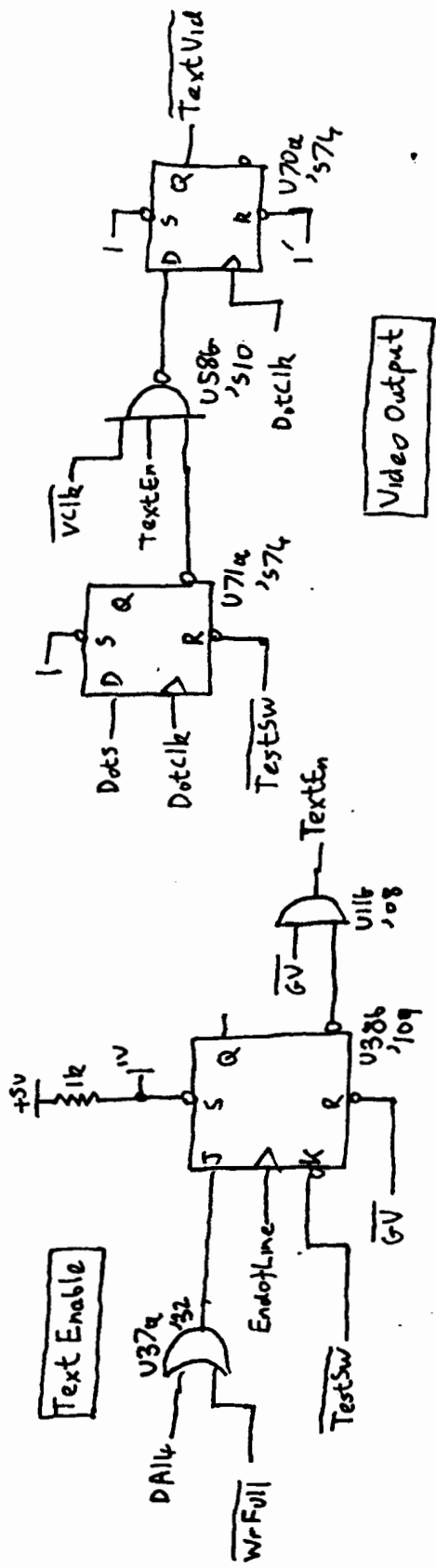
Vertical Timing

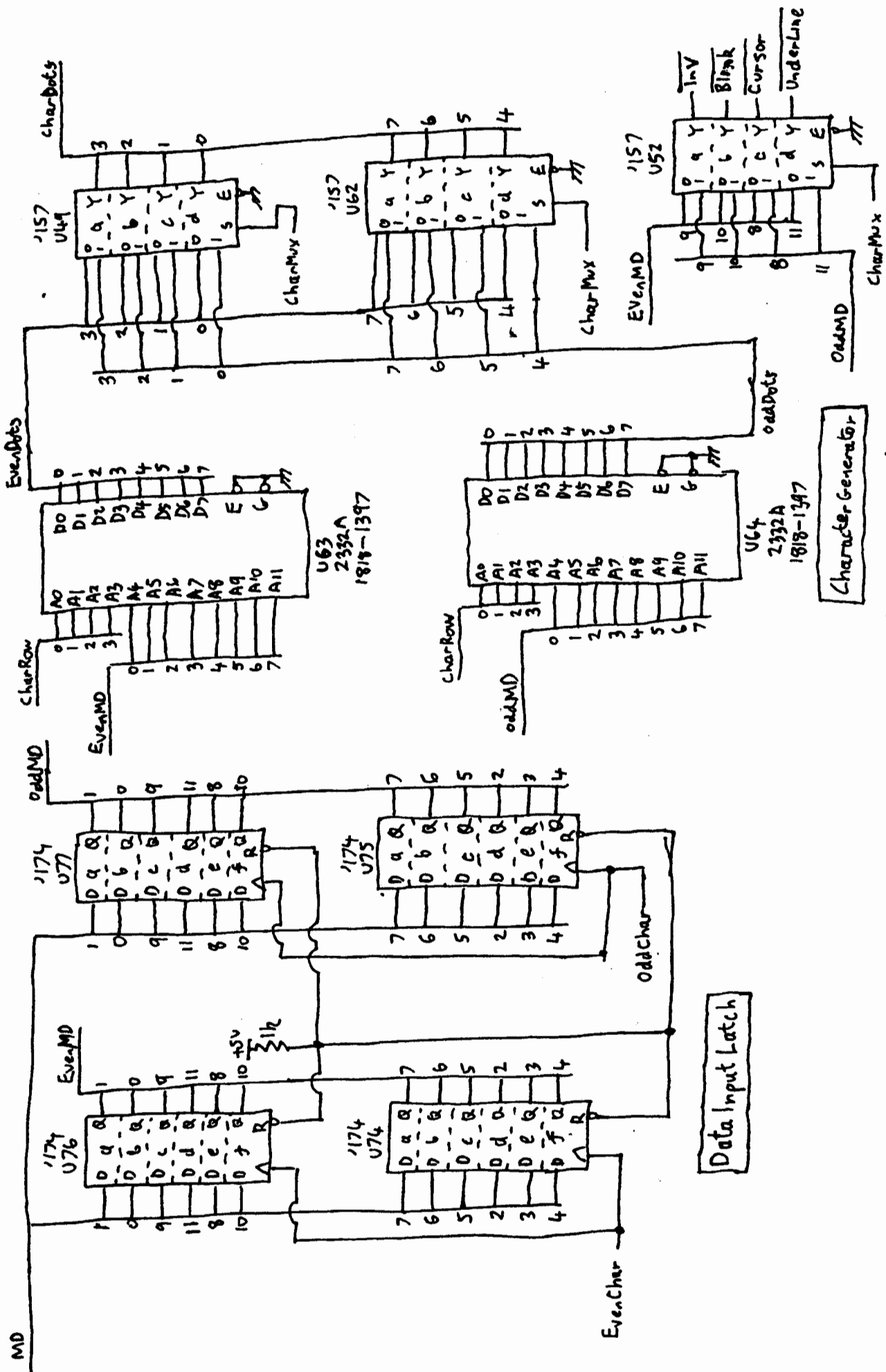


Character Timing

98780-66521 (R/B-)

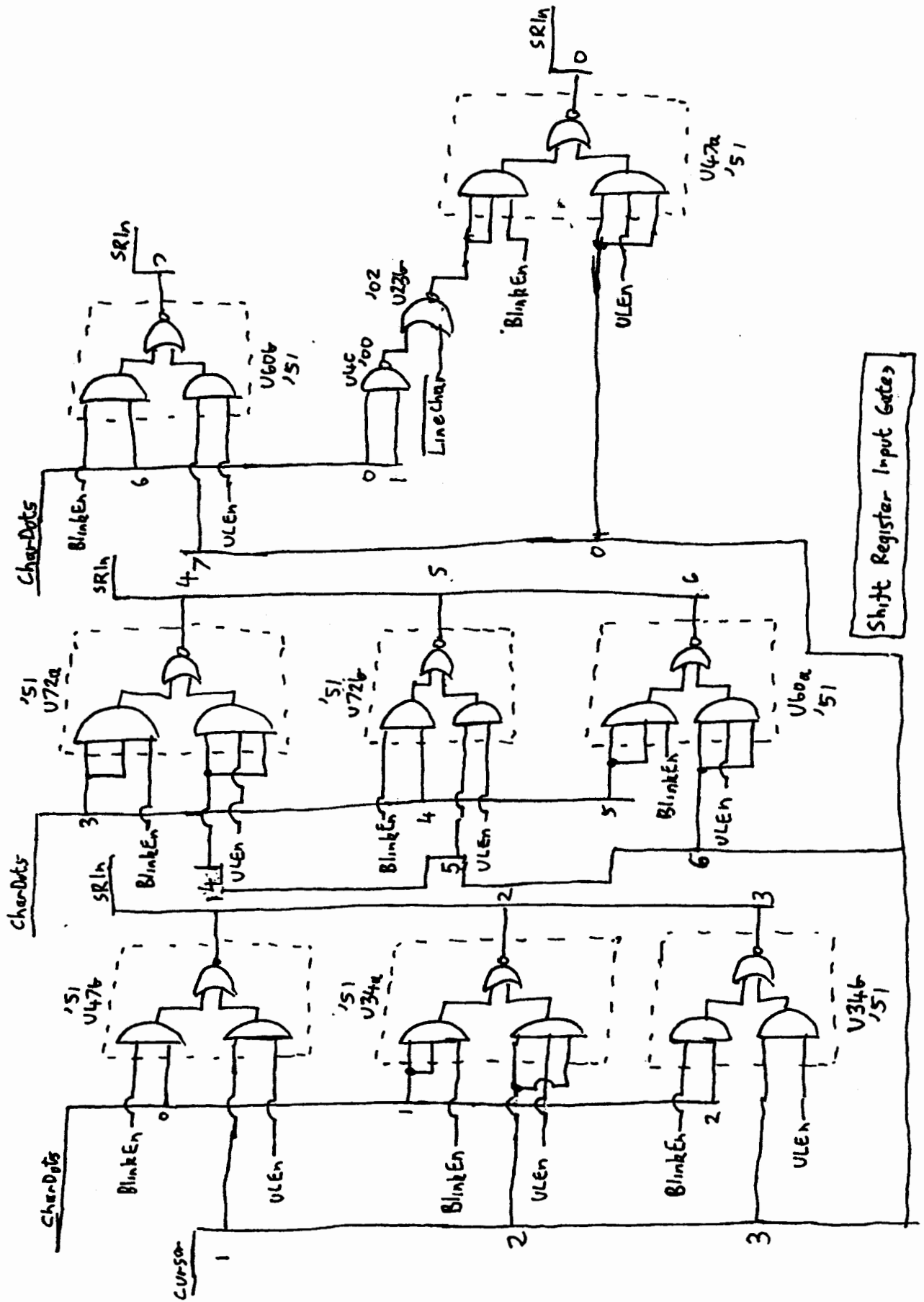
HP98780 Text PCB Sheet 7

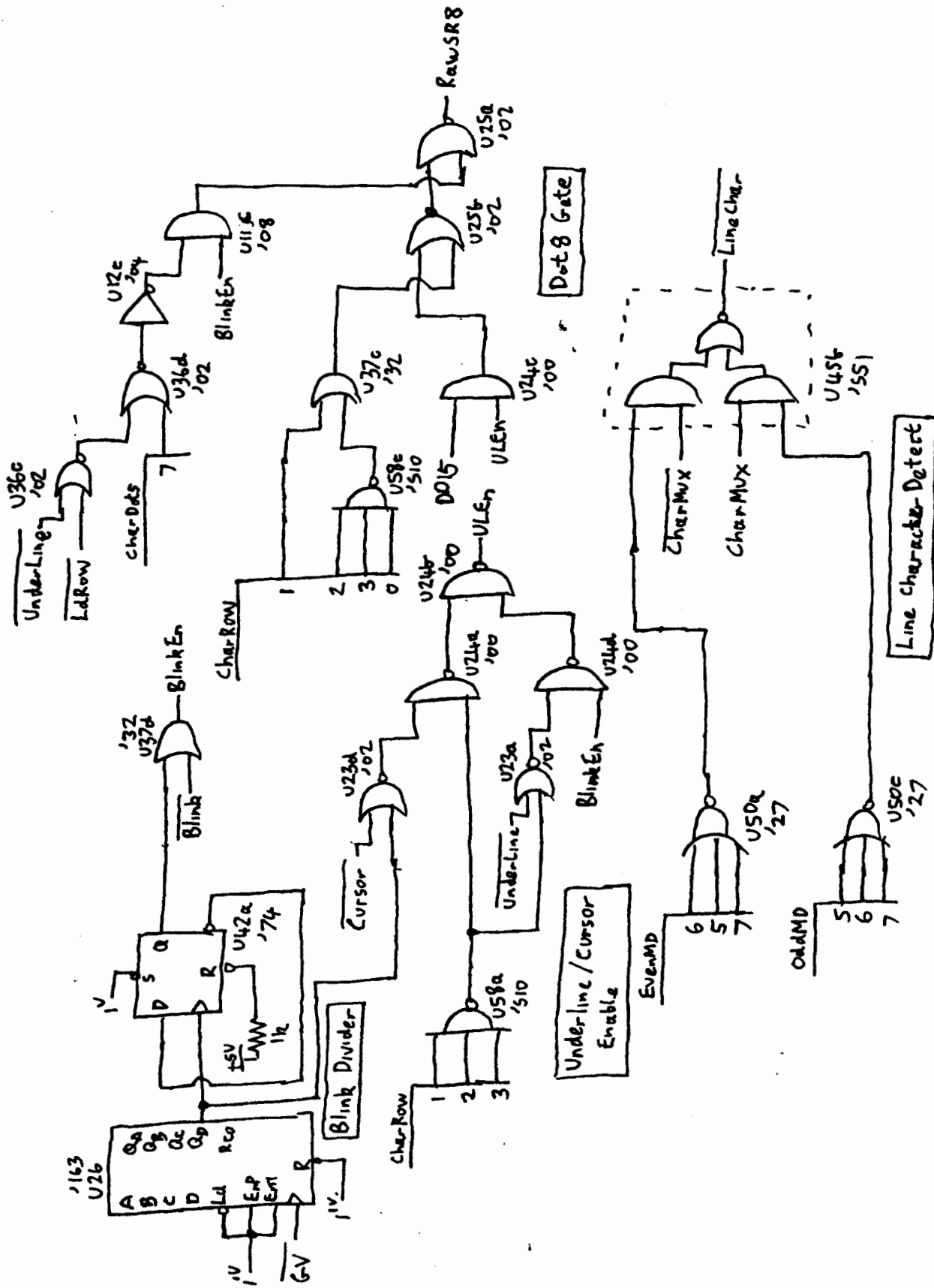


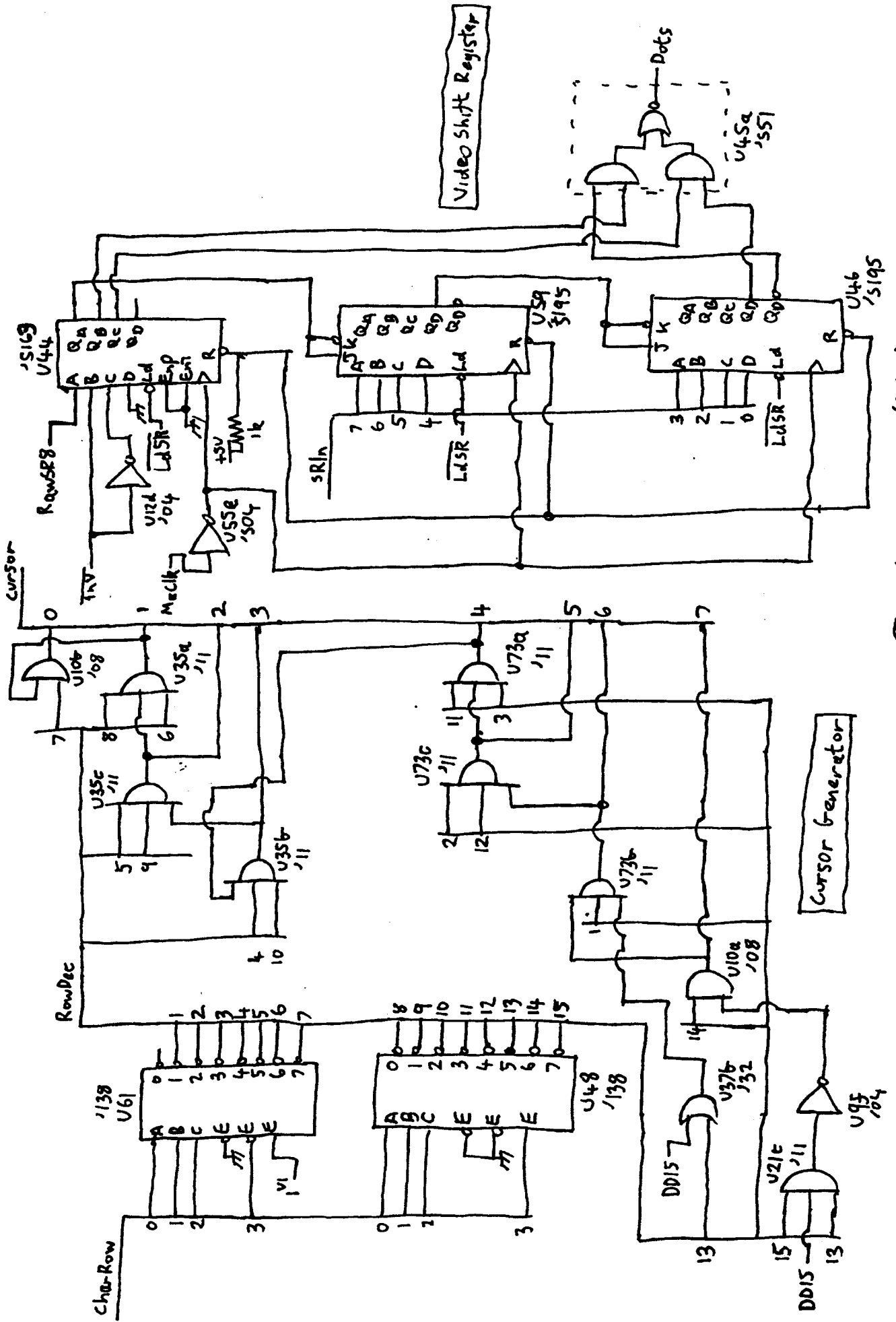


98780-66521 (R/B-)

HP98780 Text PCB sheet 9



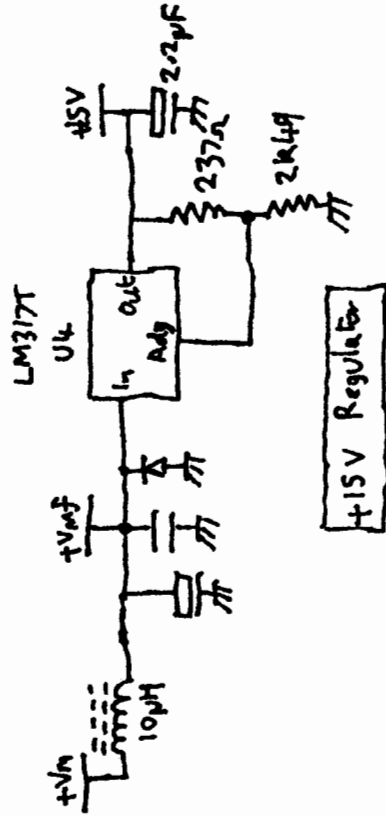
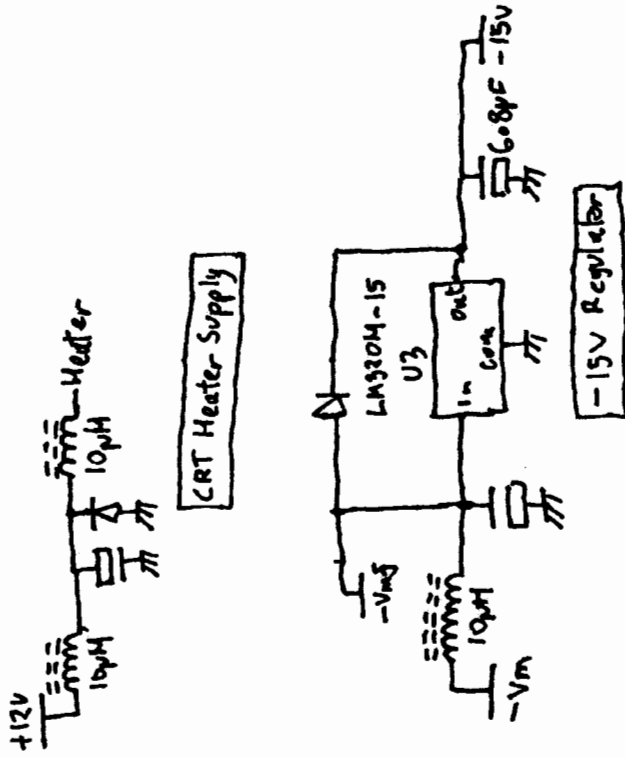
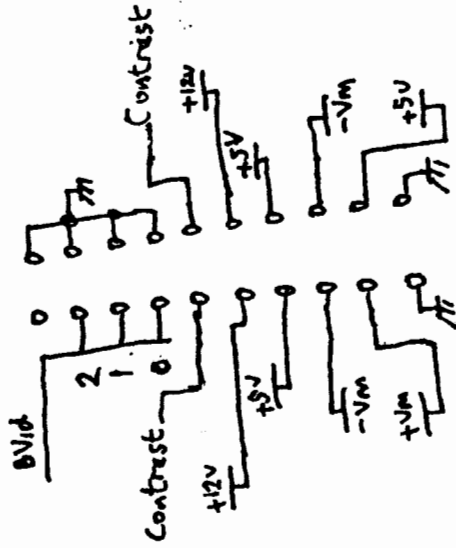




98780 - 66S21 (R/Br)

HP98780 Text PCB Sheet (12)

Front  
↗ LHS



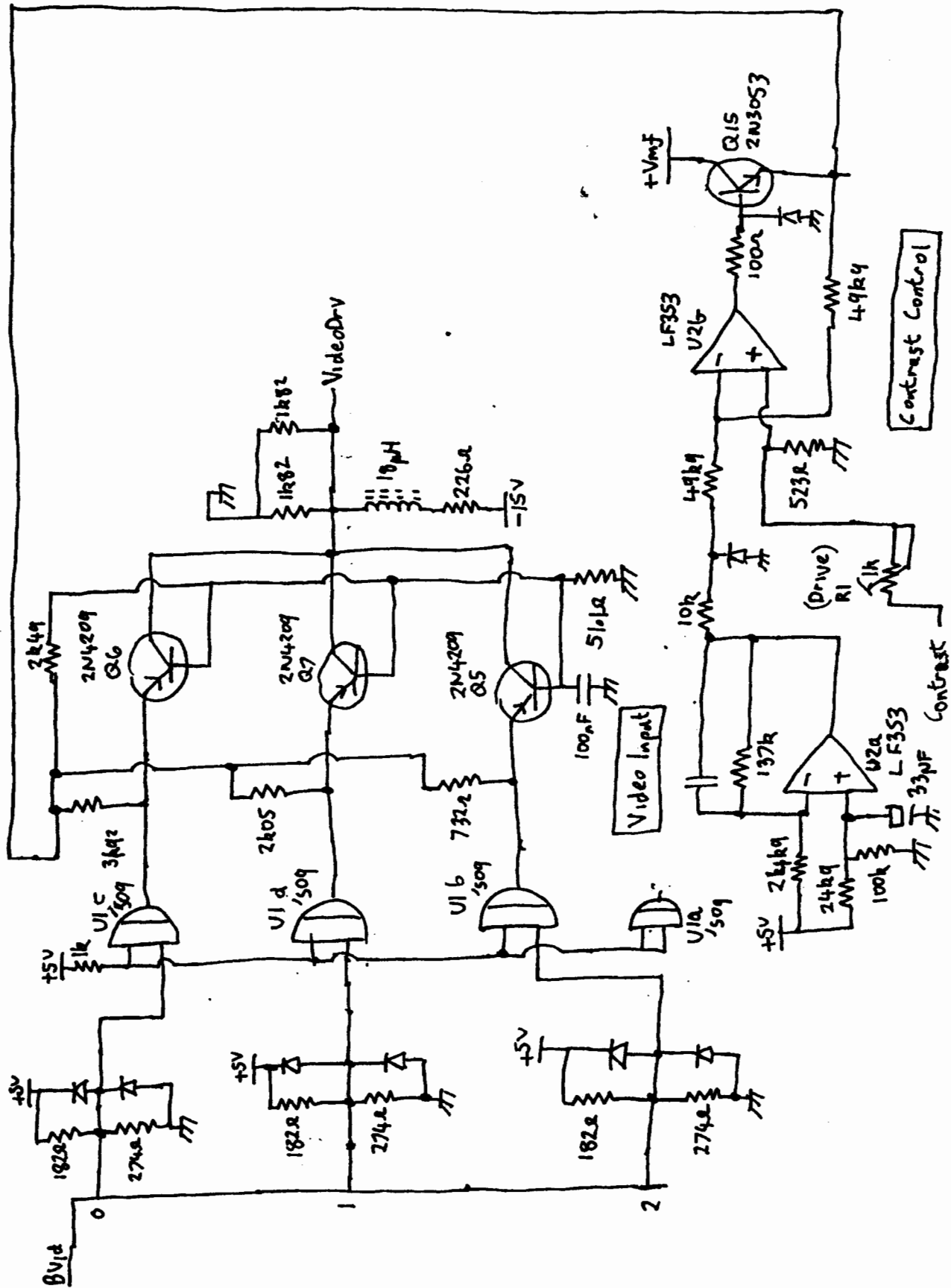
98780-66511

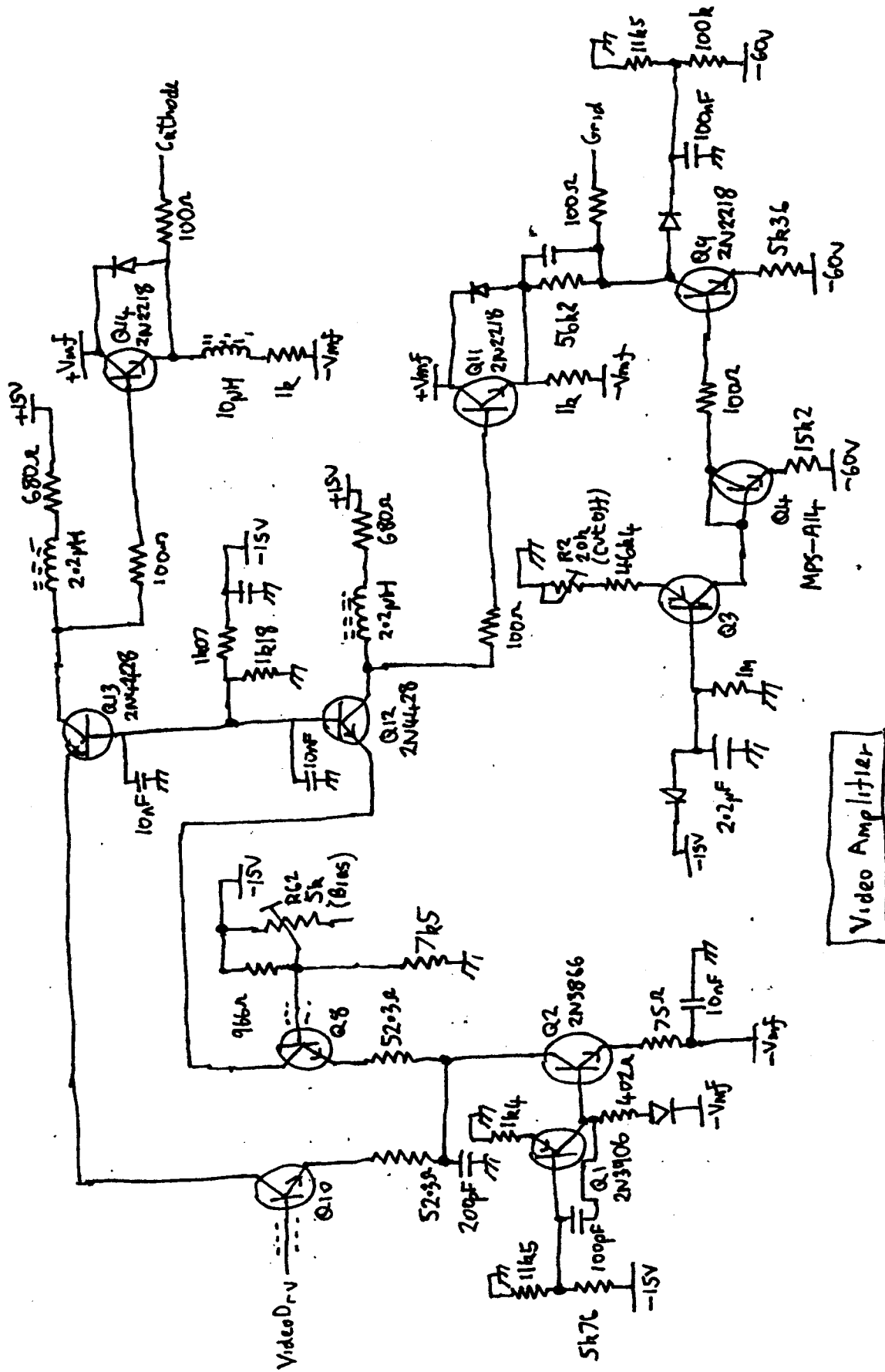
Sheet ①

Video PCB

HP98780



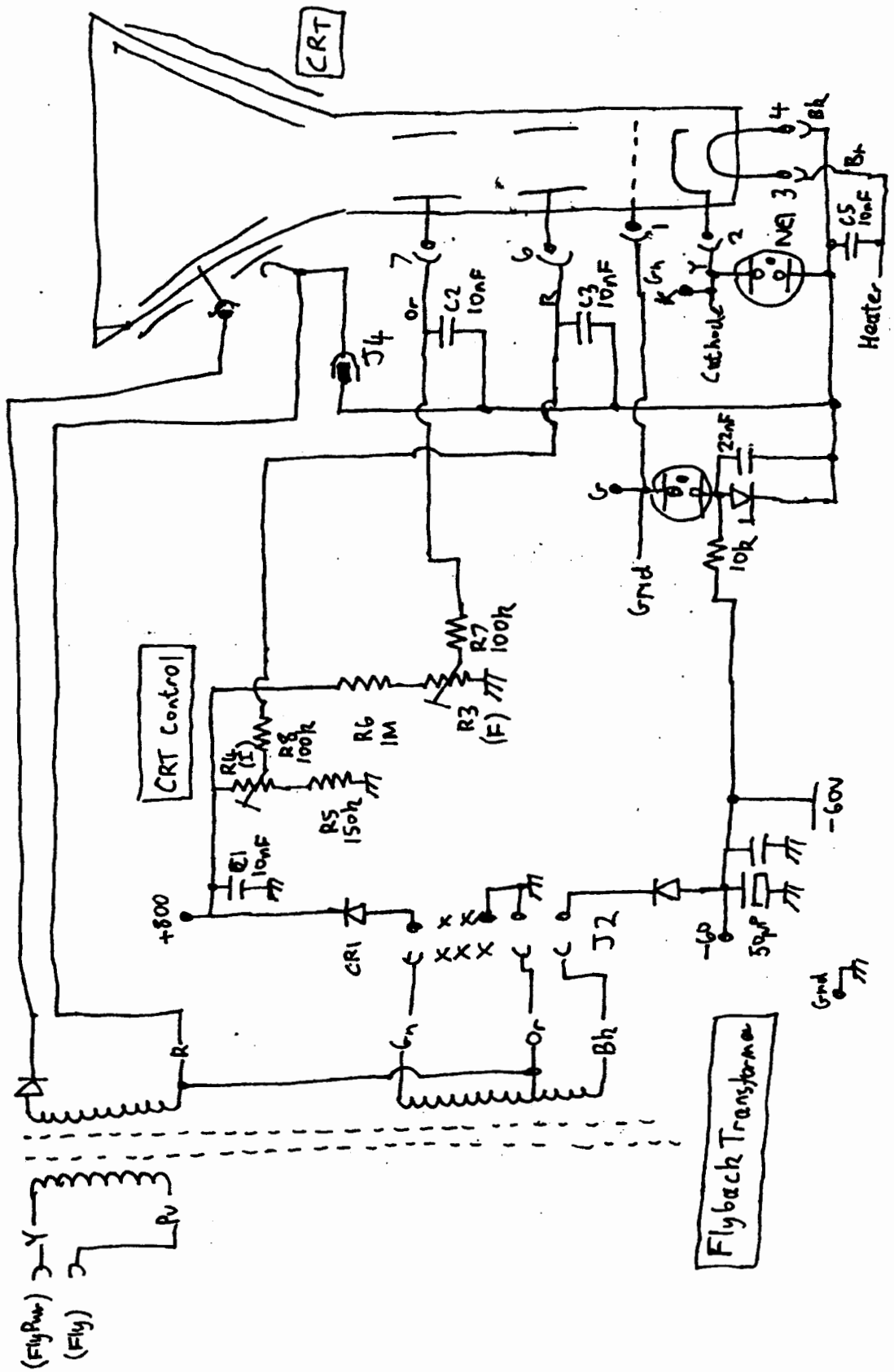





Video Amplifier

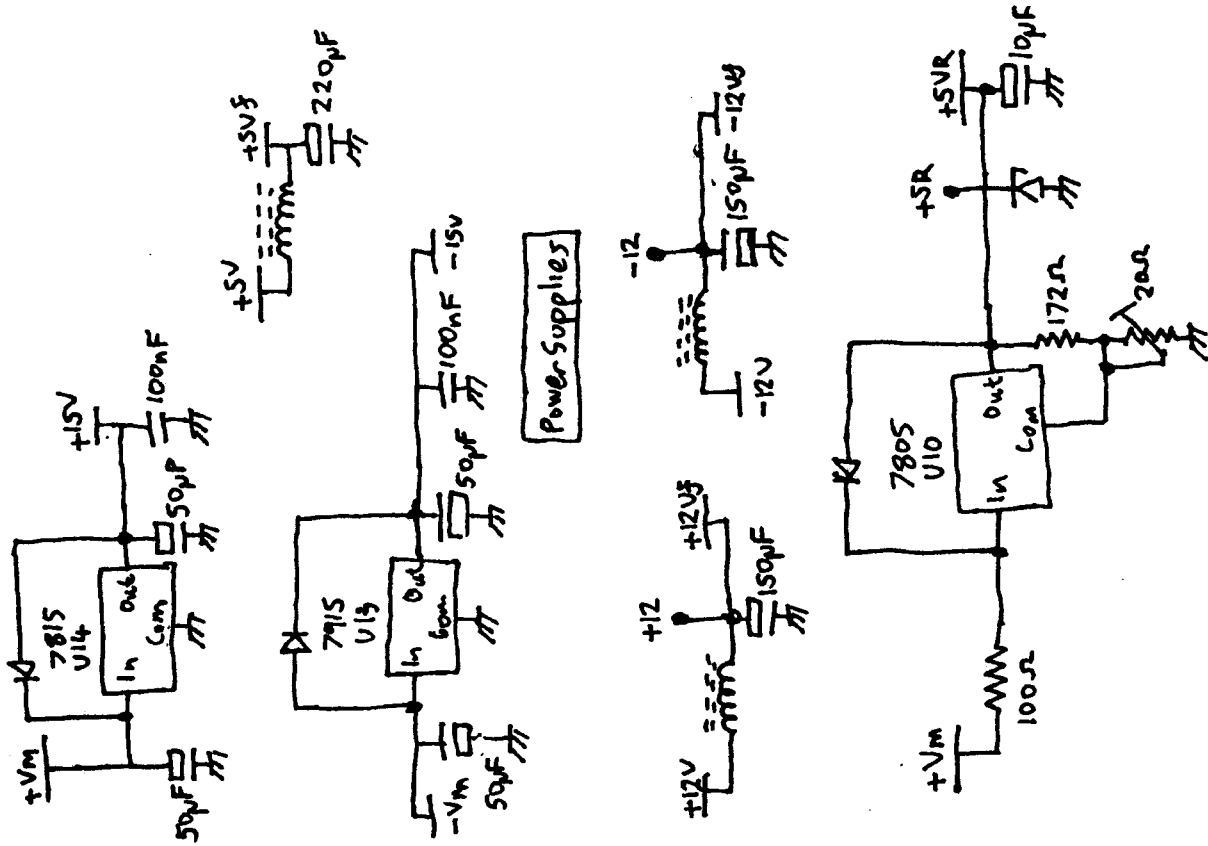
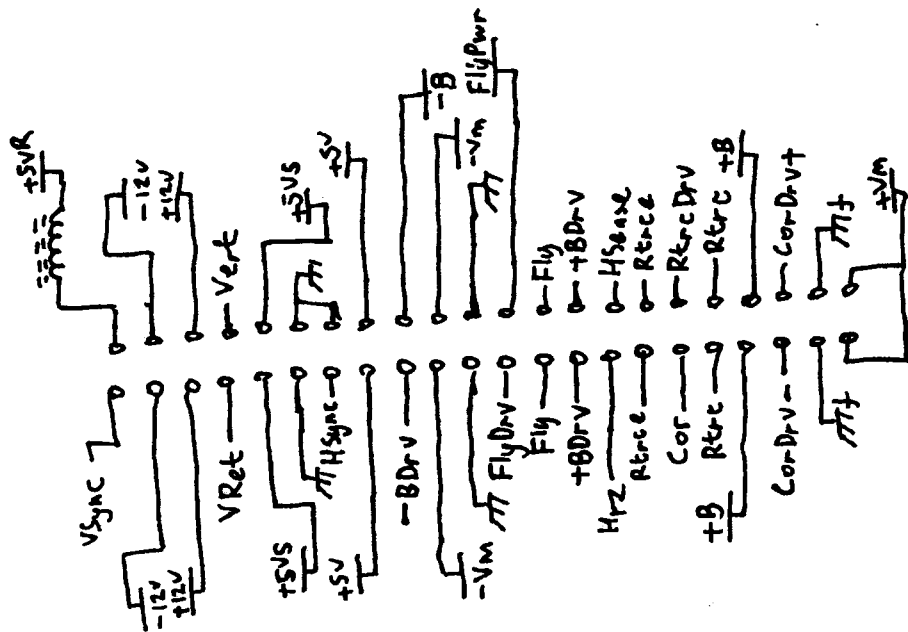
98780-66511

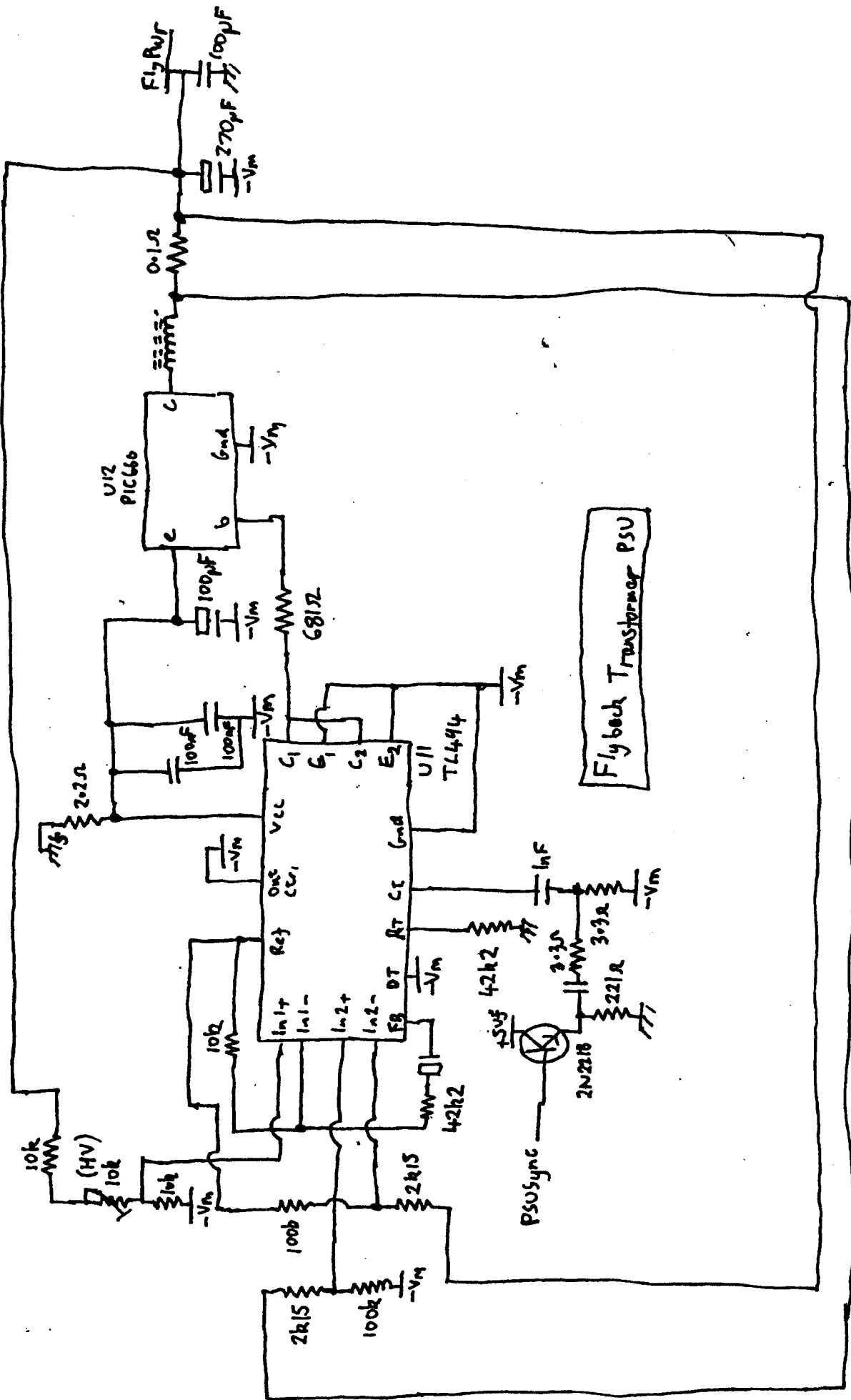
HP98780 Video PCB Sheet 3

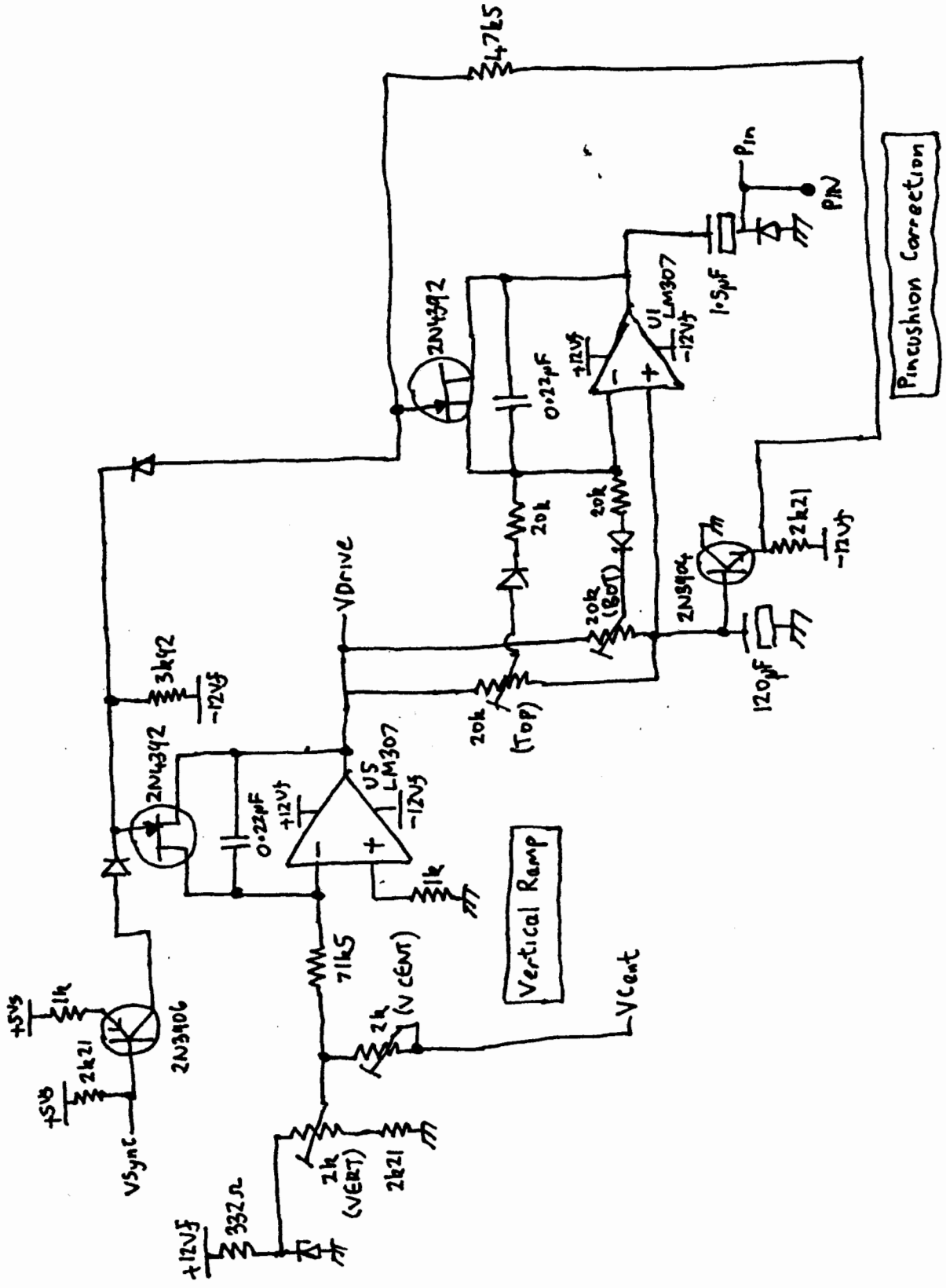


Front  
 UHS

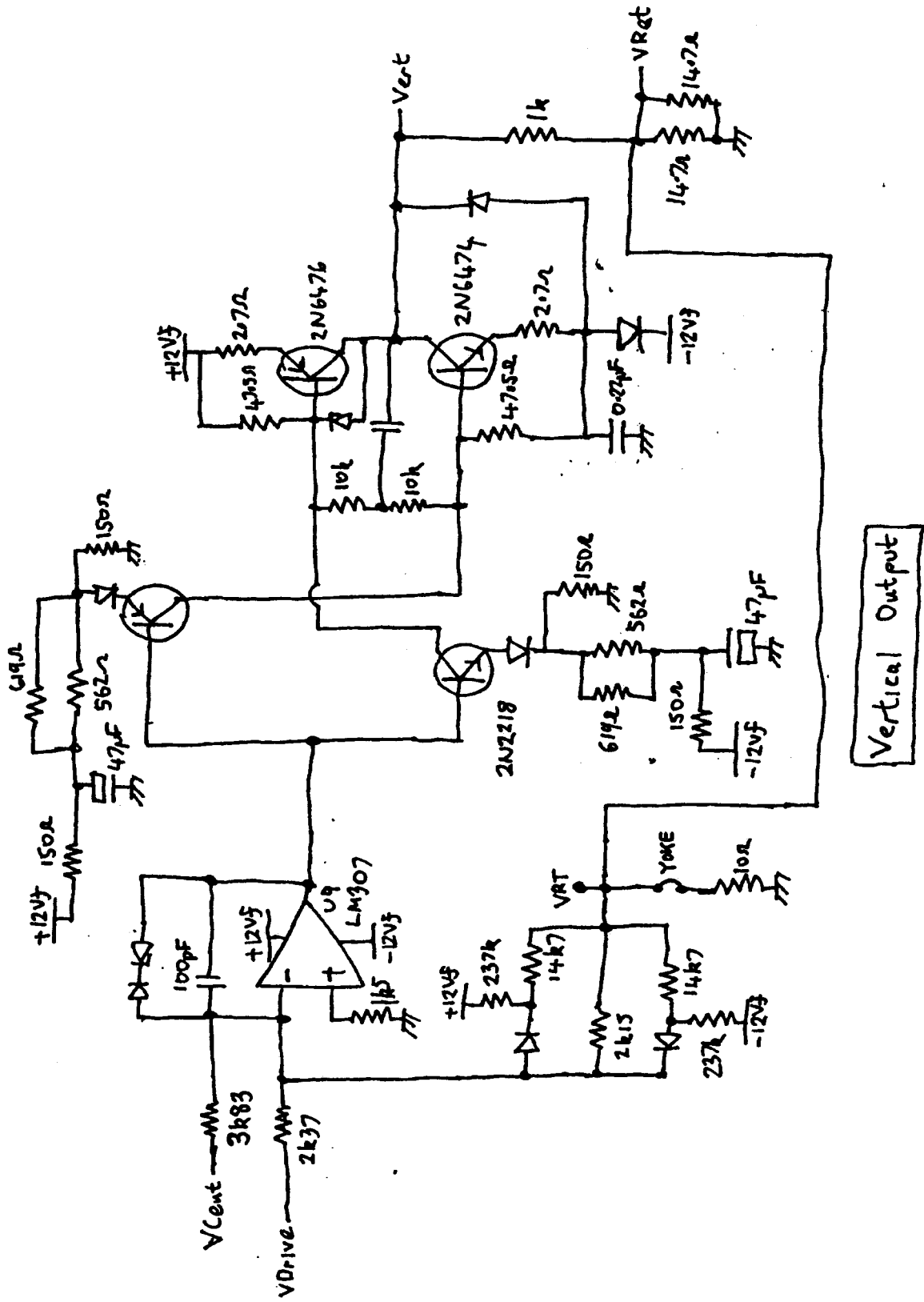
- 
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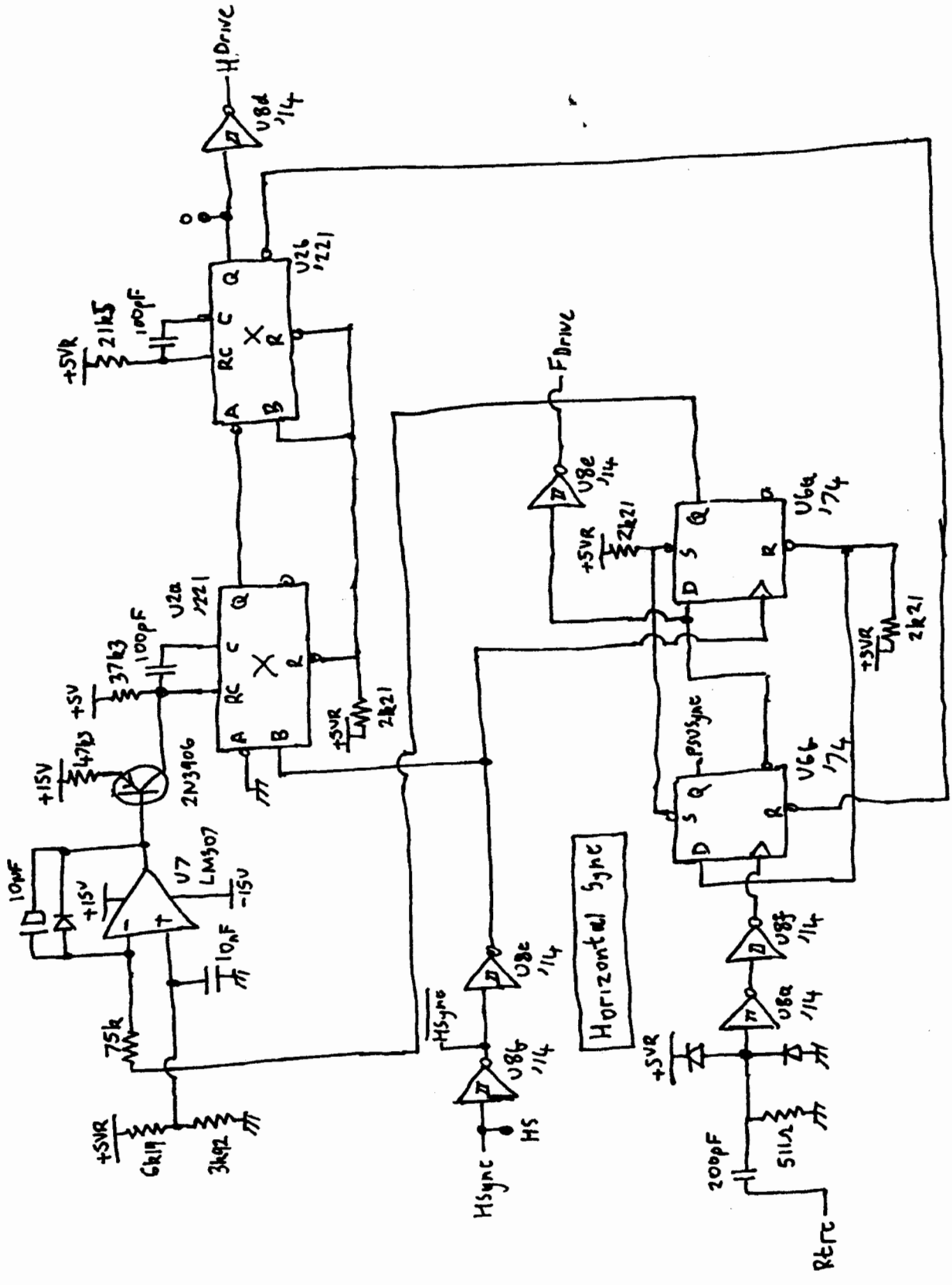




MP98780 Deflection PCB sheet ③ 98780-66514 (B/Y)



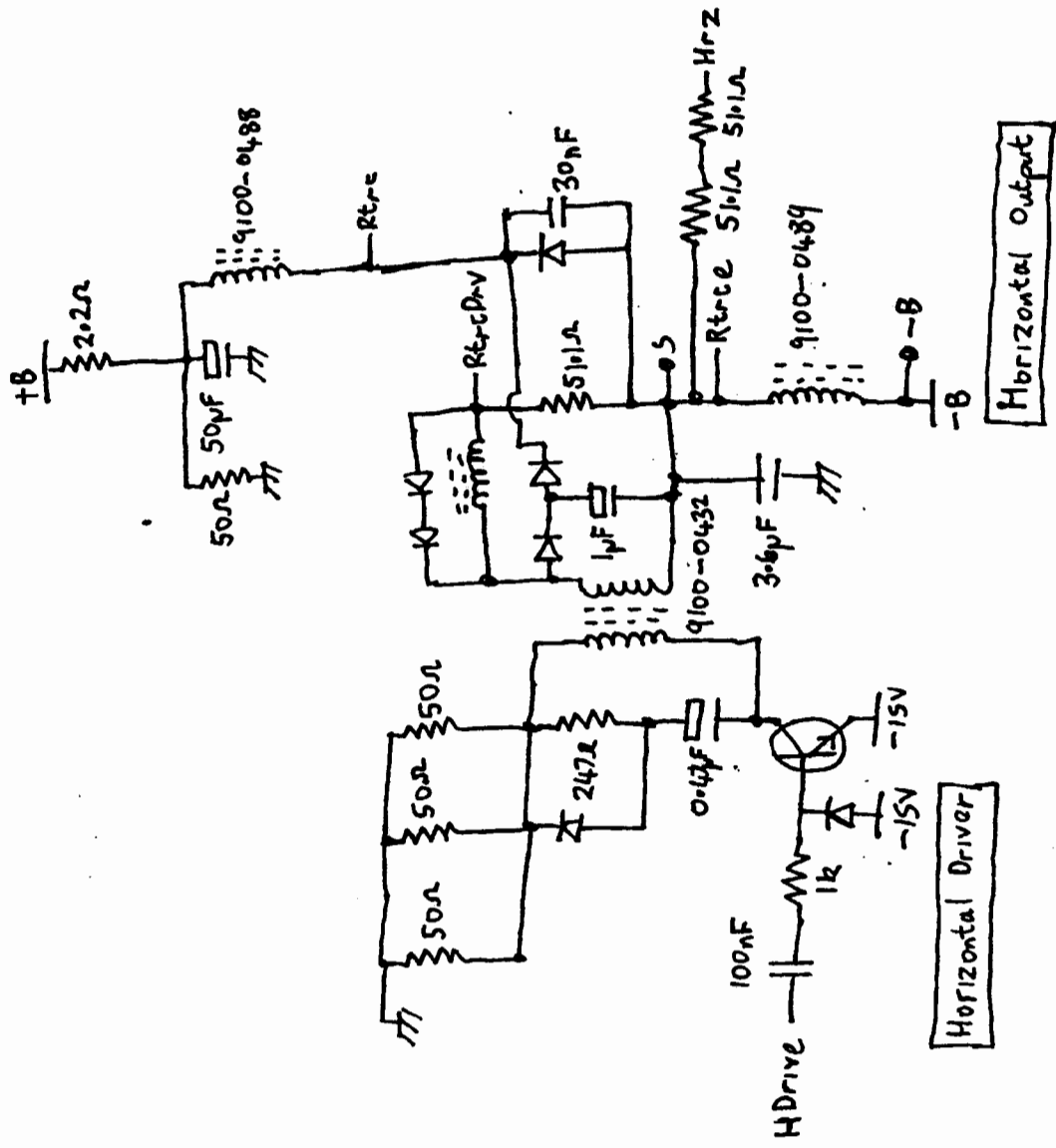
HP98780 Deflection PCB sheet (4) 98780-66514 (Br/Y)

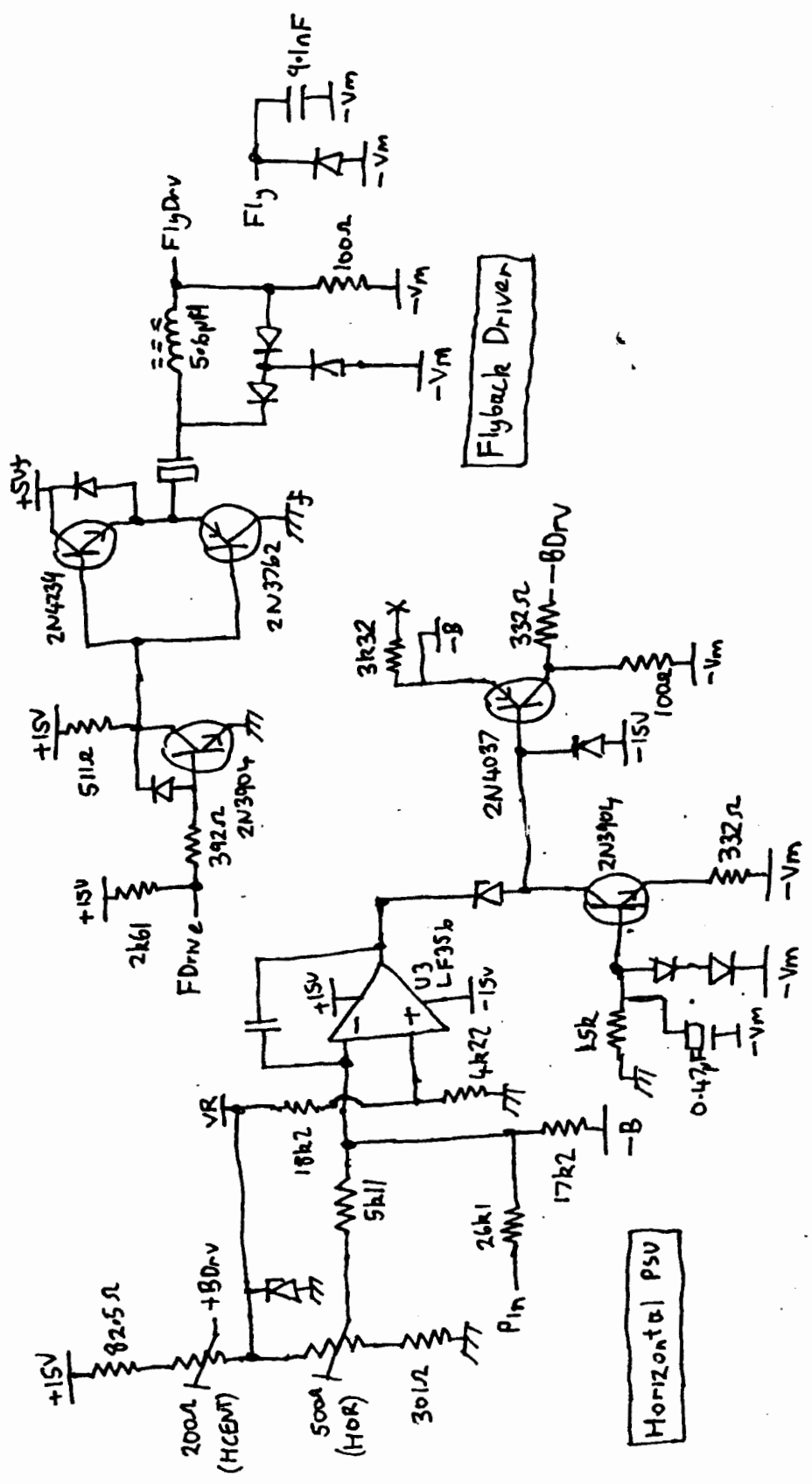


98780-66514 (B/Y)

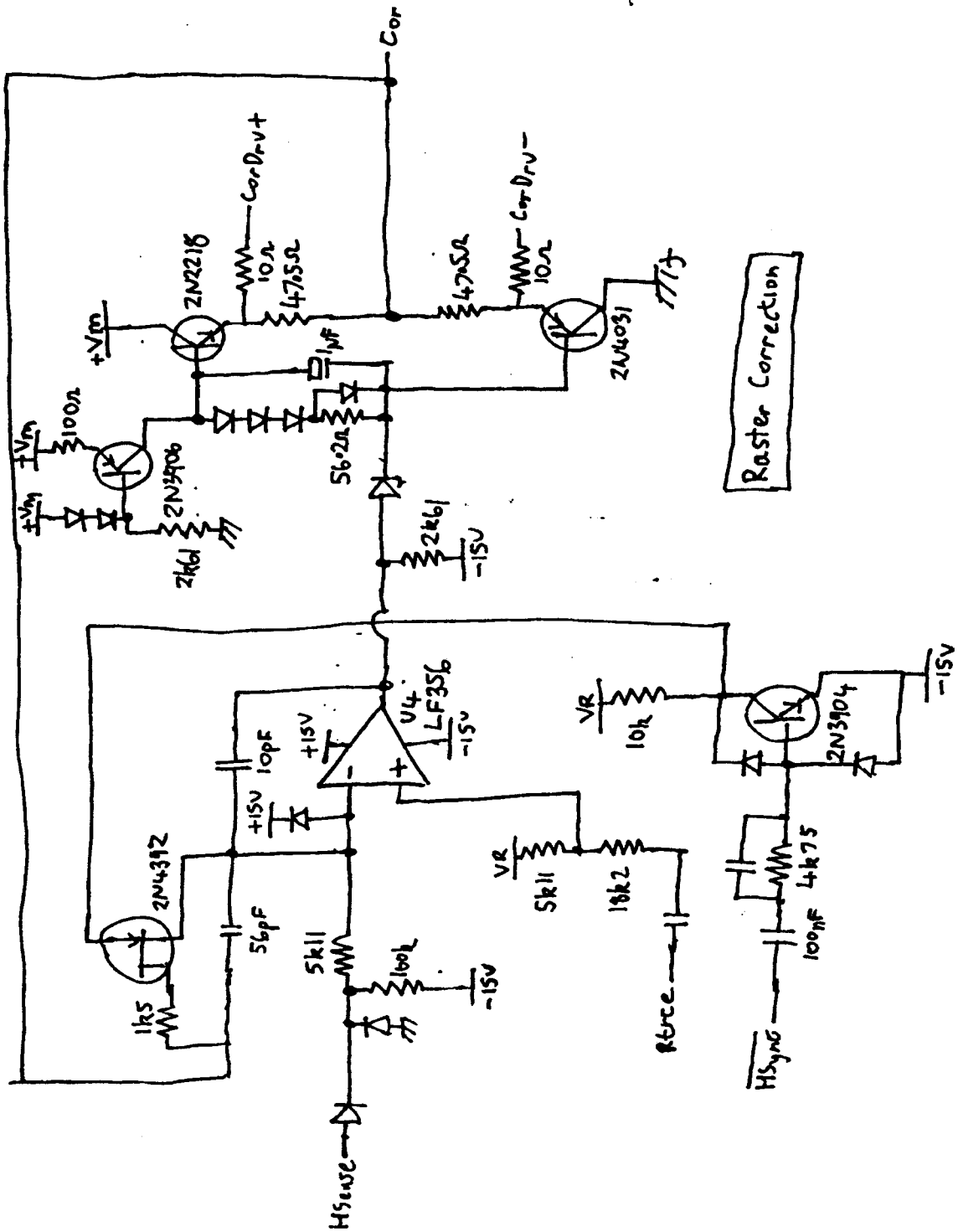
HP 98780 Deflection PCB Sheet 5








HP99780 Deflection PCB Sheet 7 98780-66514 (B-V)




TOP LMS  
↑


Q7  
1854-0518  
2N5877  
+B Pass




Q2  
2N6584  
Flyback




Q6  
1854-0518  
2N5877  
-B Pass




Q3  
1854-0818  
Retrace



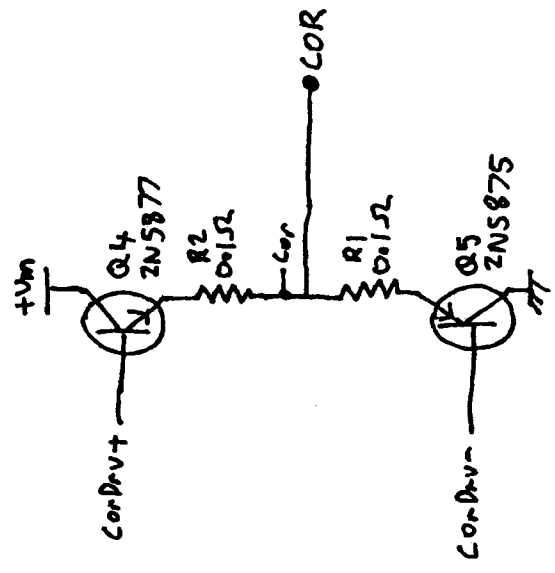
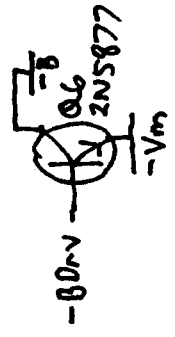
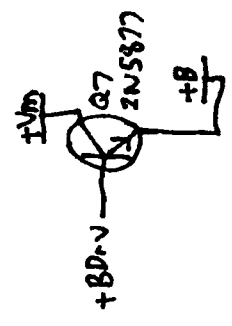
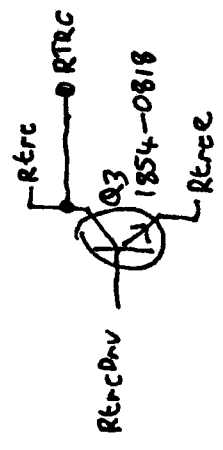
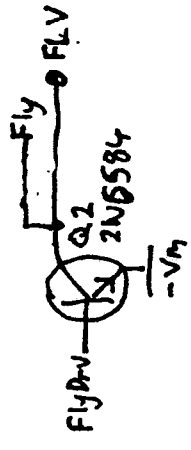
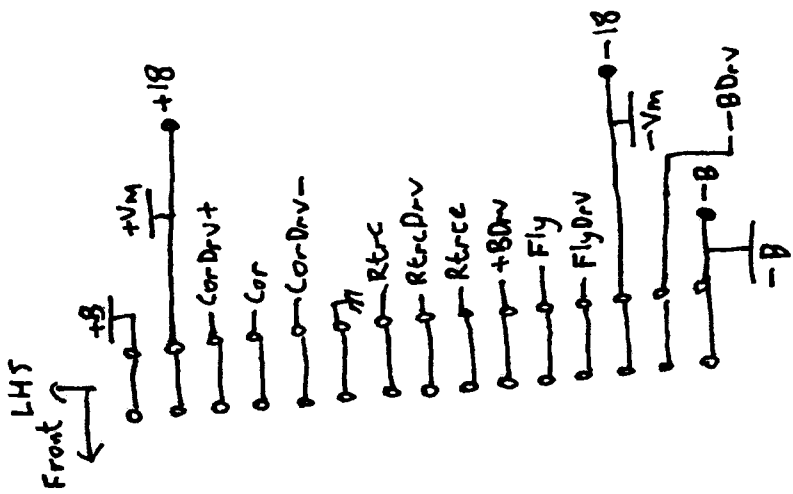
Q5  
1854-0305  
2N5875  
Corr - VC

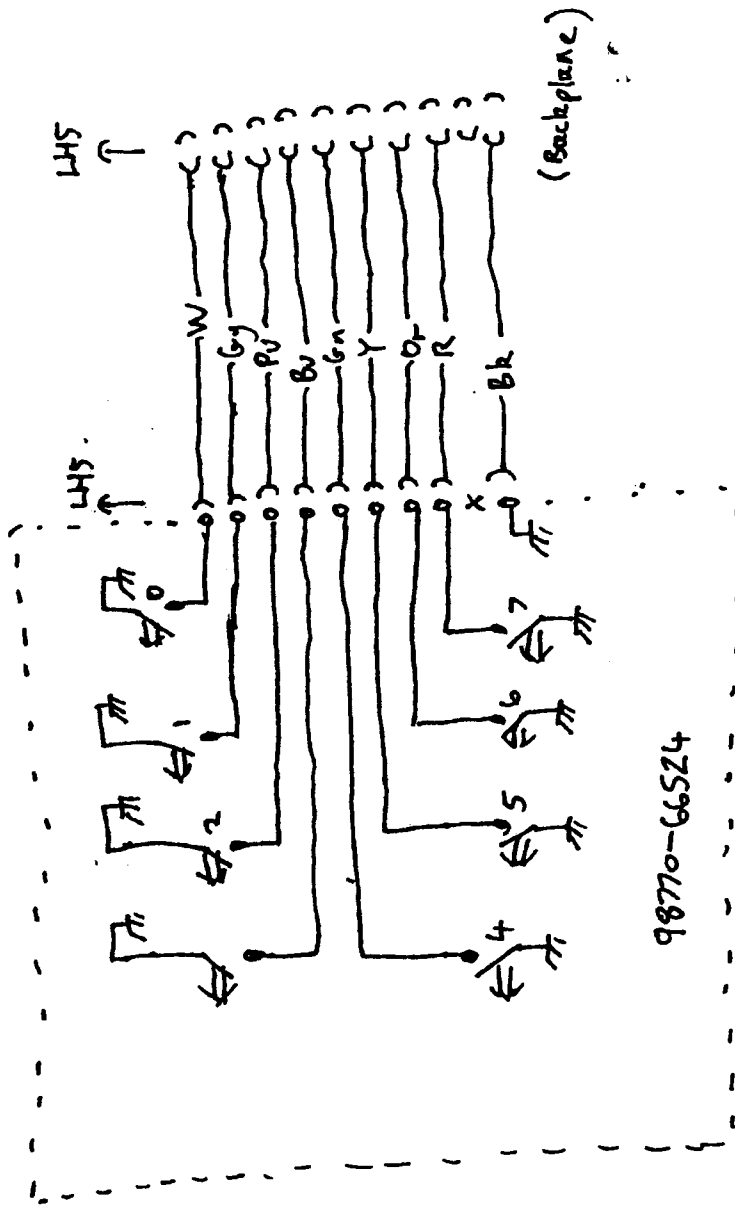


Q4  
1854-0518  
2N5877  
Corr + VC



MP98780 Heatsink Layout





HP98780 Keyswitch PCB

Peter C. ... letter

Deputy ...  
 Amendments.

Pl. Kitz.

Point of order, no review that we stop  
 pages for articles. Balance ... against  
 agreement among of that. Of the ...  
 proposal that editor news agreement.  
 A major change. ... 3 objections.  
 Editor asks to state that number ...

[Valentin is a member] [this week]

Value a program ... possible to contain  
 even if it might be in ...  
 Distinct name \$54. Probably have  
 members. What ... The only contact is  
 ...

Parton ...  
 MP12 ...  
 Block ...

Con ... 17. 19.

