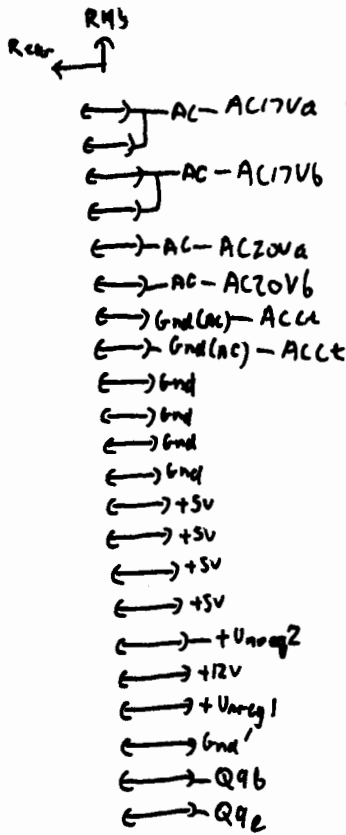
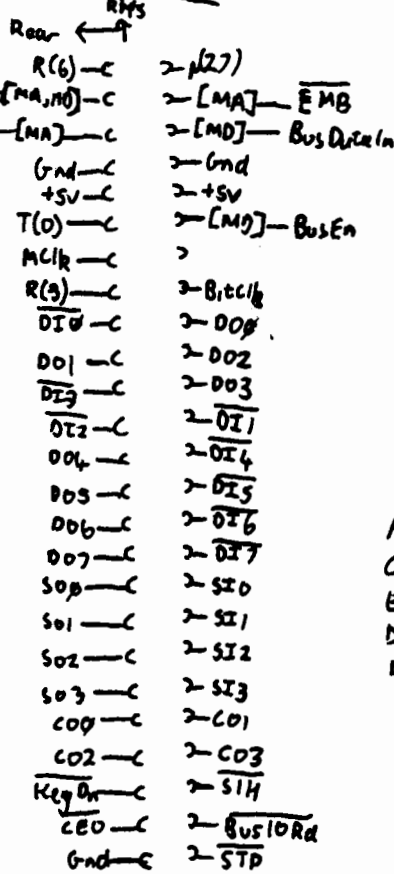


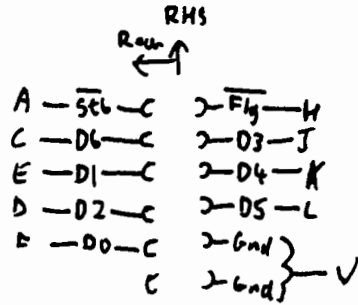
PSU



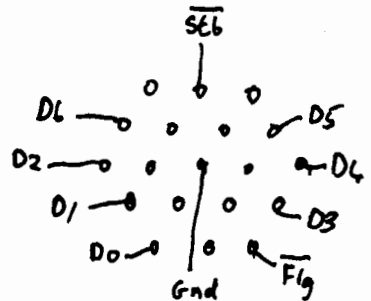
I/O Backplane



9866 Printer

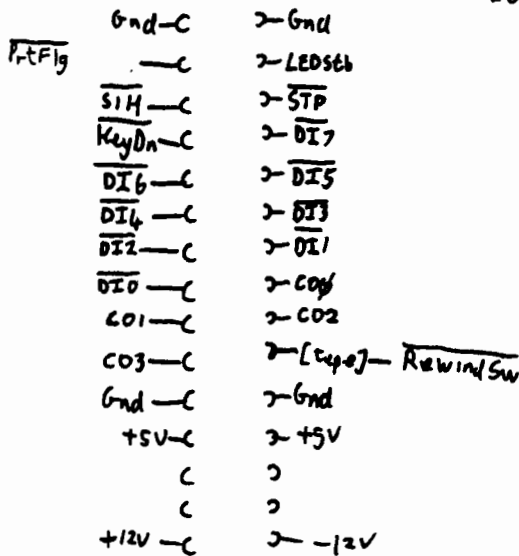


Printer Connector



04830-66502

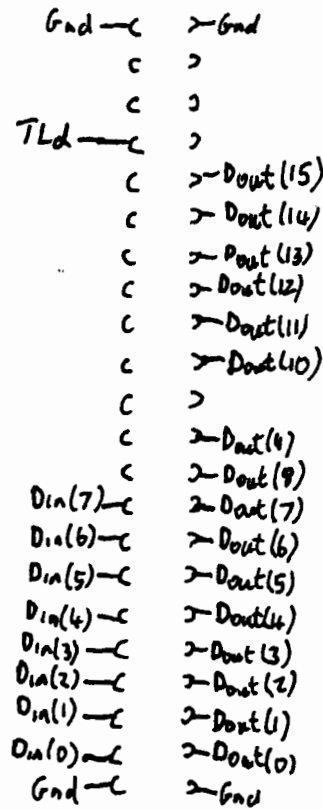
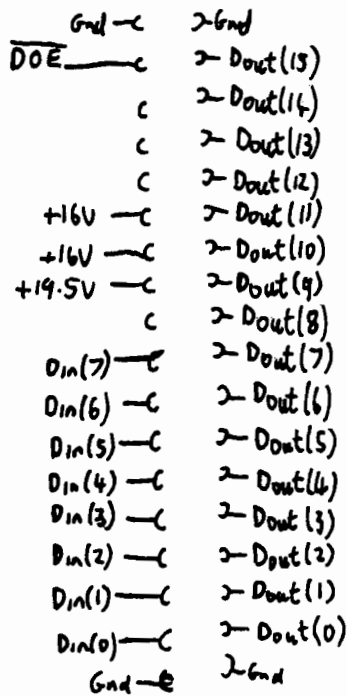
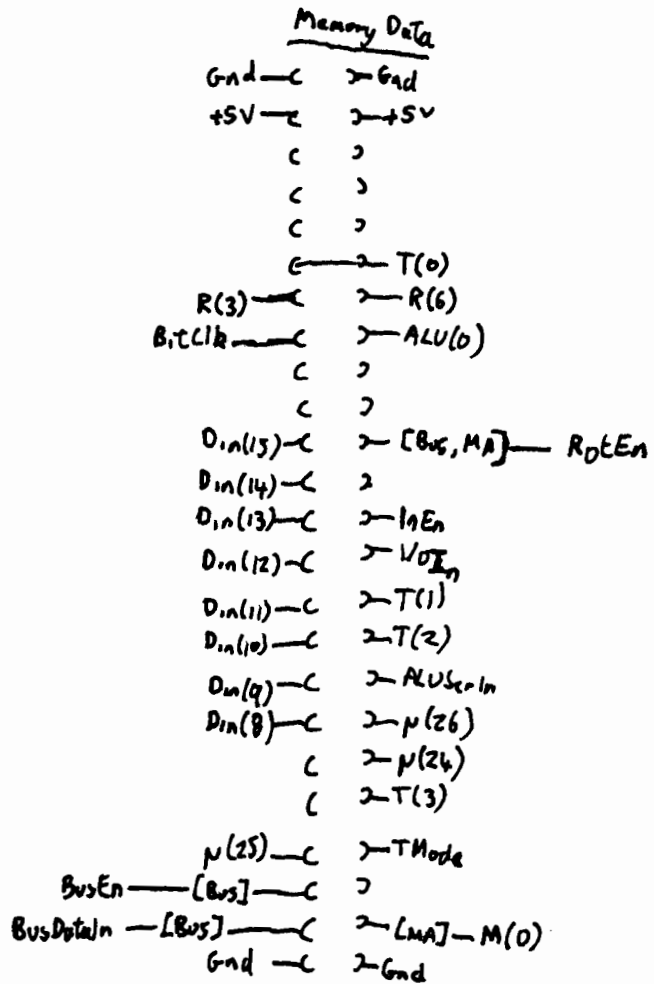
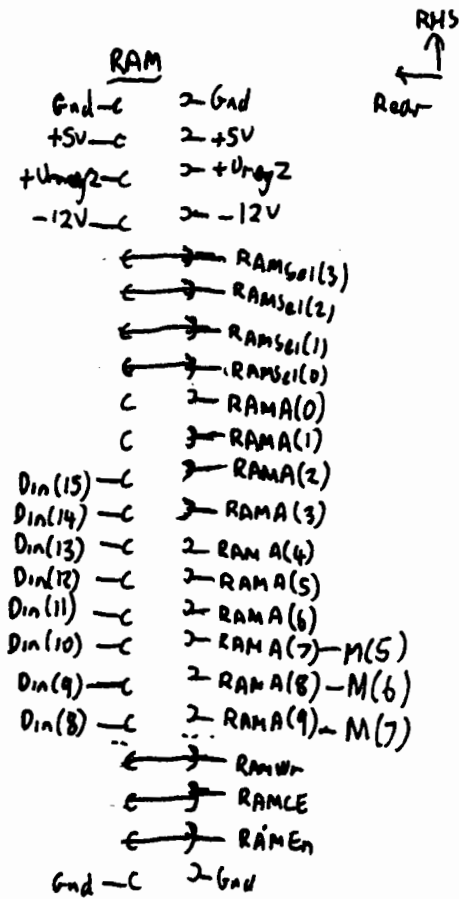
Keyboard Cable



04830-66501

04830-66504

HP9830 Main Backplane



09830-66584

09830-66583

HP9830 Main Backplane



Memory Address

Gnd	-C	>	Gnd
+5V	-C	>	+5V
ROMCS(0)	-C	>	ROMCS(1)
ROMCS(3)	-C	>	ROMCS(2)
ROMCS(5)	-C	>	ROMCS(4)
R(2)	-C	>	Wait
BitClk	-C	>	R(6)
RAMA(0)	-C	>	ALU(0)
RAMA(1)	-C	>	MC1k
RAMA(2)	-C	>	EOInst
RAMA(3)	-C	>	[MD] - RotEn
RAMA(4)	-C	>	RAMSel(7)
RAMA(5)	-C	>	RAMSel(6)
RAMA(6)	-C	>	RAMSel(5)
M(5) - RAMA(7)	-C	>	RAMSel(4)
M(6) - RAMA(8)	-C	>	RAMSel(3)
M(7) - RAMA(9)	-C	>	RAMSel(2)
RAMAR	-C	>	RAMSel(1)
RAMCE	-C	>	RAMSel(0)
RAMEN	-C	>	n(27)
Tmode	-C	>	[Bus] - EMB
R3Mode	-C	>	DispClk 2
M(10) - [MD]	-C	>	M(15)
Gnd	-C	>	Gnd

Gnd	-C	>	Gnd
+12V	-C	>	+12V
TLd	-E	>	ROMCE - RAMEN
	-C	>	ExtCE
	-C	>	[Sel] - M(13)
	-C	>	M(9)
R3Out	-C	>	M(10)
R3In	-C	>	M(11)
DOE(0)	-C	>	M(12)
DOE(1)	-C	>	ROMPage
+16V	-C	>	+16V
BROMCS(14)	-C	>	ROMA(8)
BROMCS(15)	-C	>	ROMA(9)
ROMCS(1)	-C	>	ROMA(7)
ROMCS(7)	-C	>	ROMA(6)
ROMCS(9)	-C	>	ROMA(5)
ROMCS(4)	-C	>	ROMA(4)
ROMCS(10)	-C	>	ROMA(3)
ROMCS(13)	-C	>	ROMA(2)
ROMCS(12)	-C	>	ROMA(1)
ROMCS(11)	-C	>	ROMA(0)
Gnd	-C	>	Gnd

09830-66582

ROM

Gnd	-C	>	Gnd
Gnd	-C	>	Gnd
+5V	-C	>	+5V
+5V	-C	>	+5V
ROMCS(5)	-C	>	ROMCS(5)
ROMCS(3)	-C	>	ROMCS(3)
ROMCS(0)	-C	>	ROMCS(0)
ROMCS(1)	-E	>	ROMCS(1)
ROMCS(2)	-C	>	ROMCS(2)
ROMCS(4)	-C	>	ROMCS(4)

Gnd	-C	>	Gnd
+12V	-C	>	+12V
-12V	-C	>	-12V
RAMEN	-ROMCE	>	RAMEN
Dout(15)	-C	>	Dout(15)
Dout(14)	-C	>	Dout(14)
Dout(13)	-C	>	Dout(13)
Dout(12)	-C	>	Dout(12)
ROMCS(6)	-C	>	Dout(11)
ROMCS(7)	-C	>	Dout(10)
+16V	-C	>	+16V
ROMA(8)	-C	>	Dout(9)
ROMA(8)	-C	>	Dout(8)
ROMA(7)	-C	>	Dout(7)
ROMA(6)	-C	>	Dout(6)
ROMA(5)	-C	>	Dout(5)
ROMA(4)	-C	>	Dout(4)
ROMA(3)	-C	>	Dout(3)
ROMA(2)	-C	>	Dout(2)
ROMA(1)	-E	>	Dout(1)
ROMA(0)	-C	>	Dout(0)
ROMCS(9)	-C	>	ROMCS(8)
ROMCS(13)	-C	>	ROMCS(10)
ROMCS(11)	-C	>	ROMCS(12)
Gnd	-C	>	Gnd

09830-66521

HP9830 Main Backplane

RHS
Rear

Ext ROMselector

Gnd — C —> Gnd
 +5V — C —> +5V
 +12V — C —> ExtCS(0)
 ExtCS(1) — C —> ExtCS(2)
 ExtCS(3) — C —> ExtCS(4)
 M(13) — C —> ExtCS(8)
 M(4) — C —> ExtCS(5)
 M(10) — C —> ExtCS(6)
 M(11) — C —> ExtCS(7)
 M(12) — C —> ExtCS(9)
 ROMPage — C —> ExtCS(10)
 (+16V) — C —> ExtCS(11)
 ROMA(8) — C —> ExtA(8)
 ROMA(9) — C —> ExtA(8)
 ROMA(7) — C —> ExtA(7)
 ROMA(6) — C —> ExtA(6)
 ROMA(5) — C —> ExtA(5)
 ROMA(4) — C —> ExtA(4)
 ROMA(3) — C —> ExtA(3)
 ROMA(2) — C —> ExtA(2)
 ROMA(1) — C —> ExtA(1)
 ROMA(0) — C —> ExtA(0)
 ExtCS(15) — C —> ExtCS(13)
 ExtCS(14) — C —> ExtCS(12)
 Gnd — C —> Gnd

09830-66525

Internal Ext ROM

+5V — C —> +5V
 -12V — C —> Dout(15)
 ExtCE — C —> Dout(14)
 CSA — C —> Dout(13)
 CSB — C —> Dout(12)
 C —> Dout(11)
 C —> Dout(10)
 ExtA(8) — C —> Dout(9)
 ExtA(8) — C —> Dout(8)
 ExtA(7) — C —> Dout(7)
 ExtA(6) — C —> Dout(6)
 ExtA(5) — C —> Dout(5)
 ExtA(4) — C —> Dout(4)
 ExtA(3) — C —> Dout(3)
 ExtA(2) — C —> Dout(2)
 ExtA(1) — C —> Dout(1)
 ExtA(0) — C —> Dout(0)
 Gnd — C —> Gnd

ROM Backplane

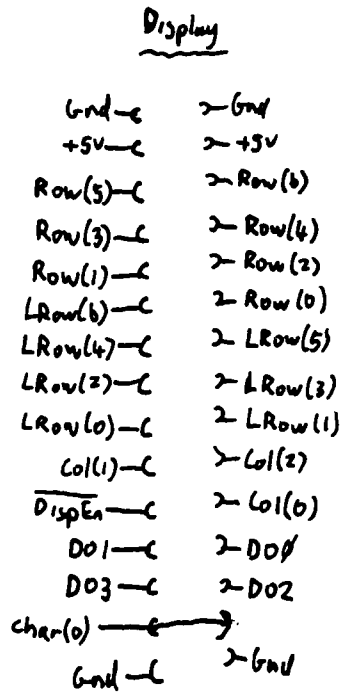
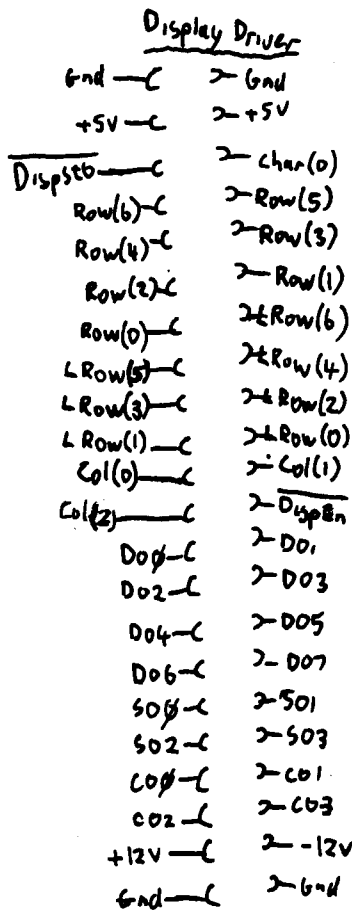
Rear
LHS

ExtA(8) — C —> ExtA(0)
 Dout(7) — C —> ExtA(7)
 Dout(5) — C —> ExtCE
 Dout(3) — C —> ExtA(2)
 Dout(10) — C —> ExtA(4)
 Dout(8) — C —> ?
 Dout(1) — C —> ?
 Dout(12) — C —> ?
 Dout(6) — C —> ExtA(6)
 Dout(14) — C —> -12V
 Dout(14) — C —> +5V
 Dout(2) — C —> Gnd
 Dout(0) — C —> Gnd
 Dout(9) — C —> ExtA(5)
 Dout(11) — C —> ExtA(3)
 Dout(13) — C —> ExtA(1)
 Dout(15) — C —> ExtCS(7)
 ExtA(8) — C —> ExtCS(2)
 ExtCS(13) — C —> ExtCS(3)
 ExtCS(15) — C —> ExtCS(0)
 ExtCS(12) — C —> ExtCS(1)
 ExtCS(14) — C —> ExtCS(6)

09830-66503

Slot	CSA	CSB
1	BROMCS(14)	BROMCS(15)
2	ExtCS(4)	ExtCS(5)
3	ExtCS(8)	ExtCS(9)
4	ExtCS(10)	ExtCS(11)

HP9830 Main Backplane



09830-66541

09830-66542

HP 9830 Main Backplane



Gnd-C } Gnd
 +5V-C } +5V
 SI3-C } SI2
 SI1-C } SI0
 DI7-C } DI6
 DI5-C } DI4
 DI3-C } DI2
 DI1-C } DI0
 CO1-C } CO1
 CO2-C } CO3

Gnd-C } Gnd
 +5V-C } +5V
 CassSw-C } WpSw
 StopTaps-C } SpeedClamp
 BuffBit4-C } WP
 Buff5C-C } CassSw
 SROut(0)-C } SROut(1)
 SROut(2)-C } SROut(4)
 SROut(4)-C } SROut(5)
 SROut(6)-C } SROut(7)
 TapeSel-C } TapeFlag
 MotorOn-C } RewindSw
 Speed-C } Dir
 Write-C } ClrMark
 RdMark-C } RdData
 RdClk-C } WrMark
 WrData-C } WrClk
 DO1-C } DO1
 DO2-C } DO3
 DO4-C } DO5
 DO6-C } DO7
 SO1-C } SO1
 SO2-C } SO3
 Gnd-C } Gnd

Gnd-C } EDT
 CassSw-C } SpeedClamp
 BuffBit4-C } WP
 Buff5C-C } CassSw
 SROut(0)-C } SROut(1)
 SROut(2)-C } SROut(5)
 SROut(4)-C } SROut(5)
 SROut(6)-C } SROut(7)
 TapeSel-C } TapeFlag
 KeyOn-C } SIH
 C60-KeyOn-C } BusI/O Rd
 STP-C } ClrMark
 MotorOn-C } CRout
 C }
 CO1-C } CO1
 CO2-C } CO3
 C }
 DispSt6-C }

09865-66562

09830-66561

Cassette Interface

- TP
- 1 Raw WClk
 - 2 TapeSel
 - 3 Write
 - 4 TapeFlag
 - 5 Motor On
 - 6 WrMarkEn
 - 7 Dir
 - 8 Speed
 - 9 SROut(0) - WrData
 - 10 WrClk
 - 11 WrMark

HP9830 Main Backplane

Read/Write

Gnd C 2 Gnd
 +5V C 2 +5V
 WA C 2 +5V
 WB C 2 RA
 WpSW C 2 RB
 Gnd'' C 2 Gnd''
 C)
 RawRA C)
 RawRB C)
 C)
 C)
 Speed C 2 (Dir)
 Write C 2 Cl-Mark
 RdMark C 2 RdData
 RdClk C 2 Wr-Mark
 WrData C 2 Wr-Clk
 +12V C 2 -12V
 Gnd C 2 Gnd

04865-66563

Motor Control

Gnd C 2 Gnd
 +5V C 2 +5V
 RewMotor C 2 Rew Motor
 FwdMotor C 2 Fwd Motor
 MotorCom C 2 Moto-Com
 LSolenoid C 2 LSolenoid
 RSolenoid C 2 RSolenoid
 +Unreg1 C 2 +Unreg1
 Gnd' C 2 Gnd'
 Q46 C 2 Q46
 Q4e C 2 Q4e
 Gnd'' C 2 Gnd''
 SpeedClk C)
 C)
 MotorOn C)
 speed C 2 Dir
 +12V C 2 -12V
 Gnd C 2 Gnd

04865-66564

TP

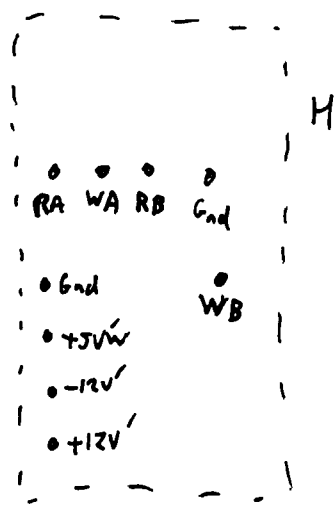
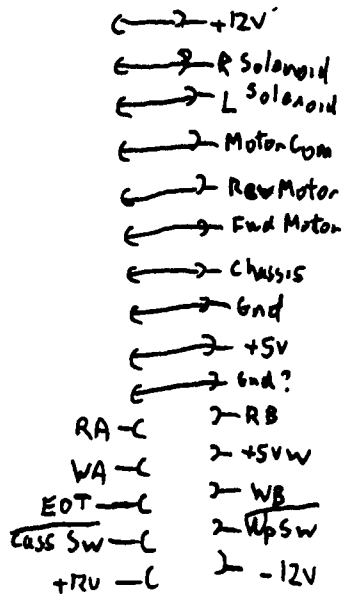
- 2 WA
- 3 WB
- 4 RdData
- 5 RA
- 6 AmpRA
- 7 AmpRB
- 8 RB
- 9 RdMark
- 10 RdClk

TP

- 1 Speed Sense
- 2 Q4e
- 3 MotorCom
- 4 Current Sense
- 5 Rew Motor
- 6 RSolenoid
- 7 LSolenoid
- 8 Fwd Motor

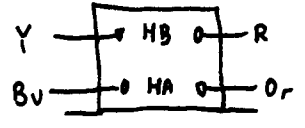
HP9830 Main Backplane

Tape Drive

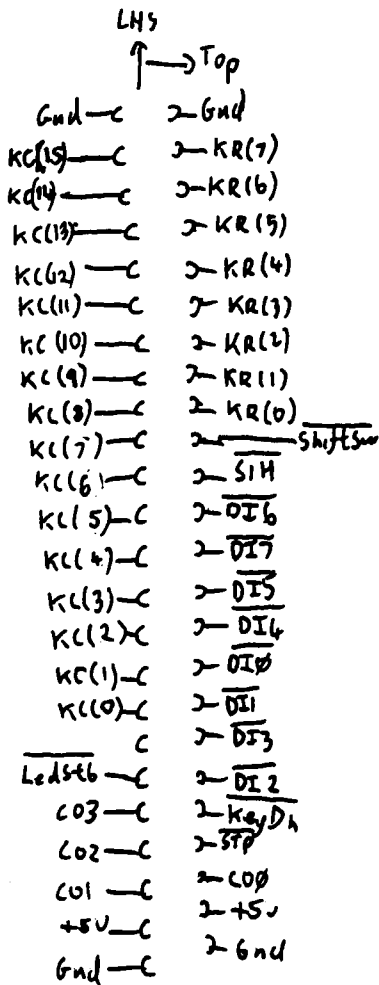


09830 - 66565

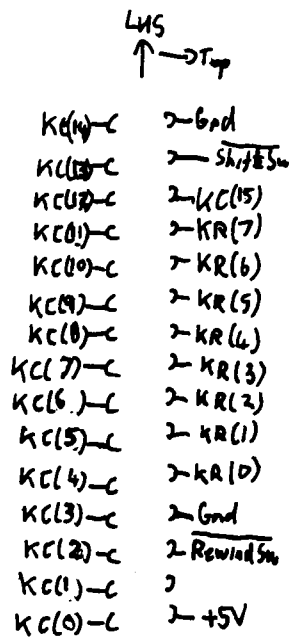
Head Connections



HP4830 Keyboard

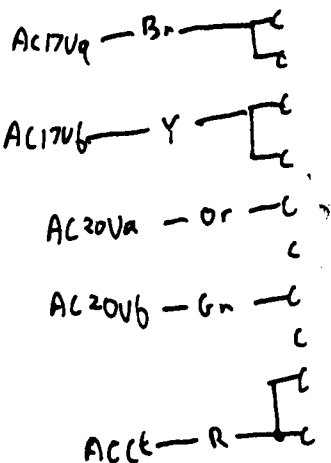


09830-66532
encoder

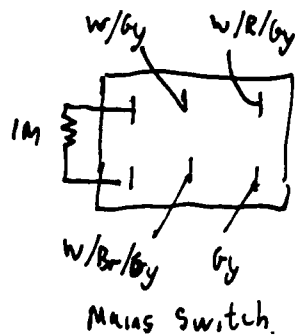


09830-66531
Keyboard

RHS
↑

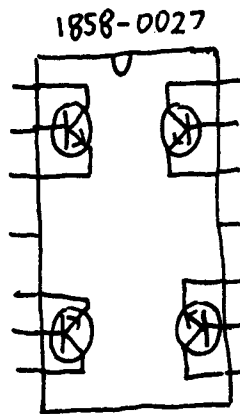
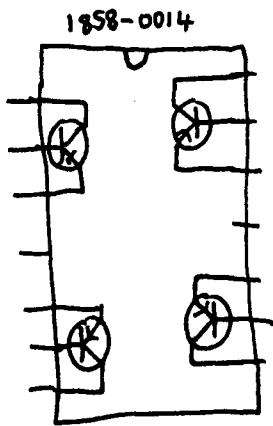
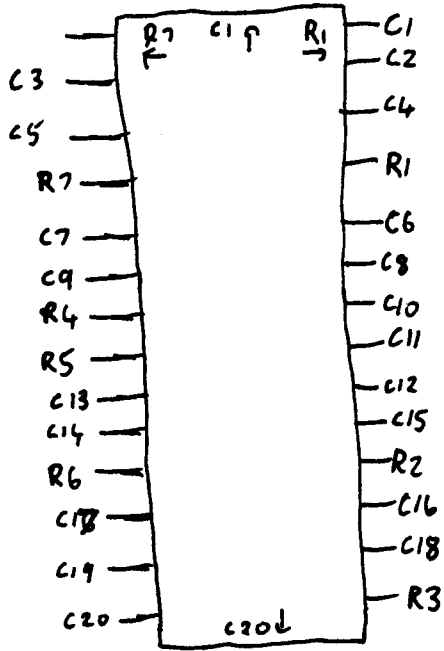


Transformer Connector

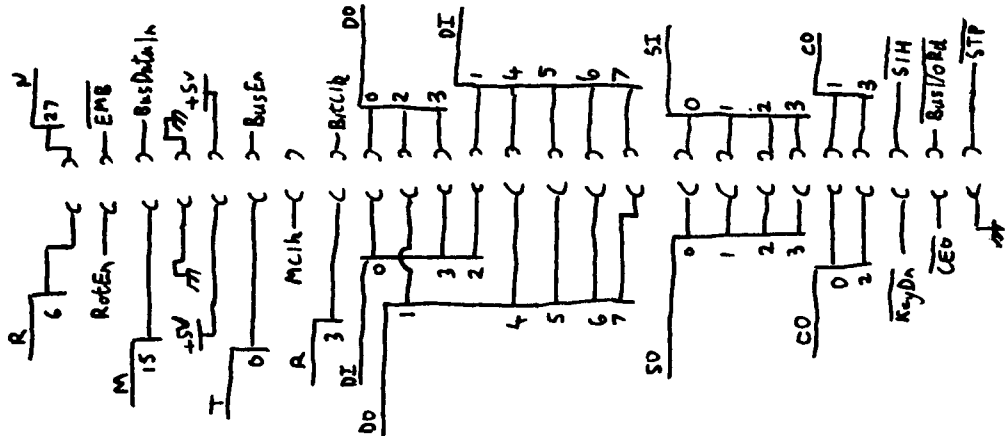


HP9830 Display

LHS
↑
→ Top

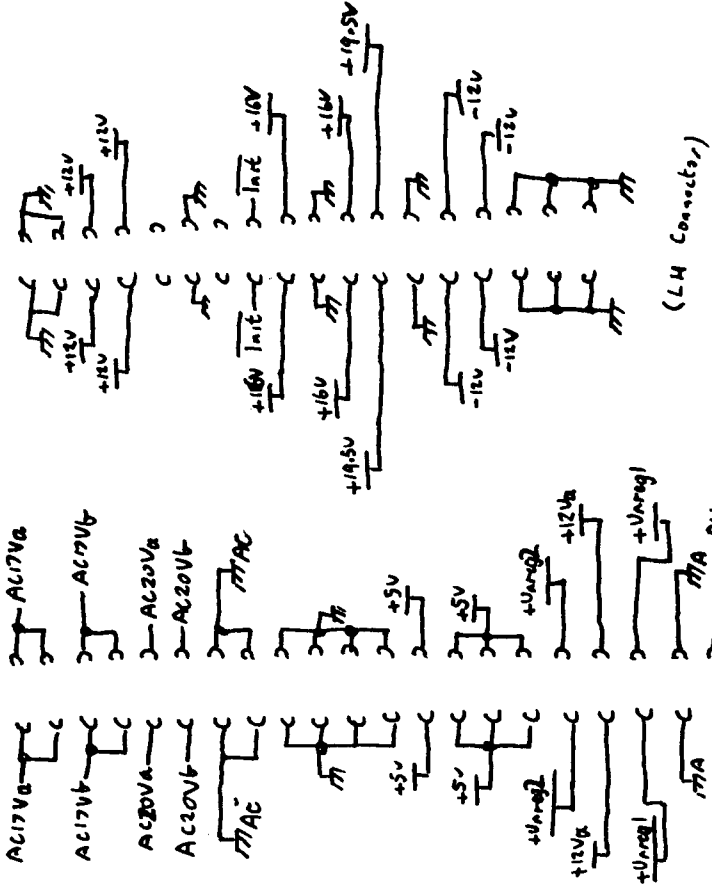


RHS
Rear



09830-66502

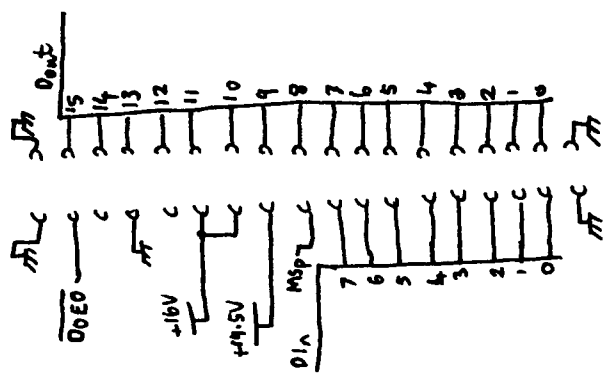
I/O Backplane



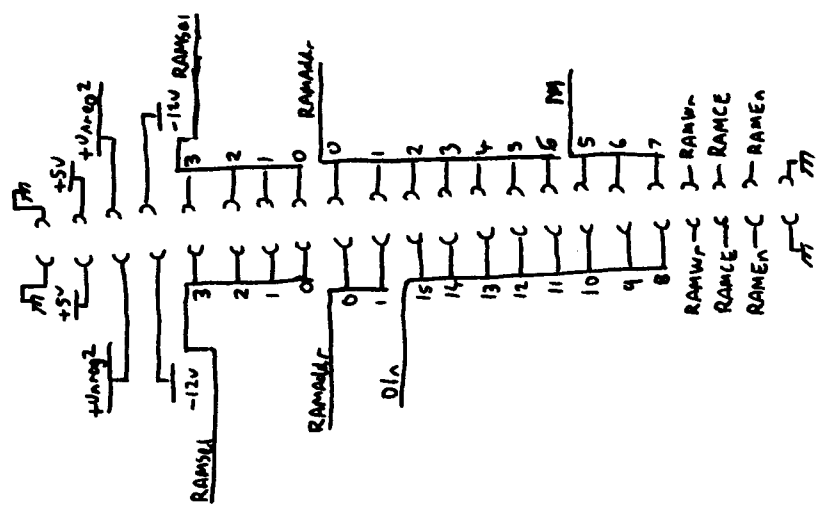
09830-66551

PSU

RHS
Rear



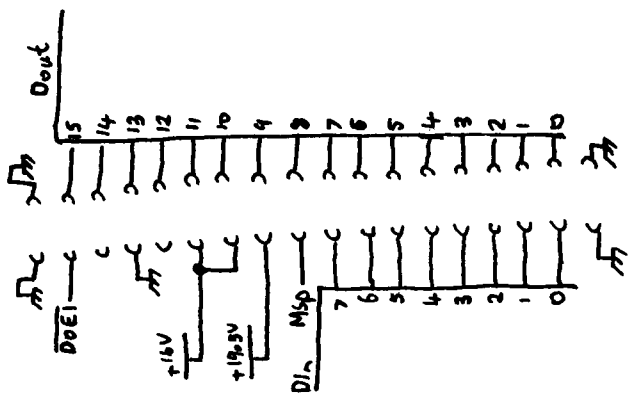
(LH Connector)



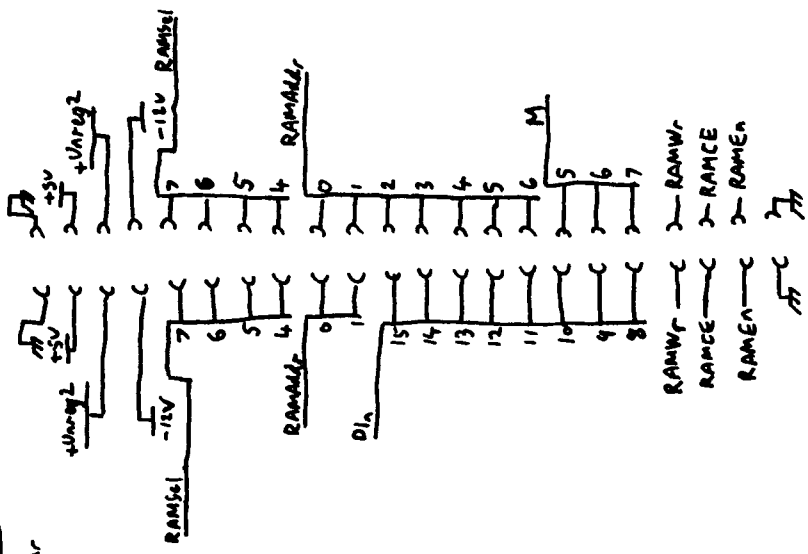
(RH Connector)

09830-66584

Rear (0) RAM



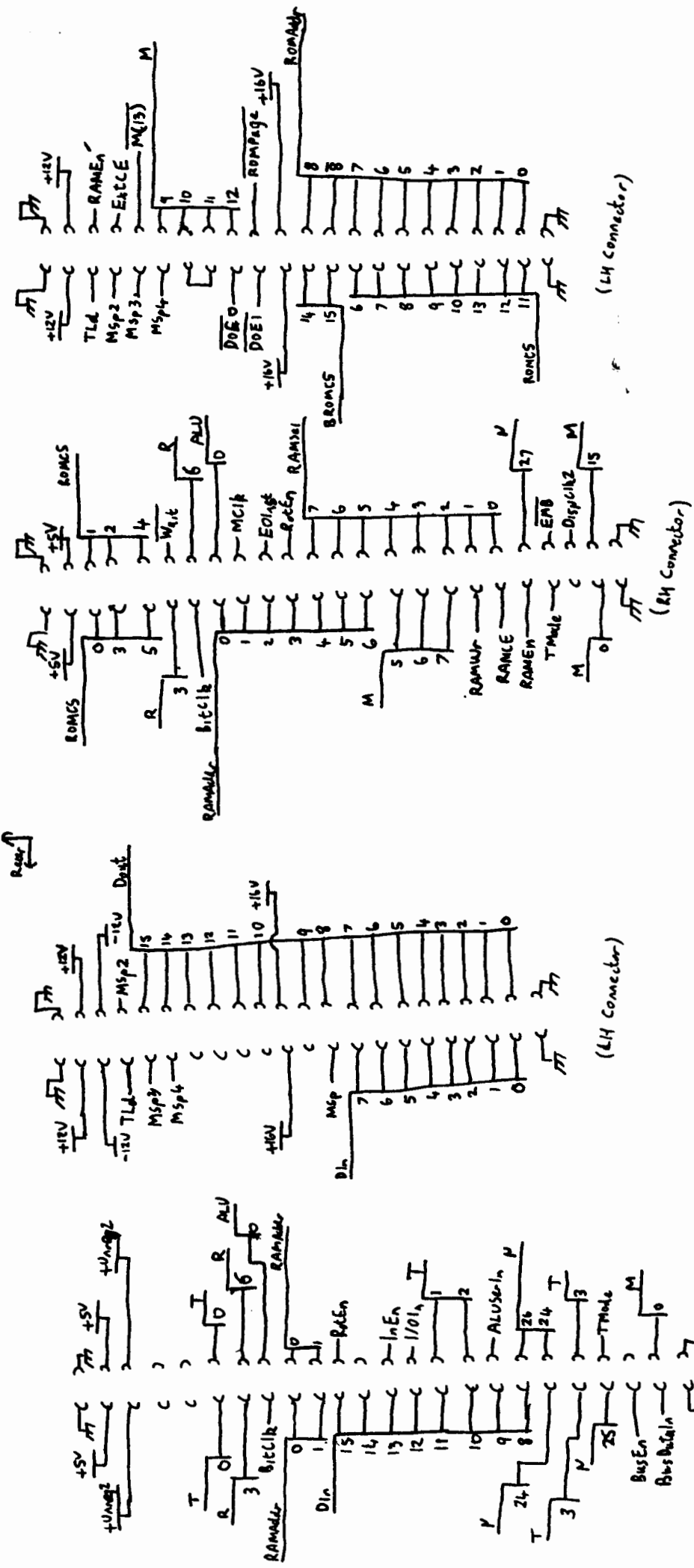
(LH Connector)



(RH Connector)

Front (1) RAM

RHS



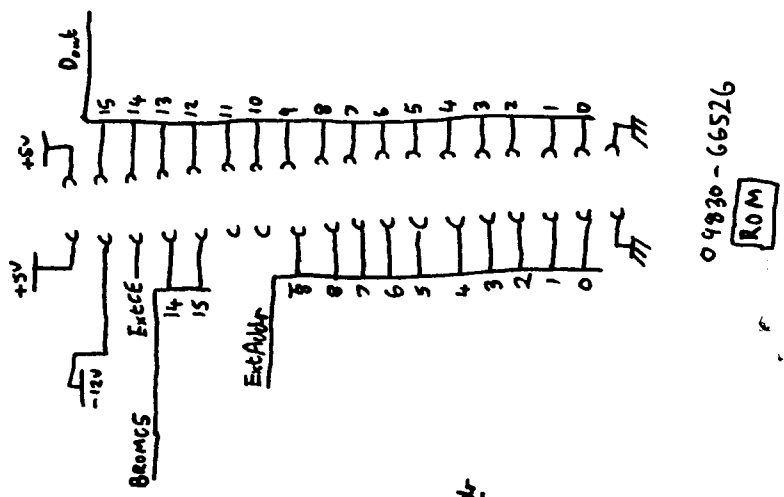
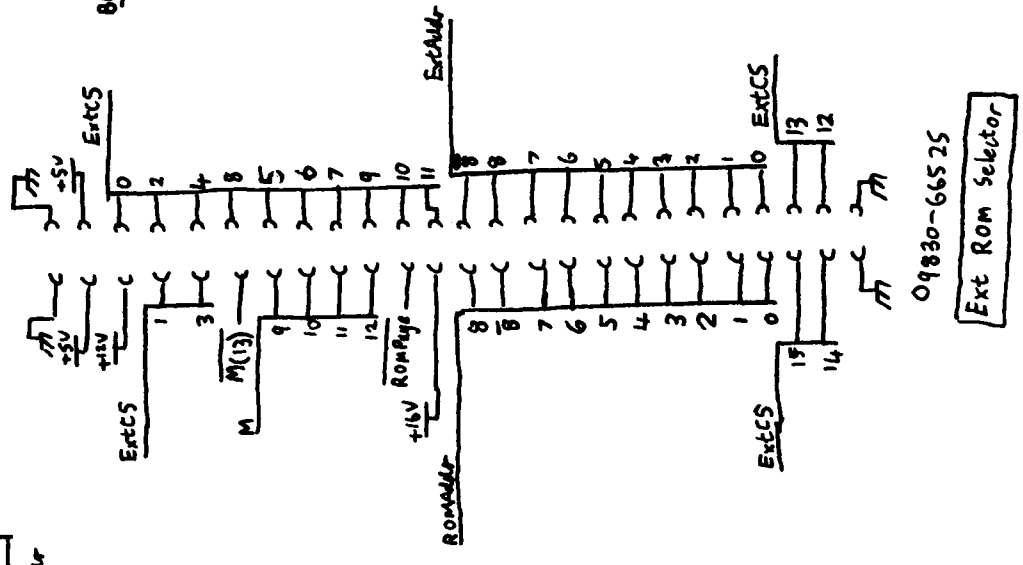
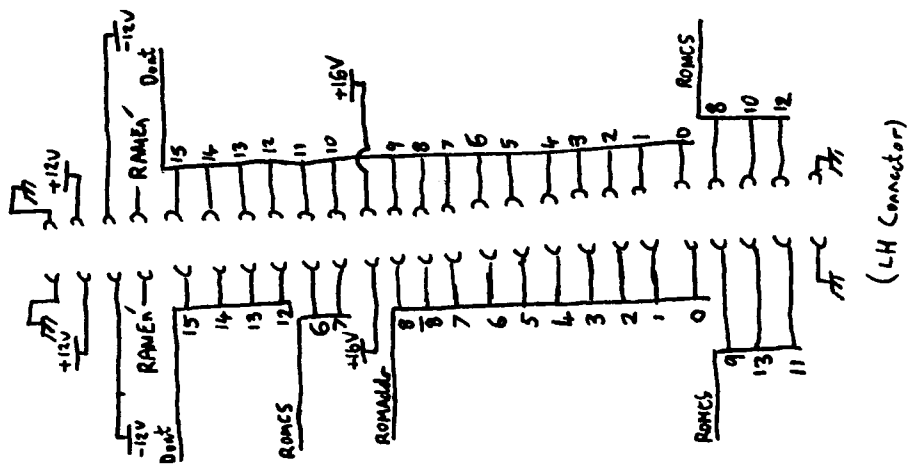
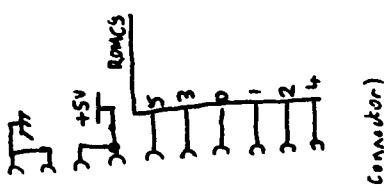
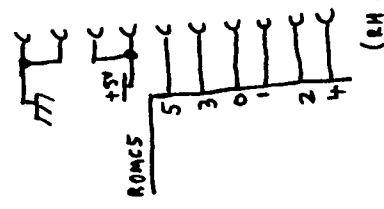
09830-66582

Memory Address

09830-66583

Memory Data

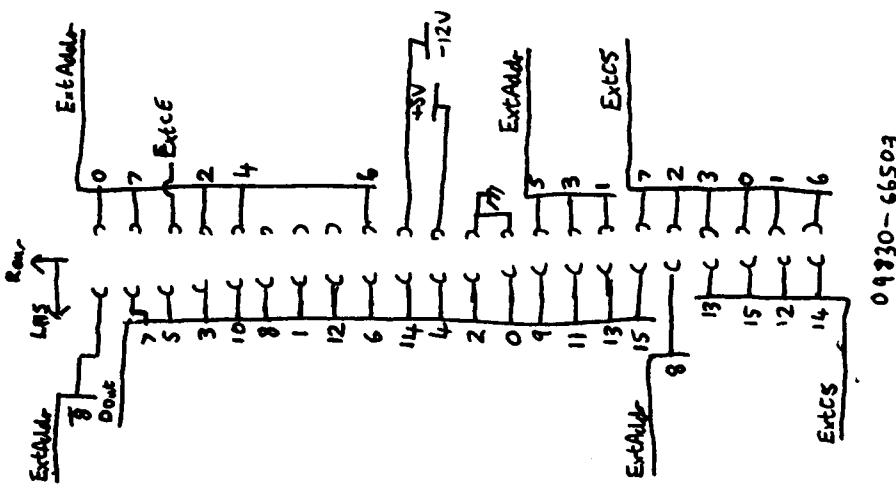
RHS
← Rear



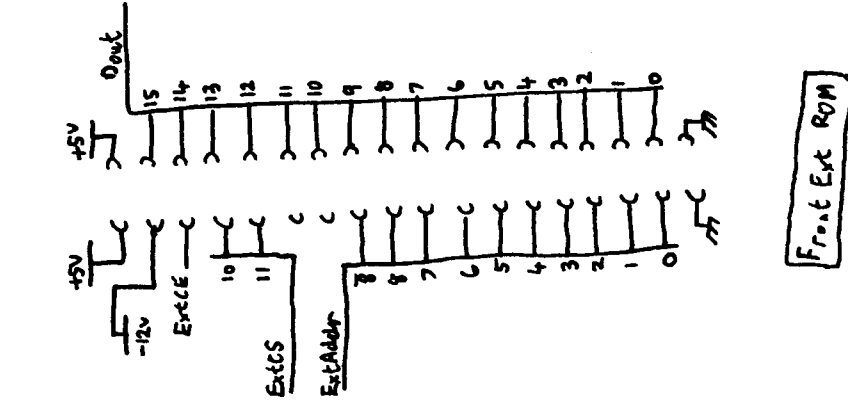
09830-66521
ROM

09830-66525
Ext ROM Selector

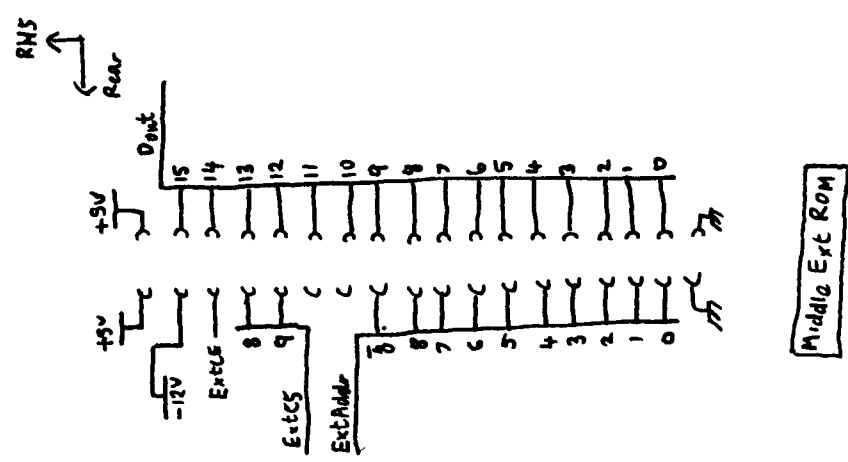
09830-66526
ROM



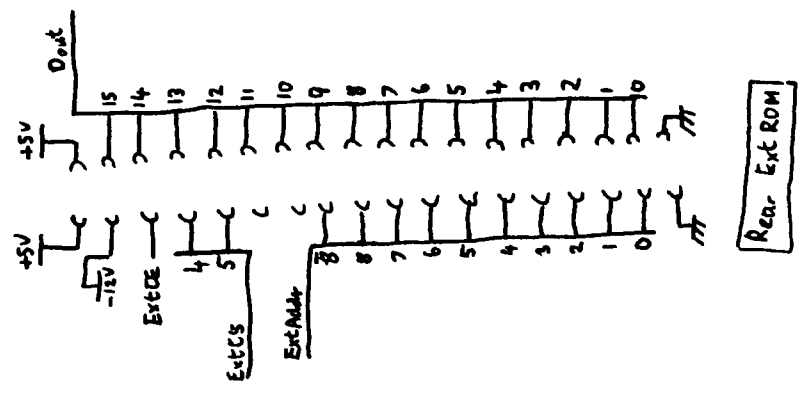
ROM Backplane



Front Ext ROM

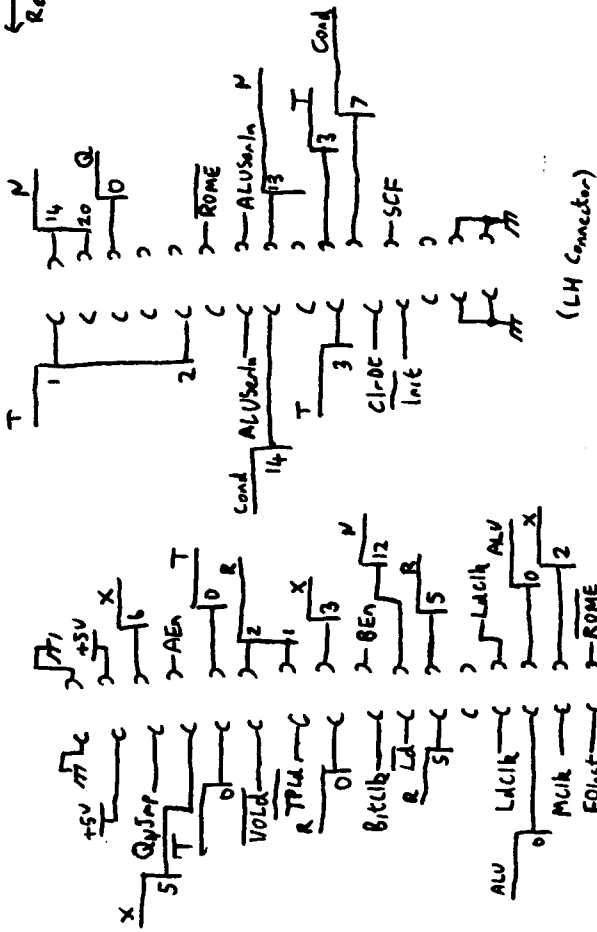


Middle Ext ROM



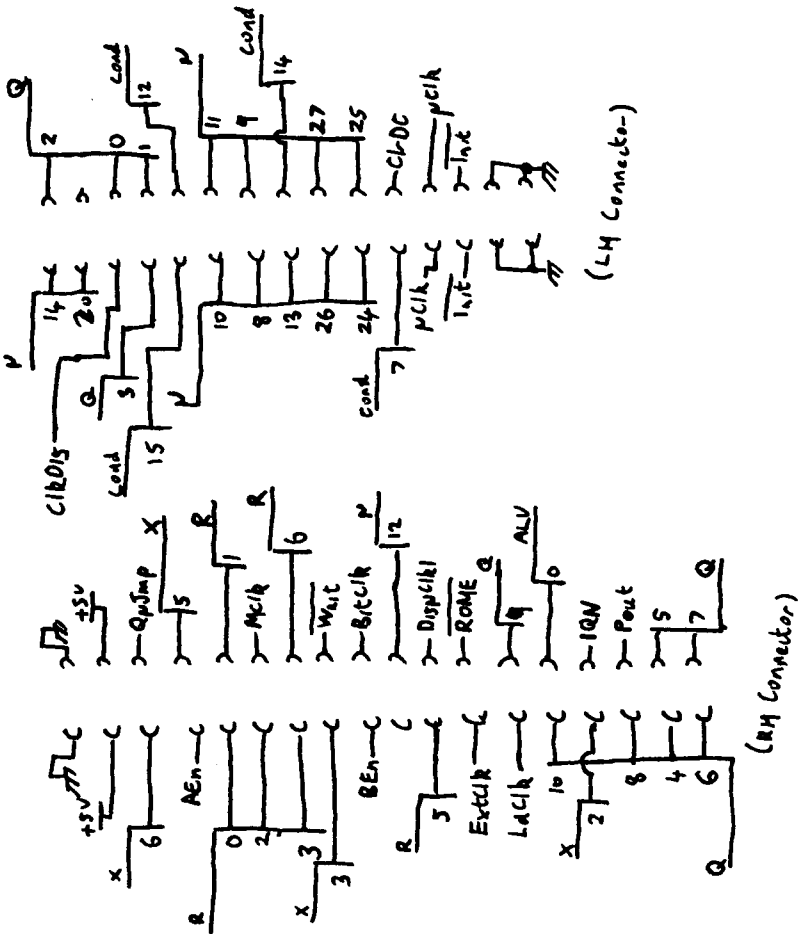
Rear Ext ROM

RHS
Rear



09810-66514

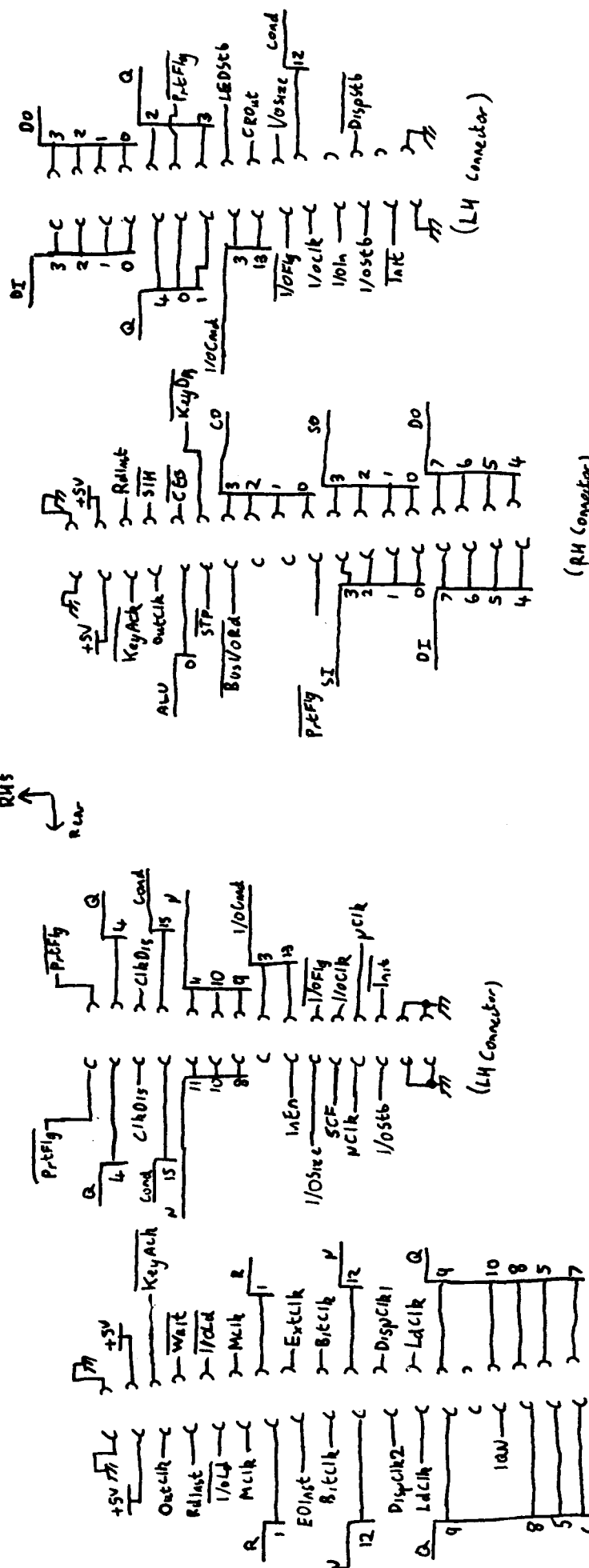
CPU Data Path



09810-66513

CPU Control

RHS
← Rear



(RH Connector)

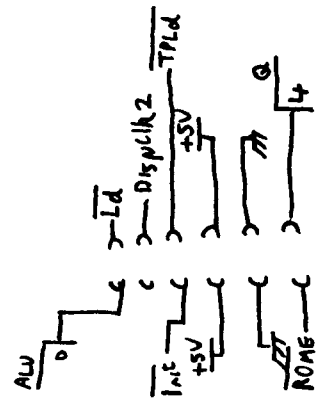
(LH Connector)

(RH Connector)

(LH Connector)

09810-66512

Clock

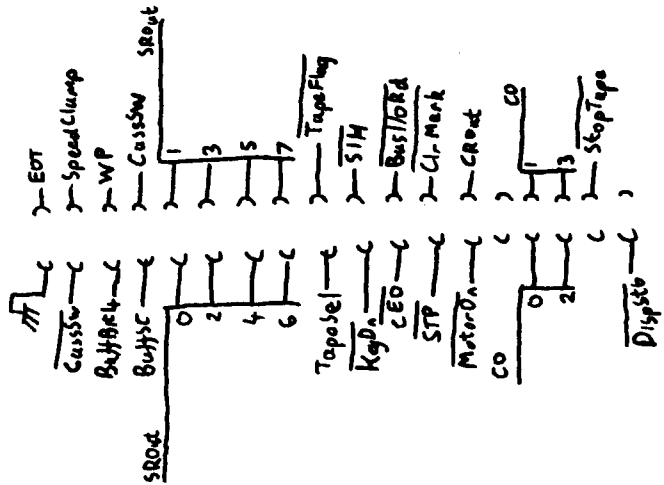
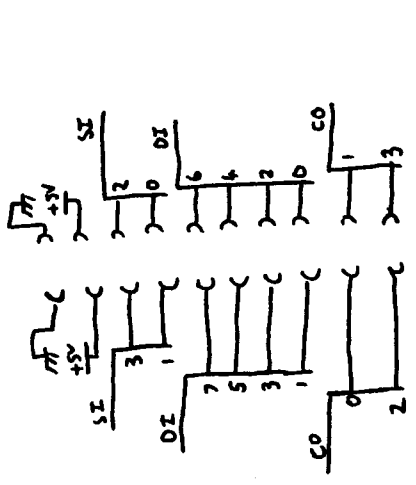


Test Connector

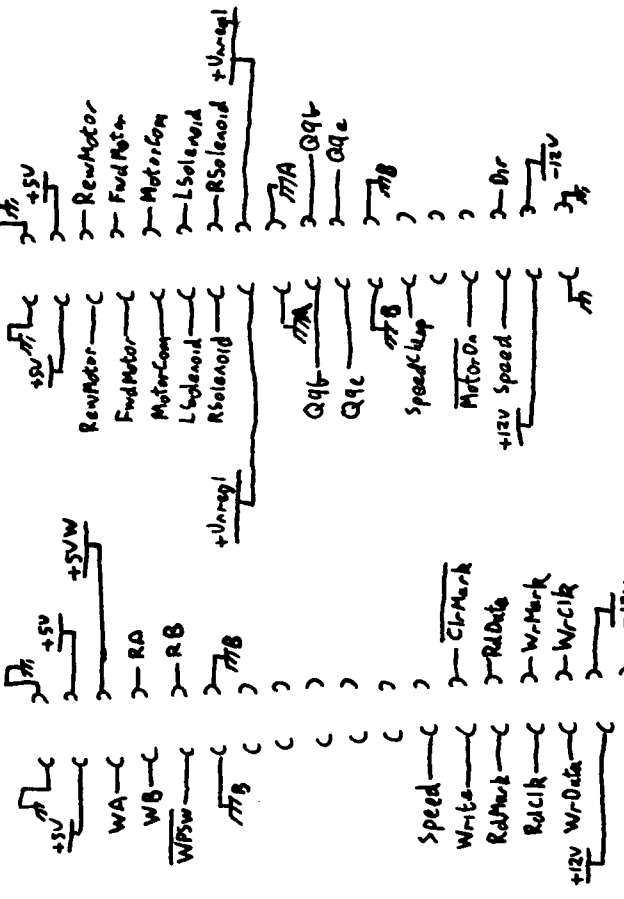
09810-66511

I/O Interface

BHS
Rear

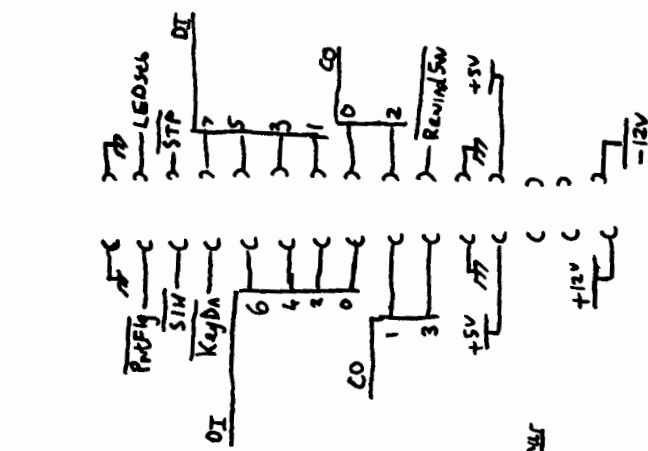


09830-66561
Tape Interface



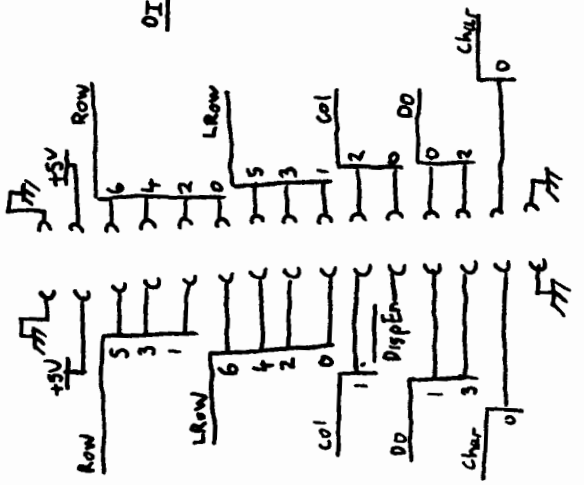
09865-66563
Read/Write

09865-66564
Motor Control



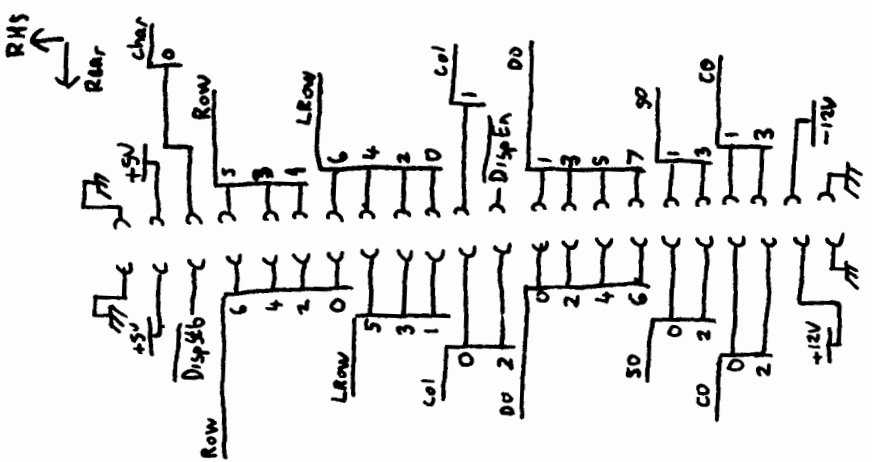
09830-66534

Keyboard



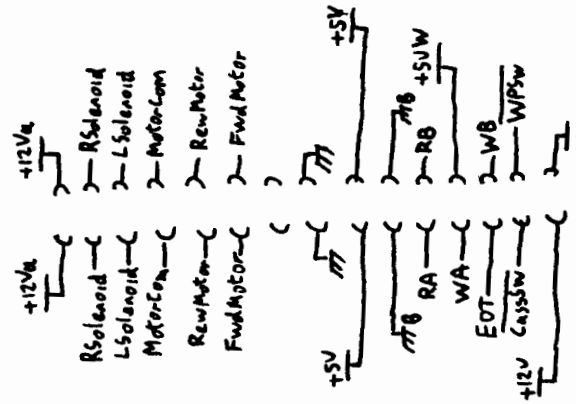
09830-66541

Display



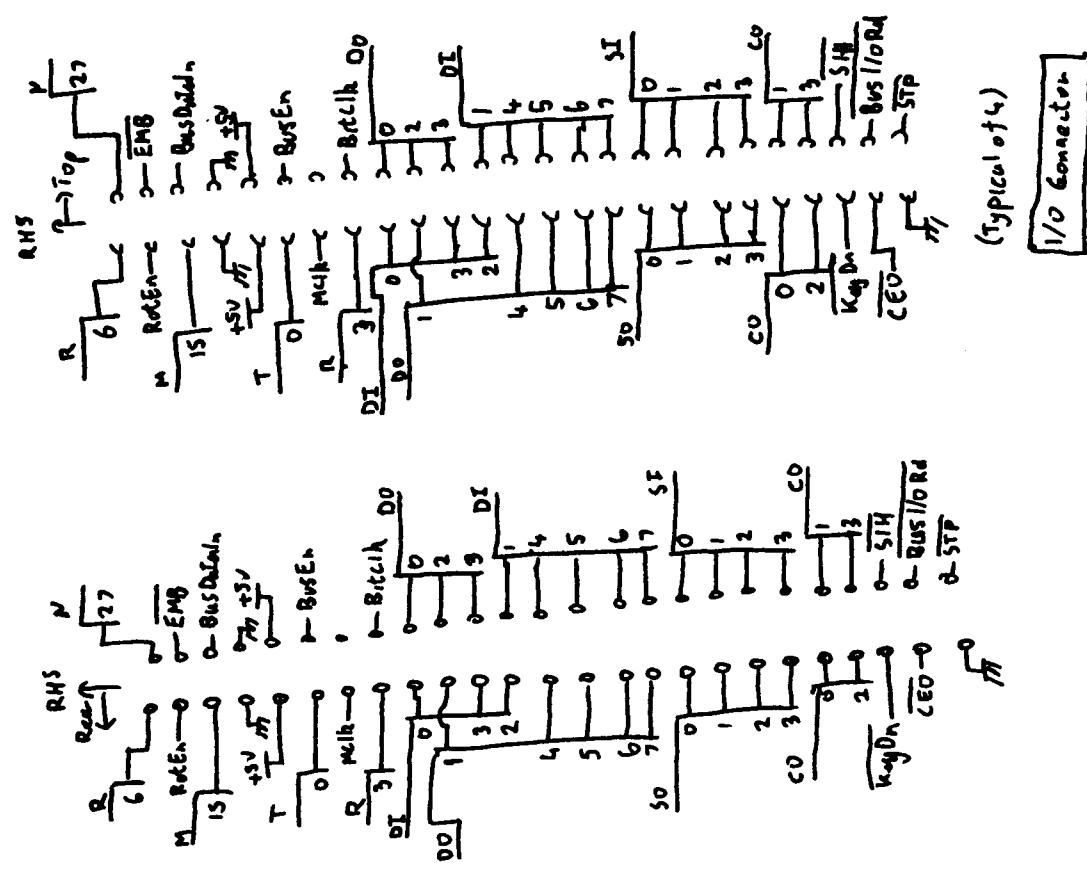
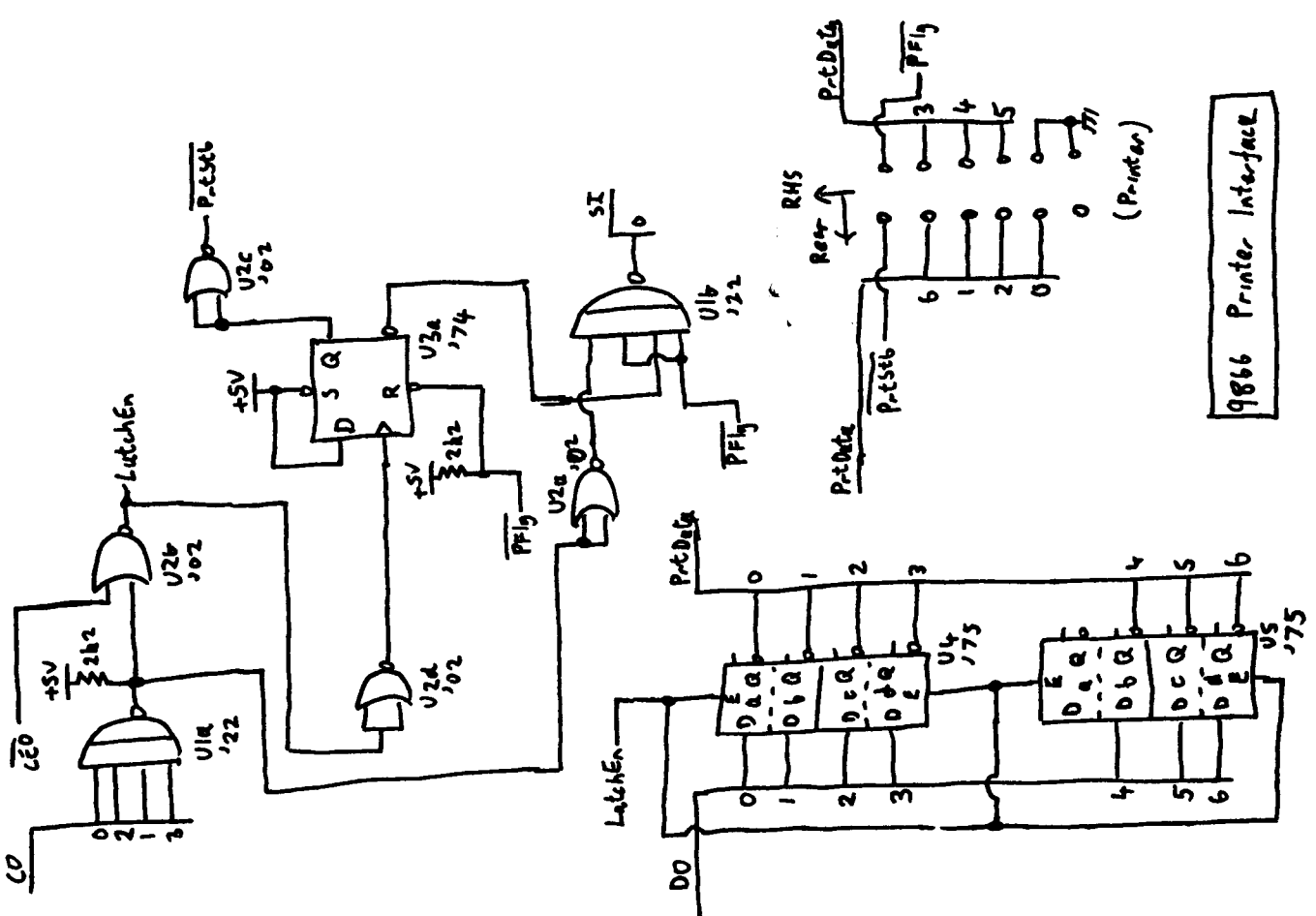
09830-66542

Display Driver



09830-66565

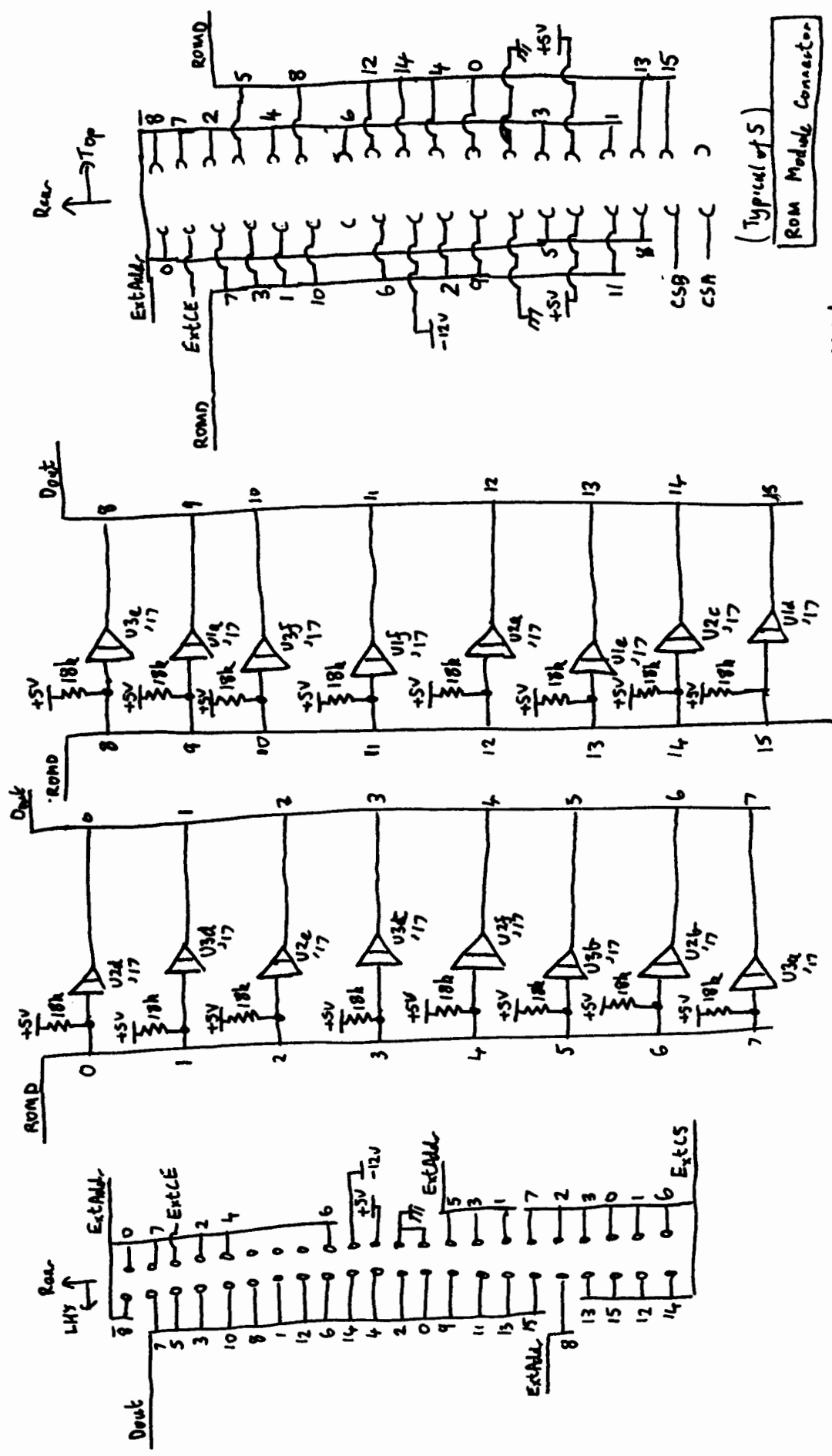
Tape Drive



HP9830 I/O Busplane 09830-66502

9866 Printer Interface

(2)

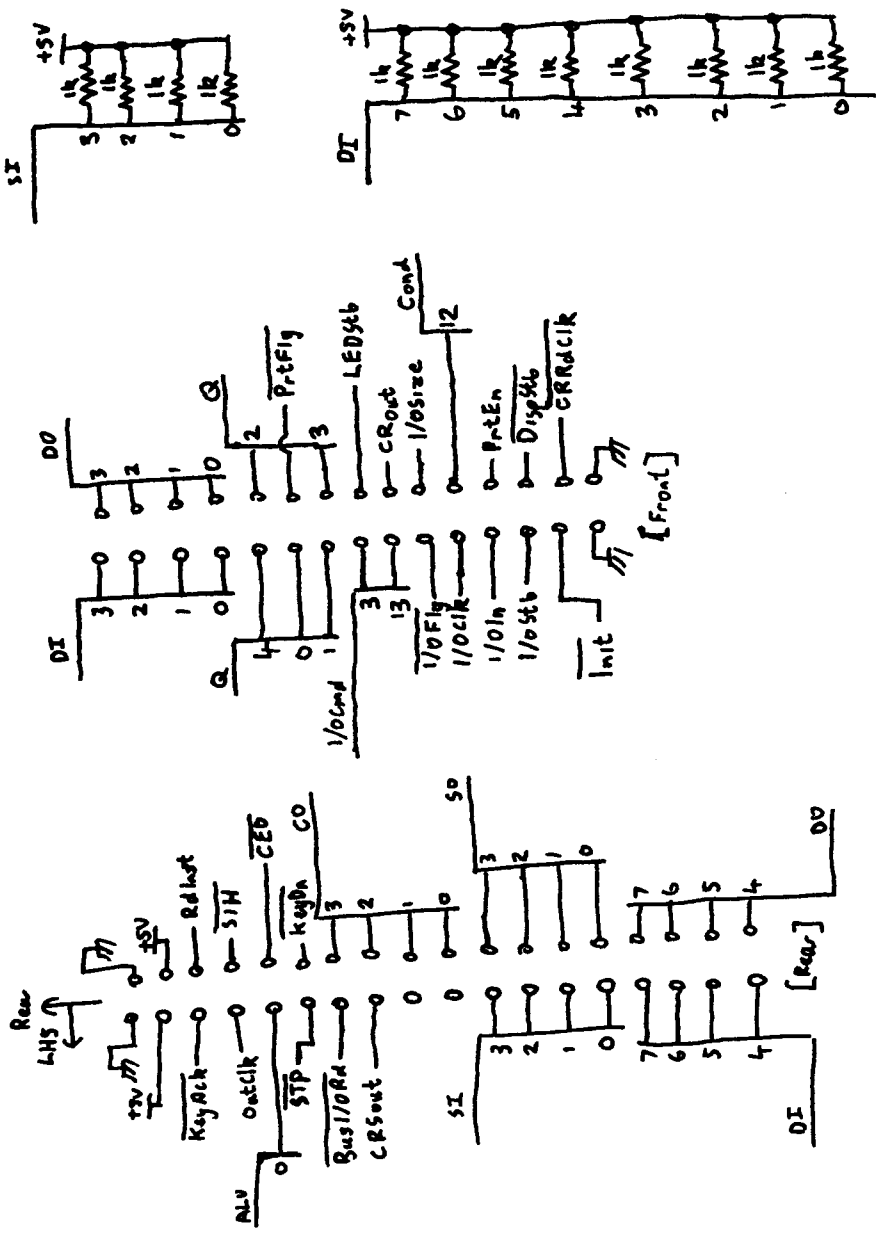


Data Buffers

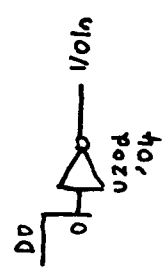
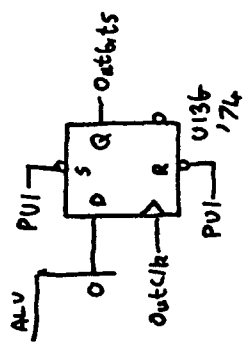
(Typical of 5)
ROM Module Connector

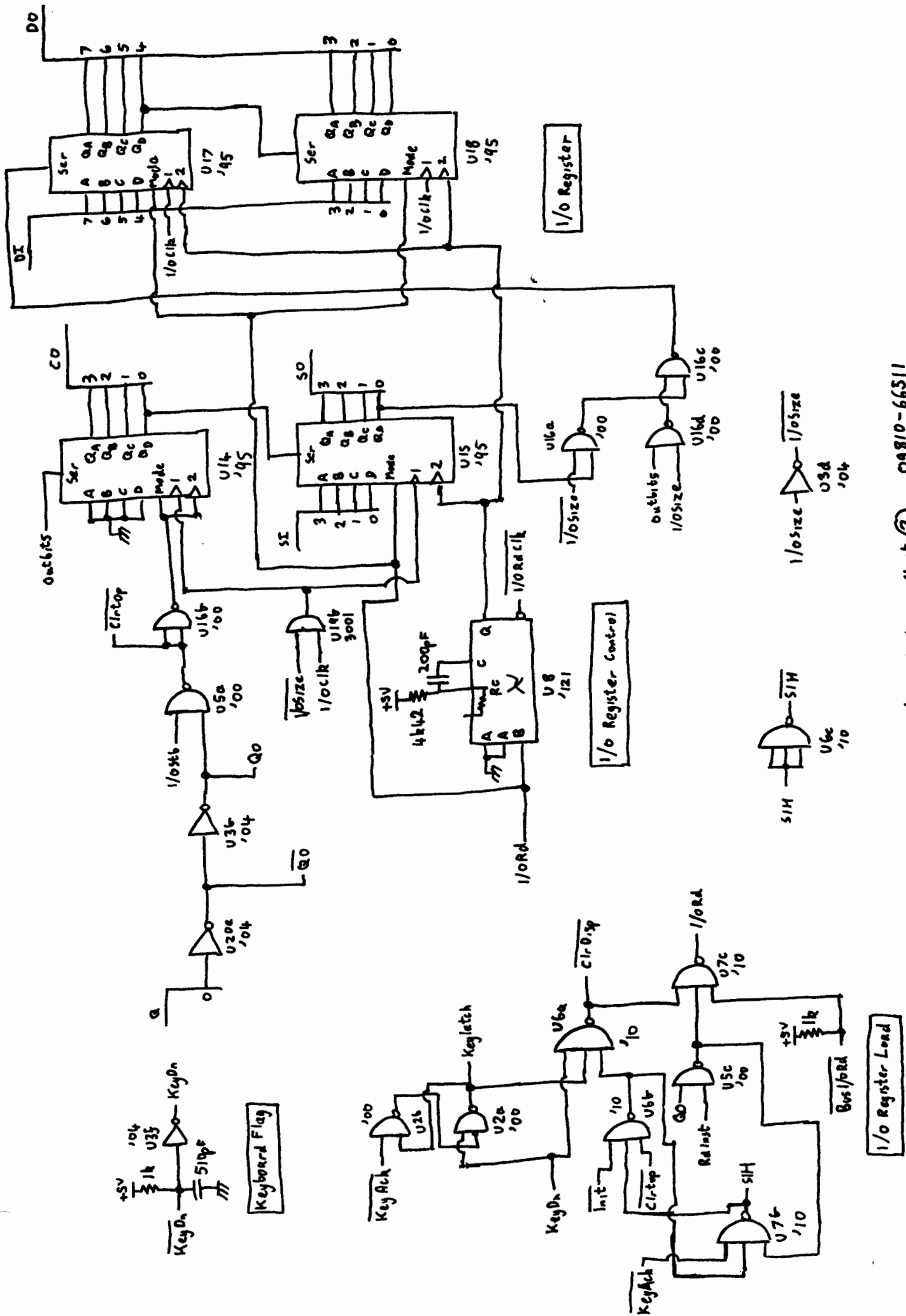
slot	CSA	CSB
(Top) 1	ExtCS(10)	ExtCS(15)
2	ExtCS(12)	ExtCS(13)
3	ExtCS(0)	ExtCS(1)
4	ExtCS(2)	ExtCS(3)
5	ExtCS(6)	ExtCS(7)

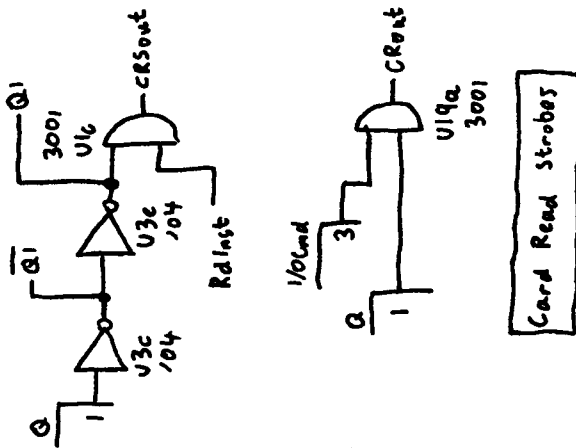
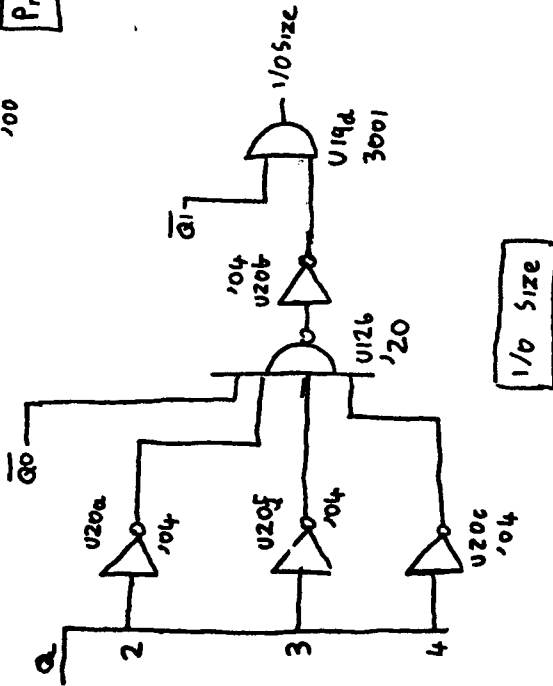
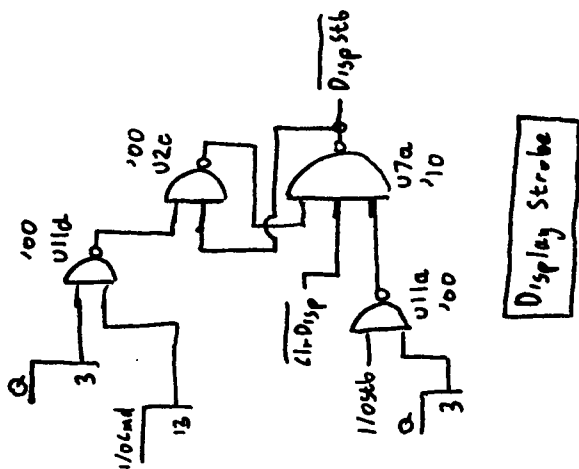
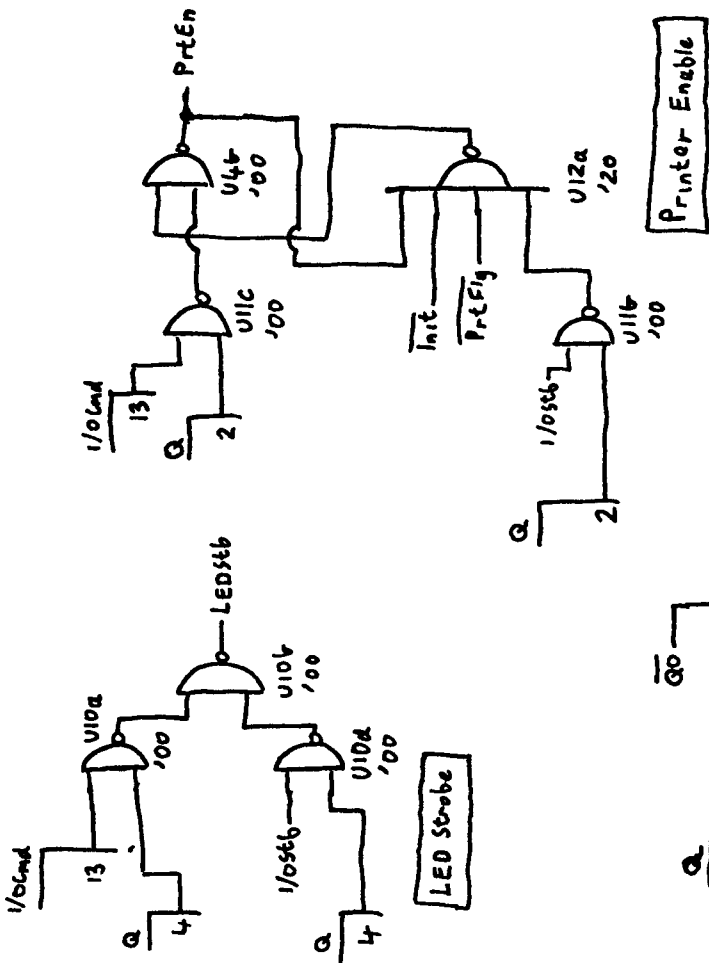
207

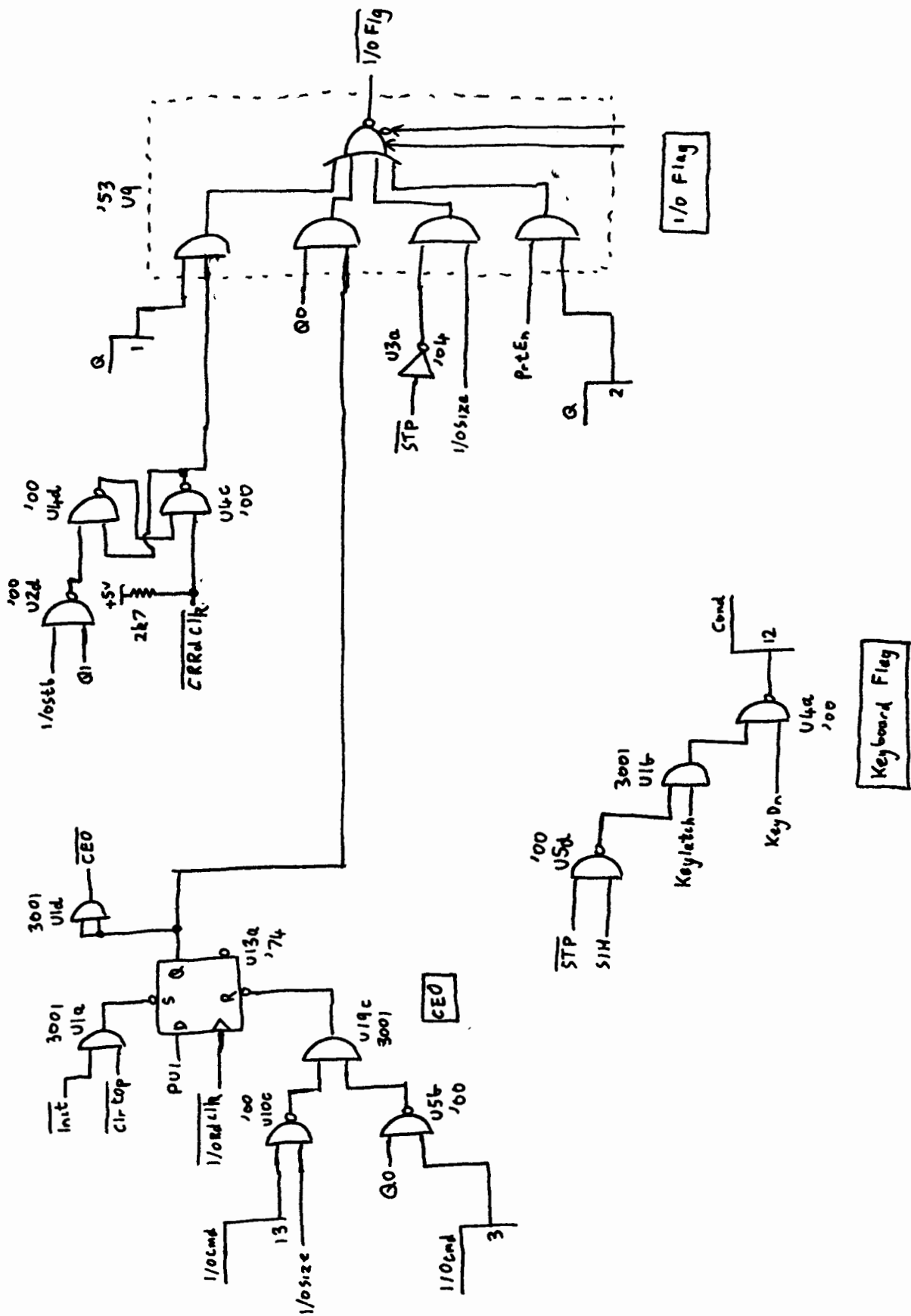


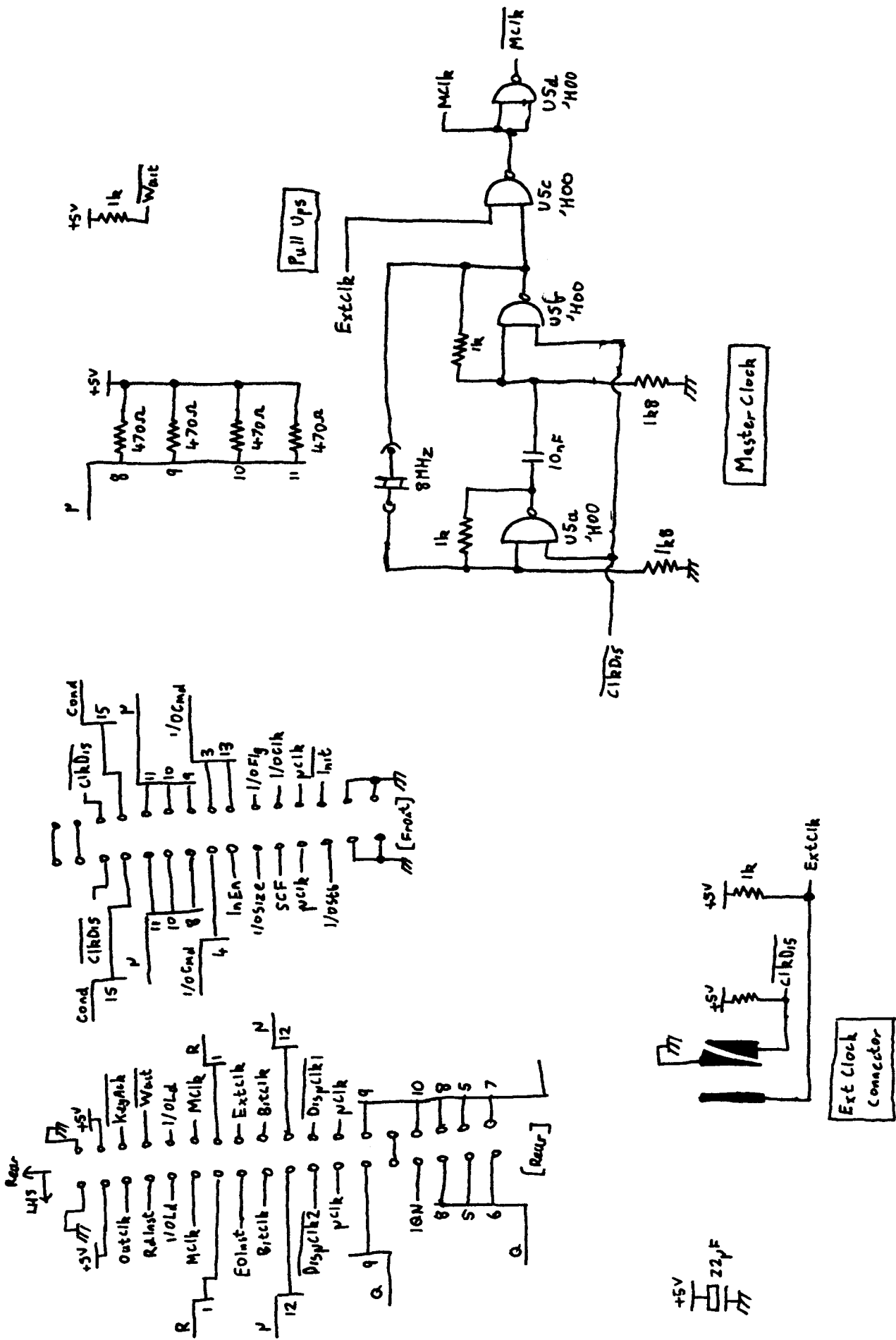
Bus Pull Ups

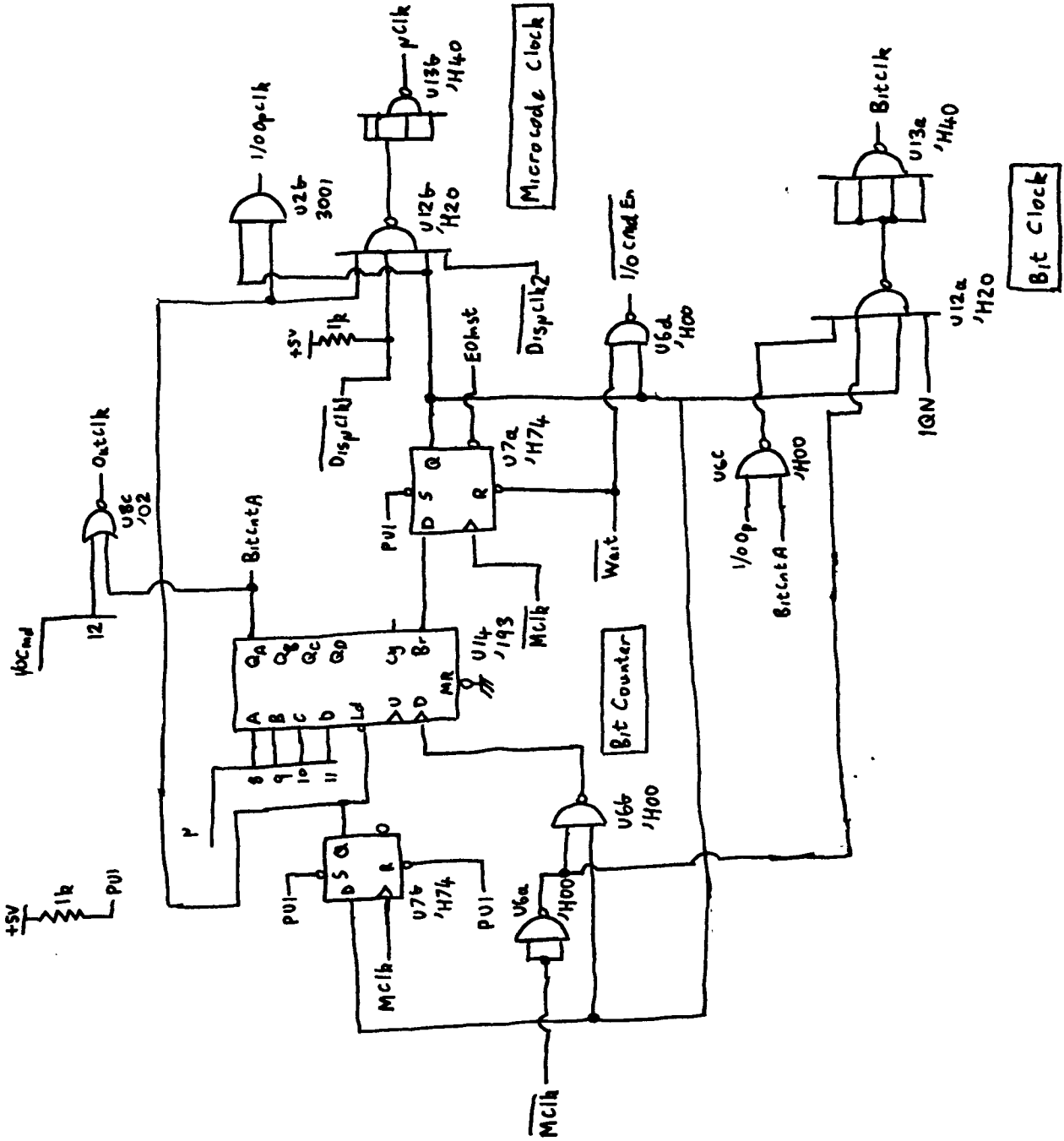


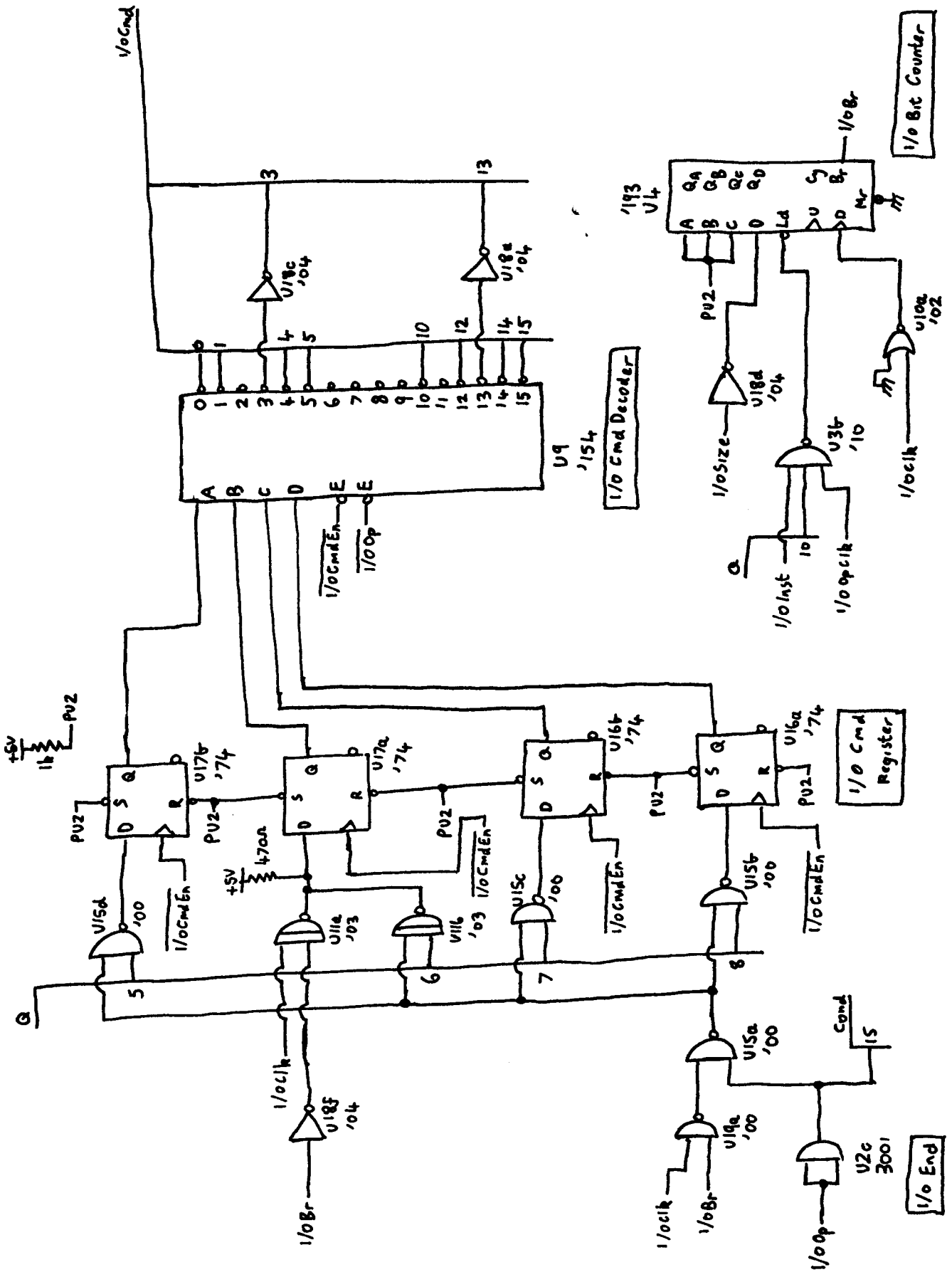


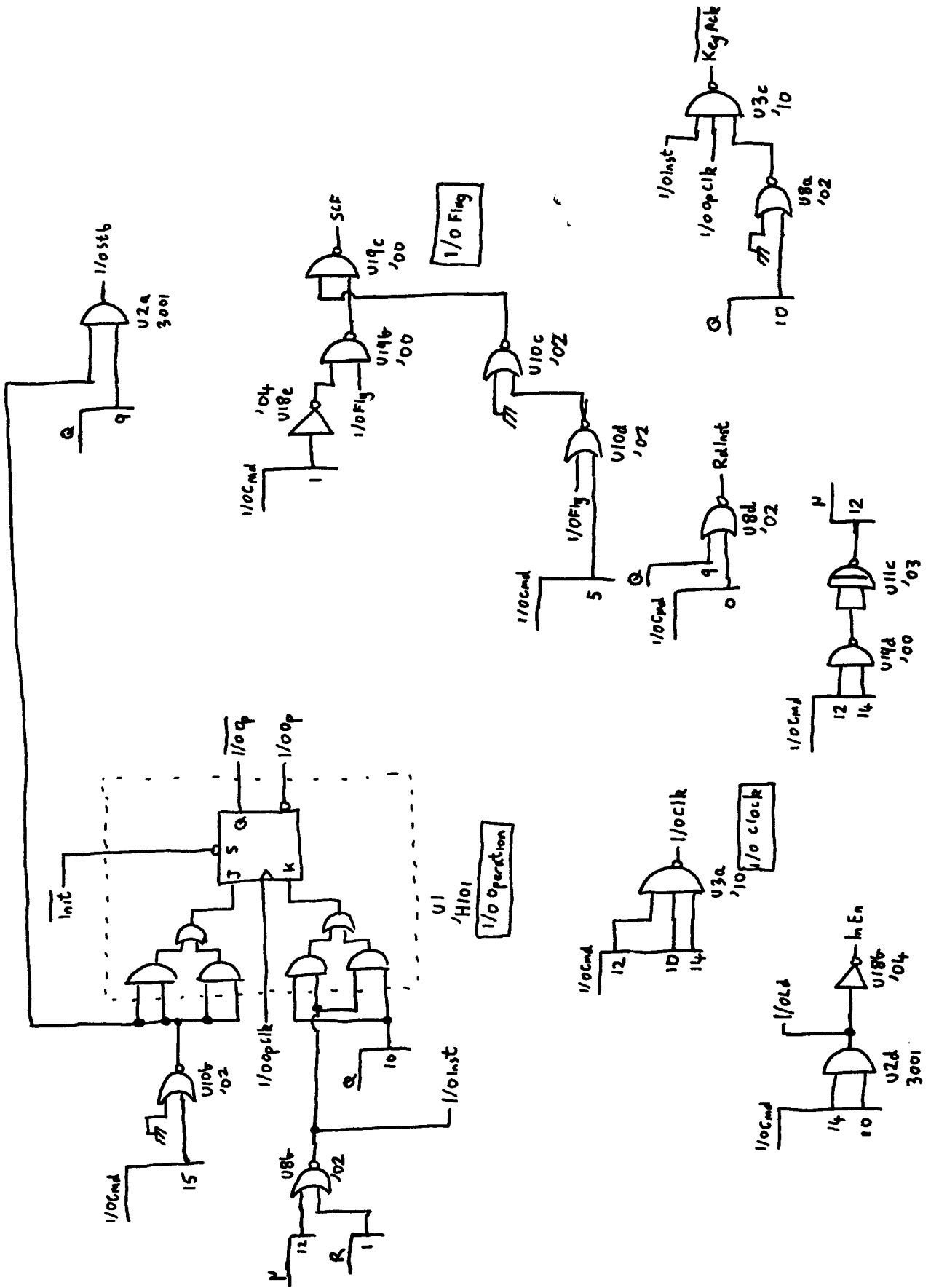




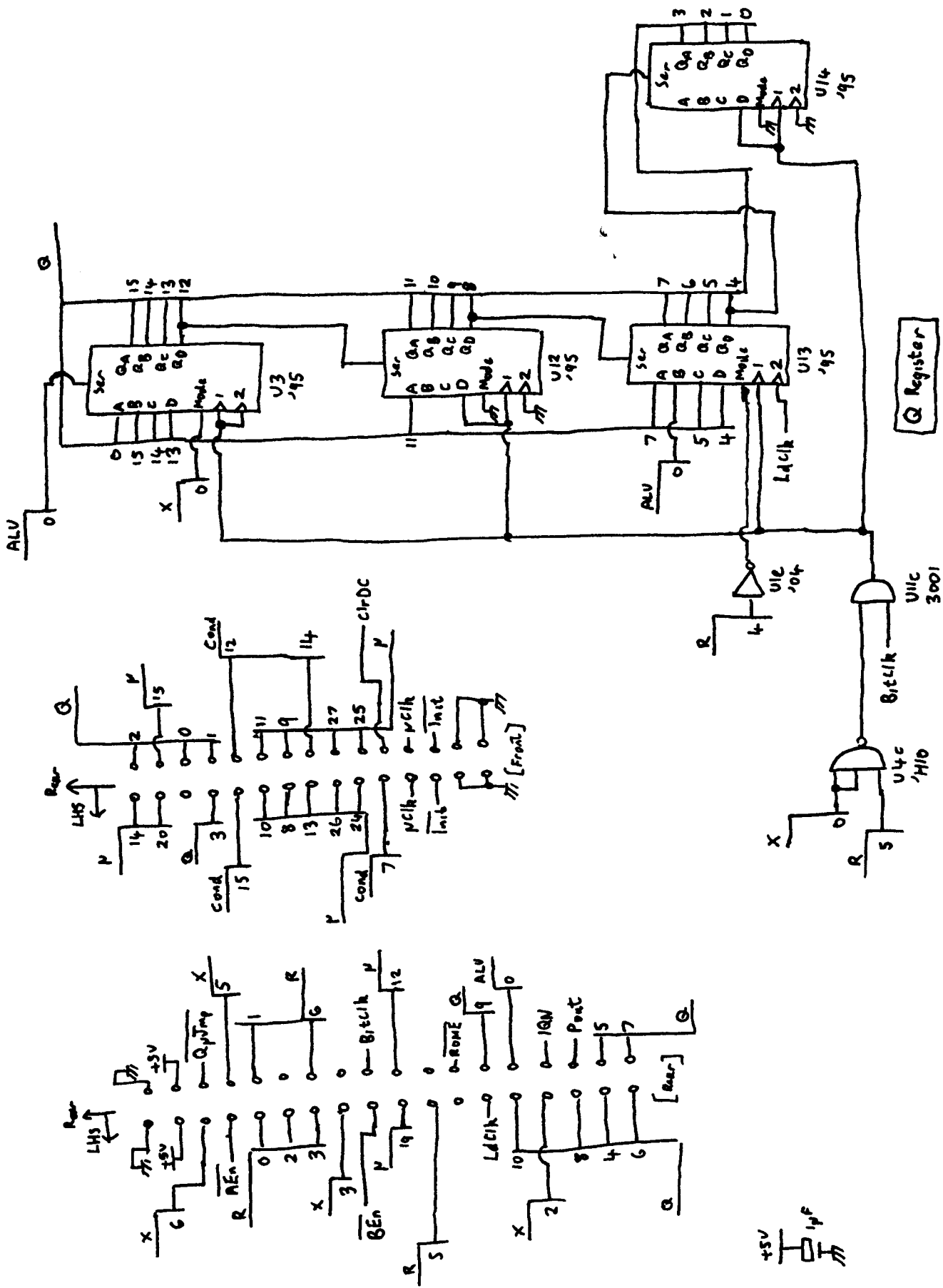


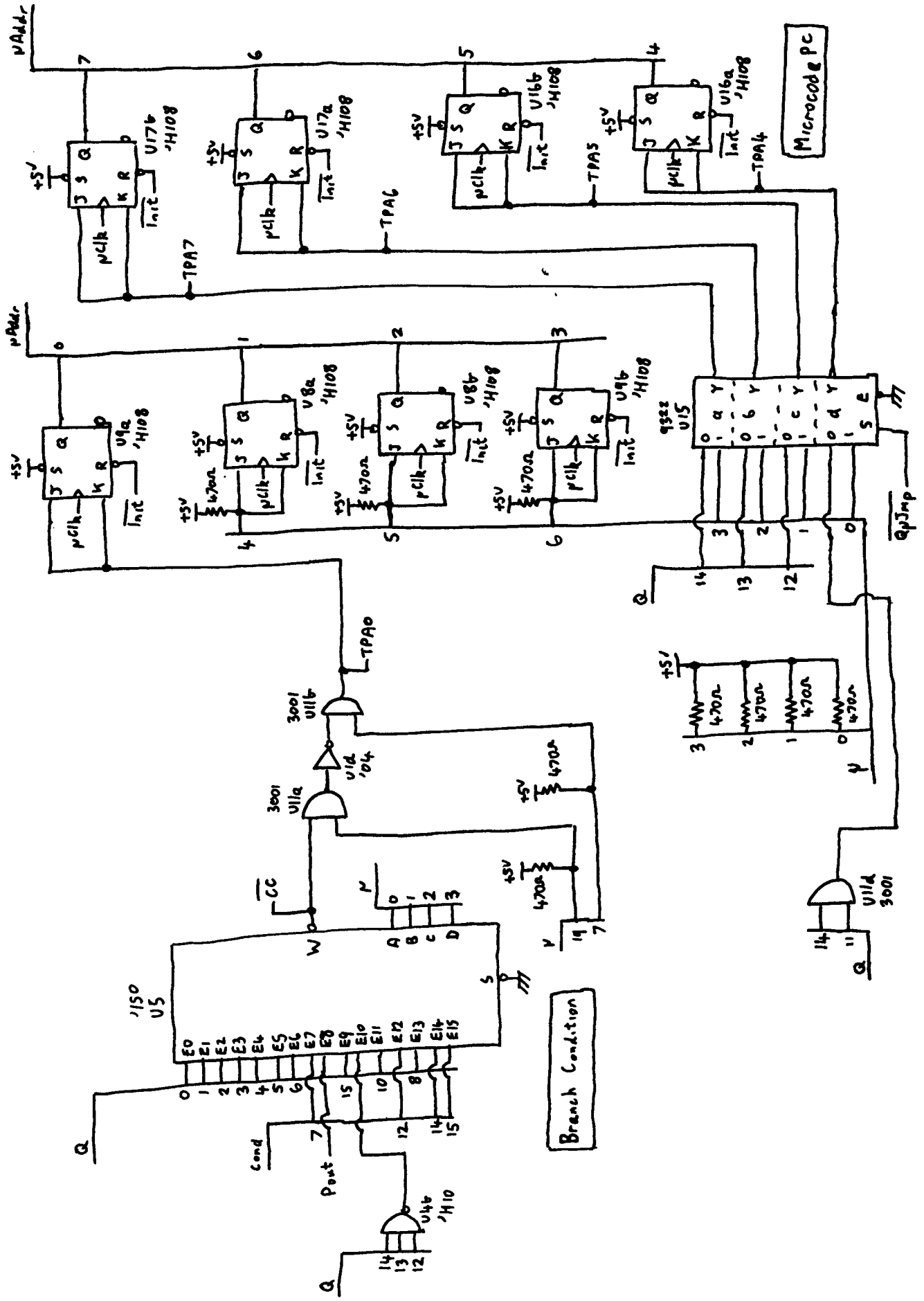






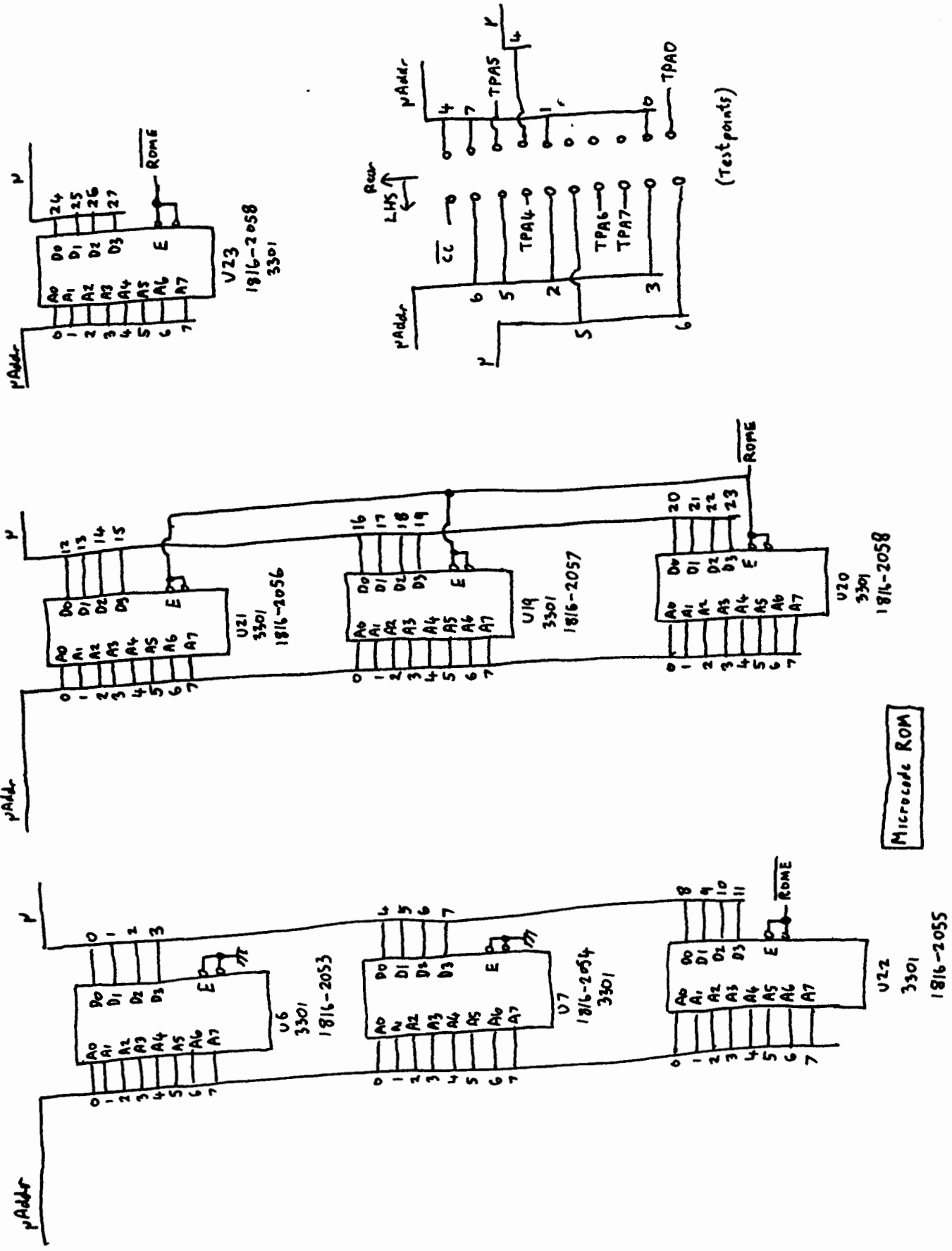
100

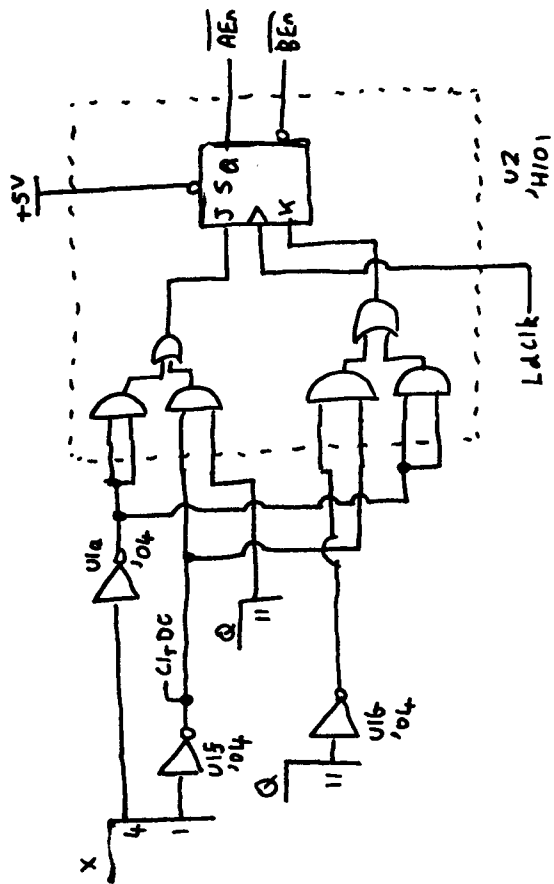




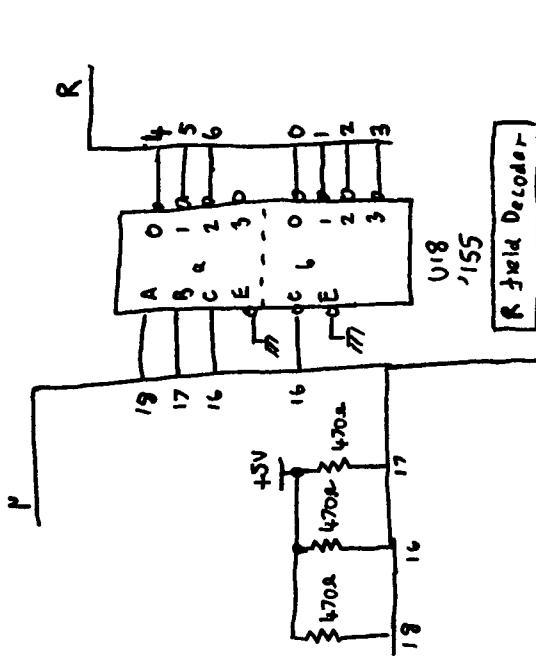
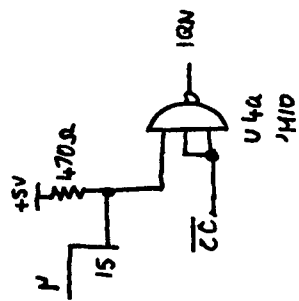
HP 9810 CPU Control Sheet 2 (B-/O-)

09810-66513

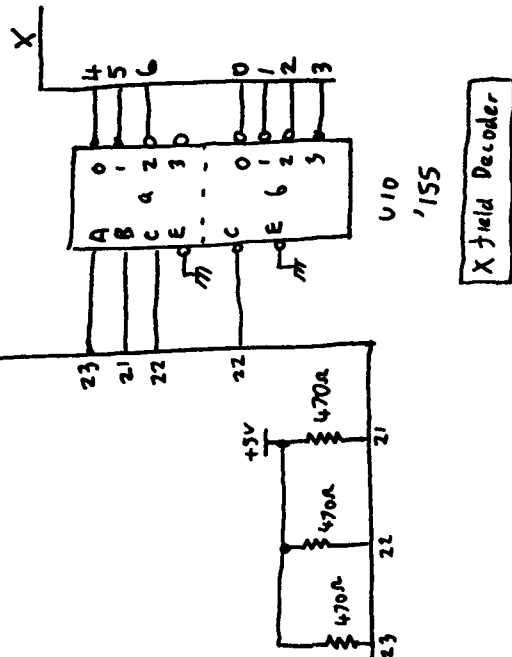




Register Select

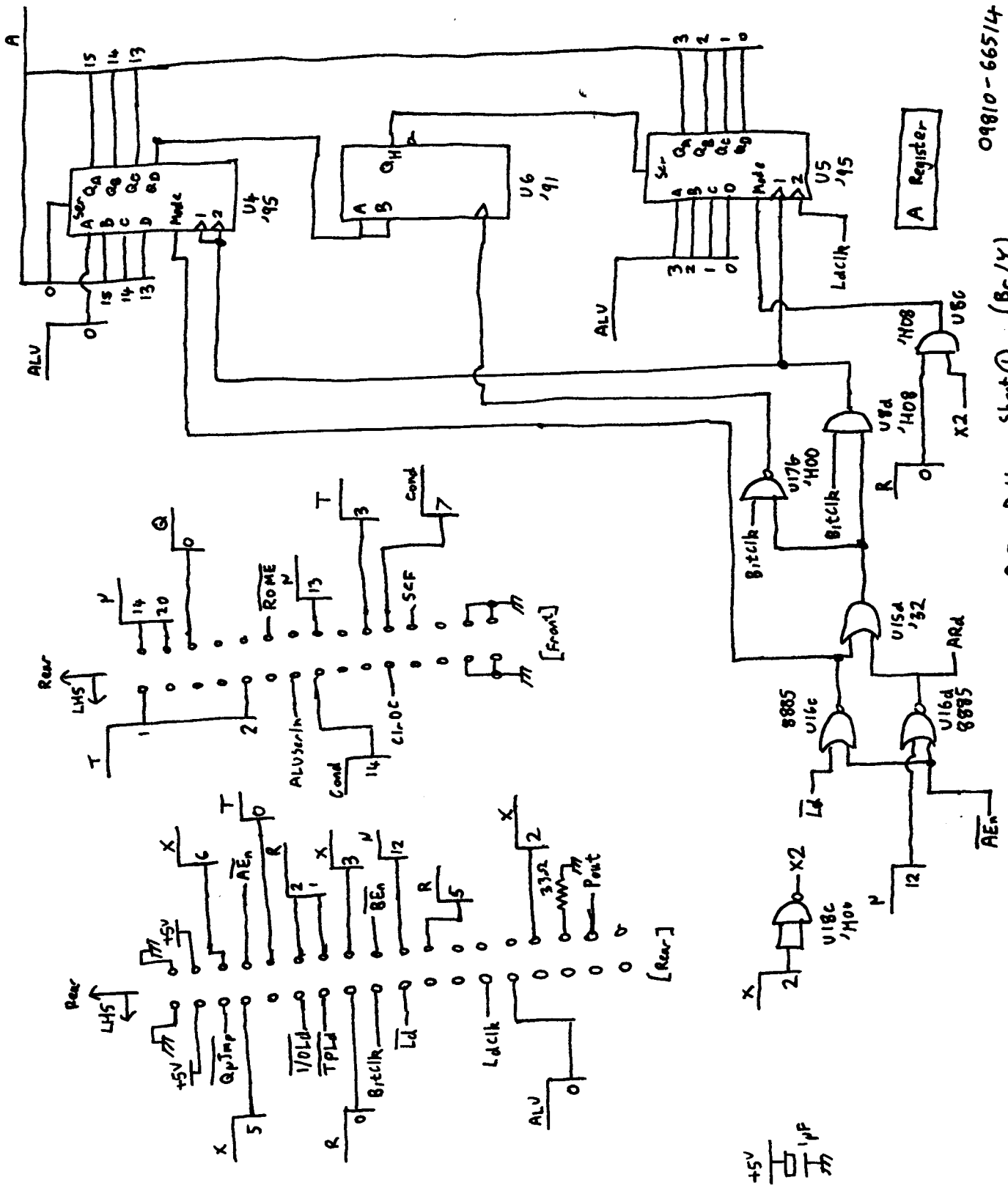


R Field Decoder



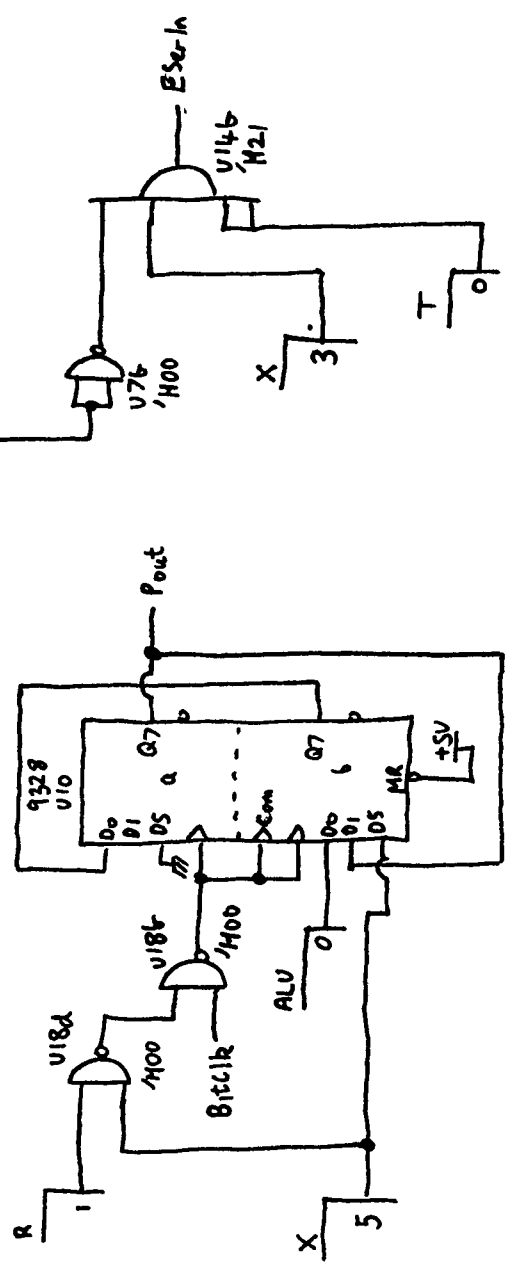
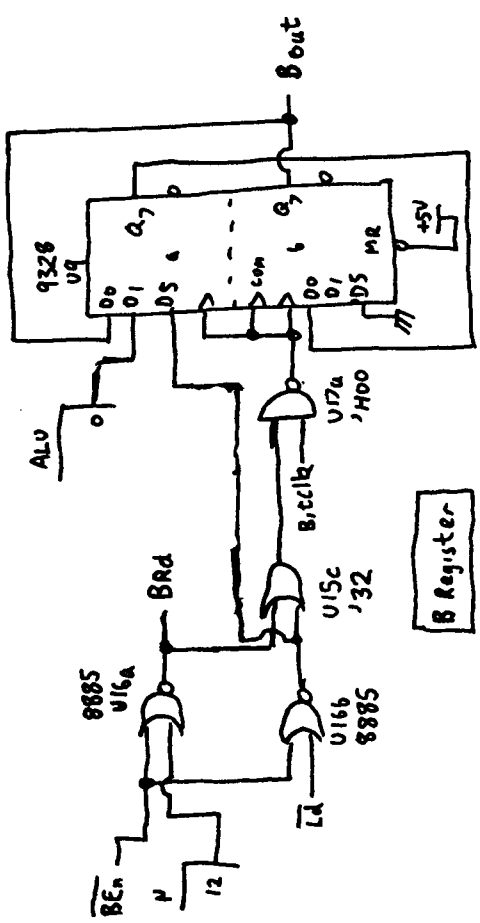
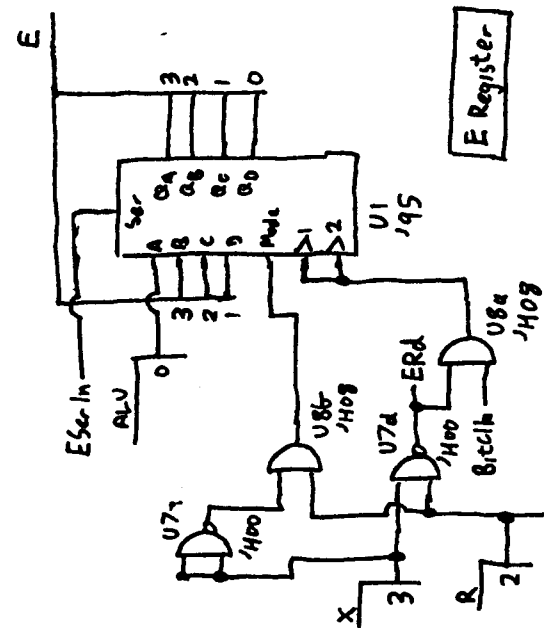
X Field Decoder

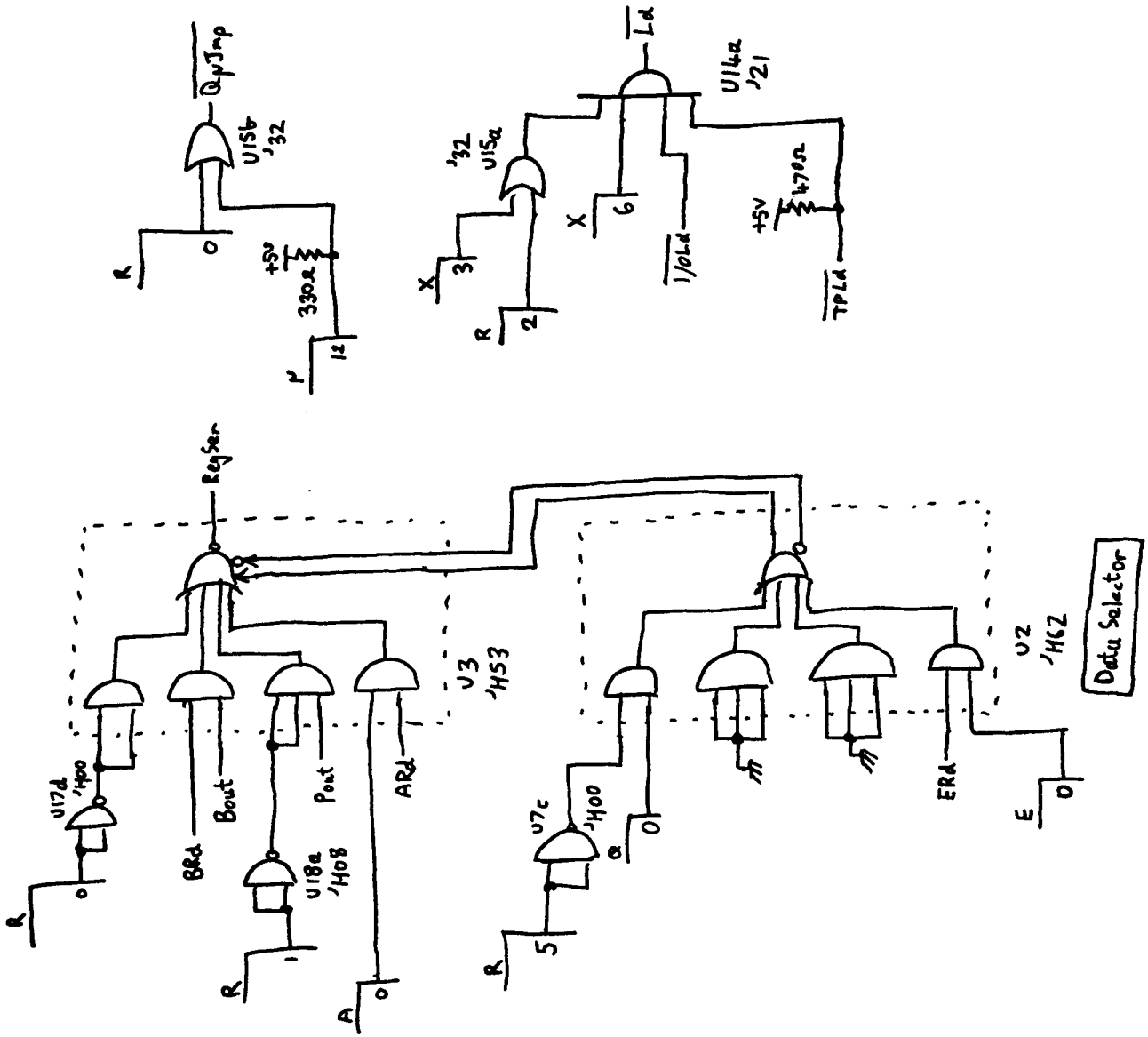
34

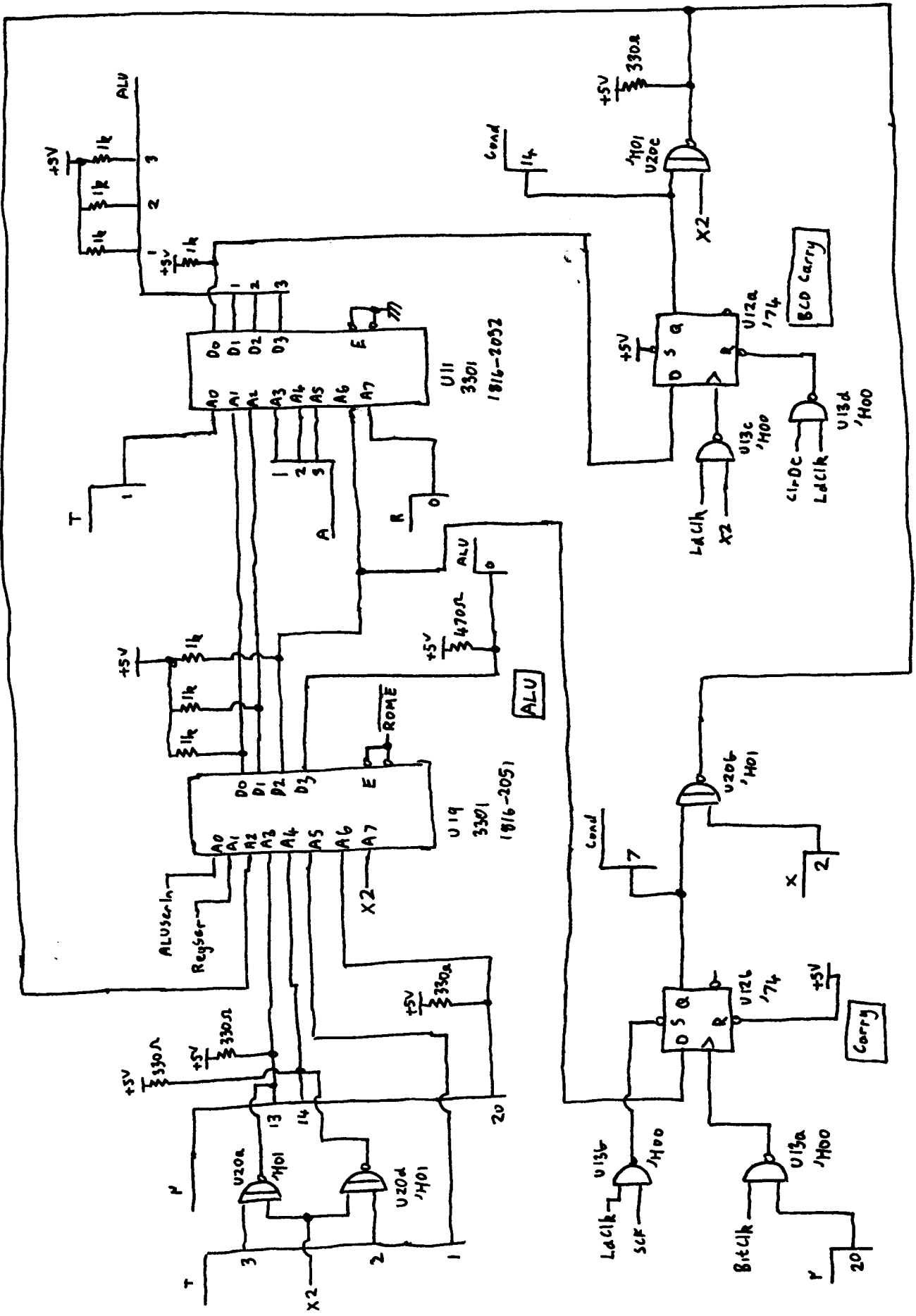


09810-66514

HP 9810 Data Path Sheet (B-Y)

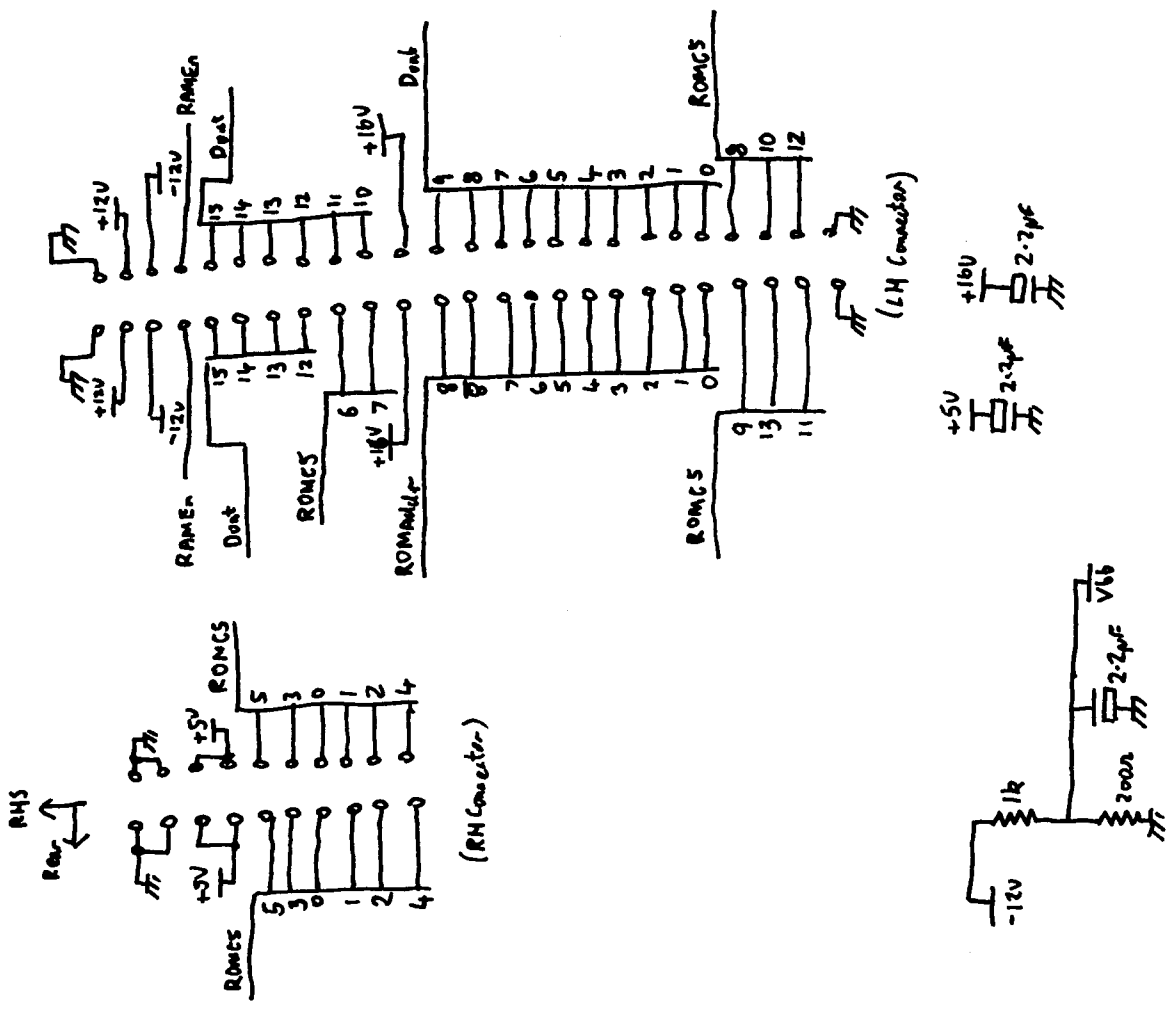
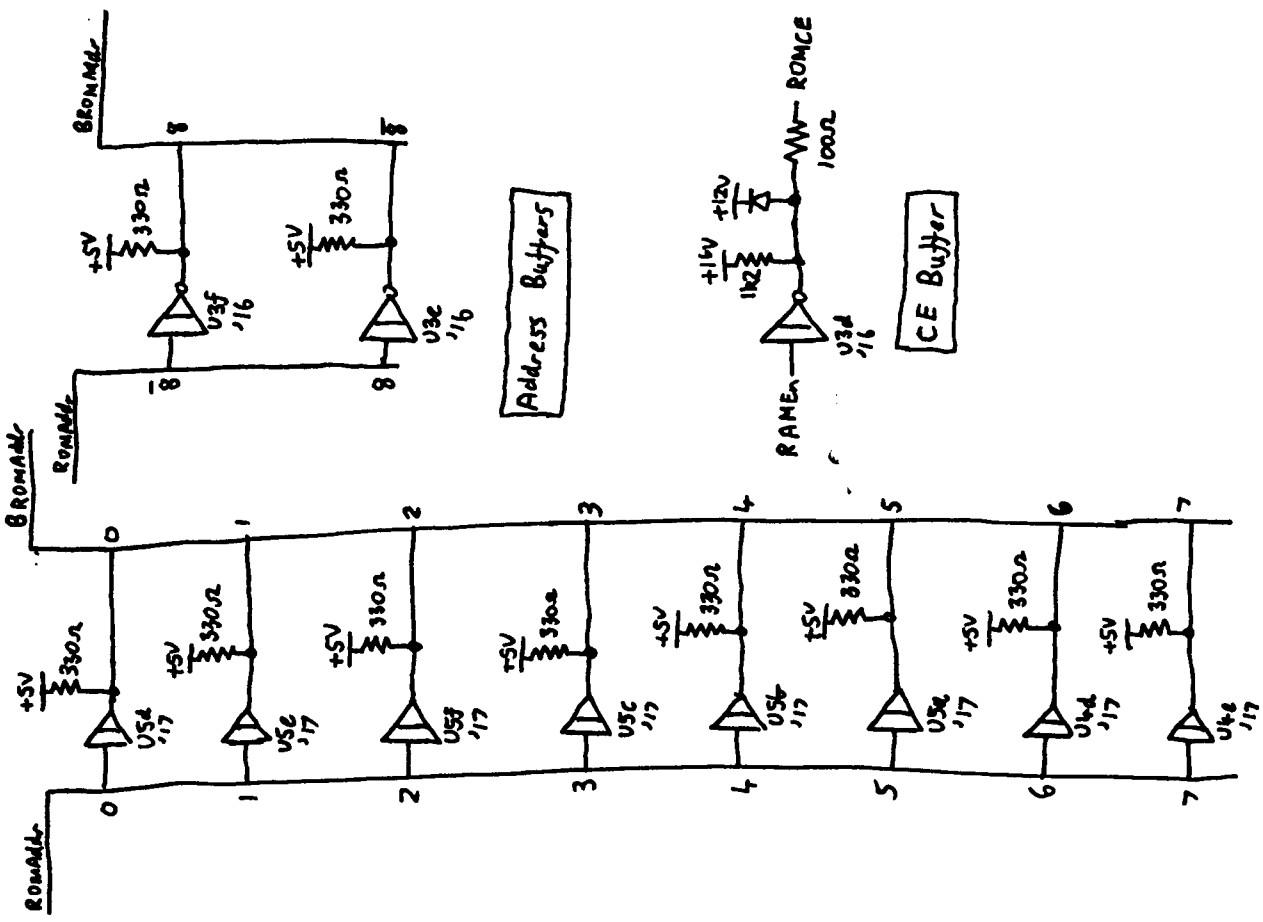


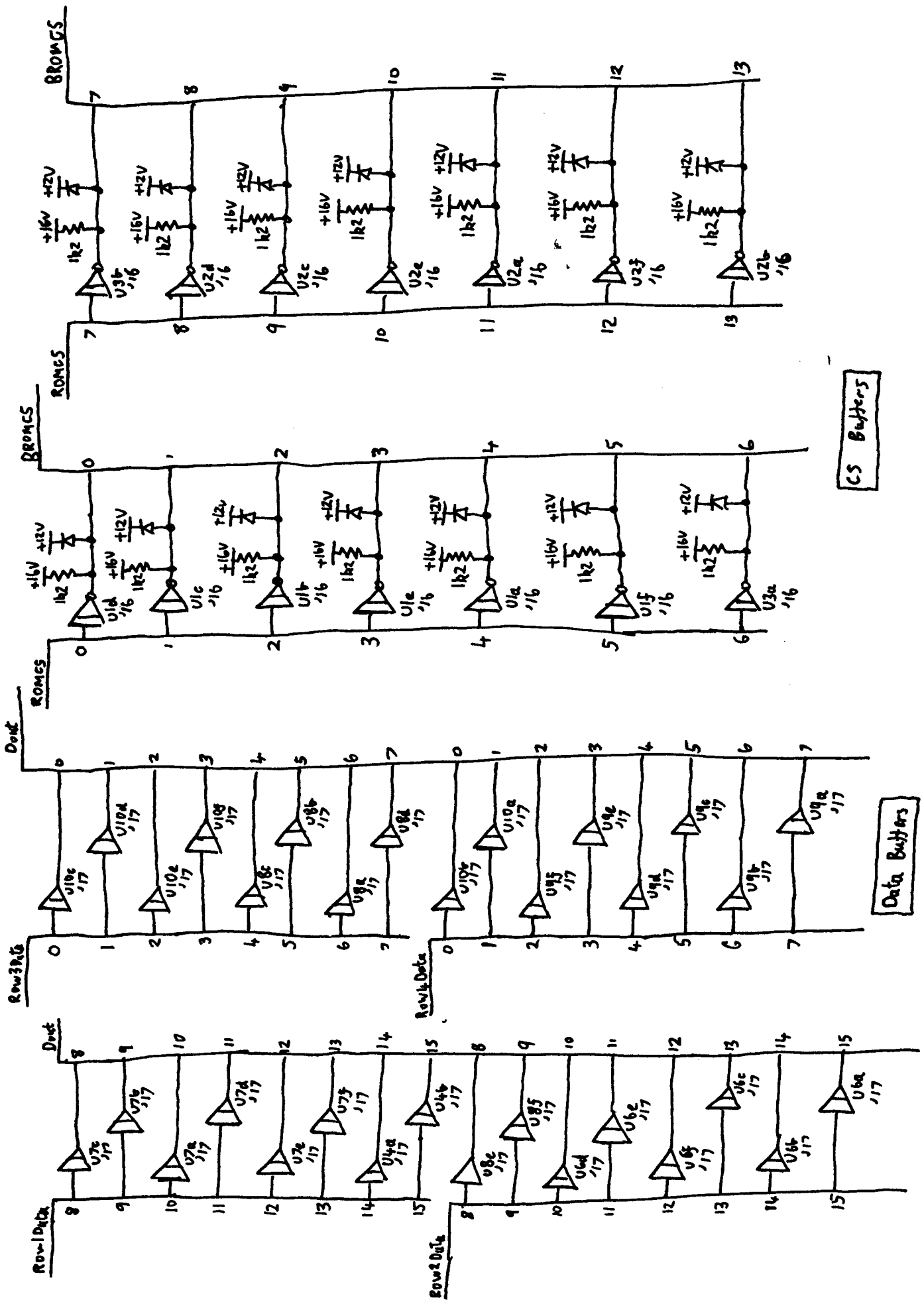


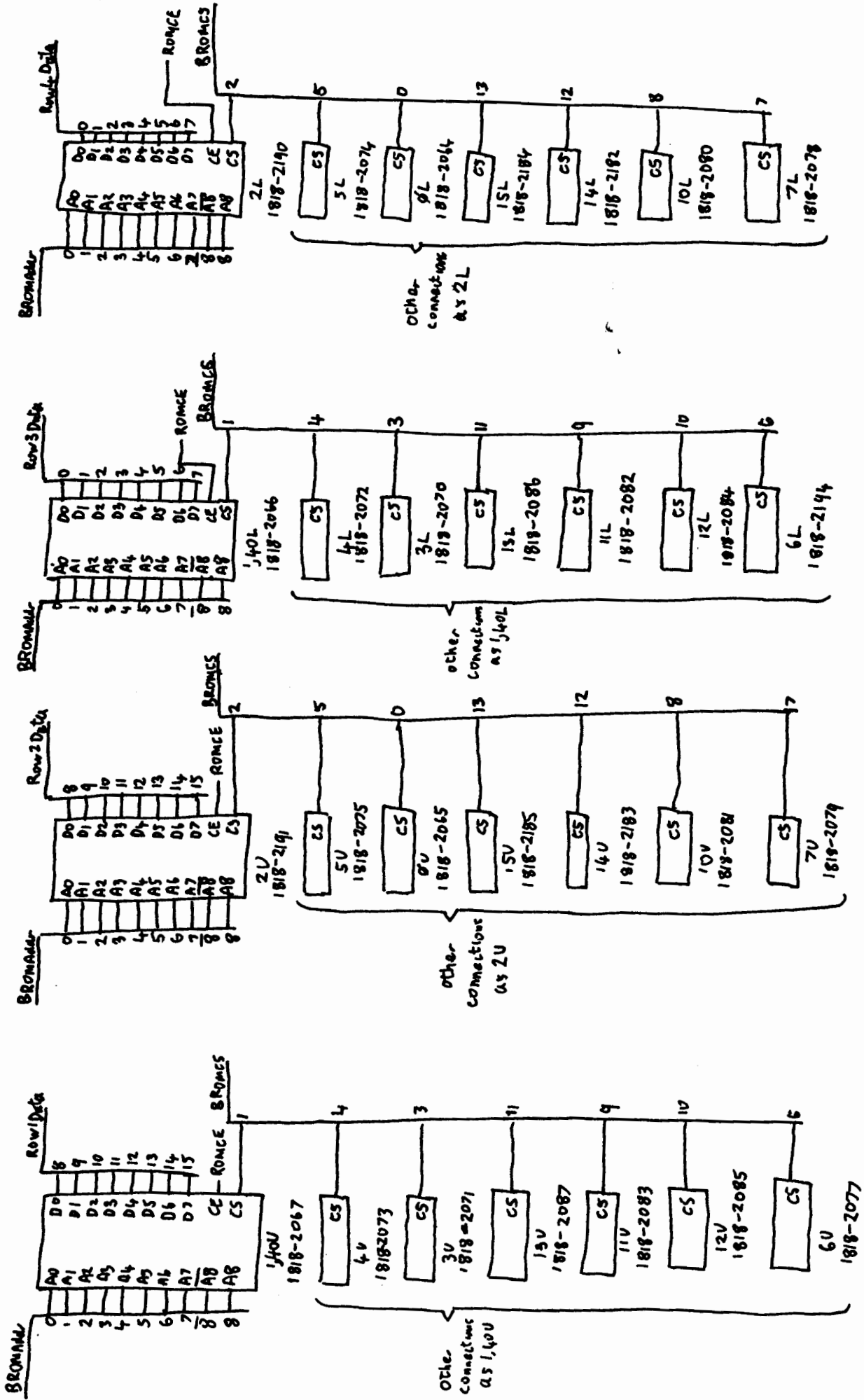


HP 9810 Data Path Sheet (4) (Br/Y) 09810-66514

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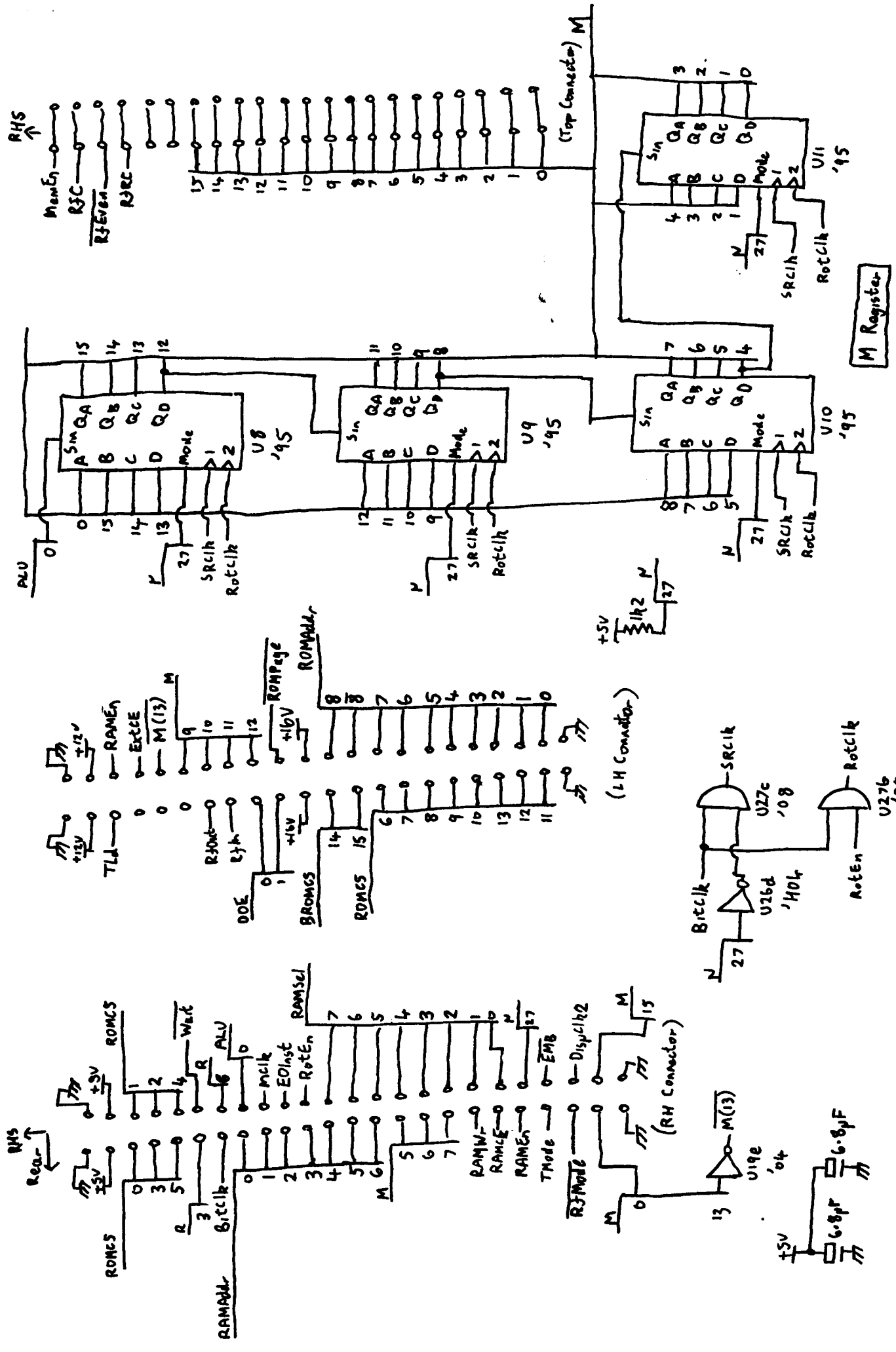


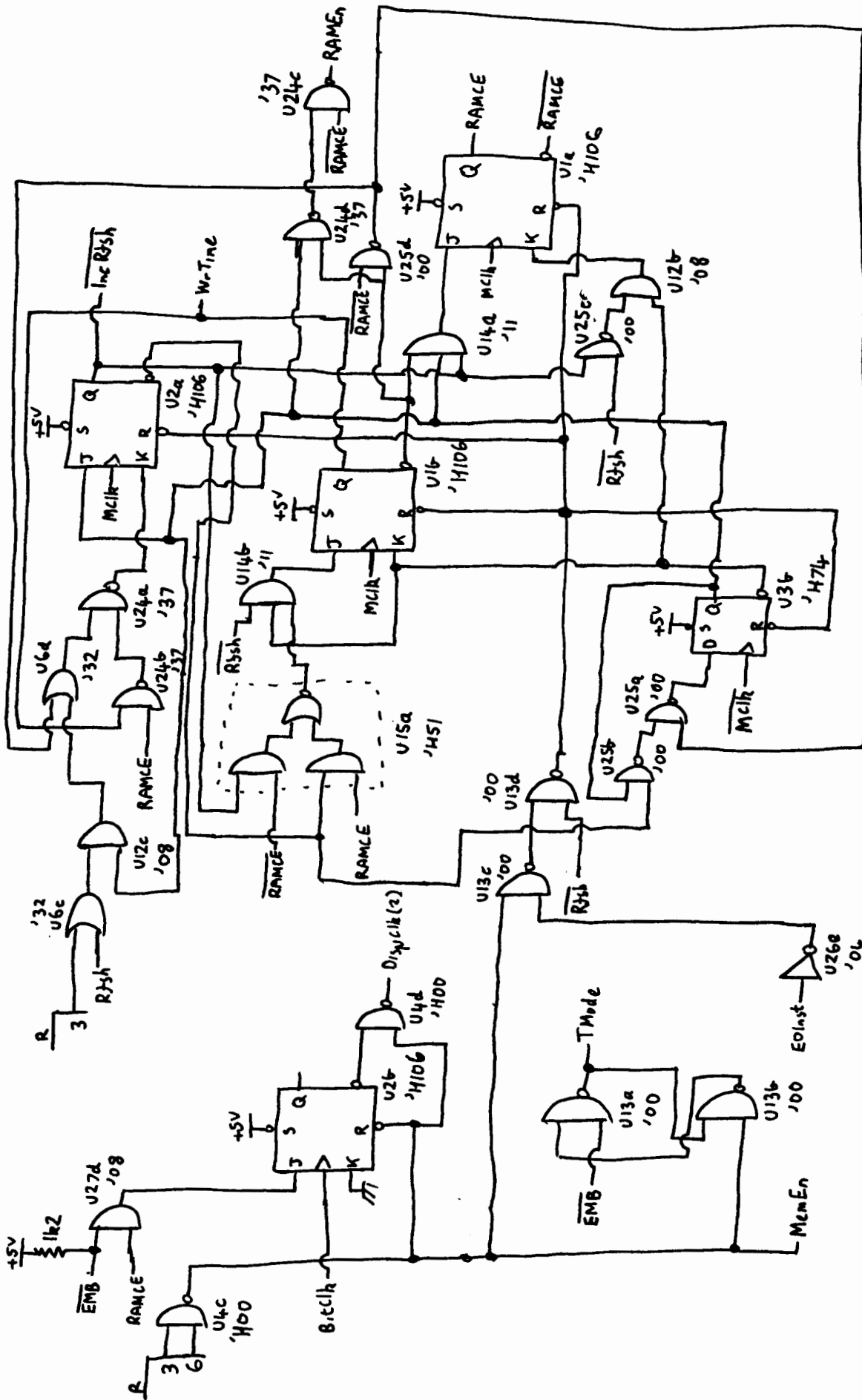




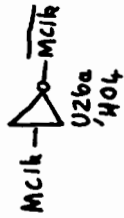
ROM

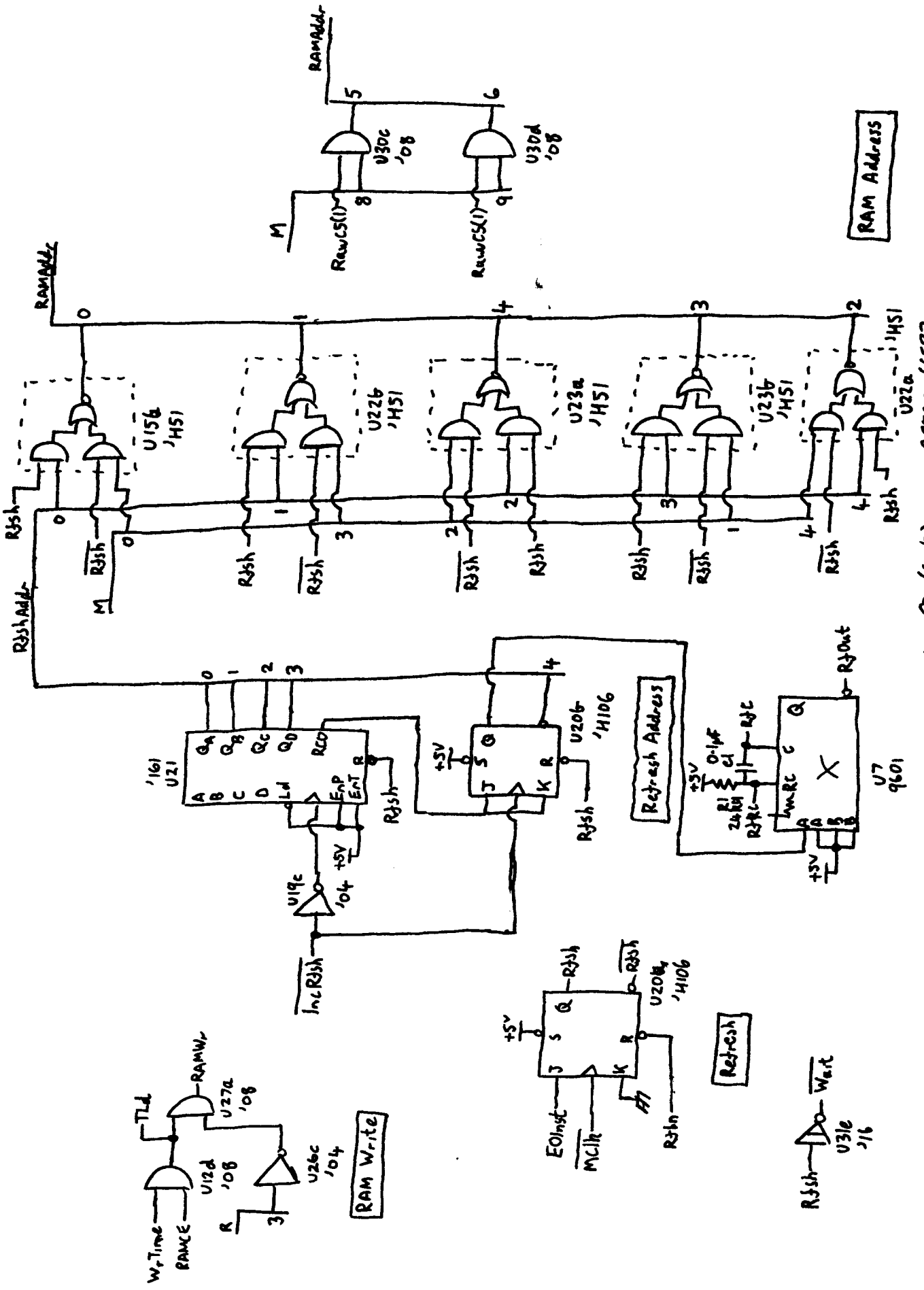
41

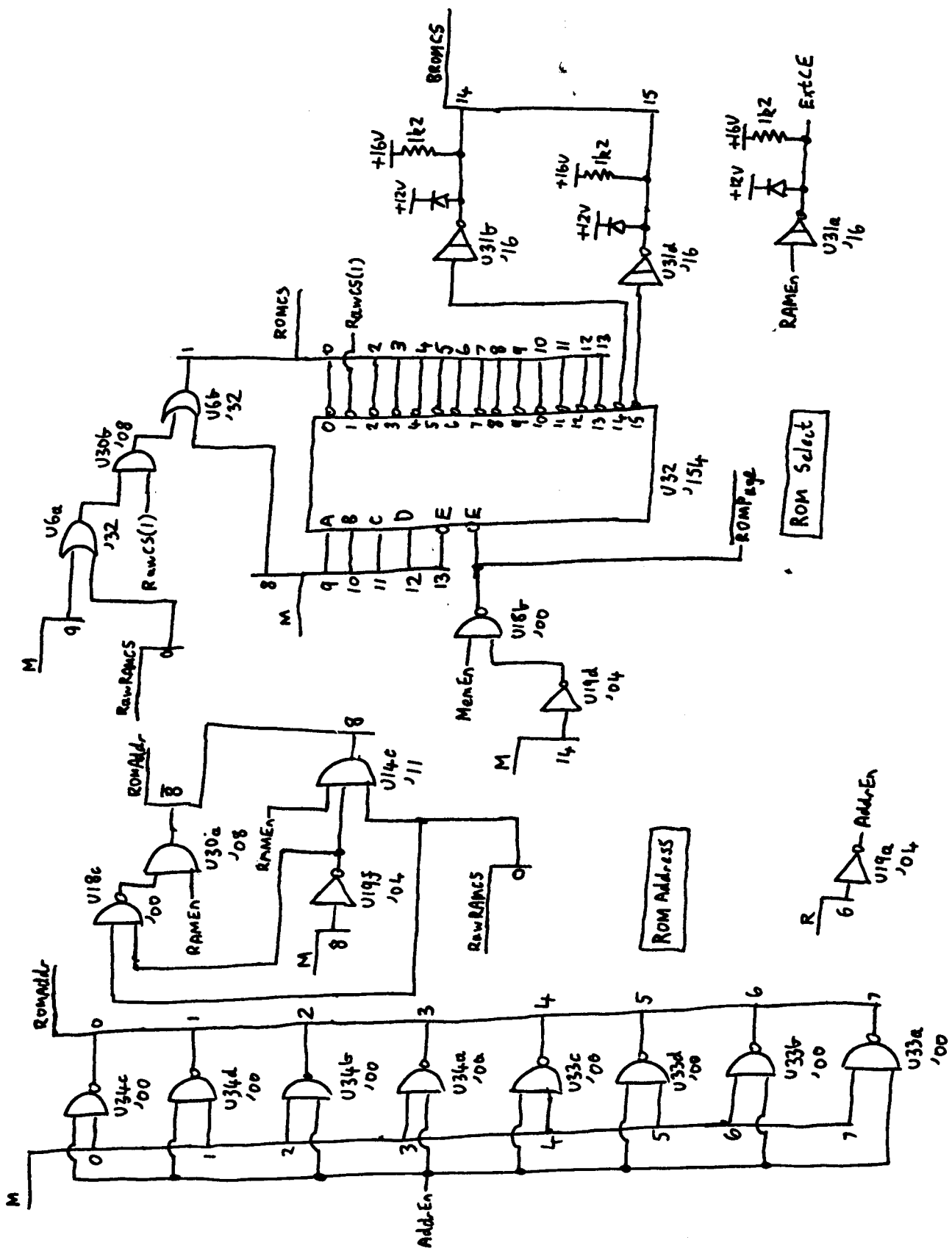




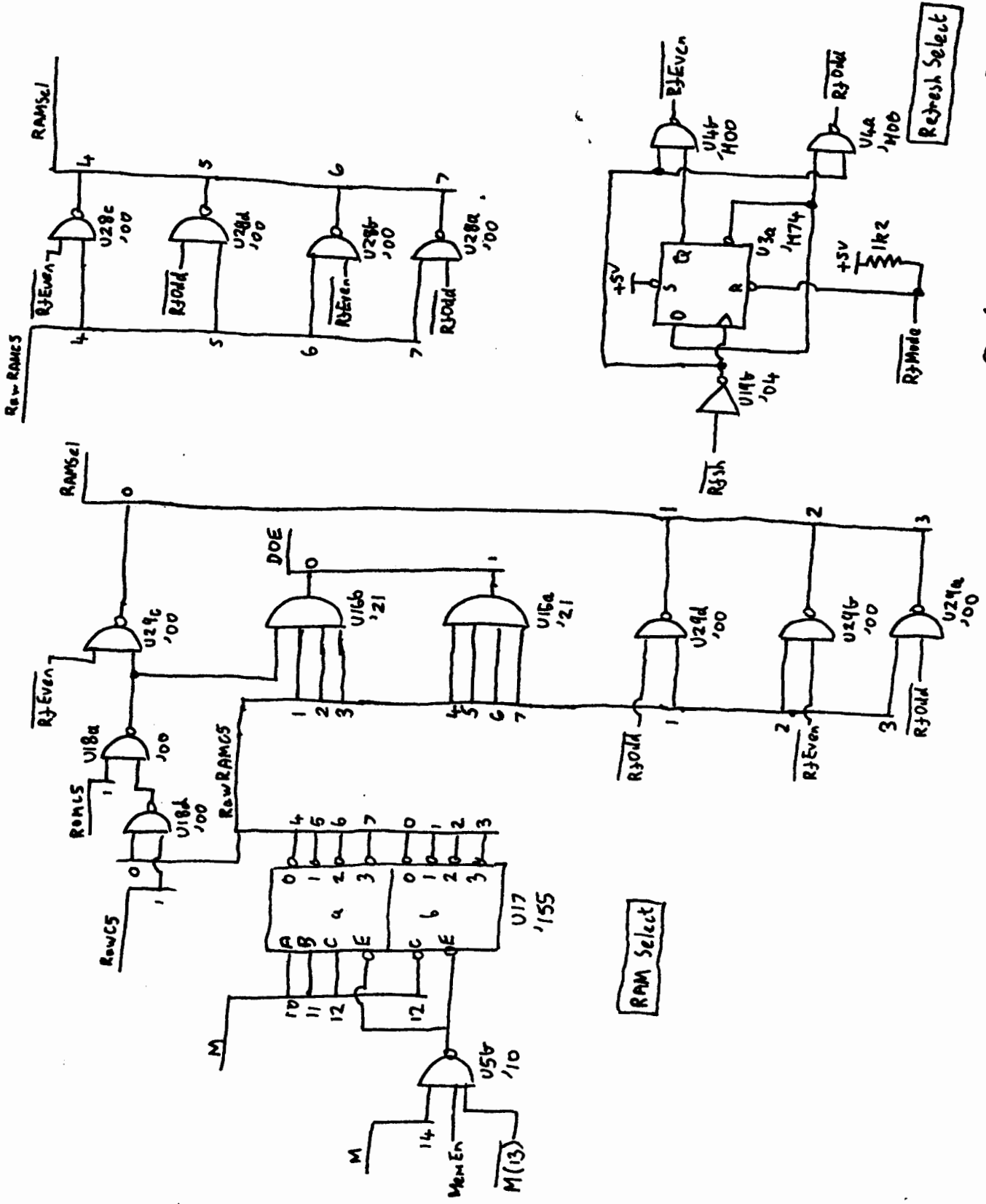
RAM Timing



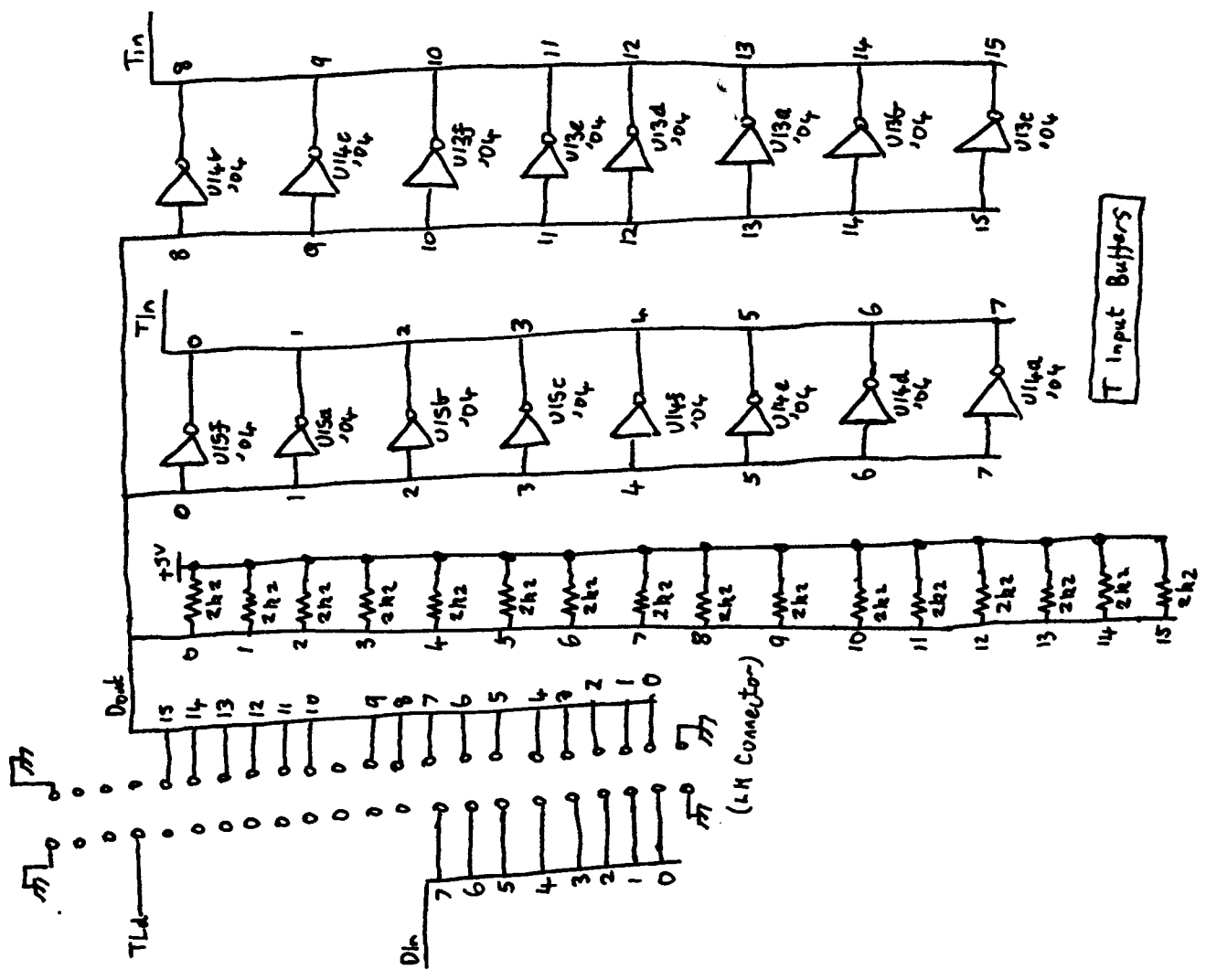
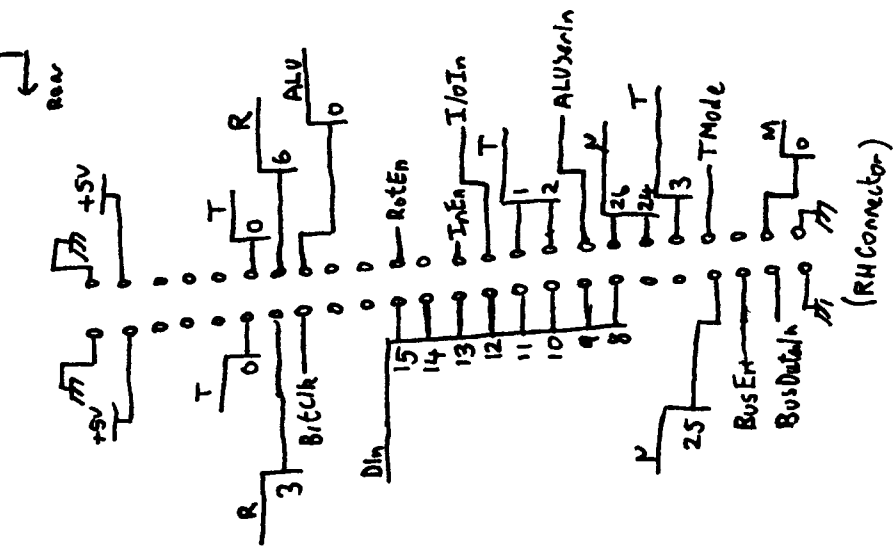


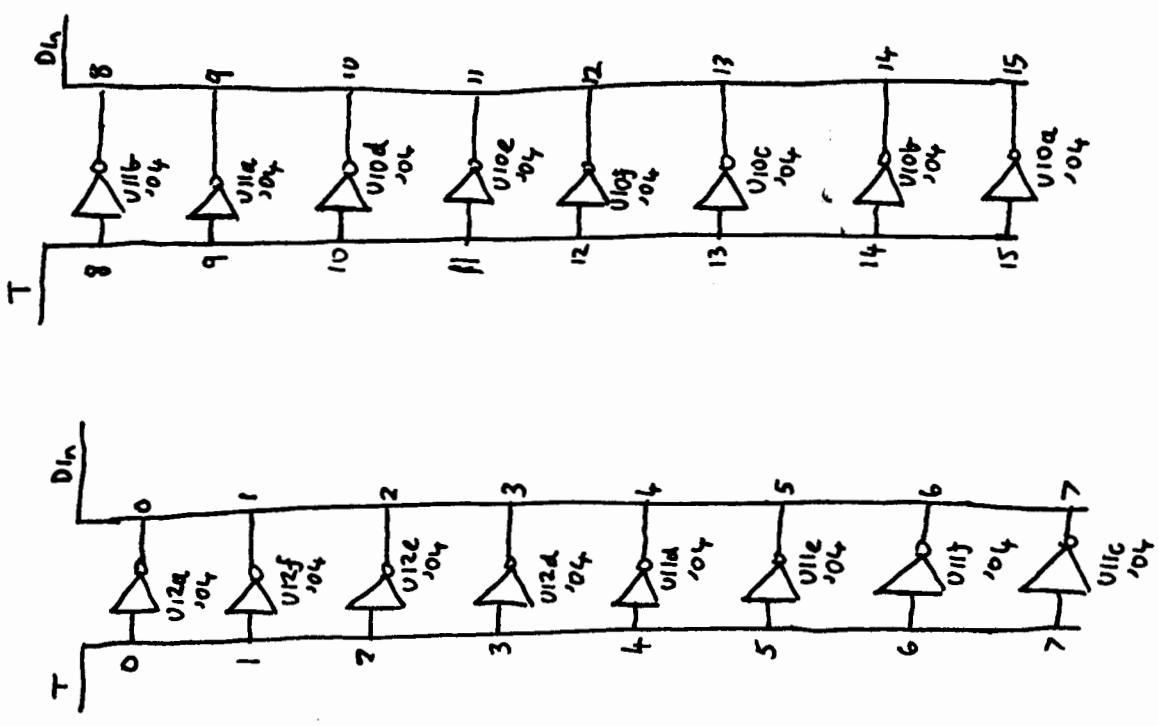


HP9830 Memory Address PCB Sheet (4) (Cy/R) 09830-66582

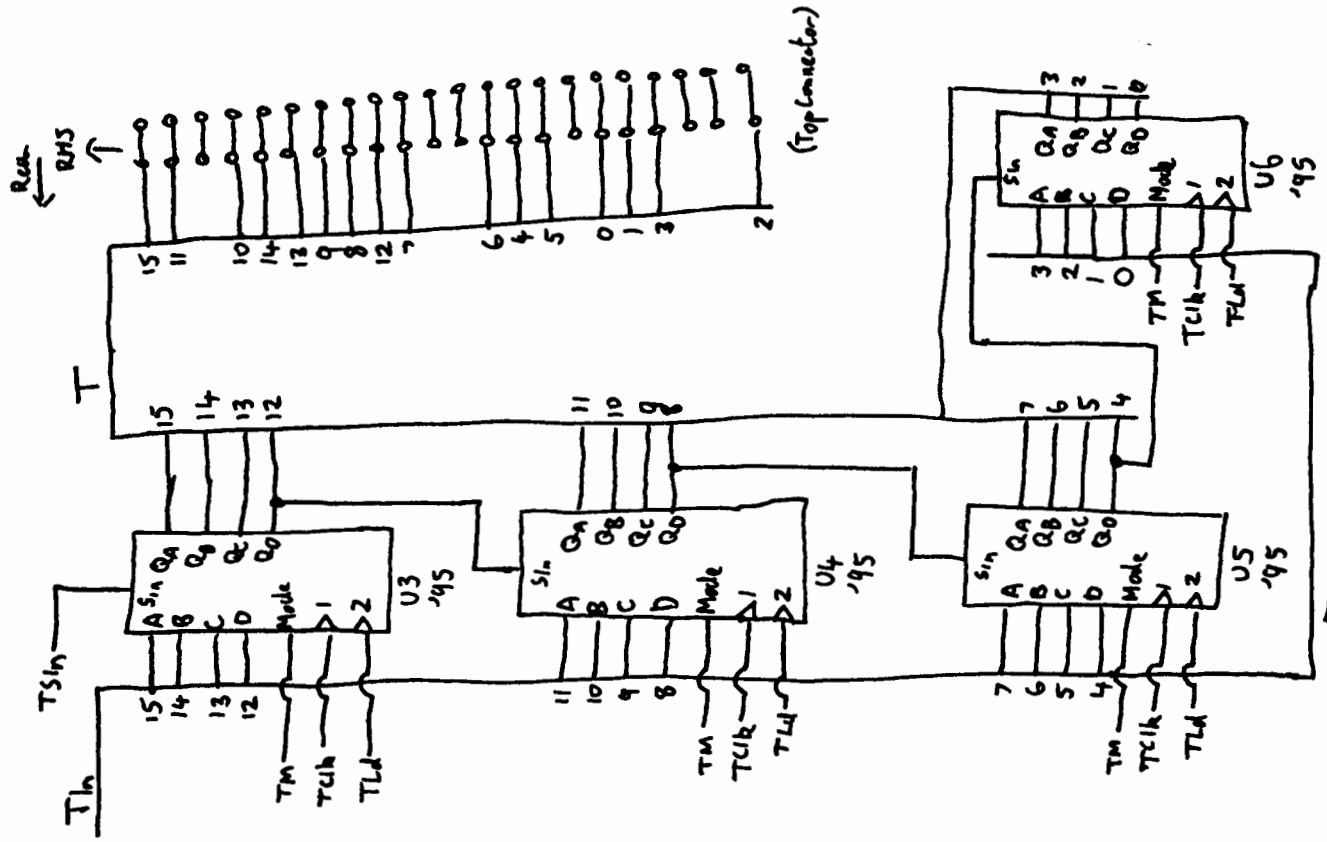


RHS
← Rear

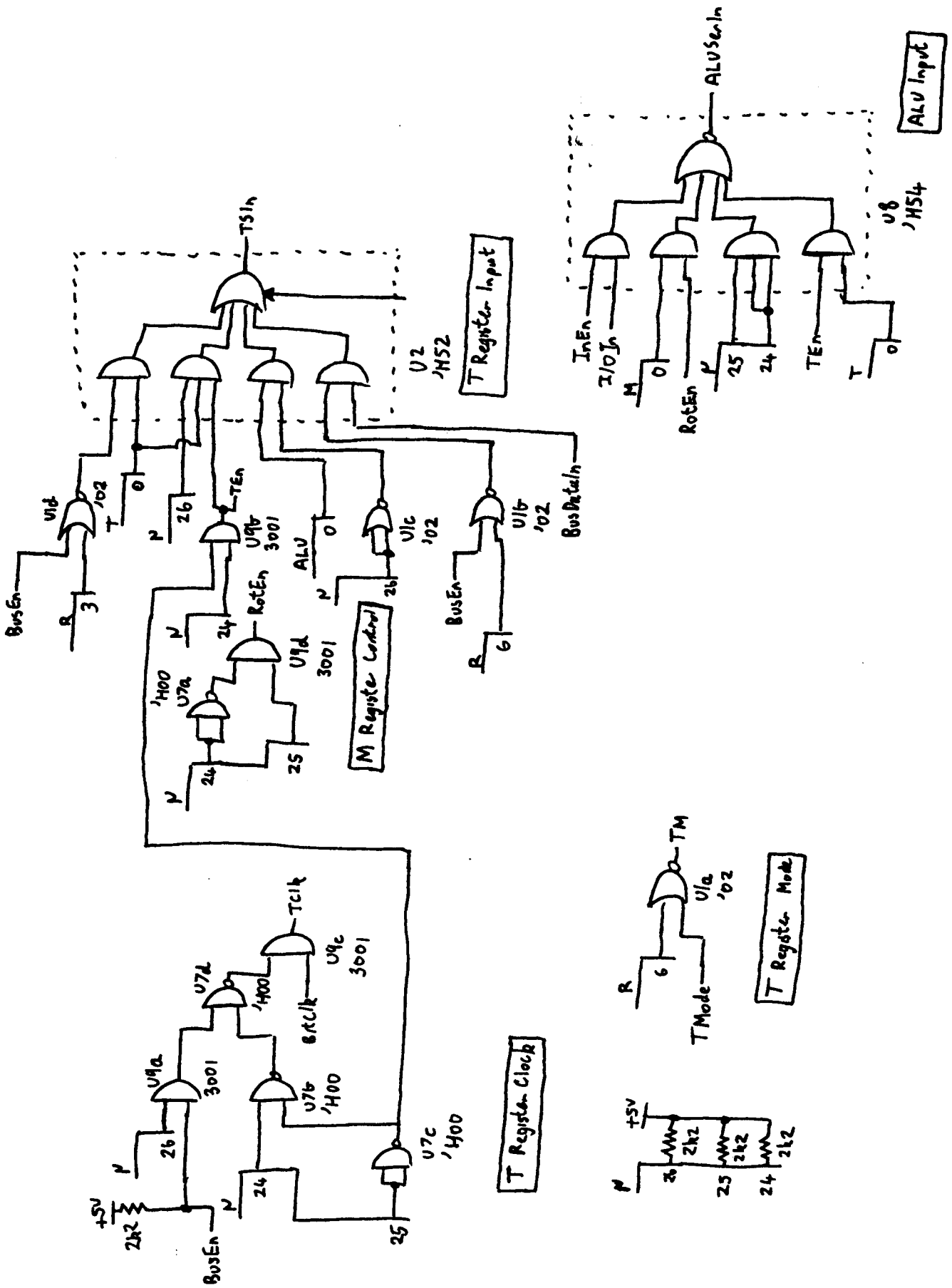




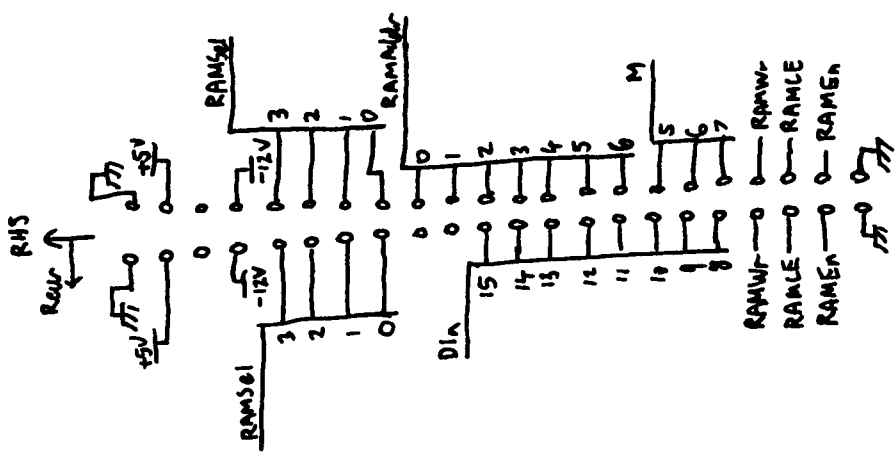
T Output Buffers



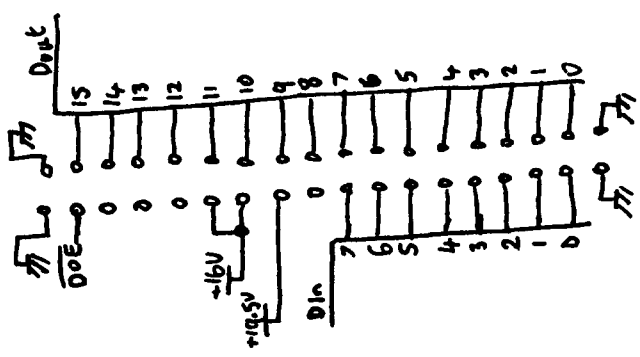
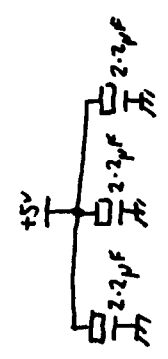
T Register



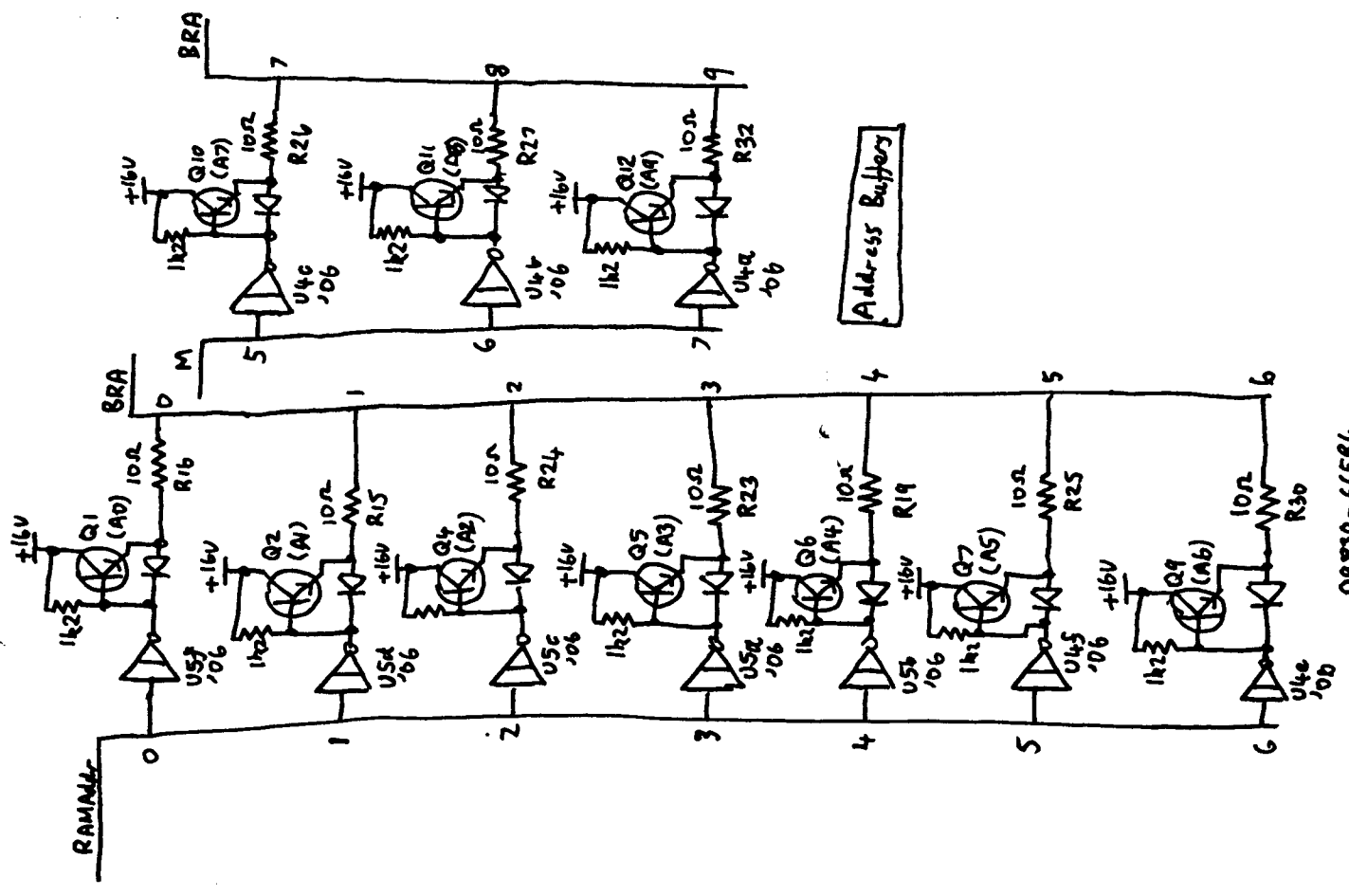
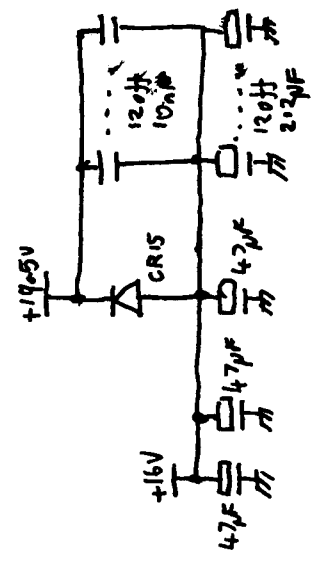
49



(RH Connector)

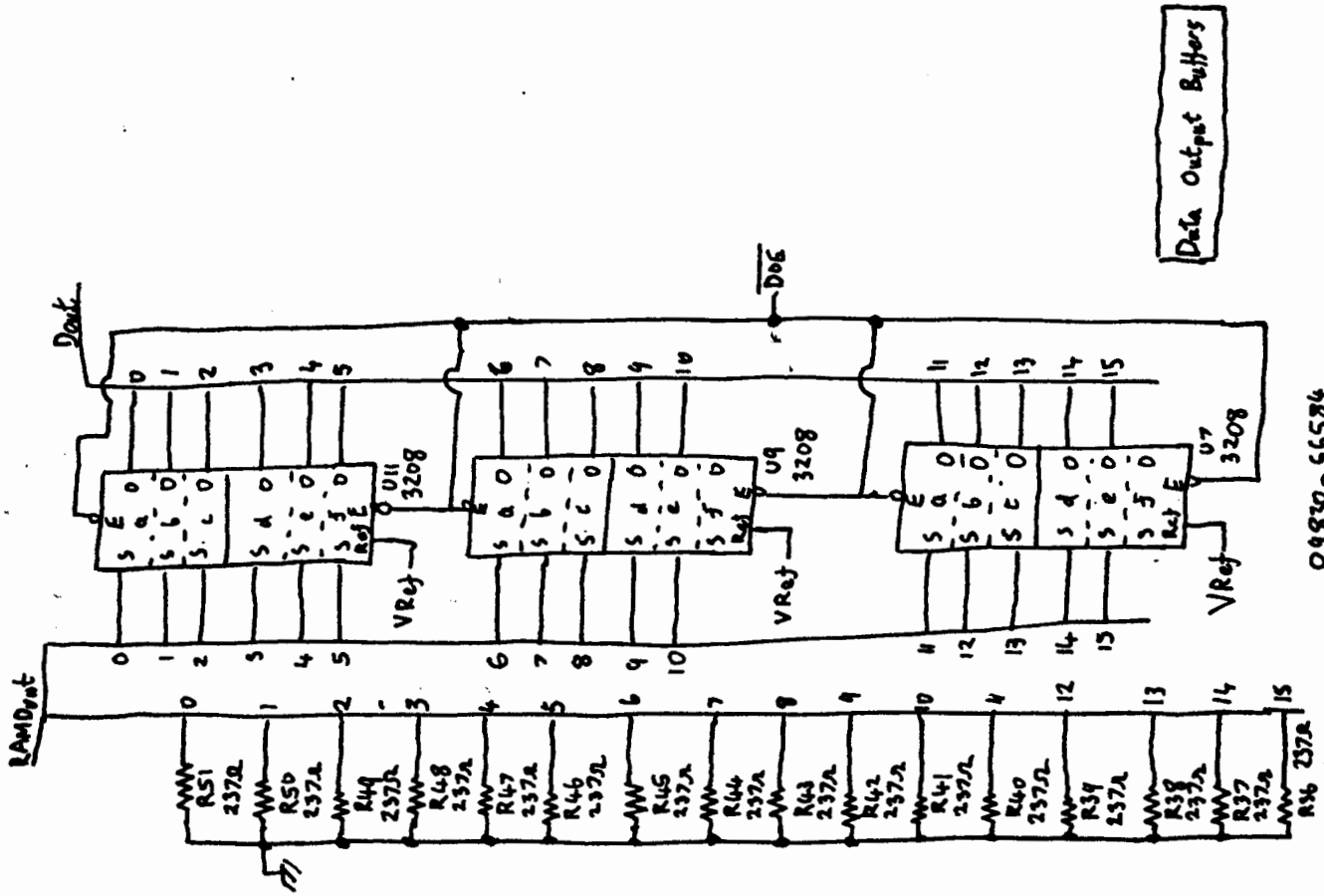


(LH Connector)



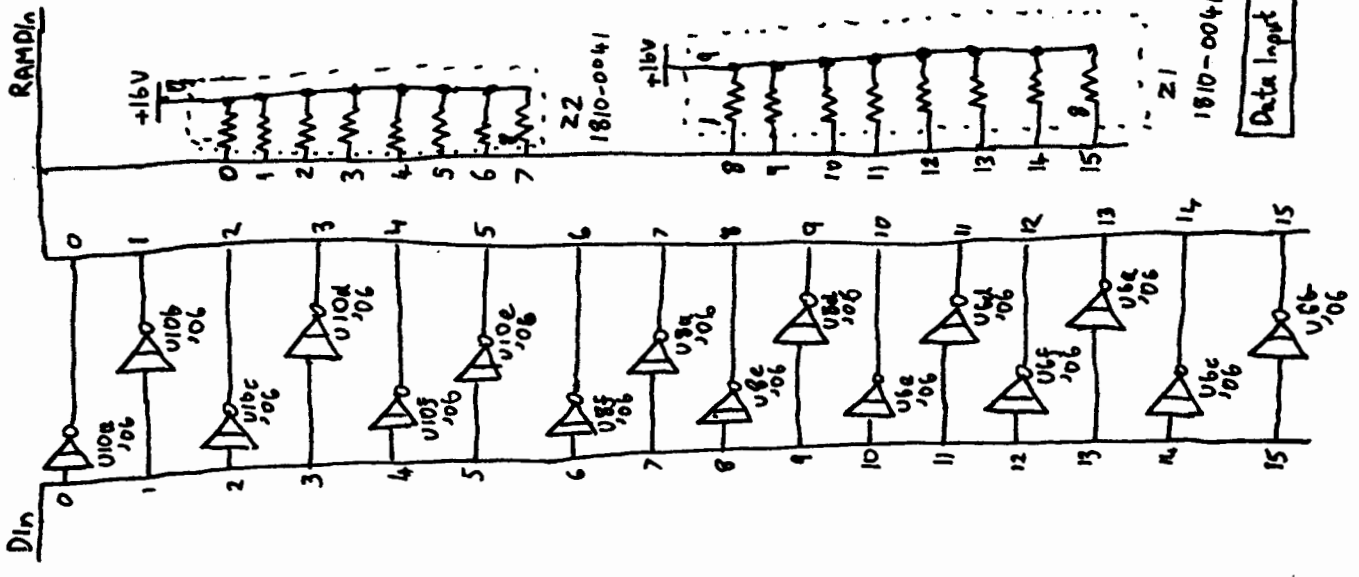
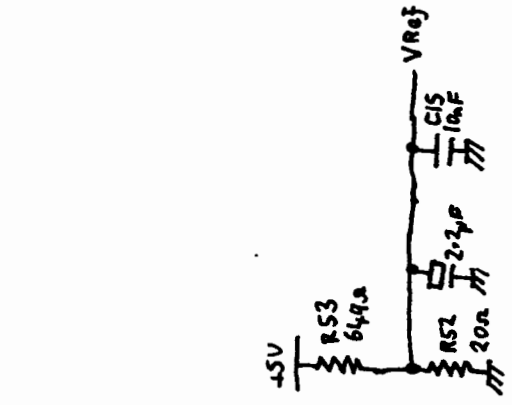
09830-66564
11275-66584

HP9830 RAM PCB Sheet ① (6y/Y)

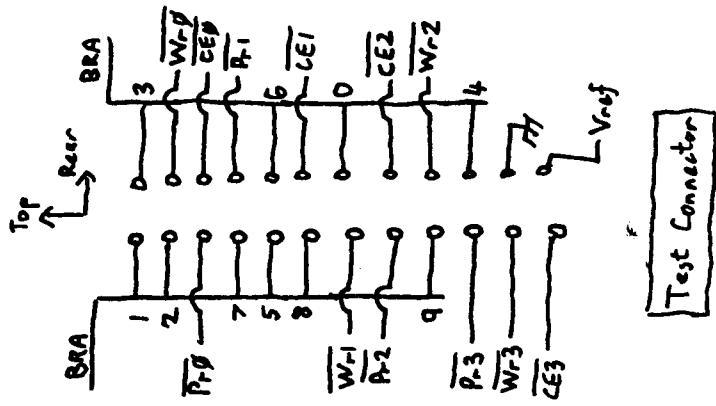
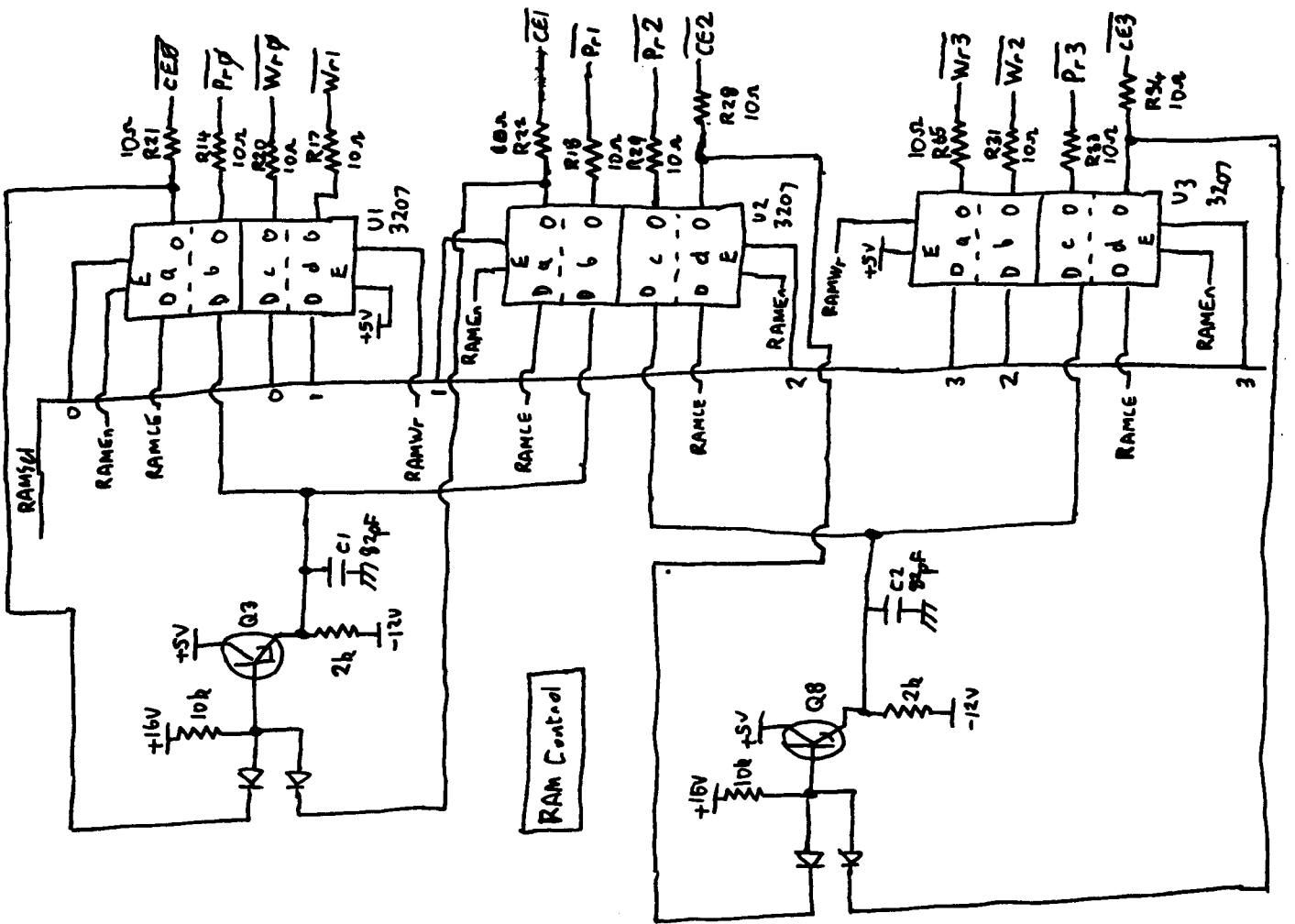


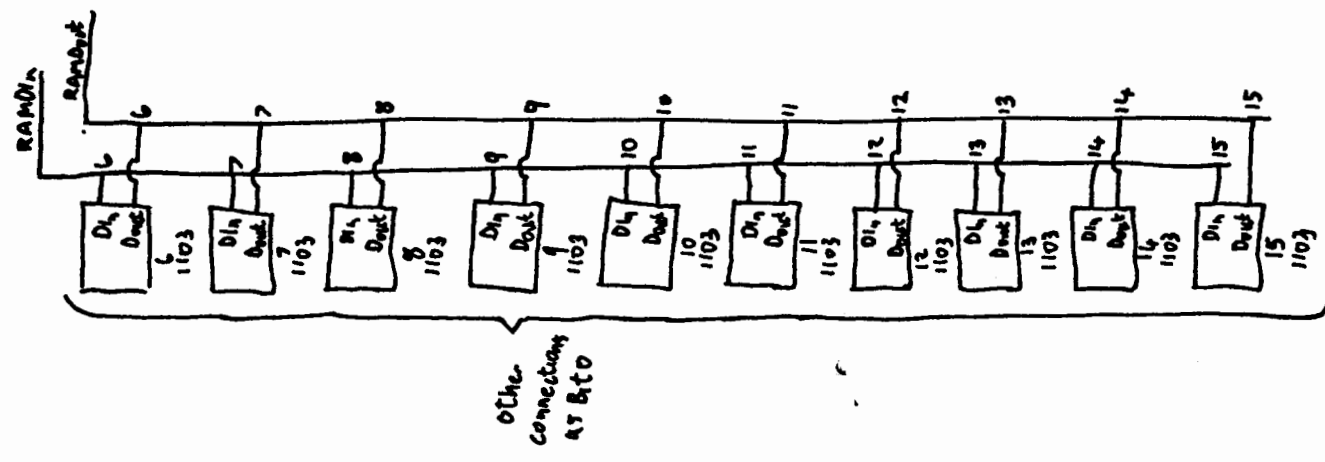
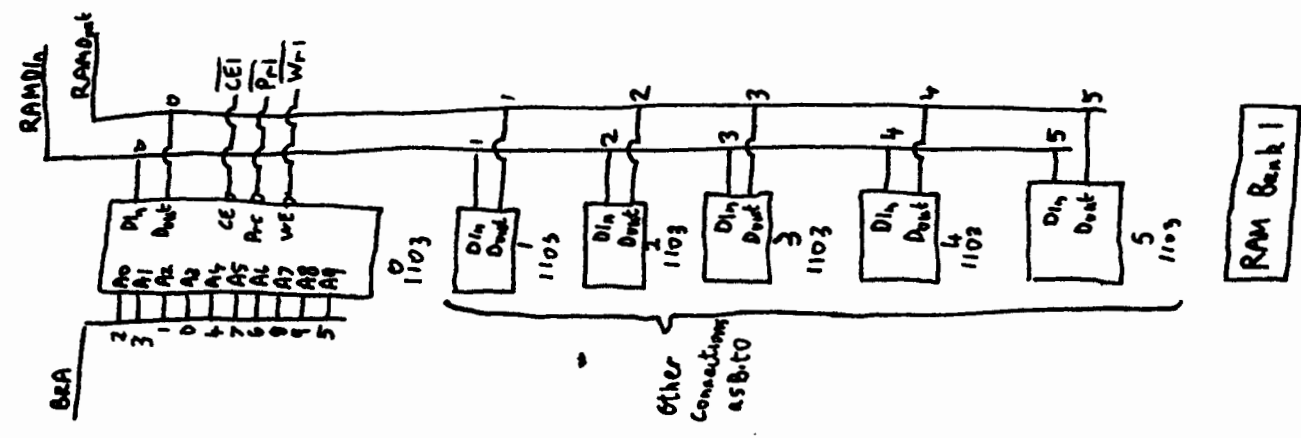
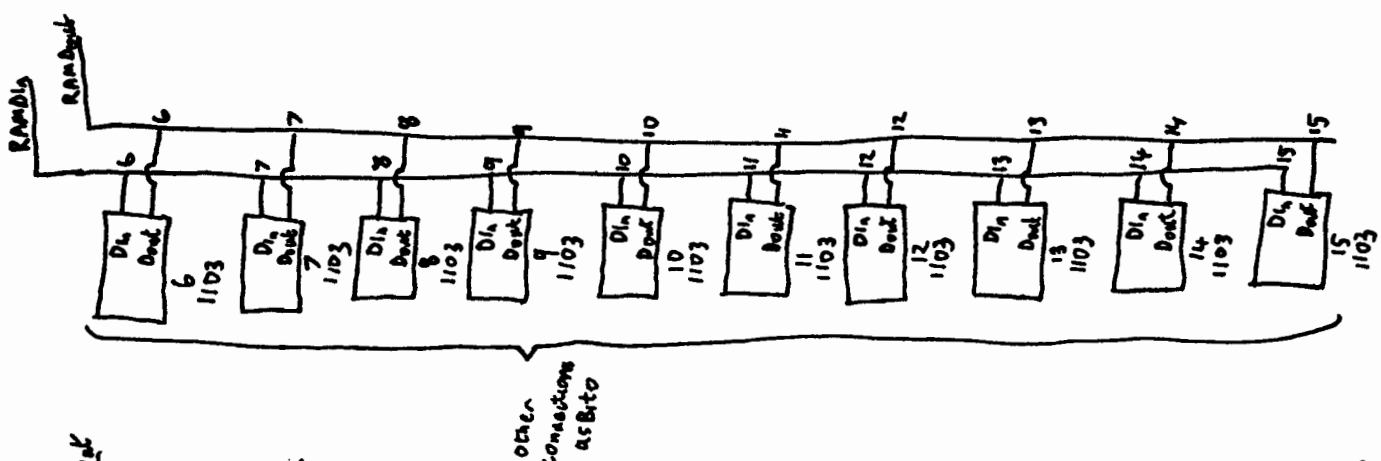
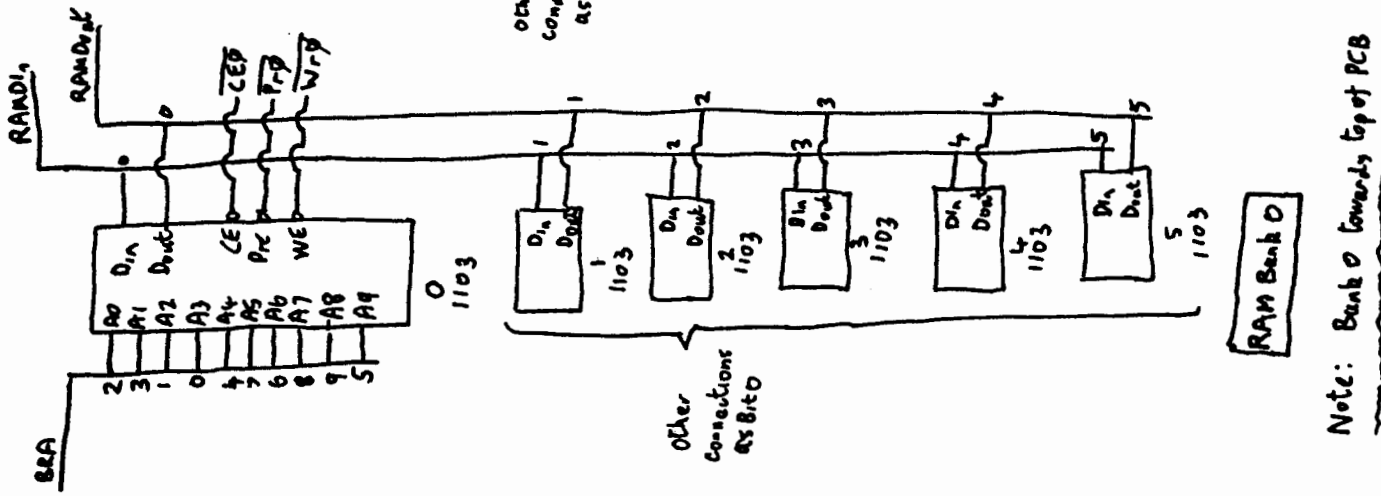
Data Output Buffers

09830-66584
11275-66584

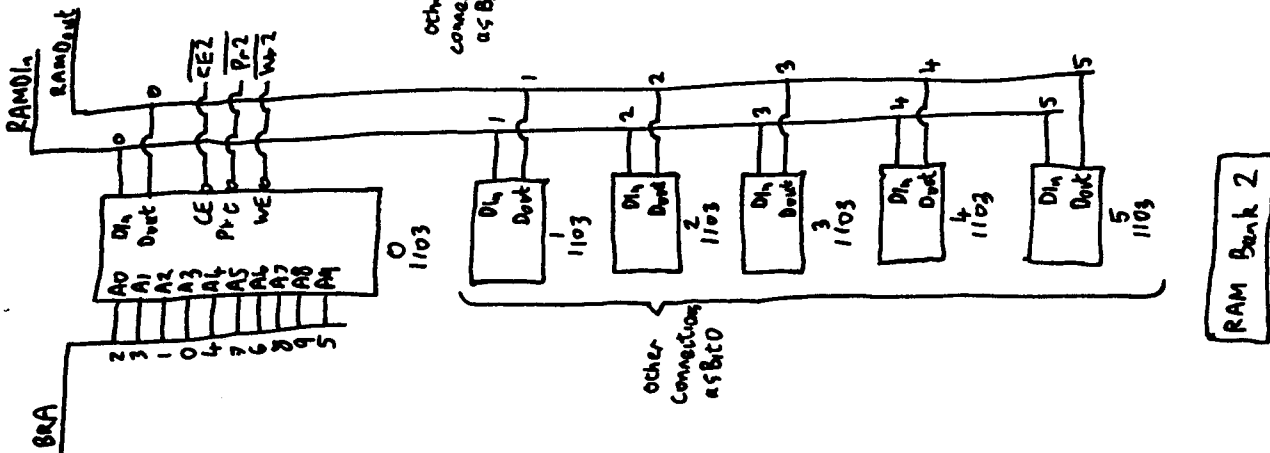
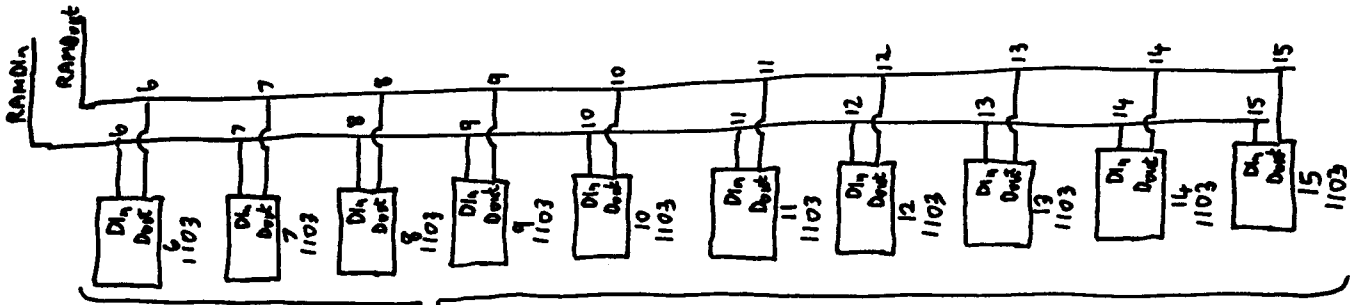
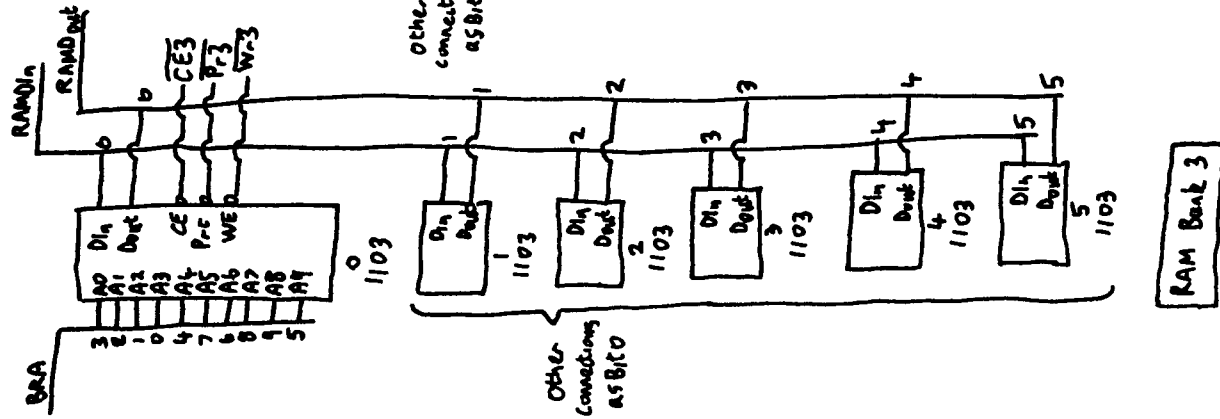
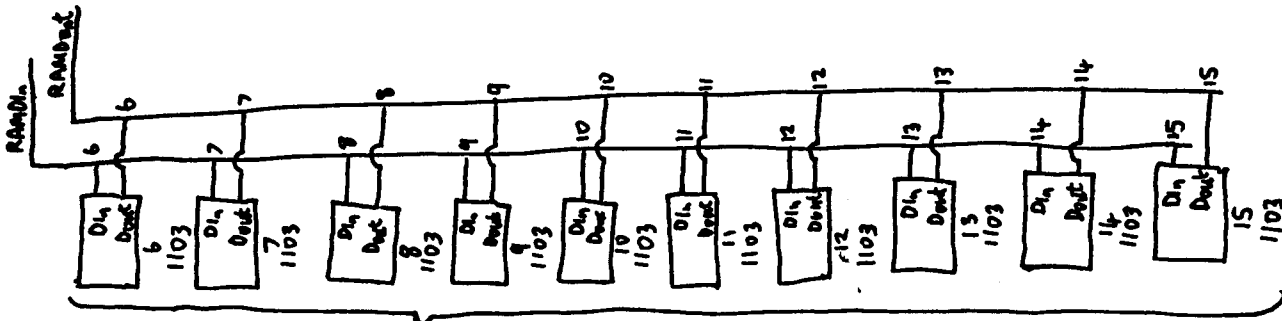


Data Input Buffers





Note: Bank 0 towards top of PCB

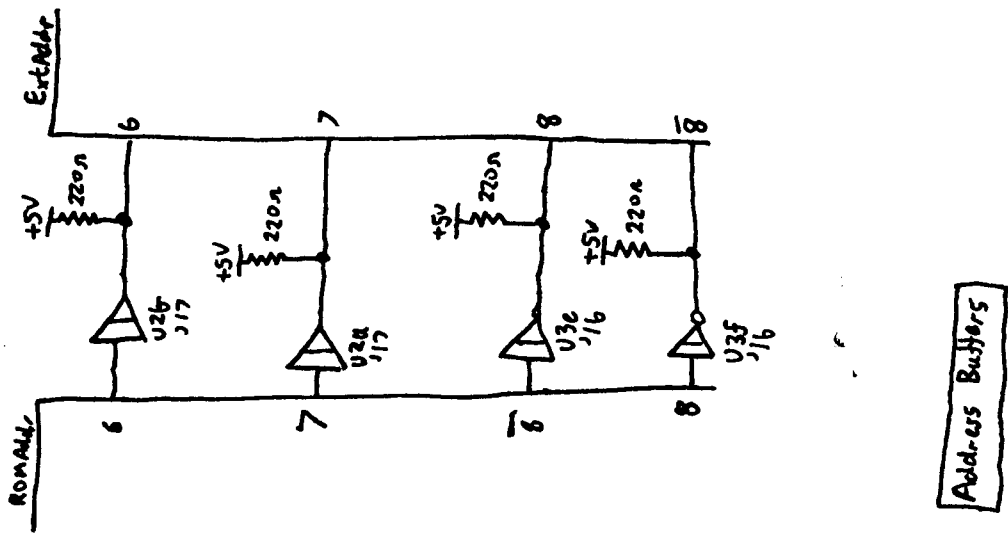
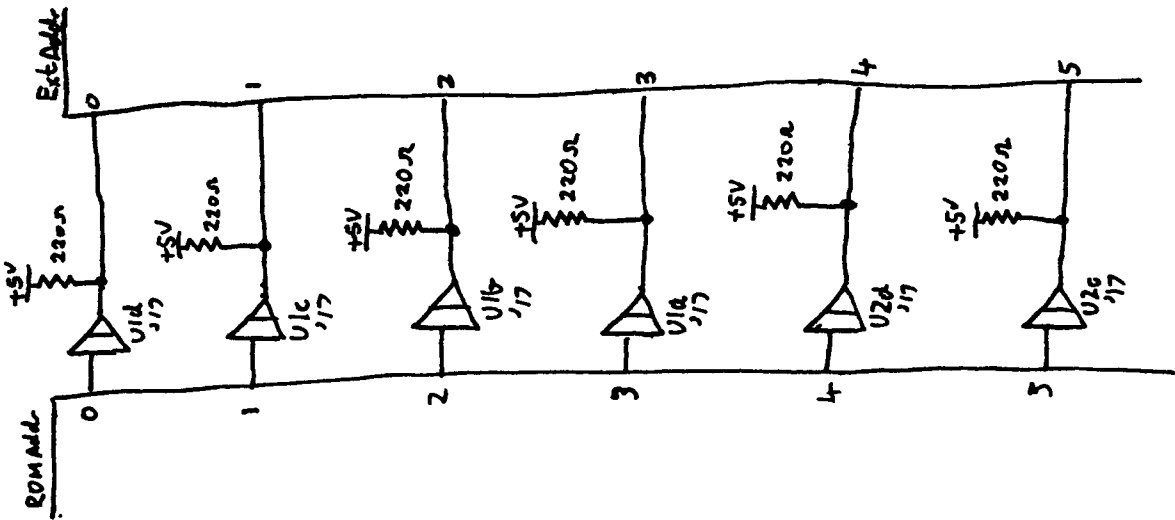
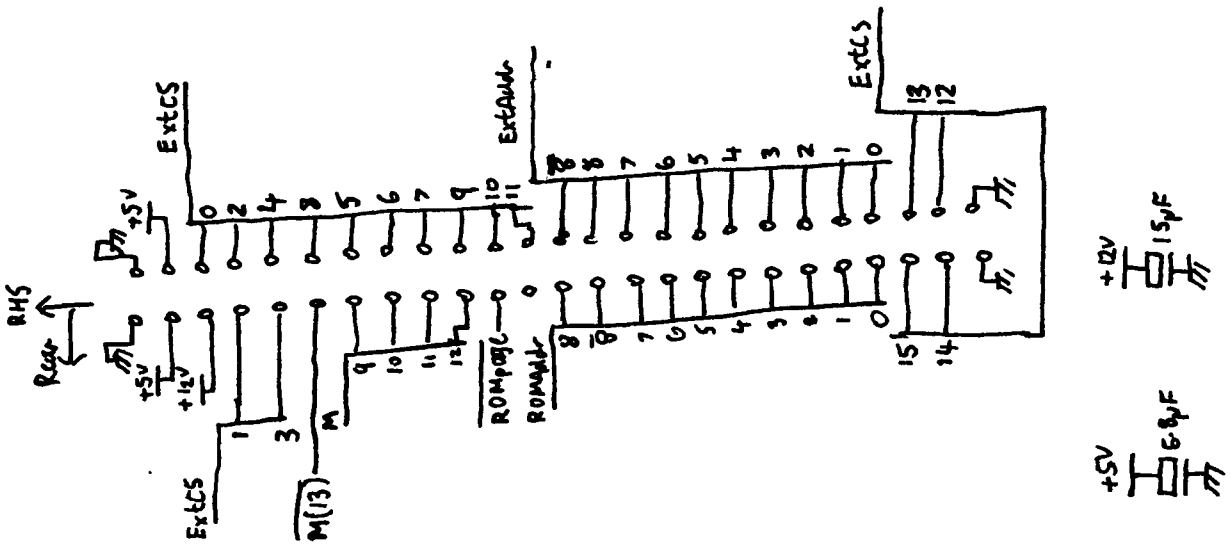


09830-66584
11275-66584

(by/Y)

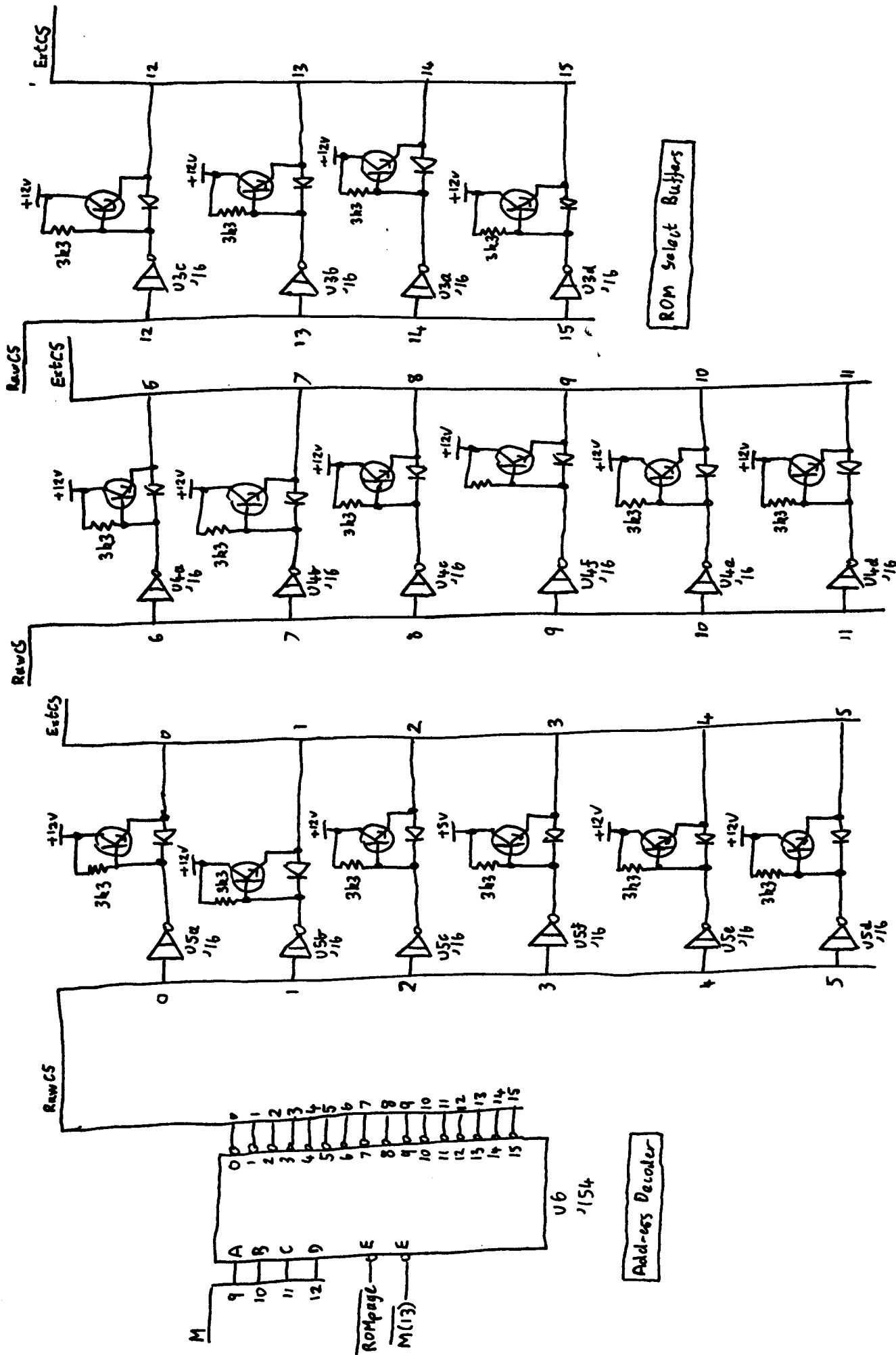
⑤

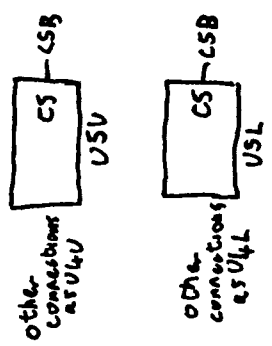
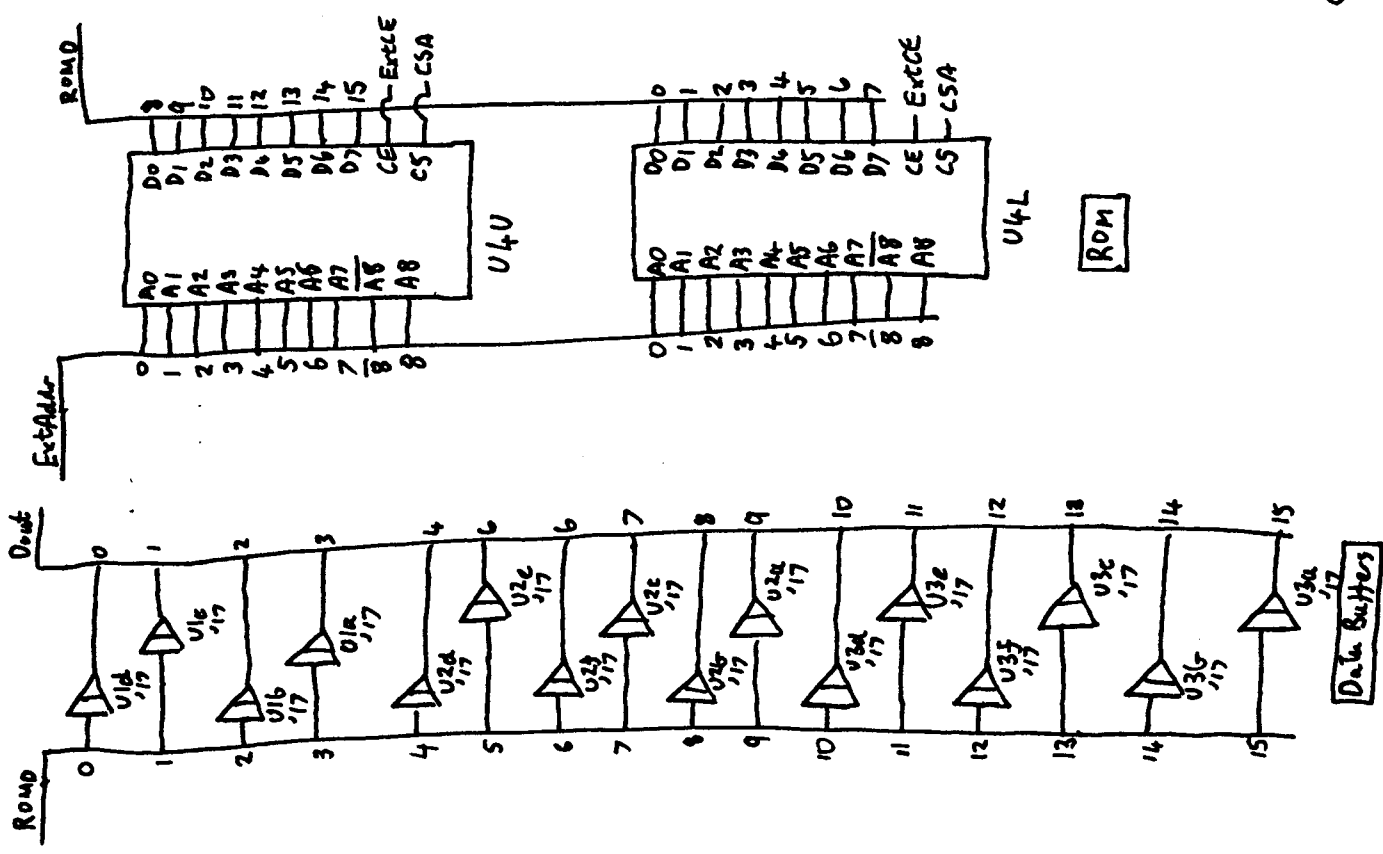
HP9830 RAM PCB Sheet



Address Buffers

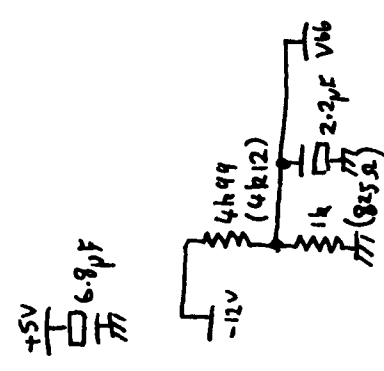
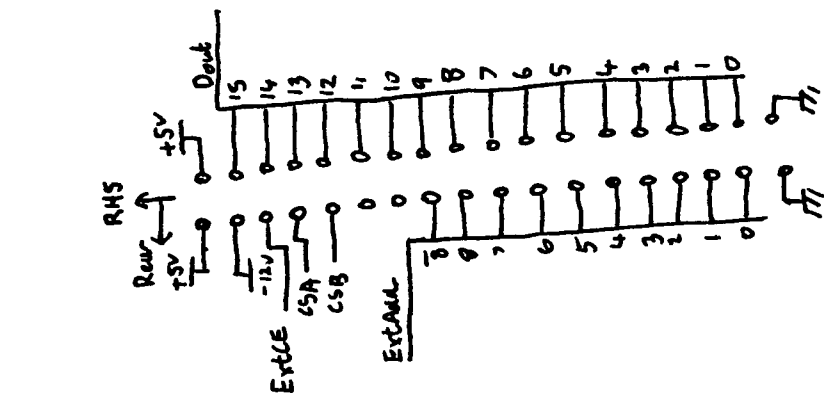
54





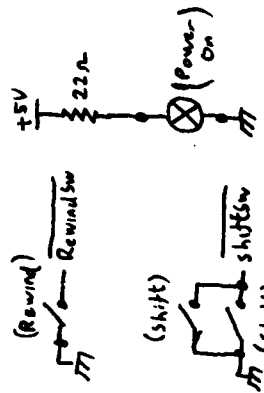
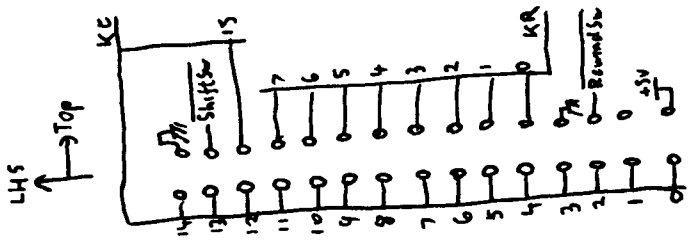
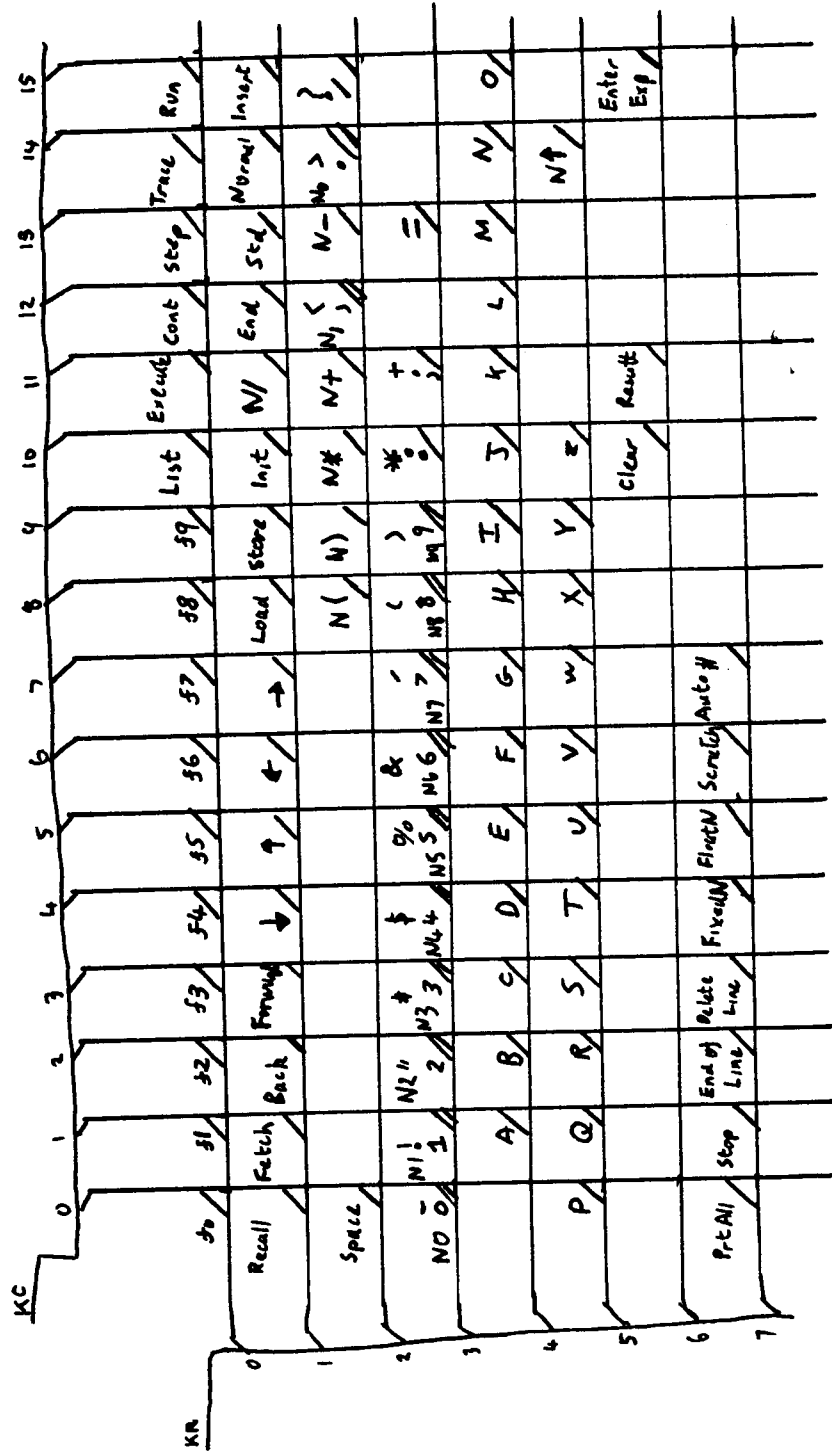
U4U	09830-66526	11270-66520	11271-66520
U4L	1818-2107	1818-2109	1818-2117
U5U	1818-2106	1818-2108	1818-2116
U5L	-	1818-2111	1818-2119
		1818-2110	1818-2118

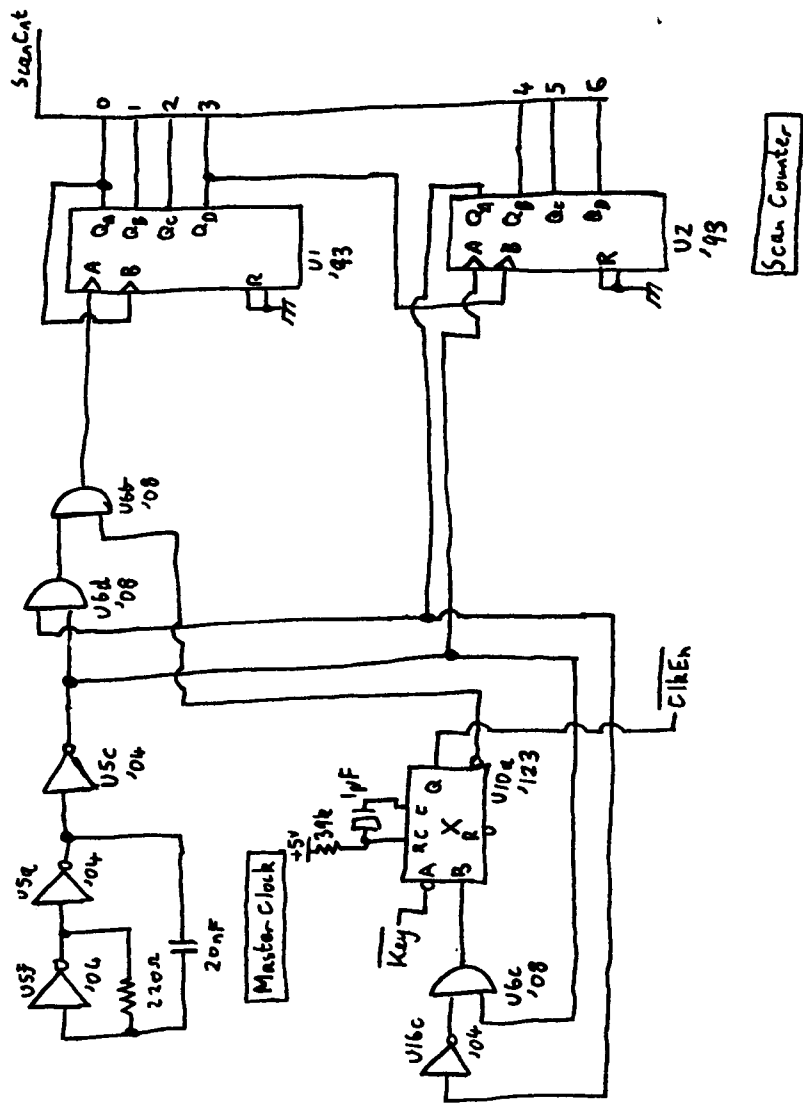
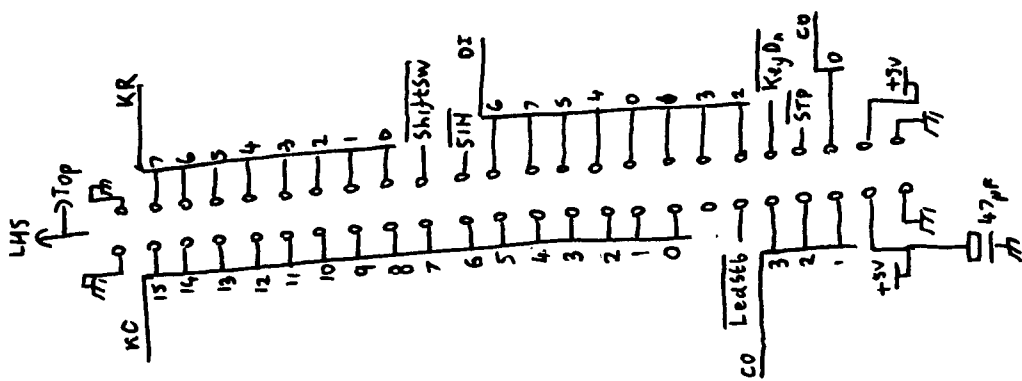
09830-66526 (R/Bu)
 11270-66520 } (R/Bk)
 11271-66521

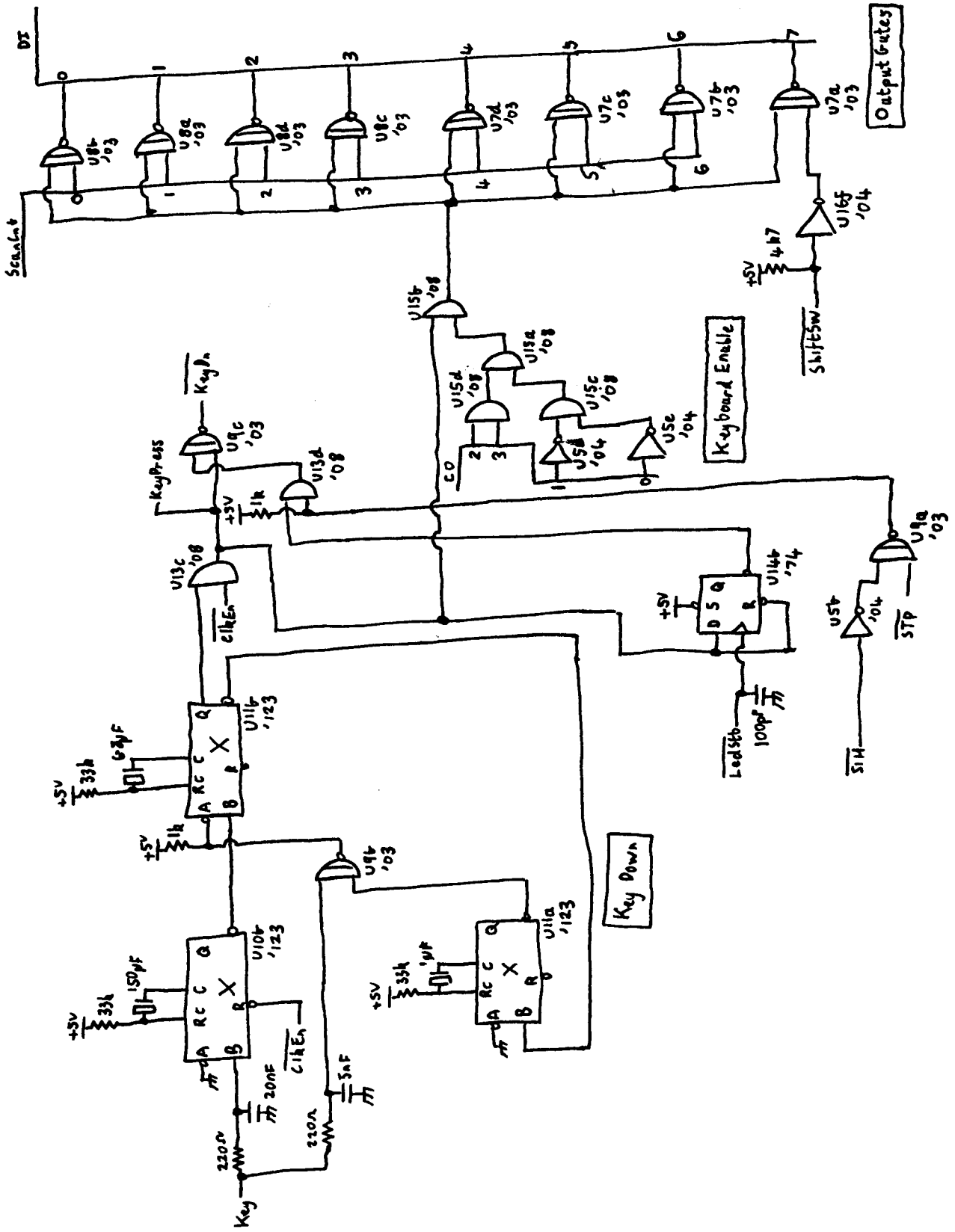


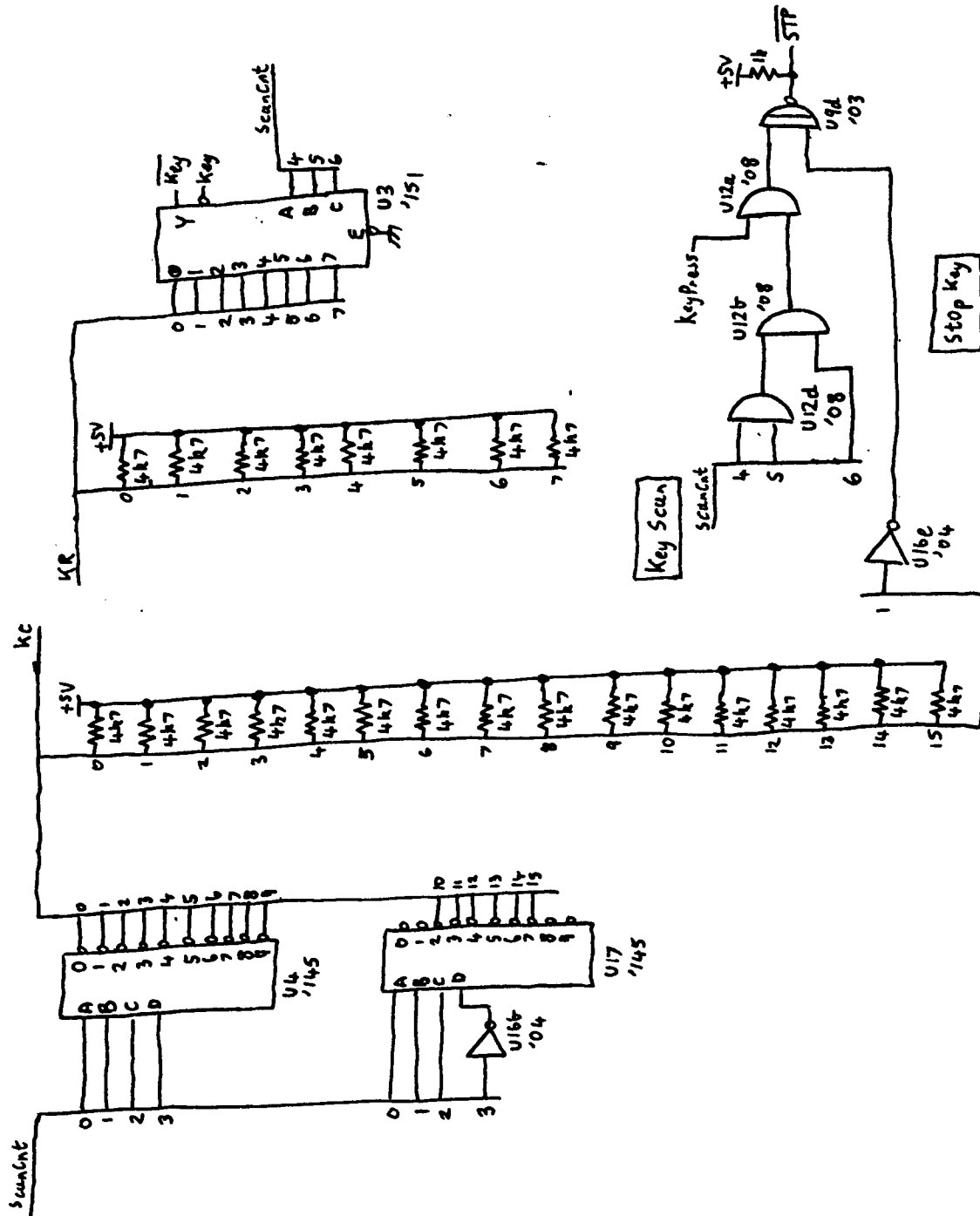
HP4830 Internal Ext ROM PCB

Data Buffers



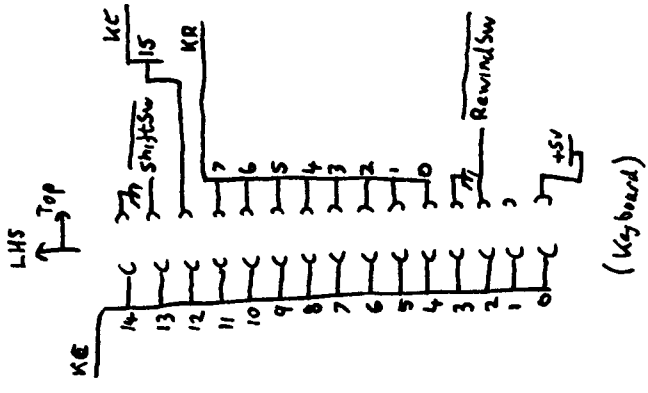
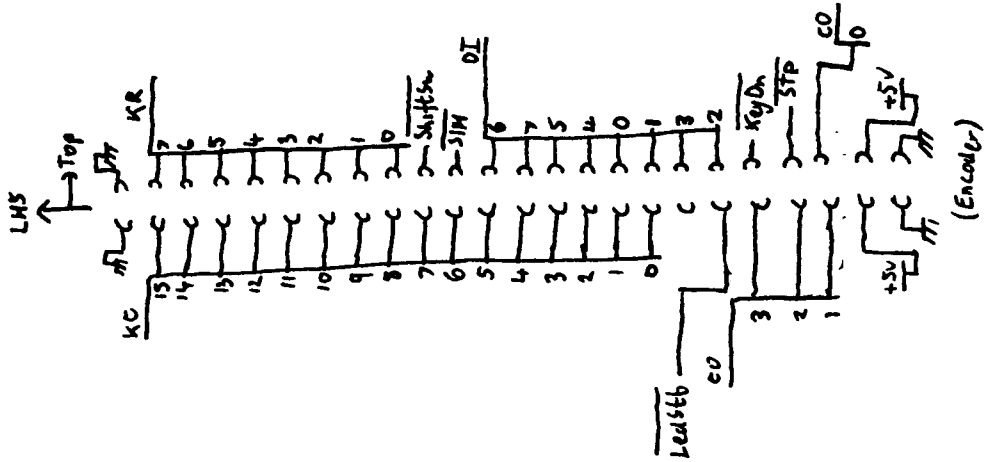
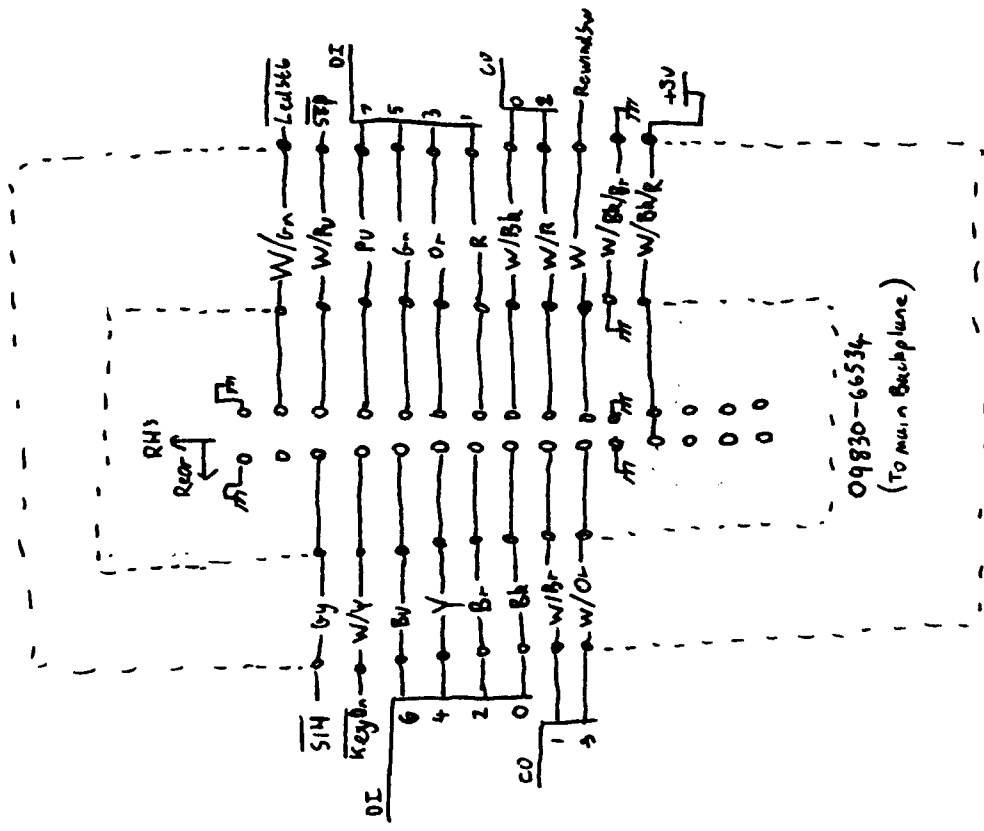






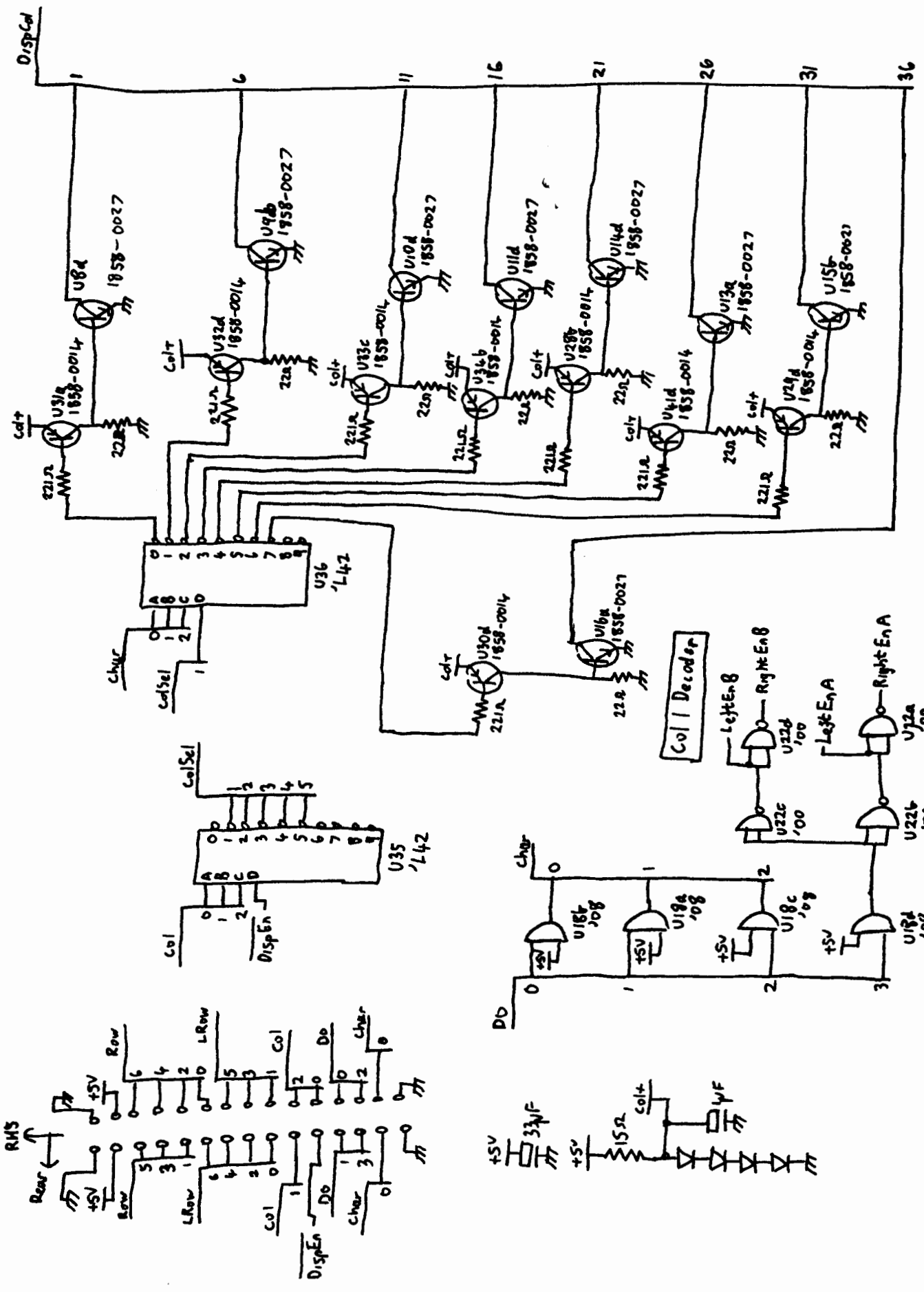
09830-66532

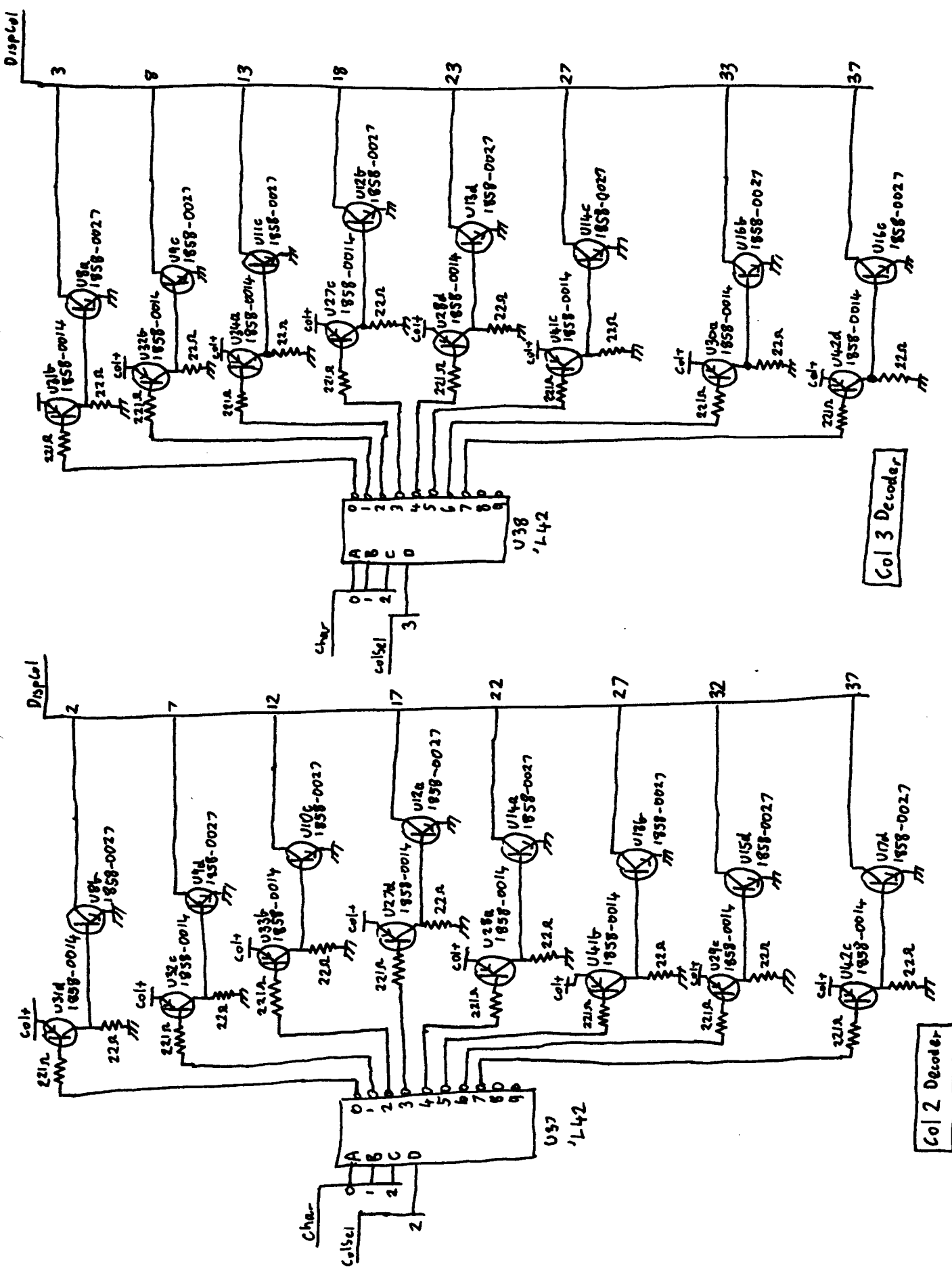
HP9830 Keyboard Encoder, sheet 3



09830-66533

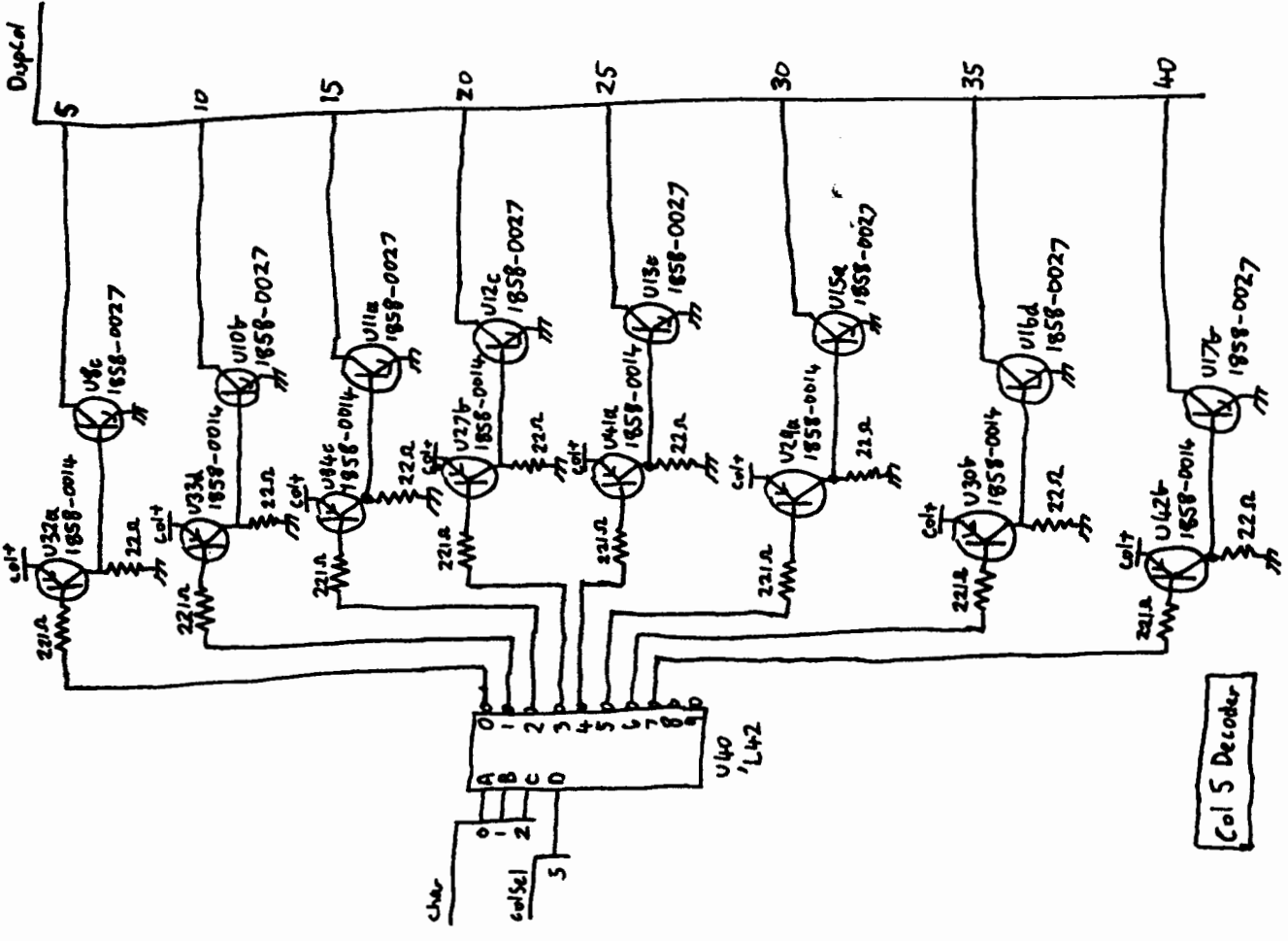
HP 9830 Keyboard Cable



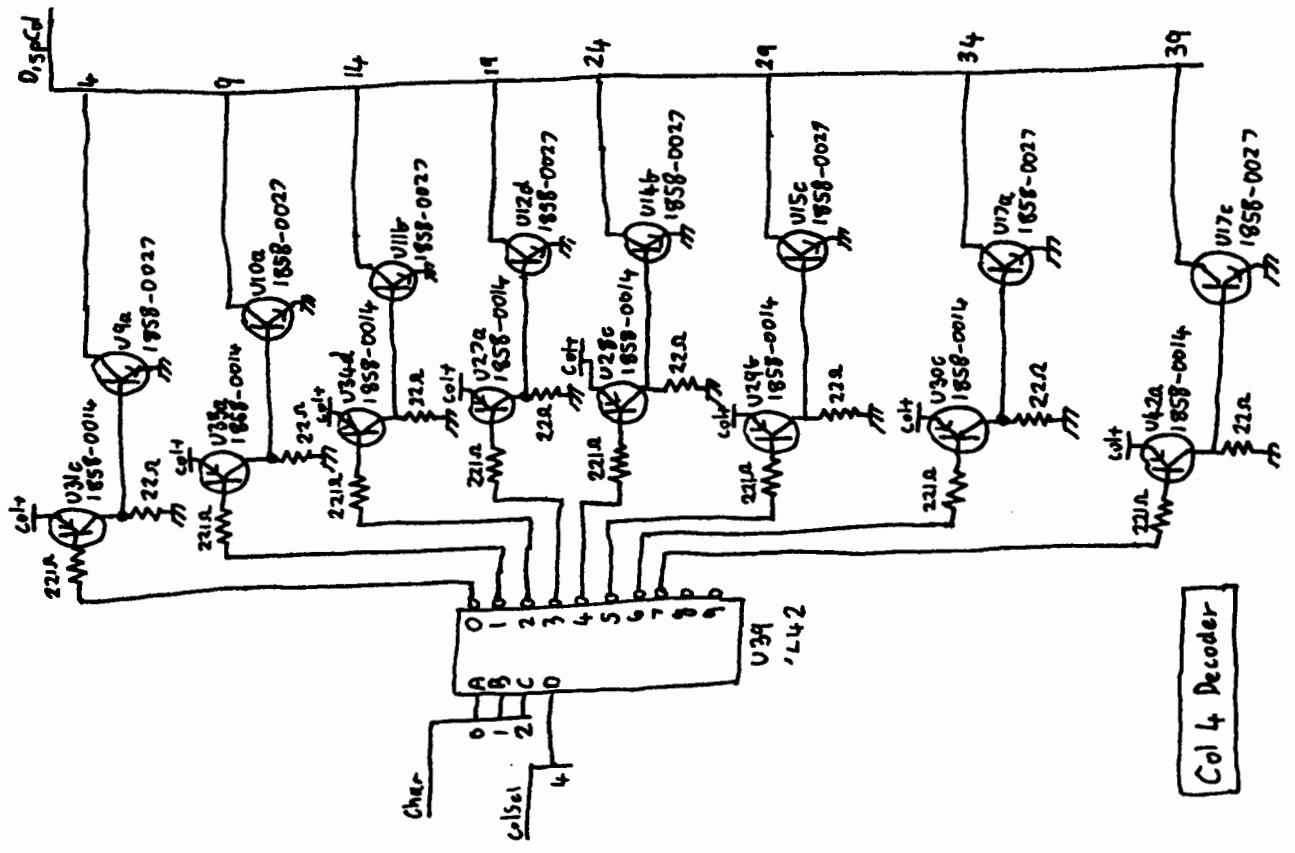


09830 - 66541

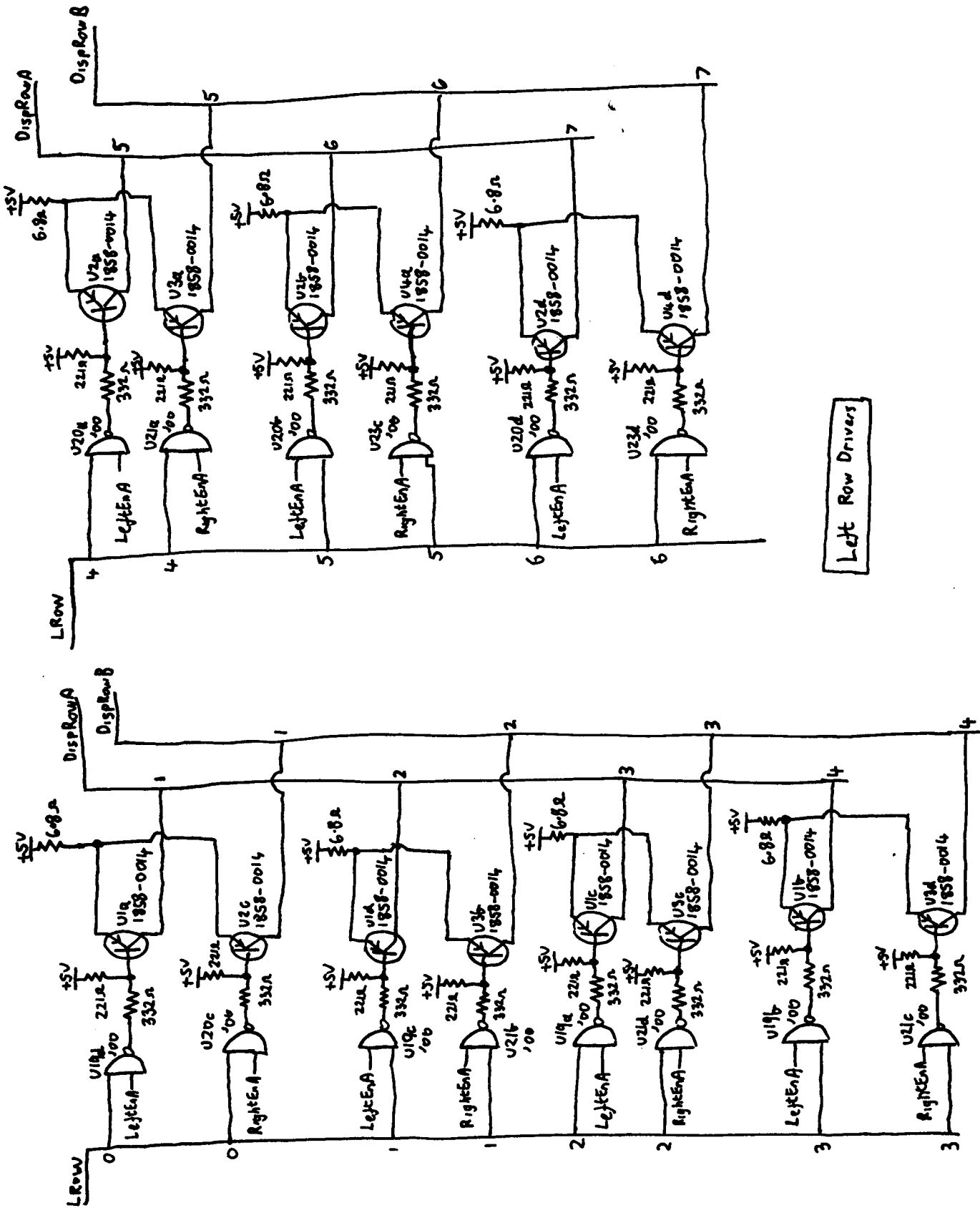
HP 9830 Display PCB Sheet 2 (Y/Br)



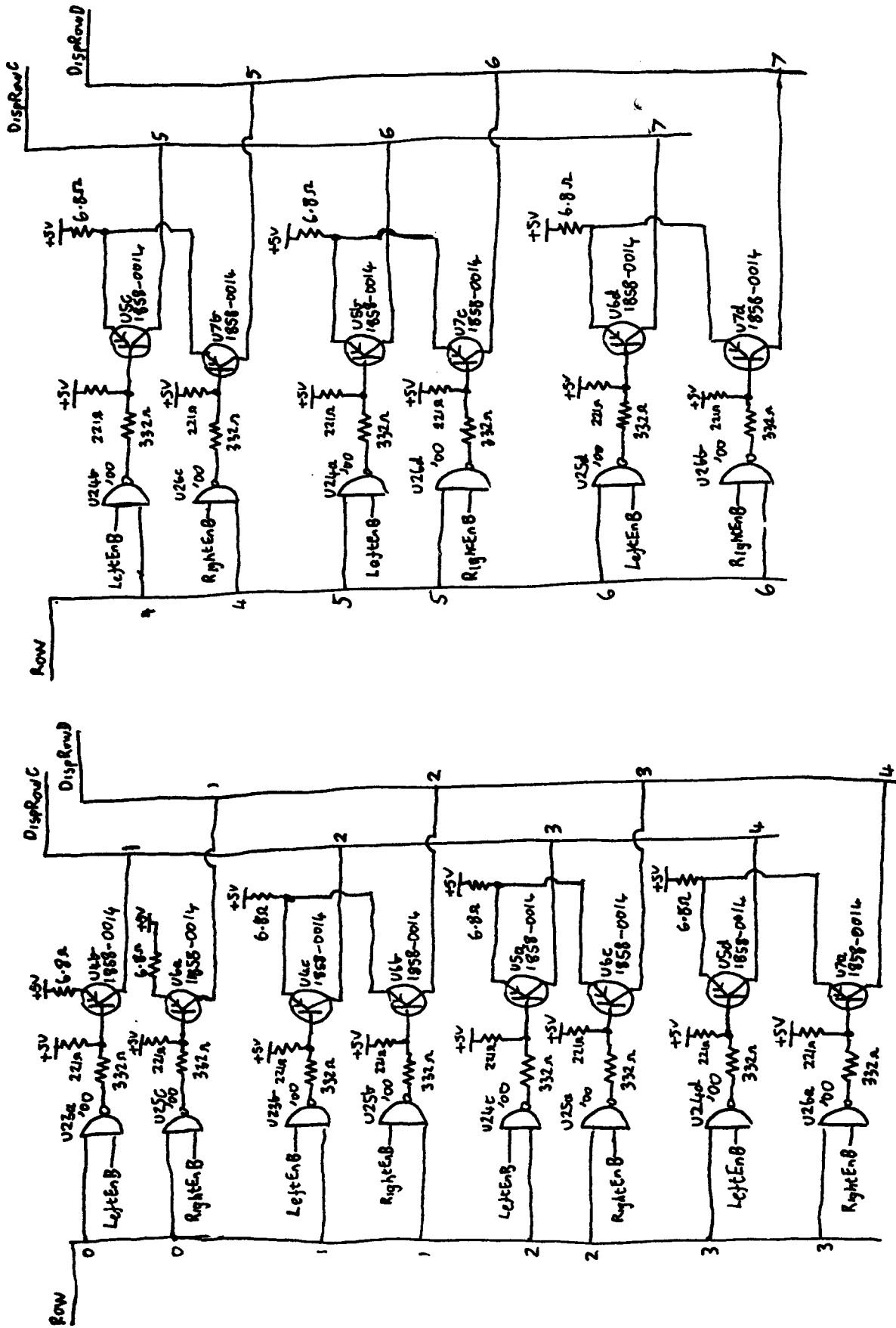
Col 5 Decoder



Col 4 Decoder



Left Row Drivers



Right Row Drivers

DisplayA

DisplayB

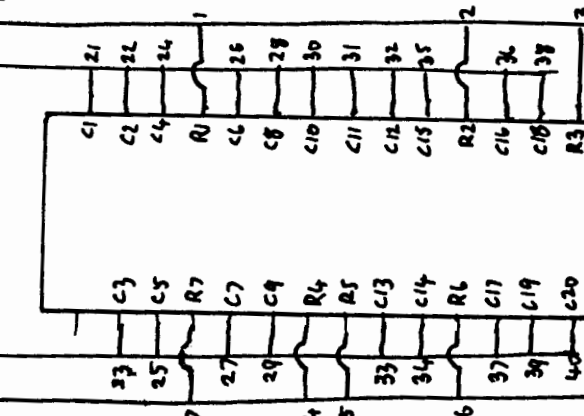
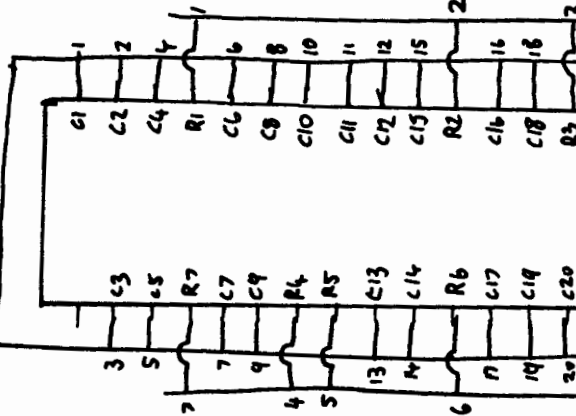
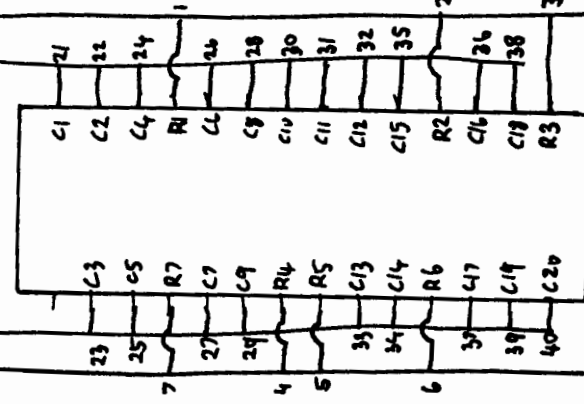
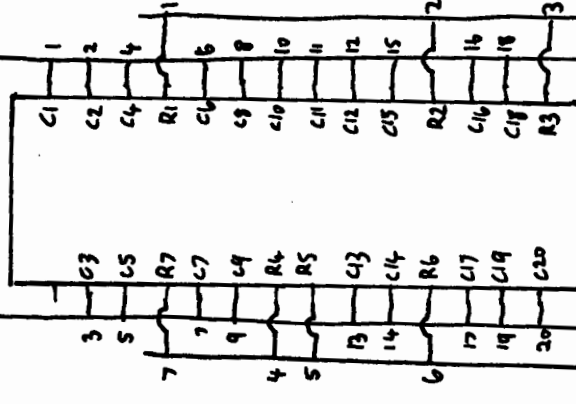
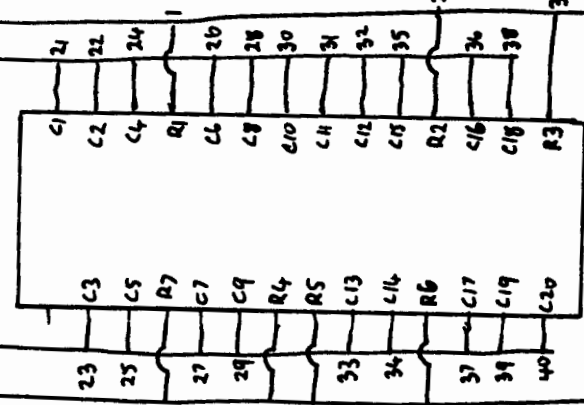
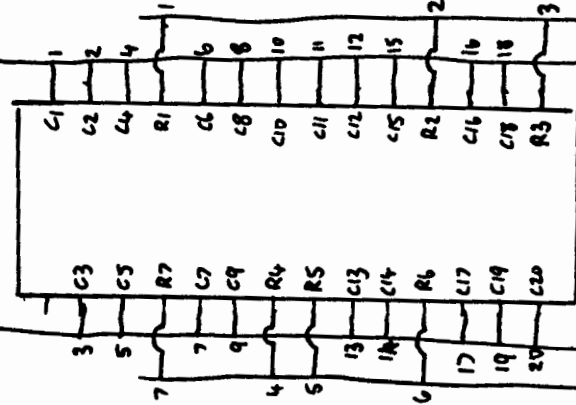
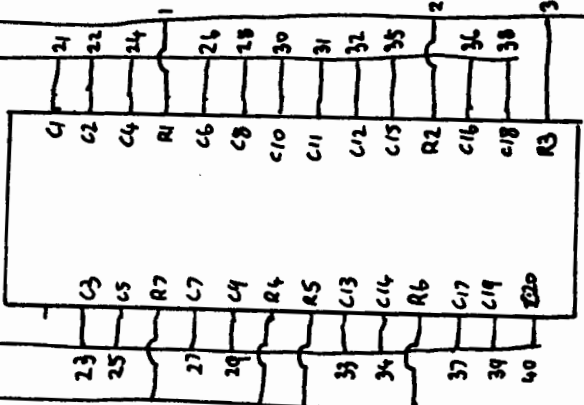
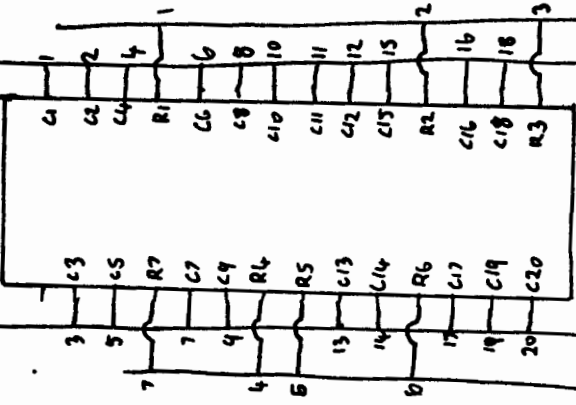
DisplayC

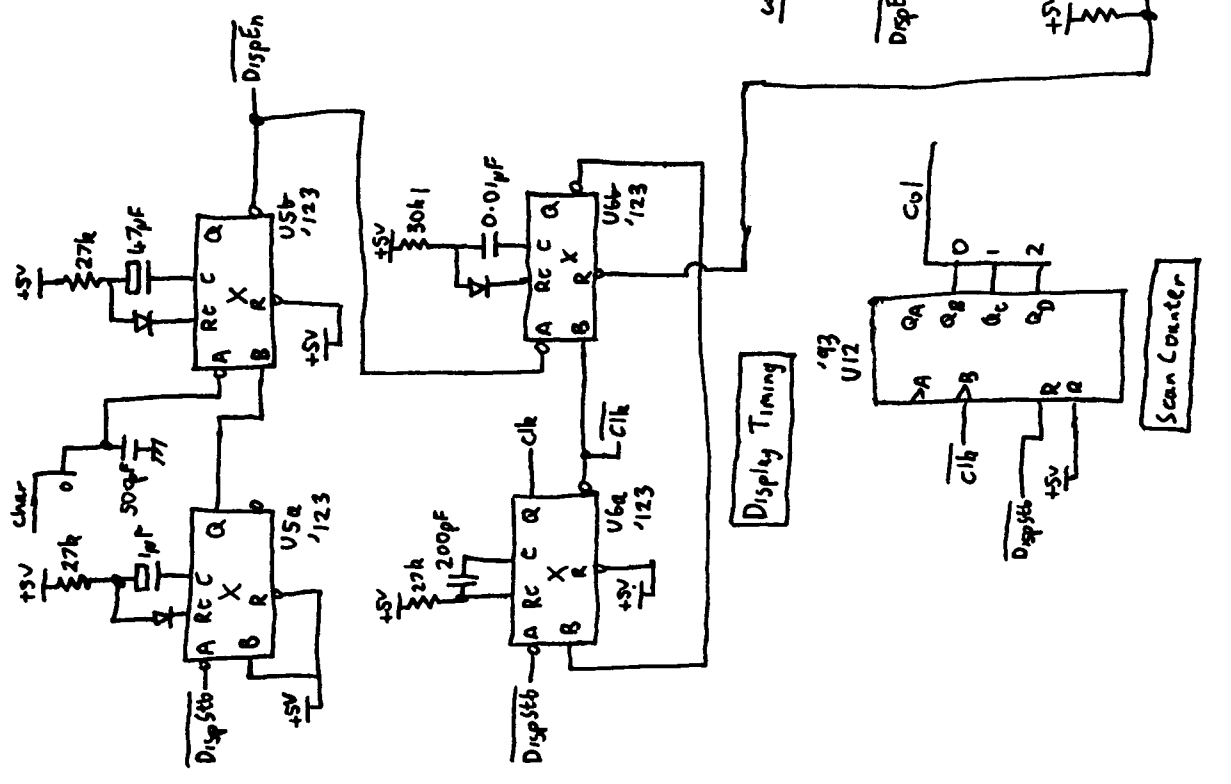
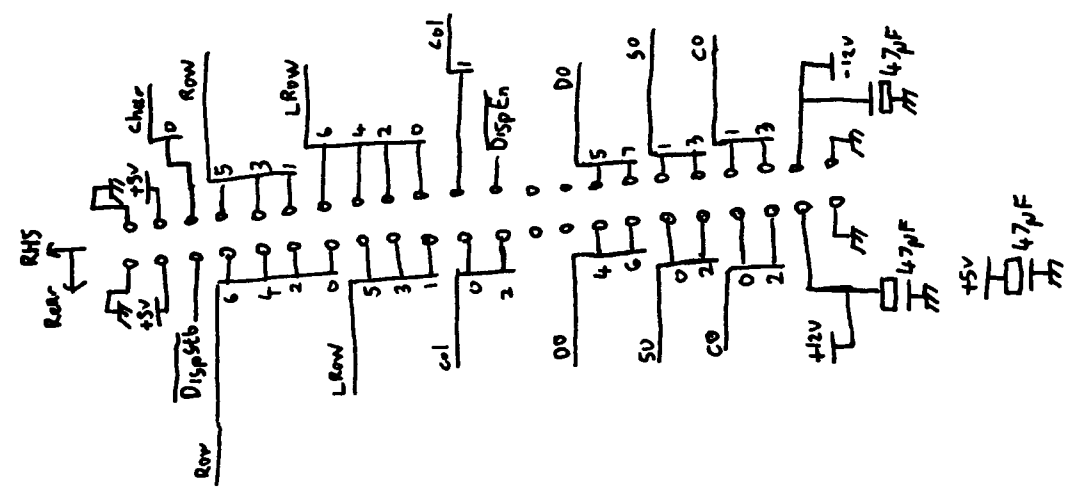
DisplayD

DisplayE

Display

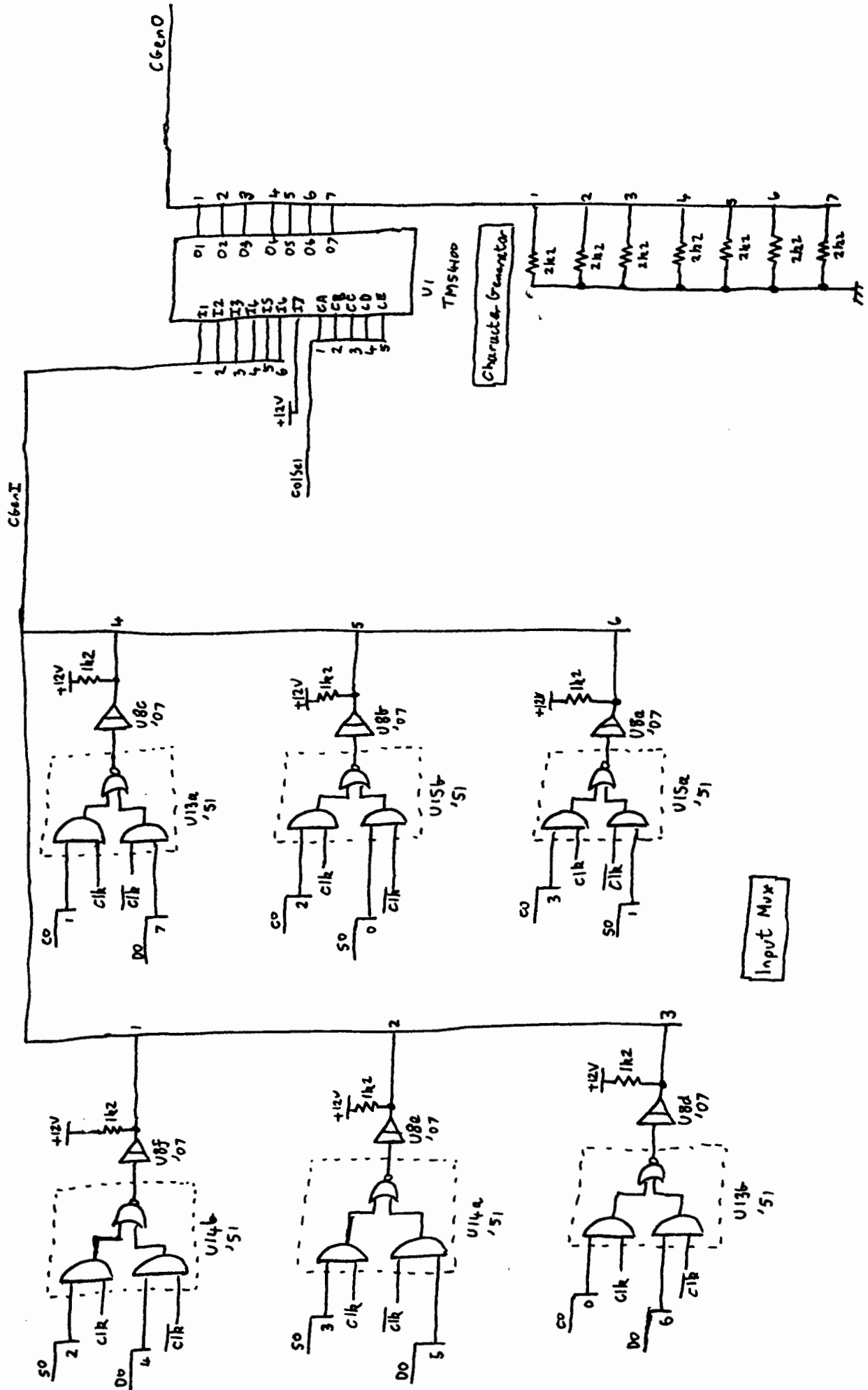
DisplayF

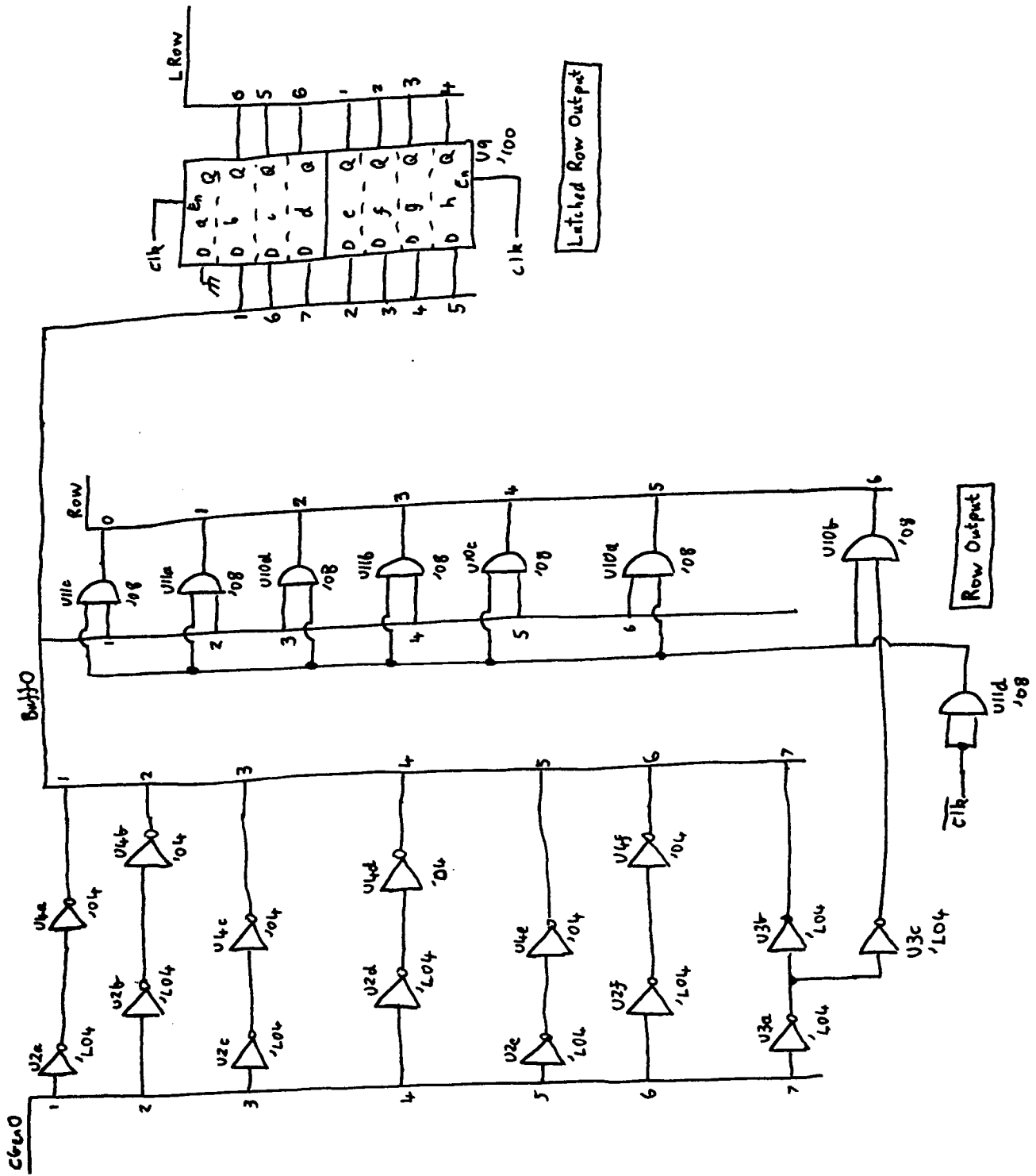




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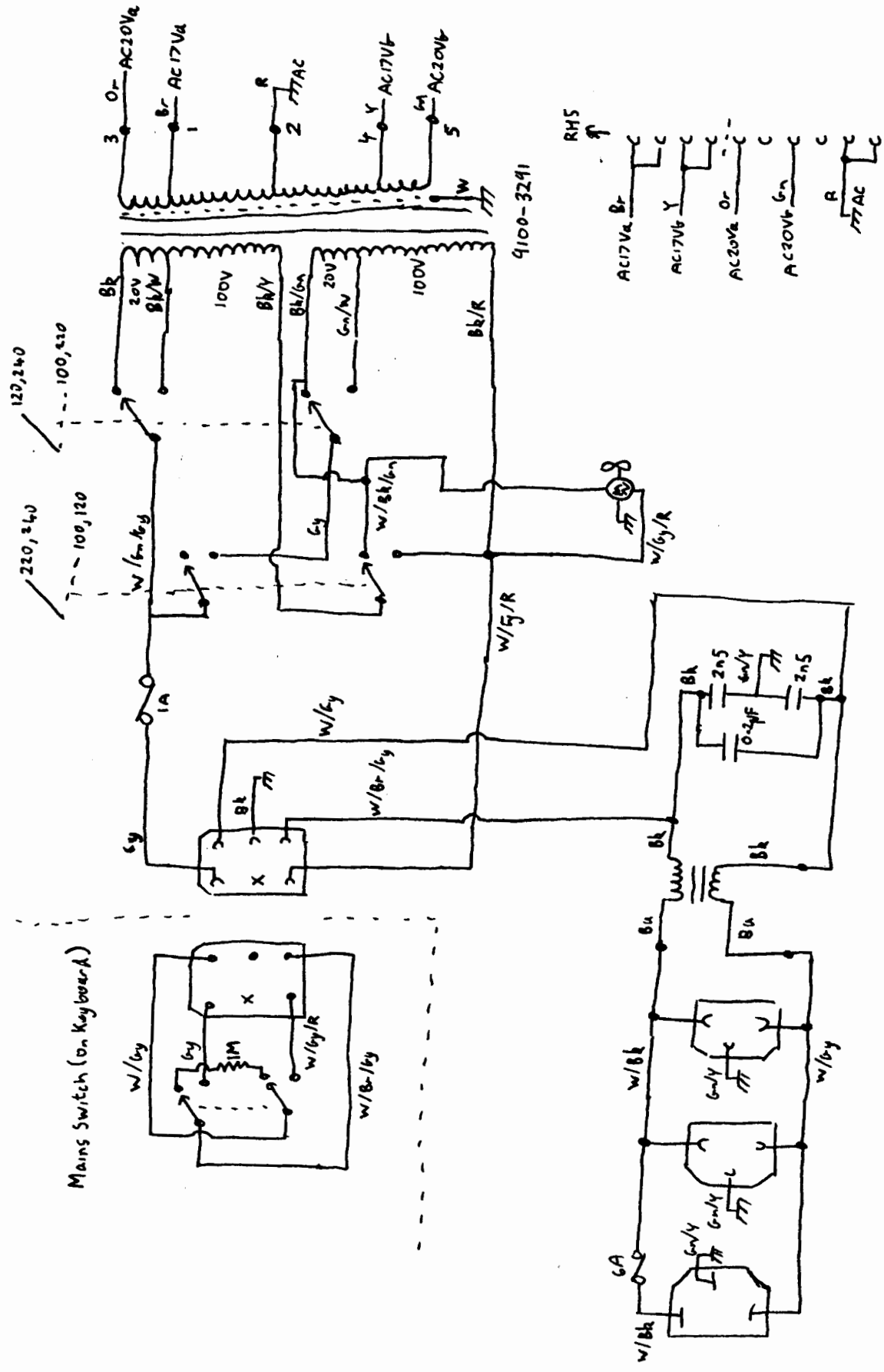
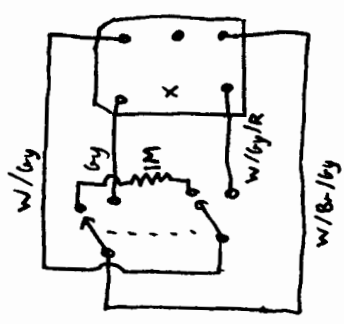
HP1830 Display Driver PCB Sheet 1 (Y/R)





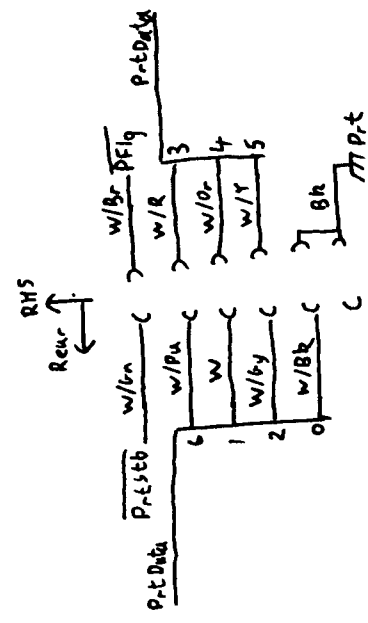
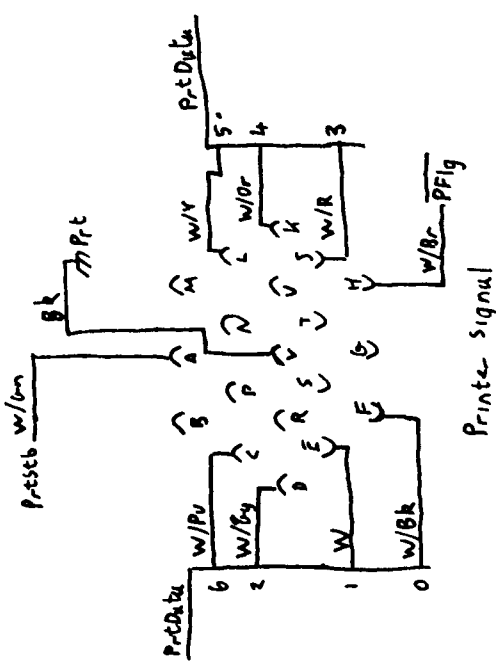
HP9830 Display Driver PCB sheet ③ (Y/R) 09830-66542

Mains Switch (on Keyboard)

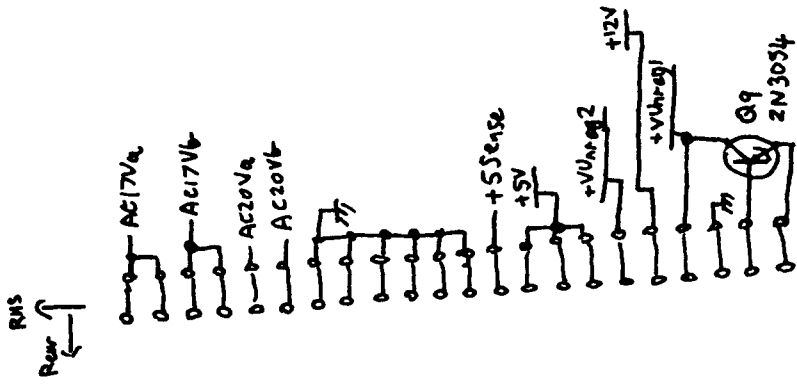


Mains Transformer

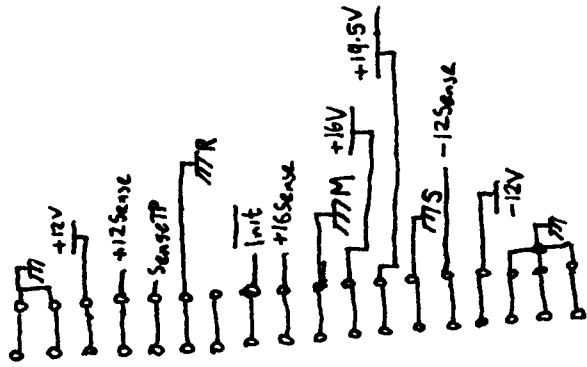
(To Main Backplane)



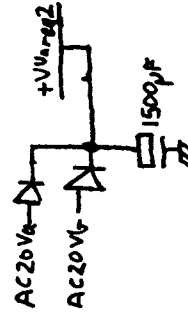
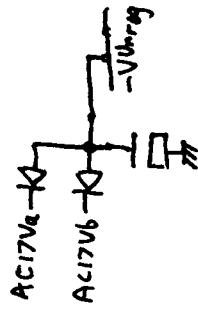
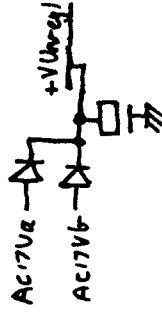
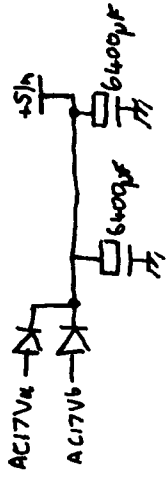
9866 Printer Connector



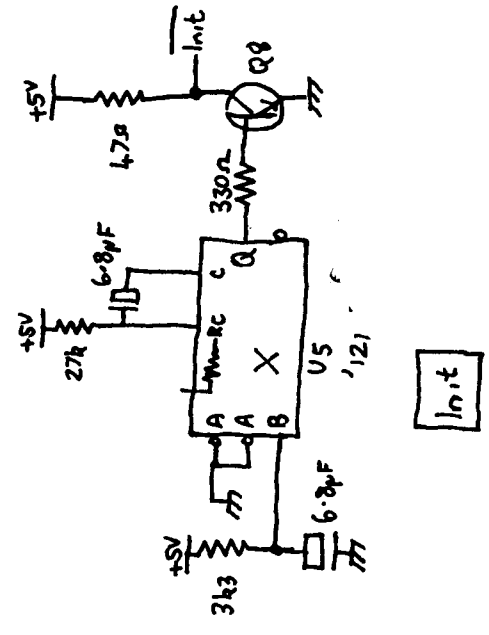
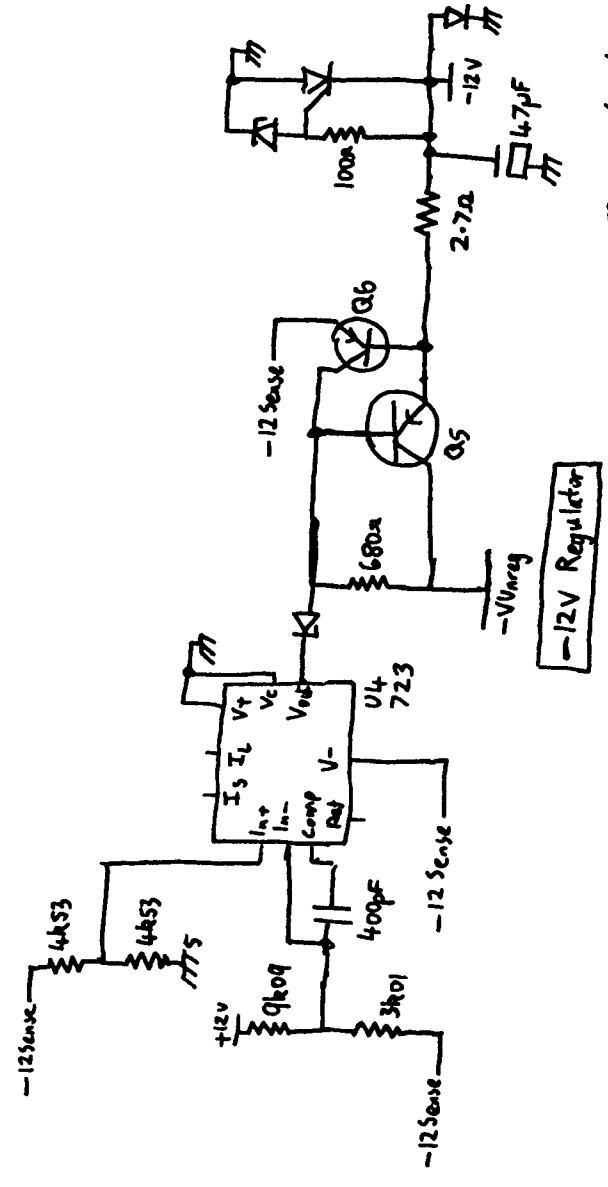
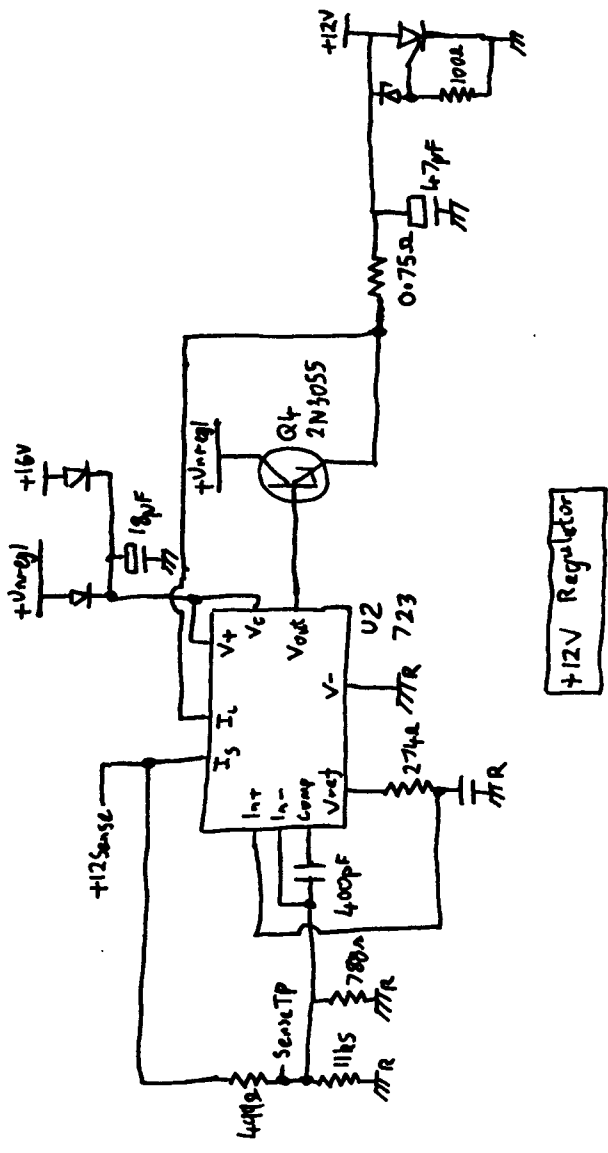
(R4 Connector)

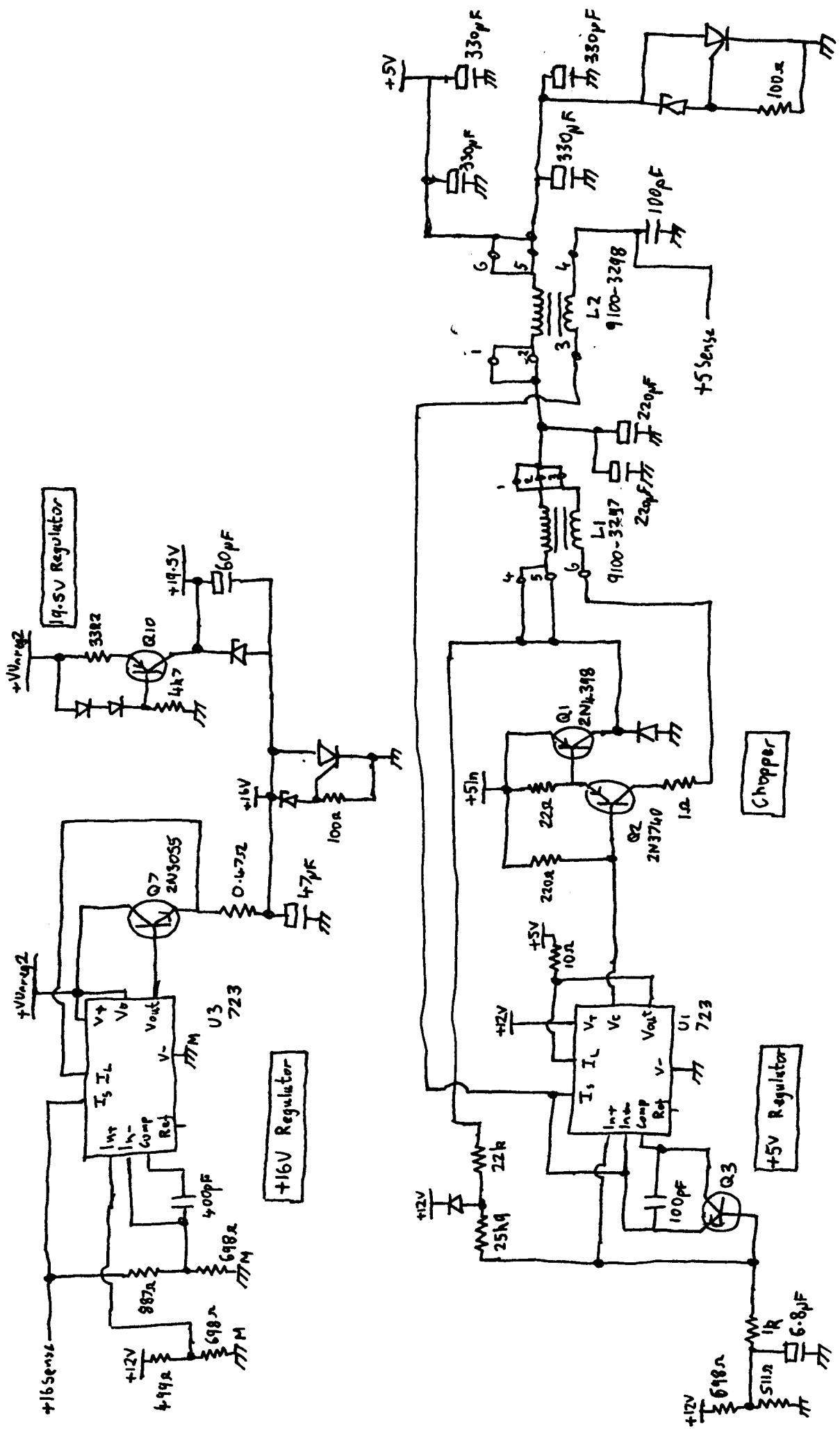


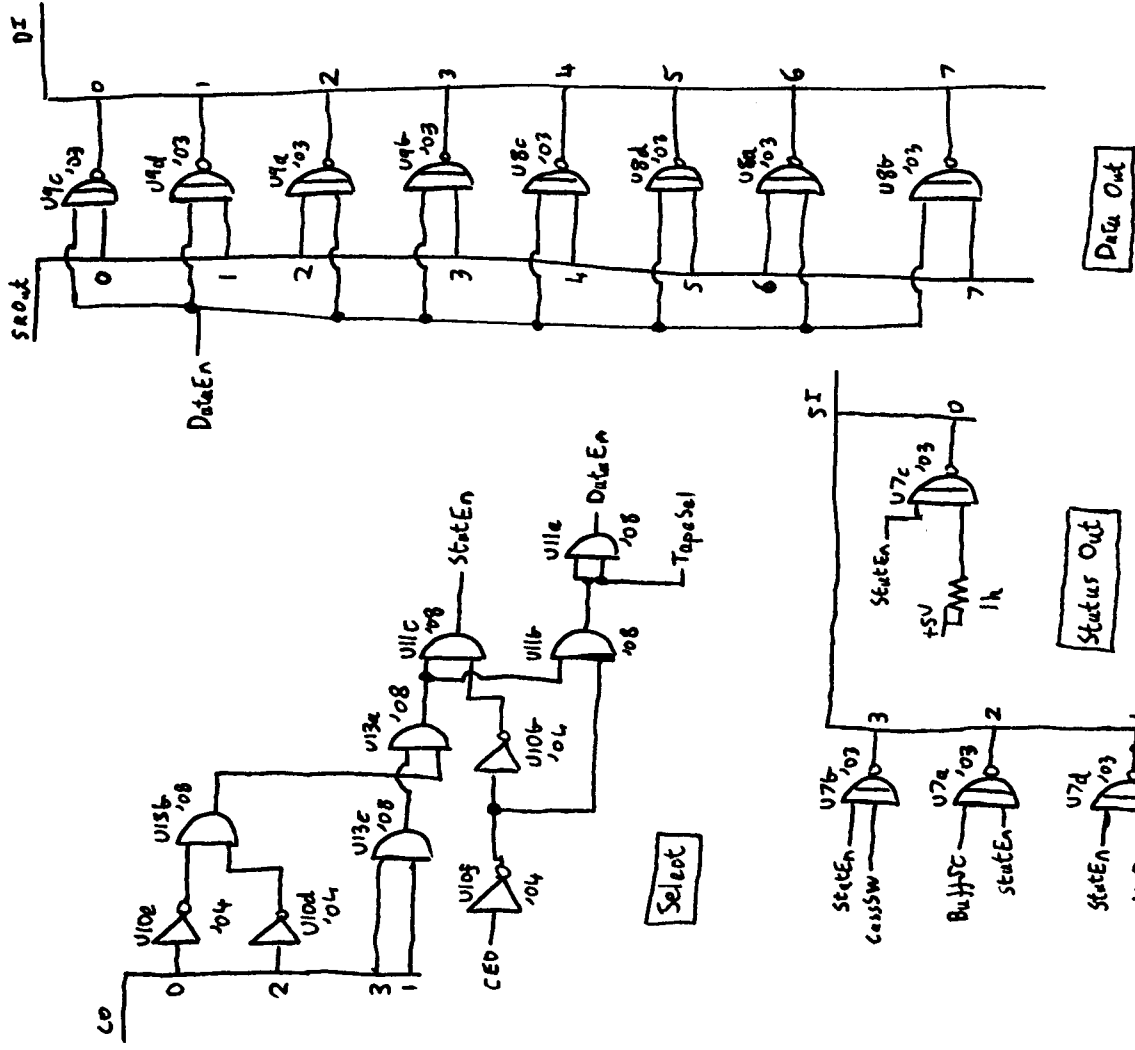
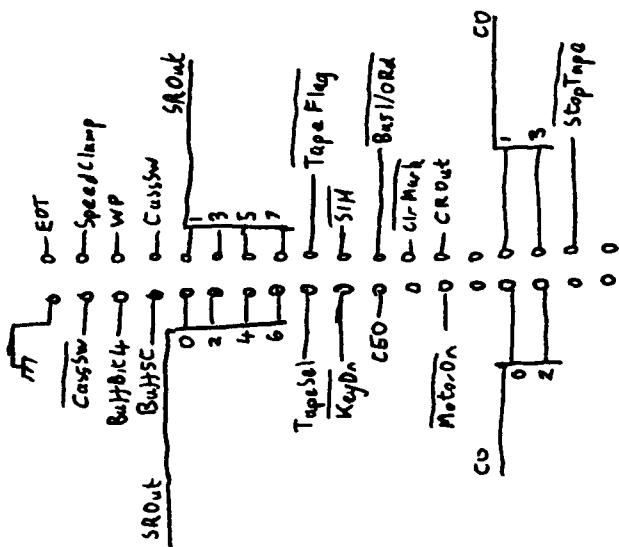
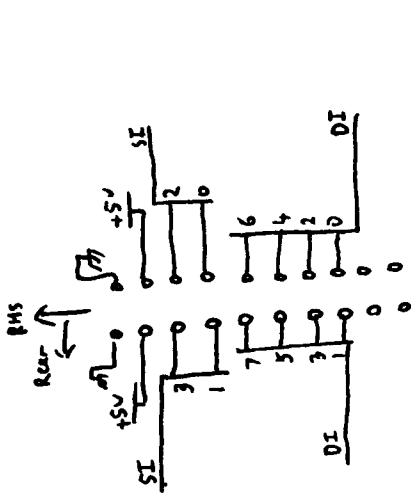
(L4 Connector)



Rectifiers

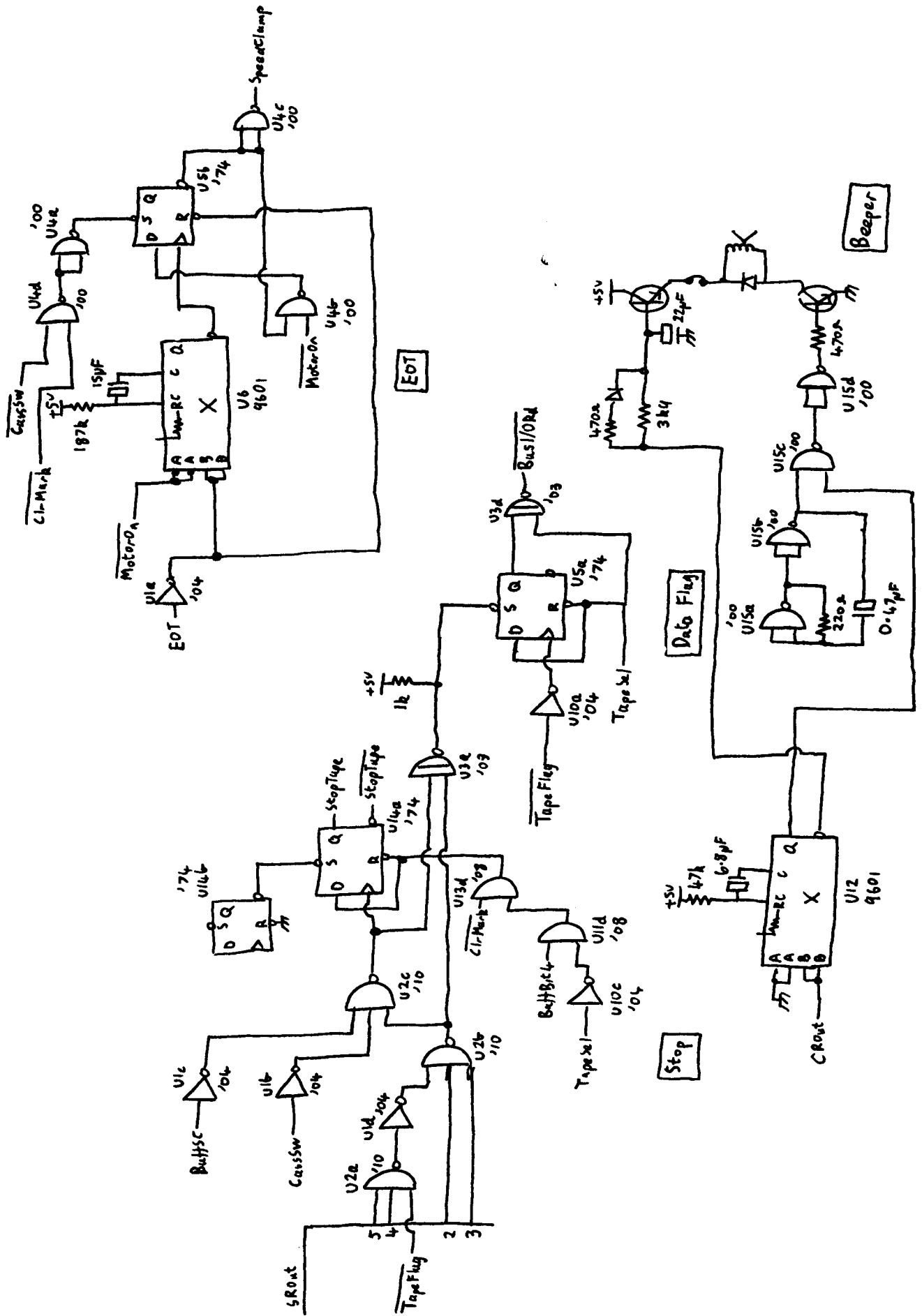




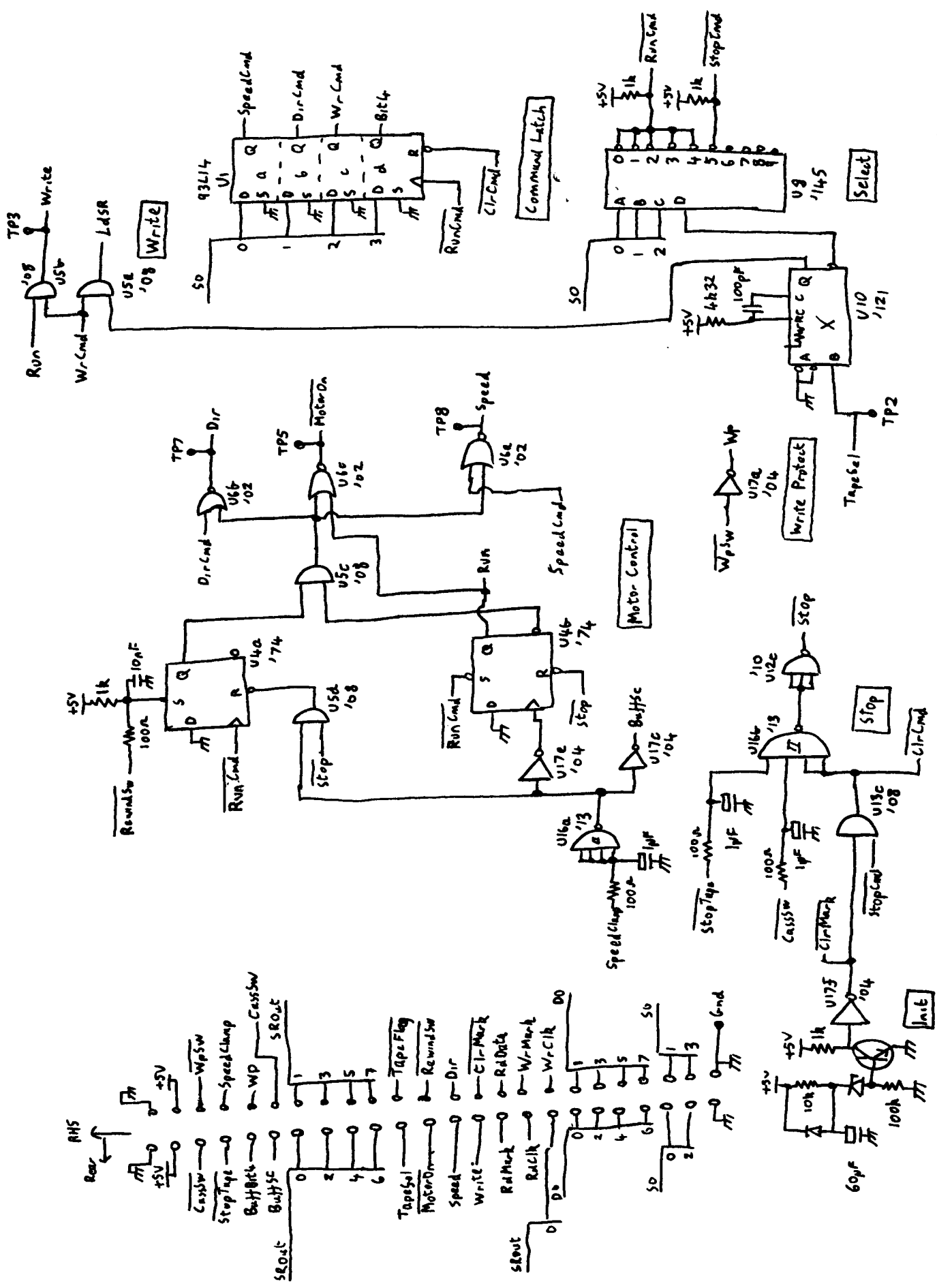


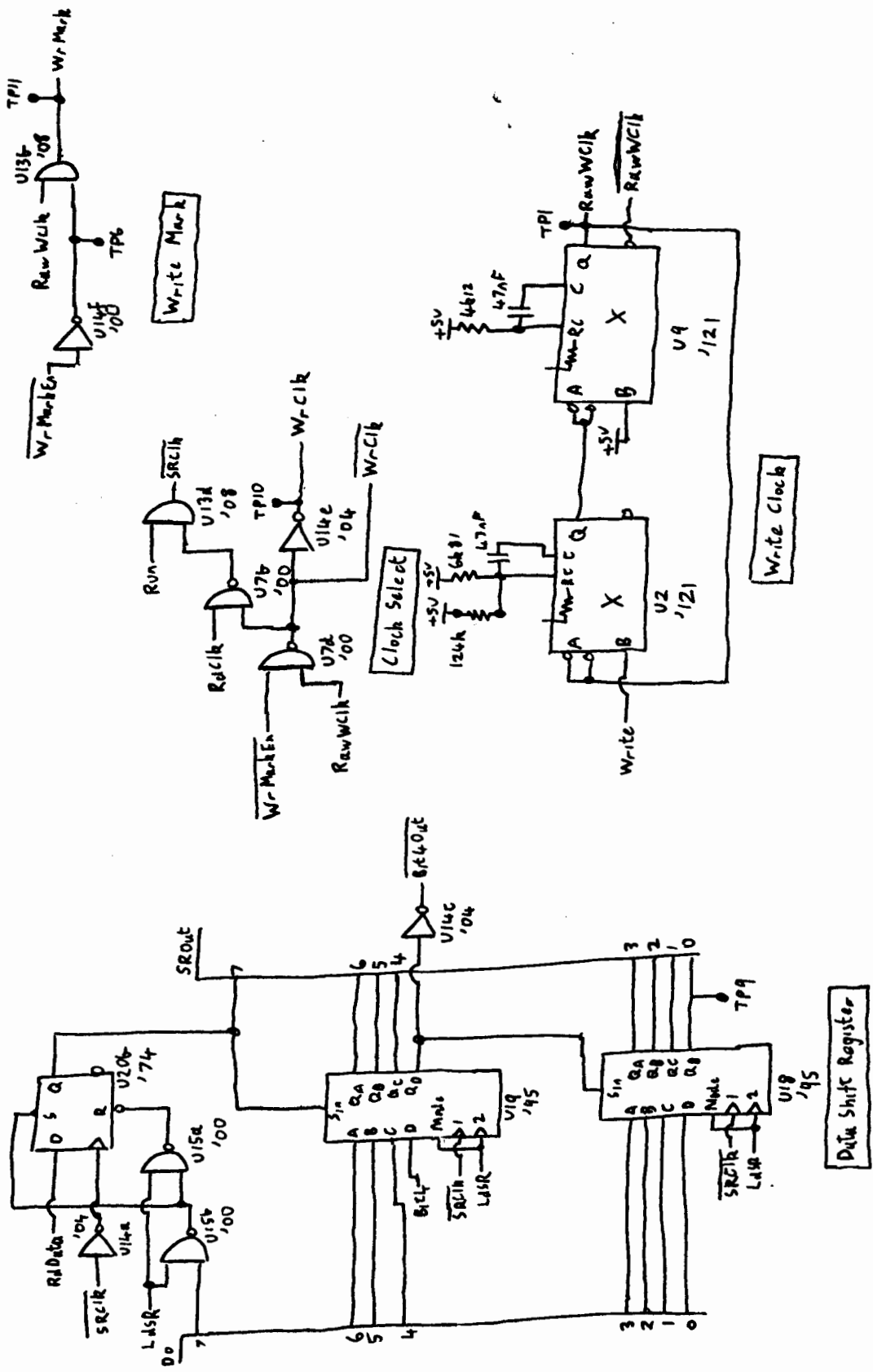
09830-66561

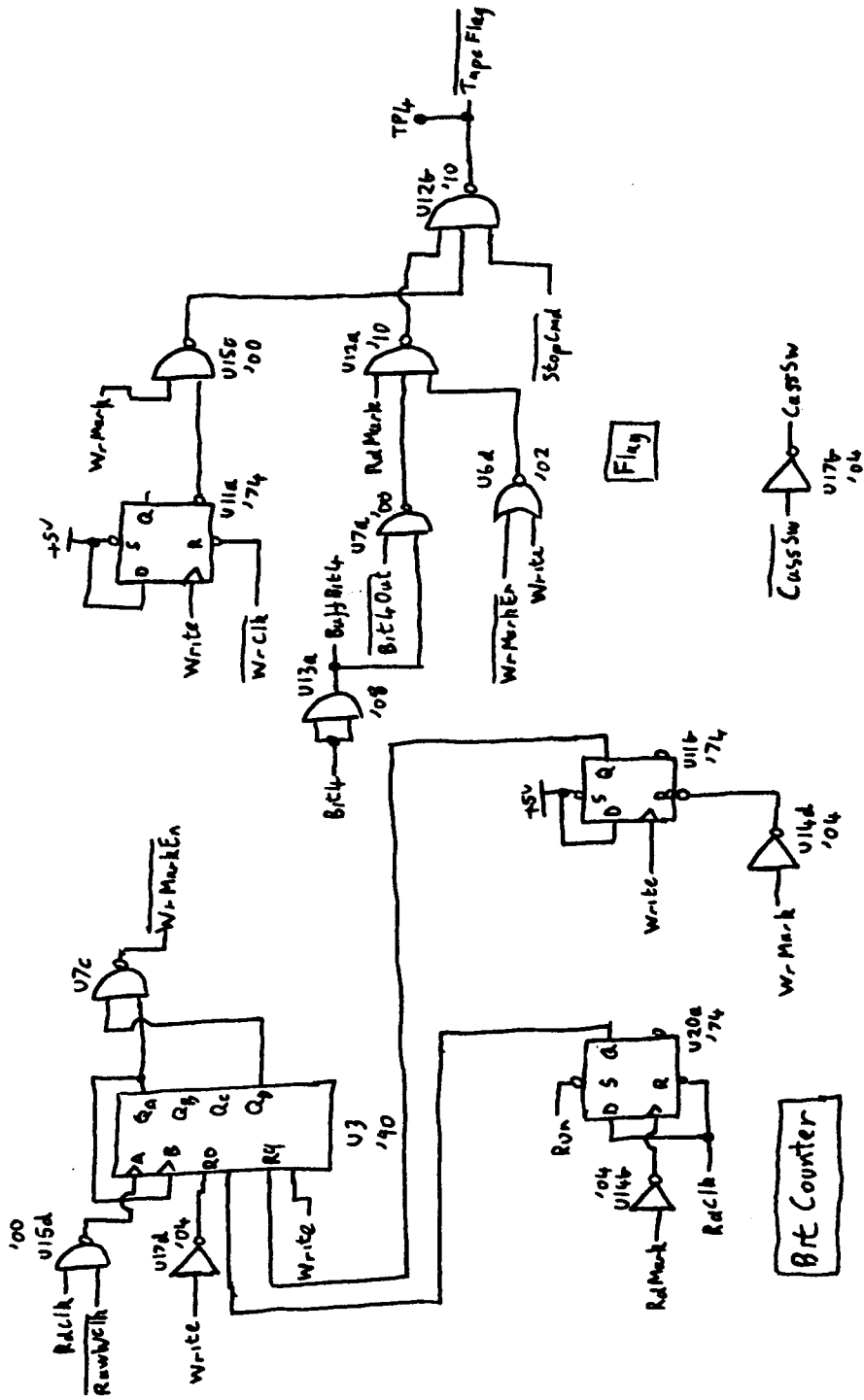
HP4830 Tape Interface PCB Sheet 1 (Bu/Br)

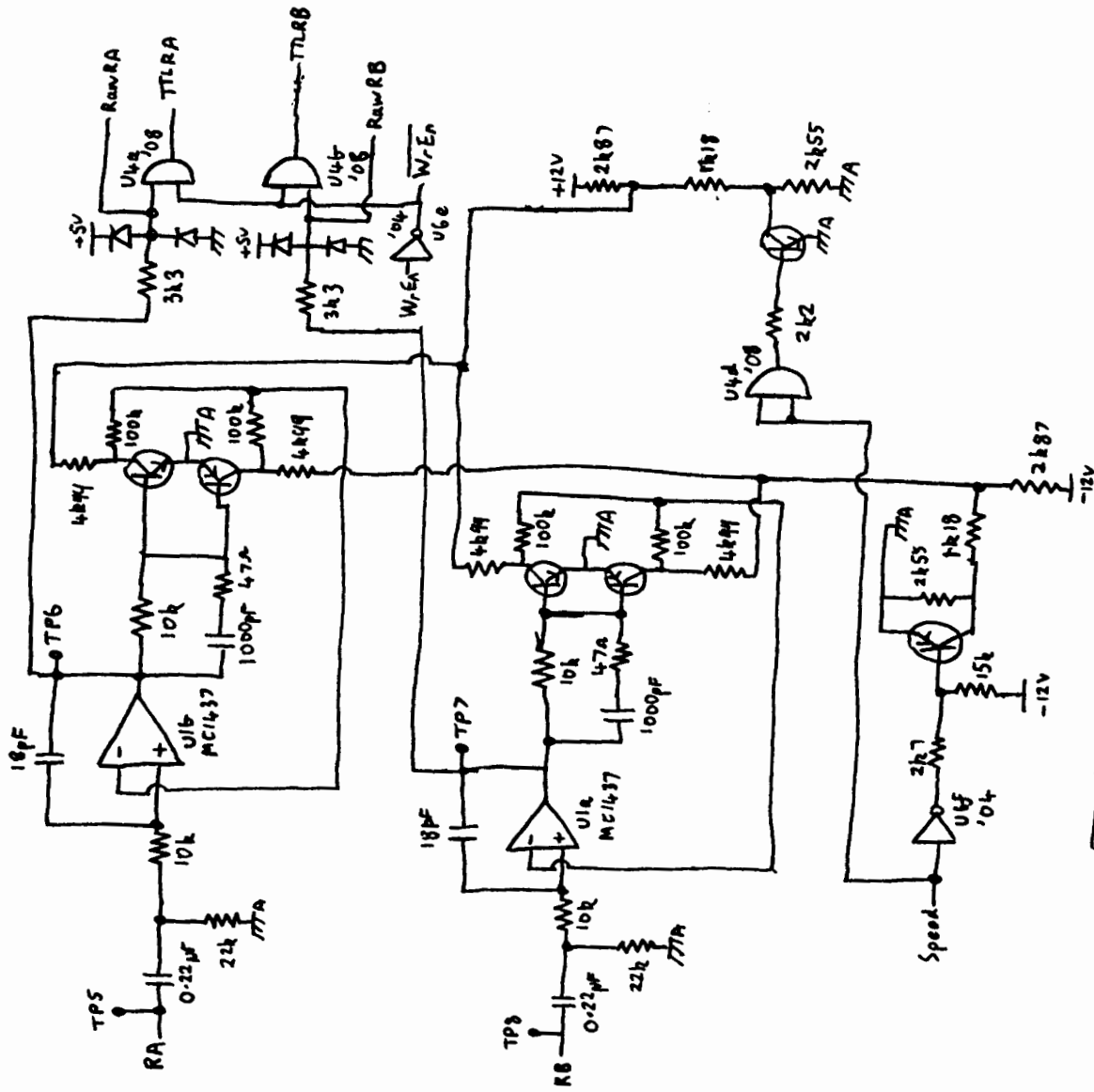
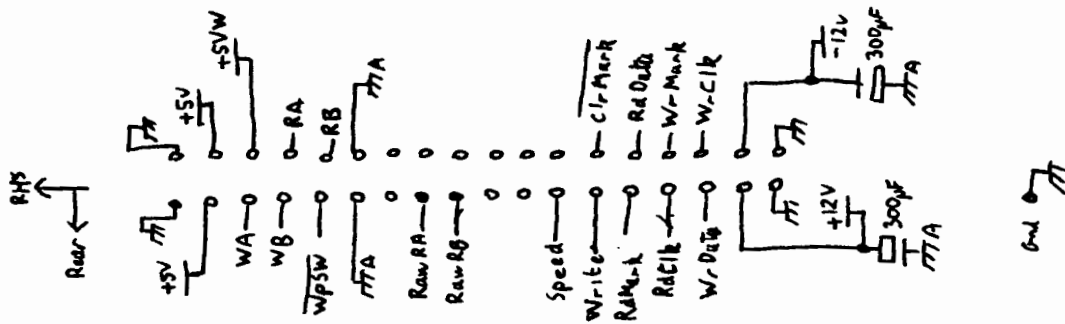


HP 9830 Tape Interface PCB Sheet 2 (Bw/Br) 09830-66561

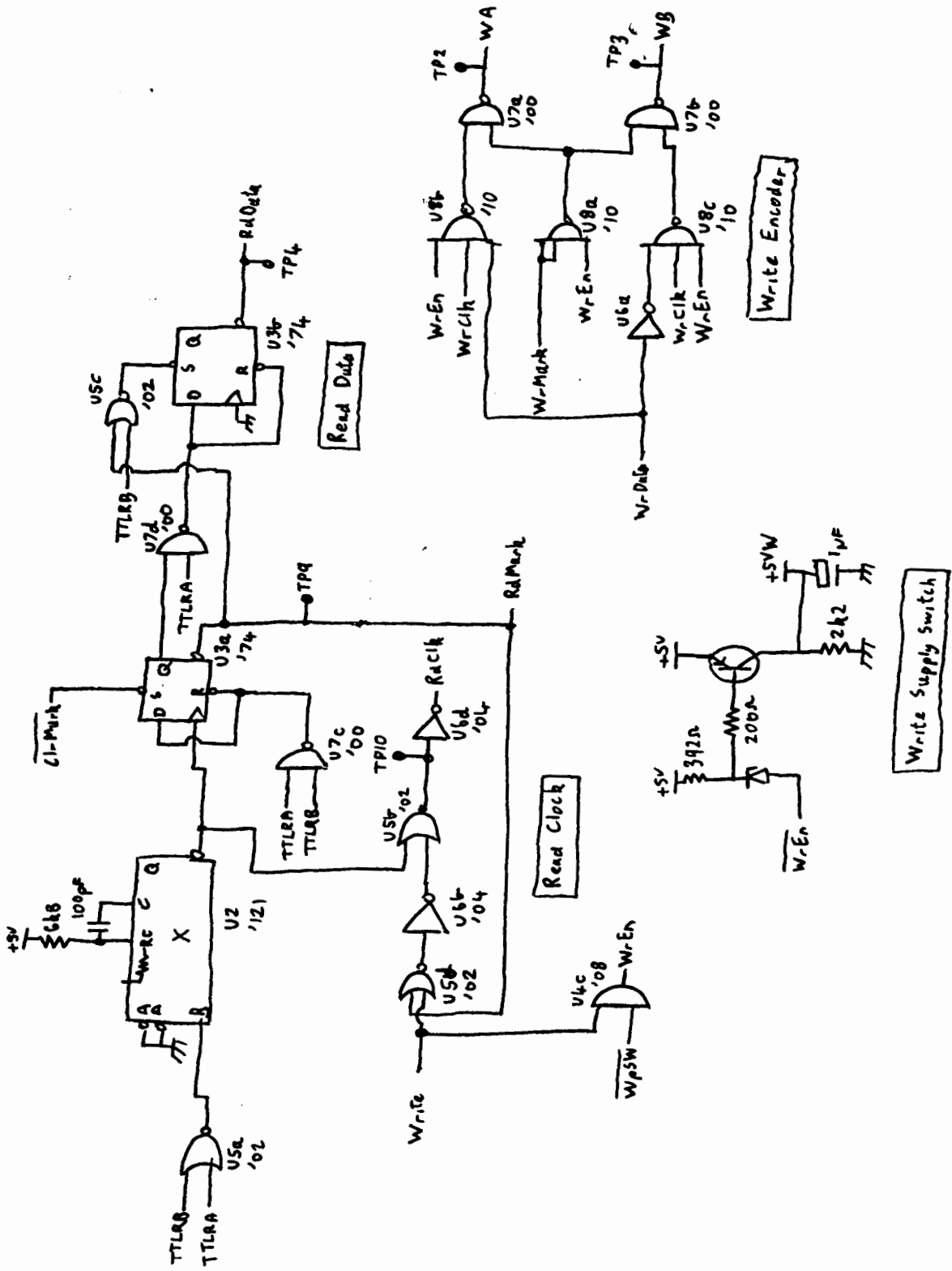


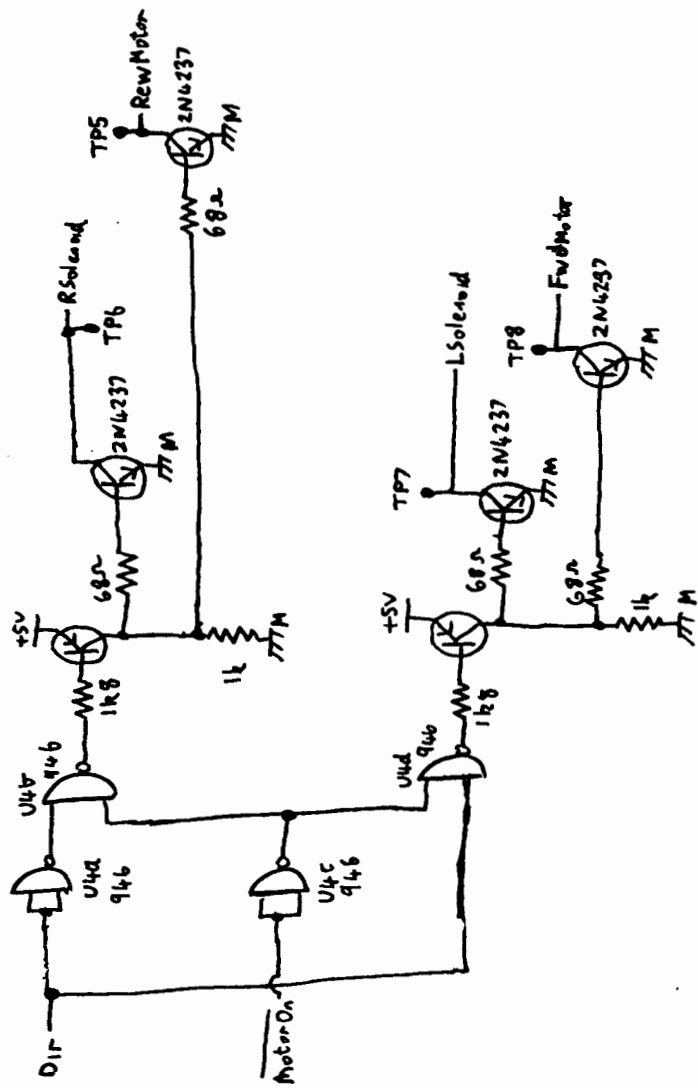




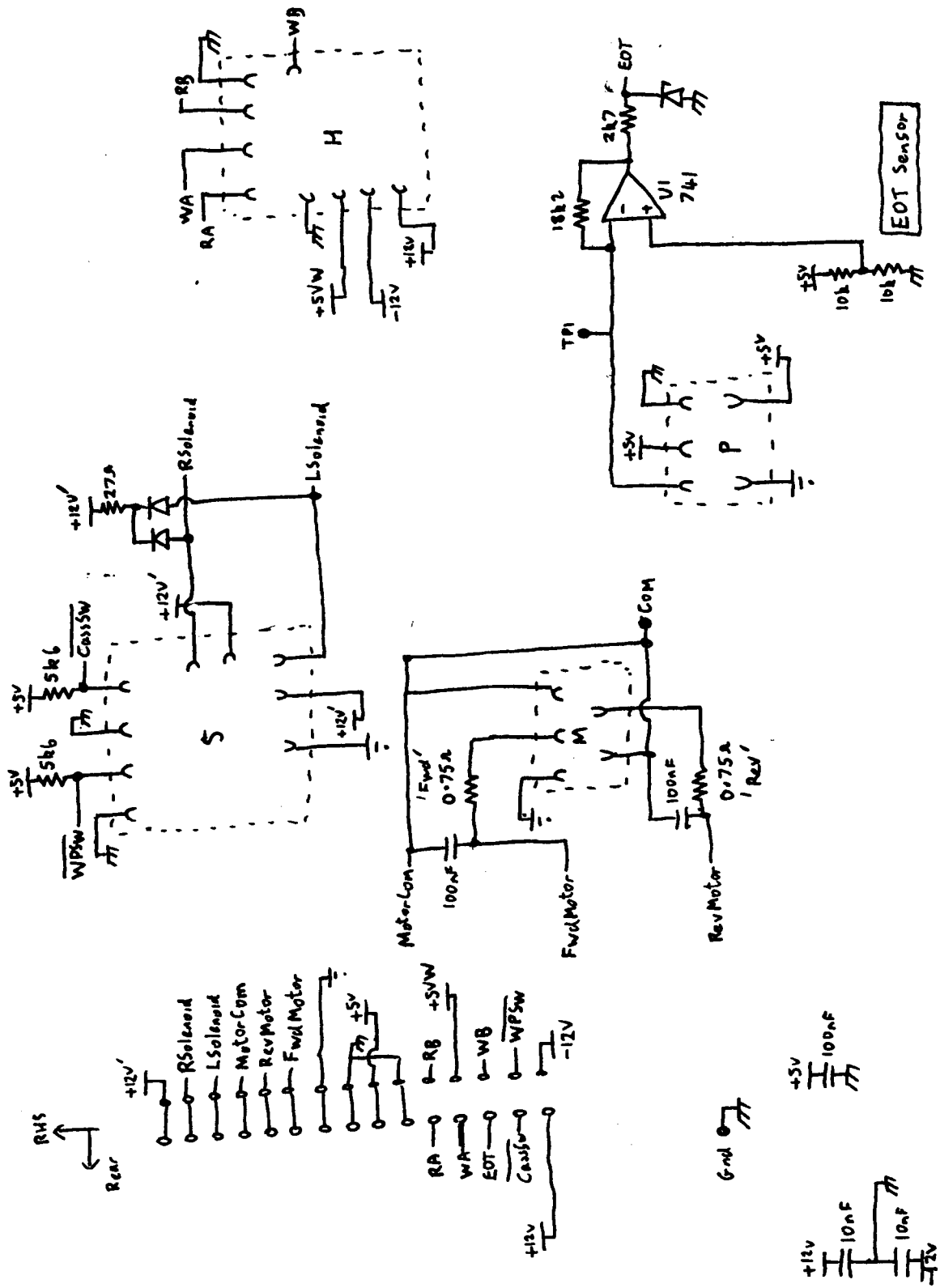


Read Amplifier



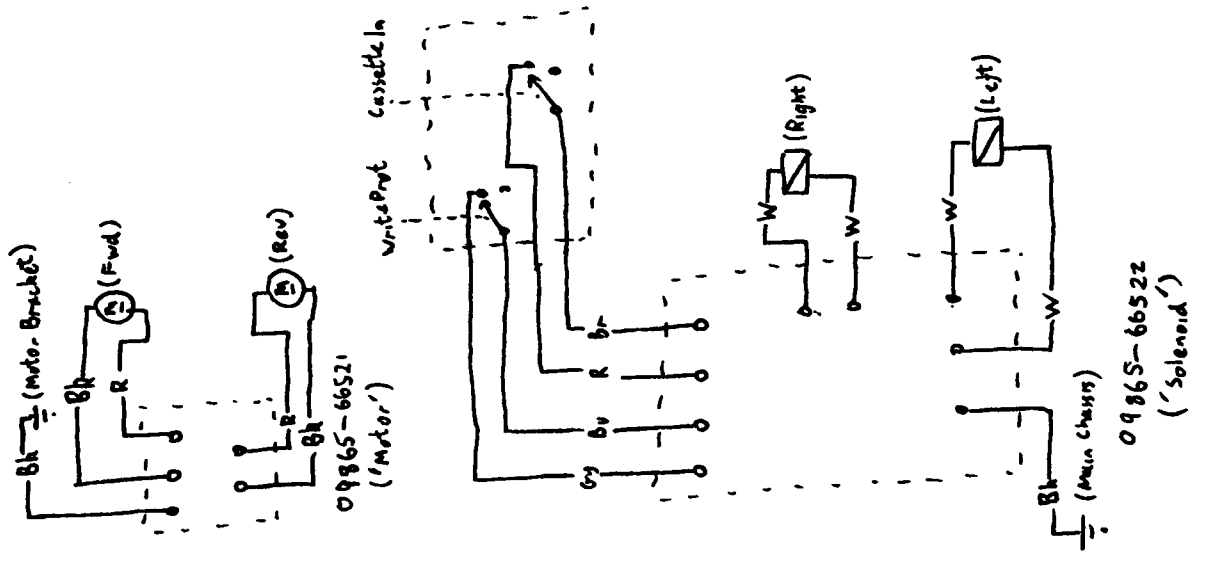
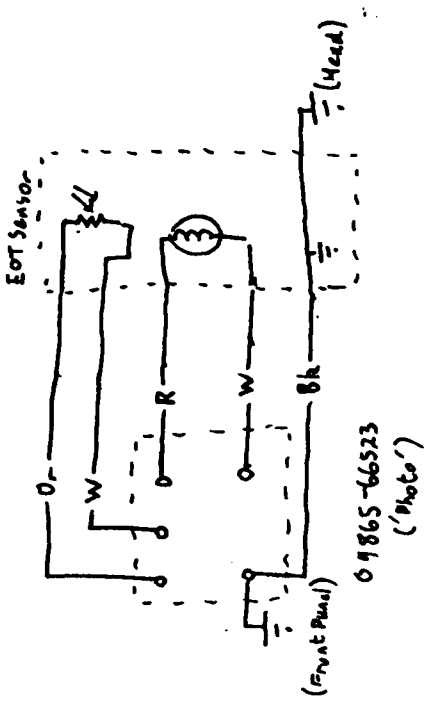


Direction Control

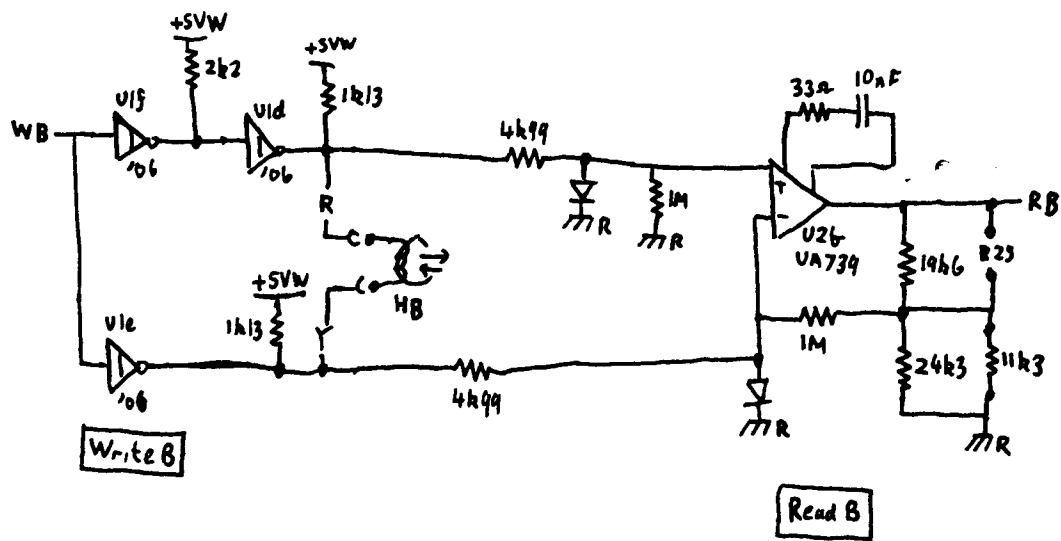
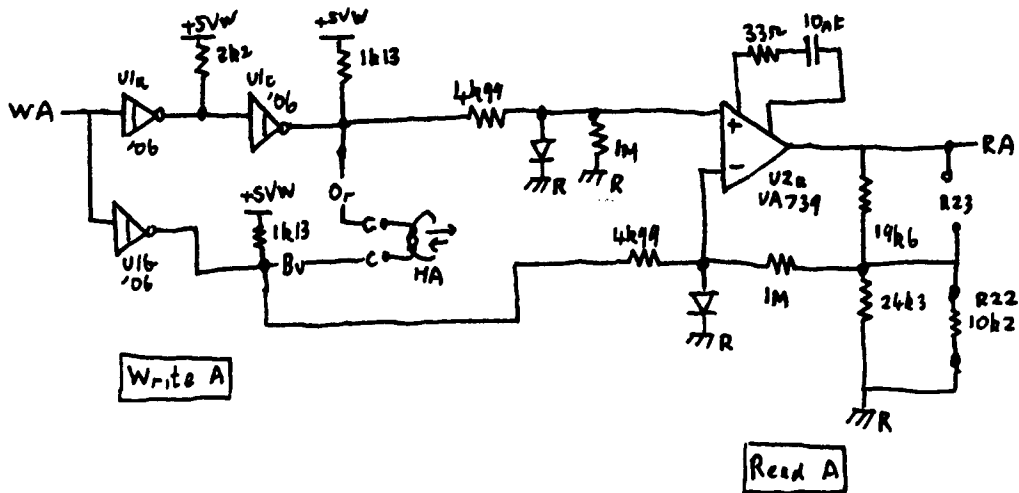
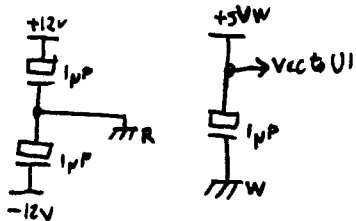
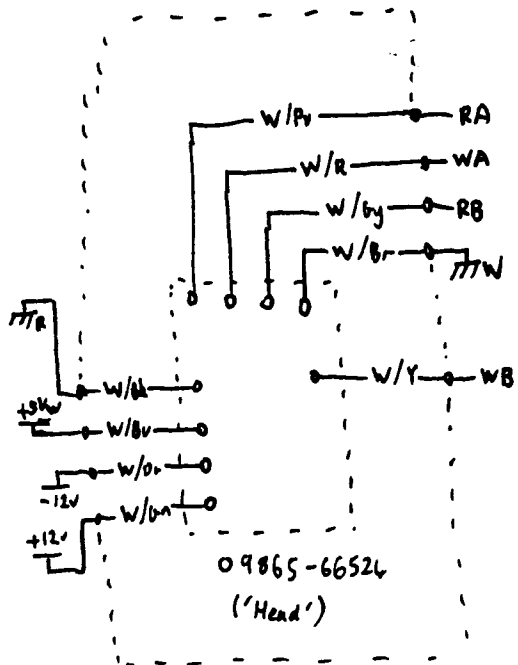


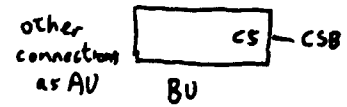
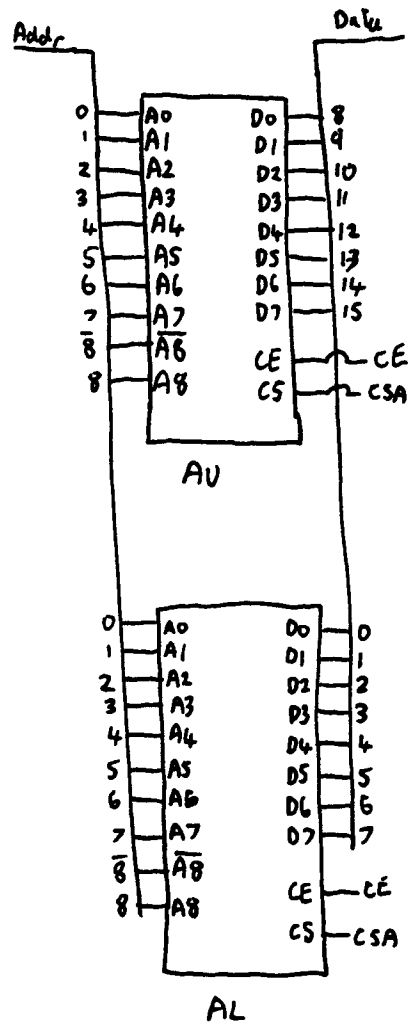
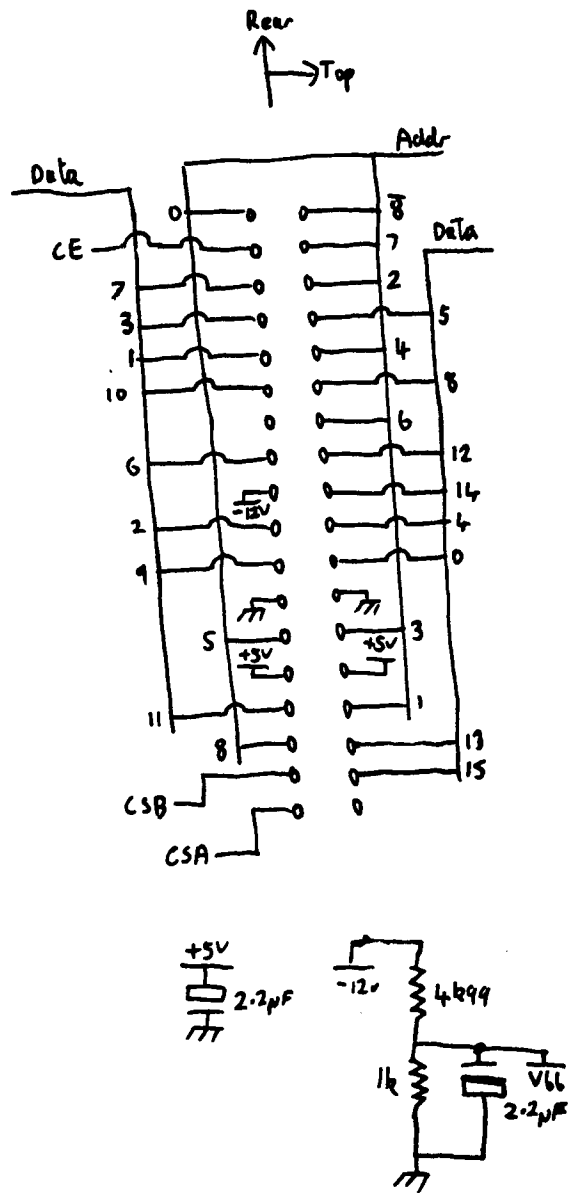
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HP4830 Tape Drive Connector PCB



HP9830 Tape Drive Wiring





	11274	11272
AL	1818-2186	1818-2134
AU	1818-2187	1818-2135
BL	1818-2188	1818-2136
BU	1818-2189	1818-2137