

MP9144

SD(0)	→	1	2	→	0-Gnd
SD(1)	→	0	→	0	+5V
SD(2)	→	0	→	0	Gnd
SD(3)	→	0	→	0	+5V
SD(4)	→	0	→	0	Gnd
SD(5)	→	0	→	0	+5V
SD(6)	→	0	→	0	Gnd
SD(7)	→	0	→	0	+5V
clk4M	→	0	→	0	Gnd
Rst	→	0	→	0	+5V
WE _n	→	0	→	0	Gnd
PVAL	→	0	→	0	Gnd
KFL	→	0	→	0	AGnd
CH5	→	0	→	0	AGnd
RHWL	→	0	→	0	AGnd
BOT	→	0	→	0	AGnd
EOT	→	0	→	0	-12V
OVrTh	→	0	→	0	-12V
CartSw	→	0	→	0	+12V
WrProt	→	0	→	0	+12V
ZData	→	0	→	0	Gnd
SVWr	→	0	→	0	Gnd
SVRd	→	0	→	0	Gnd
GNS	→	0	→	0	Gnd
WZData	→	0	→	0	AGnd

49 50

Controller → Drive

Prot _a	→	1	2	→	0-Prot _b
Fault _a	→	0	→	0	Fault _b
Busy _b	→	0	→	0	Busy _a
UnitSw	→	0	→	0	0
+5V	→	0	→	0	0
Gnd	→	0	→	0	0
		13	14		0-FromTapeSw
					0-ToTapeSw

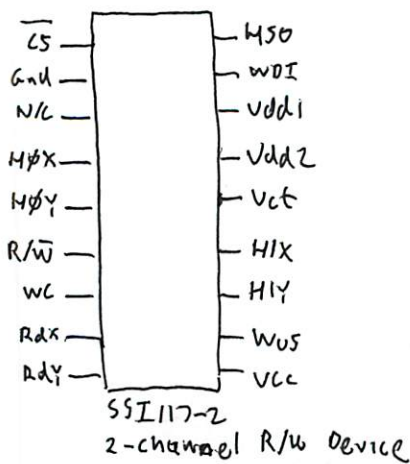
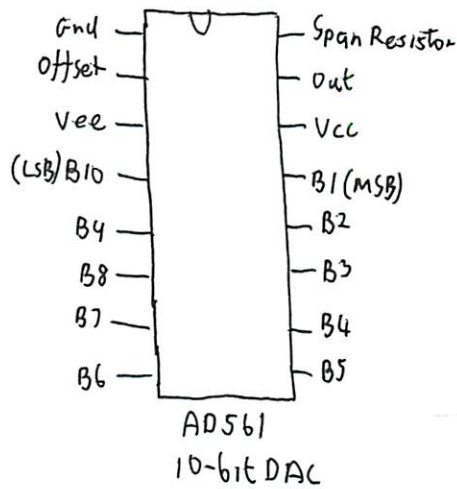
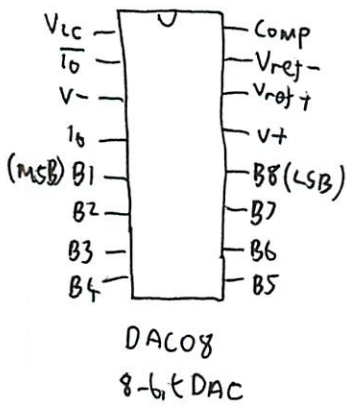
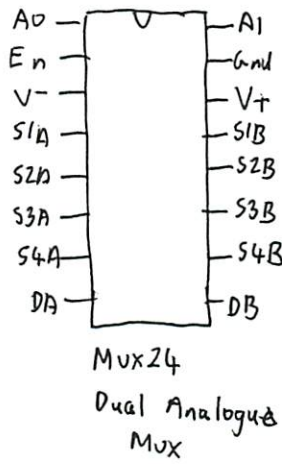
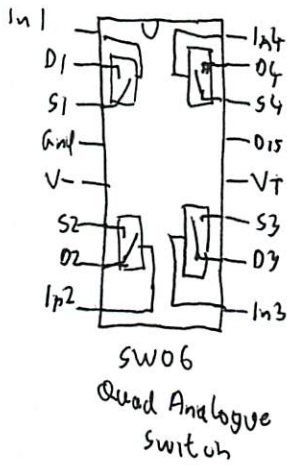
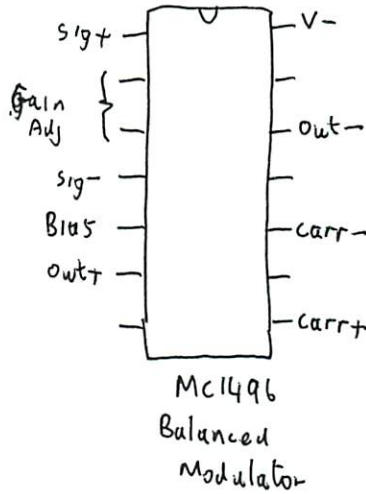
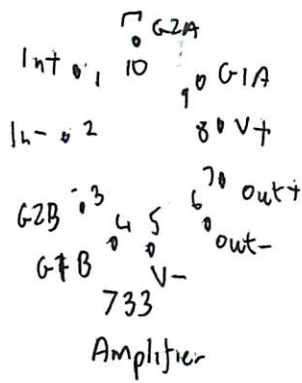
Front panel
→ Controller

0-12V
0-AGnd
0+12V
0-PVAL
X
0-Gnd
0+5V
0-Gnd
0+5V
0-Gnd

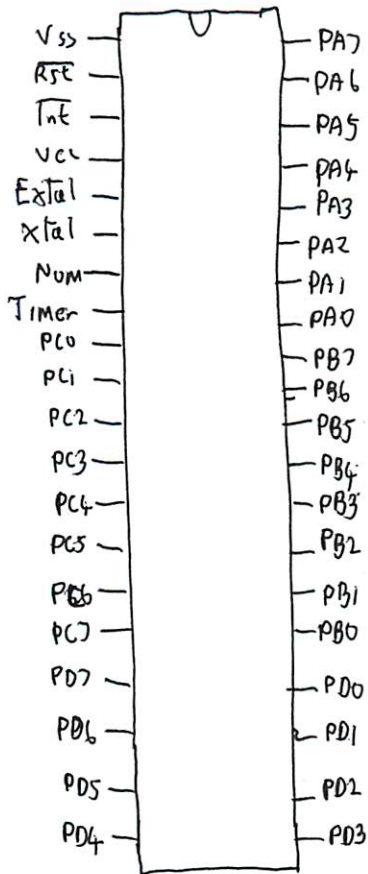
PSU → Controller

0+12UM
0N/C
X
0-GndM

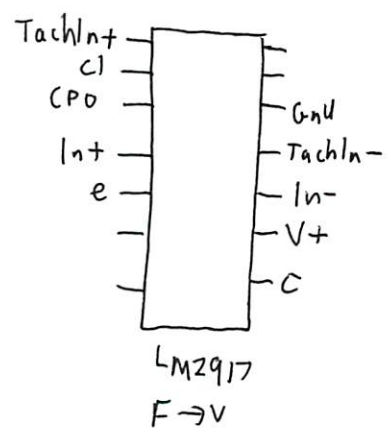
PSU Motor
supply



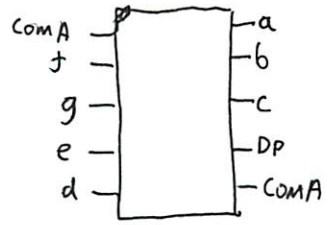
MP9144



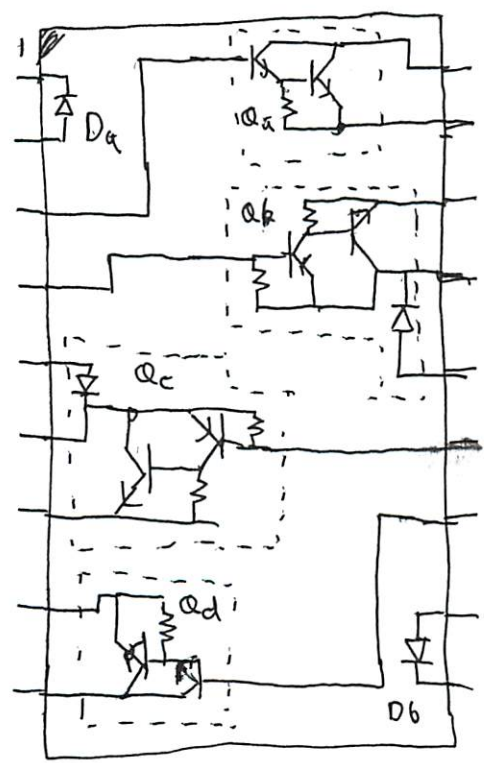
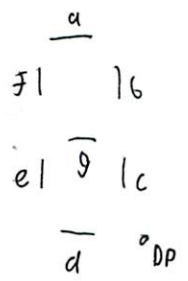
6805U3
Microcontroller



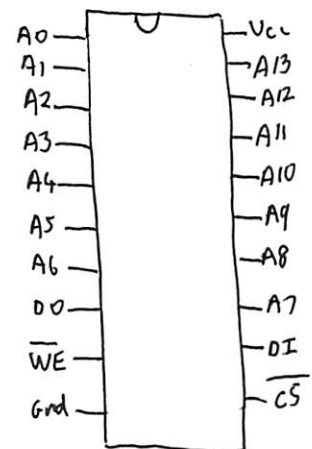
LM2917
F → V



HDSP-7301
7 Segment Display
(Common Anode)

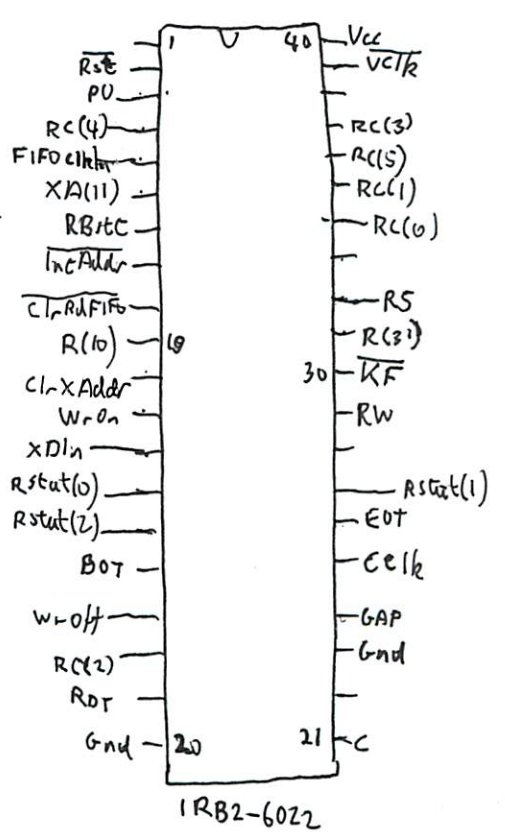
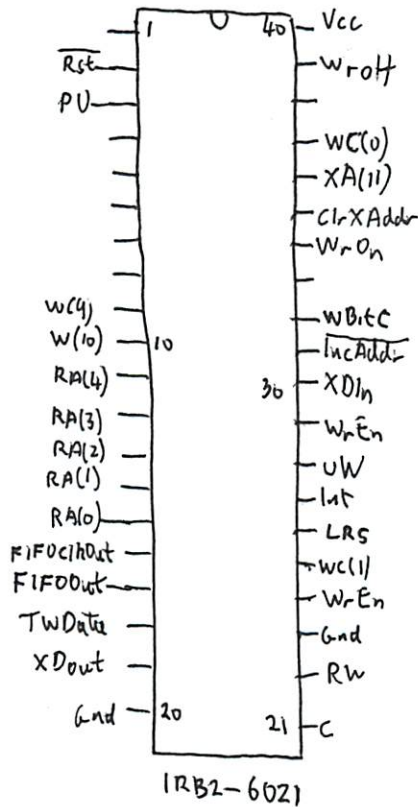
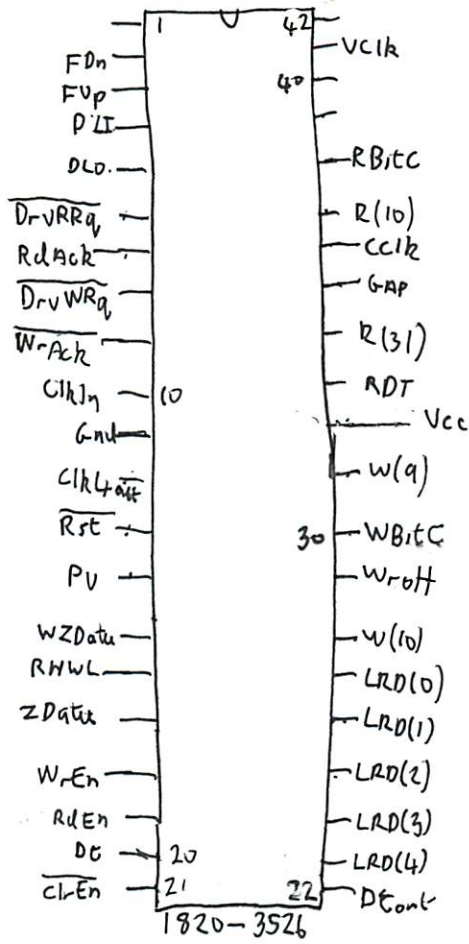
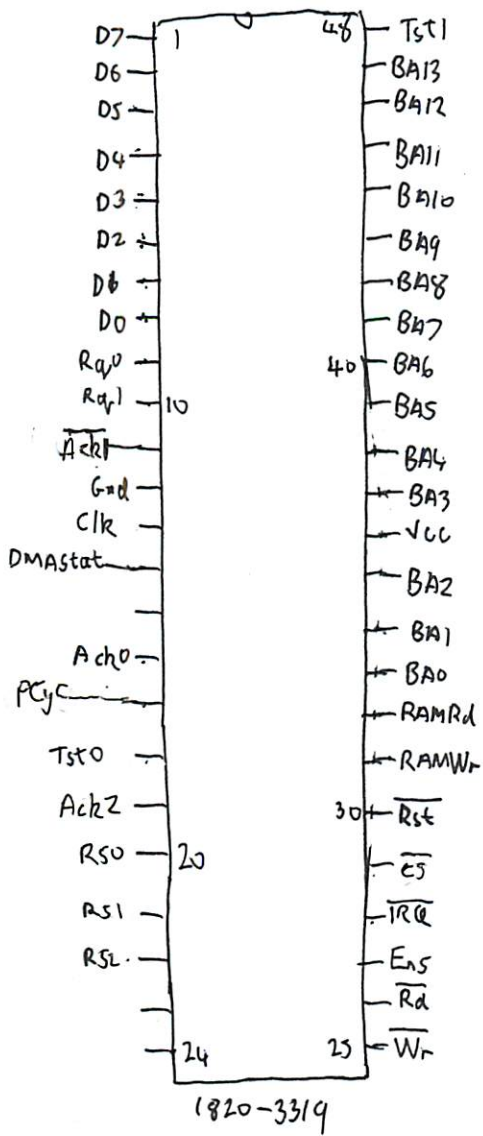


PIC900C
H-Bridge
Transistor Array



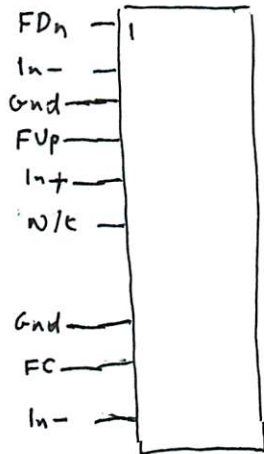
8167
16Kx1 RAM

HP9144

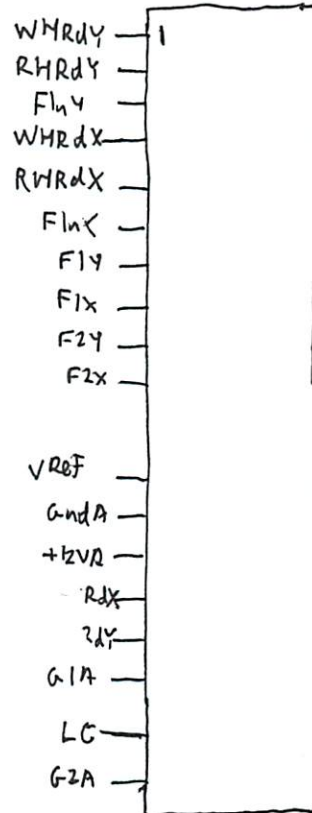


HP 9144

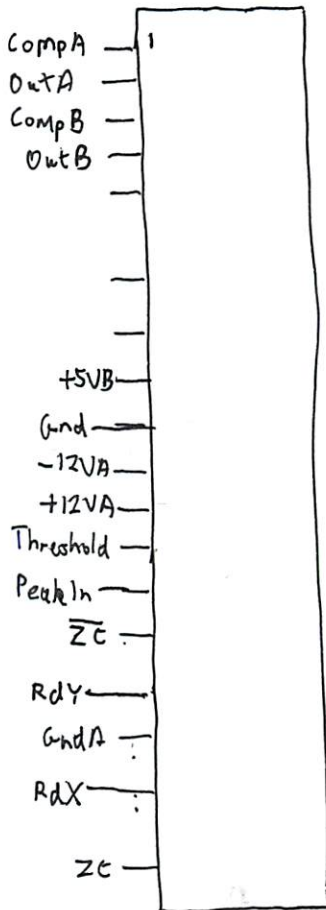
Hybrids



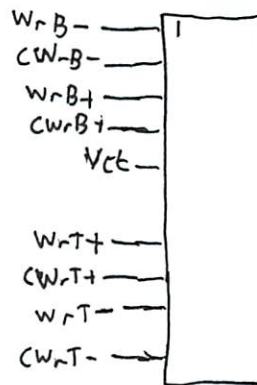
H1
09144-80101
(VCO Control)



H201
09144-80104
(Read Amplifier)



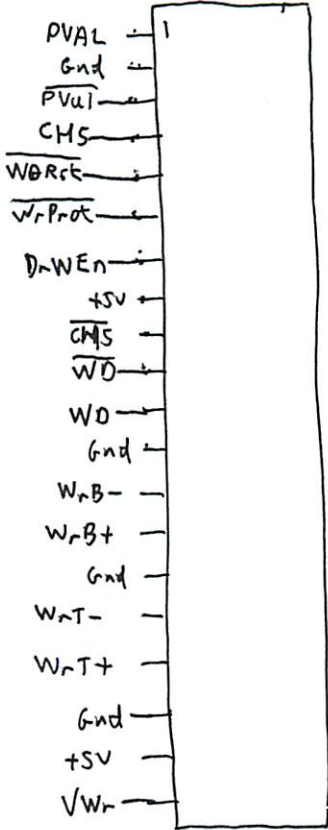
H202
09144-80102
(Read Data)



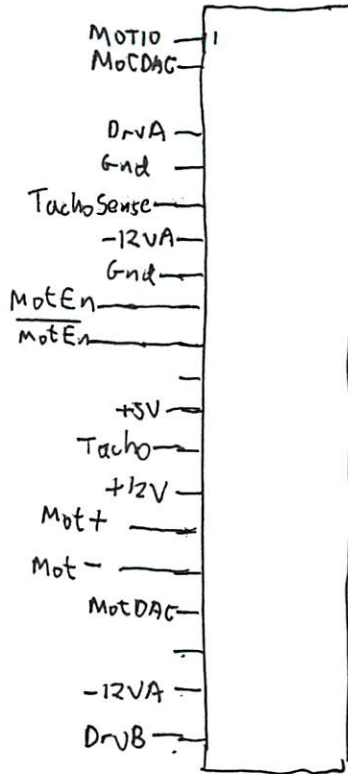
U203
09144-80105
(Head Coupling)

HP9144

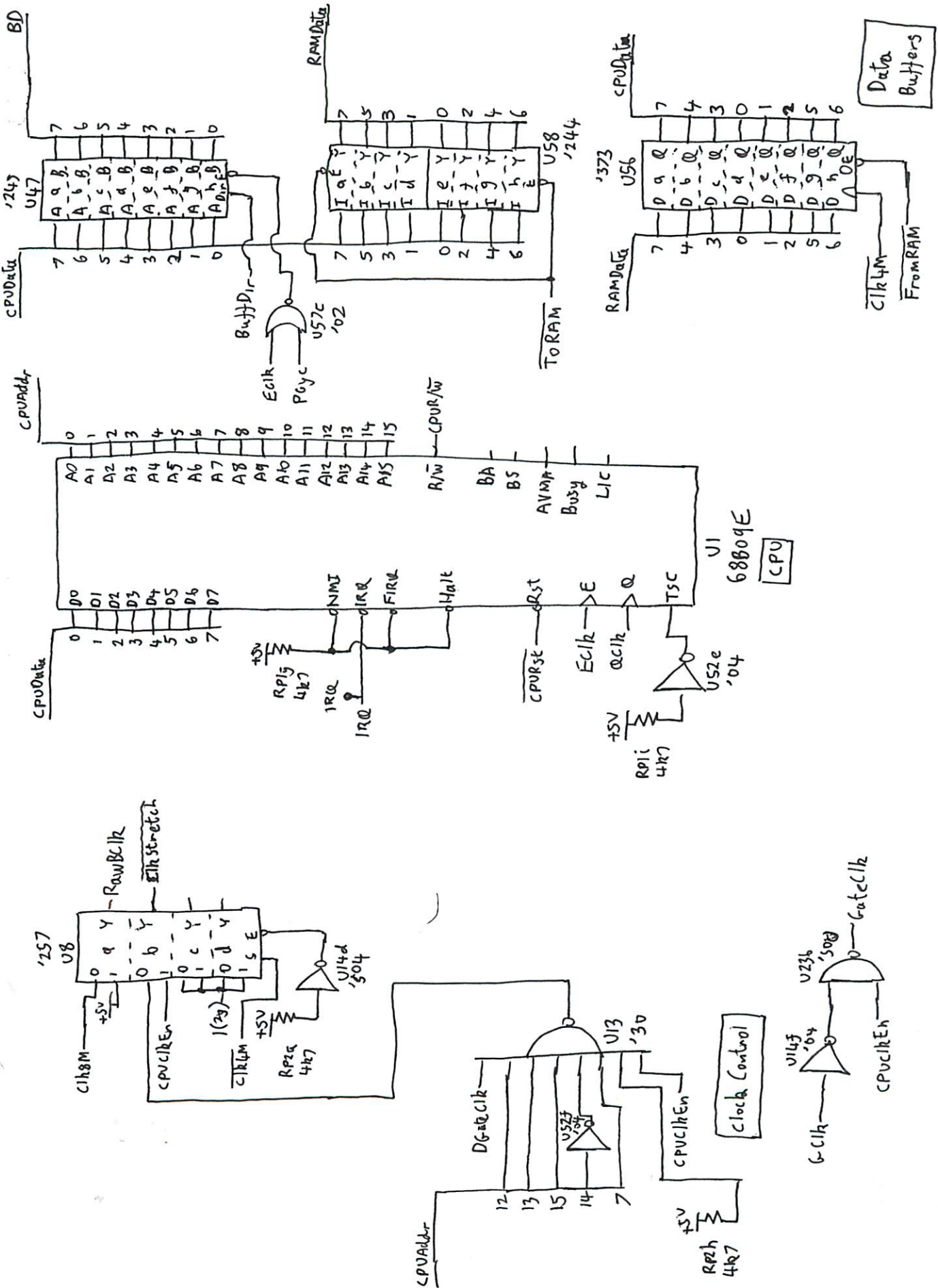
Hybrids

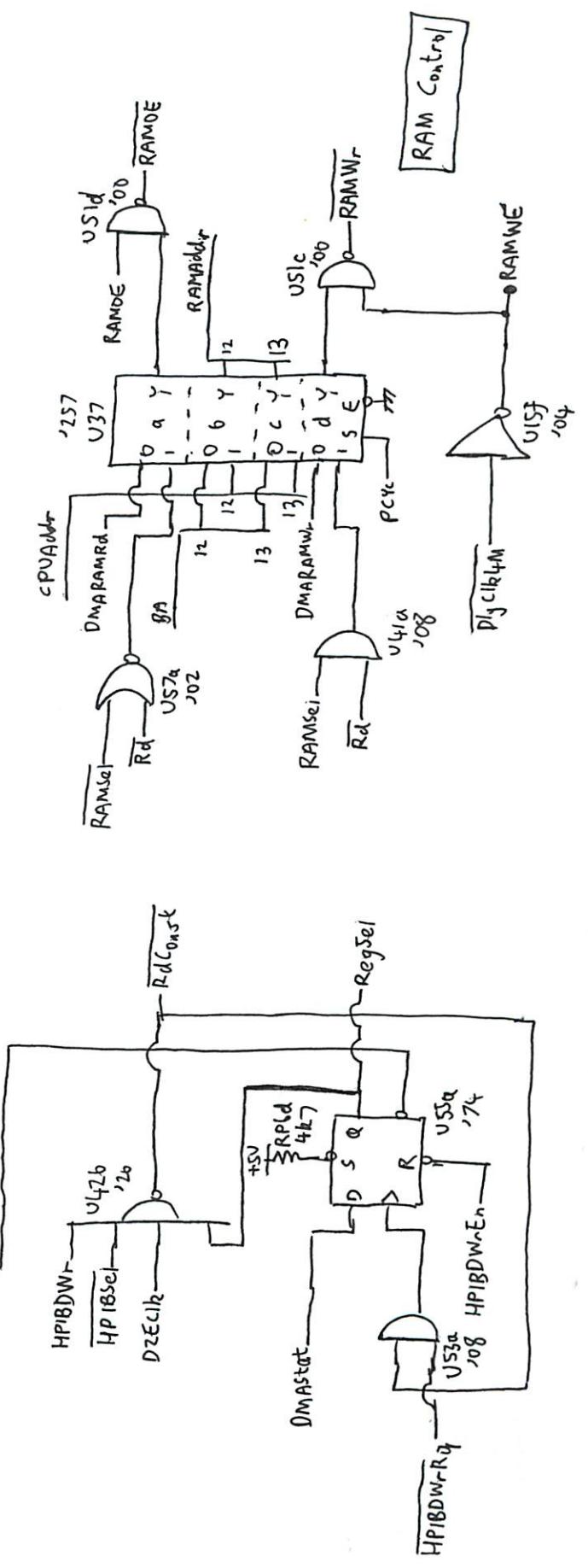
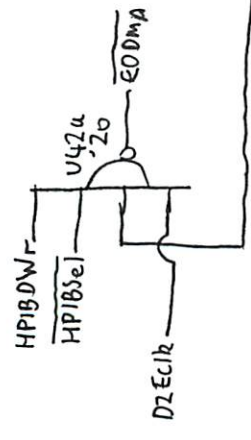
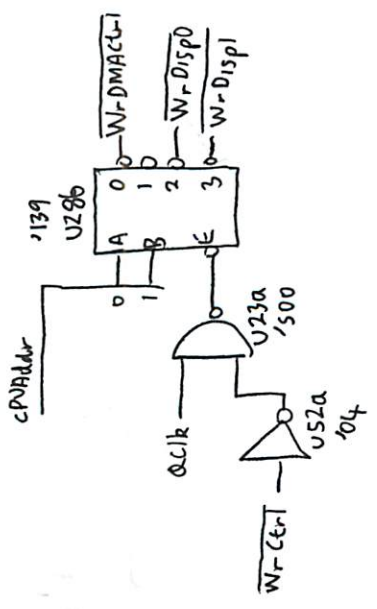
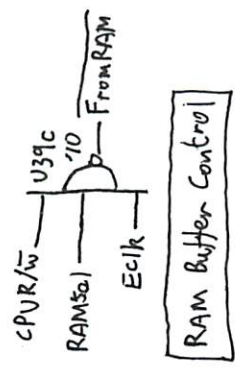
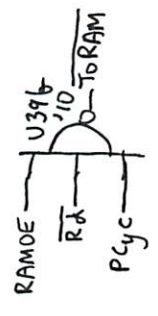
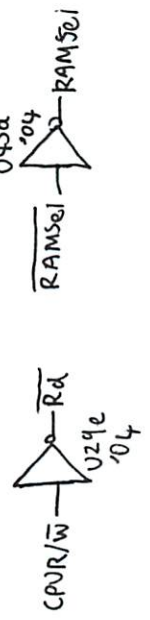
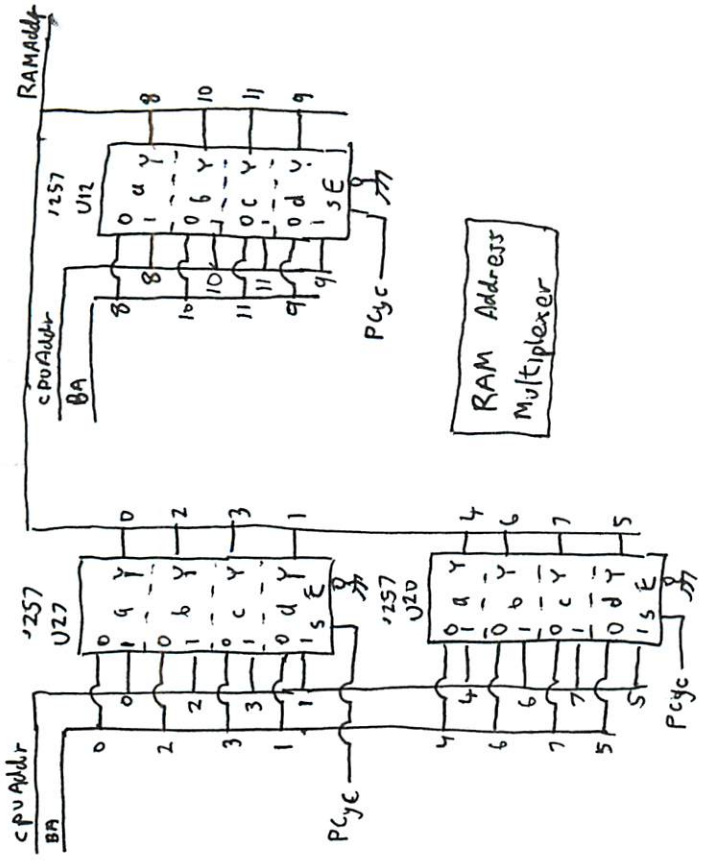


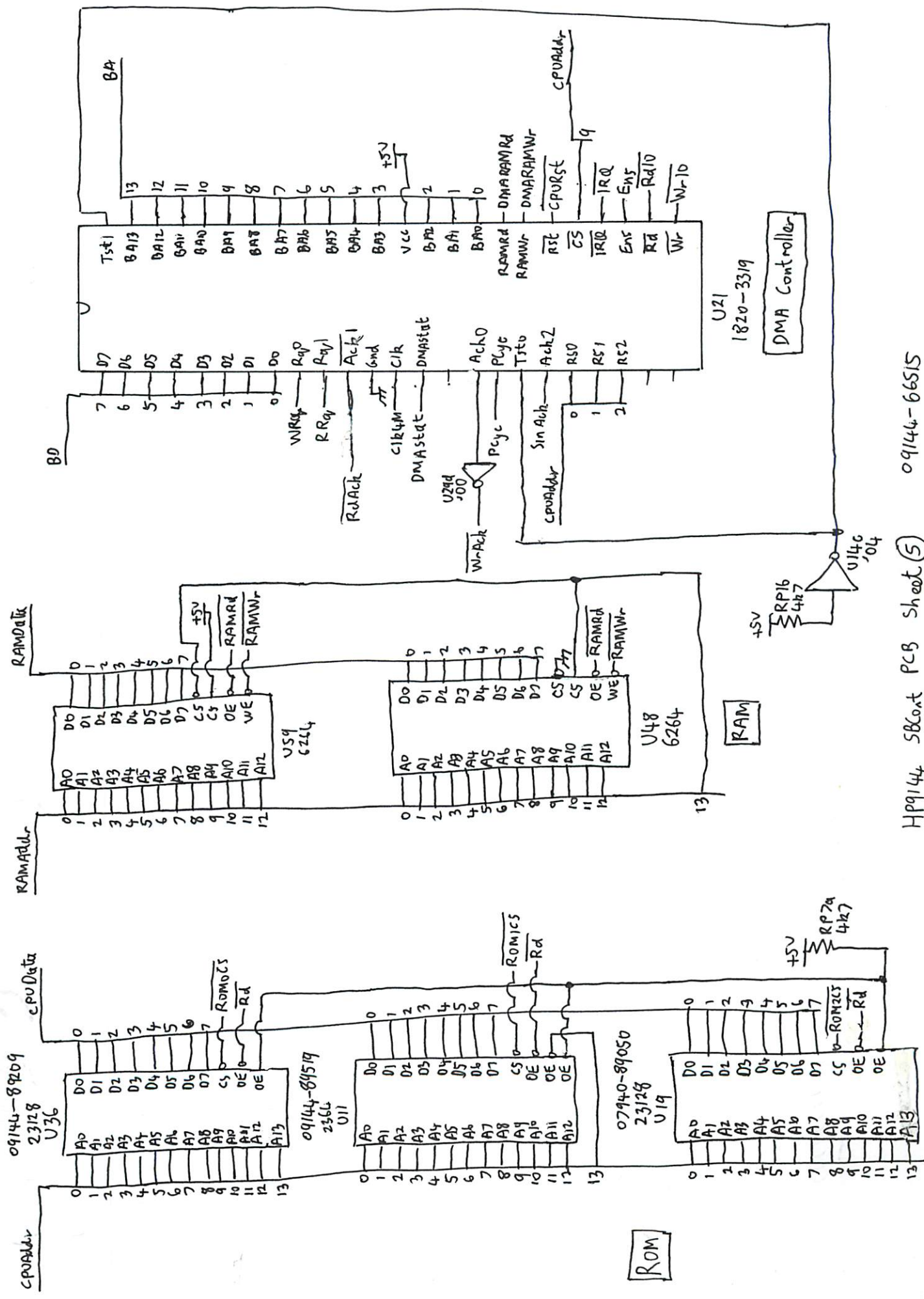
M204
09144-80103
(Write Driver)

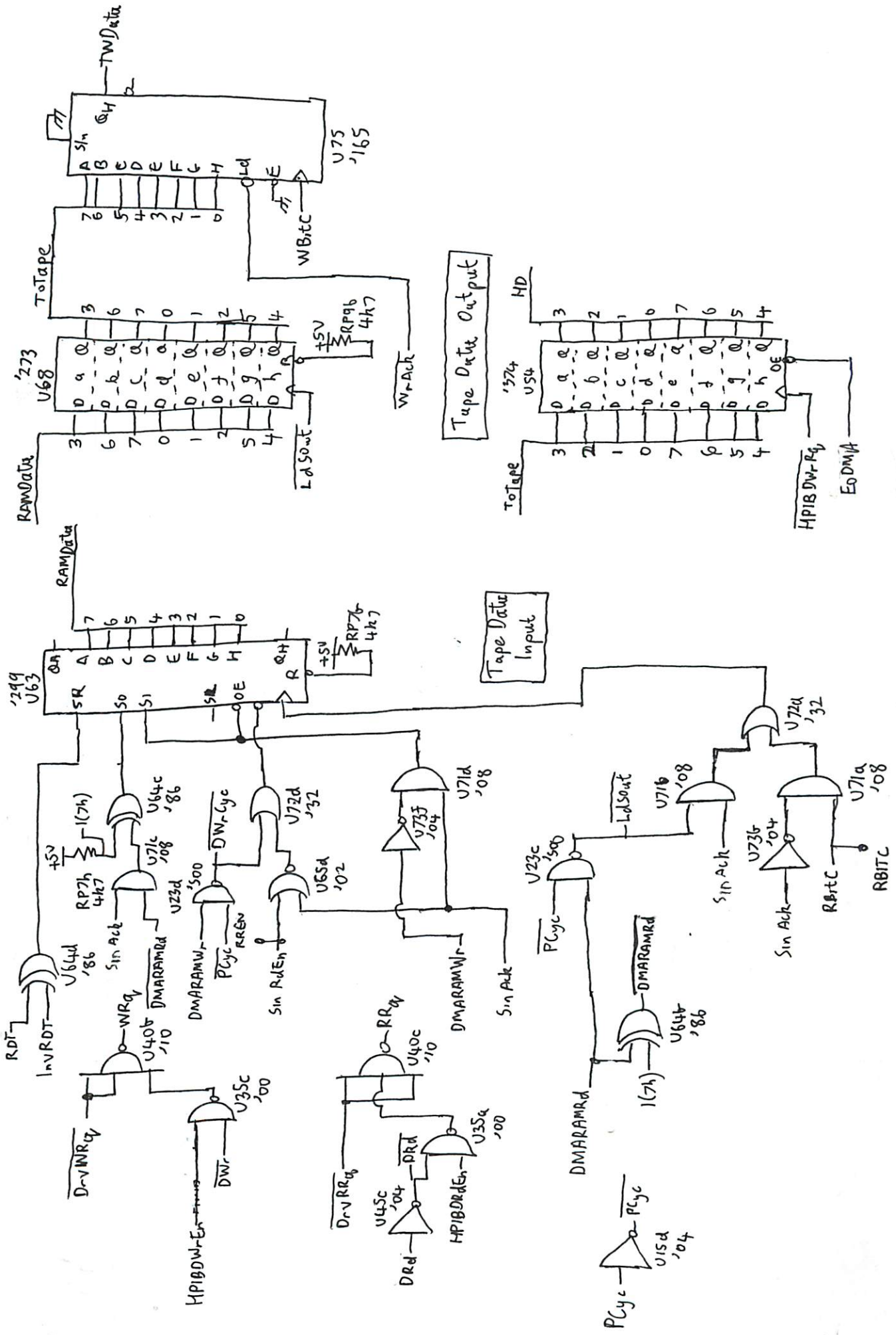


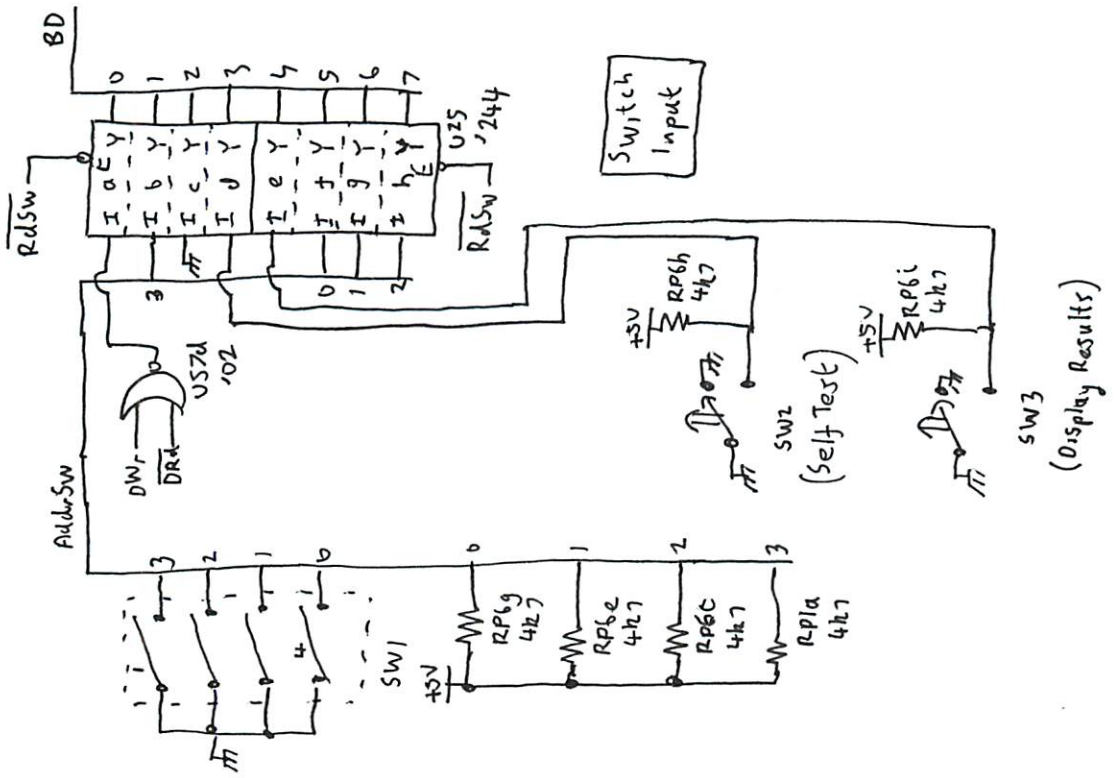
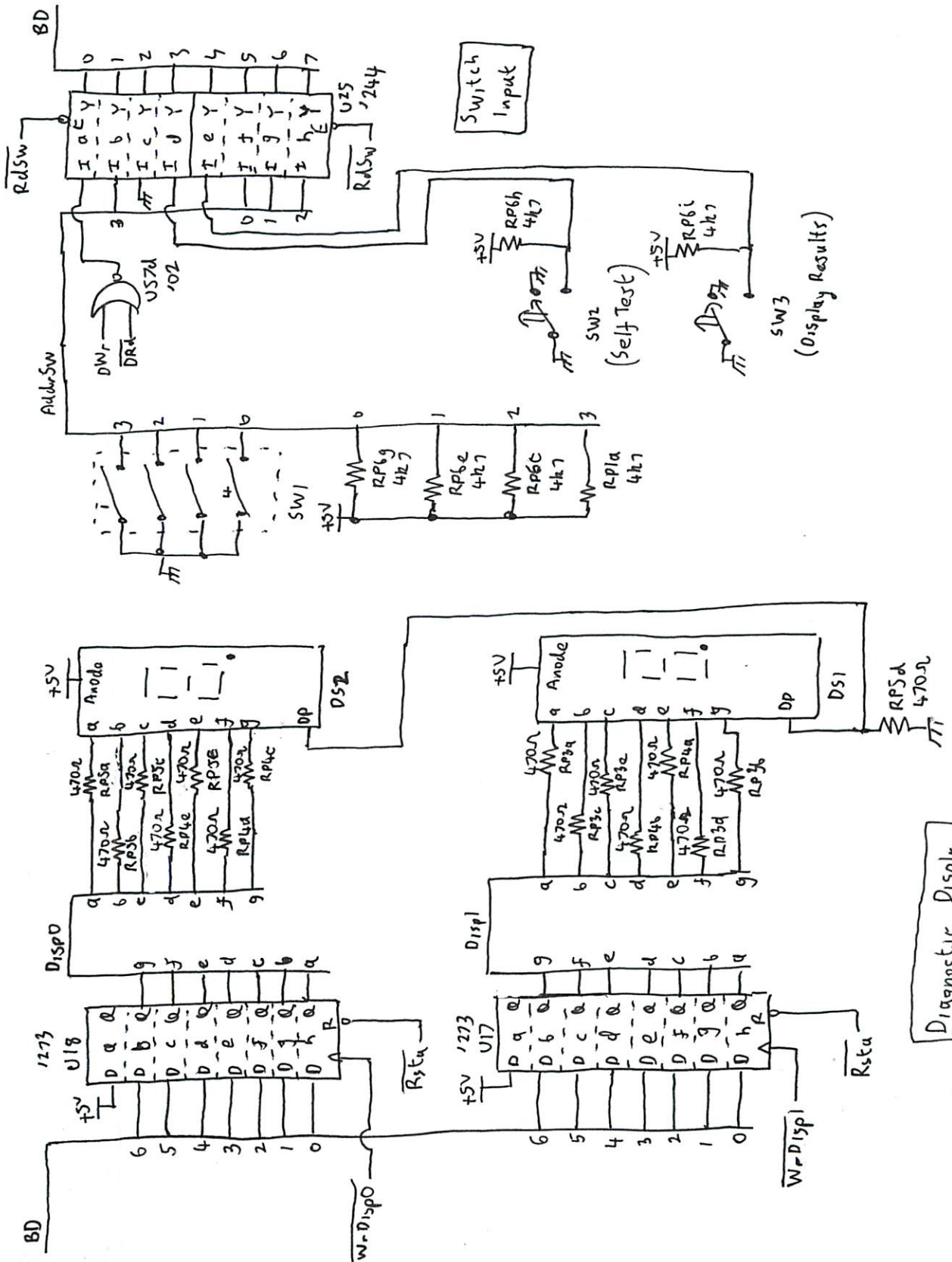
M301
09144-80100



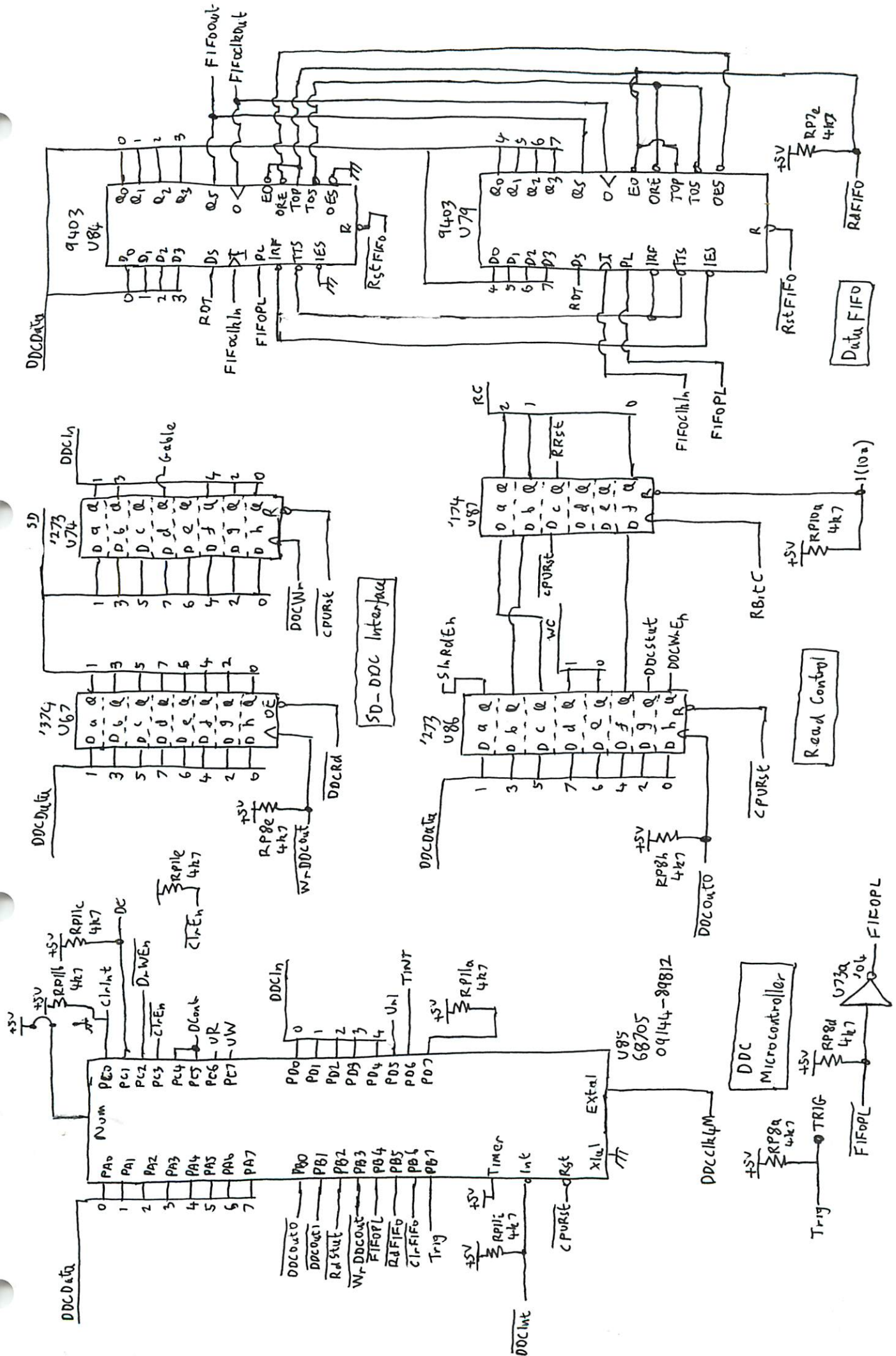


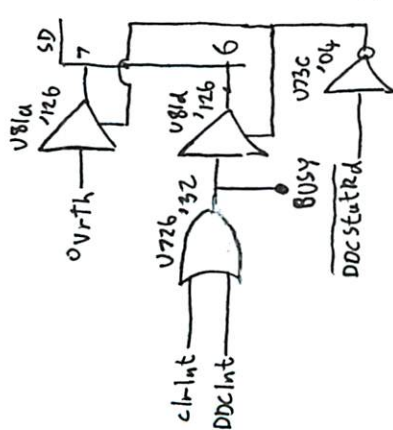
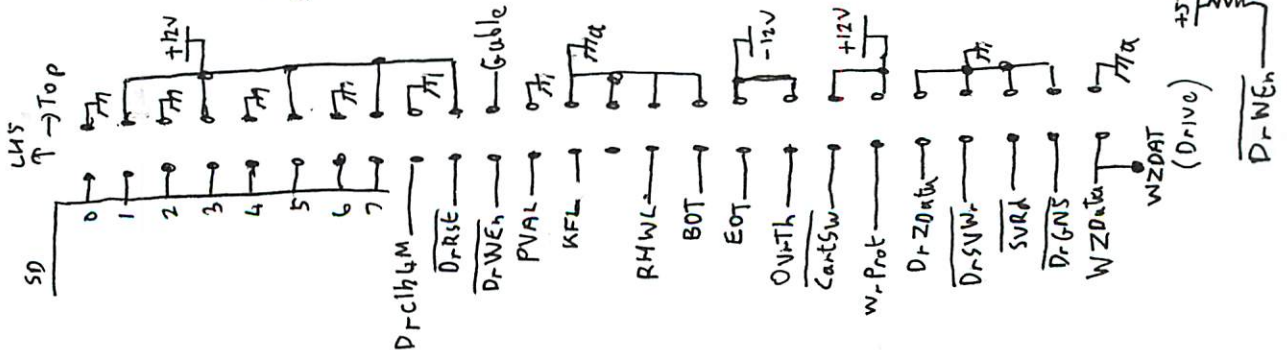




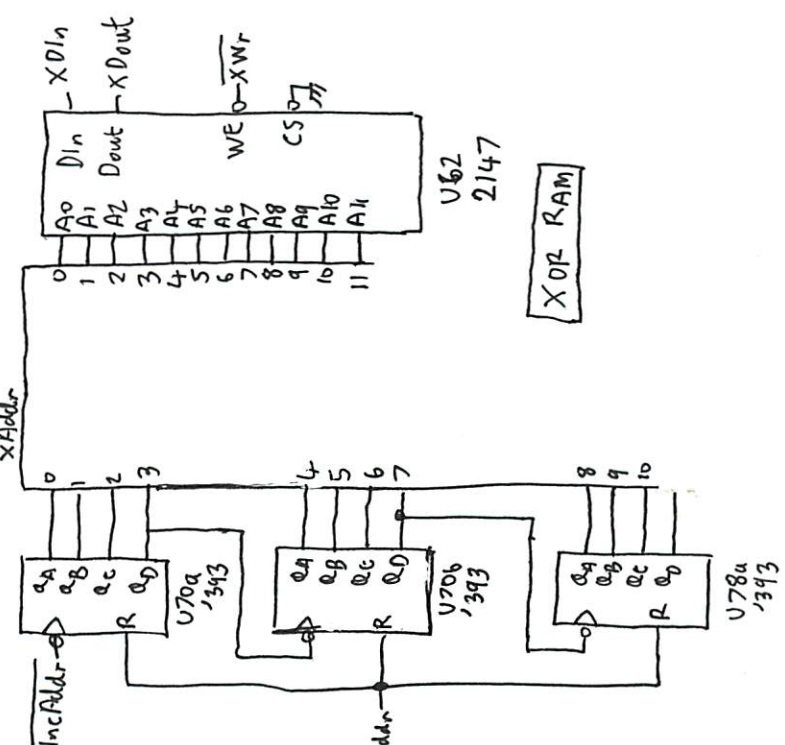
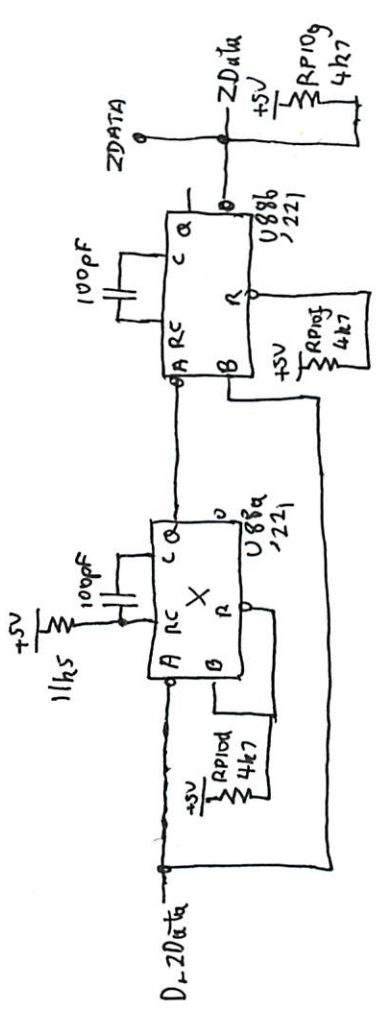
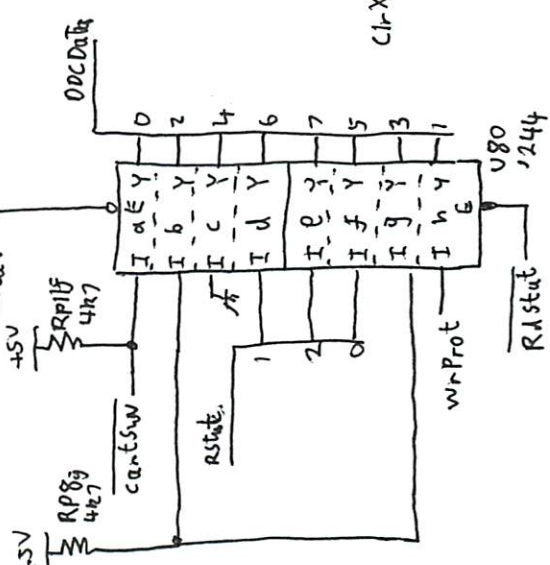


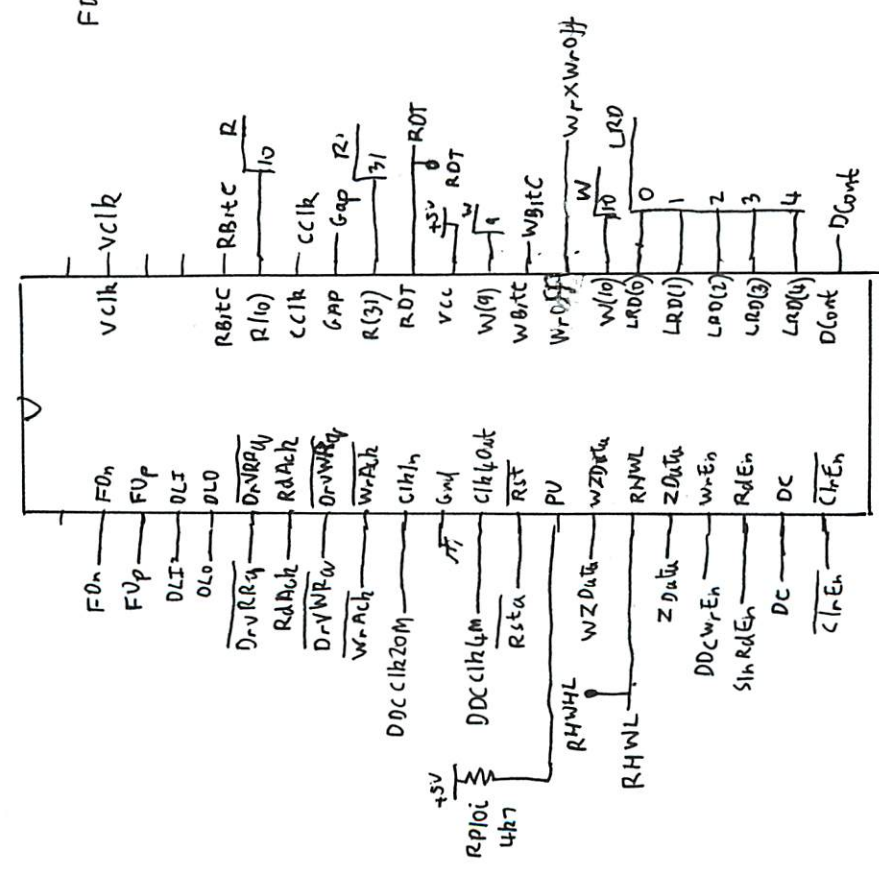
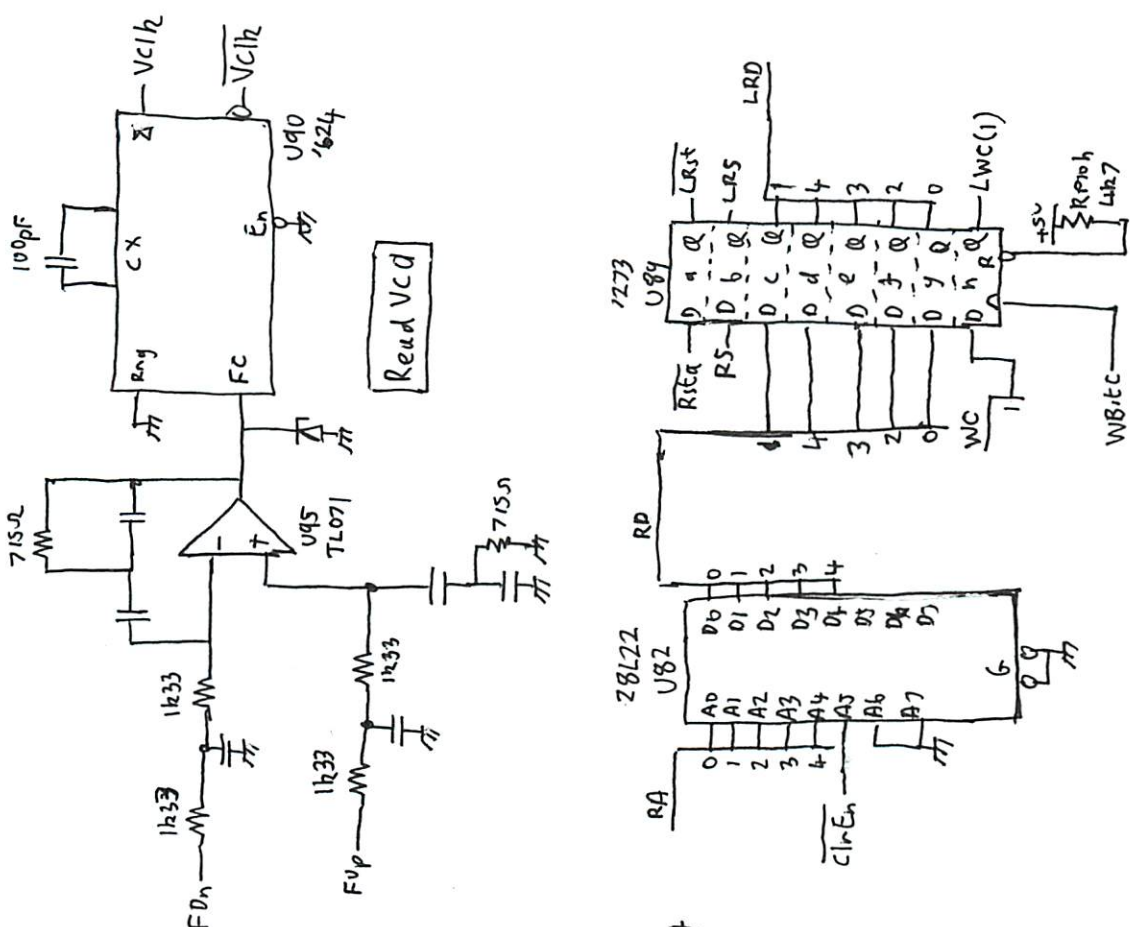
Diagnostic Display





Read Data

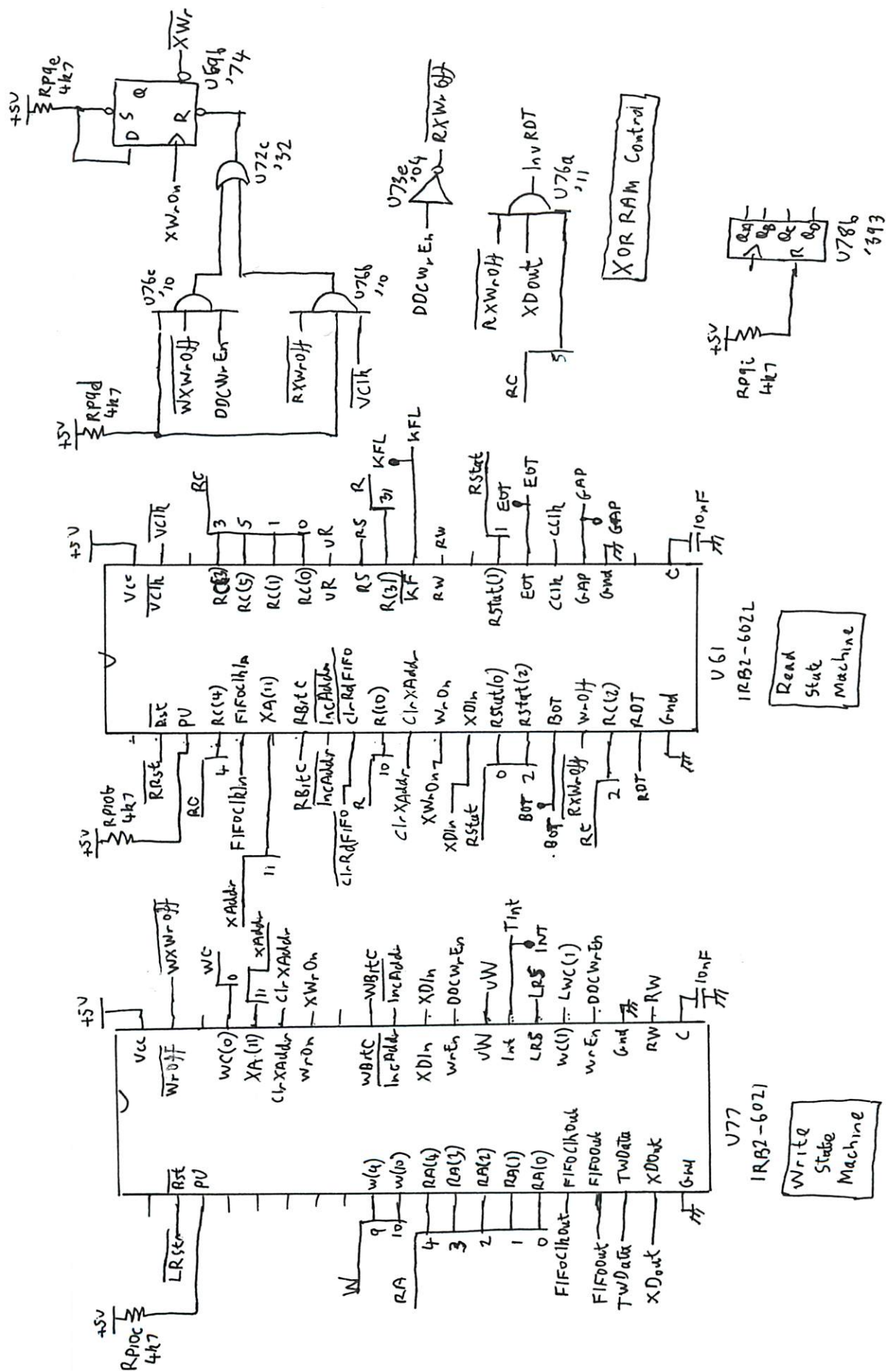


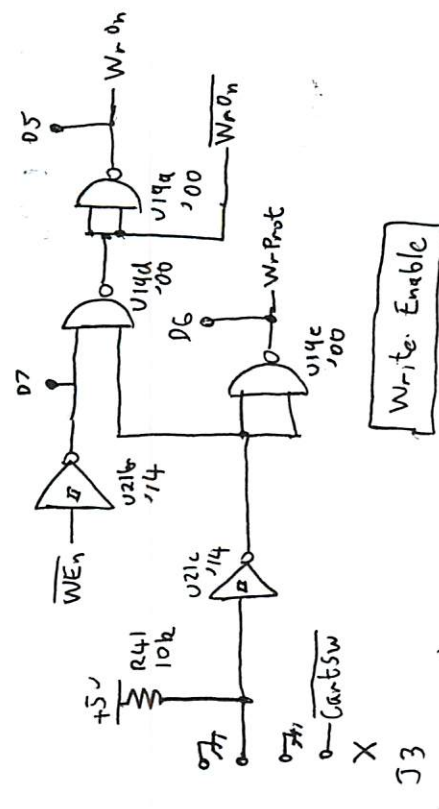
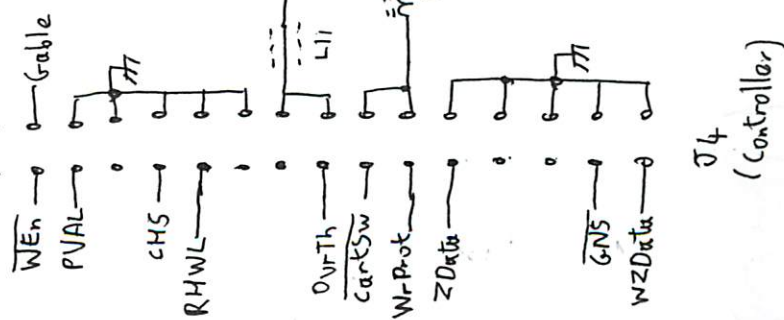
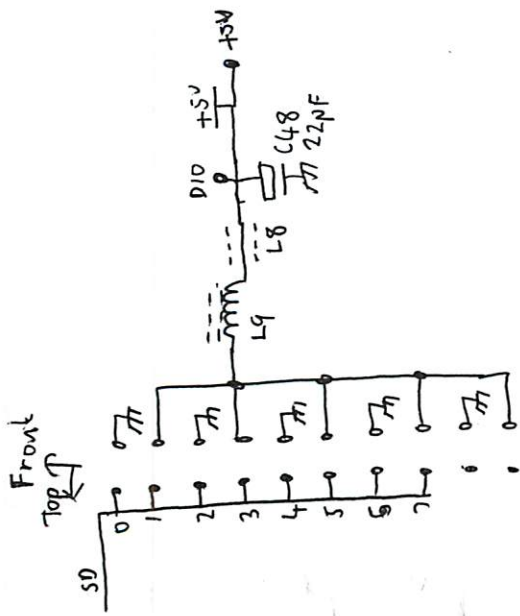


1820-3526

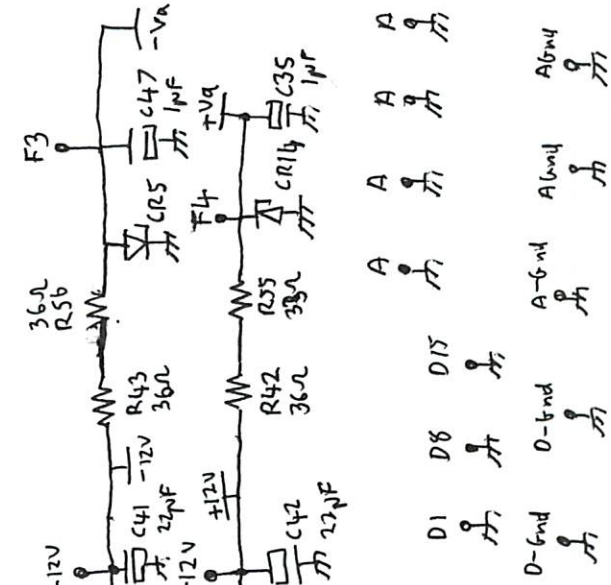
WBitC → WBITC

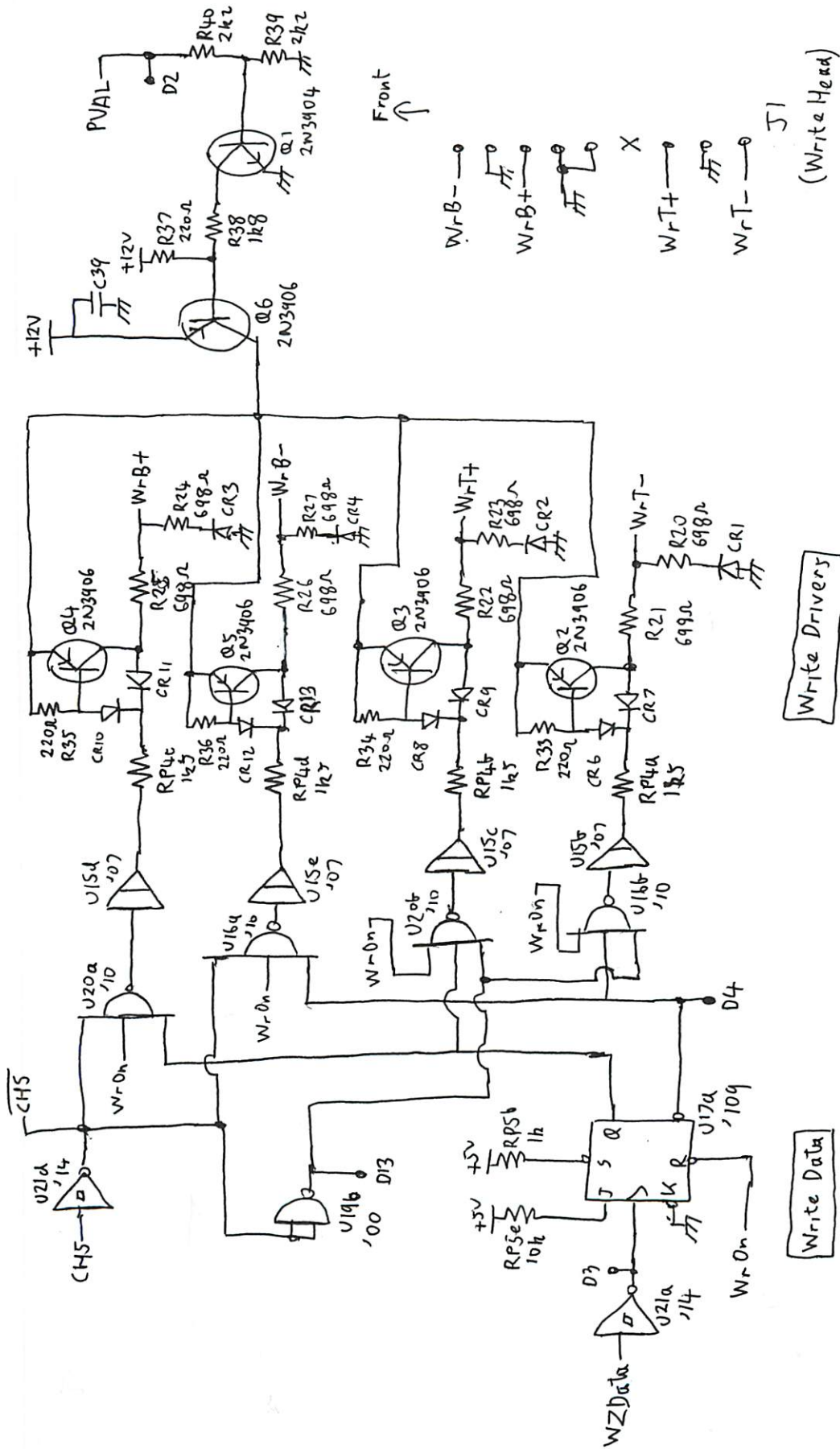
Drive Data Control





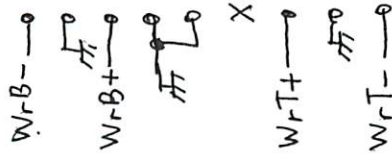
Write Enable
J3 (Microswitch)



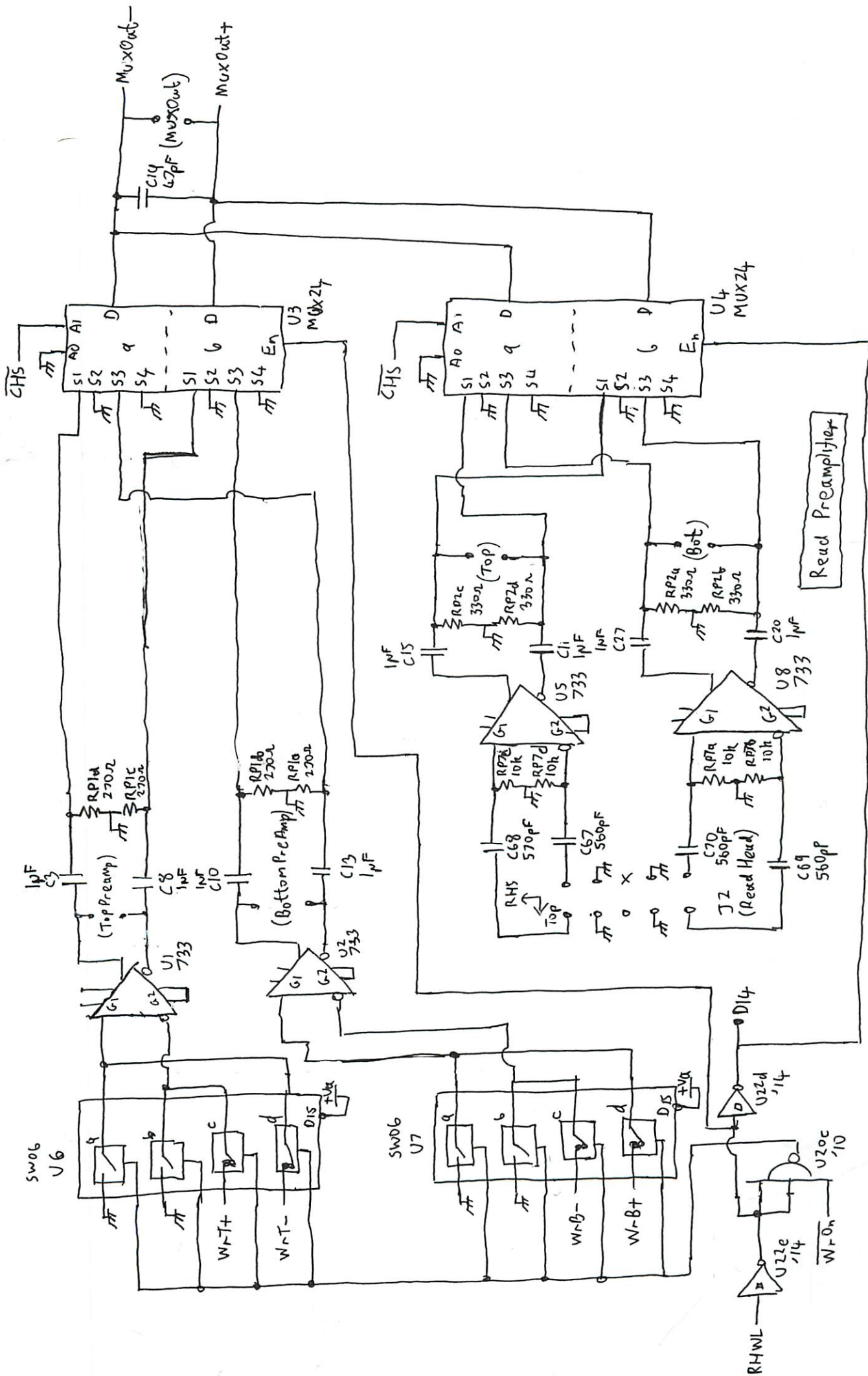


Write Drivers

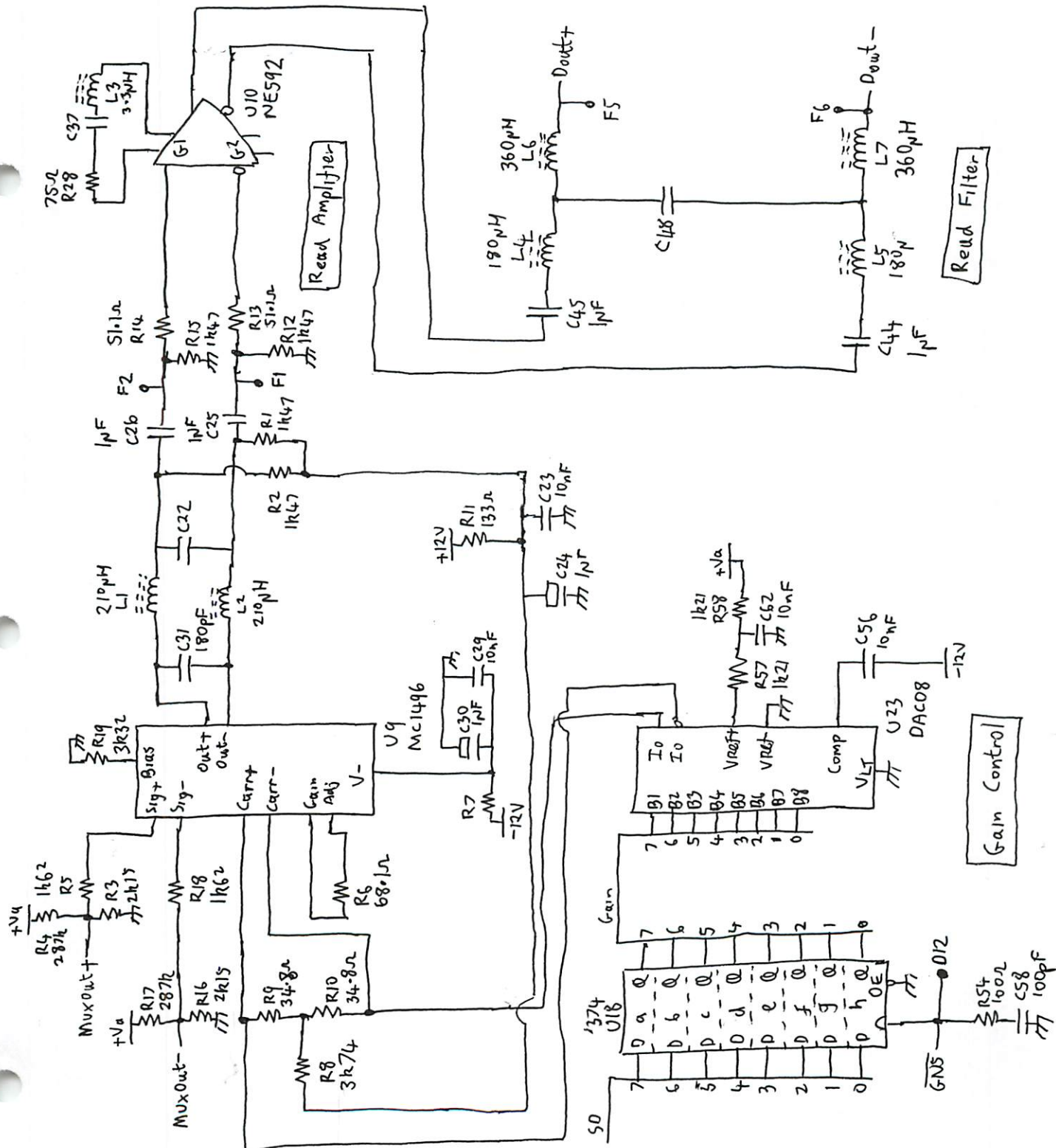
Write Data

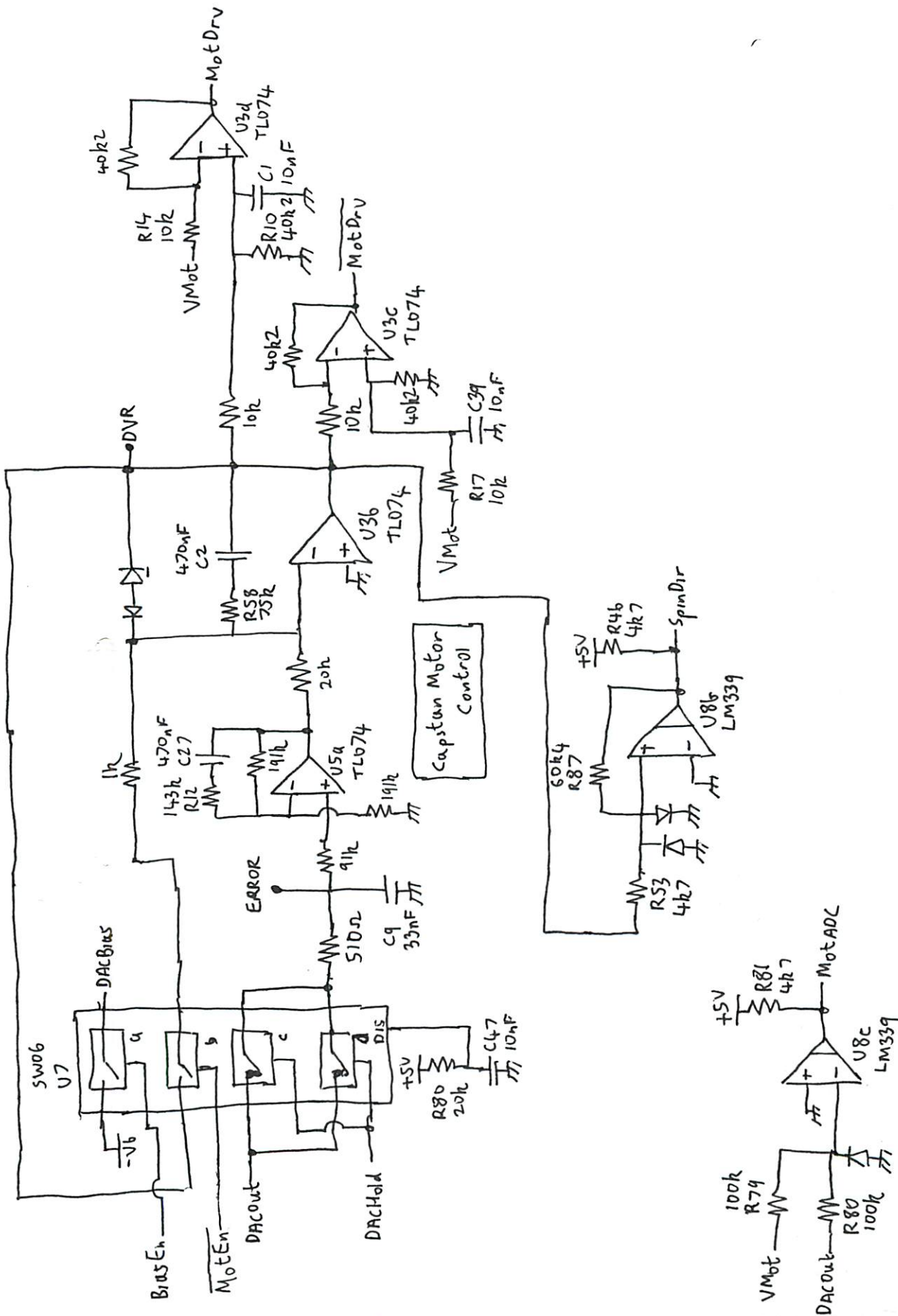


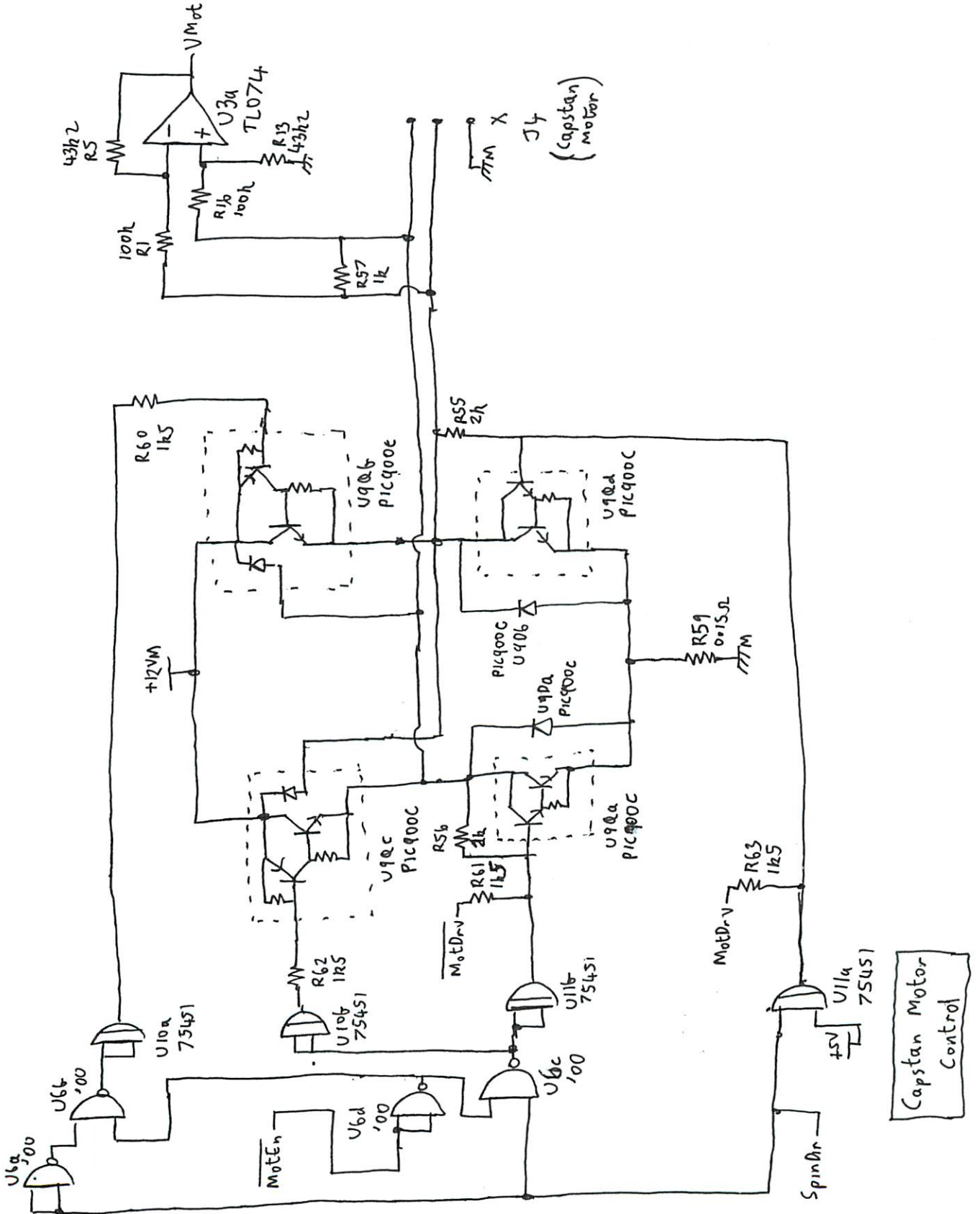
(Write Head)



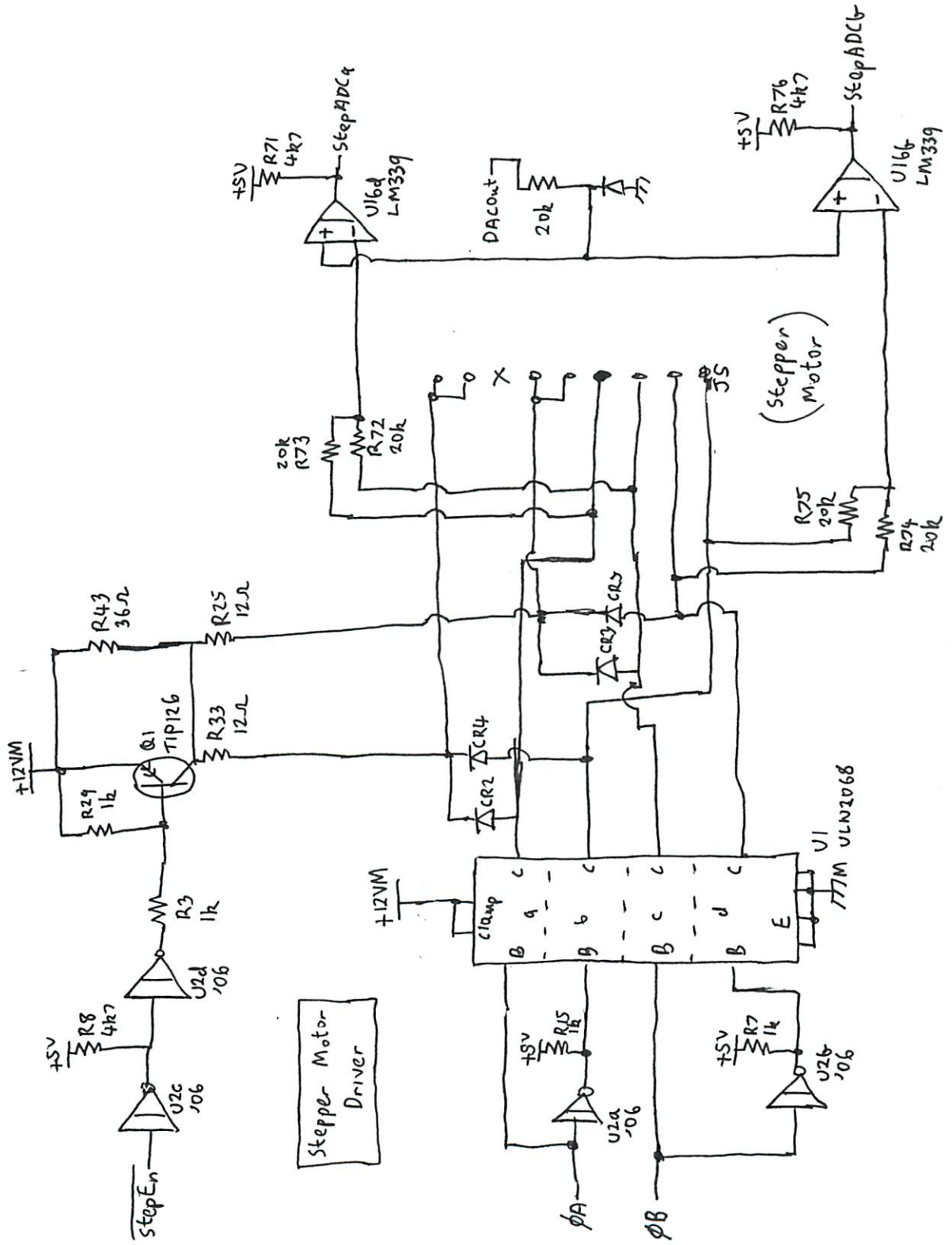
HP9144 Read/Write PCB sheet 3 09144-66513

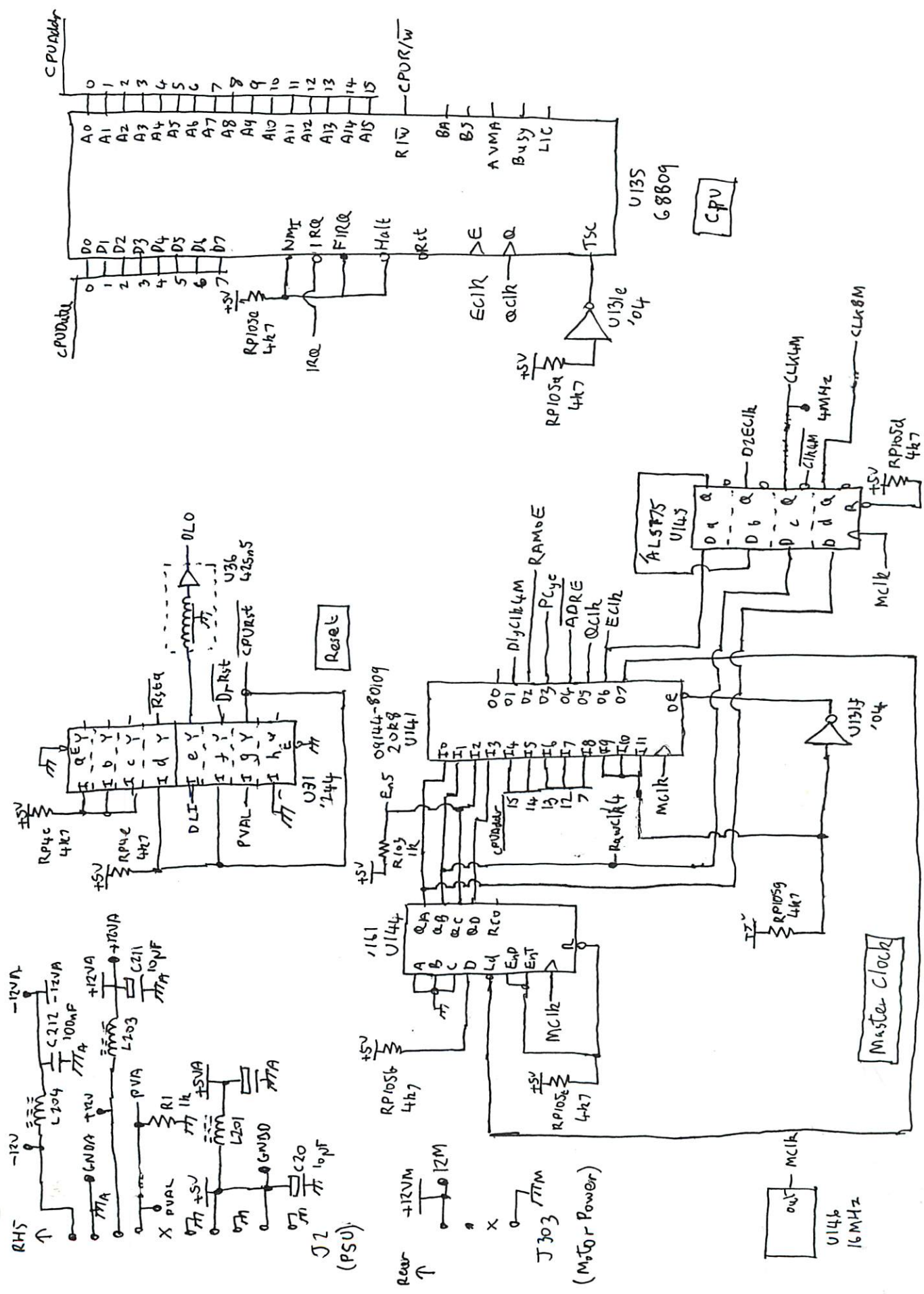






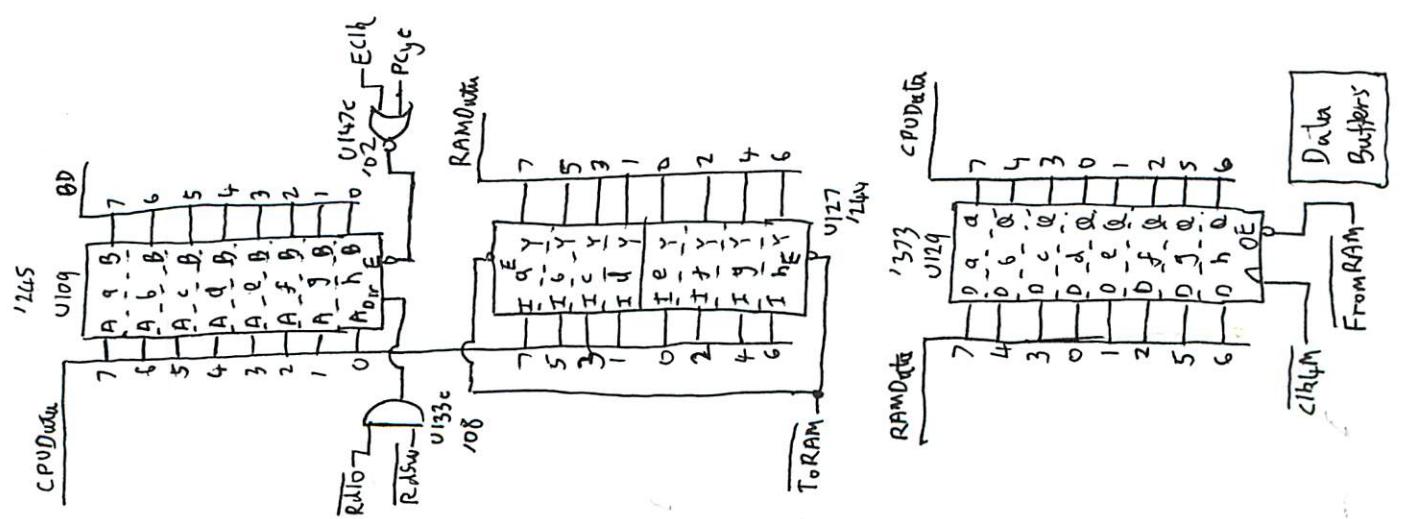
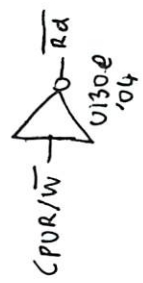
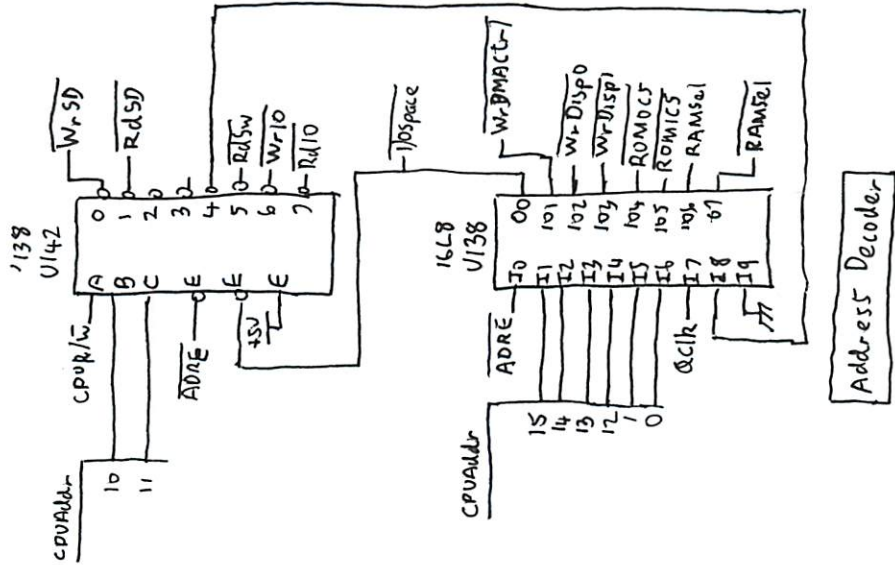
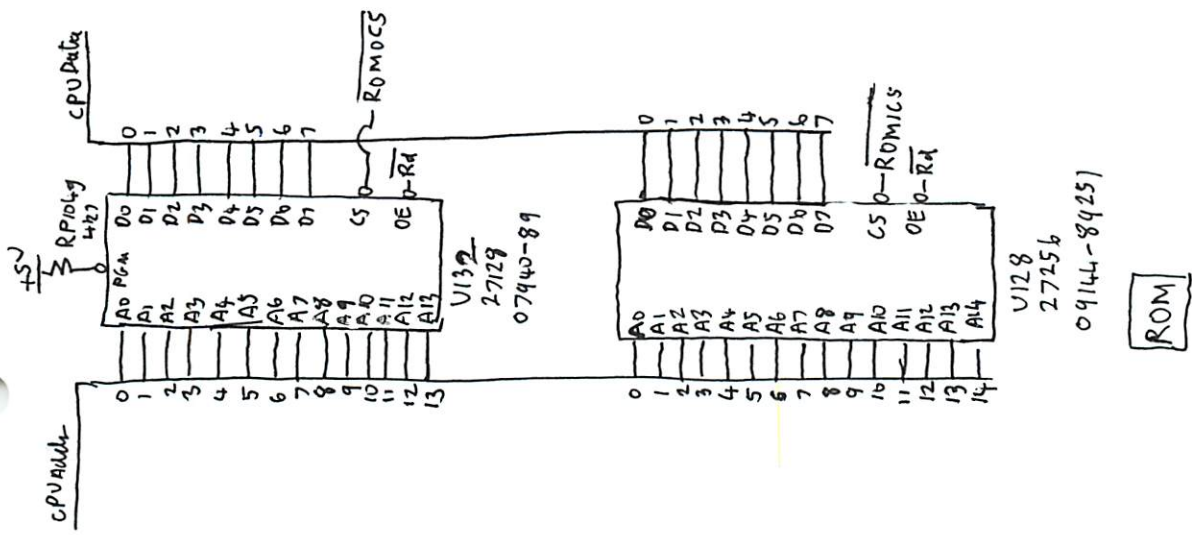
Capstan Motor Control

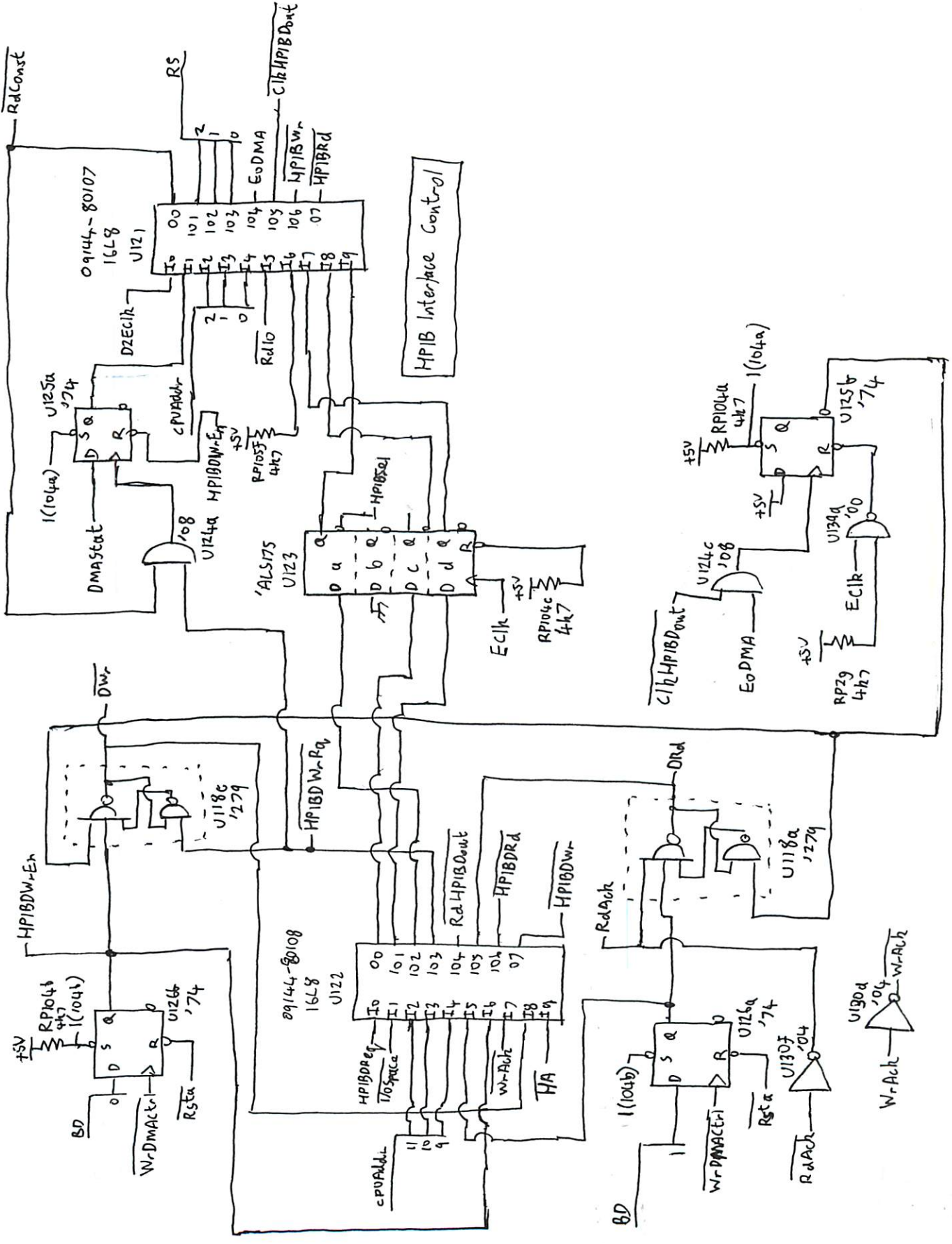


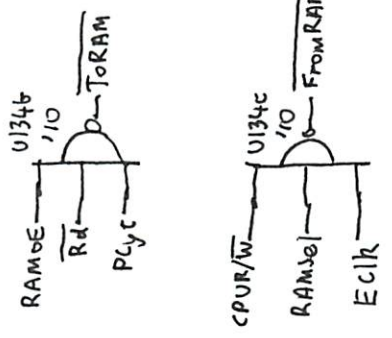
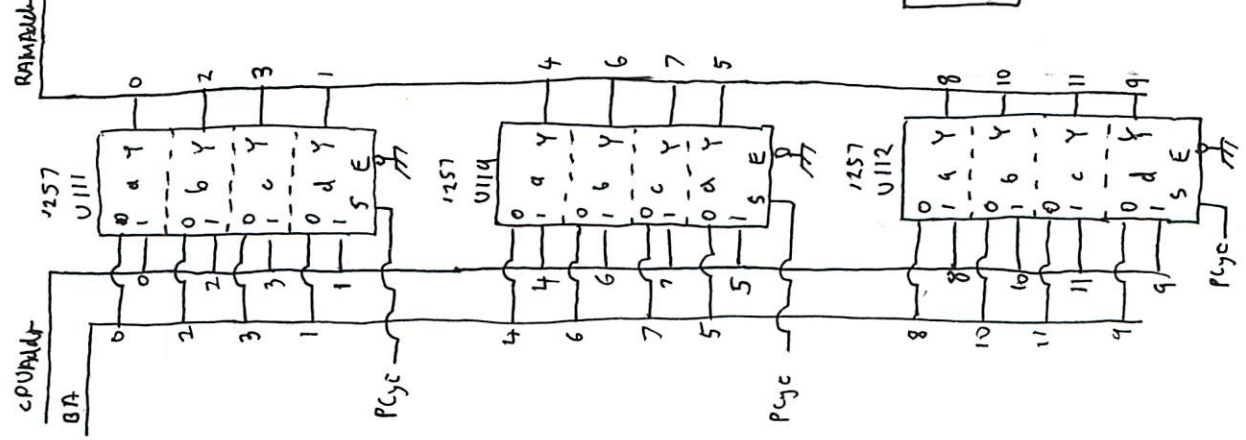
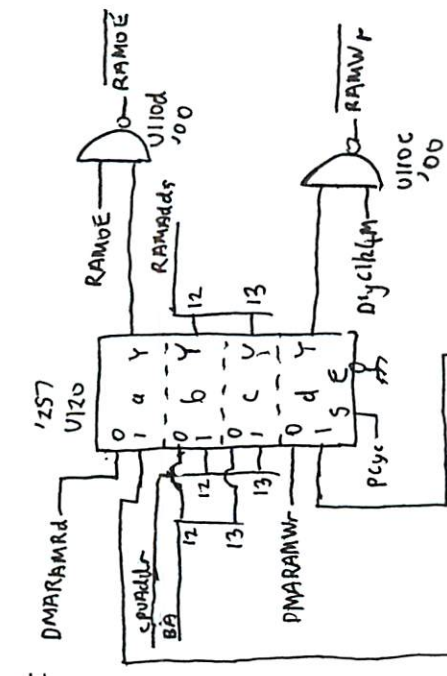
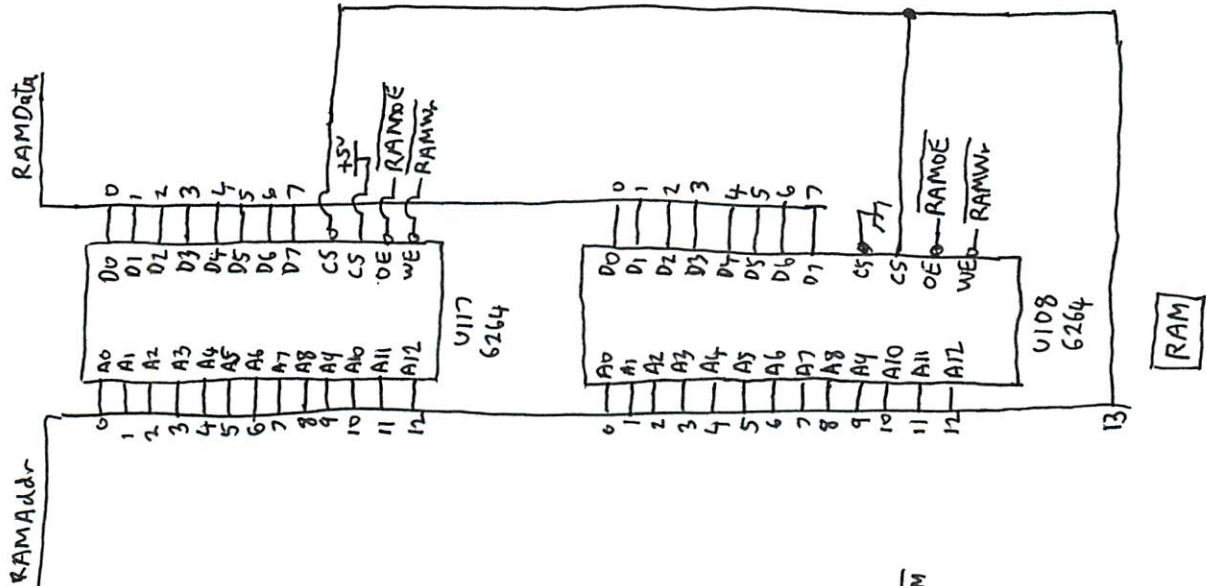


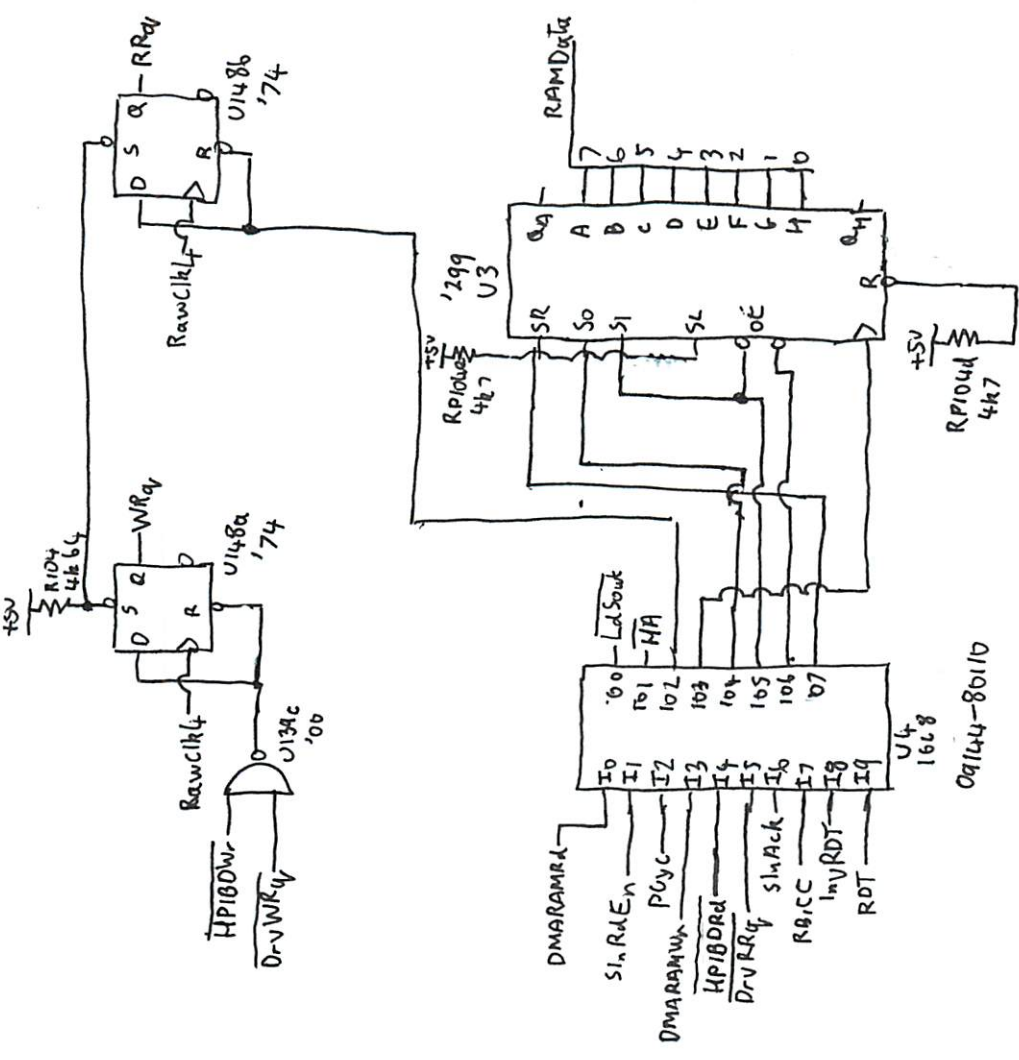
09144-66519

HP9144 Logic PCB Sheet ①

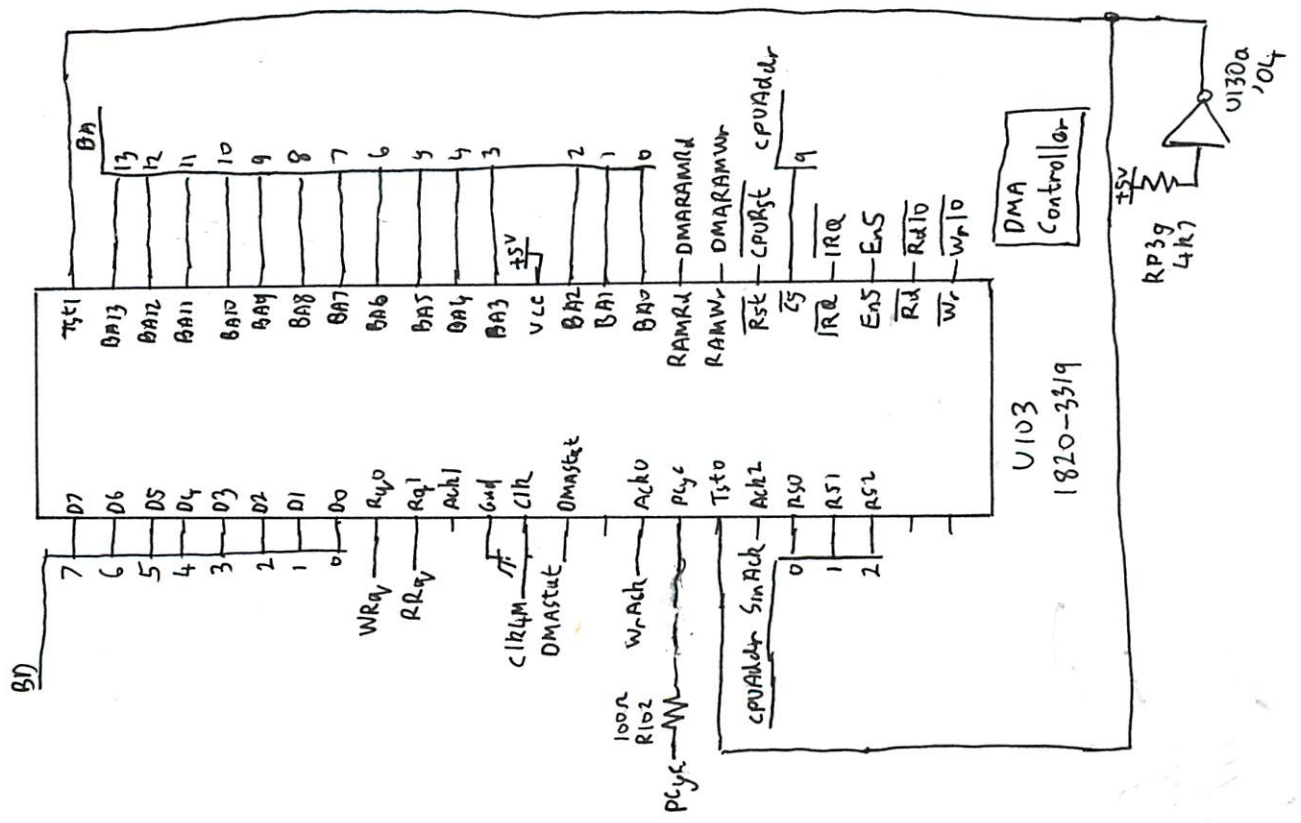


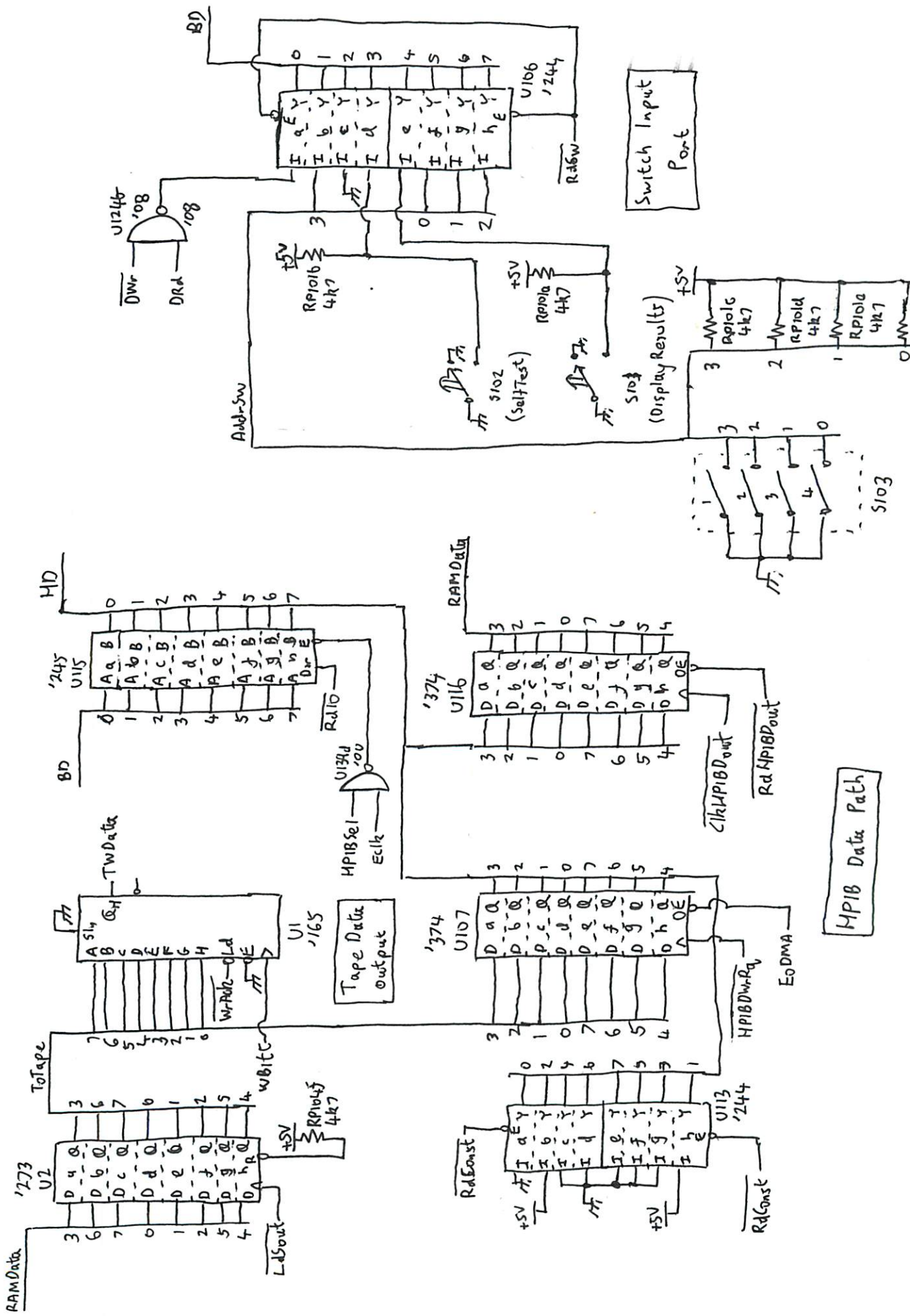




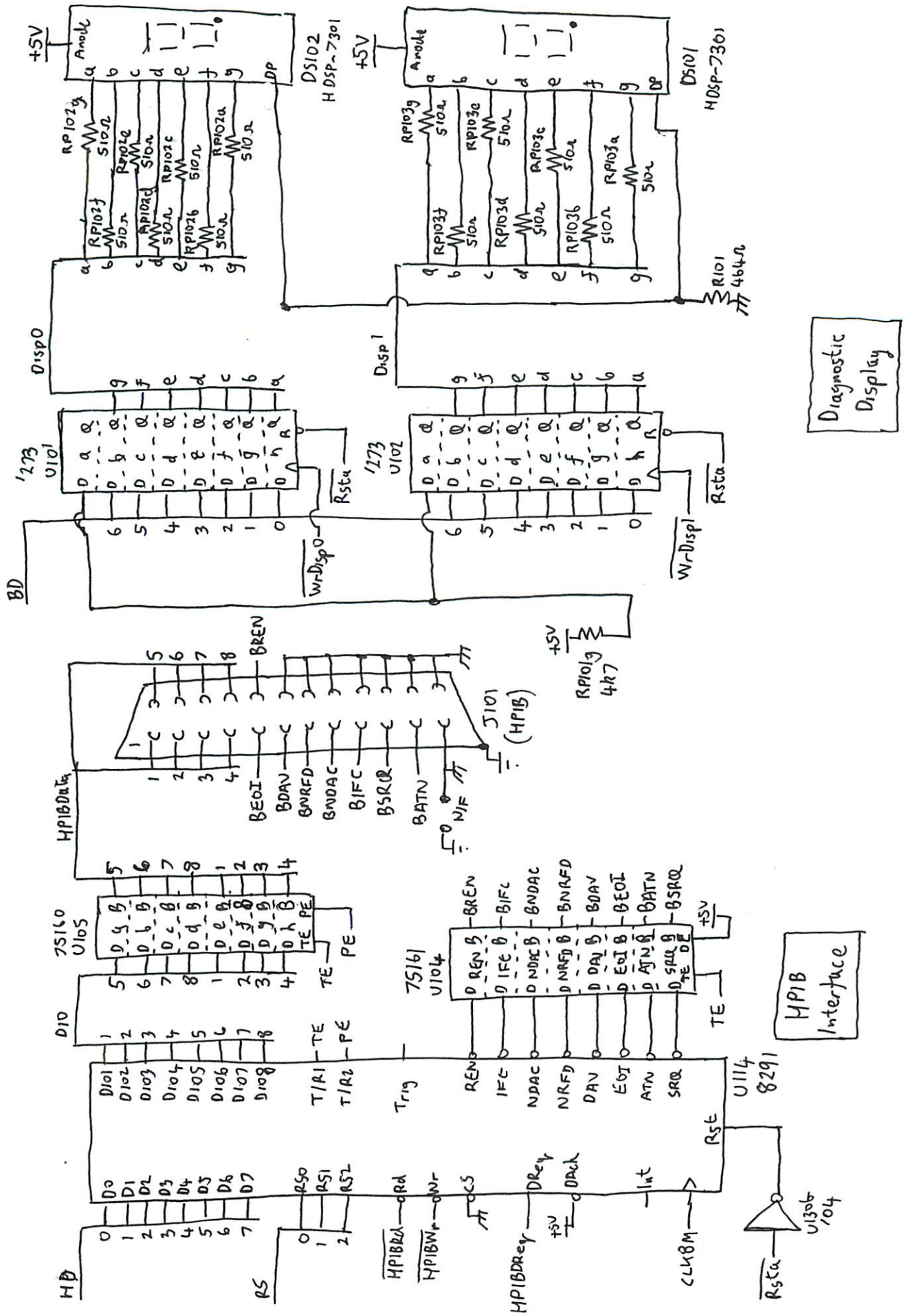


Tape Data
Input





HPiB Data Path

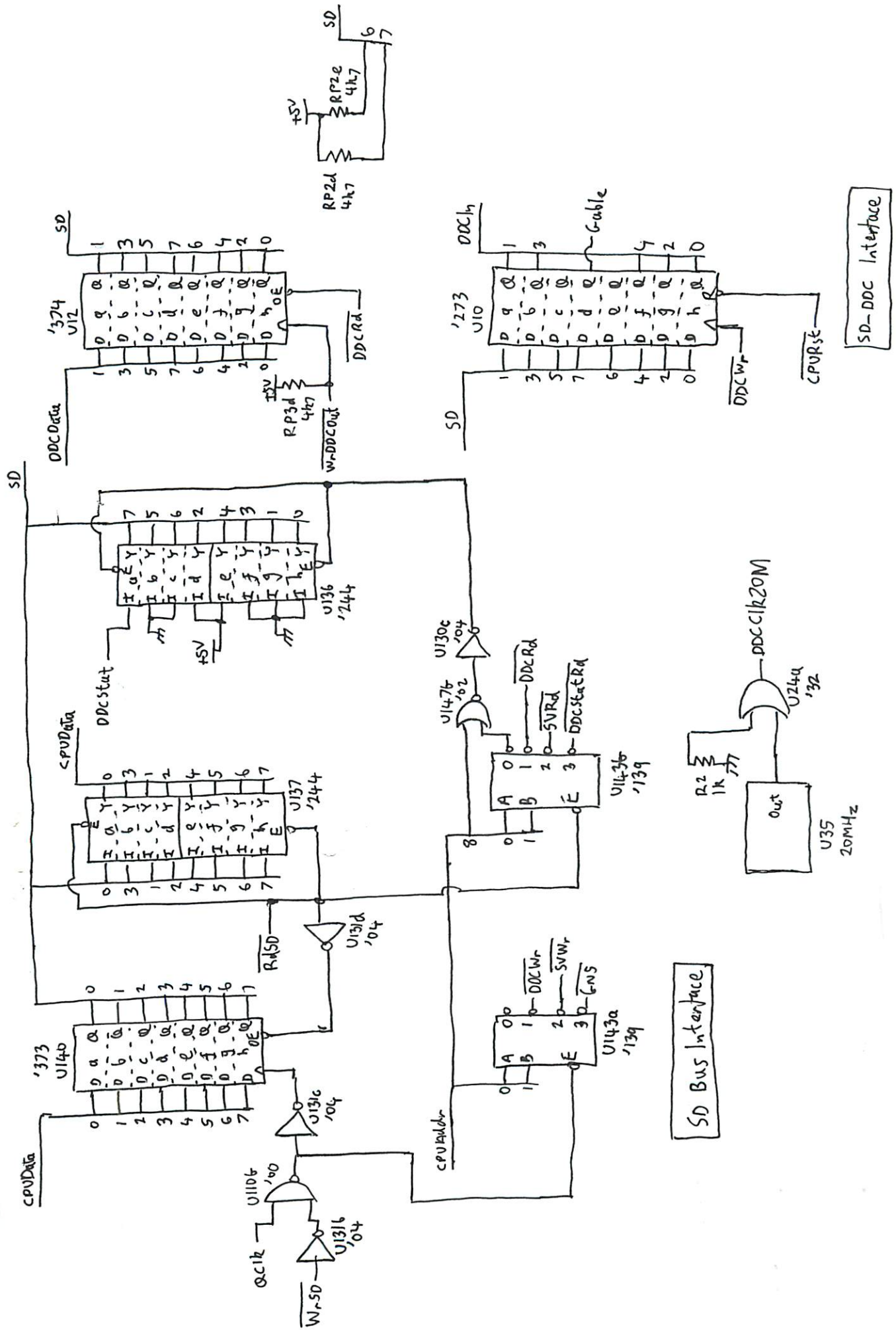


09144-66519

HP9144 Logic PCB Sheet 7

HP1B Interface

Diagnostic Display

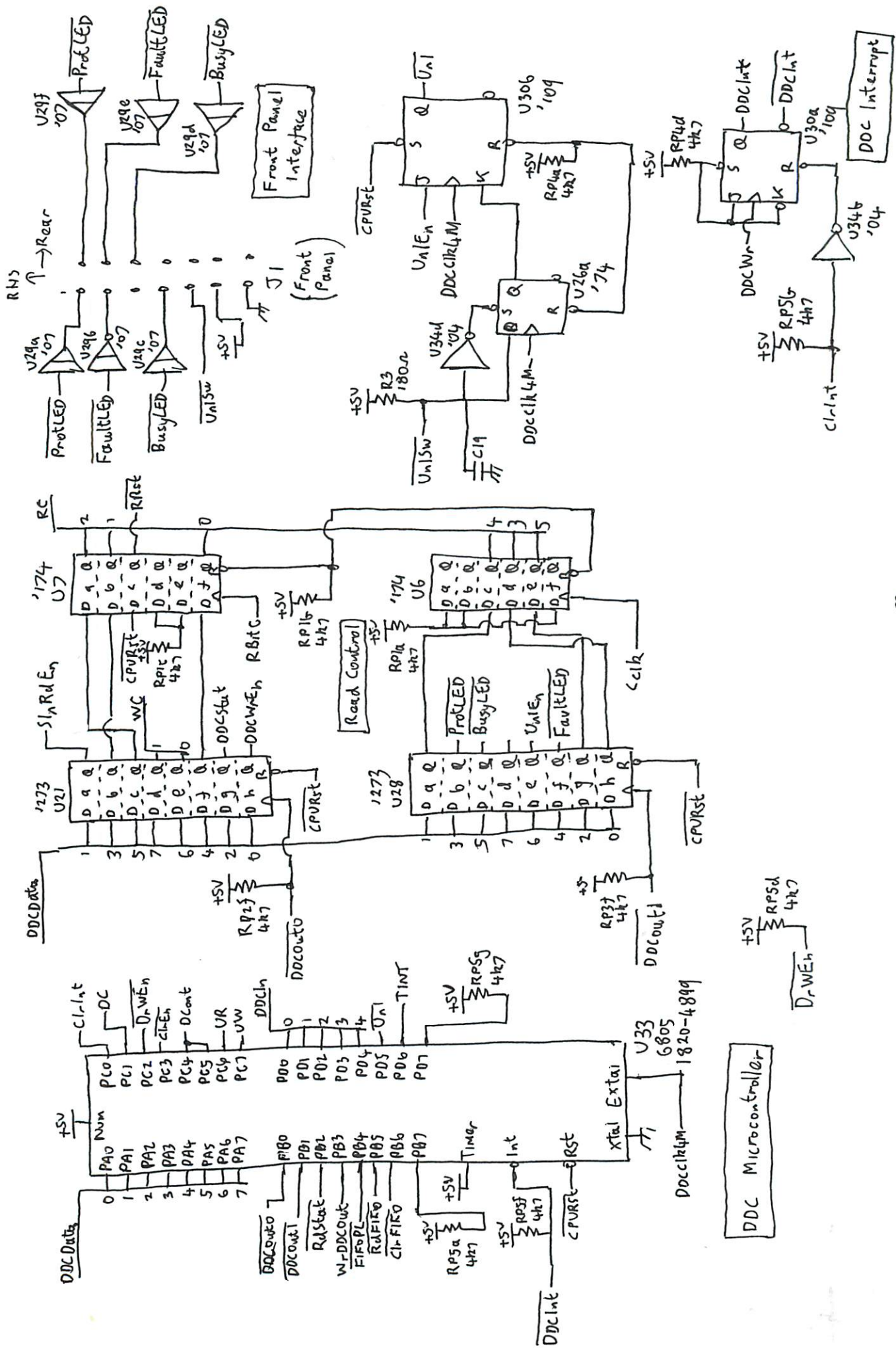


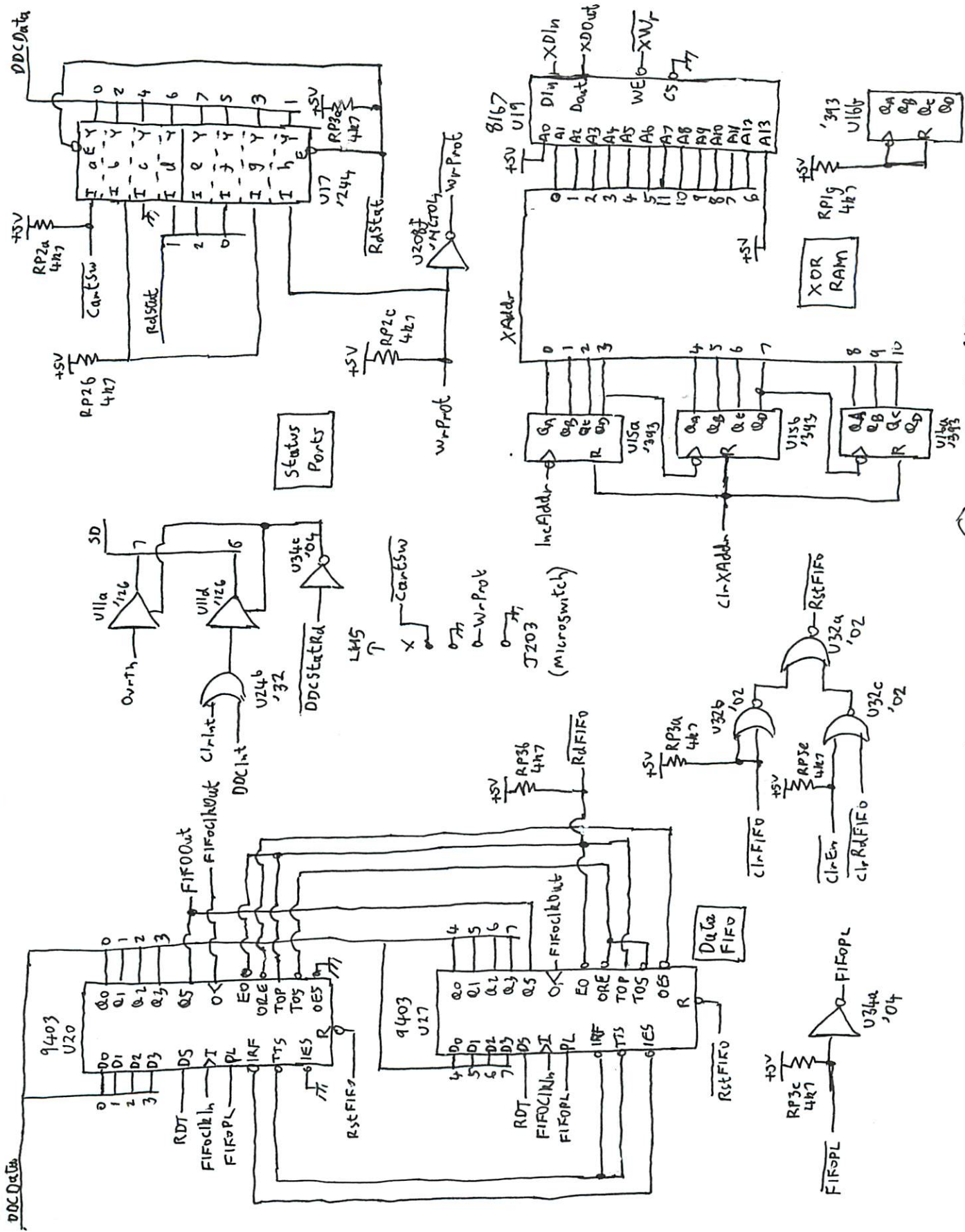
09144-66519

HP9144 Logic PCB Sheet (8)

SD-DC Interface

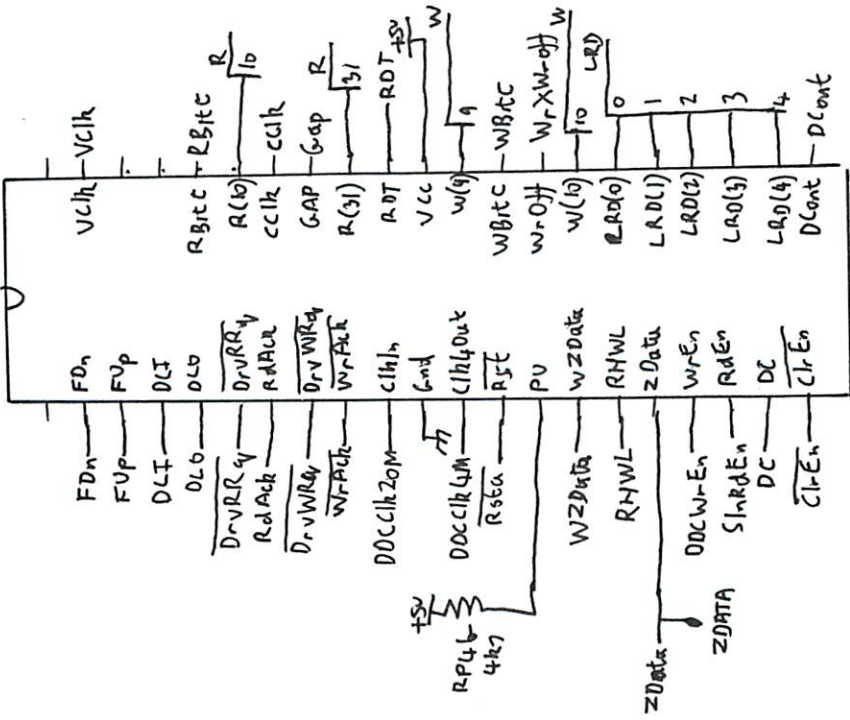
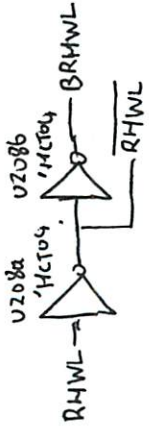
SD Bus Interface



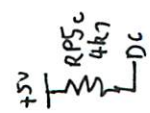


HP9144 Logic PCB Sheet (10) 09144-66519

09144-80101

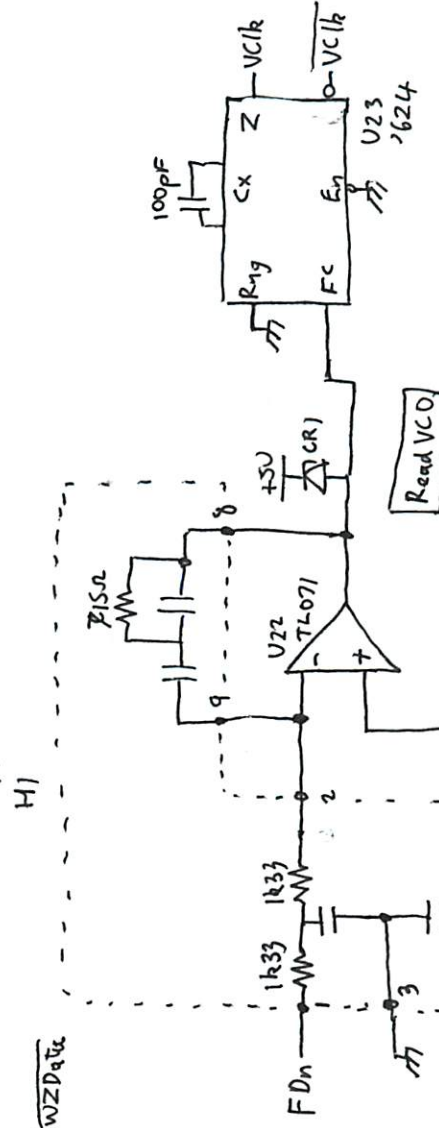


U18
1870-3526

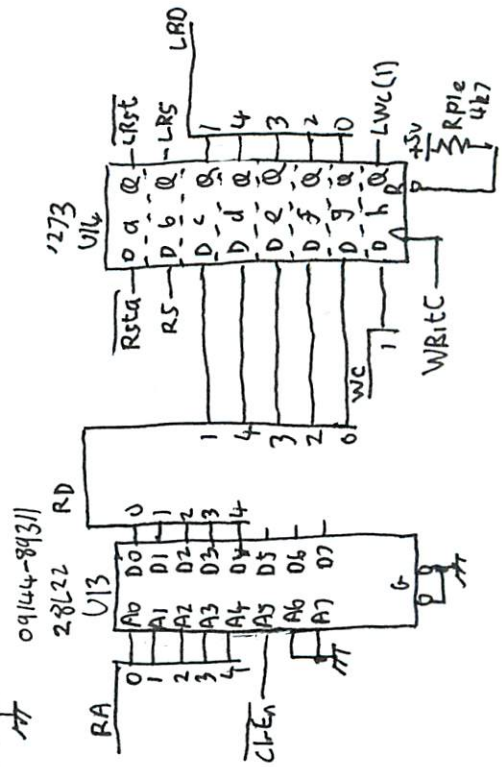


RDT → RDATA

Drive Data Control

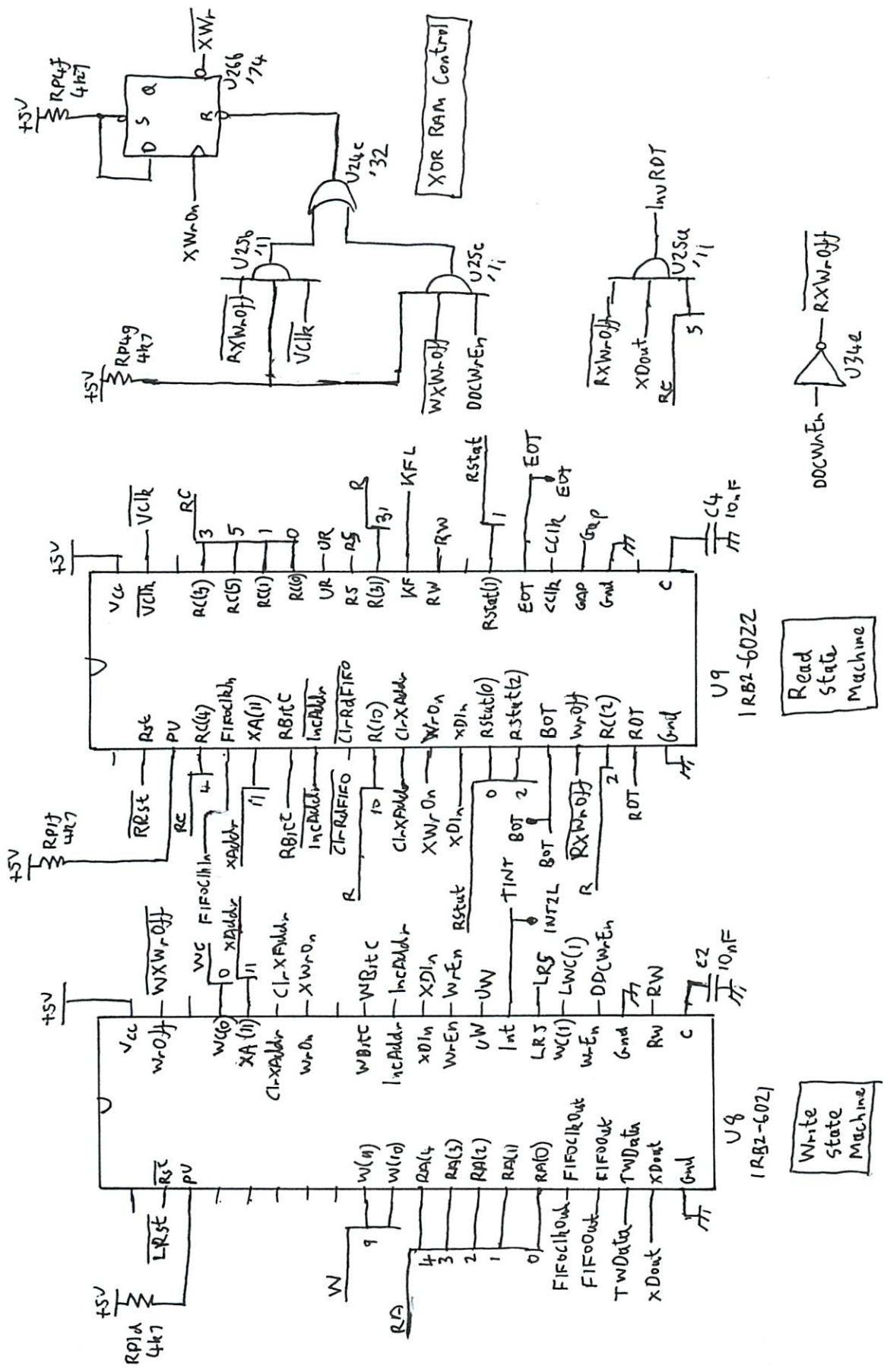


Read VCO



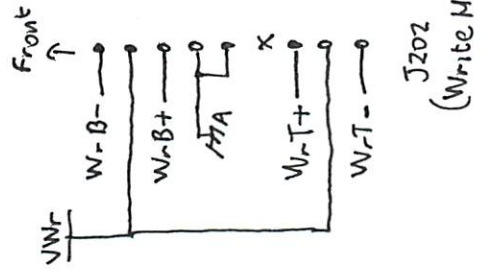
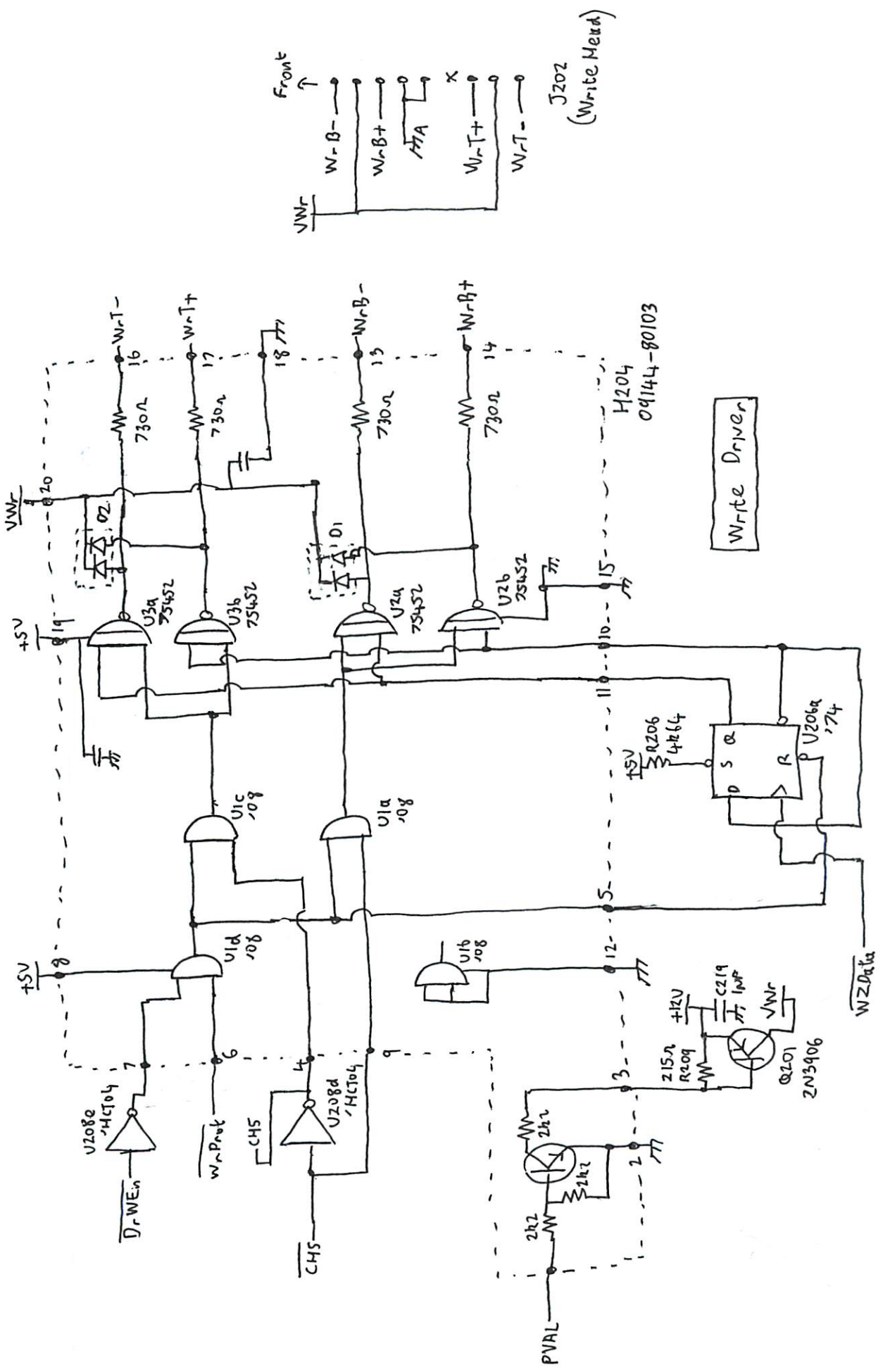
09144-80131

09144-66519



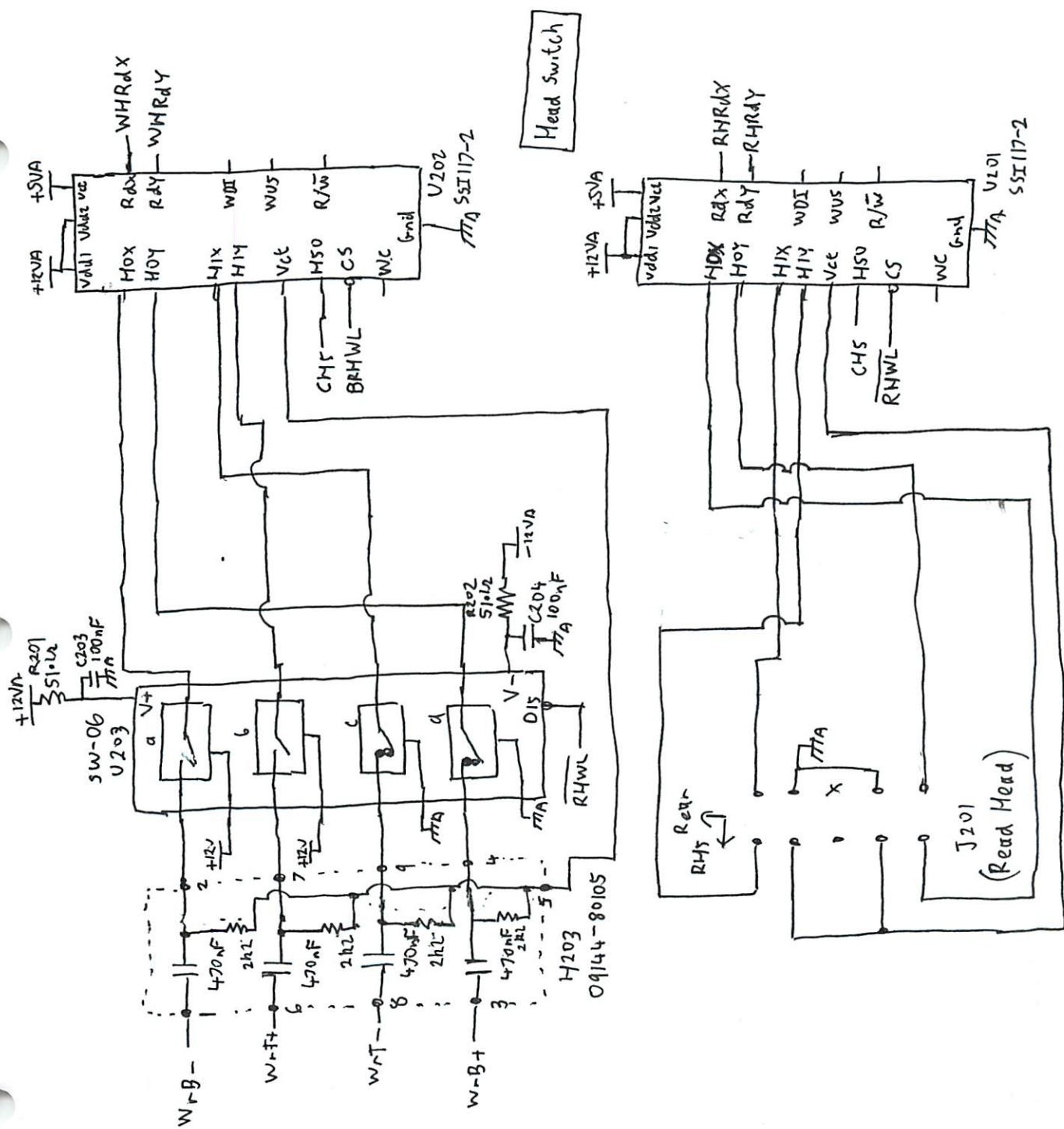
09144-66519

HP9144 Logic PCB Sheet 17

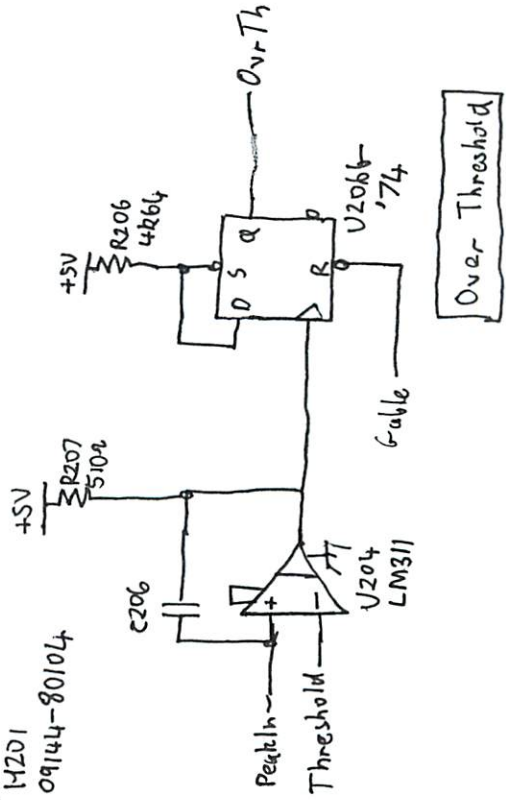
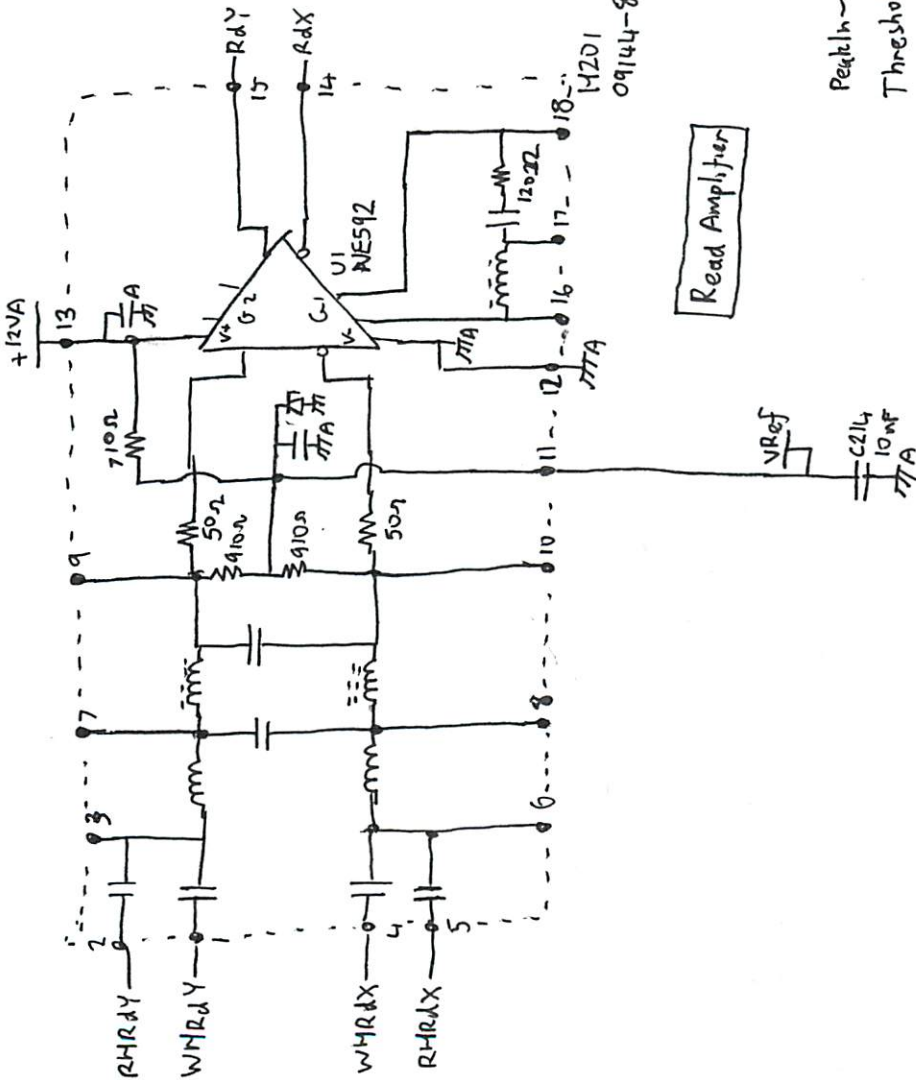
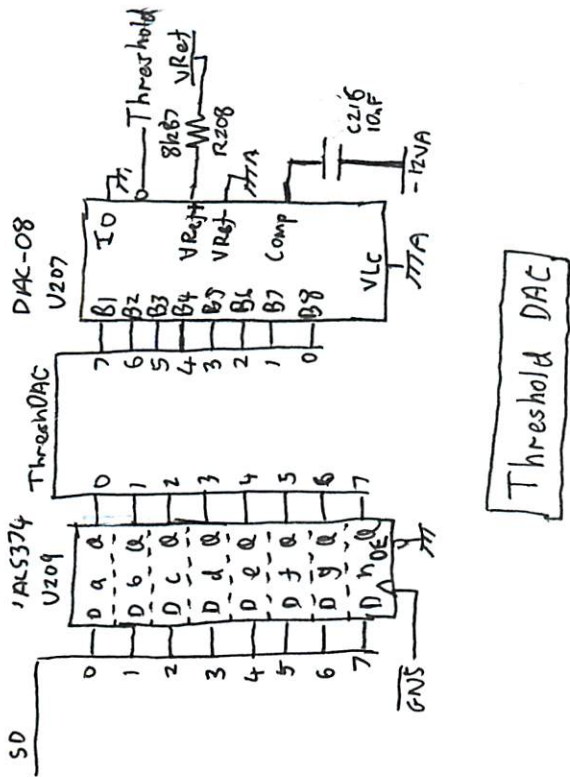


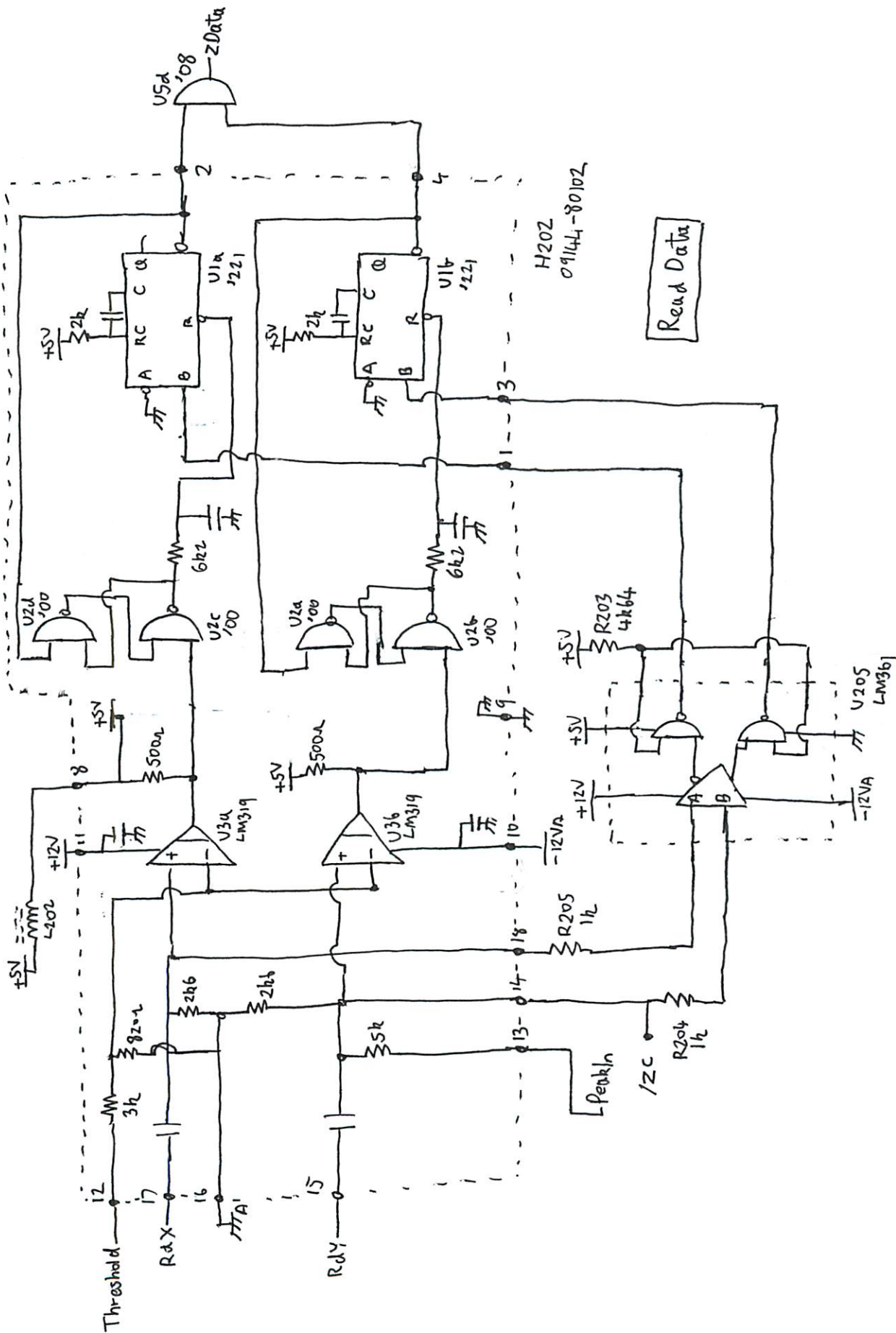
Write Driver

H204
09144-80103



09144-66514



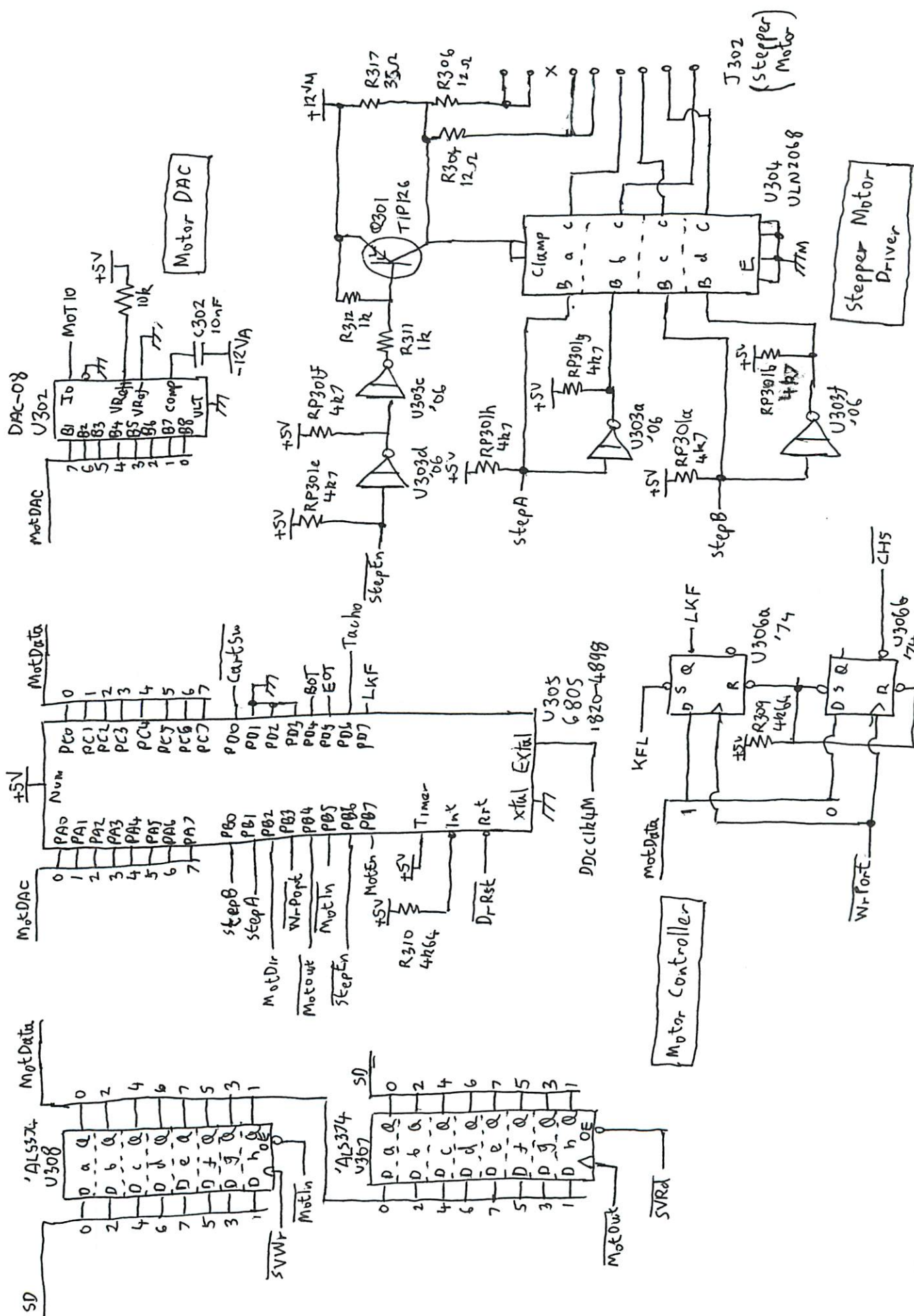


H202
09144-80102

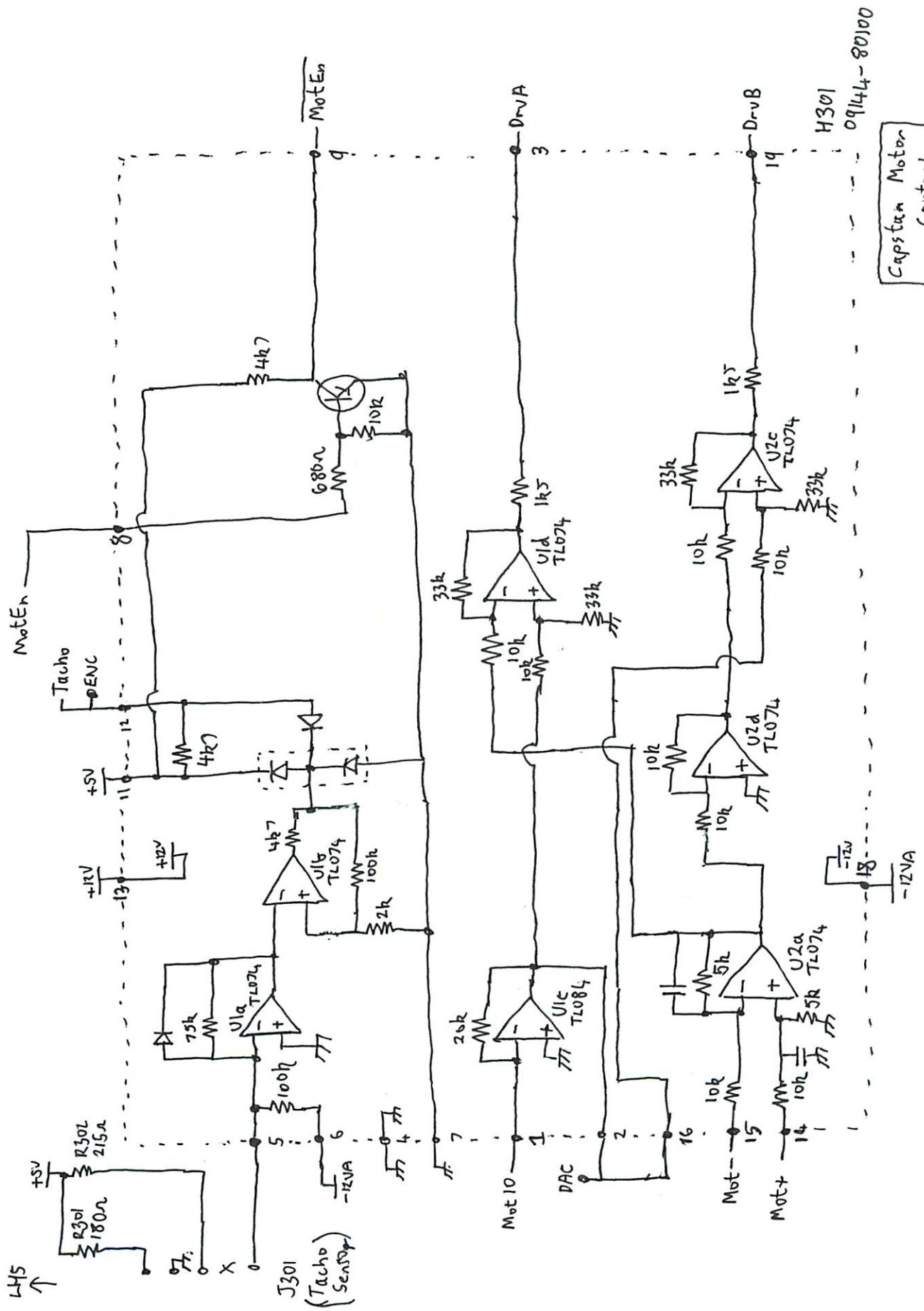
Read Data

09144-66519

HP9144 Logic PCB Sheet (16)

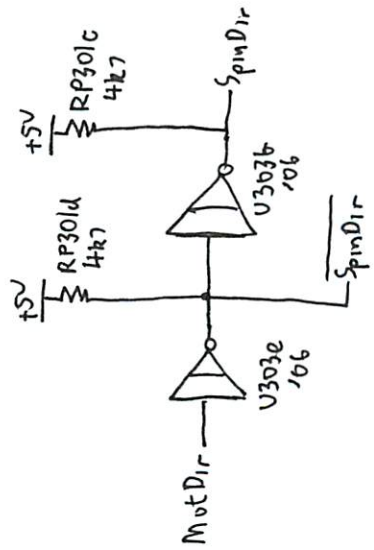
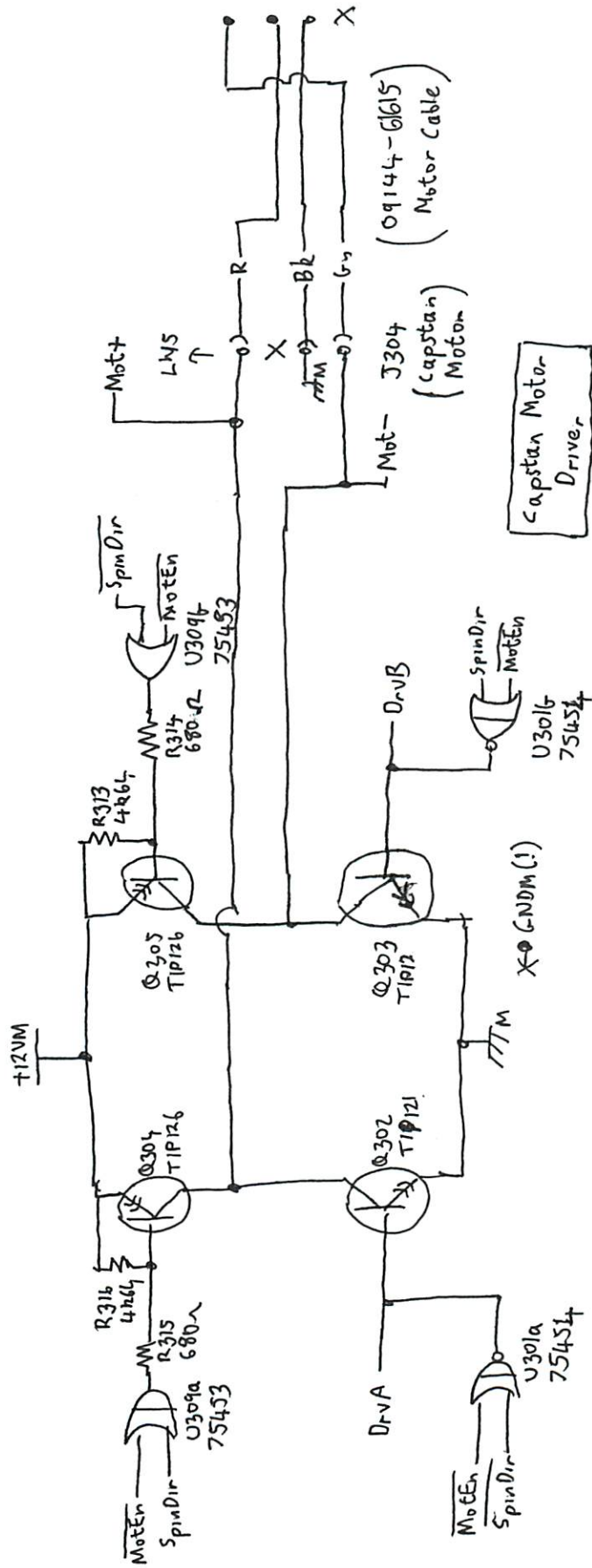


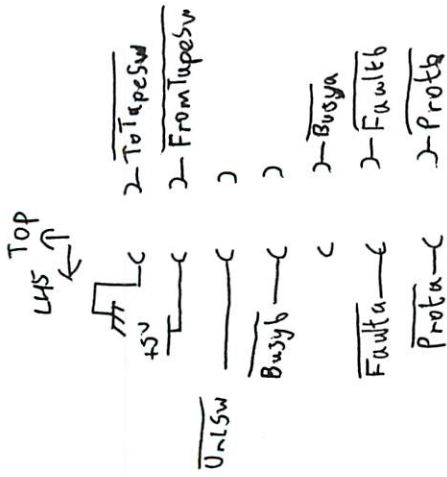
HP9144 Logic PCB Sheet 17 09144-66519



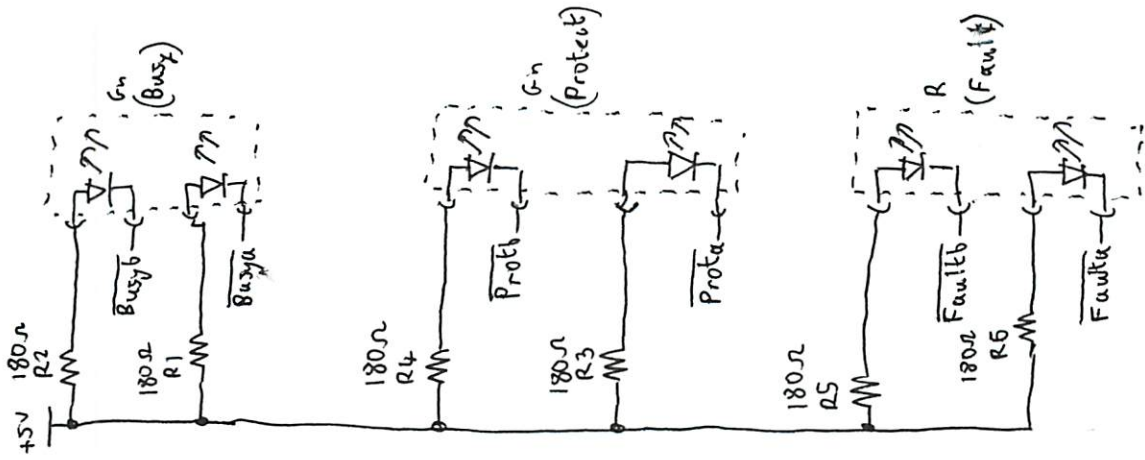
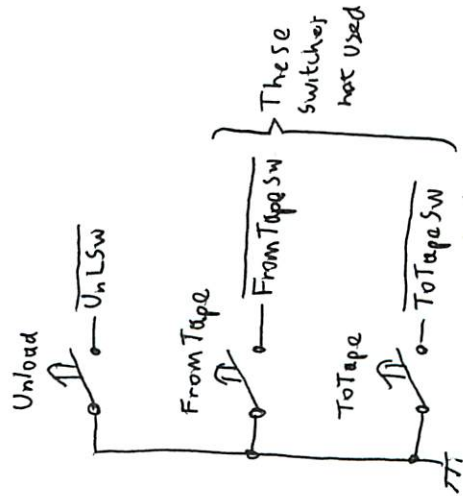
Capstan Motor Control

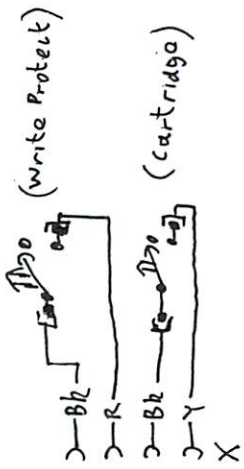
H301
09144-80100



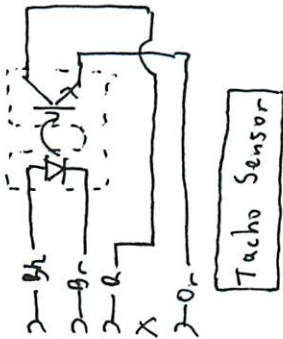


(14 pin
DIL
Sht)

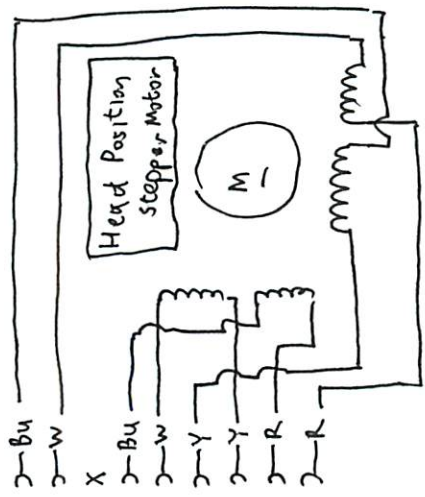




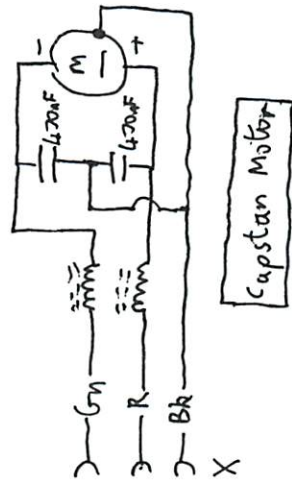
Microswitch



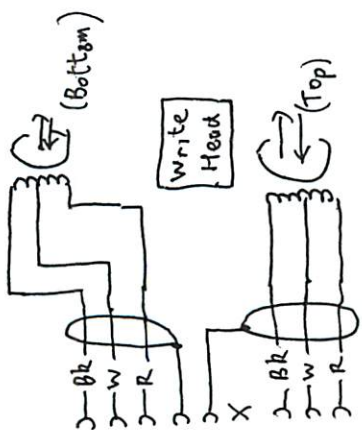
Tacho Sensor



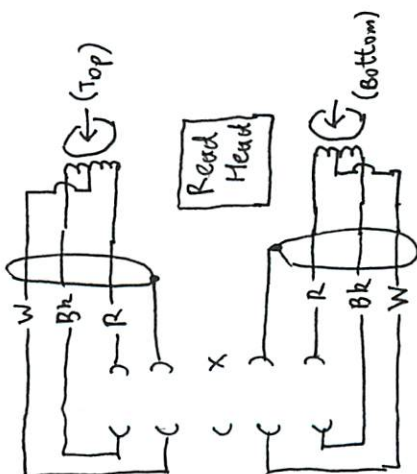
Head Position Stepper Motor



Capstan Motor

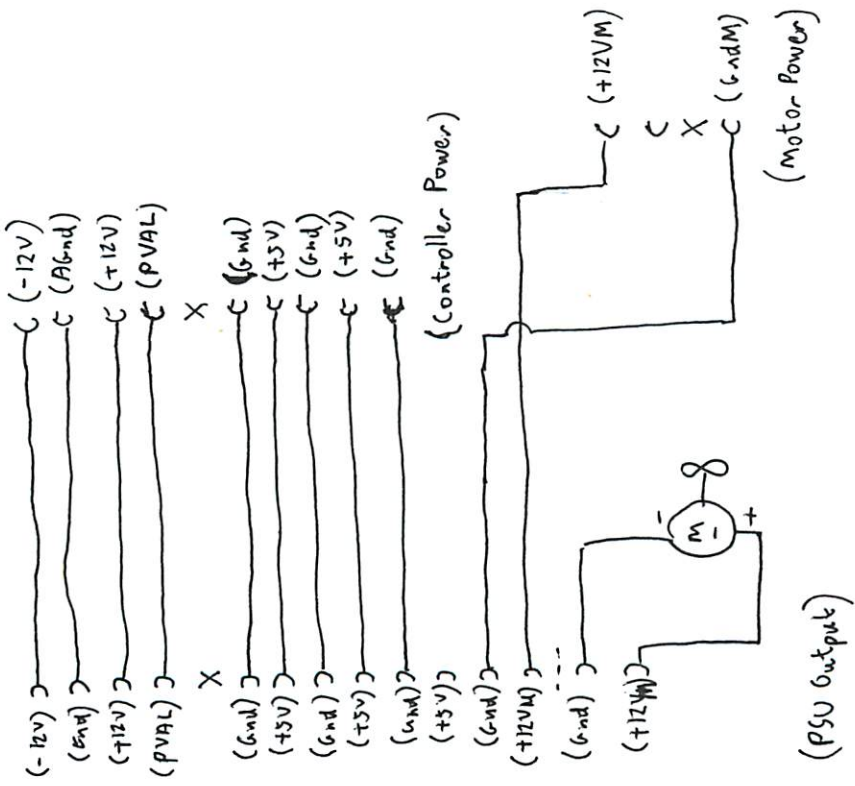


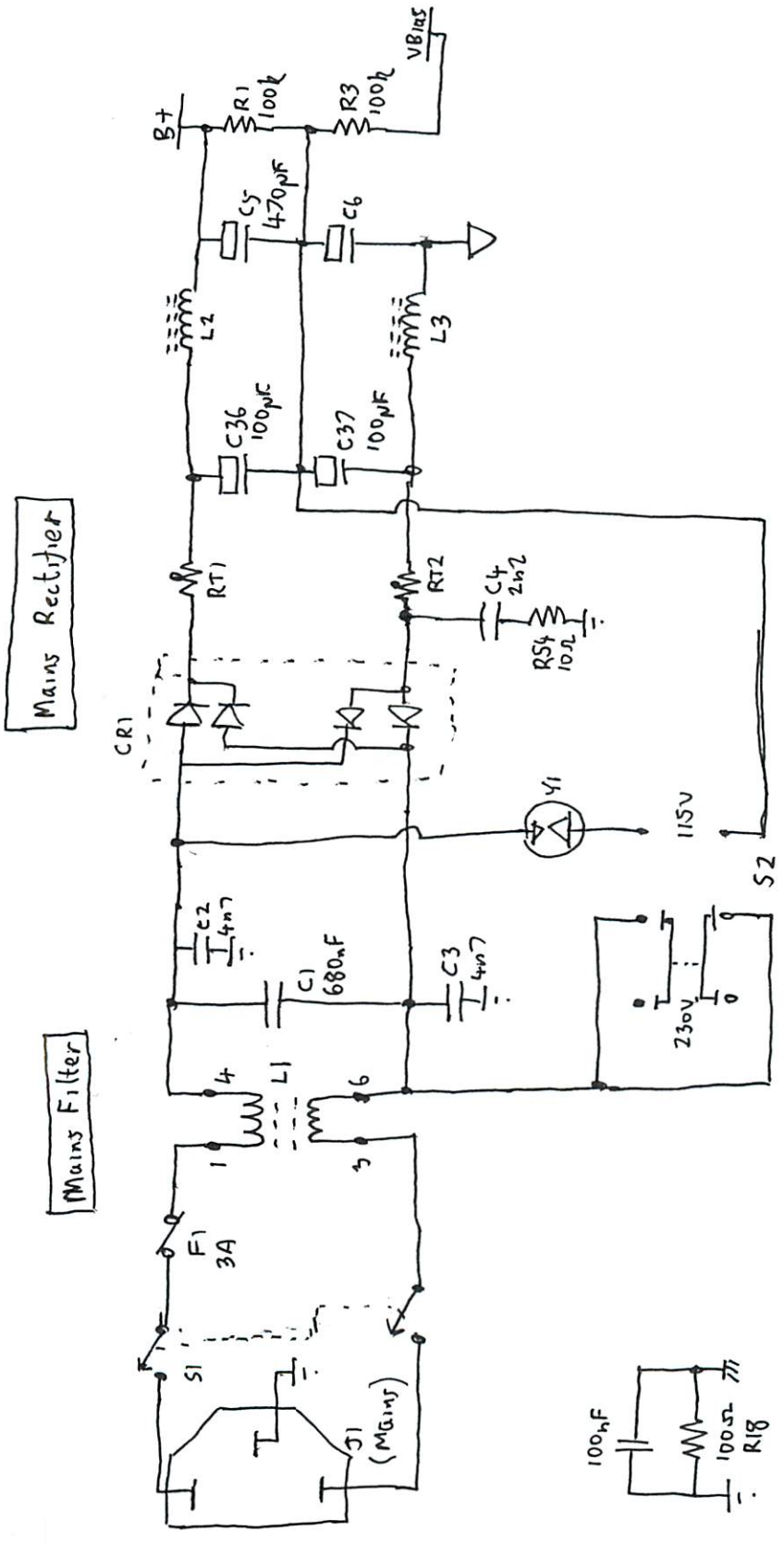
Write Head



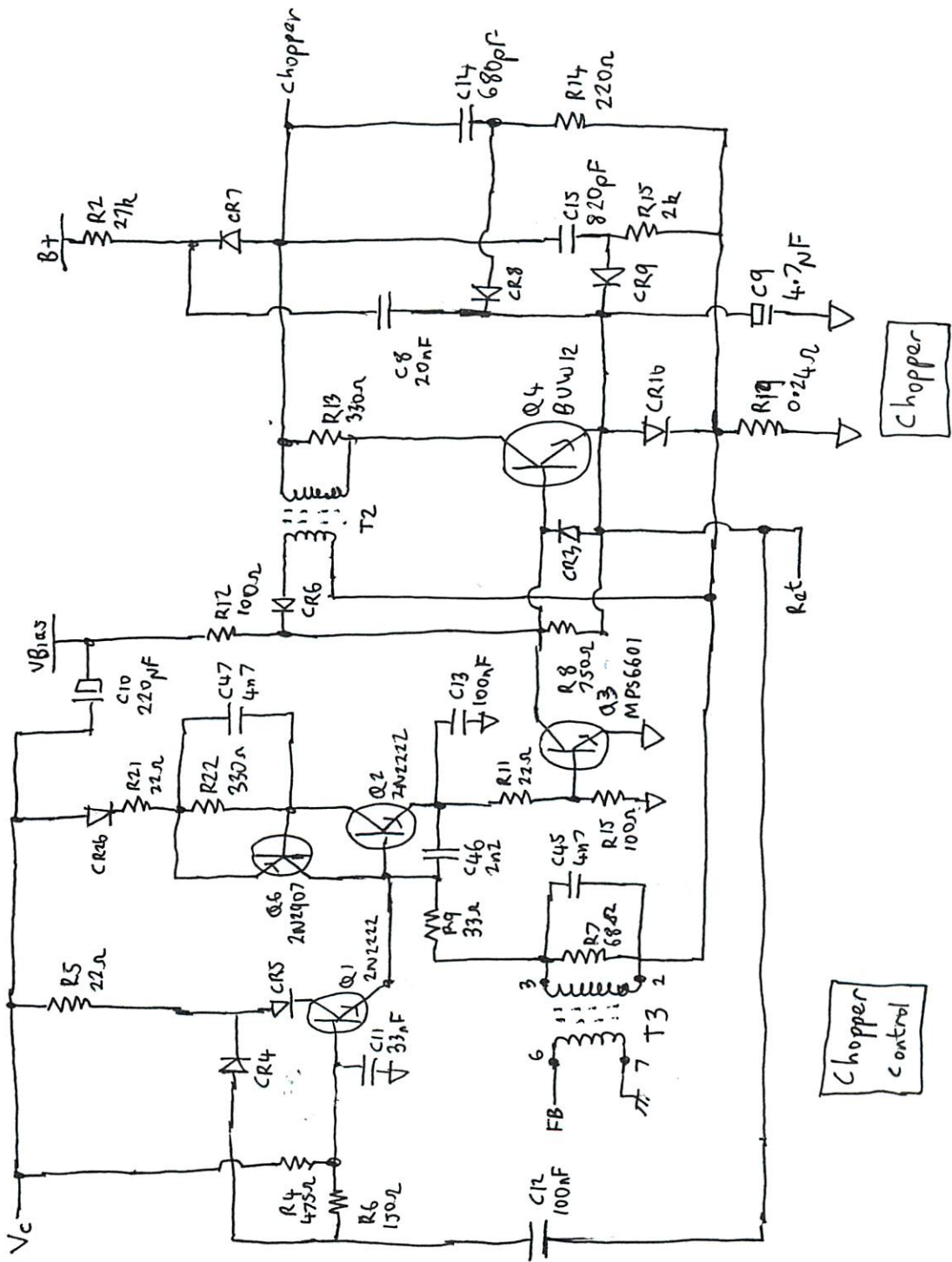
Read Head

LH5
↑





HP Mass Storage Unit PSU Sheet 1 Boschert
 XL81-3604R
 5061-3144



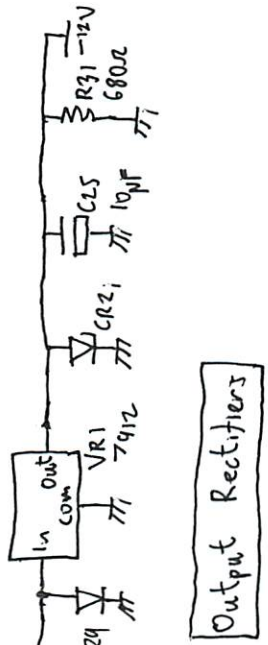
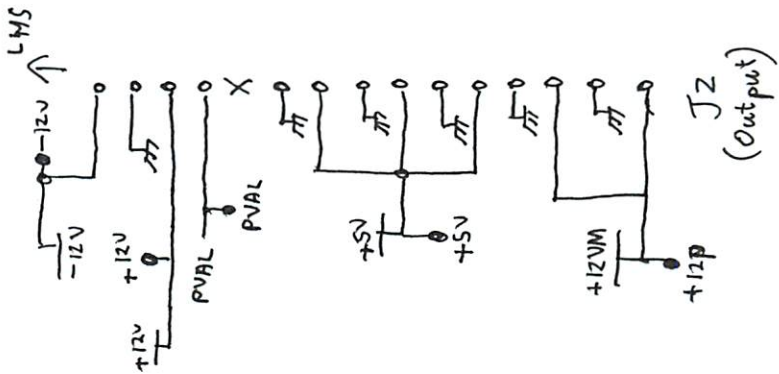
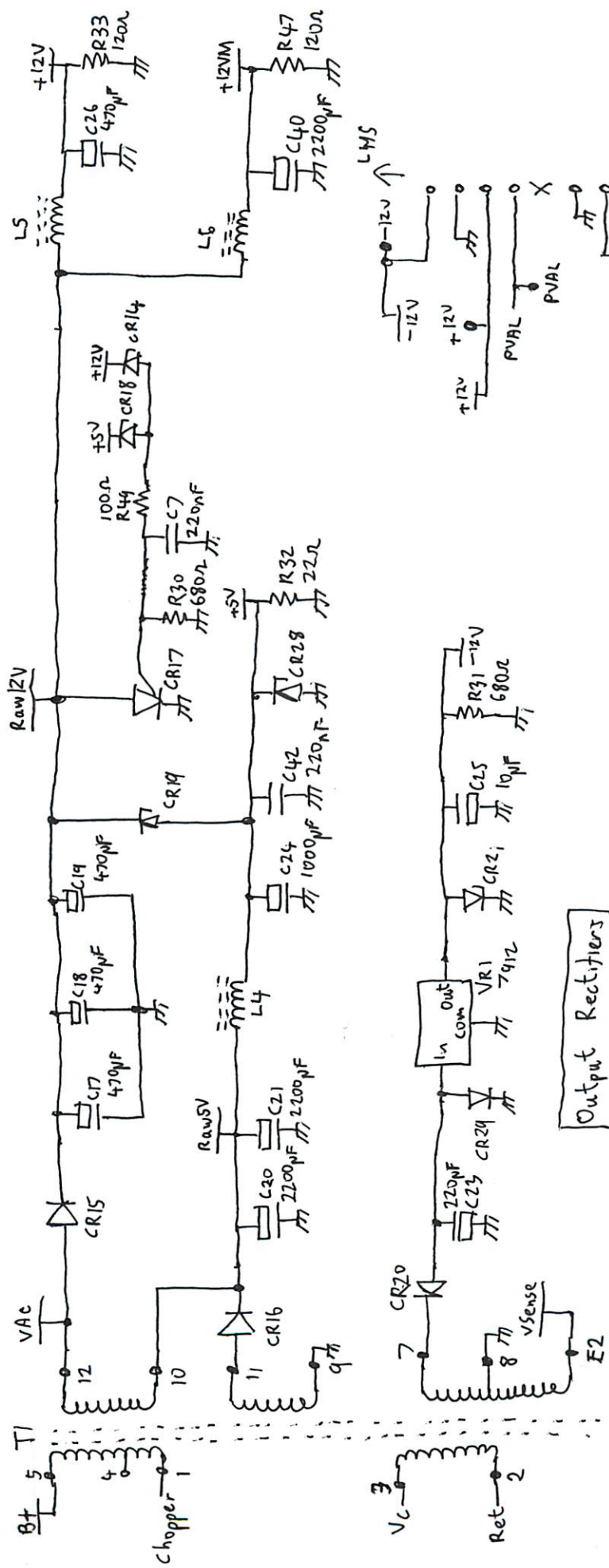
XL81-3604R

5061-3144

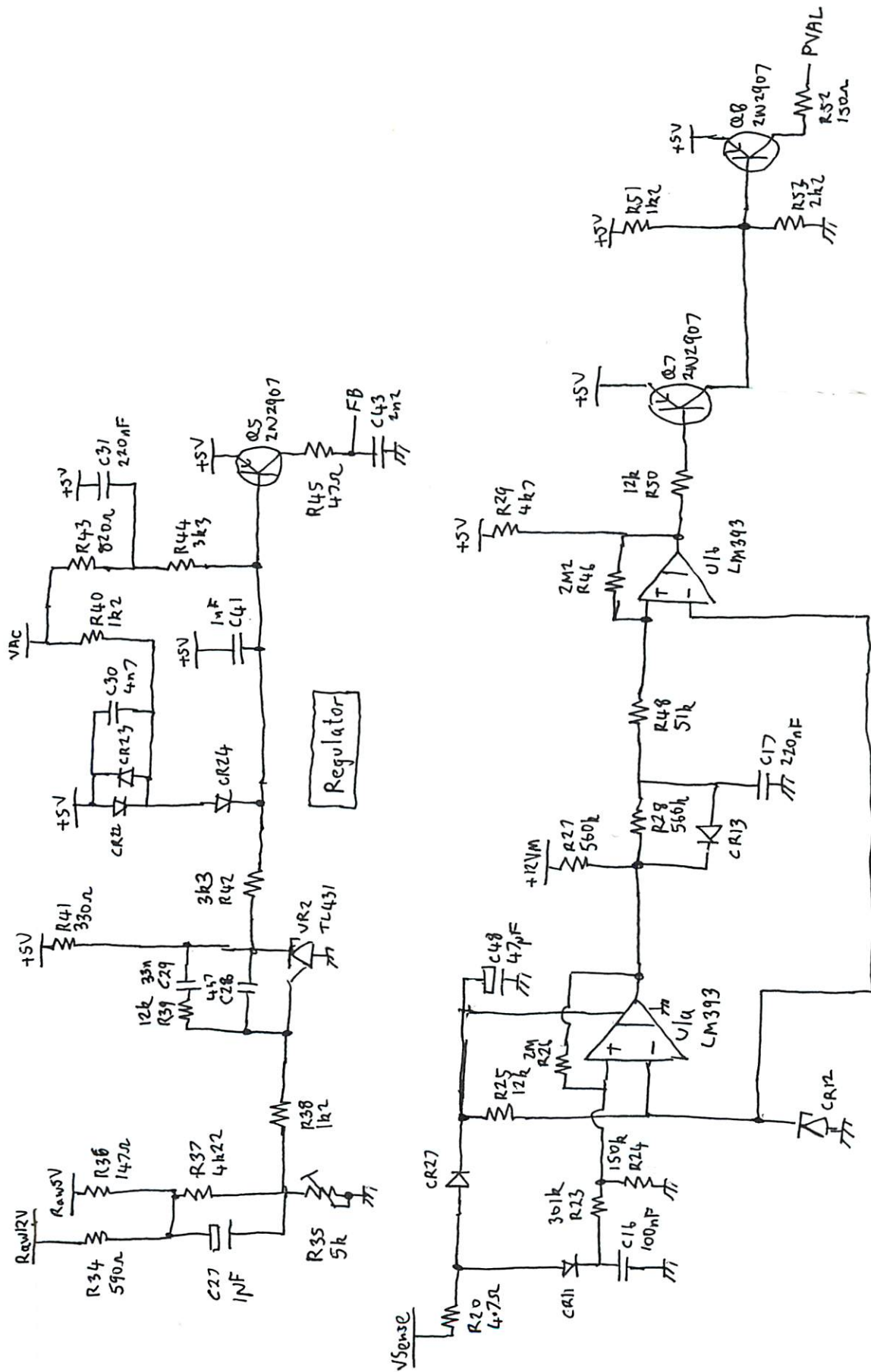
Boschert

Sheet (2)

HP Mass Storage PSU



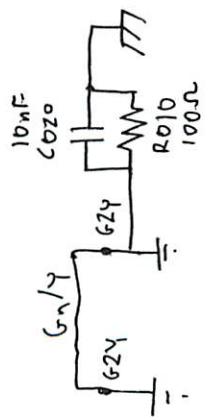
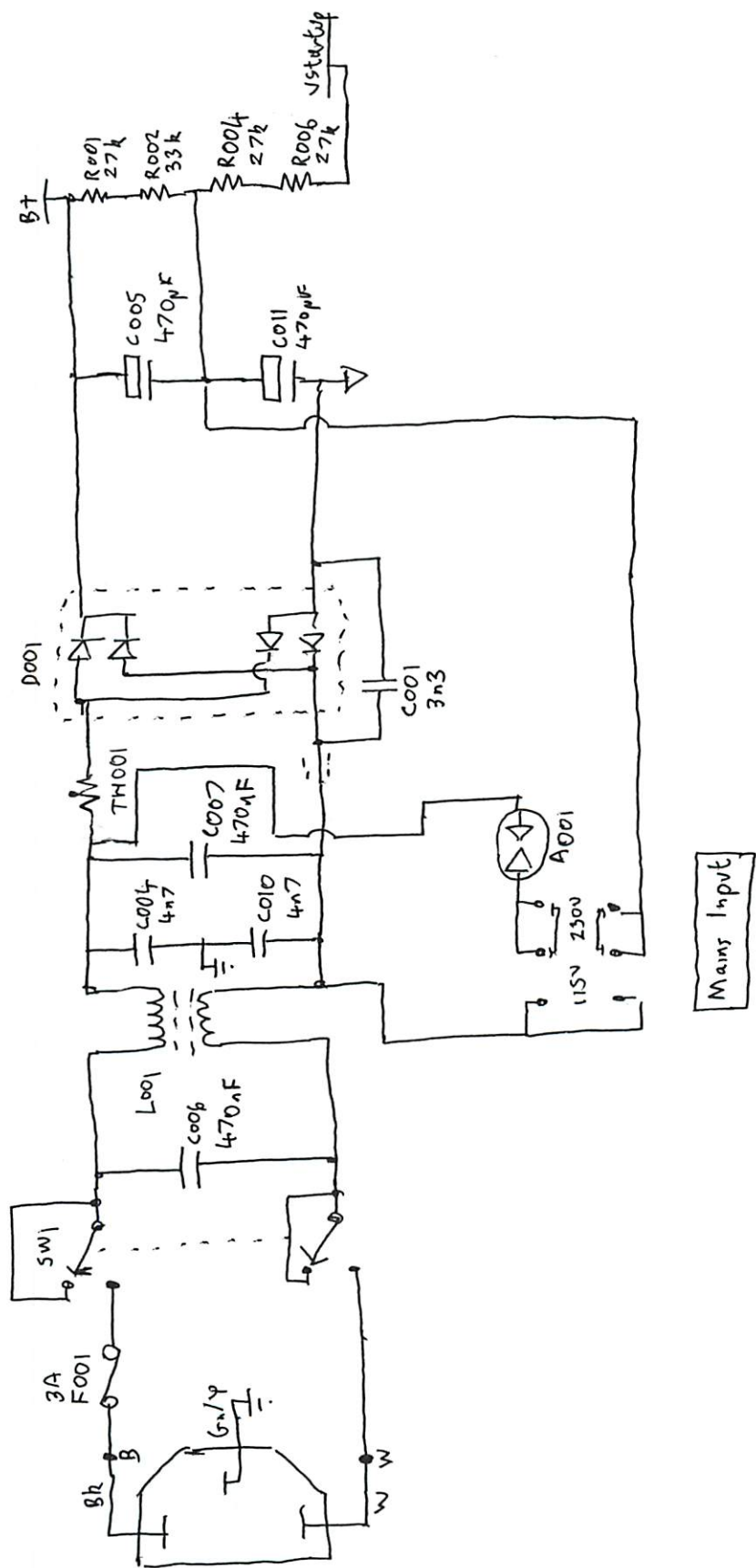
HP Mass Storage PSU Sheet 3
Boschert
5061-3144
XLR1-3604R



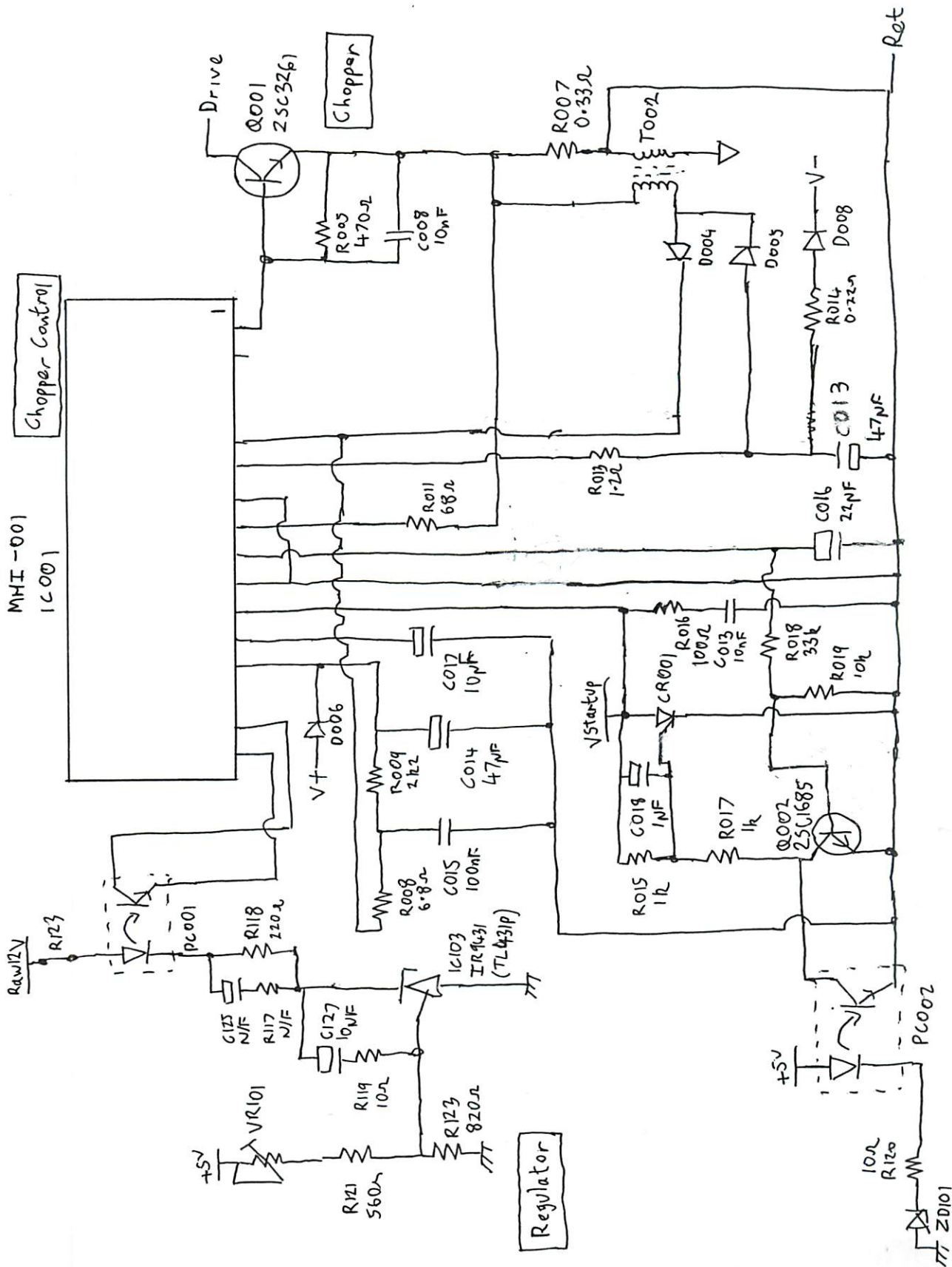
XL81-3604

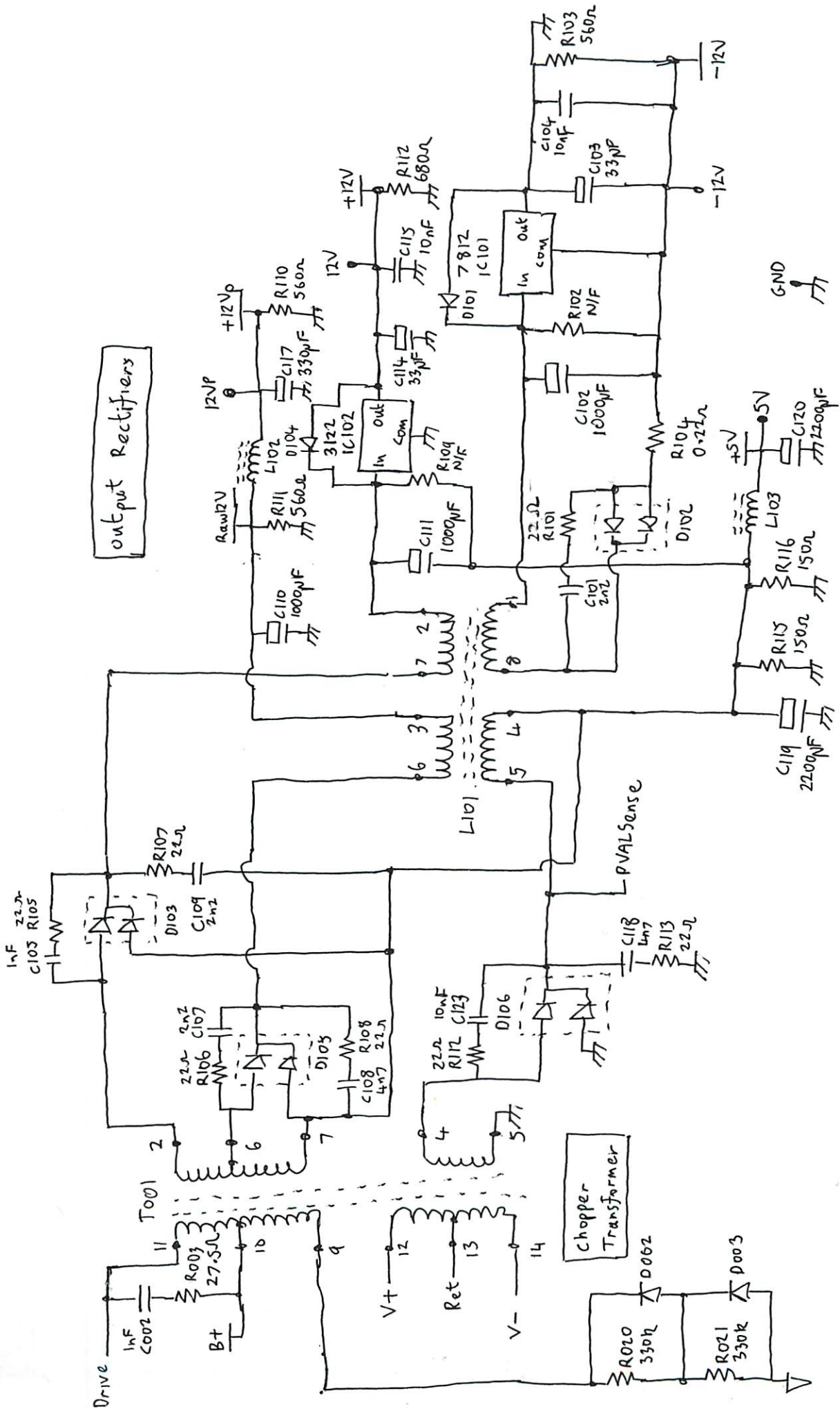
Boschart 5061-3144

HP Mass Storage PSU Sheet (4)



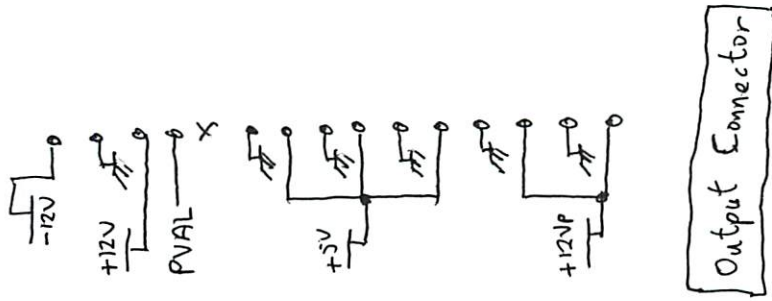
HP Mass Storage PSU PCB sheet 1 ETX-390 D8M



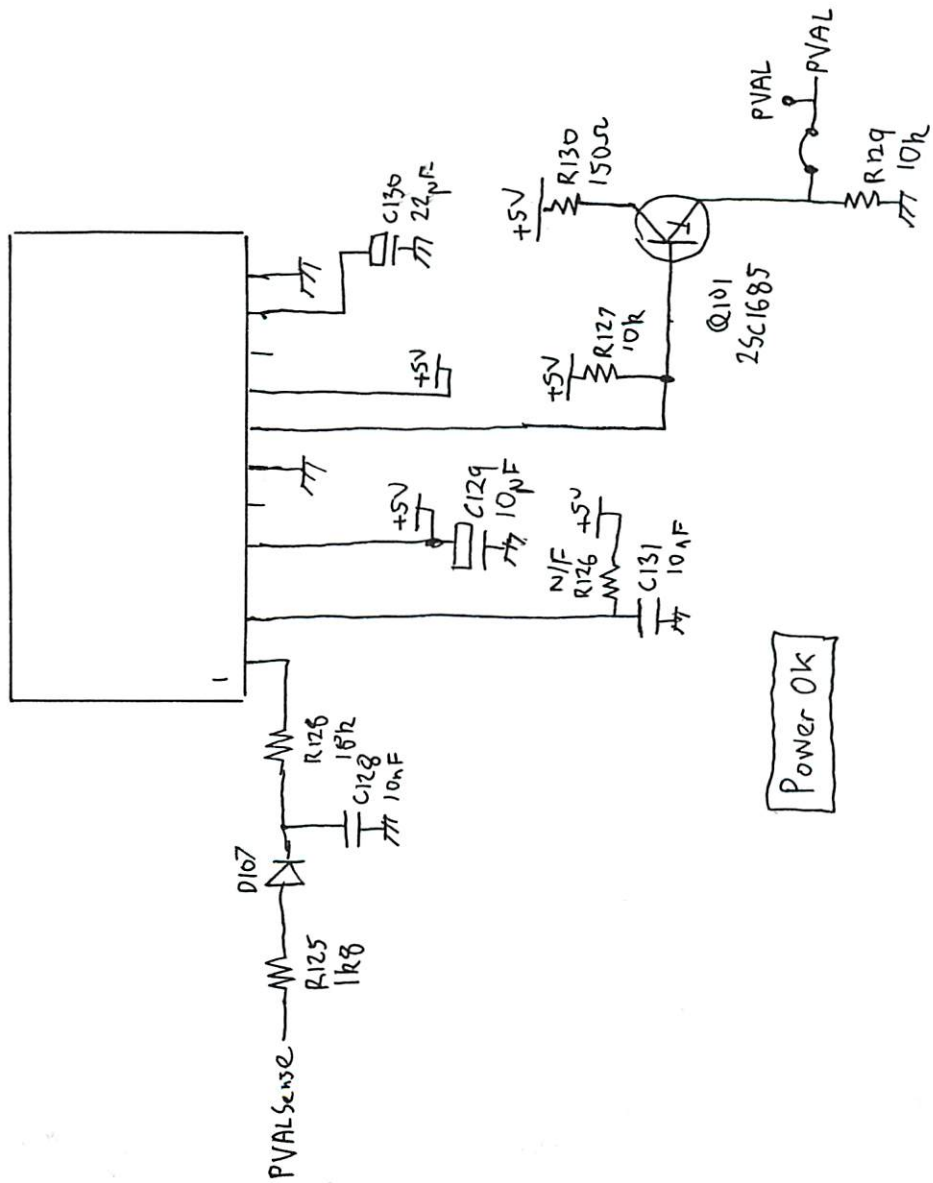


Output Rectifiers

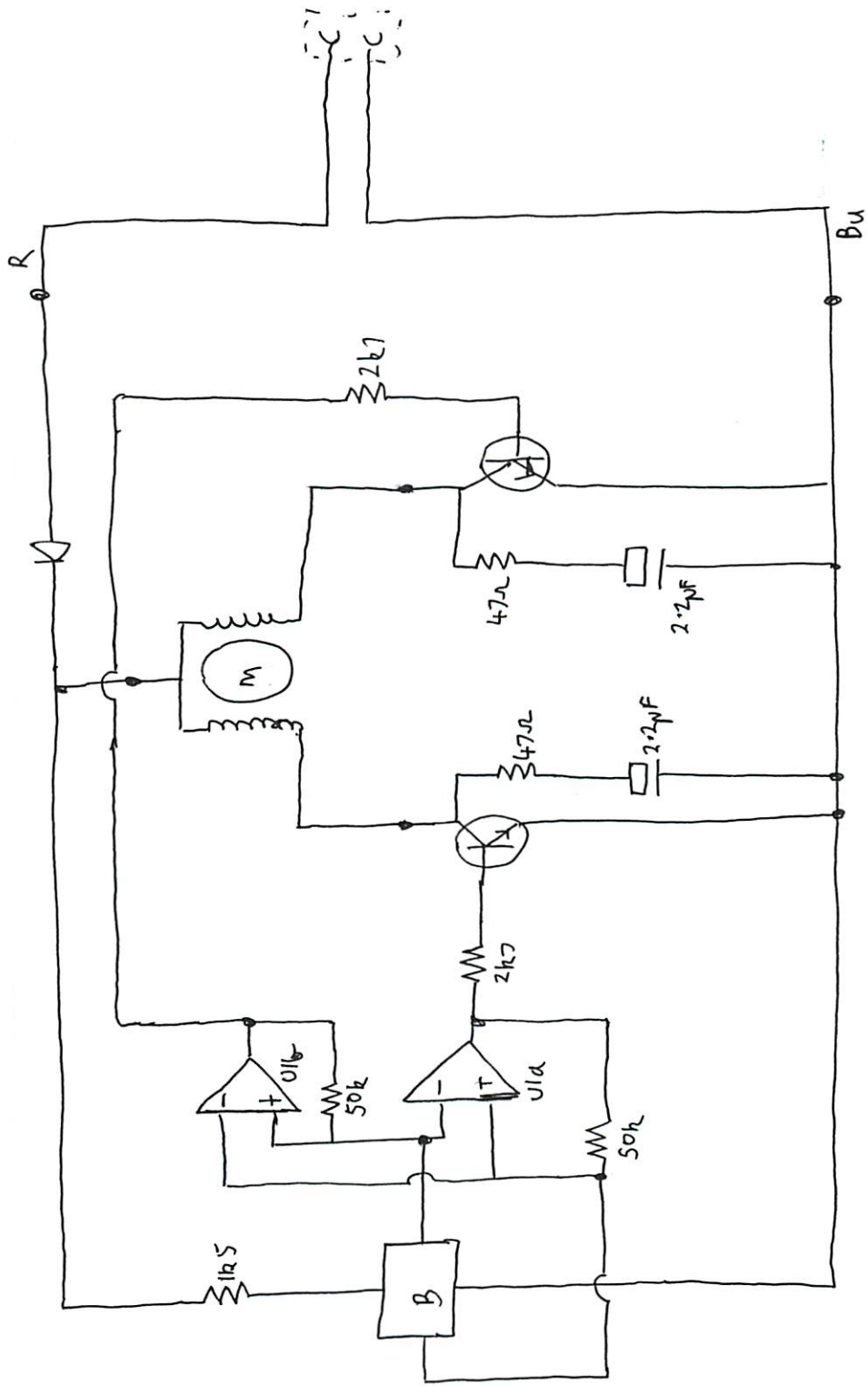
Chopper Transformer



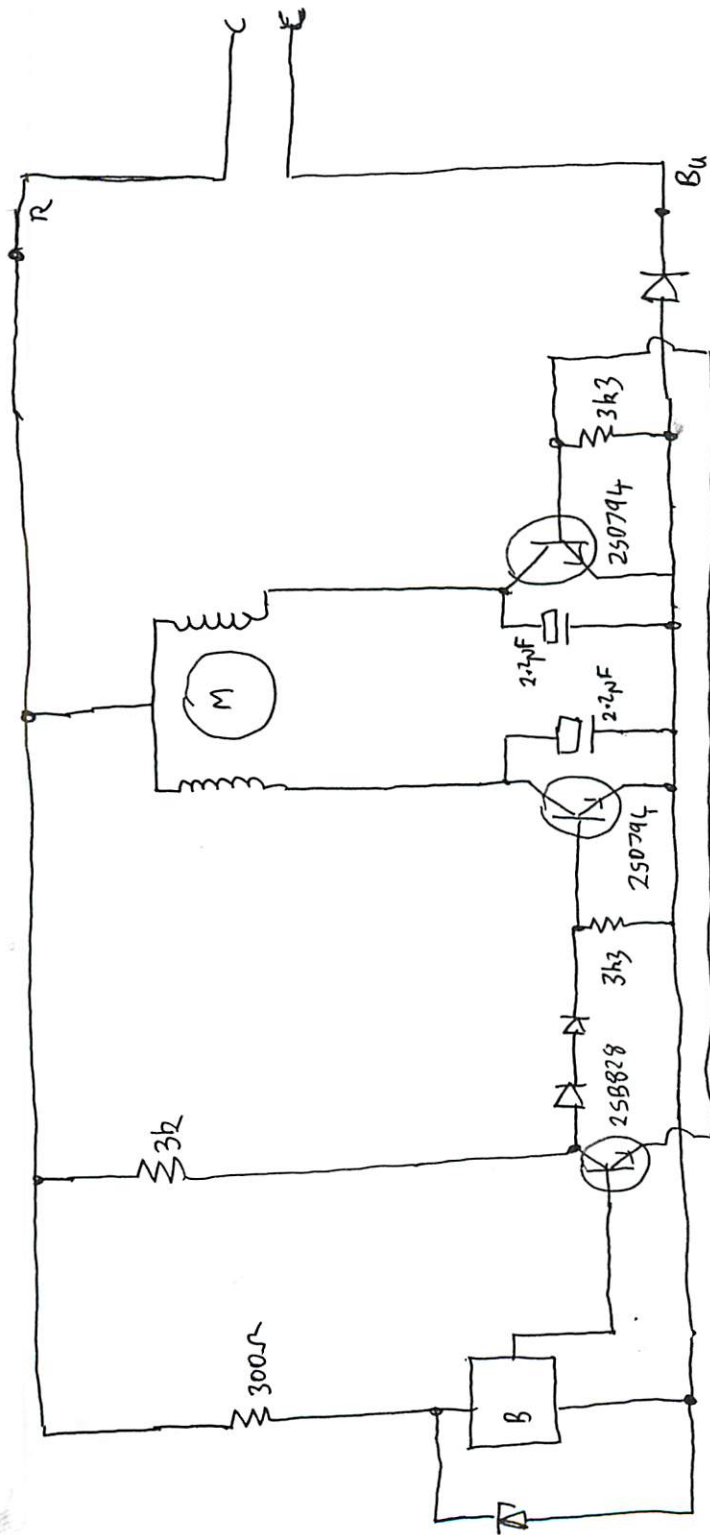
MH1002
IC104



Power OK



HP Mass Storage Unit Fan Panaflo FBH-08A 12M



Paradiglo FBP-08B12L