

HP59403

↑ Rear

○-Y } 15VAC
○-Y }

○-W/or +5V

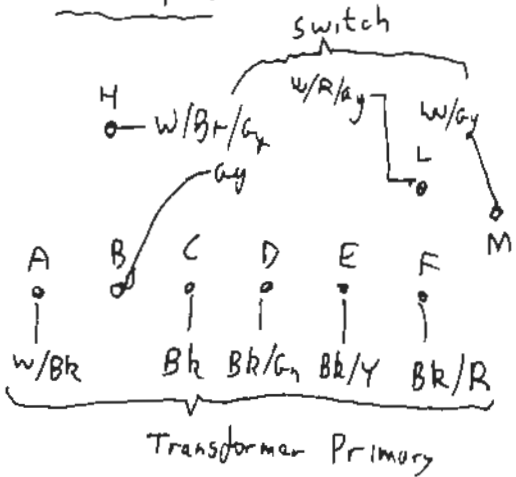
○-R } 15VAC
○-R }

Top
↑

○-W/R
In

○-W/or
out
+5V Regulator

PSU Input



○-Br - DedTx+
○-R - DedTx-
○-Or - DedRx-
○-Y - DedRx+

Dedicated Interface

Main5 Input Module

○-Br - HPiB Data (1)
○-R - HPiB Data (2)
○-Or - HPiB Data (3)
X-Y
○-Gn - HPiB Data (4)
○-Bu - HPiB Data (8)
○-Pu - HPiB Data (7)
○-Gy - HPiB Data (6)
○-W - HPiB Data (5)

○-Br - BREW
○-R - BEOI
○-Or - BDAV
○-Y - BNRFQ
○-Gn - BNDAC
○-Bu - BIFC
○-Pu - BSRQ
○-Gy - BATN
○-W - Gnd

+5V - CallComp
+5V - Abdn Rty
ParityErr - Line Disc
HandshkErr -
SynDat - Handshk Mode
Listen - On Line Mode
Flag - Gnd
Talk - Gnd

HPiB Data

○-Br - TXD
X-R
○-Or - TxC
○-Y - RxD
○-Gn - RTS
○-Bu - PxC
○-Pu - DCD
○-Gy - Gnd
○-W - DTR

R5232

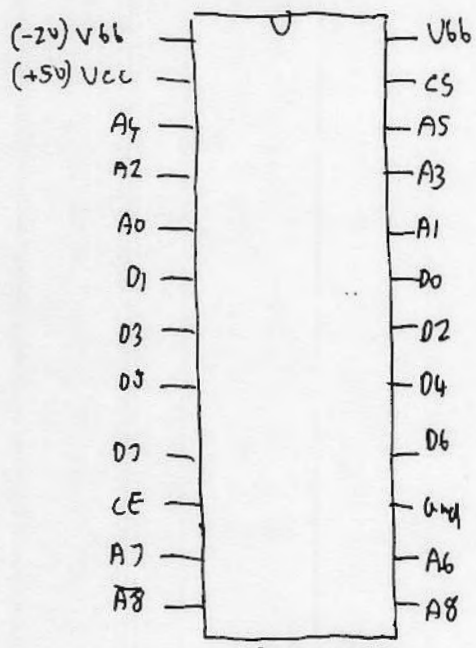
HPiB Handshake

○-Br - NB1
○-R - DPR
X-Or
○-Y - NB2
○-Gn - ACR
○-Bu - NB4
○-Pu - CRQ
○-Gy - NB8
○-W - PND
○-Br - Gnd

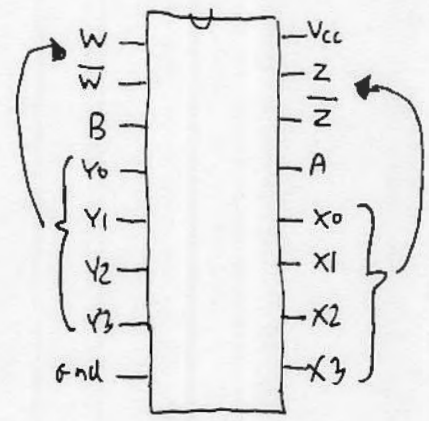
R5366

LED PCB

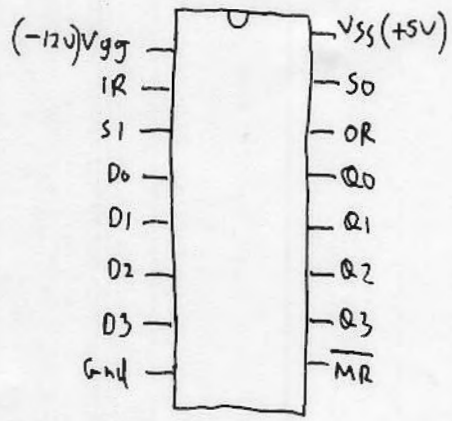
59403



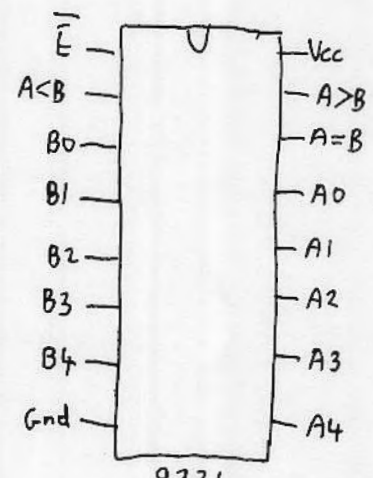
1818-2238
HP 512x8 ROM



8309
Dual 4-Input
Multiplexer

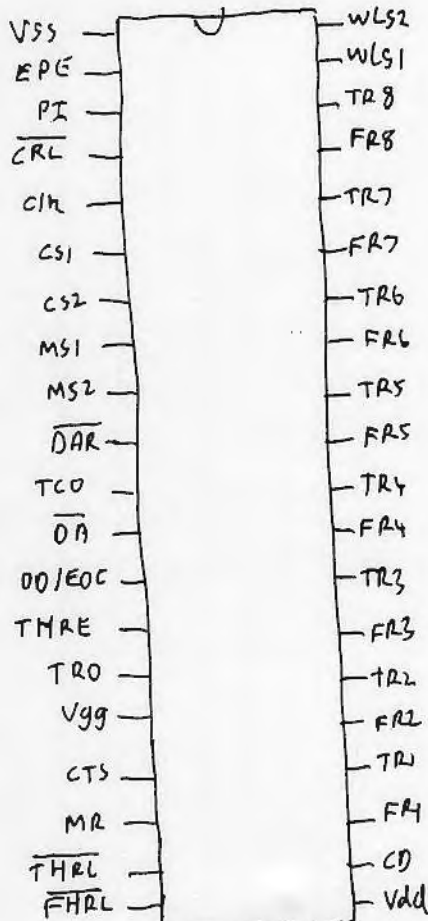


3341
64x4 FIFO



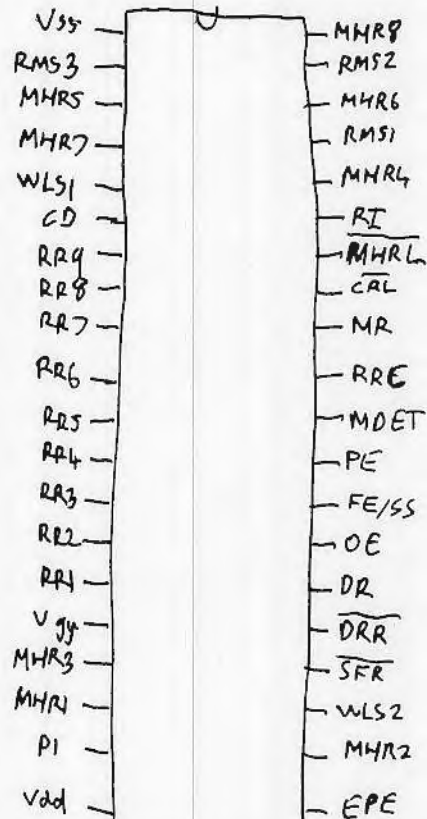
9324
5 bit Comparator

59403



PT1482-01
Transmitter

- EPE: Even Parity
- PI: Parity Inhibit
- CRL: Control Register Load (EPE, PI, CS, MS, WLS)
- CS: Clock Sel
- MS: Mode Sel
- DAR: Data Available Reset
- TCO: Transmit Clock Output
- DA: Data Available
- OD/EOC: Data Delimit/End of Char
- THRE: Transmit Holding Register Empty
- TRO: Transmit Register Output
- CTS: Clear to Send
- MR: Reset
- THRL: Transmit Holding Register Load
- FHRL: Fill Holding Register Load
- CD: Chip Disable
- FR: Fill Register
- TR: Transmit Register
- WLS: Word Length Sel

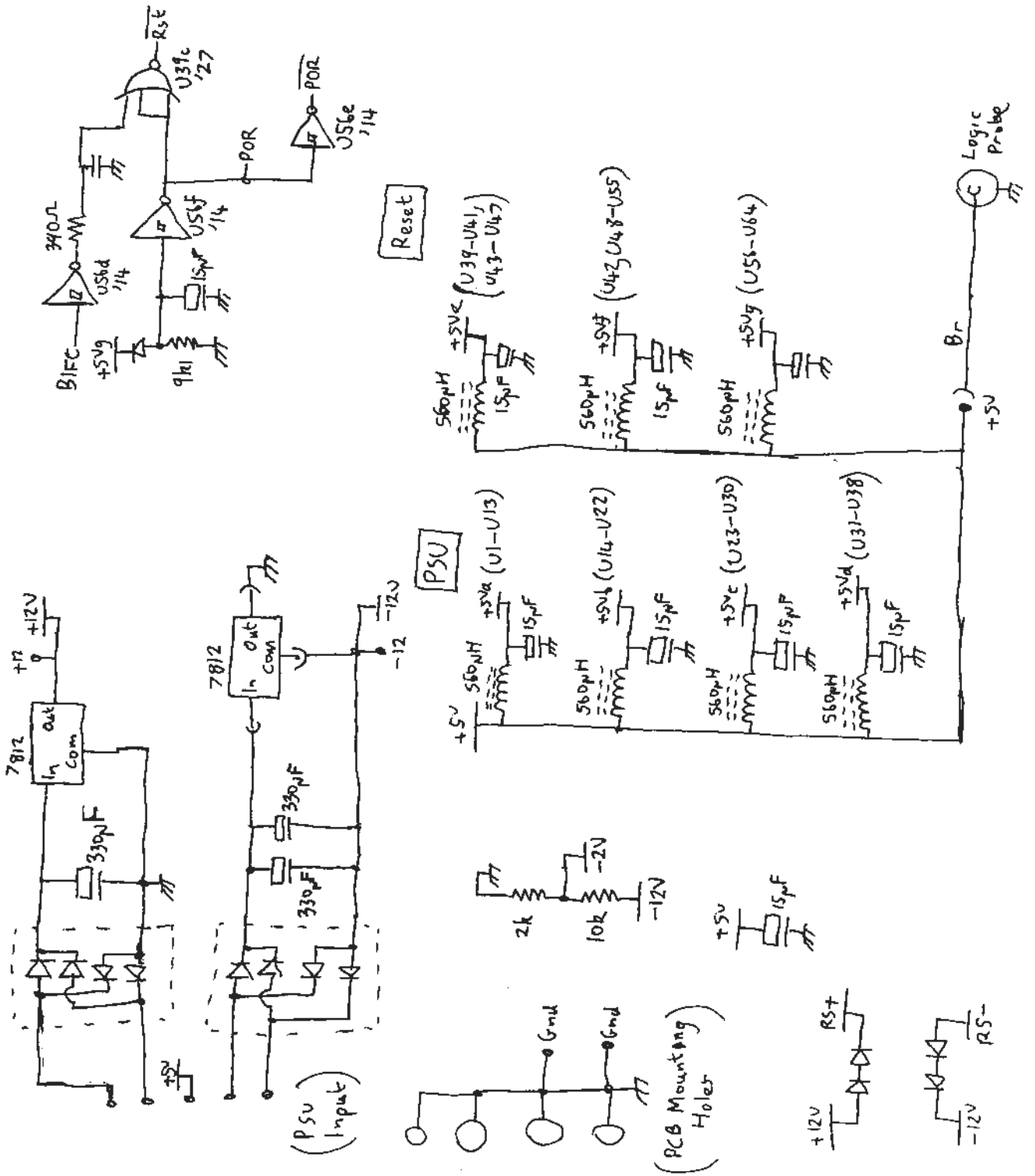


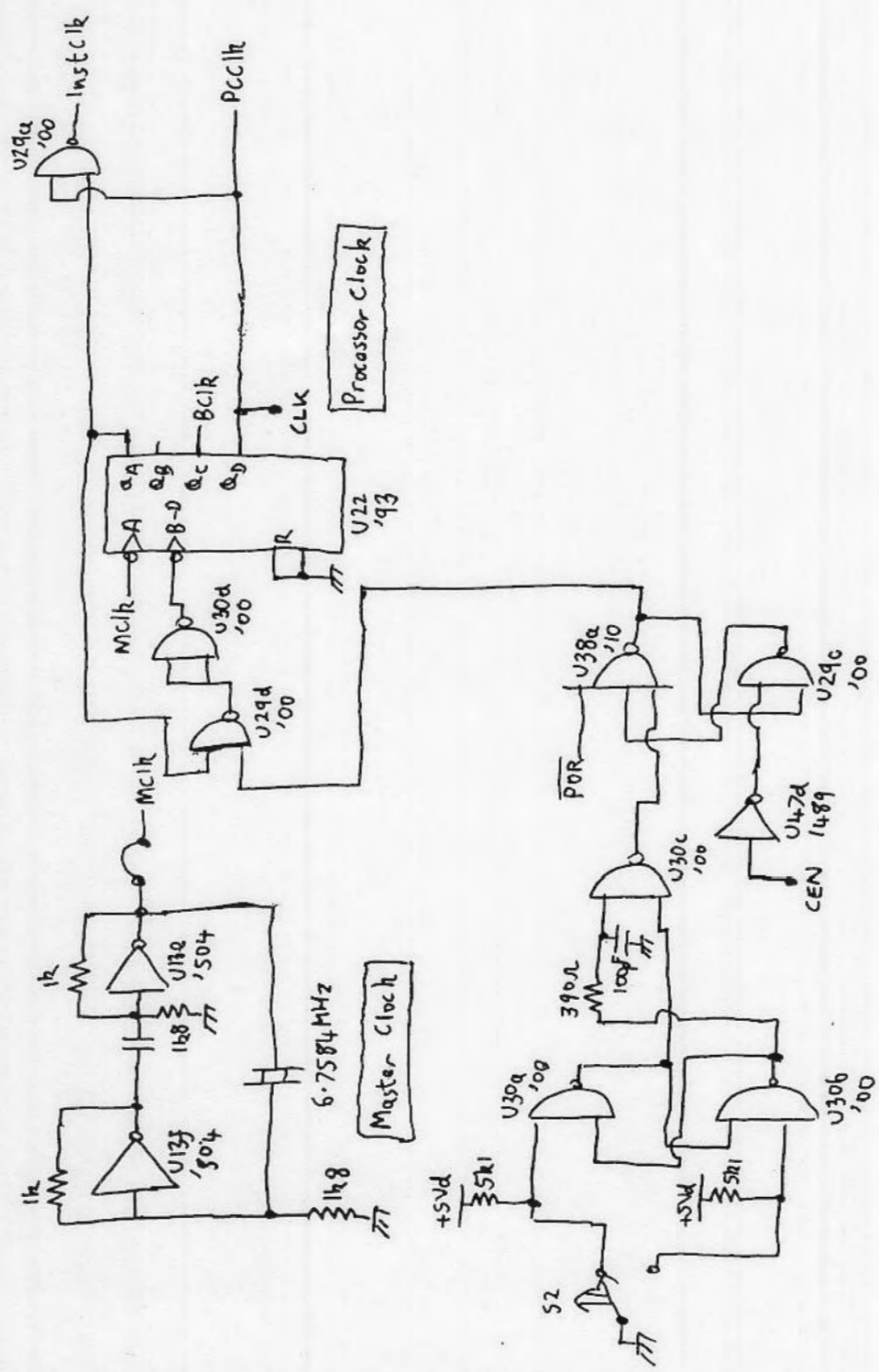
PR1472-01
Receiver

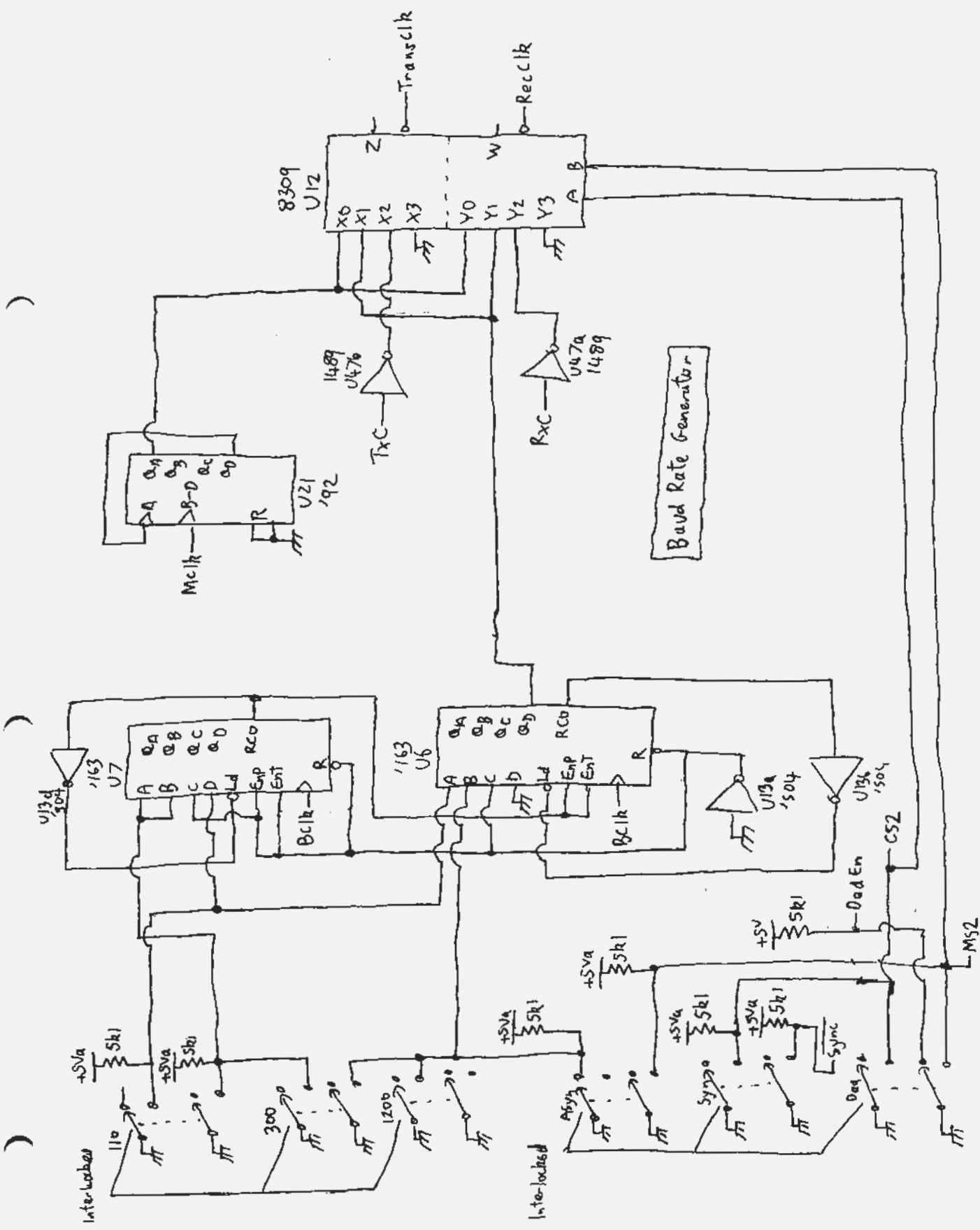
- MHR: Match Holding Register
- MDET: Match Detect
- RMS: Receiver Mode Select
- WLS: Word Length Select
- CD: Chip Disable
- RR: Receive Register (9 = parity)
- PI: Parity Inhibit
- EPE: Even Parity Enable
- PE: Parity Error
- SFR: Status Flag Reset
- DRR: Data Received Reset
- DR: Data Received
- OE: Overrun Error
- FE: Framing Error
- RRC: Receive Register Clock
- MR: Reset
- CRL: Control Register Load (EPE, PI, RMS, WLS)
- MHRL: Match Holding Register Load
- RI: Receive Input

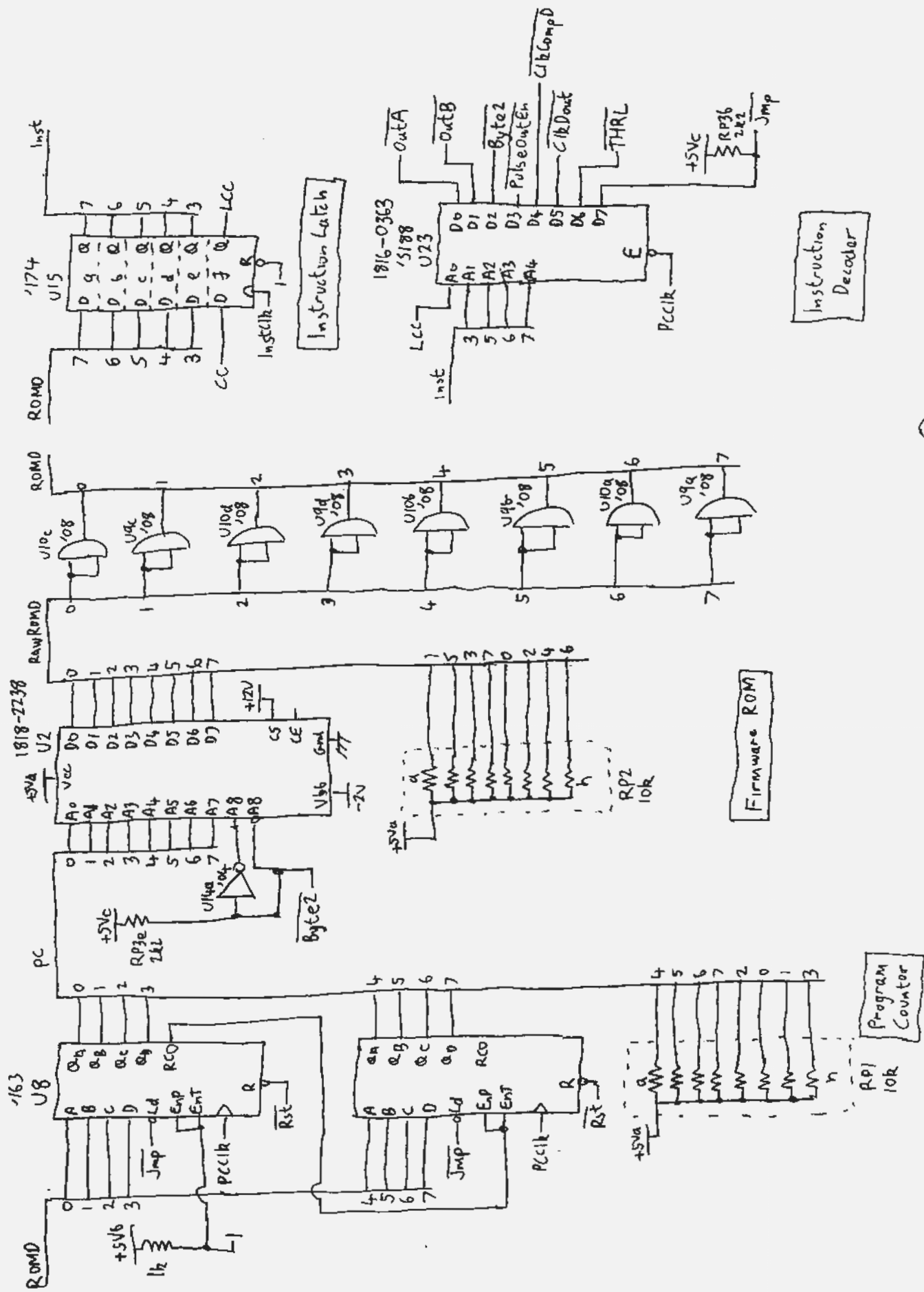
0	0	0	X	X	X	X	X	NOP
0	0	1	d	0	c	c	c	OUTB(c)=d
0	0	1	d	1	c	c	c	OUTA(c)=d
0	1	0	x	c	c	c	c	PulseOut(c)
0	1	1	0	x	x	x	x	Transmit Constant
0	1	1	1	x	x	x	x	Transmit Dout
1	0	0	0	0	x	x	x	Dout = Flags
1	0	0	x	1	x	x	x	Dout = Receive
1	0	0	1	0	x	x	x	Dout = HPIDIn
1	0	1	0	0	x	x	x	CompD = SW
1	0	1	0	1	x	x	x	CompD = Listen Addr
1	0	1	1	0	x	x	x	CompD = Talk Addr
1	0	1	1	1	x	x	x	CompD = Const
1	1	0	c	c	c	c	c	Jmp (Cond c)
1	1	1	c	c	c	c	c	Jmp (Cond c)

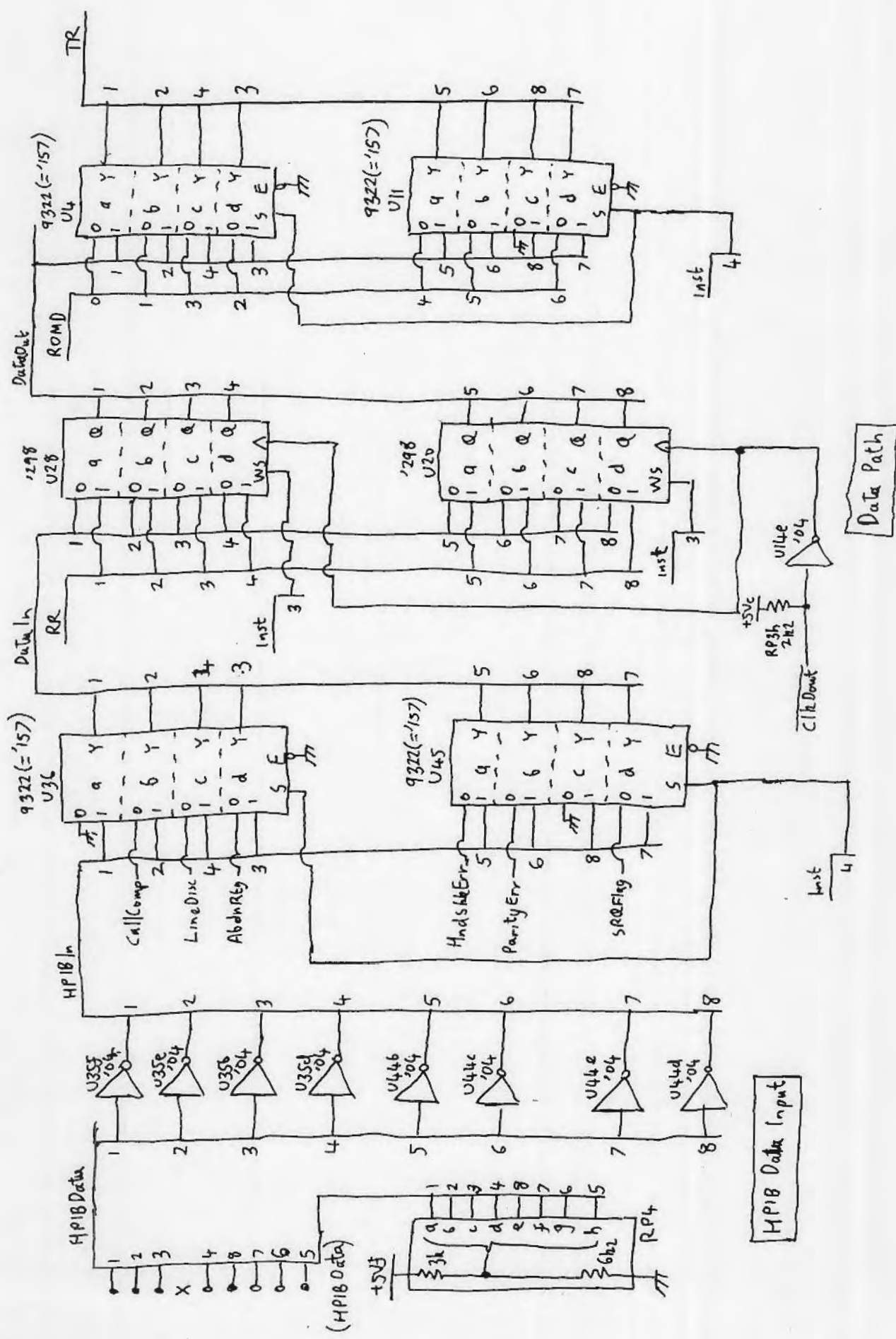
HP59403 Processor Instruction Set

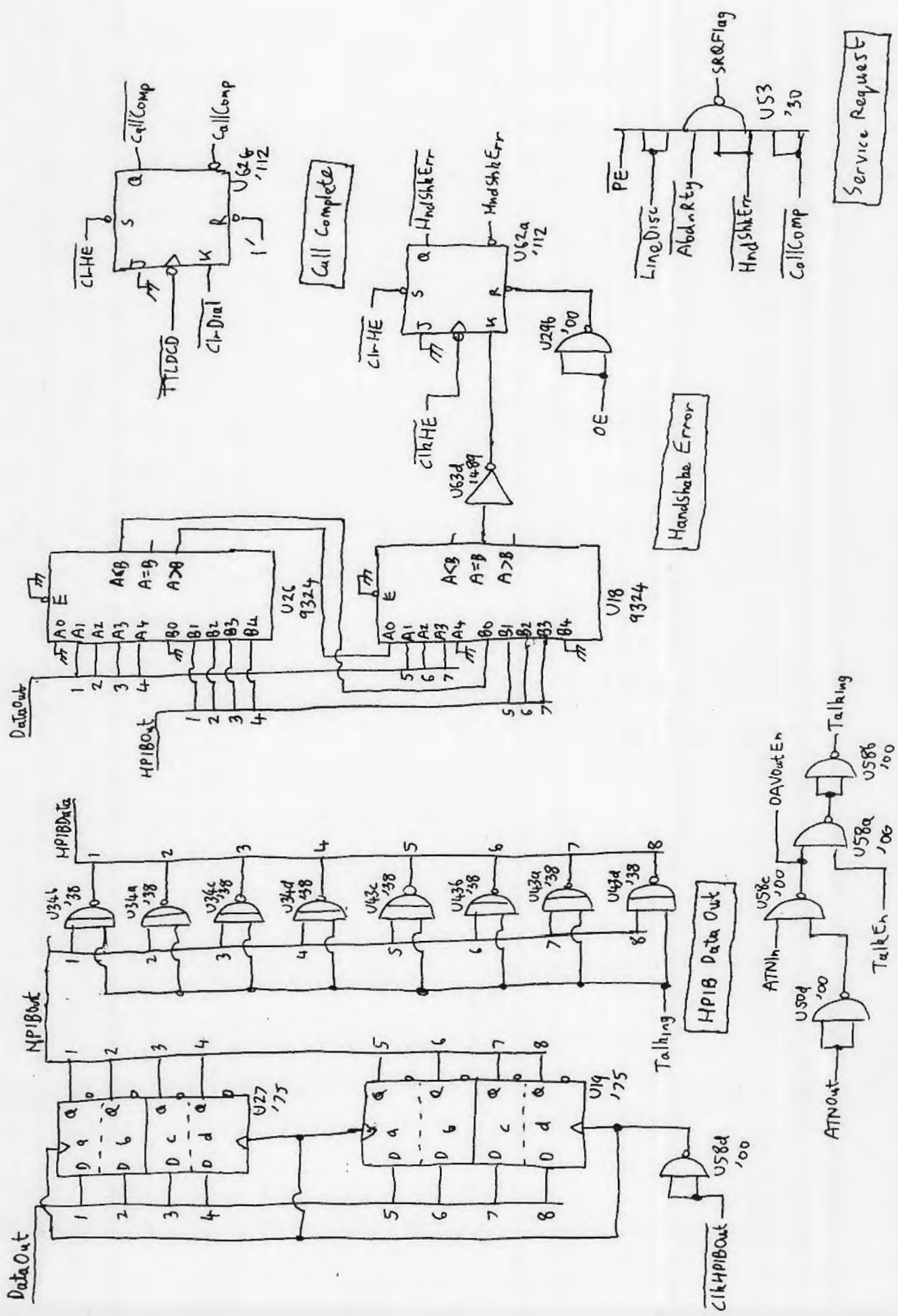






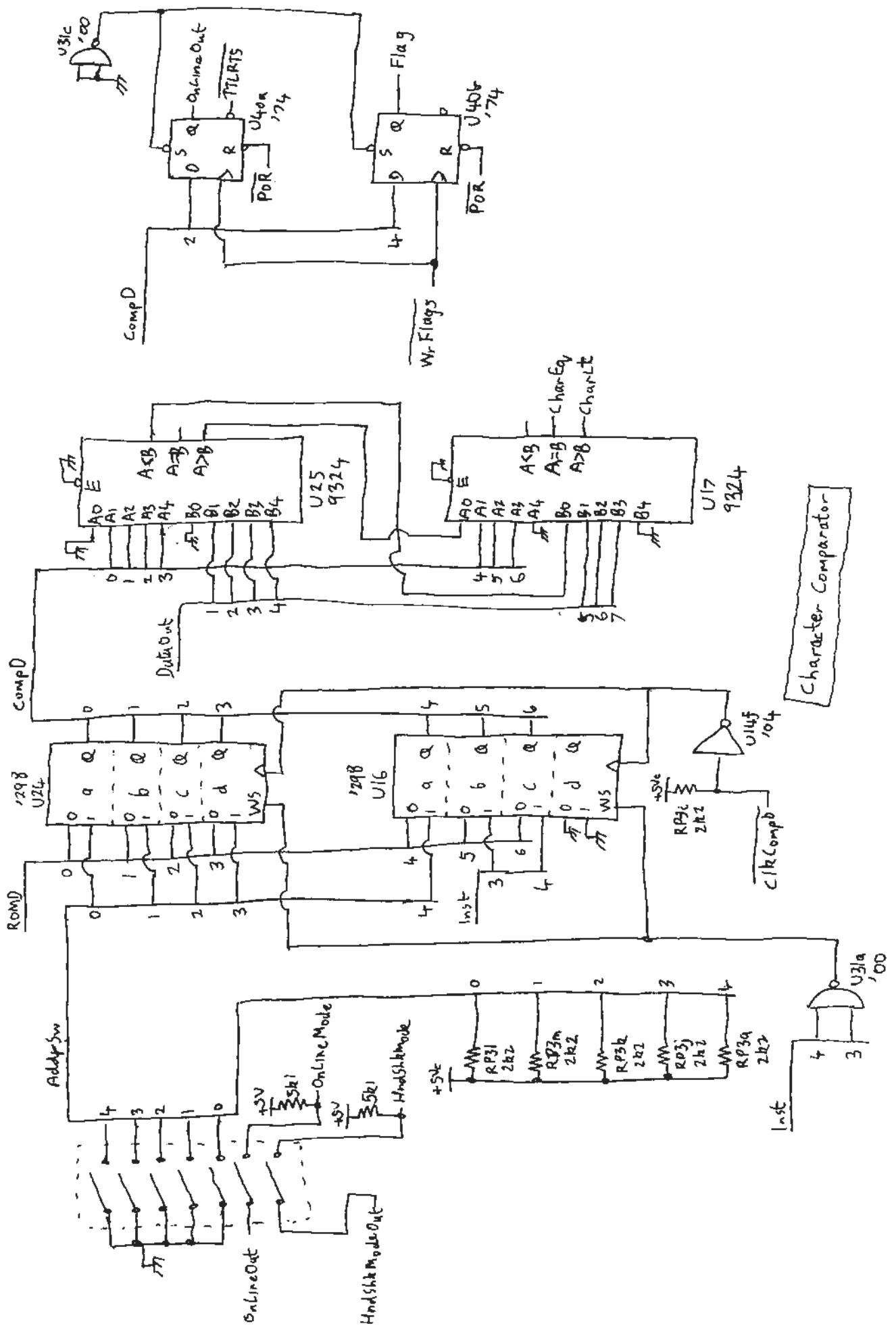


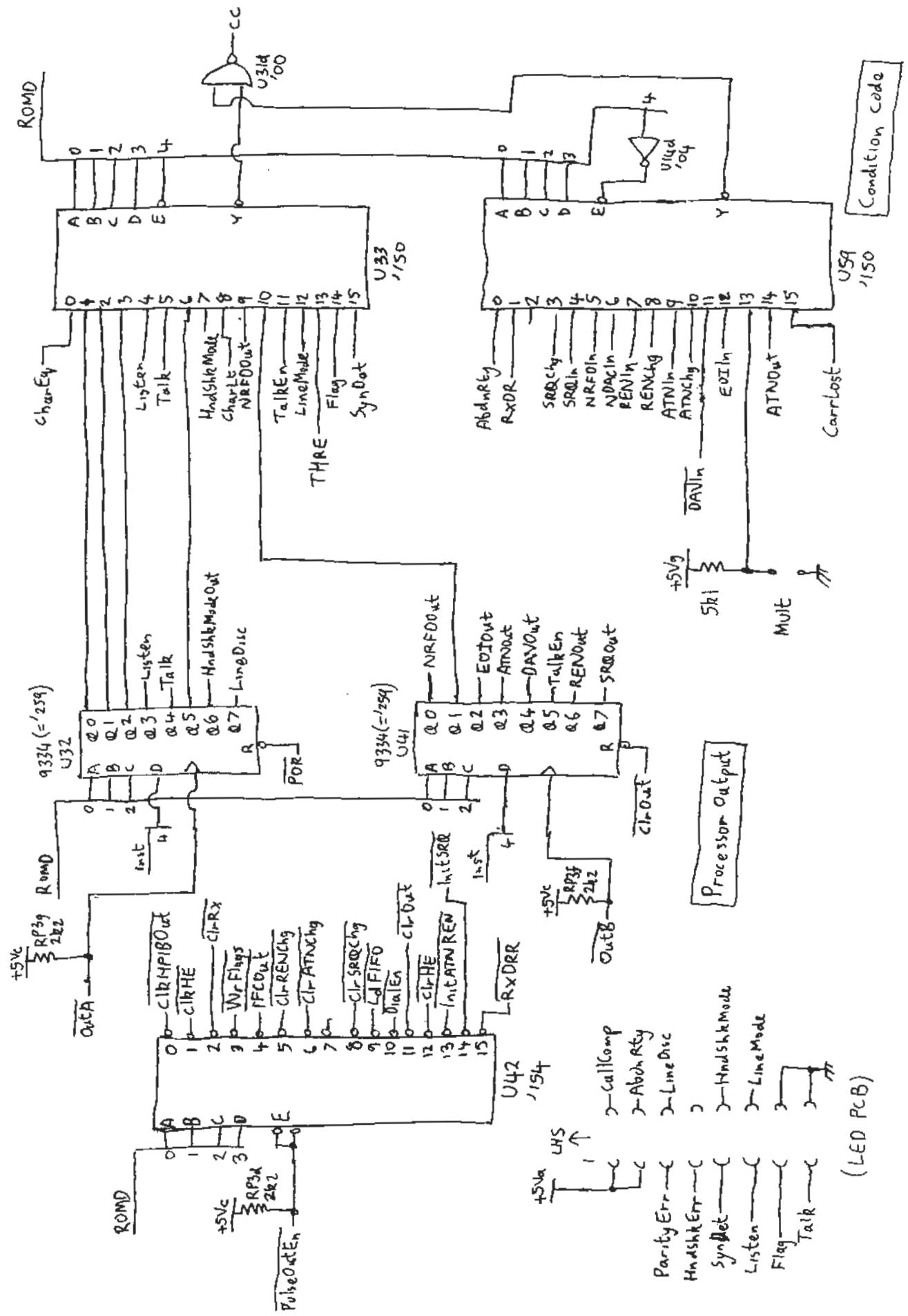




59403-66501

HP59403 Common Carrier Interface Logic PCB Sheet 6

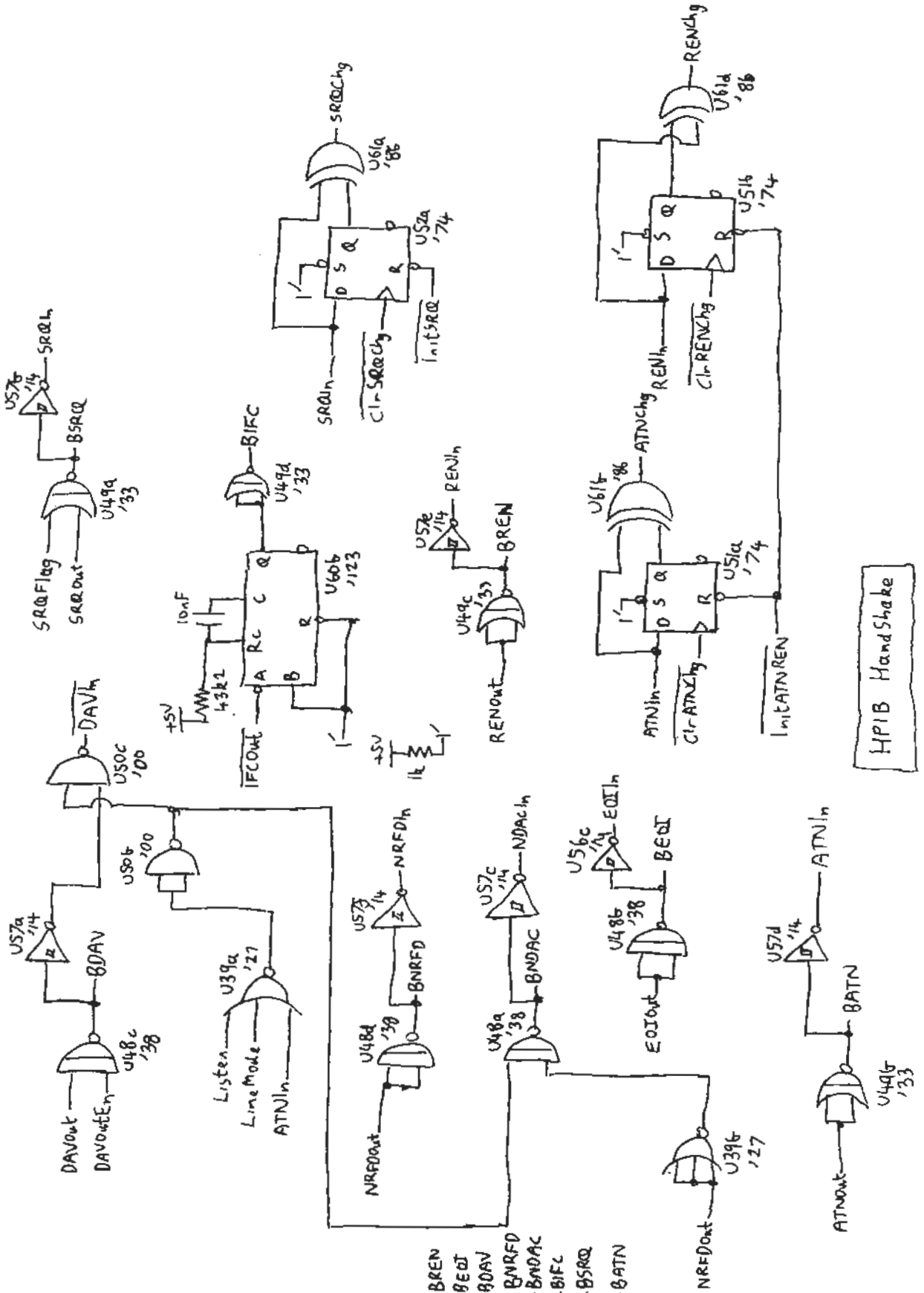


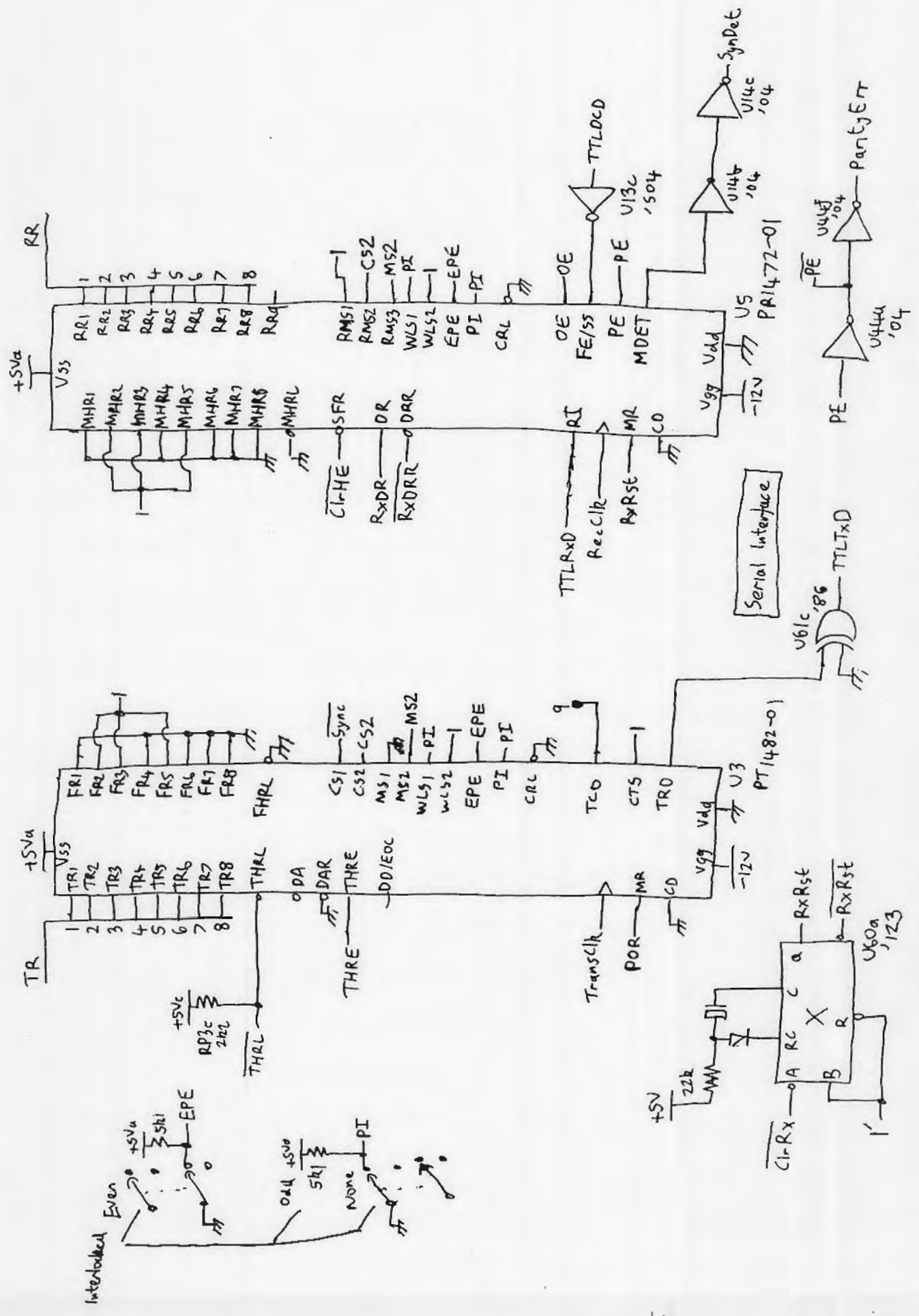


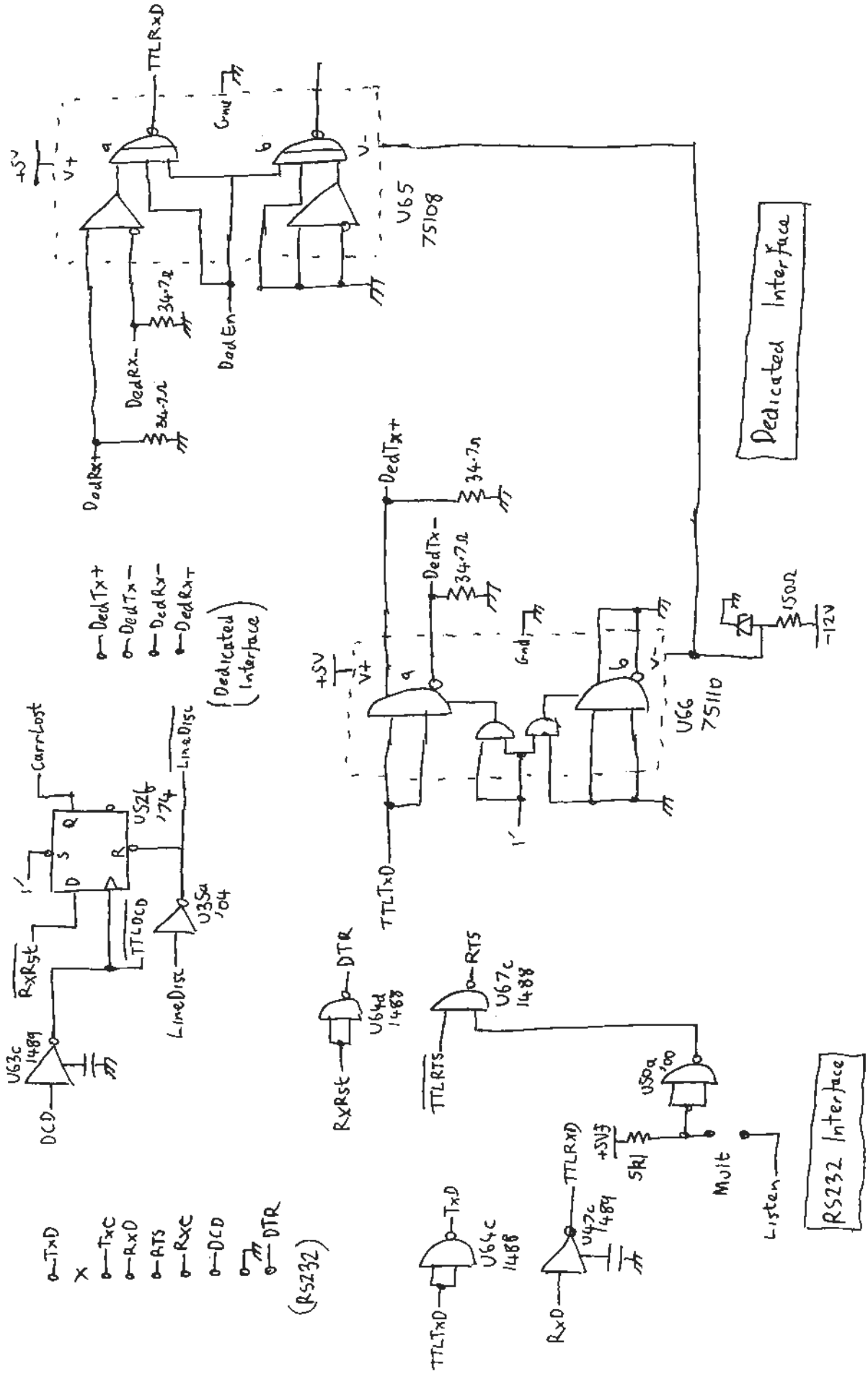
(LED PCB)

- o-BREN
- o-BEOT
- o-BDAV
- o-BNRFD
- o-BNDAC
- o-BIFC
- o-BSRQ
- o-BATN

(HPiB HandShake)







- o-TxD
- x
- o-TxC
- o-RxD
- o-RTS
- o-RxC
- o-DCD
- o-DTR

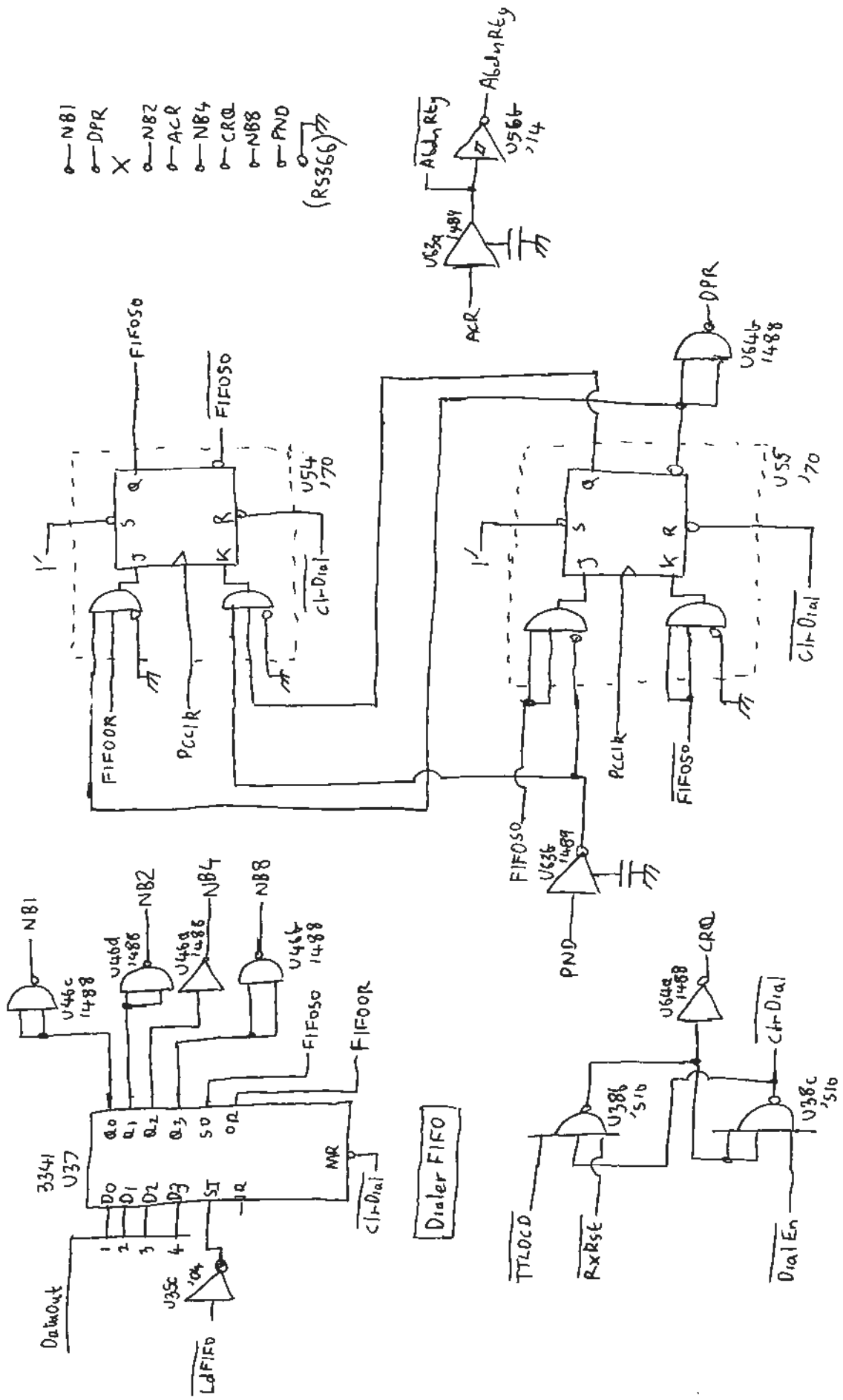
(RS232)

- o-DedTx+
- o-DedTx-
- o-DedRx-
- o-DedRx+

(Dedicated Interface)

Dedicated Interface

RS232 Interface



- N81
- DPR
- X
- NB2
- ACR
- NB4
- CRD
- NB8
- PND
- (RS366)

Dialer Control

Dialer FIFO

A4	A3	A2	A1	A0	D7	D6	D5	D4	D3	D2	D1	D0		
0	0	0	0	0	1	1	1	1	1	1	1	1	NOP	
0	0	0	0	1	1	1	1	1	1	1	1			
0	0	0	1	0	1	1	1	1	1	1	1			
0	0	0	1	1	1	1	1	1	1	1	1			
0	0	1	0	0	1	1	1	1	1	1	0	1	outB	
0	0	1	0	1	1	1	1	1	1	1	0	1		
0	0	1	1	0	1	1	1	1	1	1	1	0	outA	
0	0	1	1	1	1	1	1	1	1	1	1	0		
0	1	0	0	0	1	1	1	1	0	1	1	1	PulseOut	
0	1	0	0	1	1	1	1	1	0	1	1	1		
0	1	0	1	0	1	1	1	1	0	1	1	1		
0	1	0	1	1	1	1	1	1	0	1	1	1		
0	1	1	0	0	1	0	1	1	1	0	1	1	Transmit	
0	1	1	0	1	1	0	1	1	1	0	1	1		
0	1	1	1	0	1	0	1	1	1	0	1	1		
0	1	1	1	1	1	0	1	1	1	0	1	1		

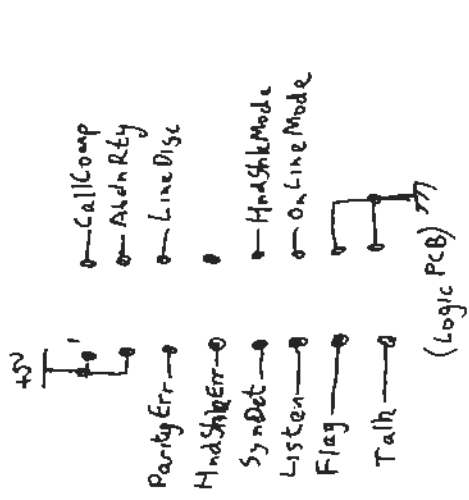
MP59403 Instruction Decode PROM (U23)

Sheet ①

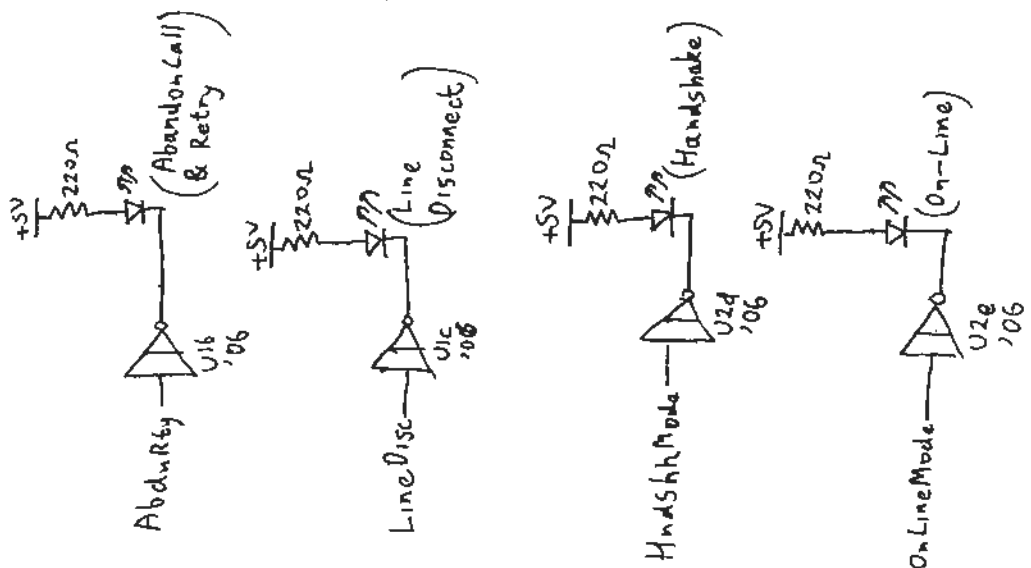
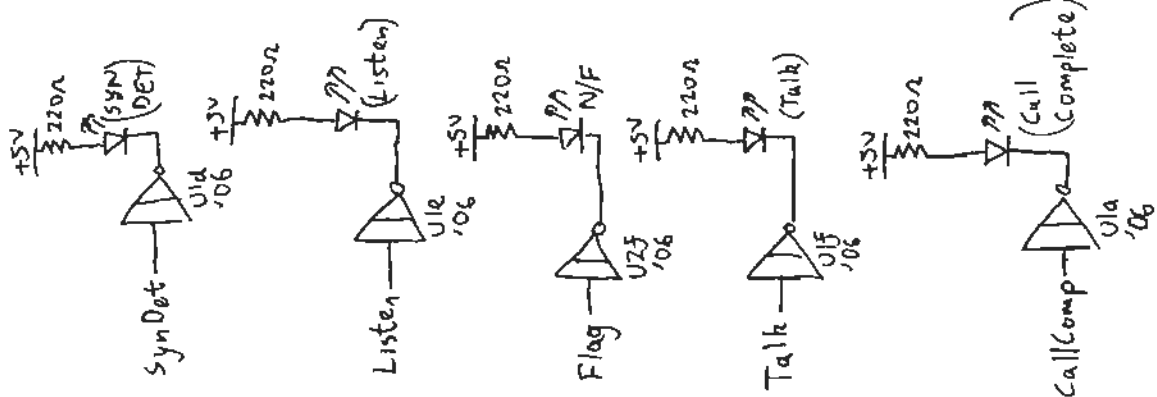
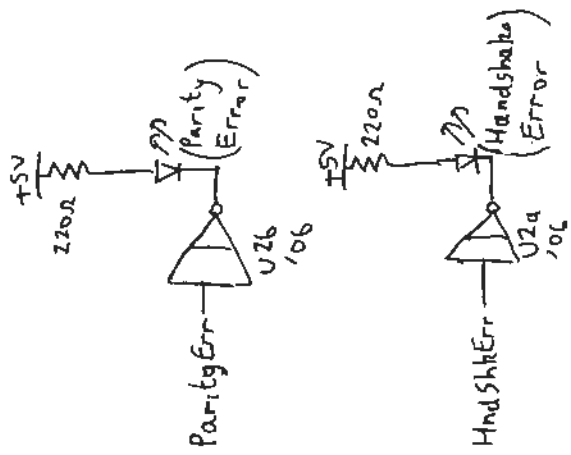
A4	A3	A2	A1	A0	D7	D6	D5	D4	D3	D2	D1	D0	
1	0	0	0	0	1	1	0	1	1	0	1	1	} Load Doak
1	0	0	0	1	1	1	0	1	1	0	1	1	
1	0	0	1	0	1	1	0	1	1	0	1	1	
1	0	0	1	1	1	1	0	1	1	0	1	1	
1	0	1	0	0	1	1	1	0	1	0	1	1	} Load CompD
1	0	1	0	1	1	1	1	0	1	0	1	1	
1	0	1	1	0	1	1	1	0	1	0	1	1	
1	0	1	1	1	1	1	1	0	1	0	1	1	
1	1	0	0	0	0	1	1	1	1	0	1	1	} Jmp(Cond)
1	1	0	0	1	1	1	1	1	1	0	1	1	
1	1	0	1	0	0	1	1	1	1	0	1	1	
1	1	0	1	1	1	1	1	1	1	0	1	1	
1	1	1	0	0	1	1	1	1	1	0	1	1	} Jmp(Cond)
1	1	1	0	1	0	1	1	1	1	0	1	1	
1	1	1	1	0	1	1	1	1	1	0	1	1	
1	1	1	1	1	0	1	1	1	1	0	1	1	

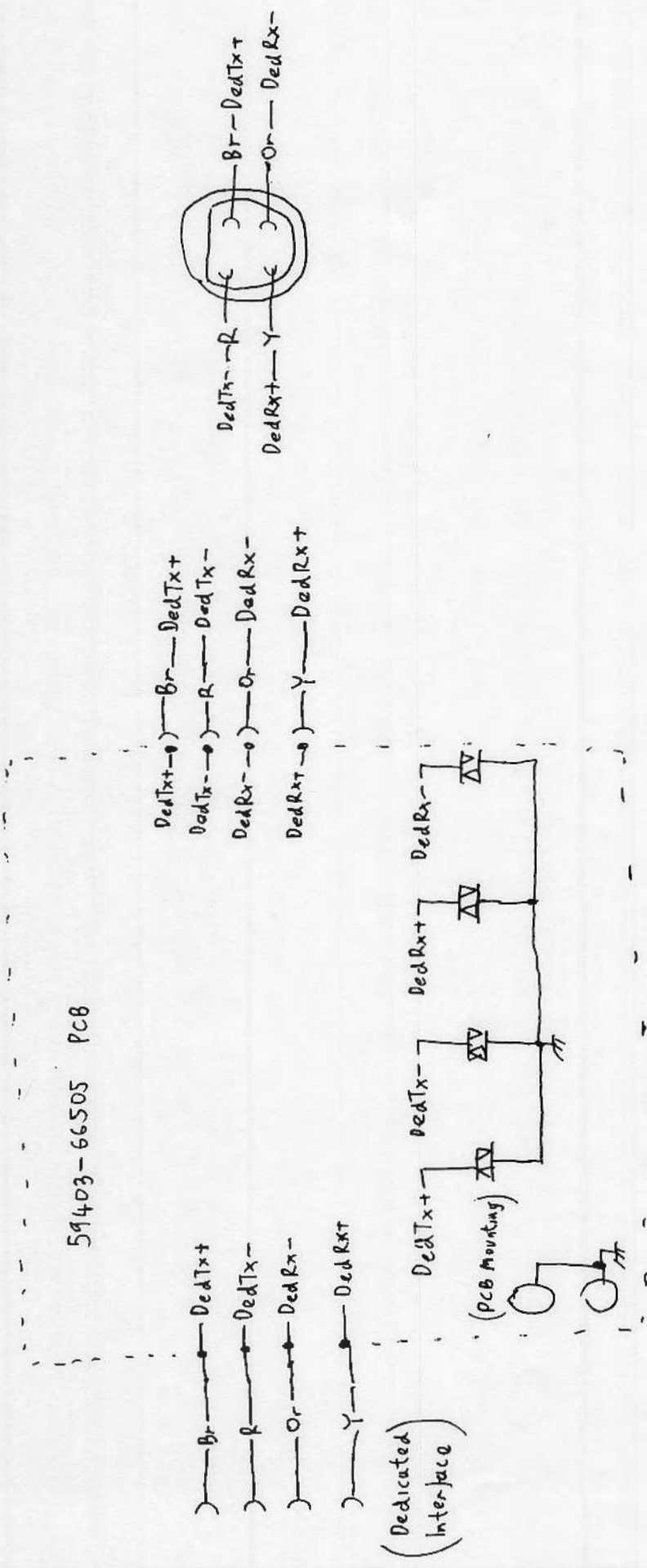
HP59403 Instruction Decode PROM (U23)

Sheet (2)



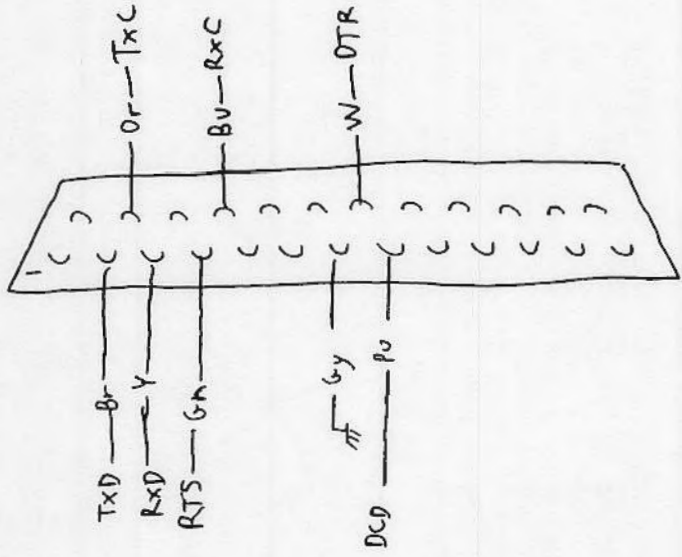
- CallComp
- AbdnRty
- LineDisc
- HndShkMode
- OnLineMode





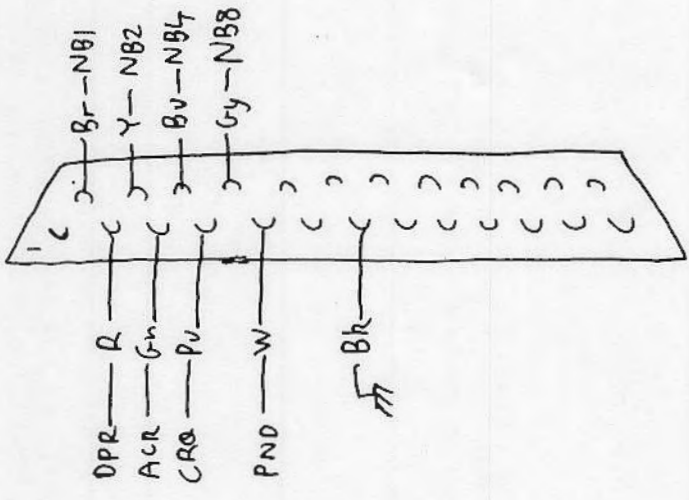
HP59403 Common Carrier Interface

Dedicated Interface Wiring



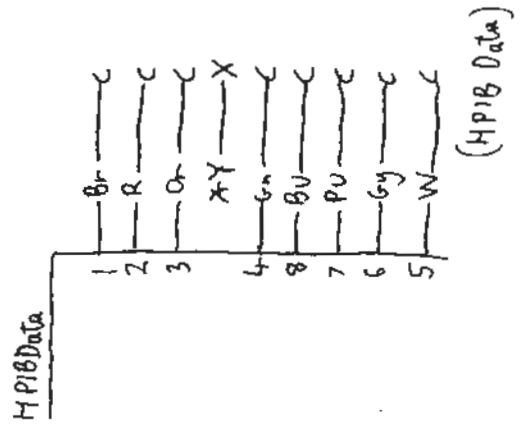
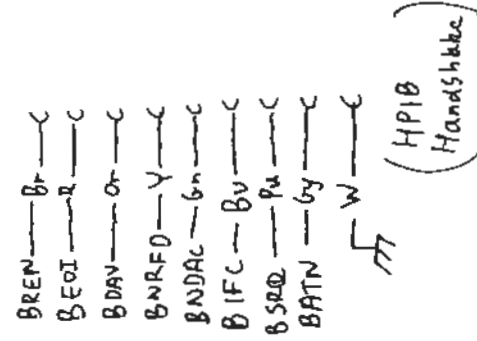
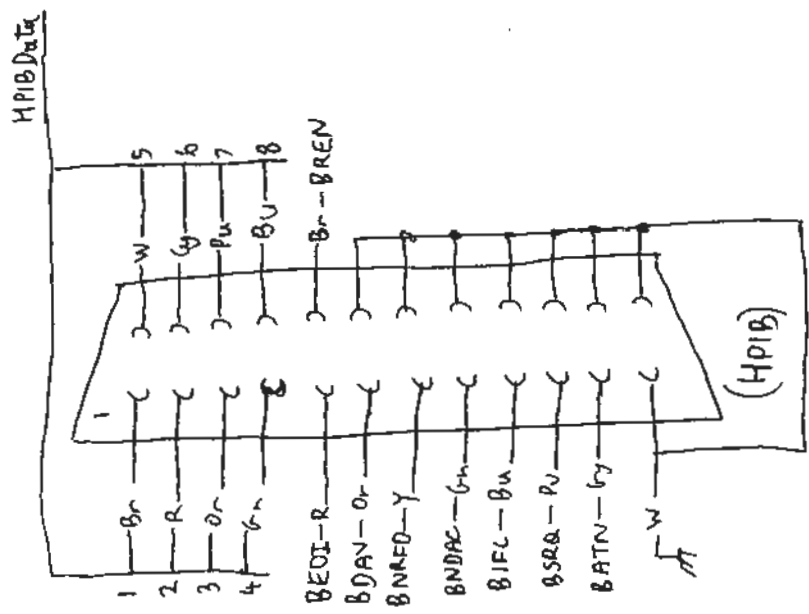
RS232

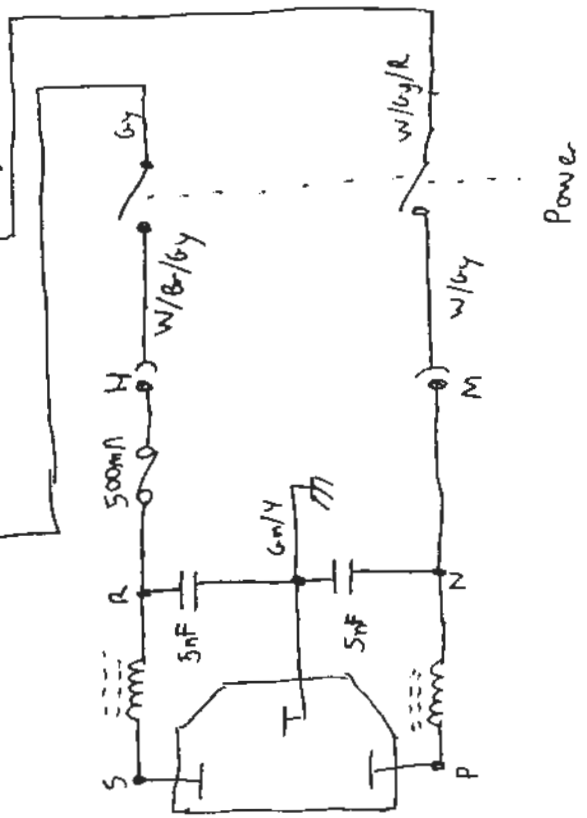
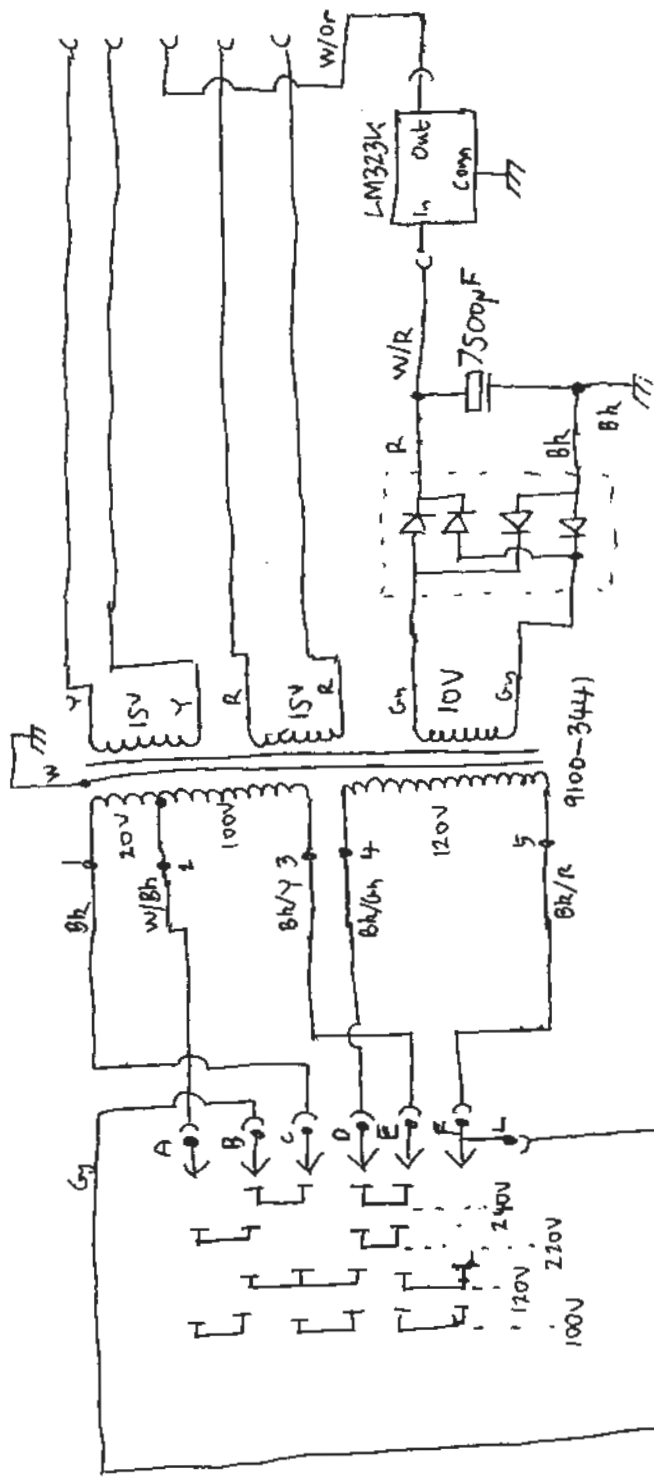
- Br — TxD
- R — RxD
- Or — TxC
- Y — RxD
- Gn — RTS
- Bu — RxC
- Pu — Dcd
- Gy —
- W — DTR



RS366

- Br — NB1
- R — DPR
- Or — X
- Y — NB2
- Gn — ACR
- Bu — NB4
- Pu — CRQ
- Gy — NB8
- W — PND
- Blk —





HPS 403 Common Carrier Interface PSU Wiring