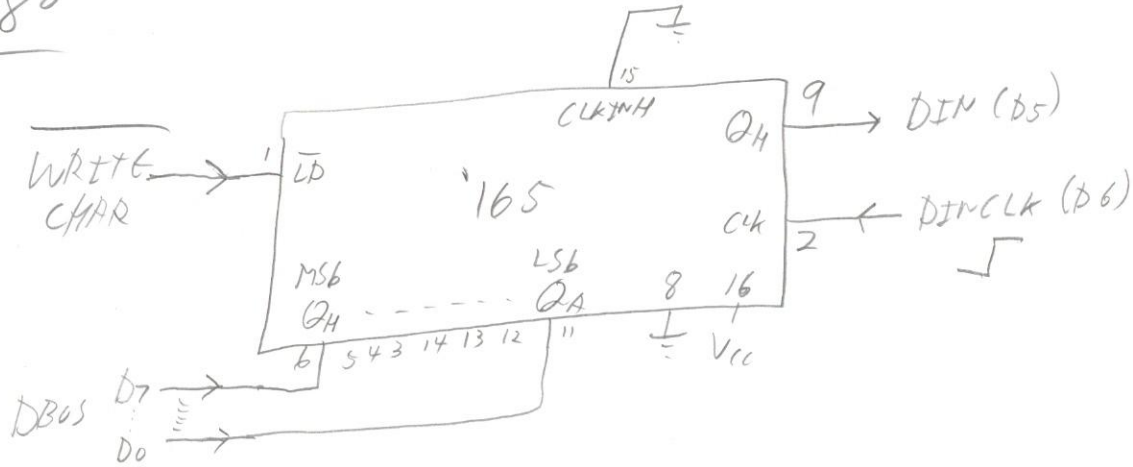


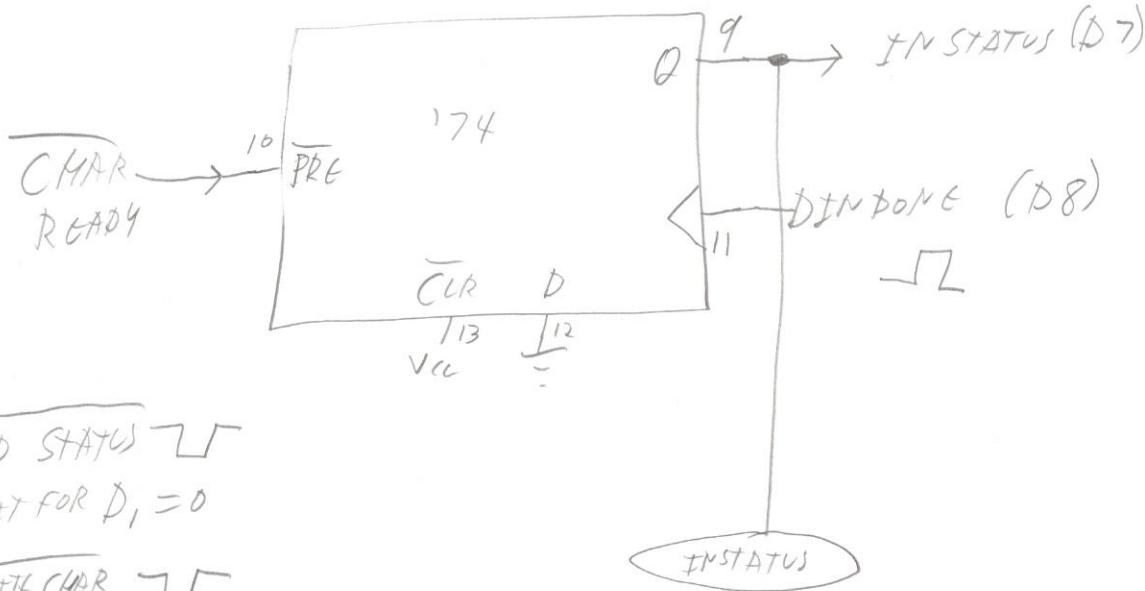
Z80-70-AT

3/22/21

Z80



AT328



- 1) CHECK IN STATUS
- 2) If = 1,
 - 8x { read DIN (MSB first)
 - pulse DINCLK \square
- 3) pulse DIN DOME \square

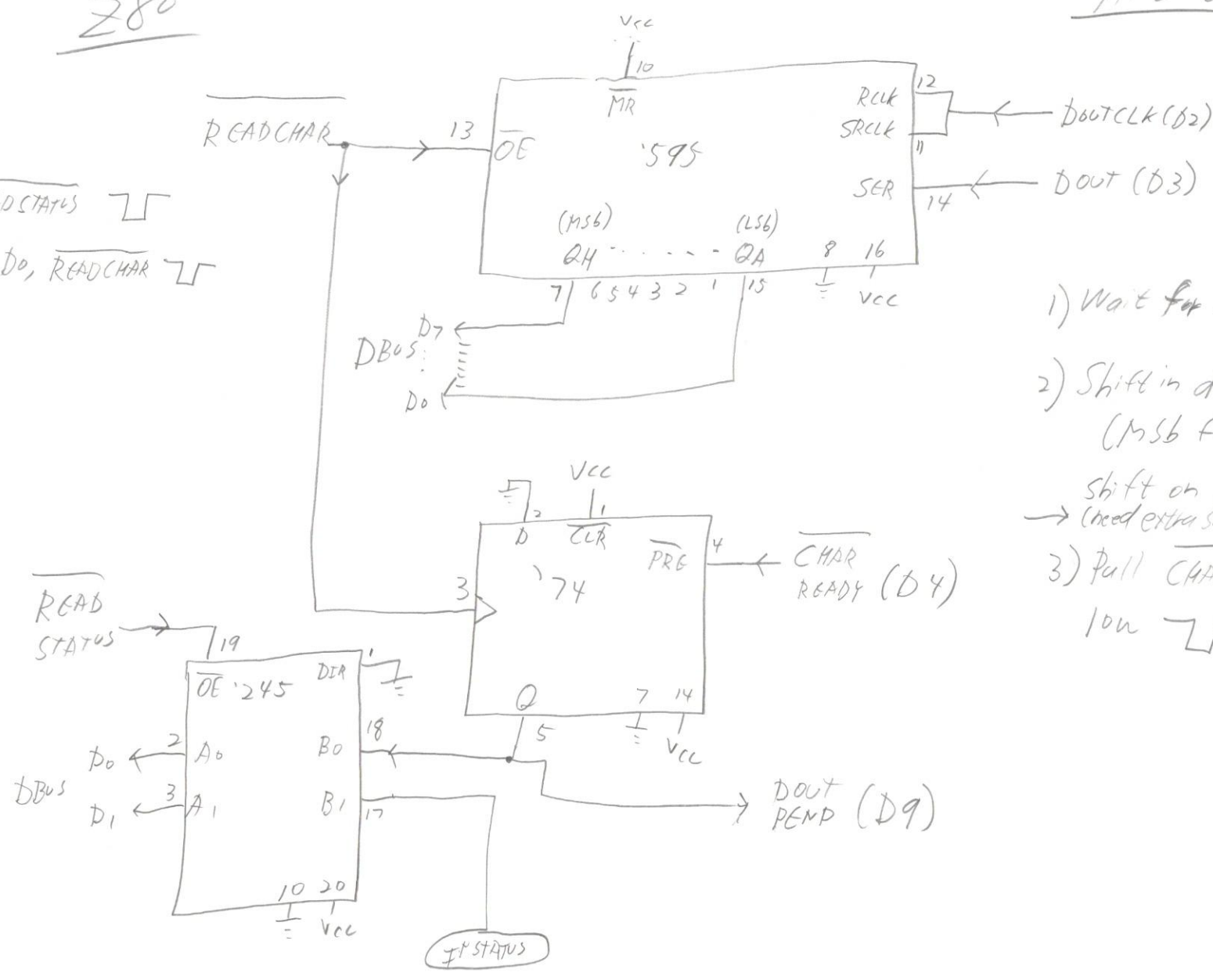
- 1) READ STATUS \square
 WAIT FOR D₇ = 0
- 2) WRITE CHAR \square
- 3) CHAR READY \square

Z80

AT328

- 1) $\overline{\text{READSTATUS}}$
- 2) If D0, $\overline{\text{READCHAR}}$

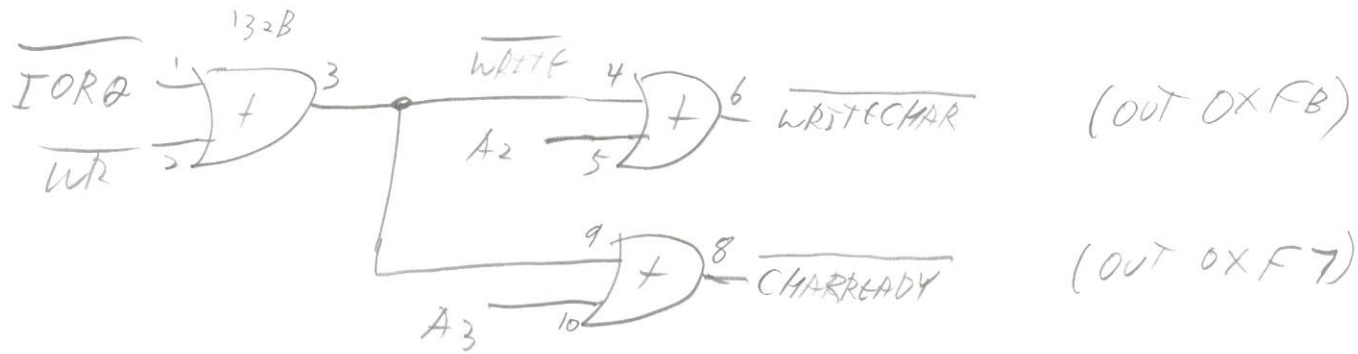
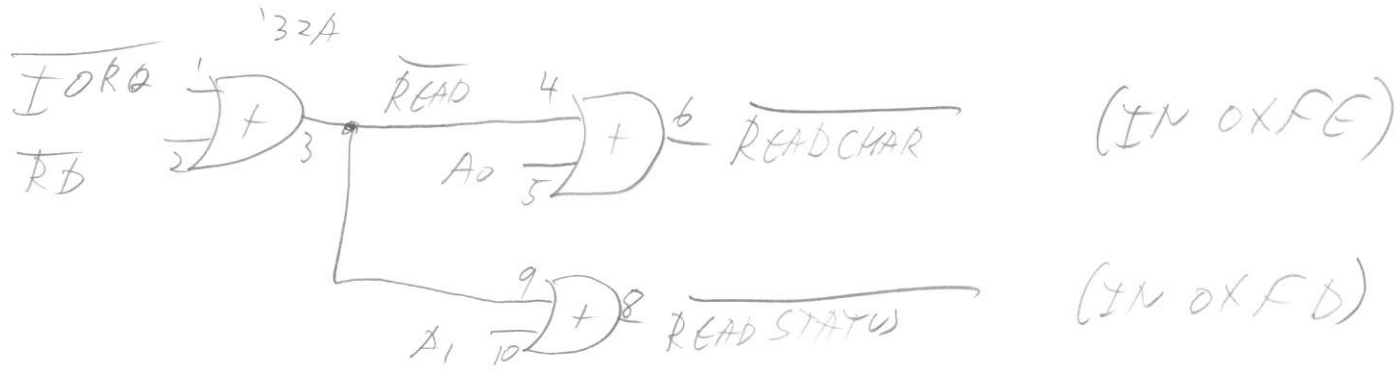
- 1) Wait for DOUTPEND=0
- 2) Shift in data (MSB first)
Shift on DOUTCLK
→ (need extra shift @ end)
- 3) Pull $\overline{\text{CHARREADY}}$ low



IPSTATUS

Z80 DECODING

3/22/21



+
+

```

;      ORA  A
0642  320008  INIT:  STA  OCSW
0645  3E4E      MVI  A,4EH      ;Initialize 8251A UART -- 3 is status port
0647  D303      OUT   3      ;1 stop bit, no parity, 8-bit char, 16x baud
0649  3E37      MVI  A,37H     ;enable receive and transmit
064B  D303      OUT   3
064D  1619      MVI  D,19H
064F          PATLOP:
064F  CD0E00      CALL CRLF
0652  15          DCR  D
0653  C24F06      JNZ  PATLOP
0656  97          SUB  A
0657  11A306      LXI  D,MSG1
065A  CD6005      CALL PRTSTG
065D  210000      LXI  H,START
0660  221308      SHLD RANPNT
0663  211708      LXI  H,TXTBGN
0666  221508      SHLD TXTUNF
0669  C3BA00      JMP  RSTART
066C  C27106      OC2:  JNZ  OC3      ;IT IS ON
066F  F1          POP  PSW      ;IT IS OFF
0670  C9          RET          ;RESTORE AF AND RETURN
0671  DB03      OC3:  IN   3      ;Check status
0673  E601      ANI  1H     ;STATUS BIT
0675  CA7106      JZ   OC3      ;NOT READY, WAIT
0678  F1          POP  PSW      ;READY, GET OLD A BACK
0679  D302      OUT  2      ;Out to data port
067B  FE0D      CPI  CR      ;WAS IT CR?
067D  C0          RNZ          ;NO, FINISHED
067E  3E0A      MVI  A,LF     ;YES, WE SEND LF TOO
0680  D7          RST  2      ;THIS IS RECURSIVE
0681  3E0D      MVI  A,CR     ;GET CR BACK IN A
0683  C9          RET

;
0684  DB03FD      CHKIO: IN   3      IN 0XFD      ;*** CHKIO ***
0686  00          NOP          ;STATUS BIT FLIPPED?
0687  E60201      ANI  2H     AND 1      ;MASK STATUS BIT
0689  C8          RZ          RZ          ;NOT READY, RETURN "Z"
068A  DB02FE      IN   2      IN 0XFE     ;READY, READ DATA
068C  E67F      ANI  7FH     ;MASK BIT 7 OFF
068E  FE0F      CPI  0FH     ;IS IT CONTROL-O?
0690  C29D06      JNZ  C11     ;NO, MORE CHECKING
0693  3A0008      LDA  OCSW     ;CONTROL-O FLIPS OCSW
0696  2F          CMA          ;ON TO OFF, OFF TO ON
0697  320008      STA  OCSW
069A  C38406      JMP  CHKIO
069D  FE03      C11:  CPI  3H     ;GET ANOTHER INPUT
069F  C0          RNZ          ;IS IT CONTROL-C?
06A0  C3BA00      JMP  RSTART   ;NO, RETURN "NZ"
;                                     ;YES, RESTART TBI

06A3  54494E59  MSG1:  DB   'TINY '

```

0436: 11FF07 LXI LSTROM

0015: C30770 JMP OC2

3/23/21

0770:	0C2:	JNZ 0C3	C2 75 07
0773:		POP PSW	F1
0774:		RET	C9
0775:	0C3:	IN 0XFD	DB FD
		ANI 2	E6 02
		JNZ 0C3	C2 75 07
		POP PSW	F1
		OUT 0XFB	D3 FB
		OUT 0XF7	D3 F7
		JMP 067B	C3 7B 06