```
                        1:  *
                        2:  *           ROM I/O AREA
                        3:  *
                        4:
                        5:  * CARTRIDGE DISK CONTROLLER
                        6:
    FF58                7:           ORG     $FF58
FF58 0002               8:           RMB     2        CONTROLLER STATUS - R/W
FF5A 0002               9:           RMB     2        CONTROLLER DATA - WRITE ONLY
FF5C 0002              10:           RMB     2        DISK STATUS - READ ONLY
                       11:  *
                       12:  * DMA CONTROLLER
                       13:  *
    FF60               14:           ORG     $FF60
FF60 0002              15:           RMB     2        CHANNEL 0 ADDRESS
FF62 0002              16:           RMB     2        CHANNEL 0 BYTE COUNT
FF64 0002              17:           RMB     2        CHANNEL 1 ADDRESS
FF66 0002              18:           RMB     2        CHANNEL 1 BYTE COUNT
FF68 0002              19:           RMB     2        CHANNEL 2 ADDRESS
FF6A 0002              20:           RMB     2        CHANNEL 2 BYTE COUNT
FF6C 0002              21:           RMB     2        CHANNEL 3 ADDRESS
FF6E 0002              22:           RMB     2        CHANNEL 3 BYTE COUNT
FF70 0001              23:           RMB     1        CHANNEL 0 CONTROL REGISTER
FF71 0001              24:           RMB     1        CHANNEL 1 CONTROL REGISTER
FF72 0001              25:           RMB     1        CHANNEL 2 CONTROL REGISTER
FF73 0001              26:           RMB     1        CHANNEL 3 CONTROL REGISTER
FF74 0001              27:           RMB     1        PRIORITY CONTROL REGISTER
FF75 0001              28:           RMB     1        INTERRUPT CONTROL REGISTER
FF76 0001              29:           RMB     1        DATA CHAIN REGISTER
```
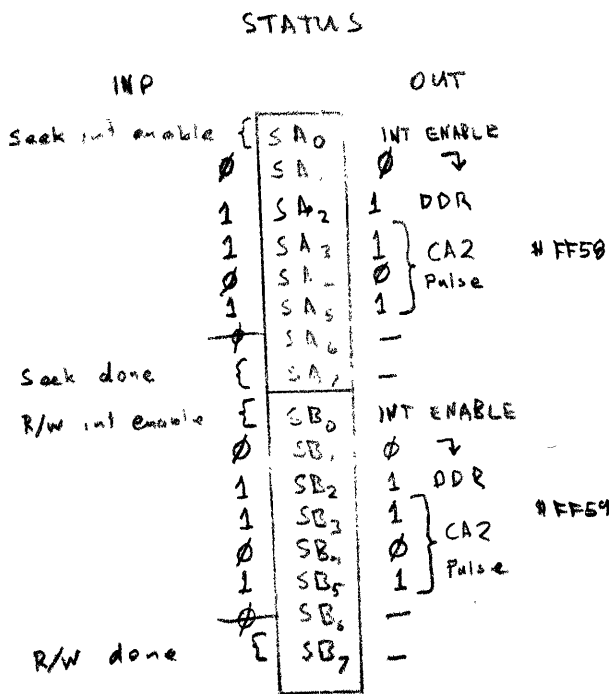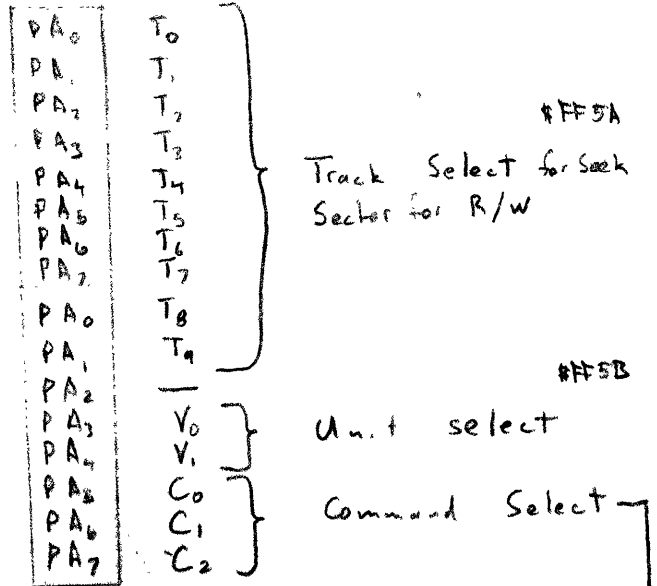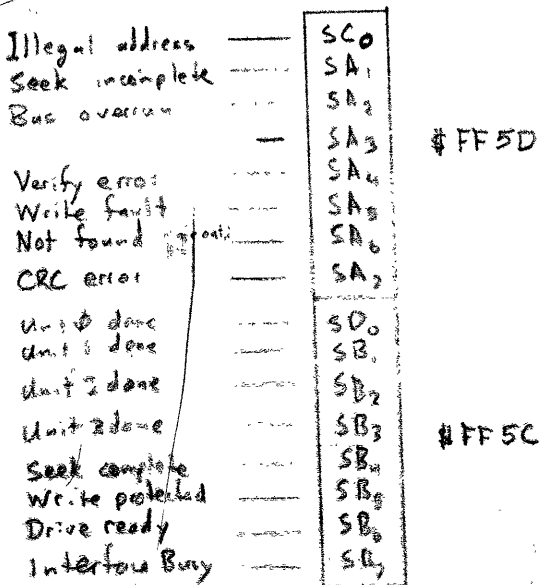
WM Cartridge Disk Controller
Programming Diagram

PIA at #FF58

STATUS

	INP		OUT	
Seek int enable {	SA_0	INT ENABLE	Ø	↲
Ø	SA_1		Ø	↲
1	SA_2	DDR	1	
1	SA_3	CA2	1	} #FF58
Ø	SA_4	Pulse	Ø	
1	SA_5		1	
⊕	SA_6		—	
Seek done {	SA_7		—	
R/W int enable {	SB_0	INT ENABLE	Ø	↲
Ø	SB_1		Ø	↲
1	SB_2	DDR	1	
1	SB_3	CA2	1	} #FF59
Ø	SB_4	Pulse	Ø	
1	SB_5		1	
⊕	SB_6		—	
R/W done {	SB_7		—	

DATA (All output)

PA_0	T_0	
PA_1	T_1	
PA_2	T_2	
PA_3	T_3	#FF5A
PA_4	T_4	Track Select for Seek
PA_5	T_5	Sector for R/W
PA_6	T_6	
PA_7	T_7	
PA_0	T_8	
PA_1	T_9	
PA_2		#FF5B
PA_3	V_0 }	Unit select
PA_4	V_1	
PA_5	C_0 }	Command Select
PA_6	C_1	
PA_7	C_2	

COMMAND

for formatting only { 000	Read address
001	Write address
010	Verify track
011	Restore
100	Read
101	Write
110	Verify
111	Seek

DISK STATUS (input only)

Illegal address —	SC_0	
Seek incomplete	SA_1	
Bus overrun	SA_2	
—	SA_3	#FF5D
Verify error	SA_4	
Write fault	SA_5	
Not found	SA_6	
CRC error —	SA_7	
Unit Ø done	SD_0	
Unit 1 done	SB_1	
Unit 2 done	SB_2	
Unit 3 done	SB_3	#FF5C
Seek complete	SB_4	
Write protected	SB_5	
Drive ready	SB_6	
Interface Busy	SB_7	