

APPENDIX G: ME1600 AND SB1600 I/O ADDRESSES

This appendix presents several tables of I/O addresses for the ME and SB1600 series machines.

Table G-1. ME1600 I/O Addresses.

Hex	Decimal	Function
FC10	-1008	Serial port A (unit #1:, #2:)
FC15	-1003	Interrupt base register serial ports A-D, Par port #6:
FC16	-1002	Serial port B (unit #7:, #8:)
FC1C	-996	Serial port C (unit #15:, #16:)
FC22	-990	Serial port D (unit #17:, #18:)
FC28	-984	Parallel port (unit #6:)
FC2C	-980	Interrupt mask register serial ports A-D, Par port #6:
FC30	-976	Floppy port (unit #4:, #5:, #9:, #10:)
FC34	-972	DMA EOB and DINTR
FC35	-971	Floppy interrupt priority
FC36	-970	Floppy interrupt base register
FC40	-960	Microcode use during interrupt handling
FC41	-959	Interrupt enable address
FC42	-958	Interrupt mask register for RTC, BTO, PFD, clock tick rate
FC43	-957	Interrupt base register for RTC, BTO, PFD
FC60	-928	Microcode use during interrupt handling
FC68	-922	Used by microcode to determine boot from RCM
FC70	-912	Winchester disk
FD10	-752	Serial port E (unit #19:, #20:)
FD15	-747	Interrupt base register serial ports E-H, par port #27:
FD16	-746	Serial port F (unit #21:, #22:)
FD1C	-740	Serial port G (unit #23:, #24:)
FD22	-734	Serial port H (unit #25:, #26:)
FD28	-728	Parallel port (unit #27:)
FD2C	-724	Interrupt mask register serial ports E-H, par port #27:
FD30	-720	Floppy port (unit #11:, #12:, #13:, #14:)
FD34	-716	DMA EOB and DINTR
FD35	-715	Floppy interrupt priority
FD36	-714	Floppy interrupt base register
FF00 to FFFF		RCM address space

Table G-2. Interrupt Addresses.

Hex	Decimal	Function
0010	16	PFD Power fail detect
0011	17	BTO Bus time out
0012	18	RTC Real time clock
0016	22	Winchester disk
001E	30	Floppy (unit #4:, #5:, #9:, #10:)
001F	31	Floppy (unit #11:, #12:, #13:, #14:)
0020	32	--- not used ---
0021	33	--- not used ---
0022	34	Serial port D output buffer empty
0023	35	Serial port D input buffer full
0024	36	Serial port D exception
0025	37	Serial port C output buffer empty
0026	38	Serial port C input buffer full
0027	39	Serial port C exception
0028	40	Parallel port #6: output
0029	41	Serial port B output buffer empty
002A	42	Serial port B input buffer full
002B	43	Serial port B exception
002C	44	Parallel port #6: input
002D	45	Serial port A output buffer empty
002E	46	Serial port A input buffer full
002F	47	Serial port A exception
0030	48	--- not used ---
0031	49	--- not used ---
0032	50	Serial port H output buffer empty
0033	51	Serial port H input buffer full
0034	52	Serial port H exception
0035	53	Serial port G output buffer empty
0036	54	Serial port G input buffer full
0037	55	Serial port G exception
0038	56	Parallel port #27: output
0039	57	Serial port F output buffer empty
003A	58	Serial port F input buffer full
003B	59	Serial port F exception
003C	60	Parallel port #27: input
003D	61	Serial port E output buffer empty
003E	62	Serial port E input buffer full
003F	63	Serial port E exception

Table G-3. Mask Registers.

Hex	Decimal	Function
FC2C	-980	Serial ports A-D, parallel port #6:
Bit		
15	Port A exception	11 Port B exception
14	Port A input	10 Port B input
13	Port A output	9 Port B output
12	Parallel #6 input	8 Parallel #6 output
7	Port C exception	3 Port D input
6	Port C input	2 Port D output
5	Port C output	1 unused
4	Port D exception	0 unused
FD2C	-724	Serial ports E-H, parallel port #27:
Bit		
15	Port E exception	11 Port F exception
14	Port E input	10 Port F input
13	Port E output	9 Port F output
12	Parallel #6 input	8 Parallel #6 output
7	Port G exception	3 Port H input
6	Port G input	2 Port H output
5	Port G output	1 unused
4	Port H exception	0 unused
FC42	-958	BTO, PFD, RTC and clockvalue mask
Bit		
5	BTP	3,2,1 clock rates
4	PFD	0 RTC

NOTE

Each mask bit set to 1 means the corresponding interrupt is enabled.

Table G-4. SB1600 I/O Addresses.

Hex	Decimal	Function
FC10	-1008	Serial port A (unit #1:, #2:)
FC18	-1000	System status word/ system control word
FC20	-992	Serial port B (unit #7:, #8:)
FC30	-976	Floppy port (unit #4:, #5:, #9:, #10:)
FC40	-960	Microcode use during interrupt handling
FC42	-958	Interrupt mask register for RTC, BTO, PFD
FC43	-957	Interrupt base register for RTC, BTO, PFD
FC48	-952	Interrupt enable address
FC4C	-948	Reserved for DES, TOD
FC60	-928	Microcode use during interrupt handling
FC68	-922	Used by microcode to determine boot from RCM/ Density sel
FC6C	-918	Parity error address / Disable parity check
FC70	-912	Parallel port #6:
FE00 to FFFF		RCM address space

Table G-5. SB1600 Interrupt Addresses.

Hex	Decimal	Function
0000	00	BTO Bus time out, Parity error, Interrupt reply time out
0020	32	Floppy (unit #4:, #5:, #9:, #10:)
0024	36	Serial port A input buffer full
0028	40	Serial port B output buffer empty
002C	44	Serial port B input buffer full
0030	48	Serial port A output buffer empty
0034	52	Serial port A, Serial port B exception
0038	56	Parallel port #6: input
003C	60	Parallel port #6: output

Table G-6. SB1600 Control Register.

Hex	Decimal	Function
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FC18 is the System Control Register/System Status Register depending whether it is read or written.

FC18 read mode

Bits

15	Set to 1 to identify G Board status
14..10	Unused
9	Set when parity error
8	Unused
7	Set when memory reply time out
6	Set when interrupts enabled
5	Set when EOB true for DMA
4	Set when DINTR for DMA
3	Set when double density enabled
2	Set when booting from floppy disk
1	Set when 8 inch floppies in use, reset for 5.25 inch floppies
0	Set when interrupt reply time out

FC18 write mode

Bits

15..12	Diagnostic Result Bits (hardware test points)
11..8	Baudrate set for serial port B
7..0	Unused
