## **APPENDIX E**

## I/O ADDRESS MAPS

## SECTION E.1: ORIGINAL 80286 IBM PC I/O ADDRESS MAP

Hex Range	Device
000-01F	DMA controller 1, 8237A-5
020–03F	Interrupt controller 1, 8259A, Master
040–05F	Timer, 8254-2
060–06F	8042 (keyboard)
070–07F	Real-time clock, NMI (nonmaskable interrupt) mask
080–09F	DMA page register, 74LS612
0A0-0BF	Interrupt controller 2, 8237A-5
0C0-0DF	DMA controller 2, 8237A-5
0F0	Clear math coprocessor busy
0F1	Reset math coprocessor
0F8-0FF	Math coprocessor
1F0-1F8	Fixed disk
200–207	Game I/O
20C-20D	Reserved
21F	Reserved
278–27F	Parallel printer port 2
2B0–2DF	Alternate enhanced graphics adapter
2E1	GPIB (adapter 0)
2E2 & 2E3	Data acquisition (adapter 0)
2F8-2FF	Serial port 2
300–31F	Prototype card
360–363	PC network (low address)
364–367	Reserved
368–36B	PC network (high address)
36C-36F	Reserved
378–37F	Parallel printer port 1
380–38F	SDLC, bisynchronous 2
390–393	Cluster
3A0–3AF	Bisynchronous 1
3B0–3BF	Monochrome display and printer adapter
3C0–3CF	Enhanced graphics adapter
3D0–3DF	Color/graphics monitor adapter
3F0-3F7	Disk controller
3F8–3FF	Serial port 1
6E2 & 6E3	Data acquisition (adapter 1)
790–793	Cluster (adapter 1)

AE2 & AE3	Data acquisition (adapter 2)
B90-B93	Cluster (adapter 2)
EE2 & EE3	Data acquisition (adapter 3)
1390–1393	Cluster (adapter 3)
22E1	GPIB (adapter 1)
2390–2393	Cluster (adapter 4)
42E1	GPIB (adapter 2)
62E1	GPIB (adapter 3)
82E1	GPIB (adapter 4)
A2E1	GPIB (adapter 5)
C2E1	GPIB (adapter 6)
E2E1	GPIB (adapter 7)

## SECTION E.2: Dell x86 PC I/O ADDRESS MAP

Use the System Information utility in Windows to get the I/O address map for your x86 PC.

Hex Range	Device
0x00000000-0x00000CF7	PCI bus
0x00000000-0x00000CF7	Direct memory access controller
0x00000000 0x00000C17	Direct memory access controller
0x00000010 0x00000011	System board
0x00000024-0x00000021	Programmable interrupt controller
0x00000024 0x00000029	Programmable interrupt controller
0x0000002C-0x0000002D	Programmable interrupt controller
0x0000002E-0x0000002F	System board
0x00000030-0x00000031	Programmable interrupt controller
0x00000034-0x00000035	Programmable interrupt controller
0x00000038-0x00000039	Programmable interrupt controller
0x0000003C-0x0000003D	Programmable interrupt controller
0x00000040-0x00000043	System timer
0x0000004E-0x0000004F	System board
0x00000050-0x00000053	System timer
0x00000060-0x00000060	Standard 101/102-Key PS/2 Keyboard
0x00000061-0x00000061	System speaker
0x00000062-0x00000062	Standard 101/102-Key PS/2 Keyboard
0x00000063-0x00000063	System speaker
0x00000064-0x00000064	Standard 101/102-Key PS/2 Keyboard
0x00000065-0x00000065	System speaker
0x00000066-0x00000066	Standard 101/102-Key PS/2 Keyboard
0x00000067-0x00000067	System speaker
0x00000070-0x00000071	System CMOS/real-time clock
0x00000072 - 0x00000077	System CMOS/real-time clock
0x00000080-0x00000085	Direct memory access controller
0x00000086-0x00000086	System board
0x00000087-0x0000008F	Direct memory access controller
0x00000090-0x00000091	Direct memory access controller
0x00000092-0x00000092	System board
0x00000093-0x0000009F	Direct memory access controller
0x000000A0-0x000000A1	System board
0x000000A4-0x000000A5	Programmable interrupt controller
0x000000A8-0x000000A9	Programmable interrupt controller

0x00	00000AC-0x000000AD	Programmable interrupt controller
0x00	00000B0-0x000000B1	Programmable interrupt controller
0x00	00000B2-0x000000B2	System board
0x00	00000B3-0x000000B3	System board
0x00	00000B4-0x000000B5	Programmable interrupt controller
	00000B8-0x000000B9	Programmable interrupt controller
	00000BC-0x000000BD	Programmable interrupt controller
	00000C0-0x000000DF	Direct memory access controller
	00000F0-0x000000FF	Numeric data processor
	0000170-0x00000177	Secondary IDE Channel
	00001F0-0x000001F7	Primary IDE Channel
	0000274-0x00000277	ISAPNP Read Data Port
	0000279-0x00000279	ISAPNP Read Data Port
	0000376-0x00000376	Secondary IDE Channel
	00003B0-0x000003BB	Mobile Intel(R) 955XM/945GM/PM/GMS/940GML
0110	0000220 011000000222	Express PCI Express Root Port - 27A1
0x00	00003B0-0x000003BB	NVIDIA Quadro FX 1500M
	00003C0-0x000003DF	Mobile Intel(R) 955XM/945GM/PM/GMS/940GML
01100		Express PCI Express Root Port - 27A1
0x00	00003C0-0x000003DF	NVIDIA Quadro FX 1500M
	00003F6-0x000003F6	Primary IDE Channel
	00004D0-0x000004D1	System board
	0000809-0x00000809	System board
	0000910-0x0000091F	System board
	0000920-0x0000092F	System board
	0000930-0x0000097F	System board
	0000A79-0x00000A79	ISAPNP Read Data Port
	0000C80-0x00000CAF	System board
	0000CB0-0x00000CBB	System board
	0000CBC-0x00000CBF	System board
	0000CC0-0x00000CFF	System board
	0000D00-0x0000FFFF	PCI bus
	0001000-0x000011005	System board
	0001006-0x00001007	System board
	0001000 0x00001007 0001008–0x0000100F	System board
	000100A-0x00001059	System board
	0001011 0x0000102F	System board
	0001060–0x0000107F	System board
	0001080–0x000010BF	System board
	00010C0-0x000010DF	Intel(R) 82801G (ICH7 Family) SMBus Controller -
0110	0001000 01100001021	27DA
0x00	00010C0-0x000010DF	System board
	000BF20-0x0000BF3F	Intel(R) 82801G (ICH7 Family) USB Universal Host
		Controller - 27CB
0x00	000BF40-0x0000BF5F	Intel(R) 82801G (ICH7 Family) USB Universal Host
0110	00021 10 01100002101	Controller - 27CA
0x00	000BF60-0x0000BF7F	Intel(R) 82801G (ICH7 Family) USB Universal Host
		Controller - 27C9
0x00	000BF80-0x0000BF9F	Intel(R) 82801G (ICH7 Family) USB Universal Host
		Controller - 27C8
0x00	000BFA0-0x0000BFAF	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial
		( ) (

ATA Storage Controller - 27C4

0x0000D000–0x0000DFFF Intel(R) 82801G (ICH7 Family) PCI Express Root Port

- 27D6

0x0000E000-0x0000EFFF Mobile Intel(R) 955XM/945GM/PM/GMS/940GML

Express PCI Express Root Port - 27A1

0x0000EF00-0x0000EF7F NVIDIA Quadro FX 1500M

0x0000F400-0x0000F4FE System board