

---

## A P P E N D I X   D

# Legacy I/O Assignments

This appendix summarizes assignments for IRQ, DMA, and I/O port addresses used by built-in devices on legacy system boards.

### Contents

---

Fixed ISA Interrupts . . . . .	376
Legacy ISA DMA Assignments . . . . .	376
Legacy ISA I/O Address Assignments. . . . .	377

## Fixed ISA Interrupts

The following IRQs used by ISA devices are considered to be fixed assignments.

### Fixed ISA Interrupts

<b>Hardware IRQ</b>	<b>Default assignment</b>
IRQ 0	System timer
IRQ 1	Keyboard
IRQ 2	Second programmable interrupt controller (PIC) cascade
IRQ 3	COM 2
IRQ 4	COM 1
IRQ 5	Sometimes LPT 2—not considered fixed
IRQ 6	Standard FDC
IRQ 7	LPT 1
IRQ 8	Real-time clock / CMOS
IRQ 9	—
IRQ 10	Sometimes COM 4—not considered fixed
IRQ 11	Sometimes COM 3—not considered fixed
IRQ 12	PC/2-style mouse
IRQ 13	Coprocessor
IRQ 14	Primary IDE controller
IRQ 15	Secondary IDE controller

## Legacy ISA DMA Assignments

The following table lists DMA channel assignment used by legacy ISA devices and therefore considered fixed.

### Legacy ISA DMA considered fixed

<b>Hardware DMA</b>	<b>System function (default)</b>
DMA 0	ISA expansion
DMA 1	—
DMA 2	FDC
DMA 3	ECP parallel port on LPT 1
DMA 4	DMA controller cascading
DMA 5	—
DMA 6	—
DMA 7	—

## Legacy ISA I/O Address Assignments

The following table lists I/O addresses used by legacy ISA devices and therefore considered fixed.

**Legacy ISA System I/O**

I/O Address	Default system function
0000–000F	Slave DMA
0010–0018	System
0001F	System
0020–0021	Master 8259
0040–0043, 0048–004B	PIT #1, PIT #2
0050–0052	System
0060	Keyboard / mouse controller
0061	System control port B
0064	Keyboard / mouse status
0070–0071	NMI Enable / real-time clock
0081–008B	DMA page registers
0090–0091	System
0092	System control port A
0093–009F	System
00A0–00A1	Slave interrupt controller
00C0–00DE	Master DMA controller
00F0–00F1	Coprocessor busy clear/reset
0170–0177	Secondary IDE controller
01F0–01F7	Primary IDE controller
0201	Joystick interface
0220–022F	Sound Blaster
0278–027A	LPT 2 (XT parallel port 3)
02E8–02EF	Alternate COM (4)
02F8–02FF	COM 2
0330–0331	MPU-401
0376	IDE Controller
0378–037A	LPT 1 (XT parallel port 2)
0388–038B	FM synthesis
03B0–03BB	MDA, EGA / VGA

*continued*

**Legacy ISA System I/O, continued**

<b>I/O Address</b>	<b>Default system function</b>
03BC–03BE	LPT 3 (XT parallel port 1)
03C0–03DF	EGA / VGA
03E0–03E7	PCIC PCMCIA controllers
03E8–03EF	Alternate COM (3)
03F0–03F7	FDC
03F8–03FF	COM 1
0534–0537	Windows Sound System-compatible
0CF8–0CFB	PCI ports