

Premiere/PCI GX

Memory Map, I/O Map, Interrupts & DMA

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Memory Map

Address Range (Dec)	Address Range (hex)	Size	Description
1024K-131072K	100000-8000000	130048K	Extended Memory
960K-1023K	F0000-FFFFF	64K	AMI System BIOS
952K-959K	EE000-EFFFF	8K	FLASH Boot Block (Available as HIMEM)
948K-951K	ED000-EDFFF	4K	LOGO Reserved
928K-947K	E8000-ECFFF	20K	BIOS RESERVED
800K-927K	C8000-E7FFF	128K	Available HI DOS Memory (open to the ISA & PCI bus)
768K-799k	C0000-C7FFF	32K	On-board Graphics BIOS
640K-767K	A0000-BFFFF	128K	On-board Graphics RAM
639K	9FC00-9FFFF	1K	Extended BIOS Data (moveable by QEMM, 386MAX)
512K-638K	80000-9FBFF	127K	Extended conventional
0K-511K	00000-7FFFF	512K	Conventional

Table G-1. Premiere/PCI GX memory map

I/O Map

Address (hex)	Size(Dec)	Description	Address (hex)	Size(Dec)	Description
0000 - 000F	16 bytes	SIO - DMA 1	0278 - 027B	4 bytes	Parallel Port 2
0020 - 0021	2 bytes	SIO - Interrupt Controller 1	02F8 - 02FF	8 bytes	On-Board Serial Port 2
0040 - 0043	4 bytes	SIO - Timer 1	0376	1 byte	Secondary IDE Chan Cmd Port
0048 - 004B	4 bytes	SIO - Timer 2	0377	1 byte	Secondary IDE Chan Stat Port
0060	1 byte	Keyboard Controller Data Byte	0378 - 037F	8 bytes	Parallel Port 1
0061	1 byte	SIO - NMI, speaker control	03BC - 03BF	4 bytes	Parallel Port x
0064	1 byte	Kbd Controller, CMD/STAT Byte	03C0 - 03CF	16 bytes	VGA Comp. Registers
0070, bit 7	1 bit	SIO - Enable NMI	03E8 - 03EF	8 bytes	Serial Port 3
0070, bits 6:0	7 bits	SIO - Real Time Clock, Address	03F0 - 03F5	6 bytes	Floppy Channel 1
0071	1 byte	SIO - Real Time Clock, Data	03F6	1 bytes	Primary IDE Channel Cmd Port
0073	1 byte	Reserved - Brd. Config.	03F7 (Write)	1 byte	Floppy Channel 1 Command
0075	1 byte	Reserved - Brd. Config.,RD only	03F7, bit 7	1 bit	Floppy Disk Change Channel 1
0078	1 byte	SIO - BIOS Timer	03F7, bits 6:0	7 bits	Primary IDE Channel Status Port
0080 - 008F	16 bytes	SIO - DMA Page Register	03F8 - 03FF	8 bytes	On-Board Serial Port 1
00A0 - 00A1	2 bytes	SIO - Interrupt Controller 2	0CF8	1 byte	PCI Configuration Space Enable
00C0 - 00DE	31 bytes	SIO - DMA 2	0CF9	1 byte	Deturbo Mode Enable
00F0	1 bytes	Reset Numeric Error	C000 - C0FF	256 byte	82434NX Config. Registers *
0170 - 0177	8 bytes	Secondary IDE Channel	C200 - C2FF	256 byte	82378ZB Config. Registers *
01F0 - 01F7	8 bytes	Primary IDE Channel	C300 - C3FF	256 byte	ATI Graphics Config. Registers *

Table H-1. Premiere/PCI GX I/O address map

Interrupts & DMA Channels

<i>IRQ</i>	<i>System Resource</i>
NMI	Parity Error
0	Reserved, Interval Timer
1	Reserved, Keyboard buffer full
2	Reserved, Cascade interrupt from slave PIC
3	Serial Port 2
4	Serial Port 1
5	Parallel Port 2
6	Floppy

7	Parallel Port 1
8	Real Time Clock
9	User available
10	User available
11	User available
12	On-board Mouse Port
13	Reserved, Math coprocessor
14	Primary IDE if enabled, else available to user
15	Secondary IDE if enabled, else available to user

Table I-1. Premiere/PCI GX interrupts

<i>DMA</i>	<i>Data Width</i>	<i>System Resource</i>
0	8- or 16-bits	Open
1	8- or 16-bits	Open - Normally used for LAN
2	8- or 16-bits	Floppy
3	8- or 16-bits	Parallel Port
4		Reserved - Cascade channel
5	16-bits	Open
6	16-bits	Open
7	16-bits	IDE

Table I-2. Premiere/PCI GX DMA map