

## USB 2.0 5-Port PCI Quick Installation Guide

#### Features and Benefits

- Compliant with USB specifications revision 2.0
- Conforms to PCI specifications revision 2.2
- Supports simultaneous operation of multiple highspeed USB 2.0 and USB 1.1 devices
- Supports high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) data transfer modes
- User friendly hot-swapping feature allows you to attach/remove USB devices withou turning off your system

**Note:** USB 1.1 devices are limited to USB 1.1 speeds even when they are connected to USB 2.0 host adapter or USB 2.0 hubs.

#### **System Requirements**

#### PC:

- Pentium-class computer with an available PCI slot
- Windows 98SE/ME/2000/XP/Server 2003

#### Mac:

- Power Mac G3 (blue & white) or later with an available PCI slot
- Mac OS 8.6 or later \*

\* Requires Mac OS X (version 10.1.3 or later) for USB 2.0 support

## Package Contents

- (1) USB 2.0 5-Port PCI
- (1) Driver CD
- This quick installation guide

#### Layout



Figure 1. Board Layout

\* **Note:** This power connector (same as the one used with your floppy disk drive) is designed to provide additional power to the board when needed. Connect this power connector (recommended) when one of the following conditions occur:

- Device(s) not being detected.

- All ports are used.

Power off your system first before making this connection.

## **USB Pin-out Header**

The USB pin-out header consists of 4 pins and allows for 1 USB connection.

**Important:** The internal USB port and the **USB Pin-out Header** can not be used at the same time. Do not connect devices to both ports at the same time.



Figure 2. USB Pin-out Header

## **Hardware Installation**

General instructions for installing the card are provided below. Refer to your computer's reference manual for further information, if needed.

- 1. Turn OFF the power to your computer.
- 2. Unplug the power cord and remove your computer's cover.
- 3. Remove the slot bracket from an available PCI slot.
- 4. Carefully align the card to the selected PCI slot and push the board down firmly, but gently, until it is well seated.
- 5. Replace the slot bracket's holding screw to secure the card.

- 6. Connect internal connections if needed. See **Board Layout** on page 2 for more details.
- 7. Replace the computer cover and reconnect the power cord.



Figure 3. Inserting the PCI board

## Windows Driver Installation

The *USB 2.0 5-Port PCI* has three built-in USB hosts. Two hosts handle USB 1.1 devices and the third host handles USB 2.0 devices. USB 1.1 and USB 2.0 devices are automatically routed to the correct USB hosts.

#### Windows 98SE

- 1. Install the board and boot up your system. At the **Add New Hardware Wizard**, click **Cancel** three times.
- Insert the driver CD. Click Start, Run, type in X:\setup.exe, then click OK. (Replace X: with the drive letter of your CD-ROM)

- 3. Choose **Yes, I want to restart my computer now**, then click **Close** to restart Windows.
- 4. When Windows restarts, a USB 1.1 host is detected.
- 5. At the **Add New Hardware Wizard**, click **Next**.
- 6. Choose Search for the best driver for your device. (Recommended)., click Next.
- 7. Clear all check boxes, click Next, and Next again.
- 8. Click **Next**, then **Finish**.

**Note:** If prompted for the **Windows Installation CD-ROM**, click **OK**. Insert this CD and click **OK**.

- 9. Repeat steps **5-8** one more time when the second USB 1.1 host is detected.
- 10. Windows now detects the USB 2.0 host and loads it's driver.
- 11. The board is now ready for use.

#### Windows ME/2000

**Note:** If you have Windows 2000 with **Service Pack 4 (SP4)** or later, the drivers will be installed automatically by the operating system. Otherwise, follow the instructions below.

- 1. Install the board and boot up your system. At the **Add New Hardware Wizard**, click **Cancel**.
- Insert the driver CD. Click Start, Run, type in X:\setup.exe, then click OK. (Replace X: with the drive letter of your CD-ROM)
- 3. Restart Windows after the driver installs.
- 4. When Windows resumes, the drivers install automatically.
- 5. The board is now ready for use.

#### Windows XP

**Note:** If you have Windows XP with **Service Pack 1 (SP1)** or later, the drivers will be installed automatically by the operating system. Otherwise, follow the instructions below.

- 1. Install the board and boot up your system. At the **Found New Hardware Wizard**, click **Cancel**.
- Insert the driver CD. Click Start, Run, type in X:\setup.exe, then click OK. (Replace X: with the drive letter of your CD-ROM)
- 3. At the **Found New Hardware Wizard**, select **Install the software automatically (Recommended)**, click **Next**, then click **Finish**.
- 4. If prompted, repeat step 3, otherwise go to step 5.
- 5. Restart Windows to complete the installation.

#### Windows Server 2003

Windows Server 2003 has built-in driver support for this controller. Just install the board and Windows will automatically detect and install the correct drivers for it. No additional driver is necessary.

#### **To Verify Windows Driver Installation**

1. Check **Device Manager** to verify successful driver installation.

<u>*Windows 98SE/ME:*</u> From the main desktop, right click **My Computer**, then click **Properties**. Click **Device Manager** tab.

*Windows 2000/XP/2003:* Right click **My Computer**, then click **Manage**. Click **Device Manage**.

2. The drivers for this controller show up differently under different versions of Windows. Please refer to the correct Windows version to verify.

# Windows Server 2003, XP with SP1 or later, 2000 with SP4 or later:

Under Universal Serial Bus controllers:

- NEC PCI to USB Open Host Controller
- NEC PCI to USB Open Host Controller
- Standard Enhanced PCI to USB Host Controller
- USB Root Hub (USB 2.0 Root Hub in Win2K)
- USB Root Hub
- USB Root Hub

Windows XP, 2000 (sp3 or earlier), ME, 98SE:

Two Universal Serial Bus controllers are listed:

- a) Under a Universal Serial Bus controllers:
- NEC PCI to USB Enhanced Host Controller
- USB 2.0 Root Hub Device
- b) Under a Universal Serial Bus controllers:
- NEC ... USB Open Host Controller ...
- NEC ... USB Open Host Controller ...
- USB Root Hub
- USB Root Hub

## Mac OS Driver Installation

The *USB 2.0 5-Port PCI* requires Mac OS X (version 10.1.3 or later) to work at USB 2.0 speed.

## Mac OS 8.6, 9.x, X (v10.0-10.1)

This board will only work at USB 1.1 speed in these OSs. Just install the board and Mac OS will automatically detect and install the correct USB 1.1 driver for it. No additional driver is necessary.

## Mac OS X (v10.1.3-10.1.5)

**Note:** Mac OS X (version 10.1.3-10.1.5) driver version does not support USB 2.0 hubs.

- 1. Install the board and boot up your system.
- 2. Insert the driver CD.
- 3. Double click the **Drivers** CD icon on your desktop.
- 4. At the new window, double click the **OS10.15** icon.
- 5. Double click **v108.img**, then double click the **USB2EHCI\_v108** disk icon that appears on the desktop.
- 6. At the next window, double click **USB2EHCI\_v108** to start installation.
- 7. At the **Authorization** window, click the **lock** icon, enter your administrator password, and click **OK**.
- 8. Click **Continue**. When prompted to select the destination disk to install the USB 2.0 driver, choose the disk where your Mac OS is installed, and click **Continue**.
- 9. Click **Install**, **Continue Installation**, and **Restart** to complete the installation.

## Mac OS X (v10.2.3-10.2.6)

- 1. Install the board and boot up your system.
- 2. Insert the driver CD.
- 3. Double click the **Drivers** CD icon on the desktop.
- 4. At the new window, double click **OS10.2X**.
- 5. Double click **USB2EHCI\_V3\_1\_5.pkg**.
- 6. At the **Authenticate** window, enter your administrator password, and click **OK**.
- 7. Click **Continue**. When prompted to select the destination disk to install the USB 2.0 driver, choose the disk where your Mac OS is installed. Then click **Continue**.
- 8. Click **Install**, **Continue Installation**, and **Restart** to complete the installation.

## Mac OS X (v10.2.8) or later

Mac OS X (v10.2.8) or later have built-in driver support for this controller. Just install the board and Mac OS will automatically detect and install the correct drivers for it. No additional driver is necessary.

#### To Verify Mac OS Driver Installation:

#### Mac OS 8.6, 9.x, X (v10.0-10.1)

Since we didn't load any additional driver under these Mac OSs, the only way to verify the board works is actually connecting devices to the USB ports.

#### Mac OS X (v10.1.3-10.1.5)

- 1. Double click **OS 10.1x** volume/drive icon.
- 2. Go to **System/Library/Extensions** folder.
- 3. If the file **OMI\_EHCI.kext** is in the **Extensions** folder, the USB 2.0 driver is installed successfully.

#### Mac OS X (v10.2.3-10.2.6)

- 1. Double click **OS 10.2x** volume/drive icon.
- 2. Go to **System/Library/Extensions** folder.
- 3. If the following files are in the **Extensions** folder, the USB 2.0 driver is installed successfully.
  - OMI\_EHCI.kext
  - OMI\_USBHub.kext

#### Mac OS X (v10.2.8) or later

Since we didn't load any additional driver under these Mac OSs, the only way to verify the board works is actually connecting devices to the USB ports.

## **Technical Support**

**QUESTIONS?** SIIG's **Online Support** has the answers! Simply visit our Web site at *www.siig.com* and click on **Support**. Our online support database is updated daily with new drivers and solutions. The answers to your problems could be just a few clicks away.

If you can't find answers or solutions to your questions, you have an option to submit the problems online to one of our technical support analysts and we will promptly respond to you with answers or solutions.

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#### PRODUCT NAME

USB 2.0 5-Port PCI

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

#### FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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