FireWire 800+Hi-Speed USB Combo Quick Installation Guide

Introducing the *FireWire 800+Hi-Speed USB Combo*

The *FireWire 800 + Hi-Speed USB Combo* features the latest technology in FireWire 800 and USB 2.0.

Features and Benefits

- Combo card design adds five USB 2.0 (480 Mbps), one 1394a (400Mbps) and two 1394b (800 Mbps) ports into your system.
- Built-in 4-pin power connector provides extra power when connected to the system's power supply (Recommended)
- Supports hot-swapping and Plug-n-Play connection of peripheral devices

FireWire 800 (1394b) interface

- Provides 3 FireWire ports for multiple 1394b and 1394a device connections
- Adds two FireWire 800 (1394b) ports (1 int. + 1 ext.) and one external 1394a (400Mbps) port
- Supports IEEE 1394b and backwards compatible with 1394a-2000 and 1394-1995 standards
- Supports data transfer rates of 100, 200, 400, and 800Mbps

USB 2.0 interface

- Adds two external and three internal USB 2.0 ports (two internal via USB Pin-out Header, see page 4)
- Compliant with USB specification rev. 2.0
- Supports high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) data transfer modes for simultaneous operation of multiple USB 2.0/1.1 devices

> **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 or equivalent computer with an available PCI slot
- Windows 98SE/ME/2000/XP/Server 2003

MAC:
- Power Mac G3 Blue & White or later with an available 64-bit or 32-bit PCI slot
- Mac OS 8.6 or later
  - Requires Mac OS X (v10.2.4) or later for FireWire 800 speed
  - Requires Mac OS X (v10.1.3) or later for USB 2.0 speed

Package Contents

- *FireWire 800+Hi-Speed USB Combo* adapter
- "Y" split power cable
- Driver CD
- Quick Installation Guide

Board Layout

1394a (6-pin)

1394b (9-pin)

USB 2.0

1394b (9-pin)

USB Pin-out Header

USB 2.0

Power Connector (recommended)

Figure 1. Board Layout

Note: The **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 9 pins arranged in 2 rows, it allows for 2 USB connections (i.e. USB4 and USB5). Normally, the pins for each port are in seperate rows.
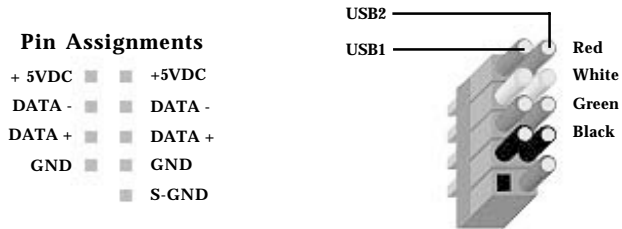
Pin Assignments

+ 5VDC	+5VDC
DATA -	DATA -
DATA +	DATA +
GND	GND
	S-GND

USB2 ——
USB1 ——
Red
White
Green
Black

Figure 2. USB Pin-out Header

> **Note:** The pin-out header is designed to connect to front mounted USB ports, flash memory card readers, or any USB devices that require pin-out header. Reference the image above and review your computer's manual for proper connection.

4

Hardware Installation

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer's case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer and any other connected peripheral devices. Unplug the computer's power cord.

2. Remove your computer's cover and install the card in an available PCI slot.

3. Push the board down firmly, but gently, until it is well seated.

4. Connect internal connections where needed. See **Board Layout** on page **3** for more details.

5. Secure the card and replace the cover.

Figure 3. Inserting the PCI Board

Windows Driver Installation

To ensure proper installation of this board, please follow the instructions step-by-step.

Windows 98SE

1. Install the board, boot up Windows, and insert the driver CD.
2. At the **Add New Hardware Wizard**, click **Cancel**.
3. Click **Start**, then **Run**. Type **X:\Windows\USB2.exe** and click **OK**. (Change **X:** to match your CD-ROM drive letter)
4. Select **Yes, I want to restart my computer now**, click **Close**.
5. When Windows resumes, at the **Add New Hardware Wizard**, click **Next**.
6. Select **Search for the best driver for your device. (Recommended)**, click **Next**.
7. Uncheck all check boxes, then click **Next**.
8. Click **Next**, then **Finish**.
9. At the **Add New Hardware Wizard**, click **Next**.
10. Select **Display a list of all drivers...**, click **Next**.
11. Click **Have Disk...**, type **X:\Windows**, click **OK**. (Change **X:** to match your CD-ROM drive letter)
12. Click **Next**, **Next**, then **Finish**.

> **Note:** If prompted for Windows 98SE Installation CD, click **OK**. Insert this CD and click **OK**.

13. Repeat steps 9, 6, 7, and 12 respectively.
14. Repeat step 13.
15. Restart the computer to complete the installation.

Windows ME

1. Install the board, boot up Windows, and insert the driver CD.
2. At the **Add New Hardware Wizard**, click **Cancel**.
3. Click **Start**, then **Run**. Type **X:\Windows\USB2.exe** and click **OK**. (Change **X:** to match your CD-ROM drive letter)
4. Restart Windows after the driver installation completes.
5. When Windows resumes, at the **Add New Hardware Wizard**, select **Automatic search for a better driver (Recommended)**, click **Next**, then click **Finish**.
6. At the **Add New Hardware Wizard**, select **Specify the location of the driver (Advanced)**, click **Next**.
7. Check **Specify a location**, uncheck the other box, type **X:\Windows**, then click **Next**. (Change **X:** to match your CD-ROM drive letter)
8. Click **Next**, **Next**, then **Finish**.
9. Click **Yes** to restart Windows to complete the installation.

Windows 2000

For Windows 2000 w/SP3 or earlier

1. Install the board, boot up Windows, and insert the driver CD.
2. At the **Found New Hardware Wizard**, click **Cancel**.
3. Click **Start**, then **Run**. Type **X:\Windows\USB2.exe** and click **OK**. (Change **X:** to match your CD-ROM drive letter)

4. Right click **My Computer**, click **Manage**, then click **Device Manager**.

5. Click the plus (+) sign next to **IEEE 1394 Bus host controllers**, then double click **Texas Instruments OHCI... 1394 Host Controller**.

6. Click the **Driver** tab, click **Update Driver...**, then click **Next**.

7. Select **Search for a suitable driver for my device (recommended)**, click **Next**.

8. Check **CD-ROM drives**, uncheck the other boxes, then click **Next**.

9. Click **Next**, then **Finish**. Restart the computer to complete the installation.

For Windows 2000 w/SP4 or later

Windows installs built-in USB 2.0 and 1394a drivers. However, to get the full speed from the 1394 interface, install the FireWire 800 driver from the included driver CD. Follow the steps in the order that they appear.

1. Install the board, boot up Windows, and insert the driver CD.

2. Right click **My Computer**, click **Manage**, then click **Device Manager**.

3. Click the plus (+) sign next to **IEEE 1394 Bus host controllers**, then double click **Texas Instruments OHCI... 1394 Host Controller**.

4. Click **Driver** tab, click **Update Driver...**, then click **Next**.

5. Select **Search for a suitable driver for my device (recommended)**, then click **Next**.

6. Check **CD-ROM drives**, uncheck the other boxes, then click **Next**.

7. Click **Next**, then **Finish**. Restart the computer to complete the installation.

Windows XP/Server 2003

For Windows XP without SP1

1. Install the board, boot up Windows, and insert the driver CD.

2. At the **Found New Hardware Wizard**, click **Cancel**.

3. Click **Start**, then **Run**. Type **X:\Windows\USB2.exe** and click **OK**. (Change **X:** to match your CD-ROM drive letter)

4. At the **Found New Hardware Wizard**, select **Install the software automatically (Recommended)**, click **Next**, then click **Finish**.

5. Right click **My Computer**, click **Manage**, then click **Device Manager**.

6. Click the plus sign (+) next to **IEEE 1394 Bus host controllers**, then double-click **Texas Instruments... Host Controller**.

7. Click the **Driver** tab, click **Update Driver...**, select **Install from a list or specific location (Advanced)**, then click **Next**.

8. Check **Don't search. I will choose the driver to install**, then click **Next**.

9. Click **Have Disk...**, type **X:\Windows**, then click **Ok**. (Change **X:** to match your CD-ROM drive letter)

10. Select **OHCI IEEE 1394b Host Controller**, click **Next**.

11. Click **Continue Anyway**, then click **Finish** to complete the installation. *Our driver has been thoroughly tested in Windows for stability.*

For Windows XP w/SP1 or later and Server 2003

Windows XP with SP1 and Server 2003 automatically install built-in USB 2.0 and 1394a drivers. However, to get the full speed from the 1394 interface, install the FireWire 800 driver from the included driver CD. Follow the steps in the order that they appear.

1. Install the board, boot up Windows, and insert the driver CD.
2. Right click **My Computer**, click **Manage**, then click **Device Manager**.
3. Click the plus sign (+) next to **IEEE 1394 Bus host controllers**, then double-click **Texas Instruments... Host Controller**.
4. Click the **Driver** tab, click **Update Driver...**, select **Install from a list or specific location (Advanced)**, then click **Next**.
5. Check **Don't search. I will choose the driver to install**, then click **Next**.
6. Click **Have Disk...**, type **X:\Windows**, then click **OK**. (Change **X:** to match your CD-ROM drive letter)
7. Select **OHCI IEEE 1394b Host Controller**, then click **Next**.
8. Click **Continue Anyway**. *Our driver has been thoroughly tested in Windows for stability.*
9. Click **Finish**. Restart Windows to complete the installation.

To Verify Windows Installation

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

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

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

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

    <u>Windows 98SE/ME:</u>

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

    b) Under **1394 Bus Controller** or **IEEE 1394 Bus host controllers:**
    - **OHCI IEEE 1394b Host Controller**

    <u>Windows 2000 (with SP4 or later):</u>

    a) Under the **Universal Serial Bus Controllers:**
    - **NEC... Open Host Controller**
    - **NEC... Open Host Controller**
    - **Standard Enhanced PCI to USB Host Controller**
    - **USB 2.0 Root Hub**

- **USB Root Hub**
- **USB Root Hub**

b) Under **IEEE 1394 Bus host controllers:**
- **OHCI IEEE 1394b Host Controller**

Windows 2000 (with SP3 or earlier) and XP (without SP1):

a) Under the **Universal Serial Bus Controllers:**
- **NEC PCI to USB Open Host Controller**
- **NEC PCI to USB Open Host Controller**
- **NEC PCI to USB Enhanced Host Controller**
- **USB 2.0 Root Hub Device**
- **USB Root Hub**
- **USB Root Hub**

b) Under **IEEE 1394 Bus host controllers:**
- **OHCI IEEE 1394b Host Controller**

Windows XP (with SP1 or later)/Server 2003:

a) Under **Universal Serial Bus Controllers:**
- **NEC PCI to USB Open Host Controller**
- **NEC PCI to USB Open Host Controller**
- **Standard Enhanced... USB Host Controller**
- **USB Root Hub**
- **USB Root Hub**
- **USB Root Hub**

b) Under **IEEE 1394 Bus host controllers:**
- **OHCI IEEE 1394b Host Controller**

Mac OS Driver Installation

The instructions below are divided into two sections, FireWire 800 and USB 2.0. To ensure proper installation of this board, please follow the instructions step-by-step in both sections.

FireWire 800 Driver Installation

To ensure proper operation of the *FireWire 800+Hi-Speed USB Combo* in your Mac, some Mac OS requires the most current Firewire software from Apple.

Apple's website contains all the information needed to download and install Firewire software update. Mac software download URL is: **http://www.info.apple.com/support/downloads**. When you are at the download page, in the **Search** box, check **Restrict to downloads**, type in **1394**, then click **GO**.

The information below will help you decide whether or not to download and install the latest Firewire driver update.

1. **Mac OS 10.2.4 or later** has built-in Firewire 800 (1394b) driver support with the operating system. No driver installation is needed. The firewire 800 ports will work up to 800 Mbps.

2. **Mac OS 9.1, 9.2.x, and Mac OS 10.1.x-10.2.3** have built-in Firewire 400 (1394a) driver support with the operating system. No driver installation is needed. The Firewire 800 ports will work up to 400 Mbps.

3. **Mac OS 9.0.x** users should download the Firewire software version 2.5 or later. The Firewire 800 ports will work up to 400 Mbps.

4. **Mac OS 8.6** users should download the Firewire software version 2.3.3. The Firewire 800 ports will work up to 400 Mbps.

USB 2.0 Driver Installation

Mac OS 8.6-9.x

This board will only work at USB 1.1 speed in these OSes. 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 (version 10.1.3-10.1.5)

> **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 **OS10.15**.
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 (version 10.2.3-10.2.6)

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. At the next window, double click **USB2EHCI_v3_1_5.pkg** to start the installation.
6. At the **Authorization** window, click the **lock** icon, 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 (version 10.2.8) or later

Mac OS X (version 10.2.8) 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 Installation

Mac OS 8.6, 9.x, X (version 10.0-10.1)

Since we didn't load any additional driver under these Mac OSes, plug in a USB device to verify installation.

Mac OS X (version 10.1.3-10.1.5)

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 (version 10.2.3-10.2.6)

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 (version 10.2.8) or later

Since we didn't load any additional driver under these Mac OSes, plug in a USB device to verify installation.

Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our website at *www.siig.com* and click on **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and one of our technical support analysts will promptly respond.

A lifetime manufacturer warranty supplied with this product is offered by SIIG, Inc. Please see SIIG website for more warranty details. If you should happen to encounter any problems with this product, please follow the procedures below.

If it is within the store's return policy period, please return the product to the store where you purchased from.

If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to SIIG RMA. If the product is determined to be defective, an RMA number will be issued. SIIG RMA department can also be reached at (510)413-5333.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.

- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.

- You are responsible for the cost of shipping the product to SIIG at the following address:

  SIIG, Inc.
  6078 Stewart Avenue
  Fremont, CA 94538
  RMA #:

- SIIG will ship the repaired or replaced product via Ground in the U.S and International Economy outside of the U.S at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading computer upgrade manufacturer of I/O connectivity products, including PCI & ISA serial and parallel ports, USB, Serial ATA & UltraATA controllers, FireWire (1394a/b), Networking, Sound Cards, and other accessories. SIIG is the premier one-stop source of upgrades.

SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High-quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, and e-commerce sites in the Americas and the UK, as well as through major distributors, system integrators, and VARs.