IEEE 1394 B/A
FireWire
FireWire 800 Adapter

User Manual
Version 1.0

What is IEEE1394B FireWire800

The 1394 standard was defined, and continues to be maintained, by the Institute of Electrical and Electronics Engineers, Inc. (IEEE). IEEE 1394B provides high performance Serial I/Osstandard of FireWire 800 technology. The FireWire 800 implementation of the IEEE 1394B standard supports transfer speeds up to 800 Mbps and device distances can now be up to 100 meters through the use of special cables. IEEE 1394B FireWire 800 products are fully backward compatible with IEEE 1394A devices. FireWire 800 high-speed serial I/O technology is particularly great for use with multimedia peripherals such as digital video (DV) camcorders, external enclosure, and tape decks.

1394B Features

The 1394B standard is a high-speed serial bus designed to deliver high data transfer speeds at a low cost, and with the low degree of latency required by a peripheral bus or by a backup to a traditional parallel bus. Among its key features are:

- **High Speed**: Speeds of 100, 200,400 and 800 Mbps are currently supported.
- **Isochronous Support**:Deterministic bandwidth allocation guarantees bandwidth for time-sensitive applications, such as real-time video feeds, that could otherwise be disrupted by heavy bus traffic.
- **Flexible Topology**:Devices can be daisy-chained and no central bus supervision is required. Besides, it supports peer to peer function and allows up to 63 devices to be connected in a chain through its standard 6-pin and 9-pin ports.
- **Hot-Plug Support**: The bus is dynamically reconfigured whenever new nodes are added, which means users don't have to configure node IDs or unique termination schemes.
- **Cable Power**: Low-cost peripherals can be powered directly from the 1394 cable, so no dedicated power supply is needed.
- **IEEE Standard**: IEEE adoption has increased industry acceptance of the standard.
- **1394 End devices**: IEEE 1394 interfaces have already been incorporated into a variety of devices, including PC cameras, DV camcorders, DV recorders, digital still cameras, high-speed hard disk drives, CD/ DVD ROM drives.

Specification

1. PCI version 2.2 or PCMCIA TypeⅡ fully compliant.
2. 33-MHz/64-bit and 33-MHz/32-bit selectable PCI interface or 32bit CardBus fully compliant.
3. 3.3-V and 12-V PCI signaling environments.
4. Isochronous and Asynchronous data transfer.
5. Fully backwards compatible with IEEE 1394A FireWire 400 devices
6. OHCI compliant IEEE 1394B Host Controller; 100 Mbps (12.5 Mbps); 200 Mbps (25 MB MBps); 400 Mbps (50MB MBps) ; 800 Mbps (100 MB/sec).
7. PCI card supports one internal 4-pin 12-V power connector.
8. Connect up to 63 internal or external devices.
9. Supports Plug-n-Play feature.
10. Complies with Standard for a IEEE 1394B High Performance Serial Bus standard.

PC System Requirements

1. Any desktop computer with at least one available 32 or 64 bit PCI slot or any Notebook with at least one available PCMCIA TypeⅡ slot.
2. Windows 98SE / ME / 2000 / XP and MAC OS support.
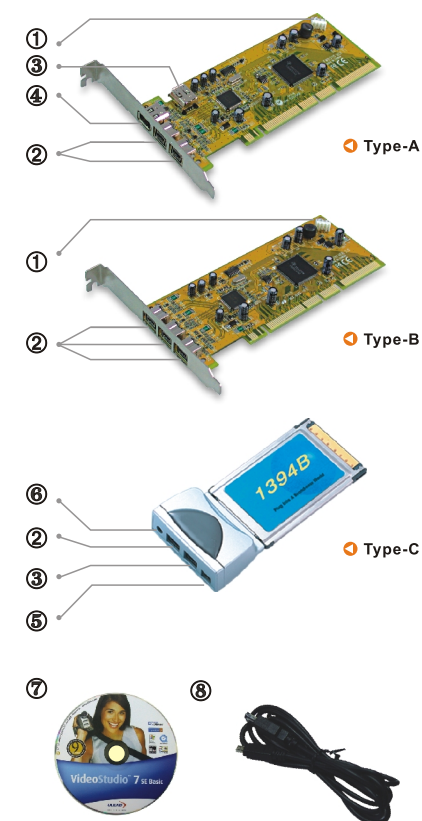3. CD/DVD ROM device to install driver.

Packing List

1. IEEE 1394B/A FireWire 800 64bit PCI Card or IEEE 1394B/A FireWire 800 CardBus.
2. CD Driver
3. User's manual

Option:
4. 1394 Cable
5. Ulead VideoStudio Software

Hardware Guide

① Type-A

② Type-B

③ Type-C

① +12V internal power connector

② FireWire 800 9-pin IEEE 1394B external ports

③ FireWire 400 6-pin IEEE 1394A internal ports

④ FireWire 400 6-pin IEEE 1394A external ports

⑤ FireWire 400 4-pin IEEE 1394A external ports

⑥ DC Input Jack (Switching Power Adapter is an option accessory)

Option accessories

⑦ VideoStudio Software

⑧ 1394 Cable

IEEE 1394 B/A FireWire 800 Adapter

Software Installation

In order to ensure proper operation of your IEEE 1394B/A adapter, please follow the instructions inside your Windows PC.

1.Please insert the CD driver into your CD/DVD ROM.

2.Click the **Setup.exe** from your CD/DVD device : \1394B

Setup

3.Follow the onscreen installation step.

4.When prompted, please restart your computer.

Hardware Installation

To install the IEEE 1394B/A adapter, please follow this procedure.

1. Make sure the computer is turned off.

2. Gain access to the interior of the PC/Notebook.

3. Insert the IEEE 1394A/B adapter in an empty PCI slot or PCMCIA slot.

4. Press the adapter gently but firmly into the slot and check to see that all contacts are fully seated in the connector.

5. Attach the bracket screws that secure the adapter to the chassis.

6. Reinstall the covers on the PC/Notebook.

Note:

FireWire 800 PCI card supplies 12V to the FireWire bus from the PCI bus. The optional +12V internal power connector (when connected to your system power supply).

## Verifying IEEE 1394B/A Adapter

■ *Windows XP/2000*

When you plug the adapter into to your system, Windows XP will detect the addition of new hardware and install files that it need. After few moments, the hardware can be used. You can check your 1394 card from"**Star > My Computer** (Click Mouse right button) **> Properties > Hardware > Device Manager**".

■ *Windows 98SE / ME*

1.Windows will detect the addition of new hardware and display the following message: "Texas Instruments OHCI IEEE 1394 Host Controller". Please click **Next**.

2.Select "Search for the best for your device(Recommended)". Please click **Next**.

3.Please insert your Windows 98SE / ME installation CD into your CD-ROM drive. Select"CD-ROM drive" and click **Next**.

4.Windows will search the CD for the appropriate driver and list what it finds. After it has identified the appropriate driver, click "**Next**" to begin installation of the driver.

5.When the dialogue box below appears onscreen, the installation is finished. Click **Finish** to complete setup. You will be instructed to reboot your computer.

6.After rebooting, click on the Device Manager tab in System Properties, which you access from the Windows Control Panel. You should see an entry for the driver you installed under the 1394 Bus Controller item. If the driver is not listed, please go back to Step 1 and reinstall the card.
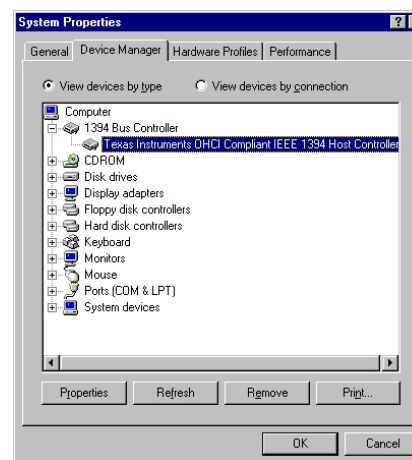
Troubleshooting

1. Q: Why the 1394B adapter can't be detected?

   A: Insert the 1394B adapter firmly into the PCI/ PCMCIA slot.

2. Q: Why the 1394B adapter has not been installed correctly?

   A: IEEE 1394B/A is only fully supported in Windows 98 / Second Edition or later version.

   In order to make 1394B PCI card perfect, please install 1394B driver from CD-ROM, or the transfer rate only support 400 Mbps.

3. Q:How to deal with there is a yellow exclamation point on Texas Instruments OHCI IEEE 1394 Host controller, when I look in my Device Manager

   A: This exclamation point usually means there is a resource conflict between the IEEE 1394B/A card and another card in your system. Shutdown your computer and move the card to another available slot. If you do not have any free slots, swap slots with another card in your system. Restart your computer. Windows will then re-configure itself and re-assign resources. Check your device manager again. If the exclamation point is still there then repeat the process until it no longer appears.

4. Q: Why the connected IEEE 1394B (Fire Wire) device can't be detected?

   A: Connect the FireWire cable correctly. Install the driver provided with your FireWire device. Also see the instruction manual provided with the device. Maybe some software need DirectX 8.1 for the best support for FireWire devices.

5. Q: Why no image is obtained form the camera in video software?

   A: Connect the FireWire cable correctly to the camera and the 1394B adapter. Turn the camera on before starting your video software. Select the camera in your video software and select the necessary settings.

6. Q: Why no sound is obtained from the camera in video software?

   A: Please connect the camera's sound output to the LINE-IN on your sound card.

7.Q: I get choppy sound or video that does not appear smooth:

   A:Check the amount of RAM in your system. The recommended amount is 128MB or higher, preferably 256MB or more. Check your hard drive for available space. Editing DV takes up large amounts of disk space. As your hard drive fills up the slower it performs. Try to free up space on your hard drive by deleting unneeded programs and files. Optimized your system.