

IEEE 1394 CardBus Adapter

User's Manual

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1. ABOUT THIS MANUAL

The purpose of this manual is to introduce you to your *1394 CardBus converter*. It will guide you on how to setup the product for proper operation in your Notebook computer. Please keep this manual for future reference.

2. IEEE 1394 BASIC

IEEE 1394 is designed to function as both a cable-connected virtual bus and as a backplane bus achieves speeds up to 400 Mbps. Higher speed in the range of one gigabits-per-second are possible in the future. This type of performance has enabled many new PC applications such as real-time digital video.

When compared with older serial and parallel I/O buses, IEEE 1394 offers a rich set of advanced features, including live connection / disconnection of devices onto a 1394-based cable I/O system or on boards into a 1394 - based backplane. The standard also supports both asynchronous and isochronous forms of communication on the same system. Whereas isochronous communication can be used to guarantee bandwidth for certain time-critical applications like streaming video or audio, asynchronous communication is appropriate for the typical PC peripherals such as printers or disk drives.

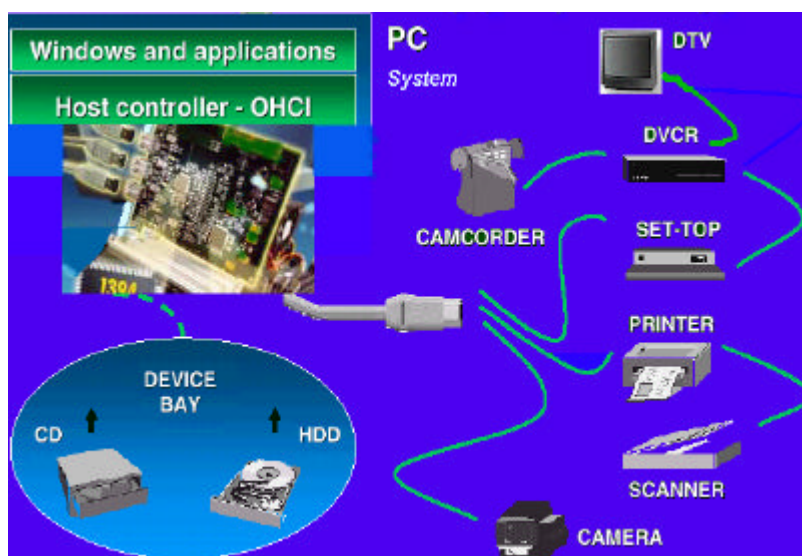
The topology of a IEEE 1394 network resembles a tree structure. Each node on a IEEE 1394 network functions as a repeater, forwarding the signals on to the next node in the daisy-chain. As many as 63 nodes can be configured on a desktop and up to 64,000 devices in a 1394 network using bridges.

Because of its high-capacity bandwidth and advanced features, IEEE 1394 has the ability to consolidate many older standards and I/O methods into one unified, high-performance serial bus. Eventually, expanding a 1394-based computer system will be as simple and as easy as plugging an appliance into an AC power socket. The PC will provide instantaneous communication on demand to the peripheral

device that is new to the 1394 bus and the user will not have to manually reconfigure and shut down the system.

On systems and products from Sony, Panasonic, JVC, Canon and Sharp, IEEE 1394 goes by the name of i.LINK™, while Apple Computer refers to it as FireWire™.

3. KEY FEATURE & BENEFITS



Key Feature & Benefits:

- 32 bit CardBus interface compatible
- 32-bit Data Bus and 33 MHz operation
- Data transfer rate up to 400 Mbps
- Connect up to 63 device
- Supports Plug-and-Play Specification
- Hot Plug
- Complies with Standard for IEEE 1394-1995, P1394a, and OHCI standard
- Up to 16 consecutive cable hops of 4.5 meters
- Isochronous and Asynchronous data transfer and transfer rate up to 400Mbps
- PTC recover fuse for reliable over-current protection

Operation System Support:

- Microsoft Windows 98/98SE/ME, Windows 2000
- MAC 8.6 or later

4. HARDWARE INSTALLATION

General instructions for installing the CardBus adapter are given since the location of the CardBus Type II slot may vary between different portable computers.

1. Insert the PC Card into an available CardBus Type II slot with the arrow orientation pointing towards the slot.
2. Hardware installation is complete. Please proceed to the next section for software installation.



5. WINDOWS 98SE DRIVER INSTALLATION

Follow the procedures below to install the Windows 98SE driver:

1. When Windows boots up, a dialog box *New Hardware Found* will appear as:

Texas Instrument OHCI Compliant IEEE 1394 Host Controller

Or

OHCI Compliant IEEE 1394 Host Controller

2. click "Next".
3. Choose "Select for the best driver for your devices", and click on "Next".
4. Insert the Windows 98SE CD-Title into your CD-ROM drive and check the box label "CD-ROM" then click "Next".
5. Click "Finish" for the driver to take effect.
6. Driver installation complete. Please proceed to Section 8 for device connection procedures.

6. WINDOWS ME DRIVER INSTALLATION

Follow procedures below to install the Windows ME driver:

1. When Windows boots up, a dialog box *New Hardware Found* will appear as:

Texas Instrument OHCI Compliant IEEE 1394 Host Controller

Or

OHCI Compliant IEEE 1394 Host Controller

2. click "Next".
3. Choose "Select for the best driver for your devices", and click on "Next".
4. Insert the Windows ME CD-ROM and check the "CD-ROM" option then click on "Next".

5. Choose "The updated driver (Recommended)", and click on "Next" then "Next" again.
6. Click on "Finish" for the driver to take effect.
7. Driver installation complete. Please proceed to Section 8 for device connection procedures.

7. WINDOWS 2000 DRIVER INSTALLATION

Follow the procedures below to install the Windows 2000 driver:

1. When Windows boots up, a dialog box *New Hardware Found* will appear as:

Texas Instrument OHCI Compliant IEEE 1394 Host Controller

Or

OHCI Compliant IEEE 1394 Host Controller

2. click "Next".
3. Choose "Select for the best driver for your devices", and click on "Next".
4. Insert the Windows 2000 CD-ROM and check the "CD-ROM" option then click on "Next".
5. Choose "The updated driver (Recommended)", and click on "Next" then "Next" again.
6. Click on "Finish" for the driver to take effect.
7. Driver installation complete. Please proceed to Section 8 for device connection procedures.

8. DEVICE CONNECTION

The following section provides information on connecting devices to the *1394 CardBus adapter*.

8.1 Connecting DV Camcorder

Before setting up the digital video camcorder, make sure to verify the driver for the CardBus PC card has been successfully installed into your system and follow the setup procedures listed below.

1. Boot up your system to Windows OS
2. Connect the 4pin connector into the digital camcorder, then power-on the camcorder. The camcorder should be recognized by the system once the power is on.
3. The setup procedure is now complete.

To verify successful device setup:

1. From the main desktop, double-click on My Computer, Control Panel, System, Device Manager.
2. Double-click on *Imaging Device* option. "Microsoft DV Camera and VCR" should be displayed when the device is successfully setup.

8.2 Connecting Other Devices

Most of the 1394 devices are supported by Windows 98 (Second Edition). Please refer to the device's user manual for detail installation information.

Note:

1. Depending on the device connecting to your system, you may need to use different type of cable for device connectivity.
2. Since the CardBus slot does not provide power. A power adapter may be required when connecting certain 1394 devices such as an external hard disk drive.