



User Manual

Firewire IEEE 1394A + USB 2.0 Combo Card

SD-CBALINEC-4E6I

About this card

This ALi Firewire IEEE 1394A + USB 2.0 Combo card is design to offer a cost effective and reliability solution to the users with PC's that have no integrated IEEE 1394A and USB 2.0 support.

The Firewire IEEE 1394A ports uses the most advanced, high-speed digital technology, low-cost and high bandwidth isochronous (real-time) data interfacing between computers, computer peripherals and consumer electronics products such as camcorders, VCRs, printers, TVs, and digital cameras. With this IEEE 1394 standard, users can transfer video or capturing images from a digital camera or camcorder to PC with no image degradation.

The USB 2.0 ports are compliant with the Universal Serial Bus Specification Revision 2.0 and Open Host Controller Interface Specification for low-speed (1.5Mbps) / full-speed (12Mbps) speed signaling and Enhanced Host Controller Interface Specification for high-speed signaling (480Mbps).

Features

Firewire IEEE 1394A Ports

- ALi (M5271) 1394A OHCI Link and NEC (D72852) PHY
- Complies with 1394 OpenHCI Specifications V1.0 and V1.1
- Compatible with Microsoft OHCI, DV, and SBP-2 driver in Windows 98, Windows 98SE, Windows Me, Windows 2000, Windows XP and MacOS operating system
- Compliant with PCI specification 2.2
- Support High Performance Bus Mastering
- Integrated 400Mbit PHY
- Compliant with IEEE 1394 Standard for High Performance Serial Bus and P1394A Supplement 4.0
- Each 1394A fully compliant cable port supporting 100/200/400 Mbit/sec
- Compliant with PCI Bus Power Management Specification V1.1
- Full support of real time dynamic insertion and removal of devices
- Fully supported by Microsoft Windows 98, 98SE, ME, 2000, XP and MacOS 9.0 Operating System

USB 2.0 Ports

- Compliant with Universal Serial Bus Specification Revision 2.0
- Compliant with Open Host Controller Interface Specification for USB Rev 1.0a
- Compliant with Enhanced Host Controller Interface Specification for USB Rev 0.95
- Supports PCI-Bus Power Management Interface Specification release 1.1
- Supporting high-speed (480Mbps), full-speed (12Mbps), and low-speed (1.5Mbps) transaction
- Support device hot-swap and wake-up
- Supports all USB-compliant devices
- Driver support for Windows 98, 98SE, ME, 2000 & XP operating system

What is in your package?

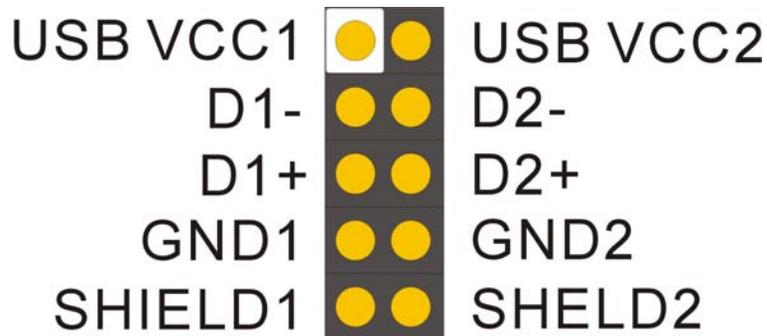
You should have the following items in your package:

- One ALi Firewire IEEE 1394A + USB 2.0 Combo card
- One User Manual
- One Driver Installation CD

Optional Accessories

- Bundled Video Editing and Capturing Software
- One Firewire IEEE 1394A Cable

Pin Assignment for Internal USB connectors (If available)



Installing the ALi Firewire IEEE 1394A + USB 2.0 Combo card

Installing this ALi Firewire IEEE1394A + USB 2.0 Combo card to your computer is simple, just simply follow these steps.

- Turn off your computer and all external devices connect to it.
- Disconnect your computer from the power sources.
- Open the computer case. Refer to your computer user manual for more details.
- Find an available PCI slot and remove the slot bracket. Save the bracket screw for later use.
- Align the combo card horizontally with respect to the PCI slot and insert it into the slot firmly and evenly. Take care not to force it into the slot. Once you have properly positioned the combo card into the slot, fasten it to the computer case with the bracket screw you have saved.
- Secure the computer case and switch on your computer.

Driver Installation

You need to install three types of driver before the combo card function properly.

1. 1394 Bus Controller driver
2. ALi PCI to USB Open Host Controller driver
3. ALi PCI to USB Enhanced Host Controller driver

For Windows 98/98SE/ME/2000 & XP Operating System

Note: Make sure you have your Microsoft Windows O/S Installation CD ready before installing this Firewire IEEE 1394A + USB 2.0 Combo card.

1. Installing 1394 Bus Controller driver

This combo card is compliant to IEEE 1394 OpenHCI Specifications and compatible with Microsoft OHCI, DV, and SBP-2 driver in Windows 98, Windows 98SE, Windows Me, Windows 2000, and Windows XP operating system. Full driver support by Microsoft OpenHCI based drivers, no additional driver required. Simply have your Windows O/S Installation CD ready when Windows Installation Wizard prompts for the location of the driver.

2. Installing ALi PCI to USB Open Host Controller driver

Windows should detect three “**ALi PCI to USB Open Host Controller**”, no additional driver required. Full driver support by Microsoft OpenHCI based drivers. Simply have your Windows O/S Installation CD ready when Windows Installation Wizard prompts for the location of the driver.

3. Installing ALi PCI to USB Enhanced Host Controller driver

Installing Windows XP driver

For Windows XP, you can use Microsoft EHCI driver for Windows XP or install the ALI EHCI driver we provided with this card.

If you have decided to use the Microsoft EHCI driver, you need to download Windows XP Service Pack 1 for the Microsoft EHCI drivers. Please refer to **“To download Windows XP Service Pack 1”** on how to download the driver. If you have already installed Windows XP Service Pack 1 in your system, Windows XP will automatically install all the drivers for you.

If you have decided to install the ALI EHCI driver we provided with the combo card, please refer to **“Installing Windows XP/2000/ME/98SE/98 driver”**.

To download Windows XP Service Pack 1

1. Make sure you are connected to the internet.
2. Click **Start** and select **Windows Update**.
3. Windows XP will launch Microsoft Internet Explorer and open the link to Microsoft Windows Update. Click **Scan for updates**.
4. Microsoft Windows Update will list all available updates on the web. At **Critical Updates and Service Packs**, select **Windows XP Service Pack 1** for download.
5. Once Windows XP Service Pack 1 is downloaded and installed into your system, you need to restart Windows XP before the Microsoft EHCI drivers are installed into your system.

Installing Windows XP/2000/ME/98SE/98 driver

Make sure the combo card has been installed correctly on your system.

1. If your card is installed correctly, Windows will automatically detects these items:
 - a) Three **“ALi PCI to USB Open Host Controller”** devices – Full driver support by Microsoft OpenHCI based drivers, no additional driver required. Simply follow the Windows instructions to install the Microsoft ALI Open Host Controller driver.
 - b) Windows should also detect a **“PCI Universal Serial Bus”** device and prompt you for the driver. Please the **“Cancel”** button to end installation.
2. Insert the supplied Driver Installation CD into the CDROM drive.
3. Execute the setup program by double clicking on the **SETUP.EXE** file in **D:\ALIM527X** folder of the Driver Installation CD (Assuming your CDROM drive is Drive D).
4. Follow the setup program instructions to finish installing the ALi EHCI drivers. Once the drivers are installed, you need to restart your Windows.

After you have installed the driver, go to the Device Manager to check if these items are added:

1. Under **“1394 Bus Controller”** in Device Manager, this item is added.
PCI OHCI Compliant IEEE1394 Host Controller
2. Under **“Universal Serial Bus Controller”** in Device Manager, these items are added.
Standard Enhanced PCI to USB Host Controller (If MS Windows XP EHCI driver is installed)
ALi PCI to USB Enhanced Host Controller (If ALI EHCI driver is installed)
ALi PCI to USB Open Host Controller
ALi PCI to USB Open Host Controller
ALi PCI to USB Open Host Controller
USB 2.0 Root Hub
USB Root Hub
USB Root Hub
USB Root Hub

If there is no yellow exclamation mark next to any of the above items then you have successfully installed the drivers for the ALi Firewire IEEE 1394A + USB 2.0 Combo card.