

FireWire 800/1394b + USB2.0 Combo PCI Express Card

Installation Guide

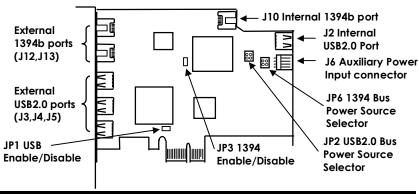
1. Introduction

Thank you for purchasing NitroAV.com "ExpressWay Series" FireWire800/1394b and USB v2.0/1.1 Combo PCI Express Card. It is the next generation of FireWire & USB built on PCIe technology and promises to spur the development of more innovative high-performance devices and applications.

Features:

- ✓ Full x1 (Single Lane) PCI Express throughput supporting up to 2.5Gbps.
- √ Provides four USB2.0 Ports (one internal, 3 externals)
- Provides three IEEE 1394b 9-pin connectors (one internal and two externals)
- ✓ Provides one Auxiliary power connector to enhance USB and 1394b Bus Power
- ✓ Supports Win98SE, ME, 2000, XP. MacOSX and latest versions of LINUX

2. Board Layout



3. Jumper Settings

| JP6: IEEE1394 Bus Power Selector | Settings |
|---|-----------|
| Use +12V from PCI Express Slot (motherboard's PCB) for 1394 Bus Power | (default) |
| Use Auxiliary Power from J5 (in this setting, please connect a power split cable from power supply to J6 of the Card) | AUX O O |

| JP2 USB Bus Power Selector | Settings |
|--|-------------------|
| The USB2.0 Bus Power is supplied by PCI Express slot of the motherboard (DC+5V supplied from PCB) | AUX O O (default) |
| The USB2.0 Bus Power is supplied by the AUX power connector (J6). You may need a power cable to connect the DC+5V power from the system power connector to J6 to get the AUX power supplied. This option provides more power for the USB devices over the USB2.0 cable | PCI OO |

| JP3: IEEE1394 Enable/Disable Jumper | Settings |
|--|-----------|
| Install the jumper to Enable all IEEE 1394b ports | (default) |
| Remove the jumper to Disable all IEEE 1394b ports | 00 |

| JP1: USB2.0 Enable/Disable Jumper | Settings |
|---|-----------|
| Install the jumper to Enable all USB2.0 ports | (default) |

| Remove the jumper to Disable all USB2.0 ports | 00 |
|---|----|
|---|----|

4. Installing the Combo PCI Card

- 1. Turn the system power OFF before installation!
- 2. Use static electricity discharge precautions.

 Remove possible static discharge potential from any objects that the host adapter may come in contact with before installation. This can be accomplished by touching a bare metal chassis rail after you have turned off the power.
- 3. Open the chassis cover from your computer
- 4. Locate an unused PCI Express slot (typically white or black, smaller than PCI slot) and remove the corresponding slot cover from computer chassis. Be sure to check with the computer manufacturer, before installing the card, to determine which slots support I/O devices(like Firewire) as some computers PCI Express slots are specifically designed for graphic card support.
- 5. Plug the Combo Card into the unused PCI Express expansion slot and attach the bracket to the computer chassis screw.
- 6. Installing IEEE1394 cables:

The IEEE 1394b host adapter has two IEEE1394b external 9-pin and internal connectors. The cables can be used as follows (they may not be included with this card):

| 1394 Connectors | Available 1394 Cables |
|-----------------------|-----------------------|
| 9-pin 1394b connector | 9-pin to 9-pin |
| (J12,J13,J10) | 9-pin to 6-pin |
| | 9-pin to 4-pin |

- 7. Up to 63 devices can be connected to the 1394b host adapter. Simply connect the IEEE1394 devices to the host adapter using the above 1394 cables. Close the chassis cover back on the computer.
- **8.** Installing USB2.0 cables, you usually need an A-type to B-Type USB2.0 cable to connect your USB devices to the Combo card.
- 9. Turn ON the power of your computer and peripherals.

5. USB Driver Installation

The following table gives a summary for the OS supports of the USB2.0 PCI Express Card:

| OS | USB1.1 Supports | USB2.0 Supports |
|---------|-----------------|-------------------|
| | (12Mbps) | (480Mbps) |
| Win ME | Yes | Yes (Note 1) |
| Win XP | Yes | Yes (Note 1, 2) |
| Win2000 | Yes | Yes (Note 1, 2) |
| Mac OS | Yes | Yes (MacOSX 10.3) |



Note 1: Required drivers available:

http://www.nitroav.com/library/usb_drivers/USB2.0-NEC/Windows/setup.exe

Note 2: Drivers are available from Microsoft with Service Pack. The WInXP SP1 and W2K SP4 (see article 319973) or in 99% of current installs the drivers are already embedded in the OS.

All installations are very straightforward. Please follow the on-screen instructions from each OS to finish the installations.

6. IEEE 1394 Driver Installation

The following table lists the current OS support of the IEEE 1394b and USB2.0 Combo PCI Express card. Since Windows bundled the IEEE 1394a drivers and Mac OS X bundled the 1394b FireWire 800 drivers, it does not need any additional driver to make it work (except the Win98SE and Mac OS 8.6 may need some updates from their web site):

| OS | Driver Supports (Kernel) |
|--------------------------|---------------------------------|
| Win98SE (Second Edition) | Yes (need a patch file, Note:1) |
| Win ME | Yes (Note:2) |
| Win 2000 | Yes (Note:2) |
| Win XP | Yes (Note:2) |
| Mac OS 10.x | Yes |



 Win98SE: Go to the following link to download the Win98SE patch file (or perform the Windows Update) from Microsoft Web site before installing any IEEE1394 Devices. (You need to choose your own language before downloading the file; wrong language selection may cause problems in your Win98SE):

http://www.microsoft.com/windows98/downloads/contents/wurecommen ded/s_wufeatured/1394/license.asp

While you are running the path file, if you are prompted during the installation, please click "Yes" for the confirmation. (You may need to click 2 to 5 times.)

7. Installing the ExpressBooster (WINDOWS)

In some cases, if the write performance of your Express Card is not as good as you would like, please install the ExpressBooster software supplied with your card.

 To install the software, download from the NitroAV.com site the setup_spbooster.exe file from the ExpressCard page. Once the software has been copied to your computer, double click the file to run the setup.



 Follow the setup on-screen instructions. You will be asked to check the Express Card item (please un-check the PCI Express Card item). Then proceed with the rest of the on-screen instructions to complete the installation.

