

USB2.0 High-Speed PCI Express Host Controller



Introduction

PCI Express is the next revolution in I/O interconnect standards that will deliver the bandwidth and features required by PCs, consumer electronics and communications devices. The architecture is a cost-effective, low-pin count, and point-to-point technologies offering maximum bandwidth, reducing cost and design complexity and enabling smaller form factors. This card is the best solution for USB2.0 High-Speed PCI Express and the interface has a potential transfer rates of 2.5 Gbps using a single-lane (or x1) PCI Express link.

The USB2.0 High-Speed implementation of the Universal Serial Bus standard supports transfer speeds up to 480 Mbps. With USB2.0 High-Speed ports, it makes you connecting kinds of USB devices and peripheral to your desktop computer instantly and conveniently. It also equips Hot-Swapping and plug-n-Play features, and you don't have to not only power down your system installing hardware but also worry about running out of slots on your mainboard or those confusing IRQ's again.

USB2.0 High-Speed PCI Express host card is particularly great for use with USB 2.0 multimedia peripheral and fully backward compatible with USB1.1 device, such as hubs, data storage devices, PC video cameras, digital cameras, CD-R/RWs, DVD-ROMs, scanners, printers, memory card readers, and more.

Specifications

- Designed to meet PCI Express Base Specification Revision 1.1.
- Single-lane (or x1) PCI Express throughput supports rates of 2.5 Gbps.
- Fully supports EHCI and OHCI Compliant standards.
- Compliant with Universal Serial Bus specification revision 2.0.
- Provides independent four external and one internal USB2.0 high speed ports.
- Supports simultaneous operation of multiple USB 2.0 and USB 1.1 devices.
- Built-in 4-pin power connector for receiving extra power supply from system.
- Supports data transfer rates of high-speed (480Mbps), full-speed (12 Mbps) and low-speed (1.5 Mbps).
- Hot-swapping feature allows you to connect/disconnect devices without powering down the system.
- Support Microsoft Windows 2000, XP, Sever2003 and Linux operation system.

Package List

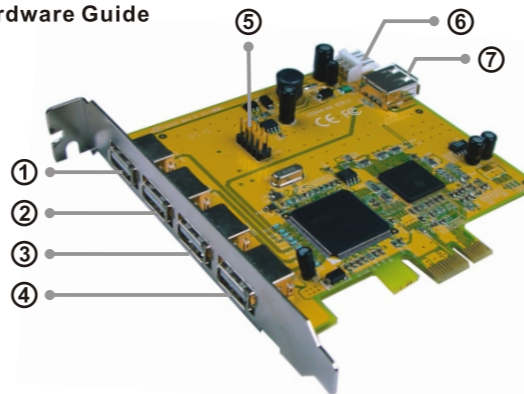
Please check if the following items are present and in good condition upon opening your package. Contact your vendor if any item is damaged or missing.

1. USB2.0 High-Speed PCI Express Host Controller
2. CD Driver
3. User's Manual (this document)

System Requirement

1. Pentium-class computer with one available x1, x4, x8 or x16 PCI Express slot.
2. Microsoft Windows 2000, XP and Sever2003 operation system.
3. Recommended system for Digital Video creating/editing:
 - Pentium4 2.0GHz computer with 256MB RAM and CD/DVD-ROM drive
 - 400MB of available hard disk space or above
 - Video card with 32MB RAM or above (AGP or PCI Express VGA Card)

Hardware Guide

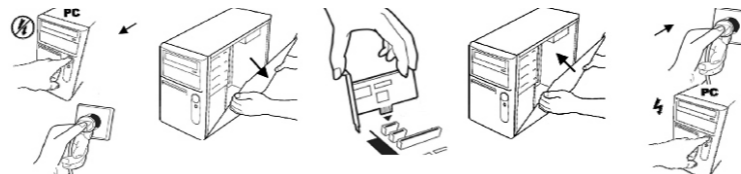


- ①②③④ USB2.0 High-Speed Independent External port
- ⑤ USB2.0 High-Speed Internal Sharing port to front panel (Optional)
(① & ⑦ ports can not be used when using ⑤ port)
- ⑥ 4-Pin Internal Power Connector
- ⑦ USB2.0 High-Speed Independent Internal port

Hardware Installation

Follow the instruction given below to install the PCI Express Card:

1. Turn your computer off and remove the power plug from the plug socket.
2. Remove the cover from the computer case.
3. Remove the metal cover plate on the rear of a free PCI Express slot.
4. Insert the card into one free PCI Express slot and screw it firmly on the bracket side.
5. Place the cover back onto the computer.
6. Insert the plug into the plug socket.



Driver Installation

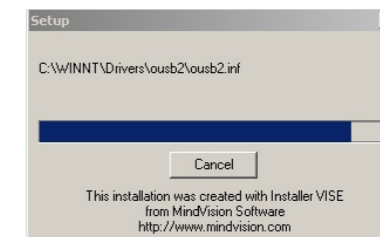
Once the Windows 2000, XP and 2003 startup, USB2.0 PCI Express card will be installed automatically without driver installing. In order to ensure the better performance, please install driver as below steps:

1. Please insert the CD driver into your CD/DVD ROM.
2. Click the **Setup.exe** from your CD/DVD device

: \USB\USB2.0-NEC\Windows\setup.exe



2. The driver will install automatically. Please do not break off installation.



NOTE:

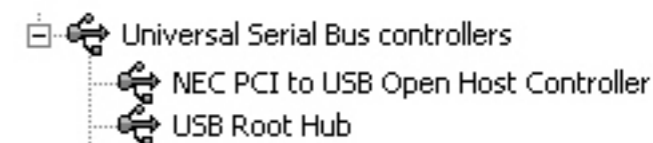
Unplugging or ejecting a device without first stopping them can often cause your computer to crash and lose valuable data. To safely unplug or eject any of the USB devices, firstly use the hardware wizard in the control panel to stop the devices. Or you can use the icon on the taskbar to quickly unplug or eject your devices.



Hardware Verify

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 Universal Serial Bus Controllers item.

Start > Controller Panel > System > Device Manager



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● Troubleshooting

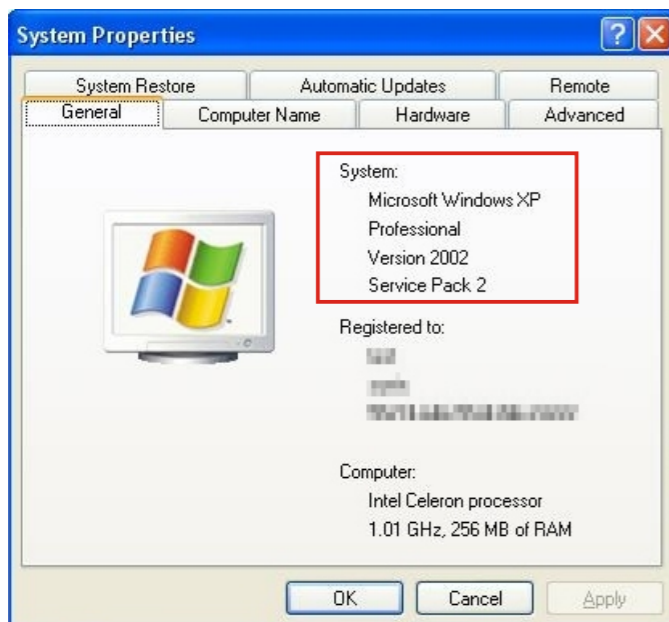
■ If the card and devices connected to the computer do not seem to be working properly, please perform following basic troubleshooting steps:

1. Check that all cables are correct and securely connected.
2. Make sure the devices are turned on.
3. Make sure the devices are getting the power they require.
4. Make sure there is no problem with the card installation.

■ I can NOT install USB2.0 PCI Express card driver properly.

USB2.0 driver bounds with Microsoft Windows system, please upgrade the latest "Service Packs" on your software vendor website, for example <http://www.microsoft.com>. We suggest updating your operation system to Windows 2000 service pack 4, Windows XP service pack 2, and Windows Sever2003 service pack1 or later version.

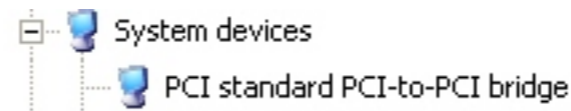
Right click your mouse on "My Computer" and select "Properties" to check your operation system service pack version as below pictures shown.



■ The computer can NOT detect the USB2.0 PCI Express card

1. Make sure that the PCI Express cards is correctly plugged into the PCI Express slot; if not, turn off the computer and plug it in again
2. If the PCI Express card is plugged in correctly, see if the golden connectors on the card are clean; if not, clean the connector surface.
3. If still NOT, please change another PCI Express slot on your motherboard.
4. Please entry "Device Manager" affirming "PCI standard PCI-to-PCI bridge" message appears in the sub-tree of "System device".

Start > Controller Panel > System > Device Manager



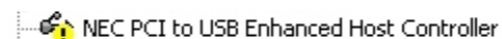
If you can not find this information in the device manager, please upgrade your motherboard BIOS to the latest version. If it still not work, contact your motherboard vendor asking the advanced supporting for BIOS updated.

5. The board itself might be defective. You can try another motherboard testing USB2.0 PCI Express card working or not.

■ Computer failed to start after inserting the USB2.0 PCI Express card.

Turn off the computer, remove the USB2.0 PCI Express card, and try to restart the computer. If the computer starts successfully, it means that the card has not been inserted into the PCI Express slot correctly. Please insert the card firmly into the PCI Express slot or try another slot.

■ How to deal with there is a yellow exclamation point on NEC PCI to USB Enhanced Host controller.



1. Please shutdown your computer and move the card to another available slot then re-install USB2.0 high speed driver.
2. Please point on this device then right-click on the mouse. Selecting "Update Driver" to renew USB driver.
3. This exclamation point usually means there is a resource conflict between the USB2.0 PCI Express card and another card in your system. Please move the card to another available slot. 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.

■ Why no sound is obtained from the camera in video software?

Connect the camera's sound output to the "LINE-IN" on your sound card.

■ A message is displayed stating that not enough power can be given to the connected device.

It caused by too many devices are connected and they are using too much power. please remove one or more devices until you have enough power. If your device request exceed the 5-Volt and 500mA specifications, please plug the 4Pin power connector on the board to provide your device stable power output. But the better way is using device self-power to satisfy it.

■ A device connected to the USB 2.0 PCI Express card does not work or does not work correctly.

The device has not been installed or has not been installed correctly. Remove the device from the USB 2.0 PCI Express card and uninstall the drivers. Install the device as described in the instruction manual provided with the device.

■ The USB cable has been extended and the device no longer works.

The length of the USB cable must not exceed 3.5 meters. Please do not extend the cable or a USB repeater must be used if the cable is longer than 3.5 meters.

■ Is it possible to connect current USB 1.1 devices to the USB 2.0 PCI Express card?

Yes. The device will not, however, obtain the USB 2.0 speed (480 Mbits/sec) but the USB 1.1 speed (12 Mbits/sec).

■ Is it possible to connect a USB2.0 hub to the USB2.0 PCI Express card?

Yes. You will then be able to connect a number of devices (max. 127) to one USB port.