

USB 2.0 4-Port PCI Express Card

User Manual

Ver. 1.00

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Chapter 1: Introduction

1.1 Product 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 USB 2.0 High-Speed PCI Express and the interface has a potential transfer rates of 2.5 Gbps using a single-lane (or x 1) PCI Express link.

The USB 2.0 High-Speed implementation of the Universal Serial Bus standard supports transfer speeds up to 480 Mbps. With USB 2.0 High-Speed ports, its make you connecting kinds of USB devices and peripherals 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 running out of slots on your motherboard or those confusing IRQ's again.

USB 2.0 High-Speed PCI Express host card is particularly great for use with USB 2.0 multimedia peripheral and fully backward compatible with USB 1.1 device, such as hubs, data storage devices, PC video cameras, digital cameras, CD-R/RWs, DVD-ROMs, scanner, printers, memory card readers, and more.

1.2 Features

- Fully compliant with PCI Express Base Specification Revision 1.1
- Single-lane (x1) PCI Express throughput rates up to 2.5 Gbps
- Compliant with Universal Serial Bus specification revision 2.0
- Provides independent three external and one internal USB 2.0 high speed ports
- Supports simultaneous operation of multiple USB 2.0 and USB 1.1 devices
- Supports the following speed data rates as follows:
Low-speed (1.5Mbps) / Full-speed (12Mbps) / High-speed (480Mbps)
- Built-in 4-pin power connector for receiving extra power supply from system

- Hot-swapping feature allows you to connect/disconnect devices without powering down the system
- Support Windows® XP/Vista/7 (32/64 bit)

1.3 System Requirements

- Windows® XP/Vista/7 (32/64 bit)
- One available PCI Express slot

1.4 Package Contents

- 1 x USB 2.0 4-Port PCI Express Card
- 1 x Driver CD
- 1 x User Manual

Note: Contents may vary depending on country/market.

Chapter 2: Getting Started

2.1 Hardware Installation

1. Turn off the power to your computer.

2. Unplug the power cord and remove your computer's cover.
3. Remove the slot bracket from an available PCIe slot.
4. To install the card, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly.
5. Replace the slot bracket's holding screw to secure the card.
6. Replace the computer cover and reconnect the power cord.

2.2 Driver Installation

2.2.1 For Windows XP (32-bit/64-bit)

Once the Windows XP startup, USB 2.0 PCI Express card will be installed automatically without driver installation. But the filter drivers are required for using "Power Management features" in Windows XP Operating Systems.

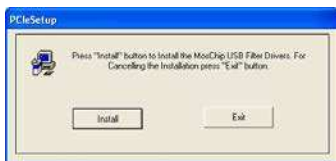
The following section shows you how to install the Filter Driver on Windows XP Operating Systems.

1. Insert the included driver CD in your CD-ROM drive.
2. On your desktop, click "Start" then "Run".
3. When the prompt display

- For Windows XP 32-bit – Enter
“D:\PCIe\MCS9990\XP_32Bit\MOSCHIP_UsbSetup.exe”
(Where “D” is the designation of your CD drive)
- For Windows XP 64-bit – Enter
“D:\PCIe\MCS9990\XP_64Bit\MOSCHIP_UsbSetup.exe”
(Where “D” is the designation of your CD drive)

4. PCIeSetup window will open as shown below, click on “Install” button to install the Filter drivers automatically.

While installation is in progress, “Software Installation” message pops up, click on “Continue Anyway” button.



5. After successful driver installation, the message will pop up saying “Installation Completed” now click on “Exit” to terminate the application.

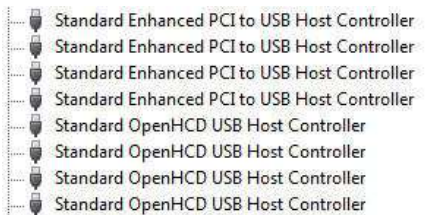
Once the Filter Driver installation is completed, in the Device Manager the EHCI/OHCI will be displayed as “Moschip OpenHCD USB Host Controller” & “Mochip USB Enhanced Host Controller” as show below.



2.2.2 For Windows Vista/7 (32-bit/64-bit)

Once the Windows Vista/7 startup, USB 2.0 PCI Express card will be installed automatically without driver installation.

The USB 2.0 PCI Express card will detect with four instances Standard EHCI USB Host controller & four standard OHCI USB host controller ports in Device Manager as shown below.



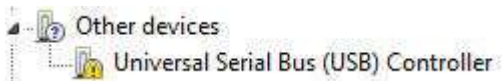
Chapter 3: Troubleshooting Tips

- If card and devices connected to the computer do not seem to be working properly, please perform below basic troubleshooting steps:
 1. Check that all cables are correct and securely connected.
 2. Make sure USB device's power is turned on.
 3. Make sure the devices are getting enough power they require.
 4. Make sure there is no problem with the card installation.
- Computer failed to start after inserting the USB 2.0 PCI Express card.

Turn off the computer, remove the USB 2.0 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 clean golden figure by rubber firstly, then change another PCI Express slot.

- How to deal with there is a yellow exclamation point on controller?



1. Please shutdown your computer and move the card to another available slot then re-install USB 2.0 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 this card and another card in your system. Please move the card to another available slot. Restart your computer. Windows will re-configure itself and re-assign resources. Check your device manager again.
- 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 instructions manual provide with the device.

- 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 Mbps) but the USB 1.1 speed (12 Mbps)