

# USB3.0 Super-Speed ExpressCard / 34mm



## Introduction

Super-Speed USB3.0 interface is the next revolution in I/O interconnect standards that will deliver the bandwidth and features required by PCs, consumer electronics and communications devices. With 10 times faster throughput than USB 2.0 standard and backward compatible with current USB device features, USB3.0 interface will be the trendy of IT technology.

This board is created to meet the need of the ExpressCard market where laptops, desktops, and docking stations could add two additional Super-Speed USB3.0 ports via a single slim-type ExpressCard slot. It works up to 5 Gbps for data transfer when connecting to USB 3.0 compliant peripherals, while maintaining compatibility with existing USB peripheral devices. Users will benefit from ExpressCard plug-n-play ease of use, which eliminates the need to open the chassis to add new features. With USB3.0 ExpressCard/34mm, it makes you connect kinds of USB peripheral instantly and conveniently, such as external storage devices, MP3 players, external DVD writer, digital cameras, webcams, networking, and all other USB devices.

## Features

- Fully compliant with ExpressCard Specification 1.0.
- Full single-lane (or x1) PCI Express throughput.
- ExpressCard/34 form factor module.
- Compliant with Universal Serial Bus 3.0 specification Revision 1.0.
- Compliant with xHCI (eXtensible Host Controller Interface) Spec. Revision 0.95.
- Supports simultaneous operation of multiple USB 3.0 / 2.0 / 1.1 devices.
- Supports USB data transfer rate of 1.5/12/480/5000 Mbps.
- Expands two external USB3.0 Super-Speed ports on the system.
- Built-in DC Jack connector for receiving extra power to meet USB3.0 +5V/900mA power output standard.
- Hot-swapping feature allows users to connect / disconnect devices without powering down the system.
- Driver supports for Microsoft Windows 2000, XP, Vista, and 7 operation system.
- Certified by CE, FCC, RoHS, and Microsoft WQHL approval.

## 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. USB3.0ExpressCard / 34mm Type
2. CD Driver
3. User's Manual (this document)
4. Power Adapter +5V /1A (Optional Accessory)

## Specifications

Interface: ExpressCard 34mm Wide

Mode: Universal Serial Bus Version 3.0

Controller: NEC  $\mu$ PD720200, Two USB3.0 ports

Speed: Data Transfer rate of 1.5/12/480/5000 Mbps.

Low Speed (1.5Mbps), Full Speed(12Mbps),

High Speed(480Mbps), Super Speed(5Gbps)

Power Input: DC Jack Power Connector / Bus Power

Power Output: +5VDC / 500mA (without Power Adapter connection)

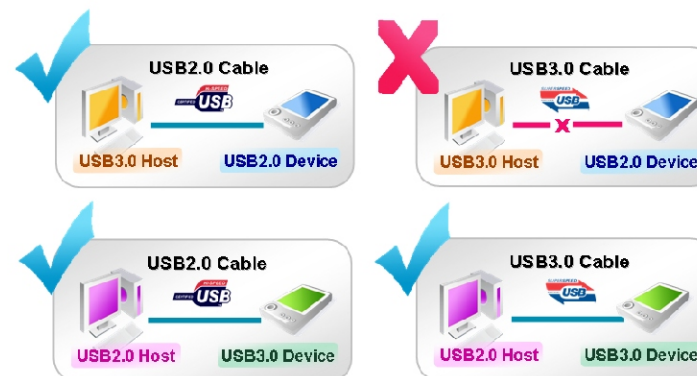
O.S. Support: Windows XP / 2003 / Vista / 7 (X86/X64)

Environment : Operation Temp. 0°C ~ 57°C, Operation Humidity: 5 ~ 95% RH  
StorageTemp.-20 °C ~ 85 °C

## Hardware Guide



**+5V Power is NOT enough:**  
If your USB device requests exceed 5-Volt and 500mA specifications, please plug power adapter into card's DC Jack to provide stable power output. But the better way is using device self-power to satisfy it. (E.g. HDD Enclosure)



## System Requirement

1. Pentium-class notebook or desktop with one available ExpressCard 34/54 slot. (Recommend PCI Express 2.0)
2. Microsoft Windows XP, Vista, and 7 operation system.
3. Pentium4 2.0GHz computer with 1GB DDR RAM or above.
4. CD/DVD-ROM drive for driver installation.

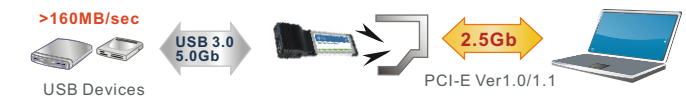
## Hardware Installation

Due to the hot-plug feature of the ExpressCard, the installation of this card quite straight forward. Please insert the USB3.0 ExpressCard/34 into your portable system or Notebook's ExpressCard 34/54 wide slot. (Please note the direction of the ExpressCard should match the direction of the slot)



## NOTE:

In order to get USB3.0 super speed performance, we recommend using latest laptop which built-in PCI Express Ver2.0 Spec. ExpressCard slot for card installation. Or only get half of the data transfer rate.



Unplugging or ejecting a devices 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, always use "Safely Remove USB Device" icon on the taskbar to quickly unplug or eject your USB devices



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## ● Driver Installation

Once Windows startup, USB3.0 ExpressCard will be detected by system. In order to ensure the better performance, please install driver as below steps:

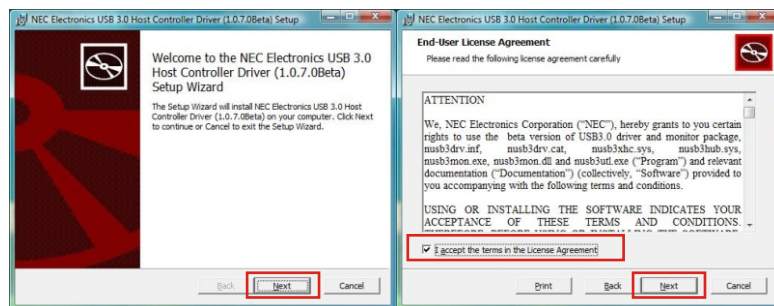
1. Please insert the attached CD into your DVD ROM and click **Setup.exe**.

: \USB\USB3.0\Setup.exe

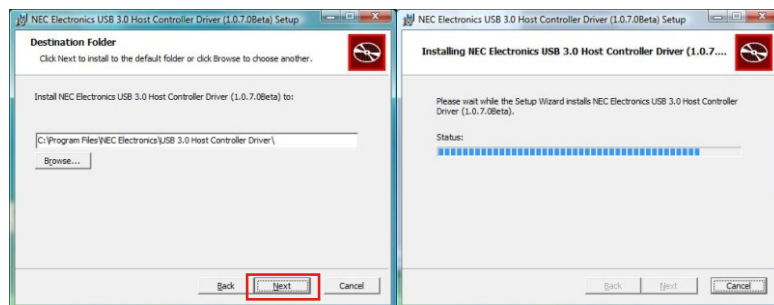


2. Click **"Next"** to continue.

Please check accept license agreement box, and click **"Next"** to continue.

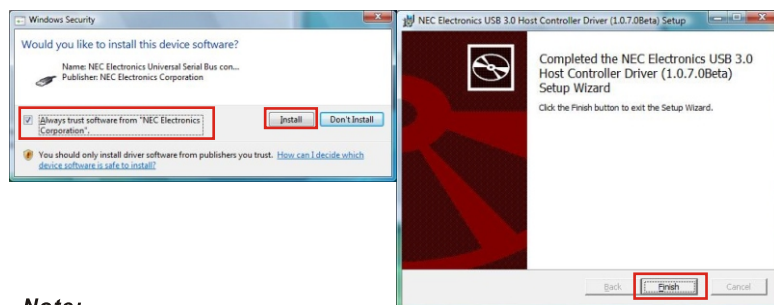


3. Specify driver installation folder in system and click **"Next"** to continue.



3. Check trust software box and click **"Install"** to continue.

Click **"Finish"** to end of the driver installation steps.



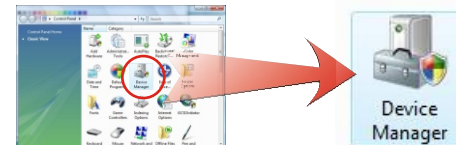
### Note:

We do not provide USB3.0 Driver for MAC and Linux operation system.

## ● Hardware Verify

Click on the **"Device Manager"** tab in the Windows Control Panel

Start > Controller Panel > Device Manager



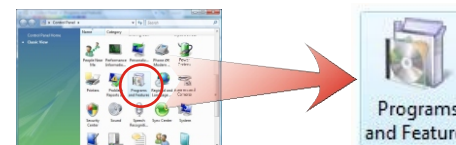
Entry Universal Serial Bus controllers item, and you can read NEC USB3.0 Host Controller and Root Hub in the device manager



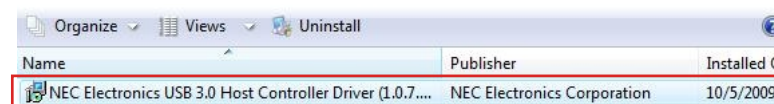
## ● Driver Uninstall

Click on the **"Programs and Features"** tab in the Windows Control Panel

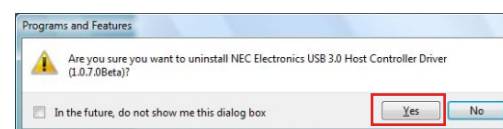
Start > Controller Panel > Programs and Features



Entry Uninstall or change a program page, and double click **"NEC USB3.0 Host Controller Driver"** to process driver uninstallation procedure.



Click **"Yes"** to confirm driver uninstallation procedure.



## ● Troubleshooting

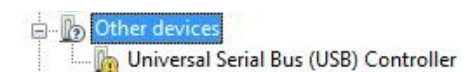
- If card and devices connected to the computer do not seem to be working properly, please perform below basic troubleshooting steps:

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 USB3.0 ExpressCard.

Turn off the computer, remove the USB3.0 ExpressCard/34mm, and try to restart the computer. If the computer starts successfully, it means that the card has not been inserted into laptop ExpressCard slot correctly. Please clean card connecting golden figure by rubber firstly, then try it again.

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



1. Please remove the card from laptop ExpressCard slot. Then reinstall USB3.0 driver again. Before re-installing driver, please uninstall old one.
2. Please point on this device then right-check on the mouse. Selecting "Update Driver" to renew USB driver.
3. Please remove this card from system and shut down your computer. Before turning on the power, make sure of card's hardware installation.
4. This exclamation point usually means there is a resource conflict with other device in your system. Please try to update your laptop's BIOS.

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

If your USB device requests exceed 5-Volt and 500mA specifications, plz plug power adapter into card's DC Jack to provide stable power output. But the better way is using device self-power to satisfy it.

- 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. The longer cable causes poor performance.

- Is it possible to connect current USB 1.1 or 2.0 devices to the USB 3.0 ExpressCard?

Yes it works. Device will not obtain the USB 3.0 speed, but USB 2.0 / 1.1.

