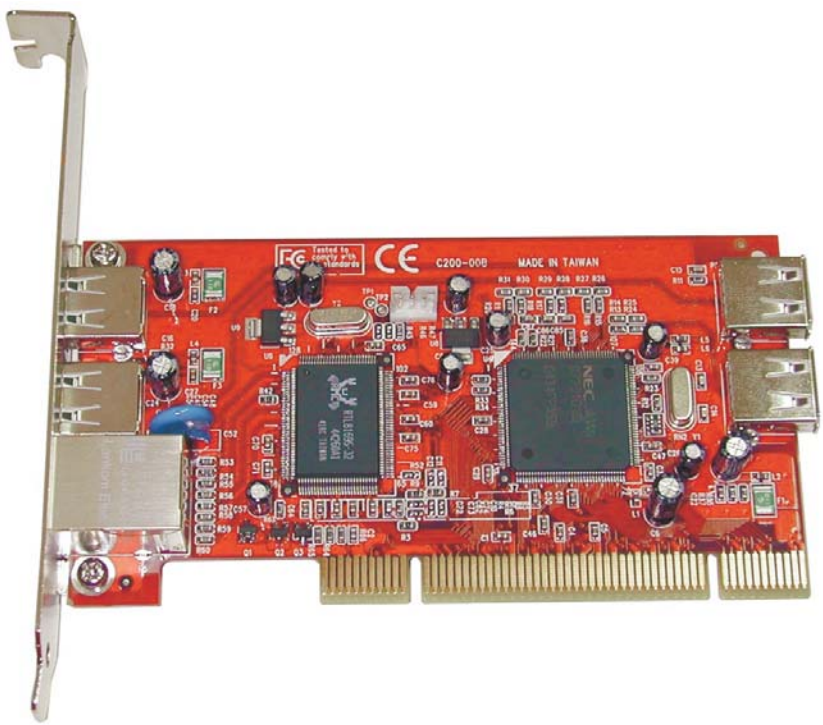
LINDY®

COMPUTER CONNECTION TECHNOLOGY

Gigabit Lan + USB2.0 PCI Host

User Manual

English



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1. Introduction

This PCI Host Adapter is a PCI controller board which can upgrade your desktop computer to have Gigabit Ethernet (1000Mbps, 100 Mbps, 10 Mbps) and three USB2.0 / USB1.1 ports.

The board supports a 32-bit 33 MHz PCI bus revision 2.2, USB transfer rate of 1.5Mb/s, 12Mb/s, 480Mb/s and Gigabit Ethernet 10/100/1000Base-T.

This Low Profile Form factor can support Low profile PCI and regular PCI both.

It comes with drivers for Windows.

1.1. Features

1.1.1. PCI Interface

- Compliant with PCI Specification, revision 2.2.
- 32 bit, 33MHz fully compliant PCI host interface.
- Integrated PCI DMA engines.

1.1.2. 1000Base-T Gigabit Ethernet

- Fully compliant with IEEE 802.3 (10Base-T Ethernet), IEEE 802.3u (100Base-TX Fast Ethernet), IEEE 802.3z (1000Base-T Gigabit Ethernet)
- Supports Ethernet 10Mbps (half-duplex), Ethernet 20Mbps (full-duplex), Fast Ethernet 100Mbps (half-duplex), Fast Ethernet 200Mbps (full-duplex), Gigabit 1000Mbps (full-duplex) and Gigabit 2000Mbps (full-duplex)
- RJ-45 Port offer high speed transmission over CAT 5 UTP cable
- Green LED indicator for 10/100/1000 Link
- Red LED indicator for ACT (Tx / Rx)
- Auto-Negotiation with Next page capability
- Supports pair swap/polarity/skew correction
- Crossover Detection & Auto-Correction

- Wake-on-LAN and remote wake-up support
- Microsoft® NDIS5 Checksum Offload (IP, TCP, UDP) and largesend offload support
- Supports Full Duplex flow control (IEEE 802.3x)
- Supports IEEE 802.1Q VLAN tagging
- 8K Transmit FIFO and 64K Receive FIFO support
- Supports power down/link down power saving

1.1.3. USB Interface

- Provides three USB2.0 / USB1.1 ports (2 External + 1 Internal).
- Compliant with Universal Serial Bus Specification Revision 2.0 (Data Rate 1.5/12/480 Mbps).
- Compliant with Open Host Controller Interface Specification for USB Rev 1.0a.
- Compliant with Enhanced Host Controller Interface Specification for USB Rev 0.95, All USB ports can handle high-speed (480 Mbps), full-speed (12 Mbps), and low-speed (1.5 Mbps) transaction.

1.2. Package Contents

- Gigabit LAN + USB 2.0 PCI Host
- This User's Manual
- Low Profile PCI Bracket
- Driver CD

2. Software Installation

2.1. Windows 2000 installation

1. Power up the system, and insert the Driver CD into your CD-ROM/DVD.
   (Note: Do not install combo card before installing USB drivers in windows)
2. Browse the Driver CD, and points specify a location, example **E:\USB2.0 Host\NEC\Win2K_XP\U2v2_1_4.exe**
3. Double click on the "**U2v2_1_4**" icon, the USB 2.0 Driver V2.1.4 setup dialog Will appear, when setup has finished, select "**NO, I will restart my computer**". Click on "**close**" button to exit the wizard, and power off the system.
4. Insert Combo Card into an available PCI slot, and power up the system.

5. During OS boot up, all necessary USB drivers will be detected and installed automatically.
6. Windows will display the Found New Hardware Wizard, "**Ethernet controller**", Click "**Next**".
7. Select "**Search for a suitable driver for my device (Recommended)**" and Click "**Next**", and make sure the Driver CD in your CD-ROM/DVD.
8. Under "**Specify a locations**" insure that is only checked, and click "**Next**".
9. Type in E:\ (If your CD-ROM/DVD is **E**:\) and click "**Browse**".
10. Points specify a location, example **E:\10_100_1000NIC\RTL8169 \WIN2K\NETRTL.inf**, and click "**OPEN**" then "**OK**".
11. When the wizard indicates that it found a driver for the device click "**Next**". Then click "**Finish**".

2.2. Windows XP installation

1. Power up the system, and insert the Driver CD into your CD-ROM/DVD.
   (Note: Do not install combo card before installing USB drivers in windows)
2. Browse the Driver CD, and points specify a location, example **E:\USB2.0 Host\NEC\Win2K_XP\U2v2_1_4.exe**
3. Double click on the "**U2v2_1_4**" icon, the USB 2.0 Driver V2.1.4 setup dialog Will appear, when setup has finished, select "**NO, I will restart my computer**". Click on "**close**" button to exit the wizard, and power off the system.
4. Insert Combo Card into an available PCI slot, and power up the system.
5. During OS boot up, Windows will display the Found New Hardware Wizard, "**NEC PCI to USB Enhanced Host Controller**".
6. Select "**Install the software automatically (Recommended)**", and click "**Next**". Then click "**Finish**".
7. Windows will display the Found New Hardware Wizard, "**Ethernet controller**". Select "**Install from a list or specific location (Advanced)**", and click "**Next**", and make sure the Driver CD is in your CD-ROM/DVD.
8. Select "**Search for the best driver in these locations**", and check "**Include this location in the search:**" uncheck the other boxes.
9. Type in E:\ (If your CD-ROM/DVD is E:\) then click "**Browse**".
10. Points specify a location, example **E:\10_100_1000NIC\RTL8169\WINXP,** and click "**OK**" then "**Next**".
11. The wizard will now copy the required files to the system and start the Driver. After starting the driver the wizard will display a completion Dialog, click "**Finish**" to exit the wizard.
12. Windows will display the Found New Hardware Wizard, "**USB 2.0 Root Hub Device**", select "**Install the software automatically (Recommended)**", and click

"**Next**". Then click "**Finish**".

2.3.Verifying the installation under Windows 2000 and XP

Follow the instructions in this section to verify that the controller was installed correctly.

1. Right click on "**My Computer**" icon, select "**Properties**", left click on "**Hardware**" tab, and then on "**Device Manager**" button.
2. Double click "**Universal Serial Bus Controllers**", If there is no yellow "**!**" or "**?**" in front of

   NEC PCI to USB Open Host controller
   NEC PCI to USB Open Host controller
   USB Root Hub
   USB Root Hub

   The driver has started correctly.
3. Double click another "**Universal Serial Bus Controllers**", If there is no yellow "**!**" or "**?**" in front of

   NEC PCI to USB Enhanced Host Controller
   USB 2.0 Root Hub Device

   The driver has started correctly.
4. Double click on "**Network adapters**", If there is no yellow "**!**" or "**?**" in front of " **Realtek RTL8169/8110 Family Gigabit Ethernet NIC** " the driver has started correctly.
5. To view information about the devices attached to the controller, right click the "**Devices**" and select Properties from the context menu, then select the tab labeled "**General**".

2.4. Windows 98SE installation

1. Power off the system. Insert Combo Card into an available PCI slot. Power up the system.
2. The Hardware wizard will display that it found "**NEC USB Open Host Controller**", click "**Next**".
3. Select "**Search for the best driver for your device (Recommended)**" and click "**Next**".
4. Select "**Floppy disk drives**" and uncheck the other boxes and click "**Next**".
5. Select "**The Updated driver (Recommended)**". NEC USB Open Host Controller, and click "**Next**". Then click "**Next**" to continue.
6. If display "**Insert Disk**" (please insert the disk labeled windows 98 second Edition CD-ROM) and click OK, Then click "**Finish**" to exit the wizard.
7. The Hardware wizard will display that it found "**NEC USB Open Host Controller**",

and click "**Next**".

8. Select "**Search for the best driver for your device(Recommended)**". Click "**Next**".
9. Select "**Floppy disk drives**" and uncheck the other boxes and click "**Next**", Select "**The Updated driver (Recommended)**" NEC USB Open Host Controller, and click "**Next**", then click "**Next**" to continue.
10. If display "**Insert Disk**" (please insert the disk labeled windows 98 second Edition CD-ROM) and click OK, Then click "**Finish**" to exit the wizard, and Remove your Windows 98 second Edition CD-ROM.
11. The Hardware wizard will display that it found "**PCI Universal serial Bus**", and click "**Next**".
12. Select "**Search for the best driver for your device (Recommended)**". Click "**Next**",
13. Make sure the " **Specify a location:** " checkbox is only checked, and insert the "**Driver CD**" in your CD-ROM/DVD drive, then click "**Browse**".
14. Points specify a location, example **E:\USB2.0 Host\NEC\Win98_me**. Click "**OK**", and click "**Next**". (If your CD-ROM/DVD drives is E:)
15. When the wizard indicates that it found a driver for the device, click "**Next**". Then click "**Finish**" to exit the wizard.
16. The Hardware wizard will display that it found "**PCI Ethernet Controller**", click "**Next**", select "**Search for the best driver for your device (Recommended)**", click "**Next**", Check "**Specify a location**", uncheck the other boxes,
17. Insert the "**Driver CD**" in your CD-ROM/DVD drive type in E:\ (If your CD-ROM/DVD is E:\) and click "**Browse**".
18. Points specify a location, example **E:\10_100_1000NIC\RTL8169 \WIN98se,** and click "**OK**" then "**Next**".
19. Click "**Next**" if display "**Insert Disk**" (please remove the Driver CD from your CD-ROM/DVD and insert the disk labeled windows 98 second Edition CD-ROM) and click "**OK**", then click "**Finish**".
20. When install driver finish, please remove windows 98 Second Edition CD-ROM, and click "**YES**" to restart your computer.

2.5. Windows ME installation

1. Power off the system. Insert Combo Card into an available PCI slot. Power up the system.
2. The Hardware wizard will display that it found "**PCI Universal Serial Bus**", Select "**Specify the location of the driver (Advanced)**", and insert the "**Driver CD**" in your CD-ROM/DVD drive, and click "**Next**".

3. Make sure "**Search for the best driver for your device (Recommended)**", and "**Specify a location** are both selected, uncheck the other boxes, and type in E:\ (If your CD-ROM/DVD is E:\) and click "**Browse**".
4. Points specify a location, example **E:\USB2.0 Host\NEC\Win98_me.**
   Click "**OK**", and click "**Next**". (If your CD-ROM/DVD drive is E:)
5. When the wizard indicates that it found a driver for the device, click "**Next**". Then click "**Finish**" to exit the wizard.
6. The Hardware Wizard will display that it found "**PCI Ethernet Controller**", select "**Specify the location of the driver (Advanced)**", and click "**Next**".
7. Select "**Search for the best driver for your device (Recommended)**", and check "**Specify a location**" are both selected, uncheck the other boxes, and type in E:\ (If your CD-ROM/DVD is E:\) and click "**Browse**".
8. Points specify a location, example **E:\10_100_1000NIC\RTL8169\WINME,** and click "**OK**" then "**Next**".
9. When the wizard indicates that it found a driver for the device, click "**Next**". Then click "**Finish**" to exit the wizard.
10. When driver install Finish please remove the Driver CD and click "**YES**" to restart your computer.

2.6. Verifying the installation under Windows 98SE and ME

Follow the instructions in this section to verify that the controller was installed correctly.

1. Right click on "**My Computer**" icon, select "**Properties**", left click on "**Device Manager**" tab.
2. Double click "**Universal Serial Bus Controllers**", If there is no yellow "**!**" or "**?**" in front of

   NEC PCI to USB Enhanced Host Controller
   NEC USB Open Host controller (E13+)
   NEC USB Open Host controller (E13+)
   USB Root Hub
   USB Root Hub

   The driver has started correctly.
3. Double click on "**Network adapter**", If there is no yellow "**!**" or "**?**" in front of "**Realtek RTL8169/8110 Family Gigabit Ethernet NIC**" the driver has started correctly.
4. To view information about the devices attached to the controller, right click the "**Devices**" and select Properties from the context menu, then select the tab labeled "**General**".

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operations.