GigaNet 1000Base-T LAN Cardbus

1. Introduction

This Cardbus Host Adapter can upgrade your notebook computer to have high-speed networking transfer rate up to 1000 Mbps. The PC card provides a 32bit cardbus interface and RJ-45 Port fully compliant with IEEE 802.3 (10Base-T Ethernet), IEEE 802.3u (100Base-TX Fast Ethernet), IEEE 802.3z (1000Base-T Gigabit Ethernet) networking.

This adapter supports half/ full duplex feature which can double network speed. 1000BaseT transmites 1000Mbps(Gigabit) over all four pairs of CAT 5 UTP cable, 100BaseTX transmites 100Mbps over two pairs of CAT 5 UTP cable and 10BaseT transmites 10Mbps over CAT 3,4,5 UTP cable.

1.1. Features

- PC Card 32 bit CardBus fully compliant
- $\circ~$ Completely with drivers for Windows 98, Windows Millennium, Windows 2000, XP, Vista and 7

1.1.1. 1000Base-T Fast 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)
- $_{\odot}$ $\,$ RJ-45 Port offer high speed transmission over CAT 5 UTP cable
- $_{\odot}$ $\,$ 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
- 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

1.2. Package Contents

- CardBus Adapter
- This User's Manual
- Driver CD

2. Software Installation

To use this CardBus adapter, the host computer must be equipped with one free PCMCIA Card Type II or Type III slot.

2.1. Windows 2000 installation

- 1. Insert Cardbus into an available Cardbus slot.
- 2. When the 'Found New Hardware Wizard' dialog appears, click 'Browse'
- 3. Point specify a location , example E:\1000_GigaNet\Rtl8169\Windows \ Win2000 , click '**Open**' and click '**OK**'. (If your CD-ROM/DVD drive is E:)
- 4. When the wizard indicates that it found a driver for the device click '**Next**'.
- 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.

2.2. Windows XP, Vista and 7 installation

- 1. Insert Cardbus into an available Cardbus slot.
- 2. When the 'Found New Hardware Wizard' dialog appears, click 'Browse'
- Point specify a location , example E:\1000_GigaNet\Rtl8169\Windows \ WinXP , click 'Open' and click 'OK'. (If your CD-ROM/DVD drive is E:)

- 4. When the wizard indicates that it found a driver for the device click 'Next'.
- 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.

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 on 'Network adapter', If there is no yellow '!' or '?' in front of 'Realtek RTL8169 Fast Ethernet adapter #3' the driver has started correctly.
- 3. 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. Insert Cardbus into an available Cardbus slot.
- 2. When the 'Found New Hardware Wizard' dialog appears, click 'Browse'
- 3. Point specify a location , example E:\1000_GigaNet\Rtl8169\Windows \ Win98 , click '**Open**' and click '**OK**'. (If your CD-ROM/DVD drive is E:)
- 4. When the wizard indicates that it found a driver for the device click 'Next'.
- 5. 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.

2.5. Windows ME installation

- 1. Insert Cardbus into an available Cardbus slot.
- 2. When the 'Found New Hardware Wizard' dialog appears, click 'Browse'
- 3. Point specify a location , example E:\1000_GigaNet\Rtl8169\Windows \ WinME , click '**Open**' and click '**OK**'. (If your CD-ROM/DVD drive is E:)
- 4. When the wizard indicates that it found a driver for the device click 'Next'.
- 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.

2.6.Verifying The installation under Windows 98SE and ME

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

- Right click on 'My Computer' icon, select 'Properties', left click on 'Device Manager' tab.
- 2. Double click on '**Network adapter**', If there is no yellow '!' or '?' in front of '**Realtek RTL8169 Fast Ethernet adapter #3**' the driver has started correctly.
- 3. 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**'.