

EZ CARD 10/100/1000 32-bit 10/100/1000Mbps Gigabit Ethernet PCI Adapter



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Compliances

FCC - Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

EC Conformance Declaration - Class A

SMC contact for these products in Europe is:

SMC Networks Europe, Edificio Conata II, Calle Fructuós Gelabert 6-8, 2o, 4a, 08970 - Sant Joan Despí, Barcelona, Spain.

This information technology equipment complies with the requirements of the Council Directive 89/336/EEC on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility and 73/23/EEC for electrical equipment used within certain voltage limits and the Amendment Directive 93/68/EEC. For the evaluation of the compliance with these Directives, the following standards were applied: RFI Emission:

- Limit class A according to EN 55022:1998, IEC 60601-1-2 (EMC, medical)
- Limit class A for harmonic current emission according to EN 61000-3-2/1995
- Limitation of voltage fluctuation and flicker in low-voltage supply system according to EN 61000-3-3/1995

Immunity:

- Product family standard according to EN 55024:1998
- Electrostatic Discharge according to EN 61000-4-2:1995 (Contact Discharge: ±4 kV, Air Discharge: ±8 kV)
- Radio-frequency electromagnetic field according to EN 61000-4-3:1996 (80 - 1000 MHz with 1 kHz AM 80% Modulation: 3 V/m)
- Electrical fast transient/burst according to EN 61000-4-4:1995 (AC/DC

power supply: ±1 kV, Data/Signal lines: ±0.5 kV)

- Surge immunity test according to EN 61000-4-5:1995
 (AC/DC Line to Line: ±1 kV, AC/DC Line to Earth: ±2 kV)
- Immunity to conducted disturbances, Induced by radio-frequency fields: EN 61000-4-6:1996 (0.15 - 80 MHz with
 - 1 kHz AM 80% Modulation: 3 V/m)
- Power frequency magnetic field immunity test according to EN 61000-4-8:1993 (1 A/m at frequency 50 Hz)
- Voltage dips, short interruptions and voltage variations immunity test according to EN 61000-4-11:1994 (>95% Reduction @10 ms, 30% Reduction @500 ms, >95% Reduction @5000 ms)

LVD

• EN 60950-1:2001

Please read the following safety information carefully before installing the device:

WARNING: Installation and removal of the unit must be carried out by qualified personnel only.

- This guide is intended for use by network administrators who are responsible for setting up and installing network equipment; consequently it assumes a basic working knowledge of LANs (Local Area Networks).
- The unit must be connected to an earthed (grounded) outlet to comply with international safety standards.
- Do not connect the unit to an A.C. outlet (power supply) without an earth (ground) connection.
- The appliance coupler (the connector to the unit and not the wall plug) must have a configuration for mating with an EN 60320/IEC 320 appliance inlet.
- The socket outlet must be near to the unit and easily accessible. You can only remove power from the unit by disconnecting the power cord from the outlet.
- This unit operates under SELV (Safety Extra Low Voltage) conditions according to IEC 60950. The conditions are only maintained if the equipment to which it is connected also operates under SELV conditions.

Veuillez lire à fond l'information de la sécurité suivante avant d'installer le Device:

AVERTISSEMENT: L.installation et la dépose de ce groupe doivent être

confiés à un personnel qualifié.

- Ne branchez pas votre appareil sur une prise secteur (alimentation électrique) lorsqu'il n'y a pas de connexion de mise à la terre (mise à la masse).
- Vous devez raccorder ce groupe à une sortie mise à la terre (mise à la masse) afin de respecter les normes internationales de sécurité.
- Le coupleur d.appareil (le connecteur du groupe et non pas la prise murale) doit respecter une configuration qui permet un branchement sur une entrée d.appareil EN 60320/IEC 320.
- La prise secteur doit se trouver à proximité de l.appareil et son accès doit être facile.
 Vous ne pouvez mettre l.appareil hors circuit qu.en
 débranchant son cordon électrique au niveau de cette prise.
- L.appareil fonctionne à une tension extrêmement basse de sécurité qui est conforme à la norme IEC 60950. Ces conditions ne sont maintenues que si l.équipement auquel il est raccordé fonctionne dans les mêmes conditions.

Bitte unbedingt vor dem Einbauen des RPU die folgenden Sicherheitsanweisungen durchlesen:

WARNUNG: Die Installation und der Ausbau des Geräts darf nur durch Fachpersonal erfolgen.

• Diese Anleitung ist fr die Benutzung durch Netzwerkadministratoren vorgesehen, die fr die Installation und das einstellen von Netzwerkkomponenten verantwortlich sind; sie setzt Erfahrung bei der Arbeit mit LANs (Local Area Networks) voraus.

- Das Gerät sollte nicht an eine ungeerdete Wechselstromsteckdose angeschlossen werden.
- Das Gerät muß an eine geerdete Steckdose angeschlossen werden, welche die internationalen Sicherheitsnormen erfüllt.
- Der Gerätestecker (der Anschluß an das Gerät, nicht der Wandsteckdosenstecker) muß einen gemäß EN 60320/IEC 320 konfigurierten Geräteeingang haben.
- Die Netzsteckdose muß in der Nähe des Geräts und leicht zugänglich sein. Die Stromversorgung des Geräts kann nur durch Herausziehen des Gerätenetzkabels aus der Netzsteckdose unterbrochen werden.
- Der Betrieb dieses Geräts erfolgt unter den SELV-Bedingungen
 (Sicherheitskleinstspannung) gemäß IEC 60950. Diese Bedingungen sind

nur gegeben, wenn auch die an das Gerät angeschlossenen Geräte unter SELV-Bedingungen betrieben werden

Stromkabel. Dies muss von dem Land, in dem es		
benutzt wird geprüft werden:		
Schweiz	Dieser Stromstecker muß die SEV/ASE	
	1011Bestimmungen ein- halten.	
Europe	Das Netzkabel muß vom Typ	
	HO3VVF3GO.75 (Mindestan-	
forderung) sein und die Aufschrift <ha< td=""></ha<>		
	oder <basec> tragen</basec>	
	Der Netzstecker muß die Norm CEE 7/7	
	erfüllen (.SCHUKO.).	

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.

- **Warning:** Installation and removal of the unit must be carried out by qualified personnel only.
- **Warning:** When connecting this device to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.
- **Caution:** Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.
- **Caution:** Do not plug a phone jack connector in the RJ-45 port. This may damage this device. Les raccordeurs ne sont pas utilisé pour le système téléphonique!
- **Caution:** Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Warnings (in German)

Achtung: Dieses Produkt enthält keine Teile, die eine Wartung vom Benutzer benötigen.

- Achtung: Installation und Deinstallation des Gerätes müssen von qualifiziertem Servicepersonal durchgeführt werden.
- Achtung: Wenn das Gerät an eine Steckdose angeschlossen wird, muß der Masseanschluß n Netzstecker mit Schutzerde verbunden werden, um elektrische Gefahren zu vermeiden.

Environmental Statement

The manufacturer of this product endeavours to sustain an environmentally-friendly policy throughout the entire production process. This is achieved though the following means:

- Adherence to national legislation and regulations on environmental production standards.
- Conservation of operational resources.
- Waste reduction and safe disposal of all harmful un-recyclable by-products.
- Recycling of all reusable waste content.
- Design of products to maximize recyclables at the end of the product.s life span.
- Continual monitoring of safety standards.

End of Product Life Span

This product is manufactured in such a way as to allow for the recovery and disposal of all included electrical components once the product has reached the end of its life.

Manufacturing Materials

There are no hazardous nor ozone-depleting materials in this product.

Documentation

All printed documentation for this product uses biodegradable paper that originates from sustained and managed forests. The inks used in the printing process are non-toxic.

Purpose

This guide details the hardware features of the product, including Its physical and performance-related characteristics, and how to install the product.

Audience

The guide is intended for use by network administrators who are responsible for installing and setting up network equipment; consequently, it assumes a basic working knowledge of LANs (Local Area Networks).

Diese Anleitung ist für die Benutzung durch Netzwerkadministratoren vorgesehen, die für die Installation und das einstellen von Netzwerkkomponenten verantwortlich sind; sie setzt Erfahrung bei der Arbeit mit LANs (Local Area Networks) voraus.

Package Contents

The following items should be found in your box:

- > One 10/100/1000Mbps Gigabit Ethernet PC Adapter
- > One Resource CD, including
 - Drivers
 - User Guide
 - Other Helpful Information

PNote:

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact with your distributor for assistance.

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Chapter 1. Introduction

Thank you for choosing SMC9452TX-2 Gigabit PCI Ethernet Adapter.

1.1 Convention

The Adapter or SMC9452TX-2 mentioned in this User Guide stands for SMC9452TX-2 Gigabit PCI Ethernet Adapter.

1.2 Product Overview

SMC9452TX-2 is a highly integrated and cost-effective single-chip Gigabit Ethernet Adapter that provides 32-bit performance, PCI bus master capability, and full compliance with IEEE 802.3 10Base-T, IEEE802.3u 100Base-TX and IEEE 802.3ab 1000Base-T specifications. It also supports ACPI, PCI power management for modern operating systems that are capable of Operating System Directed Power Management (OSPM) to achieve the most efficient power management.

Through the aid of a VLAN membership, SMC9452TX-2 adheres to the 802.1Q for multiple VLAN support, and 802.1P for packet prioritization. With 802.1Q support, server resources can be shared with multiple VLANs when used in conjunction with any 802.1Q-enabled Switch. With the 802.1p support, SMC9452TX-2 allows a range of Ethernet packets to be prioritized from a critical to a non-critical designation through a priority tag.

SMC9452TX-2 supports Full Duplex operations at 20/200/2000 Mbps data speeds used in conjunction with 802.3x flow control support. With 802.3x flow control SMC9452TX-2 uses both asymmetric and symmetric functions via the MAC control pause function. Any participating 802.3x flow control node can be controlled by initiating a pause control to stop incoming network traffic, to further reduce network congestion. SMC9452TX-2 also supports the WOL (Wake on LAN) Function which allows a remote station "wake" your computer when it is in Standby or Hibernate mode or after shutdown.

By default SMC9452TX-2 supports the standard 1518 Byte frame size. In addition, SMC9452TX-2 also supports Jumbo Frame transmission

It includes an interface for a boot ROM and can be used in diskless workstations, providing maximum network security and ease of management.

In addition, being PCI 2.2 compliant, SMC9452TX-2 works with 32-bit 33Mhz PCI busses. This compatibility provides users with an easy migration path to increase performance between servers and workstations for large file transfer, video editing and server clustering for data intensive applications.

1.3 Main Features

- > Integrated Ethernet MAC, Physical chip and transceiver in one chip
- Complies with the IEEE802.1P, IEEE802.1Q, IEEE802.3 10Base-T, IEEE802.3u 100Base-TX and IEEE802.3ab 1000Base-T standard
- Compliant to PCI Revision 2.1/2.2
- Supports Full Duplex Flow Control (IEEE 802.3x)
- > PCI local bus single-chip Ethernet controller
- Supports ACPI, PCI power management
- > Supports Auto-Negotiation function, Auto-detects network speed
- > Contains two large independent receive and transmit FIFOs
- One STP/UTP connector
- > Provides LEDs to indicate network Link/Activity/Speed
- Supports smart remote boot ROM
- Supports Wake on LAN function
- Supports Drivers for NetWare 4.x,5.x,6.x,Windows 98/ME/2000/2003/XP/Vista, Windows NT, Linux, Dos.

1.4 LED Status

The 1000M Link/Act LED of SMC9452TX-2 indicates Link/Act status when the Adapter works in the 1000M mode. It will light when connection is built, and glitter when the Adapter is transmitting or receiving data.

The 100M Link/Act of SMC9452TX-2 indicates Link/Act status when the Adapter is working in the 100M mode. It will light when connection is built, and glitter when the Adapter is transmitting or receiving data.

Chapter 2. Installation

2.1 Hardware Installation

To install the adapter, follow these steps listed below:

- Step 1: Turn off your computer and unplug the power cord and all cables.
- Step 2: Remove your computer's case cover. See your computer's user guide for information about removing the cover.
- Step 3: Locate an available PCI slot. PCI slot are usually white.
- Step 4: Remove the screw that secures the back plate (the small piece of metal that covers the opening for PCI Adapter on the back panel of your computer), then remove the back plate.
- Step 5: Carefully insert the Adapter into the PCI slot. Do not touch the metal connector on the Adapter.



Figure 2-1

- Step 6: Secure the Adapter to the case using the screw you removed from the back plate.
- Step 7: Reinstall your computer's case cover.
- Step 8: Plug in the power cord and other cables, and then turn on your computer.

PNote:

After inserting the Adapter in your Computer, you should install the driver for the Adapter. The Driver & Documentation CD provides the drivers for Win9x/ME/2000/XP/Vista, please select the appropriate driver from which for your system. The following installation takes Windows XP for example; you can install drivers for other systems similarly.

2.2 Software Installation

In this User Guide, we will take the driver installation in Windows XP for example, which is similar to the driver installation procedures for the other operation systems.

2.2.1 Install driver for XP

Step 1: After you insert the Adapter in the computer firmly, the Operating System will automatically recognize it, then the "Welcome to the Found New Hardware Wizard" screen will appear (shown in Figure 2-2). Select **No, not this time**, then click **Next**.



Figure 2-2

Step 2: Select **Install from a list or specific location (Advanced)** as shown in Figure 2-3, and then click **Next**.

Found New Hardware Wizard		
	This wizard helps you install software for: Ethernet Controller If your hardware came with an installation CD or floppy disk, insert it now. What do you want the wizard to do? Install the software automatically (Recommended) Install from a list or specific location (Advanced) Click Next to continue.	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Figure 2-3

Step 3: Select **Don't search. I will choose the driver to install** as shown below. Then click **Next**.

Found New Hardware Wizard
Please choose your search and installation options.
\bigcirc Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM)
Include this location in the search:
G:\ Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< <u>B</u> ack <u>N</u> ext > Cancel

Step 4: Select **Show All Devices** as shown in Figure 2-5, then click **Next**.

Found New Hardware Wizard				
Hardware Type.				
Select a hardware type, and then click Next. Common <u>h</u> ardware types:				
Show All Devices Show All Devices Show All Device Device Show All Device Class AVC Device Class Batteries Batteries Bluetooth Radios Computer Disk drives Disclau adaptere				
< <u>B</u> ack <u>N</u> ext >	Cancel			

Figure 2-4

Step 5: Click Have Disk... in the next screen Figure 2-6.

Found New Hardware Wizard				
Select the device driver you want to install fo	or this hardware.			
Select the manufacturer and model of your hard have a disk that contains the driver you want to				
(Standard IDE ATA/ATAPI cor (Standard keyboards) (Standard system devices) ▼ CD-ROM Driv	e (force CDDA accurate) e (force CDDA inaccurate) e (force IMAPI disable) e (IMAPI settings 0,1)			
	Back Next > Cancel			

Figure 2-5

Step 6: After that, select **Browse...** as shown in Figure 2-7 to locate the driver in the next screen.



Figure 2-6

Step 7: Locate the appointed driver as shown in Figure 2-8, click **Open**.

Locate File							? 🗙
Look in:	C WINXP		*	G	ø	• 🖭 🔊	
My Recent Documents							
Desktop							
My Documents							
My Computer							
	File <u>n</u> ame:	NETRTLX.INF				~	<u>O</u> pen
My Network	Files of <u>type</u> :	Setup Information (*.inf)				~	Cancel

Figure 2-7

SMC9452TX-2 Gigabit PCI Ethernet Adapter User Guide

Step 8: After that, you will see the next screen (shown in Figure 2-9), click OK.



Figure 2-8

Step 9: Select the model of the Adapter as shown in Figure 2-10, then click Next.

Found New Hardware Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Network Adapter:
SMC9452TX-2 Gigabit Ethernet PCI Adapter
This driver is not digitally signed! <u>Tell me why driver signing is important</u> Have Disk
< Back Next > Cancel

Figure 2-9

Step 10: After that, please wait few seconds for the wizard installing the software.

Found New Hardware Wizard				
Please wa	it while the wizard installs the software			
œ∰ E	SMC9452TX-2 Gigabit Ethernet PCI Adapter			
	Image: System 32 \DRIVERS			
	K Back Next > Cancel			

Figure 2-10

P Note:

During the installation, a warning box about Windows Logo testing (shown in Figure 2-12) may pop up, please click **Continue Anyway** to continue the installation since our drivers have been tested thoroughly and are able to work with the operating system.

Hardwa	re Installation
1	The software you are installing for this hardware: SMC9452TX-2 Gigabit Ethernet PCI Adapter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Figure 2-11

Step 11: Finally, click **Finish.** And the driver installation for Windows XP completes.



Figure 2-12

2.2.2 Update driver for XP

If the **Welcome to the Found New Hardware Wizard** screen does not appear after you insert the Adapter, you can follow the steps below to install the driver, and you can also **upgrade** the latest driver available on the CD-ROM in this way.

Step 1: Right-click **My Computer** icon on the computer and select **Properties** (show in Figure 2-14).



Figure 2-13

Step 2: Select Hardware and then Device Manager (shown in Figure 2-15).



Figure 2-14

Step 3: Right-click SMC9452TX-2 Gigabit PCI Ethernet Adapter, then select Update Driver... in Figure 2-16. (Note: If the driver was installed exactly, you may see "Ethernet Controller" instead. Right-click on it.)

🚇 Device Manager		
File Action View Help		
 MS-72F70CA72874 Computer Disk drives Display adapters Floppy disk controllers Floppy disk drives IDE ATA/ATAPI controllers Keyboards Mice and other pointing devices Monitors Monitors Wetwork adapters SMC9452TX-2 Gigabit Ethernet A SMC9452TX-2 Gigabit Ethernet A Ports (COM & LPT) Processors Sound, video and game controllers System devices Universal Serial Bus controllers 		
Launches the Hardware Update Wizard for the selected device.		

Figure 2-15

Step 4: The Hardware Update Wizard will appear, Click No, not this time, and then click Next.

Hardware Update Wizard				
	Welcome to the Hardware Update Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy			
	Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time I connect a device No, not this time			
	Click Next to continue.			
	< Back Next > Cancel			

Figure 2-16

Step 5: Select **Install from a list or specific location (Advanced)** as shown in Figure 2-18, and then click **Next**.



Figure 2-18

Step 6: Select **Don't search. I will choose the driver to install** as shown below. Then click **Next**.



Step 7: Select the model of the Adapter as shown in Figure 2-20, then click Next.

Hardware Update Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Show compatible hardware
Network Adapter:
SMC9452TX-2 Gigabit Ethernet PCI Adapter
This driver is not digitally signed! <u>Have Disk Have Disk </u>
< <u>B</u> ack Next > Cancel
Figure 2-17

Step 8: After that, select **Browse...** to locate the driver in the next screen.

Install F	rom Disk	×
-	OK Cancel	
	<u>C</u> opy manufacturer's files from: A:\	Browse

Figure 2-21

Step 9: Locate the appointed driver as shown in Figure 2-22, click **Open**.

Locate File								? 🔀
Look jn:	C WINXP		*	G	ø	ø	•	
My Recent Documents	Netrtix							
Desktop								
My Documents								
My Computer								
	File <u>n</u> ame:	Netrtlx				~		<u>O</u> pen
My Network	Files of <u>t</u> ype:	Setup Information (*.inf)				~		Cancel

Figure 2-22

Step 10: After that, you will see the next screen, click **OK**.



Figure 2-18

P Note:

Assuming D is the letter of your CD-ROM drive.

Step 11: Select the model of the Card as shown in Figure 2-24, then click Next.

Hardware Update Wizard	
Select Network Adapter Which network adapter do you want to inst	all?
Click the Network Adapter that matches installation disk for this component, click	your hardware, then click OK. If you have an Have Disk.
Network Adapter:	
SMC9452TX-2 Gigabit Ethernet PCI Adapter	
This driver is not digitally signed! <u>Tell me why driver signing is important</u>	<u>H</u> ave Disk
	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 2-24

Step 12: After that, please wait few seconds for the wizard installing the software.



Figure 2-25

P Note:

During the installation, a warning box about Windows Logo testing (shown in Figure 2-11) may pop up, please click **Continue Anyway** to continue the installation since our drivers have been tested thoroughly and are able to work with the operating system.

Hardwai	re Installation
1	The software you are installing for this hardware: SMC9452TX-2 Gigabit Ethernet PCI Adapter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Figure 2-26

Step 13: Finally, click **Finish.** And the driver installation for Windows XP completes.



Figure 2-27

2.2.3 Update driver for Vista

step 1. Insert the Driver & Installation CD into your CD-ROM drive, right-click the **Computer** icon as shown in the Figure 2-28, select the **Properties**.



Figure 2-19

step 2. Select **Device Manager** as shown in Figure 2-29, then select **Continue** in the next screen.



Figure 2-20

step 3. Right-click the adapter icon "Realtek RTL8169/8110 Family Gigabit Ethernet NIC", and select "Update Driver Software..." to proceed.



Figure 2-21

step 4. Select "Browse my computer for driver software" to install the software.

Но	Update Driver Software - Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS w do you want to search for driver software?	
•	Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device.	
•	B <u>r</u> owse my computer for driver software Locate and install driver software manually.	

Figure 2-22

step 5. Click the "Let me pick from a list of device drivers on my computer" in the next screen.

Update Driver Software - Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.0)	X
Browse for driver software on your computer	
Search for driver software in this location:	
C:\Users\lab\Desktop\smc\WINVISTA\32	
☑ Include subfolders	
Let me pick from a list of device drivers on my computer	
This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
Next Cancel	

Figure 2-23

step 6. Click "Have Disk..." in the next screen (shown in Figure 2-23).

0	Update Driver Software - Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6	.0)
	Select Network Adapter Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
	Show compatible hardware Network Adapter: Realtek RTL8169/8110 Family PCI Gigabit Ethemet NIC (NDIS 6.0) Realtek RTL8169/8110 Family PCI Gigabit Ethemet NIC (NDIS 6.0)	
	This driver is digitally signed. Have Disk <u>Tell me why driver signing is important</u>	
	Next	Cancel

Figure 2-24

step 7. After that, select "Browse..." to locate the driver in the next screen.



Figure 2-25

step 8. Locate the appointed driver as shown in Figure 2-35, click **Open**.

📇 Locate File							X
Look <u>i</u> n:	32			•	G 🦻	⊳ 🖾	
Recent Places Desktop Tab Computer	Name netrtx32	Date modif	Туре	Size			
Network	File <u>n</u> ame: Files of <u>t</u> ype:	netrtx32 Setup Inform	ation (*.inf)			•	Open Cancel

Figure 2-26

Note:

Vista X32 is designed for the Vista of 32bit, Vista X64 is designed for the Vista of 64bit, please select according as you need.

step 9. After that, you will see the next screen (shown in Figure 2-36), click OK.



Figure 2-27

P Note:

Assuming D is the letter of your CD-ROM drive.

step 10. Select the model of the Card as shown in Figure 2-37, then click Next.

0	Update Driver Software - Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6	.0)
	Select Network Adapter Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
	Show compatible hardware Network Adapter: SMC9452TX-2 Gigabit Ethemet PCI Adapter	
	This driver is not digitally signed! Tell me why driver signing is important	
	Next	Cancel

Figure 2-28





Figure 2-29

Note:

During the installation, you will see the warning box as shown in Figure 2-39, please select "Install this driver software anyway" to proceed.

😵 Wind	ows Security
۱ 🕺	Nindows can't verify the publisher of this driver software
	 Don't install this driver software You should check your manufacturer's website for updated driver software for your device. Install this driver software anyway Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or steal
Se Se	information. e <u>d</u> etails

Figure 2-30

step 12. Finally, the installation will complete, you will see the next screen below, click Close to complete.



Figure 2-31

2.3 Enable Wake on LAN function

This function allows a remote station "wake" your computer when it is in Standby or Hibernate mode or after shutdown.

To enable WOL (take the configuration in Windows XP for example):

a) Right click "My Computer" icon on the desktop and select "Properties".



b) Select "Hardware" and then "Device Manager" in the next screen.

System Properti	es		? 🗙						
System Resto	ore Autor	natic Updates	Remote						
General	General Computer Name Hardware Adv								
- Device Manag	C Device Manager								
See The I	The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.								
		Device Mana	ager						
Drivers									
🛛 🖾 🖌 comp	oatible with Windows. \	e sure that installed drive Windows Update lets you Windows Update for driv	usetup						
	Driver <u>S</u> igning		late						
Hardware Profil	es								
	Hardware profiles provide a way for you to set up and store different hardware configurations.								
Hardware <u>P</u> rofiles									
	OK Cancel Apply								

c) Right click "SMC9452TX-2 Gigabit Ethernet PCI Adapter", and then select "Properties"

🚇 Device Manager	
File Action View Help	
← → 📧 🖆 🎒 😫 🛪 🕱 🕭	
MS-72F70CA72874 Gomputer Disk drives Display adapters Display adapters DVD/CD-ROM drives Floppy disk controllers Floppy disk drives IDE ATA/ATAPI controllers Keyboards Mice and other pointing devices Monitors Monitors Monitors Monitors Monitors Monitors Monitors SMC9452TX-2 Gigabit Ethernet PCI Adapter Ports (COM & LPT) Processors Sound, video and game controllers System devices Universal Serial Bus controllers	Update Driver Disable Uninstall Scan for hardware changes Properties
Opens property sheet for the current selection.	

d) Select the **Advance** title on the next advanced configure page, then highlight the **Wake-On-Lan After Shutdown** item and set the value as **Enable**.

SMC9452TX-2 Gigabit Ethernet P	PCI Adapter Properties 🛛 🛛 🔀
General Advanced Driver Details	Resources Power Management
The following properties are available for the property you want to change on the on the right.	
Property:	<u>V</u> alue:
802.1Q VLAN ID 802.1Q/1p VLAN Tagging Flow Control Jumbo Frame Link Speed/Duplex Mode Network Address Offload Checksum Offload TCP_LargeSend Wake-On-Lan After Shutdown Wake-On-Lan Speed	Enable
	OK Cancel

P Note:

- The name of this Wake-On-Lan After Shutdown function is system-dependent, and it may be located in a category heading titled such as "Power Management". See your computer's user guide for more information regarding the BIOS Setup utility and BIOS settings.
- A Magic Packet Tool is needed on the PC to remotely wake up WoL enabled computer on Shutdown mode (which is not needed on Sleep, Standby or Hibernate mode). The Magic Packet Tool can be easily loaded down from the internet.

Appendix A: Specifications

Normal		
Interface	32-bit PCI	
Standards	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX,	
	IEEE 802.ab 1000Base-T	
Access Protocol	CSMA/CD	
Connector	one 10/100/1000M Auto-Negotiation RJ45 port	
Driver	Novell NetWare3.x, 4.x, 5.x, Windows 95, Windows 98,	
	Windows 2000, Windows NT, Windows Me, Windows XP,	
	Linux, Vista	
Indicator	100M, 1000M	
	10Base-T: Category 3 or above UTP/STP	
Media	100Base-TX: Category 5 UTP/STP (≤100m)	
	1000Base-T:Category 5 UTP/STP (≤100m)	
Power	2.2W	
Safety & Emission	FCC, CE	

Environmental and Physical		
Temperature	Operating: 0° C ~40° C (32° F ~104° F)	
	Storage: -40°C~85°C(-40°F~185°F)	
Humidity	Operating.:10% - 90%, Non-condensing	
	Storage: 5% - 90%, Non-condensing	



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