

# TP-LINK®

## User Guide

**TG-3468**

**Gigabit PCI Express Network Adapter**



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## FCC STATEMENT



This equipment has been tested and found to comply with the limits for a Class B 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 the instructions, may cause harmful interference to radio communications. However, there is no guarantee that 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 or relocate 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.

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.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



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## Safety Information

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.
- This product can be used in the following countries:

AT	BG	BY	CA	CZ	DE	DK	EE
ES	FI	FR	GB	GR	HU	IE	IT
LT	LV	MT	NL	NO	PL	PT	RO
RU	SE	SK	TR	UA			

## DECLARATION OF CONFORMITY

For the following equipment:

Product Description: **Gigabit PCI Express Network Adapter**

Model No.: **TG-3468**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

**Directives 2004 / 108 / EC, Directives 2006 / 95 / EC, Directives 2011/65/EU**

The above product is in conformity with the following standards or other normative documents:

**EN 55022:2010**

**EN 55024:2010**

**EN 61000-3-2:2006+A1:2009+A2:2009**

**EN 61000-3-3:2008**

**EN 60950-1:2006+A11: 2009+A1:2010+A12:2011**

*The product carries the CE Mark*



Person is responsible for marking this declaration:

A handwritten signature in black ink, appearing to read 'Yang Hongliang', is written over a light gray rectangular background.

**Yang Hongliang**

**Product Manager of International Business**

Date of Issue: 2013

# CONTENTS

<b>Package Contents .....</b>	<b>1</b>
<b>Chapter 1. Introduction .....</b>	<b>2</b>
1.1 Overview of the product.....	2
1.2 Features .....	2
1.3 LED Status .....	2
<b>Chapter 2. Installation Guide .....</b>	<b>3</b>
2.1 Hardware Installation.....	3
2.2 Software Installation .....	4
2.2.1 For Windows XP.....	4
2.2.2 For Windows 7 .....	11
2.2.3 For Windows 8 .....	16
<b>Appendix A: Specifications.....</b>	<b>24</b>
<b>Appendix B: Troubleshooting.....</b>	<b>25</b>

## Package Contents

The following contents should be found in your box:

- One TG-3468 Gigabit PCI Express Network Adapter
- Quick Installation Guide
- One Resource CD for TG-3468, including:
  - Drivers
  - User Guide
  - Other Helpful Information

 **Note:**

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

## Conventions

The “Adapter” mentioned in this user guide stands for TG-3468 Gigabit PCI Express Network Adapter without any explanations.

# Chapter 1. Introduction

## 1.1 Overview of the product

The TG-3468 10/100/1000Mbps PCI EXPRESS Gigabit Network Adapter is a highly integrated and cost-effective Gigabit Ethernet Adapter which is fully compliant with IEEE 802.3, IEEE 802.3u and IEEE 802.3ab specifications.

TG-3468 keeps low cost and eliminates usage barriers. It is the easiest way to upgrade a network from 10/100Mbps to 1000 Mbps. It supports 10/100Mbps network speed automatically both in Half-Duplex and Full-Duplex transfer modes, and 1000Mbps in Full-Duplex transfer mode, using Auto-Negotiation technology to detect the network speed. It can be widely used in most modern Operating Systems and includes a boot ROM for Diskless Workstations.

## 1.2 Features

- Integrated 10/100/1000Mbps transceiver
- Support PCI Express 1.1
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE802.3ab
- Auto-Negotiation with Next Page capability
- Support pair swap/polarity/skew correction
- Crossover Detection & Auto-Correction
- Wake-on-LAN and remote wake-up support
- Microsoft NDIS5, NDIS6 Checksum Offload (IPv4, IPv6, TCP, UDP) and Segmentation Task-offload (Large send v1 and Large send v2) support
- Support Full Duplex flow control (IEEE802.3X)
- Support IEEE 802.1p Layer 2 Priority Encoding and IEEE802.1Q VLAN tagging
- Support power down/link down power saving
- Support drivers for Windows XP (32bit/ 64bit), Windows Vista (32bit/ 64bit), Windows 7 (32bit/ 64bit), and Windows 8 (32bit/ 64bit)

## 1.3 LED Status

There are three LEDs, including a 10Mbps Link/Act LED, a 100Mbps Link/Act LED, a 1000Mbps Link/Act LED.

- The Link/Act LEDs of TG-3468 PCI EXPRESS 10/100/1000M LAN Card indicates Link/Act status. They will light when connection has been built, and glitter when the adapter transmits or receives data.



## Chapter 2. Installation Guide

### 2.1 Hardware Installation

To install the adapter, please follow these steps listed below:

1. Turn off your computer and unplug the power cord and all cables.
2. Remove your computer's case cover.
3. Locate an available PCI Express slot.
4. Remove the screw that secures the back plate (the small piece of metal that covers the opening for PCI Express card on the back panel of your computer), then remove the back plate.
5. Carefully insert the adapter into the PCI Express slot. Do not touch the metal connector on the adapter.
6. Secure the adapter to the case using the screw you removed from the back plate.
7. Reinstall your computer's case cover.
8. Plug in the power cord and other cables, and then turn on your computer.

 **Note:**

When the hardware has been successfully installed on your computer, you will be prompted '**Found New Hardware Wizard**' (as shown in Figure 2-1); please click **Cancel**, and then follow the **Software Installation** steps to install driver for your adapter.



Figure 2-1 Found New Hardware Wizard in Windows XP

## 2.2 Software Installation

The section will guide you through the installation procedures for Windows XP, Windows 7, and Windows 8. Please carefully follow the steps.

### 2.2.1 For Windows XP

1. Insert the TP-LINK Resource CD into the CD-ROM drive.
2. Right-click the icon **My Computer** on the desktop, and then click **Manage**.

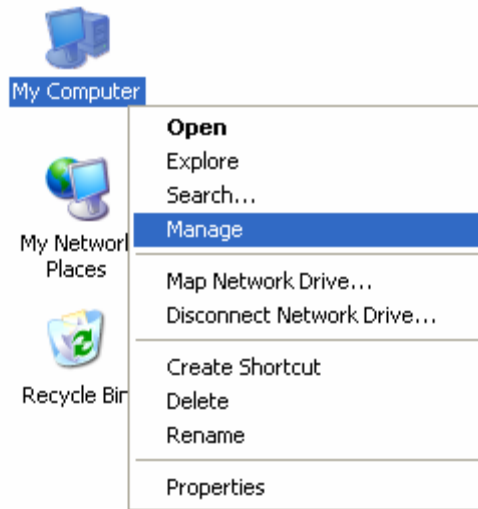


Figure 2-2

3. The **Computer Management** screen will appear as shown in Figure 2-3. Click **Device Manager**, and then you will see the various options on the right. Click **Other devices**, and then from the drop-down list please find **Ethernet Controller**. Right-click it, and then select **Update Driver....**

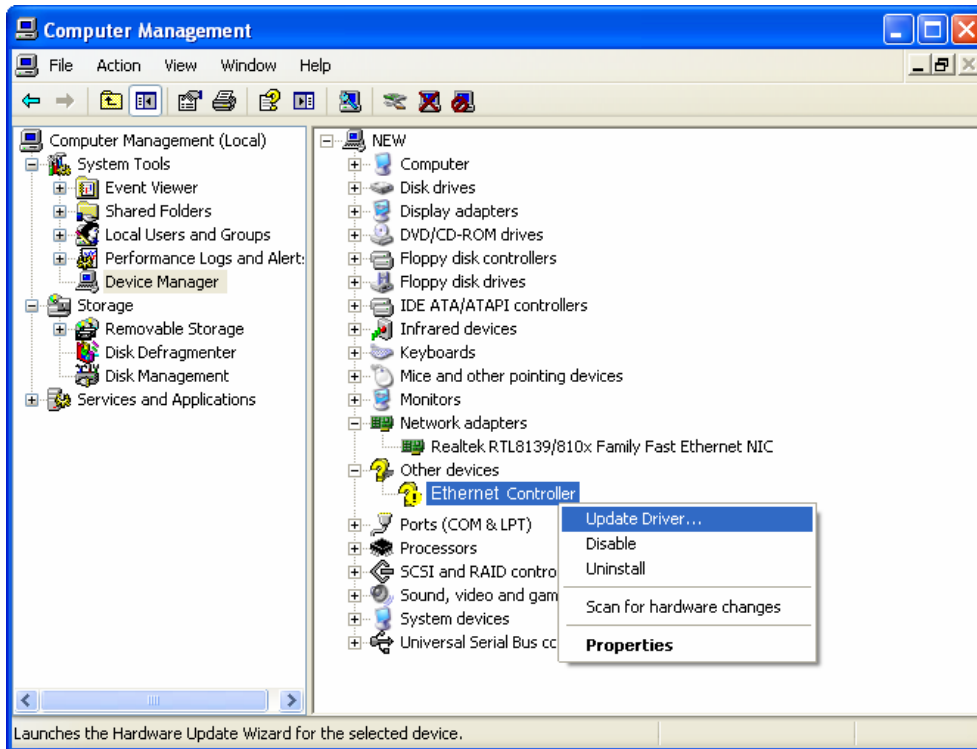


Figure 2-3

4. The **Hardware Update Wizard** window will show up as shown in Figure 2-4. Select **Install from a list or specific location [Advanced]**, and then click **Next**.

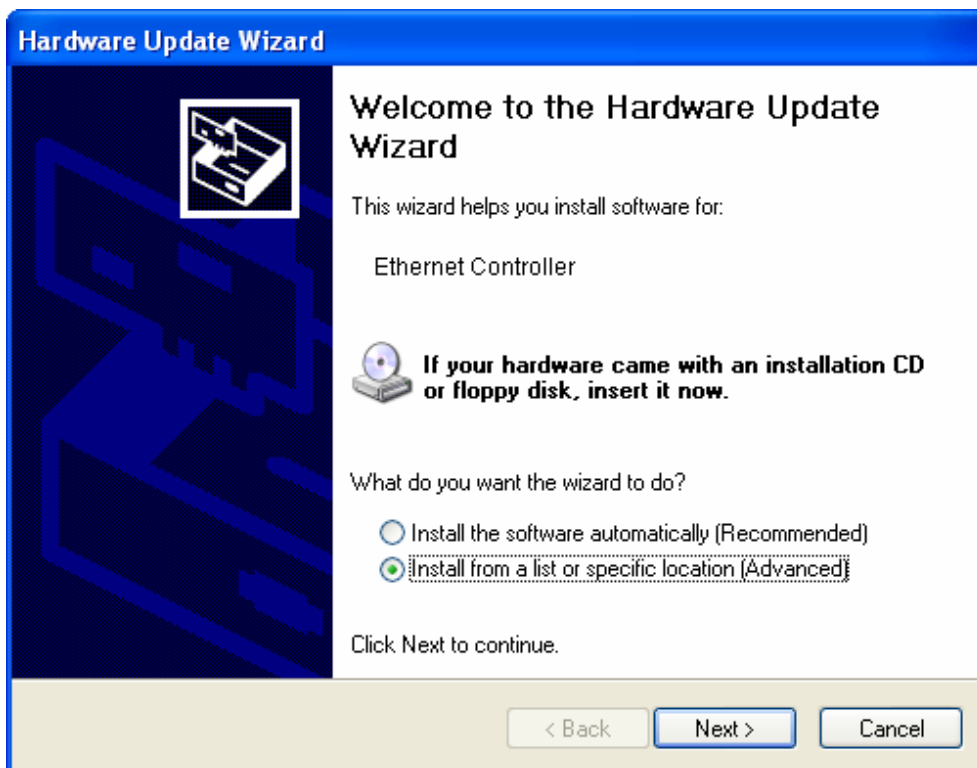


Figure 2-4

5. Select **Don't search. I will choose the driver to install**, and then click **Next**.

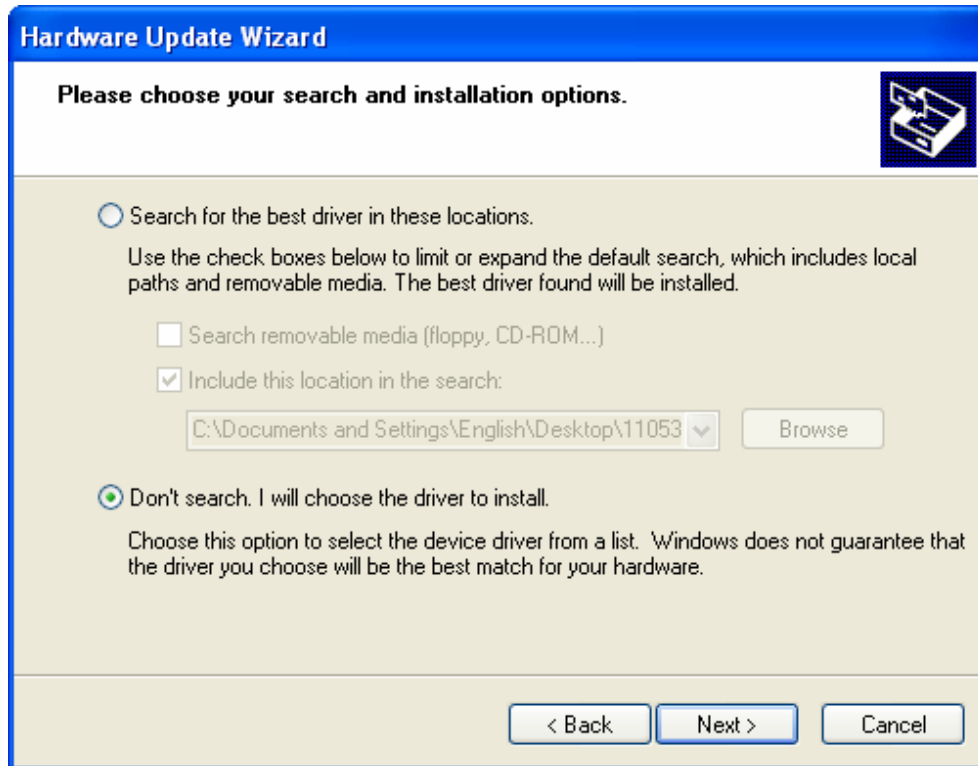


Figure 2-5

6. Select **Network adapters**, and then click **Next**.

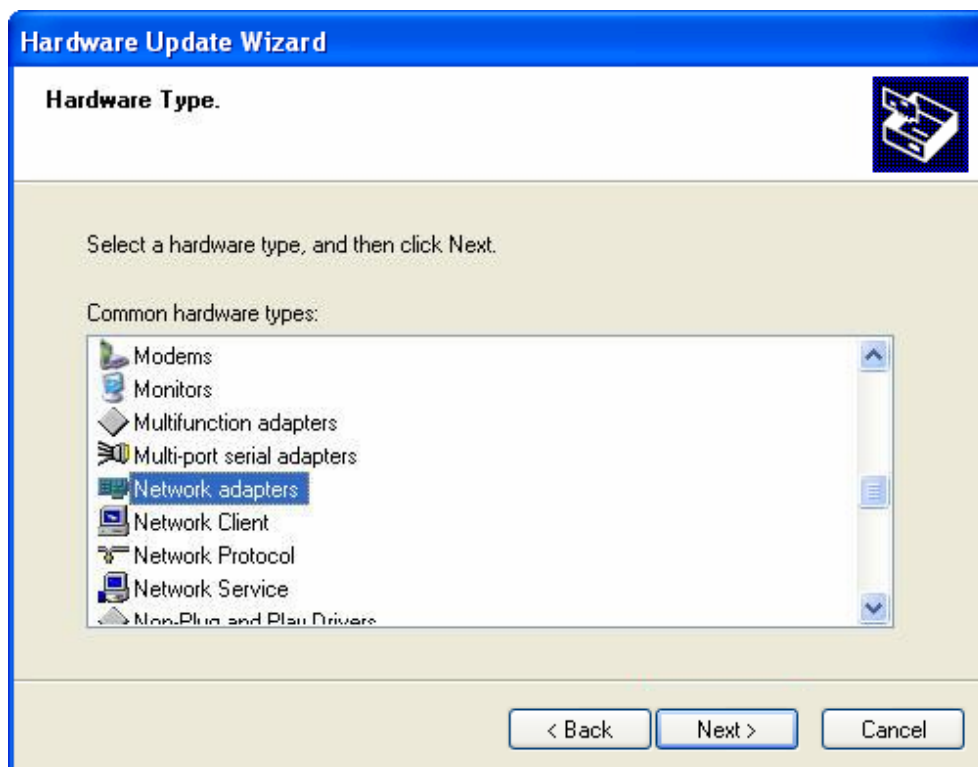


Figure 2-6

7. Click **Have Disk....**

 **Note:** Please do not select any network adapter which is listed in the window.

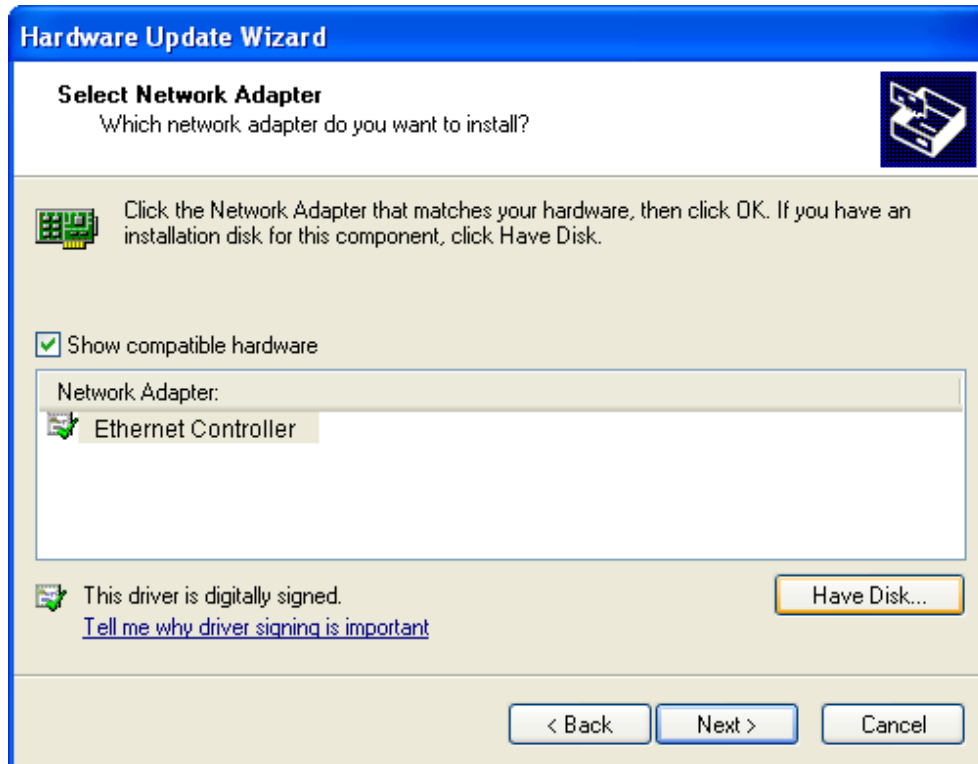


Figure 2-7

8. Click **Browse....**

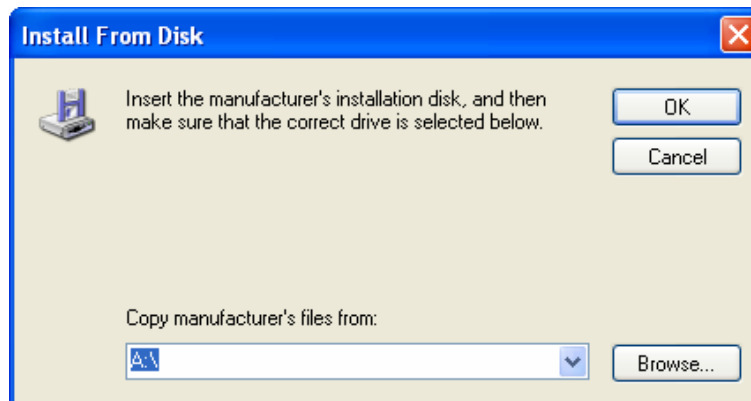


Figure 2-8

- Find the right product model (**TG-3468**) and operation system (**Windows XP**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

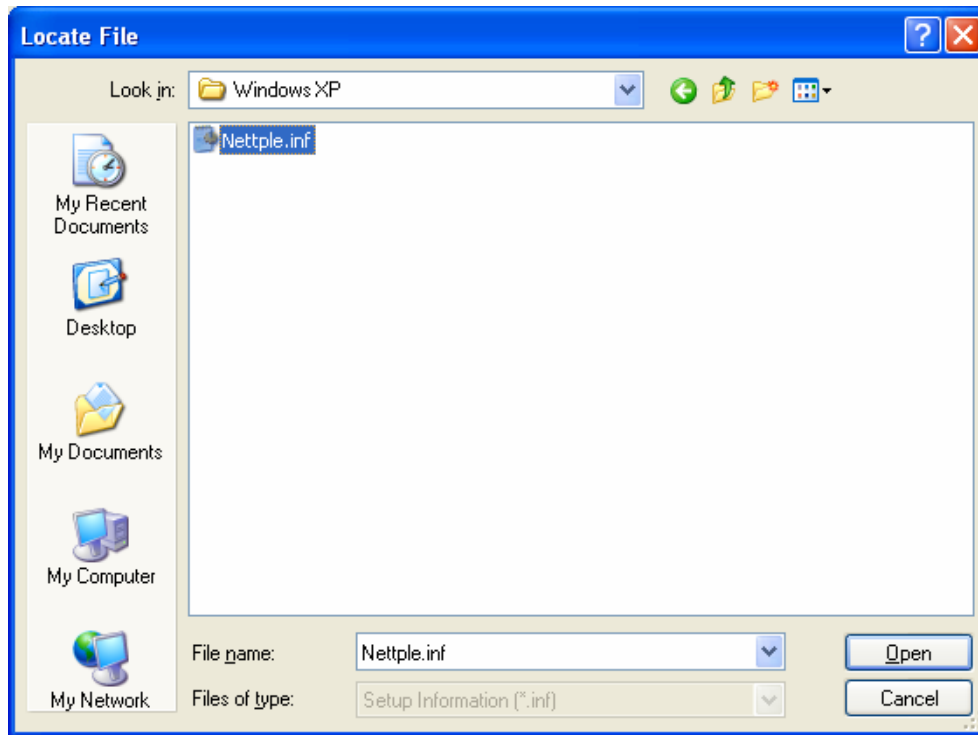


Figure 2-9

- Back to the **Install From Disk** screen, click **OK**.

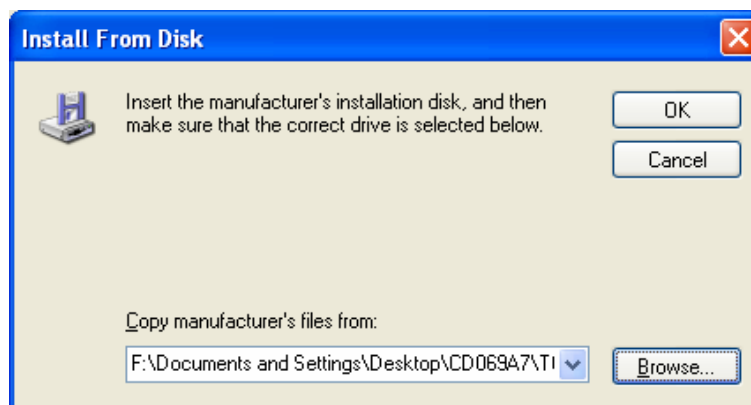


Figure 2-10

11. Click **Next**.

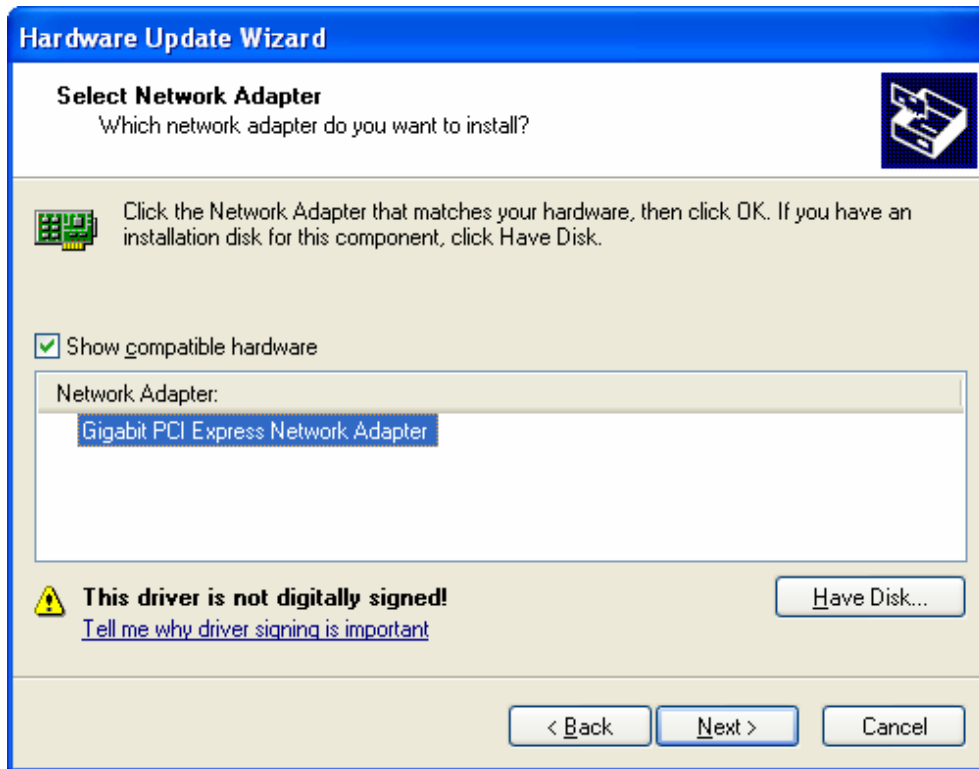


Figure 2-11

12. There will pop up Figure 2-12; select **Continue Anyway**.

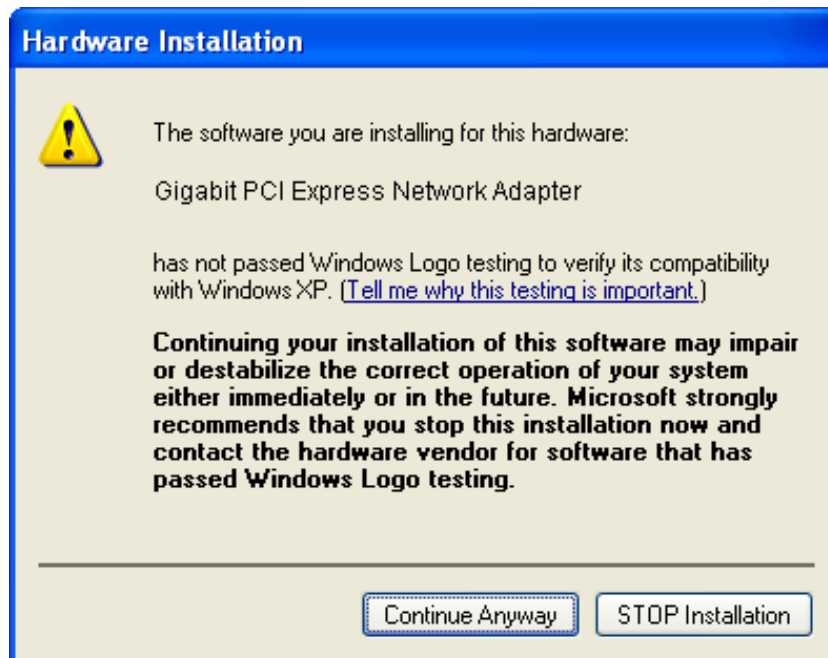


Figure 2-12

- Wait a few seconds for the installation.

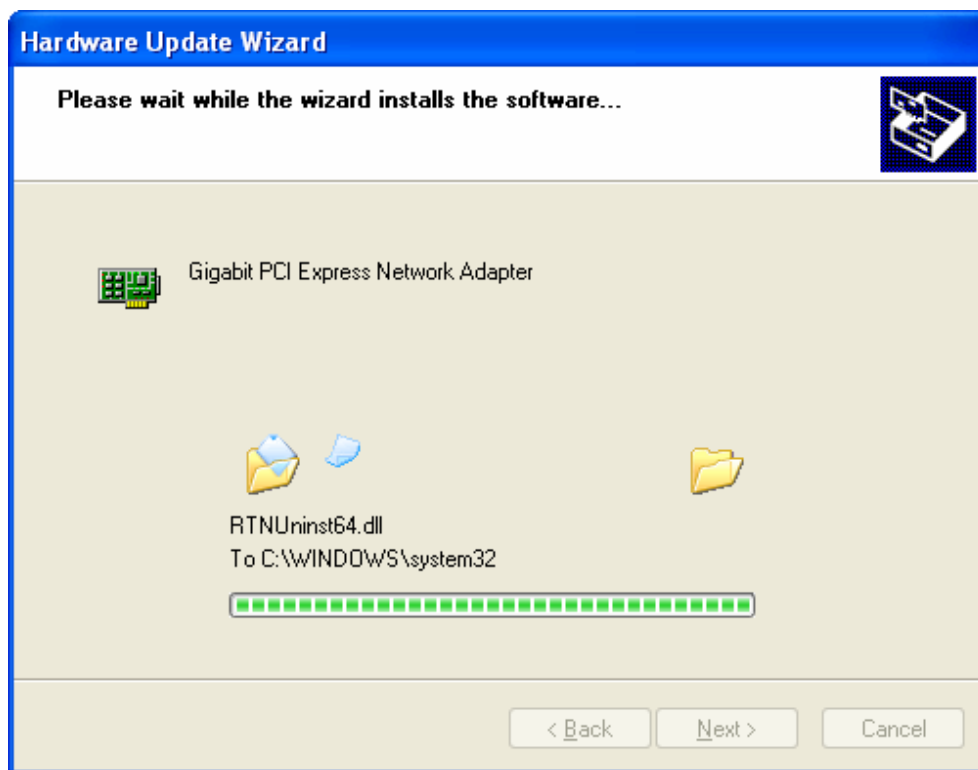


Figure 2-13

- Click **Finish** to complete the installation.

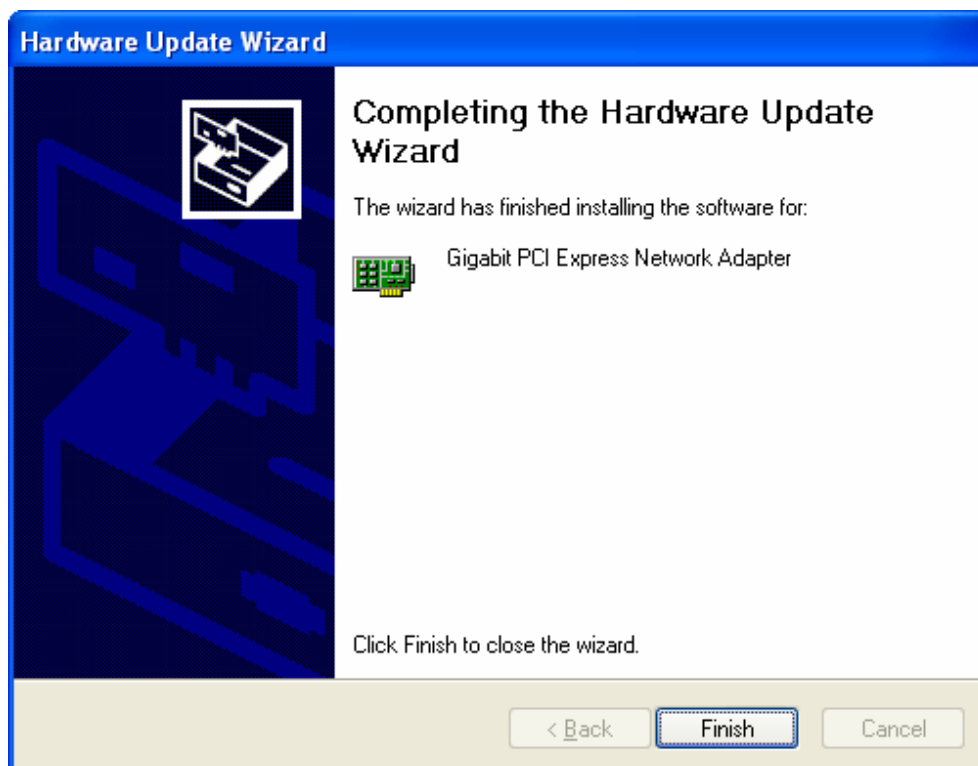


Figure 2-14



## 2.2.2 For Windows 7

1. Insert the TP-LINK Resource CD into the CD-ROM drive.
2. Right-click the icon **Computer** on the desktop, and then click **Manage**.

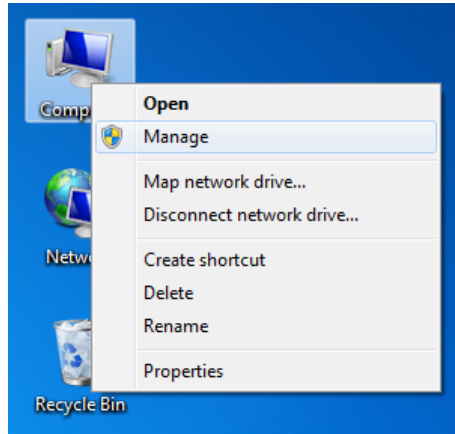


Figure 2-15

3. The **Computer Management** screen will appear as shown in Figure 2-16. Click **Device Manager**, and then you will see the various options on the right. Click **Other devices**, and then from the drop-down list please find **Ethernet Controller**. Right-click it, and then select **Update Driver Software....**

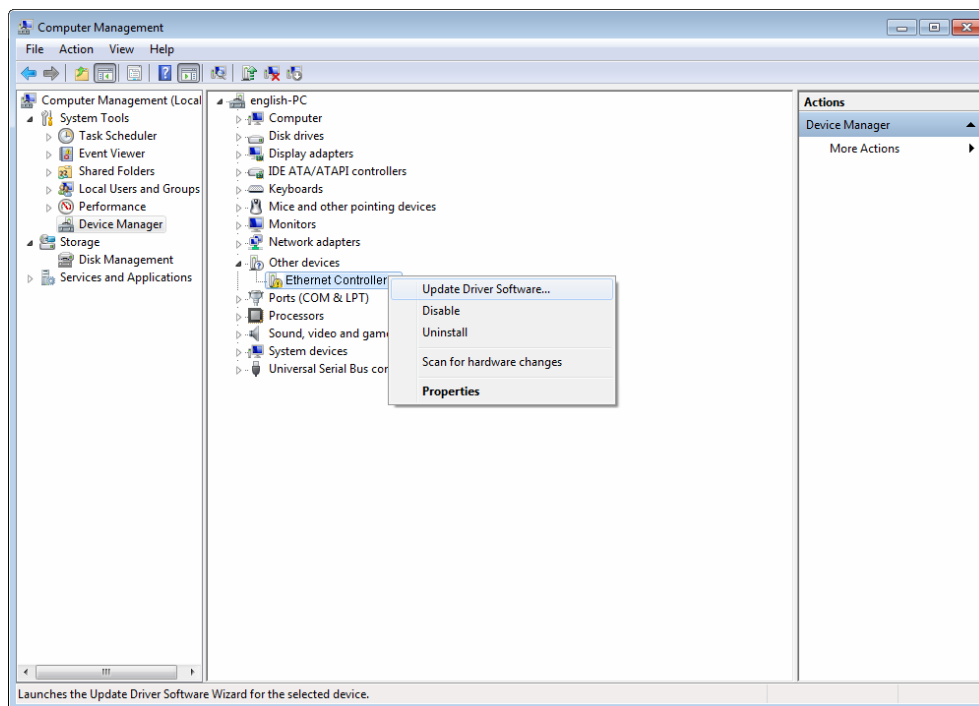


Figure 2-16

4. The next screen will appear as shown in Figure 2-17. Select **Browse my computer for driver software**.

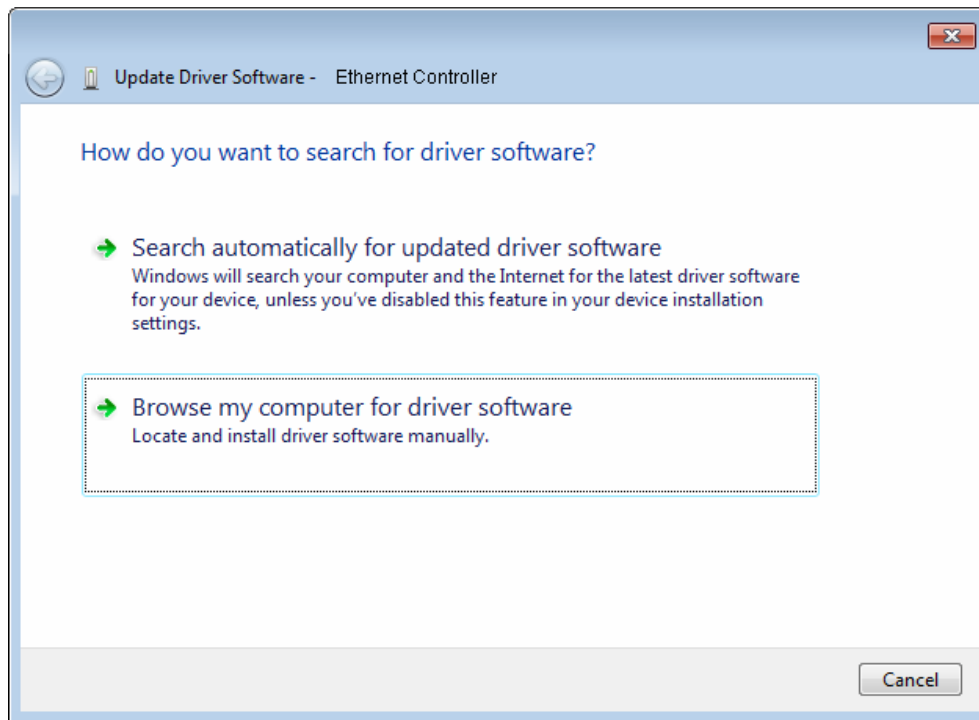


Figure 2-17

5. Select **Let me pick from a list of device drivers on my computer**, and then click **Next**.

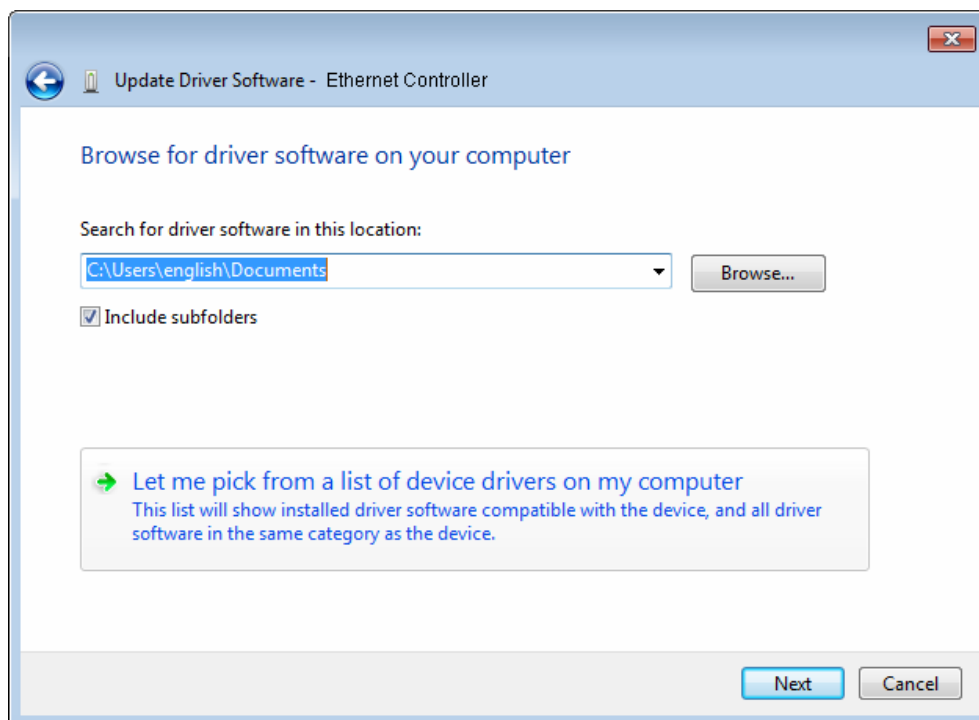


Figure 2-18

6. Click **Have Disk...** in the screen as shown in Figure 2-19.

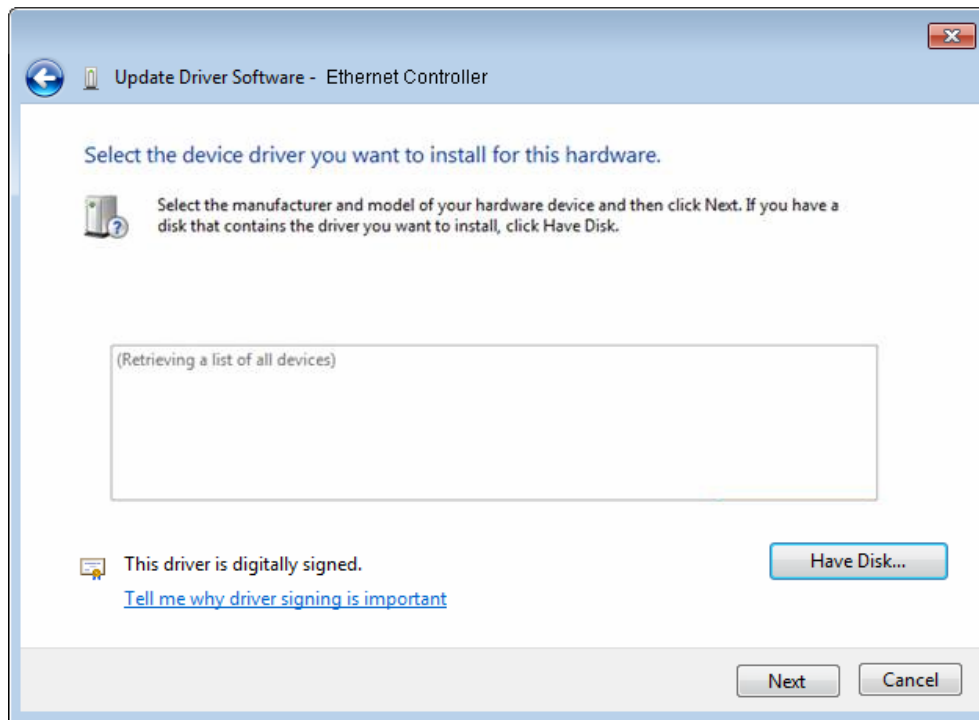


Figure 2-19

7. Click **Browse...** in the **Install From Disk** window as shown in Figure 2-20.

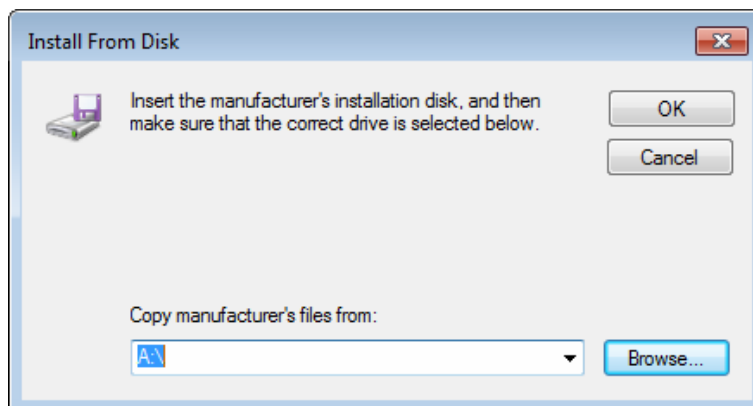


Figure 2-20

- Find the right product model (**TG-3468**) and operation system (**Windows 7 32 bits** or **Windows 7 64 bits**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

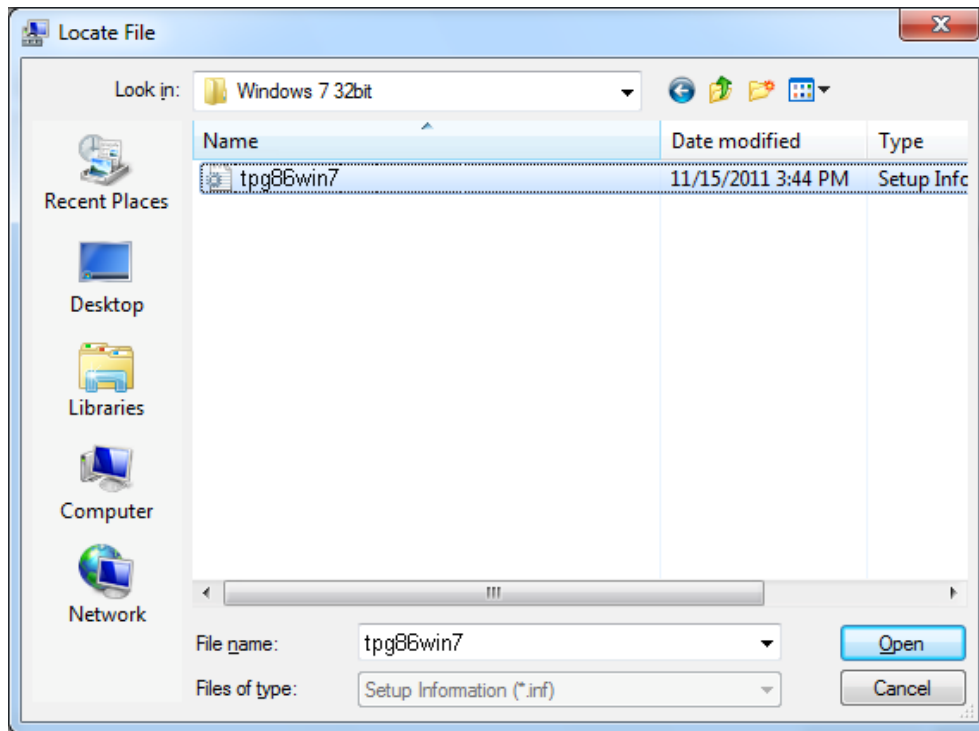


Figure 2-21

**Note:**

If you have no idea about your operating system being **Windows 7 32 bits** or **Windows 7 64 bits**, please refer to [Appendix B: Troubleshooting- T3](#).

- Back to the **Install From Disk** window as shown in Figure 2-22, click **OK**.

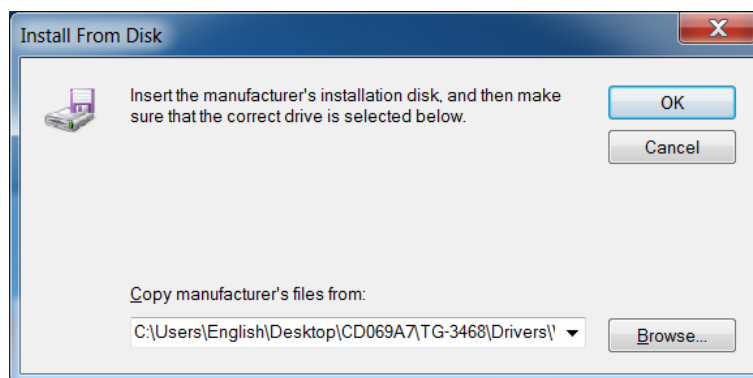


Figure 2-22

10. Click **Next** in the next screen as shown in Figure 2-23.

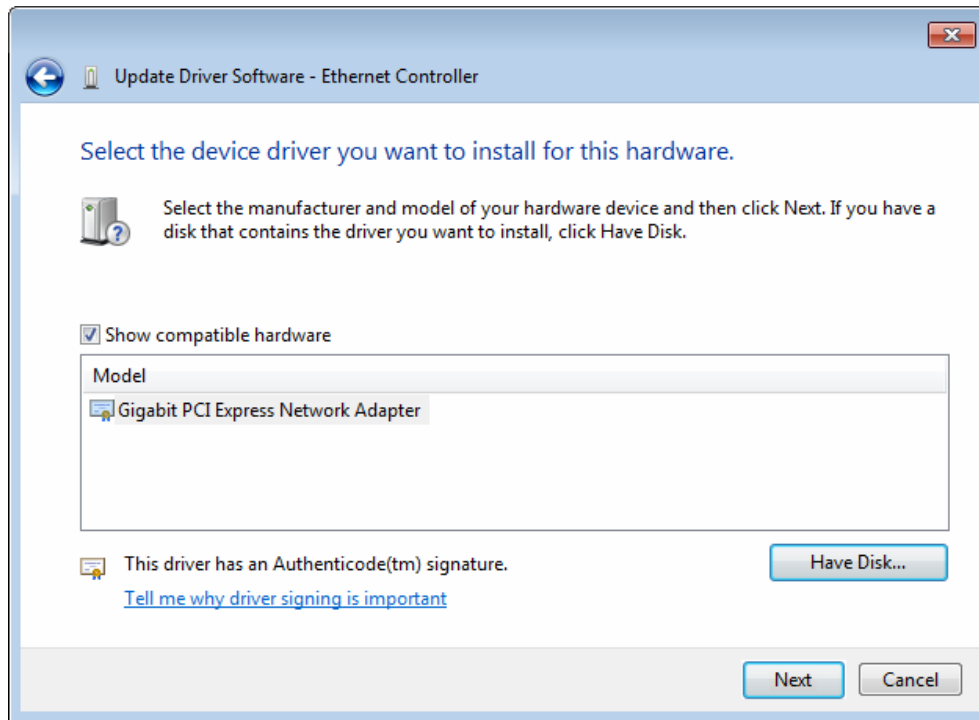


Figure 2-23

11. There will appear Figure 2-24 indicating the installation process.

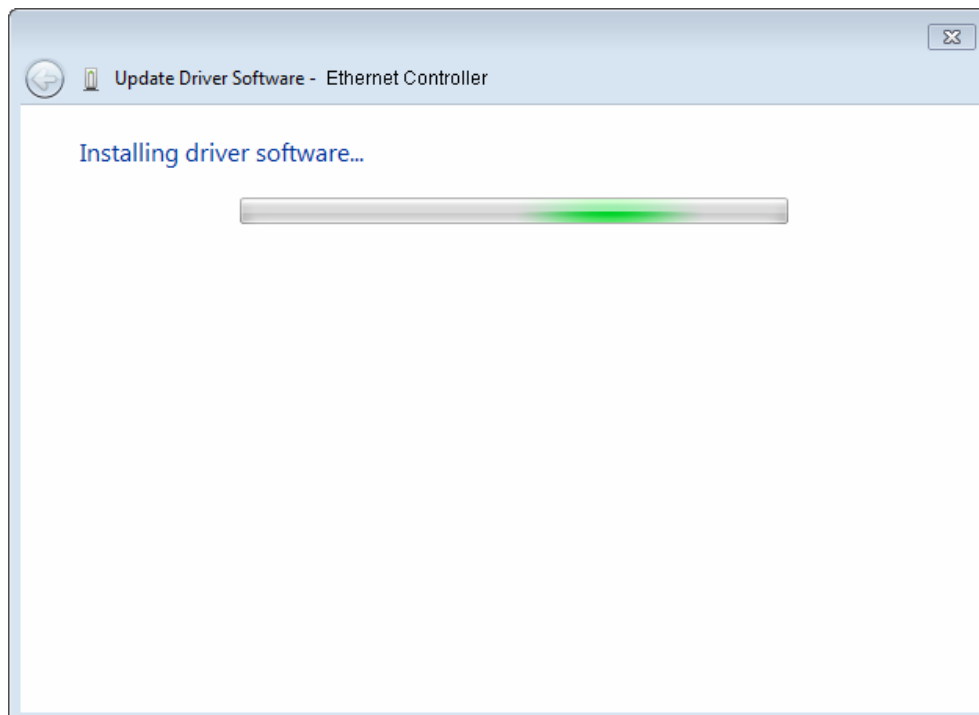


Figure 2-24

- During the above installation process, you will be prompted Figure 2-25. Select **Install** to continue with the above installation process.

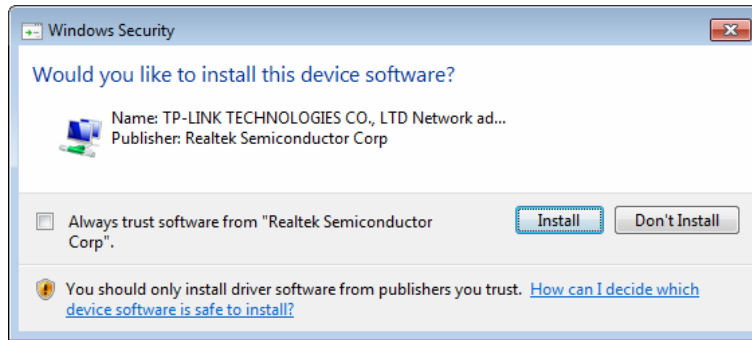


Figure 2-25

- A few moments later, Figure 2-26 will appear showing your successful installation of the driver software. Click **Close** to complete it.

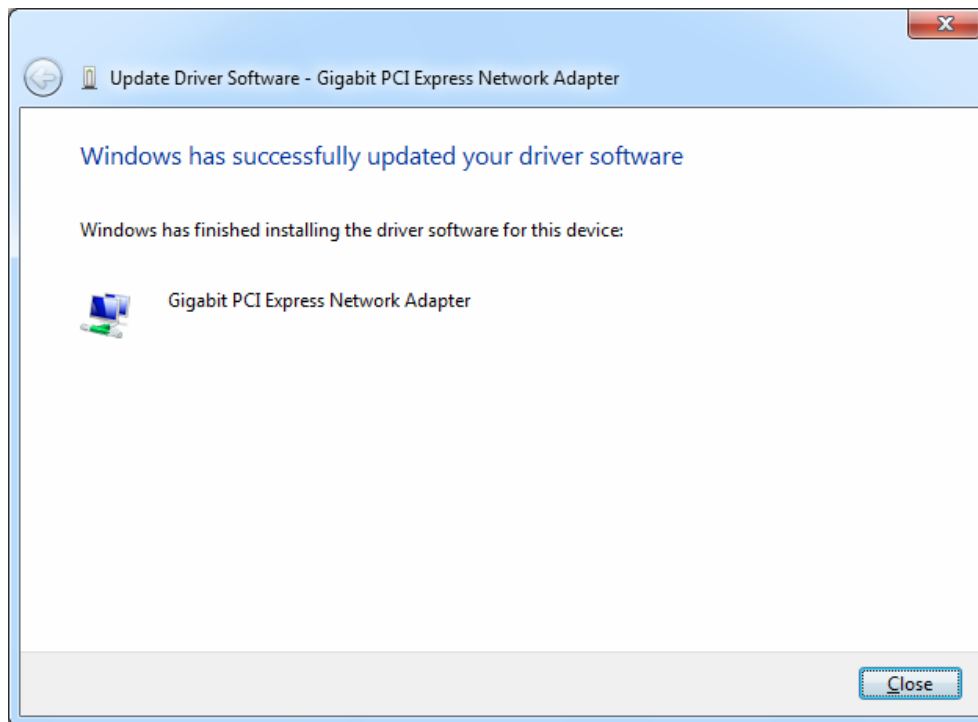


Figure 2-26

### 2.2.3 For Windows 8

- Insert the TP-LINK Resource CD into the CD-ROM drive.
- Enter the **Apps** interface, and find **Computer** under Windows System column. Then right-click the Computer icon, you will see the function bar below the Apps interface. Click **Manage**.

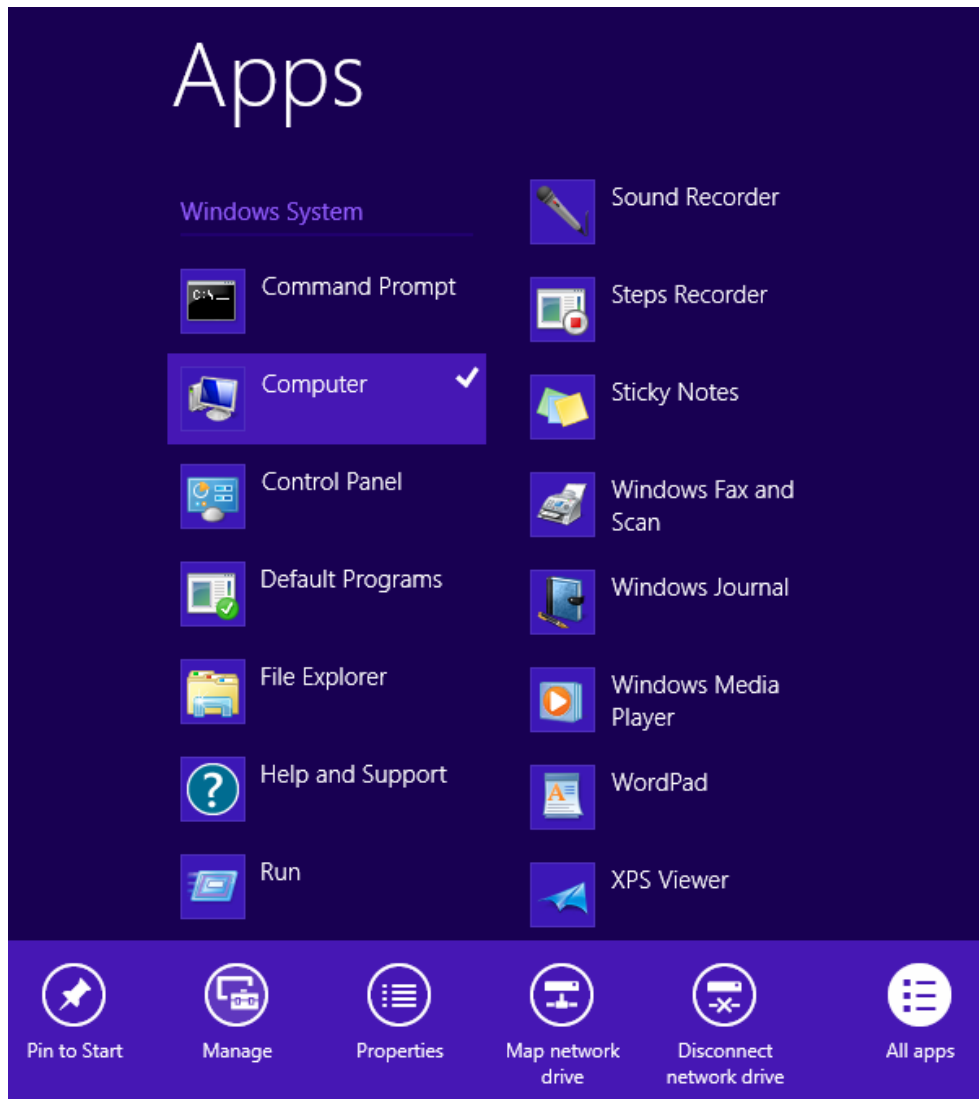


Figure 2-27

3. The **Computer Management** screen will appear as shown in Figure 2-28. Click **Device Manager**, and then you will see the various options on the right. Click **Other devices**, and then from the drop-down list please find **Realtek PCIe GBE Family Controller**. Right-click it, and then select **Update Driver Software....**

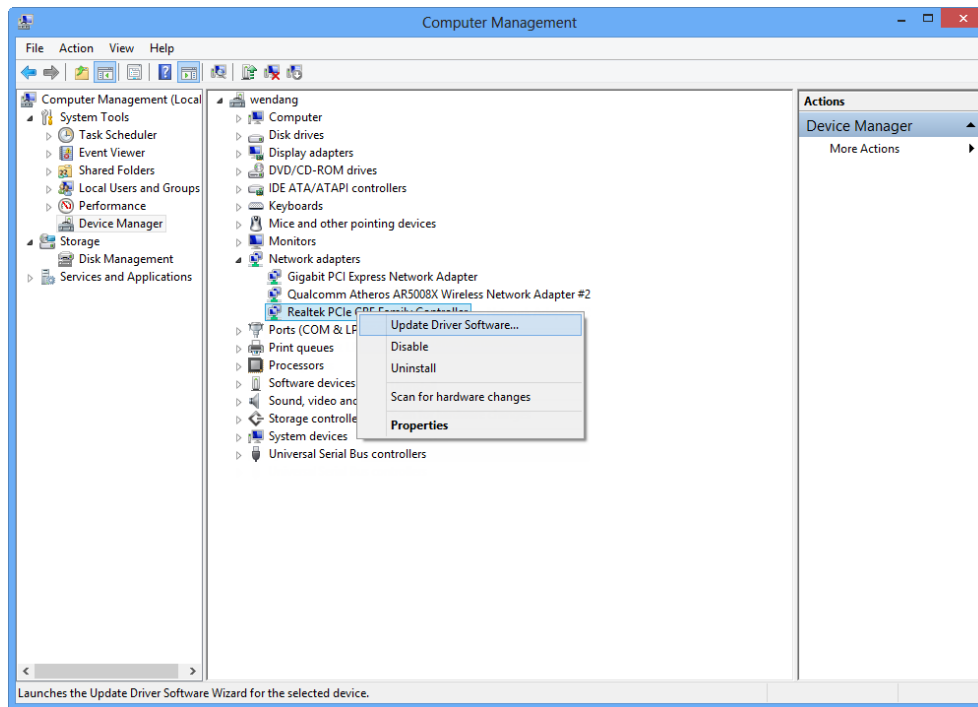


Figure 2-28

4. The next screen will appear as shown in Figure 2-29. Select **Browse my computer for driver software**.

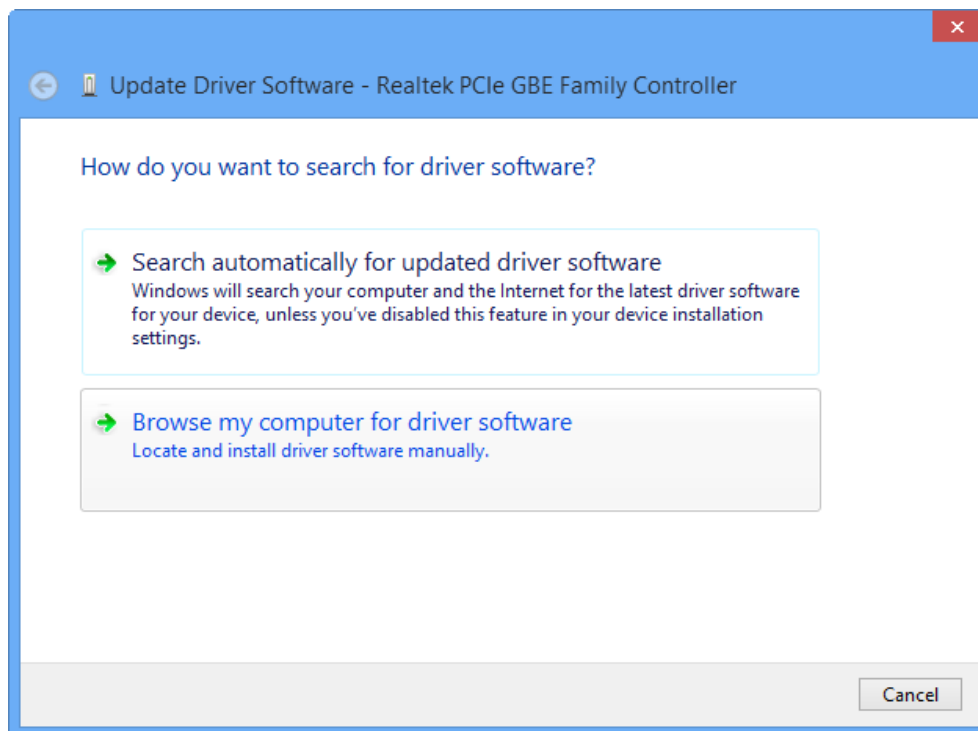


Figure 2-29

5. Select **Let me pick from a list of device drivers on my computer**, and then click **Next**.



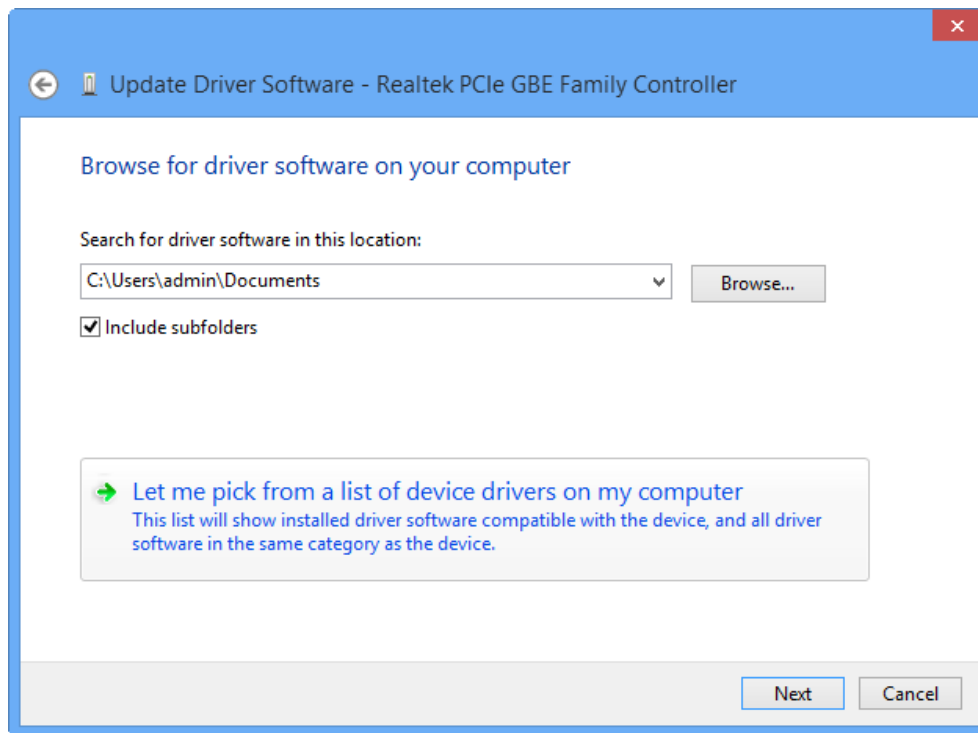


Figure 2-30

6. Click **Have Disk...** in the screen as shown in Figure 2-31.

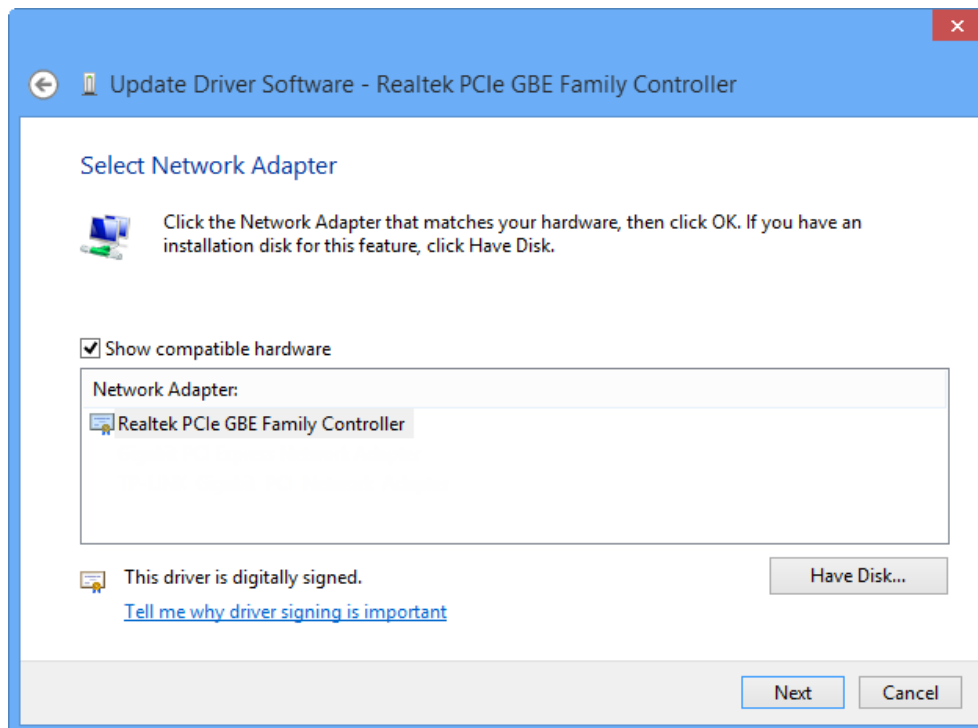


Figure 2-31

7. Click **Browse...** in the **Install From Disk** window as shown in Figure 2-32.

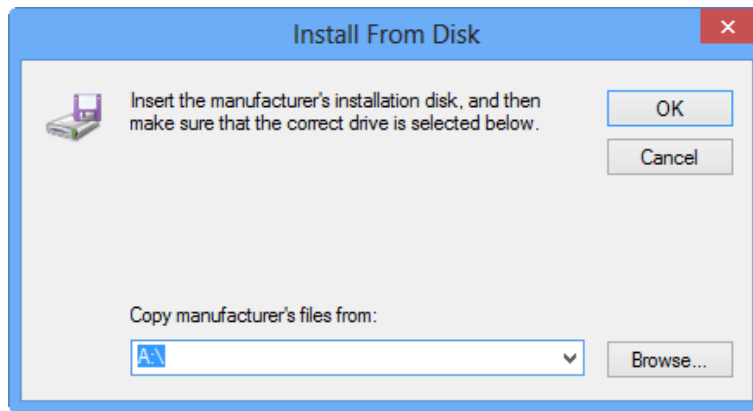


Figure 2-32

- Find the right product model (**TG-3468**) and operation system (**Windows 8 32 bits** or **Windows 8 64 bits**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

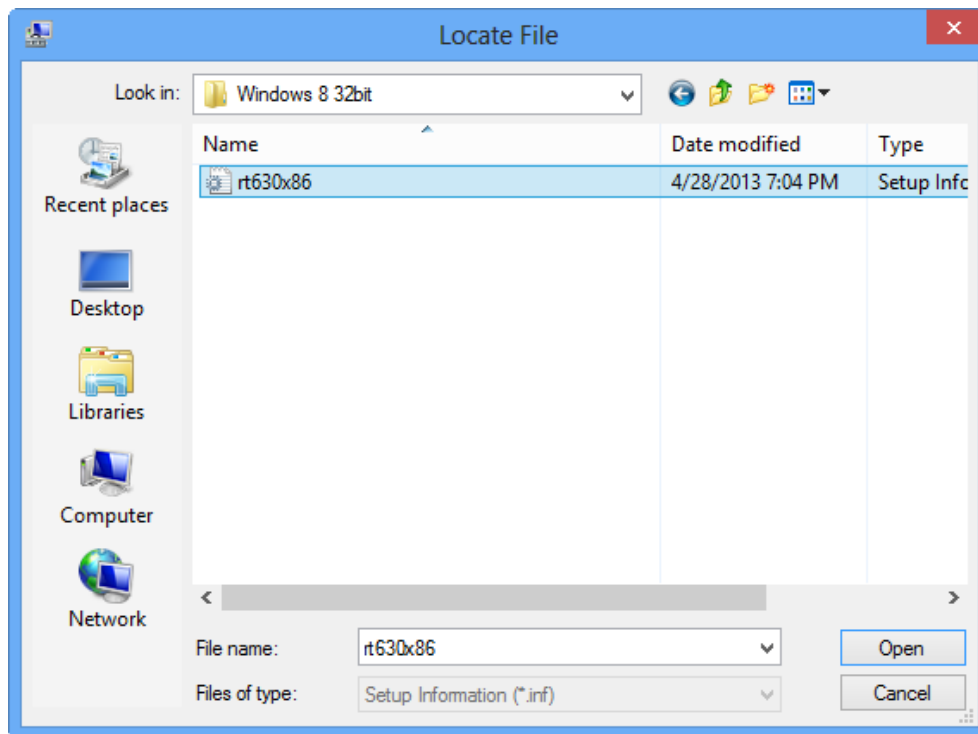


Figure 2-33

**Note:**

If you have no idea about your operating system being **Windows 8 32 bits** or **Windows 8 64 bits**, please refer to [Appendix B: Troubleshooting- T3](#).

- Back to the **Install From Disk** window as shown in Figure 2-34, click **OK**.

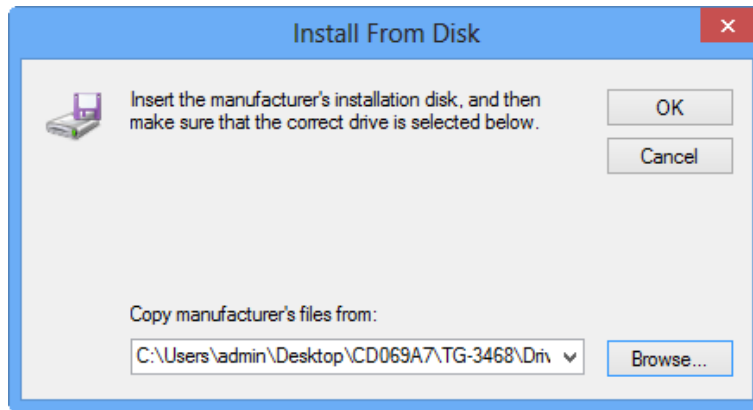


Figure 2-34

- Click **Next** in the next screen as shown in Figure 2-35.

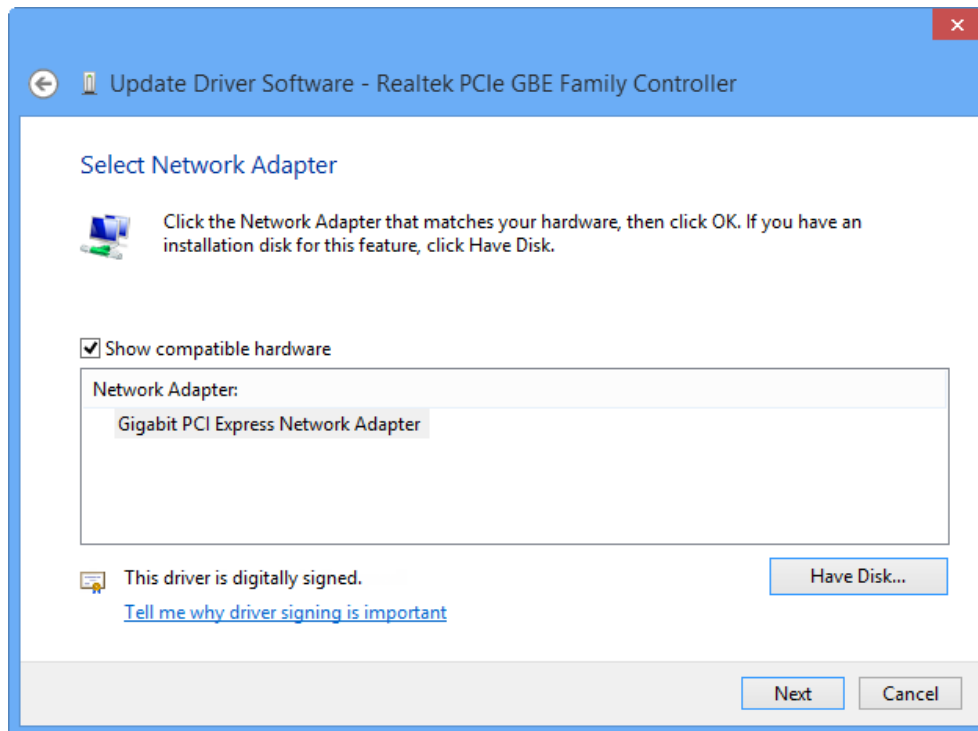


Figure 2-35

11. There will appear Figure 2-36 indicating the installation process.

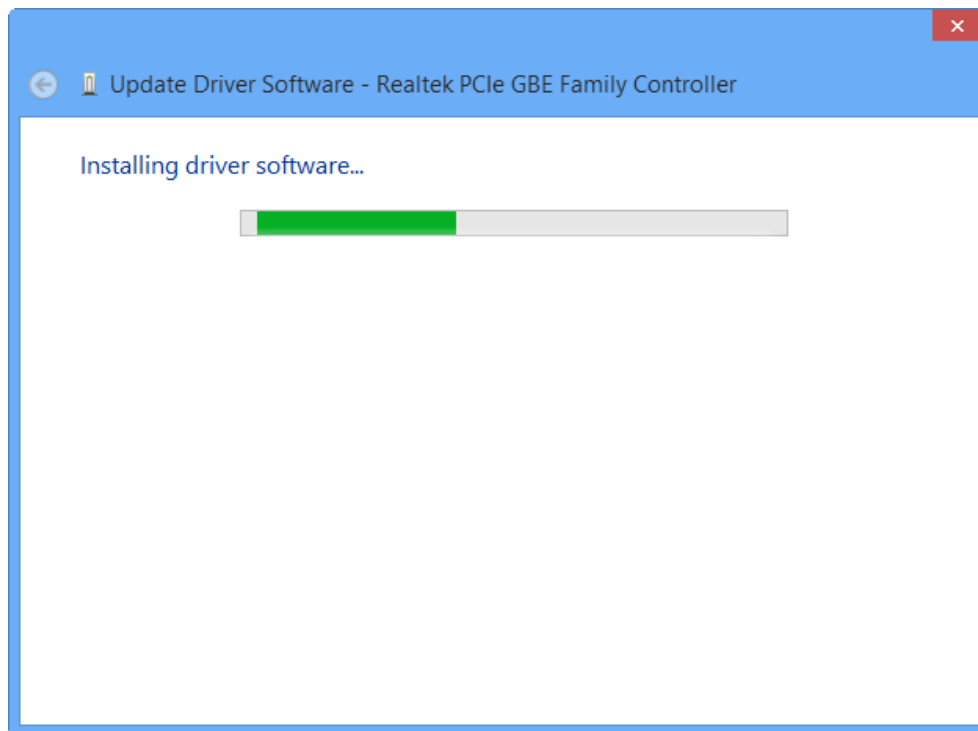


Figure 2-36

12. After a few moments, Figure 2-37 will appear showing your successful installation of the driver software. Click **Close** to complete it.

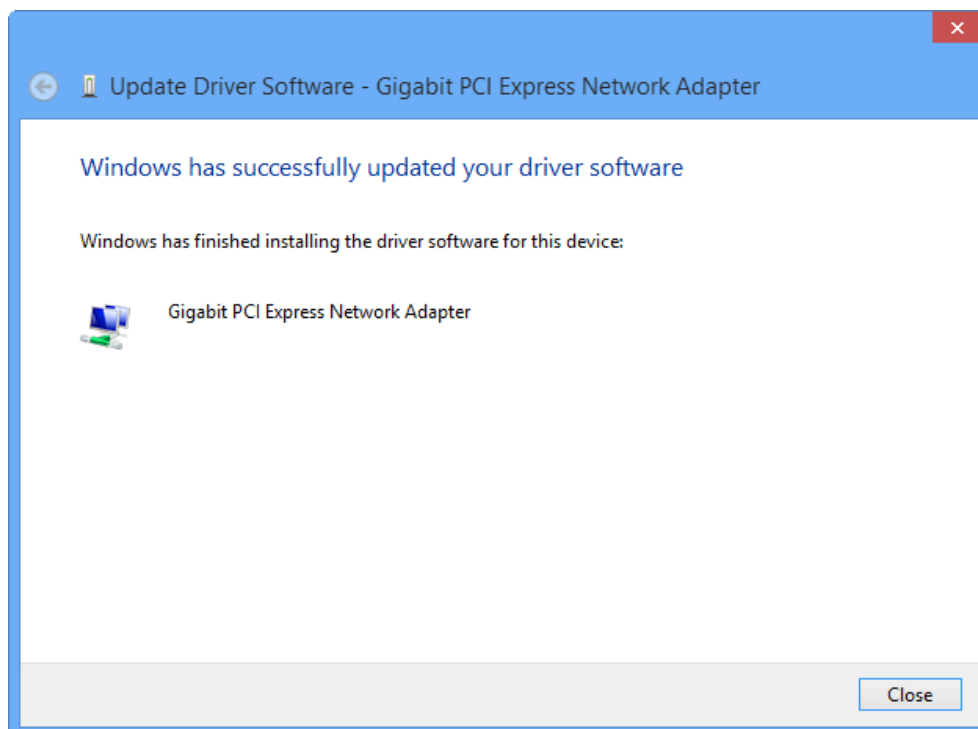


Figure 2-37

## Appendix A: Specifications

Normal	
Interface	Support PCI Express 1.1
Buffer Size	Transmit/Receive On Chip Buffer(48K)support
Standards	IEEE802.3ab 1000Base-T, IEEE802.3x, IEEE802.1q, IEEE802.1p
Transmission Rate	10/100/1000Mbps
Connector supported	one 10/100/1000M Auto-Negotiation RJ45 port
Software	Support drivers for Windows 8 (32bit / 64bit), Windows 7 (32bit / 64bit), Windows Vista (32bit / 64bit), Windows XP
LEDs	one 10M Link/Act LED, one 100M Link/Act LED, one 1000M Link/Act LED
Safety & Emission	FCC,CE

Environmental and Physical	
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 70°C
Working Humidity	10% ~ 90%
Storage Humidity	5% ~ 90%

## Appendix B: Troubleshooting

### T1. What should I do if PC cannot find the new hardware?

Check to see if the network adapter is inserted in the PCI Express slot properly; otherwise, please reinsert the adapter.

If the problem remains, please try to change another PCI Express slot.

### T2. What should I do if I could not find “Ethernet Controller” under “(My) Computer >Device Manager >Other Devices”?

In such circumstance, you are recommended to go to “(My) Computer >Device Manager >Network adapters” to find “Realtek PCIe GBE Family Controller” instead, and continue with the rest steps of installation.

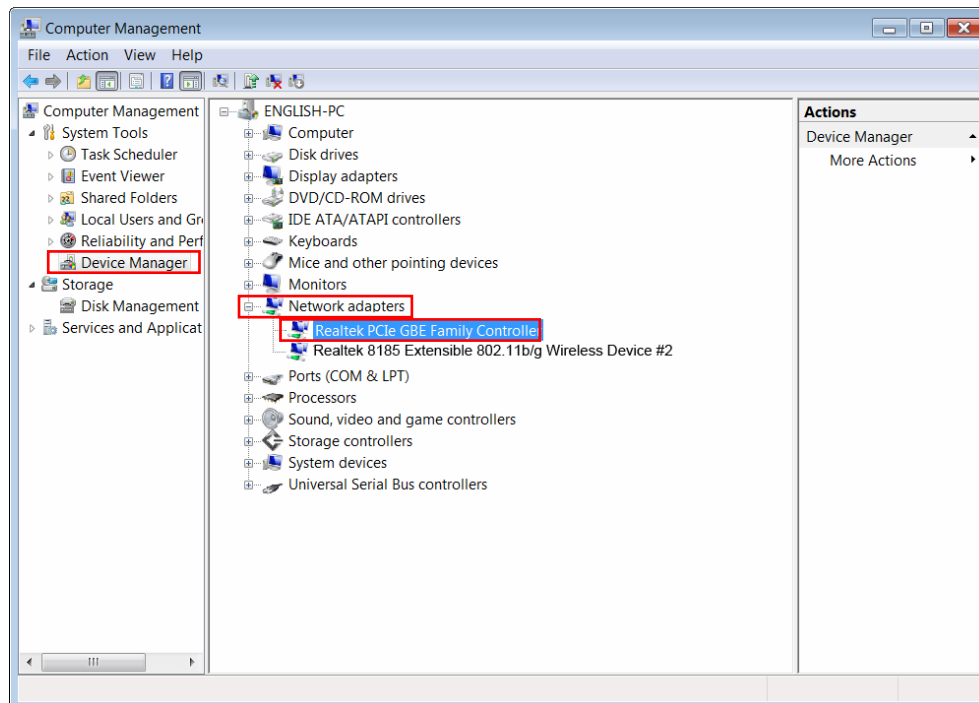


Figure B-1

### T3. How could I know whether the operating system of my computer is 32-bit or 64-bit?

- 1) Right-click **Computer** on the desktop, and then select **Properties**, as shown in Figure B-2 (for OS Windows 7) and Figure B-3 (for OS Windows 8) below.

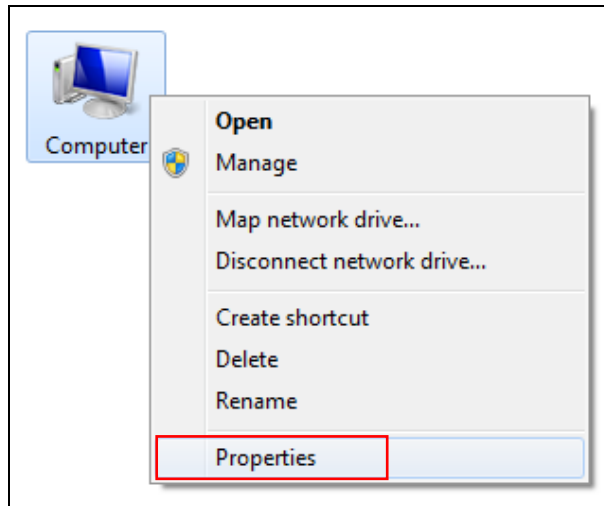


Figure B-2 (for Windows 7)

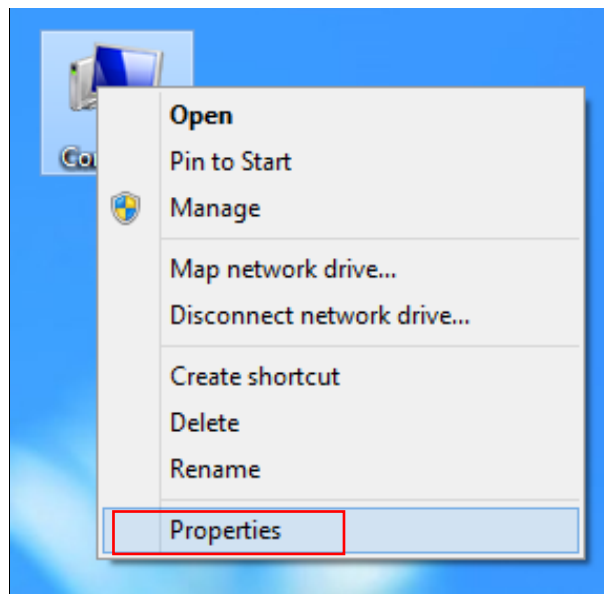


Figure B-3 (for Windows 8)

2) You can find out whether your operating system is 32-bit or 64-bit, as shown below.

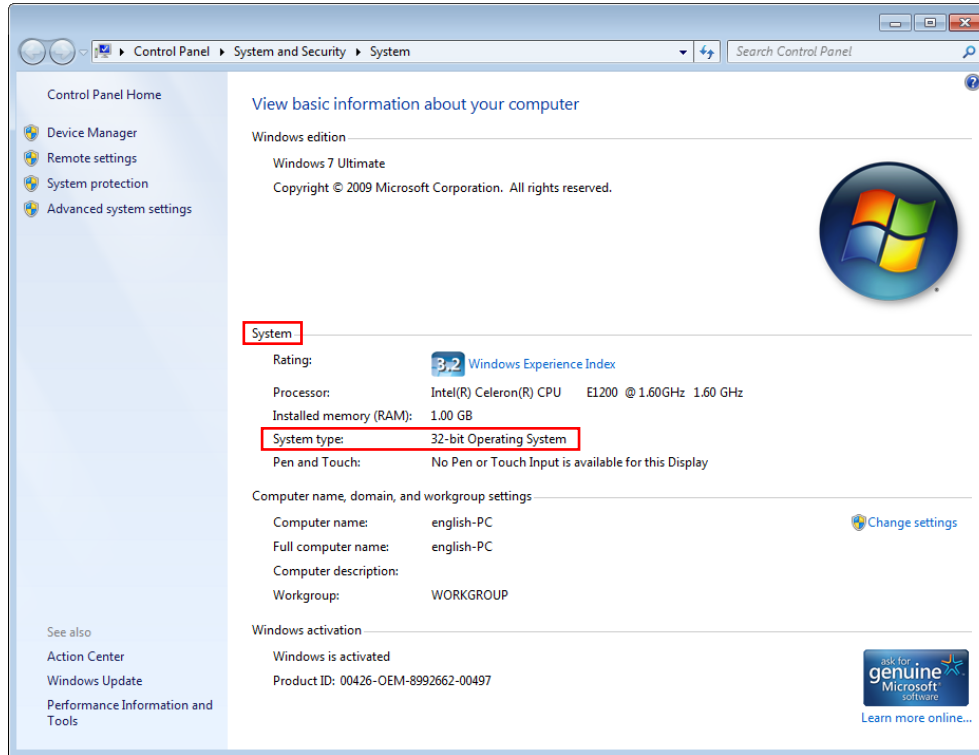


Figure B-4 (for Windows 7)

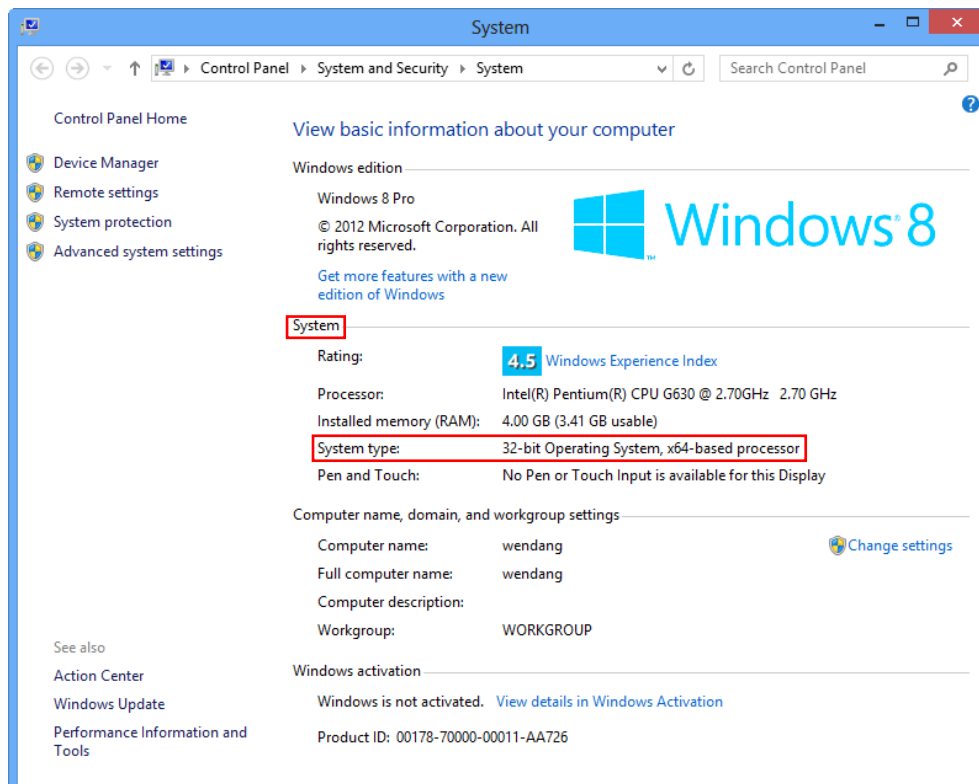


Figure B-5 (for Windows 8)