

PCIe 4-Port 1G Network Adapter

User Manual

Ver. 1.00

**All brand names and trademarks are properties of their
respective owners.**

Contents:

Chapter 1: Introduction	3
1.1 Product Introduction	3
1.2 Features.....	3
1.3 System Requirements.....	4
1.4 Product Diagram.....	4
1.5 Package Contents.....	5
Chapter 2: Getting Started	5
2.1 Hardware Layout.....	5
2.2 Hardware Installation.....	6
2.3 Driver Installation for Windows.....	6
2.3.1 Installation for Windows	6
2.3.2 Installation for Linux	7
2.4 Hardware Verify.....	7
2.4.1 Verifying for Windows	7
2.4.2 Verifying for Linux	8

Chapter 1: Introduction

1.1 Product Introduction

The N-1060 is a quad-port 10/100/1000 Mb/s x4 PCI Express (PCIe) Specification v2.1 Ethernet server adapter that supports the IEEE 802.3ab standard over Category-5 twisted pair cable. The card supports offload technologies, including Large Send, TCP segmentation, and TCP/UDP/IP checksum. Additionally, it features Receive Side Scaling (RSS), which enhances network throughput while reducing host processor utilization. As a result, the N-1060 significantly improves system overall performance. Furthermore, this server adapter ships in a small form factor that is suitable for both low-profile and standard chassis configurations.

1.2 Features

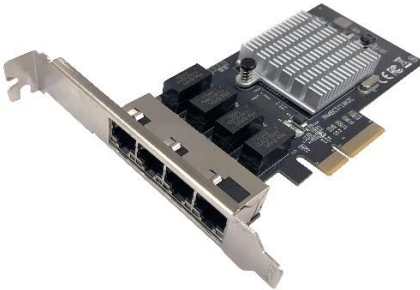
- x4 PCI Express v2.1 at 5 GT/s or 2.5 GT/s
- Quad-port 10/100/1000BASE-T Ethernet server adapter
- Energy Efficient Ethernet compliant with IEEE Std 802.3az-2010
- IEEE 802.3ap Clause 73 auto-negotiation
- Quad 10/100/1000BASE-T full-duplex/half-duplex MACs

- Virtualization support with VMware NetQueue and Microsoft VMQ
- Wake-on-LAN support
- TCP, UDP, and IP checksum offload
- Large Send Offload, TCP Segmentation Offload
- Jumbo frame support with up to 9.6 KB packet size

1.3 System Requirements

- Windows 10/11 (64-bit)
- Linux Kernel 5.8 or later

1.4 Product Diagram

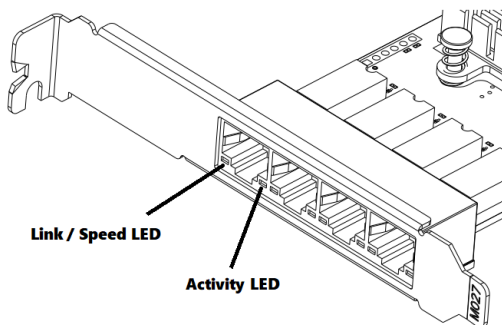


1.5 Package Contents

- 1 x N-1060 PCIe 4-Port 1G Network Adapter
- 1 x User Manual

Chapter 2: Getting Started

2.1 Hardware Layout



LED Indicator:

LED	Description
Link / Speed LED	Indicates Link Speed: <ul style="list-style-type: none">• Green = 1Gb/s; Amber = 100Mb/s; Colorless = 10Mb/s• Not illuminated = No link

Activity LED	Indicates Network Card Activity: <ul style="list-style-type: none"> • Blinking = Active • Off= No activity
--------------	------------------------------------------------------------------------------------------------------------------------------------

2.2 Hardware Installation

1. Power down your computer.
2. Unplug the power cord and remove your computer's cover.
3. Remove the slot bracket from an available PCIe slot.
4. To install the card, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly.
5. Replace the slot bracket's holding screw to secure the card.
6. Secure the computer cover and reconnect the power cord.

2.3 Driver Installation for Windows

The following section shows you how to install the PCIe 4-Port 1G Network Adapter driver on different operating systems.

2.3.1 Installation for Windows

1. Go to URL <http://www.sunrichtech.com.hk/>
2. Search N-1060, download the driver.
3. Follow the on-screen instructions to finish installing the driver.

2.3.2 Installation for Linux

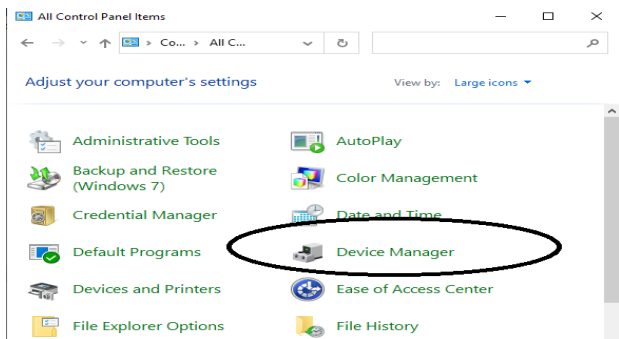
1. Go to URL <http://www.sunrichtech.com.hk/>
2. Search N-1060, download the driver.
3. Follow Readme.txt which is in the driver folder to finish installing the driver.

2.4 Hardware Verify

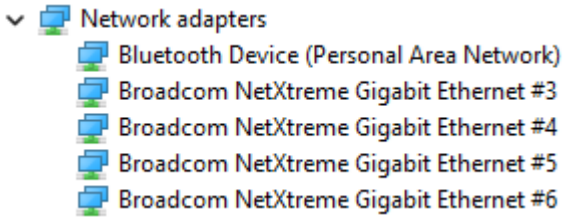
2.4.1 Verifying for Windows

1. Click on the “**Device Manager**” tab in the Windows Control Panel.

Start > Control Panel > Device Manager



2. Expand “**Network adapters**” item, and you can read “**Broadcom NetXtreme Gigabit Ethernet**” in the Device Manager.



2.4.2 Verifying for Linux

You can check whether the driver is loading by using following commands:

```
# lsmod | grep bnxt_en
```

```
# ifconfig -a
```

If there is a device name, ethX, shown on the monitor, the linux driver is load. Then, you can use the following command to activate the ethX.

```
# ifconfig ethX up, where X=0,1,2,...
```