

[Manuals.plus](#) /

› [Binardat](#) /

› Binardat 4-Port 2.5G PCIe Network Card (Model NA2G4) Instruction Manual

Binardat NA2G4

Binardat 4-Port 2.5G PCIe Network Card

Model: NA2G4

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Binardat 4-Port 2.5G PCIe Network Card. This adapter is designed to upgrade your PC to a 2.5 Gigabit Ethernet connection, offering enhanced network performance for various applications. Please read this manual thoroughly before installation and use to ensure proper functionality and longevity of the product.

PRODUCT OVERVIEW

The Binardat 4-Port 2.5G PCIe Network Card features a Realtek RTL8125B controller, providing four 2.5 Gigabit Ethernet ports. It is compatible with various network speeds including 2500Mbps, 1000Mbps, 100Mbps, and 10Mbps, automatically negotiating the highest possible speed. The card supports standard Cat5e or higher UTP cables for distances up to 100 meters (328 feet).

2.5G Base-T 4-Port PCIe Network Adapter

Upgrade your PC to a lightning-fast 2.5G speed

Chipset: RTL8125BG

Model: NA2G4

2.5Gbps



2.5Gbps Networking
4-Port 2.5G

Complete Compatibility
2.5G/1G/100M/10M



Realtek RTL8125BG



QoS for Your Games



Major OS
Support



Easy Migration



Low-Profile
and Full



Fault Tolerance



Link Aggregation



802.1Q VLAN



Energy Efficient
Ethernet

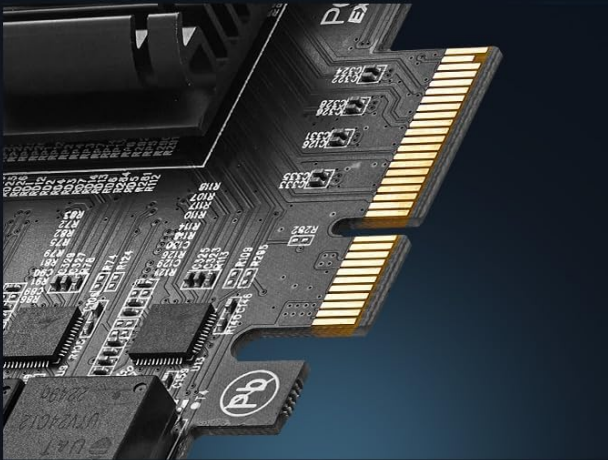


Image: Binardat 4-Port 2.5G PCIe Network Card with its main features such as 2.5Gbps networking, Realtek RTL8125BG chipset, and compatibility details.

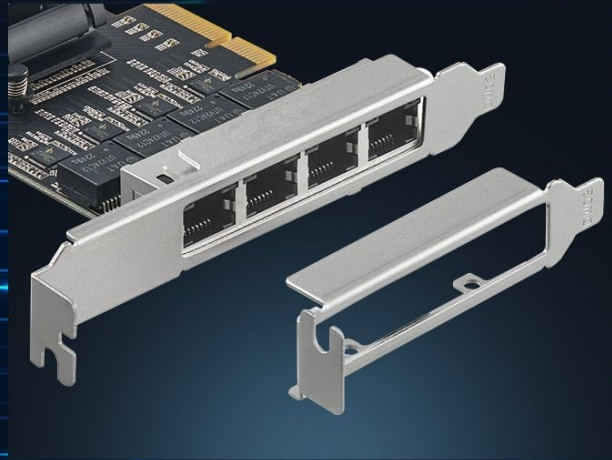
Key features include:

- **Quad 2.5Gbps Ports:** Equipped with a Realtek RTL8125B chip, supporting 2500/1000/100/10Mbps auto-negotiation.
- **PCIe Compatibility:** Designed for PCIe x4, x8, and x16 slots. Includes both standard and low-profile brackets for versatile installation in various PC, server, workstation, or NAS chassis. *Note: Not compatible with PCI slots.*
- **Broad OS Support:** Compatible with Windows 10/8.1/8/7/Server 2012/2008, and Linux (kernel 3.10 and higher).
- **Advanced Network Features:** Supports PXE boot, Auto MDIX, IEEE 802.1Q VLAN, IEEE 802.3bz (2.5GBASE-T), Full Duplex flow control (IEEE 802.3x), IEEE 802.1P Priority, and Jumbo frames up to 16Kbytes.
- **Quality Construction:** Features thickened golden fingers for reliable contact, shielded gold-plating on RJ45 ports for improved signal integrity, and a large heat sink for efficient thermal management.

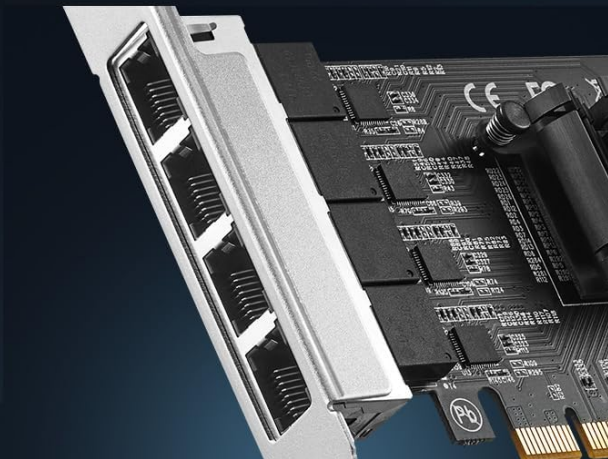
Well Designed



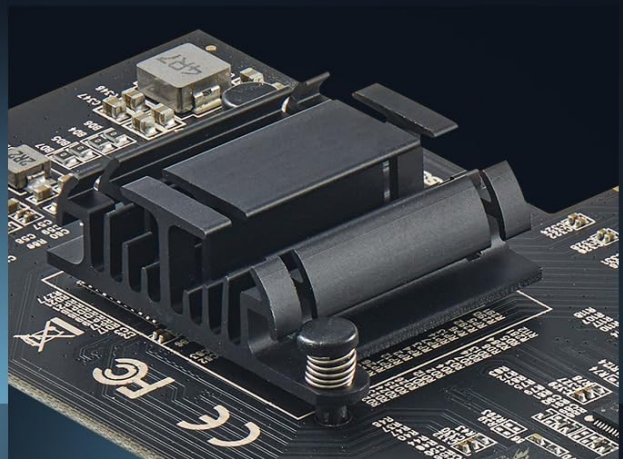
Thickened Golden Finger



Low-Profile and Full



Shielded Gold-plating
4 x 2.5G RJ45 Ports



Big Heat Sink

Image: Detailed views of the Binardat network card highlighting its robust design elements such as thickened golden fingers, shielded RJ45 ports, and the integrated heat sink.

SPECIFICATIONS

Brand	Binardat
Model Number	NA2G4
Hardware Interface	PCI Express x4
Compatible Devices	Desktop PCs, Servers, Workstations, NAS
Data Link Protocol	Ethernet, IEEE 802.1Q, IEEE 802.1p, IEEE 802.3, IEEE 802.3bz
Data Transfer Rate	2500 Megabits Per Second (2.5Gbps)
Chipset	Realtek RTL8125B

Ports	4 x RJ45
Jumbo Frame Support	Up to 16Kbytes
Item Weight	0.21 Kilograms

SETUP AND INSTALLATION

1. Physical Installation

1. **Prepare your system:** Power off your computer and disconnect all cables. Open the computer case.
2. **Select a PCIe slot:** Locate an available PCIe x4, x8, or x16 slot on your motherboard. This card is not compatible with standard PCI slots.
3. **Choose the correct bracket:** The card comes with a standard bracket installed. If your computer case requires a low-profile bracket, remove the two screws holding the standard bracket and replace it with the included low-profile bracket. Secure it with the screws.



Image: The Binardat network card illustrating the standard and low-profile brackets for different chassis types.

4. **Insert the network card:** Carefully align the network card with the chosen PCIe slot and press it firmly until it is securely seated. Secure the card with the screw or latch mechanism of your computer case.
5. **Close the case:** Reassemble your computer case and reconnect all cables.

2. Driver Installation

After physical installation, you will need to install the appropriate drivers for your operating system.

1. **Power on your computer:** Boot your system. For Windows operating systems, the card may be recognized automatically, and a basic driver might be installed.
2. **Download drivers:** For optimal performance and full feature support, it is recommended to download the latest drivers from the Binardat official website or the Realtek official website. A driver link may also be provided on the product bracket or packaging.

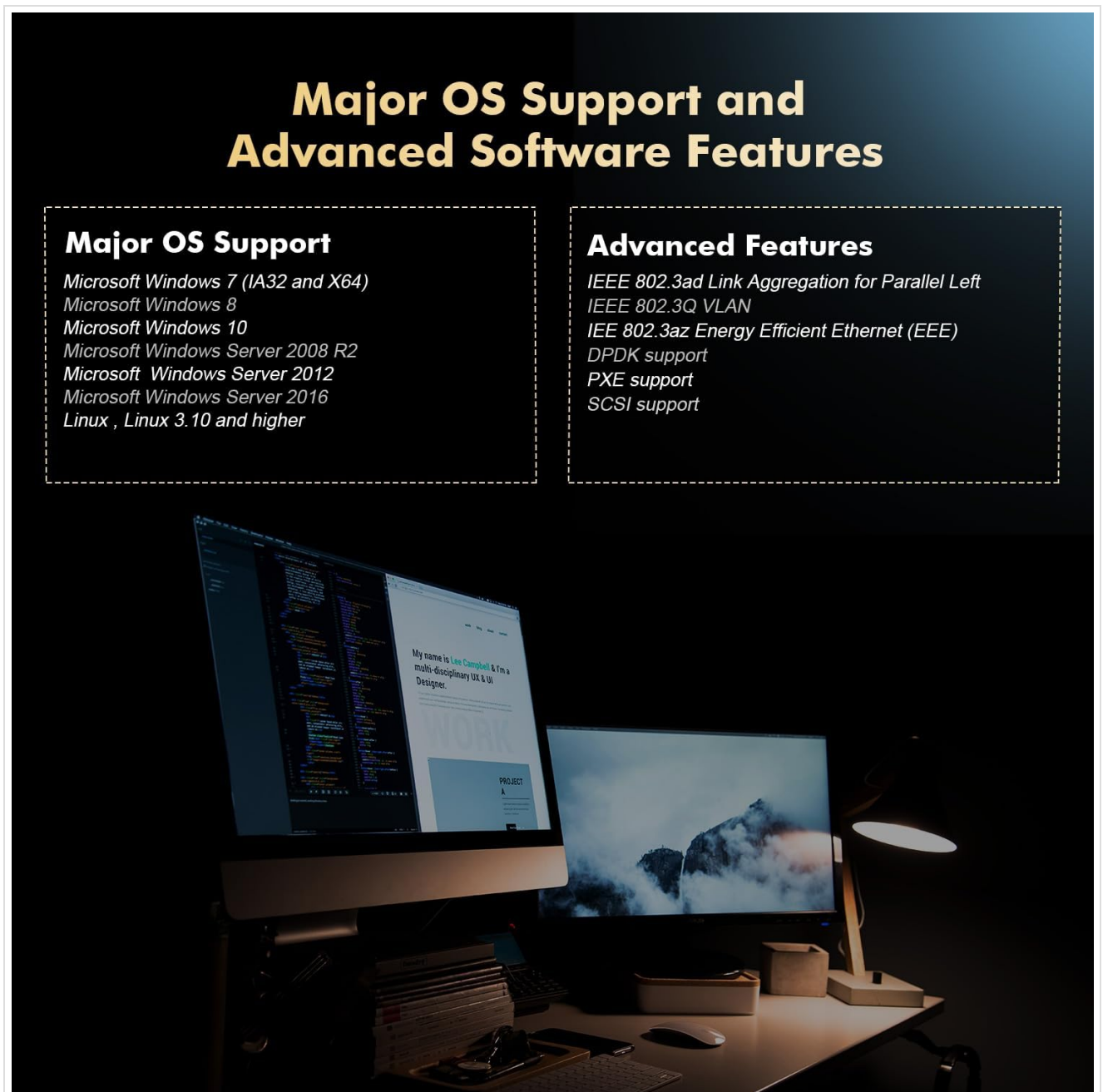


Image: A computer display showing logos for Windows and Linux, representing the broad operating system compatibility of the network card.

3. **Install drivers:** Follow the on-screen instructions to install the downloaded drivers. A system restart may be required after installation.

1. Connecting to the Network

1. Once the drivers are installed, connect your Ethernet cables (Cat5e or higher recommended) to the RJ45 ports on the network card and to your network devices (router, switch, modem, etc.).
2. Observe the LED indicators on the network card. These LEDs typically show link status and network activity. A solid light usually indicates a successful link, while a blinking light indicates data transfer.

2. Configuring Network Settings

Most operating systems will automatically configure the network settings. However, you may need to manually adjust settings for specific network environments or to enable advanced features.

- **Speed & Duplex:** In Device Manager (Windows) or network settings (Linux), you can verify or manually set the link speed and duplex mode. For 2.5Gbps operation, ensure it is set to "Auto Negotiation" or "2.5Gbps Full Duplex".
- **Jumbo Frames:** If your network infrastructure supports it, enabling Jumbo Frames (e.g., 9KB or 16KB) can improve performance for large data transfers. This setting is usually found in the advanced properties of the network adapter.
- **QoS (Quality of Service):** The card supports QoS features to prioritize network traffic, which can be beneficial for applications like online gaming or video conferencing. Configuration depends on your operating system and network management tools.

Prioritize Your Games

Quality-of-Service (QoS) technology automatically prioritizes bandwidth for gaming packets

Low Priority

Web Browsing



File Transferring



Instant Messaging



Video Conferencing



Gaming



High Priority

Image: A visual representation of Quality-of-Service (QoS) technology prioritizing gaming traffic over other network activities like web browsing or file transfers.

MAINTENANCE

The Binardat 4-Port 2.5G PCIe Network Card is designed for reliable operation with minimal maintenance. Follow these guidelines to ensure its longevity:

- **Keep it clean:** Periodically clean the interior of your computer case to prevent dust buildup on the network card's components, especially the heat sink. Use compressed air for this purpose.
- **Driver updates:** Regularly check the Binardat or Realtek official websites for updated drivers. Keeping your drivers current can improve performance, stability, and compatibility.
- **Environmental conditions:** Ensure your computer operates in a well-ventilated area to prevent overheating, which can affect the performance and lifespan of internal components.

TROUBLESHOOTING

If you encounter issues with your network card, refer to the following troubleshooting steps:

- **No Link Light / Card Not Detected:**

- Ensure the card is fully seated in the PCIe slot.
- Try the card in a different PCIe slot if available.
- Verify that the correct drivers are installed. Reinstalling drivers can resolve detection issues.
- Check your motherboard's BIOS/UEFI settings to ensure the PCIe slot is enabled.

- **Slow Network Speeds:**

- Confirm that your router/switch and Ethernet cables (Cat5e or higher) support 2.5Gbps speeds.
- Check the network adapter settings in your operating system to ensure it's set to "Auto Negotiation" or "2.5Gbps Full Duplex". Sometimes, Windows may default to 1.0Gbps.
- Update to the latest drivers from Realtek or Binardat.
- If Jumbo Frames are enabled, ensure your router/switch also supports them. Disabling Jumbo Frames can sometimes resolve speed issues if there's a compatibility conflict.
- Disable any onboard Ethernet adapters if they are causing conflicts, especially during boot-up.

- **Operating System Compatibility Issues:**

- While the card supports Windows and Linux, some specialized operating systems (e.g., certain BSD-based systems like PFSense) may not have native driver support. Verify OS compatibility before purchase if using non-standard systems.
- For Linux, ensure your kernel version is 3.10 or higher.

SUPPORT

For any questions, technical assistance, or support regarding your Binardat 4-Port 2.5G PCIe Network Card, please contact our customer support team. Refer to the contact information provided with your product packaging or on the official Binardat website for the most current support options.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question