
Broadcom NetXtreme Gigabit Ethernet Plus Network Interface Card installation

Introduction

This document describes how to install a Broadcom NetXtreme Gigabit Ethernet Plus Network Interface Card (NIC) into a PCI Express (PCIe) slot on your computer.

Kit contents

- Broadcom NetXtreme Gigabit Ethernet Plus NIC
- USB cable
- Low-profile bracket
- Broadcom NetXtreme driver and application CD
- Warranty information
- Installation instructions

Your responsibilities

You are responsible for determining whether the product is appropriate for your use and will interface with other equipment without malfunction or damage. You are also responsible for backing up data before installing any product and for regularly backing up data after installing the product. HP is not liable for any damage to equipment or data loss resulting from the use of any product. To determine the compatibility of this product with your computer or workstation, view *QuickSpecs* at <http://www.hp.com/go/productbulletin>.

The Broadcom NetXtreme Gigabit Ethernet Plus NIC is enabled with Desktop and mobile Architecture for System Hardware (DASH), a new remote IT management tool for desktop and mobile computers.












In some computers, the functionality of the DASH feature might be mutually exclusive with some internal USB accessories, like the HP Media Reader.




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Warnings and cautions

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-  **WARNING!**  Any surface or area of the equipment marked with this symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists. To reduce the risk of injury from a hot component, enable the surface to cool before touching.
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-  **WARNING!**  Any surface or area of the equipment marked with this symbol indicates the presence of an electrical shock hazard. To reduce the risk of injury from electrical shock, do not open any enclosed area marked with this symbol.
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-  **WARNING!** To reduce the risk of electric shock or damage to your equipment:
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
 - Plug the power cord in a grounded (earthed) outlet that is easily accessible at all times.
 - Disconnect power from the equipment by unplugging the power cord from the electrical outlet.
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-  **WARNING!** To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper computer setup, posture, health, and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located at <http://www.hp.com/ergo> and on the documentation CD (if one is included with the product).
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-  **WARNING!** If a product is shipped in packaging marked with this symbol, , the product must always be lifted by two persons to avoid personal injury due to product weight.
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-  **CAUTION:** Static electricity can damage the electronic components of the computer. Before beginning these procedures, be sure you discharge static electricity by briefly touching a grounded metal object.
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-  **CAUTION:** To prevent damage to the computer, observe the following Electrostatic Discharge (ESD) precautions while performing the system parts removal and replacement procedures:
- Work on a static-free mat.
 - Wear a static strap to ensure that any accumulated electrostatic charge is discharged from your body to the ground.
 - Create a common ground for the equipment you are working on by connecting the static-free mat, static strap, and peripheral units to that piece of equipment.
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-  **NOTE:** HP accessories are for use in HP computer products. They have been extensively tested for reliability and are manufactured to high quality standards.
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Step 1—Preparing for component installation

 **NOTE:** Computer models vary. All illustrations are examples only.

Download and install updates

1. Check for available system BIOS updates specified for your HP computer model and operating system at <http://www.hp.com/support>.
2. Install the system BIOS updates, if available.

Accessing the internal components of the computer

1. If you need help preparing the computer for this installation, consult the removal and replacement procedures in the service guide for your computer at <http://www.hp.com/support/manuals>.
2. Power down the computer, and then disconnect the power cord.
3. Power down all external devices, and then disconnect them from the computer.
4. Remove the side access panel.

Removing components

1. If present, remove the card support to enable access to the expansion slots and system board connectors.
2. Select the smallest available expansion slot for a PCIe expansion card and remove the slot cover. The Broadcom NIC can be installed in a PCIe x1, x4, x8, or a x16 expansion slot.


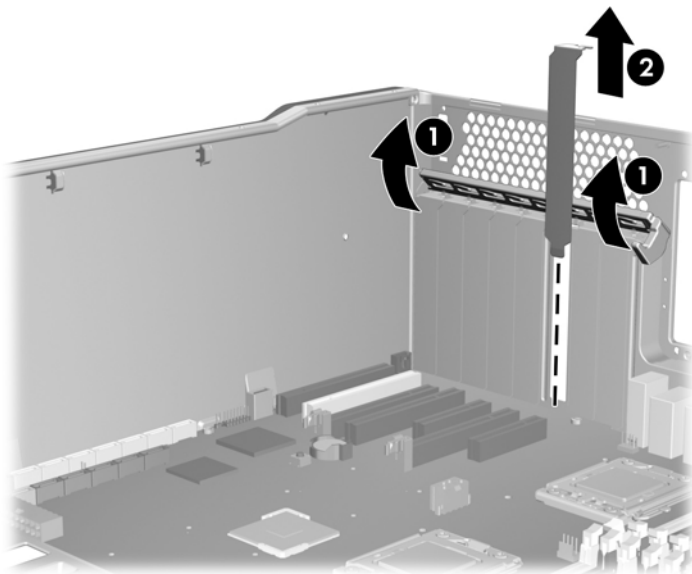
 **NOTE:** To identify an available PCIe expansion slot, see the service label on the side access panel.

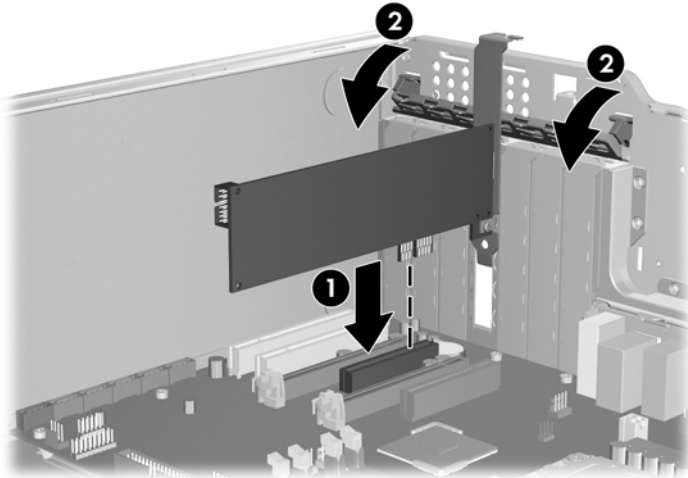
Figure 1 Removing the expansion slot cover



Step 2—Installing the PCIe NIC hardware

1. If your computer requires a low-profile card, replace the full-height bracket on the card with the supplied low-profile bracket.
2. To install the NIC in the selected PCIe slot:
 - a. Verify the keyed components of the card align with the socket (1), and then press the card securely into the socket.
 - b. Close the PCI levers (2).

Figure 2 Installing the NIC



3. For computers that support DASH, attach the USB cable provided to the USB connector on the NIC (3), and then to the DASH-enabled USB dual (10-pin) header on the system board (4).


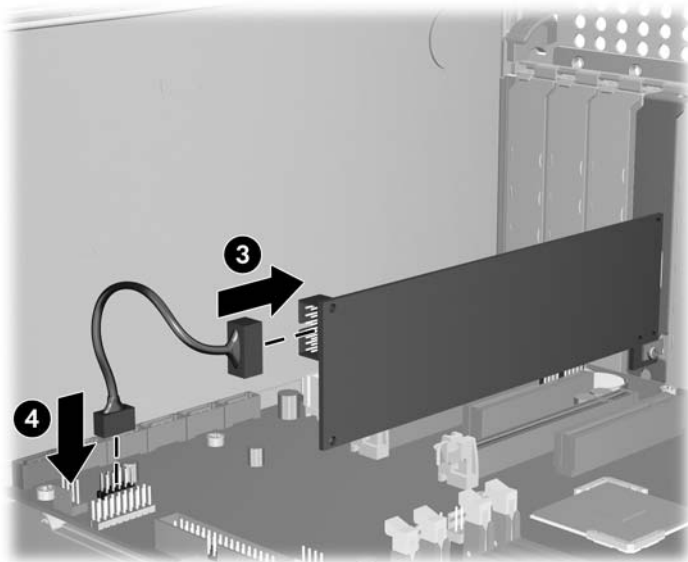
 **NOTE:** To locate the DASH-enabled USB, see the service label inside the side access panel. For information to determine DASH compatibility, see [on page 1](#).

Figure 3 Connecting the USB cable for DASH-enabled computers





Step 3—Reassembling the computer

1. Reinstall the card support, if applicable.
2. Reinstall the side access panel.
3. Reconnect power to the computer and all external devices.
4. Restore power to the computer and all external devices.

Step 4—Installing NIC software

For instructions on installing NIC software, see the driver CD supplied with this installation kit.

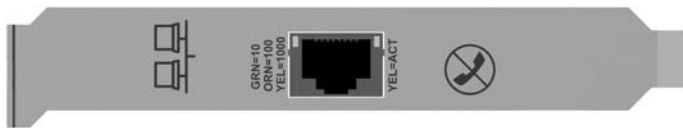
 **NOTE:** At the time of component installation, look for device software, firmware, and driver updates, designated for your computer model and operating system. Obtain updates from <http://www.hp.com/support>.

 **NOTE:** For information about DASH manageability and setup for your computer, see <http://www.hp.com/support/manuals>.

NIC LED behaviors

The faceplate on the 10/100/1000BASE-T NIC provides an RJ-45 connector for connecting the NIC to another network device.

Figure 4 NIC faceplate



The NIC has two LEDs, one indicates port speed (10 Mb/s, 100 Mb/s, and 1000 Mb/s), and one indicates ACT (activity). The port speed LED indicates active links, and the ACT LED indicates data transfer status. After the NIC is installed and the cables are connected properly, the speed LED is lit and the ACT LED is on if data traffic is present.

Table 1 NIC LED behaviors

LED	State	Description
Yellow	ON	1000-Mb/s Ethernet link.
Orange	ON	100-Mb/s Ethernet link.
Green	ON	10-Mb/s Ethernet link.
	OFF	No Ethernet link.
ACT	Blinking	Brief bursts of data are detected on the port.
	ON	Streams of data are detected on the port.
	OFF	No data is detected on the port.

Japanese 日本語

This document is available in Japanese. See <http://www.hp.com/support/manuals>, then select your product and select **Japanese** from the drop down **Manual Language** menu.

このドキュメントは日本語版が用意されています。<http://www.hp.com/support/manuals> にアクセスし、ご使用のワークステーション製品を選択し、**Manual Language** ドロップダウンメニューから **Japanese** を選択してください。