

Thank you for choosing the NVIDIA® Quadro® graphics card.





This quick start guide covers the NVIDIA Quadro K6000, K5000 Series, K4000 Series, K2000 Series, K600 Series, K420, and 410 graphics cards. Before you begin, review the following Minimum System Requirements list to ensure your system meets the minimum hardware and software specification for your graphics card.

Minimum System Requirements

- > **Motherboard**
PCI Express x16 slot
- > **Operating System**
 - Microsoft Windows 8 (32-bit or 64-bit), Windows 7, Vista, Windows XP*
 - Linux 32-bit or 64-bit on:
 - Red Hat Enterprise Linux 3.x, 4.x, 5.x
 - SUSE Linux Enterprise Desktop 11 and 10
 - OpenSUSE 11.1, 11.0, 10.3, 10.2, 10.1
 - Fedora 10, 9, 8, 7
 - Ubuntu 9.04, 8.10, 8.04, 7.10, 7.04
 - Solaris
- > **Processor**
 - Intel Core i5, i7 or Xeon processor or later
 - AMD Phenom or Operton class processor or later
- > **System Memory**
Minimum of two (2) GB memory, eight (8) GB or higher recommended
- > **Blu-ray, DVD-ROM/CD-ROM, or Ethernet connection for driver installation**

* New generation of Quadro products (K5200, K4200, K2200, K620, and K420) will not work with Microsoft Windows XP.

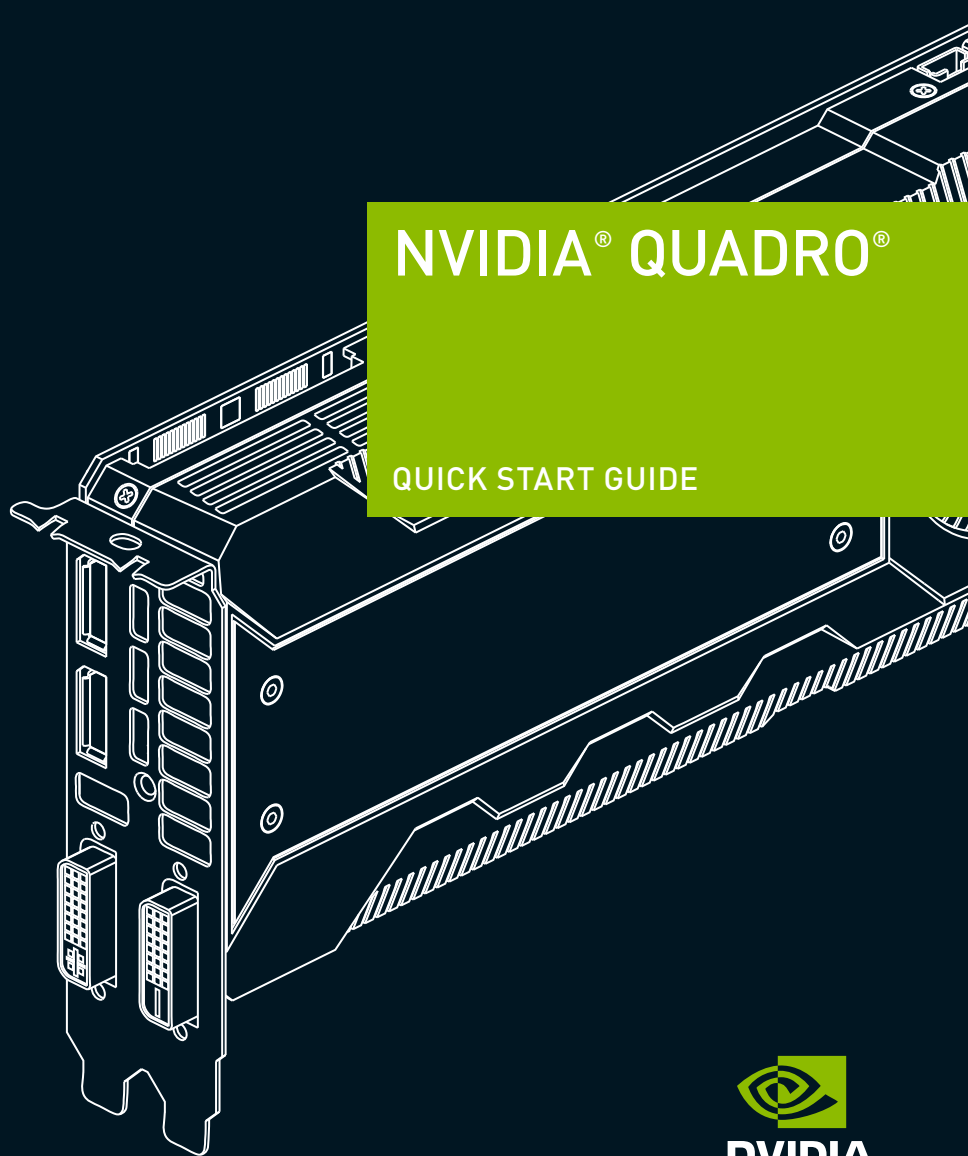
The following table lists the equipment included in the box with each NVIDIA Quadro graphics card.

EQUIPMENT	K6000	K5000 Series	K4000 Series	K2000 Series	K600 Series	410 K420
 Software Installation Disc	Yes	Yes	Yes	Yes	Yes	Yes
 Quick Start Guide	Yes	Yes	Yes	Yes	Yes	Yes
 Registration	www.pny.com/registration					
 DVI-to-VGA Adapter	1	1	1	1	1	1
 DisplayPort-to-DVI SL Adapter	2	2	1	1	1	1
 Mini-DisplayPort-to-DisplayPort	0	0	0	1**	0	0
 Auxiliary Power Cable	2	1	1	N/A	N/A	N/A
 Stereo Connector Bracket	1	1	1	N/A	N/A	N/A

** NVIDIA Quadro K2000D only.

! ATTENTION: Static electricity can severely damage electronic components. Take the following precautions when installing your new NVIDIA Quadro graphics card:

- > Before touching any electronic parts, discharge the static electricity from your body by touching the internal metal frame of your system while it is unplugged.
- > Do not remove your card from the packaging clamshell until you are ready to install it. Whenever you remove a card from your system, always place it back in the clamshell.
- > Do not allow clothing or jewelry touch any electronic parts.
- > When handling your graphics card, hold it by the edges and avoid touching any circuitry or the PCIe connector.

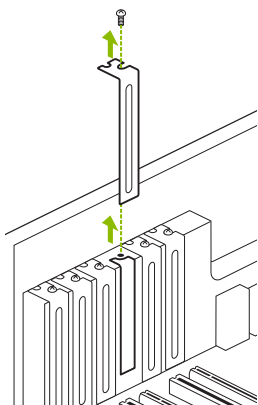


03 HARDWARE INSTALLATION

- 1 Remove the current graphics driver installed on the host system.
 - Go to **Start\Control Panel\Programs and Features**
 - Remove the current graphics driver.
- 2 Power down your system.
- 3 Unplug the power cord from the AC power source.
- 4 Remove the side panel from your system to gain access to the motherboard.

Note: Reference your specific computer documents for instructions on accessing the motherboard in your computer.

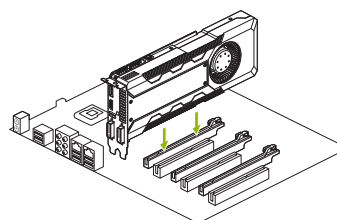
- 5 Remove the existing graphics card if present. If a retention bar is holding the card in place, remove the screw securing the card. **OR**, if there is no existing graphics card, remove the access covers from the primary x16 PCI slot.



Remove one slot cover for the PCI x16 slot if you are installing the Quadro K4000 Series, K2000 Series, K600 Series, K420, or 410. For the Quadro K6000 and K5000 Series graphics cards, remove two adjacent slot covers.

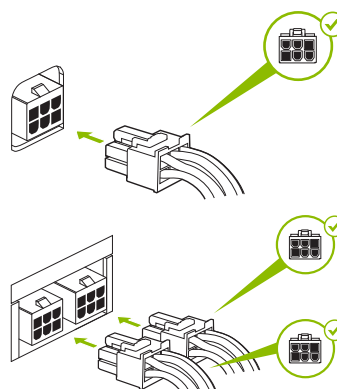
Note: The NVIDIA Quadro K6000 and K5000 Series are dual-slot cards and will require two (2) adjacent slots. The NVIDIA Quadro K4000 Series, K2000 Series, K600 Series, K420, and 410 are single slot cards and will only require a single (1) slot.

- 6 Install the card into the primary x16 PCI slot. Press gently on the card until it is seated securely in the slot.



Install the graphics card into the primary x16 PCI slot. The K6000 and K5000 Series are dual-slot cards and will cover the adjacent slot. The remaining graphic cards are single-slot cards.

- 7 Secure the card to the system frame using the screw(s) removed in **step 5**.
- 8 Connect the 6-pin auxiliary power cable(s) from the power supply to the back edge of the Quadro K6000, K5000, or K4000 Series graphics card.



The Quadro K5000 and K4000 Series graphics cards use a single 6-pin power cable. The K6000 graphics card, uses two 6-pin power cables. Install the 6-pin auxiliary power cable(s) from the power supply to the power connector(s) on the back-edge of the graphics card using the 6-pin power cable(s) included in the box.

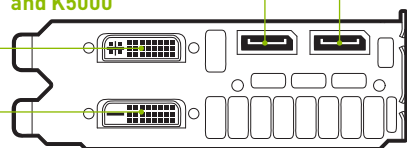
Note: Use the recommended power connector guidelines at www.nvidia.com/quadropowerguidelines.

- 9 Install the side panel removed in **step 4**.

04 CONNECTING TO THE DISPLAY

- 1 Connect the display cable(s) to your Quadro graphics card.
- 2 Reconnect your power cord to the workstation.

Quadro K6000, K5200, and K5000

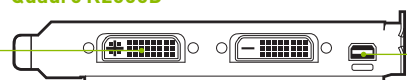


DisplayPort Connector
Supports single-lane transfer rates over a single cable. The interface is primarily used to connect a video source to a display device such as a computer monitor.

Quadro K4200, K4000, K2200, and K2000



Quadro K2000D



Mini-DisplayPort Connector

Quadro K620 and K600



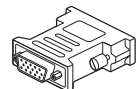
DisplayPort Connector

DVI Connectors
Use this to connect a digital display or, with an adapter, a VGA display using DVI-to-VGA adapter.

Quadro K420 and 410



DVI-to-VGA Adapter (Optional - For use with DVI-I connectors only)



05 SOFTWARE INSTALLATION AND CONFIGURATION

Driver Installation

With the hardware installed, it is now time to install the graphics driver.

- 1 Power up your computer, start Windows or Linux, and login with an account that has Administrator rights.

Note: Since there is no GPU driver currently loaded, the display may run at reduced resolution or image quality.

- 2 Download and install the driver.
 - Select and download the driver from www.nvidia.com/drivers. Launch the downloaded executable file, then follow the installer guides to complete installation.
 - Insert the software installation disc and follow directions for driver installation.

The installer may require you to reboot your system once the driver installation is complete.

Congratulations! Your NVIDIA Quadro graphics card is now ready to use!

NVIDIA QUADRO
AUTHORIZED PARTNER
PNY

PNY Technologies, Inc.
100 Jefferson Road, Parsippany, NJ 07054
Tel 408 567 5500 | Fax 408 855 0680

For more information visit: www.pny.com/quadro