

PNY NVIDIA QUADRO K2200

PNY NVIDIA Quadro K2200 Graphics Card User Manual

1. PRODUCT OVERVIEW

The PNY NVIDIA Quadro K2200 is a professional graphics card designed for demanding 3D applications. It features 4 GB of GDDR5 GPU memory, providing ample bandwidth for creating and manipulating large, complex models. Its single-slot form factor ensures compatibility with various chassis, including those with limited space and power. The advanced display engine supports up to four displays with DisplayPort 1.2, enabling ultra-high resolutions up to 3840 x 2160 at 60 Hz with 30-bit color depth.



Figure 1: PNY NVIDIA Quadro K2200 Graphics Card, top view.

2. SETUP AND INSTALLATION

2.1 System Requirements

- Available PCI Express x16 slot.
- Compatible operating system (Windows, Linux).
- Minimum recommended power supply unit (PSU) wattage (refer to your system's documentation or NVIDIA's official recommendations).

2.2 Physical Installation

1. **Power Off and Disconnect:** Ensure your computer is completely powered off and unplugged from the wall outlet.
2. **Open Computer Case:** Remove the side panel of your computer case to access the motherboard.
3. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard.

4. **Remove Slot Cover:** Remove the metal slot cover from the back of the computer case corresponding to the chosen PCIe slot.
5. **Insert Graphics Card:** Carefully align the Quadro K2200 card with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip (if present) locks into place.
6. **Secure Card:** Fasten the card to the computer case using the screw or latch mechanism.
7. **Close Case:** Replace the computer case side panel.
8. **Reconnect Peripherals:** Reconnect all cables, including the power cord, monitor cables, and other peripherals.



Figure 2: Front view of the Quadro K2200, showing the fan and heatsink.



Figure 3: Display output ports on the Quadro K2200, including DisplayPort and DVI.

2.3 Driver Installation

1. **Power On:** Turn on your computer. The operating system may install a basic display driver automatically.
2. **Download Drivers:** Visit the official PNY or NVIDIA website to download the latest Quadro drivers for your specific operating system.
3. **Install Drivers:** Run the downloaded driver installer and follow the on-screen instructions. A system restart may be required to complete the installation.
4. **Verify Installation:** After restarting, verify the driver installation through your operating system's device manager or NVIDIA Control Panel.

3. OPERATING INSTRUCTIONS

3.1 Connecting Displays

The Quadro K2200 supports multiple display configurations. Connect your monitors to the available DisplayPort and DVI outputs on the graphics card.

- **DisplayPort 1.2:** Supports resolutions up to 4096 x 2160 at 60Hz and 2560 x 1600 at 120Hz.
- **DVI-I Dual-Link:** Supports resolutions up to 2560 x 1600 at 60Hz and 1920 x 1200 at 120Hz.
- **DVI-D Dual-Link:** Supports resolutions up to 2560 x 1600 at 60Hz and 1920 x 1200 at 120Hz.

The card can simultaneously drive up to three displays natively or up to four displays when utilizing DisplayPort 1.2

multi-streaming capabilities.

3.2 NVIDIA Control Panel

The NVIDIA Control Panel, installed with the drivers, provides extensive options for configuring display settings, 3D application profiles, and other graphics card features. It allows for fine-tuning performance and visual quality for professional applications.

3.3 Professional Application Support

The Quadro K2200 is optimized for professional applications such as CAD/CAM, digital content creation, and scientific visualization. It supports CUDA 6 features, including Unified Memory, Dynamic Parallelism, and Dedicated Shared Memory, enhancing performance in compatible software.

4. MAINTENANCE

4.1 Keeping the Card Clean

Periodically inspect the graphics card for dust accumulation, especially on the fan and heatsink. Use compressed air to gently remove dust from the cooling components to ensure optimal airflow and prevent overheating. Ensure the computer is powered off and unplugged before cleaning.

4.2 Driver Updates

Regularly check the official PNY or NVIDIA website for updated drivers. Keeping your drivers current can improve performance, stability, and compatibility with new software and operating system updates.

5. TROUBLESHOOTING

5.1 No Display Output

- Ensure the monitor cables are securely connected to both the graphics card and the monitor.
- Verify that the monitor is powered on and set to the correct input source.
- Check if the graphics card is properly seated in the PCIe slot.
- Test with a different monitor or cable if possible.

5.2 Driver Issues or Instability

- Perform a clean installation of the latest drivers from the NVIDIA website.
- Ensure your operating system is up to date.
- Check for conflicts with other installed software or drivers.

5.3 Performance Problems

- Verify that your applications are configured to use the NVIDIA Quadro K2200.
- Ensure adequate cooling within your computer case to prevent thermal throttling.
- Close unnecessary background applications to free up system resources.
- Update to the latest graphics drivers.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Graphics Coprocessor	NVIDIA
Brand	PNY
Graphics RAM Size	4096 MB (4 GB)
Video Output Interface	DVI, DisplayPort
Graphics Processor Manufacturer	NVIDIA
Graphics RAM Type	GDDR5 SDRAM
Compatible Devices	Desktop
Display Resolution Maximum	3840 x 2160 at 60 Hz
Graphics Card Interface	PCI Express
Memory Clock Speed	1000 MHz
Number of Fans	1
Video Processor	NVIDIA
Model Name	NVIDIA QUADRO K2200
Graphics Description	Dedicated
Item Weight	1.3 Pounds (approx. 0.59 kg)



Figure 4: Energy Star certification logo, indicating energy efficiency.

7. WARRANTY INFORMATION AND SUPPORT

7.1 Warranty

The PNY NVIDIA Quadro K2200 Graphics Card comes with a limited 3-year warranty. For specific terms and conditions, please refer to the warranty documentation included with your product or visit the official PNY website.

7.2 Technical Support

For technical assistance, driver downloads, and further product information, please visit the official PNY support website. You can typically find support resources, FAQs, and contact information for customer service there.

PNY Support Website: www.pny.com/support

