

PNY VCQP620-PB

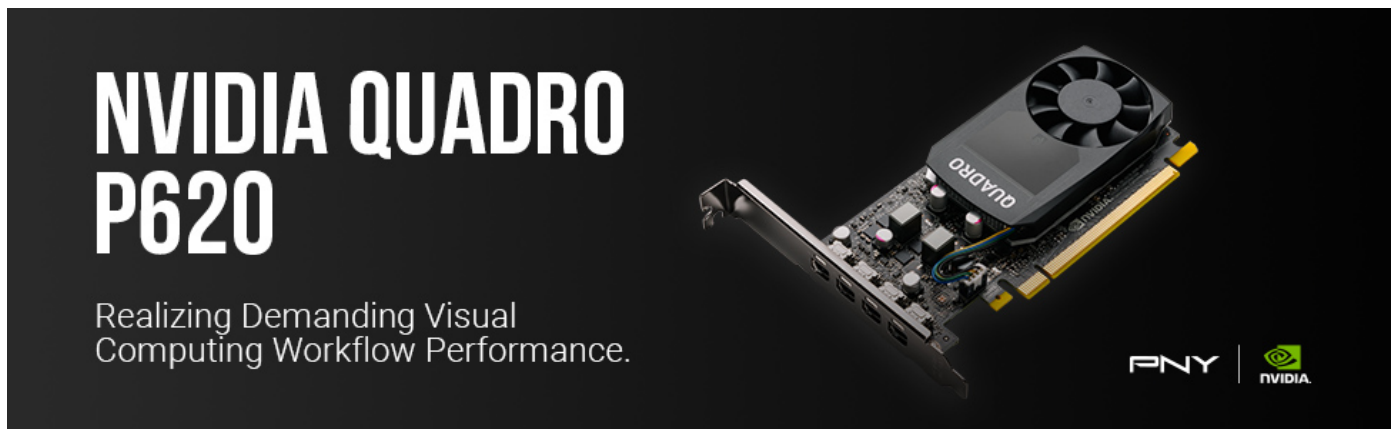
PNY NVIDIA Quadro P620 Graphics Card User Manual

Model: VCQP620-PB

Brand: PNY

1. INTRODUCTION

The PNY NVIDIA Quadro P620 is a professional graphics card designed to enhance visual computing workflows. It features a 512 CUDA Core Pascal GPU and 2GB of ultra-fast GPU memory, enabling the creation and manipulation of complex 2D and 3D models. Its flexible single-slot, low-profile form factor ensures compatibility with a wide range of systems, including those with limited space and power. The P620 supports up to four 4K displays (4096 x 2160 at 60Hz) with HDR color, providing an expansive and detailed visual workspace.



Overview of the PNY NVIDIA Quadro P620 graphics card.

2. WHAT'S IN THE BOX

Upon opening the package, please verify that all components are present:

- Quadro Graphic card
- Four Mini DisplayPort to DisplayPort adapters

3. SETUP AND INSTALLATION

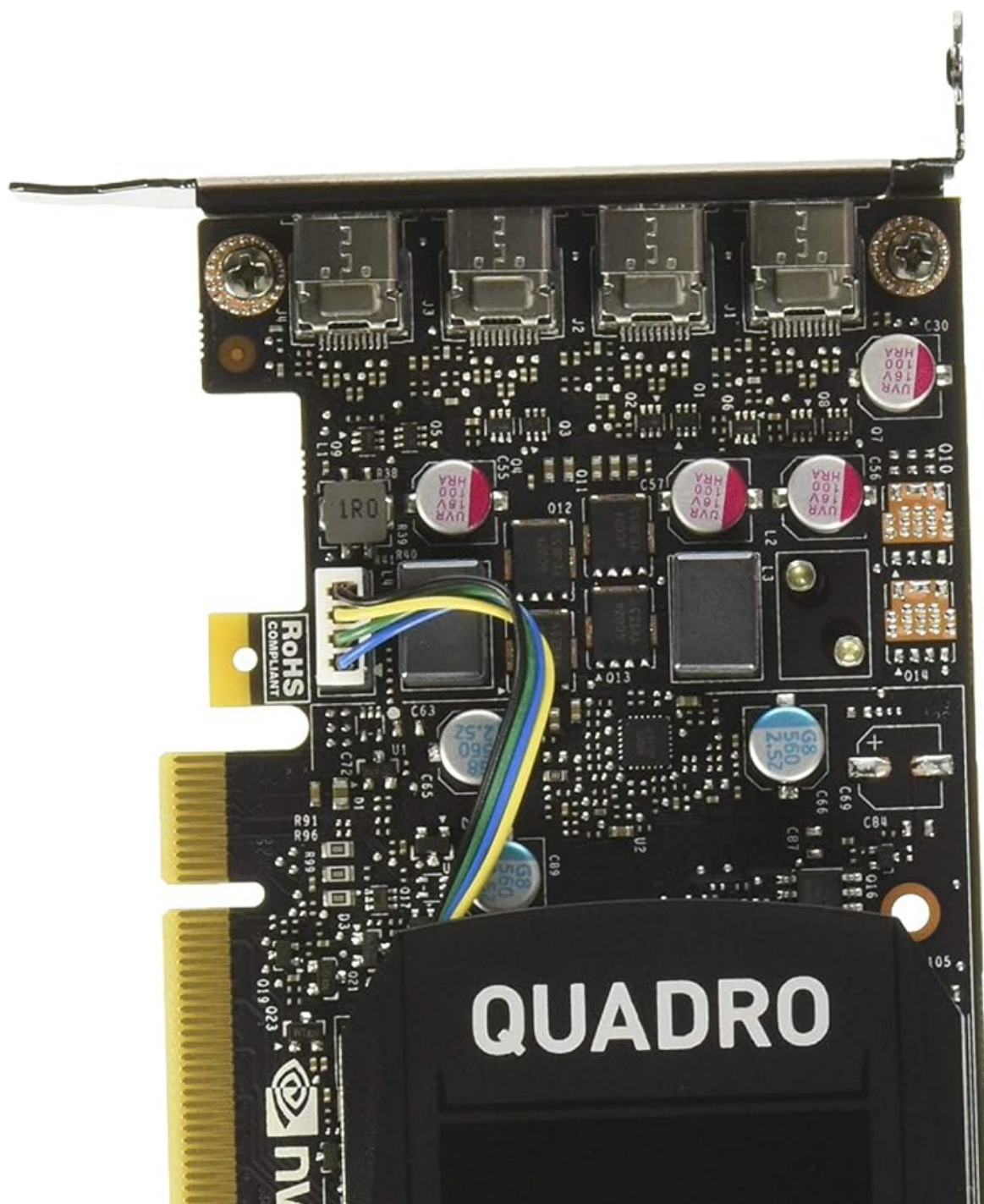
3.1 System Requirements

- Available PCI Express x16 slot
- Compatible operating system (e.g., Windows 7/8/10, Linux)
- Minimum recommended power supply

3.2 Hardware Installation

Follow these steps to install your PNY NVIDIA Quadro P620 graphics card:

1. **Prepare your system:** Power off your computer and disconnect all cables. Open the computer case.
2. **Locate an available PCIe slot:** Identify an empty PCI Express x16 slot on your motherboard.
3. **Remove slot cover:** Carefully remove the metal slot cover from the back of your computer case corresponding to the chosen PCIe slot.
4. **Insert the graphics card:** Align the graphics card with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip (if present) locks into place.
5. **Secure the card:** Use a screw or the case's retention mechanism to secure the graphics card to the computer case.
6. **Close the case:** Replace the computer case cover and reconnect all cables.





Top-down view of the PNY NVIDIA Quadro P620, showing its compact design.



Side view illustrating the cooling fan and low-profile bracket.



Angled view highlighting the four Mini DisplayPort outputs.



Detailed view of the four Mini DisplayPort connectors.

3.3 Driver Installation

After hardware installation, you must install the appropriate drivers for optimal performance:

1. **Power on your computer:** Boot your system. The operating system may detect new hardware and attempt to install generic drivers.
2. **Download drivers:** Visit the official NVIDIA website (or PNY support page) and download the latest Quadro drivers for your specific operating system and the P620 model.
3. **Install drivers:** Run the downloaded driver installer and follow the on-screen prompts. It is recommended to perform a clean installation.
4. **Restart your computer:** After the installation is complete, restart your computer for the changes to take effect.

4. OPERATION AND FEATURES

4.1 Display Connectivity

The PNY Quadro P620 features four Mini DisplayPort (mDP) outputs, supporting up to four 4K displays simultaneously. Use the included Mini DisplayPort to DisplayPort adapters or compatible cables to connect your monitors.

4.2 Key Features and Benefits

- **Multi-Display Support:** Supports up to four 4K displays (4096 x 2160 at 60Hz) for an expansive visual workspace.
- **Professional Workflows:** Designed for demanding visual computing tasks, including CAD, DCC, and visualization applications.
- **Pascal GPU Architecture:** Leverages NVIDIA's Pascal architecture with 512 CUDA Cores for accelerated performance.
- **2GB GDDR5 Memory:** Provides fast on-board memory for handling complex models and large datasets.
- **Low-Profile, Single-Slot Design:** Compatible with a wide range of workstations and small form factor systems.
- **HDR Color Support:** Enables the creation and playback of ultra-high quality HDR content.
- **H.264/HEVC Encode/Decode Engines:** Dedicated hardware for efficient video processing.

4.3 Software Configuration

Once drivers are installed, you can configure display settings and other graphics card parameters through the NVIDIA Control Panel (Windows) or NVIDIA X Server Settings (Linux). This allows for customization of display resolution, refresh rates, multi-display setups, and application-specific performance profiles.

5. MAINTENANCE

To ensure the longevity and optimal performance of your PNY NVIDIA Quadro P620 graphics card, consider the following maintenance tips:

- **Keep it Clean:** Periodically clean dust from the fan and heatsink using compressed air. Ensure the system's airflow is

not obstructed.

- **Monitor Temperatures:** Use monitoring software to keep an eye on the GPU temperature, especially during heavy workloads. Ensure adequate case ventilation.
- **Driver Updates:** Regularly check for and install the latest graphics drivers from NVIDIA's official website. Driver updates often include performance improvements, bug fixes, and new features.
- **Physical Inspection:** Occasionally inspect the card for any loose connections or visible damage.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your PNY NVIDIA Quadro P620 graphics card.

6.1 No Display Output

- **Check Connections:** Ensure the graphics card is fully seated in the PCIe slot and all display cables are securely connected to both the card and the monitor.
- **Monitor Input:** Verify your monitor is set to the correct input source (e.g., DisplayPort 1, DisplayPort 2).
- **Power Supply:** Ensure your power supply meets the minimum requirements for the graphics card and other system components.
- **Reseat Card:** Power off the system, remove the card, and re-insert it firmly.

6.2 Driver Issues / Installation Problems

- **Clean Installation:** If encountering issues during driver installation, try performing a clean installation. Uninstall existing drivers, restart, then install the new drivers.
- **Compatibility:** Ensure you have downloaded the correct drivers for your operating system and the P620 model.
- **Operating System Updates:** Ensure your operating system is up to date.

6.3 Performance Issues / Lag

- **Driver Updates:** Ensure you have the latest drivers installed.
- **System Resources:** Check if other system components (CPU, RAM, storage) are bottlenecking performance.
- **Temperature:** Monitor GPU temperature. Overheating can lead to performance throttling. Ensure proper ventilation.
- **Application Settings:** Verify that the application you are using is configured to utilize the dedicated graphics card.

6.4 Display Resolution or Refresh Rate Problems

- **NVIDIA Control Panel:** Adjust resolution and refresh rate settings through the NVIDIA Control Panel.
- **Cable Quality:** Ensure you are using high-quality DisplayPort cables capable of supporting 4K resolution at 60Hz.

7. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	PNY
Model Number	VCQP620-PB
Card Description	PNY Quadro P620
Chipset Brand	NVIDIA
Graphics Card RAM Size	2 GB

Feature	Specification
Max Screen Resolution	3840x2160 MP
Video Output Interface	Mini DisplayPort
Item Weight	0.01 ounces
Product Dimensions	14 x 7.5 x 6 inches
Date First Available	March 7, 2018

8. WARRANTY AND SUPPORT

PNY products are backed by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty information included with your product or visit the official PNY website. For technical support, driver downloads, and frequently asked questions, please visit the PNY support portal.

PNY Support Website: www.pny.com/support

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