

PNY VCG508016TFXPB1

PNY GeForce RTX™ 5080 Triple Fan Graphics Card User Manual

Model: VCG508016TFXPB1

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your PNY GeForce RTX™ 5080 Triple Fan Graphics Card. Designed for high-performance gaming and demanding creative applications, this GPU leverages NVIDIA's Blackwell architecture, AI-powered DLSS 4, and fast GDDR7 memory to deliver exceptional visual fidelity and speed. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your product.

SETUP AND INSTALLATION

1. System Requirements

- **PCI Express® Graphics Slot:** Required.
- **Operating System:** Microsoft® Windows® 10/11 64-bit or Linux 64-bit.
- **Power Connectors:** One PCIe 16-pin or three PCIe 8-pin power connectors required.
- **Power Supply:** Minimum 850W system power supply required.
- **Memory:** 16GB GDDR7.
- **Dimensions:** 12.94 x 2.35 x 0.04 inches (L x W x H).

2. Physical Installation

1. **Prepare Your System:** Power off your computer and disconnect all cables. Open your computer case.
2. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard.
3. **Remove Slot Covers:** Remove the necessary slot covers from your computer case to accommodate the graphics card.
4. **Insert Graphics Card:** Carefully align the graphics card with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip locks into place.
5. **Secure Graphics Card:** Fasten the graphics card to the computer case using screws.
6. **Connect Power Cables:** Connect the required PCIe 16-pin or three PCIe 8-pin power cables from your power

supply to the graphics card. Ensure all connections are secure.

7. **Install Support Bracket:** Attach the included support bracket to prevent GPU sag, following the instructions provided with the bracket.
8. **Close Case:** Close your computer case and reconnect all cables.



Figure 1: PNY GeForce RTX™ 5080 Triple Fan Graphics Card. This image shows the front view of the graphics card with its three cooling fans and sleek black design.

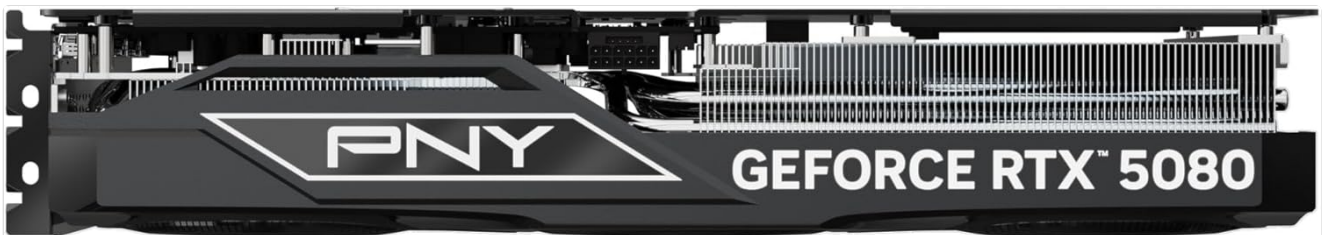


Figure 2: Side view of the PNY GeForce RTX™ 5080 Triple Fan Graphics Card. This image highlights the card's thickness and the heatsink fins for efficient cooling.



Figure 3: Exploded view of the PNY GeForce RTX™ 5080 Triple Fan Graphics Card components. This image illustrates the internal structure, including the PCB, heatsink, fans, and backplate.

3. Driver Installation

1. **Power On:** Turn on your computer.
2. **Initial Boot:** Your system may boot into a low-resolution display.
3. **Download Drivers:** Visit the official NVIDIA website (www.nvidia.com/drivers) to download the latest drivers for your GeForce RTX™ 5080.
4. **Install Drivers:** Follow the on-screen instructions to install the drivers. A restart may be required.
5. **Verify Installation:** After restarting, verify the driver installation through NVIDIA GeForce Experience or your operating system's device manager.

OPERATING YOUR GRAPHICS CARD

The PNY GeForce RTX™ 5080 is engineered to provide superior performance across various applications. Here are some key features and operational guidelines:

Key Technologies

- **NVIDIA DLSS 4:** Utilize AI-powered Deep Learning Super Sampling to boost frame rates and generate sharp, high-quality images. Enable DLSS in supported games for enhanced performance.
- **Ray Tracing:** Experience realistic lighting, shadows, and reflections in supported games thanks to dedicated Fourth-Gen Ray Tracing Cores.
- **NVIDIA Reflex:** Optimize system latency for competitive gaming. Enable NVIDIA Reflex in supported titles for quicker reaction times and improved aim precision.
- **NVIDIA Studio:** Accelerate creative workflows with NVIDIA Studio drivers and a suite of exclusive tools for AI-assisted creative applications.
- **AI Acceleration:** Leverage Fifth-Gen Tensor Cores for advanced AI capabilities in gaming, content creation, and productivity.

Connectivity

The graphics card features multiple display outputs for versatile connectivity:

- **DisplayPort:** Multiple DisplayPort outputs for high-resolution and high-refresh-rate monitors.
- **HDMI:** HDMI output for broad compatibility with displays and TVs.



Figure 4: Display output ports on the PNY GeForce RTX™ 5080 Triple Fan Graphics Card. This image shows the various DisplayPort and HDMI connections available.

MAINTENANCE

1. Cleaning

- **Frequency:** Regularly inspect your graphics card for dust accumulation, especially on the fans and heatsink. Clean every 3-6 months, or more frequently in dusty environments.
- **Procedure:** Power off your computer and disconnect it from the power source. Use compressed air to gently blow dust out of the heatsink fins and fan blades. Hold the fan blades in place while cleaning to prevent over-spinning and potential damage. Do not use liquid cleaners directly on the card.

2. Driver Updates

Keep your graphics drivers updated to ensure optimal performance, stability, and access to the latest features and game optimizations. Use NVIDIA GeForce Experience software to check for and install new drivers automatically, or download them directly from the NVIDIA website.

3. Thermal Management

Ensure adequate airflow within your computer case. Proper cable management and case fan configuration can significantly improve cooling efficiency for your GPU and overall system.

TROUBLESHOOTING

Common Issues and Solutions:

- **No Display Output:**
 - Ensure the graphics card is fully seated in the PCIe slot.
 - Verify all power cables are securely connected to the GPU and PSU.

- Check that your monitor cable is connected to the graphics card, not the motherboard's integrated graphics port.
- Test with a different display cable or monitor if possible.
- **Performance Issues (Low FPS, Stuttering):**
 - Ensure the latest graphics drivers are installed.
 - Check in-game settings; reduce resolution or graphics quality if necessary.
 - Monitor GPU temperatures. Overheating can lead to performance throttling.
 - Verify your power supply meets the minimum wattage requirement.
- **Overheating:**
 - Clean dust from the fans and heatsink.
 - Ensure proper case airflow and fan configuration.
 - Check that the fans on the graphics card are spinning correctly.
- **System Instability/Crashes:**
 - Ensure drivers are up-to-date and not corrupted (try a clean reinstallation).
 - Check for any conflicting software or background applications.
 - Verify system power stability.

SPECIFICATIONS

Feature	Detail
Graphics Coprocessor	NVIDIA GeForce RTX 5080
Chipset Brand	NVIDIA
Graphics Card RAM Size	16 GB GDDR7
Memory Speed	2295 MHz
Max Screen Resolution	7680x4320
Video Output Interface	DisplayPort, HDMI
Item Model Number	VCG508016TFXPB1
Item Weight	2.2 pounds
Product Dimensions (LxWxH)	12.94 x 2.35 x 0.04 inches
Color	Black
Manufacturer	PNY

WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official

PNY website. PNY products typically come with a limited warranty covering manufacturing defects.

What's in the Box:

- GeForce RTX™ 5080 Triple Fan GPU DLSS 4
- 1x Support Bracket
- One 16-pin to Three 8-pin Power Cable

CUSTOMER SUPPORT

If you encounter any issues or have questions regarding your PNY GeForce RTX™ 5080, please visit the PNY support website or contact their customer service for assistance. Ensure you have your product model number (VCG508016TFXPB1) and serial number ready when contacting support.

PNY Support Website: www.pny.com/support