NVIDIA RTX 5080 Founders Edition

NVIDIA GeForce RTX 5080 Founders Edition User Manual

Model: RTX 5080 Founders Edition

1. INTRODUCTION

The NVIDIA GeForce RTX 5080 Founders Edition is a state-of-the-art high-end graphics card designed to deliver exceptional performance for demanding applications, professional workloads, and the latest gaming titles. Featuring the advanced Blackwell architecture, this GPU provides unparalleled visual fidelity, real-time ray tracing capabilities, and AI-accelerated performance. This manual provides essential information for the proper installation, operation, maintenance, and troubleshooting of your new graphics card.

2. PACKAGE CONTENTS

Upon opening the NVIDIA GeForce RTX 5080 Founders Edition package, please verify that all the following items are included:

- NVIDIA GeForce RTX 5080 Founders Edition Graphics Card
- Quick Start Guide
- Support Documentation
- Power Adapter (if applicable, depending on region/model)

Image: Retail packaging of the NVIDIA GeForce RTX 5080 Founders Edition, showing the "PULL" tab for opening.

Image: Retail packaging of the NVIDIA GeForce RTX 5080 Founders Edition, displaying various product and shipping labels.

3. Setup and Installation

3.1. System Requirements

Before installing your graphics card, ensure your system meets the following minimum requirements:

- PCI Express-compliant motherboard with one dual-width x16 graphics slot

- Minimum 750W power supply with appropriate PCIe power connectors (e.g., 12VHPWR or 3x 8-pin PCIe)
- At least 16GB of system memory (RAM)
- Microsoft Windows 10 64-bit (version 1809 or higher) or Linux 64-bit
- Internet connection for driver installation and updates

3.2. Physical Installation

Follow these steps carefully to install your NVIDIA GeForce RTX 5080 Founders Edition graphics card:

1. **Prepare Your System:** Power off your computer and unplug all cables from the power outlet. Open your computer case.
2. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard. This card requires a dual-slot space.
3. **Remove Slot Covers:** Remove the two metal slot covers from the back of your computer case corresponding to the chosen PCIe slot.
4. **Insert Graphics Card:** Carefully align the graphics card with the PCIe slot and press down firmly until it is fully seated. Ensure the retention clip on the motherboard clicks into place.
5. **Secure Card:** Secure the graphics card to the case using the screws from the removed slot covers.
6. **Connect Power:** Connect the required PCIe power cables from your power supply to the graphics card. Refer to your power supply and graphics card documentation for specific power connector requirements.
7. **Close Case:** Close your computer case and reconnect all cables.
8. **Power On:** Power on your computer.

Image: The NVIDIA GeForce RTX 5080 Founders Edition graphics card, showcasing its dual-fan design and sleek black finish.

4. OPERATING INSTRUCTIONS

4.1. Driver Installation

After physical installation, you must install the latest NVIDIA drivers for optimal performance and stability:

1. **Download Drivers:** Visit the official NVIDIA website (www.nvidia.com/drivers) and download the latest drivers for your GeForce RTX 5080 Founders Edition.
2. **Run Installer:** Execute the downloaded driver installer and follow the on-screen prompts. It is recommended to perform a "Clean Installation" to remove any previous driver remnants.
3. **Restart System:** Restart your computer once the driver installation is complete.

4.2. Software Configuration

NVIDIA provides software tools to enhance your experience:

- **NVIDIA GeForce Experience:** This application optimizes game settings, updates drivers automatically, and allows for recording gameplay.
- **NVIDIA Control Panel:** Access advanced display settings, 3D settings, and other GPU-specific configurations.

These applications are typically included with the driver package or can be downloaded separately from the NVIDIA website.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your graphics card:

- **Dust Removal:** Periodically clean dust from the fans and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Airflow:** Ensure your computer case has adequate airflow to prevent overheating. Keep cables tidy and ensure intake/exhaust fans are unobstructed.
- **Driver Updates:** Regularly check for and install the latest NVIDIA drivers to benefit from performance improvements and bug fixes.

6. TROUBLESHOOTING

This section addresses common issues you might encounter:

Issue	Possible Cause	Solution
No display output	Incorrect cable connection, card not seated properly, power not connected, driver issue.	Check display cable, reseat card, ensure power cables are connected, boot into safe mode to reinstall drivers.
System crashes or freezes	Overheating, unstable drivers, insufficient power supply.	Monitor temperatures, update drivers, ensure PSU meets requirements.
Poor performance in games/applications	Outdated drivers, incorrect settings, background processes.	Update drivers, optimize settings in NVIDIA Control Panel/GeForce Experience, close unnecessary applications.
Fan noise is excessive	Dust accumulation, high temperatures, fan curve settings.	Clean fans and heatsink, ensure good airflow, adjust fan curve using third-party software if desired.

7. TECHNICAL SPECIFICATIONS

Feature	Specification
Graphics Coprocessor	NVIDIA GeForce RTX 5080
Graphics RAM Size	24 GB

Feature	Specification
GPU Clock Speed	2295 MHz
Video Output Interface	HDMI, DisplayPort
Product Dimensions	11.81 x 12.28 x 0.04 inches (Packaging)
Item Weight	10.98 pounds

Note: Product dimensions provided may refer to packaging. Actual card dimensions may vary slightly.
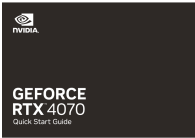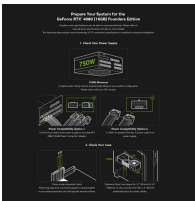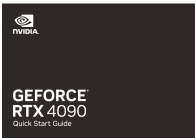
8. WARRANTY AND SUPPORT

NVIDIA products are manufactured to the highest quality standards. For information regarding the warranty coverage for your NVIDIA GeForce RTX 5080 Founders Edition, please refer to the warranty card included in your product packaging or visit the official NVIDIA support website.

For technical assistance, driver downloads, FAQs, and community forums, please visit the NVIDIA support portal:

Visit NVIDIA Support

Always ensure you are downloading drivers and software from official NVIDIA sources to prevent potential security risks.

Related Documents - RTX 5080 Founders Edition

	NVIDIA GeForce RTX 4070 Quick Start Guide A quick start guide for installing and setting up the NVIDIA GeForce RTX 4070 graphics card, including system specifications, hardware installation, and software configuration.
	GeForce RTX 4080 (16GB) Founders Edition System Preparation Guide Prepare your PC system for the NVIDIA GeForce RTX 4080 (16GB) Founders Edition graphics card by checking power supply and case compatibility requirements. This guide outlines PSU wattage, connector types, and physical space needed.
	NVIDIA GeForce RTX 4090 Quick Start Guide: Installation, Setup, and Drivers Get your NVIDIA GeForce RTX 4090 graphics card up and running with this comprehensive Quick Start Guide. Learn about system requirements, hardware installation, display connections, and software setup with GeForce Experience.

	[NVIDIA Quadro RTX Quick Start Guide](#) A quick start guide for installing and setting up NVIDIA Quadro RTX graphics cards, including minimum system requirements, included equipment, hardware installation steps, display connection, and software installation.
	[NVIDIA GeForce RTX 4060 Ti Quick Start Guide: Installation and Setup](#) Comprehensive guide to installing and setting up your NVIDIA GeForce RTX 4060 Ti graphics card, including system requirements, hardware installation, and software configuration.
	[NVIDIA TITAN X User Guide: Installation, Features, and Compliance](#) Comprehensive user guide for the NVIDIA TITAN X graphics card, covering hardware installation, software setup with GeForce Experience, SLI configuration, HDMI audio, key features, and regulatory compliances.