ASUS DUAL-RTX5060-O8G

ASUS Dual GeForce RTX 5060 8GB GDDR7 OC Edition Graphics Card User Manual

Model: DUAL-RTX5060-O8G

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your ASUS Dual GeForce RTX 5060 8GB GDDR7 OC Edition graphics card. The ASUS Dual GeForce RTX 5060 is designed to deliver robust thermal performance and broad compatibility, featuring advanced cooling solutions and a compact 2.5-slot form factor. It is powered by the NVIDIA Blackwell architecture and supports DLSS 4, offering enhanced graphics capabilities.

Key features include:

- **AI Performance:** 623 AI TOPS for advanced artificial intelligence tasks.
- **OC Mode:** Clock speeds up to 2565 MHz for enhanced performance.
- **NVIDIA Blackwell Architecture and DLSS 4:** For superior graphics and upscaling.
- **SFF-Ready Enthusiast GeForce Card:** Optimized for small form factor builds.
- **Axial-tech Fan Design:** Features a smaller fan hub for longer blades and a barrier ring to increase downward air pressure, improving cooling efficiency.

2. SAFETY INFORMATION

Please read the following safety guidelines carefully before installing or operating your graphics card:

- Always disconnect the power supply from your computer before installing or removing any components.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to the card and other components.
- Handle the graphics card by its edges to avoid touching sensitive components.
- Ensure proper ventilation within your computer case to prevent overheating.
- Do not expose the graphics card to moisture or extreme temperatures.
- If you encounter any issues, refer to the troubleshooting section or contact ASUS support.

3. WHAT'S IN THE BOX

Verify that all items are present in your product packaging:

- ASUS Dual GeForce RTX 5060 8GB GDDR7 OC Edition Graphics Card (DUAL-RTX5060-O8G)
- Speedsetup Manual / Quick Start Guide

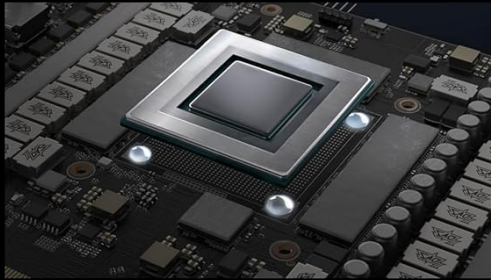Image: Included Quick Start Guide and Thank You card.

4. PRODUCT OVERVIEW

The ASUS Dual GeForce RTX 5060 is engineered for performance and durability. Below are its key physical features and design elements.

Image: The ASUS Dual GeForce RTX 5060 graphics card and its packaging.

4.1. Design and Cooling

Reliability

GPU Protection

ASUS GPU Guard applies adhesive to secure all four corners to reduce the risk of cracks.

Protective Backplate

The PCB is reinforced by a backplate that adds structural rigidity, helping to prevent flex and protect components and trace pathways from damage.

Stainless Steel Bracket

The mounting bracket of the Dual has been beefed up with 304 Stainless Steel that's harder and more resistant to corrosion.

Image: Side view illustrating the SFF-Ready 2.5-slot design, compatible with small-form-factor builds.

Image: Cooling features including a vented backplate for heat dissipation, Axial-tech fan design for improved airflow, and 0dB Technology for silent operation under light loads.

- **Axial-tech Fan Design:** Features two fans with a smaller hub to allow for longer blades and a barrier ring that increases downward air pressure, enhancing cooling efficiency.
- **0dB Technology:** Fans stop spinning when the GPU temperature is below 50°C, enabling silent operation during light tasks. They restart at 55°C to balance performance and acoustics.
- **2.5-Slot Design:** A compact design that ensures broad compatibility with various PC cases, including small form factor builds.
- **Vented Backplate:** Improves heat dissipation, contributing to better thermal performance and overall system stability.

4.2. Durability and Reliability

Cooling

Vented Backplate

The vented backplate improves heat dissipation, keeping the GPU cooler during heavy workloads. This additional airflow supports better thermal performance and overall system stability.

Axial-Tech Fans Design

Features a smaller fan hub that facilitates longer blades and a barrier ring that increases downward air pressure.
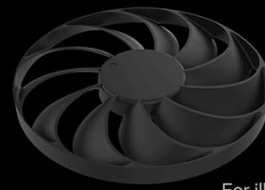
0dB Technology

For illustration only.

All two fans stop when GPU temperatures are below 50°C, allowing for quiet operation during light tasks. They restart at 55°C, balancing performance and acoustics for both work and play.

Image: Reliability features including GPU Guard for chip protection, a protective backplate for structural rigidity, and a stainless steel bracket for corrosion resistance.

- **GPU Protection:** ASUS GPU Guard applies adhesive to secure all four corners of the GPU chip, reducing the risk of cracks.
- **Protective Backplate:** The PCB is reinforced by a backplate that adds structural rigidity, preventing flex and protecting components and trace pathways from damage.
- **Stainless Steel Bracket:** The mounting bracket is constructed from 304 Stainless Steel, offering enhanced hardness and resistance to corrosion.

4.3. Connectivity

Image: Rear I/O panel with multiple DisplayPort and HDMI outputs.

- **Video Output Interfaces:** The card features three Native DisplayPort 2.1b ports and one Native HDMI 2.1b port, supporting high-resolution multi-monitor setups.
- **Power Connector:** Requires an 8-pin PCIe power connector from your power supply unit (PSU).

Image: Top view of the graphics card, highlighting the 8-pin power connector.

5. INSTALLATION AND SETUP

Follow these steps to properly install your ASUS Dual GeForce RTX 5060 graphics card:

5.1. Hardware Installation

1. **Prepare Your System:** Turn off your computer and disconnect the power cable from the wall outlet. 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 expansion slot covers from your computer case to accommodate the 2.5-slot width of the graphics card.
4. **Install Graphics Card:** Carefully align the graphics card with the PCIe slot and press it firmly until it is securely seated. Secure the card to the case with screws.
5. **Connect Power:** Connect an 8-pin PCIe power cable from your power supply unit (PSU) to the corresponding connector on the graphics card. Ensure your PSU has sufficient wattage (refer to specifications for recommended PSU wattage).
6. **Close Case:** Close your computer case and reconnect the power cable.

Image: The ASUS Dual GeForce RTX 5060 graphics card shown with a compatible 750W power supply unit. A suitable PSU is crucial for stable operation.

5.2. Driver Installation

1. **Power On:** Connect your monitor to one of the graphics card's output ports and power on your computer.
2. **Download Drivers:** Visit the official ASUS support website (www.asus.com/support) or NVIDIA's website to download the latest drivers for your GeForce RTX 5060.
3. **Install Drivers:** Follow the on-screen instructions to install the graphics drivers. A system restart may be required.

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6. OPERATION

Your ASUS Dual GeForce RTX 5060 offers various modes and software tools to optimize your experience.

6.1. Dual BIOS Switch

Image: The Dual BIOS switch, allowing selection between Performance (P Mode) and Quiet (Q Mode).

The graphics card features a Dual BIOS switch, allowing you to select between two operational modes:

- **Performance Mode (P Mode):** Maximizes cooling performance, suitable for demanding applications and gaming where optimal thermal management is critical.
- **Quiet Mode (Q Mode):** Utilizes a less aggressive fan curve for quieter operation, ideal for general use or scenarios where noise reduction is preferred, without altering power settings.

6.2. Software Utilities

Image: Overview of ASUS software utilities, GPU Tweak III for tuning and MuseTree for AI-powered image generation.

ASUS provides software to enhance your graphics card experience:

- **GPU Tweak III:** An advanced utility for GPU tuning, cooling control, and monitoring. It allows users to adjust clock speeds, voltage, and fan performance.
- **MuseTree:** An AI-powered image-generation application designed to assist in creative workflows, enabling effortless image creation and management.

6.3. NVIDIA Technologies

Leverage NVIDIA's advanced technologies for an optimized visual experience:

- **DLSS 4:** A revolutionary suite of neural rendering technologies that uses AI to boost frame rates, reduce latency, and improve image quality.
- **Ray Tracing:** Experience cinematic quality visuals with unprecedented realism, accelerated by fourth-generation RT Cores.
- **NVIDIA Reflex:** Optimizes the graphics pipeline for ultimate responsiveness, providing faster target acquisition, quicker reaction times, and improved aim precision in competitive games.

7. MAINTENANCE

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

- **Dust Removal:** Regularly clean dust from the fans and heatsink using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Airflow:** Maintain good airflow within your PC case by ensuring cables are neatly managed and case fans are functioning correctly.
- **Driver Updates:** Keep your graphics drivers updated to benefit from performance improvements and bug fixes.

8. TROUBLESHOOTING

If you encounter issues with your graphics card, refer to the following common problems and solutions:

8.1. No Display Output

- **Check Connections:** Ensure the monitor cable is securely connected to both the graphics card and the monitor.
- **Power Connection:** Verify that the 8-pin PCIe power connector is fully seated in the graphics card.
- **Reseat Card:** Power off the PC, unplug it, and reseat the graphics card in its PCIe slot.
- **Test with Another Monitor/Cable:** Rule out issues with your monitor or display cable.

8.2. System Instability or Crashes

- **Driver Issues:** Ensure you have the latest graphics drivers installed. Consider performing a clean installation of drivers.
- **Overheating:** Monitor GPU temperatures using software like GPU Tweak III. Ensure adequate case ventilation and clean any dust from the card's fans and heatsink.
- **Power Supply:** Verify your PSU meets the recommended wattage for the graphics card. Insufficient power can lead to instability.

8.3. Poor Performance in Games/Applications

- **Driver Updates:** Always use the latest graphics drivers.
- **Game Settings:** Adjust in-game graphics settings. Utilize DLSS 4 for improved performance.
- **BIOS Mode:** Ensure the Dual BIOS switch is set to Performance Mode (P Mode) for maximum performance.
- **Background Applications:** Close unnecessary background applications that may consume system resources.

9. SPECIFICATIONS

Feature	Specification
Model Number	DUAL-RTX5060-O8G
Graphics Coprocessor	NVIDIA GeForce RTX 5060
Video Memory	8 GB GDDR7
OC Mode Clock Speed	2565 MHz
Default Mode Clock Speed	2535 MHz
Memory Speed	2535 MHz
AI Performance	623 AI TOPS
Max Screen Resolution	7680x4320 Pixels
Video Output Interface	3x Native DisplayPort 2.1b, 1x Native HDMI 2.1b
Item Dimensions (LxWxH)	8.98 x 4.84 x 0.04 inches
Item Weight	1.4 pounds
Color	BLACK
Recommended PSU	750W (minimum, consult PSU companion image)

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your product or visit the official ASUS support website.

- **ASUS Support Website:** www.asus.com/support
- On the support website, select 'Graphics Cards' from the menu, then locate your product model (DUAL-RTX5060-O8G) to find drivers, utilities, FAQs, and contact information.

Related Documents - DUAL-RTX5060-O8G

ASUS GeForce RTX 5060 Ti DUAL OC Бейнекартасы Пайдалану нұсқаулығы

ASUS GeForce RTX 5060 Ti DUAL OC бейнекартасы үшін толық пайдалану нұсқаулығы, техникалық сипаттамалары, орнату, пайдалану және жою туралы ақпаратты қамтиды.

ASUS TUF Gaming GeForce RTX 3070 Ti OC Edition Graphics Card - Product Information

Detailed information about the ASUS TUF Gaming GeForce RTX 3070 Ti OC Edition Graphics Card, including specifications, features, and product details. Learn about its NVIDIA Ampere architecture, Axial-tech fan design, and military-grade components.

ASUS Graphics Card Installation and Setup Guide

A comprehensive guide for installing and setting up your ASUS graphics card, covering physical installation, display connections, and driver installation. Includes instructions in multiple languages.

ASUS Graphics Card Installation and Driver Setup Guide

Comprehensive guide for installing ASUS Graphics Cards, connecting displays, and setting up drivers. Includes safety information and support links.

ASUS TUF Gaming GeForce RTX 5090 32GB GDDR7 Graphics Card Specifications

Detailed specifications for the ASUS TUF Gaming TUF-RTX5090-O32G-GAMING NVIDIA GeForce RTX 5090 graphics card, featuring the NVIDIA GeForce RTX 5090 GPU with 32 GB of GDDR7 memory. Includes processor, memory, ports, performance, design, power, and packaging details.

ASUS Graphics Card Installation and Driver Guide

Comprehensive guide from ASUS covering the installation, display connection, and driver setup for ASUS graphics cards. Includes safety information and compliance details.