ASUS DUAL-RTX3060TI-O8G-MINI-V2

ASUS Dual GeForce RTX 3060 Ti Graphics Card User Manual

Model: DUAL-RTX3060TI-O8G-MINI-V2

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your ASUS Dual GeForce RTX 3060 Ti graphics card. Please read this manual thoroughly before installation to ensure proper setup and optimal performance.



Image: Front view of the ASUS Dual GeForce RTX 3060 Ti graphics card, showcasing its dual-fan design and sleek black aesthetic.

2. Key Features

- **NVIDIA Ampere Streaming Multiprocessors:** Offers 2X the FP32 throughput and improved power efficiency.
- **2nd Generation RT Cores:** Provides 2X the throughput of 1st gen RT Cores for enhanced ray tracing performance.
- **3rd Generation Tensor Cores:** Delivers up to 2X the throughput with structural sparsity and advanced AI algorithms like DLSS.
- **8GB GDDR6 Memory:** High-speed memory for demanding gaming and creative applications.
- **OC Edition:** Boost clock up to 1710 MHz (OC mode) for increased performance.
- **Stainless Steel Bracket:** Enhanced durability and corrosion resistance.
- **2-slot Design:** Maximizes compatibility and cooling efficiency, suitable for smaller chassis.
- **Axial-tech Fan Design:** Features a smaller fan hub and barrier ring for increased downward air pressure and improved cooling.
- **0dB Technology:** Allows for silent operation during light gaming or low-load scenarios.
- **Display Outputs:** 1 x HDMI 2.1 and 3 x DisplayPort 1.4a for versatile display connectivity.

3. Package Contents

Ensure all items are present in the package:

- ASUS Dual GeForce RTX 3060 Ti Graphics Card

- Documentation (Quick Start Guide, Warranty Card, etc.)

4. Setup and Installation

Follow these steps to install your graphics card:

1. **Prepare Your System:**
    - Turn off your computer and disconnect the power cable.
    - Open your computer case.
    - Ground yourself to discharge any static electricity.
2. **Remove Existing Graphics Card (if applicable):**
    - Unscrew any retaining screws holding the old card.
    - Carefully unclip the PCIe retention mechanism.
    - Gently pull the old card out of the PCIe slot.
3. **Install the ASUS Dual GeForce RTX 3060 Ti:**
    - Locate an available PCI Express 4.0 x16 slot on your motherboard.
    - Align the graphics card with the slot and press down firmly until it is securely seated and the retention clip engages.
    - Secure the card with screws to the chassis.
4. **Connect Power Cables:**
    - Connect the required PCIe power connectors from your power supply to the graphics card. Refer to the card's power input for the correct configuration (e.g., 8-pin connector).
5. **Close Case and Connect Peripherals:**
    - Close your computer case.
    - Connect your monitor(s) to the graphics card's DisplayPort or HDMI outputs.
    - Reconnect the power cable and other peripherals.

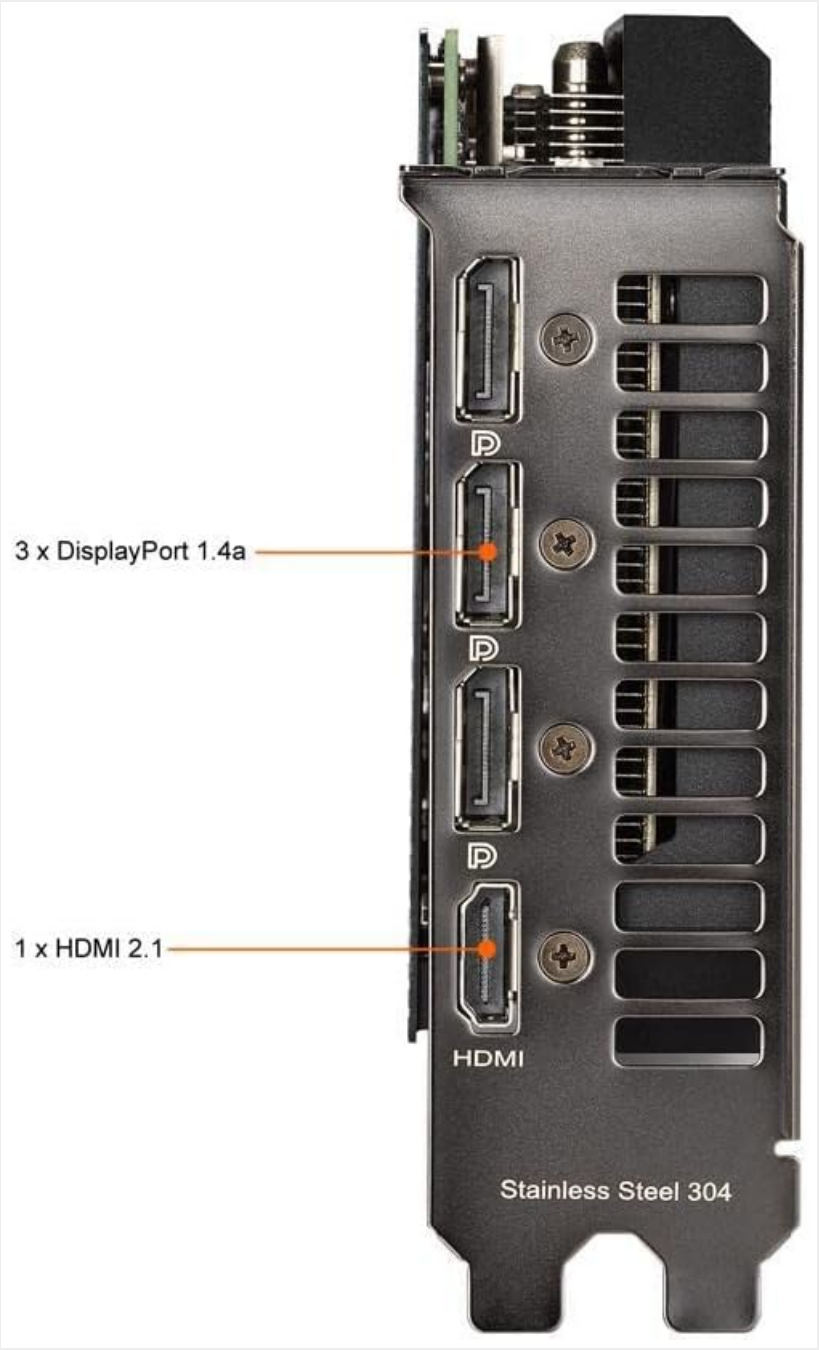


Image: Rear view of the ASUS Dual GeForce RTX 3060 Ti graphics card, showing the 3 DisplayPort 1.4a outputs and 1 HDMI 2.1 output, along with the stainless steel bracket.

5. Operating Instructions

1. **Power On:** Turn on your computer. The system should detect the new graphics card.
2. **Driver Installation:**
    - Download the latest NVIDIA drivers for your GeForce RTX 3060 Ti from the official NVIDIA website (www.nvidia.com/drivers).
    - Follow the on-screen instructions to install the drivers. A restart may be required.
3. **Display Configuration:**
    - Once drivers are installed, you can configure your display settings through your operating system's display settings or the NVIDIA Control Panel.
    - Adjust resolution, refresh rate, and multi-monitor setups as needed.

4. **Software Utilities:**
    - Consider installing ASUS GPU Tweak II or GPU Tweak III (available from the ASUS support website) for advanced monitoring, overclocking, and fan control.

6. Maintenance

Proper maintenance ensures the longevity and 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.
- **Driver Updates:** Keep your graphics drivers updated to benefit from performance improvements, bug fixes, and new features.
- **Temperature Monitoring:** Use monitoring software (e.g., ASUS GPU Tweak, HWMonitor) to keep an eye on the card's temperature, especially during heavy loads. Ensure adequate airflow within your PC case.
- **Physical Inspection:** Occasionally inspect the card for any loose connections or visible damage.

7. Troubleshooting

If you encounter issues, refer to the following common troubleshooting steps:

- **No Display Output:**
    - Ensure the monitor cable is securely connected to the graphics card and the monitor.
    - Verify the graphics card is fully seated in the PCIe slot.
    - Check that all necessary PCIe power cables are connected to the graphics card.
    - Test with a different monitor or cable if possible.
- **Driver Installation Issues:**
    - Download drivers directly from the official NVIDIA website.
    - Use Display Driver Uninstaller (DDU) in Safe Mode to completely remove old drivers before installing new ones.
- **System Instability/Crashes:**
    - Ensure your power supply unit (PSU) meets the minimum wattage requirements for your system, including the graphics card.
    - Monitor temperatures to ensure the card is not overheating. Improve case airflow if necessary.
    - Check for BIOS/UEFI updates for your motherboard.
- **Poor Performance:**
    - Ensure drivers are up to date.
    - Verify that the card is running at its expected clock speeds using monitoring software.
    - Check background applications that might be consuming system resources.

8. Specifications

Feature	Detail
Graphics Processor	NVIDIA GeForce RTX 3060 Ti

Video Memory	8 GB GDDR6
Boost Clock (OC Mode)	1710 MHz
Boost Clock (Gaming Mode)	1680 MHz
Memory Interface	256-Bit
Video Output Interface	1 x HDMI 2.1, 3 x DisplayPort 1.4a
Bus Standard	PCI Express 4.0
Dimensions (L x W x H)	12 x 6 x 3 inches (approximate)
Manufacturer	ASUS
Model Number	DUAL-RTX3060TI-O8G-MINIV2-1



Image: View of the ASUS Dual GeForce RTX 3060 Ti graphics card with approximate dimensions indicated, showing its compact form factor.

9. 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/
- **Product Registration:** Register your product on the ASUS website to receive the latest updates and support.

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