

ASUS DUAL-RTX2060-O6G-EVO

ASUS GeForce RTX 2060 O6G EVO Graphics Card User Manual

Model: DUAL-RTX2060-O6G-EVO | Brand: ASUS

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your ASUS GeForce RTX 2060 O6G EVO Graphics Card. This graphics card is designed to deliver powerful and silent gaming performance, featuring NVIDIA's Turing GPU architecture, 0dB dust-resistant fans, and support for ASUS GPU Tweak II software for easy overclocking and monitoring.

2. SAFETY INFORMATION

Please read the following safety guidelines carefully before installing or operating your graphics card to prevent damage to the product or injury to yourself.

- Always disconnect the power supply from your computer before installing or removing any components.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to discharge static electricity before handling the graphics card.
- Ensure proper ventilation within your computer case to prevent overheating.
- Do not expose the graphics card to moisture or extreme temperatures.
- Avoid using unofficial software or drivers that are not provided by ASUS or NVIDIA.

3. PACKAGE CONTENTS

Verify that all items are present in your product package:

- ASUS DUAL-RTX2060-O6G-EVO graphics card
- GPU Tweak II software (downloadable)

4. PRODUCT OVERVIEW

The ASUS GeForce RTX 2060 O6G EVO is engineered for performance and durability. Key features

include:

- **NVIDIA Turing Architecture:** Powered by NVIDIA Turing with a 1785 MHz Boost Clock, 1920 CUDA cores, and 6GB GDDR6 memory.
- **Wing-Blade Fans:** Features IP5X dust-resistance and operates at 0 dB levels when temperatures are below 55°C for silent operation.
- **Protective Backplate:** A durable aluminum backplate prevents PCB flex and protects key components.
- **Multiple Display Outputs:** Supports up to 4 monitors with DisplayPort 1.4, HDMI 2.0, and DVI ports.
- **GPU Tweak II:** Software for monitoring performance, streaming, and includes additional utilities like Game Booster and XSplit Gamecaster.



Figure 4.1: The ASUS GeForce RTX 2060 O6G EVO Graphics Card alongside its retail packaging.

Powered By NVIDIA® TURING™

Overclocked 6GB GDDR6 Memory with 1920 CUDA Cores



Figure 4.2: Side view of the graphics card, emphasizing its NVIDIA Turing architecture and memory specifications.

Quality and Performance

144-hour validation program puts cards through a series of stringent tests to ensure compatibility and performance with the latest games and applications



Figure 4.3: Top view illustrating the dual axial-tech fans and the 2.5 slot design for enhanced cooling and compatibility.

Protect and Secure

A protective backplate prevents PCB flexing and protects key components



Figure 4.4: Rear view showcasing the protective backplate designed to prevent PCB flexing and protect internal components.

5. SETUP

5.1 Hardware Installation

1. **Power Off:** Ensure your computer is completely powered off and unplugged from the wall outlet.
2. **Open Case:** Remove the side panel of your computer case.
3. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard.
4. **Remove Slot Covers:** Remove the necessary expansion slot covers from the back of your computer case corresponding to the PCIe slot.
5. **Insert Graphics Card:** Carefully align the graphics card with the PCIe slot and press down firmly until it is securely seated. A click may be heard.
6. **Secure Card:** Secure the graphics card to the case using the screw or latch mechanism.
7. **Connect Power:** Connect the required 8-pin PCIe power connector from your power supply unit (PSU) to the graphics card. Ensure a firm connection.
8. **Close Case:** Replace the computer case side panel.
9. **Connect Display:** Connect your monitor cable (HDMI, DisplayPort, or DVI) to the corresponding port on the graphics card.
10. **Power On:** Plug in your computer's power cord and power on the system.

5.2 Driver Installation

After hardware installation, you will need to install the latest drivers for optimal performance.

1. **Download Drivers:** Visit the official ASUS support website or NVIDIA's official driver download page. Select your graphics card model (RTX 2060) and operating system.
2. **Run Installer:** Download and run the driver installation package.
3. **Follow Prompts:** Follow the on-screen instructions to complete the installation. A system restart may be required.

6. OPERATING YOUR GRAPHICS CARD

6.1 Initial Boot-up

Upon successful driver installation, your operating system should recognize the graphics card. You can verify this in your system's Device Manager (Windows) or System Information (macOS/Linux).

6.2 Software and Utilities

ASUS provides the **GPU Tweak II** utility to enhance your graphics card experience. This software allows you to:

- Monitor GPU clock speed, temperature, and fan speed in real-time.
- Overclock your GPU for increased performance.
- Switch between different performance profiles (e.g., OC Mode, Gaming Mode, Silent Mode).
- Access Game Booster for optimizing system performance for gaming.
- Utilize XSplit Gamecaster for streaming and recording gameplay.

You can download GPU Tweak II from the official ASUS support website.

7. MAINTENANCE

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

- **Dust Removal:** Periodically clean the fans and heatsink of the graphics card using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Airflow:** Ensure your computer case has adequate airflow to prevent dust buildup and maintain optimal operating temperatures.
- **Driver Updates:** Regularly check for and install the latest graphics drivers from ASUS or NVIDIA 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:

- **No Display Output:**
 - Ensure the monitor cable is securely connected to both the graphics card and the monitor.
 - Verify that the graphics card is fully seated in the PCIe slot and the power connector is attached.
 - Test with a different display cable or monitor if possible.
- **Driver Installation Issues:**

- Download the latest drivers directly from the ASUS or NVIDIA website.
- Uninstall any previous graphics drivers using a utility like Display Driver Uninstaller (DDU) before attempting a fresh installation.

- **Overheating/Performance Drops:**

- Check fan operation on the graphics card.
- Ensure adequate airflow in your PC case. Clean any dust buildup on the graphics card heatsink and fans.
- Monitor temperatures using GPU Tweak II or other monitoring software.

- **System Instability/Crashes:**

- Ensure your power supply unit (PSU) meets the minimum wattage requirements for the graphics card and your system.
- Verify that drivers are up to date and not corrupted.
- Check for any conflicting software or background applications.

9. SPECIFICATIONS

Detailed technical specifications for the ASUS GeForce RTX 2060 O6G EVO Graphics Card:

Feature	Specification
Graphics Coprocessor	NVIDIA GeForce RTX 2060
Chipset Brand	NVIDIA
Graphics Card RAM Size	6 GB GDDR6
Memory Speed	1785 MHz
Max Screen Resolution	7680x4320
Video Output Interface	DVI, DisplayPort, HDMI
Item Weight	1 pounds
Product Dimensions (LxWxH)	9.53 x 5.12 x 2.09 inches
Manufacturer	ASUS

10. WARRANTY AND SUPPORT

Your ASUS GeForce RTX 2060 O6G EVO Graphics Card is covered by a manufacturer's warranty. For detailed warranty terms and conditions, please refer to the official ASUS website or the warranty card included with your product.

For technical support, driver downloads, and additional resources, please visit the official ASUS support page:

[Visit the ASUS Store on Amazon](#)

A PDF version of the user manual may also be available for download from the product's support page.

Related Documents - DUAL-RTX2060-O6G-EVO

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