

## ASUS ROG-STRIX-RTX3080-O10G-V2-GAMING

# ASUS ROG Strix NVIDIA GeForce RTX 3080 V2 OC Edition Gaming Graphics Card User Manual

## 1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your ASUS ROG Strix NVIDIA GeForce RTX 3080 V2 OC Edition Gaming Graphics Card. Please read this manual thoroughly before installing and using your graphics card to ensure proper functionality and to prevent damage.

The ASUS ROG Strix GeForce RTX 3080 V2 OC Edition is designed to deliver high-performance gaming and computing experiences, featuring NVIDIA Ampere architecture, 10GB GDDR6X memory, and advanced cooling solutions.

## 2. SAFETY INFORMATION

- Always disconnect the power supply from your computer before installing or removing any hardware components.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.
- Handle the graphics card by its edges to avoid touching sensitive components.
- Ensure adequate ventilation within your computer case to prevent overheating.
- Do not attempt to repair the graphics card yourself. Refer to qualified service personnel for assistance.

## 3. PACKAGE CONTENTS

Verify that all items are present in your package:

- ASUS ROG Strix NVIDIA GeForce RTX 3080 V2 OC Edition Gaming Graphics Card (Model: ROG-STRIX-RTX3080-O10G-V2-GAMING)
- ROG Velcro Hook & Loop cable ties
- ROG ruler
- Collection card
- Speed setup manual (this document)

## 4. PRODUCT OVERVIEW

The ASUS ROG Strix RTX 3080 V2 OC Edition features a robust design optimized for performance and cooling. Key

components and features include:



Figure 4.1: The ASUS ROG Strix RTX 3080 V2 OC Edition Graphics Card alongside its retail packaging.

#### 4.1. Axial-tech Fan Design

The graphics card incorporates an advanced Axial-tech fan design. This design features more fan blades and a reversed rotational direction for the center fan, which enhances airflow and reduces turbulence for improved cooling efficiency.

# Axial-tech Upgrades

The Axial-tech Fan Design has been tuned up with more fan blades and a reversed rotational direction for the center fan



**Figure 4.2:** Close-up view of the Axial-tech fan design, highlighting the fan blades and rotational direction.

## 4.2. 2.9-Slot Design

An enlarged heatsink is integrated into the 2.9-slot design, significantly expanding the cooling surface area. This provides greater thermal headroom, allowing the GPU to maintain lower temperatures under load.

# 2.9-slot Design

An enlarged heatsink expands cooling surface area compared to last gen for more thermal headroom than ever before



**Figure 4.3:** Side view illustrating the substantial 2.9-slot heatsink design for enhanced thermal dissipation.

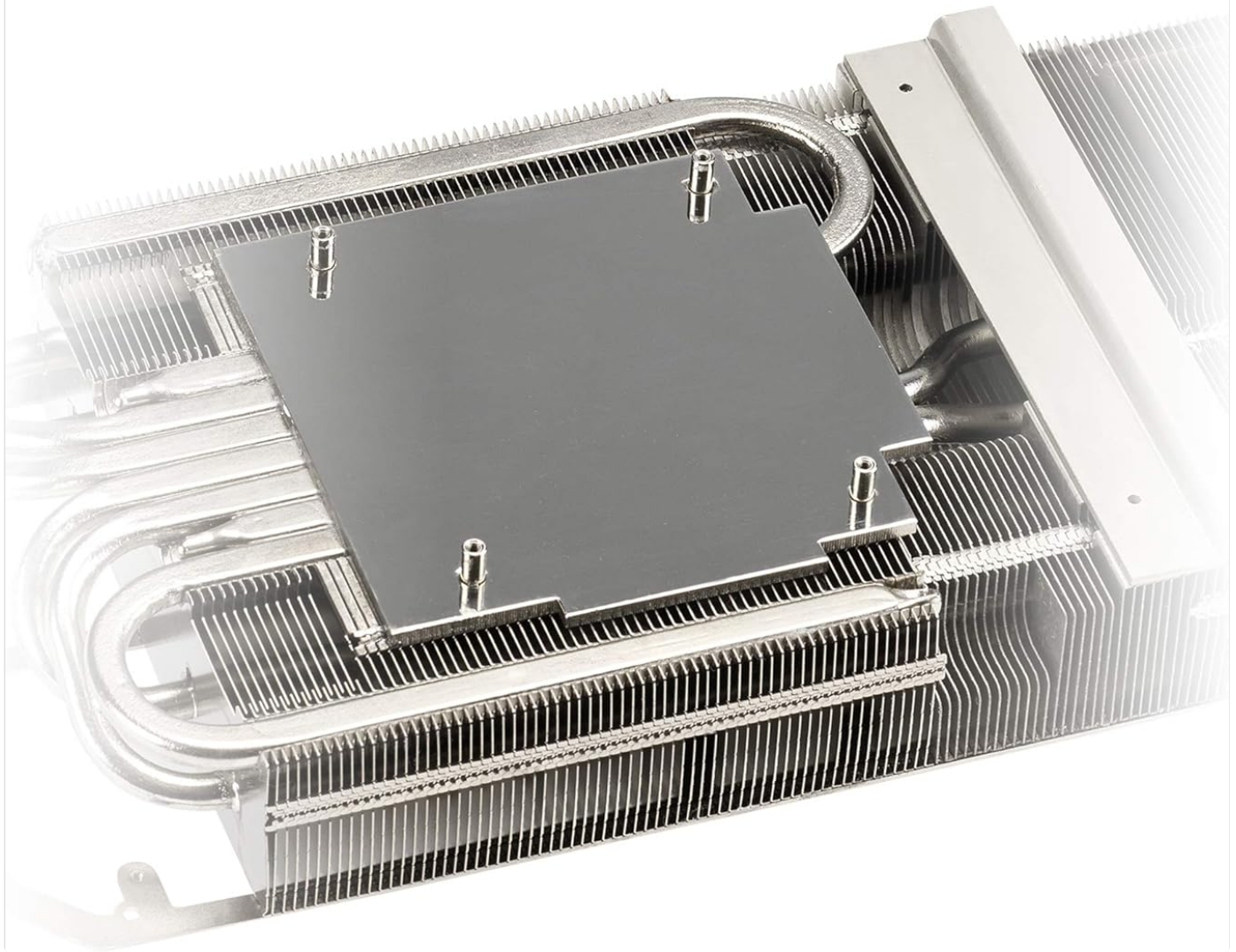
## 4.3. MaxContact Technology

The heat spreader utilizes MaxContact technology, which provides up to 2 times more contact with the GPU chip. This improved contact surface facilitates more efficient thermal transfer from the GPU to the heatsink, contributing to better cooling performance.



# MaxContact

The heat spreader makes up to 2x more contact with the GPU chip for improved thermal transfer.



**Figure 4.4:** Detailed view of the MaxContact heat spreader, showing its direct contact with the GPU die.

## 4.4. I/O Ports

The graphics card provides multiple display output options for versatile connectivity:

- **3 x Native DisplayPort 1.4a:** For high-resolution and high-refresh-rate monitors.
- **2 x Native HDMI 2.1:** Supporting 4K at 120Hz or 8K at 60Hz for modern displays and TVs.

3 x Native DisplayPort 1.4a

2 x Native HDMI 2.1



Figure 4.5: Rear view of the graphics card showing the DisplayPort and HDMI output connectors.

## 4.5. Auto-Extreme Technology

The card is manufactured using Auto-Extreme Technology, an automated manufacturing process that enhances reliability and ensures consistent quality across all components.

*Note: No official seller videos demonstrating Auto-Extreme Technology were provided in the product data.*

## 5. SETUP AND INSTALLATION

### 5.1. Pre-Installation Checklist

- **Power Supply:** Ensure your power supply unit (PSU) meets the recommended wattage for an RTX 3080 (typically 750W or higher, consult your PSU manufacturer for specific requirements). The card requires three 8-pin PCIe power connectors.
- **Motherboard:** Verify your motherboard has an available PCIe 4.0 x16 slot. The card is also compatible with PCIe 3.0 slots, but performance may be limited.
- **Case Clearance:** Confirm your computer case has sufficient space for the card's dimensions (12.53 x 5.51 x 2.27

inches).

- **Monitor Cables:** Have appropriate DisplayPort 1.4a or HDMI 2.1 cables ready.

## 5.2. Hardware Installation

1. **Prepare Your System:** Power off your computer and unplug all cables. Open your computer case.
2. **Remove Old Graphics Card (if applicable):** Unscrew any retaining screws, unclip the PCIe retention tab, and carefully remove the old card.
3. **Install New Graphics Card:** Align the graphics card with an available PCIe x16 slot. Press down firmly until it is securely seated and the PCIe retention tab clicks into place.
4. **Secure the Card:** Use screws to fasten the graphics card to the computer case's expansion slot brackets.
5. **Connect Power:** Connect three 8-pin PCIe power cables from your power supply to the corresponding power connectors on the graphics card. Ensure connections are firm.
6. **Close Case and Connect Peripherals:** Close your computer case, reconnect all cables (monitor, power, etc.), and power on your system.

## 5.3. Driver Installation

1. **Boot into Operating System:** Your system may boot with a basic display driver.
2. **Download Drivers:** Visit the official ASUS support website or NVIDIA's official driver download page. Select your graphics card model (RTX 3080) and operating system.
3. **Install Drivers:** Run the downloaded driver installer and follow the on-screen instructions. A system restart will likely be required.
4. **Verify Installation:** After restarting, open NVIDIA Control Panel or Device Manager to confirm the graphics card and drivers are correctly recognized.

# 6. OPERATING THE GRAPHICS CARD

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## 6.1. Connecting Displays

Connect your monitor(s) to the DisplayPort 1.4a or HDMI 2.1 ports on the graphics card. The card supports multiple displays simultaneously. Ensure your monitor is set to the correct input source.

## 6.2. ASUS GPU Tweak II Software

The ASUS GPU Tweak II utility allows you to monitor and fine-tune your graphics card's performance. You can download this software from the official ASUS support website.

- **Monitoring:** View real-time information on GPU clock speed, memory clock, temperature, and fan speed.
- **Performance Modes:** Easily switch between different performance profiles, such as OC Mode (Boost clock 1935 MHz) for maximum performance or Gaming Mode (Boost clock 1905 MHz) for a balanced experience.
- **Customization:** Adjust clock speeds, voltage, and fan curves to optimize performance or acoustics according to your preferences.

## 6.3. NVIDIA Features

Leverage NVIDIA's advanced features for an enhanced experience:

- **DLSS (Deep Learning Super Sampling):** Utilize AI rendering to boost frame rates while maintaining image quality.
- **Ray Tracing:** Experience realistic lighting, shadows, and reflections in supported games.
- **NVIDIA Broadcast:** Transform your room into a home studio with AI-powered voice and video effects.

## 7. MAINTENANCE

### 7.1. Cleaning

- **Dust Removal:** Periodically clean dust from the graphics card's fans and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning. Hold the fan blades gently to prevent over-spinning during cleaning.
- **Exterior Cleaning:** Use a soft, dry cloth to wipe the exterior of the card. Avoid using liquid cleaners directly on components.

### 7.2. Software Updates

Regularly check for and install the latest graphics drivers from the official ASUS or NVIDIA websites. Driver updates often include performance improvements, bug fixes, and support for new games and applications.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display output	Loose cable, incorrect input, card not seated, power not connected, driver issue.	<ul style="list-style-type: none"><li>• Ensure monitor cables are securely connected.</li><li>• Select correct input on monitor.</li><li>• Verify graphics card is fully seated in PCIe slot.</li><li>• Confirm all PCIe power connectors are attached.</li><li>• Reinstall or update graphics drivers.</li></ul>
System instability or crashes	Overheating, unstable overclock, driver conflict, insufficient power.	<ul style="list-style-type: none"><li>• Monitor GPU temperatures. Ensure adequate case airflow.</li><li>• Reset GPU Tweak II settings to default or reduce overclock.</li><li>• Perform a clean installation of graphics drivers.</li><li>• Verify PSU meets recommended wattage.</li></ul>
Fan noise or unusual sounds	Dust accumulation, fan obstruction, coil whine.	<ul style="list-style-type: none"><li>• Clean fans and heatsink from dust.</li><li>• Ensure no cables are obstructing fan rotation.</li><li>• Coil whine is a normal characteristic of some high-performance electronics and typically does not indicate a fault.</li></ul>

## 9. SPECIFICATIONS

Feature	Detail
Model Name	ROG-STRIX-RTX3080-O10G-V2-GAMING
Graphics Processor	NVIDIA GeForce RTX 3080



Feature	Detail
Video Memory	10GB GDDR6X
Boost Clock (OC Mode)	1935 MHz
Boost Clock (Gaming Mode)	1905 MHz
Memory Speed	19 Gbps (Effective)
Memory Interface	320-bit
Output Ports	3 x DisplayPort 1.4a, 2 x HDMI 2.1
Max Digital Resolution	7680x4320
Power Connectors	3 x 8-pin
Recommended PSU	750W or higher
Dimensions (LxWxH)	12.53 x 5.51 x 2.27 inches (31.85 x 14.01 x 5.78 cm)
Slot	2.9 Slot
Weight	3.9 pounds (1.77 kg)

## 10. WARRANTY AND SUPPORT

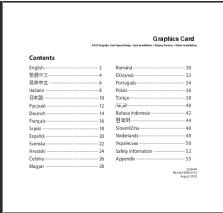

Your ASUS ROG Strix NVIDIA GeForce RTX 3080 V2 OC Edition Gaming Graphics Card comes with a manufacturer's warranty. For detailed warranty terms and conditions, please refer to the warranty card included in your package or visit the official ASUS support website.





For technical support, driver downloads, and further assistance, please visit the official ASUS support website:

[www.asus.com/support/](http://www.asus.com/support/)

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### Related Documents - ROG-STRIX-RTX3080-O10G-V2-GAMING

	<p><a href="#">ASUS Graphics Card Installation and Driver Guide</a></p> <p>Comprehensive guide from ASUS covering the installation, display connection, and driver setup for ASUS graphics cards. Includes safety information and compliance details.</p>
	<p><a href="#">ASUS ROG STRIX Power Supply Unit Quick Start Guide</a></p> <p>This document provides a quick start guide for the ASUS ROG STRIX Power Supply Unit, covering installation, safety precautions, and product features. It includes multilingual quick start information and compliance details.</p>

	<p><a href="#">Ghid Electronic ASUS ROG Strix SCAR 18 (2023) G834 - Manual Complet</a></p> <p>Explorați manualul electronic complet pentru notebook-ul ASUS ROG Strix SCAR 18 (2023) G834. Descoperiți ghiduri detaliate despre configurarea hardware, utilizarea sistemului Windows, sfaturi de întreținere și soluții de depanare.</p>
	<p><a href="#">ASUS ROG Strix 1200W Platinum Power Supply Unit - Features and Specifications</a></p> <p>Explore the features and specifications of the ASUS ROG Strix 1200W Platinum power supply unit, including GaN MOSFET, Intelligent Voltage Stabilizer, ROG Heatsinks, ATX 3.1 compatibility, and 10-year warranty.</p>
	<p><a href="#">ASUS ROG Strix OLED XG32UCWMG User Guide</a></p> <p>User guide for the ASUS ROG Strix OLED XG32UCWMG monitor, covering setup, features like GamePlus and Aura Sync, and safety information.</p>
	<p><a href="#">ASUS ROG Strix LC II ARGB Series Liquid CPU Cooler Quick Start Guide</a></p> <p>Comprehensive guide for installing the ASUS ROG Strix LC II ARGB Series liquid CPU cooler. Covers package contents, step-by-step installation for Intel and AMD platforms, cable connections, and software download instructions.</p>