

ZOTAC ZT-B50800Q-10P

ZOTAC Gaming GeForce RTX 5080 Solid OC White Edition Graphics Card User Manual

Model: ZT-B50800Q-10P

1. INTRODUCTION

The ZOTAC GAMING GeForce RTX 5080 SOLID OC White Edition is a high-performance graphics card designed for demanding gaming and creative workloads. It features NVIDIA's cutting-edge Blackwell architecture, DLSS 4 technology, and an advanced IceStorm 3.0 cooling solution. This manual provides essential information for the proper installation, operation, and maintenance of your graphics card.



Figure 1: Front view of the ZOTAC Gaming GeForce RTX 5080 Solid OC White Edition graphics card.

Key Features:

- Powered by the NVIDIA Blackwell architecture and DLSS 4.
- 16GB GDDR7, 256-bit, 30 Gbps, PCIe 5.0, Boost Clock 2640 MHz.
- IceStorm 3.0 Advanced Cooling with 3x 100mm BladeLink fans, Vapor Chamber, Composite Heatpipes, Pass-thru Airflow Design, FREEZE Fan Stop, Active Fan Control.
- Metal Backplate, Reinforced Frame Structure, Dual BIOS, SPECTRA 2.0 ARGB Lighting, SPECTRA Link.
- 3 x DisplayPort 2.1b, 1 x HDMI 2.1b, 8K Ready, 4 Display Ready, HDCP 2.3, VR Ready.

2. WHAT'S IN THE BOX

Carefully unpack your ZOTAC Gaming GeForce RTX 5080 Solid OC White Edition graphics card and ensure all components are present:

- ZOTAC GAMING GeForce RTX 5080 SOLID OC White Edition graphics card
- User Manual (this document)
- 3 x 8-pin-to-16-pin power cable
- SPECTRA LINK cable
- GPU Support Stand
- Quick Start Guide



Figure 2: Included accessories and documentation with the graphics card.

3. SETUP AND INSTALLATION

Follow these steps to properly install your ZOTAC Gaming GeForce RTX 5080 graphics card into your system.

3.1 System Requirements

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

- Minimum 750W power supply (consult your system builder or PSU manufacturer for specific recommendations).
- 3 x 8-pin PCIe power connectors available from your power supply.
- Windows 11 / Windows 10 64-bit (v1809 November 2018 or later).

3.2 Hardware Installation

1. **Prepare Your System:** Power off your computer and disconnect all cables. Open your computer case.
2. **Locate PCIe Slot:** Find an available PCI Express 5.0 x16 slot on your motherboard. Remove any expansion slot covers that obstruct the installation.
3. **Install the Graphics Card:** Align the graphics card with the PCIe slot and press it firmly until it is seated correctly and the retention clip locks into place. Secure the card to the chassis with screws.
4. **Connect Power Cables:** Connect the three 8-pin power cables from your power supply to the provided 16-pin adapter cable, then connect the 16-pin cable to the graphics card. Ensure a secure connection.
5. **Install GPU Support Stand:** Use the bundled GPU support stand to prevent sag and provide additional stability for the graphics card. Follow the quick guide provided with the stand for proper installation.
6. **Close Case and Connect Displays:** Close your computer case. Connect your display(s) to the graphics card using DisplayPort 2.1b or HDMI 2.1b cables.



Figure 3: DisplayPort and HDMI output ports on the graphics card.

4. OPERATING INSTRUCTIONS

Once the hardware is installed, follow these steps to get your graphics card fully operational.

4.1 Driver Installation

1. **Power On:** Turn on your computer.
2. **Download Drivers:** Visit the official NVIDIA website (www.nvidia.com/drivers) to download the latest Game Ready or Studio Drivers for your GeForce RTX 5080.
3. **Install Drivers:** Follow the on-screen instructions to complete the driver installation. A system restart may be required.

4.2 ZOTAC GAMING FireStorm Utility

The ZOTAC GAMING FireStorm Utility is a powerful software tool that allows you to monitor your graphics card, adjust fan speeds, and customize the SPECTRA 2.0 ARGB lighting.

- **Download:** Download the FireStorm Utility from the ZOTAC website (www.zotac.com/support).
- **Installation:** Install the utility by following the on-screen instructions.
- **Features:** Use FireStorm to access features like Active Fan Control, FREEZE Fan Stop, and SPECTRA 2.0 ARGB lighting customization.



Figure 4: ZOTAC GAMING FireStorm Utility for advanced control.

4.3 SPECTRA 2.0 ARGB Lighting and SPECTRA LINK

Your graphics card features customizable SPECTRA 2.0 ARGB lighting. Use the FireStorm Utility to select various lighting modes and colors. The SPECTRA LINK cable allows you to synchronize the graphics card's lighting with compatible motherboard ARGB systems for a unified aesthetic.

Video 1: Official ZOTAC video showcasing the ZOTAC GAMING GeForce RTX 50 series, highlighting features like SPECTRA 2.0 ARGB lighting and overall design.

5. MAINTENANCE

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

5.1 Cooling System

The IceStorm 3.0 Advanced Cooling system is designed for efficient heat dissipation. It includes a larger Vapor Chamber, up to 9 composite heatpipes, and a card-length heat sink. The triple BladeLink fans feature FREEZE Fan Stop (fans stop at low temperatures for silent operation) and Active Fan Control (individual fan speed adjustment via FireStorm Utility).

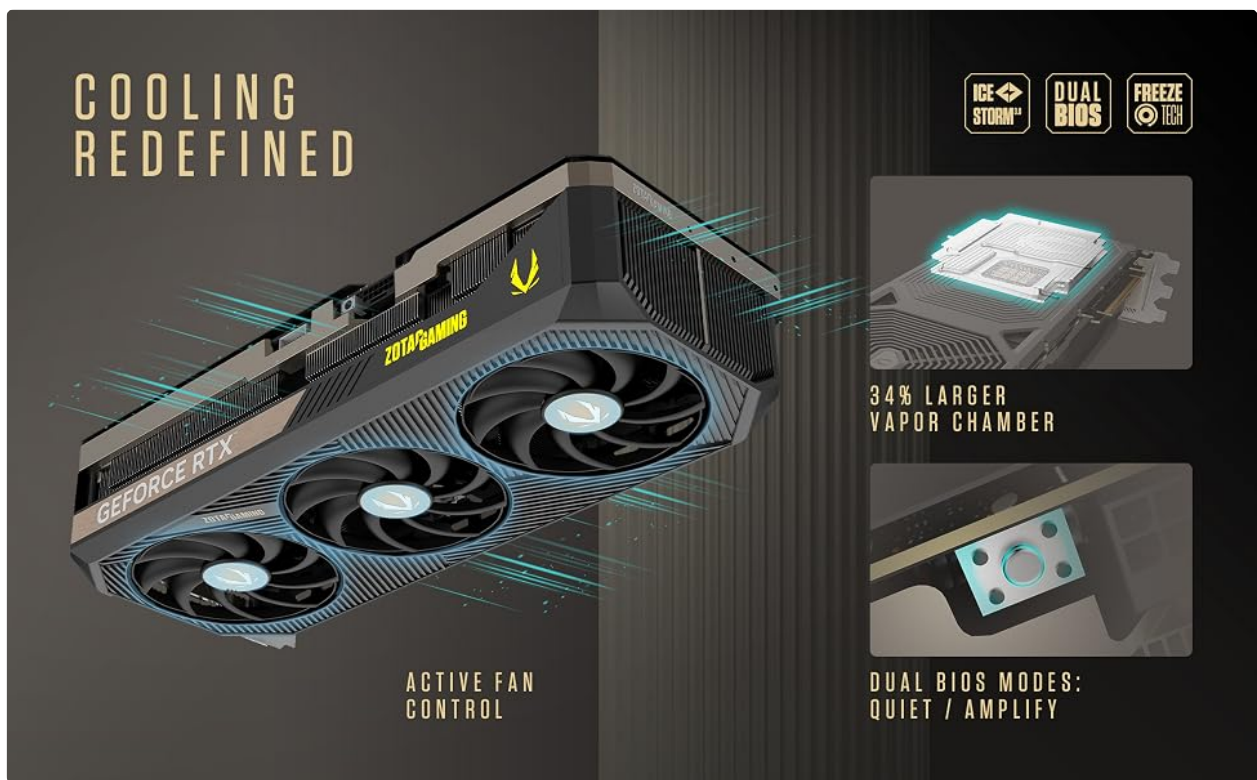


Figure 5: Illustration of the IceStorm 3.0 advanced cooling system components.

5.2 Cleaning

Regularly clean the fans and heatsink fins to prevent dust buildup, which can impede airflow and reduce cooling efficiency. Use compressed air to gently remove dust from the fan blades and heatsink. Ensure the system is powered off and unplugged before cleaning.

6. TROUBLESHOOTING

If you encounter issues with your graphics card, refer to the following common troubleshooting tips.

6.1 No Display Output

- Ensure the graphics card is fully seated in the PCIe slot.
- Verify that all power cables (including the 16-pin connector) are securely attached to the graphics card and power supply.
- Check the 12VHPWR Safety Light on the graphics card. A red light indicates an improper power connection. Re-seat the power cable if necessary.
- Confirm that your display cable is connected to the graphics card's output ports, not the motherboard's integrated graphics ports.
- Test with a different display cable or monitor if possible.

6.2 Driver Issues

- Perform a clean installation of the latest NVIDIA drivers. Uninstall existing drivers before installing new ones.
- Ensure your operating system is up to date.

6.3 Performance Problems

- Monitor GPU temperatures using the FireStorm Utility. Excessive heat can lead to performance throttling.
- Ensure adequate airflow within your PC case.
- Check for background applications consuming system resources.

7. SPECIFICATIONS

Feature	Specification
Graphics Coprocessor	NVIDIA GeForce RTX 5080
Graphics RAM Size	16 GB GDDR7
Memory Bus	256-bit
Memory Clock Speed	30 Gbps
Engine Boost Clock	2640 MHz
PCI Express	5.0 x16
Video Output Interface	3x DisplayPort 2.1b, 1x HDMI 2.1b
Max Display Resolution	7680x4320
Number of Fans	3
Dimensions (L x W x H)	329.7 mm (13 in) x 67.8 mm (2.67 in) x 137.8 mm (5.43 in) (3.5 slot)
UPC	810012085526

8. WARRANTY AND SUPPORT

Your ZOTAC Gaming GeForce RTX 5080 Solid OC White Edition graphics card comes with a 2 + 1 Years warranty. For customer service, technical support, or general inquiries, please visit the dedicated ZOTAC support page:

www.zotac.com/support



Figure 6: ZOTAC offers dedicated customer support for product assistance.