

ZOTAC ZT-T20710E-10M

ZOTAC Gaming GeForce RTX 2070 Super Mini Graphics Card User Manual

Model: ZT-T20710E-10M

1. INTRODUCTION

Welcome to the user manual for your ZOTAC Gaming GeForce RTX 2070 Super Mini Graphics Card. This guide provides essential information for the proper installation, operation, maintenance, and troubleshooting of your new graphics card, ensuring optimal performance and longevity.

Key Features

- Turing architecture with dedicated Ray Tracing Cores and Tensor Cores for NVIDIA DLSS.
- 8GB 256-bit GDDR6 memory with 14Gbps speed.
- Ice Storm 2.0 advanced cooling system for efficient heat dissipation.
- Durable metal wraparound backplate for enhanced structural integrity.
- 4K ready and supports up to 4 displays simultaneously.
- Super compact design with an 8.3-inch length, fitting in most systems.
- Display outputs: 3 x DisplayPort 1.4, 1 x HDMI 2.0b.
- Boost Clock: 1770 MHz.

2. SETUP AND INSTALLATION

Package Contents

- ZOTAC Gaming GeForce RTX 2070 Super Mini Graphics Card
- Quick Installation Guide (digital or printed)
- Driver CD (or instructions for online download)

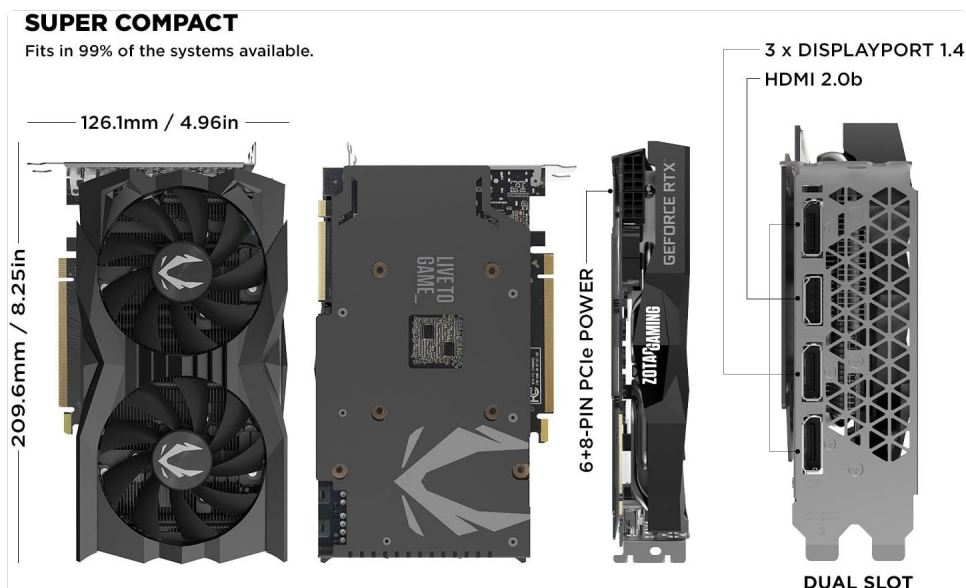
System Requirements

- PCI Express-compliant motherboard with one dual-width x16 graphics slot.
- Minimum 650W or greater system power supply with one 6-pin and one 8-pin PCIe power connector.
- Microsoft Windows 10 / 7 (64-bit) or Linux (64-bit) operating system.
- Internet connection for driver download and updates.

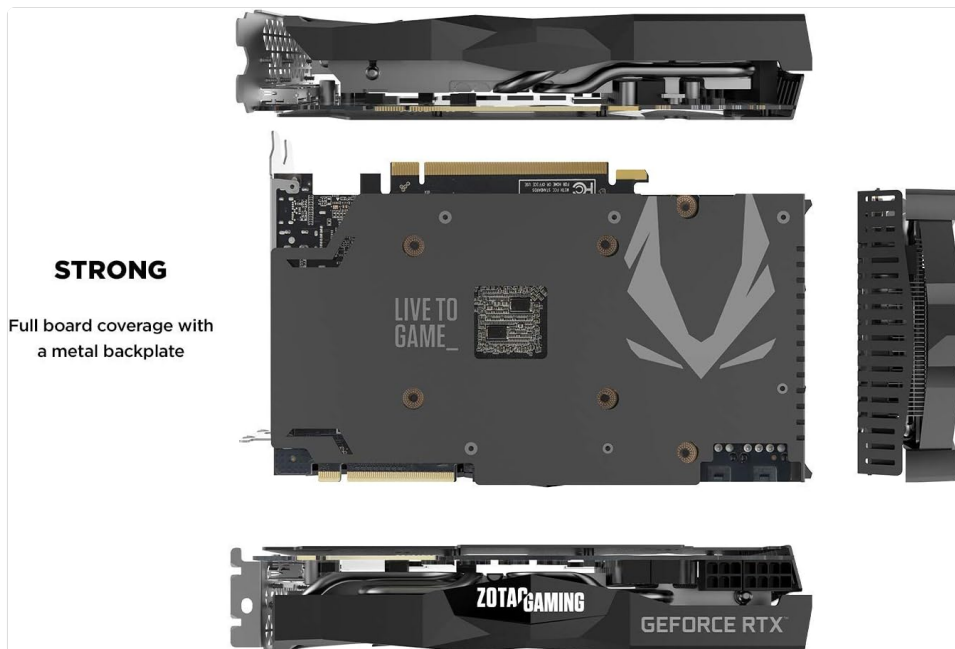
Physical Installation

Follow these steps to install your graphics card:

1. Power off your computer and disconnect all power cables from the wall outlet.
2. Open your computer case by removing the side panel.
3. Locate an available PCI Express x16 slot on your motherboard.
4. Remove any expansion slot covers corresponding to the chosen PCIe slot.
5. Carefully insert the graphics card into the PCIe x16 slot, applying even pressure until it is fully seated and the retention clip clicks into place.
6. Secure the graphics card to the case with a screw or the case's retention mechanism.
7. Connect the required 6-pin and 8-pin PCIe power cables from your power supply to the corresponding ports on the graphics card.
8. Close your computer case and reconnect all power and display cables.
9. Power on your computer.



This image illustrates the compact dimensions of the ZOTAC Gaming GeForce RTX 2070 Super Mini graphics card, measuring 209.6mm (8.25in) in length and 126.1mm (4.96in) in width. It also highlights the dual-slot design and the available display outputs: three DisplayPort 1.4 ports and one HDMI 2.0b port. The required 6+8-pin PCIe power connectors are also visible.



This image showcases the robust design of the ZOTAC Gaming GeForce RTX 2070 Super Mini, featuring a full board coverage with a durable metal backplate. This backplate enhances structural integrity and aids in heat dissipation.

3. OPERATION

Driver Installation

After physically installing the graphics card, it is crucial to install the latest graphics drivers. Visit the official NVIDIA website (www.nvidia.com/drivers) or ZOTAC website (www.zotac.com/support) to download the most current drivers for your RTX 2070 Super Mini.

Connecting Displays

Connect your monitor(s) to the available DisplayPort 1.4 or HDMI 2.0b outputs on the graphics card. The ZOTAC Gaming GeForce RTX 2070 Super Mini supports up to four displays simultaneously, allowing for multi-monitor setups.

Software Utilities

ZOTAC provides its FireStorm utility, which allows you to monitor your graphics card's performance, adjust fan speeds, and fine-tune settings for optimal gaming and productivity. This software can be downloaded from the ZOTAC official website.

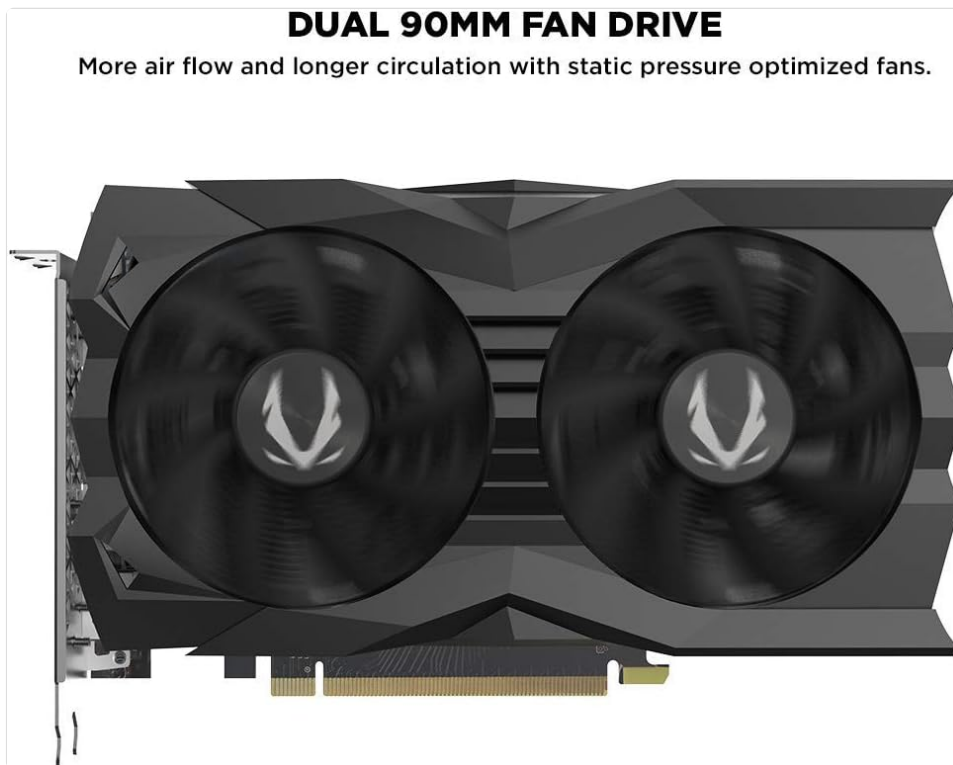
4. MAINTENANCE

Cleaning

Regular cleaning of your graphics card is essential for maintaining optimal cooling performance. Periodically, power off your computer and use compressed air to gently remove dust from the fans and heatsink fins. Avoid touching the delicate components directly.

Airflow

Ensure that your computer case has adequate airflow to prevent heat buildup. Keep the interior of your case free from cable obstructions and ensure case fans are functioning correctly to facilitate efficient heat exhaust.



This image highlights the dual 90mm fan drive system of the ZOTAC Gaming GeForce RTX 2070 Super Mini. These static pressure optimized fans are designed to provide increased airflow and longer circulation for efficient cooling.



This image provides an exploded view of the IceStorm 2.0 cooling system, ZOTAC's advanced cooling solution. It shows the three 6mm copper heatpipes for direct contact and maximum heat extraction, along with the wide array aluminum heatsink designed for full coverage and maximum heat dissipation.

5. TROUBLESHOOTING

No Display Output

- Ensure all power cables (6-pin and 8-pin PCIe) are securely connected to the graphics card and power supply.
- Verify that the graphics card is fully seated in the PCI Express slot on the motherboard.
- Check that your monitor cable is securely connected to both the graphics card and the monitor.
- Try connecting your monitor to a different display output port on the graphics card or try a different monitor if available.
- Confirm that your power supply meets the minimum wattage requirement (650W recommended).

Driver Issues

- Always uninstall previous graphics drivers before installing new ones to prevent conflicts.
- Download drivers exclusively from the official NVIDIA or ZOTAC websites to ensure authenticity and compatibility.
- Perform a clean installation of the drivers, selecting the 'Custom' and 'Perform a clean installation' options during the NVIDIA driver setup.

Overheating

- Check if the graphics card fans are spinning correctly. If not, ensure they are not obstructed.
- Clean any accumulated dust from the fans and heatsink using compressed air.
- Improve the airflow within your computer case by managing cables and ensuring proper fan placement.
- Use monitoring software (e.g., ZOTAC FireStorm, MSI Afterburner) to check GPU temperatures during operation.

6. TECHNICAL SPECIFICATIONS

Feature	Detail
Graphics Coprocessor	NVIDIA GeForce RTX 2070 Super
GPU Clock Speed	1770 MHz (Boost)
Video Memory	8 GB GDDR6
Memory Interface	256-bit
Memory Clock	14 Gbps
Output Ports	3 x DisplayPort 1.4, 1 x HDMI 2.0b
PCI Express	3.0 x16
Dimensions (L x W x H)	209.6mm x 126.1mm x 41mm (approx.)
Cooling System	Ice Storm 2.0 (Dual 90mm fans, 3x 6mm copper heatpipes, wide array aluminum heatsink)

Feature	Detail
Power Connectors	1 x 6-pin PCIe, 1 x 8-pin PCIe
Recommended PSU	650W
Features	Turing architecture, Ray Tracing Cores, Tensor Cores, NVIDIA DLSS, Metal Backplate, LED Lit
Item Weight	2.09 pounds
Manufacturer	Zotac

7. WARRANTY AND SUPPORT

Warranty Information

This product is a renewed item. Please refer to the specific warranty terms provided by the seller, "Renewed Technology Group", or Amazon Renewed for details on coverage and duration. Standard Amazon Renewed products typically come with a 90-day refund or replacement policy. It is recommended to retain your proof of purchase for any warranty claims.

Technical Support

For technical assistance, driver downloads, or software utilities related to your ZOTAC graphics card, please visit the official ZOTAC website or contact their customer support directly.

ZOTAC Official Website: www.zotac.com