

## MSI MEG Z890 GODLIKE

# MSI MEG Z890 GODLIKE E-ATX Motherboard User Manual

For Intel Core Ultra Processors (Series 2), LGA 1851

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, configuration, and maintenance of the MSI MEG Z890 GODLIKE E-ATX motherboard. Designed for Intel Core Ultra Processors (Series 2) with an LGA 1851 socket, this motherboard offers advanced features and robust performance for high-end computing systems.

Please read this manual thoroughly before beginning installation to ensure proper setup and operation.

## 2. KEY FEATURES

- **Processor Support:** Compatible with the latest Intel Core Ultra Processors (Series 2) for LGA 1851 socket.
- **Power Delivery:** Features a 26 DRPS (110A, SPS) VRM for the CPU and dual 8-pin CPU power connectors, ensuring stable power delivery for high-performance processors.
- **Memory Support:** Four DDR5 DIMM SMT slots supporting speeds up to 9200+ MT/s (OC).
- **Storage Options:** Includes two onboard M.2 Gen5 x4 slots and four M.2 Gen4 x4 slots, all with double-sided Shield Frozr cooling. An M.2 XPANDER-Z SLIDER GEN5 card provides two additional M.2 Gen5 slots.
- **Expansion Slots:** Premium GPU support with PCIe 5.0 x16 and PCIe 4.0 x4 slots.
- **Cooling Solutions:** Equipped with Frozr Guard, including a wavy fin design, direct-touch cross heat-pipe, 9W/mK MOSFET thermal pads, extra choke thermal pads, and EZ M.2 Shield Frozr II.
- **Connectivity:** Integrated Wi-Fi 7, Bluetooth 5.4, Marvell 10G Super LAN, Intel Killer 5G LAN, onboard Thunderbolt 4 Type-C, and a Thunderbolt 5 accessory card.
- **User-Friendly Design:** EZ DIY features such as EZ Link with EZ Bridge and EZ Control Hub, PCIe Release, EZ Magnetic M.2 Shield Frozr II, and EZ M.2 Clip II for simplified assembly.
- **Dynamic Dashboard III:** An integrated 3.99" LCD for hardware monitoring and personalization.

### 3. PACKAGE CONTENTS

Verify that all items are present and in good condition upon opening the package. If any items are missing or damaged, contact your retailer.



Figure 3.1: MSI MEG Z890 GODLIKE Motherboard with included accessories and retail packaging.

- MSI MEG Z890 GODLIKE E-ATX Motherboard
- M.2 XPANDER-Z SLIDER GEN5 Card
- Thunderbolt 5 Accessory Card
- SATA Cables
- Wi-Fi Antennas
- M.2 Screws and Standoffs
- User Manual and Documentation

## 4. INSTALLATION GUIDE

Before installation, ensure your system is powered off and unplugged from the wall outlet. Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.

### 4.1. CPU Installation

1. Locate the LGA 1851 socket on the motherboard.
2. Open the CPU socket lever and remove the protective cover.
3. Carefully align the Intel Core Ultra Processor (Series 2) with the socket, ensuring the gold triangle on the CPU matches the indicator on the socket.
4. Gently place the CPU into the socket without forcing it.
5. Close the socket lever to secure the CPU.

### 4.2. Memory (RAM) Installation

1. Locate the four DDR5 DIMM slots.
2. Open the clips at both ends of the DIMM slot.
3. Align the notch on the DDR5 memory module with the key in the DIMM slot.
4. Insert the memory module firmly into the slot until the clips snap into place.
5. For dual-channel configuration, refer to the motherboard layout for recommended slot pairing.

### 4.3. M.2 SSD Installation

The motherboard supports both Gen5 and Gen4 M.2 SSDs with integrated Shield Frozr cooling.

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Figure 4.1: Overview of M.2 and PCIe slots, including the M.2 XPANDER-Z SLIDER GEN5 card.

1. Locate the M.2 slots on the motherboard. Some slots are covered by M.2 Shield Frozr heatsinks.
2. Remove the M.2 Shield Frozr heatsink by unscrewing it.
3. Insert the M.2 SSD into the slot at an angle.
4. Secure the M.2 SSD using the EZ M.2 Clip II or a screw.
5. Reattach the M.2 Shield Frozr heatsink to ensure optimal cooling.
6. For additional M.2 Gen5 storage, install the M.2 XPANDER-Z SLIDER GEN5 card into an available PCIe slot and follow its specific instructions.

#### 4.4. Graphics Card Installation

1. Locate the PCIe 5.0 x16 slot.
2. Remove the corresponding expansion slot cover from your PC case.
3. Align your graphics card with the PCIe slot and press down firmly until it clicks into place.
4. Secure the graphics card to the case with a screw.

5. Connect the necessary PCIe power cables from your power supply to the graphics card.

## 4.5. Power Connections

1. Connect the 24-pin ATX main power connector from your power supply to the motherboard.
2. Connect the dual 8-pin CPU power connectors (EPS12V) from your power supply to the motherboard.
3. Connect any additional power cables required for your graphics card or other components.

## 4.6. Front Panel and Peripheral Connections

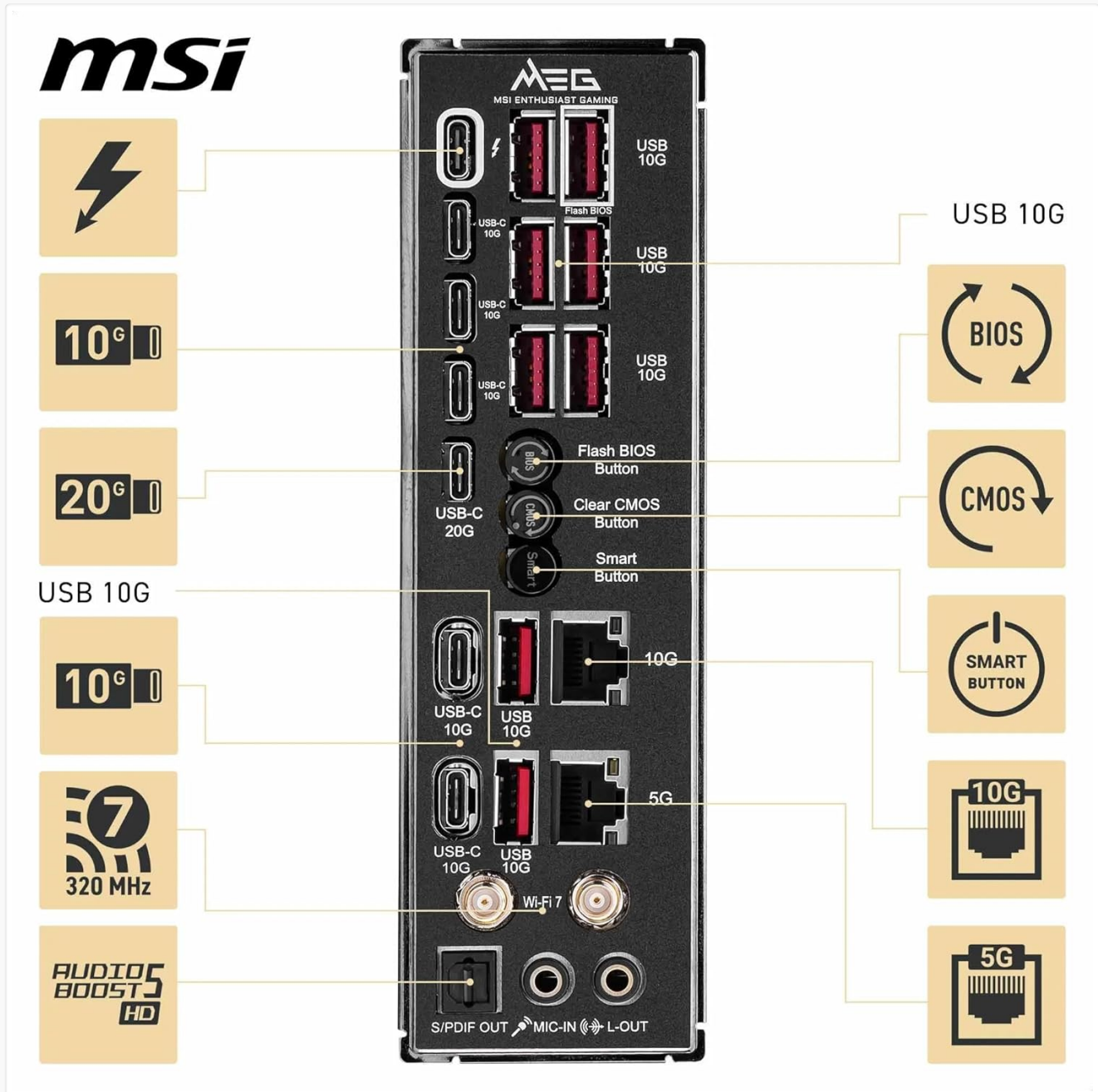


Figure 4.2: Detailed view of the rear I/O panel connections.

- Connect your case's front panel connectors (power button, reset button, USB ports, audio jacks) to the corresponding headers on the motherboard. Refer to the motherboard manual for exact header locations.
- Attach the Wi-Fi antennas to the rear I/O panel connectors.
- Connect your display to the graphics card.
- Connect your keyboard, mouse, and other USB devices to the available USB ports.

- Connect your Ethernet cable to either the 10G or 5G LAN port.

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## 5. OPERATING INSTRUCTIONS

### 5.1. Initial Boot-Up

1. After all components are installed and connected, plug in the power cord and turn on your power supply.
2. Press the power button on your PC case.
3. The system should power on, and you may see the MSI logo or BIOS screen.

### 5.2. BIOS/UEFI Setup

To enter the BIOS/UEFI setup, press the **DEL** key repeatedly during the initial boot sequence. From the BIOS, you can configure system settings, boot order, and monitor hardware status.

### 5.3. Driver Installation

After installing your operating system, install the necessary drivers for the motherboard components (chipset, LAN, Wi-Fi, audio, etc.). These drivers are typically provided on a USB drive included with the motherboard or can be downloaded from the official MSI website.

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## 6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your motherboard and PC system.

- **Dust Removal:** Periodically clean dust from the motherboard, heatsinks, and fans using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Thermal Paste:** If replacing the CPU cooler, reapply thermal paste to the CPU for efficient heat transfer.
- **BIOS Updates:** Check the MSI website for the latest BIOS/UEFI updates. Update the BIOS only if necessary and follow MSI's instructions carefully.
- **Cable Management:** Ensure cables are neatly routed to improve airflow and prevent interference.

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## 7. TROUBLESHOOTING

This section addresses common issues you might encounter during setup or operation.

### 7.1. No Power / No Boot

- Verify all power cables (24-pin ATX, 8-pin CPU, GPU power) are securely connected.
- Ensure the power supply switch is in the 'ON' position.
- Check front panel connections (power button header) for correct placement.
- Try booting with minimal components (CPU, one RAM stick, graphics card) to isolate the issue.

### 7.2. No Display Output

- Ensure your monitor is connected to the graphics card, not the motherboard's integrated graphics ports

(unless using an Intel processor with integrated graphics).

- Verify the graphics card is fully seated in its PCIe slot and has all necessary power connections.
- Test with a different display cable or monitor if possible.

### 7.3. System Instability / Crashes

- Check CPU and GPU temperatures using monitoring software. Ensure cooling solutions are properly installed.
- Verify RAM modules are correctly seated and compatible with the motherboard. Run memory diagnostic tools.
- Ensure all drivers are up-to-date.
- Reset BIOS settings to default.

## 8. SPECIFICATIONS



Figure 8.1: MSI MEG Z890 GODLIKE Motherboard highlighting key features and components.

Feature	Detail
Brand	MSI
Model Name	MEG Z890 GODLIKE
CPU Socket	LGA 1851
Compatible Processors	Intel Core Ultra Processors (Series 2)
Chipset Type	Intel Z890
RAM Memory Technology	DDR5
Memory Clock Speed	9200 MHz (OC)
Product Dimensions	10.91 x 11.97 x 2.36 inches
Item Weight	6.83 pounds
LAN	Marvell 10G Super LAN + Intel Killer 5G LAN
Wireless Connectivity	Wi-Fi 7, Bluetooth 5.4
Thunderbolt	Thunderbolt 4 Type-C (onboard), Thunderbolt 5 (accessory card)

## 9. WARRANTY AND SUPPORT

Specific warranty terms and conditions for the MSI MEG Z890 GODLIKE motherboard are not detailed within this manual. For comprehensive warranty information, technical support, driver downloads, and BIOS updates, please visit the official MSI website:

**[www.msi.com](http://www.msi.com)**

You may also contact MSI customer support directly for assistance with product-related inquiries or issues.