

MSI PRO B760M-A

MSI PRO B760M-A WiFi DDR4 Motherboard User Manual

Model: PRO B760M-A
Brand: MSI

1. INTRODUCTION

This user manual provides comprehensive instructions for the installation, operation, and maintenance of the MSI PRO B760M-A WiFi DDR4 ProSeries Motherboard. Designed to support 12th and 13th Gen Intel Processors with an LGA 1700 socket, this motherboard offers robust performance and connectivity features including DDR4 memory support, PCIe 5.0, M.2 slots, 2.5Gbps LAN, USB 3.2 Gen2, and Wi-Fi 6E. Please read this manual thoroughly before proceeding with installation to ensure proper setup and optimal performance.

2. PRODUCT OVERVIEW

The MSI PRO B760M-A WiFi DDR4 motherboard is a micro-ATX (mATX) form factor board built for reliability and efficiency, suitable for professional and general computing tasks. It features a robust power delivery system, comprehensive cooling solutions, and a wide array of connectivity options to meet diverse user needs.

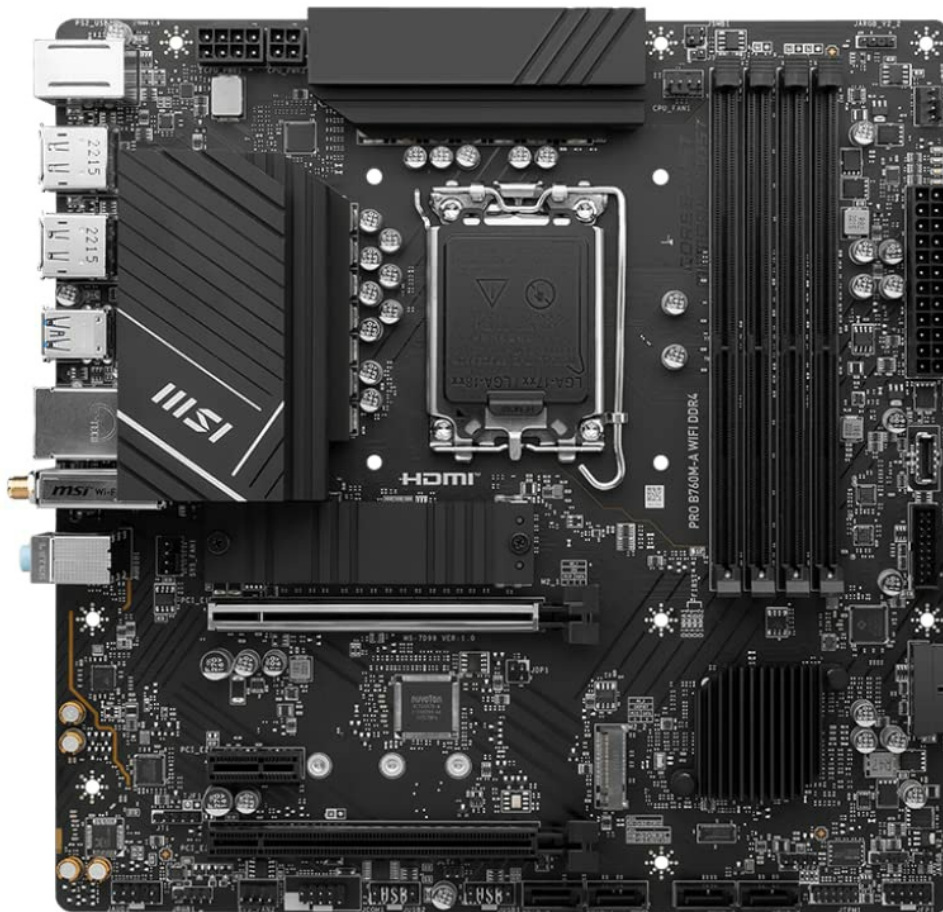


Figure 2.1: Top-down view of the MSI PRO B760M-A WiFi DDR4 Motherboard, showcasing the LGA 1700 CPU socket, four DDR4 DIMM slots, PCIe slots, M.2 slots, and various I/O ports.

3. SETUP GUIDE

Follow these steps carefully for proper installation of your motherboard and components.

3.1. CPU Installation

1. Locate the LGA 1700 CPU socket on the motherboard.
2. Gently push down the load lever and pull it to the side to open the CPU socket retention frame.
3. Align the triangular mark on the CPU with the corresponding mark on the socket. Carefully place the CPU into the socket, ensuring it sits flat without force.
4. Close the retention frame and push the load lever back into its locked position.

Note: Handle the CPU by its edges only. Avoid touching the gold contacts or the socket pins.

3.2. RAM (DDR4) Installation

1. Identify the four DDR4 DIMM slots. For dual-channel operation, refer to the motherboard manual for specific slot pairing (usually slots 2 and 4).
2. Open the clips at both ends of the DIMM slot.
3. Align the notch on the DDR4 memory module with the key in the DIMM slot.
4. Press down firmly on both ends of the memory module until the clips snap into place.

3.3. Storage Device Installation (M.2 and SATA)

3.3.1. M.2 SSD Installation

1. Locate the M.2 slots on the motherboard. This board supports multiple M.2 slots, including one with PCIe 4.0 x4 support.
2. Remove the M.2 heatsink (if present) and the standoff screw from the desired M.2 slot.
3. Insert the M.2 SSD into the slot at a 30-degree angle.
4. Gently push the SSD down and secure it with the standoff screw. Reattach the M.2 heatsink if applicable.

3.3.2. SATA Drive Installation

1. Connect one end of a SATA data cable to a SATA port on the motherboard.
2. Connect the other end of the SATA data cable to your SATA HDD/SSD.
3. Connect a SATA power cable from your power supply unit (PSU) to the SATA drive.

3.4. PCIe Device Installation (Graphics Card, etc.)

1. Locate the PCIe 5.0 x16 slot for your graphics card.
2. Open the retention clip at the end of the PCIe slot.
3. Align your graphics card with the slot and press down firmly until it clicks into place and the retention clip closes.
4. Secure the graphics card to your PC case with screws.
5. Connect any necessary PCIe power cables from your PSU to the graphics card.

3.5. Power Connections

- **24-pin ATX Power Connector:** Connect the main 24-pin power cable from your PSU to the corresponding connector on the motherboard.
- **8-pin CPU Power Connector:** Connect the 8-pin (or 4+4 pin) CPU power cable from your PSU to the connector near the CPU socket.

3.6. Front Panel Connections

Connect the cables from your PC case (Power Button, Reset Button, HDD LED, Power LED, USB, Audio) to the corresponding headers on the motherboard. Refer to the motherboard's detailed diagram for exact pin assignments.

4. OPERATING INSTRUCTIONS

4.1. Initial Boot and BIOS Setup

1. After assembling all components, connect your monitor, keyboard, and mouse.
2. Power on your system. Press the **DEL** key repeatedly during startup to enter the BIOS/UEFI setup utility.
3. In the BIOS, you can configure boot order, enable/disable features, monitor system status, and update the BIOS firmware.

4.2. Driver Installation

After installing your operating system, install the necessary drivers for the motherboard's components (chipset, LAN, Wi-Fi, audio, USB, etc.). These drivers are typically available on the MSI support website for your specific motherboard model.

5. MAINTENANCE

- **Dust Removal:** Regularly clean dust from the motherboard and components using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **BIOS/Firmware Updates:** Periodically check the MSI website for updated BIOS versions. BIOS updates can improve stability, compatibility, and performance. Follow MSI's instructions carefully when updating the BIOS.
- **Driver Updates:** Keep your system drivers updated to ensure optimal performance and compatibility with new software and hardware.
- **Cable Management:** Ensure cables inside the case are neatly managed to improve airflow and prevent obstruction.

6. TROUBLESHOOTING

This section addresses common issues you might encounter.

- **No Power/No Boot:**
 - Check all power connections (24-pin ATX, 8-pin CPU, GPU PCIe power).
 - Ensure the PSU is switched on and connected to a working power outlet.
 - Verify front panel power button connection.
- **No Display:**
 - Ensure the monitor is connected to the graphics card (or motherboard if using integrated graphics).
 - Reseat the graphics card and RAM modules.
 - Test with a single RAM stick in different slots.
- **System Instability/Crashes:**
 - Check CPU and GPU temperatures. Ensure cooling solutions are properly installed.
 - Run memory diagnostic tools to check for RAM errors.
 - Ensure all drivers are up to date.
- **Wi-Fi/LAN Connectivity Issues:**
 - Install or update Wi-Fi/LAN drivers.
 - Ensure Wi-Fi antennas are securely connected.
 - Check network cable connection for LAN.

For more detailed troubleshooting, refer to the official MSI support website or contact MSI technical support.

7. SPECIFICATIONS

Key technical specifications for the MSI PRO B760M-A WiFi DDR4 Motherboard:

Feature	Specification
Brand	MSI
Model Name	PRO B760M-A
CPU Socket	LGA 1700

Feature	Specification
Compatible Processors	12th/13th Gen Intel Processors
RAM Memory Technology	DDR4
Memory Storage Capacity (Max)	64 GB
Chipset Type	Intel B760
Graphics Card Interface	PCIe 5.0, PCI Express
LAN	2.5Gbps LAN
Wireless Connectivity	Wi-Fi 6E
USB	USB 3.2 Gen2
Product Dimensions	9.6 x 9.6 x 2.5 inches (mATX)
Item Weight	1 pounds

8. WARRANTY AND SUPPORT

This MSI motherboard is covered by a manufacturer's warranty. For detailed warranty terms, conditions, and duration, please refer to the warranty card included with your product or visit the official MSI website. For technical support, driver downloads, and further assistance, please visit the MSI support portal:

[MSI Official Support Website](#)

When contacting support, please have your motherboard model (PRO B760M-A) and serial number ready.