MSI 911-7D43-003

MSI PRO B660M-A WiFi DDR4 Motherboard User Manual

Model: PRO B660M-A WIFI DDR4

1. Introduction

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of the MSI PRO B660M-A WiFi DDR4 Micro-ATX motherboard. This motherboard is designed to support Intel 12th Gen Core Processors with an LGA 1700 socket, featuring DDR4 memory support up to 4800+MHz/OC, PCIe 4.0 x16 slot, dual M.2 Gen4 slots, 2.5G LAN, and Wi-Fi 6 connectivity. Please read this manual thoroughly before proceeding with installation.

2. Package Contents

Verify that all items listed below are present in your motherboard package. If any item is missing or damaged, contact your retailer.



Image: MSI PRO B660M-A WiFi DDR4 Motherboard, I/O Shield, SATA Cables, M.2 Screws, and Wi-Fi Antenna.

- MSI PRO B660M-A WiFi DDR4 Motherboard
- I/O Shield
- 2 x SATA Cables
- 2 x M.2 Screws
- Wi-Fi Antenna
- User Manual (this document)

3. Setup

3.1 Before You Begin

- Ensure you have a static-free environment. Use an anti-static wrist strap or frequently touch a grounded metal object.
- Turn off and unplug your power supply before installing or removing any components.
- Refer to the specific component manuals for detailed installation instructions.

3.2 Component Installation



Image: Top-down view of the MSI PRO B660M-A WiFi DDR4 Motherboard, showing CPU socket, RAM slots, and M.2 slots.

3.2.1 CPU Installation (LGA 1700)

1. Open the CPU socket lever and lift the load plate.
2. Carefully align the CPU with the socket, ensuring the triangular mark on the CPU matches the mark on the socket.
3. Gently place the CPU into the socket without forcing it.
4. Close the load plate and secure it with the lever.

3.2.2 RAM Installation (DDR4 DIMM Slots)

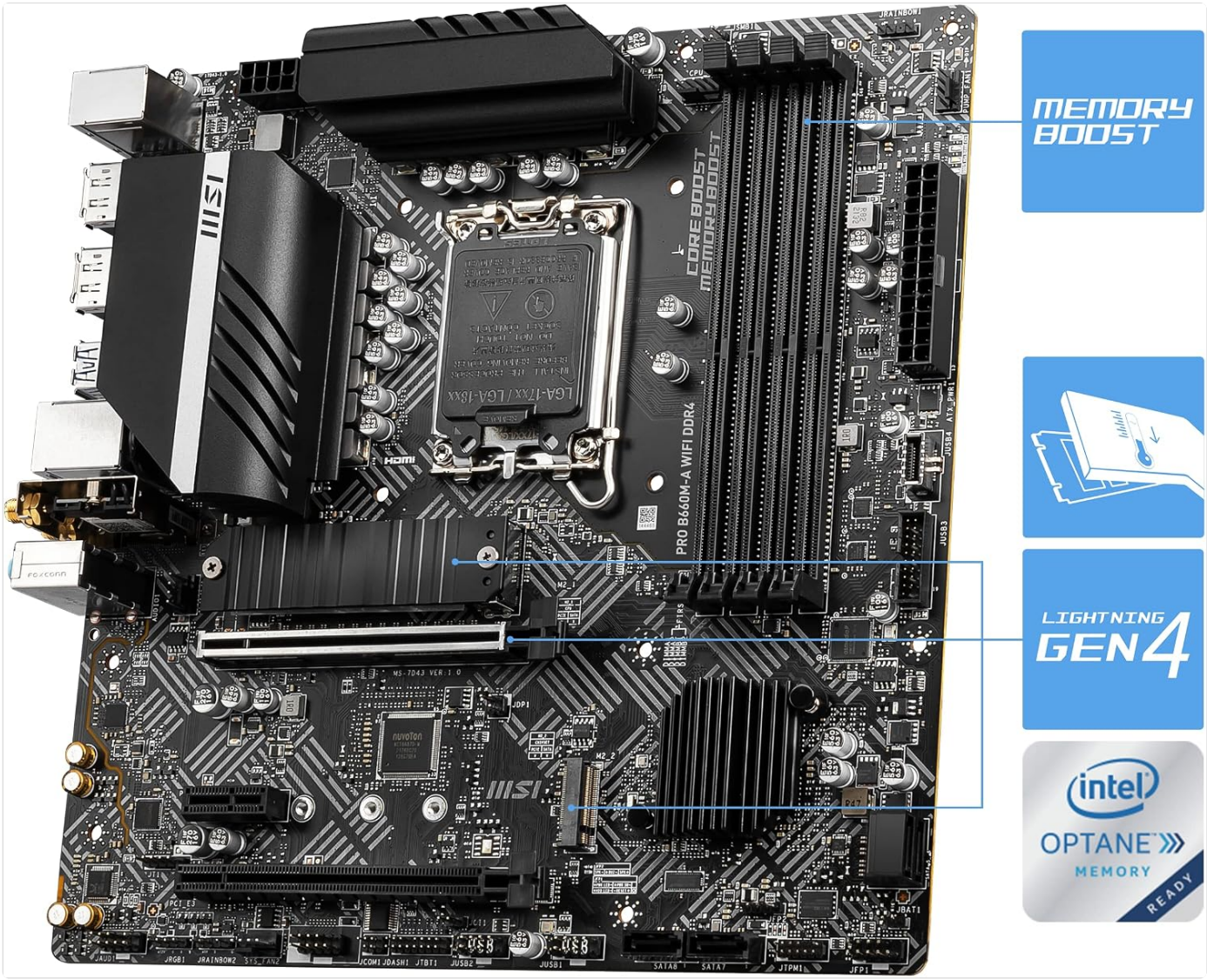


Image: Angled view of the motherboard, highlighting the DDR4 DIMM slots with Memory Boost technology.

1. Open the clips at both ends of the DIMM slot.
2. Align the notch on the DDR4 memory module with the key in the DIMM slot.
3. Insert the module firmly until the clips snap into place.

3.2.3 Storage Installation (M.2 Gen4, SATA)

- **M.2 SSD:** Locate the M.2 slots (M2_1 and M2_2). Remove the M.2 Shield Frozr heatsink if present. Insert the M.2 SSD at an angle, then push it down and secure it with the provided M.2 screw. Reattach the heatsink if applicable.
- **SATA Drives:** Connect SATA data cables from your storage drives to the SATA ports on the motherboard.

3.2.4 Graphics Card Installation (PCIe 4.0 x16)

1. Locate the primary PCIe 4.0 x16 slot (Steel Armor reinforced).
2. Align your graphics card with the slot and press firmly until it is fully seated and the retention clip locks.

3. Secure the card to your PC case with screws.

3.2.5 Power Supply Connection

- Connect the 24-pin ATX main power connector from your power supply to the motherboard.
- Connect the 8-pin ATX 12V CPU power connector to the motherboard.

3.3 Connecting Peripherals

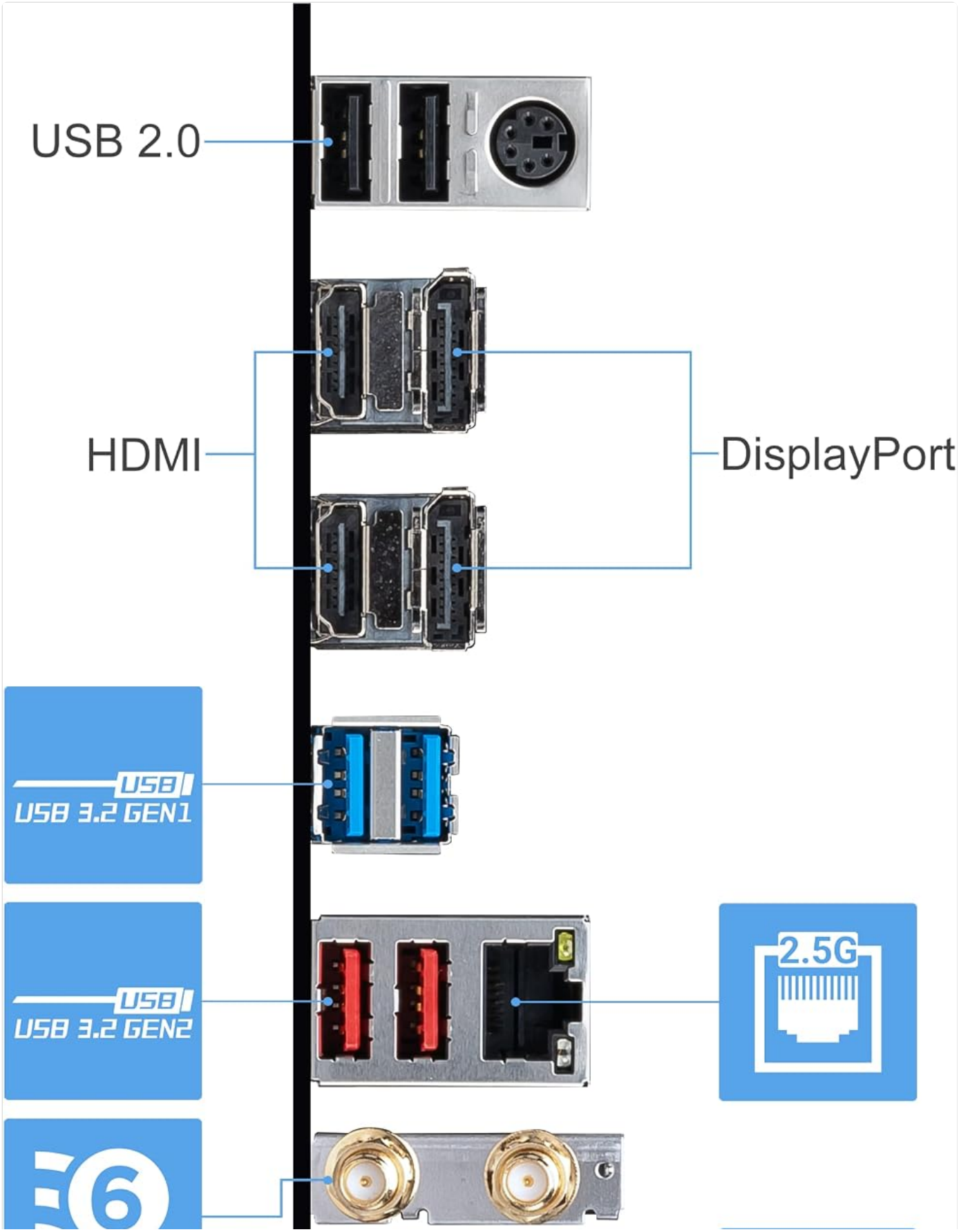




Image: Diagram of the rear I/O panel, showing USB 2.0, HDMI, DisplayPort, USB 3.2 Gen1, USB 3.2 Gen2, 2.5G LAN, Wi-Fi 6 antenna connectors, and Audio Boost ports.

- **USB Devices:** Connect keyboards, mice, and other USB devices to the available USB 2.0, USB 3.2 Gen1, or USB 3.2 Gen2 ports.
- **Display:** Connect your monitor to the HDMI 2.1 or DisplayPort 1.4 outputs on the rear I/O panel.
- **Network:** Connect an Ethernet cable to the 2.5G LAN port or attach the Wi-Fi antennas for wireless connectivity.
- **Audio:** Connect speakers or headphones to the audio jacks.

4. Operating Instructions

4.1 First Boot and BIOS Setup

1. After assembling your system, connect the power cable and turn on the power supply.
2. Press the power button on your PC case.
3. During startup, repeatedly press the `DEL` key to enter the BIOS/UEFI setup utility.
4. In the BIOS, you can configure boot order, system time, and other hardware settings. Save changes and exit to boot into your operating system.

4.2 Driver Installation

After installing your operating system (Windows 10 or Windows 11 recommended), install the necessary drivers for optimal performance. Drivers can typically be found on the MSI support website for your specific motherboard model.

- Chipset Drivers
- LAN Drivers
- Wi-Fi/Bluetooth Drivers
- Audio Drivers

5. Maintenance

5.1 Cleaning

Regularly clean your computer's interior to prevent dust buildup, which can lead to overheating. Use compressed air to remove dust from fans, heatsinks, and other components. Ensure the system is powered off and unplugged before cleaning.

5.2 BIOS Updates

Periodically check the MSI support website for BIOS updates. BIOS updates can improve system stability, add support for new hardware, or fix bugs. Follow the instructions provided by MSI carefully when updating the BIOS.

5.3 Driver Updates

Keep your drivers updated to ensure compatibility and optimal performance with new software and hardware. Check the MSI support website or use the MSI Driver Utility for the latest drivers.

6. Troubleshooting

Problem	Possible Cause / Solution
No Power / System Does Not Turn On	Check power supply connections (24-pin ATX, 8-pin CPU). Ensure power supply switch is ON. Verify front panel power button connection.
No Display / No POST	Ensure monitor is connected and powered. Reseat RAM modules. Reseat graphics card. Check CPU installation. Clear CMOS.
System Instability / Crashes	Check CPU/GPU temperatures. Verify RAM is properly seated. Update drivers and BIOS. Run memory diagnostic tests.
No Network Connection	Check Ethernet cable connection. Ensure Wi-Fi antennas are attached. Install/update LAN/Wi-Fi drivers. Check network settings in OS.
M.2 SSD Not Detected	Ensure M.2 SSD is fully seated and secured. Check BIOS settings for M.2 slot enablement. Update chipset drivers.

7. Specifications

Feature	Detail
Model Name	PRO B660M-A WIFI DDR4
CPU Socket	LGA 1700
Compatible Processors	12th Generation Intel Core Processors
Chipset	Intel B660
RAM Memory Technology	DDR4
Memory Slots	4 x DDR4 DIMM slots (Memory Boost, up to 4800+ MHz/OC)
PCIe Slots	1 x PCIe 4.0 x16 (Steel Armor), 1 x PCIe 3.0 x16 (x4 mode)
M.2 Connectors	2 x M.2 Gen4 x4 64Gb/s slots (M2_1 with Shield Frozr)
LAN	2.5G LAN
Wireless Connectivity	Intel Wi-Fi 6, Bluetooth 5.2
USB Ports (Rear)	USB 3.2 Gen 2 Type-A (10Gbps), USB 3.2 Gen 1 Type-A, USB 2.0
Video Outputs	HDMI 2.1, DisplayPort 1.4 (4K/60Hz support)
Audio	7.1 HD Audio with Audio Boost
Form Factor	Micro-ATX
Dimensions	9.84 x 1.97 x 11.81 inches

Feature	Detail
Weight	2.2 pounds
Operating System Support	Windows 10, Windows 11

8. Warranty and Support

MSI provides a limited warranty for this product. The duration and terms of the warranty may vary by region. Please retain your proof of purchase for warranty claims.

8.1 Technical Support

For technical assistance, driver downloads, BIOS updates, and further information, please visit the official MSI support website. You can typically find support resources by searching for your specific model number (PRO B660M-A WIFI DDR4) on their website.

MSI Support Website: https://www.msi.com/support

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question