

MSI B650M-P V1

MSI PRO B650M-P V1 Motherboard User Manual

Model: B650M-P V1 | Brand: MSI

1. INTRODUCTION

This manual provides detailed instructions for the installation, configuration, and maintenance of your MSI PRO B650M-P V1 Motherboard. Designed for value-oriented creative businesses and enthusiasts, this Micro-ATX motherboard supports AMD Ryzen 9000/8000/7000 series processors on the AM5 socket, offering robust performance and extensive connectivity options.

2. SAFETY INFORMATION

Always observe the following safety precautions when handling your motherboard:

- Disconnect the power supply before installing or removing any components.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.
- Handle components by their edges; avoid touching pins or circuitry.
- Ensure proper ventilation within your PC case to prevent overheating.
- Keep the motherboard away from moisture and extreme temperatures.

3. PACKAGE CONTENTS

Verify that all items are present in your motherboard package:

- MSI PRO B650M-P V1 Motherboard
- I/O Shield
- SATA Cables
- M.2 Clips/Screws
- User Manual and Documentation



I/O Shield



SATA Cable



2 x M.2 Clips

Figure 3.1: MSI PRO B650M-P V1 Motherboard and accessories.

4. MOTHERBOARD LAYOUT

Familiarize yourself with the key components and connectors on your motherboard.



AMD
SOCKET
AM5

B650 AMD
RYZEN

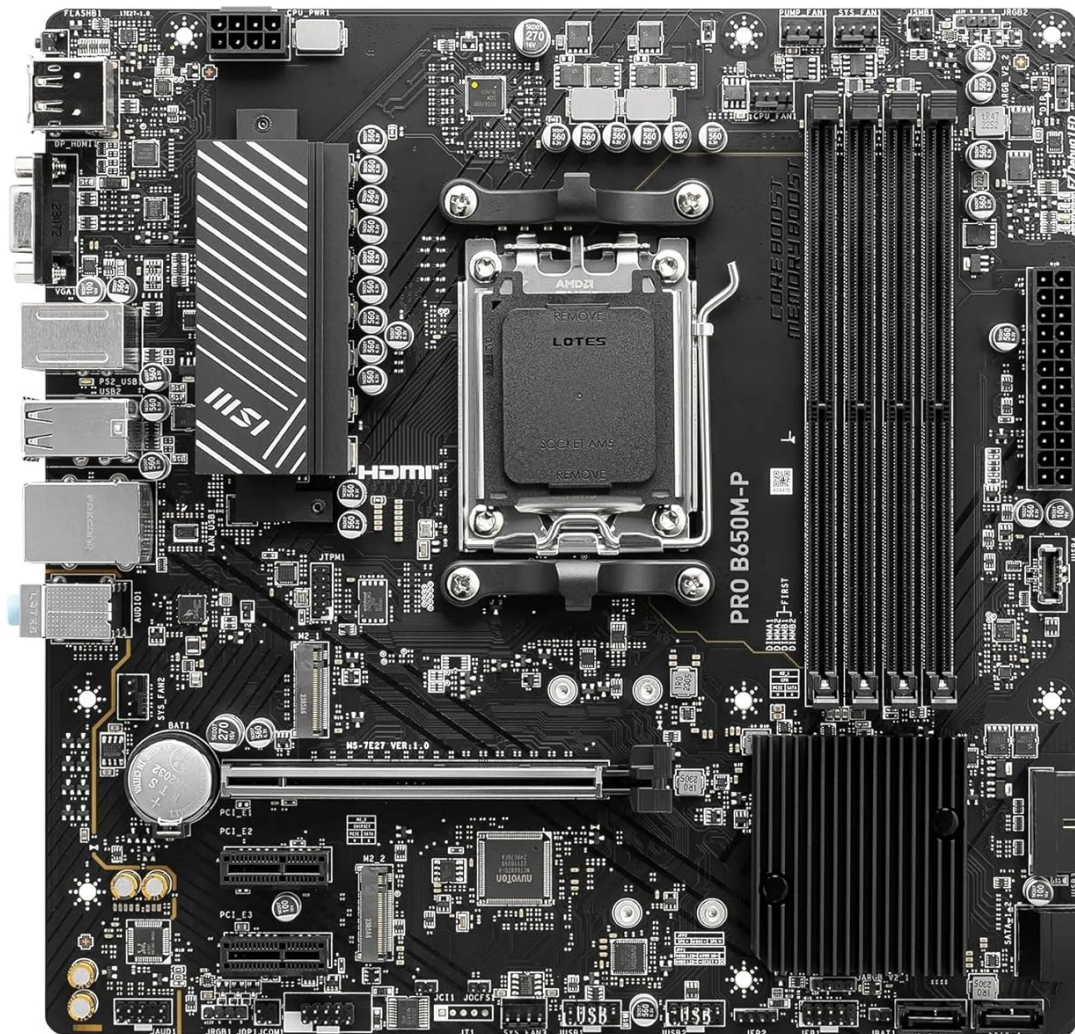
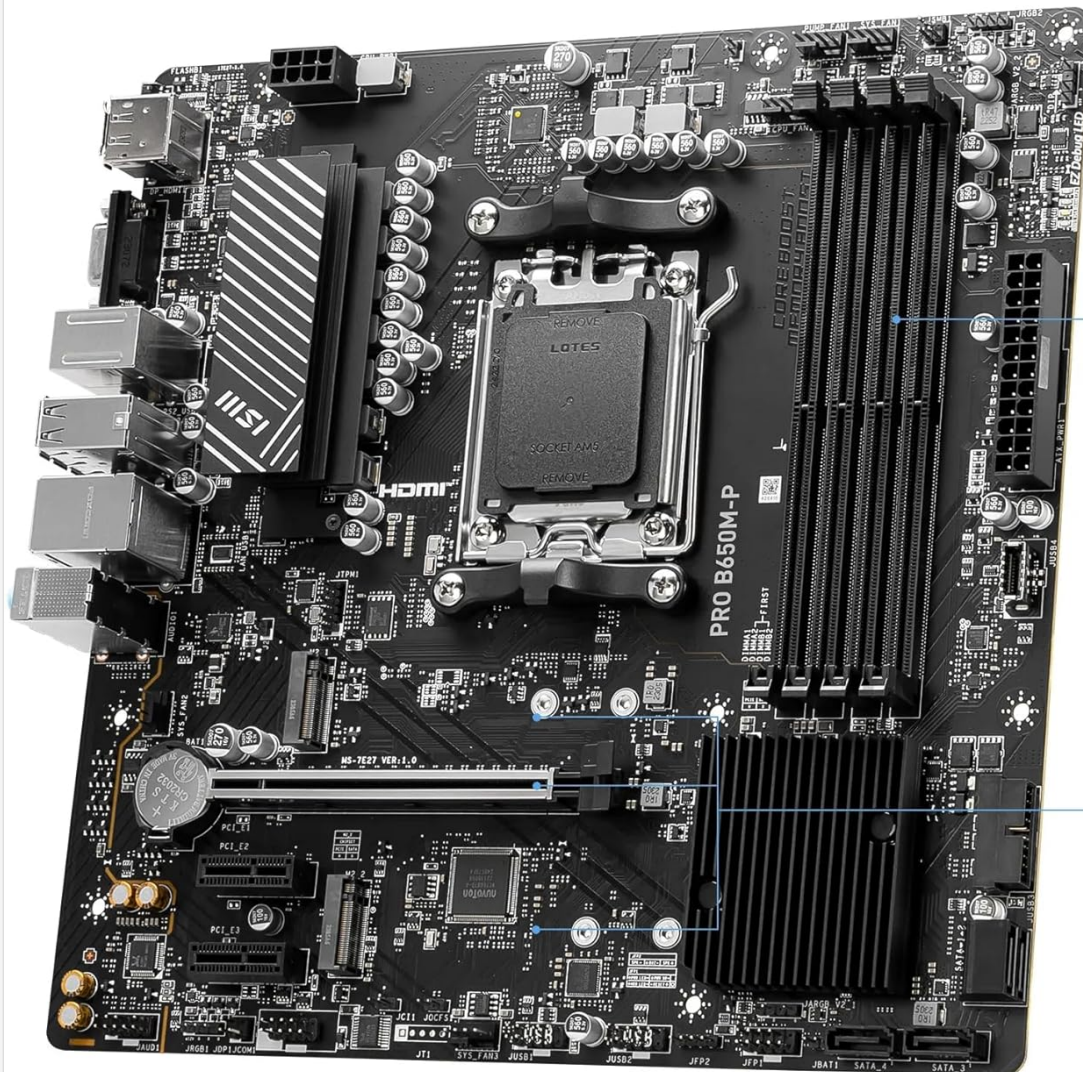


Figure 4.1: Top-down view of the MSI PRO B650M-P V1 Motherboard.



MEMORY
BOOST

LIGHTNING
GEN4

Figure 4.2: Motherboard highlighting Memory Boost (DDR5) and Lightning Gen4 (PCIe 4.0) features.

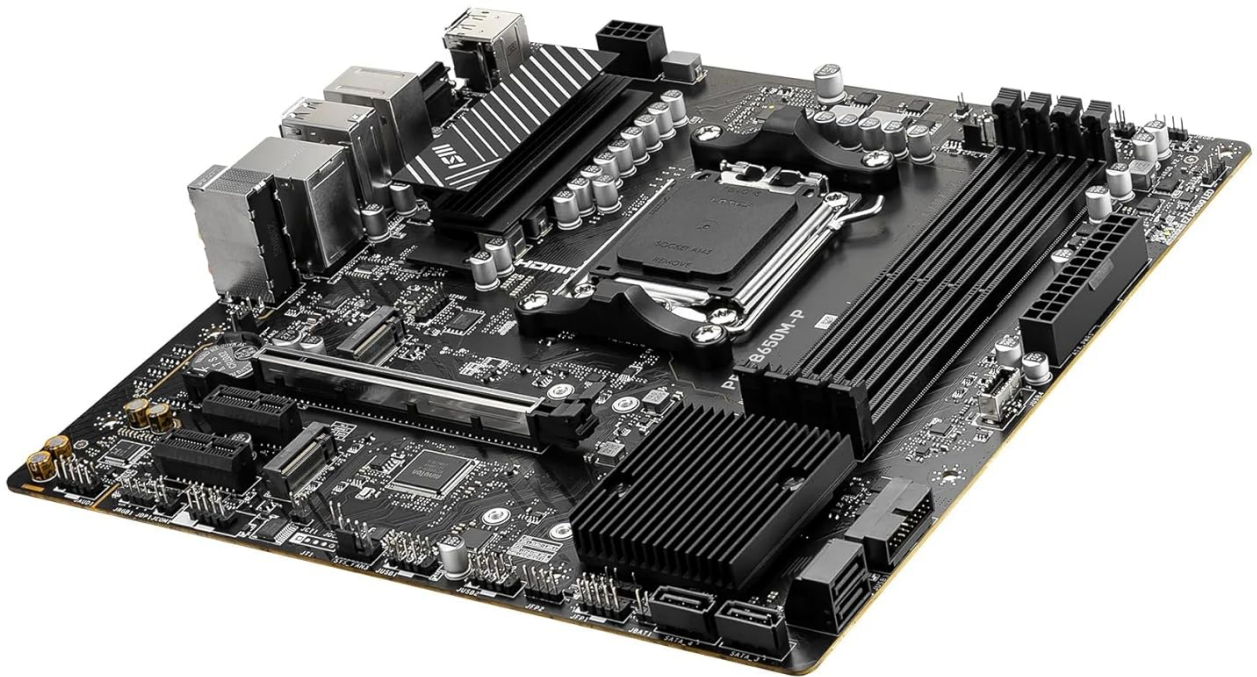


Figure 4.3: Motherboard showing 6-layer PCB and Frozr AI cooling features.

5. SETUP

5.1 CPU Installation

The MSI PRO B650M-P V1 Motherboard uses an AM5 socket. Carefully align your AMD Ryzen processor with the socket, ensuring the golden triangle on the CPU matches the triangle on the socket. Gently lower the CPU into place without forcing it. Secure the retention arm.

5.2 RAM Installation

This motherboard supports DDR5 memory. Open the clips on both ends of the DIMM slots. Align the memory module with the slot, ensuring the notch on the module matches the key in the slot. Press down firmly on both ends of the memory module until the clips snap into place.

5.3 Storage Installation (M.2 & SATA)

The motherboard features 2 x M.2 Gen4 x4 64Gbps slots for high-speed SSDs. Install M.2 SSDs by inserting them

into the slot and securing them with the provided M.2 clips/screws. For SATA drives, connect the SATA data cables to the motherboard's SATA ports and the power cables from your power supply to the drives.

5.4 Graphics Card Installation

Insert your graphics card into the PCIe 4.0 x16 slot. Ensure it is seated firmly and secure it with the case screw. Connect any necessary PCIe power cables from your power supply to the graphics card.



Figure 5.1: PCIe 4.0 x16 slot for graphics card installation.

5.5 Power Connections

Connect the 24-pin ATX power connector and the 8-pin CPU power connector from your power supply to the corresponding ports on the motherboard.

5.6 Front Panel and Rear I/O Connections

Connect your case's front panel headers (power button, reset button, USB ports, audio jacks) to the appropriate pins on the motherboard. For rear I/O, connect your peripherals to the ports shown below.

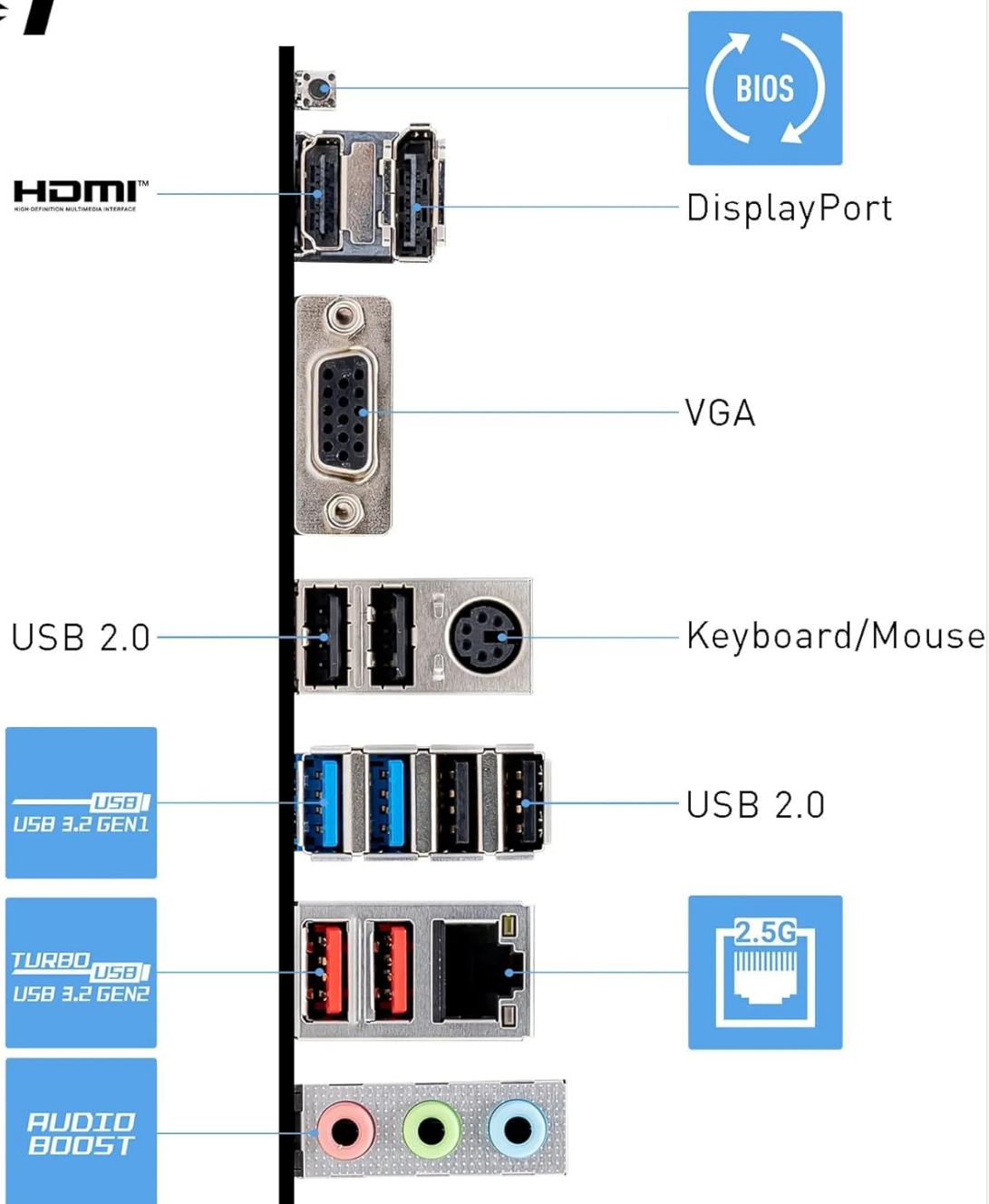


Figure 5.2: Rear I/O Ports Overview.

6. OPERATING

6.1 BIOS/UEFI Setup

Upon first boot, you may need to enter the BIOS/UEFI setup to configure settings such as boot order, date/time, and enable specific features. Press the 'Delete' key during startup to enter the BIOS. Refer to the on-screen instructions for navigation.

6.2 Driver Installation

After installing your operating system, install the necessary drivers for the motherboard's components (chipset, LAN, audio, etc.). These can typically be found on the MSI support website for your specific motherboard model.

6.3 Software Utilities

MSI provides various software utilities to enhance your system's performance and customization. Check the MSI website for available tools specific to your motherboard model, which may include monitoring tools, RGB lighting control, and fan speed management.

7. MAINTENANCE

7.1 Cleaning

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

7.2 BIOS Updates

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

Video 7.1: Motherboard BIOS Update Tutorial (ASRock USA). This video provides a general guide on how to update a motherboard's BIOS, which can be helpful for maintaining your MSI motherboard.

8. TROUBLESHOOTING

If you encounter issues, consider the following common troubleshooting steps:

- **No Power:** Check all power connections (24-pin ATX, 8-pin CPU, GPU power). Ensure the power supply is switched on.
- **No Display:** Verify monitor connections. Ensure the graphics card is properly seated. If using integrated graphics, ensure your CPU supports it and connect to the motherboard's video output.
- **System Instability:** Check RAM seating. Ensure CPU cooler is properly installed. Update BIOS and drivers.
- **Boot Issues:** Verify boot order in BIOS. Check M.2/SATA drive connections.

9. SPECIFICATIONS

Feature	Specification
CPU Socket	AM5
Supported Processors	AMD Ryzen 9000/8000/7000 Series
Chipset	AMD B650
Memory	4 x DDR5 DIMM SMT slots, Boost 6000+MHz/OC
PCIe Slots	1 x PCIe 4.0 x16
Storage	2 x M.2 Gen4 x4 64Gbps slots, SATA ports
LAN	2.5Gbps LAN
USB Ports	USB 3.2 Gen 2 Type-A (10Gbps), USB 2.0
Video Outputs	HDMI 2.1, DisplayPort 1.4, VGA (4K/60Hz support)

Audio	7.1 HD Audio with Audio Boost
Form Factor	Micro-ATX

10. WARRANTY AND SUPPORT



For warranty information, technical support, and driver downloads, please visit the official MSI website. Keep your proof of purchase for warranty claims.

Video 10.1: Closer look at MSI Pro B650M-P. This video provides a visual overview of the MSI PRO B650M-P motherboard, showcasing its features and design.



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Related Documents - B650M-P V1

 PRO B650M-A WIFI PRO B650M-A Motherboard User Guide Deutsch/English Manual/Guide Punktschrittweise Anweisungen 點對點說明 點對點說明 點對點說明	MSI PRO B650M-A WIFI & PRO B650M-A Motherboard User Guide Comprehensive user guide for the MSI PRO B650M-A WIFI and PRO B650M-A motherboards. Learn about installation, specifications, components, BIOS setup, and more for your AMD AM5 build.
 B650M GAMING PLUS WIFI Motherboard User Guide	MSI B650M GAMING PLUS WIFI Motherboard User Guide Comprehensive user guide for the MSI B650M GAMING PLUS WIFI motherboard, covering installation, specifications, features, BIOS setup, and troubleshooting for AMD AM5 platform.

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