GIGABYTE B650M D3HP

GIGABYTE B650M D3HP Motherboard Instruction Manual

Model: B650M D3HP

INTRODUCTION

The GIGABYTE B650M D3HP is a Micro ATX motherboard designed to support AMD Ryzen 7000, 8000, and 9000 Series Processors on the AM5 socket. It features robust power delivery, high-speed storage options, and advanced connectivity for optimal performance in various computing tasks.

KEY FEATURES

- **AMD Socket AM5:** Supports AMD Ryzen 7000 / Ryzen 8000 / Ryzen 9000 Series Processors.
- **Unparalleled Performance:** 5+2+2 Phases Digital VRM Solution for stable power delivery.
- **Dual Channel DDR5:** 4*SMD DIMMs with AMD EXPO & Intel XMP Memory Module Support.
- **SuperSpeed Storage:** PCIe 4.0 x4 M.2 Connector for high-speed NVMe SSDs.
- **EZ-Latch:** PCIe x16 Slot with Quick Release Design for easy graphics card installation/removal.
- **Fast Networking:** Integrated 2.5GbE LAN for high-speed wired internet.
- **Fine Tuning Features:** Smart Fan 6 for optimized cooling, Q-Flash Plus for BIOS updates without CPU, Memory, or GPU.
- **Stable Connectivity:** Includes 2*PCIe 4.0 x4 M.2 slots and USB 3.2 Gen 2 Type-C ports.

SETUP GUIDE

This section provides general instructions for setting up your GIGABYTE B650M D3HP motherboard. Always refer to the detailed manual available on the GIGABYTE support website for specific component compatibility and installation steps.
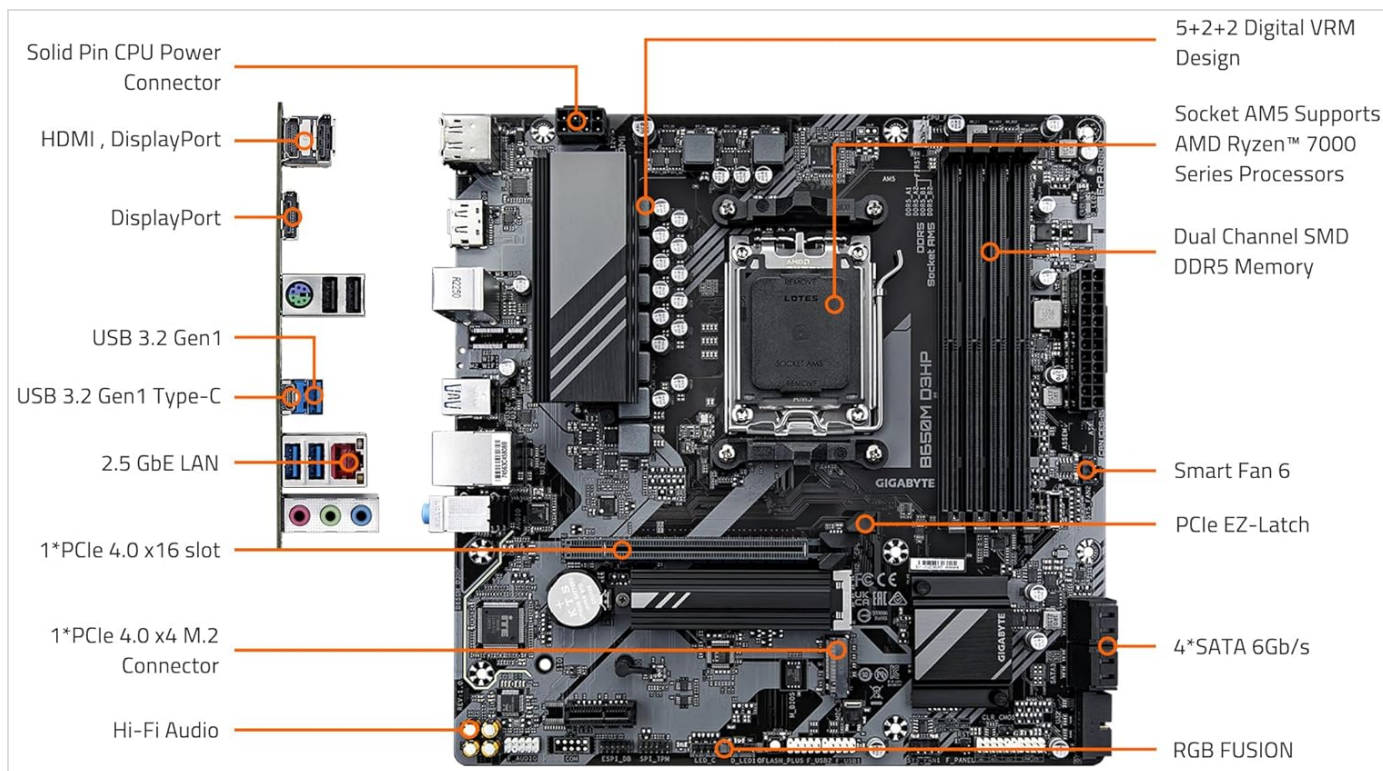
1. Motherboard Overview

Solid Pin CPU Power Connector	5+2+2 Digital VRM Design
HDMI , DisplayPort	Socket AM5 Supports AMD Ryzen™ 7000 Series Processors
DisplayPort	Dual Channel SMD DDR5 Memory
USB 3.2 Gen1	
USB 3.2 Gen1 Type-C	
2.5 GbE LAN	Smart Fan 6
1*PCIe 4.0 x16 slot	PCIe EZ-Latch
1*PCIe 4.0 x4 M.2 Connector	4*SATA 6Gb/s
Hi-Fi Audio	RGB FUSION

Image Description: An overhead view of the GIGABYTE B650M D3HP motherboard highlighting key components such as the AM5 CPU socket, DDR5 DIMM slots, PCIe 4.0 x16 slot, M.2 connectors, SATA ports, USB 3.2 Gen1 Type-C, 2.5GbE LAN, and audio ports.

2. Installing the CPU

Carefully open the CPU socket lever. Align the triangular mark on your AMD Ryzen processor with the corresponding mark on the AM5 socket. Gently place the CPU into the socket without applying force. Close the lever to secure the CPU.
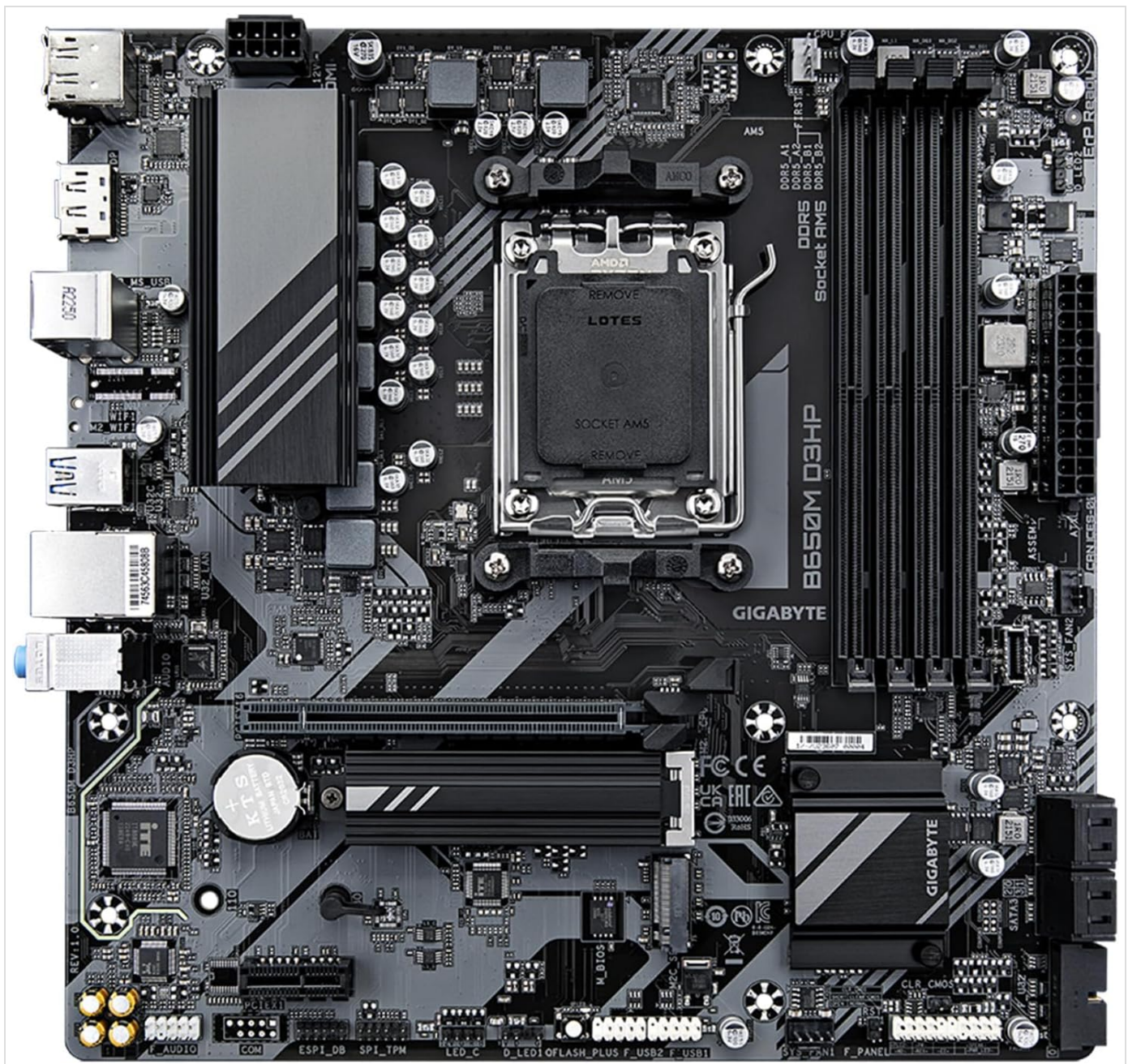
Image Description: A close-up view of the GIGABYTE B650M D3HP motherboard's AM5 CPU socket, ready for processor installation. The protective cover is visible.

3. Installing DDR5 Memory

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

4. Installing M.2 SSDs

Locate the M.2 slots on the motherboard. Remove the M.2 screw or standoff. Insert the M.2 SSD into the slot at an angle, then gently push it down and secure it with the screw or EZ-Latch mechanism.

5. Installing the Graphics Card

Open the retention clip on the PCIe 4.0 x16 slot. Align your graphics card with the slot and press down firmly until it is seated correctly and the clip locks. Secure the card to your chassis with screws.

6. Connecting Power Supply

Connect the 24-pin ATX main power connector and the 8-pin CPU power connector from your power supply to the corresponding

ports on the motherboard. Ensure all connections are secure.

7. Connecting Peripherals

Connect your display to the graphics card or motherboard's video output (HDMI/DisplayPort). Connect USB devices, Ethernet cable, and audio devices to the rear I/O panel.

Image Description: A detailed view of the GIGABYTE B650M D3HP motherboard's rear I/O panel, showing various ports including USB, HDMI, DisplayPort, 2.5GbE LAN, and audio jacks.

OPERATING INSTRUCTIONS

After successful assembly, power on your system. The motherboard's UEFI BIOS provides a graphical interface for system configuration. You can access it by pressing the 'Delete' key during startup.

BIOS Configuration

The UEFI BIOS allows you to configure boot order, enable/disable features like AMD EXPO or Intel XMP for memory, adjust fan speeds with Smart Fan 6, and monitor system status. Save changes before exiting the BIOS.

Driver Installation

After installing your operating system, install the necessary drivers for the chipset, LAN, audio, and any other integrated components. These can be found on the GIGABYTE support website for your specific motherboard model.

MAINTENANCE

BIOS Updates (Q-Flash Plus)

The B650M D3HP supports Q-Flash Plus, allowing you to update the BIOS without installing the CPU, memory, or graphics card. Download the latest BIOS file from the GIGABYTE website, rename it as instructed, and place it on a USB flash drive. Insert the USB drive into the designated Q-Flash Plus port on the rear I/O panel and press the Q-Flash Plus button. The system will automatically update the BIOS.

Your browser does not support the video tag.

Video Description: An official GIGABYTE overview video showcasing the features and benefits of GIGABYTE B650 Motherboards, including the B650M D3HP. This video provides a general introduction to the product line.

Your browser does not support the video tag.

Video Description: An official GIGABYTE trailer video for the B650 series motherboards, highlighting their capabilities and design. This video offers a dynamic visual introduction to the product line.

System Cleaning

Regularly clean dust from your computer case and motherboard components using compressed air. Ensure the system is

powered off and unplugged before cleaning.

TROUBLESHOOTING

- **No Boot/No Display:**

    - Ensure all power cables (24-pin ATX, 8-pin CPU, GPU PCIe) are securely connected.
    - Reseat RAM modules. Try booting with only one RAM stick.
    - Check CPU installation and ensure the cooler is properly mounted.
    - Verify that the display cable is connected to the graphics card (if installed) or the motherboard's integrated graphics port.
    - Update BIOS using Q-Flash Plus if experiencing compatibility issues with newer CPUs.

- **System Instability/Crashes:**

    - Check CPU and GPU temperatures using monitoring software. Ensure adequate cooling.
    - Verify RAM stability. Run memory diagnostic tools.
    - Ensure all drivers are up-to-date.

- **Network Connectivity Issues:**

    - Ensure the Ethernet cable is properly connected.
    - Install the latest LAN drivers from the GIGABYTE website.
    - Check router/modem status.

SPECIFICATIONS

Category	Specification
Brand	GIGABYTE
Model Name	B650M D3HP
CPU Socket	Socket AM5
Compatible Processors	AMD Ryzen™ 7000/ Ryzen™ 8000/ Ryzen™ 9000 Series
Chipset Type	AMD B650
RAM Memory Technology	DDR5
Memory Slots	4 x SMD DIMMs
Memory Speed	2133 MHz (Base), supports AMD EXPO & Intel XMP
PCIe Slots	1 x PCIe 4.0 x16 slot (with Quick Release Design)
M.2 Connectors	2 x PCIe 4.0 x4 M.2 Connectors
LAN	2.5GbE LAN
USB Ports	USB 3.2 Gen 2 Type-C, USB 2.0, etc.
Form Factor	Micro ATX
Dimensions	10.43 x 10.43 x 2.12 inches

WARRANTY AND SUPPORT

The GIGABYTE B650M D3HP motherboard comes with a 5-Year Warranty. For detailed warranty information, technical support, driver downloads, and further documentation, please visit the official GIGABYTE website or contact their customer service.
You can also visit the GIGABYTE Store on Amazon for product information and related accessories.

Related Documents - B650M D3HP

B650M GAMING PLUS WIFI (B650M GAMING PLUS WF) B650M D3HP AX B650M D3HP User's Manual Rev. 1021	**GIGABYTE B650M GAMING PLUS WIFI & B650M D3HP AX Motherboard User Manual** Comprehensive user manual for GIGABYTE B650M GAMING PLUS WIFI and B650M D3HP AX motherboards, covering installation, specifications, BIOS setup, and troubleshooting. Includes detailed hardware layout and connector information.
B650M GAMING WIFI6E B650M GAMING WIFI User's Manual Rev. 1001	**GIGABYTE B650M GAMING WIFI6E / B650M GAMING WIFI Motherboard User Manual** Comprehensive user manual for the GIGABYTE B650M GAMING WIFI6E and B650M GAMING WIFI motherboards. Covers installation, specifications, BIOS setup, troubleshooting, and regulatory information.
B850M D3HP 사용자 설명서	**GIGABYTE B850M D3HP Motherboard Installation and User Guide** This guide provides comprehensive instructions for installing and configuring the GIGABYTE B850M D3HP motherboard, including component installation, BIOS setup, software utilities, RAID configuration, and regulatory information.

B650M D3HP AX B650M D3HP User's Manual Rev. 1001	[GIGABYTE B650M D3HP AX / B650M D3HP Motherboard User Manual](#) Comprehensive user manual for the GIGABYTE B650M D3HP AX and B650M D3HP motherboards, detailing hardware installation, product specifications, BIOS setup, operating system and driver installation, and regulatory information.
B650 EAGLE AX B650 EAGLE 使用手册 Rev. 1001	[Gigabyte B650 EAGLE AX Motherboard User Manual](#) Comprehensive user manual for the Gigabyte B650 EAGLE AX motherboard, detailing installation, BIOS setup, hardware connections, and features for AMD AM5 socket processors.
B650M D3HP User's Manual Rev. 1001	[GIGABYTE B650M D3HP Motherboard User Manual - Installation and Specifications](#) Comprehensive user manual for the GIGABYTE B650M D3HP motherboard. Includes installation guides for CPU, memory, expansion cards, detailed specifications, BIOS setup, OS installation, driver installation, and regulatory information.