GIGABYTE B760M D3HP DDR4

GIGABYTE B760M D3HP DDR4 Motherboard User Manual

Model: B760M D3HP DDR4

Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your GIGABYTE B760M D3HP DDR4 Motherboard. Designed to support 14th, 13th, and 12th Gen Intel Core Processors, this motherboard features a robust 4+1+1 phase hybrid digital VRM solution, DDR4 memory support up to 5333MHz (OC), and dual PCIe 4.0 M.2 connectors for high-speed storage. Please read this manual thoroughly before beginning installation to ensure proper setup and optimal performance.

Safety Information

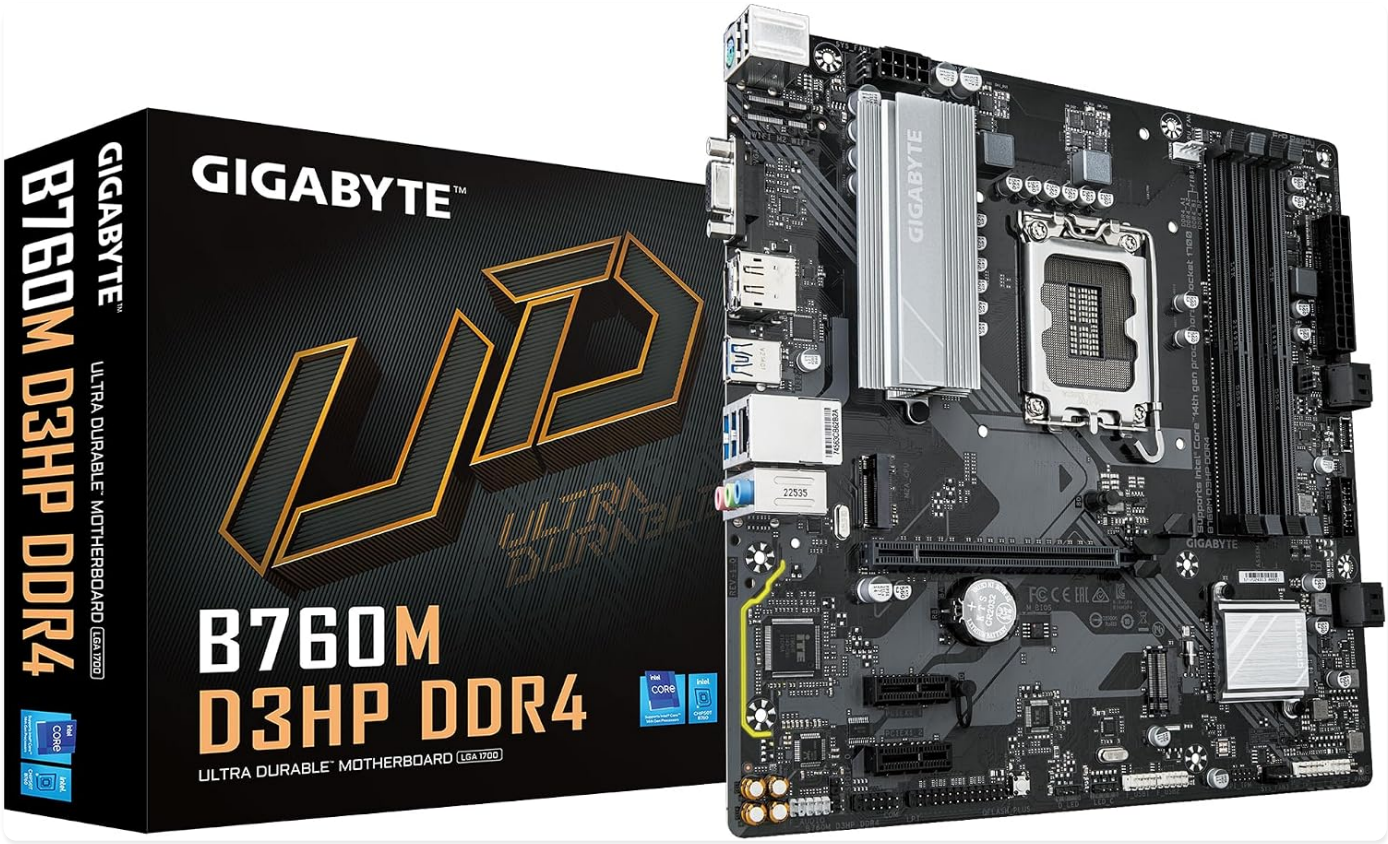
Always observe the following safety precautions when handling computer components:

- **Electrostatic Discharge (ESD) Prevention:** Always wear an anti-static wrist strap or frequently touch a grounded metal object (like the computer case) before handling components to discharge static electricity.
- **Power Disconnection:** Ensure the power supply is unplugged from the wall outlet and the power button on the power supply is switched off before installing or removing any components.
- **Component Handling:** Hold components by their edges, avoiding contact with pins, circuits, or connectors.
- **Ventilation:** Ensure adequate ventilation within your computer case to prevent overheating.
- **Liquid and Moisture:** Keep the motherboard and other components away from liquids and excessive moisture.

Package Contents

Verify that all items listed below are included in your motherboard package:

- GIGABYTE B760M D3HP DDR4 Motherboard
- SATA Data Cables (x2)
- I/O Shield
- Multilingual Installation Guide

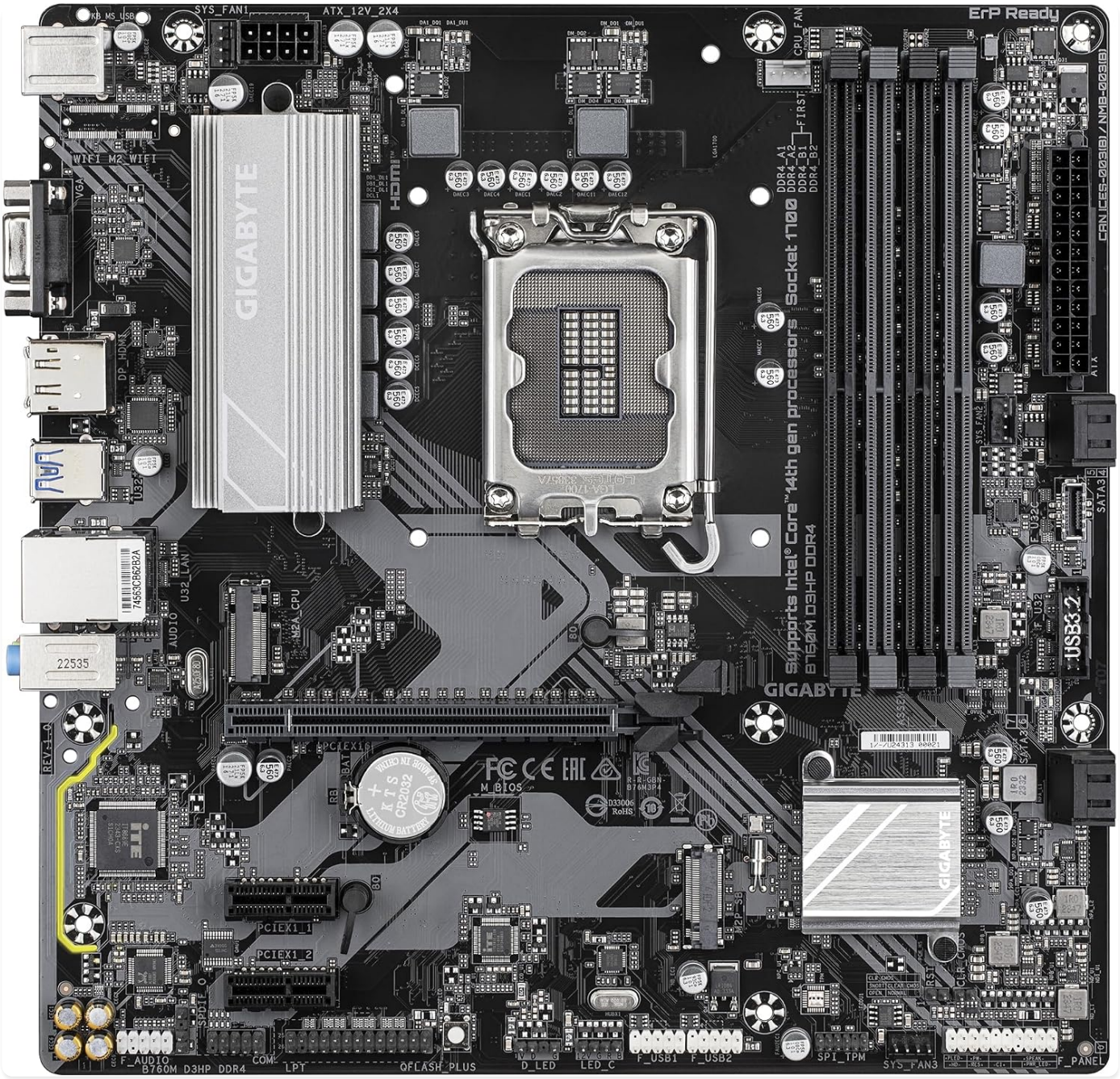


The GIGABYTE B760M D3HP DDR4 Motherboard shown alongside its retail packaging.

Component Overview

Motherboard Layout

Familiarize yourself with the key components and connectors on the motherboard:



A comprehensive top-down view of the motherboard, illustrating the LGA 1700 CPU socket, four DDR4 DIMM slots, and various expansion slots and headers.



An angled perspective of the motherboard, providing a clearer view of the chipset heatsink and the two M.2 slots for high-speed NVMe SSDs.

Rear I/O Panel

The rear I/O panel provides various ports for connecting external devices:



Detailed view of the rear I/O panel, featuring PS/2 port, USB 2.0, VGA, HDMI, DisplayPort, USB 3.2 Gen1, GbE LAN, and audio jacks.

Setup

1. CPU Installation (LGA 1700)

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. Carefully align the triangular mark on the CPU with the mark on the socket.
4. Place the CPU into the socket without forcing it.
5. Close the retention frame and secure it by pushing the load lever back into place.

2. Memory (DDR4) Installation

1. Open the clips at both ends of the DIMM slots.
2. Align the notch on the DDR4 memory module with the key on the DIMM slot.
3. Insert the memory module firmly into the slot until the clips snap into place. Ensure both clips are closed.
4. For dual-channel configuration, refer to the motherboard manual for recommended slot pairings (typically A2 and B2).

3. Storage Installation (M.2 & SATA)

- **M.2 SSD:** Locate the M.2 slots. Remove the M.2 screw/standoff. Insert the M.2 SSD at an angle into the slot, then gently push it down and secure it with the screw.
- **SATA Drives:** Connect one end of the SATA data cable to a SATA port on the motherboard and the other end to your SATA HDD/SSD. Connect the SATA power cable from your power supply to the drive.

4. Expansion Card Installation (PCIe)

1. Remove the metal bracket from the desired PCIe slot on your computer case.
2. Align your graphics card or other PCIe expansion card with the slot.
3. Press down firmly until the card is securely seated in the slot.
4. Secure the card to the case with a screw.

5. Power Connections

- **24-pin ATX Power:** Connect the main 24-pin power cable from your power supply to the 24-pin ATX power connector on the motherboard.

- **8-pin ATX 12V Power:** Connect the 8-pin ATX 12V power cable from your power supply to the 8-pin connector near the CPU socket.

6. Front Panel Connections

Connect the cables from your computer case's front panel to the corresponding headers on the motherboard. These include:

- Power Button, Reset Button, HDD LED, Power LED
- Front Panel Audio (HD Audio)
- Front Panel USB 2.0 and USB 3.2 Gen1 (including USB-C 5Gbps)

Operating

First Boot

After completing all hardware installations and connections, you can power on your system. The system will perform a Power-On Self-Test (POST). If all components are detected correctly, the system will proceed to boot from your designated storage device.

BIOS/UEFI Setup

To access the BIOS/UEFI setup utility, press the **DEL** key during the POST process. The BIOS/UEFI allows you to configure system settings, boot order, overclocking parameters, and monitor hardware status. Refer to the GIGABYTE website for detailed BIOS/UEFI guides and updates.

Maintenance

- **Dust Removal:** Regularly clean dust from inside your computer case and off the motherboard components using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **BIOS/UEFI Updates:** Periodically check the GIGABYTE support website for the latest BIOS/UEFI updates. Updates can improve system stability, compatibility, and performance. Use the Q-Flash Plus feature for easy BIOS updates without CPU, memory, or graphics card installation.
- **Driver Updates:** Keep your motherboard drivers (chipset, LAN, audio, etc.) updated to ensure optimal performance and compatibility with your operating system and peripherals.
- **Cable Management:** Ensure cables are neatly managed to improve airflow and prevent obstruction of components.

Troubleshooting

This section addresses common issues you might encounter:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
System does not power on	Loose power cables, faulty power supply, incorrect front panel connections.	Check all power connections (24-pin ATX, 8-pin CPU), ensure power supply is switched on, verify front panel power button connection.
No display output	Incorrect display cable connection, faulty graphics card, improperly seated RAM.	Ensure display cable is connected to the correct port (motherboard or graphics card), reseat graphics card and RAM modules, test with a different display or cable.
System boots but no OS detected	Incorrect boot order in BIOS, faulty storage drive, corrupted OS installation.	Check boot order in BIOS/UEFI, ensure storage drive is properly connected, attempt to reinstall OS if necessary.
System unstable or crashes	Overheating, outdated drivers, faulty components, insufficient power.	Monitor temperatures, update all drivers, test components individually, ensure power supply meets system requirements.

Specifications

Feature	Detail
CPU Support	14th/13th/12th Gen Intel Core Processors
CPU Socket	LGA 1700
Chipset	Intel B760
Memory	4 x DDR4 DIMM slots, up to 5333MHz (OC)
Graphics Interface	1 x PCIe 4.0 x16
Display Interface	HDMI, DisplayPort, D-Sub
Storage	2 x M.2 PCIe 4.0 x4 connectors, 4 x SATA 6Gb/s ports
LAN	GbE LAN
USB	USB-C front 5Gbps, USB 3.2 Gen1, USB 2.0
Form Factor	mATX (244mm x 244mm)

Warranty and Support

GIGABYTE motherboards come with a manufacturer's warranty. For detailed warranty terms and conditions, please refer

to the warranty card included with your product or visit the official GIGABYTE website. Technical support, driver downloads, and BIOS updates are also available on the GIGABYTE support page. Please have your product model and serial number ready when contacting support.
For further assistance, visit: www.gigabyte.com

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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

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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