GIGABYTE B760 GAMING X DDR4

Gigabyte B760 Gaming X DDR4 Motherboard User Manual

Model: B760 GAMING X DDR4

Important Safety Information

Please read all instructions carefully before installing or operating your motherboard. Failure to do so may result in damage to the product or personal injury.

- Always disconnect the power cord from the wall outlet before touching any components inside the computer case.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to discharge static electricity before handling components.
- Ensure proper ventilation for your system to prevent overheating.
- Do not expose the motherboard to moisture or extreme temperatures.
- Keep small components and packaging materials away from children.

Product Overview

The Gigabyte B760 Gaming X DDR4 Motherboard is designed to support 13th and 12th Gen Intel Core processors, offering robust performance and connectivity for gaming and productivity.

Key Features:

- Intel Socket LGA 1700: Support 13th and 12th Gen Series Processors
- Unparalleled Performance: Hybrid 8+1+1 Phases Digital VRM Solution
- Dual Channel DDR4: 4*DIMMs XMP Memory Module Support
- Next Generation Storage: 3*PCIe 4.0 x4 M.2 Connectors
- Advanced Thermal Design & M.2 Thermal Guard: To Ensure VRM Power Stability & M.2 SSD Performance
- EZ-Latch: PCIe 4.0x16 Slot with Quick Release Design
- Fast Networks: 2.5GbE LAN
- Extended Connectivity: Front USB-C 10Gb/s, DP, HDMI
- Smart Fan 6: Features Multiple Temperature Sensors, Hybrid Fan Headers with FAN STOP

- Q-Flash Plus: Update BIOS Without Installing the CPU, Memory and Graphics Card



This image displays the Gigabyte B760 Gaming X DDR4 Motherboard alongside its retail box, highlighting the product's branding and initial presentation.



A comprehensive top-down view of the Gigabyte B760 Gaming X DDR4 Motherboard, illustrating the layout of the LGA 1700 CPU socket, four DDR4 DIMM slots, multiple PCIe slots, and M.2 connectors.



This image details the rear input/output (I/O) panel of the Gigabyte B760 Gaming X DDR4 Motherboard, featuring USB ports, display outputs (HDMI, DisplayPort), 2.5GbE LAN, and audio jacks.

Setup Guide

Before You Begin:

- Ensure you have all necessary components: CPU, CPU cooler, RAM, storage devices (SSD/HDD), graphics card (if not using integrated graphics), power supply unit (PSU), and a compatible PC case.
- Work in a clean, well-lit, and static-free environment.
- Refer to your PC case manual for specific installation instructions related to your case.

Motherboard Installation Steps:

1. **Prepare the PC Case:** Install the standoffs in your PC case that align with the motherboard's mounting holes.
2. **Install I/O Shield:** If your case does not have an integrated I/O shield, install the provided I/O shield into the rear opening of your PC case.
3. **Secure the Motherboard:** Carefully place the motherboard into the case, aligning the mounting holes with the standoffs. Secure it with screws.
4. **Install the CPU:** Open the CPU socket lever. Carefully place your Intel LGA 1700 CPU into the socket, ensuring the triangular markers on the CPU and socket align. Close the lever to secure the CPU.
5. **Install the CPU Cooler:** Follow the instructions provided with your CPU cooler to install it onto the CPU and motherboard. Ensure proper thermal paste application.
6. **Install RAM Modules:** Open the clips on the DDR4 DIMM slots. Insert the RAM modules firmly until the clips snap into place. For dual-channel performance, install modules in matching colored slots (e.g., A2 and B2).
7. **Install M.2 SSDs:** Insert M.2 SSDs into the M.2 slots. Secure them with the provided M.2 screws or EZ-Latch mechanism. If applicable, install the M.2 Thermal Guard.
8. **Install Graphics Card (Optional):** Insert your graphics card into the PCIe 4.0 x16 slot. Ensure it is fully seated and secured with the case's retention mechanism.
9. **Connect Power Cables:** Connect the 24-pin ATX main power connector and the 8-pin CPU power connector from your PSU to the motherboard. Connect any necessary PCIe power cables to your graphics card.
10. **Connect Front Panel Headers:** Connect the power button, reset button, HDD LED, power LED, and front USB/audio headers from your case to the corresponding pins on the motherboard. Refer to the motherboard manual for pinout diagrams.

Operating Instructions

First Boot and BIOS Setup:

After assembling your system, connect a monitor, keyboard, and mouse. Power on the system. During the boot process, repeatedly press the **DEL** key to enter the BIOS (Basic Input/Output System) setup utility. Here you can configure system settings, boot order, and enable features like XMP for RAM.

The Gigabyte B760 Gaming X DDR4 supports **Q-Flash Plus**, allowing you to update the BIOS without installing the CPU, memory, or graphics card. This is useful for ensuring compatibility with newer CPUs or resolving boot issues. Refer to the Gigabyte website for detailed Q-Flash Plus instructions.

Driver Installation:

After installing your operating system, it is crucial to install the latest drivers for your motherboard components. These include:

- **Chipset Drivers:** Essential for proper communication between the CPU and motherboard components.
- **LAN Drivers:** For enabling the 2.5GbE network connectivity.
- **Audio Drivers:** For sound functionality.
- **Graphics Drivers:** For integrated graphics (if used) or your dedicated graphics card.

Drivers can be downloaded from the official Gigabyte website for your specific motherboard model.

Maintenance

Regular maintenance helps ensure the longevity and stable operation of your motherboard and PC system.

- **Dust Removal:** Periodically clean dust from inside your PC case, especially from fans, heatsinks, and vents, using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Cable Management:** Ensure cables are neatly routed to improve airflow and prevent interference.
- **BIOS Updates:** Check the Gigabyte website regularly for new BIOS versions. BIOS updates can improve stability, add support for new hardware, and fix bugs. Follow the update instructions carefully.
- **Driver Updates:** Keep your drivers updated to ensure optimal performance and compatibility.
- **Physical Inspection:** Occasionally inspect the motherboard for any loose connections, damaged components, or bulging capacitors.

Troubleshooting

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

Common Issues and Solutions:

- **No Power/No POST (Power-On Self-Test):**
    - Check all power connections (24-pin ATX, 8-pin CPU, GPU power).

- Ensure CPU, RAM, and GPU are properly seated.
- Try booting with only essential components (CPU, one RAM stick, GPU if no integrated graphics).
- Clear CMOS (Complementary Metal-Oxide-Semiconductor) by removing the CMOS battery for a few minutes or using the clear CMOS jumper.

- **No Display:**
  - Ensure monitor cable is connected to the graphics card (or motherboard if using integrated graphics).
  - Test with a different monitor or cable.
  - Reseat the graphics card.
- **System Freezes/Crashes:**
  - Check CPU and GPU temperatures. Ensure adequate cooling.
  - Run memory diagnostic tools to check RAM integrity.
  - Update BIOS and drivers to the latest versions.
  - Check power supply stability.
- **Network Connectivity Issues:**
  - Ensure LAN cable is securely connected.
  - Install or update the 2.5GbE LAN driver.
  - Check network adapter settings in the operating system.
- **USB Port Malfunction:**
  - Ensure front panel USB headers are correctly connected to the motherboard.
  - Update chipset drivers.
  - Test with different USB devices.

For more detailed troubleshooting or specific error codes, consult the Gigabyte support website or contact their technical support.

Specifications

Feature	Specification
Brand	GIGABYTE
Series	B760 GAMING X DDR4
Model Name	B760 GAMING X DDR4
CPU Socket	LGA 1700
Compatible Processors	Intel Core 13th and 12th Gen Series, Intel Core of the 14th generation
Chipset Type	Intel B760
RAM Memory Technology	DDR4
Memory Speed	533 MHz (up to 5333MHz OC)

Number of USB 2.0 Ports	2 (rear I/O)
Product Dimensions	9.61 x 12.01 x 1.38 inches
Item Weight	3.3 pounds
Color	Black
Platform	Windows

Warranty Information

GIGABYTE motherboards come with a manufacturer's warranty. The specific terms and duration of the warranty may vary by region and purchase date. Please retain your proof of purchase for warranty claims.

For detailed warranty information, including coverage, limitations, and the process for making a claim, please visit the official GIGABYTE website or contact your local retailer.

Support

For further assistance, technical support, driver downloads, BIOS updates, and frequently asked questions, please visit the official GIGABYTE support website:

www.gigabyte.com

You can also visit the GIGABYTE Store on Amazon for product information and related accessories:GIGABYTE Amazon Store

When contacting support, please have your motherboard model (B760 GAMING X DDR4) and serial number ready.

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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