

ASUS B760-PLUS WIFI

ASUS TUF B760-PLUS WIFI Motherboard and Intel Core i7-12700K Processor Bundle User Manual

Model: ASUS TUF B760-PLUS WIFI Motherboard, Intel Core i7-12700K Processor

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of your ASUS TUF B760-PLUS WIFI Motherboard and Intel Core i7-12700K Processor bundle. This powerful combination is designed for high-performance computing, including gaming and demanding multitasking. Please read this manual thoroughly before proceeding with installation.



Image: The ASUS TUF B760-PLUS WIFI Motherboard alongside the Intel Core i7-12700K processor retail box, illustrating the complete bundle.

2. SETUP AND INSTALLATION

Follow these steps for proper installation of your motherboard and processor. Ensure your system is powered off and unplugged before beginning any installation.

2.1 Motherboard Installation

1. **Prepare the PC Case:** Ensure your ATX compatible PC case has standoffs correctly installed for the motherboard.
2. **Install I/O Shield:** If your case requires it, install the motherboard's I/O shield into the case opening.
3. **Position Motherboard:** Carefully align the motherboard with the standoffs and the I/O shield. Gently lower the motherboard into place.
4. **Secure Motherboard:** Use screws to secure the motherboard to the standoffs. Do not overtighten.

2.2 Processor (CPU) Installation

1. **Open CPU Socket:** Locate the LGA 1700 socket on the motherboard. Push down the load lever and pull it away from the socket to open the metal retention frame.
2. **Align CPU:** Carefully remove the Intel Core i7-12700K processor from its packaging. Align the triangular marker on the CPU with the corresponding marker on the socket. Ensure the notches on the CPU align with the socket keys.
3. **Insert CPU:** Gently place the CPU into the socket. Do not force it. The CPU should sit flat in the socket.
4. **Close CPU Socket:** Lower the metal retention frame over the CPU, then push the load lever back into its locked position. This will secure the CPU and remove the protective cover from the socket.
5. **Install CPU Cooler:** Apply thermal paste (if not pre-applied to your cooler) and install your compatible CPU cooler according to its manufacturer's instructions. Connect the CPU fan cable to the designated header on the motherboard.





Image: A detailed view of the ASUS TUF B760-PLUS WIFI Motherboard, highlighting the LGA 1700 CPU socket and surrounding components.

2.3 Memory (RAM) Installation

1. **Open DIMM Slots:** Open the clips at both ends of the DIMM slots where you intend to install memory modules.
2. **Align RAM:** Align the notch on the DDR4 memory module with the key in the DIMM slot.
3. **Insert RAM:** Press down firmly on both ends of the memory module until the clips snap into place, securing the module.

2.4 Storage Device Installation

- **M.2 SSDs:** The motherboard features PCIe 4.0 M.2 slots. Remove the M.2 heatsink, insert the M.2 SSD at an angle, then push it down and secure it with the provided screw or Q-Latch mechanism. Reinstall the M.2 heatsink.
- **SATA Drives:** Connect SATA data cables from your storage drives (HDDs/SSDs) to the SATA ports on the motherboard. Connect SATA power cables from your power supply to the drives.

2.5 Graphics Card Installation

1. **Open PCIe Slot Latch:** Locate the PCIe 5.0 x16 slot (usually the top reinforced slot) and open its retention latch.
2. **Insert Graphics Card:** Align your graphics card with the slot and press down firmly until it clicks into place and the latch closes.
3. **Secure Card:** Secure the graphics card to the PC case with screws.
4. **Connect Power:** Connect any required PCIe power cables from your power supply to the graphics card.

2.6 Power Supply Connections

- **24-pin ATX Power:** Connect the main 24-pin ATX power cable from your power supply to the corresponding connector on the motherboard.
- **8+4-pin CPU Power:** Connect the 8-pin and 4-pin CPU power cables (ATX12V) from your power supply to the ProCool sockets near the CPU.

2.7 Front Panel and Peripheral Connections

- Connect front panel headers (power button, reset button, USB ports, audio jacks) to their respective pins on the motherboard. Refer to the motherboard manual for exact pin layouts.
- Connect external peripherals such as keyboard, mouse, and monitor.

3. OPERATING INSTRUCTIONS

3.1 Initial Boot-up

1. After all components are installed and connected, plug in your power supply and turn on the power switch.
2. Press the power button on your PC case.
3. The system should power on, and you should see a display on your monitor. If not, refer to the Troubleshooting section.

3.2 BIOS/UEFI Configuration

1. During boot-up, repeatedly press the **DEL** or **F2** key to enter the BIOS/UEFI setup utility.
2. In the BIOS/UEFI, you can configure boot order, enable/disable features, monitor system status, and adjust performance settings.
3. Save changes and exit the BIOS/UEFI to continue booting.

3.3 Driver Installation

After installing your operating system, it is crucial to install the latest drivers for your motherboard and processor. These can typically be found on the ASUS support website for the B760-PLUS WIFI motherboard and the Intel website for the i7-12700K processor. Key drivers include:

- Chipset drivers
- LAN (Ethernet) drivers
- Wi-Fi and Bluetooth drivers
- Audio drivers
- Intel UHD Graphics drivers (if using integrated graphics)

3.4 Operating System Installation

Insert your operating system installation media (USB drive or DVD) and follow the on-screen prompts to install your

preferred operating system.

4. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your system.

4.1 Cooling System Maintenance

- **Dust Removal:** Periodically clean dust from CPU heatsinks, VRM heatsinks, M.2 heatsinks, PCH heatsink, and case fans using compressed air. Ensure fans are not spinning during cleaning.
- **Thermal Paste:** If CPU temperatures are high, consider reapplying thermal paste to the CPU cooler every few years.

4.2 BIOS/UEFI and Driver Updates

- **BIOS/UEFI:** Check the ASUS support website for updated BIOS/UEFI versions. Updates can improve stability, compatibility, and performance. Follow ASUS's instructions carefully when updating the BIOS/UEFI.
- **Drivers:** Regularly check the ASUS and Intel websites for the latest drivers for your motherboard and processor to ensure optimal performance and security.

5. TROUBLESHOOTING

If you encounter issues, review these common troubleshooting steps.

5.1 Common Issues and Solutions

- **No Power:** Ensure all power cables (24-pin ATX, 8+4-pin CPU, GPU PCIe power) are securely connected. Check the power supply switch and wall outlet.
- **No Display:** Verify the monitor is connected to the graphics card (or motherboard if using integrated graphics) and powered on. Reseat the graphics card and RAM modules.
- **System Instability/Crashes:** Check CPU and GPU temperatures. Ensure all drivers are up to date. Test RAM modules individually.
- **Boot Loop:** Reset BIOS/UEFI settings to default (clear CMOS). Check boot order in BIOS/UEFI.
- **Peripheral Not Detected:** Ensure the peripheral is properly connected. Try a different port. Install necessary drivers.

6. SPECIFICATIONS

Key technical specifications for the ASUS TUF B760-PLUS WIFI Motherboard and Intel Core i7-12700K Processor.

Component	Specification
Motherboard Model	ASUS TUF B760-PLUS WIFI
CPU Socket	LGA 1700
Chipset	Intel B760

Component	Specification
Compatible Processors	13th Gen Intel Core, 12th Gen Intel Core, Pentium Gold, Celeron Processors
Memory Slots	4 x DIMM (DDR4)
Power Solution	12+1 DrMOS power stages, Digi+ VRM
PCIe Slots	1 x PCIe 5.0 x16, PCIe 4.0 slots
Storage	PCIe 4.0 M.2 slots, SATA ports
Connectivity	Rear USB 3.2 Gen 2x2 Type-C, Front Panel USB 3.2 Gen 2 Type-C, Thunderbolt (USB4) header, 2.5Gb LAN, Wi-Fi
Processor Model	Intel Core i7-12700K
Cores/Threads	12 Cores (8 Performance, 4 Efficient) / 20 Threads
Max Turbo Frequency	Up to 5.0 GHz
L3 Cache	25MB
Integrated Graphics	Intel UHD Graphics 770



Image: The retail packaging for the Intel Core i7-12700K 12th Gen Unlocked Desktop Processor.

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official ASUS website for the motherboard and the Intel website for the processor. You can typically find detailed warranty terms, FAQs, and contact information for customer service on their respective support pages. Keep your proof of purchase for warranty claims.

<div><div>ASUS</div><div>TUF GAMING B660-PLUS WIFI D4</div><div>Motherboard</div></div>	<p>ASUS TUF Gaming B660-PLUS WIFI D4 Motherboard User Manual</p> <p>Comprehensive user manual for the ASUS TUF Gaming B660-PLUS WIFI D4 ATX motherboard. Includes installation guides, specifications, safety information, BIOS setup, and support details.</p>
<div><div>ASUS</div><div>TUF GAMING B660M-E D4</div></div>	<p>مشخصات و نصب - ASUS TUF GAMING B660M-E D4 راهنمای مادربرد</p> <p>CPU، با جزئیات مشخصات فنی، نحوه نصب ASUS TUF GAMING B660M-E D4 راهنمای جامع مادربرد، حافظه DDR4 و اتصالات پنل پشتی. پشتیبانی از پردازنده‌های نسل دوازدهم اینتل و حافظه M.2،</p>
<div><div>ASUS</div><div>TUF H310-PLUS مادربرد</div></div>	<p>ASUS TUF H310-PLUS GAMING Motherboard User Guide</p> <p>Comprehensive user guide for the ASUS TUF H310-PLUS GAMING motherboard, detailing specifications, package contents, installation instructions, BIOS setup, and exclusive ASUS features.</p>
<div><div>ASUS</div><div>TUF B560M-PLUS WIFI</div></div>	<p>ASUS TUF GAMING B560M-PLUS WIFI Motherboard Technical Specifications and Manual</p> <p>Comprehensive technical specifications, installation guide, and BIOS information for the ASUS TUF GAMING B560M-PLUS WIFI motherboard, featuring Intel B560 chipset, LGA1200 socket, DDR4 memory support, PCIe 4.0, Wi-Fi 6, and 2.5Gb Ethernet.</p>
<div><div>ASUS</div><div>TUF GAMING B760M-PLUS WIFI II</div><div>Motherboard</div></div>	<p>ASUS TUF GAMING B760M-PLUS WIFI II Motherboard User Manual</p> <p>Comprehensive user manual for the ASUS TUF GAMING B760M-PLUS WIFI II motherboard, detailing installation, configuration, features like Intel LGA1700 socket, DDR5 memory, Wi-Fi 6E, and support resources.</p>

ROG STRIX
B760-G
GAMING
WIFI D4



[ASUS ROG STRIX B760-G GAMING WIFI D4 Motherboard User Manual](#)

Comprehensive user guide for the ASUS ROG STRIX B760-G GAMING WIFI D4 motherboard, detailing installation, specifications, safety precautions, and BIOS/RAID support for Intel 13th & 12th Gen processors.