

## ASRock B560 PRO4

# ASRock B560 PRO4 Motherboard User Manual

Detailed instructions for installation, operation, and maintenance.

## 1. INTRODUCTION AND OVERVIEW

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The ASRock B560 PRO4 is a high-performance ATX motherboard designed for Intel 10th and 11th Generation Core processors, utilizing the LGA1200 socket. It supports DDR4 memory, PCIe 4.0, and offers a robust set of features for building a reliable personal computer system. This manual provides essential information for proper installation, configuration, and maintenance of your motherboard.

## 2. SETUP AND INSTALLATION

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### 2.1 Pre-installation Checklist

Before beginning installation, ensure you have the following components:

- ASRock B560 PRO4 Motherboard
- Compatible Intel LGA1200 CPU (10th or 11th Gen)
- DDR4 RAM modules
- CPU Cooler
- Graphics Card (if not using integrated graphics)
- Storage Devices (M.2 SSDs, SATA SSDs/HDDs)
- Power Supply Unit (PSU)
- Computer Case
- Screwdriver and anti-static wrist strap

### 2.2 Motherboard Layout

Familiarize yourself with the motherboard's layout to identify key components and connectors.



Figure 1: Top-down view of the ASRock B560 PRO4 motherboard, highlighting the CPU socket, RAM slots, PCIe slots, and M.2 heatsinks.



Figure 2: Angled view of the ASRock B560 PRO4 motherboard, showing the various components from a different perspective.

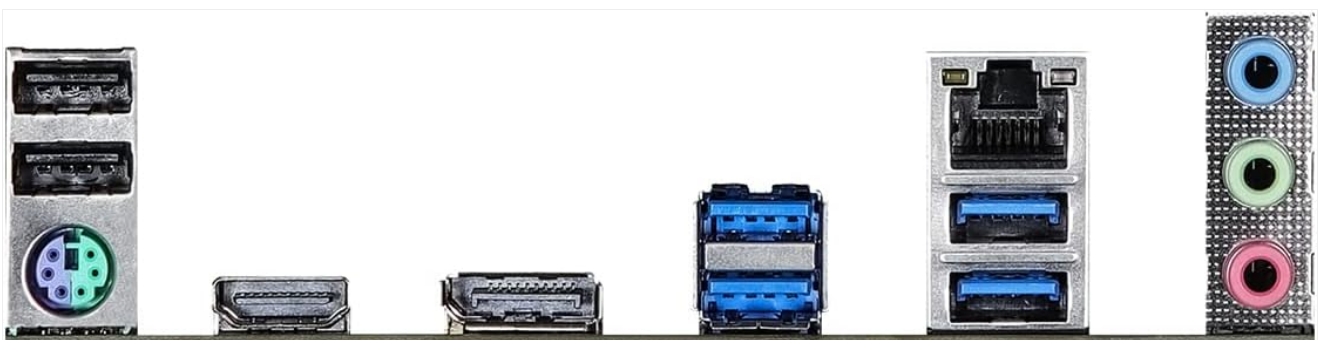


Figure 3: Close-up of the ASRock B560 PRO4 motherboard's rear I/O panel, displaying USB ports, Ethernet port, audio jacks, HDMI, and DisplayPort outputs.

## 2.3 CPU Installation

Carefully open the CPU socket lever. Align the triangular mark on your Intel LGA1200 CPU with the corresponding mark on the socket. Gently place the CPU into the socket without forcing it. Close the lever to secure the CPU. Install the CPU cooler according to its manufacturer's instructions.

## 2.4 RAM Installation

Open the clips on both ends of the DDR4 memory slots. Align the notch on the RAM module with the key in the slot. Press down firmly on both ends of the module until the clips snap into place. For optimal performance, install modules in the recommended dual-channel configuration (refer to the motherboard manual for specific slot pairings).

## 2.5 Storage Device Installation

**M.2 SSDs:** Locate the M.2 slots. Remove the M.2 heatsink/cover if present. Insert the M.2 SSD into the slot at an angle, then gently push it down and secure it with the provided screw. Reattach the heatsink if applicable. The B560 PRO4 features two M.2 slots, with one supporting PCIe Gen4 for 11th Gen Intel CPUs.

**SATA Drives:** Connect SATA data cables from your SSDs/HDDs to the SATA 6Gb/s ports on the motherboard. Connect SATA power cables from your PSU to the drives.

## 2.6 Expansion Card Installation

Insert your graphics card or other PCIe expansion cards into the appropriate PCIe slots. The B560 PRO4 includes one PCIe 4.0 x16 slot (for 11th Gen CPUs), one PCIe 3.0 x16 slot, and two PCIe 3.0 x1 slots. Ensure the card is fully seated and secured with a screw to the case.

## 2.7 Power Connections

Connect the 24-pin ATX power connector from your PSU to the main power socket on the motherboard. Connect the 8-pin (or 4+4-pin) CPU power connector to the CPU power socket near the CPU.

## 2.8 Front Panel Connections

Connect the front panel headers for USB ports, audio jacks, power button, reset button, and LED indicators to their respective pins on the motherboard. Refer to the motherboard's detailed diagram for correct pin assignments.

# 3. OPERATING INSTRUCTIONS

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## 3.1 First Boot and BIOS/UEFI Access

After completing all hardware installations, connect your monitor, keyboard, and mouse. Power on your system. During the boot process, repeatedly press the **Delete** or **F2** key to enter the BIOS/UEFI setup utility. Here you can configure boot order, system time, and other advanced settings.

## 3.2 Driver Installation

Once your operating system is installed, install the necessary drivers for the motherboard's components (chipset, audio, LAN, etc.). These drivers are typically provided on a support CD or can be downloaded from the official ASRock website ([www.asrock.com](http://www.asrock.com)).

# 4. MAINTENANCE

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## 4.1 Cleaning

Regularly clean your computer's interior 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.

## 4.2 BIOS/UEFI Updates

ASRock periodically releases BIOS/UEFI updates to improve stability, add new features, or support new hardware. Download updates from the official ASRock website and follow the provided instructions carefully. Incorrect BIOS updates

can damage your motherboard.

## 5. TROUBLESHOOTING

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### 5.1 Common Issues

- **No Power:** Check all power connections (24-pin ATX, 8-pin CPU, PSU switch, wall outlet).
- **No Display (No POST):** Ensure RAM modules are properly seated. Reseat the graphics card. Check monitor connections. Try booting with minimal components (CPU, one RAM stick, GPU).
- **System Instability:** Verify CPU and RAM compatibility. Check for overheating. Ensure drivers are up to date.
- **Operating System Not Booting:** Check boot order in BIOS/UEFI. Verify storage device connections.

For more detailed troubleshooting, refer to the comprehensive manual available on the ASRock website or contact ASRock technical support.

## 6. SPECIFICATIONS

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Below are the key specifications for the ASRock B560 PRO4 Motherboard:

Feature	Specification
Brand	ASRock
Model Name	B560 PRO4
CPU Socket	LGA 1200
Compatible Processors	10th Generation Intel Core, 11th Generation Intel Core
Chipset Type	Intel B560
RAM Memory Technology	DDR4
Memory Slots Available	4
Ram Memory Maximum Size	128 GB
Memory Clock Speed	4800 MHz (Max OC)
Graphics Card Interface	PCI Express
Total PCIe Ports	4 (1x PCIe 4.0 x16, 1x PCIe 3.0 x16, 2x PCIe 3.0 x1)
Total SATA Ports	6
M.2 Slots	2

Feature	Specification
Total USB Ports	10 (Rear: 2x USB 3.2 Gen2, 4x USB 3.2 Gen1, 2x USB 2.0; Front: 1x USB 3.2 Gen1 Header, 2x USB 2.0 Headers)
Number of Ethernet Ports	1 (Realtek 2.5 Gigabit LAN)
Total Number of HDMI Ports	1
DisplayPort	1
Audio	Realtek ALC897 Audio Codec
Form Factor	ATX
Item Weight	2.2 Pounds

## 7. WARRANTY INFORMATION

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The ASRock B560 PRO4 Motherboard comes with a **3-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For full warranty terms, conditions, and claim procedures, please visit the official ASRock website or contact your local retailer.

## 8. SUPPORT

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For technical assistance, driver downloads, BIOS updates, and frequently asked questions, please visit the official ASRock support page:

[ASRock Support Center](#)

You may also contact ASRock customer service directly through their website for further assistance.