ASRock B760 Pro RS WiFi

ASRock B760 Pro RS WiFi 6E Motherboard Instruction Manual

MODEL: B760 PRO RS WIFI

Brand: ASRock

1. Introduction

This manual provides detailed instructions for the installation, configuration, and operation of your ASRock B760 Pro RS WiFi 6E motherboard. This ATX motherboard is designed to support 14th, 13th, and 12th Generation Intel Core Processors with an LGA1700 socket, offering a robust platform for various computing needs. It features DDR5 memory support, advanced connectivity options including Wi-Fi 6E and 2.5G LAN, and multiple PCIe and M.2 slots for expansion.

2. Safety Information

Please read and follow these safety guidelines to prevent damage to the motherboard and ensure personal safety:

- **Electrostatic Discharge (ESD) Precautions:** Always wear an anti-static wrist strap or frequently touch a grounded object (e.g., the metal chassis of your PC) before handling the motherboard or any components.

- **Power Off:** Ensure the power supply is disconnected from the wall outlet before installing or removing any components.

- **Proper Handling:** Hold the motherboard by its edges and avoid touching sensitive components or circuits.

- **Ventilation:** Ensure adequate ventilation within your PC case to prevent overheating.

- **Liquid and Moisture:** Keep the motherboard away from liquids and moisture.

3. Package Contents

Verify that all items are present in your motherboard package:

- ASRock B760 Pro RS WiFi 6E Motherboard

- Quick Installation Guide / User Manual

- Support CD (for drivers and utilities)

- SATA Data Cables

- Wi-Fi Antenna

- M.2 Screws / Standoffs

- I/O Shield

4. Motherboard Overview

Familiarize yourself with the layout and key components of your ASRock B760 Pro RS WiFi 6E motherboard.
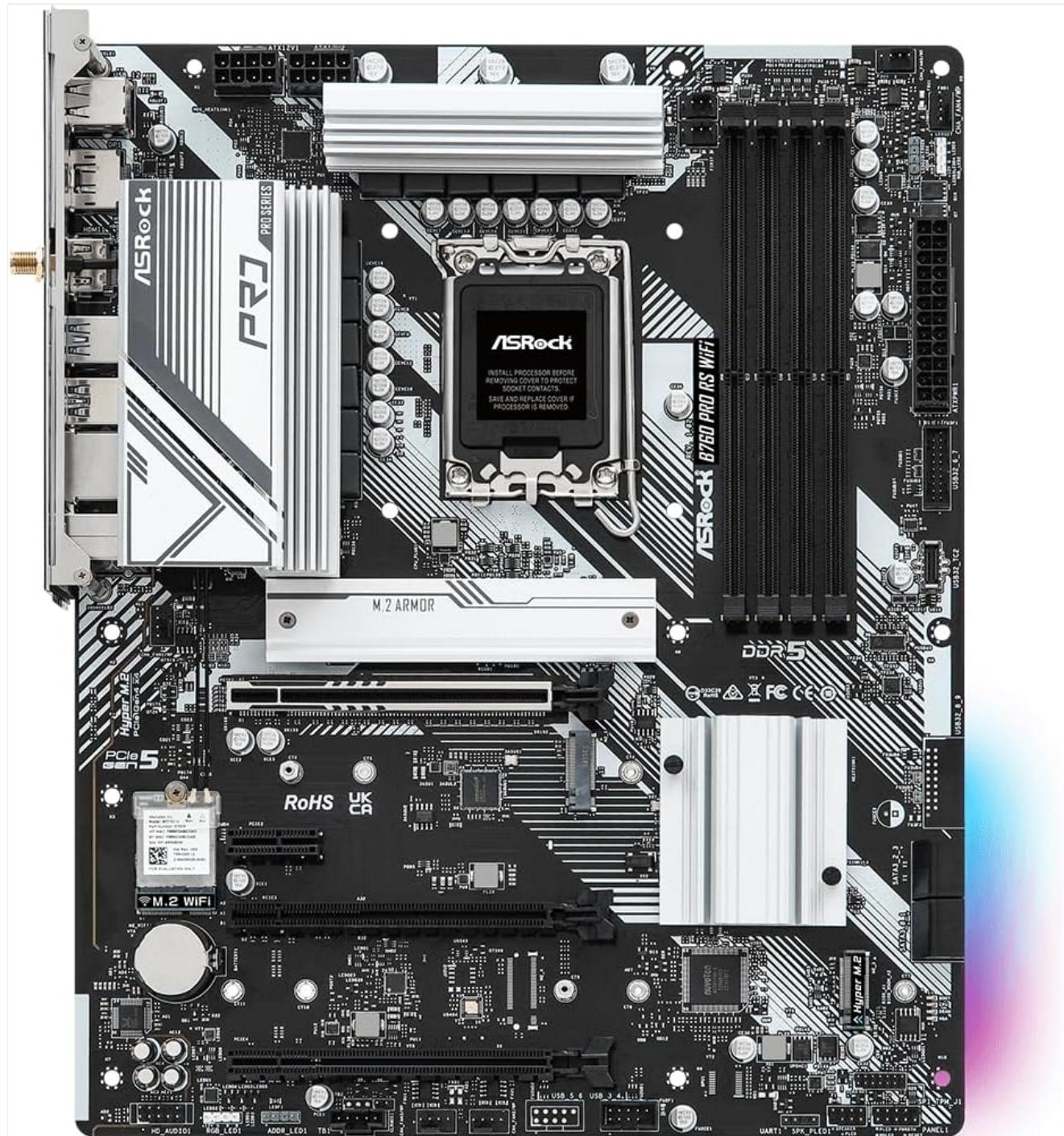
Figure 1: Top view of the ASRock B760 Pro RS WiFi 6E motherboard, showcasing the CPU socket, DIMM slots, PCIe slots, and heatsinks.

Figure 2: Diagram highlighting key features and components on the ASRock B760 Pro RS WiFi 6E motherboard, including power connectors, VRM design, DDR5 DIMMs, PCIe slots, M.2 sockets, SATA3 ports, and USB headers.


Optimized for stability, durability, and efficiency, the Pro Series combines reliable performance, user-friendly features and streamlined style for daily computing tasks.
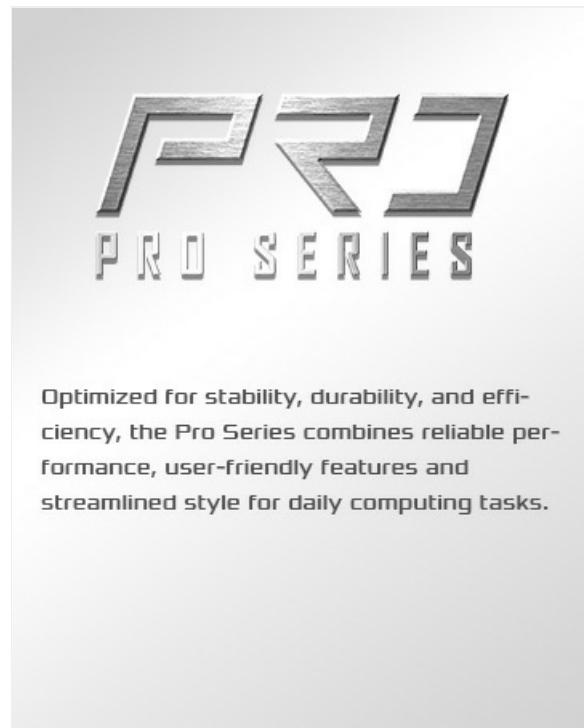
Figure 3: Diagram illustrating the cooling solutions on the ASRock B760 Pro RS WiFi 6E motherboard, including aluminum VRM heatsink, M.2 SSD heatsink, chipset heatsink, and various fan headers.

Figure 4: Rear I/O panel of the ASRock B760 Pro RS WiFi 6E motherboard, showing HDMI, DisplayPort, USB 3.2 Gen2 Type-C, USB 3.2 Gen2 Type-A, USB 3.2 Gen1, USB 2.0, 2.5G LAN, Wi-Fi 6E antenna connectors, and audio jacks.

Product Demonstration Video

Video 1: A general product demonstration video showcasing various angles and features of a motherboard, providing a visual overview of the product.

5. Installation Guide

Follow these steps to install your motherboard and its components into your PC chassis.

5.1. CPU Installation

1. Open the CPU socket lever and lift the load plate.

2. Carefully align the CPU with the socket, ensuring the triangular mark on the CPU matches the mark on the socket. Gently place the CPU into the socket.

3. Close the load plate and push down the lever until it locks into place.

5.2. CPU Cooler Installation

Install your CPU cooler according to its manufacturer's instructions. Ensure proper thermal paste application and secure mounting for optimal cooling performance.

5.3. Memory (RAM) Installation

1. Open the clips at both ends of the DDR5 DIMM slots.

2. Align the notch on the memory module with the notch in the DIMM slot.

3. Press down firmly on both ends of the memory module until the clips snap into place.

5.4. Storage Device Installation

- **M.2 SSDs:** Locate the Hyper M.2 or M.2 sockets. Remove the M.2 heatsink if present. Insert the M.2 SSD into the slot at an angle, then push it down and secure it with the provided screw/standoff. Reattach the heatsink if applicable.

- **SATA Drives:** Connect SATA data cables from your storage drives to the SATA3 ports on the motherboard. Connect power cables from your power supply to the SATA drives.

5.5. Expansion Card Installation

Insert your PCIe expansion cards (e.g., graphics card) into the appropriate PCIe slots. Ensure they are seated firmly and secured with the chassis screw.

5.6. Power Supply Connections

- Connect the 24-pin ATX power connector from your power supply to the corresponding header on the motherboard.

- Connect the 8-pin (or 4+4-pin) 12V CPU power connector(s) to the CPU power header(s) on the motherboard.

5.7. Front Panel Connections

Connect the cables from your PC case's front panel (USB ports, audio jacks, power button, reset button, and LED indicators) to the corresponding headers on the motherboard. Refer to the motherboard layout diagram for header locations.

5.8. Rear Panel Connections

Connect your peripherals (monitor, keyboard, mouse, network cable, Wi-Fi antennas) to the rear I/O ports as shown in Figure 4.

6. Operating Instructions

6.1. BIOS Setup

To enter the BIOS setup utility, press the Del or F2 key during system startup. Within the BIOS, you can configure various system settings, including boot order, date/time, and memory profiles (e.g., XMP for DDR5 RAM). Consult the full user manual for detailed BIOS settings.

6.2. Driver Installation

After installing your operating system, install the necessary drivers for your motherboard components. You can use

the provided support CD or download the latest drivers from the ASRock website. The ASRock Auto Driver Installer can simplify this process.

6.3. Initial Boot

After all components are installed and connected, power on your system. The system should boot to your operating system. If issues arise, refer to the Troubleshooting section.

7. Maintenance

7.1. Cleaning

Regularly clean your PC 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.

7.2. BIOS Updates

Periodically check the ASRock website for BIOS updates. BIOS updates can improve system stability, add support for new hardware, or fix bugs. Follow the instructions provided by ASRock carefully when performing a BIOS update.

8. Troubleshooting

This section addresses common issues you might encounter:

- **No Power:** Check all power connections (24-pin ATX, 8-pin CPU, GPU). Ensure the power supply switch is on.

- **No Display:** Verify monitor connection and input source. Reseat the graphics card and memory modules. Check if the CPU requires integrated graphics or a dedicated GPU.

- **System Instability/Crashes:** Check memory seating and compatibility. Ensure CPU cooler is properly installed. Update drivers and BIOS.

- **Network Connectivity Issues:** Ensure LAN cable is connected or Wi-Fi antennas are securely attached. Install or update network drivers.

- **CPU Compatibility:** This motherboard supports 12th, 13th, and 14th Gen Intel Core Processors. Ensure your CPU is compatible.

9. Specifications

Feature	Specification
CPU Socket	LGA 1700
Compatible Processors	14th, 13th & 12th Gen Intel Core Processors
Chipset	Intel B760
Memory Technology	4 x DDR5 DIMMs, Dual Channel, up to 7200+ (OC) MHz, 192GB Max
Expansion Slots	1 x PCIe 5.0 x16, 1 x PCIe 4.0 x16, 1 x PCIe 3.0 x16, 1 x PCIe 3.0 x1

Feature	Specification
Graphics Output	HDMI, DisplayPort, eDP
Audio	Realtek ALC897 7.1 CH HD Audio Codec, Nahimic Audio
Storage	4 x SATA3 6.0 Gb/s, 2 x Hyper M.2 (PCIe Gen4x4), 1 x M.2 (PCIe Gen4x2)
USB Ports	2 x USB 3.2 Gen2 Type-C (1 Rear, 1 Front), 1 x USB 3.2 Gen2 Type-A (Rear), 6 x USB 3.2 Gen1 (4 Rear, 2 Front), 4 x USB 2.0 (2 Rear, 2 Front)
LAN	Dragon 2.5G LAN
Wireless/Bluetooth	802.11ax Wi-Fi 6E + Bluetooth
Form Factor	ATX
Dimensions	12.2 x 8.27 x 1.97 inches
Weight	2.16 pounds

10. Warranty and Support

ASRock provides a limited warranty for its motherboards. Please refer to the warranty card included in your package or visit the official ASRock website for detailed warranty terms and conditions. For technical support, driver downloads, and further assistance, please visit the ASRock Support Page or contact ASRock customer service. For purchases made through Amazon, you may also refer to the seller's return policy and support options. The seller for this product is ASRock USA.