ASUS TUF GAMING B850-PLUS WIFI - motherboard - ATX - Socket AM5 - AMD B850(90MB1J30-M0EAY0)

ASUS TUF GAMING B850-PLUS WIFI - Motherboard - ATX - Socket AM5 - AMD B850 Chipset - USB-C 3.2 Gen 2x2, USB-C 3.2 Gen 2, USB 3.2 Gen 1 - 2.5 Gigabit LAN, Wi-Fi 7, Bluetooth - onboard graphics (CPU required) - HD Audio (8-channel)



The ASUS TUF GAMING B850-PLUS WIFI motherboard is designed for gamers and PC enthusiasts seeking reliable performance and advanced features. With support for Ryzen 7000/8000/9000 Series processors, it provides a robust platform for building high-performance systems. The motherboard features a UEFI BIOS with ASUS EZ Flash 3, enabling easy updates and management of system settings. This motherboard supports DDR5 SDRAM with speeds up to 4000 MHz overclocked, allowing for a fast and responsive user experience. Its multiple expansion slots, including PCIe 5.0 and M.2, offer extensive upgrade potential. The integrated 2.5 Gigabit Ethernet and Wi-Fi 7 compatibility ensure smooth and speedy connectivity, making it suitable for online gaming or multimedia experiences.

Key Selling Points

Supports Ryzen 7000/8000/9000 Series processors DDR5 SDRAM support with speeds up to 4000 MHz Featuring PCIe 5.0 for enhanced expansion options Includes 2.5 Gigabit Ethernet and Wi-Fi 7 connectivity Equipped with UEFI BIOS and ASUS EZ Flash 3

Product Features

Reliable Audio Performance

The motherboard includes a high definition audio codec, Realtek ALC1220P, providing 8-channel audio output ensuring clear and immersive sound quality during gaming sessions.

Versatile Connectivity Options

Equipped with multiple USB ports, including USB 3.2 Gen 2 and USB-C 3.2 Gen 2x2, this motherboard allows for extensive connectivity with peripherals and external devices.

Efficient Power Design

The motherboard features a 14+2+1 phase power design and high-quality 80A power stages, ensuring stable power delivery to the CPU and RAM for maximum performance.

Enhanced Thermal Management

It includes VRM heatsink design and ASUS ProCool technology, effectively managing the thermal output during peak loads to maintain system stability.

User-Friendly Features

The presence of ASUS Q-Design and M.2 Q-Latch makes it easier to install and manage hardware components, enhancing the DIY experience for builders.

Main Specifications

Product Description	ASUS TUF GAMING B850-PLUS WIFI - motherboard - ATX - Socket AM5 - AMD B850
Product Type	Motherboard - ATX
Chipset Type	AMD B850
Processor Socket	1 x Socket AM5
Compatible Processors	Ryzen (supports Ryzen 7000/8000/9000 Series)
Max RAM Size	192 GB
RAM Supported	4 DIMM slots - DDR5, non-ECC, on-die ECC, unbuffered
Storage Ports	4 x SATA-600 (RAID), 3 x M.2

USB / FireWire Ports	1 x USB-C 3.2 Gen 2x2 + 3 x USB 3.2 Gen 2 + 4 x USB 3.2 Gen 1 + 2 x USB 2.0 + (1 x USB-C 3.2 Gen 2 + 2 x USB 3.2 Gen 1 + 4 x USB 2.0 via headers)
Audio	HD Audio (8-channel)
LAN	2.5 Gigabit Ethernet, 802.11a/b/g/n/ac/ax/be (Wi-Fi 7), Bluetooth 5.4

Extended Specification

General

Product Type	Motherboard - ATX
Chipset Type	AMD B850
Processor Socket	Socket AM5
Max Processors Qty	1
Compatible Processors	Ryzen (supports Ryzen 7000/8000/9000 Series)

Expansion / Connectivity

Expansion Slots	1 x CPU $ $ 4 x DIMM 288-pin $ $ 1 x PCIe 5.0 x16 $ $ 1 x PCIe 4.0 x16 (x8/x4 mode) $ $ 2 x PCIe 4.0 x1 $ $ 1 x PCIe 4.0 x16 $ $ 2 x M.2 socket (2280 M.2 Key M slot) $ $ 1 x M.2 socket (2280/22110 M.2 Key M slot)
Storage Interfaces	SATA-600 -connectors: 4 x 7pin Serial ATA - RAID 0 / RAID 1 / RAID 10 \ddagger PCIe 4.0 -connectors: 3 x M.2 - RAID 0 / RAID 1 / RAID 10
Interfaces	1 x HDMI \mid 1 x DisplayPort \mid 1 x USB-C 3.2 Gen2x2 \mid 3 x USB 3.2 Gen 2 \mid 4 x USB 3.2 Gen 1 \mid 2 x USB 2.0 \mid 1 x LAN (2.5Gigabit Ethernet) \mid 1 x microphone - minijack \mid 1 x audio line-out - mini-jack \mid 2 x aerial
Internal Interfaces	4 x USB 2.0 - header $ $ 2 x USB 3.2 Gen 1 - header $ $ 1 x USB-C 3.2 Gen 2 - header $ $ 1 x audio - header $ $ 1 x Thunderbolt - header $ $ 1 x serial - header
Power Connectors	24-pin main power connector, 4-pin ATX12V connector, 2 x 8-pin ATX12V connectors

Miscellaneous

Included Accessories	ASUS Wi-Fi Q-antenna, 2 x M.2 rubber package, TUF GAMING sticker
Cables Included	2 x Serial ATA cable
Software Included	Sonic Radar III, Sonic Studio III, Armoury Crate, ASUS AURA Creator, ASUS Fan Xpert 4, ASUS AI Suite III, ASUS Turbo App, PC Cleaner, MyAsus, WinRAR
Compliant Standards	FCC Part 15 Class B, VCCI Class B ITE, JATE, EU REACH, EU RoHS, UKCA, DisplayPort 1.4
Width	30.5 cm
Depth	24.4 cm

Audio

Туре	HD Audio (8-channel)
Audio Codec	Realtek ALC1220P
Compliant Standards	High Definition Audio, DTS Sound Unbound

Features

BIOS Type	AMI
BIOS Features	UEFI BIOS, ASUS EZ Flash 3
Sleep / Wake Up	Wake on LAN (WOL), wake on PME

Hardware Features

ASUS OptiMem II, SupremeFX Shielding technology, Savitech SV3H712 amplifier, BIOS FlashBack button, Water Pump Header, jack retasking, audio jack detect technology, ASUS Extreme Engine Digi+, 5K Black Metallic Capacitors, ASUS Q-Design, M.2 Q-Latch, PCIe Slot Q-Release, Q-LED, Q-DIMM, Q-Slot, VRM heatsink design, ASUS EZ DIY, BIOS FlashBack LED, ASUS ProCool, pre-mounted I/O shield, ASUS SafeSlot, ASUS SafeDIMM, ASUS Aura Sync, ASUS TPU (TurboV Processing Unit), ASUS DIGI+ VRM, CrashFree BIOS 3, 14+2+1 Phase Power Design, 80A Power Stage, DIY Friendly Design, ASUS Enhanced Memory Profile (AEMP), ESD Guards

LAN

Network Controller	Intel I225-V
Network Interfaces	2.5 Gigabit Ethernet, 802.11a/b/g/n/ac/ax/be (Wi-Fi 7), Bluetooth 5.4
Supported RAM	
Max Size	192 GB
Technology	DDR5
Bus Clock	4000 MHz (O.C.)
Supported RAM Integrity Check	Non-ECC, on-die ECC
Registered or Buffered	Unbuffered

AMD EXPO technology, dual channel memory architecture

What's in the box

Features

ASUS TUF GAMING B850-PLUS WIFI $2 \times Serial ATA \ cable$ $2 \times M.2 \ rubber \ package, TUF \ GAMING \ sticker, \ ASUS \ Wi-Fi \ Q-antenna \ Software$

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