PRIME-B840-PLUSWIFI

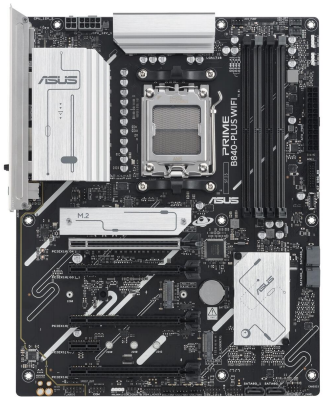
Asus Prime B840-PLUS a WiFi AMD Ryzen 7000 / 8000 / 9000 series Socket AM5 ATX motherboard

Product Overview

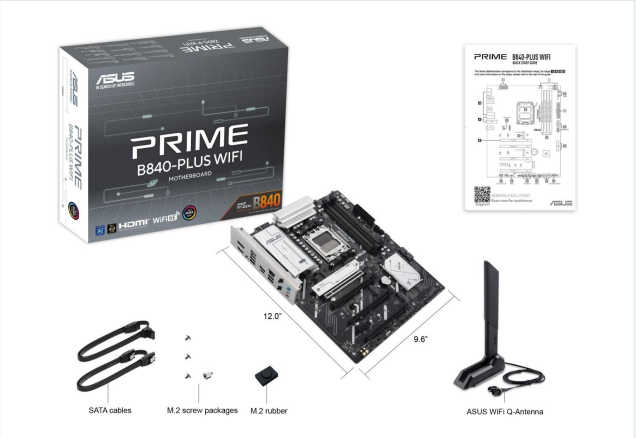
Asus Prime B840-PLUS a WiFi AMD Ryzen 7000 / 8000 / 9000 Series Socket AM5 ATX Motherboard, AMD B840 Chipset, 4x DDR5 DIMM Memory slots, 1x DisplayPort, 1x HDMI Port, 1x PCI-e 4.0 x16 slot (Supports x16 mode), 1x PCI-e 3.0 x16 slot (Support x4 mode), 2x PCI-e 3.0 x16 slots (Support x1 mode), 1x PCI-e 3.0 x1 slot, 3x M.2 slots supports up to PCI-e 4.0 x4 mode, 4x SATA 6Gb/s Ports, 1x Realtek 2.5Gb Ethernet, Wi-Fi 6E, Bluetooth V5.3, USB 10Gbps Ports (Type-A + Type-C), USB 5Gbps Ports (Type-A), USB 2.0 Ports (Type-A), 3x audio jacks, 1x BIOS FlashBack Button











Specifications

Overview:

B840-PLUS WIFI

ASUS Prime series motherboards are expertly engineered to unleash the full potential of AMD Ryzen9000 series processors. The PRIME B840-PLUS WIFI motherboard provides users and PC DIY builders with a range of performance optimizations via intuitive software and firmware features. It's designed to be Advanced AI PC-ready, offering the power and connectivity needed for demanding AI applications.

Features:

AI Solutions

ASUS AI Solutions include AI Advisor as your technical expert with expertise in PC performance.

AI Advisor

ASUS AI Advisor allows users to explore the functionality and advanced features of ASUS motherboards in a simple and straightforward way.

Digital Power Design

PRIME B840-PLUS WIFI features an 8+2+1 phase power design with discrete MOSFETs, ensuring efficient and stable power delivery for AMD processors plus steady performance for day-to-day use.

Enhanced DDR5 performance

Comprehensive memory tuning options are the cornerstone of PRIME motherboards. The PRIME B840-PLUS WIFI maximizes the potential of your DDR5 modules, from entry-level to extreme-speed kits.

For entry-level modules without EXPOsupport, ASUS Enhanced Memory Profile (AEMP) automatically detects memory chips and provides optimized profiles for enhanced performance.

For those looking to surpass stock DDR5 speeds, the PRIME B840-PLUS WIFI offers extensive AMD Extended Profiles for Overclocking (EXPO) support and a wide array of UEFI settings for further performance tweaks.

Three M.2 slots (up to 64 Gbps)

PRIME B840-PLUS WIFI offers a total of three M.2 slots, including two that support data-transfer speeds of up to 64 Gbps via PCIe 4.0, and one that supports PCIe 3.0. This enables quicker boot-up and app load times with OS or application drives.

Cooling

Cooler by design

The PRIME B840-PLUS WIFI motherboard is engineered with multiple onboard heatsinks and an array of hybrid fan headers to help ensure your rig stays cool and stable under intense workloads.

ASUS Fan Xpert 2+

ASUS Fan Xpert 2+ software provides comprehensive control over fans. An Auto-Tuning mode intelligently configures all parameters with a single click. There's also an Extreme Quiet mode that reduces chassis fan speeds to below the default

minimum to keep your system whisper-quiet when performing light tasks. Fans can also be controlled via the UEFI BIOS.

Cooler compatibility

ASUS AIO coolers offer robust performance, high overclocking potential, bold aesthetics and customizable functionality for new motherboards, empowering you to build your dream gaming rig.

Empowering connections

This motherboard offers a versatile range of connectivity, including support for WiFi 6E, PCIe 4.0 slot and an arsenal of USB ports which includes Type-Cconnections.

- WiFi 6E
- 2.5Gb Ethernet
- PCIe 4.0
- PCIe 4.0 slot
- USB 10Gbps

WiFi 6E

Built-in WiFi 6E technology takes advantage of the newly available radio spectrum in the 6 GHz band. With triple the bandwidth of the 2.4/5/6 GHz band, WiFi 6E delivers ultrafast wireless networking speeds with improved capacity and better performance in dense wireless environments.

Realtek 2.5 Gb Ethernet

Realtek 2.5 Gb Ethernet reduces CPU overhead and offers exceptionally high TCP and UDP throughput for faster, smoother data transfers.

USB 10Gbps Type-C

A batch of USB ports support high-end rigs loaded with peripherals, including a rear USB Type-C connector with ultrafast USB 10Gbps for transmission speeds of up to 10Gbps.

Q-Antenna

With Q-Antenna, attaching a WiFi antenna to your PC is now easy and fast. Instead of slowly rotating two fasteners until they finally lock in, they just snap into place. Less hassle, and more consistent performance.

Pre-Mounted I/O Shield

Our pre-installed I/O shield safeguards ports, simplifies the build process, increases functionality and enhances aesthetics for PC DIY enthusiasts.

BIOS FlashBack

BIOS FlashBacksimplifies BIOS updates. Just load the BIOS file onto a FAT32 USB stick, insert it into the BIOS FlashBackport, and press a button-no CPU or memory needed.

SafeSlot Core+

SafeSlot Core+ is a one-piece stainless-steel brace that shields the slot to protect it from damage. The metal cover is tightly secured to the slot with hooks, and the entire assembly is firmly anchored to the PCB with strengthened solder points to provide a secure foundation for heavyweight graphics cards.

Build for the most advanced pc for gaming and creating

When only the fastest will do, ASUS motherboards deliver. With faster dual-channel DDR5 memory support, AMD EXPOtechnology and PCIe 4.0 support for both graphics and NVMe, you can play the most demanding games and deliver your biggest projects with the revolutionary performance of an ASUS motherboard and AMD Ryzen9000, 8000, and 7000 Series processors.

Specifications:

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Specifications

Product Code	PRIME-B840-PLUSWIFI
Model	PRIME B840-PLUS WIFI
CPU	AMD Socket AM5 for AMD Ryzen 9000 & 8000 & 7000 Series Desktop Processors
Chipset	AMD B840 Chipset
Memory	4 x DIMM slots, max. 192GB, DDR5 Supports up to 7600+MT/s (OC) with Ryzen 9000 & 8000 & 7000 Series Processors, ECC and Non-ECC Un-buffered DIMM
	Dual channel memory architecture
	Supports AMD Extended Profiles for Overclocking (EXPO)
	ASUS Enhanced Memory Profile (AEMP)
	Adjustments will be made based on the specifications of mass-produced memory products available on the market.
	* Non-ECC, un-buffered DDR5 memory supports On-Die ECC function.
Graphics	1 x DisplayPort
	1 x HDMI port
	* Graphics specifications may vary between CPU types. Please refer to AMD CPU specifications.
	** Supports max. 8K@30Hz as specified in DisplayPort 1.4.
	* Supports 4K@60Hz as specified in HDMI 2.1.
Expansion Slots	AMD Ryzen 9000 & 7000 Series Desktop Processors
	1 x PCIe 4.0 x16 slot (supports x16 mode)
	AMD Ryzen 8000 Series Desktop Processors
	1 x PCIe 4.0 x16 slot (supports x8/x4 mode)
	AMD B840 Chipset
	1 x PCIe 3.0 x16 slot (support x4 mode)
	2 x PCIe 3.0 x16 slots (support x1 mode)
	1 x PCIe 3.0 x1 slot
	** Specifications vary by CPU types.
	* The PCIEX16(G3)_1/3 and PCIEX1(G3) share bandwidth with PCIEX16(G3)_2. The PCIEX16(G3)_2 will run x1 mode when any of the PCIEX16(G3)_1/3 and PCIEX1(G3) slots is occupied.

Storage	Supports 3 x M.2 slots and 4 x SATA 6Gb/s ports
	AMD Ryzen 9000 & 7000 Series Desktop Processors
	M.2_1 slot (Key M), type 2280 (supports PCIe 4.0 x4 mode)
	M.2_2 slot (Key M), type 2280 (supports PCIe 4.0 x4 mode)
	AMD Ryzen 8000 Series Desktop Processors
	M.2_1 slot (Key M), type 2280 (supports PCIe 4.0 x4 mode)
	M.2_2 slot (Key M), type 2280 (supports PCIe 4.0 x4/x2 mode)
	AMD B840 Chipset
	M.2_3 slot (Key M), type 2242/2260/2280 (supports PCIe 3.0 x4 mode
	4 x SATA 6Gb/s ports
	* Specifications vary by CPU types.
	AMD RAIDXpert2 Technology
	Ryzen 9000 Series Processors: RAID 0/1/5/10
	Ryzen 8000 Series Processors: RAID 0/1
	Ryzen 7000 Series Processors: RAID 0/1/10
Ethernet	1 x Realtek 2.5Gb Ethernet
	ASUS LANGuard
Wireless & Bluetooth	"Wi-Fi 6E
	2x2 Wi-Fi 6E (802.11ax)
	Supports 2.4/5/6GHz frequency band
	Bluetooth v5.3
	* WiFi 6E 6GHz regulatory may vary between countries, supported only in Windows 11 or later.
	** The Bluetooth version may vary, please refer to the Wi-Fi module manufacturer's website for the latest specifications."
USB	Rear USB (Total 8 ports)
	2 x USB 10Gbps port(s) (1 x Type-A + 1 x USB Type-C)
	2 x USB 5Gbps ports (2 x Type-A)
	4 x USB 2.0 ports (4 x Type-A)
	Front USB (Total 7 ports)
	1 x USB 5Gbps connector (supports USB Type-C)
	1 x USB 5Gbps header supports 2 additional USB 5Gbps ports
	2 x USB 2.0 headers support 4 additional USB 2.0 ports
	* USB Type-C power delivery output: max. 5V/3A

Audio	Realtek 7.1 Surround Sound High Definition Audio CODEC
	- Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking
	- Supports up to 24-Bit/192 kHz playback
	Audio Features
	- Audio Shielding
	- Premium audio capacitors
	- Dedicated audio PCB layers
	* A chassis with an HD audio module in the front panel is required to support 7.1 Surround Sound audio output.
Back Panel I/O Ports	1 x USB 10Gbps port (1 x USB Type-C)
	1 x USB 10Gbps port (1 x Type-A)
	2 x USB 5Gbps ports (2 x Type-A)
	4 x USB 2.0 ports (4 x Type-A)
	1 x DisplayPort
	1 x HDMI port
	1 x Wi-Fi module
	1 x Realtek 2.5Gb Ethernet port
	3 x Audio jacks
	1 x BIOS FlashBack button

Internal I/O Connectors	Fan and Cooling Related
	1 x 4-pin CPU Fan header
	1 x 4-pin CPU OPT Fan header
	1 x 4-pin AIO Pump header
	4 x 4-pin Chassis Fan header
	Power Related
	1 x 24-pin Main Power connector
	1 x 8-pin +12V CPU Power connectors
	1 x 4-pin +12V CPU Power connectors
	Storage Related
	3 x M.2 slots (Key M)
	4 x SATA 6Gb/s ports
	USB
	1 x USB 5Gbps connector (supports USB Type-C)
	1 x USB 5Gbps header supports 2 additional USB 5Gbps ports
	2 x USB 2.0 headers support 4 additional USB 2.0 ports
	Miscellaneous
	3 x Addressable Gen 2 headers
	1 x Clear CMOS header
	1 x Chassis Intrusion header
	1 x COM Port header
	1 x Front Panel Audio header (F_AUDIO)
	1 x S/PDIF Out header
	1 x SPI TPM header (14-1 pin)
	1 x 10-1 pin System Panel header
	1 x Thunderbolt (USB4) header

Special Features	ASUS 5X PROTECTION III
	- DIGI+ VRM
	- LANGuard
	- Overvoltage protection
	- SafeSlot core+
	- Stainless-steel back I/O
	ASUS Q-Design
	- Q-Antenna
	- Q-Dashboard
	- Q-DIMM
	- Q-LED Core
	- Q-Slot
	ASUS Thermal Solution
	- Flexible M.2 heatsink
	- VRM heatsink design
	ASUS EZ DIY
	- BIOS FlashBack button
	- BIOS FlashBack LED
	- Pre-mounted I/O shield
	- SafeSlot core+
	Aura Sync
	- Addressable Gen 2 headers

Software Features	ASUS Exclusive Software
	Armoury Crate
	- Aura Creator
	- Aura Sync
	- Fan Xpert 2+
	- Power Saving
	ASUS Driver Hub
	ASUS GlideX
	TurboV Core
	ASUS CPU-Z
	Adobe Creative Cloud (Free Trial)
	Norton 360 Deluxe (60 Days Free Trial)
	WinRAR (40 Days Free Trial)
	UEFI BIOS
	ASUS EZ DIY
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 3
	- ASUS UEFI BIOS EZ Mode
	- ASUS MyHotkey
BIOS	256 Mb Flash ROM, UEFI AMI BIOS
Manageability	WOL by PME, PXE
Accessories	Cables
	2 x SATA 6Gb/s cables
	Miscellaneous
	1 x ASUS WiFi Q-Antenna
	1 x M.2 rubber packages
	3 x Screw packages for M.2 SSD
	Documentation
	1 x Quick start guide
Operating System	Windows 11, Windows 10 64-bit
Form Factor	ATX Form Factor
	12 inch x 9.6 inch (30.5 cm x 24.4 cm)

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:
https://www.comx.co.za/PRIME-B840-PLUSWIFI-Asus-Prime-B840-PLUS-a-WiFi-AMD-Ryzen-7000-8000-9000-series-Socket-p-321031.php

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