



Model

PRIME B840M-A

News & Updates

Please visit our [GLOBAL website](https://www.asus.com/support/download-center/) to check and download the latest updates.

CPU

AMD Socket AM5 for AMD Ryzen™ 9000 & 8000 & 7000 Series Desktop Processors*

* Refer to <https://www.asus.com/support/download-center/> for CPU support list.

Chipset

AMD B840 Chipset

Memoria

4 x DIMM slots, max. 256GB, 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)

* Supported memory types, data rate (speed), and number of DRAM modules vary depending on the CPU and memory configuration, for more information please refer to CPU/Memory Support list under the Support tab of product information site or visit <https://www.asus.com/support/download-center/>. 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.

Gráficos

2 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.

Ranuras de expansión

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

2 x PCIe 3.0 x16 slots (support x1 mode)

* Please check the PCIe bifurcation table on the support site

(<https://www.asus.com/support/FAQ/1037507/>).

** Specifications vary by CPU types.

- To ensure compatibility of the device installed, please refer to <https://www.asus.com/support/download-center/> for the list of supported peripherals.

Almacenamiento

Total 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 2242/2260/2280 (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 2242/2260/2280 (supports PCIe 4.0 x4/x2 mode)*

AMD B840 Chipset

M.2_3 slot (Key M), type 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

USB

Rear USB (Total 7 ports)

2 x USB 10Gbps ports (2 x Type-A)

1 x USB 5Gbps port (1 x USB Type-C®)

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.

Puertos E/S traseros

2 x USB 10Gbps ports (2 x Type-A)

1 x USB 5Gbps port (1 x USB Type-C®)

4 x USB 2.0 ports (4 x Type-A)

2 x DisplayPort

1 x HDMI™ port

1 x Realtek 2.5Gb Ethernet port

3 x Audio jacks

1 x BIOS FlashBack™ button

Puertos E/S internos

Fan and Cooling Related

1 x 4-pin CPU Fan header

1 x 4-pin CPU OPT Fan header

2 x 4-pin Chassis Fan headers

Power Related

1 x 24-pin Main Power connector

1 x 8-pin +12V CPU Power connector

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 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 Front Panel System header

Tecnologías especiales

ASUS 5X PROTECTION III

- DIGI+ VRM

- LANGuard

- Overvoltage protection

- SafeSlot Core+

- Stainless-steel back I/O

ASUS Q-Design

- Q-Dashboard

- Q-DIMM

- Q-LED Core

- Q-Slot

ASUS Thermal Solution

- M.2 heatsink

- VRM heatsink design

ASUS EZ DIY

- BIOS FlashBack™ button

- BIOS FlashBack™ LED
- Pre-mounted I/O shield

Aura Sync

- Addressable Gen 2 headers

Software

ASUS Exclusive Software

Armoury Crate

- Aura Creator
- Aura Sync
- Fan Xpert 2+
- Power Saving

ASUS DriverHub

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

Manejabilidad

WOL by PME, PXE

Accesorios

Cables

2 x SATA 6Gb/s cables

Miscellaneous

1 x M.2 rubber package

2 x Screw packages for M.2 SSD

Documentation

1 x Quick start guide

Sistema operativo

Windows 11, Windows 10 64-bit

Factor de forma

micro-ATX Form Factor

9.6 inch x 9.6 inch (24.4 cm x 24.4 cm)