



Model

PRIME B860M-A

News & Updates

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

CPU

Support Intel® Core™ Ultra Processors (Series 2) , LGA1851*

Supports Intel® Turbo Boost Technology 2.0 and Intel® Turbo Boost Max Technology 3.0***

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

Intel® Turbo Boost Max Technology 3.0 support depends on the CPU types.

Chipset

Intel® B860 Chipset

Memory

4 x DIMM slots, max. 256GB, DDR5

Supports up to 8666+MT/s (OC), Non-ECC,Un-buffered,Clocked Unbuffered DIMM (CUDIMM)*

Dual channel memory architecture

DIMM Fit

Supports Intel® Extreme Memory Profile (XMP) memory module

ASUS Enhanced Memory Profile III(AEMP III)

*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.

Graphics

2 x DisplayPort**

1 x HDMI™ port***

* Graphics specifications may vary between CPU types. Please refer to www.intel.com for any updates.

** Supports max. 4K@60Hz as specified in DisplayPort 1.4.

*** Supports 4K@60Hz as specified in HDMI 2.1.

***** VGA resolution support depends on processors' or graphic cards' resolution.

***** While installing the operating system, please ensure that your monitor is connected to the HDMI port on the back I/O panel or to a discrete graphics card.

Expansion Slots

Intel® Core™ Ultra Processors(series 2)

*1 x PCIe 5.0 x16 slot

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1 x PCIe 4.0 x16 slot (supports x4 mode)

1 x PCIe 4.0 x1 slot

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

Storage

Total supports 2 x M.2 slots and 4 x SATA 6Gb/s ports*

Intel® Core™ Ultra Processors (Series 2) *

M.2_1 slot (Key M), type 2242/2260/2280 (supports PCIe 5.0 x4 mode)

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M.2_2 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 modes)

4 x SATA 6Gb/s ports

* Intel® Rapid Storage Technology supports SATA RAID 0/1/5/10.

Ethernet

1 x Realtek 2.5Gb Ethernet

ASUS LANGuard

USB

Rear USB (Total 8 ports)

- 1 x USB 20Gbps 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)**

Front USB (Total 5 ports)

- 1 x USB 10Gbps connector (supports USB Type-C®)
- 1 x USB 5Gbps header supports 2 additional USB 5Gbps ports
- 1 x USB 2.0 header supports 2 additional USB 2.0 ports

*USB Type-C® power delivery output: max. 5V/3A

**USB_E1 port, USB_E2 port, USB_E3 port and USB_E4 port share the bandwidth.

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 20Gbps 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)
- 2 x DisplayPort
- 1 x HDMI™ port
- 1 x Realtek 2.5Gb Ethernet port
- 3 x Audio jacks

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

3 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

2 x M.2 slots (Key M)

4 x SATA 6Gb/s ports

USB

1 x USB 10Gbps connector (supports USB Type-C®)

1 x USB 5Gbps header supports 2 additional USB 5Gbps ports

1 x USB 2.0 header supports 2 additional USB 2.0 ports

Miscellaneous

3 x Addressable Gen 2 headers

1 x Aura RGB header

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 Front System Panel header

1 x Thunderbolt™ (USB4®) header

Special Features

ASUS 5X PROTECTION III

- DIGI+ VRM (- Digital power design with DrMOS)
- ESD Guards
- LANGuard
- Overvoltage protection
- SafeSlot
- 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

- ProCool
- Pre-mounted I/O shield

Aura Sync

- Aura RGB header
- Addressable Gen2 headers

Software Features

ASUS Exclusive Software

Armoury Crate

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

ASUS DriverHub

ASUS CPU-Z

Norton 360 for Deluxe (60 Days Free Trial)

WinRAR (40 Days Free Trial)

UEFI BIOS

ASUS EZ DIY

- ASUS CrashFree BIOS 3
- ASUS EZ Flash
- ASUS UEFI BIOS EZ Mode
- ASUS MyHotkey

BIOS

256 (128+128) Mb Flash ROM, UEFI AMI BIOS

Manageability

WOL by PME, PXE

Accessories

Cables

2 x SATA 6Gb/s cables

Miscellaneous

1 x M.2 rubber package

1 x Screw package for M.2 SSD

Documentation

1 x Quick start guide

Operating System

Windows 11 (22H2 & later), Windows 10 64-bit(21H2 & later)

Form Factor

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