

# B840M H

- Key Features
- Specifications**
- Support
- News & Awards
- Gallery
- Where to Buy

## Specifications

### CPU

AMD Socket AM5, support for:  
 AMD Ryzen™ 9000 Series Processors  
 AMD Ryzen™ 8000 Series Processors  
 AMD Ryzen™ 7000 Series Processors  
 (Go to GIGABYTE's website for the latest CPU support list.)

### Chipset

AMD B840

### Memory

Support for DDR5 7200(OC)/7000(OC)/6800(OC)/6666(OC)/6600(OC)/6400(OC)/6200(OC)/6000(OC)/5600(OC)/5200/4800/4400 MT/s memory modules  
 2 x DDR5 DIMM sockets supporting up to 128 GB (64 GB single DIMM capacity) of system memory  
 Dual channel memory architecture  
 Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules  
 Support for AMD EXtended Profiles for Overclocking (AMD EXPO™) and Extreme Memory Profile (XMP) memory modules  
 (The CPU and memory configuration may affect the supported memory types, data rate (speed), and number of DRAM modules, please refer to "Memory Support List" on GIGABYTE's website for more information.)

### Onboard Graphics

Integrated Graphics Processor with AMD Radeon™ Graphics support:  
 - 1 x DisplayPort, supporting a maximum resolution of 3840x2160@144 Hz  
 \* Support for DisplayPort 1.4 version.

**GIGABYTE uses cookies to enhance and improve the website user experience.**

We use cookies to enhance your browsing experience, serve personalized ads or content, and analyze our traffic. By clicking "Accept All", you consent to our use of cookies. Read more in our [Cookie Policy](#)

Customize

Accept

## Realtek® Audio CODEC

High Definition Audio

2/4/5.1/7.1-channel

\* You can change the functionality of an audio jack using the audio software. To configure 7.1-channel audio, access the audio software for audio settings.

## LAN

Realtek® GbE LAN chip (1 Gbps/100 Gbps/10 Mbps)

## Expansion Slots

1 x PCI Express x16 slot, integrated in the CPU:

- AMD Ryzen™ 9000/7000 Series Processors support PCIe 4.0 x16 mode
- AMD Ryzen™ 8000 Series-Phoenix 1 Processors support PCIe 4.0 x8 mode
- AMD Ryzen™ 8000 Series-Phoenix 2 Processors support PCIe 4.0 x4 mode

\* The PCIe x16 slot can only support a graphics card or an NVMe SSD.

Chipset:

- 1 x PCI Express x1 slot, supporting PCIe 3.0 and running at x1

## Storage Interface

1 x M.2 connector, integrated in the CPU, supporting Socket 3, M key, type 2580/2280 SSDs:

- AMD Ryzen™ 9000/7000 Series Processors support PCIe 4.0 x4/x2 SSDs
- AMD Ryzen™ 8000 Series-Phoenix 1 Processors support PCIe 4.0 x4/x2 SSDs
- AMD Ryzen™ 8000 Series-Phoenix 2 Processors support PCIe 4.0 x4/x2 SSDs

4 x SATA 6Gb/s connectors

RAID 0, RAID 1, RAID 5, and RAID 10 support for NVMe SSD storage devices

\* RAID 5 is only available on AMD Ryzen™ 9000 Series Processors.

RAID 0, RAID 1, and RAID 10 support for SATA storage devices

## USB

CPU:

- 2 x USB 3.2 Gen 1 ports on the back panel
- 1 x USB 2.0/1.1 port on the back panel

Chipset:

- 2 x USB 3.2 Gen 1 ports available through the internal USB header
- 7 x USB 2.0/1.1 ports (3 ports on the back panel, 4 ports available through the internal USB headers)

## Internal I/O Connectors

**GIGABYTE uses cookies to enhance and improve the website user experience.**

We use cookies to enhance your browsing experience, serve personalized ads or content, and analyze our traffic. By clicking "Accept All", you consent to our use of cookies. Read more in our [Cookie Policy](#)

- 1 x front panel header
- 1 x front panel audio header
- 1 x USB 3.2 Gen 1 header
- 2 x USB 2.0/1.1 headers
- 1 x Trusted Platform Module header (For the GC-TPM2.0 SPI V2 module only)
- 1 x reset jumper
- 1 x Clear CMOS jumper

## Back Panel Connectors

- 4 x USB 2.0/1.1 ports
- 1 x PS/2 keyboard/mouse port
- 1 x Q-Flash Plus button
- 2 x USB 3.2 Gen 1 ports
- 1 x DisplayPort\*
- 1 x HDMI port\*
- 1 x RJ-45 port
- 3 x audio jacks

\* Actual support may vary by CPU.

## I/O Controller

iTE® I/O Controller Chip

## H/W Monitoring

- Voltage detection
- Temperature detection
- Fan speed detection
- Water cooling flow rate detection
- Fan fail warning
- Fan speed control

\* Whether the fan speed control function is supported will depend on the fan you install.

## BIOS

- 1 x 256 Mbit flash
- Use of licensed AMI UEFI BIOS
- PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0

## Unique Features

**GIGABYTE uses cookies to enhance and improve the website user experience.**

We use cookies to enhance your browsing experience, serve personalized ads or content, and analyze our traffic. By clicking "Accept All", you consent to our use of cookies. Read more in our [Cookie Policy](#)

Norton® Internet Security (OEM version)

## Operating System

Support for Windows 11 64-bit

Support for Windows 10 64-bit

## Form Factor

Micro ATX Form Factor; 23.0cm x 22.5cm



\* The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

\* The entire materials provided herein are for reference only. GIGABYTE reserves the right to modify or revise the content at anytime without prior notice.

\* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

\* All trademarks and logos are the properties of their respective holders.

\* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.

Follow us



Company



Consumer



Enterprise



Solution



Service / Support



Resource



**GIGABYTE uses cookies to enhance and improve the website user experience.**

We use cookies to enhance your browsing experience, serve personalized ads or content, and analyze our traffic. By clicking "Accept All", you consent to our use of cookies. Read more in our [Cookie Policy](#)