AMD B840

Supports AMD Ryzen™ 9000/ 8000/ 7000 Series Desktop Processors
Socket AM5

2x DDR5 UDIMM, Maximum Memory Capacity 128GB
Memory Support DDR5 8000 - 5600 (OC) MT/s / 5600 - 4800 (JEDEC) MT/s
Ryzen™ 9000 Series Processors max. overclocking frequency:
• 1DPC 1R Max speed up to 8000+ MT/s
• 1DPC 2R Max speed up to 7200+ MT/s

Supports AMD POR Speed and JEDEC Speed
Supports Memory Overclocking and AMD EXPO^{TM}
Supports Dual-Channel mode
Supports Non-ECC, Un-buffered memory
Supports CUDIMM, Clock Driver bypass mode only*

*CUDIMM support and POR boot frequency may vary by CPU series, with manual overclocking available after boot. Certain CPUs may fail to boot, but future BIOS updates will improve compatibility.
• The DIMM slots on this motherboard have single-sided latches.
• Memory compatibility and supported speeds can vary depending on the CPU and memory configuration. For detailed information, please refer to the Memory Compatibility List available on the product's Support page or visit https://www.msi.com/support/.

1x HDMI™
Support HDMI^{TM} 2.1, maximum resolution of 4K 60Hz*
1x D-Sub
Support VGA, maximum resolution of 2048x1536 50Hz, 2048x1280 60Hz, 1920x1200 60Hz*
*Available only on processors featuring integrated graphics. Graphics specifications may vary depending on the CPU installed.

1x PCI-E x16 slot (Qty)
1x PCI-E x1 slot (Qty)
PCI_E1 Gen PCIe 4.0 supports up to x16 (From CPU)
PCI_E2 Gen PCIe 3.0 supports up to x1 (From Chipset)

PCI_E1 slot
• Supports PCIe 4.0 x16 (For Ryzen™ 9000/ 7000 Series processors)
• Supports PCIe 4.0 x8 (For Ryzen™ 8700/ 8600/ 8400 Series processors)
• Supports PCIe 4.0 x4 (For Ryzen™ 8500/ 8300 Series processors)

Realtek$^®$ ALC897
7.1-Channel High Definition Audio

2x M.2 (Qty)
M.2_1 Source (From CPU) supports up to PCIe 4.0 x4 , supports 2280/2260 devices
M.2_2 Source (From CPU) supports up to PCIe 4.0 x4 , supports 2280/2260 devices
4x SATA 6G (Qty)

M2_2 slot
• Supports up to PCIe 4.0 x4
• Supports up to PCIe 4.0 x2 (For Ryzen™ 8500/ 8300 Series processors)

Supports RAID 0, RAID 1 and RAID 10 for SATA storage devices
Supports RAID 0 and RAID 1 for M.2 NVMe storage devices

2x USB 2.0 (Rear)
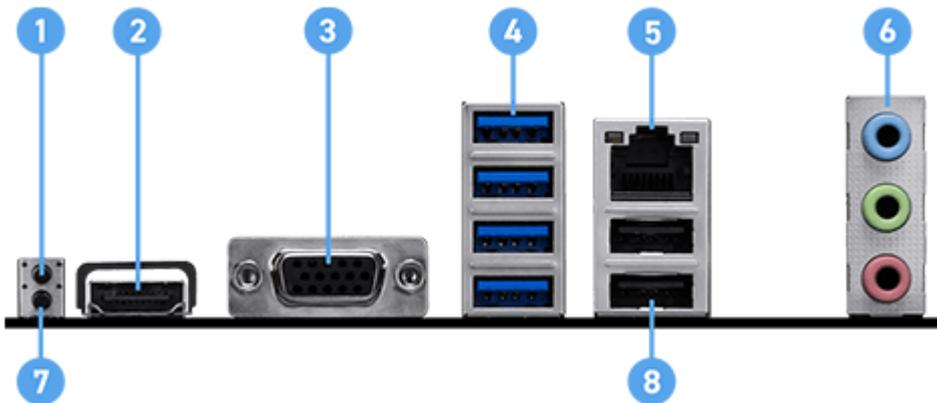4x USB 2.0 (Front)
4x USB 5Gbps Type A (Rear)
2x USB 5Gbps Type A (Front)
1x USB 5Gbps Type C (Front)

Realtek$^®$ 8125D 2.5G LAN

1x Power Connector(ATX_PWR)

1x Power Connector(CPU_PWR)

1x CPU Fan

2x System Fan

2x Front Panel (JFP)

1x Chassis Intrusion (JCI)

1x Front Audio (JAUD)

1x Com Port (JCOM)

3x Addressable V2 RGB LED connector (JARGB_V2)

1x RGB LED connector(JRGB)

1x TPM pin header(Support TPM 2.0)

4x USB 2.0 ports

2x USB 5Gbps Type A ports

1x USB 5Gbps Type C ports

4x EZ Debug LED

1x EZ Memory Detection LED

Clear CMOS Button

HDMI™

VGA

USB 5Gbps Type-A

2.5G LAN

Audio connectors

Flash BIOS Button

USB 2.0

Support for Windows® 11 64-bit