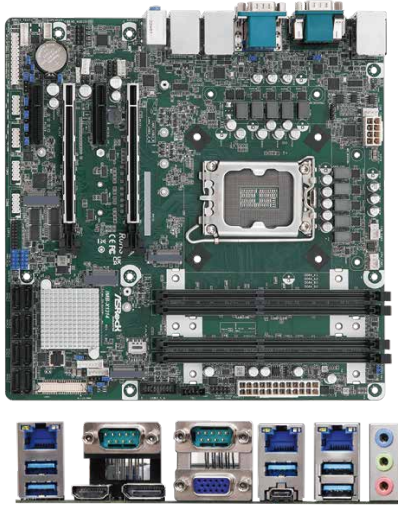




IMB-X1314

Micro-ATX Motherboard



KEY FEATURES

- Intel® 13th/12th Gen (Raptor Lake-S/Alder Lake-S) Core™ Processors with W680 chipset
- 4 x 288-pin ECC/non-ECC Long-DIMM DDR4 3200 MHz, up to 128GB (32GB per DIMM)
- 1 x PCIe16 (Gen4), 1 x PCIe8 (Gen4), 2 x PCIe4 (Gen4), 1 x USB3.2 Gen2x2 Type C, 5 x USB 3.2 Gen2, 2x USB 3.2 Gen1, 4 x USB 2.0, 1 x M.2 Key E, 2 x M.2 Key M, 1 x M.2 Key B, 6 x COM, 8 x SATA3
- 3 x Intel 2.5 Gigabit LAN
- Support Quad display, 1 x HDMI2.0b, 1 x DP 1.4a, 1 x VGA, 1 x LVDS
- TPM2.0 on board IC
- Supports Intel® vPro, AMT, VMD RAID 0/1/5/10
- ATX PWR (24+8 Pin)

SPECIFICATIONS

Form Factor

| | |
|------------|--|
| Dimensions | Micro-ATX (9.6-in x 9.6-in x 1.4-in, 24.4 cm x 24.4 cm x 3.6 cm) |
|------------|--|

Processor System

| | |
|---------|--|
| CPU | Intel® 13th/12th Gen (Raptor Lake-S/Alder Lake-S) Core™ Processors, up to 125W |
| Chipset | Intel® W680 |
| Socket | LGA 1700 |
| BIOS | AMI SPI 256 Mbit |

Memory

| | |
|------------|--|
| Technology | Dual Channel ECC/non-ECC DDR4 3200 MHz |
| Capacity | 128GB (32GB per DIMM) |
| Socket | 4 x 288-pin Long-DIMM |

Graphics

| | |
|--------------|---|
| Controller | Intel® UHD Graphics |
| HDMI | HDMI 2.0b Max resolution up to 4096 x 2160@60Hz |
| DisplayPort | DisplayPort 1.4a, DP++ Max resolution up to 4096x2160@60Hz |
| VGA | Max resolution up to 1920 x 1200@60Hz |
| LVDS | Dual channel 24 bit up to 1920 x 1200@60Hz |
| MultiDisplay | Quad Display |

Expansion Slot

| | |
|------------|---|
| PCIe | 2 x PCIe Gen4 Slots (PCIe1/PCIe3; single at x16(PCIe1); dual at x8 (PCIe1) / x8 (PCIe3)) (PCIe1: Support riser card x8/x8) 2 x PCIe4 (Gen4)* *If using PCIex8/x16 card on PCIe2/PCIe4 slot, M.2 Key M2(M2_M2) and M.2 Key E(M2_E1) are limited to install. |
| M.2 | 1 x M.2 (Key B, 3042/3052) with PCIe1, USB3.2 Gen1, USB2.0 and SIM for 4G/5G 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless |
| SIM Socket | 1x SIM socket connected to M.2 key B |

Audio

| | |
|-----------|---|
| Interface | Realtek ALC897 HD, High Definition Audio. Line-In, Line-Out, Mic-In |
|-----------|---|

Ethernet

| | |
|-------------------|--|
| Controller/ Speed | LAN1: Intel® I225LM with 10/100/1000/2500 Mbps, support AMT/vPro LAN2: Intel® I225LM with 10/100/1000/2500 Mbps LAN3: Intel® I225LM with 10/100/1000/2500 Mbps |
| Connector | 3 x RJ-45 |

Rear I/O

| | |
|-------------|--|
| HDMI | 1 x HDMI2.0b |
| DisplayPort | 1 x DP1.4a |
| VGA | 1 |
| Ethernet | 3 x 2.5 Gigabit LAN |
| USB | 5 x USB 3.2 Gen2 1 x USB3.2 Gen2x2 (20G) Type C |
| Audio | 3 (Line-In/Line-Out/Mic-In) |
| Serial Port | COM1, COM2 (RS-232/422/485) |

Internal Connector

| | |
|--------------------|--|
| USB | 2 x USB 3.2 Gen1 (1xUSB3.2 header) 4 x USB 2.0 (2x2.54pitch header) |
| COM | COM3, COM4, COM5, COM6 (RS-232) |
| Parallel | 1 (shared with GPIO) |
| GPIO | 8 x GPI, 8 x GPO (shared with LPT header) |
| TPM | TPM2.0 on board IC |
| LVDS | 1 |
| Speaker Header | 1 |
| PS/2 | 1 x PS/2 header |
| Thunderbolt header | 1 (only use with PCIe4) |

Storage

| | |
|------|--|
| M.2 | 1 x M.2 (Key M, up to 25110) with PCIe4 Gen4 for SSD 1 x M.2 (Key M, 2242/2260/2280) with PCIe4 Gen3 for SSD |
| SATA | 8 x SATA3 |
| RAID | Intel® VMD RAID 0/1/5/10 **supported by identical interface (PCIe or SATA) PCIe interface: M.2 Key B + M.2 Key M1/2 or 2* M.2 Key M SATA interface: SATA port |

Watchdog Timer

| | |
|----------|-----------------------------------|
| Output | From Super I/O to drag RESETCON# |
| Interval | 256 Segments, 0, 1, 2, ...,255sec |

Power Requirements

| | |
|-----------|---|
| Input PWR | ATX PWR (24+8-pin) |
| Power On | AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready |

Environment

| | |
|--------------------|----------------|
| Operating Temp | 0°C - 70°C |
| Storage Temp | -40° C - 85° C |
| Operating Humidity | 5% - 90% |
| Storage Humidity | 5% - 90% |

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