



IMB-1236

Mini-ITX Motherboard

KEY FEATURES

- Intel® Alder Lake-PS MCP Processors
- 2 x 262-pin SO-DIMM DDR5 4800 MHz, up to 64GB (32GB per DIMM)
- 1 x PCIe x4 (Gen4), 2 x USB4/Thunderbolt™4, 2 x USB 3.2 Gen2, 1x USB 3.2 Gen1, 3 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 1 x M.2 Key B, 6 x COM, 2 x SATA3
- 1 x Intel 1 Gigabit LAN, 1 x Intel 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI2.0b, 2 x DP 1.4a (2 from Type-C), 1 x LVDS, 1 x eDP
- TPM 2.0 onboard IC
- Supports Intel® vPro, VMD RAID 0/1
- 12~28V DC-In (Lockable DC Jack)

SPECIFICATIONS

Form Factor

| | |
|-------------------|---|
| Dimensions(LxWxH) | Mini-ITX (6.7-in x 6.7-in x 1.5-in, 17.0 cm x 17.0 cm x 3.8 cm) |
|-------------------|---|

Processor System

| | |
|--------------|--|
| CPU | Intel® Alder Lake-PS Core™ Processors, up to 45W |
| Chipset | LGA 1700 |
| BIOS | AMI SPI 256 Mbit |
| Secure Flash | AMI SPI 32Mbit (Optional) |

Memory

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|------------|----------------------------|
| Technology | Dual Channel DDR5 4800 MHz |
| Capacity | 64GB (32GB per DIMM) |
| Socket | 2 x 262-pin SO-DIMM |

Graphics

| | |
|--------------|---|
| Controller | Intel® Iris® Xe Graphics |
| HDMI | 2 x HDMI 2.0b Max resolution up to 4096x2160@60Hz |
| LVDS | Dual channel 24 bit up to 1920 x 1200@60Hz |
| eDP | eDP 1.4b Max resolution up to 4096x2160@60Hz |
| DisplayPort | 2 x DisplayPort 1.4a Max resolution up to 4096x2160@60Hz |
| MultiDisplay | Quad display (Included 2 outputs from Type-C) |

Expansion Slot

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|------------|--|
| PCIe | 1 x PCIe x4 (Gen4) |
| M.2 | 1 x M.2 (Key B, 3042/3052) with PCIe x1, USB 3.2, USB 2.0 and SIM for 4G/5G 1 x M.2 (Key E, 2230) with PCIe and USB 2.0 |
| SIM Socket | 1x SIM socket connected to M.2 key B |

Audio

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|-----------|---|
| Interface | Realtek ALC897 HD, High Definition Audio. |
|-----------|---|

Ethernet

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|-------------------|--|
| Controller/ Speed | LAN1: Intel® I226LM with 10/100/1000/2500 Mbps, supports vPro LAN2: Intel® I210AT with 10/100/1000 Mbps |
| Connector | 2 x RJ-45 |

Rear I/O

| | |
|----------|---|
| HDMI | 2 x HDMI 2.0b |
| Ethernet | 1 x 1 Gigabit LAN 1 x 2.5 Gigabit LAN |
| USB | 2 x USB 2.0 2 x USB 3.2 Gen2 2 x USB4/Thunderbolt™4 (5V/3A, Support DP 1.4a display output) * For Thunderbolt support, please refer to support list. |
| Audio | 2 (Mic-In/Line-Out) |
| DC Jack | 1 DC-in |

Internal Connector

| | |
|-----------------|--|
| USB | 1 x USB 3.2 Gen1 and 1 x USB 2.0 (1xUSB 3.2 header) |
| COM | COM1, COM2 (RS-232/422/485) COM3, COM4, COM5, COM6 (RS-232) |
| GPIO | 4 x GPI, 4 x GPO |
| LVDS | 1 |
| eDP | 1 |
| SATA PWR Output | 1 |
| Speaker Header | 1 |

Storage

| | |
|------|---|
| M.2 | 1 x M.2 (Key M, 2242/2260/2280) with PCIe Gen4 x4 for SSD |
| SATA | 2 x SATA3 (6Gb/s) |
| RAID | Intel® VMD RAID 0/1 **supported by identical interface (PCIe or SATA) PCIe interface: M.2 Key B+ M.2 Key M SATA interface: 2 x SATA port |

Security

| | |
|-----|--------------------|
| TPM | TPM 2.0 onboard IC |
|-----|--------------------|

Watchdog Timer

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

Power Requirements

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|-----------|---|
| Input PWR | 12V~28V DC-in with Lockable DC Jack |
| 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 | -20°C ~ 70°C |
| Storage Temp | -40° C ~ 85° C |
| Operating Humidity | 5% ~ 90% |
| Storage Humidity | 5% ~ 90% |

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