ASRock Industrial

# IMB-1235

Mini-ITX Motherboard

## KEY FEATURES

- Intel® 13th Gen Raptor Lake-P MCP Processors
- 2 x 260-pin SO-DIMM DDR4 3200 MHz, up to 64GB (32GB per DIMM)
- 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
- 2 x Intel 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.0b, 2 x DP 1.4a (2 from Type C), 1 x LVDS, 1 x eDP
- TPM 2.0 onboard IC
- Supports Intel® vPro (IMB-1235P/IMB-1235M), 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® 13th Gen (Raptor Lake-P) Core™ Processors<br>IMB-1235P (i7-1365UE, 2P+8E)<br>IMB-1235M (i5-1335UE, 2P+8E)<br>IMB-1235V (i3-1315UE, 2P+4E) |
| Chipset | MCP |
| BIOS | AMI SPI 256 Mbit |

### Memory

| | |
|---|---|
| Technology | Dual Channel DDR4 3200 MHz |
| Capacity | 64GB (32GB per DIMM) |
| Socket | 2 x 260 SO-DIMM |

### Graphics

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

### Expansion Slot

| | |
|---|---|
| M.2 | 1 x M.2 (Key B, 3042/3052) with PCIex1, USB 3.2, USB 2.0 and SIM for 4G/5G<br>1 x M.2 (Key E, 2230) with PCIe, 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. |

### Ethernet

| | |
|---|---|
| Controller/ Speed | IMB-1235P/IMB-1235M<br>LAN1: Intel® I226LM with 10/100/1000/2500 Mbps, supports vPro<br>LAN2: Intel® I226V with 10/100/1000/2500 Mbps<br>IMB-1235V<br>LAN1: Intel® I226LM with 10/100/1000/2500 Mbps<br>LAN2: Intel® I226V with 10/100/1000/2500 Mbps |
| Connector | 2 x RJ-45 |

### Rear I/O

| | |
|---|---|
| HDMI | 2 x HDMI 2.0b |
| Ethernet | 2 x 2.5 Gigabit LAN |
| USB | 2 x USB 2.0<br>2 x USB 3.2 Gen2<br>2 x USB4/Thunderbolt™4 (5V/3A, supports DP1.4a display output)<br>* 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 (1 x USB3.2 header) |
| COM | COM1, COM2 (RS-232/422/485)<br>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<br>**supported by identical interface (PCIE or SATA)<br>PCIE interface: M.2 Key B+ M.2 Key M<br>SATA interface: 2 x SATA port |

### Security

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

### Watchdog Timer

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

### Power Requirements

| | |
|---|---|
| Input PWR | 12V~28V DC-in with Lockable DC Jack |
| Power On | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- 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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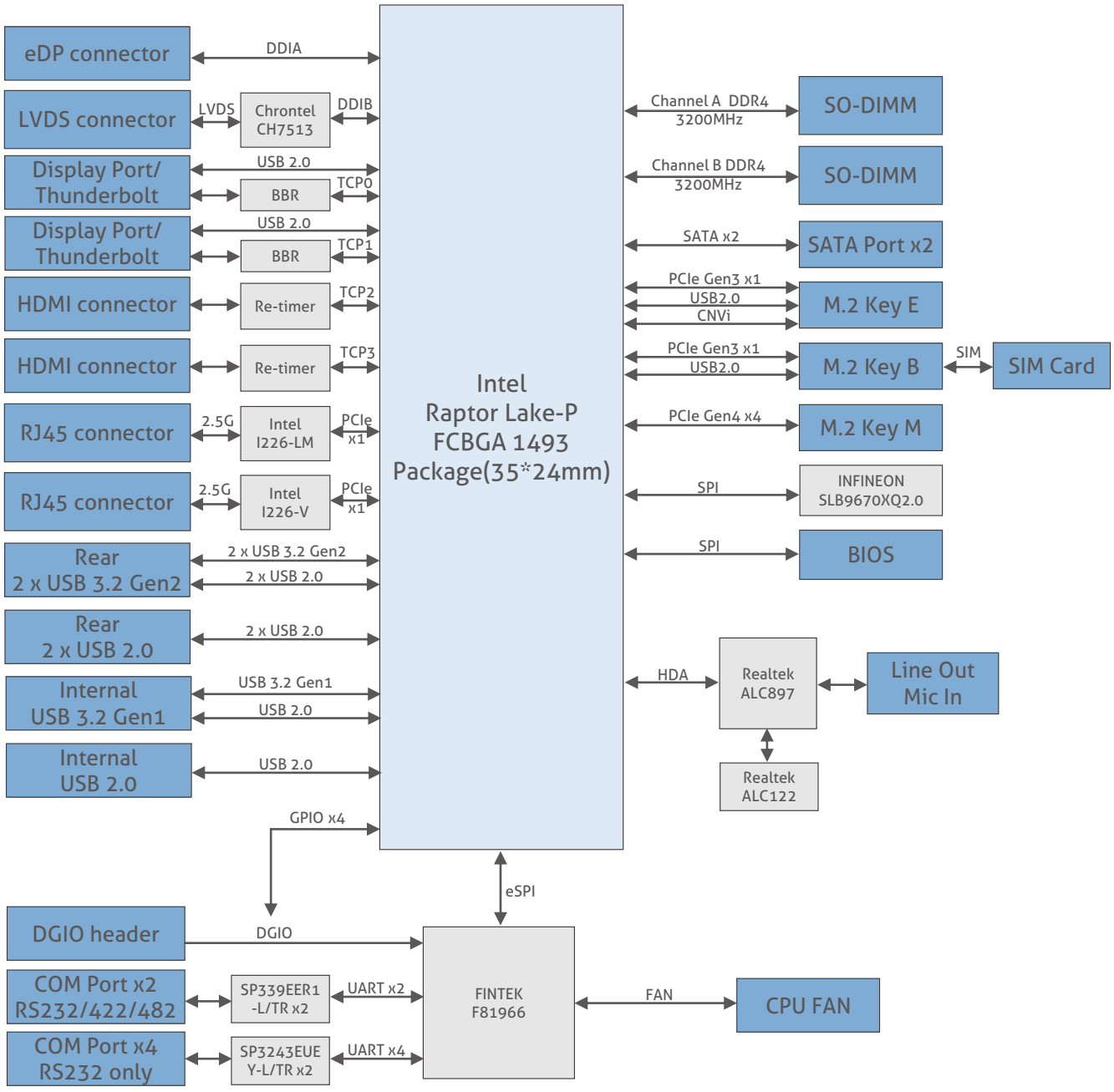
## BLOCK DIAGRAM

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