ASRock Industrial

IMB-1234

Mini-ITX Motherboard

KEY FEATURES

- Intel® 12th Gen Alder Lake-P MCP Processors
- 2 x 260-pin SO-DIMM DDR4 3200 MHz, up to 64GB (32GB per DIMM)
- 2 x USB 3.2 Gen2, 1x USB 3.2 Gen1, 4 x USB 2.0, 2 x Type C (Thunderbolt), 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
- Support Quad display, 1 x LVDS, 1 x eDP, 2 x HDMI2.0b, 2 x DP 1.4a (2 from Type-C)
- TPM2.0 on board IC
- Supports Intel® vPro, AMT (IMB-1234P/IMB-1234M), 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® 12th Gen Alder Lake-P Processors IMB-1234P (i7-1265UE, 2P+8E) IMB-1234M (i5-1245UE, 2P+8E) IMB-1234V (i3-1215UE, 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 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

M.2	1 x M.2 (Key B, 3042/3052) with PCIex1, USB3.2, USB2.0 and SIM for 4G/5G 1 x M.2 (Key E, 2230) with PCIe, USB2.0 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-1234P/IMB-1234M LAN1: Intel® I225LM with 10/100/1000/2500 Mbps, supports AMT/vPro LAN2: Intel® I225LM with 10/100/1000/2500 Mbps IMB-1234V LAN1: Intel® I225LM with 10/100/1000/2500 Mbps LAN2: Intel® I225LM with 10/100/1000/2500 Mbps
Connector	2 x RJ-45

Rear I/O

HDMI	2 x HDMI2.0
Ethernet	2 x 2.5 Gigabit LAN
USB	2 x USB 2.0 2 x USB 3.2 Gen2 2 x USB 3.2 Gen2 (Type-C, Support DP1.4a display output) * USB4™ Compliance Test is pending for certification. * 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 2 x USB 2.0 (1xUSB3.2 header)
COM	COM1, COM2 (RS-232/422/485) COM3, COM4, COM5, COM6 (RS-232)
GPIO	4 x GPI, 4 x GPO
TPM	TPM2.0 onboard IC
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

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 - 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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