

IMB-1254-WV

Mini-ITX Motherboard



KEY FEATURES

- Intel® Core Processors Series 3 (Wildcat Lake-U)
- 1 x 262-pin SO-DIMM DDR5 6400MHz up to 64GB, supports In-Band ECC
- 1 x PCIe x1 (Gen4), 1 x USB 3.2 Gen2x2, 2 x USB 3.2 Gen2, 4 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 4 x COM, 2 x SATA3
- 1 x Intel 1 Gigabit LAN, 1 x Intel 2.5 Gigabit LAN
- Supports Triple display, 2 x HDMI 2.0b, 1 x DP 1.4a (1 from Type-C), 1 x LVDS or eDP
- OOB Function (Optional)
- 9~28V DC-In

SPECIFICATIONS

Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in x 0.87-in, 17.0 cm x 17.0 cm x 2.21 cm)
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Processor System

CPU	Intel® Core Processors Series 3 (Wildcat Lake-U) IMB-1254M-WV (Core™ 5 320, 2P+4LPE) IMB-1254E-WV (Core™ 3 304, 1P+4LPE) *All CPU sku can support In-Band ECC
BIOS	AMI SPI 256 Mbit

Memory

Technology	Single Channel DDR5 6400 MHz
Capacity	64GB
Socket	1 x 262-pin SO-DIMM

Graphics

Controller	Intel® Graphics
HDMI	HDMI 2.0b Max resolution up to 4096x2160@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz (Connector shared with eDP)
eDP	Max resolution up to 1920 x 1080@60Hz (Connector shared with LVDS)
DisplayPort	DisplayPort 1.4a, DP++ Max resolution up to 4096x2160@60Hz
MultiDisplay	Triple display (Included 1 output from Type-C)

Expansion Slot

PCIe	1 x PCIe x1 (Gen4)
M.2	1 x M.2 (Key E, 2230) with PCIe Gen4 x1, USB 2.0 and CNVi for Wireless

Audio

Interface	Realtek ALC256 HD, High Definition Audio.
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Ethernet

Controller/ Speed	LAN1: Intel® I226V with 10/100/1000/2500 Mbps 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 3.2 Gen2 2 x USB 2.0
Audio	2 (Mic-In/Line-Out)
DC Jack	1 DC-in

Internal Connector

USB	2 x USB 2.0 (1 x 2.54mm pitch header) 1 x USB 3.2 Gen2x2 (Type-C header, 5V/3A, supports DP 1.4a display output)
COM	COM1 (RS-232/422/485) COM2, COM3 (RS-232) COM4 (RS-232/TTL 5V/ccTalk, switch by Jumper setting)
GPIO	4 x GPI, 4 x GPO
LVDS	1 (Connector with LVDS/eDP signal, switch by BIOS)
SATA PWR Output	1
Speaker Header	1
OOB	On board OOB (Optional)

Storage

M.2	1 x M.2 (Key M, 3052/2280) with PCIe Gen4 x1 for SSD
SATA	2 x SATA3 (6Gb/s)

Security

TPM	TPM Header Intel® PTT
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Watchdog Timer

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

Power Requirements

Input PWR	9~28V DC-In 12V DC-In (BOM option)
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% (non-condensing)
Storage Humidity	5% ~ 90% (non-condensing)