IMB-1318

Micro-ATX Motherboard

KEY FEATURES

- · Intel® 14th/13th/12th Gen (Raptor Lake-S Refresh/Raptor Lake-S/Alder Lake-S)
 Core™ Processors with H610 chipset
- · 2 x 288-pin Long-DIMM DDR5 4800/5600 MHz, up to 96GB (48 GB per DIMM)
- 1 x PCle x16 (Gen5), 1 x PCle x4 (Gen3), 2 x PCle x1 (Gen3), 4 x USB 3.2 Gen1,
 6 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 6 x COM, 4 x SATA3
- · 2 x Intel 1 Gigabit LAN
- · Supports Triple display, 3 x HDMI 1.4b
- · ATX PWR (8+24 Pin)





SPECIFICATIONS

Form Factor

Dimensions	Micro-ATX (9.6-in x 9.6-in x 1.58-in, 24.4 cm x 24.4 cm x 4.02 cm)
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Processor System

CPU	Intel® 14th/13th/12th Gen (Raptor Lake-S Refresh/Raptor Lake-S/
	Alder Lake-S) Core™ Processors, up to 65W
Chipset	Intel® H610
Socket	LGA 1700
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel DDR5 4400/5600 MHz*
	*Actual memory frequency depends on the CPU types and
	DRAM modules, for more information refer to
	https://www.asrockind.com/en-gb/index.php?route=newsblog/
	faq&faq_id=90 technical FAQ
Capacity	96GB (48GB per DIMM)
Socket	2 x 288-pin Long-DIMM

Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 1.4b
	Max resolution up to 4096 x 2160@30Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz
	(Connector shared with eDP) (BOM option)
eDP	Max resolution up to 1920 x 1080@60Hz
	(Connector shared with LVDS) (BOM option)
MultiDisplay	Triple Display

Expansion Slot

	1 x PCle x16 (Gen5) 1 x PCle x4 (Gen3)
	2 x PCle x1 (Gen3)
M.2	1 x M.2 (Key E, 2230) with CNVi for Wireless

Audio

Interface Realtek ALC897 HD, High Definition Audio. Line-In, Line-Out, N	∕lic-Ir
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Ethernet

LAN1: Intel® I210AT with 10/100/1000 Mbps LAN2: Intel® I219V with 10/100/1000 Mbps
2 x RJ-45

Rear I/O

HDMI	3 x HDMI 1.4b
Ethernet	2 x 1 Gigabit LAN
USB	4 x USB 3.2 Gen1
	2 x USB 2.0
Audio	3 (Line-In/Line-Out/Mic-In)
Serial Port	COM1 (RS-232/422/485), COM2 (RS-232)

Internal Connector

USB	4 x USB 2.0 (1 x 2.54 pitch header, 2 x USB 2.0 Type-A vertical con)
COM	COM3, COM4, COM5, COM6 (RS-232)
Parallel	1 (shared with GPIO)
GPIO	8 x GPI, 8 x GPO (shared with LPT header)
LVDS	1 (Connector with LVDS/eDP signal, switch by BIOS) (BOM option)
Speaker Header	1
PS/2	1 x PS/2 header
Thunderbolt header	1

Storage

M.2	1 x M.2 (Key M, 2242/2280/25110) with PCle Gen3 x1 for SSD
SATA	4 x SATA3

Security

	TPM	TPM Header

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	-20°C ~ 70°C
Storage Temp	-40°C∼85°C
Operating Humidity	5%~90%
Storage Humidity	5%~90%