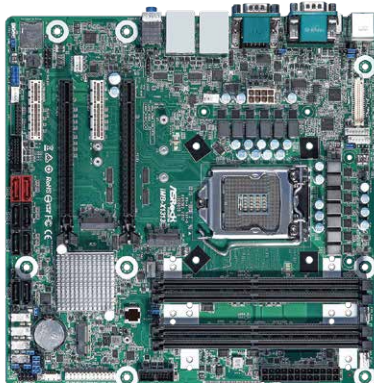


IMB-1313/ IMB-X1313

Micro-ATX Motherboard



KEY FEATURES

- Intel® 10th Gen (Comet Lake-S) Core™ Processors with Q470E chipset (IMB-1313)
- Intel® 10th Gen (Comet Lake-S) Core™ Processors with W480E chipset (IMB-X1313)
- 4 x 288-pin Long-DIMM DDR4 2933MHz , up to 128GB (32GB per DIMM) (IMB-1313)
- 4 x 288-pin ECC/non-ECC Long-DIMM DDR4 2933 MHz, up to 128GB (32GB per DIMM) (IMB-X1313)
- 1 x PCIe x16 (Gen3), 1 x PCIe x8 (Gen3), 2 x PCIe x4 (Gen3), 4 x USB3.2 Gen2, 4 x USB 3.2 Gen1, 4 x USB 2.0
- 1 x M.2 Key E, 2 x M.2 Key M, 1 x M.2 Key B, 6 x COM, 8 x SATA3
- 1 x Intel 2.5 Gigabit LAN, 1 x Intel 1 Gigabit LAN
- Supports Triple display, 1 x HDMI 2.0a, 1 x DP 1.2, 1 x VGA, 1 x LVDS
- TPM 2.0 onboard IC
- Supports Intel® vPro, AMT, VMD RAID 0/1/5/10
- ATX PWR (8+24 Pin)

SPECIFICATIONS

Form Factor	IMB-1313	IMB-X1313
Dimensions	Micro-ATX (9.6-in x 9.6-in x 1.4-in, 24.4 cm x 24.4 cm x 3.6 cm)	

Processor System

CPU	Intel® 10th Gen (Comet Lake-S) Core™ Processors, up to 125W	
Chipset	Intel® Q470E	Intel® W480E
Socket	LGA1200	
BIOS	AMI SPI 256 Mbit	

Memory

Technology	Dual Channel DDR4 2933 MHz	Dual Channel ECC/non-ECC DDR4 2933 MHz
Capacity	128GB (32GB per DIMM)	
Socket	4 x 288-pin Long-DIMM	

Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 2.0a Max resolution up to 4096x2160 @60Hz
DisplayPort	DisplayPort 1.2 , DP++ Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz
MultiDisplay	Triple Display

Expansion Slot

PCIe	2 x PCIe Gen3 Slots (PCIe1/PCIe3: single at x16 (PCIe1); dual at x8 (PCIe1) / x8 (PCIe3)) (PCIe1: Support riser card x8/x8, x8/x4/x4) 2 x PCIe x4 (Gen3)
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe x1, USB3.2 Gen1, USB 2.0 and SIM for 4G/5G
SIM Socket	1x SIM socket connected to M.2 key B

Audio

Interface	Realtek ALC897/ALC 887, High Definition Audio. Line-in, Line-out, Mic-in
-----------	--

Ethernet

Controller/ Speed	LAN1: Intel® I225LM/I225V with 10/100/1000/2500 Mbps LAN2: Intel® I219LM with 10/100/1000 Mbps, support AMT/vPro
Connector	2 x RJ-45

Rear I/O	IMB-1313	IMB-X1313
HDMI	1 x HDMI 2.0a	
DisplayPort	1 x DP 1.2++	
VGA	1	
Ethernet	1 x 1 Gigabit LAN 1 x 2.5 Gigabit LAN	
USB	4 x USB 3.2 (Gen2) 2 x USB2.0	
Audio	3 (Line-In, Line-Out, Mic-In)	
COM	COM1, COM2 (RS-232/422/485)	
PS2	1	

Internal Connector

USB	4 x USB 3.2 Gen1 (2 x USB 3.2 header) 2 x USB 2.0 (1 x 2.54 pitch header)
COM	COM3, COM4, COM5, COM6 (RS-232)
Parallel	1 (shared with GPIO)
GPIO	8 x GPI, 8 x GPO, (shared with LPT header)
TPM	TPM 2.0 onboard
LVDS	1

Storage

M.2	1 x M.2 (Key M, 2242/2260/2280)with SATA and PCIe x4 for SSD * Shared with SATA3_5/ SATA3_6 Ports - When using M.2 PCIe x4 SSD, both SATA3_5 and SATA_6 Ports are disabled - When using M.2 SATA SSD, only SATA3_5 Port is disabled, and SATA3_6 Port is available
SATA	8 x SATA3 (6Gb/s) *Only SATA3_1 ~ SATA3_6 Ports support RAID function
RAID	Intel® SATA RAID 0/1/5/10

Watchdog Timer

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

Power Requirements

Input PWR	ATX PWR (8+24 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	0°C ~ 60°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%