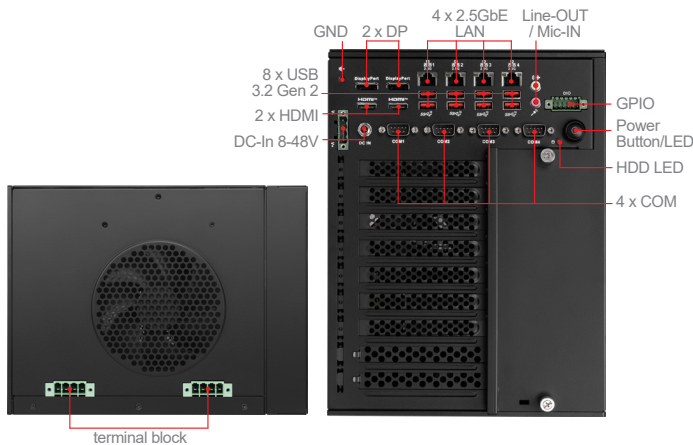


NEW



Features

- Intel® 12th/13th/14th Gen Alder Lake-S/Raptor Lake-S/Raptor Lake-S Refresh/Bartlett Lake Series with R680E
- 2 DDR5 5600 MHz ECC/non-ECC SODIMM slots up to 96GB
- Quadruple independent displays: 2 HDMI, 2 DP
- 4 2.5 GbE LAN with RJ-45
- 1 PCIe x16 (Gen 5), 1 PCIe x8, 1 PCIe x1
- 1200W dual graphic card supported by DC-in 12~48V
- 2 SATA 3.0 (2.5" SSD/HDD, 7mm) for storage
- SATA RAID 0/1
- 8 USB 10 Gbps, 2 USB 2.0, 4 COM, Audio, GPIO, CPU FAN, System FAN
- Onboard TPM 2.0
- GPIO 8-bit supports, 5~35V, Isolation 1.3KV
- Easy access CPU, HDD, memory, expansion slots
- Anti-Vibration & Shockproof Design to Compliance IEC 60068-2
- Wide Voltage DC-IN 8~48V
- Fan design

Ordering Information

Part Number	Description
-------------	-------------

Please check MSI IPC website at <http://ipc.msi.com> for details.

Packing List

Part Number	Description
-------------	-------------

Please check MSI IPC website at <http://ipc.msi.com> for details.

Optional Item

Part Number	Description
-------------	-------------

Please check MSI IPC website at <http://ipc.msi.com> for details.

Specifications

Processor	CPU	Intel® 12th Gen IOTG Alder Lake-S Processor Core i9/i7/i5/i3, Pentium®, Celeron® Processor, Max. 65W Intel® 13th Gen IOTG Raptor Lake-S Processor Core i9/i7/i5/i3, Max. 65W Intel® 14th Gen IOTG Raptor Lake-S Refresh Processor Core i9/i7/i5/i3, Max. 65W Intel® Core 200S series processors (Bartlett Lake S, Max 65W)
	Frequency	P-Core 1.1 GHz~5.5 GHz (Depends on CPU) E-Core 0.8 GHz~4.0 GHz (Depends on CPU)
	L2 Cache	4M~36M (Depends on CPU)
	CPU Type	Socket (LGA1700)
	Chipset	Intel® R680E chipset
	BIOS	AMI
Memory	Technology	Dual-channel DDR5(ECC/non-ECC) 5600MHz (ECC support & Frequency will depend on CPU)
	Max. Capacity	Up to 96GB
	Socket	2 x 262-pin SO-DIMMs
Display	Controller	Intel® UHD Graphics
	Graphic Memory	Depends on CPU
	Multiple Display	4 Independent displays
Display	Display Interface	HDMI up to 4096 x 2304 @60Hz DP up to 4096 x 2304 @60Hz
	Ethernet	1 x Intel® I226LM 2.5GbE LAN (Support Intel® AMT) 3 x Intel® I226V 2.5GbE LAN
Audio	Controller	Realtek® ALC897 HD Audio Codec
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Infineon SLB9672VU2.0
Expansion Slot	PCIe x16	1
	PCIe x8	1
	PCIe x4	N/A
	PCIe x1	1
	PCI	N/A
	M.2	1 x M.2 M key (PCIe Gen4 x4 NVMe & SATA 3.0), 2280
Storage	Mini-PCIe	N/A
	SATA	2 x 2.5" HDD/SSD
	mSATA	N/A
	CFast	N/A
	CompactFlash	N/A
I/O Interface	RJ-45	4
	PoE	N/A
	Audio	1 x Mic-in 1 x Line-out
	USB	8 x USB 10 Gbps 2 x USB 2.0 (internal)
	Serial	4 x COM ports COM1~2: RS232/422/485, 0V/5V/12V COM3~4: RS-232, 0V
	PS/2	N/A
	GPIO	8-bits (4 x GPI; 4 x GPO), 5~35V, isolation 1.3KV
	CANbus	N/A
	HDMI	2
	LVDS	N/A
	DVI	N/A
	DisplayPort	2
Power Supply	Antenna	N/A
	DC Input	DC-In 8-48V Wide-Range for MB Pluggable connectors with latch (V+, V-) DC-In 12-48V Wide-Range for Graphic Card Pluggable connectors with latch (V+, V-)
Environment	IP Rating	N/A
	Operating Temperature	-10 ~ 50°C w/ industrial DC power Up to 65W CPU with Fan.
	Operating Humidity	10 ~ 90% , non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
	Vibration	Operating, IEC 60068-2-64: 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (w/ HDD/SSD)
	Shock	Operating, IEC 60068-2-27: 50G, half sine, 11ms (w/ HDD/SSD)
Form Factor	Dimensions (Wx DxH)	285 x 217 x 431.1 mm
	Weight	11 kg
	Mounting	Wall mount
Certification	EMC	FCC Class A, CE, RCM, BSMI, VCCI, UKCA, IC
	Safety	IEC 62368: CE(LVD) / BSMI
Software Platform	OS Support	Windows 11 IoT Enterprise LTSC (64-bit, 24H2) Windows 10 IoT Enterprise 2021 LTSC (64-bit, 21H2, Pre-scan) Linux (Support by request)