

MS-C910

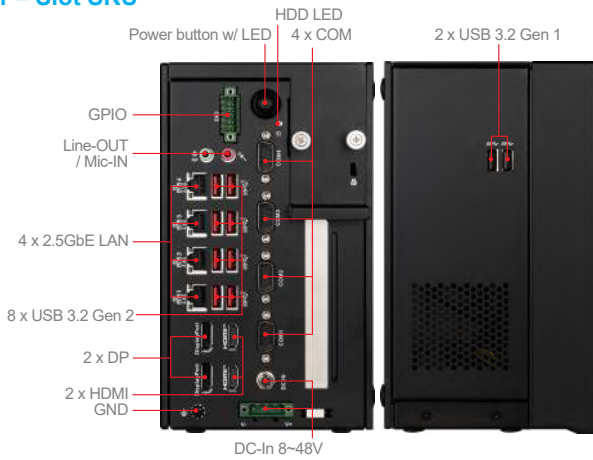
Outperform Fanless Box PC with 12th/13th/14th Gen Intel® Core™ i Processor for Rugged, Scalable & Versatile Solution



2 or 4 – Slots SKU



1 – Slot SKU



Features

- Intel® 12th/13th/14th Gen Alder Lake-S/Raptor Lake-S/Raptor Lake-S Refresh Series with R680E
- 2 DDR5 5600 MHz ECC/non-ECC SODIMM slots up to 64GB
- Quadruple independent displays: 2 HDMI, 2 DP
- 4 2.5 GbE LAN with RJ-45
- SKU1: 1 PCIe x16 (Gen 4), 3 PCI
SKU2: 1 PCIe x16 (Gen 4), 1 PCI, 1 x Mini-PCIe (Full size)
SKU3: 1 PCIe x16 (Gen 4)
- 2 SATA 3.0 (2.5" SSD/HDD, 7mm) for storage
- SATA RAID 0/1
- 8 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 3 USB 2.0, 4 COM, Audio, GPIO, System FAN
- Onboard TPM 2.0
- SKU1 : 2 COM (RS232/422/485) Isolation
- GPIO 8-bit supports, Isolation 1.5KV
- Easy access CPU, HDD, memory, expansion slots
- Anti-Vibration & Shockproof Design to Compliance IEC 60068-2/ EN50155
- Wide Voltage DC-IN 8~48V
- Fanless design

Specifications

Processor	CPU	Intel® 12th Gen IOTG Alder Lake-S Processor Core i9/i7/i5/i3, Pentium®, Celeron® Processor, Max. 35W Intel® 13th Gen IOTG Raptor Lake-S Processor Core i9/i7/i5/i3, Max. 35W Intel® 14th Gen IOTG Raptor Lake-S Refresh Processor Core i9/i7/i5/i3, Max. 35W			
	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			
Memory	BIOS	AMI			
	Technology	Dual-channel DDR5(ECC/non-ECC) 5600MHz (ECC support will depend on CPU)			
	Max. Capacity	Up to 64GB			
Display	Socket	2 x 262-pin SO-DIMMs			
	Controller	Intel® UHD Graphics			
	Graphic Memory	Depends on CPU			
Ethernet	Multiple Display	4 Independent displays			
	Display Interface	HDMI up to 4096 x 2304 @60Hz DP up to 4096 x 2304 @60Hz			
Audio	Controller	1 x Intel® I226LM 2.5GbE LAN (Support Intel® AMT) 3 x Intel® I226V 2.5GbE LAN			
	Controller	Realtek® ALC897 HD Audio Codec			
H/W Monitor	Watchdog Timer	256-level Watchdog Timer			
	Smart Fan	Yes			
TPM	Controller	Infineon SLB9672VU2.0			
	PCIe x16	1	1	1	
Expansion Slot	PCIe x8	N/A	N/A	N/A	
	PCIe x4	N/A	N/A	N/A	
	PCIe x1	N/A	N/A	N/A	
	PCI	3	1	N/A	
	M.2	1 x M.2 M key (PCIe Gen4 x4 NVMe & SATA 3.0), 2280			
	Mini-PCIe	N/A	1 x Full-size	N/A	
	SATA	2 x 2.5" HDD/SSD			
Storage	mSATA	N/A			
	CFast	N/A			
I/O Interface	CompactFlash	N/A			
	RJ-45	4			
I/O Interface	PoE	N/A			
	Audio	1 x Mic-in 1 x Line-out			
	USB	8 x USB 3.2 Gen 2 2 x USB 3.2 Gen 1 3 x USB 2.0 (internal, Type-A)			
	Serial	COM1~2:	RS232/422/485, 0V/5V/12V	4 x COM ports COM1~2: RS232/422/485, 0V/5V/12V	4 x COM ports COM1~2: RS232/422/485, 0V/5V/12V
		COM3~4:	RS-232, 0V (internal)	COM3~4: RS-232, 0V	COM3~4: RS-232, 0V
		COM5~6:	RS232/422/485, 0V, isolation (by option)		
	PS/2	N/A			
	GPIO	8-bits (4 x GPI; 4 x GPO), isolation 1.5KV			
	CANbus	N/A			
	HDMI	2			
LVDS	N/A				
DVI	N/A				
DisplayPort	N/A				
Antenna	N/A				
Power Supply	DC Input	DC-In 8-48V Wide-Range Pluggable connectors with latch (V+, V-)			
	IP Rating	N/A			
Environment	Operating Temperature	0 ~ 50°C w/ industrial DC power Up to 35W CPU Note: Thermal w/ Airflow:0.7m/s			
	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) / EN50155			
Form Factor	Shock	Operating, IEC 60068-2-27: 50G, half sine, 11ms (w/ HDD/SSD)			
	Dimensions (Wx DxH)	176 x 226 x 217 mm	143 x 226 x 217 mm	123 x 226 x 217 mm	
Certification	Weight	4.8 kg	4.3 kg	4.1 kg	
	Mounting	Wall mount			
Software Platform	EMC	FCC Class A, CE, RCM, BSMI, VCCI, UKCA, IC			
	Safety	IEC 62368: CE(LVD) / BSMI			
OS Support	OS Support	Windows 10 IoT Enterprise 2021 LTSC (64-bit, 21H2) Windows 11 IoT Enterprise (64-bit, 22H2, Pre-scan) Linux (Support by request)			