### **Expandable System**

High Performance Expandable Industrial Computer Powered by 13th/12th Gen Intel<sup>®</sup> Core<sup>™</sup> i9/i7/i5/i3 DT processors









# **Specifications**

System Mainboard	MB998 Series MicroATX motherboards
CPU Type	13th/12th Gen Intel <sup>®</sup> Core <sup>™</sup> DT processors (TDP 65W)
System Speed	Up to 5.60 GHz (W680R supports ECC by CPU SKUs)
Memory	2x DDR5 UDIMM, Max. 64GB
Accelerator Card	Optional RTX-2080 or equivalent GPU card
LAN	Intel® I226LM + I226V
Front Panel External I/O	Power button 2-pin remote boot extension design Detachable side cover for GFX Card 4x Slots 2x DisplayPort + HDMI + DVI-D [Optional] 6x USB3.0 ports ; 2x RJ45 for 2.5GbE 2x RS232/422/485, 2x RS232
Rear Panel External I/O	Pluggable cooling-fan
Expansion Slot	1x PCI-E(x16) [Gen.5], 1x PCI-E(x4) [Gen.4], 1x PCI-E(x4) [Gen.3]
Storage	4x 2.5" SATA (supports RAID 0/1)+ 2x M.2 M-Key (2280) storage
Auto Control and Monitoring	Watchdog Timer: 256 segments, 0, 1, 2255 (sec/min)
Power Requirement	ATX
Power Supply	500W
Construction	SECC
Chassis Color	Black
Mounting	Desktop & wall mount
Weight	Depends on the configuration of power supply and motherboard related components
Dimensions	362.4mm(W) x 350.0mm(D) x 156.0mm(H)
Others	N/A
Operating Temperature	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing
Storage Temperature	-20°C~80°C (-4°F~176°F), @60°C, non-condensing
Relative Humidity	10~95%, non-condensing@60 degree-C
Vibration	With SSD: 1Grms, IEC 60068-2-64, random, 5Hz~500Hz
Shock	With SSD: Operating 20G, IEC 60068-2-27, half-sine, 11 ms duration With SSD Non-Operating 40G, IEC 60068-2-27, half-sine, 11 ms duration With SSD
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## **Features**

- Supports 13th/12th Gen Intel<sup>®</sup> Core<sup>™</sup> DT processors (TDP 65W)
- Supports discrete GPU cards with reserved expansion slots
- Multiple expansion slots : 1x PCI-E(x16) [PCI-E Gen.5], 1x PCI-E(x4) [PCI-E Gen. 4], 1x PCI-E(x4) [PCI-E Gen.3]
- 500W 1U Flex ATX power supply [Default]
- 2-pin remote boot extension design
- Supports multi-display interfaces [HDMI, DisplayPort, DVI-D] and 2.5GbE ports , USB 3.0 ports
- 4 set of 2.5" storage devices (supports RAID 0/1)
- 2x M-Key (2280) for NVMe, 1x E-Key (2230) for WiFi/BT, support CNVi, 1x B-Key (3052) for 5G
- fTPM, DIO, iAMT(16.1), Watchdog timer

Certification	CE FCC Class A / LVD
Operating System	Windows 10, Linux Ubuntu

# **Ordering Information**

	(CMB), Chassis with MicroATX 13th/12th motherboard
CMB108M	w/o CPU, memory, storage, support Intel® i9/i7/i5/i3 /
	Pentium® / Celeron® processors, up to 5.4GHz

# **Dimensions and Drawing**

