



Features

- 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
- 3x 2.5G Ethernet port, HDMI & 2x DisplayPort (DP++)
- Built-in 8-in & 8-out isolated Digital IO (optional)
- 2x removable drive bays for SSD with RAID0/1
- 1x accessible M.2 NVMe SSD (optional)
- Over/Under/Reverse voltage protection
- Supports iAMT(16.1) & TPM (2.0)
- 8V~48V DC wide-range power input with ignition control
- Supports a single NVIDIA® GPU card with up to 350W

Specifications

System Mainboard	MBA-100 with Intel® R680E PCH
CPU Type	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
System Speed	Up to 5.0 GHz
Memory	2x DDR5-4800/5600 SO-DIMM, Max. 64GB
Front Panel External I/O	1x DisplayPort + 1x HDMI + 1x VGA (optional) 3x RJ45 2.5G Ethernet ports 2x USB 3.2 Gen.2, 4x USB 3.2 Gen.1 2x DB9M connectors for COM1 #1 / COM#2 (RS232/422/485) 2x DB9M connectors for COM1 #3 / COM#4 (RS232 only) Isolated 8-in & 8-out digital I/O ports (optional) 1x Line-out & MIC-in 6x antenna holes for WLAN & WWAN module 1x 2-pin terminal block for remote power 1x power button with LED, 3x LED indicators (storage, WLAN, WWAN) 1x PCI-E(x16) Gen.4 slot + 2x PCI-E(x4) Gen.4 slots
Rear Panel External I/O	1x 4-pin terminal block for 8V~48V power input 1x 3-pin terminal block for Ignition control
Expansion Slots	1x M.2 2230 E-key socket for WLAN & BT (PCI-E + USB 2.0 + SMBus). 1x M.2 3042/52 B-key socket for WWAN (4G/5G) (PCI-E + USB3.2 Gen.1 + SMBus). 1x M.2 2280 M-key socket for NVMe SSD (PCI-E x4 [Gen.4]) 2x Mini PCI-E full-size socket for CAN FD module (PCI-E + USB 2.0 + SMBus)
Storage	2x 2.5" HDD/SSD (front-accessible) 1x front-accessible M.2 2280 M-key tray for NVMe SSD (PCI-E x4 [Gen.4]) [optional]
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mounting
Dimensions	213.8mm (W) x 363.6mm (D) x 215mm (H) 8.4" (W) x 14.3" (D) x 8.46" (H)
Weight	TBD
Operating Temperature	-20°C to 60°C (-4°F~140°F) *with air flow
Storage Temperature	-40°C to 70°C (-40°F to 158°F)

Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating/Non-operating (SSD): 2,26 Grms (5~500 Hz) / MIL-STD-810G
Shock	Operating: Sawtooth: 20G, 11 msec (Z-axis) / MIL-STD-810H Non-operating: Sawtooth: 40G, 11 msec (Z-axis) / MIL-STD-810H
Certification	CE (EN 62368 / EN55032 / EN55035) & LVD FCC Class-A

Ordering Information

AES100M	Expandable Edge AIoT System with MBA-100 (R680E PCH), w/o CPU/ memory/storage/ Power adaptor; supports vPro & iAMT 16.1, desktop/wall mounting brackets (RoHS2)
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Dimensions and Drawing

