

BOXER-6843-ADS

Fanless Embedded Controller with 12/13th Generation Intel® Core™/Celeron® Processor G Series

Front View



Rear View



Features

- 12th/13th Generation Intel® Core™/Celeron® Processor G Serie
- DDR5 U-DIMM x 4
- HDMI x 2 + DP x 2
- PCIe [x16] + PCIe [x4] or Dual PCIe [x8] (in [x16] slot) + PCIe [x4]
- Supports Dual Graphics Cards with Dual Power Inputs
- Support NVIDIA L4

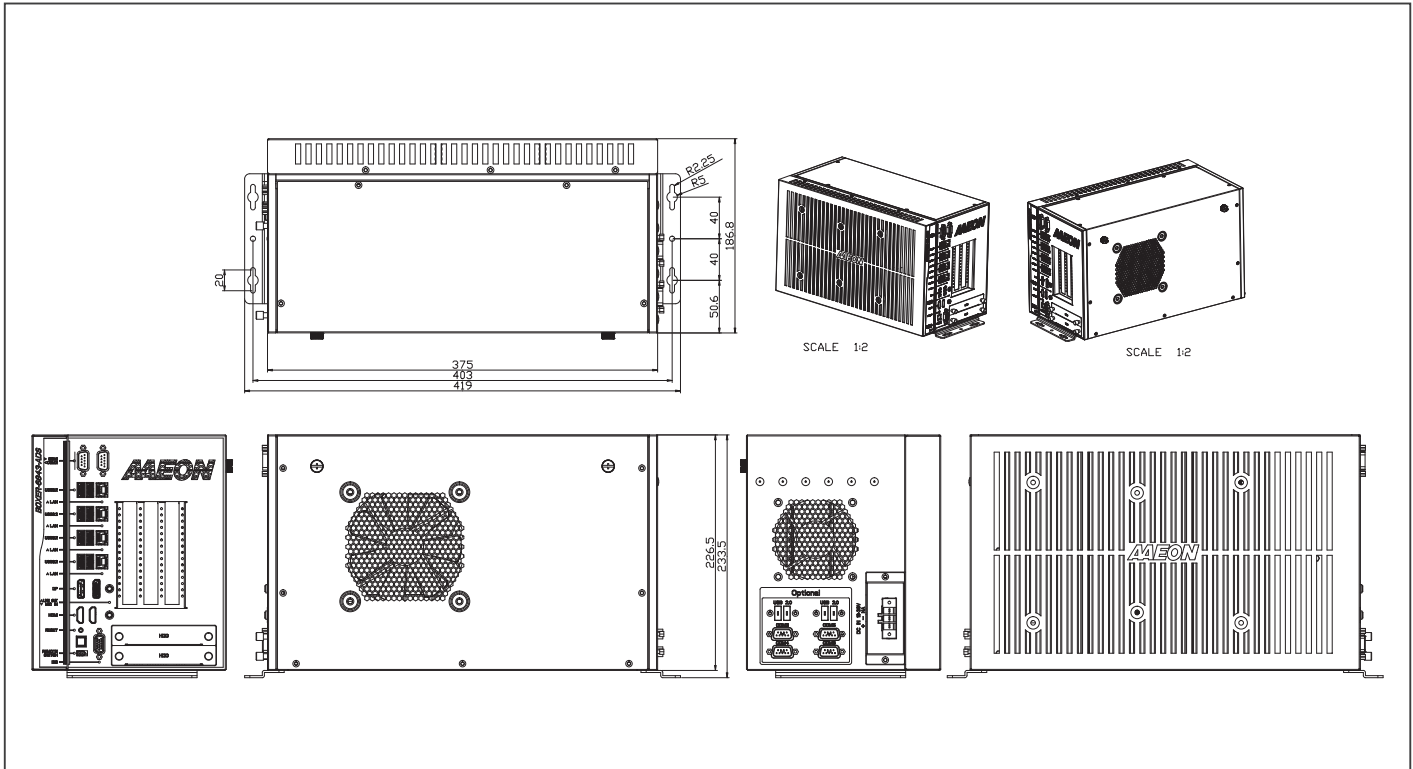


Specifications

System	
CPU	12th Generation Intel® Core™, TDP Max. 65W Intel® Core™ i9-12900TE/i9-12900E Intel® Core™ i7-12700TE/i7-12700E Intel® Core™ i5-12500TE/i5-12500E Intel® Core™ i3-12100TE/i3-12100E
Chipset	Q670E
System Memory	DDR5 4800MHz U-DIMM x 4, up to 128GB
Display Interface	HDMI x 2 (Type-A) Display Port x 2
Storage Device	2.5" SATA Drive Bay x 2 (external, swappable) M.2 2280 M-Key x 2 (PCIe Gen 4 [x4]) 3.5" SATA Drive Bay (internal, non-swappable, optional)
Ethernet	2.5GbE x 3 (Intel® I226-IT) GbE x 1 with LED Indicator (Intel® I219-LM)
I/O	HDMI x 2, Display Port x 2 RJ-45 x 4 3.2 Gen 2 x 8 (Type-A) DB-9 Male x 6 for RS-232/422/485 (Autoflow, Programmable) DB-15 Male x 1 for 8-bit DIO Audio (Mic-in/Line-out) DC 19 ~ 36V 3-pin Terminal Block Connector Power Button with LED x 1 Remote Power On/Off x 1 Reset Button x 1
Expansion	M.2 2230 E-Key x 1 M.2 3052 B-Key w/SIM x 1 M.2 2280 M-Key/B+M-Key x 2 Full-Size Mini Card x 1 (PCIe + USB) A1: PCIe [x4] x 1 + PCIe [x16] x 1 A2: PCIe [x4] x 1 + PCIe [x8] (in x16 slot) x 2 Max. Power Consumption of GPU card 300W Max. Size of GPU card 305mm x 120mm x 50mm
Indicator	—
OS Support	Windows® 10 IoT Enterprise LTSC 2021 Windows® 11 Pro Linux Ubuntu 22.04
Power Supply	
Power Requirement	DC 19~36V 3-pin Terminal Block
Mechanical	
Mounting	Wallmount
Dimensions (W x H x D)	7.35" x 8.92" x 14.76" (186.8 x 226.5 x 375 mm)(Without brackets) 7.35" x 9.19" x 16.50" (186.8 x 233.5 x 419 mm)(With brackets)
Gross Weight	20.9 lb (9.5Kg)
Net Weight	18.1 lb (8.2 Kg)
Environmental	
Operating Temperature	-4°F ~ 113°F (-20°C ~ 45°C), according to IEC68-2 with 0.5 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Storage Humidity	5 ~ 95% @ 40°C, non-condensing
Anti-Vibration	3 Grms/ 5 ~ 500Hz/ operation (with SSD)
Anti-Shock	50G, IEC 68-2-27, half sine, 11 ms duration (with SSD)
Certification	CE/FCC Class A

Dimension

Unit: mm



Ordering Information

Part Number	CPU	PCH	LAN	FAN	Graphic Card	USB	RS-232/422/485	Digital I/O	Audio	Storage	Display	Expansion	Mounting	Power	Operation Temp
BOXER-6843-ADS-A1-1010	—	Q670E	4	Fan	—	USB 3.2 Gen 2 x 8	6	8-bit	Mic-in Line-out x 1	2.5" SATA Drive bay x 2 M.2 2280 NVMe SSD slot x 2	HDMI x 2 DP x 2	Full-Size Mini Card x 1 M.2 2230 E-Key x 1 M.2 3052 B-Key w/SIM x 1 PCIe [x4] x 1, PCIe [x16] x 1	Wallmount	DC In 19~36V with 3-pin terminal block	-20°C ~ 45°C with 0.5m/s airflow
BOXER-6843-ADS-A2-1010	—	Q670E	4	Fan	—	USB 3.2 Gen 2 x 8	6	8-bit	Mic-in Line-out x 1	2.5" SATA Drive bay x 2 M.2 2280 NVMe SSD slot x 2	HDMI x 2 DP x 2	Full-Size Mini Card x 1 M.2 2230 E-Key x 1 M.2 3052 B-Key w/SIM x 1 PCIe [x4] x 1, PCIe [x8] x 2 (in [x16] slot)	Wallmount	DC In 19~36V with 3-pin terminal block	-20°C ~ 45°C with 0.5m/s airflow

Packing List

- Wallmount Bracket x 2
- 3 Pin DC-in Power Connector x 1
- Screw Package x 1
- Thermal Pad Package x 1
- BOXER-6843-ADS

Optional Accessories

- **1255903300**
330W Power Adapter
- **1255X00021**
480W Power Adapter (DIN Rail)
- **170X000799**
Power Cord (US type)
- **170X000800**
Power Cord (European Type)
- **170X000803**
Power Cord (Japanese Type)
- **9741364A00**
WiFi Module & Antenna
- **9741EG25G0**
4G Module & Antenna (for global)
- **9741EC25A0**
4G Module & Antenna (for USA-AT&T)
- **9741EC25V0**
4G Module & Antenna (for USA-Verizon)
- **9651500Q00**
5G Module & Antenna (for USA & EMEA, Asia)