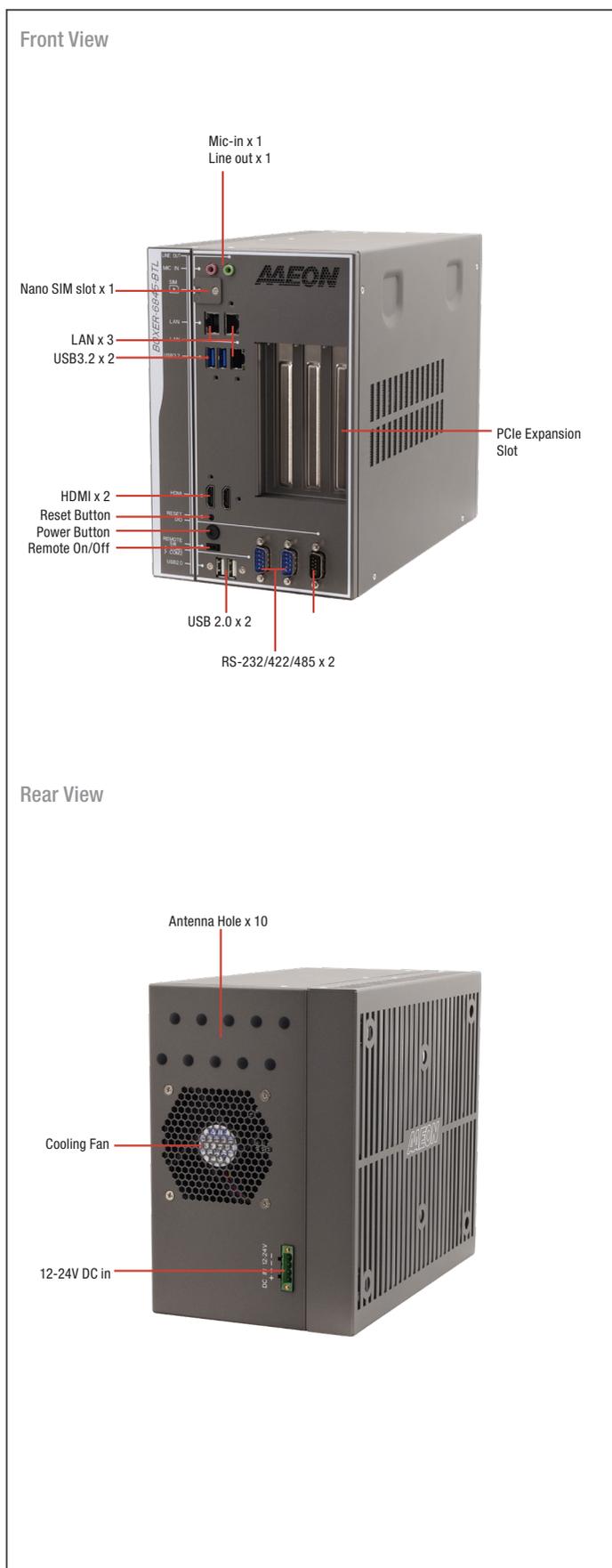# BOXER-6845-BTL

Compact Embedded Computer with Intel® Core™ processors Series 2 (formerly Bartlett Lake)

Front View

Mic-in x 1
Line out x 1

Nano SIM slot x 1

LAN x 3
USB3.2 x 2

PCIe Expansion Slot

HDMI x 2
Reset Button
Power Button
Remote On/Off

USB 2.0 x 2

RS-232/422/485 x 2

Rear View

Antenna Hole x 10

Cooling Fan

12-24V DC in

Features

- **Intel® Core™ processors Series 2 (formerly Bartlett Lake), TDP Max. 65W**
- **Compact 150mm x 270mm x 225mm Size**
- **DDR5 SODIMM x 2, up to 64GB (ECC Support)**
- **SATA Drive Bay x 2 & M.2 2280 M-Key x 2**
- **M.2 3052 B-Key x 2**
- **Wide 12V-24V DC Input Range with Protection Circuit**
- **Wide -20°C-45°C Operating Temperature**
- **Riser Card Expansion: PCIe [x16] + PCIe [x4] / PCIe [x8] + PCI x 2**
- **NVIDIA RTX™ 4000 SFF Ada Graphics Card Support**
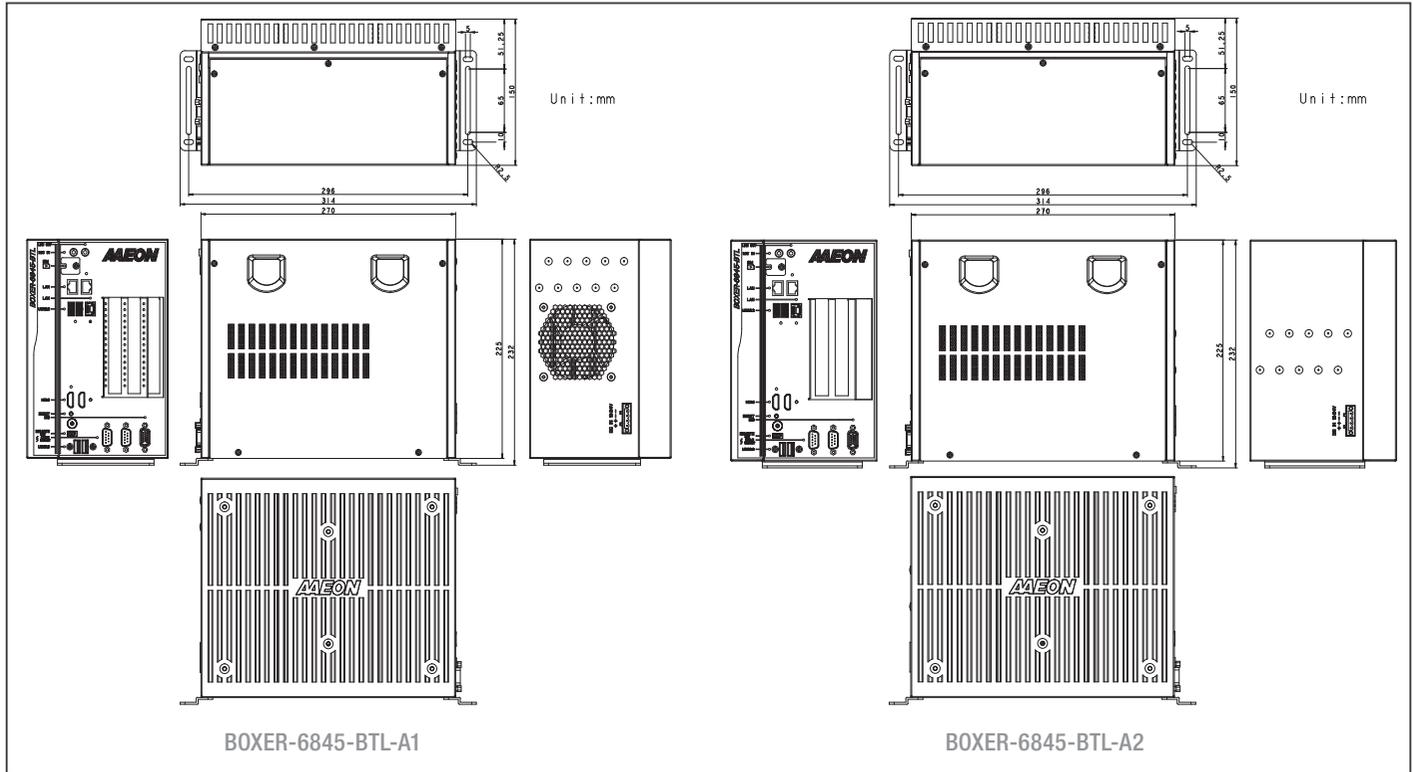- **TPM 2.0 Onboard**

DDR **5** | **1000** Giga LAN | SS← **USB 3.2 Gen 2** | **2.5**GbE | PCIe **PCI Express** | HDMI | Audio | UKCA

Specifications

System	
CPU	Intel® Core™ processors Series 2 (formerly Bartlett Lake), TDP Max. 65W: Intel® Core™ 7 Processor 251E, Intel® Core™ 7 Processor 251TE, Intel® Core™ 5 Processor 221E, Intel® Core™ 5 Processor 221TE, Intel® Core™ 5 Processor 211E, Intel® Core™ 5 Processor 211TE, Intel® Core™ 3 Processor 201TE
Chipset	Intel® W680 Chipset
System Memory	DDR5 SODIMM Slot x 2, up to 64GB (Un-buffered ECC / Non-ECC)
Display Interface	HDMI x 2 (Lockable)
Storage Device	2.5" SATA Drive Bay x 2 M.2 2280 M-Key x 2 (NVMe)
Ethernet	Lockable RJ-45 x 3 for GbE LAN
I/O	USB 3.2 (10Gbps) x 2 USB 2.0 x 2 DB-9 for RS-232/422/485 x 2 Mic-in x 1 Line-out x 1 DB-15 for DIO 8-bit x 1 Remote Power Switch x 1 Power Button with LED Indicator x 1 Reset Button x 1 Antenna Opening x 10
Expansion	M.2 2230 E-Key x 1 (Wi-Fi) M.2 3052 B-Key x 1 w/ Front Access Nano SIM Slot (LTE/5G) M.2 3052 B-Key x 1 (PCIe [x1] + USB 3) Front Access Nano SIM Slot x 1 with cover OOB function (by request) Riser Card Expansion: A1 SKU: PCIe [x16] + PCIe [x4] Total share 150W by power cable Max. GPU card power consumption: 150W Max. GPU card length: 221mm A2 SKU: PCIe [x8] + PCI x 2
Indicator	System Power
OS Support	Windows® 10 IoT 2021 LTSC Windows® 11 IoT LTSC Linux Ubuntu 24.04
Power Supply	
Power Requirement	12V-24V 4-pin DC Terminal Block Connector with protection circuit
Mechanical	
Mounting	Wallmount
Dimensions	5.9" x 10.6" x 8.8" (150mm x 270mm x 225mm) without brackets
Gross Weight	18.1 lb (8.2 Kg)
Net Weight	14.3 lb (6.5 Kg)
Environmental	
Operating Temperature	-4°F ~113°F (-20°C ~ 45°C) with 0.7 m/s airflow(with industrial wide temp. SSD/RAM, without add-on card)
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 @ wallmount, half sine, 11 ms duration (with SSD)
Certification	CE/FCC Class A

Note: All specifications are subject to change without notice.

Dimension

Unit: mm

BOXER-6845-BTL-A1

BOXER-6845-BTL-A2

Ordering Information

Part Number	CPU	PCH	LAN	Fan	USB	RS-232/422/485	Digital I/O	Audio	Storage	Display	Expansion	Mounting	Power	Operation Temp.
BOXER-6845-BTL-A1-1010	—	Intel® W680 Chipset	3	Fan	USB 3.2 Gen 2 x 2 USB 2.0 x 2	2	8-bit	Mic-in x 1 Line-out x 1	2.5" SATA Drive Bay x 2 M.2 2280 M-Key x 2	HDMI x 2	M.2 2230 E-Key x 1 M.2 3052 B-Key w/ SIM x 1 M.2 3052 B-Key w/o SIM x 1 M.2 2280 M-key x 2 PCIE [x16] x 1, PCIE [x4] x 1	Wallmount	12-24V DC in	-20°C ~ 45°C with 0.7 m/s airflow
BOXER-6845-BTL-A2-1010	—	Intel® W680 Chipset	3	Fanless	USB 3.2 Gen 2 x 2 USB 2.0 x 2	2	8-bit	Mic-in x 1 Line-out x 1	2.5" SATA Drive Bay x 2 M.2 2280 M-Key x 2	HDMI x 2	M.2 2230 E-Key x 1 M.2 3052 B-Key w/ SIM x 1 M.2 3052 B-Key w/o SIM x 1 M.2 2280 M-key x 2 PCIE [x4] x 1, PCI x 2	Wallmount	12-24V DC in	-20°C ~ 45°C with 0.7 m/s airflow

Packing List

- BOXER-6845-BTL
- Wallmount Bracket x 2
- 4-pin Terminal Block Connector x 1 (for DC input)
- Thermal Pad Package x 1
- Screw Package x 1
- Remote ON/OFF Connector x 1
- 8-pin to 8-pin Graphics Card Power Cable x 1 (A1 model only)

Optional Accessories

- **170X001024**
  Power Cord (European Type)
- **170X000799**
  Power Cord (US type)
- **170X000803**
  Power Cord (Japanese Type)
- **1255X00118**
  240W AC to DC Power Adapter