

# SB-5512

## Fanless Embedded Box PC with Intel® Core™ Series 2/14th/13th/12th LGA 1700 Processor

### Applications

- Edge AI Computing
- Factory Automation
- Motion Control
- Machine Vision
- Data Analytics



### Features

- Supports Intel® Core™ Series 2 (Bartlett Lake) /14th/13th/12th LGA 1700 CPU
- Dual Channel DDR5 4800/5600MHz, up to 96GB
- Multiple Display: 2 x HDMI 2.0b, 1 x DP 1.4a++
- 1 x 2.5GbE (Intel® I226V), 1 x GbE (Intel® I219LM)
- Supports 2 x Removable 2.5" SATA HDD/SSD
- Supports 2 x Flexible I/O windows for Scalability
- -20°C ~ 60°C Wide Operating Temperature

### Ordering Information

Part No.	Description
SB-5512	Intel® Core™ Series 2/14th/13th/12th LGA1700 CPU socket, Q670 Chipset, 1 x 2.5GbE, 1 x GbE, 2 x HDMI, 1 x DP, 2 x RS-232/422/485, 4 x USB3.2, 1 x GPIO, 2 x Mic-In/Line-Out, 2 x Flexible I/O windows, 12~28VDC

### Packing List

#### Description

1 x SB-5512

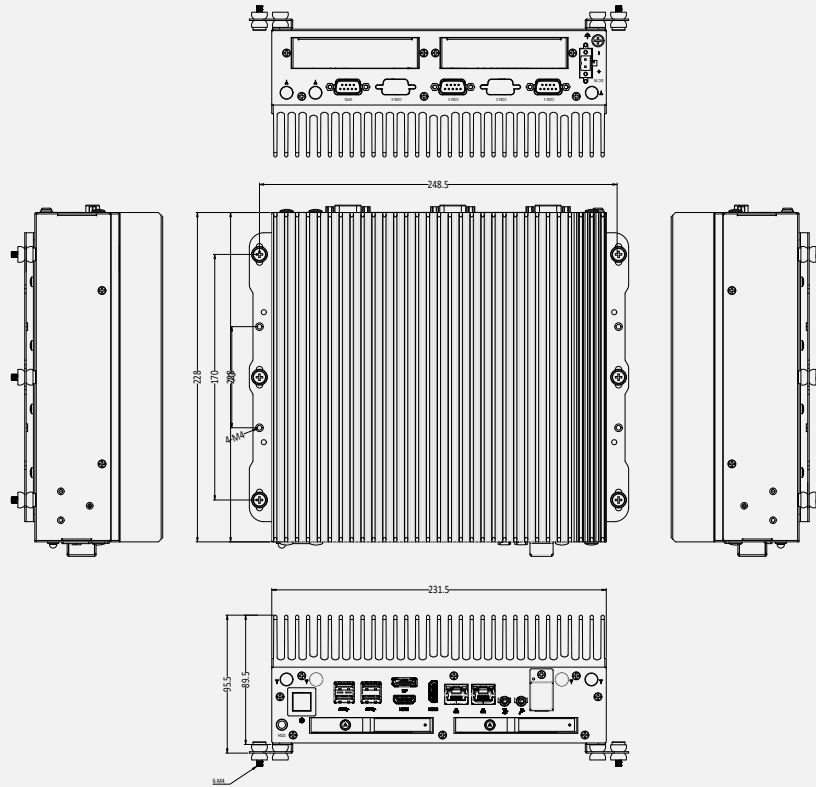
## Optional Items

Part No.	Description
EA-PS-80W12VTB2xx-0111	Adaptor_80W/12V/6.7A_-30~70°C_TB2
27-x301010005-CA	Power Cord, 3-pin EU Type, 180 cm
27-x301000003-CA	Power Cord, 3-pin US Type, 180 cm
251TE	Series 2 Intel® Core™ 7 Bartlett Lake_36M Cache, up to 5.40GHz_45W
221TE	Series 2 Intel® Core™ 5 Bartlett Lake_24M Cache, up to 5.00GHz_45W
211TE	Series 2 Intel® Core™ 5 Bartlett Lake_20M Cache, up to 4.80GHz_45W
201TE	Series 2 Intel® Core™ 3 Bartlett Lake_12M Cache, up to 4.60GHz_45W
i7-14700T	14 <sup>th</sup> Gen Intel® Core™ i7-14700T Raptor Lake Refresh_30M Cache, up to 5.00GHz_35W
i5-14500T	14 <sup>th</sup> Gen Intel® Core™ i5-14500T Raptor Lake Refresh_24M Cache, up to 4.80GHz_35W
i3-14100T	14 <sup>th</sup> Gen Intel® Core™ i3-14100T Raptor Lake Refresh_12M Cache, up to 4.40GHz_35W
i7-13700TE	13 <sup>th</sup> Gen Intel® Core™ i7-13700TE Embedded Raptor Lake_30M Cache, up to 4.80GHz_35W
i5-13500TE	13 <sup>th</sup> Gen Intel® Core™ i5-13500TE Embedded Raptor Lake_24M Cache, up to 4.50GHz_35W
i3-13100TE	13 <sup>th</sup> Gen Intel® Core™ i3-13100TE Embedded Raptor Lake_12M Cache, up to 4.10GHz_35W
i7-12700TE	12 <sup>th</sup> Gen Intel® Core™ i7-12700TE Embedded Alder Lake_25M Cache, up to 4.60 GHz_35W
i5-12500TE	12 <sup>th</sup> Gen Intel® Core™ i5-12500TE Embedded Alder Lake_18M Cache, up to 4.30 GHz_35W
i3-12100TE	12 <sup>th</sup> Gen Intel® Core™ i3-12100TE Embedded Alder Lake_12M Cache, up to 4.00 GHz_35W
AWD-4G005	4G (LTE) EM05-G + 2 Antennas, M.2 (for Global)
AWD-WF009	Wi-Fi 802.11 a/b/g/n/ac/BT5.0 (2T2R) +2 Antennas (Dual Band), M.2 2230 Type

## Specifications

Model		SB-5512
Processor System	CPU	Intel® Core™ Series 2 (Bartlett Lake) & 14th/13th/12th LGA 1700 Processors (35/45W)
	System Chipset	Intel® Q670
	BIOS	AMI 256 Mbit
	TPM	Onboard TPM 2.0
Memory	Technology	Dual Channel DDR5 4800/5600MHz
	Max. Capacity	96GB
	Socket Type	2 x 262-pin SO-DIMM
Display	Graphics Engine	Intel® UHD Graphics
	Multiple Display	3
	HDMI	2 x HDMI 2.0b, Max resolution up to 4096 x 2160
	DP	1 x DP, Max solution 4096 x 2160
I/O Interface	USB	4 x USB3.2 Gen2
	Serial Port	2 x RS-232/422/485 (Optional for 2 x RS-232)
	Ethernet	1 x 2.5GbE (Intel® I226V) 1 x GbE (Intel® I219LM)
	Audio	1 x Line-out, 1 x Mic-in
	GPIO	4 x Input, 4 x Output (D-SUB 9-pin)
	Antenna Hole	7
	Flexible I/O Window	2
Storage	2.5" HDD / SSD	2 x Removable 2.5" SATA HDD/SSD
	M.2	1 x M.2 M-Key 2242/2280 (PCIe Gen4 x4) 1 x M.2 M-Key 2242 (PCIe Gen4 x4 and SATA III)
	RAID	Intel® VMD RAID 0/1(supported by identical interface (PCIe or SATA))
Expansion	M.2	1 x M.2 E-Key 2230 (PCIe x1, USB 2.0 and CNVi for Wireless) 1 x M.2 B-Key 3042/3052 (PCIe x1, USB 3.2 Gen1, and USB 2.0)
Power	Power Mode	AT / ATX
	Power Supply Voltage	12~28V DC Input
	Power Connector Type	1 x 2-pin Terminal Block Connector
Mounting	Type	Wall Mount
Environment	Operating Temperature	-20 ~ 60°C
	Storage Temperature	-40 ~ 75°C
	Humidity	5% ~ 90% (Non-condensing)
	Vibration	1Grms, 5-500 Hz, 1hr/Axis
	Shock	20Grms, Half-sine 11ms
General	Certification	CE/FCC Class A
	Thermal Dissipation	Fanless System
	Material	Aluminum & SECC
	Dimensions (W x D x H)	231.5x228x89.5 mm
	Net Weight	5.0kg
	Operating System	Windows 10 IoT, Windows 11 (IoT/Professional), Linux

## Dimensions



## Viewing

2 x RS-232/422/485 (Optional for 2 x RS-232)

4 x GPI, 4 x GPO (D-SUB 9-pin)

