

EPC-B3588

Embedded System with Alder Lake-S/ Raptor Lake-S/Raptor Lake-S Refresh Platform and 3 PCIe Expansion Slots



Features

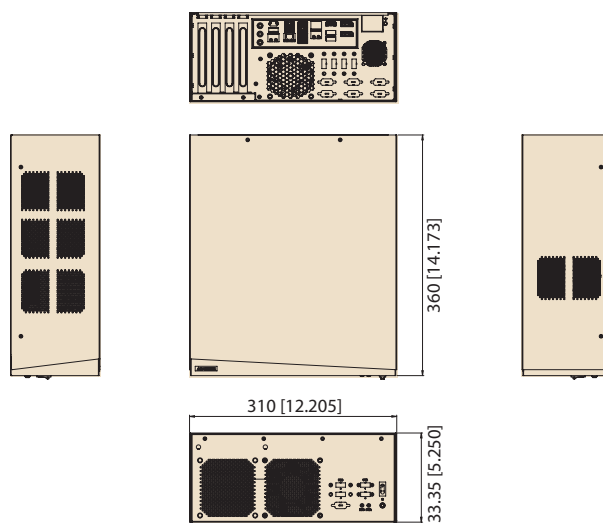
- Intel Alder Lake-S/Raptor Lake-S/Raptor Lake-S Refresh platform to support 12th/13th/14th Gen processors
- 3U Embedded System with 3 PCIe expansion slots
- Up-to 8x 2.5" SATA SSD
- To accommodate 500W PSU for different applications
- Plentiful IO Ports for Various Applications
- NVIDIA Certified with RTX A4500 graphic card
- Win10 IoT, and Ubuntu 20.04 OS compatible

Specifications

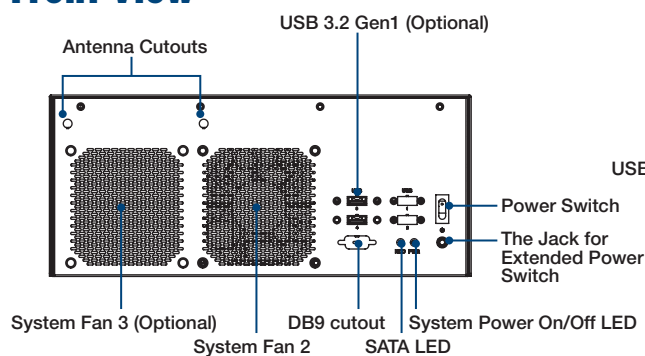
Model Name		EPC-B3588
Motherboard		AIMB-588QM-0AB1
Dimensions (W x H x D)	Dimensions (W x H x D)	310 x 133.35 x 360 mm
System Thermal Design	CPU Cooler	CPU cooler
	PSU	500W
	System Fan	2
Environmental Conditions	Operating Temperature	0 ~ 50 °C (w/o Graphic card), 0 ~ 45 °C (with RTX-A4500)
	Non-operating Temperature	-20 ~ 60 °C
	Humidity	95% @ 40 °C, non-condensing
	Operating Shock	10G/11ms
	Operating Random Vibration (5 ~ 500 Hz)	1.0Grms (w/o Expansion Cards)
CPU	14th Processor System	i9-14900/i9-14900T i7-14700/i7-14700T i5-14500/i5-14500T i5-14400/i5-14400T i3-14100/i3-14100T Intel® Processor 300/Intel® Processor 300T
		i9-13900E/i9-13900TE i7-13700E/i7-13700TE i5-13500E/i5-13500TE i3-13100E/i3-13100TE i9-13900/i7-13700/i5-13500/i5-13400/i3-13100
	13th Processor System	i9-12900E/i9-12900TE i7-12700E/i7-12700TE i5-12500E/i5-12500TE i3-12100E/i3-12100TE G7400E/G7400TE G6900E/G6900TE i9-12900/i7-12700/i5-12500/i5-12400/i3-12100
	12th Processor System	
Chipset	Chipset	Q670E
Storage	Storage Bay	Up-to 8x 2.5" SSD
	Power switch	1
Front IO	LED	1 Power LED 1 HDD LED
	Power remote Jack	1 2.5Φ Jack
	USB	Up-to 2 USB3.2 Gen1 (Optional)
	GPIO	1 8 bit GPIO via DB9 (Optional)
Rear IO (By Motherboard)	Display ports	HDMI x1, DP x2
	USB	1 USB3.2 Gen2 x2 Type C; 5 USB 3.2 Gen2 type A; 4 USB 2.0 type A
	Serial port	Up-to 6 COM (Optional)
	LAN	2 RJ45 GbE (1 2.5GbE, 1 GbE)
	Audio	1 Mic-in, 1 Line-out
Certification	EMC / Safety / Certifications	CE / FCC (Class B) / CCC / CB / UL
Power Requirements		500W ATX / AT mode
Weight	Weight	15 Kg
PCIe Expansions		1 PCIe x16 2 PCIe x4

Dimensions

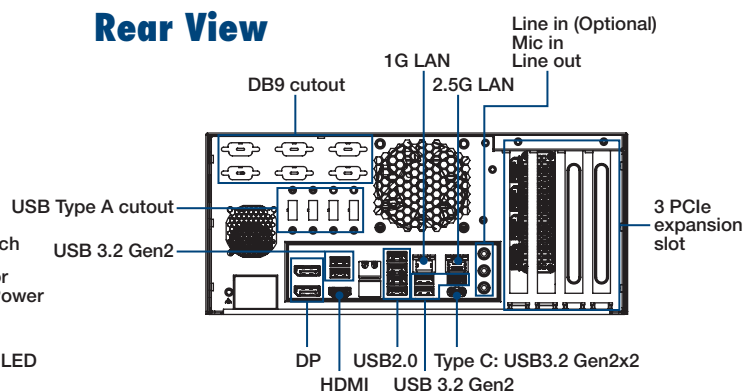
Unit: mm



Front View



Rear View



Ordering Information

Model	PSU	Chipset	DDR5 UDIMM Socket	2.5" SATA Bay	Rear IO							Expansion	
					Display Port	HDMI	2.5 GbE	GbE	USB3.2 Gen2 x2	USB3.2 Gen1	USB2.0	PCIe x4	PCIe x16
EPC-B3588-ABQ0 Bare-bone	500W	Q670E	4	1 (support 4x 2.5" SSD)	2	1	1	1	1	5	4	2	1

Remarks

Bare-bone, w/o CPU, w/o RAM, w/o Storages

Packing List

Item	Part Number	Quantity
CPU Cooler	1970005349T001	1
2.5" Storage Metal Tray	1960109003N000	1
HDD damper rubber	1990015239T000	4
Screw for HDD Tray	1930004828	4
SATA2 Cable	1700003194	2
SATA1 Cable	1700033607-01	2
Screw M3x5L to fix 2.5" SSD	1930001241	16
CABLE TIE (P.G. GT-160M)	1992822010	4

Optional Accessory

Item	Part Number	Description
Power Cable	1700000596-11	Power cable 3-pin 183cm, China type
	1702031801	Power cable 3-pin 183cm, UK type
	1702002600	Power cable 3-pin 183cm, USA type
	1702002605	Power cable 3-pin 183cm, Europe type
USB Cable	1700000237-01	Power cable 3-pin 183cm, Japan type
	1700033970-01	Front IO USB3.2 Gen1 Cable
COM Cable	1700033421-01	1 to 4 DB-9 cable
	1700034131-01	1 to 2 DB-9 cable
GPIO Cable	1700034192-01	8-bit GPIO cable

Embedded OS/API

OS/API	Part Number	Description
Ubuntu	20706U22DS0009	Ubuntu 22.04
	20706WX1HS0017	
Win 10	20706WX1VS0017	Windows 10 IoT Enterprise 2021
	20706WX1ES0017	