EPC-B2278

Embedded System with Intel Alder Lake Platform and One Expansion Slot



Features

- Supports Intel® 12th Gen Core™ i processor (LGA1700) with Intel Q670E
- Two DDR5 4800MHz SODIMM and up-to 64GB
- Supports triple display of 2x DP/HDMI
- One low-profile PCIe expansion slot
- Reserved 2 USB, 2 COM, punchouts on front panel

Windows 10 WISE-PaaS/DeviceOn CE FCC RoHS COMPLIANT 2002/95/EC

- Note: CE (No RED certification)

Specifications

Model Name		EPC-B2278											
Order Number		EPC-B2278-ABQ0											
Drive Bay	Slim Optical Disk Drive and HDD	2.5" SSD*2											
Cooling	Fan	2 (7cm/39.45CFM each) / 1 CPU Cooler											
System Spec	CPU	i9-12900E/ i9-12900	i9-12900TE	i7-12700E/ i7-12700	i7-12700TE	i5-12500E/ i5-12500/ i5-12400	i5-12500TE	i3-12100E/ i3-12100	i3-12100TE	G7400E	G7400TE	G6900E	G6900TE
	Core Number	16	16	12	12	6	6	4	4	2	2	2	2
	Base frequency	2.3GHz/ 2.4GHz	1.1GHz	2.1GHz	1.4GHz	2.9GHz/ 3.0GHz/ 2.5GHz	1.9GHz	3.2GHz	2.1GHz	3.6GHz	3.0GHz	3.0GHz	2.4GHz
	Max Speed	5.0GHz	4.8GHz	4.8GHz	4.7GHz	4.5GHz/ 4.6GHz/ 4.4GHz	4.3GHz	4.2GHz/ 4.3GHz	4.0GHz	NA	NA	NA	NA
	Smart cache	30M	30M	25M	25M	18M	18M	12M	12M	6M	6M	4M	4M
	TDP	65W	35W	65W	35W	65W	35W	60W	35W	46W	35W	46W	35W
	Chipset	Q670E											
	BIOS	AMI EFI 256 Mbit SPI											
Front IO	USB	2 (Optional)											
	Serial	2 (Optional)											
	WLAN Antenna	2 (Optional)											
	Miscellaneous	Power and HDD LED x1 , RST Button x1, Power Switch x1, Remote switch x1											
Rear IO	HDMI	HDMI2.0b, supports max. resolution 4096 x 2160 @ 60 Hz											
	Display Port	DP1.4a, supports max. resolution 4096 x 2304 @ 60 Hz											
	Ethernet	1 2.5GbE, 1 GbE											
	USB	6 USB3.2 Gen2											
	Audio	1 (Line out/Mic in/Line in(Optional))											
	Serial	2 (COM1 RS-232, COM2 RS232/422/485) (Optional)											
	Power Input	100-240V~, 6-3A, 60-50Hz											
	Expansion slot	PCIe x16 Gen5(32GT/s) for discrete GPU card and storage devices											
Environment	Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)											
	Non-operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)											
	Humidity	95% @ 40 °C, non-condensing											
	Vibration (5 ~ 500 Hz)	1 Grms (SSD*2)											
	Shock	10G (with 11ms duration, half sine wave)											
	Certification	CE/FCC											
Physical Characteristics	Dimensions (W x H x D)	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")											
	Weight	5.0 kg											

* Top drive bay supports max. 12.5mm height HDD or slim ODD; Bottom drive bay supports max. 9.5mm height HDD.

Front View



Internal View



Rear View

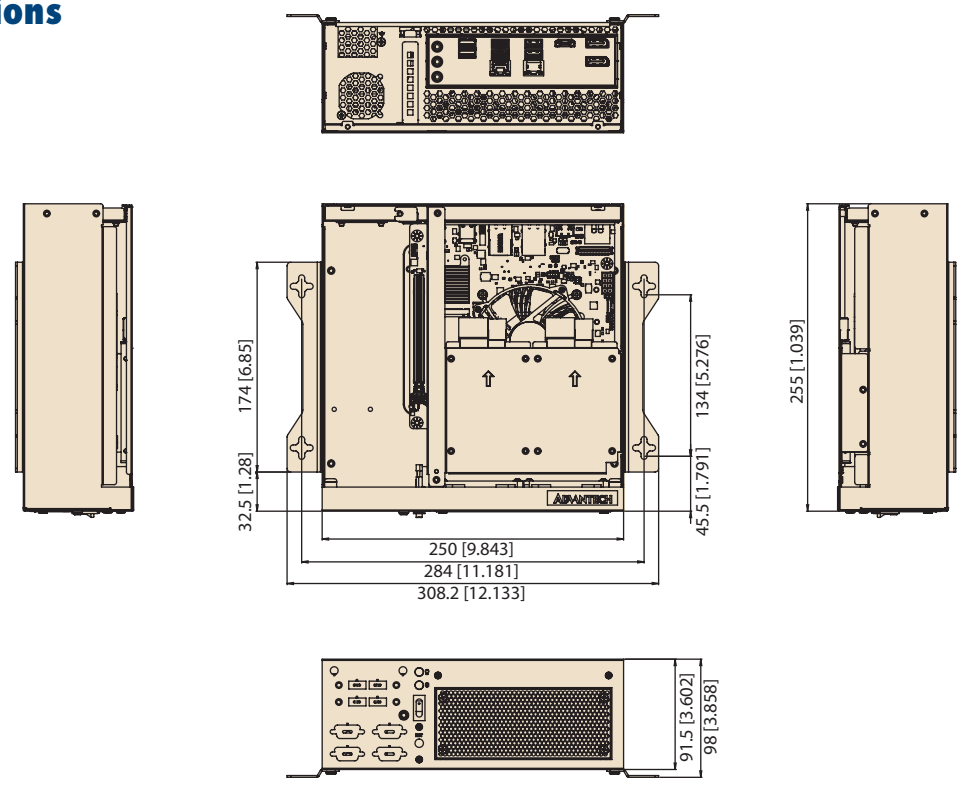


All product specifications are subject to change without notice.

Last updated: 10-Aug-2023

Dimensions

Unit: mm [inch]



Ordering Information

Model Name	Part Number	Description	Supported MB	Certification
EPC-B2278	EPC-B2278-ABQ0	EPC-B2278 barebone with 350W PSU	AIMB-278Q-00A1	CE/FCC

Packing List

Part Number	Description	Quantity
1970005349T001	CPU Cooler	1
1700018971	SATA 1 Cable	1
1700008941-11	SATA 2 Cable	1
1990009411T000	Mylar 94X69 for HDD	2
1960014487T001	Wall Mount Bracket	2
1990012452S000	Rubber Foot	4
1930003238	M3x5 Screws For Rubber Foot/Wall Mount bracket	4
1930006770-01	Screws For M.2 module	1

Optional Accessories

Part Number	Description
1700022989-01	2 port USB 3.0 Cable
1700031130-11	2 port COM cable
1700034192-01	1 port GPIO cable
1700000596	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
1700000237	Power cable 3-pin 183 cm, Japan type
1700001714	Power cable 3-pin 183 cm, Taiwan type