

EPC-C301

8th Gen. Intel® Core Processor SoC Multiple I/Os Fanless Embedded System

NEW



Features

- 8th Gen. Intel Core i7-8665UE/i5-8365UE Quad Core
- Dual Display HDMI + DP, up to 4K2K
- 4 x GbE, 8 x USB3.0/2.0, 4 x UART, 2 x CANBus
- 4 Expansion: M.2 E-Key 2230, M-Key 2280, B-Key 3042, F/S mPCIe
- DC-in 12V, Wall Mount & DIN Rail
- iManager3.0 & SW APIs, WISE-PaaS/DeviceOn

Software APIs:



Utilities:



Specifications

Platform	Processor	i7-8665UE	i5-8365UE
	Base Frequency	1.70 GHz	1.60 GHz
	Max. Frequency	4.40 GHz	4.10 GHz
	Core/Tread	4/8	4/8
	LLC	8MB	6MB
	CPU TDP	15W	15W
	Chipset	Intel® WHL-U SoC integrated	
BIOS	AMI UEFI 256Mbit		
Memory	Technology	DDR4-2400MT/s	
	Max. Capacity	32GB	
	Channel/Socket	Dual Channels / 2 Sockets	
	ECC Support	N/A	
Graphics	Controller	Integrated Intel® UHD Graphics 620	
	3D/HW Acceleration	DX12, OGL4.4 HW Encode: H.264, MPEG2 HW Decode: H.264, MPEG2	
Storage	SSD	M.2 2280 SATA SSD or NVMe SSD (default bundled with SQF-SM8M4-128G-SBE)	
Display I/O	HDMI/DP	HDMI1.4 up to 4096x2160@30/24Hz DP1.2 up to 4096x2306@60Hz (Note: not support Audio stream & Hot-plug & HDCP)	
Ethernet	Controller	LAN1: Intel i219, LAN2: Intel i210, LAN3: Intel i210, LAN 4: Intel i210	
Audio	Speed	10/100/1000 Mbps	
Internal expansion Slot	Audio Codec	Realtek ALC888, High Definition Audio, Line-out, Mic-in	
	M.2 3042 B-Key	1	
	M.2 2230 E-Key	1	
	M.2 2280 M-Key	1 (Default bundled with 128G SATA SSD)	
	Full Size MiniPCIe	1 (*Intel EVK SKU will default bundled with VEGA-330, Intel® Movidius™ Accelerator Card)	
Front Panel	HDMI	1	
	DP	1	
	Gigal LAN	4	
	USB 3.0	4	
	USB 2.0	4	
	MIC-In	1	
	LINE-Out	1	
	COM	2 x Full RS-232/422/485	
	DC Jack	1	
	SIM card	1 (Nano SIM)	
	Power Button	1	
Side Panel	Antenna	4	
	COM	2 (1 x Full RS-232/422/485, 1 x RS-232)	
	CANBUS	2 Support CAN 2.0B at 1Mb/s	
	DIO	1	
Miscellaneous	LED Indicators	2 (Power LED, HDD LED)	
	Switch	-	
	Circular Cutouts	-	
Power Requirement	Power Voltage	Vin: DC 12V ± 10%; RTC Battery: Lithium 3V/210MAH	
	Power input Type	DC-Jack (only ATX mode)	
	Consumption	Idle: 6.683W; Max.: 65.591W	
Mechanical	Construction	Aluminum housing	
	Mounting	Din-Rail mounting/ Wall-mounting	
	Dimension	170 x 118 x 70 mm	
Environment	Operating temperature	With extended temperature peripherals: -20 ~ 60 °C (-4 ~ 140 °F) with 0.7m/s air flow without VEGA 330/ -20 ~ 50 °C with VEGA 330	
	Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)	
	Relative Humidity	95% @ 40 °C (non-condensing)	
Regulation	EMC	CE/FCC Class B, CCC, BSMI (*No RED certification)	
	Safety	CB, UL	

*Note: Support by request

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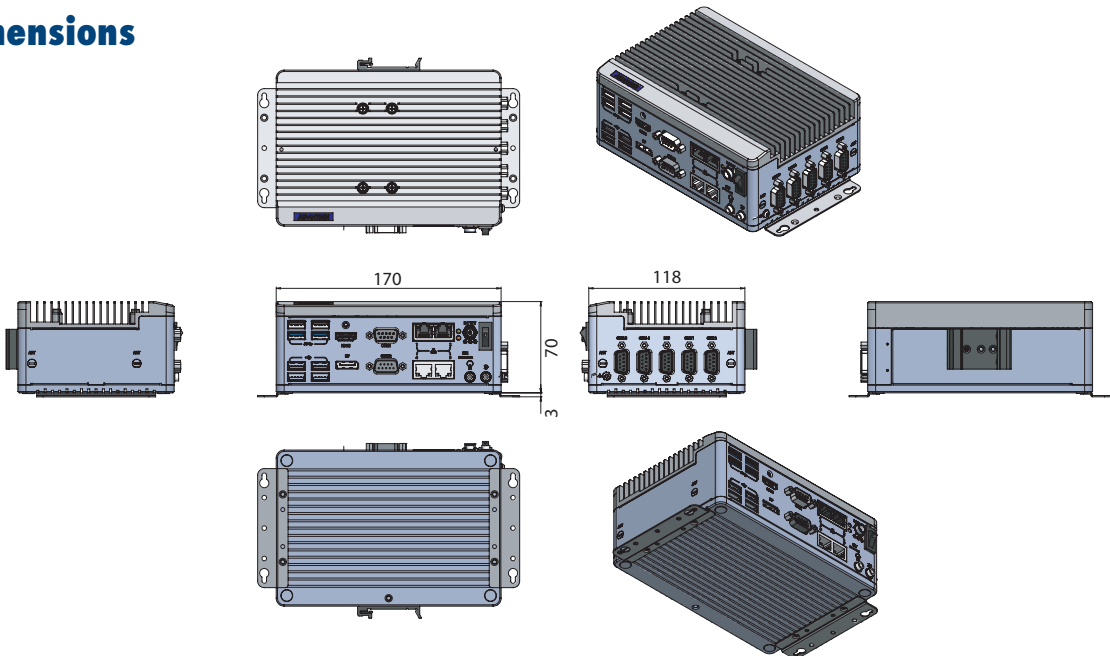
MI/O Extension SBCs, Modules and Chassis

All product specifications are subject to change without notice.

Last updated: 14-Jan-2021

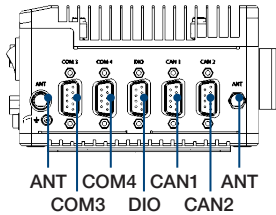
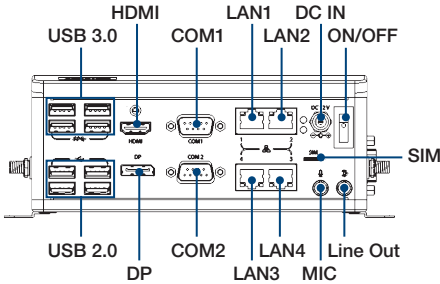
Dimensions

Unit: mm



Front Panel External I/O Mechanical Layout/Drawing

Side Panel External I/O mechanical Layout/ Drawing



Ordering Information

Part Number	CPU	Max. Frequency	Core	Memory	Storage	OS	Adapter	AI Accelerator Card	Operating Temp
EPC-C301EVK-S7A1	i7-8665UE	4.40 GHz	4	16GB (Dual Channel)	128G SATA SSD	Ubuntu v18.04	Yes	Yes (VEGA-330)	-20 ~ 50 degree
EPC-C301C7-S7A1	i7-8665UE	4.40 GHz	4	16GB (Dual Channel)	128G SATA SSD	N/A	No	No	-20 ~ 60 degree
EPC-C301EVK-S6A1	i5-8365UE	4.10 GHz	4	8GB (Single Channel)	128G SATA SSD	Ubuntu v18.04	Yes	Yes (VEGA-330)	-20 ~ 50 degree
EPC-C301C5-S6A1	i5-8365UE	4.10 GHz	4	8GB (Single Channel)	128G SATA SSD	N/A	No	No	-20 ~ 60 degree

Packing List

Part No.	Description	Quantity
EPC-C301	EPC-C301	1
	Quick Start Guide (for EVK SKU only)	1
	China RoHS	1

Embedded OS/API

Embedded OS/API	Part No.	Description
Win10 (High End)	20706WX9HS0068	img W10 19HL EPC-C301 64b 1809 ENU
Win10 (Value)	20706WX9VS0072	img W10 19VL EPC-C301 64b 1809 ENU
Ubuntu v18.04	360SC301000101	Ubuntu V18.04 image w/ Intel OpenVINO Toolkit
Software API		SUSI 4.0/iManager 3.0
Software API		WISE-PaaS/DeviceOn

Optional Accessories

Part No.	Description
96PSA-A120W12W7-3	Adapter 100-240V 120W 12V, LOCKABLE DC JACK
1702002600-01	Power cable 3-pin 183 cm, USA type
1700018704	Power cable 3-pin 180 cm, UK type
1702002605	Power cable 3-pin 183 cm, Europe type
170000237-01	Power cable 3-pin 183 cm, PSE type