EPC-P30X6

2U system with 8th/9th Gen Intel® Core™ i CPU (LGA 1151)



Features

- Supports Intel® 8th/ 9th Gen Core™ i processor (LGA1151) with Intel C246/ H310 chipset
- Up to 4 x Extension Card by Riser Card
- 3 x GigaLAN and 8 x USB3.0
- 2 x RS-232/422/485 and 4 x RS232 serial ports, 16 bit GPIO
- 4 x SATA, 1 x M.2 E key, 1 x M.2 B/M key, 2 x F/S mSATA
- VGA+HDMI or 2 x HDMI output
- 12~24V DC input power range
- Support Advantech I Door module

Specifications

Model Name		EPC-P3000				
Order Number		EPC-P3066EA-00Y0E	EPC-P30665A-00Y0E	EPC-P3066SA-00Y0E	EPC-P3086CA-00Y0E	EPC-P3086SA-00Y0E
Cooling	SYS Fan / CPU Fan	2 / 1				
System Spec	CPU	XEON E-2176G	i5-8500	N/A	G4900	N/A
	Core Number	6	6		2	
	Max Speed	3.7 GHz	3.0 GHz		3.1 GHz	
	TDP	80W	65W		54W	
	Chipset	C246	C246	C246	H310	H310
	Memory	Two 260-pin SO-DIMM up to 64GB DDR4 2400/2666 MHz SDRAM				
Ethernet	Controller	LAN1: Intel I219LM (GbE) LAN2: Intel i210AT (GbE) LAN3: Realtek RTL8111H (GbE)			LAN1: Intel I219LM (GbE) LAN2: Intel i210AT (GbE)	
Audio	Chipset	Realtek ALC888S, High Definition Audio(HD)				
Storage	2.5" HDD/SSD	2 x 2.5" HDD/SSD (Default)				
	mSATA	2	2	2	1	1
	M.2 B key	1	1	1	-	-
Storage in extension card Area (share w/ PCIe & PCI cards)	2.5" HDD/SSD (optional)	2 x 2.5" HDD			-	-
	3.5" HDD (optional)	2 x 3.5" HDD			-	-
Front IO	VGA	1	1	1	1	1
	HDMI	1	1	1	1	1
	Ethernet	3	3	3	2	2
	USB 3.1/3.0/2.0	2/4/0	2/4/0	2/4/0	0/4/2	0/4/2
	Serial Port	6 ports; 2 x RS232/422/485 (BIOS select) + 4 x RS232				
	Power SW / LED	1				
	Remote Control	6-pin connector (2.0 Pitch) by HSG A2004H030 (Power SW+/SW- + LED+/- + RST +/-)				
	GPIO (16 bits)	2 x D-sub 9-pin				
	i Door window	1	1	1	1	1
	Expansion slot	Up to 4 x extended Card by Riser Card				
	LED indicator	5 (COM1 TX/RX, COM2 TX/RX, HDD LED)				
	Power input	12~24V with terminal block 4-Pin				
Internal I/O	HDMI (max 1080P)	2 (pin header, with external IO up to 3 Displays)	2 (pin header, with external IO up to 3 Displays)	2 (pin header, with external IO up to 3 Displays)	-	-
	Audio	MIC in, Line out (pin header)				
	USB 2.0	4 (pin header)	4 (pin header)	4 (pin header)	2 (pin header)	2 (pin header)
	SATA III	3	3	3	2	2
Internal expansion Slot	M.2 B Key	1 (support 2280 & 3042), support SIM card holder, Optional	1 (support 2280 & 3042), support SIM card holder, Optional	1 (support 2280 & 3042), support SIM card holder, Optional	-	-
	M.2 E key	1 (support 2230)	1 (support 2230)	1 (support 2230)	-	-
	Mini-PCIe	2 Full size (with USB2.0/PCIe/mSATA) for EPC-P3066		2 Full size (one with USB2.0/mSATA, other with USB2.0/PCIe) for EPC-P3086		
Environment	Operating Temperature	0 ~ 40 °C				
	Non-operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)				
	Humidity	10 ~ 95% @ 40 °C, non-condensing				
	Vibration (5 ~ 500 Hz)	0.5 Grms (2 x 2.5" HDD; PCIe Card inserted)				
	Shock	10G (with 11ms duration, half sine wave)				
	Certification	CE/FCC/CB/UL/CCC	CE/FCC/CB/UL/CCC	CE/FCC/CB/UL/CCC	CE/FCC/CB/UL/CCC	CE/FCC/CB/UL/CCC
Physical Characteristics	Dimensions (W x D x H)	335 x 260 x 88 mm				
	Weight	6.54 kg				

* Other CPU will be project base (TPN)
* Extra HDD/SSD will occupied PCIe or PCI slot space

Front Side



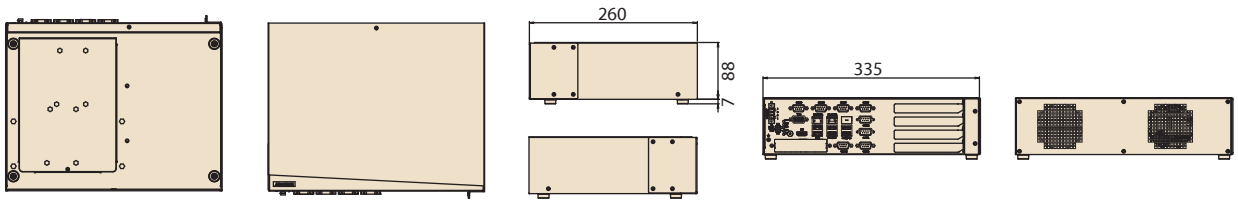
Rear Side



All product specifications are subject to change without notice.

Dimensions

Unit: mm



Ordering Information

PN	CPU	Chipset	Front IO					Internal IO[1]								Power input	Riser Card		
			VGA/ HDMI	COM	USB3.1/ USB3.0/ USB2.0	GbE LAN	GPIO	HDMI	SATA III	USB	Audio	M.2[2] B/M-key	M.2 E-key	mini-PCIe	TPM	Power input	PN	Slot	SATA/SATA PWR
EPC-P3066EA-00Y0E	E-2176G	C246	1/1	6	2/4/0	3	16-bit	2[3]	3	4	2	1	1	2 (F/S)	(1)	DC 12~24V	EPC-RF484-13A1E EPC-RF48P-22A1E EPC-RF2F4-11A1E EPC-RF4F1-13A1E[5]	1 PCIEx8 + 3 PCIEx4 2 PCIEx8 + 2 PCI 1 PCIEx16 + 1 PCIEx4 1 PCIEx16 + 3 PCIEx1	1/1 1/1 1/1 1/1
EPC-P30665A-00Y0E	I5-8500	C246	1/1	6	2/4/0	3	16-bit	2[3]	3	4	2	1	1	2 (F/S)	(1)		EPC-RF484-13A1E EPC-RF48P-22A1E EPC-RF2F4-11A1E EPC-RF4F1-13A1E[5]	1 PCIEx8 + 3 PCIEx4 2 PCIEx8 + 2 PCI 1 PCIEx16 + 1 PCIEx4 1 PCIEx16 + 3 PCIEx1	1/1 1/1 1/1 1/1
EPC-P3066SA-00Y0E	N/A	C246	1/1	6	2/4/0	3	16-bit	2[3]	3	4	2	1	1	2 (F/S)	(1)		EPC-RF484-13A1E EPC-RF48P-22A1E EPC-RF2F4-11A1E EPC-RF4F1-13A1E[5]	1 PCIEx8 + 3 PCIEx4 2 PCIEx8 + 2 PCI 1 PCIEx16 + 1 PCIEx4 1 PCIEx16 + 3 PCIEx1	1/1 1/1 1/1 1/1
EPC-P3086CA-00Y0E	G4900	H310	1/1	6	2000/4/2	2	16-bit	–	2	2	2	0	0	2 (F/S)[4]	(1)		EPC-RF48P-22A1E EPC-RF2F4-11A1E EPC-RF4F1-13A1E[5]	1 PCIEx16 + 2 PCI 1 PCIEx16 + 1 PCIEx4 1 PCIEx16 + 3 PCIEx1	1/1 1/1 1/1
EPC-P3086SA-00Y0E	N/A	H310	1/1	6	2000/4/2	2	16-bit	–	2	2	2	0	0	2 (F/S)[4]	(1)		EPC-RF48P-22A1E EPC-RF2F4-11A1E EPC-RF4F1-13A1E[5]	1 PCIEx16 + 2 PCI 1 PCIEx16 + 1 PCIEx4 1 PCIEx16 + 3 PCIEx1	1/1 1/1 1/1

1. All internal IO need Optional Cable or bracket.
2. M.2 B/M-key: support SIM card holder.
3. Internal HDMI 1 and VGA port are either one
4. mini-PCIe: for H310 sku, one with USB2.0/mSATA, other with USB2.0/PCIe.
5. EPC-RF4F1-13A1E need custom BIOS. Supported by projects (TPN)

Power Adapter Options

Part Number	Watts	Input	Output	Safety
96PSA-A230W24P4-3	230W	AC 100 ~ 240 V	24V, 9.58A	CE/FCC/CCC/UL/CB/TUV/KCC/BSMI
96PSA-A150W19P4-3	150 W	AC 100 ~ 240 V	19V, 7.89A	CE/FCC/CCC/UL/CB/TUV/KCC/BSMI

* 150W power adapter supports EPC-P30X6 Without riser card options.
** Please consider the overall power consumption and carefully select the power supply that is right for you.

Packing List

Item	Quantity
SATA Data cable	2
SATA power cable	1
Terminal block conn. (male)	1
Manual	1
HDD screws	8

Optional Accessories

Items	Part Number	Description
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
	1700000237-01	Power cable 3-pin 183cm, Japan type
iDoor*	EPC-DORP-HDM00	Dual HDMI cables and BKT
	EPC-DORP-USB00	Dual USB2.0 cable and BKT
Bracket	AIMB-0BRK-WM02E	Wall Mount Bracket
	EPC-BRKP-RM010	Rack Mount Bracket
	EPC-BRKP-H3510	Dual 3.5" HDD mounting kit
	EPC-BRKP-H2510	Dual 2.5" HDD mounting kit
OS	20706WX9ES0041	img W10 19EL 64b 1809 ENU
	20706WX9HS0028	img W10 19HL 64b 1809 ENU
	20706WX9VS0031	img W10 19VL 64b 1809 ENU

* iDoor module and secondary 2.5" HDD are either one

Optional Accessories (extended Card)

Function	Part Number	PCIe	Description
LAN Card	96NIC-1G-PE-IN	x1	INTEL NIC 10/100/1000M PCIEx1 DESKTOP(G) RJ45
Dual LAN	96NIC-1G2P-PE-IN3	x4	INTEL NIC 10/100/1000M PCIEx4 2PORT SER RJ45
RAID	96RC-SAS-4P-PE-AD4	x8	ADAPTEC 8405E SAS 4P 12GB/S 512M PCIEX8
Frame Grabber	PCIE-1674E-AE	x4	4-Port PCIe GigE Vision Frame Grabber w/ PoE
Frame Grabber	PCIE-1154-AE	x4	4-port PCIe USB Vision Frame Grabber
Serieal Ports	PCIE-1622B-BE	x1	8-port RS-232/422/485 PCIe w/ surge
CAN BUS	PCIE-1680-AE	x1	2-Port CAN-Bus PCIe card w/ Isolation
DIDO	PCIE-1751-AE	x1	48-ch digital I/O and 3-ch counter PCIe card
Motion Card	PCI-1245L-AE	PCI	4-axis Stepping and Servo Motor Control Universal