

PE400D

Intel® 10th Gen Xeon® W or Core™ i9/ i7/ i5/ i3 Embedded Computer with 3 expandable PCIe slots

Features

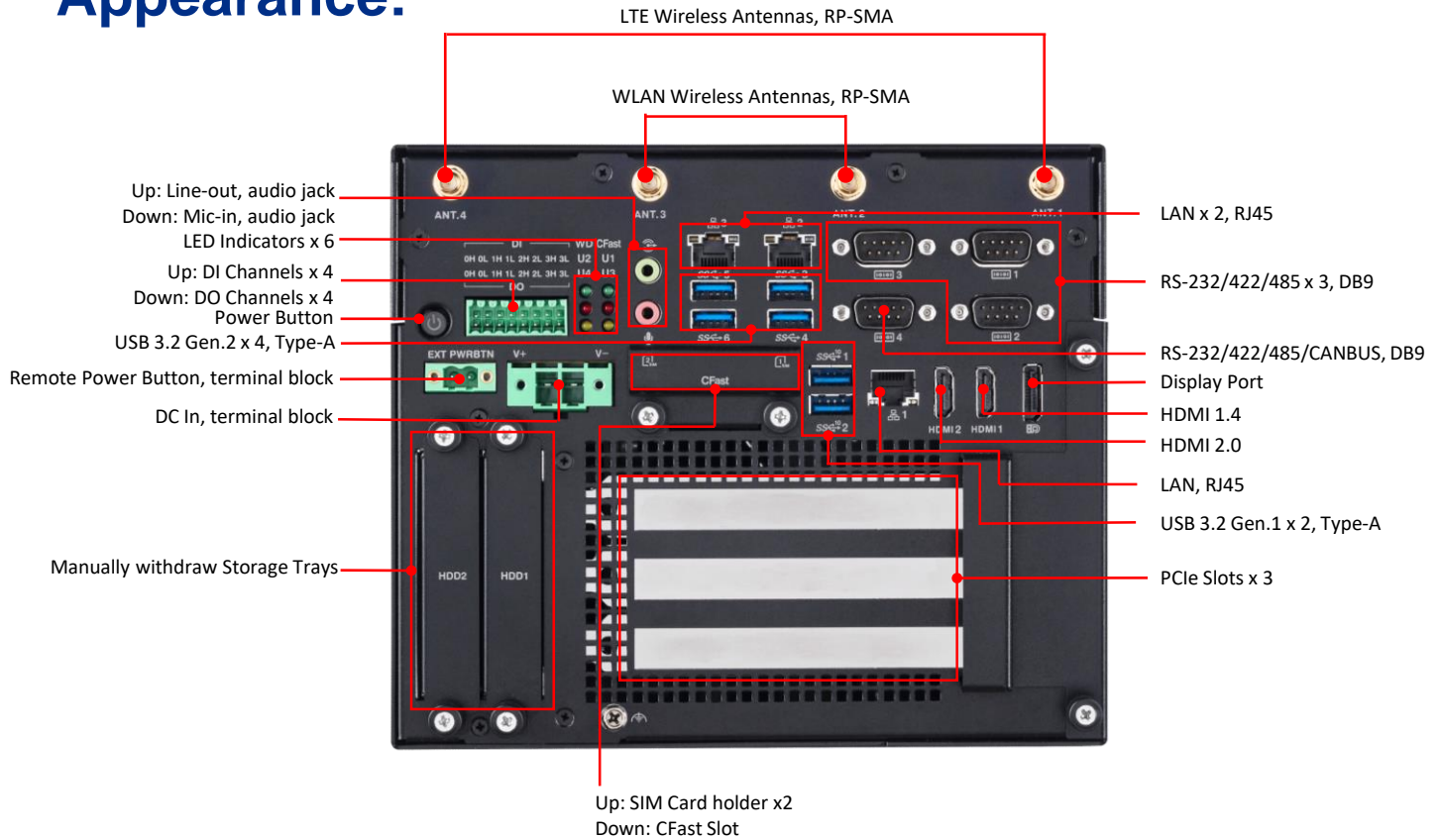
- Diverse SKUs with Intel® 10th Gen CPU support up to 64GB DDR4 memory
- 1x mPCIe socket for cellular, 1x M.2 for Wi-Fi/BT, 1x M.2 for storage
- 3x independent displays and 3x PCIe slots
- Wide-operating temperature: -20°C ~60°C



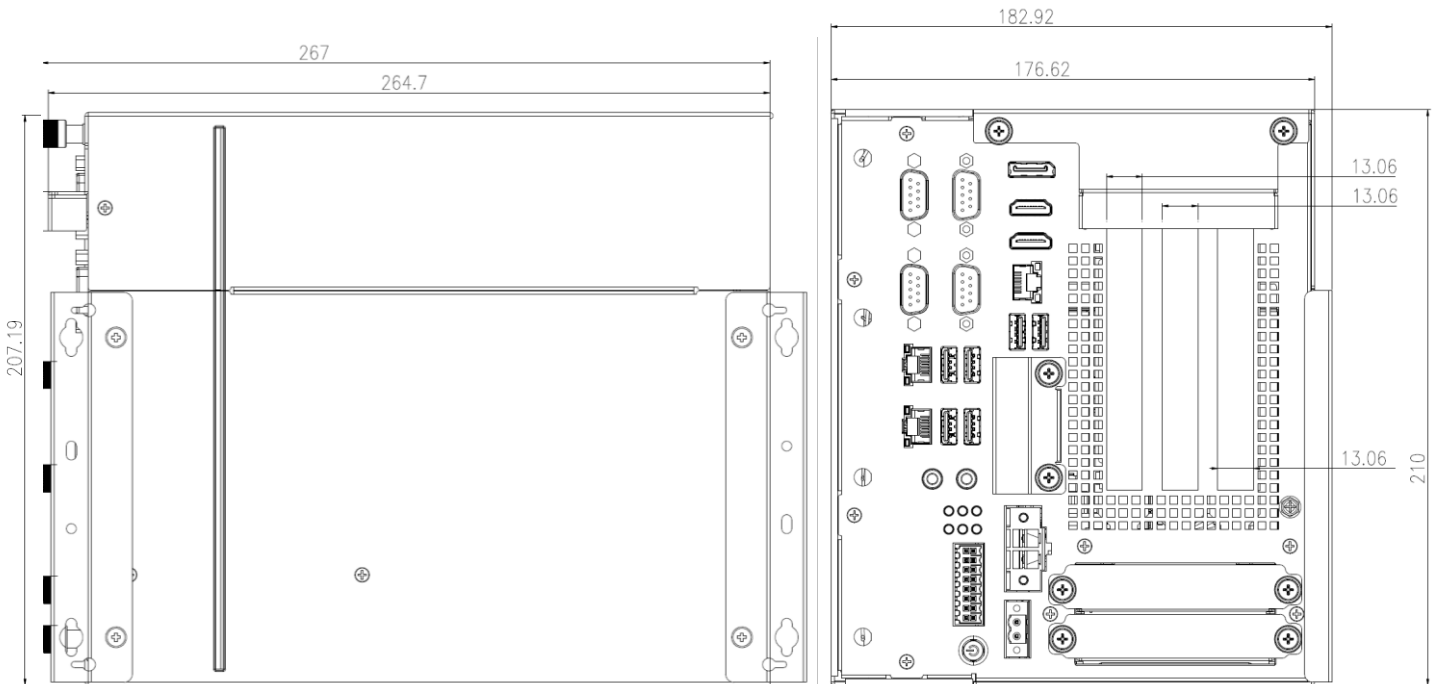
Specifications

System	CPU	Intel® Xeon® W-1290TE	Intel® Core™ i9-10900E	Intel® Core™ i7-10700E	Intel® Core™ i5-10500E	Intel® Core™ i3-10100E
	TDP	35W	65W	65W	65W	65W
	# of Cores	10	10	8	6	4
	Base Freq.	1.8GHz	2.8GHz	2.9GHz	3.1GHz	3.2GHz
	Max Turbo Freq.	4.5GHz	4.7GHz	4.5GHz	4.2GHz	3.8GHz
	Memory	2 x SO-DIMM, DDR4 2666/2400/2133 MHz, ECC (only for Xeon CPU), max. 64GB				
External Interfaces	Display	1 x HDMI 2.0, supports up to 4096 x 2160 @ 60 Hz 1 x HDMI 1.4, supports up to 4096 x 2160 @ 30 Hz 1 x DP 1.2, supports up to 4096 x 2304 @ 60 Hz *Default 4096 x 2304 @60Hz supports 3 independent displays at the same time				
	Ethernet	3 x Intel® i210-IT (1 GbE, TSN), support PXE boot, RJ45				
	USB	2 x USB 3.2 gen.2, 4 x USB 3.2 gen. 1				
	Audio	1 x Mic-in, audio jack 1 x Line-out, audio jack				
	COM/CAN*	3 x COM: RS-232/422/485, DB9 1 x COM*: RS-232/422/485, CANBus (2.0A/B), DB9 *Default RS-232, configured to CANBus by onboard jumper				
	DIO	4 x DI, 4 x DO support relay output & isolation, 2 x 8 terminal block				
	SIM	2 x nano SIM slot				
	Storage	CFast	1 x Type II CFast slot for OS storage			
SATA		2 x 2.5" HDD slots (hot-swappable, supports SATA 3.0, 7~7.5mm)				
Expansion Slot	PCIe	3 x PCIe slot *2 configuration: 1 x PCIe16 + 1 x PCIe4 or 2 x PCIe8 + 1 x PCIe4, auto-detect *Max. length<192mm; Max. 100W power supply from mainboard for total 3 slots				
	Mini PCIe	1 x Mini PCIe socket (supports mSATA or cellular module)				
	M.2 M Key	1 x M.2 2242/60/80 M-key socket (PCIe4 & SATA mode)				
	M.2 E Key	1 x M.2 2230 E-key socket (supports CNVi, Wi-Fi/BT module)				
Power	Power	9 to 36 VDC, 2-pin terminal block *System can be powered up by pressable button/remote power button *Pressable power button can be disabled by onboard jumper/BIOS setting				
	Mechanical	Mounting	Desktop mount			
Dimensions		176.6 (H) x 210 (W) x 250 (D) mm				
Weight		6.8 kg				
Environment	Operating Temp.	-20~60°C w/ all module operating (industrial parts) at 0.3m/s air flow 0~40° w/ all module operating (commercial parts) at 0.3m/s air flow				
	Storage Temp.	-40~85°C				
	Relative Humidity	5 to 95% (non-condensing)				
	EMC	CE (IEC 61000-6-2/4), FCC, VCCI, RCM, CCC, BSMI				
	Safety	UL, CB, CCC, BSMI				
	Vibration	Operating: 0.5 Grms, sine, 5-500 Hz (with SSD)				
	Shock	Operating: 50 Grms, half sine, 11ms(with SSD)				
Security	Green	GA (RoHS)				
	TPM	TPM v2.0 powered by Nuvoton NCPT 750 (Optional)				
Others	Watch dog timer	Yes. HW WDT Enable (WDT_EN)				
	Operating System	Windows 10 IoT Enterprise				

Appearance:



Dimension (mm):



Ordering Information:

PN	CPU	Chipset	SO-DIMM	SPI Header	CFast	M.2 M-key/E-key	2.5" SATA	mPCIe	HDMI /DP	COM	USB	Lan	DIO	SIM	Audio	Power	OP Temperature ¹
90AE0011-M000A0	i3-10100TE	W480E	2	1 ²	1	3 ⁴ 1/1	2	1 ⁵	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
90AE0011-M000B0	i5-10500TE	W480E	2	1 ²	1	3 ⁴ 1/1	2	1 ⁵	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
90AE0011-M00090	i7-10700E	W480E	2	1 ²	1	3 ⁴ 1/1	2	1 ⁵	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
90AE0011-M00030	i9-10900E	W480E	2	1 ²	1	3 ⁴ 1/1	2	1 ⁵	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
90AE0011-M00020	W-1290TE	W480E	2	1 ²	1	3 ⁴ 1/1	2	1 ⁵	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°

1. Depends on selective key part 2. TPM 3. M.2 SATA SSD / TPU 4. TPU 5. mSATA SSD / TPU

Packing List:

Description	Qty
Power terminal block to power jack adaptor, 10cm	1
External power button terminal block	1
DIO terminal block	1
Desktop mount bracket Set (2 pcs)	1
Dust cover set	1

Optional Accessories:

Part Number	Description
ADAPTER	
0A001-01030200	Power adapter, input voltage 90 to 264VAC, output voltage 24VDC with 13.75A DC load, 0 to 70°C (>40°C de-rating) operating temperature
POWER CORD	
14009-00021400	Power cord with United States (US) plug, 180cm
14009-00021000	Power cord with Europe (EU) plug, 180cm
14009-00021100	Power cord with China (CN) plug, 180cm
14009-00020600	Power cord with Japan (JP) plug, 180cm
14009-00020800	Power cord with Australia (AU) plug, 180cm
14009-00020900	Power cord with United Kingdom (UK) plug, 180cm
14009-00021000	Power cord with Korea (KR) plug, 180cm
14009-00020700	Power cord with Swiss (CH) plug, 180cm
14009-00021200	Power cord with Taiwan (TW) plug, 180cm
WIRELESS EXTENSION CABLE	
14012-00880000	External wireless extension cable, RP-SMA to RP-SMA, 60cm
4G LTE ANTENNA	
14012-00041200	Omni-directional rubber duck GPRS/EDGE/UMTS/HSPA/LTE antenna, 704 to 960MHz & 1710 to 2690MHz, 3.5 dBi, RP-SMA, antenna length 10cm
WI-FI ANTENNA	
14012-00041300	Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm
Wi-Fi Module	
0C031-00090100 ¹	QUECTEL/EC25-AU
LTE Module	
0C031-00090100 ¹	Quectel EC25-AU LTE cat.4 mini-PCIe module, supports B1, 2, 3, 4, 5, 7, 8, 20, 40, -40~85°C
CORAL TPU	
04020-03420700	CORAL MINI PCIE ACCELERATOR
04020-03420300	CORAL M.2 PCIE ACCELERATOR
04020-03420600	CORAL M.2 PCIE ACCELERATOR With Dual Edge TPU
Fan Duct	
13AE0010AM0601 ²	PE400D AIR DUCT BRKT ASSY

1. System integrated certification is not offered
2. For NVIDIA T4 GPU