

PE400D

Intel® 10th Generation Xeon® /Core™ i7/ i5/ i3 Embedded Computer with 3 expandable PCIe slots

Features

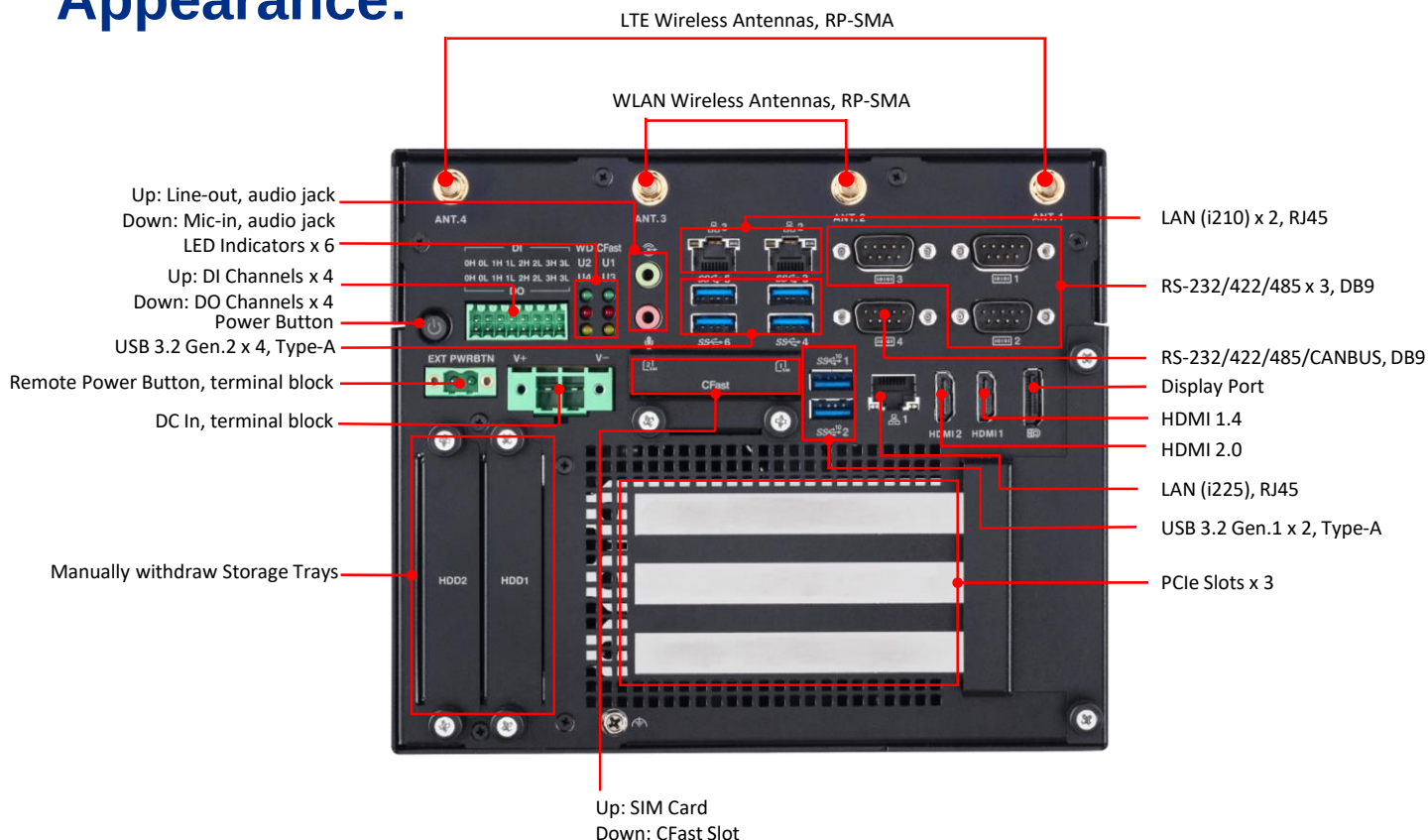
- Diverse skus with Intel 10th Gen. processors supports up to 64GB DDR4 memory
- 1*mPCIe socket for cellular, 1*M.2 for Wi-Fi/BT, 1*M.2 for storage
- 3 x independent displays & 3 x PCIe slots
- Wide-operating temperature: -20~60°C



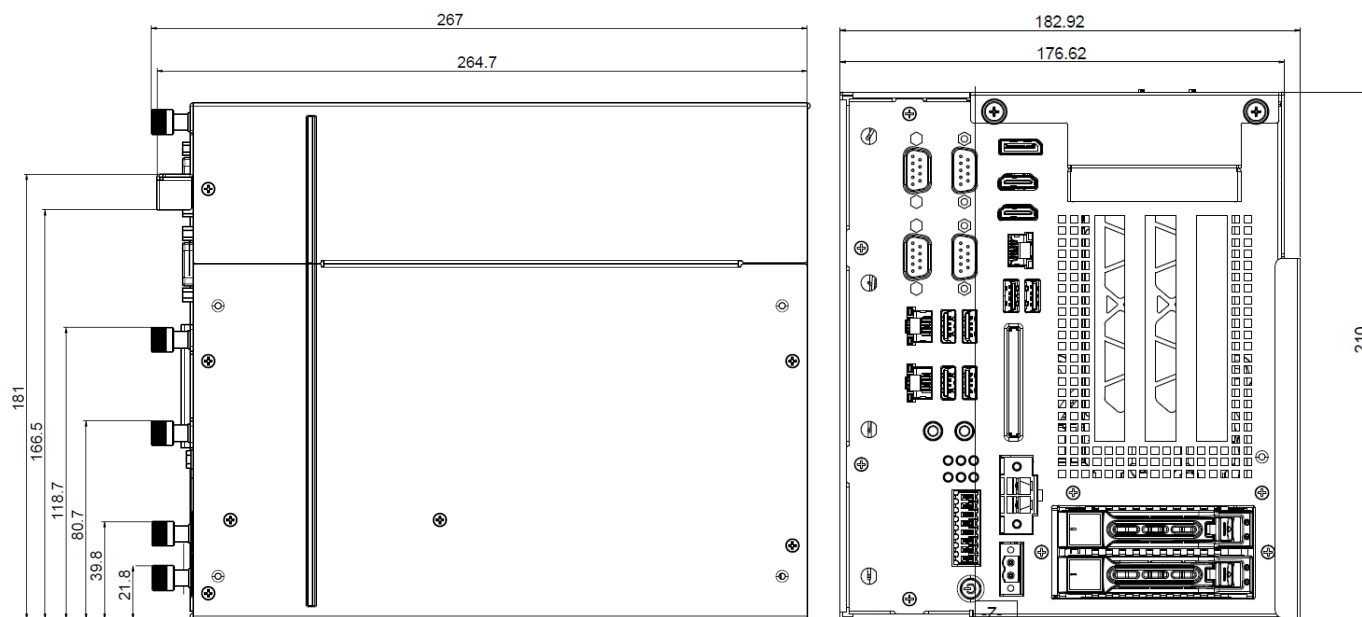
Specifications

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*, max. 64GB *Only when use with Xeon CPU				
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 4096x2304 @60Hz supports 3 independent displays at the same time				
	Ethernet	3 x Intel i210 (1Gb, TSN), 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, 2 x 8 terminal block				
	SIM	1 x nano SIM slot				
Storage	CFast	1 x Type II CFast slot for OS storage				
	SATA	2 x 2.5" HDD slots (supports SATA 3.0 and hot-swappable, 7~7.5mm)				
Expansion Slot	PCIe	3 x PCIe slot (1 x PCIe16 + 1 x PCIe4 or 2 x PCIe8 + 1 x PCIe4, auto-detect) *Max. length<192mm, max. 100W supply from mainboard for 3 slots in total				
	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				
	Mounting	Desktop mount				
Mechanical	Dimensions	176.6 (H) x 210 (W) x 250 (D) mm				
	Weight	TBD				
	Operating Temp.	-20~60°C w/ all module operating (industrial parts) with 0.3m/s air flow 0~40° w/ all module operating (commercial parts) with 0.3m/s air flow				
Environment	Storage Temp.	-40~85°C				
	Relative Humidity	5 to 95% (non-condensing)				
	EMC	CE (IEC 61000-6-2/4), FCC, VCCI, RCM, CCC, KCC, BSMI				
	Safety	UL, CB, CCC, BSMI				
	Shock	Operating: 100 Grms, half sine 11ms duration (w/ SSD/CFast)				
	Vibration	Operating: 5 Grms, 5-500 Hz, 3 axes (w/ SSD/CFast) Operating: 0.5 Grms, 5-500 Hz, 3 axes (w/ HDD)				
	Green	GA (RoHS)				
Security	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
TBD	i3-10100TE	W480E	2	1 ²	1	1 ³ /1 ⁴	2	1 ⁴	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
TBD	i5-10500TE	W480E	2	1 ²	1	1 ³ /1 ⁴	2	1 ⁴	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
TBD	i7-10700E	W480E	2	1 ²	1	1 ³ /1 ⁴	2	1 ⁴	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
TBD	i7-10700TE	W480E	2	1 ²	1	1 ³ /1 ⁴	2	1 ⁴	1/1	4	6	3	1	2	In / Out	9-36V	-20~60/ 0~40°
TBD	W-1290TE	W480E	2	1 ²	1	1 ³ /1 ⁴	2	1 ⁴	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. mSATA SSD/ TPU 5. 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) & 4 screws	1
Dust cover set (2 HDMI; 1 DP; 4 DB9; 6 USB; 3 LAN; 2 audio jack; 4 SMA)	1

Optional Accessories:

Part Number	Description
ADAPTER	
0A001-01030100	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