

PE400D

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

Features

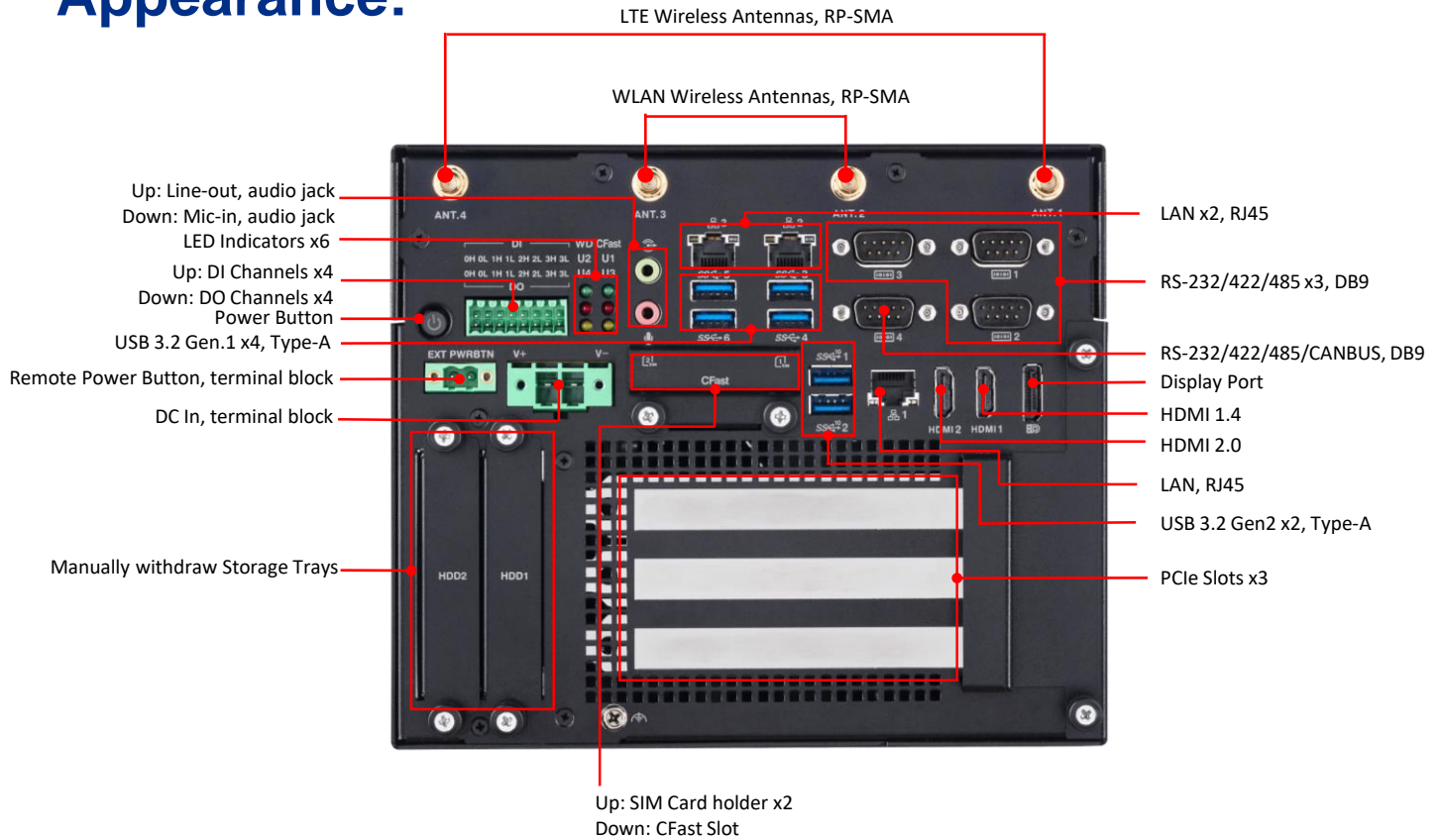
- Diverse SKUs with Intel® 10th Gen CPU support up to 64GB DDR4 memory
- 1x mPCIe socket for cellular, 1x M.2 for Wi-Fi/BT, 1x M.2 for storage
- 3x independent displays and 3x PCIe slots
- Wide-operating temperature: -20°C ~60°C



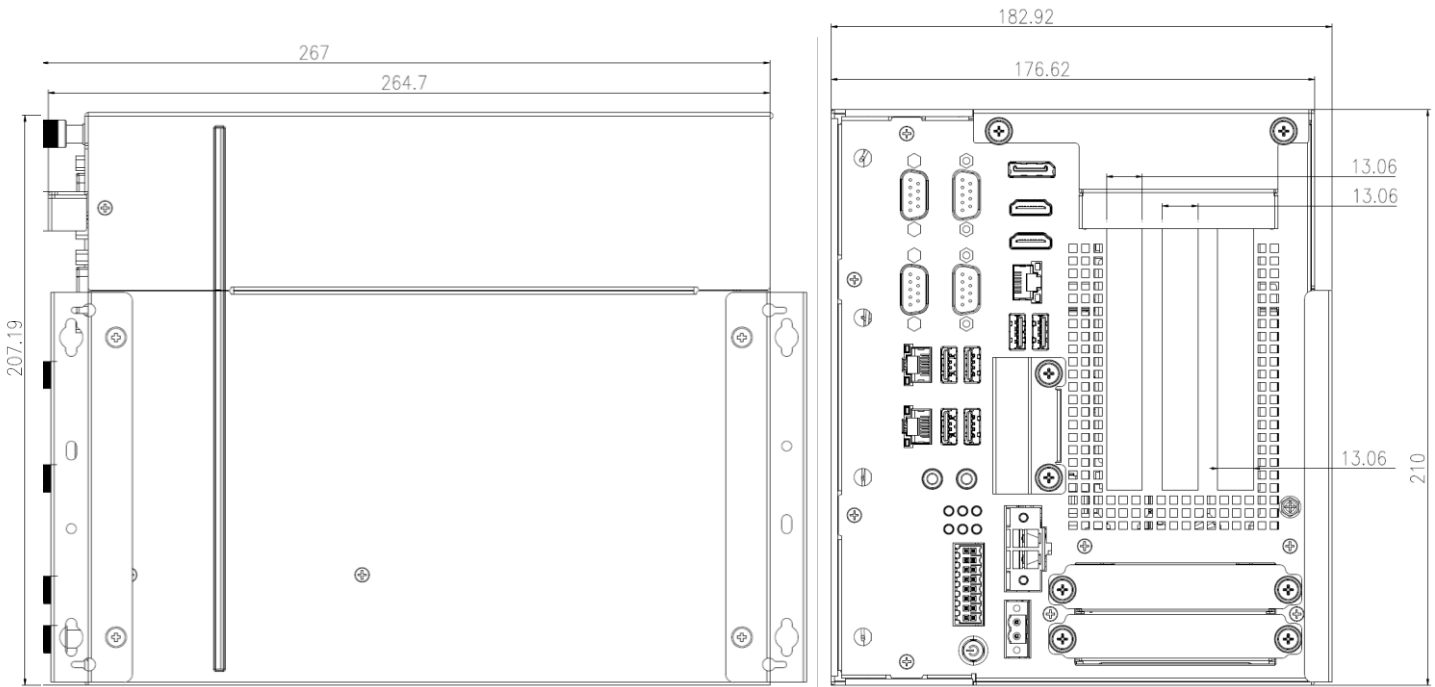
Specifications

| | | | | | | |
|----------------------------|-------------------|---|------------------------|------------------------|------------------------|------------------------|
| 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 | | | | |
| | Mounting | Desktop mount | | | | |
| Mechanical | Dimensions | 176.6 (H) x 210 (W) x 250 (D) mm | | | | |
| | Weight | 6.8 kg | | | | |
| | 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 | | | | |
| Environment | 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) | | | | |
| | 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 |
|-----------------|------------|---------|---------|----------------|-------|-----------------------------------|-----------|----------------|----------|-----|-----|-----|-----|-----|----------|-------|----------------|
| 90AE0011-M000A0 | i3-10100TE | W480E | 2 | 1 ¹ | 1 | 2 ² 3 ³ 1/1 | 2 | 1 ⁴ | 1/1 | 4 | 6 | 3 | 1 | 2 | In / Out | 9-36V | -20~60/0~40° |
| 90AE0011-M000B0 | i5-10500TE | W480E | 2 | 1 ¹ | 1 | 2 ² 3 ³ 1/1 | 2 | 1 ⁴ | 1/1 | 4 | 6 | 3 | 1 | 2 | In / Out | 9-36V | -20~60/0~40° |
| 90AE0011-M00090 | i7-10700E | W480E | 2 | 1 ¹ | 1 | 2 ² 3 ³ 1/1 | 2 | 1 ⁴ | 1/1 | 4 | 6 | 3 | 1 | 2 | In / Out | 9-36V | -20~60/0~40° |
| 90AE0011-M00030 | i9-10900E | W480E | 2 | 1 ¹ | 1 | 2 ² 3 ³ 1/1 | 2 | 1 ⁴ | 1/1 | 4 | 6 | 3 | 1 | 2 | In / Out | 9-36V | -20~60/0~40° |
| 90AE0011-M00020 | W-1290TE | W480E | 2 | 1 ¹ | 1 | 2 ² 3 ³ 1/1 | 2 | 1 ⁴ | 1/1 | 4 | 6 | 3 | 1 | 2 | In / Out | 9-36V | -20~60/0~40° |

* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

* Please check with your importer or integrator for system level certification.

1. TPM
2. M.2 SATA SSD/ TPU
3. TPU
4. mSATA SSD/ TPU/ LTE

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 | |
| | 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 | |
| | Power cord with United States (US) plug |
| | Power cord with Europe (EU) plug |
| | Power cord with China (CN) plug |
| | Power cord with Japan (JP) plug |
| | Power cord with Australia (AU) plug |
| | Power cord with United Kingdom (UK) plug |
| | Power cord with Korea (KR) plug |
| | Power cord with Swiss (CH) plug |
| | Power cord with Taiwan (TW) plug |
| | Power cord with Thailand (TH) plug |
| WIRELESS EXTENSION CABLE | |
| | External wireless extension cable, RP-SMA to RP-SMA, 60cm |
| 4G LTE ANTENNA | |
| | 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 | |
| | Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm |
| Fan Duct | |
| | PE400D AIR DUCT BRKT ASSY ¹ |

1. For NVIDIA T4, A2 GPU