

# PE200S

Atom® X Series Processor, DDR3L SO-DIMM, DP, HDMI,  
Dual-LAN, Multiple COM, 12-24V DC

## Features

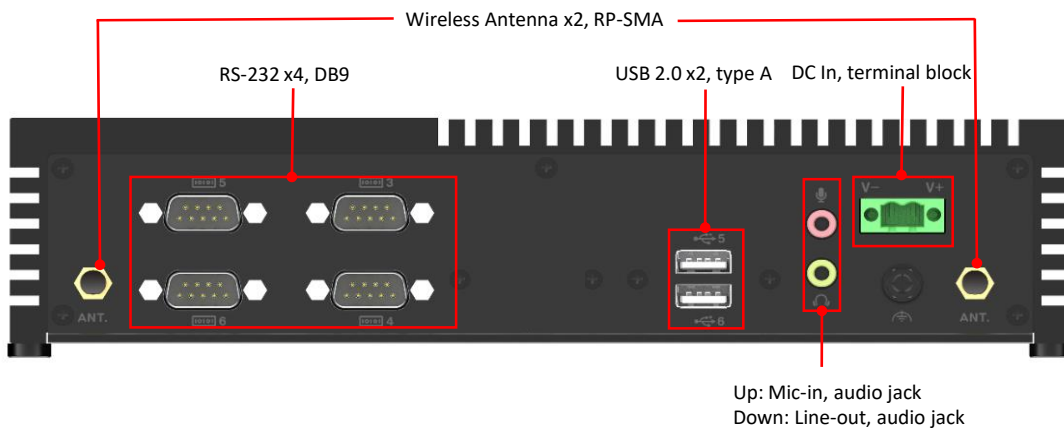
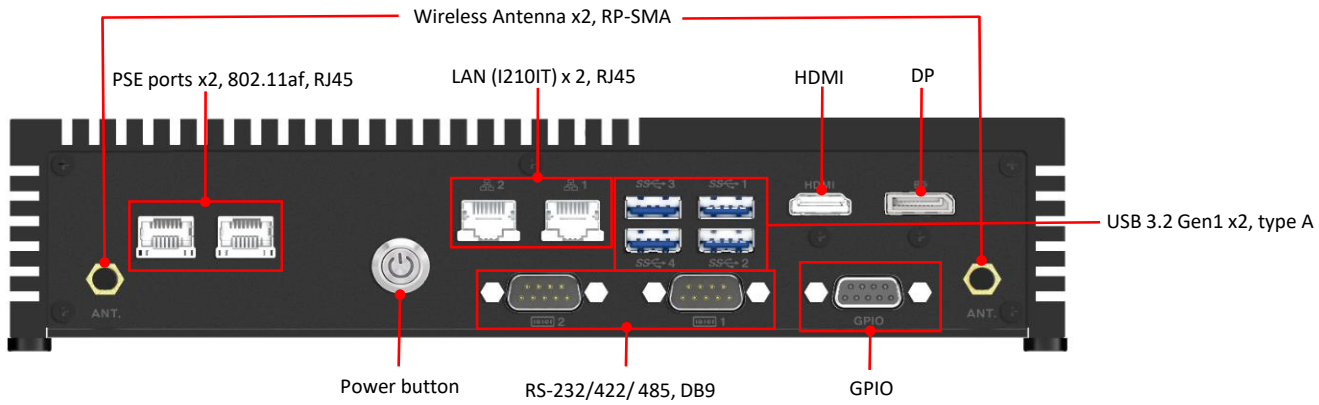
- Supports 2 x RS-232/422/485, 4 x RS-232
- Supports dual independent video outputs
- Supports Windows® 10 IoT Enterprise or Linux OS
- Wide Operating Temperature Range: -20~60°C



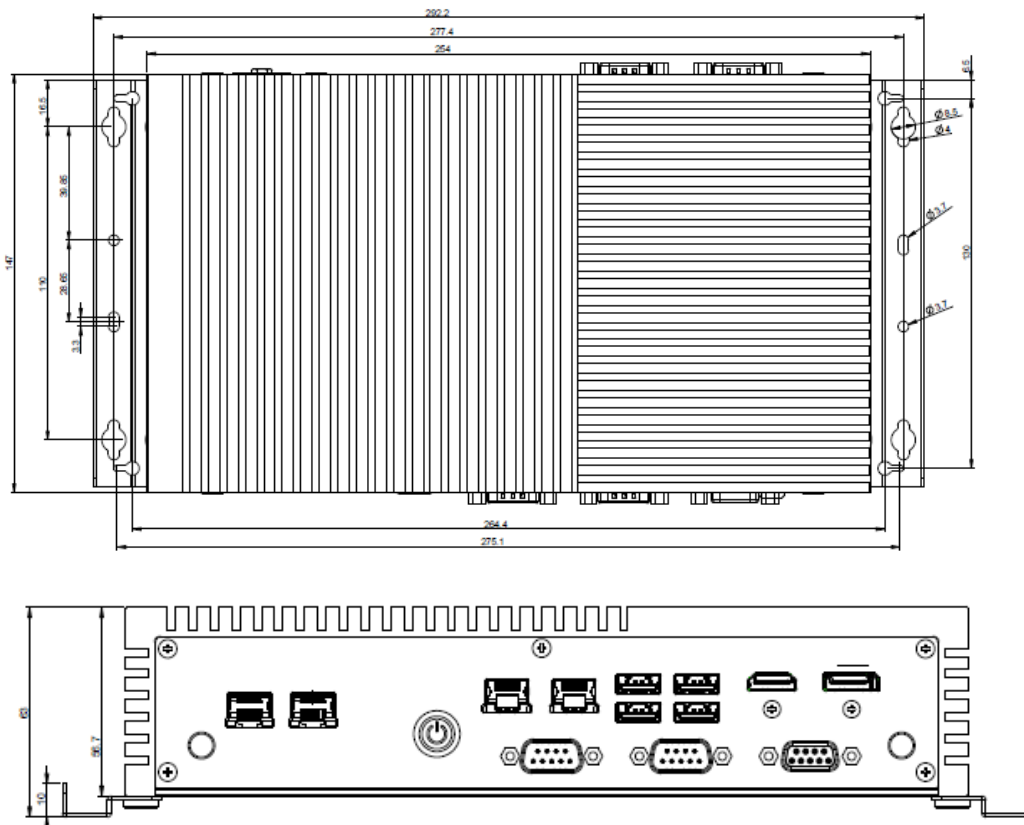
## Specifications

|                       | CPU                        | Intel® Atom® X5-E3930   | Intel® Atom® X5-E3940   | Intel® Atom® X7-E3950 |
|-----------------------|----------------------------|---|---|-----------------------|
| <b>System</b>         | TDP                        | 6.5W  | 9.5W  | 12W                   |
|                       | # of Cores                 | 2   | 4   | 4                     |
|                       | Base Freq.                 | 1.3GHz  | 1.6GHz  | 1.6GHz                |
|                       | Max Turbo Freq.            | 1.8GHz  | 1.8GHz  | 2.0GHz                |
|                       | Memory                     | 1 x SO-DIMM, DDR3L 1866 MHz, supports up to 8GB   |   |                       |
|                       | <b>External Interfaces</b> | Display   | 1 x HDMI 1.4, supports up to 3840 x 2160 @ 30 Hz<br>1 x DP 1.2a, supports up to 4096 x 2160 @ 60 Hz |                       |
| Ethernet              |                            | 2 x 10/100/1000 Mbps, RJ45 (2 x Intel i210IT (1Gb))<br>2 x 802.11af PSE ports, RJ45 (optional)<br>2 x 10/100/1000 ethernet ports, RJ45 (optional) *either one |   |                       |
| USB                   |                            | 4 x USB 3.2 Gen 1, type A<br>2 x USB 2.0, type A (optional)   |   |                       |
| Audio                 |                            | 1 x Mic-in, phone jack<br>1 x Line-out, phone jack  |   |                       |
| COM                   |                            | 2 x COM: RS-232/422/485, DB9<br>4 x COM: RS232, DB9 (optional)  |   |                       |
| GPIO                  |                            | 1 x 8bit GPIO, DB9  |   |                       |
| <b>Storage</b>        |                            | SATA  | 1 x SATA 6 connector supports 2.5" SSD  |                       |
|                       | Micro SD                   | 1 x Micro SD Card slot (on-board)   |   |                       |
| <b>Expansion Slot</b> | Mini PCIe                  | 1 x Mini PCIe socket ( USB / PCIe2 mode)  |   |                       |
|                       | M.2 M Key                  | 1 x M.2 2242 M-key socket, (SATA mode)  |   |                       |
|                       | M.2 E Key                  | 1 x M.2 2230 E-key socket (PCIe2 / USB 2.0 mode) (supports BT/Wi-Fi module)   |   |                       |
|                       | SIM                        | 1 x nano-SIM slot   |   |                       |
| <b>Power</b>          | Power input                | 12 to 24 V DC, 2-pin terminal block   |   |                       |
| <b>Mechanical</b>     | Mounting                   | Wall-mount/ VESA mount  |   |                       |
|                       | Dimensions                 | 254 (H) x 147 (W) x 57 (D) mm   |   |                       |
|                       | Weight                     | 2.45 kg   |   |                       |
| <b>Environment</b>    | Operating Temp.            | -20~60°C with wide temperature parts, fanless   |   |                       |
|                       | Storage Temp.              | -40~85°C  |   |                       |
|                       | Relative Humidity          | 10 to 95% (non-condensing)  |   |                       |
|                       | EMC                        | CE (ITE), FCC , VCCI, BSMI  |   |                       |
|                       | Safety                     | UL,CB, CCC, BSMI, CE  |   |                       |
|                       | Vibration                  | Operating: 0.21Grms, 5~500 Hz, 20min duration   |   |                       |
|                       | Shock                      | Operating: 50 G, half sine 11ms duration  |   |                       |
| Green                 | GA (RoHS)                  |   |   |                       |
| <b>Security</b>       | TPM                        | TPM v2.0 powered by Nuvoton NCPT 750 (Optional)   |   |                       |
| <b>Others</b>         | Watch dog timer            | Yes. HW WDT Enable (WDT_EN)   |   |                       |
|                       | Operating System           | Windows® 10 IoT Enterprise (64 bit) / Linux   |   |                       |

# Appearance



# Dimension (mm)



## Ordering Information

| 90 P/N           | CPU   | DRAM       | 2.5" SATA | TPM built-in | LAN | PoE | Serial port | USB | mPCIe          | M.2 2230 E-key | M.2 2242 M-key | Operating temp      |
|------------------|---|------------|-----------|--------------|-----|-----|-------------|-----|----------------|----------------|----------------|---------------------|
| PE200S_ Entry    | Intel® Atom® X5-E3930/<br>X5-E3940/<br>X7-E3950 | Up to 8 GB | 1         | optional     | 2   | --  | 2           | 4   | 1 <sup>1</sup> | 1 <sup>2</sup> | 1 <sup>3</sup> | -20~60°C<br>/0~40°C |
| PE200S_ Semi     | Intel® Atom® X5-E3930/<br>X5-E3940/<br>X7-E3950 | Up to 8 GB | 1         | optional     | 2   | --  | 6           | 6   | 1 <sup>1</sup> | 1 <sup>2</sup> | 1 <sup>3</sup> | -20~60°C<br>/0~40°C |
| PE200S_ LAN FULL | Intel® Atom® X5-E3930/<br>X5-E3940/<br>X7-E3950 | Up to 8 GB | 1         | optional     | 4   | --  | 6           | 6   | 1 <sup>1</sup> | 1 <sup>2</sup> | 1 <sup>3</sup> | -20~60°C<br>/0~40°C |
| PE200S_ FULL     | Intel® Atom® X5-E3930/<br>X5-E3940/<br>X7-E3950 | Up to 8 GB | 1         | optional     | 2   | 2   | 6           | 6   | 1 <sup>1</sup> | 1 <sup>2</sup> | 1 <sup>3</sup> | -20~60°C<br>/0~40°C |

\* 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. LTE
2. Wi-Fi
3. M.2 SSD

## Packing list

| Description   | Qty |
|---|-----|
| Power terminal block to power jack adaptor, 10cm                        | 1   |
| PE200U Wall mount bracket   | 2   |
| SATA 22P to SATA 7P+4P 15+12CM  | 1   |
| 2.5HDD screw pack   | 1   |
| Dust cover set (1 HDMI; 1 DP; 6 DB9; 6 USB; 4 LAN; 2 audio jack; 4 SMA) | 1   |
| Quick installation guide  | 1   |

## Optional Accessories (purchased separately)

| Part Number                     | Description   |
|---------------------------------|---|
| <b>ADAPTER</b>                  |   |
|                                 | Power adapter, 65W 12V, input voltage 100 to 264VAC, output voltage 12VDC with 5.41A DC load, 0 to 40°C operating temperature       |
|                                 | Power adapter, 120W 20V, input voltage 90 to 264VAC, output voltage 20VDC with 6A DC load, 0 to 40°C operating temperature          |
| <b>POWER CORD</b>               |   |
|                                 | 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  |
| <b>WIRELESS EXTENSION CABLE</b> |   |
|                                 | External wireless extension cable, RP-SMA to RP-SMA, 60cm   |
| <b>4G LTE ANTENNA</b>           |   |
|                                 | Omni-directional rubber duck GPRS/EDGE/UMTS/HSPA/LTE antenna, 704 to 960MHz & 1710 to 2690MHz, 3.5 dBi, RP-SMA, antenna length 10cm |
| <b>WI-FI ANTENNA</b>            |   |
|                                 | Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm  |