

PPC-3100

10.4" Fanless Panel PC with Intel® Atom™ E3940 Processor



Features

- 10.4" SVGA TFT LCD with resistive touchscreen
- Intel® Atom™ E3940, 1.6 GHz, processor
- Up to 8 GB DDR3L 1600/1866 SDRAM
- Supports 1 x internal 2.5" SATA HDD and 1 x mSATA
- Fanless design with low power consumption
- Wide range DC support (9 ~ 32 V_{DC})
- 1 x isolated RS-422/485 with automatic flow control and dual Intel GbE
- Optional GPIO (8 channels, TTL level)



Introduction

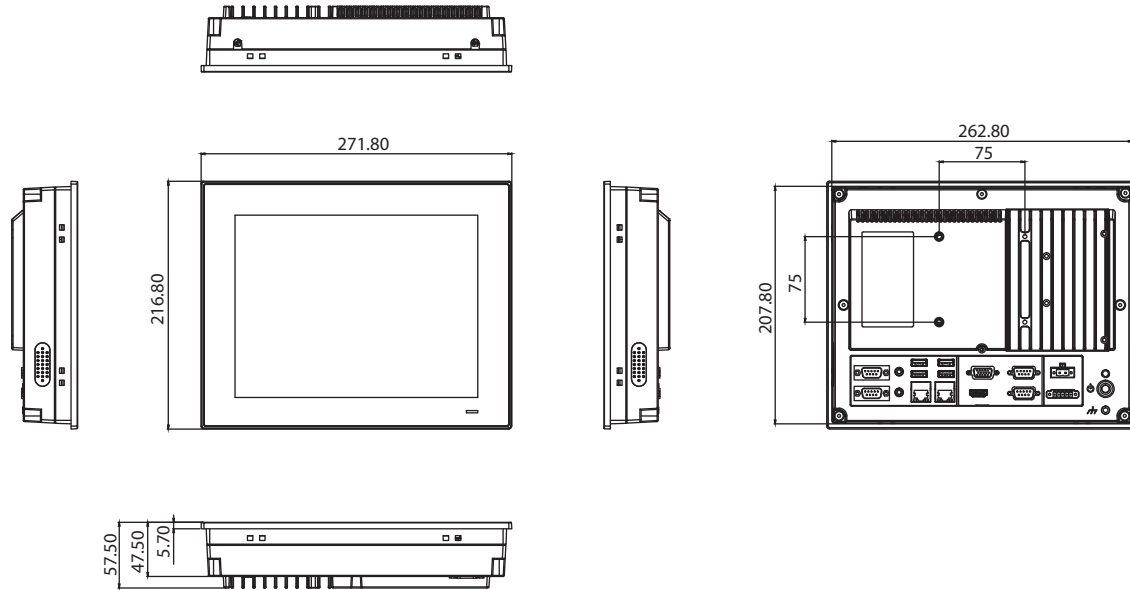
The PPC-3100 is a 10.4" fanless panel PC equipped with a high-performance Intel® Atom™ E3940 quad-core processor that supports wide power input range (9 ~ 32 V_{DC}). The provision of multiple I/O, including 4 x COM, 4 x USB 3.0, 1 x isolated RS-422/485, and dual Intel® Gigabit Ethernet, ensures easy integration and connectivity.

Specifications

| | | |
|---------------------------------|--------------------------------|---|
| System | CPU | Intel® Atom™ E3940 quad core |
| | Frequency | 1.6 GHz |
| | L2 Cache | 2 MB |
| | Memory | 1 x SODIMM DDR3L 1600/1866 MHz (max. 8 GB) |
| | Storage | 1 x 2.5" SATA bay 1 x mSATA bay |
| | Network (LAN) | 2 x Intel I226LM controller; Speed: 10M / 100M / 1000M / 2.5G |
| | I/O | 5 x Serial ports: 4 x RS-232, 1 x isolated RS-422/485 (Adjustable through BIOS) 4 x USB 3.0 1 x Line-out, 1 x Mic-in 1 x VGA 1 x HDMI 1 x GPIO (8 channels, TTL level, internal) |
| | Expansion | 1 x Mini PCIe |
| Physical Characteristics | Watchdog Timer | 255 timer levels, set up by software |
| | Speaker | 2 x 1W |
| OS Support | OS Support | Microsoft® Windows Win 10 IOT LTSC(64-bit), Linux, Android |
| | OS Support | Microsoft® Windows Win 10 IOT LTSC(64-bit), Linux, Android |
| Power Consumption | Input Voltage | 9 ~ 32 V _{DC} |
| | Power Consumption | 30W (Burn-in test 8.0 in Windows 10 64bit) |
| LCD | Display Type | 10.4" TFT LED Panel (LED backlight) |
| | Max. Resolution | 800 x 600 |
| | Viewing Angle | 80 (left), 80 (right), 70 (up), 70 (down) |
| | Luminance (cd/m ²) | 400 |
| | Contrast Ratio | 700 |
| | Backlight Lifetime | 30,000 hr (typical) |
| Touchscreen | Touch Type | 5-wire resistive touch |
| | Light Transmission | 80±5% at 550nm wavelength |
| | Controller | USB interface |
| Environment | Operating Temperature | -20 ~ 60 °C (-4 ~ 140 °F) |
| | Storage Temperature | -30 ~ 60 °C (-22 ~ 140 °F) |
| | Relative Humidity | 95% @ 40 °C (non-condensing) |
| | Shock | Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27 |
| | Vibration | Operating Random Vibration Test 5~500Hz, 2Grms @with SSD, follow IEC 60068-2-64 |
| | EMC | CE, FCC Class B, EN 61000-6-2, BSMI, VCCI, UKCA |
| | Safety | CB, UL, CCC, UKCA |
| Front Panel Protection | IP66 compliant | |

Dimensions

Unit: mm

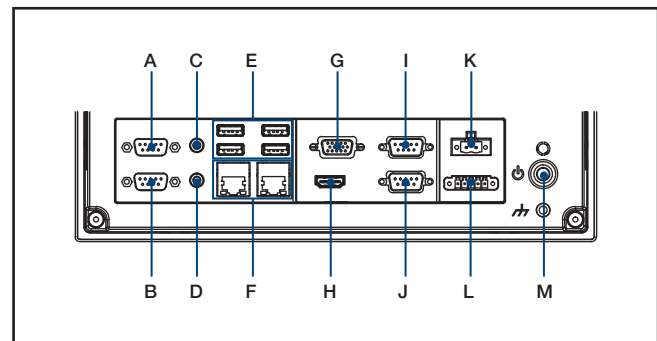


Panel Cutout Dimensions: 265 x 210 mm (10.43 x 8.26 in)

Ordering Information

| Part Number | Description |
|--------------------|---|
| PPC-3100-RE9B | 10.4" PPC w/Intel E3940 , Res. |
| 96PSA-A90W190T-3 | Power adapter 100-240V 90W 19V |
| 1700001524 | Power cord 3P UL 10A 125V 1.8m |
| 170203183C | Power cord 3P Europe (WS-010+083)183cm |
| 1700008921 | Power cord 3P/3P Power supply 1.8M PSE |
| 96CB-POWER-B-1.8MB | Power code 3P CCC(China) 1.8M |
| PPC-174T-WL-MTE | Wall mount kit for PPC series |
| PPC-ARM-A03 | ARM VESA Standard for PPC series |
| PPC-STAND-A1E | Stand For PPC Series |
| PPC-WLAN-D1 | M.2, WiFi6 +BT5.2, 2T2R, w/Antenna, Mini PCIe adapter |

I/O View



- A. COM4: RS-232
- B. COM5: RS-232
- C. Line Out
- D. Mic In
- E. 4 x USB 3.0
- F. 2 x LAN
- G. VGA
- H. HDMI
- I. COM1: RS-232
- J. COM2: RS-232
- K. DC Inlet and AT/ATX switch
- L. COM3: Isolated RS-422/485
- M. Power Button

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.