

PPC-3190

19" Fanless Panel PC with Intel® Atom™ Quad-Core Processor



Features

- 19" SXGA TFT LCD with resistive touchscreen
- Intel® Atom™ E3845 quad-core, 1.91 GHz, processor
- Fanless, slim design
- Supports 1 x internal 2.5" SATA HDD and 1 x mSATA
- 1 x PCI/PCIe x1 expansion slot
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- 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

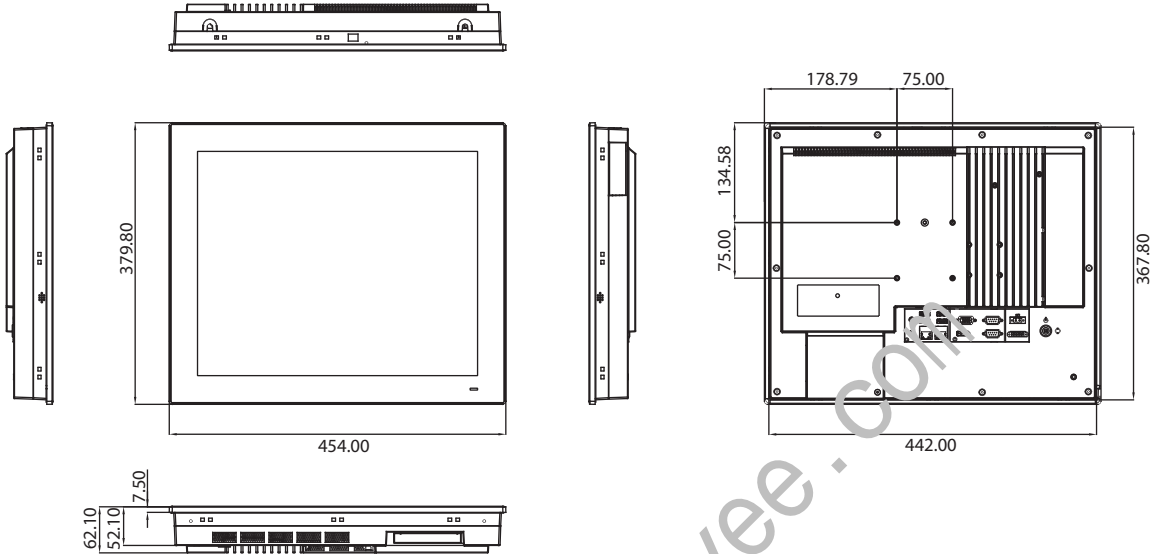
The PPC-3190 is a 19" fanless panel PC equipped with a high-performance Intel® Atom™ E3845 quad-core, 1.91 GHz processor that supports both a wide operating temperature range (-20 ~ 60 °C) and wide power input range (9 ~ 32 V_{DC}). The provision of multiple I/O, including 4 x COM, 1 x USB 3.0, 1 x isolated RS-422/485, and dual Intel® Gigabit Ethernet, ensures easy integration and connectivity. With the inclusion of 1 x PCI/PCIe expansion slot, the PPC-3190 can be integrated with fieldbus protocols or proprietary cards for increased application potential.

Specifications

| | | |
|---------------------------------|--------------------------------|---|
| System | CPU | Intel® Atom™ E3845 quad-core |
| | Frequency | 1.91 GHz |
| | L3 Cache | 2 MB |
| | Memory | 1 x SODIMM DDR3L 1333 MHz (max. 8 GB) |
| | Storage | 1 x 2.5" SATA bay 1 x mSATA bay |
| | Network (LAN) | 2 x 10/100/1000 Mbps Ethernet (Intel I210) |
| | I/O | 1 x isolated RS-422/485 (terminal block) 2 x RS-232, two external and two by internal pin header (need optional module) 1 x GPIO (8 channels, TTL level) by internal pin header (need optional module) 1 x USB 3.0, 3 x USB 2.0 1 x VGA 1 x DP1.1a 1 x Line-out, 1 x Mic-in |
| | Expansion | 1 x Mini PCIe 1 x PCI (default); 1 x PCIe x1 (in the accessory box) Optional: 1 x Internal USB dongle; 2 x RS-232 or 1 x RS-232 + 1 x GPIO |
| | Watchdog Timer | 255 timer levels, set up by software |
| | Speaker | 2 x 1W |
| Physical Characteristics | Dimensions | 454.0 x 379.8 x 62.1 mm (17.8 x 14.9 x 2.4 in) |
| | Weight | 7.0 kg (15.4 lb) |
| OS Support | OS Support | Microsoft® Windows 7(32/64-bit), WES7P, WEC7, Win 10 IOT LTSC(64-bit), Linux, Android 6.0 |
| Power Consumption | Input Voltage | 9 ~ 32 V _{DC} |
| | Power Consumption | 27W (Burn-in test 7.0 in Windows 7 32 bit) |
| LCD | Display Type | 19" TFT LED panel |
| | Max. Resolution | 1280 x 1024 |
| | Viewing Angle | 85 (left), 85 (right), 80 (up), 80 (down) |
| | Luminance (cd/m ²) | 350 |
| | Contrast Ratio | 1000 |
| | Backlight Lifetime | 50,000 hr (min.) |
| | Touch Type | 5-wire analog resistive |
| Touchscreen | Light Transmission | 81+/-3% |
| | Controller | USB interface |
| | Operating Temperature | -20 ~ 60 °C (-4 ~ 140 °F) |
| Environment | Storage Temperature | -40 ~ 60 °C (-40 ~ 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 A, BSMI, VCCI, UKCA |
| | Safety | CB, UL, CCC, UKCA |
| | Front Panel Protection | IP66 compliant |

Dimensions

Unit: mm

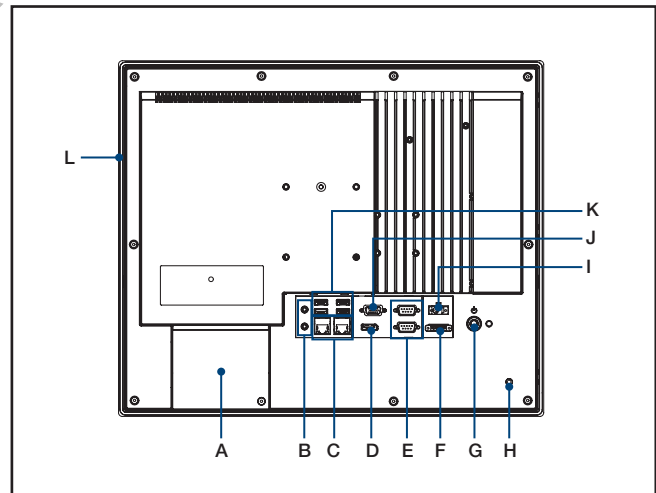


Panel Cutout Dimensions: 444 x 370 mm (17.48 x 14.56 in)

Ordering Information

I/O View

| Part Number | Description |
|--------------------|---|
| PPC-3190-RE4CE | 19" PPC w/Intel E3845, Res. |
| PPC-WLAN-D1 | M.2, WiFi6 +BT5.2, 2T2R, w/Antenna, Mini PCIe adapter |
| PPC-174T-WL-MTE | Wall mount kit for PPC series |
| PPC-ARM-A03 | PPC ARM VESA Standard |
| 96PSA-A90W190T-3 | Power adapter 100-240V 90W 1.8V |
| 1700001524 | Power cord 3P UL 10A 125V 1.8M |
| 170203183C | Power cord 3P Europe (WS-010+083) 183cm |
| 1700008921 | Power cord 3P 2P 1.8M PSE |
| 96CB-POWER-B-1.8MB | Power cord 3P CCC(China) 1.8M |
| PPC-STAND-A1E | Stand For PPC Series |
| 98R3C31500E | PPC-315/317/319 internal USB dongle kits |
| 98R3C31530E | Additional ports module (either two RS-232 or one RS-232 and one GPIO port) |



- A. 1 x Expansion slot (PCI or PCIe x1)
- B. Mic-in/Line-out
- C. 2 x Intel Gigabit Ethernet
- D. 1 x DisplayPort
- E. 2 x RS-232
- F. 1 x Isolated RS-422/485
- G. Power Button
- H. Ground Line
- I. DC inlet and AT/ATX switch
- J. VGA x1
- K. 1 x USB 3.0, 3 x USB 2.0
- L. Optional modules

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.