

PPC-417 EHL

17" Fanless Panel PC with Intel® Atom™ x6425E Processor



Features

- 17" SXGA TFT LCD with resistive (default) or projected capacitive (by request) touchscreen
- Intel® Atom™ x6425E quad-core, 2.0 GHz processor
- Fanless, slim design
- Supports 1 x 2.5" SATA and 1 x M.2 B key slot for expansion
- 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
- Dual 2.5GBASE-T Ethernet supports Time-Sensitive Network (TSN) technology
- Optional GPIO (8 channels, TTL level)



Introduction

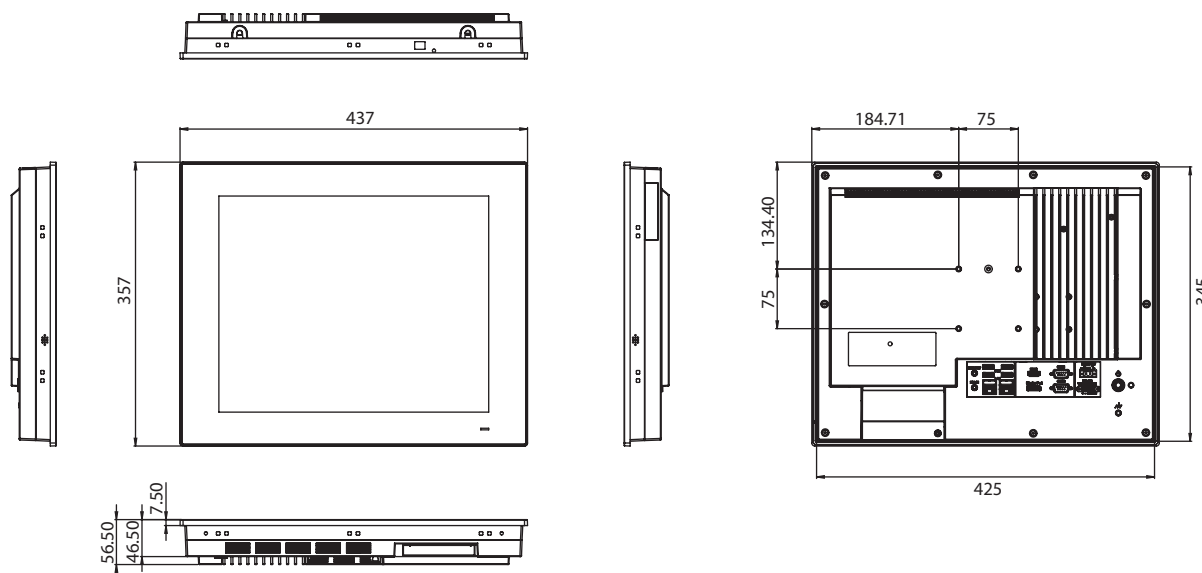
The PPC-417 is a 17" fanless panel PC equipped with a high-performance Intel® Atom™ x6425E quad-core, 2.0 GHz, processor that supports both a wide operating temperature range (-20 ~ 60 °C) and wide power input range (9 ~ 32 V_{DC}). The provision of multiple I/O, including 4 x COM, 2 x USB 3.2, 1 x isolated 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-417 can be integrated with fieldbus protocols or proprietary cards for increased application potential.

Specifications

| | | |
|---------------------------------|--------------------------------|---|
| System | CPU | Intel® Atom™ x6425E quad core |
| | Frequency | 2.0 GHz |
| | L2 Cache | 1.5 MB |
| | Memory | 1 x SODIMM DDR4 3200 MHz (max. 32 GB) |
| | Storage | 1 x 2.5" SATA bay 1 x M.2 B key bay (size: 2242/2280 or 3042/3052 mm; Singal: SATA, PCIe X1, USB 3.0) |
| | Network (LAN) | 2 x 10/100/1000/2500 Mbps Ethernet (Intel I226) |
| | I/O | 5 x Serial ports: 2 x RS-232, 1 x RS-422/485 with 1K V _{DC} isolation, 2 x RS-232 (on right side optional) 2 x USB 3.2, 3 x USB2.0 (2pcs default, 1pcs optional) 1 x Line-Out, 1 x Mic-In 1 x HDMI 1.4 1 x DisplayPort (1.4) 1 x 8bit GPIO (Optional) 1 x TPM2.0 |
| | Expansion | 1 x M.2 2230 E Key slot for wireless card 1 x PCIe x1 (default), 1 x PCI (optional); Optional: 1 x Cfast/CF card or 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 | 437 x 357 x 56.5 mm (17.2 x 14.0 x 2.22 in) |
| | Weight | 6.3 kg (13.89 lb) |
| OS Support | OS Support | Microsoft® Windows 10/11(64-bit), Win10 IOT LTSC, Linux |
| Power Consumption | Input Voltage | 9 ~ 32 V _{DC} |
| | Power Consumption | 65W (Burn-in test 8.1 in Windows 10, 64 bit) |
| LCD | Display Type | 17" TFT LED panel |
| | Max. Resolution | 1280 x 1024 |
| | Viewing Angle | 80 (left), 80 (right), 60 (up), 80 (down) |
| | Luminance (cd/m ²) | 350 |
| | Contrast Ratio | 800 |
| | Backlight Lifetime | 50,000 hr (min.) |
| Touchscreen | Touch Type | 5-wire analog resistive |
| | Light Transmission | 81+/-3% |
| | Controller | USB interface |
| Environment | Operating Temperature | -20 ~ 60 °C (-4 ~ 140 °F) |
| | 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 B, EN 61000-6-2, BSMI, VCCI, UKCA |
| | Safety | CB, UL, CCC, UKCA |
| | Front Panel Protection | IP66 compliant |

Dimensions

Unit: mm



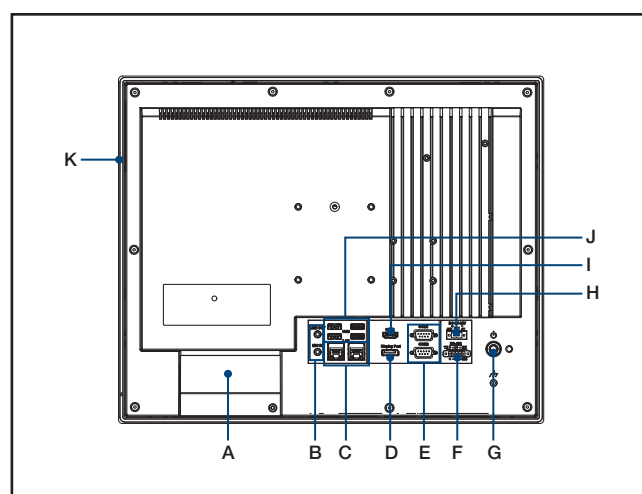
Panel Cutout Dimensions: 427 x 347 mm (16.81 x 13.66 in)

Ordering Information

| Part Number | Description |
|--------------------|---|
| PPC-417-RX6A | 17" PPC w/Intel x6425E, Res. T/S |
| PPC-WLAN-D2 | M.2, WiFi6 +BT5.2, 2T2R, w/Antenna |
| 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 19V |
| 1700001524 | Power cord 3P UL 10A 125V 1.8M |
| 170203183C | Power cord 3P Europe (WS-010+083) 183cm |
| 1700008921 | Power cord 3P/3P 1.8M PSE |
| 96CB-POWER-B-1.8MB | Power code 3P CCC(China) 1.8M |
| 98R3175R00E | 19" Rack Mounting kits for PPC |
| PPC-STAND-A1E | Stand For PPC Series |
| 98R3C31500E | PPC-315/317/319 internal USB dongle kits |
| 98R3C31510E* | PPC-3150/3170 install CF card kits |
| 98R3C31520E* | PPC-3150/PPC-3170 CFast card kits |
| 98R3C31530E | Additional ports module (either two RS-232 or one RS-232 and one GPIO port) |
| 989K093802E | PClex1 to PCI riser card |

*: Shares cable with 2.5 "SATA bay and cannot be used at the same time

I/O View



- 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. DC inlet and ATX/ATPS switch
- I. 1 x HDMI
- J. 2 x USB 3.2, 2 x USB 2.0
- K. Optional modules