PPC-3170

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

Features

ƒ 17" SXGA TFT LCD with resistive touchscreen

ƒ Intel® Atom™ E3845 quad-core, 1.91 GHz, processor ƒ Fanless, slim design

ƒ Supports 1 x internal 2.5" SATA HDD and 1 x mSATA ƒ 1 x PCI/PCIe x1 expansion slot

ƒ Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)

ƒ Wide range DC support (9 ~ 32 V_{DC})

ƒ 1 x isolated RS-422/485 with automatic flow control and dual Intel GbE ƒ Optional GPIO (8 channels, TTL level)

SUSIAccess Microsoft Windows Embedded VCI CCC EHL CE FCC RoHS c UL us
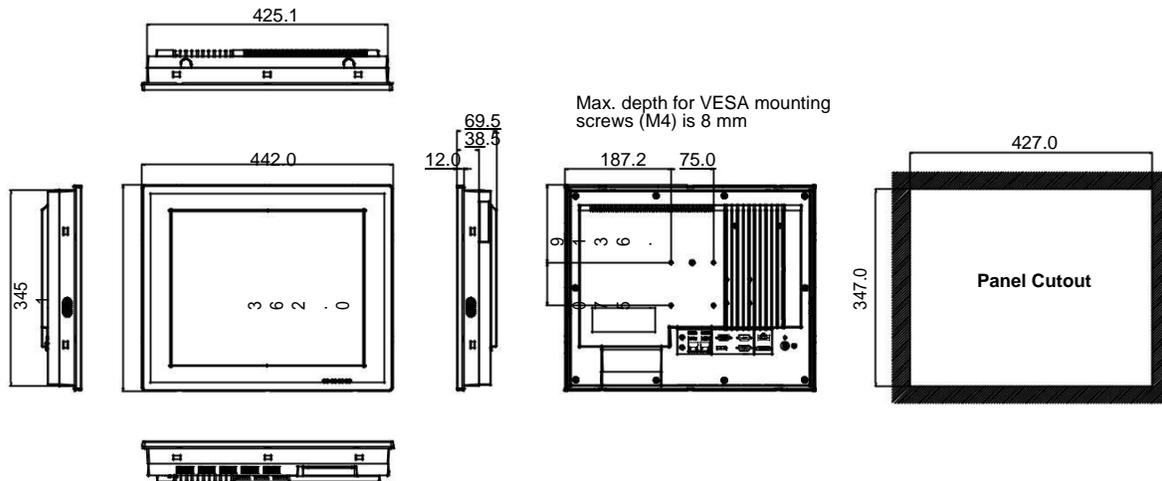
Introduction

The PPC-3170 is a 17" 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-3170 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) 4 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 Cfast; 1 x CF card; 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	442.0 x 362.0 x 69.5 mm (17.4 x 14.3 x2.74 in)
	Weight	6.3 kg (13.89 lb)
OS Support	OS Support	Microsoft® Windows 7/8.1/10 (32/64-bit), WES7, WEC7, Linux
Power Consumption	Input Voltage	9 ~ 32 V_{DC}
	Power Consumption	34W (Burn-in test 7.0 in Windows 7 32 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/m2)	350
	Contrast Ratio	800
	Backlight Lifetime	50, 000 hr (min.)
Touchscreen	Touch Type	5-wire analog resistive
	Light Transmission	81+/-3%
	Controller	USB interface
	Durability (Touches)	36 million

Dimensions

Unit: mm

425.1

69.5
38.5
12.0

442.0

Max. depth for VESA mounting
screws (M4) is 8 mm

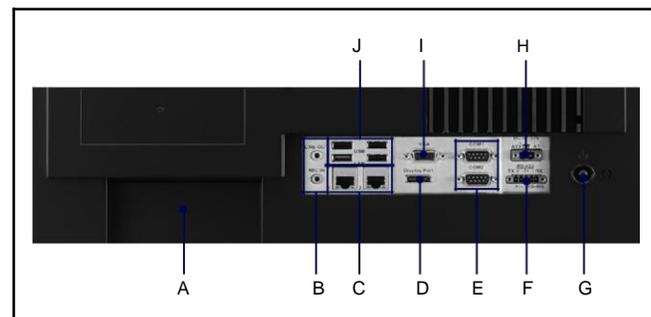187.2   75.0

345

362.0

427.0

347.0

Panel Cutout

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

Environment	Operating Temperature	0 ~ 50 °C (32 ~ 122 °F) with 2.5" SATA SSD -20 ~ 60 °C (-4 ~ 140 °F) with -40 ~ 85 °C mSATA or 2.5" SATA SSD
	Storage Temperature	-40 ~ 60 °C (-40 ~ 140 °F)
	Relative Humidity	10 ~ 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, 1Grms @with HDD, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part Number	Description
PPC-3170-RE4AE	Intel Atom E3845 (1.91G) Panel PC with 17" SXGA panel, 5-wire resistive T/S, w/o memory
PPC-WLAN-B1E	WiFi Module with Antenna Cable 40cm for PPC
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-3150-COME	Module to install either two additional RS-232 port or one additional RS-232 and one GPIO for PPC-3150/PPC-3170
96PSA-A90W19OT-1	ADP A/D 100-240V 90W 19V W/PFC
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-1.8M	Power code 3P CCC(China) 1.8M
2070015120	Image WES 7P 32bit MUI v4.17 for PPC-3150/70/90
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

I/O View

J   I   H

A   B   C   D   E   F   G

A. 1 x Expansion slot x 1 (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 AT/ATX switch
I. 1 x VGA
J. 1 x USB 3.0, 3 x USB 2.0