PPC-3190

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



Features

- 19" TFT SXGA LCD with resistive touchscreen
- Embedded Intel Atom Quad-Core E3845 1.91G
- Fanless and Slim design
- Supports one internal 2.5" SATA HDD, one mSATA socket
- Built-in one PCI or one PCIe x1 expansion slot
- Wide operating temp. range from -20~60°C
- Wide range power input for 9~32V_{DC}
- One isolated RS-422/485 with Autoflow, Dual Intel GbE
- One optional GPIO (8 channels, TTL level)

Introduction

The PPC-3190 is a 19" fanless panel PC that doesn't only deliver high performance with an Intel quad-core Atom processor but also supports a wide operating temp. (-20~60°C) and wide range of power input (9~32V_{DC}). It consolidates performance and reliability in one system. With multiple I/Os such as 4 x COM, 1 x USB3.0, 1x isolated RS-422/485 and dual Intel Gigabit Ethernet make it easier to connect to devices and be integrated into machine building industry. The PCI/PCIe expansion is allowed to add on field bus or proprietary card makes more application possibility.

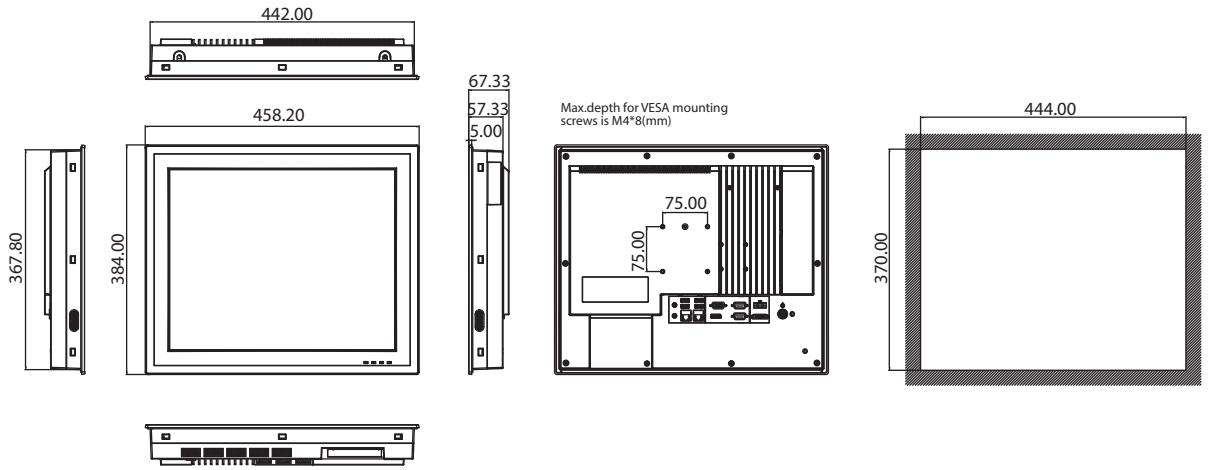
Specifications

Processor system	CPU	Intel ATOM E3845
	Frequency	1.91 GHz
	L3 Cache	2M
	Chipset	Intel Bay-Trial I
	Memory	1 x 204-pin SODIMM DDR3L support up to 8GB
	Storage 1	1 x 2.5" SATA bay
	Optional Storage & I/O	Either: ▪ 1 x Full size mSATA ▪ CFast card (optional module) ▪ CF card (optional module) ▪ Internal USB connector for USB dongle (optional module) ▪ 2 x DB9 for two RS-232 or one RS-232 and one GPIO (optional module)
	Network (LAN)	2 x Gigabit Ethernet, (Intel I210)
	I/O Ports	▪ 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 USB3.0 + 3 x USB2.0 ▪ 2 x Gigabit Ethernet ▪ 1 x D-SUB VGA port ▪ 1 x DP1.1a ▪ 1 x Line-out, 1 x Mic-in, 2 x 1W speaker,
	Expansion slots	Either ▪ One PCI (standard) ▪ One PCIe x 1 (in the accessory box)
	Other Expansion	1 x Full-size Mini PCIe
Physical Characteristics	Dimensions	458.2 x 384 x 67.3(mm)(18" x 15" x 2.6")
	Weight	7.9kg (17.3lb)
OS support	OS Support	WES7 32&64bit / Windows 7 32&64bit/ Windows 8 32&64bit
Power supply	Input Voltage	9-32 V_{DC}
	Power Consumption	27W (Burn-In test 7.0 in windows 7 32bits)
LCD Display	Display Type	19" TFT LCD (LED Backlight)
	Max. Resolution	1280 x 1024
	Colors	16.7M
	Viewing Angle	85 (left), 85 (right), 80 (up), 80 (down)
	Luminance(cd/m2)	350
	Conrast Ratio	1000
	Backlight Lifetime	50,000 hrs (typ.)

All product specifications are subject to change without notice

Dimensions

Unit: mm

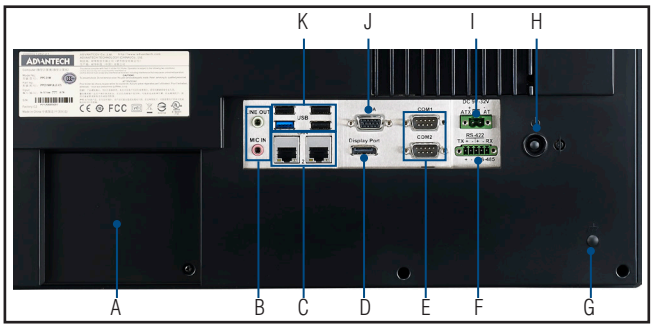


Touchscreen	Touch Type	Analog Resistive 5-wire
	Light Transmission	81% ± 3 %
	Controller	USB interface
	Software Driver Supports	Windows 7 / Windows 8
	Durability (Touches)	36 million
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F) with 2.5" SATA HDD -20 ~ 60°C (-4 ~ 140°F) with -40 ~ 85°C mSATA or 2.5" SATA SSD
	Storage Temperature	-20 ~ 60°C (-4 ~ 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, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part NO	Description
PPC-3190-RE4AE	Intel Atom E3845(1.91G),19" SXGA LED&T/S,W/O RAM
PPC-WLAN-A2E	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-3190-COME	Module to install either two additional RS-232 port or one additional RS-232 and one GPIO for PPC-3190
PPC-3150-USBE	Module to install internal USB dongle for PPC-3150/ PPC-3170
PS-DC19-L157E	19V DC power adapter module for fanless PPC series
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
2070013015	Image WES7P 32-bit Multi V4.12 for PPC-3150/3170
2070013321	Image WES7P 64-bit Multi V4.12 for PPC-3150/3170
PPC-STAND-A1E	Stand For PPC Series (single acting hinge)
PPC-174 Stand	Stand for PPC Series (double acting hinges)

I/O Appearance



A. Expansion slot x 1 (PCI or PCIe x1)
B. Line out/ Mic in
C. Intel Gigabit Ethernet x 2
D. DisplayPort x 1
E. RS-232 x 2
F. Isolated RS-422/485 x 1
G. Ground Line
H. Power Button
I. DC inlet and AT/ATX switch
J. VGA x1
K. USB3.0 x 1 + USB2.0 x 3