APPC 1232T

12.1" TFT SVGA 4:3 Flush Panel PC with Intel® Atom™ D2550, 1.86GHz, Touch Screen, 2GB DDR3, 4x USB, 2x COM and VGA

Main Features

- 4:3 12.1" SVGA Fanless LED Panel Computer
- Intel® Atom™ D2550, Dual Core, Low Consumption CPU
- Flush Panel by 5-wire Touch Screen
- Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- USB x4/ 2x Mini-PCIe sockets/ 1x CFast/ 2x RS232/ 422/ 485

- Fieldbus enable
- DDR3 2GB/ 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm
- Wide Range Power Input 12V~30V DC

Product Overview

The 12.1" fanless panel PC APPC 1232T incorporating an industrial motherboard is intended for versatile industrial applications. APPC 1232T has a touch screen LED backlight LCD panel with 800x600 (SVGA) resolution and 450-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

This APPC series supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two Mini-PCIe slots and one SIM card holder. With support for wide power input of 12V~30V, this APPC series can gain a strong foothold in industrial field and machine devices. In addition, this APPC series can hook 2nd display via a VGA port for dual independent display. APPC 1232T has two isolated RS232/422/485 ports, four isolated channels of DI and DO, and Fieldbus ports.

Specifications

Panel
- LED Size: 12.1", 4:3
- Resolution: SVGA 800x600
- Luminance: 450cd/m²
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing Angle: 65(U), 75(D), 80(L), 80(R)
- Backlight: LED

Touch Screen
- 5-wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System
- CPU: On-board Intel® Atom™ Dual Core processor D2550, 1.86GHz, 1M L2 Cache
- BIOS: AMI BIOS
- System chipset: Intel® NM10 Express chipset
- System memory: 2x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (Default),Support up to 4GB DDR3-800/1066, Non-ECC and Un-buffered
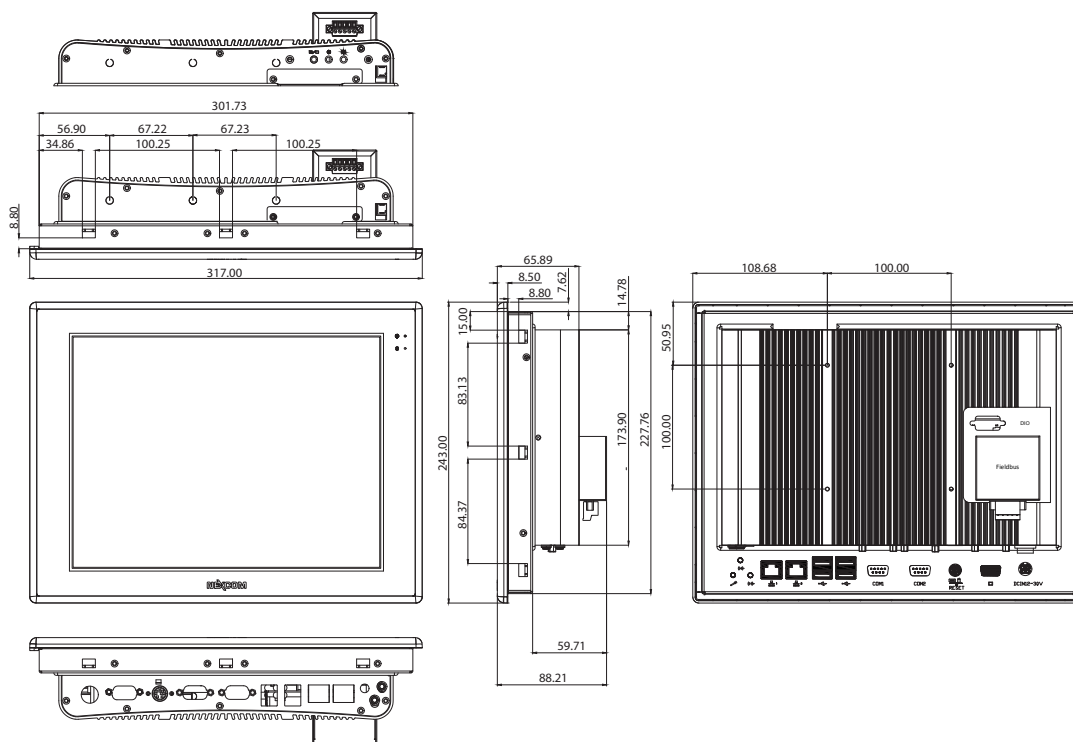
- Storage Device:
  - 1x external locked CFast socket
  - 1x hard drive bay: optional 1x 2.5" SATA HDD or 1x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)
- H/W status monitor: Monitoring system temperature, and voltage
- Expansion: 2x Mini-PCIe sockets (support optional Wi-Fi, 3.5G module or Fieldbus Card)
- Panel backlight control button: Increase brightness / decrease brightness / Backlight On/Off

Rear I/O
- Ethernet: 2x RJ45
- 2nd display VGA port: 1x DB15
- Audio port: 1x Line out; 1x Line in; 1x MIC-in
- USB: 4x USB 2.0
- PS2 keyboard/ mouse
- Power switch
- Reset button
- DIO w/ 2.5kv isolated:
  4x Digital Input (Source type)

NE:COM

Dimension Drawing

- Input Voltage (Dry Contact): Logic 0: Close to GND
- Logic 1: Open
- Input Voltage: Logic 0: 3V max
- Logic 1: +5V ~ +30V

4x Digital Output (Sink type)

- Output Voltage: 3.6V ~ 5V
- Sink current: 200 mA max. per channel
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #4: RS232 w/ RI or 12V selection
- Fieldbus: (Protocol interface Optional)

Model	Protocol	Connector
FBI90E-PNM	ProfiNET Master	Dual RJ-45
FBI90E-EP	Ethernet/IP Master	
FBI90E-ECM	EtherCAT Master	
FBI90E-PBM	Profibus Master	DB9
FBI90E-DNM	DeviceNet Master	5-pins Phoenix Contact Terminal

Audio

- AC97 codec: Realtek ALC886-GR
- Audio interface: Line out/ Line in/ MIC-in Audio Jack

Ethernet

- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Color: pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~ 30VDC
- Power adapter: Optional AC to DC power adaptor (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD Operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast Operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)

- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing Limits to be at 90% RH at max 50°C
- Dimension: 317 x 243 x 88.2mm
- Weight: 4 Kg

Certifications

- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1232T (P/N: 10IA1232T00X0)**

  12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 2GB DDR3, 2xRS232/422/485 and 4x4 DI/O with isolated protection, Brightness adjustment buttons, Fieldbus

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060017X00)**
- **ProfiNET Master Interface: FBI90E-PNM for APPC (P/N: 88IA1932T00X0)**
- **Ethernet/IP Interface: FBI90E-EP for APPC (P/N: 88IA1932T01X0)**
- **EtherCAT Master Interface: FBI90E-ECM for APPC (P/N: 88IA1932T02X0)**
- **Profibus Master Interface: FBI90E-PBM for APPC (P/N: 88IA1932T03X0)**
- **DeviceNet Master Interface: FBI90E-DNM for APPC (P/N: 88IA1932T04X0)**