

APPC 1940T

19" TFT SXGA 4:3 Flush Panel PC with Intel® Atom™ E3826, 1.46GHz,
Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM, and Fieldbus port



Main Features

- 4:3 19" SXGA Fanless LED Panel Computer
- Intel® Atom™ E3826, Dual Core, Low Consumption CPU
- Flush Panel by 5-wire Touch Screen
- Dual GbE/2nd display-VGA/Line-out/PS2 KB/MS
- USB x 3/2 x Mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- Fieldbus port
- DDR3L 4GB/2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/Wall/Stand/VESA 100mm x 100mm
- Wide Range Power Input 12V~ 30VDC

Product Overview

The 19" fanless panel PC APPC 1940T incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1280 x 1024 (SXGA) resolution. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

The APPC 1940T 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, APPC 1940T can gain a strong foothold in industrial field and machine devices. In addition, APPC 1940T can hook 2nd display via a VGA port for dual independent display. APPC 1940T has two isolated RS232/422/485 ports, four isolated channels of DI and DO, and Fieldbus ports.

Specifications

Panel

- LED Size: 19", 4:3
- Resolution: SXGA 1280x1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing Angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: On-board Intel® Atom™ Dual Core processor E3826, 1.46GHz, 1M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (Default), Support up to 8GB DDR3L-1066/1333, Non-ECC and Un-buffered
- Storage Device:
 - 1 x external locked CFast socket
 - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x 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: 2 x 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: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB2.0, 1 x USB3.0
- PS2 keyboard/mouse
- Power switch
- Reset button
- 2-pin Remote Power on/ off switch
- DIO w/ 2.5kv isolated:
 - 4 x Digital Input (Source type)
 - Input Voltage (Dry Contact): Logic 0: Close to GND
 - Logic 1: Open
 - Input Voltage: Logic 0: 3V max
 - Logic 1: +5V ~ +30V
 - 4 x Digital Output (Sink type)

Dimension Drawing

Coming Soon

- Output Voltage: 3.6V ~ 5V
- Sink current: 200 mA max. per channel
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated
- 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® I210AT 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 50°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: 457.64 x 379.24 x 61.25 mm
- Weight: 6.7 Kg

Certifications

- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC1940T (P/N: TBD)**
19" SXGA LED Backlight Touch Panel PC, Intel® Atom™ E3826 1.46GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485 and 4 x 4 DI/O with isolated protection, Brightness adjustment buttons, fieldbus module installed
- **ProfiNET Master Interface: FBI90E-PNM for APPC (Protocol Option P/N: 88IA1932T00X0)**
- **Ethernet/IP Interface: FBI90E-EP for APPC (Protocol Option P/N: 88IA1932T01X0)**
- **EtherCAT Master Interface: FBI90E-ECM for APPC (Protocol Option P/N: 88IA1932T02X0)**
- **Profibus Master Interface: FBI90E-PBM for APPC (Protocol Option P/N: 88IA1932T03X0)**
- **DeviceNet Master Interface: FBI90E-DNM for APPC (Protocol Option P/N: 88IA1932T04X0)**

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060017X00)**