

eTOP-IPC1840P Tech-Note

The 18.5" fanless panel PC IPC1840P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touchscreen LED backlight LCD panel with 1366 x 768 (HD; WXGA) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications. The IPC1840P 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 12~30VDC, IPC1840P can gain a strong foothold in industrial field and machine devices. In addition, IPC1840P can hook 2nd display via a VGA port for dual independent display. IPC1840P has two isolated RS232/422/485 ports and optional fieldbus ports.



- Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2Cache
- Metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- Dual GbE/2nd display-VGA/Line-out/PS2 KB/MS
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP66 compliant front panel
- Support fieldbus module (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Specifications

Panel

LCD size: 18.5", 16:9
Resolution: WXGA 1366 x 768
Luminance: 300cd/m2
Contrast ratio: 1000
LCD color: 16.7M
Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
Backlight: LED

Touch

Ten points P-Cap (projected capacitive touch)
Touch light transmission: 87%
Anti-scratch surface: 7H hardness
Touch interface: USB
Windows 8 compliance

System

CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz, 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
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:

-1x External locked CFast socket
-1x 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

Front logo LED indicator to show operating status

Rear I/O

Ethernet: 2 x RJ45
2nd display VGA port: 1 x DB15
Audio port: 1x Line-out

USB: 2 x USB 2.0, 1 x USB 3.0
 2-pin remote power on/off switch
 Power switch
 Reset button
 COM #1: RS232/422/485 w/ 2.5kv isolated
 COM #2: RS232/422/485 w/ 2.5kv isolated
 Fieldbus: (protocol interface optional)

Audio
 HD codec: Realtek ALC886-GR
 Audio interface: Line-out audio jack

Ethernet
 LAN chip: dual Intel® I210AT Gigabit LAN
 Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment
 Color: Pantone 425C\RAL 70 24 front bezel
 IP protection: IP66 front
 Mounting: panel/wall/stand/VESA 100mm x 100mm
 System with panel mounting kit w/o panel mounting hole
 Power input: 12~30VDC
 Power adapter: optional AC to DC power adapter (+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: -10°C to 60°C
 Storage temperature: -20°C to 75°C
 Operating humidity: 10%~90% relative humidity, non-condensing
 Dimension: 490.8 x 320.6 x 62.65mm
 Weight: 8.2Kg

Certifications
 CE (including EN61000-6-2/EN61000-6-4)
 FCC class A

OS Support Lists
 Windows 8 32-bit/64-bit
 Windows 7 32-bit/64-bit
 WinCE 7.0

