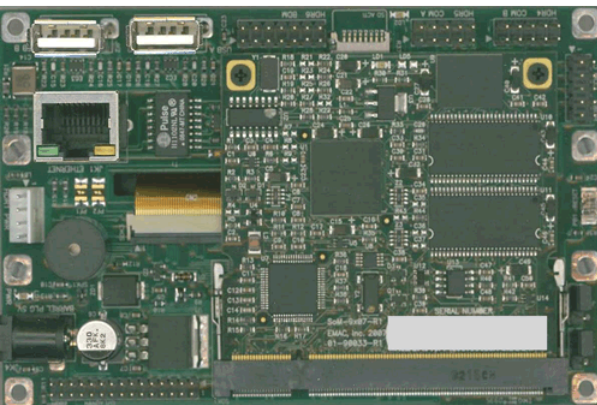
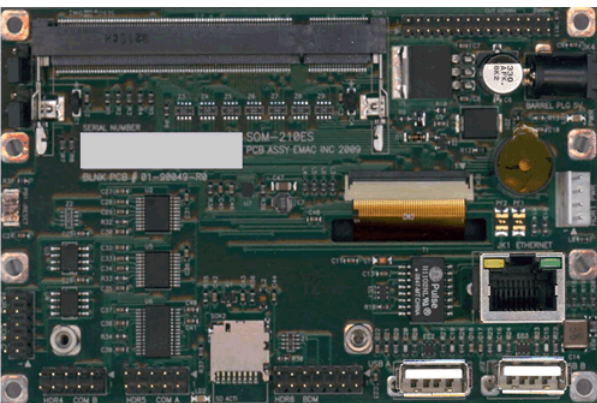


PPC-E4



MaverickCrunch Hardware Floating Point Math Coprocessor

Inexpensive Open-Frame Design

10/100BaseT Ethernet with on-board PHY

3 Serial ports with handshake

2 USB 2.0 (Full Speed) Host ports

Up to 128 MB of SDRAM

Up to 64 MB of Flash

128K Bytes of Serial Flash

Battery backed Real Time Clock

Micro SD Flash Card Interface

1 SPI & 1 I2S port

1 Audio Beeper

Timer/Counters and Pulse Width Modulation (PWM) ports

4 Channel 12-bit Analog-to-Digital converter

Graphic LCD Interface with 2D acceleration

WQVGA (480 x 272) Resolution with LED Backlight

Touchscreen Interface and Software Controlled Backlight On/Off & Brightness

JTAG for debug, including real-time trace

FREE Eclipse IDE with GCC & GDB development tools

WinCE 6.0 BSP and SDK available

The PPC-E4, an ultra compact Panel PC with a 4.3 inch WQVGA (480 x 272) TFT color LCD and a resistive touch screen. The dimensions of the PPC-E4 are 4.8” by 3.0”, about the same dimensions as that of popular touch cell phones. The PPC-E4 is small enough to fit in a 2U rack enclosure. Unlike other compact Panel PCs, the PPC-E4 comes with either Windows CE 6.0 or EMAC's Embedded Linux distribution installed and fully configured on the onboard flash disk. This allows the software engineer to concentrate on writing applications and not have to worry about configuration and setup. Just apply power and watch the User Interface appear on the vivid color LCD, be it WinCE Desktop or Linux X-Windows desktop. Interact with the PPC-E4 using the responsive, integrated touch screen. The PPC-E4 compact Panel PC utilizes a System on Module (SoM) for the processing core. This allows the user to easily upgrade, if more memory capacity, storage capacity or processing power is required. The PPC-E4 includes an embedded ARM 9 SoM; this ARM System on Module features a 200Mhz Fanless Low Power Processor with a Hardware Floating Point Math Coprocessor and 2D Video Accelerator. The SoM provided with the PPC-E4 supports up to 128MB of SDRAM, 64 MB of Flash, and 128K bytes of serial flash. Typical power consumption is less than 5 Watts and the LED backlight can be shut off when not in use to further decrease its power consumption. The PPC-E4 offers two RS-232 serial ports, and one RS-422/485 port. Also provided are two USB 2.0 host ports, an Audio Beeper and a battery backed real time clock. A Micro SD card socket is provided for additional Flash storage. The PPC-E4 can be connected to a network using the 10/100 Base-T Ethernet controller and its onboard RJ-45 connector. When developing CE 6.0 application for the PPC-E4, Microsoft Visual Studio 2005/2008 can be utilized. For Embedded Linux application development, EMAC provides a Free Eclipse IDE. Both Visual Studio and Eclipse provide

everything the user needs for developing PPC-E4 applications. All the compiling, linking, downloading, and debugging inherent to software development can be done from one easy to use high level interface. EMAC provides an SDK for the PPC-E4, which contains source examples and drivers.

Specifications
PowerPC type.

Open Frame PPC
Processor
Processor.

Embedded Cirrus EP9307 with Hardware Floating Point Math Engine

Clock Speed:

200 MHz

Real Time Clock:

Memory
RAM type.

100 Mhz SDRAM

Primary Flash:

64 MB External NOR Intel P30 Flash

Secondary Flash:

128K of utility serial Flash

Memory Misc.:

Flash Disk: SPI serial Micro HCSD interface.

System Reset: Supervisor with external Reset Button provision.

SSD: supported SPI serial HCSD interface up to 8+ GB Flash Disk

Primary I/O
GPIO.

4x Programmable 3.3V I/O lines

Video Out:

2D Accelerated Video Interface

Audio:

PWM driven Beeper

USB:

2x USB 2.0 Full Speed Hosts

Serial Ports:

2x RS-232 with handshaking

1x RS-232/422/485

high-speed SPI with chip selects

Watchdog:

Primary I/O Misc.:

Ethernet MAC: Built-In

Ethernet PHY: Intel/Cortina LXT927ALC with software PHY shutdown control

Ethernet Type: 10/100 Base-T Ethernet

Ethernet Interface: On-Board RJ-45 connector

Touchscreen

Type:

4 Wire Analog Resistive

Resolution: Continuous

Controller: Built-In

Driver: WinCE, Linux

Transparency: 80%

Durability: Over one million touches

Secondary I/O
Timers/ Counters/ PWM:

2x general purpose 16-bit

1x 32-bit timer

2x 16-bit PWMs.

LPT Port:

Keypad:

PS/2:

Touch:

12-Bit, 4 wire analog resistive Touchscreen

Expansion
Bus.

30-pin, 2mm dual row header

Analog
A/D.

A/D Channels:

4

A/D Resolution:

12-bit

D/A:

Dimensions
Dimensions.

$4.8 \times 3 \times 1.2$ in

Weight:

5.7 oz

Power Requirements
Voltage.

5 V

Typical Current:

1 A

Typical Voltage:

5 V

Environmental
Low Operating Temperature:

0 C

High Operating Temperature:

60 C

Pricing
Product Variations:

PPC-E4-0300

Compact PPC w/Touchscreen 64M Flash, 64 MB Ram - 200 MHz

\$345.00

Parent Product:

Source URL: <https://www.emacinc.com/content/ppc-e4>