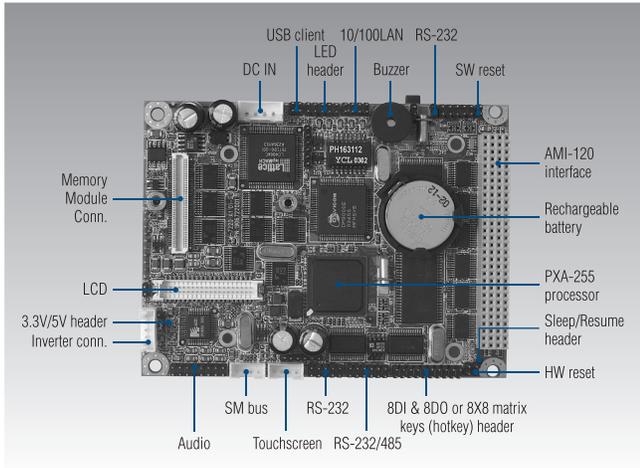


PCM-7220 Series

2.5" OS-ready SBC Intel® XScale® PXA255 processor, Windows® CE .NET/Linux



Features

- Platform integrates with Advantech software solution including Bootloader, device driver, OS kernel and system utility in a pre installed package on either onboard flash or CF card.
- Multiple boot options through the onboard flash, extended memory module, or CF card
- Extended temperature (Advantech Phoenix models) available as optional models
- Full power management for Ultra low power performance (Normal- < 2.5 W/ Suspend < 200 mW)
- AMI-120 interface for quick function expansion.
- SM bus interface for battery powered applications
- Evaluation kit integrating 5.7" STN QVGA panel, touch screen, battery pack, 8DI & 8DO/8x8 Matrix Keypad (hot key) is available for project feasibility evaluation

Introduction

The PCM-7220 series integrates Intel's PXA255 processor and Windows® CE .NET or Embedded Linux solution in a 78 x 104 mm (3" x 4") compact form factor. It is designed to provide customers with a high performance subsystem board based on Intel® XScale™ technology with character of OS-ready, compact, and flexible expansion to meet versatile application needs.

Certified platform functionality offers fast, flexible CTOS (Customize To Order Service)

The PCM-7220 offers customers a fast time to market and flexible reference platform that is fully customizable. All functionality has been completely certified and can be leveraged to customize various hardware specifications and system optimization needs based on customers' request.

Solution platform based on Intel® XScale™ technology

This platform offers rich I/O interfaces and high performance, along with an Intel® PXA255 processor, complete with 32-bit, up to 400 MHz speed SoC engine. It also reserves interfaces for flexible configuration that will exceed expectations for high performance vs. cost.

Applications

- Industrial mobile device platform
- Telematics / Navigator / AVL / DBA
- Touch Panel base terminal
- Low cost HMI

Specifications

System Kernel

- CPU** Intel XScale PXA255 400 MHz default (200,300 MHz optional)
- OS** Supports WinCE.NET4.1/EmbeddedLinux (2.4.19 kernel)
- Boot Loader** 1 MB AMD Flash ROM for Bootloader
- OS image storage** OS Image loaded from external CF at default or optional memory module
- Watchdog Timer** PXA255 internal
- RTC** HT1381, backup by internal backup battery

Memory

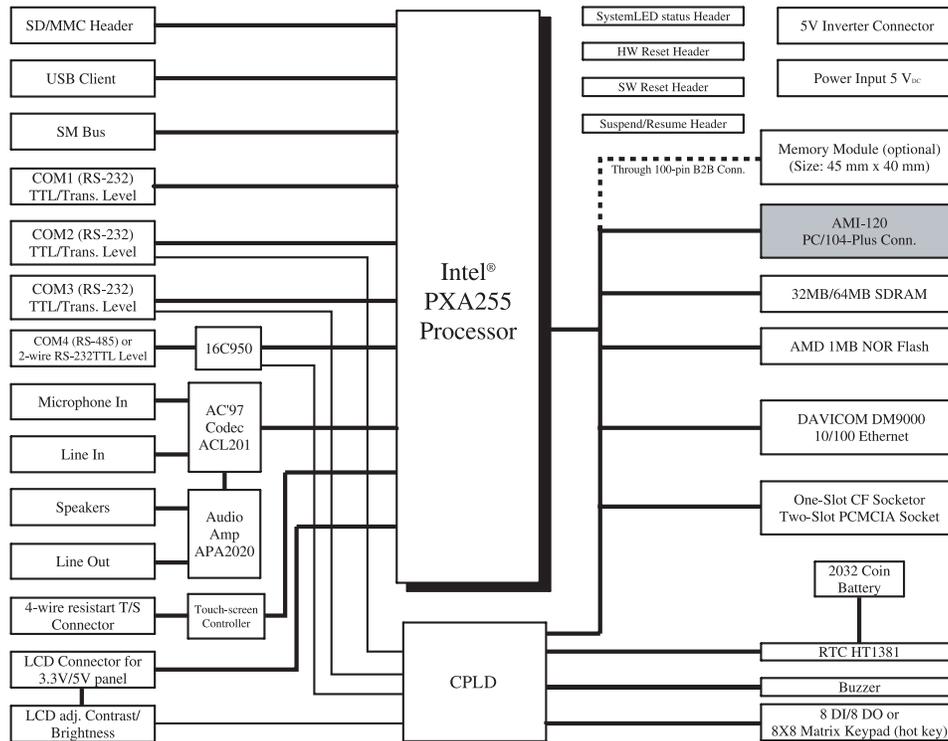
- Flash** Optional CF card or memory module up to 64MB

- SDRAM** 32/64 MB (default) SDRAM on board or upto 128 MB thru memory module
- Display**
 - LCD** Intel PXA255 processor built-in LCD interface (TFT/STN VGA/QVGA 16bpp suggested, QVGA setting default)
T/S 4-wire resistant touch screen
SM bus For smart battery, pin header, I2C bus
 - System Back-up Battery** Rechargeable Li-ion battery 65 mAH, supports system SDRAM and RTC

I/Os

- PCMCIA** 2x type II PCMCIA slot support I/O & data mode.
- RS232(COM1-COM3)** 3x RS-232 COM Port full 9 pin transceiver level
- RS485 (COM4)** 1x RS-485 COM W/ AFC. (RS-232, 2-pin TTL configurable)
- USB** 1x USB Client for ActiveSync
- Ethernet Interface** DM9000 10/100Base-T.
- Digital I/Os** 8 DI & 8 DO or 8 x 8 matrix keys, configured by software
- Audio** AC'97 interface included line-in, line-out, speaker out and MIC in. Pin header output.
- Input power** 5 V DC @ 0.5 A typical in 4- pin header

Board Diagram



Packing List

- **Advantech Software Support CD: Selected Windows® CE .NET or Linux**
- **Windows® CE .NET end user license agreement: Windows® CE .NET model only**
- **Cable kit (optional)**

Ordering Information

- **PCM-7220S-030CE** Intel® PXA255 processor at 400 MHz, 64 MB SDRAM onboard (Memory Module interface reserved), with Windows® CE .NET solution integrated
- **PCM-7220S-230CE** Intel® PXA255 processor at 400 MHz, 64MB SDRAM onboard, 32 MB flash on memory module, with Windows® CE .NET solution integrated
- **PCM-7220-CK001 (optional)** Cables kit for PCM-7220 series of Windows® CE .NET

Remarks:

- All Linux OS package is ready for evaluation reference by Project request.
- The size of flash and system memory can be configured per customer
- Different system specification based on PCM-7220 platform can be customized in project base through Advantech customization service.

- 1 Applied Panel Computing
- 2 Industrial Computing Platform
- 3 Compact PCI
- 4 Industrial Workstation & Panel Computing
- 5 Industrial I/O