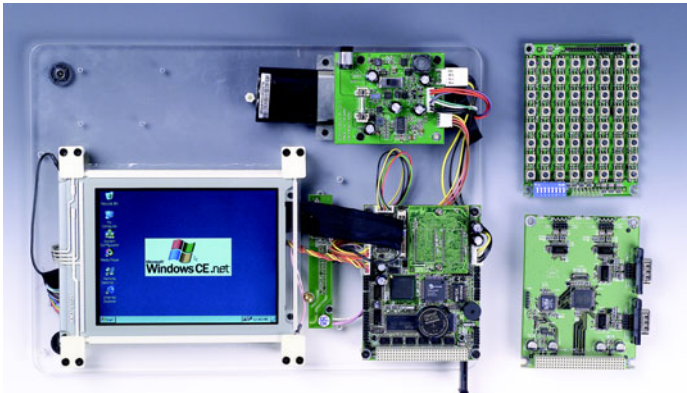


# PCM-7220 Evaluation Kit

RISC 2.5" Intel® Xscale PXA255, Multitasking, Ready-to-Run Platform



## Features

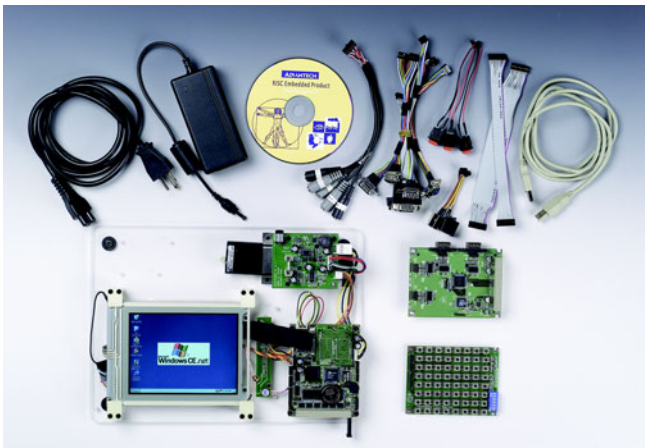
- Intel® Xscale PXA255 as the kernel
- 5.7" STN QVGA LCD display with Touch Screen are integrated.
- Integrated 4-cell Battery pack and charger system
- 8 x 8 Matrix keypad with D I/O function bundled with selection utility
- 4-COM AMI module is bundle for function expansion
- Complete SW support with SDK for application development
- Binary format BSP (Board Support Package) optional on a project basis.

## Introduction

Based on the PCM-7220 platform, the PCM-7220 Platform Evaluation kit integrates all solution developer needs into a package that provides customers an effortless system platform for project evaluation, application development and solution feasibility testing that decreases lead-times and lowers initial expense and investment.

### **Xscale-based kit makes everything easy, simple, and risk-free**

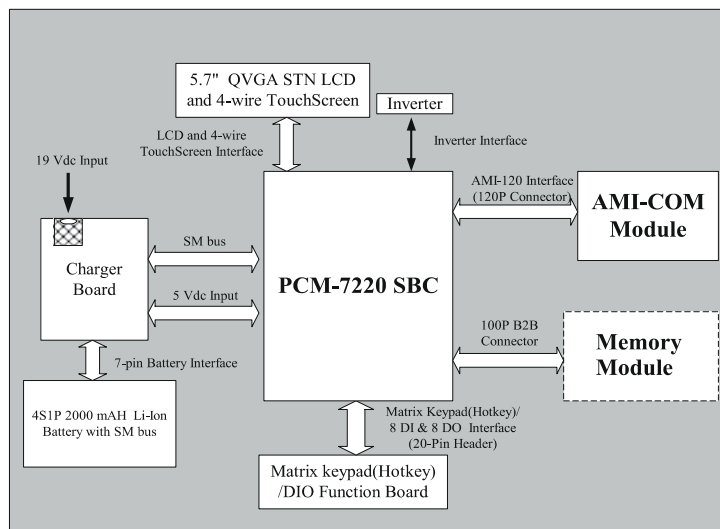
Making project development and implementation functional and risk-free at the starting point of a project, PCM-7220 Evaluation kits have already integrated complete certified functional peripherals in a battery-powered pack under both WinCE .NET or Embedded Linux. Including all necessary cables, power core and Support CDs, the Evaluation kit also contains a 8000 mAH (4S1P) Li-Ion battery pack, one 4-COM AMI-120 module and one Matrix 8x8 keypad integrated with a D/I/O interface. All bundled parts/components including the PCM-7220 main board arrive fully tested and certified in production-ready condition.



## Specifications

System M/B kernel	
Main board kernel	PCM-7220K-230CE/LX
CPU- Xscale PXA-255	400 MHz
System Memory	64 MB SDRAM on board
Flash Memory	32 MB on flash module (CE/LX solution pre-installed)
Display module	
LCD	5.7" QVGA, STN 8-bits LCD (NAN-YA LCBF61M23)
Touch Screen	4-wire resistant Touch screen
Charge board	
Battery pack	4S1P,2000 mAH Li-Ion packs thru SM bus
Power Input	Recommend 19 V <sub>DC</sub> POWER jack
Power Switch	Turn on/off the power supply form Battery or DC source
Matrix Keypad module	
Matrix key pad (8x8)	For WinCE.NET model only
Digital Input/Output (Default setting)	Programmed by CPLD as hot key or character key, the key is defined by Advantech, but can be modified by customer in their own defined.
Software utility for setting and configuration	8 x DO indicators by LED 8 x DI dip switch for configuration
AMI-120 solution module	1) Configure Default setting for Matrix or D I/O 2) Define keys of 8x8 Matrix keys
AMI-120 solution module	4-COM module ( AMI-4COM-01) for function expansion

## Block Diagram



**PCM-7220 Evaluation Kit**

## Packing List

<b>AMI solution module</b>	4-COM module (AMI-4COM-01)
<b>SW Support CD</b>	Per models of WinCE.NET or Embedded Linux
<b>License agreement</b>	Windows CE end user License agreement (for WinCE model only)
<b>Cables</b>	USB Client ActiveSync cable JTAG cable (Linux model only) Audio cable 4x RS-232 cable 1x RS-485/232 cable 1x null modem Cable (For Linux model only) Plastic Stylus for Touch Screen input 1x Reset Button

## Software Utility bundle with WinCE solution

System Utility bundled in Advantech WinCE.NET solution pack in PCM-7220 models includes:

- **General information:** memory status and software version information
- **Touch Screen Calibration**
- **Display Control:** backlight on/off, brightness and contrast tuning, resolution setting
- **D I/O:** Digital Input / Out setting and verification
- **Miscellaneous:** other setting for registry, Watch dog, etc
- Matrix D I/O
- Persistent Storage file system: for file folder setting
- Image upgrade utility

## Linux solution bundle package:

The Linux support packages including the following components:

- **Bootloader:** initiate hardware platform and load Linux system kernel
- **Kernel:** system kernel code (like scheduler, I/O control, DMA, Interrupt, etc)
- **Ramdisk:** file system
- **Utility:** gcc (compiler)
- **GUI (Graphic User Interface) SDK:** iCava SDK for implement interface

## Ordering Information

- PCM-7220K-230CE/LX:** Intel PXA 255 400 MHz, 64 MB SDRAM on board, Optional Flash Module (32 MB Flash/ 0 MB SDRAM) with Win CE/Linux solution integrated
- PCM-7220-0K0CE/LX:** PCM-7220 Evaluation Kit system based on PCM-7220K-230CE/LX
- PCM-7220S-030CE/LX:** Intel PXA 255 400 MHz, 64 MB SDRAM on board, W/O Flash Module and Win CE/ Linux solution integrated
- PCM-7220M-020CE/LX:** Intel PXA 255 400 MHz, 32 MB SDRAM on board, W/O Flash Module and Win CE/ Linux solution integrated

## Optional Items

### Advantech's Off-the-Shelf AMI-120 Modules

- USB Hub and IDE modules,** P/N:AMI-USB-IDE-01
- Epson LCD controller module,** P/N: AMI-LCD-E-01
- Intel SA-1111 Companion chip module,** P/N:AMI-SA1111-01