

-- [Advantech's Most Advanced Xscale RISC SBC](#) -- [Embedded Linux Now Runs on RISC SBC](#) -- [Self-serve Payment System with PPC-105](#) --

## Prime News

### [Advantech's Most Advanced Xscale RISC SBC](#)



Based on the Intel Xscale PXA-250/5 Application processor, the PCM-7210 series SBC and its Xscale platform evaluation kit represent Advantech's most advanced Xscale RISC SBC to date. With the low power, high performance, 32-bit Intel Xscale core-based CPU (200, 300 and 400 MHz), the Advantech PCM-7210 RISC SBC system includes hardware, plus preinstalled

embedded OS porting either Windows CE.NET or Embedded Linux. ([read more...](#))

### [Embedded Linux Now Runs on RISC SBC](#)



This Embedded solution will bring the customer another open standard Embedded OS environment to satisfy application needs. With all the benefits of flexibility, open standard, ultra small footprint, real-time operation, and low royalties, the Linux solution has been playing an important role in embedded applications, especially in the post-PC era. ([more....](#))

## Application Story

### [Self-serve Payment System Integrates PPC-105](#)



Entrac chose the Advantech PPC-105 for its super-reliable, compact-sized platform, 10" TFT integrated LCD touchscreen, and fast time-to-market preinstalled Microsoft Windows CE 3.0 OS. ([more](#))

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December 19, 2002 Vol.81

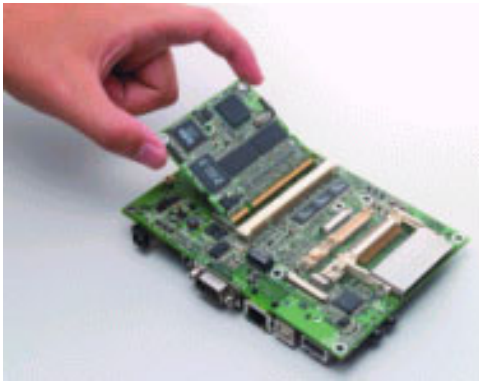
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## Prime News

### Advantech announces the most advanced Intel Xscale RISC SBC platform PCM-7210 SBC Series!



Advantech is proud to announce its most advanced RISC embedded computing SBC, based on the Intel Xscale PXA-250/5 Application processor – the PCM-7210 series SBC and its Xscale platform evaluation kit. With the low power, high performance, 32-bit Intel Xscale core-based CPU (200, 300 and 400 MHz), the Advantech PCM-7210 RISC SBC system includes hardware, plus preinstalled embedded OS porting either Windows CE.NET or Embedded Linux. This is a complete

application-ready-platform SBC targeting low power consumption, high computing power embedded applications such as mobile platforms, telematics, real-time systems, security controls, medical devices, POS / kiosks, industrial controllers, and thin-client terminals.

For more information about Intel Xscale, please visit <http://intel.com/design/pca/prodbref/298620.htm>

### Complete, all-in-one, application-ready PCM-7210 SBC

## Other News

### Prime News

- [Linux on PCM-7130](#)
- [Xscale RISC SBC Platform](#)

### Application Story

- [Payment System Has PPC-105](#)

### RECENT ISSUES

- [Dec 6, 2002](#)
- [Nov 14, 2002](#)
- [Oct 28, 2002](#)
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- [Sep 26, 2002](#)

**1. Advantech Xscale SOM Embedded:** The PCM-7210 has the Advantech RISC Xscale SOM embedded as system kernel. This offers customers a flexible, scalable platform for an optimized solution in terms of functionality and performance.



**2. Ported with either Windows CE.NET or and Embedded Linux solution:** the Xscale base platform has multi OS solution options to meet different application requirements. The complete Board Support Packages, either Win CE.NET 4.1 version or Embedded Linux 2.4. version, are designed to assist customers in customizing their solutions with complete freedom.

**3. Complete, Scalable, Flexible RISC SBC:** The PCM-7210 platform is designed with a complete I/O interface and high performance display solution, but it also reserves flexible scalability to meet versatile needs. The CPU, Flash, SRAM and other functional controller can be customized based on application and cost requirements. The 120 pin expansion connector also provide an system interface bus to expand the functionality.

**4. Ready-to-Run Integration Evaluation kit available:** The PCM-7210 platform also comes with an integration system kit. The Advantech evaluation kits not only accelerate developers' application development cycles, but also help them evaluate the feasibility of their projects and reduce the time to trial runs.

### Availability:

1. The WinCE.NET version is available now
2. The Embedded Linux version is scheduled for 1/15/03.

### Ordering Information

PCM-7210-3200CE	Xscale-400MHz, 32/64 MB Flash /SDRAM, CE.NET 4.1 version
PCM-7210-2100LX	Xscale-20MHz, 16/32MB Flash /SDRAM, Linux 2.4.18 version
PCM-7210-0k0CE	Xscale / CE.NET 4.1 Evaluation kit with PCM-7210-3200 S SBC
PCM-7210-0k0LX	Xscale / Linux 2.4.18 kernel Evaluation kit with PCM-7210-3200 SBC

For more information about Advantech's PCM-7210, please contact your nearest Advantech representative, check our website at

<http://www.advantech.com.tw/epc> or send an e-mail to  
[PM.RISC@Advantech.com.tw](mailto:PM.RISC@Advantech.com.tw)

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December 19, 2002 Vol.81

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## Prime News

### Embedded Linux Solution Now Runs on RISC SBC PCM-7130!



## Linux Kernel 2.4.0

In addition to Advantech's Windows CE.NET solution, Advantech's RISC Embedded Solutions now include the Embedded Linux solution; the PCM-7130 SBC, the first RISC embedded model, has been released for mass production. This Embedded solution will bring the customer another open standard Embedded OS environment to satisfy application needs. With all the benefits of flexibility, open standard, ultra small footprint, real-time operation, and low royalties, the Linux solution has been playing an important role in embedded applications, especially in the post-PC era.

The Embedded Linux Solution pre-installed in the PCM-7130 RISC SBC is a ready-to-run solution with complete Board Support Package (BSP), including boot loader, source code, compiler, RAM DISK, and a unique I-CAVA GUI programming tool that will offer the application solution developer complete and maximum freedom to create add-on value. In addition, the platform PCM-7130 evaluation kit is also available for application development and project feasibility studies.



#### BSP for Embedded Linux Solution in the PCM-7130 RISC SBC:

1. 2.14.18 embedded Linux kernel
2. RAM Disk
3. Compiler
4. I-CAVA GUI development tool
5. Kernel and on board driver Source code
6. Boot loader
7. Power management

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### RECENT ISSUES

- [Dec 6, 2002](#)
- [Nov 14, 2002](#)
- [Oct 28, 2002](#)
- [Oct 11, 2002](#)
- [Sep 26, 2002](#)

## PCM-7130 SBC Brief Specificaitons:

CPU: Intel® StrongARM\* SA-1110, 206 MHz  
 Flash memory\*: up to 32 MB flash memory on board  
 Memory: 64 MB SDRAM on board  
 Watchdog timer: Dallas DS1670  
 Audio: AC'97 stereo audio interface  
 Dimensions: 145 x 102 mm (5.71" x 4")  
 Gross weight: 0.2 kg (0.4 lb.)  
 SSD: 1 type-II CompactFlash™ card slot  
 DIO: 8 digital inputs, 8 digital outputs  
 Ethernet: 1 RJ-45 10Base-T port  
 GPIO: 8  
 IrDA: 1 IrDA interface  
 PCMCIA: 1 type-II PCMCIA slot  
 PS/2 port: 1 PS/2 port for keyboard/mouse  
 Serial ports: 2 full RS-232 ports and 1 RS-485 port with automatic data flow control  
 USB ports: 1 USB host and 1 USB client ports  
 Display Chipset: Epson S1D13806 VGA controller  
 LCD interface: 18-bit TFT active color LCD/16 bit DSTN passive color LCD; 20-pin header for 18-bit LVDS interface  
 TV-out: supports both NTSC and PAL output  
 Touchscreen: supports 4-wire resistive touchscreen via SPI (Serial Peripheral Interface)  
 FCC Class A certified  
 CE certified

## Features:

- Ready to Run, All-in-One 3.5" Biscuit SBC
- Intel StrongARM 206 MHz SVGA LCD /CRT interface, T/S screen interface
- Scalable Intel Strata Flash, SDRAM
- Compact Flash / PCMCIA
- RS232, RS485, USB Host/ Client, PS2, IrDA, Audio

## Ordering Information

PCM-7130-1200CE	3.5" StrongARM SBC with 32 MB flash, 64 MB SDRAM and Windows CE.NET English on board
PCM-7130-1100LX	3.5" StrongARM SBC with 16 MB flash, 32 MB SDRAM and Linux English on board
PCM-7130-0K0CE	PCM-7130 Evaluation Kit with 10.4" TFT LCD , I/O board, charger board and battery pack with PCM-7130-1200CE as kernel
PCM-7130-0K0LX	PCM-7130 Evaluation Kit, the same as PCM-7130-0K0CE, but with PCM-7130-1100LX as kernel

Check out Advantech RISC Embedded Solution at <http://www.advantech.com.tw/risc>

OEM and integration service inquires enthusiastically accepted! For sales inquiries email us at [ecgnews@advantech.com.tw](mailto:ecgnews@advantech.com.tw). Contact Advantech today!

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December 19, 2002 Vol.81

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## Application Story

# World Leader in Access and Transaction Control for Self-serve Business Equipment Integrates Advantech PPC-105 Panel Computer into Self Serve Payment System

Entrac Technologies Inc., the world leader in Self Serve Payment Systems, is using an Advantech Panel PC computing platform in one of their newest 24 x 7 self-serve payment kiosks. Now being used in major retail locations throughout the US and other countries, Entrac is capitalizing on the continued growth of the self-serve transaction market that is being driven by retailers' demand for new ways to more effectively serve customers. Advantech's industrial-proven panel computing platforms and services meet this market's demanding requirements. The Entrac ExpressPay kiosk can be found in many Kinkos 24 Hour copy centers. Kinkos uses the ExpressPay kiosks to provide self serve access control and payment systems for photocopiers, PCs and Macintosh computers. The system allows complete tracking of copies, time, applications, and prints utilizing credit cards, in-store charge cards, and in-store chip cards and coupons. Entrac provides monitoring of system status and troubleshooting that reduces onsite technical support, increasing overall system reliability and improving the customers' experience.



## Why Advantech:

### Reliability

Entrac chose the Advantech PPC-105 for its super-reliable, compact-sized platform, 10" TFT integrated LCD touchscreen, and fast time-to-market preinstalled Microsoft Windows CE 3.0 OS. Touchscreen integration was a major issue for Entrac. The ready to run PPC-105 offered obvious benefits when compared to a comparable kiosk assembled with separate SBC, touchscreen and peripherals. Touchscreen integration, OS installation and image porting and system testing literally add months to project development.

### Expedited Development

The PPC-105 offers a fully tested platform with all the needed features, ready to run.

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### RECENT ISSUES

- [Dec 6, 2002](#)
- [Nov 14, 2002](#)
- [Oct 28, 2002](#)
- [Oct 11, 2002](#)
- [Sep 26, 2002](#)



The Windows CE 3.0 OS preinstalled on the PPC-105 (on CompactFlash) gives the kiosks great reliability. Since the Windows CE OS/image is very hardware specific, the PPC-105 comes fully tested, configured and ready for the customer to load their Windows CE application. Integrating the NS Geode based fanless PPC-105 at the heart of Entrac's state of the art payment kiosks, expedited project development, eliminated system integration concerns and gave a tested software/hardware platform able to handle the rigors of 24/7/365 use.

## For More Information

Check out other Advantech solutions at <http://www.advantech.com>

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