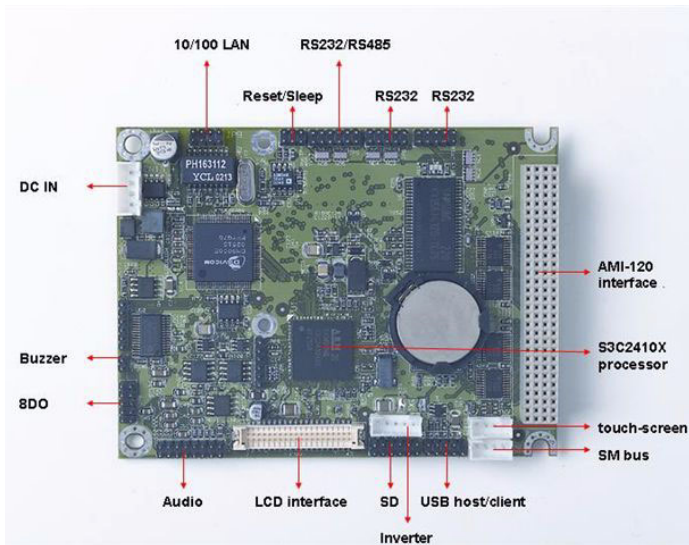


PCM-7320 Series

RISC 2.5" Ready-to-Run SBC with Samsung S3C2410 processor, Windows® CE .NET/Linux



Features

- Platform booting approach through the onboard flash.
- Extended Temperature (Advantech Phoenix Std.) is available as optional model.
- Full power management for Ultra low power performance (Normal <2.5 W/ Suspend<200 mW).
- AMI-120 interface for function expansion in a second.
- SM bus interface for battery powered application
- Evaluation kit integrating 5.7" STN QVGA panel, touchscreen, battery pack, 8X8 Matrix keypad is available for project feasibility evaluation

Introduction

The PCM-7320 series platform is an application ready board level solution integrating Samsung ARM9 S3C2410 SoC (System on Chip) base at 78 x 104mm (3" x 4") compact form factor. It was designed to provide customers a high performance, but cost effective ARM9 based board solution. Its compact, ready-to-run, system function ready, and flexibility in expansion meets all versatile embedded application needs.

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

The PCM-7320 offers a fast time to market and flexible reference platform that is fully customizable. All functionality has been completely certified, and leveraged to customize different hardware specifications and system optimization based on the customer's request.

Samsung ARM9 base solution offers high performance/price ratio

The Samsung ARM9 S3C2410 SoC is a complete 32-bit, 200 MHz System On Chip Solution, which offers rich I/O interfaces at high performance. It also reserves flexible functionality configuration that offers an optimal high-performance/price combination.

Through the unique open expansion interface of the AMI-120 (ARM Module Interface), the full line of AMI solution modules for the PCM-7320 act like PC/104 modules to x86 platforms, all easily enhance platform functionality. The AMI module interface is also open for customized solution modules as well.

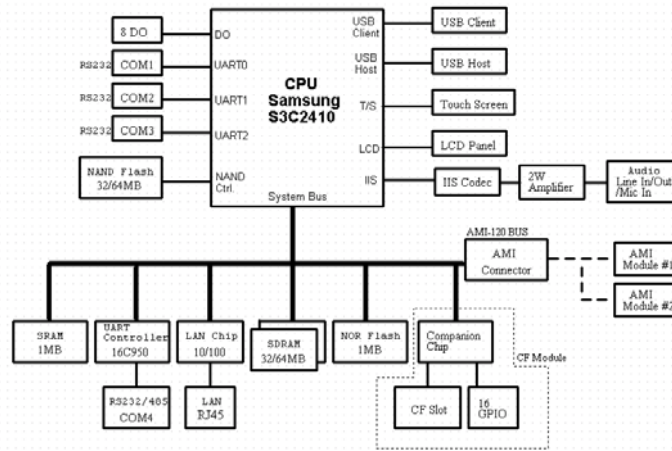
Applications

- Industrial mobile device
- Distribution data management
- Touch base Human Machine Interface
- Telemetric / AVL / DBA
- Medical and security controller

Specifications

	PCM-7320 Series	PCM-7320S
CPU- Samsung ARM9 S3C2410	200 MHz	200 MHz
System Memory	16~64 MB SDRAM onboard	64MB SDRAM onboard
Boot Flash ROM	1 MB AMD NOR flash for bootloader	v
Flash Memory	1) 16/32/64/128 MB flash on board 2) 16 MB~1GB on CF card	64 MB flash on board
WatchDog	Samsung ARM9 S3C2410 Internal	V
RTC	Samsung ARM9 S3C2410 Internal	V
Backup battery for RTC and SRAM	Lithium 3V 220 mAh	V
Serial Port	COM1~COM4 Full 9-pin TTL/transceiver level RS232 RS-485 AFC or 2-wire RS232 at TTL level	Full 9-pin transceiver level RS-232 RS-485 AFC
Ethernet LAN	10/100 BASE-T	V
CF /PCMCIA Slot	1x type II CF slot	1x Type II CF slot
USB Host	USB 1.1	V
USB Client	1 x USB B type port	V
GPIO or matrix keys	Alternative for 16 GPIO or 8x8 matrix keys	V
LCD (TFT/STN)	S3C2410 CPU built-in LCD interface (QVGA 16bpp suggested)	V
T/S Interface	4-Wire resistant	V
Audio through I2S interface	Mic-in, Line in/out, Spk out	V

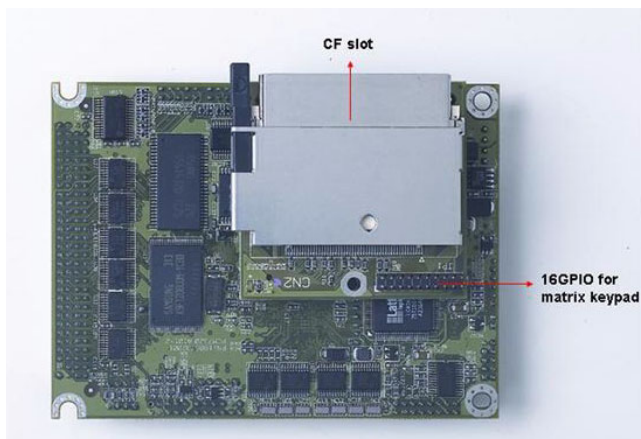
Block Diagram



PCM-7320 Series

Specifications (cont.)

	PCM-7320 Series	PCM-7320S
SM Bus Interface	Through system bus (100 MHz)	V
Expansion Slot	V	V
AMI-120		
Software Support	WinCE.NET 4.1	V
Package	Linux2.4.19 kernel	V
Power Supply Interface	5Vdc@1.2A typical in 4-pin header	V
Working Temperature (Extended Temperature model)	0~60° C (32~140° F)(-20/-40~80/90° C is in option)	V
Operating Humidity	0%~90% Relative Humidity	V
Certification	FCC/ CE EMI Class A	V
Form factor / Weight	78x104mm(3"x4") /0.08kg (0.18lb)	V



Packing List

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

Ordering Information

- PCM-7320S-330CE:** Samsung ARM9 200MHZ, 64MB SDRAM, 64MB flash onboard, with CF slot and windows® CE .Net solution integrated
- PCM-7320S-330LX:** Samsung ARM9 200MHZ, 64MB SDRAM, 64MB flash on board, with CF slot and Linux solution integrated
- PCM-7320C-330CE:** Samsung ARM9 200MHZ, 64MB SDRAM, 64MB flash on board, with windows® CE .Net solution integrated
- PCM-7320C-330LX:** Samsung ARM9 200MHZ, 64MB SDRAM, 64MB flash on board, with Linux solution integrated
- PCM-7320-0K0CE:** PCM-7320 Evaluation kit system based on PCM-7320S-330CE
- PCM-7320-0K0LX:** PCM-7320 Evaluation kit system based on PCM-7320S-330LX
- PCM-7320-CK001(optional):** Cables kit for PCM- 7320 series of Windows® CE .NET
- PCM-7320-CK002(optional):** Cables kit for PCM- 7320 series of Linux

Remarks:

- The size of flash and system memory can be configured per customers' needs on project basis through Advantech customization service.
- Different system specification based on PCM-7320 platform can be customized in project basis Advantech customization service.
- Full AMI-120 solution modules are available to fit with PCM-7320 series through Advantech customization service. However, the combination of system functionality may need to be optimized for best performance.

AMI-120 Expansion Solution

Advantech Off-the-Shelf AMI-120 Modules

- 4-COM AMI-120 module:** 4 full function 9-pin TTL/transceiver level RS-232 interface
- USB Hub and modules:** 4x USB Host port (v1.1, 1.5 MB/S) with 44-pin IDE connector module.
- Epson LCD controller module:** Epson#13806 LCD controller with module with LCD/LVDS/CRT/TV-out interfaces.