

Embest Mini2410-III Processor Card

Features

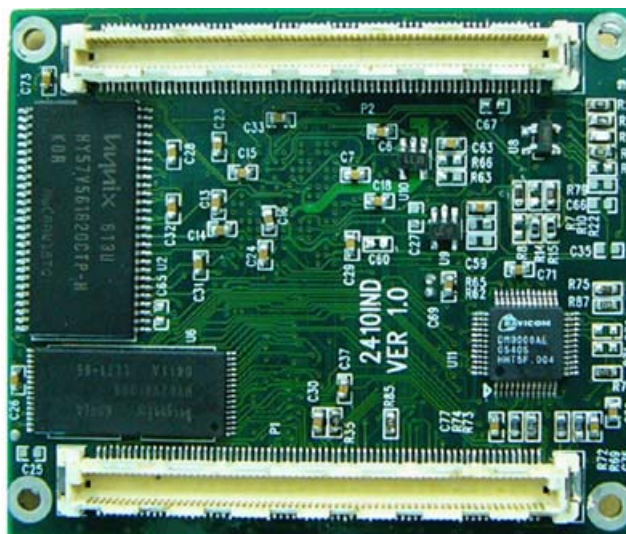
- Dimensions: 50mm x 60mm
- Temperature: 0~+70°C
- Samsung S3C2410A microcontroller based on an ARM920T CPU core with MMU
- 64Mbyte SDRAM (32Mbyte optional)
- 64Mbyte Nand flash (32Mbyte optional)
- 2Mbyte Nor Flash
- 128Kbyte SRAM
- On-chip MPLL generates the 12MHz OSC up to operate MCU at up to 203MHz
- 32768Hz RTC (Battery backed)
- 1.0mm space 8-pin JTAG interface
- LCD,AD,SPI,Uart,USB,SD/MMC Card,



Ethernet (DM9000AE), IIS, I2C, RTC, PWM, GPIO, Local bus and all I/O CPU lines can be extended via two 4mm height 0.6mm space 140-pin board-to-board connectors.

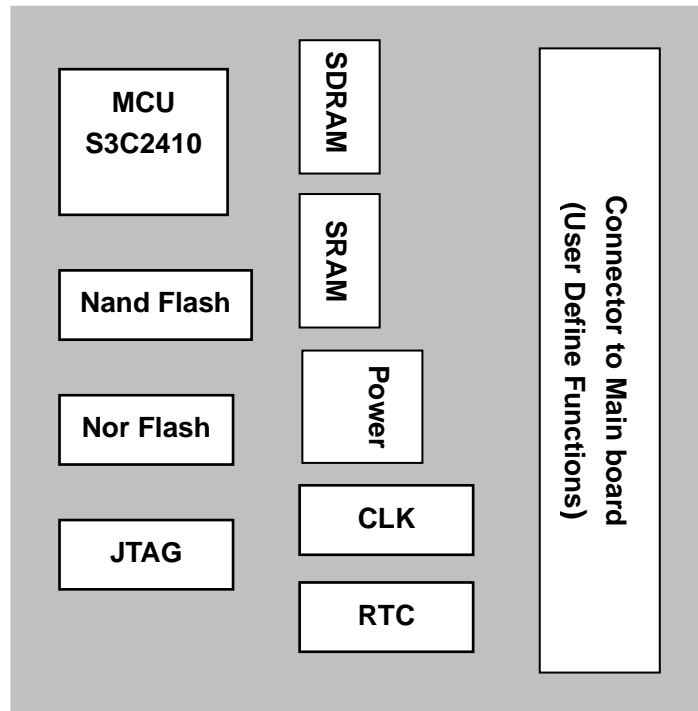
General Description

The Embest Mini2410-III processor card measuring only 50mm by 60mm is an ideal embedded microprocessor solution. The tiny board is based on the Samsung S3C2410A ARM920T processor. The processor card takes full features of S3C2410A and the connection between the processor card and your carrier board is through two pairs of 4mm height, 0.6mm space and 140-pin Board-to-Board connectors. A complete set of peripherals including LCD, AD, SPI, Uart, USB, SD/MMC Card, Ethernet (DM9000AE), IIS, I2C, RTC, PWM, GPIO, Local bus and all I/O CPU lines can be extended via two 4mm height 0.6mm space 140-pin board-to-board connectors. The fully expansion can be used adapted to customer requirements.

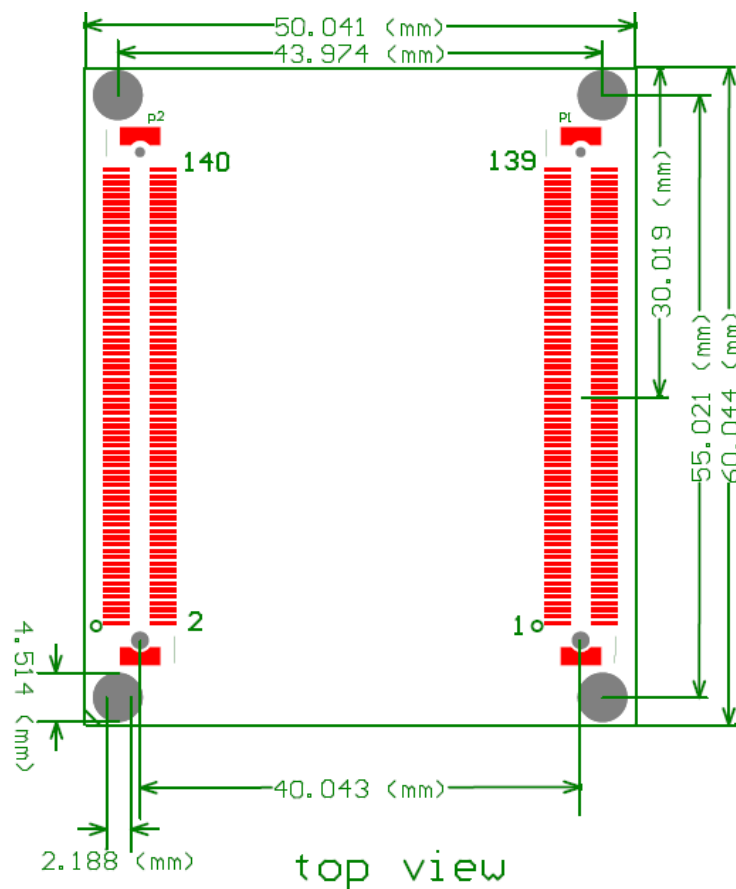


Integration of the Embest Mini2410-III processor card to customer special design is fully supported by Embest technologies. The processor card has no software on itself originally. Customers can develop the software according to their own designs. Embest also designed one PC/104 carrier board for this tiny CPU board called EM104V1, the whole board kit is provided with Linux2.6.14 BSP, customers can use it already if cater to your needs. Embest also offers professional custom software and hardware development and you can leverage our experience to increase your own productivity. This processor card provides users with a flexible development environment based on S3C2410A and a shortened development timeframe, which would be a best choice for engineers.

Function Diagram



Dimension of Mini2410-III



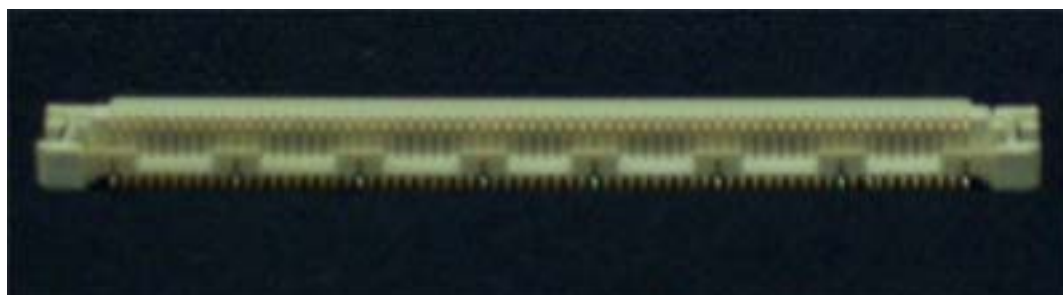
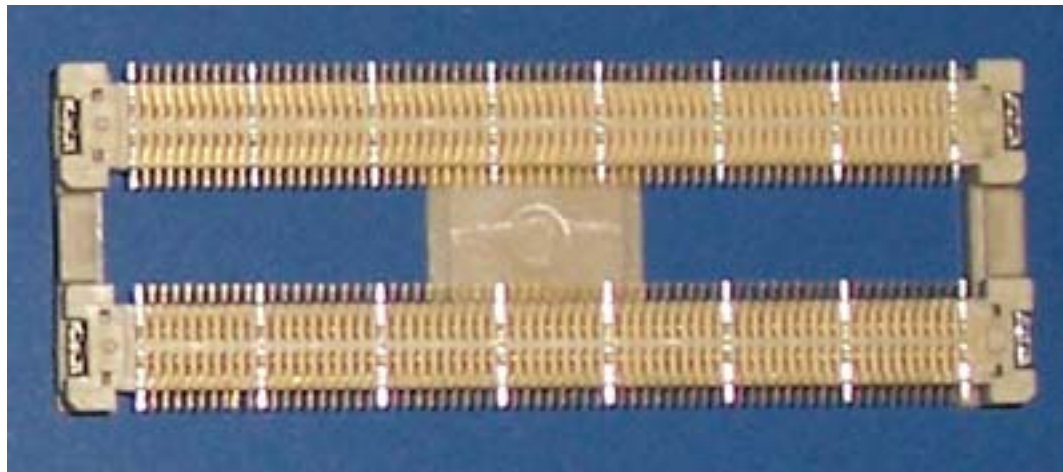
JTAG debug interface pin explanation

Embest Mini2410-III processor card uses an 8-pin JTAG debug interface to connect to your development system through debug cable or emulator for debugging. Detailed pin explanation is as following:

Pin	Name	Function explanation
1	VDD33	Power 3.3V
2	GND	GND
3	RESET	Reset the target system
4	nTRST	Reset the TAP controller at start
5	TCK	Clock input for the JTAG logic
6	TDI	Serial port input for testing instructions and data
7	TDO	Serial port output for testing instructions and data
8	TMS	Control the sequence of the TAP controller's states

140-pin Board-to-Board Connector

Embest Mini2410-III processor card is connected to carrier board via two pairs of 4mm height, 0.6mm space and 140-pin board-to-board connectors. Below shows the male connector, which can be used on your carrier board for connecting to the Mini2410-III. It is convenient for your next design according to your own requirement.



Signals routed to P1 and P2 on Mini2410-III

Please see [Schematic of Mini2410-III](#).

(User can download from Embest website: <http://www.embedinfo.com/english/product/mini2410III.asp>)

Order Information

Order No.	MC2410T1
Item	Embest Mini2410-III Processor Card
Option hardware	Two 140-pin board to board male connectors to be used on your carrier board for connecting Embest Mini2410-III processor card
Contact	E-mail: market@embedinfo.com Tel: +86-755-25636285/5656 Fax: +86-755-25616057



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