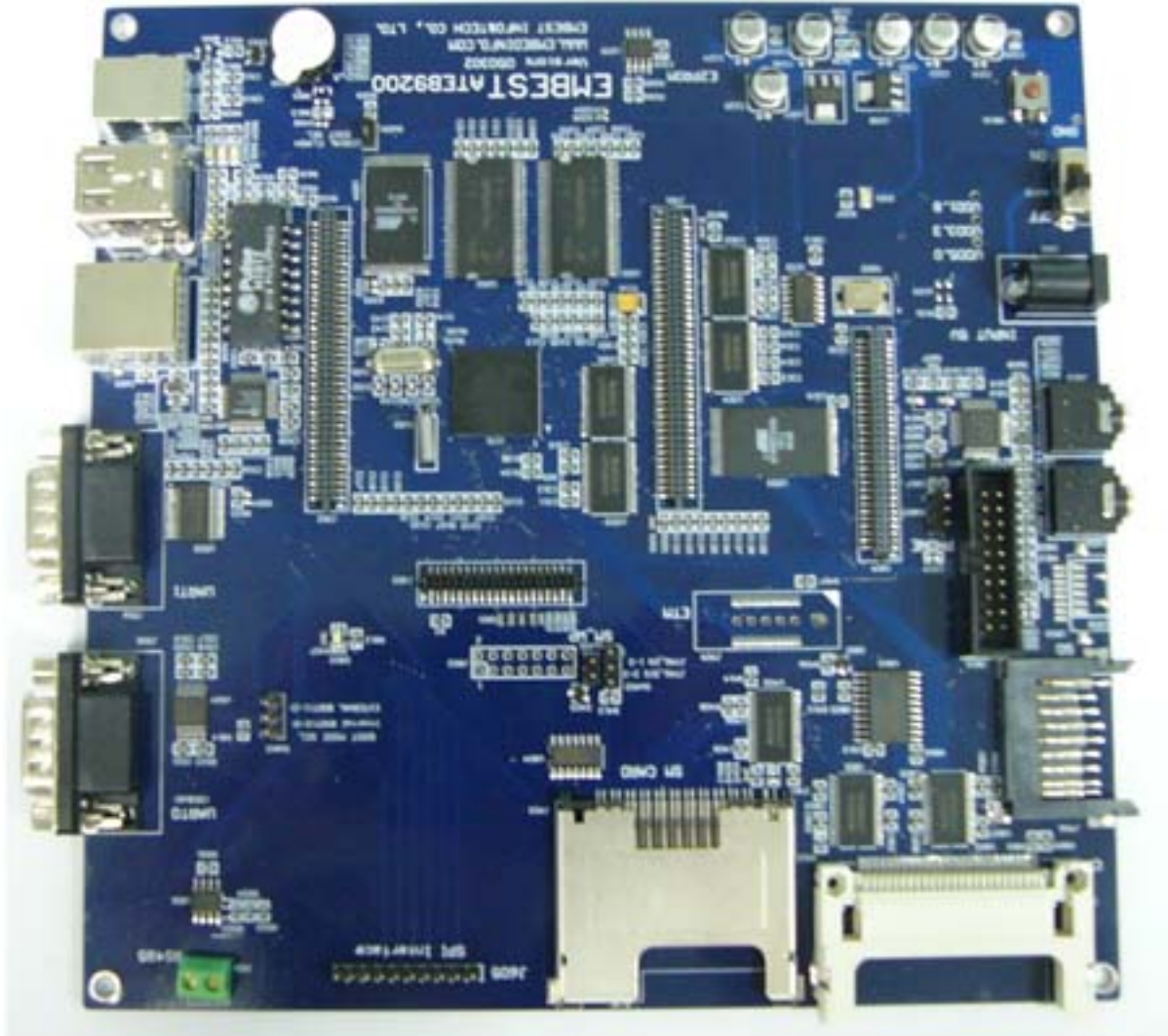


## Embest ATEB9200 Evaluation Board

- Evaluation Platform Based on Atmel's 16/32-bit AT91RM9200 ARM920T Microcontroller
- USB Host/Device, Ethernet, IrDA, SD/MMC, CF, SM, JTAG, RS232, RS485, ...
- A Complete Linux Development System



Embest ATEB9200 Evaluation Board

Atmel's AT91RM9200 SoC (System-on-chip) is built around the 200 MIPS ARM920T ARM Thumb processor with integrated 16K-byte instruction and 16K-byte data cache memories. It incorporates a rich set of system and application peripherals and standard interfaces in order to provide a single-chip solution for a wide range of applications that require maximum functionality at minimum power consumption at lowest cost. It features an ETM (Embedded Trace Macrocell) and an enhanced ARM architecture 4v MMU and supports various memories including SDRAM, Static Memory, Burst Flash, CompactFlash, SmartMedia and NAND Flash integrated with a wide range of standard interfaces containing serial interfaces, Ethernet MAC interface, USB2.0 Full Speed Host and Device ports, I2S, I2C, SPI, etc. To complete the offer this SoC benefits from many debug features including JTAG-ICE, a dedicate UART debug channel (DBGU) and an embedded run-time trace.

Embest ATEB9200™ Evaluation Board is based on Atmel's AT91RM9200 ARM9 microcontroller running at 180MHz. The board itself is provided with plenty of example programs. It is a complete Linux development environment that includes all the necessary hardware and software to allow embedded engineers to achieve fast result and reap the benefit of the open source software. Due to the extensive on-chip functions, CPU-intensive applications requiring low power consumption can be realized at low cost. Typical applications are POS (Point-of sale), medical system and industrial automation requiring Ethernet and USB. Users can fully take use of it for evaluation, development and applications.

## Hardware Specification

- Dimensions: 180x180mm
- Working temperature: -45~85 Celsius
- Processor: AT91RM9200 based on 16/32-bit ARM920T core microcontrollers
- Power input: DC5.0V
- 2M parallel flash memory
- 32M SDRAM (support 64M for option)
- 8M data flash
- 2 USB Host Port and 1 USB Device Port
- 2 serial ports with 1 simple interface and 1 all connected interface which could connect to RS232 MODEM
- 1 IrDA interface
- 1 RS485 interface
- 1 SPI interface could connect CAN module
- 1 EEPROM connected to the Two-wire Interface (TWI)
- 1 10/100M Ethernet interface module
- AC97 module
- SD/MMC interface
- CF interface
- SM interface
- I/O ports all extended via sockets
- Embedded Trace Microcell (ETM) interface
- 20pin standard JTAG interface

## Layout and Function Block Diagram

**Diagram (1):** Embest ATEB9200 Evaluation Board Layout

**Diagram (2):** Embest ATEB9200 Evaluation Board Functional Block Diagram

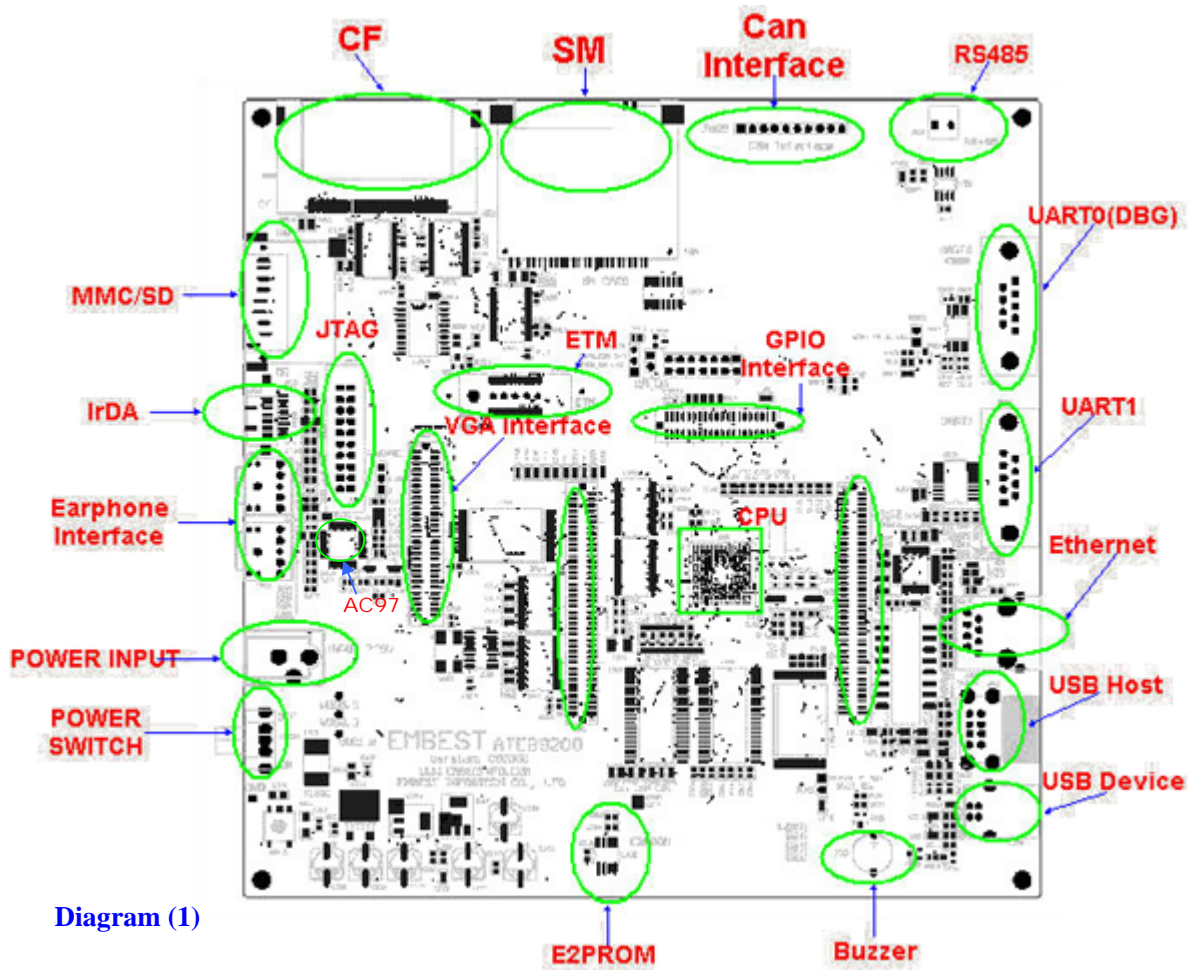


Diagram (1)

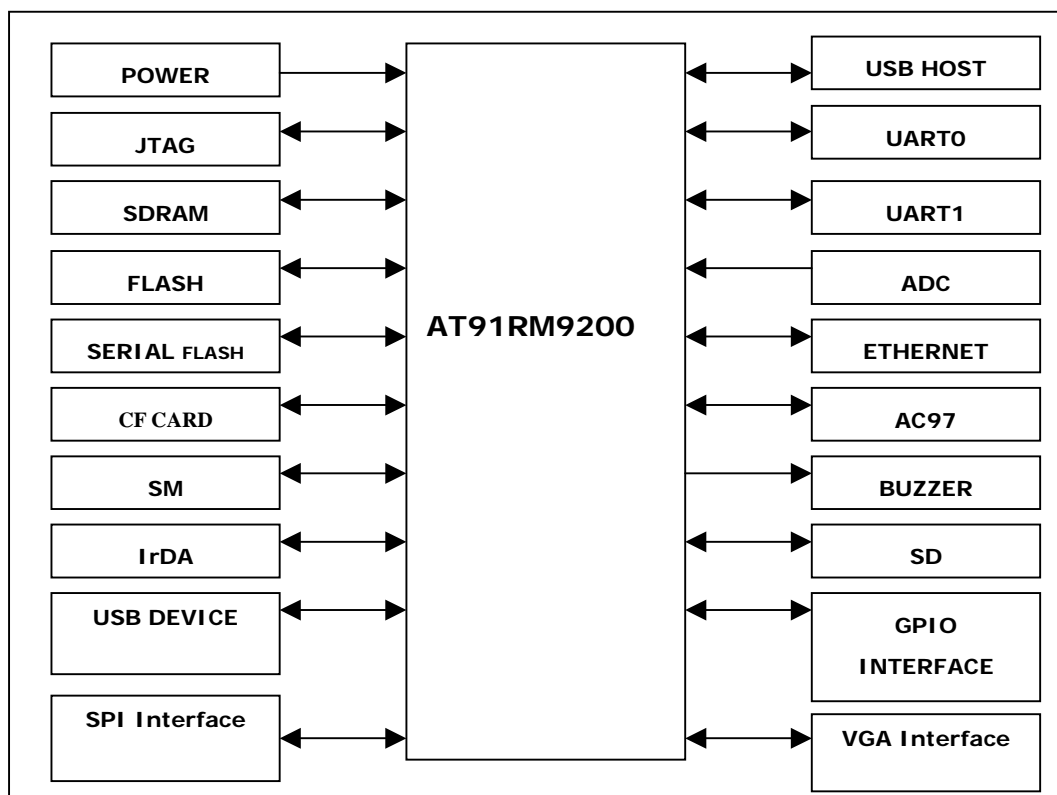


Diagram (2)

## Software Examples

Embest Provides plenty of software examples for this ATEB9200 evaluation board, all in source code:

- basic\_test (basic demonstration program)
- BasicIdle\_test (processor run mode demonstration program)
- EMAC\_test (Ethernet MAC demonstration program)
- MCIDevice\_test (EBI (External Bus Interface) demonstration program )
- MMU\_test (Memory Management Units demonstration program)
- public\_test (public source code file)
- ROM\_BootLoader\_test (ROM Bootloader demonstration program)
- ROM\_Services\_test
- UHP\_test (USB demonstration program)
- USARTPDC\_test (serial interfaces demonstration program)
- SPI\_test (SPI demonstration program)
- TWIEeprom\_test (TWI demonstration program)

## Order Information

Embest ATEB9200 Evaluation Board is a low-cost evaluation board with many functionalities and low power consumption and contains plenty of example software.

Order No.	L1
Item	Embest ATEB9200 Evaluation Board
CD-ROM	<ul style="list-style-type: none"> <li>● software examples</li> <li>● Embest products references</li> <li>● Documents (user manual, circuit schematic drawing, Datasheet, footprint)</li> <li>● Related development tools</li> <li>● ATMEL AT91RM9200 original data</li> <li>● ATEB9200 EVB Linux development related data</li> <li>● ATEB9200 EVB uboot development related data</li> </ul>
Development Tools	<ul style="list-style-type: none"> <li>● Linux cross-compiling tool</li> <li>● Tftp server tool</li> <li>● Configuration files for Embest Emulator flash program</li> </ul>
Others	<ul style="list-style-type: none"> <li>● 1 Cross line serial cable</li> <li>● 1 Cross Ethernet cable</li> <li>● 1 USB cable</li> <li>● 5V/1A power adepter</li> </ul>
Option Tools	<p><a href="#">Embest IDE for ARM</a> Development Tools Suite I or II, III, include:</p> <ul style="list-style-type: none"> <li>● IDE, editor, GNU ARM Compiler and Linker, debugger, full registered version</li> <li>● <a href="#">Embest PowerICE</a> or <a href="#">Embest Emulator</a>, <a href="#">Embest UnetICE</a></li> <li>● <a href="#">Embest Flash Programmer</a></li> </ul>



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