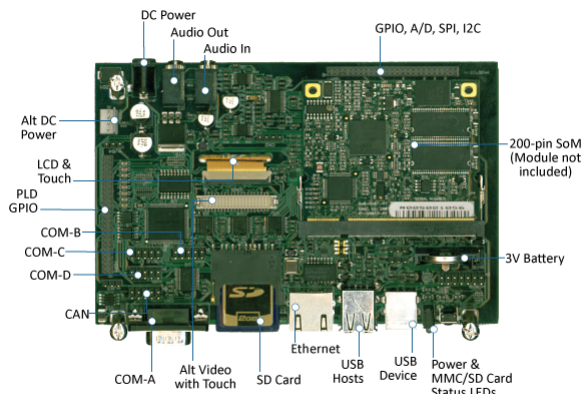
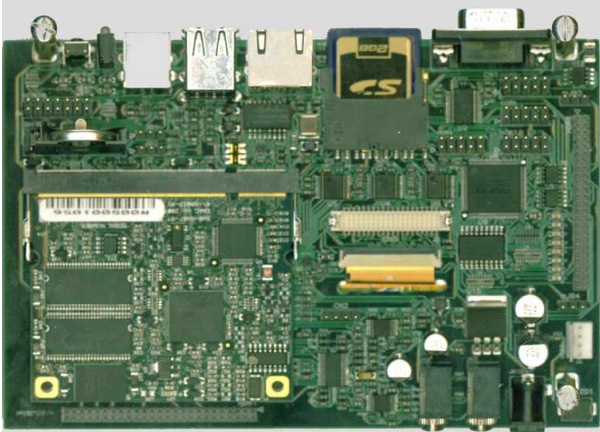


Source URL: <http://emacinc.com/content/som-200es>

SoM-200ES



*System on Module (SoM) - Module not included

- Small, Half-EBX mounting hole form factor (4.37" x 6.00")
- 1x 10/100 BaseT Ethernet with onboard Magnetics and RJ45
- 4x Serial Ports (3x serial RS232 ports & 1x RS232/485 port)
- 24x General Purpose digital (PLD) I/O lines (PLD Option)
 - 8 Digital Input lines
 - 8 Digital Output lines with 20 ma. drive
 - 8 High Drive Digital Output lines with status LEDs (500 ma. sink)
- 32x SoM Specific lines
- Resistive Touch Screen Interface
- 4.3" Graphic LCD interface with WQVGA TFT LCD with Touch
- Battery for nonvolatile RAM and Real Time Clock
- MMC/SD Flash Card Socket
- Dual USB Host Jack
- USB Device Jack
- 1x CAN 2.0 Port
- System Reset button
- Power and Flash Drive Status LEDs

ON-BOARD OPTIONS FOR STANDARD CARRIER

- I2S Audio Stereo CODEC with line-in & line-out

BARE-BONES FEATURES

- Small, Half-EBX mounting hole form factor (4.37" x 6.00")
- 10/100 BaseT Ethernet with onboard Magnetics and RJ45 Jack
- Battery for nonvolatile RAM and Real Time Clock
- LCD interface and Touchscreen connectors
- Dual USB Host Jack
- USB Device Jack
- MMC/SD Flash Card Socket
- 2x Serial RS232 Ports
- System Reset button

The SoM-200ES is versatile SoM Carrier/Socket board ideal for evaluation and early development work. This Carrier is designed to work with all EMAC 200-pin SODIMM type SoMs. Note: The SoM-200 is specifically designed for SoMs with Video & USB capability.

The SoM-200ES provides access to all the SoM's I/O through on-board connectors as well as a number of additional I/O expansion blocks such as Video, Touchscreen, Digital I/O, Audio CODEC, and MMC/SD flash disk. Full schematics of the SoM-200ES are provided giving the user a solid base with which to design their own SoM Carrier. Schematics of the SoM-200ES are included on the CD provided with the Carrier board.

Although a good deal of customers will want a Carrier that is unique and is designed specifically for their application, the SoM-200ES when coupled with a SoM-3517 SODIMM SoM makes for a powerful User Interface Control System with USB and Ethernet capabilities. This allows the user to gather data and respond with Control commands via the Internet. An Enclosure and Power Supply are available options for the SoM-200ES.

When a unique custom board is required, the amount of design work required is greatly minimized by the SoM approach. The custom Carrier designer does not have to worry about the processor, memory, and standard I/O functions and can concentrate on the I/O, connectors and dimensional aspects required for the application.

In situations where a custom Carrier is required but the customer does not have the capability to design such a board in-house, EMAC's Custom to Order Services (COS) can be utilized. Using COS the customer can select from a library of standard I/O blocks. These blocks can be put together quickly into a form-factor of the customer's choosing, providing prototypes in as little as 30 days.

Specifications

SOM Type:

SODIMM Carrier Boards

Processor

Real Time Clock:

Memory

Primary Flash:

MMC/SD Flash Slot

Secondary Flash:

1x SD Flash Card Socket

Primary I/O

GPIO:

24x GPIO Lines

32 SOM Specific I/O Lines

Video Out:

1x 4-wire Resistive Touch Screen Interface

Audio:

1x I2S Audio Line In/Out Port

Ethernet:

1x 10/100 BaseT Ethernet with onboard Magnetics and RJ45

USB:

2x USB 2.0 Host Ports

1x USB 2.0 Device Port

Serial Ports:

4x Serial Ports (3x RS232 & 1x RS232/485)

Watchdog:

Primary I/O Misc.:

32x SoM Specific I/O Lines

- Lines as provided by 200pin SoM module

24x General Purpose Digital (PLD) I/O Lines (PLD Option)

- 8x Digital Input Lines
- 8x Digital Output Lines with 20 ma. drive
- 8x High Drive Digital Output Lines with Status LEDs (500 ma. sink)

Secondary I/O

CAN:

1x CAN 2.0B Port

LPT Port:

Keypad:

PS/2:

Touch:

Resistive Touch Screen Interface

Secondary I/O Misc.:

Graphic LCD interface with WQVGA TFT LCD with Touch

Analog on

A/D:

D/A:

Dimensions

Dimensions:

4.37 × 6 in

Power Requirements

Voltage:

5 V

Typical Current:

2 A

Typical Voltage:

5 V

Environmental

Low Operating Temperature:

0 C

High Operating Temperature:

60 C

Upper Operating Humidity:

90%

Pricing

SoM-200ES-007

Bare-Bones Carrier Board, with CAN, without PLD & LCD

\$145.00

Base Product:

SoM-200ES

SoM-200ES-000

Standard Carrier Board with CAN, PLD & 4.3" LCD

\$245.00

Base Product:

SoM-200ES

SoM-200ES-001

Deluxe Carrier Board with Audio, CAN, PLD & 4.3" LCD

\$295.00

Base Product:

SoM-200ES

Non-Stock NCNR:

0

Carrier Boards:**Title: SoM-9G45M-110**

w/ AT91SAM9G45 CPU, 512 MB FLASH 128 MB RAM

\$190.00

Base Product:

SoM-9G45M

Title: SoM-9M10M-130

w/ AT91SAM9M10 CPU, 1 GB FLASH 256 MB RAM

\$250.00

Base Product:

SoM-9M10M

Title: SoM-3517M-130

TI ARM Cortex-A8 CPU, 2GB eMMC FLASH, 256MB RAM (0 ~ +70C)

\$198.00

Base Product:

SoM-3517M

Title: SoM-3517M-141

TI ARM Cortex-A8 CPU, 4GB eMMC FLASH, 512MB RAM

\$0.00

Base Product:

SoM-3517M

Title: SoM-3517M-339

TI ARM A8 CPU, 512MB NAND FLASH, 256MB RAM, INDUSTRIAL TEMP (-40C ~ +85C)

\$0.00

Base Product:

SoM-3517M

Title: SoM-3354M-140

SOM-3354, TI AM3354 ARM-A8, 512MB RAM, 4GB eMMC Flash, 16MB Serial Data flash, 4x COM, 3x USB2, 10/100 ETH, Video (-40 to +85)

\$160.00

Base Product:

SoM-3354M