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SOM-250GS

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[Panel PC Front Open Frame E7 & E10](http://www.EMAC.com/sites/default/files/EMAC%20Panel%20Front%20Open%20Frame%20E7%20E10.png)

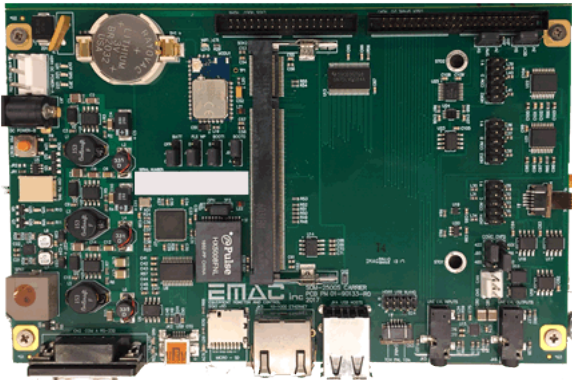
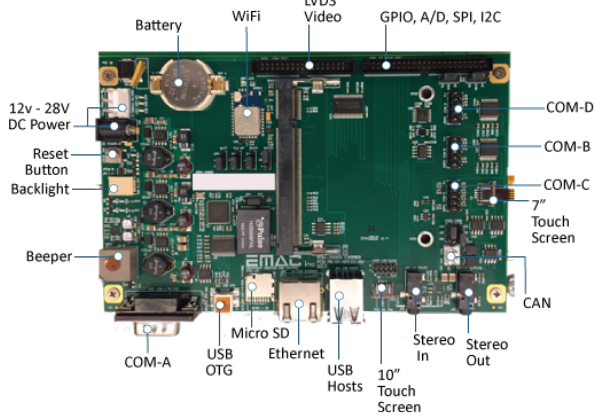


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[EMAC OEM](http://www.EMAC.com/sites/default/files/EMAC%20OEM_0.png)



- Inexpensive Open-Frame Design
- 10/100/1000 BaseT Ethernet with on-board PHY

- Wireless 802.11 b/g/n; Bluegiga [WF111-E] onboard
- Micro-SD card Slot
- 22x SoM Specific I/O lines (GPIO, A/D, SPI, I2C)
- 4x Serial Ports (3x RS232 & 1x RS232/422/485)
- 1x I2S Audio port with Line-In/Line-Out
- 1x CAN 2.0B Port
- 1x 10/100/1000 BaseT Ethernet with Status LEDs
- 2x USB 2.0 High Speed Host ports
- 1x USB 2.0 High Speed OTG port
- Battery for nonvolatile RAM and Real Time Clock
- System Reset button
- 1x Audio Beeper
- 7" TFT Color LCD, 800 x 480 WVGA @ 256K Colors
- 800 (cd/m²), Durability - Over one million touches
- 10" TFT LVDS Color LCD, 1024 x 600 WSVGA @ 256K Colors
- 460 (cd/m²), Durability - Over one million touches
- Backlight Brightness Control
- 4-Wire Analog Resistive Touch Screen
- 4x Channels A/D
- 7.55" × 4.15" (191mm × 105mm)
- Input Voltage +12 to +28 Vdc.
- Typical Running Current Consumption 350mA @ 12 Vdc including SoM, USB & LCD
- (Note: Up to 1.0A is Req. if USB Host is providing power to 3x USB devices)
- 0° to 60°C Operating Temperature (Extended Temperature Optional)
- 90% Upper Operating Humidity
- Bluetooth Optional

The SoM-250GS is a compact, low-power SoM Carrier/Socket board with a optional 7" WVGA (800 x 480) or the 10" WSVGA (1024 X 600) color LCD and resistive touch screen. This versatile SoM Carrier/Socket board is ideal for evaluation and early development work. This Carrier is designed to work with all EMAC 200-pin SODIMM type SoMs. Note: The SoM-250GS is specifically designed for SoMs with Video & USB capability.

The SoM-250GS provides access to much of the SoM's I/O through on-board connectors as well as a number of additional I/O expansion blocks such as Video, Touchscreen, Wireless Networking, Gigabit Ethernet and Micro HCSD/MMC flash disk.

Although a good deal of customers will want a Carrier that is unique and is designed specifically for their application, the SoM-250GS when coupled with a SoM-A5D36, SoM-3354M, or SoM-3517M 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.

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.

SOM Type:
SODIMM Carrier Boards

Processor

Real Time Clock:

Primary I/O

GPIO:

22x SoM Specific I/O Lines

Disk Interface:

Micro-SD Card Slot

SPI:

1x SPI

Video Out:

Graphic LCD with TTL & LVDS Interfaces with Resistive Touch Screen Interface

Audio:

1x I2S Audio port with Line-In/Line-Out

Ethernet:

1x 10/100/1000 BaseT Ethernet with Status LEDs (10/100 SOM Module compatible)

USB:

2x USB 2.0 High Speed Host Ports

1x USB 2.0 High Speed OTG port

Serial Ports:

4x Serial Ports (3x RS232 & 1x RS232/422/485)

I2C:

1x I2C port

Watchdog:

Secondary I/O

CAN:

1x CAN2.0B port

Timers/ Counters/ PWM:

Timers/Counters/ PWM

LPT Port:

Keypad:

PS/2:

Analog on

A/D:

A/D Channels:

4

D/A:

Dimensions

Dimensions:

7.55 × 4.15 in

Power Requirements

Voltage:

12 V

Typical Current:

350 mA

Typical Voltage:

12 V

Environmental

Low Operating Temperature:

0 C

High Operating Temperature:

60 C

Upper Operating Humidity:

90%

Environmental Misc.:

Extended Temperature Optional

Pricing

SoM-250GS-000

Standard Carrier Board with CAN, Audio, 7" LCD & Touch Screen, WiFi

\$399.00

Build to Order

Order:

1

Base Product:

SoM-250GS

SoM-250GS-001

Deluxe Carrier Board with CAN, Audio, 10" LCD & Touch Screen, WiFi

\$399.00

Order:

2

Base Product:

SoM-250GS

SoM-250GS-007

Bare-Bones Carrier Board with CAN, Audio, WiFi, without LCD

\$250.00

Order:

3

Base Product:

SoM-250GS

Non-Stock NCNR:

0

Carrier Boards:

Title: SoM-3517M-130

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

\$198.00

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

Title: SoM-A5D36-140

ARMA5 VID/GbE/USB/512MB RAM, 4GB eMMC, -40 to +85, RoHS

\$150.00

Base Product:

SoM-A5D36

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