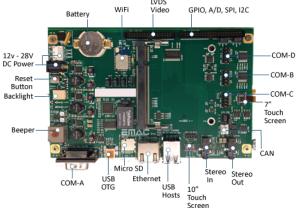


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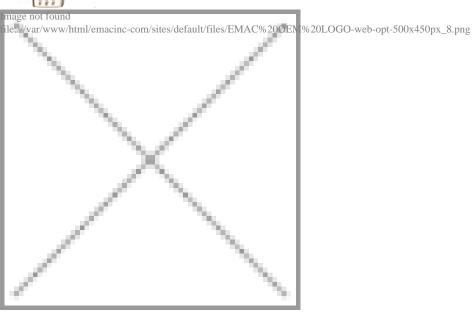
Source URL: https://www.emacinc.com/content/som-250gs

## SQM<sub>T</sub>250GS

Panel PC Front Open Frame E7 & E/10 s/PPC% 20 Panel % 20 Front % 20 Open % 20 Frame % 20 E7 % 20 E10.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

 $6.55" \times 4.15" (166mm \times 105mm)$ 

7" LCD bracket the dimensions are 7.55" x 4.15" (191mm x 105mm) (The metal mounting tabs add 1" to the width)

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

RoHS 2 (2011) compliance

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.

Specifications

SOM Type:

SODIMM Carrier Boards

Processor Real Time Clock:

Primary I/O

22x SoM Specific I/O Lines

Disk Interface:

Micro-SD Card Slot

Video Out:

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

1x SPI
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 CAIN.
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.
$6.55 \times 4.15$ in
Dimensions Misc.:
7" LCD bracket the dimensions are 7.55" x 4.15" (191mm x 105mm) (The metal mounting tabs add 1" to the width)
Power Requirements
Input Voltage +12 to +28 Vdc.
350mA typical current at 12V
Environmental Low Operating Temperature:
0 C
High Operating Temperature:
60 C
Upper Operating Humidity: 90%
Environmental Misc.:
Extended Temperature Optional
Pricing Sour-2003S-000
Standard Carrier Board with CAN, Audio, 7" LCD & Touch Screen, WiFi
\$399.00

SPI:

Build to 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:
SoM-3517M-131
TI ARM Cortex-A8 CPU, 4GB eMMC FLASH, 256MB RAM (0 ~ +70C)
\$198.00
Base Product:
SoM-3517M
SoM-3354M-140
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
SoM-A5D36-140
ARM A5 VID/GbE+EMAC interface for Carrier PHY support for Dual LAN/USB/512MB RAM, 4GB eMMC, -40 to +85, RoHS
\$150.00 Barrier Barrier (1997)
Base Product:
SoM-A5D36
SOM-A536M-140
ARM A5 VID/ 10/100 Network PHY+ EMAC interface for Carrier PHY support for Dual LAN/USB/512MB RAM, 4GB eMMC, -40 to
+85, RoH
\$0.00
Base Product:
SoM-A5D36
SoM-A536P-140
ARM A5 VID/IEEE1588 10/100 Network PHY+EMAC interface for Carrier PHY support for Dual LAN/USB/512MB RAM, 4GB
eMMC, -40 to +85, RoHS
\$165.00
Base Product:
SoM-A5D36
Source URL: https://www.emacinc.com/content/som-250gs
- variable

Order: