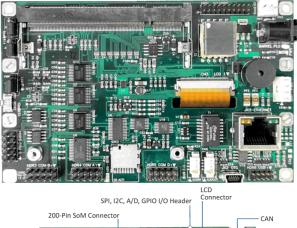


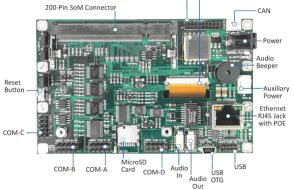
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## 50M72112ES

SoM 212EShFrontside with QWWGAILCPC-E4-3354% 20Panel% 20Front\_circlelogo\_webopt.png





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Ultra Small form factor (4.8" x 3.0")

10/100 BaseT Ethernet with onboard Magnetics and RJ45

3 serial RS232 ports and 1 RS232/485 port

32 SoM Specific lines with JTAG

Resistive Touchscreen interface

Graphic LCD interface with WQVGA TFT LCD with Touch

Battery for nonvolatile RAM and Real Time Clock

Micro SD Flash Card Socket

Dual USB Host Jack

USB OTG Host/Device Port

CAN 2.0B Port

Audio Beeper

System Reset button

Power and Flash Drive Status LED

## ON BOARD OPTIONS FOR STANDARD CARRIER

Optional Stereo Audio Line In / Out

Optional Power Over Ethernet (POE)

## BARE-BONES FEATURES

Ultra Small form factor (4.8" x 3.0")

10/100 BaseT Ethernet with onboard Magnetics and RJ45 Jack

Battery for nonvolatile RAM and Real Time Clock

Dual USB Host USB (10 pin header connector, Cable extra)

Micro SD Flash Card Socket

3 serial RS232 ports and 1 RS232/485 port, (Only 1 Serial cable included)

CAN 2.0B Port

Audio Beeper

System Reset button

Power and Flash Drive Status LED

The SoM-212ES is an ultra compact SoM Carrier/Socket board with an optional 4.3 inch WQVGA (480 x 272) TFT color LCD and a resistive touch screen. The dimensions of the SoM-212 are 4.8" by 3.0", about the same dimensions as that of popular touch cell phones. The SoM-212ES is small enough to fit in a 2U rack enclosure. 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-212ES is specifically designed for SoMs with Video & USB capability.

The SoM-212ES 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, Ethernet and micro SD flash disk. Full schematics of the SoM-212ES are provided giving the user a solid base with which to design their own SoM Carrier. Schematics of the SoM-212ES 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-212ES when coupled with a SoM-9G45 SODIMM SoM makes for a powerful User Interface Contol 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 16x GPIO (5x dedicated GPIO 11x Configurable I/O) Video Out: Graphic LCD interface with WQVGA TFT LCD with Touch Audio: Audio Beeper Ethernet: 10/100 BaseT Ethernet with onboard Magnetics and RJ45 USB: Dual USB Host Jack & USB OTG Host/Device Port Serial Ports: 3x RS232 1x RS232/485 Watchdog: Primary I/O Misc.: Power Over Ethernet POE (Optional)

Stereo Audio Line In & Line Out (Optional)

Secondary I/O CAN 2.0B Port LPT Port: Keypad: PS/2: Touch: Resistive Touchscreen interface

Analog on

A/D: D/A:

Dimensions Dimensions 4.8 × 3 in Vonage. 5 V Typical Current: 1 A Power Misc.: Power Requirements: Typical <~1.0A. @ 5 Vdc. including SoM, USB & LCD (Note: up to 1.0A additional is required if USB Host is providing power to USB devices)

Alternate Wide voltage Input: 8-36 Vdc (Typical: 5 watts of power, Max 15 Watts)

Environmental Low Operating Temperature: 0 C High Operating Temperature: 60 C Upper Operating Humidity: 90%

Pricing Solvi-212LS-000 Standard Carrier Board with Touch Screen \$175.00 Base Product: SoM-212ES SoM-212ES-003 Deluxe Carrier Board with Touch Screen, POE, and Stereo Audio \$225.00 Base Product: SoM-212ES SoM-212ES-007 Bare Bones Carrier Board \$110.00 Base Product: SoM-212ES Non-Stock NCNR: 0 Carrier Boards: SoM-9G45M-110 w/ AT91SAM9G45 CPU, 512 MB FLASH 128 MB RAM \$190.00 Base Product: SoM-9G45M SoM-9M10M-130 w/ AT91SAM9M10 CPU, 1 GB FLASH 256 MB RAM \$250.00 Base Product: SoM-9M10M

SoM-3517M-131 TI ARM Cortex-A8 CPU, 4GB eMMC FLASH, 256MB RAM (0 ~ +70C) \$198.00 Base Product: SoM-3517M SoM-3517M-141 TI ARM Cortex-A8 CPU, 4GB eMMC FLASH, 512MB RAM \$0.00 Base Product: SoM-3517M SoM-3517M-339 TI ARM A8 CPU, 512MB NAND FLASH, 256MB RAM, INDUSTRIAL TEMP (-40C ~ +85C) \$0.00 Base Product: SoM-3517M 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

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