

SOM-100ES

Quick Start

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EMAC, Inc.

EMAC, inc.
EQUIPMENT MONITOR AND CONTROL
2390 EMAC Way, Carbondale, Illinois 62901
World Wide Web: <http://www.emacinc.com>
Phone: (618) 529-4525 Fax: (618) 457-0110

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2 Quick Start

This document contains a short how-to for powering up a SoM with a SoM-100ES carrier and seeing some quick results. This Quick Start is intended for use with any module from the EMAC SoM line, and takes a user up to the point of login to the operating system.

2.1 Obtaining the materials

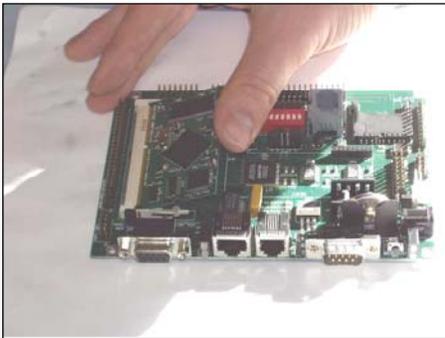
To perform this quick start you will need the following components

- SoM Module (SoM-400EM, SoM-5282M and etc.)
- SoM-100ES Carrier
- Power Supply (wall mount or PC)
- DB9 serial port cable (for PC or Terminal connection)
- CAT5 cable (for network connection)

2.2 Connections

For this simple example, we connect the SoM module, a serial port terminal, ethernet, and power.

2.2.1 Step 1. Module Insertion



Insert the SoM into the SODIMM socket of the SoM-100ES.

The module should fit snugly into the socket, and snap down with a click, locking the two side tabs in place

2.2.2 Step 2. Serial Port Connection

Connect a serial port to COM1. This should use a standard serial cable (not a null modem cable).

For communication with normal serial terminals the DTR_RESET jumper (located behind and slightly to the right of COM1) should be set to “OFF”.

The other end of the terminal should be connected to a PC or ASCII terminal for initial bring up of the board.



2.2.3 Step 3. Ethernet Connection

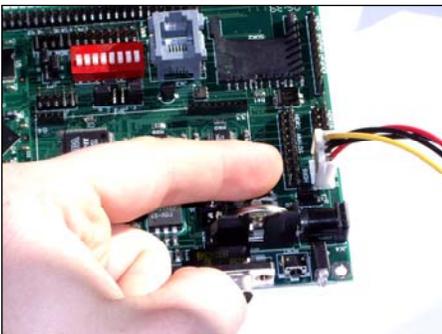
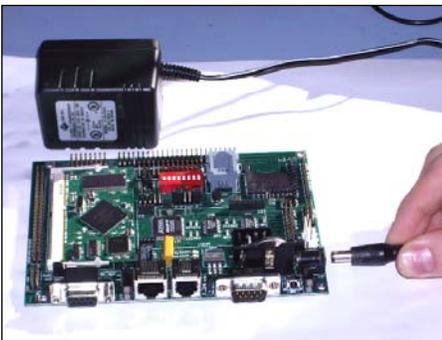


A network connection may be established by connecting the carriers Ethernet jack to a standard 10/100 base-T network.

If the jack is connected directly to a PC, a crossover cable should be used. If the board is connected to a router or switch, a standard CAT5 should be used.

2.2.4 Step 4. Power Connection

Power can be applied to the SoM system using either the wall mount connector or standard PC power supply jack.



On SOM-100ES carrier revisions prior to revision 5, the power supply jumper (JP3) must be set according to the type of power supply. Revision 5 boards have no jumper setting requirements related to the type of power supply so skip to the next section if you have a revision 5 board.

JP3 has two settings, which are labeled on the silkscreen as; 5V and reg.

If 5V is selected, the board will be powered directly from the voltage applied across the standard 5V and GND terminals of the PC connector. From a power management standpoint, this is the most efficient way of powering the board.

If REG is selected, the boards power comes in through the 12V supply line of the PC connector, or over the Wall Mount connector (9V). This supply is then regulated down to 5V. Using regulated power is less efficient but allows the use of smaller, cheaper power supplies.

2.3 Setting up a Terminal

(The following section does not apply to the SoM-NE64M).

Unless your network provides DHCP service and you have some way of dynamically locating the board on the network, you will need to establish a serial connection to initially establish communications with the board.

For this any terminal program can be used (Hyperterminal is the most common for Windows).

The following settings should be used for connection:

BAUD 115200

BITS 8

PARITY none

Line feeds - off

Apply power to the board (turn on the PC power supply or plug in the wall mount unit).

At this point the OS will load and you should see data scrolling past as it boots.

All SoM boards will then display a login prompt from which a terminal session may be entered if you know the password.

2.3.1 Default Logins

Device	Login	Password
SoM-400EM	root	tini
SoM-5282M	root	emac_inc