### Thank you for choosing the MitySOM-335x Development Kit from Critical Link.

In this Quick Start Guide you will be guided through the initial steps of setting up your MitySOM-335x Development Kit. A Linux Operating System is pre-loaded onto the SD card and will showcase many of the Development Kits features such as 3D graphics processing, Gigabit networking and more through a demonstration application that will start automatically.

#### The MitySOM-335x Development Kit contains the following:

#### Provided Hardware:

- MitySOM-335x baseboard with:
  - o MitySOM-335x System on Module
  - Audio Input and Output
  - o HDMI (video only) Output
  - o 8-Channel ADC
  - 10/100/1000 Networking
  - Dual CAN Bus Interfaces
  - o Dual UART Expansion Ports
  - o More!
- RS232 Expansion Kit
- RS485/422 Expansion Kit
- Serial cable
- HDMI to DVI cable
- AC/DC 12V 1.2A adapter
- SD Card pre-loaded with Linux Operating System and demonstration applications
- USB Drive
  - o Linux Software Development Kit including Virtual Machine
  - Development Kit Documentation

#### **Printed Documents:**

• MitySOM-335x Development Kit Quick Start Guide (this document)

#### Software and documentation:

- Linux Software Development Kit (SDK) and readme.pdf
- MitySOM-335x Development Kit Data Sheet
- MitySOM-335x Development Kit Schematics
- MitySOM-335x Development Kit Bill of Materials
- MitySOM-335x Development Kit Gerber Files

#### Suggested Hardware (not provided):

- Widescreen HDMI or DVI display
- USB to Serial adapter if PC does not have a serial port
- USB Mouse (for interaction with Demo)

#### Default Setup (Boot from SD card)



#### \*3: SD Card is on the bottom side of the board

Verify that the SysBoot jumpers are set as shown. They are located on the top side of the board below the SoM.
Numbered 0 to 11 = 00010000000



2) Connect the supplied Null Modem serial cable to the DB-9 connector, J507, and then to your PC. Configure your PC serial port application with: 115200 baud rate, 8 data bits, no parity, 1 stop bit and no flow control.



**3)** Make sure that the SD card has been inserted fully into the SD card slot on the bottom side of the board, J501.



4) Connect a HDMI cable (A) to J400 for video output to a monitor, an Ethernet cable (B) to the RJ45 port, J200 and then to a network with a DHCP server. Connect an USB Mouse (C) to the USB 2.0 Type A port, J502.



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5) Connect the 12V power input to J601. At this time the module should boot from the SD card. Note: LED D2 on the MitySOM module should light and stay lit once power is applied.



6) On the serial port you should see boot messages appearing and after approximately 15 seconds there should be a MitySOM-335x prompt shown. The login is "root"; there is no password.

Critical Link Linux //support.criticallink.com mitysom335x tty00 'ison Linux armv7l #27 Tue May 6 15:46:19 EDT 2014 mitysom335x login:

7) At this time if a monitor has been connected you should see the following demonstration screen displayed. Each icon, when clicked, displays an overview of that feature and typically a related demonstration.



- 8) With the device connected to a network you can also view the Demo application through a web browser.
  - a. In the serial terminal login with "root"
  - b. Then type "ifconfig"
  - c. In the list returned should be an address similar to that of other devices on your network
  - d. In a web browser on a PC enter this IP address plus port 8080 (I.E. 10.0.20.100:8080)



- e. You should see the same display as shown in step #7
- f. Note: The "graphical" demonstrations will not work over the network.
- **9)** At this point you may now explore the demonstration applications using your USB mouse.
- **10)** To prepare your Development Environment on your PC; insert the provided USB thumb drive into it.



 Follow the instructions outlined in the "readme.pdf" document on the USB thumb drive to setup the Development Environment. On boot of the Linux Virtual Machine further documentation will be displayed in a web browser.

The login information is as follows for the Linux virtual machine:

- a. Login/username is "mitydsp"
- b. Password is "mitydsp"
- 12) If you have any questions please visit our Wiki pages at <u>http://support.criticallink.com/redmine/projects/a</u> <u>rmc8-platforms/wiki</u>

# For more details visit www.criticallink.com





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