Thank you for choosing the MityDSP-L138 Development Kit from Critical Link.

In this Quick Start Guide you will be guided through the initial steps of setting up your MityDSP-L138 Development Kit. A Linux Operating System is pre-loaded onto the NAND and will showcase many of the Development Kits features such as

The MityDSP-L138 Development Kit contains the following:

Provided Hardware:
- Industrial IO baseboard with:
    - MitySOM/MityDSP System on Module (ie. MitySOM-1810, MitySOM-1808, MityDSP-6748F or MityDSP-L138 series)
    - Audio Input and Output
    - DVI Output
    - 10/100 Networking
    - CAN Bus Interface
    - UART Expansion Port
    - More!
- 6 ft Null Modem Cable M/F Serial cable
- 10 pin DB-9 Serial Adapter Cable
- 5 ft UTP Ethernet Network Cable
- JTAG Rigid PCA
- AC/DC 12V 1.2A adapter
- 2.1mm DC Jack Pigtail Cable
- USB Flash Drive
    - Linux Software Development Kit including Virtual Machine
    - Development Kit Documentation

Software and documentation:
- Linux Software Development Kit (SDK) and readme.pdf
- MityDSP-L138 Development Kit Data Sheet
- MityDSP-L138 Development Kit Schematics
- MityDSP-L138 Development Kit Bill of Materials
- MityDSP-L138 Development Kit Gerber Files

Default Setup (Boot from On-SOM NAND)

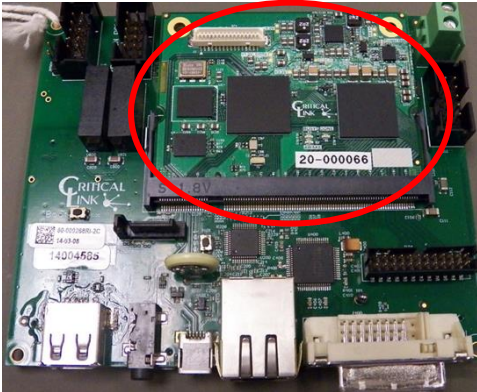1) Install the L138 Module into connector J101 on the Dev Kit.

Figure 1: Installing L138 Module

2) Install the DC Power Jack Pigtail 2.1mm into the power input plug, J600 on the Dev Kit. The 12 VDC power supply plugs into this adapter.
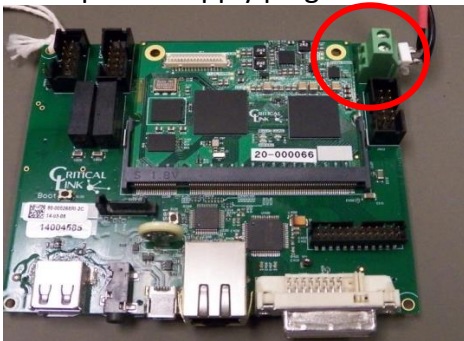

Figure 2: Installing Power Jack Pigtail Cable Asy.

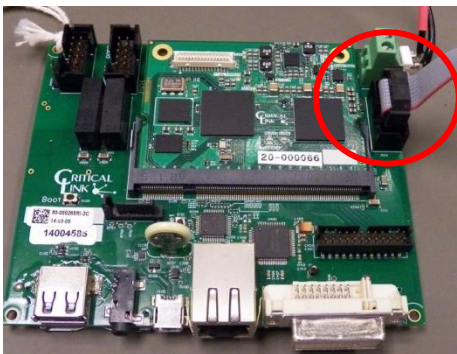3) Connect the Serial Adapter, 10 pin to DB-9, into connector J502 on the Dev Kit.

Figure 3: Installing 10 pin to DB-9 Serial Adapter Cable

4) Connect provided Null Modem Serial Cable into the Serial Adapter previously connected to Dev Kit. **Note: If you wish to use a different Serial Cable be sure the cable is Null Modem or has a Null Modem adapter.**

5) Install an Ethernet cable into J200 on the Dev Kit.

Figure 4: Installing Ethernet connection

6) The Dev Kit is ready to boot. Once the Dev kit is connected to a PC, a serial port application, like teraterm, needs to be configured for 115200 baud rate, 8 data bits, no parity, 1 stop bit and no flow control to communicate with the SOM.

7) Once the SOM is booted, the serial connection application will look like figure 5. The login is "root"; there is no password.

Figure 5: SOM Login screen

8) If you have had no problems up to now your board is ready to use.

9) Connect the provided USB Flash drive to the PC and follow the steps in this link to bring up your Virtual Machine(VM): https://support.criticallink.com/redmine/projects/arm9-platforms/wiki/Starter_Guide The VM username is "mitydsp": the VM password is "mitydsp"

10) Once the SOM is booted and you have logged in, if the SOM is connected to a network, typing "ifconfig" in the terminal will give the SOMs current IP address. Using an application like putty will let you ssh into the device using the discovered ip address.

11) Using the Virtual Machine just set up and following the steps here: https://support.criticallink.com/redmine/projects/arm9-platforms/wiki/Updating_devkit_to_latest_MDK , the files on the L138 can be updated. If you want to boot from an SD card follow the instructions here: https://support.criticallink.com/redmine/projects/arm9-platforms/wiki/Linux_Root_File_System under Booting off MMC / SD Card.

MitySOM/MityDSP Development Kit

Quick Start Guide