

TMS320DM36x Evaluation Module Quick Start Guide

Welcome to the DM36x Evaluation Module (EVM) Quick Start Guide. This guide is designed to help you through the initial setup of your EVM. This EVM allows you to experience a new graphical user interface complete with numerous demonstrations that showcase the DM365 & DM368 digital video capabilities. The board uses the faster DM368 at 432MHz.

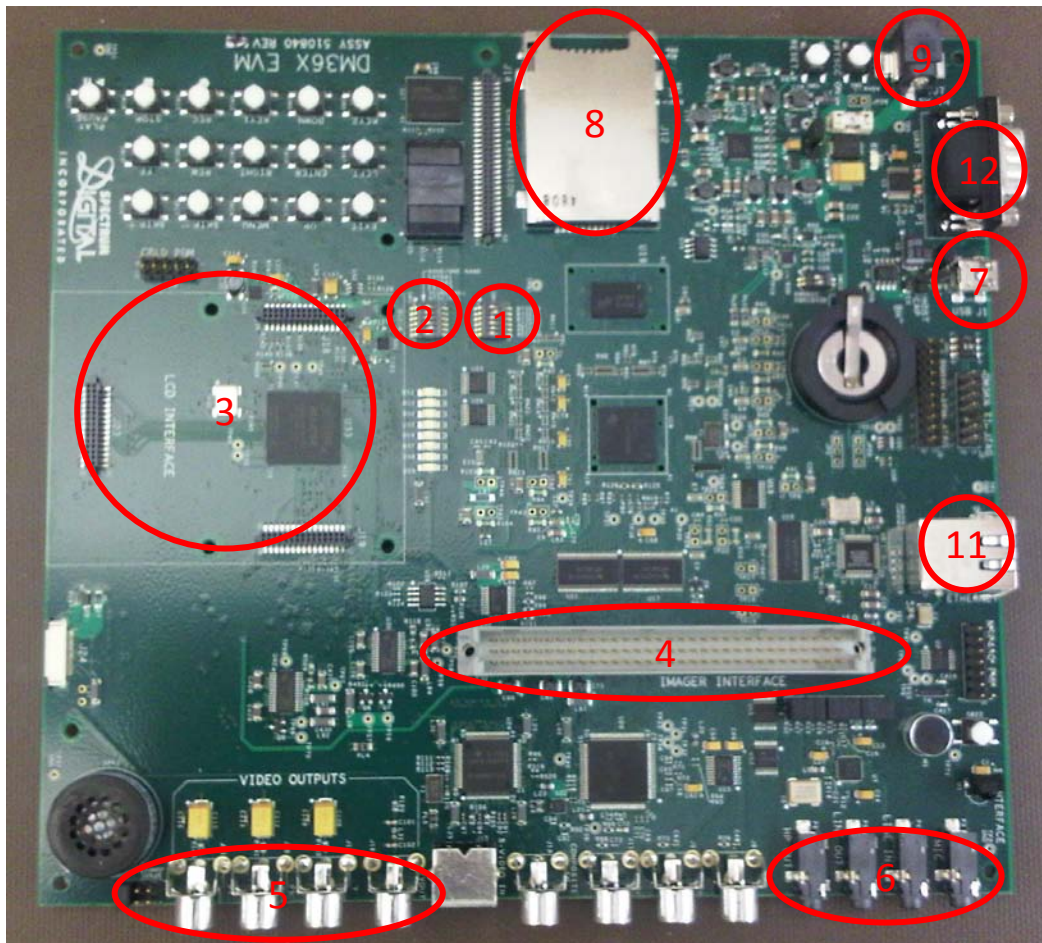
The TMS320DM36x Digital Video Evaluation Module (DM36x EVM) contains the following:

- Hardware:
 - DM36x Main board
 - DM36x LCD board with touch screen
 - LI-5M02 camera board
 - USB mouse
 - USB adaptor
 - Universal power supply and power cords
 - Null model serial cable
 - Ethernet cable
 - Component Cable
 - Linux SDK SD card
 - USB SD card reader
- Printed Document:
 - DM36x EVM Quick Start Guide (this document)
 - Linux SDK SD card content sheet
 - Software license agreement
 - CE Waiver
- Software and soft copy document:
 - DM36x Software Developer's Kit (SD card)
 - Sourcery G++™ evaluation tools DVD
 - Ubuntu 10.04 LTS CD

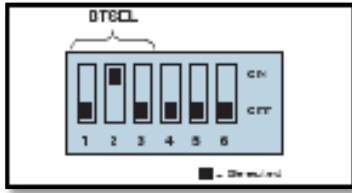
To view the Out Of Box demo provided with the EVM, you will need the following items as well:

- A 1080p, 60Hz capable HD display with component input.
- A stereo audio source (CD, laptop etc.) which can be connected to a 3.5mm stereo jack.
- A stereo audio output (speakers, headphones etc.) which can be connected to a 3.5mm stereo jack.

To develop software using the Linux Digital Video Software Development Kit (DVSDK), you will also need a Linux development host. The only supported Linux host distribution is currently Ubuntu 10.04 LTS.

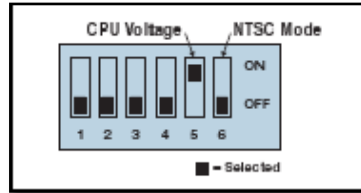


Setting up the EVM for Out Of Box demo



1

Verify DIP SW4 is configured to SD boot mode



2

Verify DIP SW5 is configured to 1.35-V core voltage mode and component video output mode.



3

Connect LCD module to main board



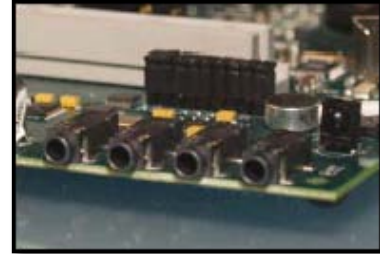
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Connect Sensor module to main board



5

Connect your 1080p display to the component video out RCA connector. Power on the HD video display.



6

Connect an audio speaker to stereo line out and an audio source to stereo mic input.



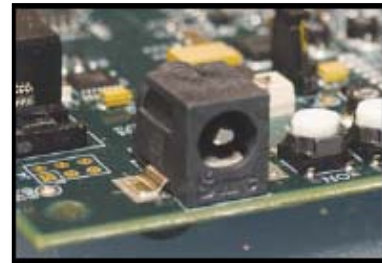
7

Connect the USB mouse to the USB port on the EVM. Using the mini-USB adaptor.



8

Insert the SD card containing the Linux demo image into the SD/MMC slot



9

Connect the power cable to the EVM power jack on the EVM[†].



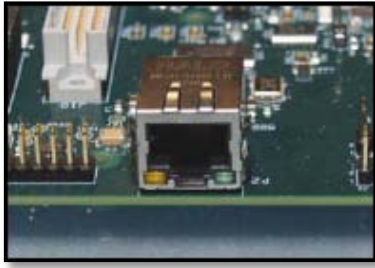
10

Once the EVM board has booted, the LCD screen should show the Matrix application launcher

From the Matrix application launcher, you can start a variety of ARM utilities, multimedia demos and QT browser. Feel free to explore. During video encode and decode, the video output will be switched to the external display.

Setting up the EVM for Linux Software Development

You need to go through the following additional steps to enable your EVM for Linux software development.



11

Connect the provided Ethernet cable to the Ethernet port on the EVM board. The other end of the cable needs to be connected to a network accessible by your Linux development host



12

Connect the provided RS-232 null modem cable to the EVM UART port. The other end of the cable needs to be connected to your Linux development host.



13

After completing the EVM setup continue with the toolchain and DVSDK installation steps provided on the ti.com DVSDK download page.



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When ready to start programming the DM36x EVM, remove power from the board, remove the Linux SDK SD card and insert into the included USB SD card reader. From a Linux host PC, insert the reader into any unused USB port and from the START HERE folder, run setup.htm.

† the USB adaptor supplied is a female A to male mini-A one; if you are using a female A to male mini-B adaptor (more common), you will need to place a jumper between pins 2 & 3 of J26 to force the USB_ID signal to ground. If the mouse does not respond, make sure you connect it to the board prior to powering up the system.

‡ To reduce ESD risk, always plug in the power supply to the board before plugging in the power supply to the power outlet.

For more information on DM365 and DM368 or to download the latest software, please visit www.ti.com/dm365; www.ti.com/dm368.

For support questions, please go to support.ti.com or to www.ti.com/e2e for our forum.

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