TMS320DM365 EVM Quick Start Guide





TMS320DM365 Digital Video Evaluation Module



Introduction

This Quick Start Guide (QSG) explains how to set up the TMS320DM365 EVM to show the Out Of Box demo, and how to install the Linux Digital Video Software Development Kit (DVSDK).

The TMS320DM365 Digital Video Evaluation Module (DVEVM) contains the following:

- DM365 EVM Technical Reference Manual (hard copy user's manual)
- Spectrum Digital, Inc. DM365 EVM target board
- Universal power supply and power cords
- Serial cable

- Ethernet cable
- Code Sourcery Toolchain, 1 CD-ROM
- Spectrum Digital, Inc. board support software, 1 CD-ROM
- Secure Digital (SD) Media card

Out of Box Linux demo image TI Digital Video Software Development Kit (DVSDK) installer for Linux development

To view the Out Of Box demo provided with the EVM, you will need this in addition:

- A 720P, 60Hz capable HD display with component input.
- A 720P, 60Hz capable HD video source (e.g. camera, Blue Ray DVD player, etc.).
- 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.
- A USB mouse
- A USB Female Standard-A to Male Mini-B Adapter (if the mouse has a USB Standard-A connector)

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. In addition, the development host machine must have an SD card reader attached.



Setting up the EVM for the Out Of Box demo

The steps below have corresponding numbers in the EVM overview picture above.

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. Make sure your video source outputs 720P 60Hz, and connect the video source to the component video in the RCA connector. Power on your video source.



4. Connect your 720P capable HD video display to the component video out RCA connector. Power on the HD video display.



5. Connect an audio speaker to stereo line out and an audio source to stereo line in.



6. Connect a USB mouse to the USB port on the EVM. Given the EVM comes with a mini-USB connector, you may need to use an adapter between your mouse and the connector.



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



8. Connect the power cable to the EVM power jack on the EVM. To be ESD safe, plug in the other end of the cable only after you have connected the power cord to the board.



9. Once the EVM board has booted, your video display should show the Matrix application launcher.



From the Matrix application launcher, you can launch a variety of ARM utilities, multimedia demos and QT browser. Feel free to explore.

Note: If the mouse does not respond, make sure you remember to connect it *prior* to powering up the board. Also, it is possible that the adapter between your mouse and the board is incompatible. One trick is to make sure you use an optical mouse. It would light up if it is powered. If it does not light up, try changing the adapter.

Setting up the EVM for Linux Software Development

In addition to the steps above, the following steps will set up 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.



After completing the EVM setup continue with the toolchain and DVSDK installation steps provided on the <u>DVSDK download page</u>.

EVM Hardware Overview

To better understand the DM365 EVM hardware, you may want to review the DM365 EVM Technical Reference which can be found by visiting <u>Spectrum Digital</u> website.

Software Updates

The latest DVSDK software can be downloaded from the following link:

http://software-dl.ti.com/dsps/dsps_public_sw/sdo_sb/targetcontent/dvsdk/index.html

TI Worldwide Technical Support

Internet

TI Semiconductor Product Information Center Home Page support.ti.com

TI Semiconductor Know ledgeBase Home Page

support.ti.com/sc/knowledgebase

Product Information Centers

Americas	Phone	+1(972) 644	-5580		
Brazil	Phone	0800-891-2	0800-891-2616 0800-670-7544		
Mexico	Phone	0800-670-7			
	Fax	+1(972) 927	-6377		
	Internet/E-mail	support.fi.co	support.fi.com/sc/pic/americas.htm		
Europe, Midd Phone	lle East, and Afri	ca			
European Free Call 0080 International +49 (Russian Support +7 (4)0-ASK-TEXAS (00800 275 83927) (0) 8161 80 2121 4) 95 98 10 701			
Note: The technical d	European Free Call ifficulty calling the	(Toll Free) numbe free call number,	er is not active in all o please use the inter	countries. If you have national number above.	
Fax +(48		(49) (0) 8161 80 2045			
Internet st		support.ti.com/sc/pic/euro.htm			
Japan Fax	.81.2.2244	5217	Domestic	0120-81-0025	
Internet/E-mai		-5317 1	Duringstig	0120-01-0030	
Internationa	l support.ti.c	om/sc/pic/japan.b	htm		
Domestic	www.tij.co.	www.tij.co.jp/pic			
Asia					
Internationa	I - 91-80-413	81665			
Domestic	Toll-Free Nu	Toll-Eree Number Toll-Eree N			
Australia	1-800-999-0	164	Malaysia	1-800-80-3973	
China	800-820-86	82	New Zealand	0600-445-934	
Hong Kon	q 800-96-594	1	Philippines	1-800-765-7404	
India	1-600-425-7	7668	Singapore	800-886-1028	
Indonesia	001-803-88	61-1006	Taiwan	0600-006800	
Korea	060-551-28	04	Thailand	001-800-886-0010	
Fax	+666-2-237	8-6808	E-mail	tiasia@ti.com	
Internet	Internet support.ti.com/sc/pic/asia.htm			11 F 2 10 11	

C093008

Important Notice: The products and services of Texas instruments incorporated and its subsidiaries described herein are sold subject to TI's standard terms and conditions of sale. Customers are addised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer's applications or product designs, software performance, or initingement of patents. The publication of information regarding any other company's products or services does not constitute TI's approval, warranty or endorsement thereof.

The platform bar and DaVinci are trademarks of Texas instruments.

All other trademarks are the property of their respective owners. SPRM352A

© 2009 Texas instruments incorporated