Getting Started

The EVM ships with a Power On Self Test (POST) flashed into I2C EEPROM. The POST automatically executes when the board is powered ON. POST performs memory test and internal EMAC loopback test. At power ON, the user LEDs are OFF by default. The LEDs blink and turn OFF to indicate successful DSP booting.

After booting, User LED-1 turns ON to indicate successful RAM test and User LED-2 turns ON to indicate successful internal EMAC loop-back test. These LEDs remain ON to indicate success of both the tests.

Please refer to the EVM User Guide for software installation and other details

Important Notes when handling the FVM

- Plug in all the cables before powering ON the EVM to ensure proper grounding.
- •Do not unnecessarily flex the boards, while inserting cables. Excessive flexing can break
- Use proper ESD procedures when handling the EVM.
- Warning: Some components on the EVM may be too hot to touch with your bare hand when power is on.

Online Documentation

- •TMS320C6670 processor website
- http://focus.ti.com/docs/prod/folders/print/tms320c6670.html
- •TMS320C6678 processor website
- http://focus.ti.com/docs/prod/folders/print/tms320c6678.html
- •MCSDK website for updates http://focus.ti.com/docs/toolsw/folders/print/b
- ioslinuxmcsdk.html
 •CCS v5
- http://processors.wiki.ti.com/index.php/Category:Code_Composer_Studio_v5

C6678 EVM Information:

http://www.advantech.com/Support/TI-EVM/default.aspx

This link contains

- •Hardware & Software details
- User Guide
- •Technical Reference Manual
- •TMS320C6678 Datasheet

C6678 EVM Support: Please write to

EVM667xsupport@advantech.com.tw for technical queries related to this EVM.

Advantech Address:

Advantech Co., Ltd.
No. 1, Alley 20, Lane 26, Rueiguang Rd., Neihu Dist., Taipei 114, Taiwan, R. O. C.
Toll Free: 0800-777-111
Phone:886-2-2792-7818
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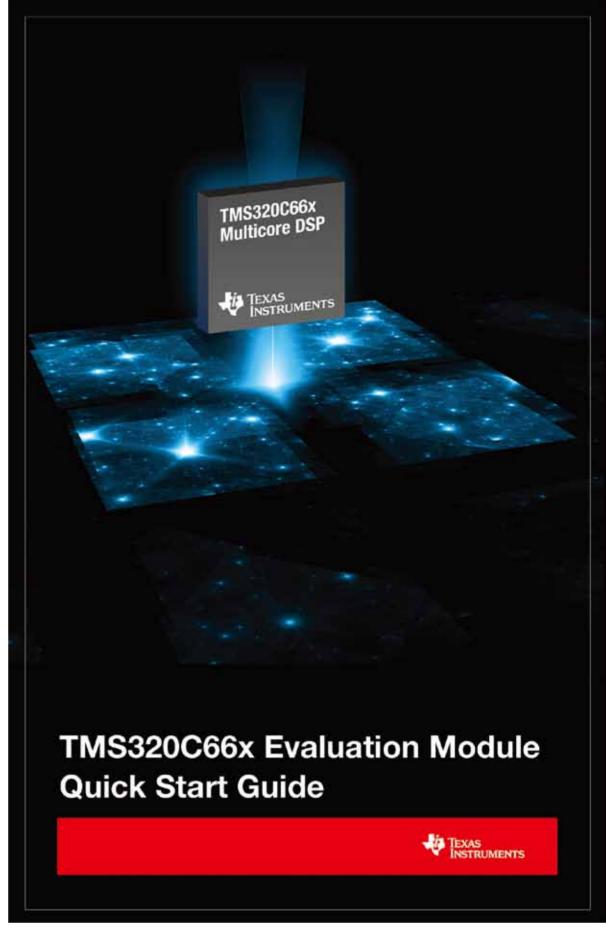
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Internet support.ti.com/sc/pic/asia.htm

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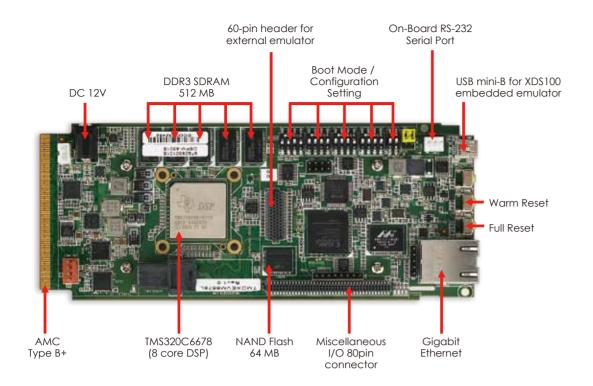
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TMDSEVM6678L

TMS320C6678 Evaluation Module



The TMDSEVM6678L (Evaluation Module) kit includes:

- TMS320C6678 Evaluation Module
- Power adapter and power cord
- USB cable for on-board JTAG emulation (XDS100v1)
- Ethernet cable
- RS-232 serial cable
- Software (DVD) and documentation



Insert the DVD and load the USB COM driver by executing the program \drivers\DPInst32.exe

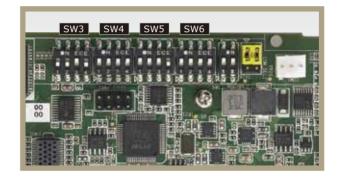
For 64-bit systems execute the program \drivers\DPInst64.exe



7

Connect the USB mini-B cable to USB1, Ethernet cable to Ethernet port (LAN1) and 12V DC power adapter to power jack.

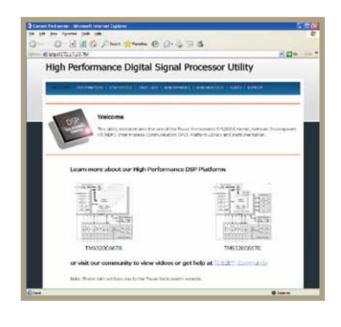
Ensue EVM configuration switch (SW3, SW4, SW5 and SW6) are set as shown.





3

Open HyperTerminal, select COM port, configure settings.



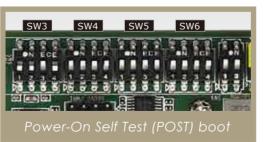
5

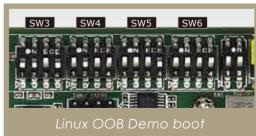
Open the web browser, copy the IP address (172.17.10.76) from step 4 to the web browser.

Note:

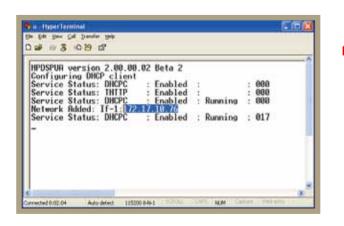
Additionally, this EVM has two boot modes settings, Power-On Self Test (POST) boot and Linux OOB Demo boot.
The settings of the EVM configuration switches (SW3, SW4, SW5 and SW6) for power-on self test boot is shown as left figure and Linux OOB Demo boot is shown as right figure.

Press the RESET_FULL after changing switch settings and follow HyperTerminal and webpage settings in Step 4 and 5.





- 2. Follow the READ_ME_FIRST instructions for installing tools, MCSDK 2.0 and demos on your PC.
- 3. Refer to the Getting Started Guide under MCSDK for details on boot configurations.
- 4. Visit the following website for the latest MCDSK updates: http://focus.ti.com/docs/toolsw/folders/print/bioslinuxmcsdk.html



4

Press the RESET_FULL button on the

Allow 40 seconds for the BIOS Out-Of-Box (OOB) Demo to complete booting.

The demo acquires an IP address from server and displays it on console.

Copy the Network Added: Inf-1: IP address from HyperTerminal screen.