

**7** To prepare your workstation for software development, power off the EVM, remove the SD card and insert it into your Ubuntu Linux workstation.



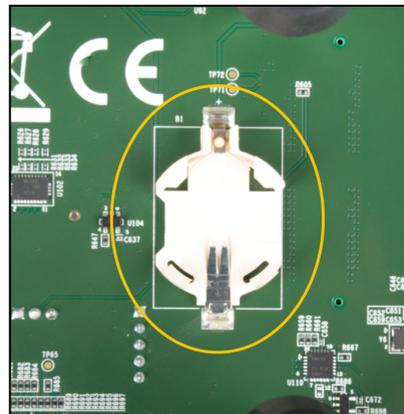
Download and install the latest Processor SDK-Linux from <http://www.ti.com/tool/processor-sdk-am65x>. Connect the supplied USB debug cable as described in Step 2. Connect the supplied Ethernet cable to the RJ-45 jack labeled "MCU ETHERNET" on the board. Connect the other end of the cable to an Internet-enabled router or Ethernet switch. Follow Steps 3 through 6.

For more details on Linux, refer to [www.ti.com/processor\\_sdk\\_linux](http://www.ti.com/processor_sdk_linux).

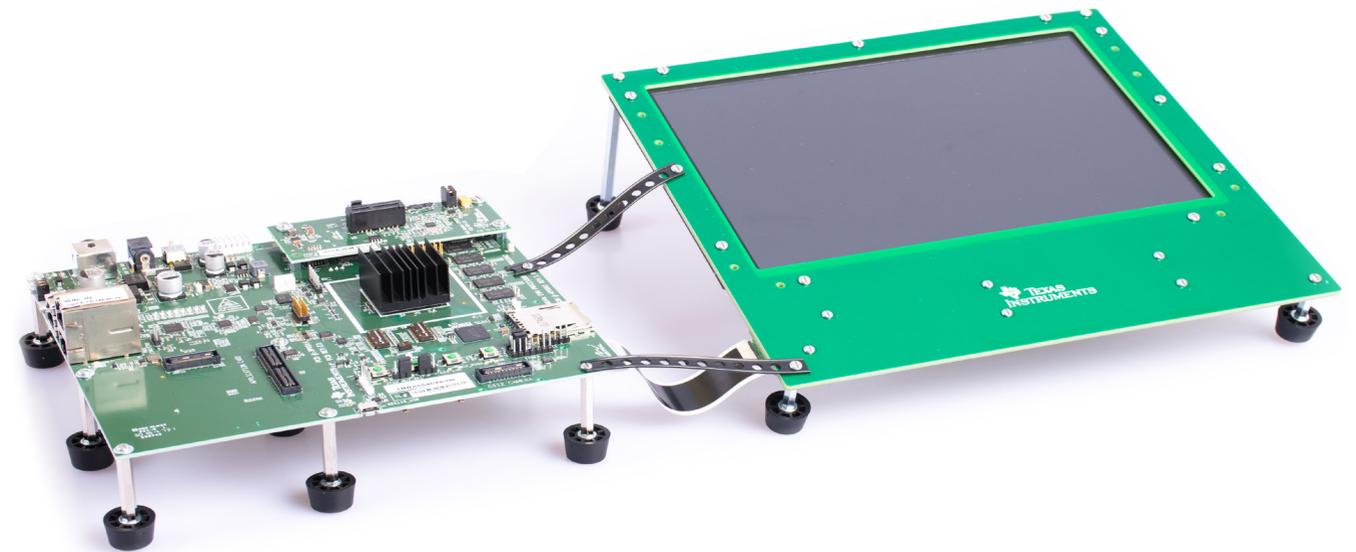
For TI-RTOS, refer to [www.ti.com/processor\\_sdk\\_rtos](http://www.ti.com/processor_sdk_rtos).

For Android, refer to [www.ti.com/processor\\_sdk\\_android](http://www.ti.com/processor_sdk_android).

**8** Note that this EVM comes with a coin battery holder. A coin battery is not necessary for normal operation of the EVM.



Note: This EVM is designed for optional use with a removable CR2032 UL recognized lithium battery (not supplied). Always use the CR2032VP Energizer 3V Lithium coin cell battery or similar CR2032 UL recognized battery with Nominal Voltage 3.0 Volts, Capacity 235mAh



 TEXAS INSTRUMENTS

# AM65x/DRA80xM Evaluation Module

Manufactured by Mistral Solutions Pvt. LTD. • [www.mistralsolutions.com](http://www.mistralsolutions.com)

For more information on AM65x processors, including:

• User Guide • Software • How To • Design Files

Please visit [www.ti.com/am65x](http://www.ti.com/am65x)

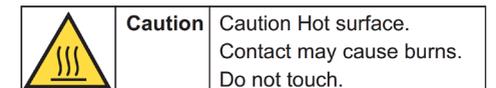
For support questions, please contact: [support@ti.com](mailto:support@ti.com) or [www.ti.com/e2e](http://www.ti.com/e2e)

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SPRW323B



Welcome to the AM65x/DRA80xM General Purpose (GP) Evaluation Module (EVM) Quick Start Guide. This guide is designed to help you through the initial setup of the board. This EVM allows you to experience Linux®, TI-RTOS or other operating systems (OS's) that showcase the AM65x/DRA80xM Quad-Core Cortex®-A53, Dual-Core Cortex-R5F, gigabit PRU-ICSS (real-time industrial communications subsystem), and more. The EVM contains the following:

#### Hardware

- AM6548/DRA804M Quad Core Cortex®-A53 function equivalent processor
- 1-lane PCIe / USB 3.0 SerDes card
- 4GB DDR4 with ECC
- On board 16 GB eMMC
- On board 512Mb OSPI Flash

#### Printed Documents

- AM65x/DRA80xM GP EVM Quick Start Guide (this document)

#### Miscellaneous

- 1 SD card
- 1 USB 2.0 cable
- 1 Ethernet cable

#### Not included in box

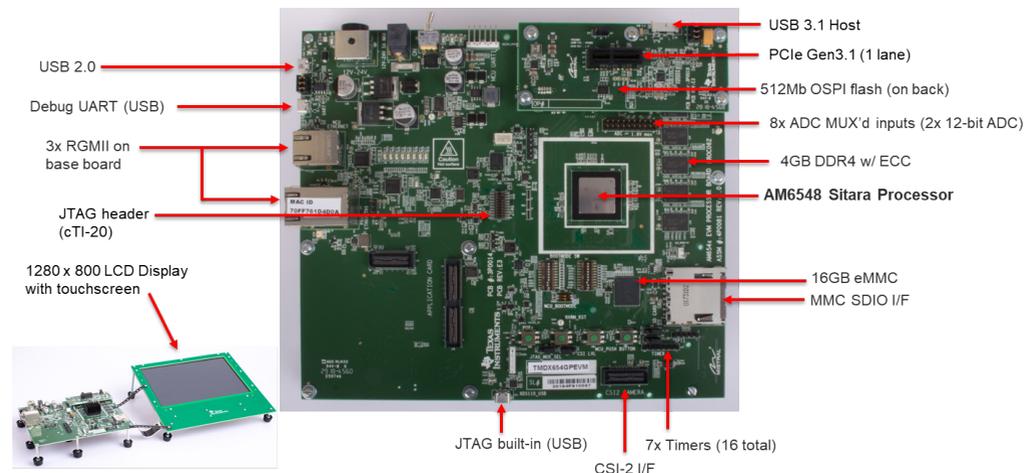
The following hardware is not included in the box and must be procured separately:

1. Power supply. Use one of the following power supply options for powering up the IDK. Pick a power supply with all the applicable regional product regulatory/safety certification requirements such as UL, CSA, VDE, CCC, PSE, etc.

Connector	Specifications	Examples
Power DIN, 4 Pin	+24VDC, 5A Output (Max)	CUI Inc. SDI120-24-U-P51
Barrel Plug, 2.5mm I.D. x 5.5mm O.D. x 9.5mm	+24VDC, positive center, 2.71A Output (Max)	CUI Inc. SDI65-24-UD-P6

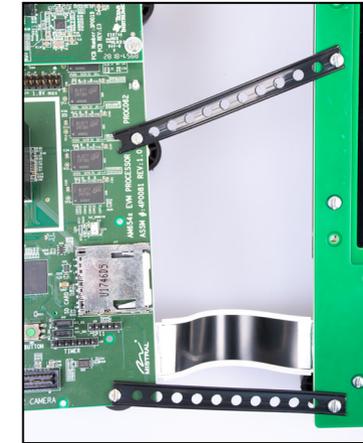
The DIN connector power supply is recommended to provide enough power for applications that make use of the PCIe interface.

2. 1280 x 800 LCD Display Accessory Kit. The LCD Kit ships in a separate box (TI part number TMDSLCD1EVM).



## Default setup (Linux boot from SD card)

- 1 Assemble the LCD Accessory Kit onto the main processor board by following the instructions included with the LCD Accessory Kit.



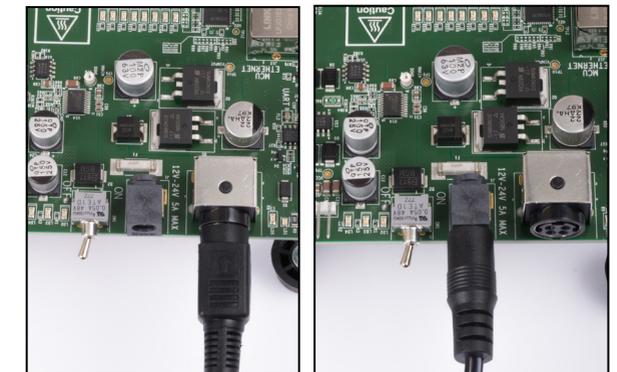
- 2 Connect the supplied USB debug cable to the USB connector labeled "UART" on the board. Connect the other end to your Linux PC.



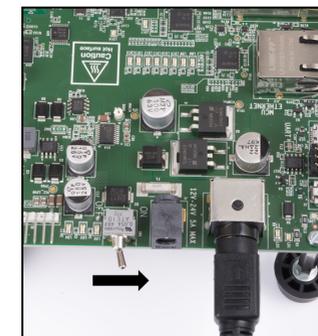
- 3 Insert the SD card into the EVM. Alternatively, download and install the Processor SDK-Linux from <http://www.ti.com/tool/processor-sdk-am65x>, create a bootable SD card and insert it into the EVM.



- 4 Connect a power supply (not included) to the DIN connector or power jack on the EVM and plug it in to an AC power source. Do not connect both, only one power supply must be connected.



- 5 Turn on the EVM by sliding the toggle switch to the right. To turn off, slide the toggle switch left.



- 6 You are now ready to explore the Linux demos which include various example applications. Click on any icon to start the demo.



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