

JEXAS INSTRUMENTS

Tiva[™] DK-TM4C123G Getting Started Guide

🔱 Texas Instruments

ICDI

Welcome to the Tiva TM4C123G Development Kit. The DK-TM4C123G is a complete development platform that provides everything you need to develop applications for the Tiva C Series TM4C123x microcontrollers.

1. Board Setup

Welcome

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-TM4C

23G

Install Power Select jumper J6 (top left corner) to the In-Circuit Debug Interface (ICDI) for debug power select mode. Connect the included USB cable from a Windows[®]-enabled PC to the ICDI Debug USB Port (top right corner) on the Tiva TM4C123G development kit. This USB port provides JTAG debug and Virtual COM Port connectivity via the ICDI.

Note: If the Found New Hardware dialog box appears on your PC, ignore it until it is time to install the drivers.

2. Quickstart Application

The DK-TM4C123G comes preprogrammed with the data logger quickstart application. This application demonstrates the 9-axis Digital Motion Sensor (Accelerometer, Gyroscope, Magnetometer), the internal and external temperature sensors, current measurement, and analog-to-digital converter (ADC) sampling.

You can select which sources to display, how often to sample, and where to save the results by using the five push buttons around the graphic display. When you have made your selections under the CONFIG menu you may start the application by selecting START at the top level. In addition, you can view samples on your computer by setting STORAGE to HOST PC and using the Windows application logger.exe located in C:/ti/TivaWare_C_Series-*/tools/bin.

3. Software, Drivers, and Documentation

Insert the USB flash drive into your PC. Install the TivaWare™ software library from /Tivaware/SW-DK-TM4C123G*.exe. The drivers for the board are located in the /Drivers folder, these should be installed via the Found New Hardware wizard in Windows. Documentation can be found in the /Documentation folder. IDE tools and the LMFlash Programmer tool can befound in the /Tools directory. For additional assistance, or if you have any questions, please visit the Tiva C Series e2e[™] forums at http://e2e.ti.com

4. Further Reading

When you are ready, take a look at the other examples for the DK-TM4C123G installed as part of TivaWare to C:/ti/TivaWare_C_Series-*/examples/boards/dk-tm4c123g/. In addition, please review the Read Me First file (located on the USB flash drive) as well as the graphical pin configuration shown on the back of this page.



Tiva DK-TM4C123G Pin Configurations



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