Tiva™ C Series TM4C123G USB+CAN Development Kit

Texas Instruments

Tiva C Series TM4C123G Development Kit is a compact and versatile evaluation platform for the Tiva C Series TM4C123G ARM® Cortex™-M4-based microcontroller. The development kit design highlights the TM4C123G microcontroller's integrated USB 2.0 On-the-Go/Host/Device interface, CAN, precision analog, sensor hub and low-power capabilities.

Features

- Tiva TM4C123GH6PGE with 256KB internal Flash and 144-LQFP with 105 GPIOs for excellent prototyping capabilities
- 96×64 color OLED display providing useful output and interface options
- USB Micro-AB for prototyping USB OTG applications
- microSD card slot for data storage
- 5-mm screw terminals for external analog inputs and CAN signals
- Precision 3.0-V reference for accurate analog-to-digital conversion
- Temperature sensor
- 9-axis motion sensor that includes a 3-axis accelerometer, 3-axis gyroscope and 3-axis magnetometer for motion and position tracking
- All I/Os brought out to headers for easy prototyping
- Five user/navigation buttons (including select/wake) for user input
- One user LED
- CAN transceiver
- 10-pin JTAG header providing standard debug interface
- Debug out capability with minor modifications

Development Kit Overview

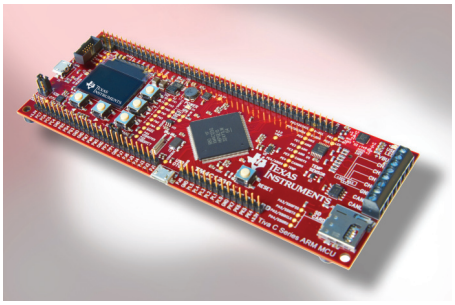
The development kit features a Tiva C Series microcontroller in a 144-LQFP package, a color OLED display, USB OTG connector, a microSD card slot, a coin-cell battery for the low-power Hibernate mode, a CAN transceiver, a temperature sensor, a 9-axis sensor for motion tracking and easy-access through-holes to all of the available device signals.

The Tiva C Series TM4C123G Development Kit includes a flash drive pre-loaded with software libraries, utilities, development environments and project files that give you the tools to start building your own applications. The 30+ example applications enable you to get started with real-world applications in 10 minutes or less.

Development Kit Contents

The DK-TM4C123G development kit contains everything you need to develop and run applications for Tiva C Series microcontrollers, including:

- Tiva C Series DK-TM4C123G pre-loaded with data logger quickstart application
- On-board In-Circuit Debug Interface (ICDI) for easy flash programming and debugging
- Cables:
  - USB Micro-B-plug-to-USB-A for debug function
  - USB Micro-B-plug-to-USB-A plug cable (connects to PC as a USB device)
  - USB Micro-A-plug-to-Std-A receptacle cable (connects to USB flash drive)
- 3-V CR2032 lithium coin-cell battery
- Development Kit USB flash drive:
  - Complete documentation
  - TivaWare™ for C Series Firmware Development Package with example source code
  - Texas Instruments' Code Composer Studio™ IDE
  - Keil™ RealView® Microcontroller Development Kit (MDK-ARM)
  - IAR Embedded Workbench® development tools
  - Sourcery CodeBench development tools
  - GCC



▲ *Tiva C Series TM4C123G Development Kit*

Product Number	Description
DK-TM4C123G	Tiva C Series Development Kit for Texas Instruments Code Composer Studio IDE, Keil RealView, IAR Embedded Workbench, Sourcery CodeBench and GCC

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