



# **EK-TM4C123GXL-BOOSTXL-BATTPACK Firmware Development Package**

**USER'S GUIDE**

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Texas Instruments  
108 Wild Basin, Suite 350  
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## Revision Information

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# 1 Introduction

This document describes the example applications that are provided for the EK-TM4C123GXL when paired with the BOOSTXL-BATTPAC BoosterPack.

## Features

See the Battery BoosterPack User's Guide for more detailed information on this booster pack at <http://www.ti.com/tool/boostxl-battpack>



## 2 Example Applications

The example applications show how to use features of the Cortex-M4F microprocessor, the peripherals on the Tiva C Series microcontroller, and the drivers provided by the peripheral driver library. These applications are intended for demonstration and as a starting point for new applications.

There is an IAR workspace file (`ek-tm4c123gx1-boostxl-battpack.eww`) that contains the peripheral driver library project, USB library project, and all of the board example projects, in a single, easy to use workspace for use with Embedded Workbench version 6.

There is a Keil multi-project workspace file (`ek-tm4c123gx1-boostxl-battpack.mpw`) that contains the peripheral driver library project, USB library project, and all of the board example projects, in a single, easy to use workspace for use with uVision.

All of these examples reside in the `examples/boards/ek-tm4c123gx1-boostxl-battpack` subdirectory of the firmware development package source distribution.

### 2.1 Fuel Tank BoosterPack Measurement example application (`boostxl_battpack`)

This example demonstrates the basic use of the Sensor Library, TM4C123G LaunchPad and the Fuel Tank BoosterPack to obtain state-of-charge, battery voltage, temperature, and several other supported measurements via the BQ27510G3 gas gauge sensor on the Fuel tank boosterpack.

Connect a serial terminal program to the LaunchPad's ICDI virtual serial port at 115,200 baud. Use eight bits per byte, no parity and one stop bit. The raw sensor measurements are printed to the terminal.

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
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