# Stellaris® LM4F232 USB+CAN Evaluation Kit

**TEXAS INSTRUMENTS**

The Stellaris LM4F232 USB+CAN Evaluation Kit is a compact and versatile evaluation platform for the Stellaris LM4F232 ARM® Cortex™-M4F-based microcontroller. The evaluation kit design highlights the LM4F232 microcontroller's integrated USB 2.0 On-the-Go/Host/Device interface, CAN, analog, and low-power capabilities.

## Features

The evaluation kit features a Stellaris microcontroller in a 144-LQFP package, a color OLED display, USB OTG connector, a microSD card slot, a coin cell battery for use with the Stellaris low-power Hibernate mode, a temperature sensor, a three-axis accelerometer for motion detection, and easy access through holes to all of the available device signals.

The kit also includes extensive source code examples, allowing you to start building C code applications quickly. The evaluation kit includes the following features:

- Uses Stellaris LM4F232H5QD with 256KB internal Flash and 144-LQFP with excellent prototyping capability
- 96×64 color OLED display providing useful output and interface options
- USB Micro-AB for prototyping USB application
- microSD card slot for data storage
- 5-mm screw terminals for attaching external sensors and other analog inputs
- Precision 3.0-V reference for accurate analog-to-digital conversion
- Temperature sensor for temperature monitoring
- 3-axis accelerometer for position sensing
- All I/O brought out to headers for easy prototyping
- Five user/navigation buttons (including select/wake) for user input
- One user LED
- 10-pin JTAG header providing standard debug interface

## Kit Contents

The evaluation kit contains everything you need to develop and run applications for Stellaris microcontrollers including:

- Stellaris EK-LM4F232 evaluation board
- On-board Stellaris In-Circuit Debug Interface (ICDI)
- Cables
    - USB Mini-B cable for debug function
    - USB Micro-A-plug-to-Std-A receptacle cable (connects to USB Flash drive)
    - USB Micro-B-plug-to-USB-A plug cable (connects to PC as a USB device)
    - USB Flash drive
- 3-V CR2032 lithium coin-cell battery
- Evaluation Kit CD containing:
    - Complete documentation
    - StellarisWare® Peripheral Driver Library and example source code
- Stellaris Firmware Development Package with example source code
- Quickstart application with source code
    - Windows companion application for quickstart application
- A supported evaluation version of one of the following:
    - Keil™ RealView® Microcontroller Development Kit (MDK-ARM)
    - IAR Embedded Workbench® development tools
    - Sourcery CodeBench development tools
    - Code Red Technologies Red Suite
    - Texas Instruments' Code Composer Studio™ IDE

## Ordering information

| Product Number | Description |
|---|---|
| EKK-LM4F232 | Stellaris LM4F232 Evaluation Kit for Keil™ RealView® MDK-ARM (32 KB code-size limited) |
| EKI-LM4F232 | Stellaris LM4F232 Evaluation Kit for IAR Systems Embedded Workbench® (32 KB code-size limited) |
| EKC-LM4F232 | Stellaris LM4F232 Evaluation Kit for Sourcery CodeBench (30-day limited) |
| EKT-LM4F232 | Stellaris LM4F232 Evaluation Kit for Code Red Technologies Red Suite (90-day limited) |
| EKS-LM4F232 | Stellaris LM4F232 Evaluation Kit for Code Composer Studio™ IDE (board-locked) |

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**Cortex** Intelligent Processors by ARM®

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