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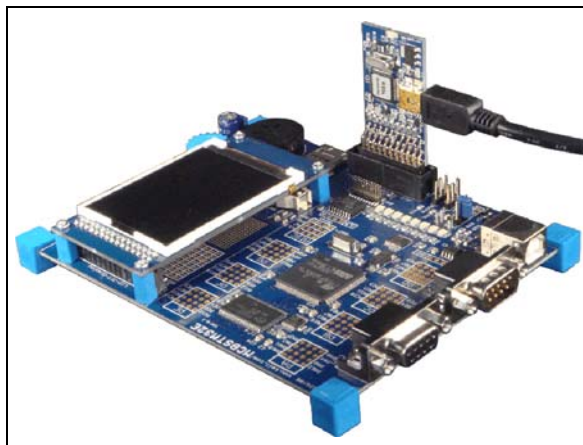
**Keil™ starter kit for STM32F100/101/102/103 lines  
(with STM32F103ZG MCU)**

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Data brief

**Features**

- The Keil MDK-Lite development tools:
  - µVision®4 IDE/Debugger for application programming and debugging
  - ARM C/C++ compiler
  - RTX real-time kernel, a multi-tasking operating system for embedded applications
  - MDK-Lite supports applications with up to 32 KB code-size
- ULINK-ME in-circuit debugger/programmer with USB interface to host PC and 20-pin JTAG or 10-pin CoreSight debug interface
- Full-featured Keil evaluation board with a 72 MHz STM32F103ZG MCU

**Description**

The Keil starter kit is a complete, cost-effective solution for starting application development and evaluating the STMicroelectronics STM32F100/101/102/103 ARM Cortex™-M3 processor-based microcontrollers.

The STM3210G-SK/KEI starter kit provides all the hardware and software you need to start developing applications for the STM32 ARM core-based families of microcontrollers. It comes complete with a full-featured evaluation board (including USB device, CAN, USARTs, Audio, MicroSD Card interface and QVGA LCD), Keil's MDK-ARM Lite Edition (32 KB) development tools, and the ULINK-ME™ (USB/JTAG) adapter.

Keil starter kits are available for a full range of ST ARM core-based microcontrollers.

## Starter kit architecture

**Keil development software** is a suite of software development tools for creating and debugging microcontroller applications that includes:

- **µVision® 4** integrated development environment, which integrates the ARM RealView Compilation Tools and Keil's debugging software so that users can quickly and easily develop and debug their applications while they run on a target microcontroller.
- **ARM RealView Compilation Tools (RVCT)** 32 KB code-size limited version of the optimizing C/C++ compiler for ARM™ core-based microcontrollers.
- **ULINK-ME™** USB/JTAG in-circuit debugger / programmer, which integrates fully with µVision4, allowing users to download the application to the target and debug it while it runs on the ST ARM core-based microcontroller on the evaluation board.
- **Keil™ evaluation board**, an application board that provides a full range of features to help users evaluate and start developing applications for the included STM32F103ZGTx microcontroller. The Keil MCBSTM32EXL evaluation board includes the following key features:
  - 1-Mbyte external RAM, FSMC
  - 8-Mbyte external Flash, SPI
  - Micro SD/MMC card connector
  - 20-pin JTAG connector
  - 20-pin trace tool connector
  - Power supply from USB
  - USART connector
  - SPI
  - I<sup>2</sup>C
  - CAN connector
  - USB connector
  - 8 user LEDs
  - QVGA LCD display
  - Potentiometer connected to ADC
  - 4 user and wake-up push buttons
  - Reset button
  - Wrap area
  - Joystick

## Ordering information

Keil starter kits can be ordered from Keil or from your nearest ST distributor or sales office for STM32F100/101/102/103 lines (ST order code: STM3210G-SK/KEI).

For more information and complete documentation, please refer to the Keil web site or the STMicroelectronics microcontroller support site on [www.st.com](http://www.st.com).

## Revision history

**Table 1. Document revision history**

| Date        | Revision | Changes          |
|-------------|----------|------------------|
| 27-Sep-2013 | 1        | Initial release. |

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