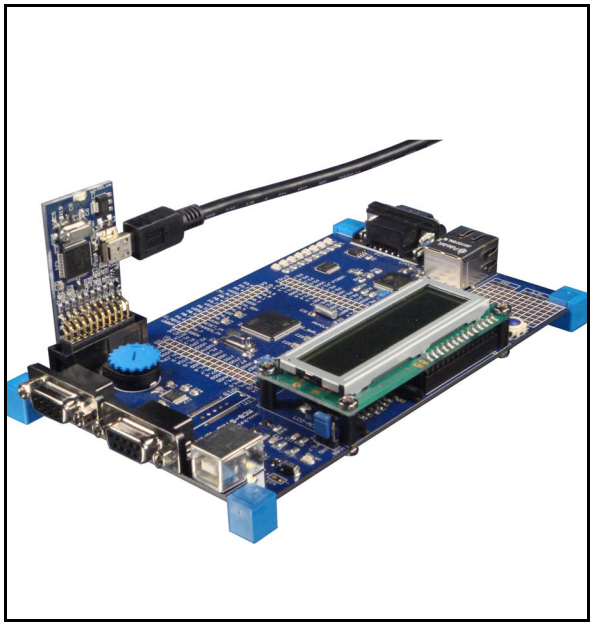
STM3210B-SK/KEIL
STR91X-SK/KEI, STR7-SK/KEIL

Keil™ starter kits for ST ARM core-based microcontrollers

Data brief

Features



- The ARM® RealView™ Microcontroller Development Kit complete development software package with:
  - µVision3® integrated development environment for application programming and debugging
  - ARM RealView Compilation Tools C/C++ compiler for output of code up to 16 Kbytes
  - RTX real-time kernel, a multi-tasking operating system for embedded applications
- ULINK™ in-circuit debugger/programmer with USB interface to host PC and 20-pin JTAG application interface
- Full-featured Keil evaluation board with target microcontroller.

Description

The Keil starter kits are complete solutions for starting application development and evaluating the STMicroelectronics STM32F101/103 (up to 128K Flash), STR91x, STR75x, STR73x, and STR71x ARM core-based microcontrollers.

They come with all the hardware and software you need to start developing applications for the STM32, STR9 and STR7 ARM core-based families of microcontrollers. The kits come complete with Keil's µVision3 integrated development environment for ARM and the 16 Kbyte code-size limited version of the ARM RealView Compilation Tools, a full-featured evaluation board (including USB, USART, SPI, ADC) and target microcontroller, with the ULINK (USB/JTAG) in-circuit debugger/programmer.

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

For further information contact your local STMicroelectronics sales office. www.st.com

Starter kit architecture

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

- **µVision3®** 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)** 16K code-size limited version of the optimizing C/C++ compiler for ARM™ core-based microcontrollers.
- **ULINK™** USB/JTAG in-circuit debugger/programmer, which integrates fully with µVision3, 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 microcontroller.

Table 1. Evaluation board key features

Feature	Starter kit				
	STM3210B -SK/KEIL	**STR91X -SK/KEI**	**STR750 -SK/KEIL**	**STR73xF(1)**	**STR71xF(1)**
Included microcontroller	STM32F103B	STR912FAW4	STR750FV2	STR730FZ2	STR710FZ2
20-pin JTAG connector	Yes	Yes	Yes	Yes	Yes
10-pin ARM Cortex-debug connector	No	No	No	No	No
Trace tool connector	N/A	38-pin (footprint)	N/A	N/A	N/A
External power supply included	No	No	No	No (7-12V DC)	No (7-9V DC)
Power supply from USB	Yes	Yes	Yes	No	No
USART connector(s)	1	2	2	4	2
SPI	Yes	Yes	Yes	Yes	Yes
I^2C	Yes	Yes	Yes	Yes	No
CAN connector	Yes	Yes	Yes	Yes	Yes
USB connector	Yes	Yes	Yes	No	Yes
Ethernet connector	N/A	Yes	N/A	N/A	N/A
User LEDs	8	8	8	16	8
LCD display	Yes (2x16)	Yes (2x16)	Yes (2x16)	No	No
SD/MMC card connector	Yes	Yes	Yes	No	No

Table 1. Evaluation board key features (continued)

Feature	Starter kit				
	STM3210B -SK/KEIL	STR91X -SK/KEI	STR750 -SK/KEIL	STR73xF[1]	STR71xF[1]
Potentiometer connected to ADC	Yes	Yes	Yes	Yes	No
User and wake-up push button(s)	3	3	3	2	3
Reset button	Yes	Yes	Yes	Yes	Yes
Wrap area	Yes	Yes	Yes	Yes	No

1. STR73x and STR71x starter kit references are available at www.keil.com.

Ordering information

All Keil starter kits can be ordered from Keil. Starter kits are available from your nearest STMicroelectronics distributor or sales office for the following:

- STM32 performance and access line microcontrollers with 128K Flash (ST order code: **STM3210B-SK/KEIL**)
- STR91xF microcontrollers (ST order code: **STR91X-SK/KEI**)
- STR75xF microcontrollers (ST order code: **STR750-SK/KEIL**)
- STR73x microcontrollers (order code: refer to www.keil.com)
- STR71x microcontrollers (order code: refer to www.keil.com)

For more information and documentation, please refer to the Keil web site or the STMicroelectronics microcontroller support site at www.st.com.

Revision history

Table 2. Document revision history

Date	Revision	Changes
14-Jun-2007	1	Initial release.
04-Oct-2006	2	Added STR750-SK/KEIL and product characteristics
04-Oct-2007	3	Modified document title. Added STM3210B-SK/KEIL and product characteristics
17-Oct-2008	4	Added STM3210E-SK/KEIL and product characteristics
18-Jun-2009	5	Added STM3210C-SK/KEIL and product characteristics.
dd-MMM-2011	6	Modified document title. Removed STM3210C-SK/KEIL, STM3210E-SK/IKEIL and product characteristics.

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