



STM32-SK/IAR STR91X-SK/IAR, STR7-SK/IAR

IAR™ starter kits for ST ARM core-based microcontrollers

Data brief

Features

- The IAR Embedded WorkBench™ for ARM® (EWARM) software package with:
 - KickStart™ C/C++ compiler for output of code up to 32 Kbytes
 - VisualState™ code generator, 20-state version
 - C-SPY high-level language debugger
 - Editor, linker and librarian tools
- J-Link in-circuit debugger/programmer with USB interface to host PC and 20-pin JTAG application interface (embedded on some kits)
- Full-featured KickStart™ development board with target microcontroller. On-board features are listed in [Table 1](#).

Description

The **IAR KickStart kits** are complete, cost-effective solutions for starting application development and evaluating STMicroelectronics' ARM core-based microcontrollers.

The KickStart kit's come with all the hardware and software you need to start developing applications including the KickStart development board with target microcontroller, the IAR J-Link in-circuit debugger/programmer (USB/JTAG) and IAR Embedded Workbench™ for ARM (EWARM) integrated development environment with the KickStart edition of the IAR C/C++ compiler (output code up to 32 Kbytes), built-in Flash loader and sample projects for all device peripherals.

IAR KickStart kits provide evaluation and development support for a full range of ST ARM core-based microcontrollers.



Starter kit architecture

The **IAR development software** is a suite of software tools for all phases of application development that includes:

- **IAR Embedded Workbench for ARM** integrated development environment with the KickStart 32KB C/C++ compiler to build the application and the C-SPY™ debugger for debugging the application while it runs on your microcontroller.
- **VisualSTATE 20-state version** of IAR's graphical design environment with C/C++ code generator for developing application code based on machine states.
- **J-Link** in-circuit debugger/programmer (USB/JTAG) which integrates fully with EWARM, allowing you to download the application to your target and debug it while it runs on your ST ARM core-based microcontroller. J-Link is embedded on the KickStart development board in the STM32 starter kits.
- **KickStart development board** that provides a full range of features to help developers evaluate and start developing applications for the included microcontroller. The board is powered from the J-Link's USB connection with the host PC.

Table 1. KickStart development board key features

Feature	Starter kit							
	STM3210C-SK/IAR	STM3210E-SK/IAR	STR91X-SK/IAR	STR750-SK/IAR	STR731-SK/IAR	STR730-SK/IAR	STR712-SK/IAR	STR711-SK/IAR
Included microcontroller	STM32F107C	STM32F103E	STR912FAW4	STR750FV2	STR731FV2	STR730FZ2	STR712FR2	STR711FR2
J-Link	Embedded	Embedded	Standalone	Standalone	Standalone	Standalone	Standalone	Standalone
20-pin JTAG connector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Trace tool connector	20-pin	20-pin	38-pin	N/A	N/A	N/A	N/A	N/A
Power supply from USB connection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Backup power supply	No	No	3V button battery	No	No	No	No	No
USART connector(s)	2	2	3	3	4	4	2	2
SPI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I ² C	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CAN connector	Yes	No	Yes	Yes	No	Yes	Yes	No
USB connector	Host OTG	Host	Host	Host	Host	No	No	Host
Ethernet connector	Yes	N/A	Yes	N/A	N/A	N/A	N/A	N/A
User LEDs	4	4	16	16	16	16	2	2
LCD display	Graphical	Graphical	Yes (2x16)	Yes (2x16)	Yes (2x16)	Yes (2x16)	No	No

Table 1. KickStart development board key features (continued)

Feature	Starter kit							
	STM3210C-SK/IAR	STM3210E-SK/IAR	STR91X-SK/IAR	STR750-SK/IAR	STR731-SK/IAR	STR730-SK/IAR	STR712-SK/IAR	STR711-SK/IAR
SD/MMC connector	Yes	Yes	Yes	Yes	No	No	No	No
Potentiometer connected to ADC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User, tamper, wake-up push button(s)	3	3	3	5	5	5	3	3
Reset button	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wrap area	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Additional features								
Stepper motor	Yes	Yes	No	No	No	No	No	No
MEMS accelerometer	Yes	Yes	No	No	No	No	No	No

Ordering information

IAR KickStart kits can be ordered from IAR or from your nearest ST distributor or sales office. Kits are currently available for:

- STM32 connectivity line microcontrollers (ST order code: **STM3210C-SK/IAR**)
- STM32 performance and access line microcontrollers with up to 512K Flash (ST order code: **STM3210E-SK/IAR**)
- STR91xF microcontrollers (ST order code: **STR91X-SK/IAR**)
- STR75xF microcontrollers (ST order code: **STR750-SK/IAR**)
- STR731F microcontrollers (ST order code: **STR731-SK/IAR**)
- STR730F microcontrollers (ST order code: **STR730-SK/IAR**)
- STR712F microcontrollers (ST order code: **STR712-SK/IAR**)
- STR711F microcontrollers (ST order code: **STR711-SK/IAR**)

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

Revision history

Table 2. Document revision history

Date	Revision	Changes
1-Apr-2005	1	Initial release.
27-Sep-2005	2	Added STR730-SK/IAR and table of on-board features.
7-Jun-2006	3	Added STR91X-SK/IAR and STR731-SK/IAR and key features.
4-Oct-2006	4	Added STR750-SK/IAR and key features.
4-Oct-2007	5	Modified document title. Added STM3210B-SK/IAR and key features.
17-Oct-2008	6	Added STM3210E-SK/IAR and key features.
18-Jun-2009	7	Added STM3210C-SK/IAR and key features. Removed STM3210B-SK/IAR and key features.

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