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.
- Full-featured KickStart™ development board with target microcontroller.

Description

The IAR KickStart Kits™ are complete, cost-effective solutions for starting application development and evaluating the STMicroelectronics STR91x, STR75x, STR73x and STR71x ARM core-based microcontrollers.

The KickStart kits 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 are available for a full range of ST ARM core-based microcontrollers.

www.st.com
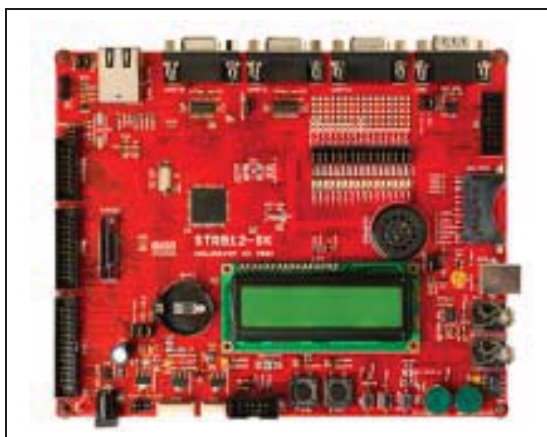
Starter kit architecture

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.
- IAR 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.
- 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				
	STR91X-SK/IAR	STR750-SK/IAR	STR731-SK/IAR	STR712-SK/IAR	STR711-SK/IAR
Included microcontroller	STR912FAW4	STR750FV2	STR731FV2	STR712FR2	STR711FR2
J-Link	Standalone	Standalone	Standalone	Standalone	Standalone
20-pin JTAG connector	Yes	Yes	Yes	Yes	Yes
Trace tool connector	38-pin	N/A	N/A	N/A	N/A
Power supply from USB connection	Yes	Yes	Yes	Yes	Yes
Backup power supply	3V button battery	No	No	No	No
USART connector(s)	3	3	4	2	2
SPI	Yes	Yes	Yes	Yes	Yes
I^{2}C	Yes	Yes	Yes	Yes	Yes
CAN connector	Yes	Yes	No	Yes	No
USB connector	Host	Host	Host	No	Host
Ethernet connector	Yes	N/A	N/A	N/A	N/A
User LEDs	16	16	16	2	2
LCD display	Yes (2x16)	Yes (2x16)	Yes (2x16)	No	No
SD/MMC connector	Yes	Yes	No	No	No
Potentiometer connected to ADC	Yes	Yes	Yes	Yes	Yes

Table 1.   **KickStart development board key features (continued)**

Feature	Starter kit				
	STR91X-SK/IAR	**STR750-SK/IAR**	**STR731-SK/IAR**	**STR712-SK/IAR**	**STR711-SK/IAR**
User, tamper, wake-up push button(s)	3	5	5	3	3
Reset button	Yes	Yes	Yes	Yes	Yes
Wrap area	Yes	Yes	Yes	Yes	Yes

Ordering information

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

●   STR91xF microcontrollers (ST order code: **STR91X-SK/IAR**)

●   STR75xF microcontrollers (ST order code: **STR750-SK/IAR**)

●   STR73xF microcontrollers (ST order code: **STR731-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.
15-Mar-2011	8	Modified document title. Removed STM3210C-SK/IAR, STM3210E-SK/IAR and key features.

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com