

STM32-SK/HIT STR91X-SK/HIT, STR7-SK/HIT

Hitex starter kits for ST ARM core-based microcontrollers

Data Brief

Features

- Hitex software toolset for ARM[®] devices, with:
 - HiTOP5 integrated development environment (IDE) for application programming and debugging
 - Tasking VX C/C++ compiler (STM32 kit), or GNU C/C++ compiler (STR9 and STR7 kits)
- In-circuit debugger/programmer with USB interface to host PC and industry-standard JTAG interface to the target device
- Full-featured Hitex evaluation board with target microcontroller. On-board features are listed in *Table 1*.

Description

The **Hitex starter kits** are complete, full-featured solutions for starting application development and evaluating the features of STMicroelectronics' ARM core-based microcontrollers. They come with all the hardware and software that developers need to start developing applications for STM32, STR9 and STR7 devices, including full-featured evaluation board, target microcontroller, in-circuit debugger/programmer (USB/JTAG) and the HiTOP5 development software with C/C++ toolset.



Starter kit architecture

Hitex development software provides a complete set of software tools for creating and debugging microcontroller applications. It includes **HiTOP5**, Hitex's integrated development environment that drives the hardware and offers a full range of project management, source-code editing and debugging features from an intuitive graphical interface. HiTOP5 with Tasking VX C/C++ compiler delivered in STM32 kits has no code-size limitation when used with the included STM32-PerformanceStick. HiTOP5 in STR9 and STR7 kits allows debugging of applications up to 16 Kbytes in size.

HiTOP5 drives a range of in-circuit debugging / programming tools including Tantino and Tanto, for STR7/9 and Tanto Port Trace for STR9 MCUs with Embedded Trace Macrocell.

Starter kits include complete C/C++ toolsets for compiling application source files. The STM32 starter kits include the Tasking VX C/C++ compiler. STR9 and STR7 kits come with unlimited GNU C/C++ compiler toolset. For more information about HiTOP5 downloads and updates, refer to the Hitex web site.

Hardware interface – For in-circuit debugging and programming of the target microcontroller, the STM32 kit includes *STM32-PerformanceStick* with integrated debugging/programming via dedicated USB interface. STR9 and STR7 kits include the *Tantino* in-circuit debugging and programming tool featuring USB host interface and industry standard JTAG application board interface.

Hitex evaluation board – Full-featured evaluation boards with target microcontroller are designed for quick and easy evaluation of a complete range of microcontroller-specific features such as Ethernet, USB, CAN, UART, I²C, SPI, and ADC. Power supply is included.

Table 1. Hitex evaluation board key features

Feature	Starter kit					
	STM32F10xB kit	STR91xF kit	STR75xF kit	STR73xF kit	STR71xF kit	
Included STR microcontroller	STM32F103B	STR912FW4	STR750FV2	STR730FZ2	STR710FZ2	
20-pin JTAG interface connector	N/A	Yes	Yes	Yes	Yes	
38-pin trace tool connector	N/A	Yes (footprint only)	N/A	N/A	N/A	
External power supply included	N/A	Yes	Yes	Yes	Yes	
Backup power supply	3V button battery	3V button battery	N/A	N/A	N/A	
UART connector(s)	1	2	2	4	2	
SPI	Yes	Yes	Yes	Yes	Yes	
I ² C	Yes	Yes	Yes	Yes	No	
CAN connector	Yes	Yes	Yes	Yes	Yes	
USB connector	Yes	Yes	Yes	No	Yes	
Ethernet connector	No	Yes	No	No	No	

577

Table 1. Hitex evaluation board key features

Feature	Starter kit					
	STM32F10xB kit	STR91xF kit	STR75xF kit	STR73xF kit	STR71xF kit	
User LEDs	3 (Simple LED)	2 (7 segment LED)	2 (7 segment LED)	2 (7 segment LED)	8 (Simple LED)	
LCD display	No	Footprint	Footprint	No	No	
SD/MMC connector	No	Yes	Yes	No	No	
Potentiometer connected to ADC	No	Yes	Yes	Yes	Yes	
User push button(s)	2	5	3	No	No	
Reset button	Yes	Yes	Yes	Yes	Yes	
Wrap area	No	No	No	Yes	No	
Motor control connector	No	34-pin header	34-pin header	No	No	
Extension board connectors	one 80-pin connector	Two 50-pin headers	No	No	No	

Ordering information

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

- STM32F10xB microcontrollers (ST order code: STM3210B-SK/HIT)
- STR91xF microcontrollers (ST order code: STR91X-SK/HIT)
- STR75xF microcontrollers (ST order code: STR750-SK/HIT)
- STR73xF microcontrollers (ST order code: STR730-SK/HIT)
- STR71xF microcontrollers (ST order code: STR710-SK/HIT)

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

Revision history

Table 2. Document revision history

Date	Revision	Changes
14-Dec-2005	1	Initial release.
7-Jun-2006	2	Added STR91X-SK/HIT and STR730-SK/HIT
4-Oct-2006	3	Added order code and product characteristics for STR750-SK/HIT
4-Oct-2007	4	Modified document title. Added STM3210B-SK/HIT and 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.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2007 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

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

www.st.com

577