



ARM RealView™ Developer Kit (RVDK) for ST Development environment for STR7 and STR9 microcontrollers

Data Brief

The **RealView™ Developer Kit for ST** is a complete development and debugging environment for designing applications for the STR7 and STR9 families of ARM™ core-based microcontrollers. The kit is comprised of C compilation tools, debugging software and the RealView ICE Micro Edition (RVICE-ME) JTAG run control device. While the RealView Developer Kit is tailored to work with ST products, it provides the same compiler optimizations and debugging features as the ARM RealView™ Developer Suite (RDS).

Features

The RealView Developer Kit includes:

RealView ICE-ME (RVICE-ME) – the ARM in-circuit debugger and programmer, featuring USB host interface and industry standard JTAG interface to the application board.

RealView Debugger – ARM's powerful, debugging interface that provides a complete range of run control and breakpoint features.

RealView C Compilation Tools (RVCT) – ARM C compiler, macro assembler and linker offering a range of optimizations for code size or speed of execution. An optional C++ extension is available.

RVDK for ST does not include tools with trace capability to take advantage of the STR9's Embedded Trace Macrocell™. For information about tool kits that support the STR9 trace



capability, please refer to the data brief for either the IAR Advanced Developer's Kit for STR91xF (STR91X-DK/IAR), or the Raisonance Professional Developer Kit for STR9 (STR9-DK/RAIS).

Ordering information

Several ordering options are available for RVDK, which are summarized in the table below. Additional ordering codes for compiler and license extensions, as well as for upgrades of previous versions to support STR9 are provided in the product selector at www.st.com/mcu.

Order codes	C compiler (with full optimization) ¹	Debugger	Optimum JTAG download	45-day limited license	RVICE-ME ²
STR79-RVDK	Yes	Yes	Yes	No	Yes
STRx-RVDK/BAS ⁵	No ³	Yes	No ⁴	No	Yes
STR-RVICE/ME	Yes	Yes	Yes	Yes	Yes

1. Additional C++ option is available (STR79-RVDK/CPP).

2. RealView ICE Micro Edition hardware emulator can be purchased separately (STR-RVICE/ME).

3. C Compiler delivered with the Basic editions (STR9-RVDK/BAS and STR7-RVDK/BAS) has a maximum optimization at level -O1 (highest is -O2, the lowest is -O0).

4. STR7-RVDK/BAS Basic edition has a download/single stepping speed restricted to 25% of maximum speed of STR79-RVDK maximum JTAG download speed.

5. The initial key license for STR7-RVDK/BAS and STR9-RVDK/BAS are limited to one year only.

- **STR79-RVDK** – RVDK Full Edition for STR7 and STR9. Includes RealView ICE-ME, debugging software and C compilation tools (without C++ extension).

Note: *Note: The ordering code STR79-RVDK replaces the STR7-RVDK code that was previously used to order the RVDK Full Edition for STR7.*

- **STR9-RVDK/BAS** – RVDK Basic Edition for STR9 with 1-year license. Includes RealView ICE-ME, debugging software and C compilation tools (without C++ extension).
- **STR7-RVDK/BAS** – RVDK Basic Edition for STR7 with 1-year license. Includes RealView ICE-ME, debugging software and C compilation tools (without C++ extension).
- **STR79-RVDK/CPP** – Optional C++ extension for the RealView compilation tools.
- **STR79-RVDK/UPG** – Upgrade for RVDK Basic Edition (1-year license) to the RVDK Full Edition (STR79-RVDK).
- **STR-RVICE/ME** – RealView ICE-ME in-circuit debugger programmer. Includes 45-day trial version of the RealView debugging software and C compilation tools.

Upgrade ordering codes for RVDK for STR7 users:

- **STR79-RVDK/9** – Upgrade RVDK for STR7 to RVDK for STR7/9.
- **STR79-RVDKCPP/9** – Upgrade RVDK for STR7 with C++ extension to RVDK for STR7/9 with C++ extension.

RVDK for ST will continue to be available from and supported by STMicroelectronics for ST's ARM7TDMI (STR7) and ARM966E (STR9) core-based MCUs. However this tool package will not support ST microcontrollers that use future ARM cores. For support of current and future ARM core-based MCUs, ARM has introduced a new tool package RealView Microcontroller Development Kit for ARM based on the ARM compilation tools and the Keil uVision3 IDE.

For more information...

The microcontroller support site, www.st.com/mcu provides a number of free tool and microcontroller support features including software downloads, on-line product selector, user groups and complete documentation.

1 Revision history

Table 1. Document revision history

Date	Revision	Changes
6-Sep-2006	1	Initial release.

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.

© 2006 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