RVDK

ARM RealView® Developer Kit (RVDK) for ST development environment for STR7 and STR9 microcontrollers
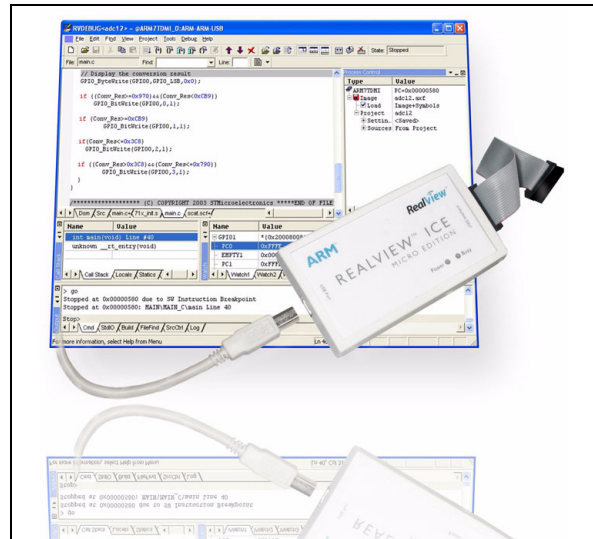
Data Brief

Features

The RVDK for ST includes:

- RealView ICE-ME (RVICE-ME), ARM's 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's C compiler, macro assembler and linker offering a range of code size or speed of execution optimizations. An optional C++ extension is available.

Description

The ARM 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. 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). 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 (STR9DK/RAIS).

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

Table 1. Device summary

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[3]	No[4]	Yes	No[5]	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. The initial key license for STR7-RVDK/BAS and STR9-RVDK/BAS are limited to one year only.
4. 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).
5. STR7-RVDK/BAS Basic edition has a download/single stepping speed restricted to 25% of maximum speed of STR79-RVDK maximum JTAG download speed.

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

Ordering the RVDK

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

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

Revision history

Table 2. Document revision history

Date	Revision	Changes
06-Sep-2006	1	Initial release.
09-Feb-2009	2	Revision number on cover page corrected. Cover page content restructured. No technical changes.

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