STX-RLINK

Raisonance's in-circuit debugger/programmer for ST7, uPSD and STR7

The ***RLink*** (STX-RLINK) is Raisonance's versatile, low-cost, in-circuit debugger and programmer for ST7, uPSD, and STR7 microcontrollers. It connects to application or evaluation boards for programming and debugging via a JTAG standard connection for ARM core-based and uPSD microcontrollers, or via STMicroelectronic's In-Circuit Communication (ICC) connection for ST7 microcontrollers.

RLink driven by Raisonance's RIDE integrated development environment provides both in-circuit debugging and programming of applications for ST7 and uPSD, and in-circuit programming of STR7 microcontrollers. In combination with Raisonance's free RFlasher programming software, RLink can be used as a very-low cost, dedicated in-circuit programmer for ST7, uPSD or STR7.

Figure 1. RLink and connection adapters

Architecture

RLink – in-circuit debugging and programming tool supports both JTAG and ICC protocols and connects to your application board via one of three adapters:

- 10-pin ICC adapter for ST7 microcontrollers
- 14-pin JTAG adapter for uPSD microcontrollers
- 20-pin JTAG adapter for STR7 microcontrollers

RIDE – Raisonance's integrated development environment drives the RLink and offers seamless control of software development tools (compiler, assembler, linker, debugger, etc.) from an intuitive graphical interface. RIDE comes in separate versions supporting STR7, uPSD or ST7. All versions offer full integration the relevant C or C/C++ toolsets, project management, code editor, SIMICE instruction set simulator. The *optional* Code Compressor, Raisonance's post link code optimizer is also available for ST7.

RFlasher – Raisonance's easy-to-use programming interface that drives RLink allows you to erase, program view and verify microcontroller memory. RFlasher also includes ***automated mode*** for automatic execution of programming sequences for mass programming and ***project mode*** that allows you to save your programming configuration.

Key Features

RLink:

- In-circuit debugging and programming
- Connection to application board via JTAG standard, or ST standard ICC connection
- USB interface to host PC
- Powered from USB

Note: RLinks included with REva starter kits for (STRxxx-SK/RAIS from ST) and Professional Kits for STR7 (RKITPSTRxxx from Raisonance only) allow debugging of STR7 microcontrollers.

RIDE:

All versions include:

- Free downloads of evaluation versions from *www.raisonance.com*
- Free ***RFlasher*** programming software
- High-level language debugging
- Color syntax highlighting editor
- Project manager

RIDE for STR7

- GNU C/C++ toolset for ARM
- ***SIMICE-STR7*** simulator
- Available in free evaluation version that includes the unlimited GNU C/C++ compiler.

RIDE for ST-uPSD

- RC-51 ANSI C compiler
- ***SIMICE-51*** simulator
- Available in free evaluation version with 4KB code-size limited version of the RC51 compiler, unlimited debugging.
- Supports *softExpress* for configuration of uPSD microcontrollers
- Supports ***CComp-51*** code compressor *optional* post-link code optimizer. Applies optimizations such as inlining, factorization and peepholing.

RIDE for ST7

- Cosmic C and Metrowerks C toolsets for ST7
- ***SIMICE-ST7*** simulator
- ***RBuilder*** application builder (requires use of a C compiler) for quick, easy configuration of ST7 peripherals and generation of associated application source code.
- Supports ST7-EMU3 and ST7-DVP3 series emulators
- Supports ***CodeCompressor***, Raisonance's optional post-link code optimizer. Applies optimizations such as inlining, factorization and peepholing.
- Available in free evaluation version with unlimited debugging.

Note: RIDE for ST7 is compatible with the free 16K code-size limited version of the Cosmic C toolset. For more information and free downloads, refer to www.cosmic-software.com.

Revision history

Date	Revision	Changes
1-Dec-2005	1	Initial release.
8-Feb-2006	2	• Introduction corrected to indicate in-circuit debugging capabilities. • Added Code Compressor support for ST7. • Added product references for in-circuit debugging of STR7

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