



STR9-DK/RAIS, STX-PRO/RAIS

Raisonance's unlimited development tool bundles for STR7 and STR9

The **Professional Kit** (STX-PRO/RAIS) and the **STR9 Professional Developer Kit** (STR9-DK/RAIS) provide cost-effective, unlimited application development solutions for STMicroelectronics ARM7TDMI™ and ARM966E™ core-based microcontrollers.

Based on proven software and hardware tools from Raisonance, the tool kits everything required to develop STR7/9 applications including in-circuit debugger/programmer, Raisonance Integrated Development Environment (*RIDE*) and GNU C/C++ compiler. In addition the *STR9 Professional Developer Kit* includes extras such as Signum's JTAGjet supporting execution trace and REva evaluation board with STR91xF and plenty of code samples to help users get started with peripherals such as Ethernet and USB.

The development tools

In-circuit debugger/programmer – in-circuit debugging/programming tools feature the industry standard JTAG application board interface and USB connection to the host PC. **Raisonance's RLink** (in the STX-PRO/RAIS) is a versatile tool that allows in-circuit debugging and programming of a range of STMicrocontrollers from the 32-bit STR7/9 to the 8-bit ST7 and uPSD families. **Signum's JTAGjet** (in the STR9-DK/RAIS), includes support for execution trace during debugging, so that users can take advantage of the STR9's Embedded Trace Macrocell.

RIDE software – the unlimited version of the Raisonance integrated development environment, drives both *RLink* and *Signum's JTAGjet* and offers seamless control of software development tools (compiler, assembler, linker, debugger, etc.) from an intuitive graphical interface. Fully integrates control of the GNU C/C++ compiler.

GNU C/C++ compiler – the unlimited, optimizing C/C++ compiler for ARM core-based microcontrollers.

Figure 1. Professional Kit with RLink



Figure 2. STR9 Professional Developer kit



REva evaluation board (in the STR9-DK/RAIS) – modular evaluation board designed to help users quickly evaluate a range of ST microcontrollers and device features. The motherboard provides general evaluation features including LEDs, push buttons, switches, temperature sensor, potentiometer and interfaces for I2C, SPI and UART. The daughterboard features specific components for the STR912FW4, including the MCU itself, ETM trace connector and Ethernet connector. Daughterboards are interchangeable and plug into a standard SO-DIMM connector found on all REva motherboards.

Development tool key features

In-circuit debugger/programmer

Raisonance RLink (in STX-PRO/RAIS)

- USB host PC interface
- Industry standard JTAG application interface (20-pin)

Note: RLink also includes ICC and JTAG connection adapters for in-circuit debugging/programming of 8-bit ST7 and uPSD microcontroller families.

Signum JTAGjet (in STR9-DK/RAIS)

- USB host PC interface
- 2 Mbyte trace buffer
- Trace connection for the STR9's Embedded Trace Macrocell™
- Industry standard JTAG application interface

RIDE integrated development environment

- Unlimited version
- SIMICE simulator for STR7 and STR9
- Seamless control of GNU C/C++ toolset
- Color syntax highlighting editor
- High-level language debugger
- Project manager

RIDE drives both the RLink in-circuit debugger/programmer and the Signum JTAGjet in-circuit debugger/programmer with trace for use with the STR9 microcontroller's Embedded Trace Macrocell™.

Note: RIDE also supports application development and debugging for the 8-bit ST7 and uPSD microcontroller families. RIDE provides the same seamless integration of Compilers and Assemblers for these families and supports a range of debugging tools and emulators. For more information and downloads, refer to www.raisonance.com.

REva evaluation board (in STR9-DK/RAIS)

REva motherboard

- 1 standard SO-DIMM connector to plug in daughter boards.
- RS232 driver and 2 DB9 connectors
- Prototyping area
- Digital and analog I/O evaluation features, including on-board LEDs, buttons, switches, external analog connector, temperature sensor and potentiometer
- VDD settings for 1.8V, 3.3V and 5V
- USB powered, no external power required
- I²C EEPROM and bus

REva STR91xF daughterboard

- STR912FW4 (LQFP128 package)
- Ethernet connector
- Clock selector and other device dependant features
- ETM trace connector

Ordering information

Raisonance development tool bundles can be ordered from Raisonance (www.raisonance.com), Signum (www.signum.com) or from your nearest ST Distributor or sales office. The following tool bundles are currently available:

Table 1. Order codes

Order code	In-circuit debugger/ programmer	Integrated Development Environment	C/C++ compiler	Evaluation board
STX-PRO/RAIS	RLink (no trace)	RIDE	GNU C/C++	No
STR9-DK/RAIS	JTAGjet with trace support	RIDE	GNU C/C++	REva with STR912FW4

For more information and documentation, please refer to www.raisonance.com or the STMicroelectronics microcontroller support site, www.st.com/mcu.

Revision history

Date	Revision	Changes
27-June-2006	1	Initial release.

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