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# STR91X-SK/RAI, STR730-SK/RAIS STR71X-SK/RAIS

## Raisonance's complete, low-cost starter kit for STR7 and STR9

The **REva Starter Kits** (STR71X-SK/RAIS, STR730-SK/RAIS, STR91X-SK/RAI) are Raisonance's complete, low-cost solutions for starting application development and evaluating the features of STMicroelectronic's ARM7TDMI™ and ARM966E™ core-based microcontrollers.

Kits come with all the hardware and software developers need to start developing applications for STR7 and STR9 devices, including the **REva** evaluation board, microcontroller(s), embedded **RLink** JTAG in-circuit debugger/programmer and Raisonance Integrated Development Environment (**RIDE**).

### Starter kit architecture

**Embedded RLink** – in-circuit debugging and programming tool with JTAG application board interface and USB connection to the host PC.

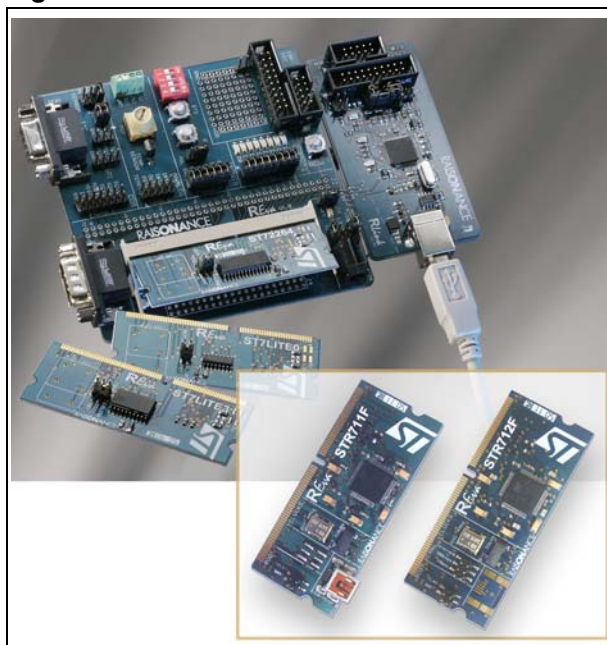
**REva motherboard** – universal evaluation board designed for quick and easy evaluation of a complete range of device features. It is powered from the **RLink's** USB connection to the host PC.

**REva daughter boards** – interchangeable boards featuring different target microcontrollers, make it easy to evaluate and develop applications for a complete range of MCUs from a single evaluation platform.

**RIDE software** – Raisonance's integrated development environment drives the hardware and offers seamless control of all software development tools (compiler, assembler, linker, debugger, etc.) from an intuitive graphical interface. Fully integrates control of the GNU C/C++ tools. The starter kit comes with the 16K code size limited version of RIDE.

REva Starter Kits based on the same mother/daughter board design, with embedded RLink, and driven by RIDE are available for the ST7 and uPSD 8-bit microcontroller families. For more information refer to [www.st.com/mcu](http://www.st.com/mcu).

Figure 1. REva starter kit for STR71xF



### Starter kit key features

#### Embedded RLink:

- USB interface to host PC
- Industry standard JTAG application interface

#### REva motherboard:

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

**Table 1. REva motherboard key features**

Feature	Starter Kit		
	STR91X-SK/RAI	STR730-SK/RAIS	STR71X-SK/RAIS
Daughterboard(s) with STR microcontroller	STR912F	STR730F	STR711F STR712F
20-pin JTAG interface connector	Yes	Yes	Yes
Power supply from RLink USB connection	Yes	Yes	Yes
UART connector(s)	2	2	2
SPI	Yes	Yes	Yes
I <sup>2</sup> C	Yes	Yes	Yes
CAN connector	Yes	Yes	Yes
User LEDs	8	8	8
Potentiometer connected to ADC	Yes	Yes	Yes
User push button(s)	2	2	2
Reset button	Yes	Yes	Yes
Wrap area	Yes	Yes	Yes

**REva daughter boards:**

- Interchangeable daughter boards featuring different microcontrollers make it possible to develop applications for a wide range of devices in the STR7 and STR9 families.

**Table 2. REva daughter board microcontrollers and features**

MCU Daughter board	MCU package	MCU specific features
<b>STR71X-SK/RAIS starter kit</b>		
STR711F	TQFP64	• USB mini-B connector
STR712F	TQFP64	• CAN configuration jumpers
<b>STR730-SK/RAIS starter kit</b>		
STR730F	TQFP144	• CAN configuration jumpers
<b>STR91X-SK/RAI starter kit</b>		
STR912F	LQFP128	• Ethernet connector • ETM connector footprint for trace tool support

**RIDE for STR7/9:**

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

## STRxxx-SK/RAIS

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In addition to RLink, RIDE also drives the Signum JTAGjet in-circuit debugging and programming tool for ARM core-based microcontrollers, which supports trace using the STR9 microcontroller's Embedded Trace Macrocell™.

For more information about RIDE for STR7 and STR9 and for free downloads, refer to [www.raisonance.com](http://www.raisonance.com).

### Ordering information

REva starter kits can be ordered from Raisonance or from your nearest ST Distributor or sales office. Kits are currently available for the STR71xF (ST order code: **STR71X-SK/RAIS**), STR730F (ST order code: **STR730-SK/RAIS**) and STR91xF (ST order code: **STR91X-SK/RAI**) microcontrollers.

For more information and documentation, please refer to [www.raisonance.com](http://www.raisonance.com) or the STMicroelectronics microcontroller support site, [www.st.com/mcu](http://www.st.com/mcu).

### Revision history

Date	Revision	Changes
1-August-2005	1	Initial release.
21-September-2005	2	<ul style="list-style-type: none"><li>• Addition of the STR730-SK/RAIS</li><li>• Addition of JTAGjet in hardware driven by RIDE-STR7</li></ul>
7-June-2006	3	<ul style="list-style-type: none"><li>• Additions of ordering codes and product information for the STR91X-SK/RAI</li><li>• Addition of REva motherboard table of features</li></ul>
16-June-2006	4	<ul style="list-style-type: none"><li>• Corrected ordering codes in <a href="#">Table 1</a>.</li></ul>

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