STM32-SK/RAIS, STR91X-SK/RAI STR7-SK/RAIS, STM32-D/RAIS, STRx-D/RAIS

Raisonance REva starter kits for ST ARM core-based microcontrollers

Data Brief

Features

- Raisonance software toolset with:
  - GNU C/C++ compiler
  - RIDE integrated development environment allowing RAM debug of up to 32 Kbytes of code for STM32 or up to 16 Kbytes of code for STR7 and STR9
  - High-level language debugger, editor, project manager and SIMICE simulator
  - RFlasher dedicated programming interface
- Embedded RLink in-circuit debugger/programmer with USB interface to host PC and 20-pin JTAG application interface
- Interchangeable daughter boards featuring different target microcontrollers allowing development of applications for a wide range of ST microcontrollers
- REva universal evaluation motherboard with:
  - One standard SO-DIMM connector to plug in interchangeable daughter boards.
  - Digital and analog I/O evaluation features, including on-board LEDs, buttons, switches, external analog connector, temperature sensor and potentiometer
  - I²C 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

Description

The **Raisonance REva Starter Kits** are complete, low-cost solutions for starting application development and evaluating the features of STMicroelectonic's ARM® Cortex™-M3, ARM966E™ and ARM7TDMI™ core-based microcontrollers.
Kits come with all the hardware and software that developers need to start developing applications,
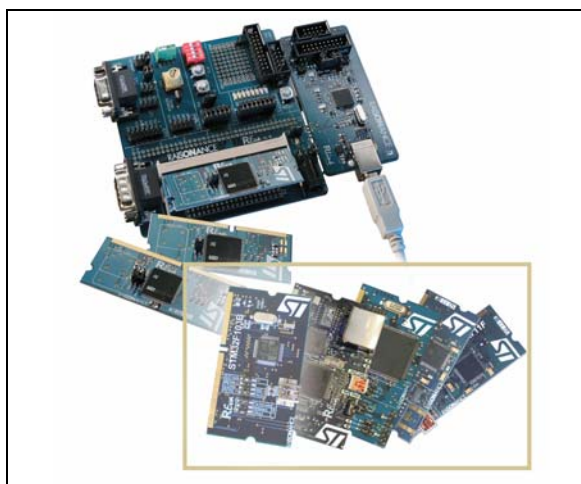
including the REva evaluation board, microcontrollers, embedded RLink JTAG in-circuit debugger/programmer and Raisonance Integrated Development Environment (RIDE).

REva starter kits are available for a full range of 32-bit and 8-bit microcontrollers including the ST7 and uPSD families. For more information, refer to the microcontrollers support site on www.st.com.

Table 1.   Order codes

Root parts	Order codes
Starter kits	
STM32-SK/RAIS	STM3210B-SK/RAIS
STR91X-SK/RAIS	STR91X-SK/RAI
STR7-SK/RAIS	STR750-SK/RAIS
	STR730-SK/RAIS
	STR71X-SK/RAIS
Daughter boards	
STM32-D/RAIS	STM32103B-D/RAIS
STR9-D/RAIS	STR912-D/RAIS
STR7-D/RAIS	STR750-D/RAIS
	STR730-D/RAIS

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For further information contact your local STMicroelectronics sales office.

www.st.com

Starter kit architecture

RIDE software – Raisonance's integrated development environment drives the hardware and offers seamless control of all software development tools (compiler, assembler, linker, debugger) from an intuitive graphical interface. RIDE fully integrates control of the GNU C/C++ tools. The STM32 starter kit comes with the 32K code size limited version of RIDE, and STR7/9 starter kits come with the 16K code size limited version of RIDE.

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™.

REva motherboard – universal evaluation board designed for quick and easy evaluation of a complete range of device features. All REva motherboards in starter kit for STM32, STR9 and STR7 provide the following on-board evaluation and development features:

● SO-DIMM connector for connection of interchangeable daughter board featuring ST microcontrollers

● 20-pin JTAG interface connector

● Power supply from USB connection (embedded RLink)

● 2 USART connectors

● SPI

● I^2C

● SPI

● CAN connector

● Eight user LED

● Potentiometer connected to ADC

● Two user push buttons and a reset button

● Wrapping area

REva motherboards in STM32 starter kits include additional evaluation features including an LCD, MEMs and buzzer.

Embedded RLink – in-circuit debugging and programming tool with JTAG application board interface and 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.

Table 2.   REva daughter board microcontrollers and features

MCU daughter board	MCU specific features	Included in starter kit	Daughter board order code
STM32F10xB	– USB connector	STM32F10xB kit	STM3210B-D/RAIS
STR912F	– Ethernet connector – USB connector – CAN connector – ETM connector footprint for trace tool support	STR91xF kit	STR912-D/RAIS

Table 2.   REva daughter board microcontrollers and features

MCU daughter board	MCU specific features	Included in starter kit	Daughter board order code
STR750F	– USB connector – Boot mode configuration jumper – CAN configuration jumper	STR75xF kit	STR750-D/RAIS
STR730F	– CAN configuration jumpers	STR73xF kit	STR730-D/RAIS
STR712F	– CAN configuration jumpers	STR71xF kit	-
STR711F	– USB mini-B connector		-

Ordering information

REva starter kits can be ordered from Raisonance or from your nearest ST distributor or sales office. Kits are currently available for:

● STM32F10xB microcontrollers (ST order code: **STM3210B-SK/RAIS**)

● STR91xF microcontrollers (ST order code: **STR91X-SK/RAI**)

● STR75xF microcontrollers (ST order code: **STR750-SK/RAIS**)

● STR73xF microcontrollers (ST order code: **STR730-SK/RAIS**)

● STR71xF microcontrollers (ST order code: **STR71X-SK/RAIS**)

For more information and documentation, please refer to the Raisonance web site or the STMicroelectronics microcontroller support site on *www.st.com*.

Revision history

Table 3.   Document revision history

Date	Revision	Changes
1-Aug-2005	1	Initial release.
21-Sep-2005	2	Added STR730-SK/RAIS and features. Added JTAGjet in hardware driven by RIDE.
7-Jun-2006	3	Added ordering codes and product information for the STR91X-SK/RAI. Added REva motherboard table of features.
16-Jun-2006	4	Corrected ordering codes in Table 1.
14-Feb-2007	5	Addition of the STR750-SK/RAIS. Updated Table 1 and Table 2 for STR750.
5-Oct-2007	6	Modified document title. Added order codes on first page Added STM3210B-SK/RAIS and features. Modified presentation of daughter board features (removed Table 1).

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