ST7xxxx-SK/RAIS

Raisonance's complete, low-cost starter kits for ST7

The **REva starter kits** are Raisonance's complete, cost-effective solutions for starting application development and evaluating ST7LITEx, ST7232x, ST7234x, ST7236x and ST7263B microcontrollers.

Kits come with all the hardware and software developers need to start developing applications for ST7 microcontroller, including the *REva* evaluation board, target ST7 microcontrollers, the embedded *RLink* for in-circuit debugging and in-circuit programming and the Raisonance Integrated Development Environment (*RIDE*) with application builder.

Starter kit architecture

Embedded *RLink* – in-circuit debugging and programming tool that uses in-circuit communication (ICC) for ST7 and interfaces with the host PC via USB connection.
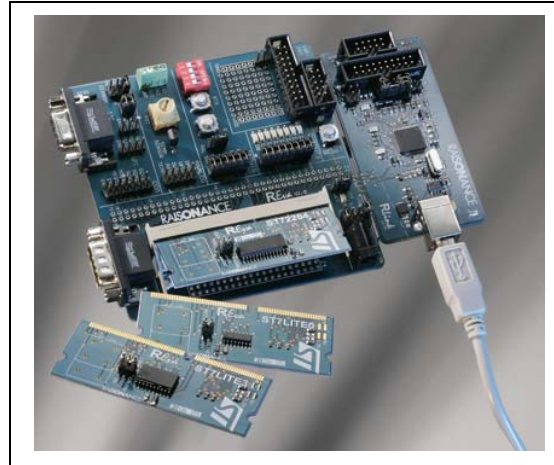
***REva* mother board** – universal evaluation board designed for quick and easy evaluation of a complete range of features (I/Os, ADC, SPI, CAN, I^2C...) for a variety of ST7s. It is powered from the *RLink's* USB connection to the host PC.

***REva* daughterboards** – interchangeable boards featuring different ST7 microcontrollers, make it easy to evaluate and develop applications for a complete range of MCUs from a single evaluation platform.

***RIDE* software** – Raisonance's free 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 Cosmic C and Metrowerk's C toolsets. Includes RBuilder, an easy-to-use graphical inter-face for starting an ST7 application from scratch without writing a single line of code.

Starter kit key features

Figure 1.   REva starter kit for ST7

Embedded RLink:

- USB interface to host PC
- In-circuit debugging (ICD)
- In-circuit programming (ICP)

REva motherboard:

- 1 standard SO-DIMM connector to plug in daughterboards.
- 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 microcontrollers
- USB powered, no external power required

REva daughterboards:

- Interchangeable daughterboards featuring different ST7 microcontrollers make it possible to develop applications for a wide range of devices and may include additional device specific features.

Table 1.   REva daughterboards and additional features

Daughterboard	Supports development for...	MCU on daughterboard	Additional features
ST7FLITE-SK/RAIS starter kit			
ST7LITE0	ST7LITE0 ST7SUPERLITE	ST7FLITE09Y0 (SO16)	Clock source selection jumper Oscillator footprint
ST7LITE1B	ST7LITE1B	ST7FLIT19BF1 (SO20)	Clock source selection jumper Oscillator footprint
ST7LITE3	ST7LITE1 ST7LITE2 ST7LITE3	ST7FLITE39F2 (SO20)	Clock source selection jumper Oscillator footprint
ST7232X-SK/RAIS starter kit			
ST72325J	ST72321 ST72321B ST72324 ST72325	ST72F325J6 (TQFP44)	Clock source selection jumper Oscillator footprint
ST72F34X-SK/RAIS starter kit			
ST72264	ST72260 ST72262 ST72264	ST72F264G2 (SO28)	Clock source selection jumper Oscillator footprint
ST72F36X-SK/RAIS starter kit			
ST72361	ST7236x ST7256x	ST72F361AR9 (TQFP64)	USB mini-B connector 24MHz oscillator Clock source selection jumper
ST72F63B-SK/RAIS starter kit			
ST7263B	ST7263B	ST72F63BH6 (TQFP48)	USB mini-B connector 24MHz oscillator Clock source selection jumper

RIDE-ST7:

- Free download from *www.raisonance.com*
- Seamless control of Cosmic C and Metrowerks C toolsets for ST7
- RBuilder application builder (requires use of a C compiler) for quick, easy configuration of ST7 peripherals and generation of associated application source code.
- *SIMICE-ST7* simulator
- High level debugger
- Color syntax highlighting editor
- Project manager
- 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.

RIDE-ST7 is compatible with the free limited code-size versions of the Cosmic and Metrowerks C toolsets. For more information and free downloads, refer to *www.cosmic-software.com* or *www.metrowerks.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 ST7LITE (ST order code: **ST7FLITE-SK/RAIS**)**,** ST7232x (ST order code: **ST7232X-SK/RAIS**)**,** ST7234x (ST order code: **ST72F34X-SK/RAIS**), ST7236x (ST order code: **ST72F36X-SK/RAIS**) and ST7263B (ST order code: **ST72F63B-SK/RAIS**) microcontrollers.

REva starter kits based on the same mother/daughterboard design, with embedded RLink, driven by RIDE software are also available for uPSD microcontrollers and the STR7 and STR9 ARM core-based microcontrollers. For more information refer to www.st.com/mcu.

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
1-March-2005	1	Initial release.
24-August-2005	2	• Added part number ST7232x-SK/RAIS and ST7LITE1B daughterboard
21-June-2006	3	• Added part number ST72F34X-SK/RAIS, ST72F36X-SK/RAIS and ST72F63B-SK/RAIS • Added daughterboard features to Table 1.

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