# ST7FUS-PRIMER

## Complete, ultra low-cost kit for evaluation and application development with ST7Ultralite

**Data Brief**

The ST7Ultralite Primer (ST7FUS-PRIMER) is a complete, ultra low-cost evaluation and development package that provides a fun and easy introduction to the features of ST's tiny 8-pin ST7FLITEUS microcontrollers including the internal RC oscillator, 10-bit Analog Digital Converter (ADC), 12-bit Autoreload timer with PWM, Low voltage and Auxiliary voltage detectors.

The Primer comes pre-programmed with the *UltraliteMusic* software application and plugs directly into a USB port on a host PC. Powered by the USB connection, this light sensor/buzzer application plays five musical selections. Changes in light intensity cause the application to step sequentially through the musical selections. If disconnected from the USB port and then plugged back in, the music starts playing from the point where it left off thanks to the MCU's low voltage detection feature. Users can modify or create their own application using the included C compiler and RIDE software toolset, which comes with a ready-to-build project and C source files for the *UltraliteMusic* application.

For in-circuit debugging and programming the ST7Ultralite Primer includes the Raisonance uRLink[1] in-circuit debugger and programmer, which allows users to run, modify and debug the application code via the USB connection on their PC using the RIDE development environment.



*Magnifying glass to see the ST7Ultralite in tiny DFN8 package*

*Light sensor*

*USB connection provides:*
- *Application power supply*
- *In-circuit debugging and programming via uRLink[1]*

## Features

The ST7Ultralite Primer is a complete evaluation and development solution for the ST7FLITEUS that includes:

- Ready-to-run light sensor/buzzer application:
  - ST7FLITEUS microcontroller
  - Power supply via USB
  - uRLink[1] for in-circuit debugging and in-circuit programming via USB

- Raisonance software tools for building, debugging and programming the application:
  - RIDE integrated development environment for complete control of debugging and programming of the application
  - Raisonance C compiler for ST7FLITEUS
  - RIDE project file and application source code (C sources)
  - RBuilder application builder for quick, easy configuration of ST7 peripherals and generation of associated application source code based on the ST7 Software Library
  - RFlasher programming software interface

- *QuickStart* for modifying and debugging the application with RIDE in 9 easy steps. See *QuickStart_ST7Ultralite_Primer.pdf* on the Raisonance software installation mini-ROM.

*Note:    1  The uRLink is the Primer's embedded version of the RLink in-circuit debugger/programmer with the same capabilities.*

*www.st.com*

## Ordering information

The ST7Ultralite Primer (ST order code: ST7FUS-PRIMER) is available from STMicroelectronic's sales offices and distributors. When ordering the ST7FUS-PRIMER directly from ST, ordering quantities are in multiples of 10.

## For more information...

The ST7Ultralite Primer includes the **ST 8, 16 and 32-Bit Microcontrollers** mini-ROM, with a detailed presentation of ST's microcontroller families, applications and development tools.

The microcontroller support site, www.st.com/mcu provides a number of free tools and microcontroller support features including software downloads, on-line product selector, user groups and complete documentation.

For further information about the ST7Ultralite and supporting development tools, refer to the on-line product selector, or the *ST7FLITEUS Datasheet* available at www.st.com/mcu.

## Revision history

**Table 1.     Document revision history**

| Date | Revision | Changes |
|------|----------|---------|
| 8-Sep-2006 | 1 | Initial release. |

**Please Read Carefully:**