

Evaluation board for STR91xF

DATA BRIEF

The **STR910 evaluation board** (STR910-EVAL) is a complete, development platform for STMicroelectronic's ARM® core-based STR91xF microcontrollers. Based on a cost effective, flexible and open design, STR910-EVAL allows easy demonstration of STR91xF capabilities and enables rapid evaluation of the microcontroller's peripherals and other features.

It includes the high performance STR910F microcontroller, which is based on the ARM966ES core and includes Pre-fetch Queue and Branch cache, full speed USB 2.0 compatible port, Ethernet 100/10 interface, Embedded MAC, CAN 2.0B compliant interface, large Dual Bank Flash memory, large SRAM and many peripherals.

The STR910-EVAL features a complete range of connectors and hardware features for developing applications based on STR91xF peripherals including motor control, USB, Ethernet, and RS232 connectors, microphone, speaker, joystick, LCD display and IrDA.

The STR910-EVAL uses a JTAG standard interface to connect to your host PC via any of a range of in-circuit emulators (ICE) for ARM core-based microcontrollers. In addition the STR910-EVAL includes an ETM connector that allows you to take advantage of the MCU's Embedded Trace Macrocell (ETM) during debugging, using an ICE with trace add-on or trace capability.

Key Features

- Three 5V power supply options: jack, USB connection or a daughter board
- RTC with tamper detection
- Audio play and record
- 3 RS232 connectors with support of full modem control on one connector
- Infrared Data Access (IrDA)
- USB 2.0 compliant with full-speed (12 Mb/s) data transmission

Figure 1. STR910 evaluation board



- CAN 2.0B connection
- Inductor Motor Control connector with 6 PWM output, Emergency Stop and Tachometer input
- IEEE-802.3-2002 compliant Ethernet connection
- Debug support via 20-pin JTAG connector
- 38-pin ETM connector for optional connection to STR9 trace module
- Dot-matrix LCD module
- Joystick with 4-direction control and selector
- Extension connectors for daughter board or wrapping board

More information...

STR910-EVAL User Manual– complete description, board schematics and use information for the STR910-EVAL evaluation board.

STR91xF Datasheet– Complete information about microcontroller features and peripherals

UM0238 STR91xF Demonstration Software Getting Started– Guide to using the demonstration software provided with your evaluation board.

AN2339 STR91xF Hardware Development Getting Started– Guide to developing your application hardware based on the STR91xF microcontrollers.

Further information and documentation is available for free download at www.st.com/mcu.

Revision history

Date	Revision	Changes
13-Apr-2006	1	Initial release.

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