# STR910-EVAL



# Evaluation board for STR91xF

DATA BRIEF

The **STR910 evaluation board** (STR910-EVAL) is a complete, development platform for STMicroelectronic's ARM<sup>®</sup> 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.

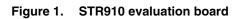
It includes the high performance STR910F microcontroller, which is based on the ARM966ES core and includes Pre-fetch Queue and Branch cache, full speed USB 2.0 compatible port, Ethernet 100/10 interface, Embedded MAC, CAN 2.0B compliant interface, large Dual Bank Flash memory, large SRAM and many peripherals.

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 corebased 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





- 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

April 2006

### 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.

#### Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZE REPRESENTATIVE OF ST, ST PRODUCTS ARE NOT DESIGNED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS, WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries. Nomadik is a registered trademark of STMicroelectronics in Hong Kong, Japan, South Korea, Taiwan, International (China, Switzerland, Norway, Singapore, Turkey) European Community (CEE countries). Registration is pending in Canada, USA and Israel. Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2006 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com



3/3