

# STM32373C-EVAL

#### STM32373C-EVAL evaluation board

**Data brief** 

#### **Features**

- STM32F373VCT6 microcontroller
- Four 5 V power supply options:
  - Power jack
  - ST-LINK/V2 USB connector
  - User USB connector
  - Daughter board
- Audio jack connected to I2S DAC
- Microphone connected to ADC through an amplifier
- 2 GByte (or more) MicroSD card on SPI
- Three components on I<sup>2</sup>C bus: temperature sensor, EEPROM and dual interface RF EEPROM
- RS232 communication configurable for communication of Flash loader
- IrDA transceiver
- 240x320 TFT color LCD connected to SPI interface
- Joystick with 4-direction control and selector
- Reset, Wakeup or Tamper, and Key buttons
- 4 color user LEDs
- 2 LEDs for MCU power range indicator
- ECG, pressure sensor and PT100 temperature sensor connected to the 16-bit Sigma Delta ADC of STM32F373VCT6
- Extension connectors for daughter board or wrapping board
- MCU voltage: 3.3 V or adjustable 2.0 V 3.6 V
- USB FS connector
- Touch slider
- RTC with backup battery
- CAN 2.0 A/B compliant connection
- Light dependent resistor (LDR)
- Two HDMI connectors with DDC and CEC



- IR transmitter and receiver
- Two ADC & DAC input and output signal connectors and one Sigma Delta ADC input signal connector
- Potentiometer
- JTAG/SWD and ETM trace debug support
- Embedded ST-LINK/V2
- RoHS compliant (lead free)

Table 1. Device summary

Order code	Reference
STM32373C-EVAL	STM32F37x series evaluation board

Description STM32373C-EVAL

## 1 Description

The STM32373C-EVAL evaluation board is designed as a complete demonstration and development platform for STMicroelectronics ARM Cortex-M4 core-based STM32F373VCT6 microcontroller. It features two I2Cs, three SPIs, three USARTs, one CAN, one CEC controller, one 12-bit ADC, three 16-bit sigma delta ADCs, three 12-bit DACs, internal 32-KByte SRAM and 256-KByte Flash, touch sensing slider, USB FS, and JTAG debugging support. This evaluation board can be used as a reference design for user application development but it is not considered as the final application.

The full range of hardware features on the board can help the user evaluate all peripherals (USB FS, USART, audio DAC, microphone ADC, dot-matrix LCD, IrDA, LDR, MicroSD card, HDMI CEC, ECG, pressure sensor, CAN, IR transmitter and receiver, EEPROM, touch slider, temperature sensor, etc.) and develop their own applications. Extension headers make it possible to easily connect a daughter board or wrapping board for a specific application.

An ST-LINK/V2 is integrated on the board as an embedded in-circuit debugger and programmer for the STM32 MCU.

## 2 Revision history

Table 2. Document revision history

	Date	Revision	Changes
(	03-Sep-2012	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 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 TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, 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. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

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.

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.

© 2012 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 - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com

