

Evaluation board for STM32F373xx microcontrollers

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 I²C bus: temperature sensor, EEPROM and dual interface RF EEPROM
- RS-232 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

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.

The STM32373C-EVAL evaluation board does not support STM32F383xx MCUs (1.65 V to 1.95 V power supply).

Ordering information

To order the evaluation board for STM32F373xx microcontrollers, use the STM32373C-EVAL order code.

Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|---|
| 03-Sep-2012 | 1 | Initial release. |
| 11-Mar-2013 | 2 | Modified title and added Ordering information . Added information on STM32F383xx MCUs in Description . |

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