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 STM32F3x8 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

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-Sep-2012</td>
<td>1</td>
<td>Initial release.</td>
</tr>
<tr>
<td>11-Mar-2013</td>
<td>2</td>
<td>Modified title and added Ordering information. Added information on STM32F383xx MCUs in Description.</td>
</tr>
<tr>
<td>09-Sep-2014</td>
<td>3</td>
<td>Replaced “STM32F383xx MCUs” by “STM32F3x8 MCUs”</td>
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