STM32479I-EVAL

Evaluation board with STM32F479NI MCU

Features

- STM32F479NIH6 microcontroller with 2 Mbytes of Flash memory and 324 Kbytes of RAM in TFBGA package
- six 5 V power supply options:
  - power jack
  - ST-LINK/V2-1 USB connector
  - user USB HS connector
  - user USB FS1 connector
  - user USB FS2 connector
  - daughterboard
- SAI Audio DAC
- stereo audio jack which supports headset with microphone
- stereo digital microphone
- audio jack connector used to connect external speakers
- 2-Gbyte (or more) SDMMC interface microSD card
- RF-EEPROM on I2C compatible serial interface
- RS232 communication
- IrDA transceiver
- JTAG/SWD and ETM trace debug support embedded ST-LINK/V2-1
- IEEE-802.3-2002 compliant Ethernet connector
- camera module
- 8Mx32 bit SDRAM, 1Mx16 bit SRAM and 8Mx16 bit NOR Flash
- 512-Mbit Quad-SPI NOR Flash
- 4-inch 800x480 pixel TFT color LCD with MIPI DSI interface and capacitive touch panel
- joystick with 4-direction control and selector
- reset, WakeUp/Tamper or key button
- 4 color user LEDs
- extension connectors and memory connectors for daughterboard or wrapping board
- USB OTG HS and FS with Micro-AB connectors
- RTC with backup battery
- CAN2.0A/B compliant connection
- potentiometer
- motor control connector
1 Description

The STM32479I-EVAL evaluation board is a complete demonstration and development platform for STMicroelectronics ARM® Cortex®-M4 core-based STM32F479NIH6 microcontroller. It features three I2C interfaces, six SPIs with two multiplexed full-duplex I2S interfaces, SDMMC, four USARTs, two CANs, three 12-bit ADCs, two 12-bit DACs, one SAI, 8 to 14-bit digital camera module interface, internal 320+4 Kbytes of SRAM and 2 Mbytes of Flash memory, USB HS OTG and USB FS OTG, Ethernet MAC, FMC Interface, MIPI DSI interface, Quad-SPI interface, Cryptographic acceleration, JTAG and ETM debugging support. This evaluation board can be used as a reference design for user application development but it is not considered as a final application.

The full range of hardware features on the board helps the user to evaluate all peripherals (USB OTG HS, USB OTG FS, Ethernet, motor control, CAN, microSD Card, USART, Audio DAC and ADC, digital microphone, IrDA, RF-EEPROM, SRAM, NOR Flash, SDRAM, Quad-SPI Flash, 4" TFT LCD with MIPI DSI interface and capacitive touch panel and others) and to develop his own applications. Extension headers make it possible to easily connect a daughterboard for specific application.

The integrated ST-LINK/V2-1 provides an embedded in-circuit debugger and programmer for the STM32 MCU.

2 Ordering information

To order the evaluation boards based on the STM32F479NI MCU, use the order code: STM32479I-EVAL.
3  Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>07-Sep-2015</td>
<td>1</td>
<td>Initial release.</td>
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