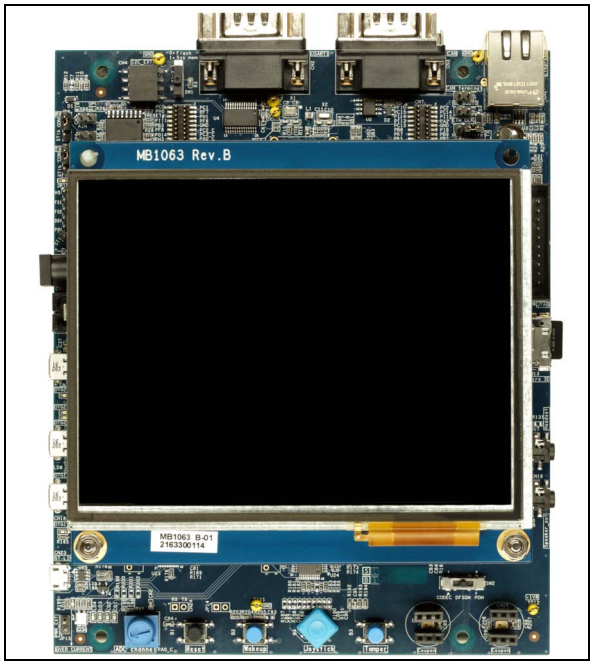
STM32H743I-EVAL

Evaluation board with STM32H743XI MCU

Data brief

Features

- STM32H743XIH6 microcontroller with 2 Mbytes of Flash memory and 1 Mbyte of RAM in TFBGA240+25 package
- 5.7” 640x480 TFT color LCD with touch screen
- Ethernet compliant with IEEE-802.3-2002
- USB OTG HS and FS
- I^2C compatible serial interface
- RTC with rechargeable backup battery
- SAI Audio DAC
- ST-MEMS digital microphones
- 8-Gbyte (or more) SDIO3.0 interface microSD™ card
- 8Mx32bit SDRAM, 1Mx16bit SRAM and 8Mx16bit NOR Flash
- 1-Gbit Twin Quad-SPI NOR Flash
- Potentiometer
- 4 colored user LEDs
- Reset, wakeup, tamper or key buttons
- Joystick with 4-direction control and selector
- Board connectors
  - Power jack
  - 3 USB with Micro-AB
  - RS-232 communications
  - Ethernet RJ45
  - FD-CAN compliant connection
  - Stereo headset jack including analog microphone input
  - 2 audio jacks for external speakers
  - microSD™ card
  - JTAG/SWD and ETM trace
- Expansion connectors:
  - Extension connectors and memory connectors for daughterboard or wire-wrap board



1. Picture is not contractual.

- Flexible power-supply options: ST-LINK USB V_{BUS} or external sources
- On-board ST-LINK/V2-1 debugger/programmer with USB re-enumeration capability: mass storage, virtual COM port and debug port
- Comprehensive free software libraries and examples available with the STM32Cube package
- Support of a wide choice of Integrated Development Environments (IDEs) including IAR™, Keil®, GCC-based IDEs

Description

The STM32H743I-EVAL Evaluation board is a high-end development platform for the ARM® Cortex®-M7-based STM32H743XI microcontroller. The STM32H743I-EVAL Evaluation board provides access to all the STM32 peripherals for user applications, and includes an embedded ST-LINK debugger/programmer.

The full range of the hardware features on the STM32H743I-EVAL Evaluation board, helps to evaluate all the peripherals (USB OTG HS and FS, Ethernet, FD-CAN, USART, Audio DAC and ADC, digital microphone, SRAM, SDRAM, NOR Flash, Twin Quad-SPI Flash, microSD™ 3.0 card and 5.7” 640x480 TFT color LCD with touch screen) and to develop applications.

The expansion connectors provide an easy way to add specialized features, while ETM trace is supported through external probes.

System requirements

- Windows® OS (XP, 7, 8 and 10), Linux® or macOS™
- USB Type-A to Micro-B cable

Development toolchains

- Keil® MDK-ARM(a)
- IAR™ EWARM(a)
- GCC-based IDEs including free SW4STM32 from AC6

Demonstration software

The demonstration software is preloaded in the STM32H743XI Flash memory for easy demonstration of the device peripherals in standalone mode. For the latest version of the demonstration source code and the associated documentation, refer to the STM32H743I-EVAL demonstration software available on the *www.st.com* website.

a. On Windows® only.

Ordering information

To order the STM32H743I-EVAL Evaluation board refer to *Table 1*.

Table 1. Ordering information

Order code	Target STM32
STM32H743I-EVAL	STM32H743XI

Revision history

Table 2. Document revision history

Date	Revision	Changes
07-Apr-2017	1	Initial version.