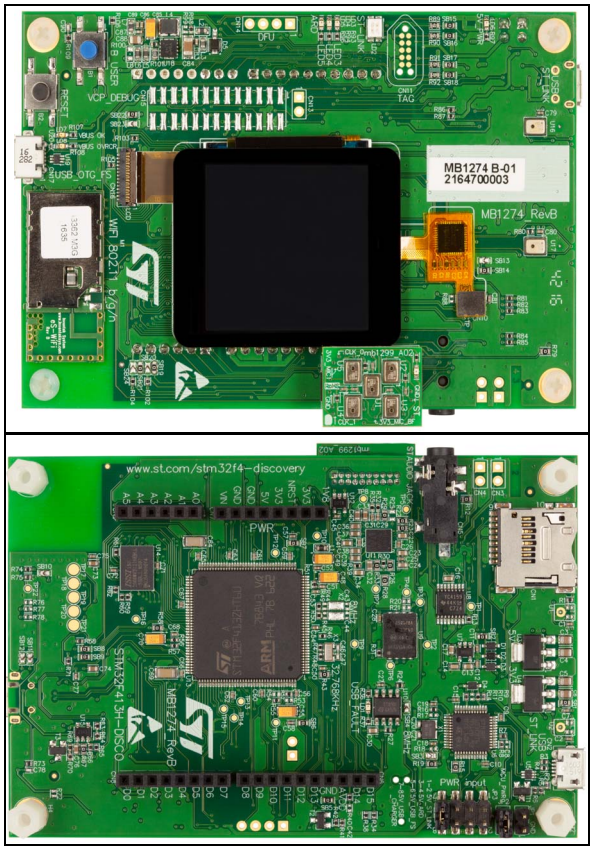
32F413HDISCOVERY

Discovery kit with STM32F413ZH MCU

Data brief

Features

- STM32F413ZHT6 microcontroller featuring 1.5 Mbytes of Flash memory and 320 Kbytes of SRAM, in LQFP144 package
- On-board ST-LINK/V2-1 supporting USB re-enumeration capability
- USB ST-LINK functions:
  - Virtual COM port
  - Mass storage
  - Debug port
- 240x240-pixel LCD with parallel interface and touch-panel connector
- 8-Mbit PSRAM; 512K word x 16bits
- 128-Mbit Quad-SPI Flash memory
- I^2S audio codec
- Jack connector for Audio line with microphone input and stereo output
- Two on-board ST-MEMS microphones
- Connector extension for up to 5-MEMS microphones.
- USB OTG FS with Micro-AB connector
- Connector for microSD™ card
- Integrated Wi-Fi® module 802.11 b/g/n
- Two push-buttons (user and reset)
- Two user LEDs: one green and one red
- Arduino™ Uno V3 connectors
- Four power supply options:
  - ST LINK/V2-1
  - USB FS connector
  - 5 V from Arduino™ Uno V3
  - USB charger
- Comprehensive free software including a variety of examples, part of the STM32Cube package
- Support of a wide choice of integrated development environments



1. Pictures are not contractual.

Description

The 32F413HDISCOVERY Discovery kit allows users to develop applications with the STM32F4 Series microcontrollers based on ARM® Cortex®-M4 core.

The 32F413HDISCOVERY Discovery kit enables a wide diversity of applications, taking benefit from audio, multi-sensor support, graphics, security, video and high-speed connectivity features.

The Arduino™ Uno V3 connectivity support provides unlimited expansion capabilities with a large choice of specialized add-on boards.

For further information contact your local STMicroelectronics sales office. www.st.com

System requirements

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

Development toolchains

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

Demonstration software

The demonstration software is preloaded in the STM32 Flash memory for easy demonstration of the device peripherals in standalone mode. The latest versions of the demonstration source code and associated documentation can be downloaded from the www.st.com/stm32f4-discovery webpage.

Ordering information

To order the 32F413HDISCOVERY Discovery kit, refer to *Table 1*:

Table 1. Ordering information

Order code	Target STM32
STM32F413H-DISCO	STM32F413ZHT6

a. On Windows® only.

Revision history

Table 2. Document revision history

Date	Revision	Changes
13-Dec-2016	1	Initial release.
05-Apr-2017	2	Updated *Features*.

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