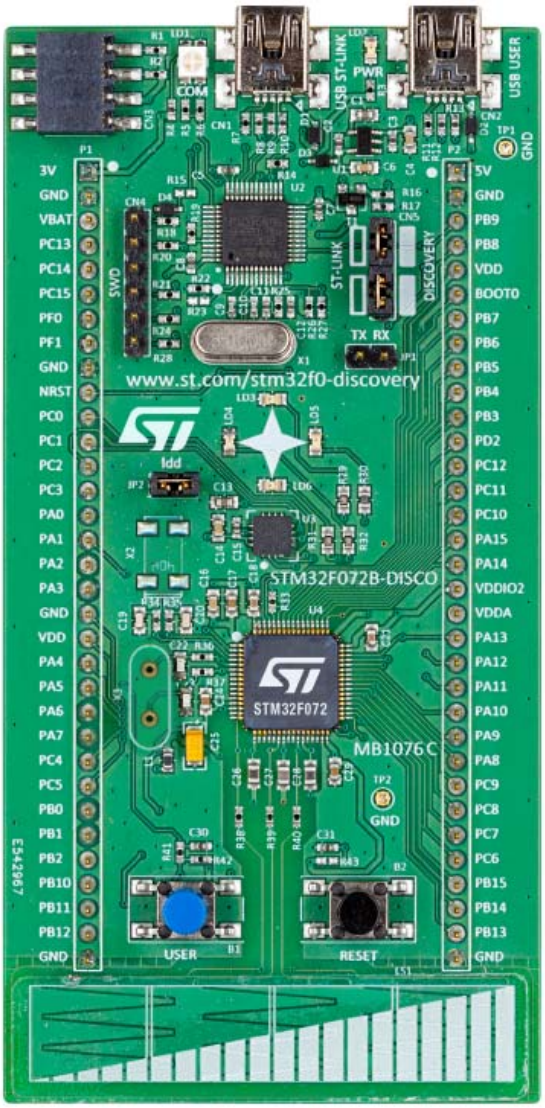
32F072BDISCOVERY

Discovery kit for STM32F072xx microcontrollers

Data brief

Features

- STM32F072RBT6 microcontroller featuring 128 Kbytes of Flash memory, 16 Kbytes of SRAM in an LQFP64 package
- USB FS with Mini-B connector
- I3G4250D ST MEMS motion sensor 3-axis digital output gyroscope
- One linear touch sensor or four touch keys
- Six LEDs:
  - LD1 (red/green) for USB communication
  - LD2 (red) for 3.3 V power on
  - Four user LEDs: LD3 (red), LD4 (orange), LD5 (green) and LD6 (blue)
- Two push-buttons (user and reset)
- RF EEPROM daughterboard connector
- Extension header for LQFP64 I/Os for quick connection to a prototyping board and easy probing
- On-board ST-LINK/V2 with switch to use the kit as a standalone ST-LINK/V2 (with SWD connector for programming and debugging)
- Flexible power supply options:
  - USB bus or external 5 V supply voltage
- Power supply output for external applications: 3 V and 5 V
- Comprehensive free software including a variety of examples, part of STM32CubeF0 or STM32SnippetsL0 packages or STSW-STM32139 for legacy Standard Libraries usage



Picture is not contractual.

Description

The 32F072BDISCOVERY Discovery kit helps users to discover the STM32F072RB, which has the full set of features available in the STM32F0 Series, and to develop their applications easily. It includes everything required for beginners and experienced users to get started quickly.

Based on the STM32F072RBT6 microcontroller, it includes an ST-LINK/V2 embedded debug tool interface, an ST MEMS gyroscope, LEDs, push-buttons, linear touch sensor, touch keys, RF EEPROM connector and a USB Mini-B connector.

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

1 Ordering information

To order the 32F072BDISCOVERY Discovery kit, refer to *Table 1*. For a detailed description, refer to the user manual on the product web page. Additional information is available from the datasheet and reference manual of the target STM32.

Table 1. Ordering information

Order code	Board reference	User manual	Target STM32
STM32F072B-DISCO	MB1076	UM1690	STM32F072RBT6

1.1 Product marking

Evaluation tools marked as “ES” or “E” are not yet qualified and are therefore not ready to be used as reference designs or in production. Any consequences arising from such usage will not be at ST’s charge. In no event will ST be liable for any customer usage of these engineering sample tools as reference designs or in production.

‘E’ or ‘ES’ marking examples of location:

- on the targeted STM32 that is soldered on the board (For an illustration of STM32 marking, refer to the section ‘Package information’ of the STM32 datasheet at *www.st.com*).
- next to the evaluation tool ordering part number, that is stuck or silkscreen printed on the board

1.2 Codification

The meaning of the codification is explained in *Table 2*.

Table 2. Codification explanation

32XXYYZDISCOVERY	Description	Example: 32F072BDISCOVERY
32XX	MCU series in STM32 32-bit Arm Cortex MCUs	STM32F0 Series
YY	MCU product line in the series	STM32F072
Z	STM32 Flash memory size: – B for 128 Kbytes	128 Kbytes
DISCOVERY	Discovery kit	Discovery kit

2 Development environment

The 32F072BDISCOVERY Discovery kit features an STM32F0 Series microcontroller based on the Arm®(a) Cortex®-M0 processor.

2.1 System requirements

- Windows® OS (7, 8 and 10), Linux® 64-bit or macOS®(b) (c)
- USB Type-A to Mini-B cable

2.2 Development toolchains

- IAR™ - EWARM(d)
- Keil® - MDK-ARM(d) (e)
- STMicroelectronics - STM32CubeIDE

2.3 Demonstration software

The demonstration software, included in the STM32Cube MCU Package, 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/stm32f0-discovery webpage.

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b. macOS® is a trademark of Apple Inc. registered in the U.S. and other countries.

c. All other trademarks are the property of their respective owners.

d. On Windows® only

e. Free MDK-ARM for Arm® Cortex®-M0/M0+ cores.

Revision history

Table 3. Document revision history

Date	Revision	Changes
27-Dec-2013	1	Initial release.
11-Apr-2014	2	Added new board picture
29-Sep-2014	3	Updated *Section : Features* and *Section : Description* to introduce STM32CubeF0, STM32SnippetsL0 and STSW-STM32139. Updated L3GD20 feature. Updated *Section : System requirements* and *Section : Development toolchains*. Changed link to web page in *Section : Demonstration software*.
19-Mar-2020	4	Updated ST MEMS and LEDs details in *Features*. Reorganized the entire document: – Updated *Features*, *Description*, *Ordering information*, and *Development toolchains* – Added *Product marking* and *Codification*

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