

32F429IDISCOVERY

Discovery kit with STM32F429ZI MCU

Data brief

Features

- STM32F429ZIT6 microcontroller featuring 2 Mbytes of Flash memory, 256 Kbytes of RAM in an LQFP144 package
- On-board ST-LINK/V2 on STM32F429I-DISCO (old order code) or ST-LINK/V2-B on STM32F429I-DISC1 (new order code)
- mbed[™]-enabled (see http://mbed.org) with the new order code only
- USB functions:
 - Debug port
 - Virtual COM port (with new order code only)
 - Mass storage (with new order code only)
- Board power supply: through the USB bus or from an external 3 V or 5 V supply voltage
- 2.4" QVGA TFT LCD
- 64-Mbit SDRAM
- L3GD20, ST-MEMS motion sensor 3-axis digital output gyroscope
- Six LEDs:
 - LD1 (red/green) for USB communication
 - LD2 (red) for 3.3 V power-on
 - Two user LEDs: LD3 (green), LD4 (red)
 - Two USB OTG LEDs: LD5 (green) VBUS and LD6 (red) OC (over-current)
- Two push-buttons (user and reset)
- USB OTG with micro-AB connector
- Extension header for LQFP144 I/Os for a quick connection to the prototyping board and an easy probing
- Comprehensive free software including a variety of examples, part of STM32CubeF4 package or STSW-STM32138, for using legacy standard libraries



1. Picture is not contractual.

Description

The 32F429IDISCOVERY kit leverages the capabilities of the STM32F429 high-performance microcontrollers, to allow users to easily develop rich applications with advanced Graphic User interfaces.

With the latest board enhancement, the new STM32F429I-DISC1 order code has replaced the old STM32F429I-DISCO order code.



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System requirements

- Windows[®] OS (XP, 7, 8)
- USB Type-A to Mini-B cable

Development toolchains

- IAR[®] EWARM (IAR Embedded Workbench[®])
- Keil[®] MDK-ARM[™]
- GCC-based IDEs (free AC6: SW4STM32, Atollic[®] TrueSTUDIO[®],...)
- ARM[®] mbed[™] online

Demonstration software

The demonstration software is preloaded in the MCU Flash memory. It displays on the screen icons to run different applications: clock/calendar, a game, a video player and an image browser, performance monitoring and system information.

The latest versions of the demonstration source code and associated documentation can be downloaded from the www.st.com/stm32f4-discovery webpage.

Product marking

Tools marked as "ES" or "E" are not yet qualified and as such, they may be used only for evaluation purposes. ST shall not be liable for any consequences related with other ways of use of such non-qualified tools, for example, as reference design or for production.

Examples of location of "E" or "ES" marking:

- on target STM32 microcontroller part mounted on the board (for illustration, refer to section "Package information" of a STM32 datasheet at <u>www.st.com</u>)
- next to the evaluation tool ordering part number, as a label stuck or a silk-screen printed on the board

Ordering information

To order the Discovery kit for the STM32F429 line of microcontrollers, refer to Table 1.

	Table	1.	List	of	the	order	codes
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Order code	ST-LINK version		
STM32F429I-DISCO	ST-LINK/V2		
STM32F429I-DISC1	ST-LINK/V2-B		

Revision history

Date	Revision	Changes
06-Sep-2013	1	Initial version.
29-Sep-2014	2	Updated Section : Features and Section : Description to introduce STM32cubeF4 and STSW-STM32138. Updated ST MEMS feature. Updated Section : System requirements and Section : Development toolchains.
23-Oct-2015	3	Updated Section : Features, Section : Description, Section : Product marking.
28-Oct-2016	4	Updated <i>Section : Features</i> and <i>Section : Description</i> to inform that the new STM32F429I-DISC1 order code has replaced the old STM32F429I-DISCO order code.

Table 2. Document revision history



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