

STM32F3DISCOVERY

Discovery kit with STM32F303VC MCU

Data brief

Features

- STM32F303VCT6 microcontroller featuring 256-Kbyte Flash memory, 48-Kbyte RAM in an LQFP100 package
- On-board ST-LINK/V2 for PCB version A or B or ST-LINK/V2-B for PCB version C and newer
- USB ST-LINK functions:
 - Debug port
 - Virtual COM port with ST-LINK/V2-B only
 - Mass storage with ST-LINK/2-B only
- Board power supply: through USB bus or from an external 3 V or 5 V supply voltage
- External application power supply: 3 V and 5 V
- L3GD20, ST MEMS motion sensor, 3-axis digital output gyroscope
- LSM303DLHC, ST MEMS system-in-package featuring a 3D digital linear acceleration sensor and a 3D digital magnetic sensor
- Ten LEDs:
 - LD1 (red) for 3.3 V power on
 - LD2 (red/green) for USB communication
 - Eight user LEDs: LD3/10 (red), LD4/9 (blue), LD5/8 (orange) and LD6/7 (green)
- Two push-buttons (user and reset)
- USB USER with Mini-B connector
- Extension header for all LQFP100 I/Os for quick connection to prototype board and easy probing
- Comprehensive free software including a variety of examples, part of STM32CubeF3 package or STSW-STM32118 for legacy Standard Library usage



1. Picture not contractual.

Description

The STM32F3DISCOVERY allows users to easily develop applications with the STM32F3 Series based on ARM® Cortex®-M4 mixed-signal MCU. It includes everything required for beginners and experienced users to get started quickly.

Based on the STM32F303VCT6, it includes an ST-LINK/V2 or ST-LINK/V2-B embedded debug tool, accelerometer, gyroscope and e-compass ST MEMS, USB connection, LEDs and push-buttons.

The STM32F3DISCOVERY discovery board does not support the STM32F313xx MCUs (1.65 V to 1.95 V power supply).

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[®],...)

Demonstration software

The demonstration software is preloaded in the board Flash memory. It uses the USER push-button to switch the operation of the eight LEDs into different modes from simple blinking mode, to indicate the gyroscope movements, or the direction of the North Pole. The latest version of the demonstration source code together with the associated documentation can be downloaded from the www.st.com/stm32f3discovery webpage.

Ordering information

To order the Discovery kit for the STM32F303 line of microcontrollers, refer to *Table 1*.

Table 1. List of the order codes

Order code	ST-LINK version
STM32F3DISCOVERY	ST-LINK/V2 for PCB version A or B
	ST-LINK/V2-B for PCB version C and newer

STM32F3DISCOVERY Revision history

Revision history

Table 2. Document revision history

Date	Revision	Changes
03-Sep-2012	1	Initial release.
11-Mar-2013	2	Modified title and added <i>Ordering information</i> . Added information on STM32F313xx MCUs in <i>Description</i> .
24-Oct-2014	3	Updated features list. Updated Section : Development toolchains.
19-Jul-2016	4	Updated <i>Features</i> list to introduce the information that boards come with ST-LINK/V2 or ST-LINK/V2-B.

IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics – All rights reserved