

STM32F0DISCOVERY

STM32F0DISCOVERY kit

Data brief – preliminary data

Features

- STM32F051R8T6 microcontroller featuring 64 KB Flash, 8 KB RAM in an LQFP64 package
- On-board ST-LINK/V2 with selection mode switch to use the kit as a standalone ST-LINK/V2 (with SWD connector for programming and debugging)
- Board power supply: through USB bus or from an external 5 V supply voltage
- External application power supply: 3 V and 5 V
- Four LEDs:
 - LD1 (red) for 3.3 V power on
 - LD2 (red/green) for USB communication
 - LD3 (green) for PC9 output
 - LD4 (blue) for PC8 output
- Two push buttons (user and reset)
- Extension header for all LQFP64 I/Os for quick connection to prototyping board and easy probing
- An additional board is provided which can be connected to the extension connector for even easier prototyping and probing.

Description

The STM32F0DISCOVERY helps you to discover the STM32F0 Cortex-M0 features and to develop your applications easily. It includes everything required for beginners and experienced users to get started quickly.

Based on the STM32F051R8T6, it includes an ST-LINK/V2 embedded debug tool, LEDs, pushbuttons and an additional prototyping board for easy connection of additional components and modules.



A large number of free ready-to-run application firmware examples are available on www.st.com/stm32f0discovery to support quick evaluation and development.

Table 1. Device summary

Order code	Reference
STM32F0DISCOVERY	STM32F0DISCOVERY kit

March 2012

Doc ID 022931 Rev 1

1/3

This is preliminary information on a new product now in development or undergoing evaluation. Details are subject to change without notice. For further information contact your local STMicroelectronics sales office.



1 System requirements

- Windows PC (XP, Vista, 7)
- USB type A to Mini-B cable

2 Development toolchains

- Altium TASKING[™] VX-Toolset
- Atollic TrueSTUDIO®
- IAR, EWARM
- Keil™, MDK-ARM

3 Demonstration software

The demonstration software is preloaded in the board Flash memory. It uses the user button B1 to change the blinking frequency of the green LED LD3. Each click on the button is confirmed by the blue LED LD4.

The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com/stm32f0discovery.



www.BDTIC.com/ST

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2012 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com



Doc ID 022931 Rev 1

www.BDTIC.com/ST