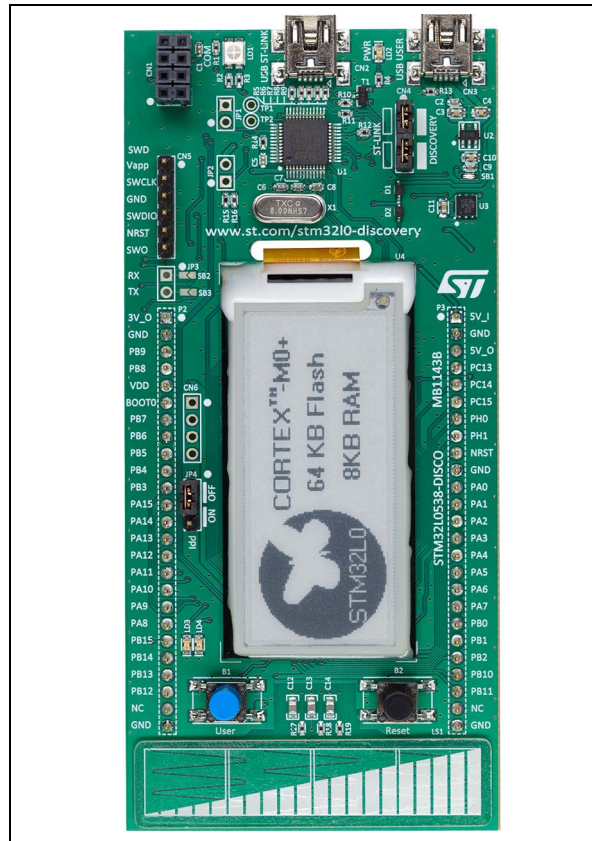


Features

- STM32L053C8T6 microcontroller featuring 64 KB of Flash memory, 8 KB RAM in an LQFP48 package.
- On-board ST-LINK/V2-1 with selection mode switch to use the kit as a standalone ST-LINK/V2-1 (with SWD connector for programming and debugging)
- mbed™-enabled (mbed.org)
- USB ST-LINK with re-enumeration capability and three different interfaces:
 - virtual com port
 - mass storage
 - debug port
- Board power supply: through USB bus or from an external 5 V supply voltage
- External application power supply: 3 V and 5 V.
- One linear touch sensor or four touchkeys.
- I_{DD} current measurement.
- 2.04" E-paper display, 172x72 pixels
- Four LEDs:
 - LD1 (red/green) for USB communication
 - LD2 (red) for 3.3 V power-on
 - Two user LEDs: LD3 (green), LD4 (red)
- Two pushbuttons (user and reset)
- Extension header for LQFP48 I/Os for a quick connection to the prototyping board and easy probing
- Comprehensive free software including a variety of examples, part of STM32CubeL0 package



Description

The STM32L053 discovery kit helps you to discover the ultra-low-power microcontrollers of the STM32L0 series. It offers everything required for beginners and experienced users to get started quickly and develop applications easily.

Based on an STM32L053C8T6, it includes an ST-LINK/V2-1 embedded debug tool interface, linear touch sensor, touch keys, I_{DD} current measurement, 2.04" E-paper display, NFC connector for PLUG-CR95HF-B board, LEDs, pushbuttons and a USB Mini-B connector.



System requirements

- Windows OS (XP, 7, 8)
- USB standard 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 STM32L053xx Flash memory. It uses the linear sensor to select one of the displayed demo application on the e-paper display (EPD): USB mouse demo or I_{DD} measurement demo in different power modes.

The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com/stm32l0-discovery.

Ordering information

To order the Discovery kit for STM32L053xx microcontrollers, use the order code: STM32L0538-DISCO.

Revision history

Table 1. Document revision history

Date	Revision	Changes
19-June-2014	1	Initial release.
20-Oct-2014	2	Updated title to extend document scope to STM32L0 series. Updated Section : Features and Section : Description to introduce STM32CubeL0. Added Section : System requirements and Section : Development toolchains .
12-Jan-2016	3	embed-enabled logo added to the cover page. mbed-enabled added to Features . Free AC6 and ARM® mbed™ online added to Section : Development toolchains .

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