Discovery kits for STM32L151/152 line

Data brief

Features

- STM32L152RBT6 (128 KB Flash memory, 16 KB RAM, 4 KB EEPROM) or STM32L152RCT6 (256 KB Flash memory, 32 KB RAM, 8 KB EEPROM) microcontroller 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 3.3 or 5 V supply voltage

- External application power supply: 3 V and 5 V

- I_{DD} current measurement

- LCD
  - DIP28 package
  - 24 segments, 4 commons

- Four LEDs:
  - LD1 (red/green) for USB communication
  - LD2 (red) for 3.3 V power-on
  - Two user LEDs, LD3 (green) and LD4 (blue)

- Two pushbuttons (user and reset)

- One linear touch sensor or four touchkeys

- Extension header for LQFP64 I/Os for quick connection to prototyping board and easy probing

- Comprehensive free software including a variety of examples, part of STSW-STM32072 package

Description

The STM32L-DISCOVERY and 32L152CDISCOVERY kits help you to discover the STM32L ultra low power features and to develop and share your applications.
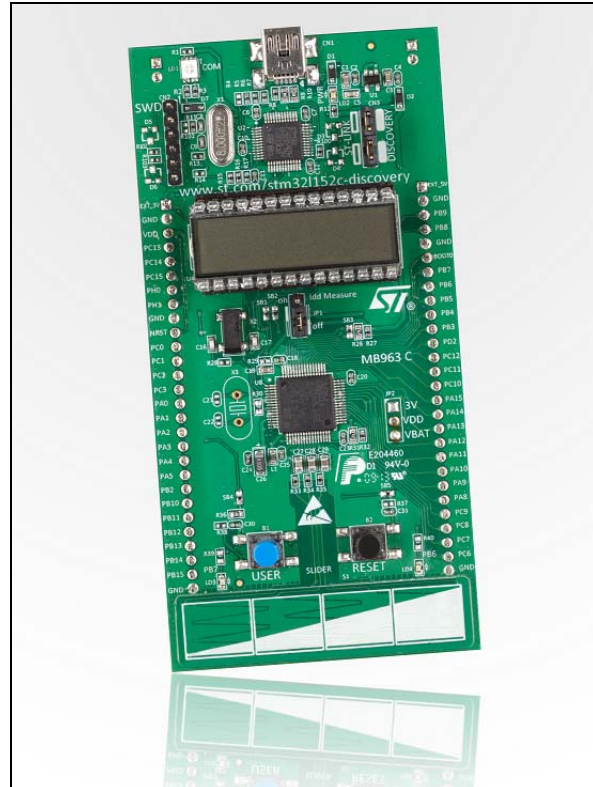
They are based on an STM32L152RBT6 and an STM32L152RCT6, respectively; and include an ST-LINK/V2 embedded debugging tool interface, an LCD (24 segments, 4 commons), LEDs, pushbuttons, a linear touch sensor or touchkeys.

Table 1. Device summary

Part number	Order code	Description
STM32L-DISCOVERY	STM32L-DISCOVERY[1]	Discovery kit based on STM32L152 RBT6
32L152CDISCOVERY	STM32L152C-DISCO	Discovery kit based on STM32L152 RCT6

1. STM32L-DISCOVERY is replaced by STM32L152C-DISCO.

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

System requirements

- Windows PC (XP, 7, 8)
- USB type A to Mini-B USB cable.

Development toolchain

- IAR EWARM (IAR Embedded Workbench®)
- Keil® MDK-ARM™
- GCC-based IDE (ARM® Atollic® TrueSTUDIO®,...)

Demonstration software

The demonstration software is preloaded in the board Flash memory. It uses the built-in I_{DD} measurement and touch sensing feature of the STM32L-DISCOVERY or the 32L152CDISCOVERY to automatically measure and display on the LCD the microcontroller consumption in run and low-power modes.

The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com/stm32l1-discovery.

Revision history

Table 2. Document revision history

Date	Revision	Changes
29-April-2011	1	Initial release.
11-May-2011	2	Replaced slider by linear touch sensor and touch key by touchkey.
16-Apr-2013	3	Added 32L152CDISCOVERY discovery kit and related features.
29-Sep-2014	4	Updated *Section : Features* to introduce STSW-STM32072. Updated *Section : System requirements* and *Section : Development toolchain*.

IMPORTANT NOTICE – PLEASE READ CAREFULLY