STM8A-DISCOVERY
Discovery kit for STM8A microcontrollers

Data brief

Features

STM8AF and STM8AL common features:

■ On-board ST-LINK/V2 included for debugging and programming

■ Board power supply: through 5 V USB bus

■ Internal dual ST662A step-up converter building the 12 Vdc when powered by USB port

■ External application power supply V_{BAT} (up to 14 Vdc)

■ 16 MHz HSE XTAL crystal oscillator

■ L99PM62GXP power management IC with LIN and high speed CAN with SPI control interface and high-side drivers

■ Two push buttons (USER1 and USER2)

■ Extension header for L99PM62GXP including relays, high-side outputs and wake-up capabilities

STM8AF dedicated features:

■ STM8AF5288T microcontroller featuring 64 Kbytes Flash, 2 Kbytes data EEPROM, LIN, CAN in an 48-pin package

■ Seven LEDs:
  – LD1 (red/green) for USB communication
  – LD2 (red) for 5 V power ON
  – Five user LEDs LD3 (red) and LD4 to LD7 (green)

■ RV1 potentiometer connected to the ADC peripheral

■ Extension headers for MCU connectivity (full Port B, free ports pins, RESET)

STM8AL dedicated features:

■ STM8AL3L68T microcontroller featuring 32 Kbytes Flash, 1 Kbytes data EEPROM, LCD in an 48-pin package

STM8AF board

STM8AL board
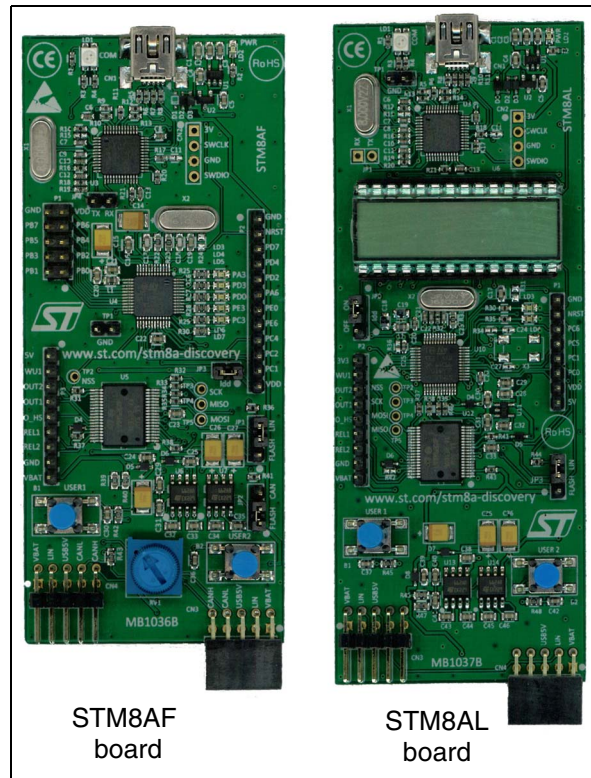
■ Four LEDs:
  – LD1 (red/green) for USB communication
  – LD2 (red) for 3.3 V power ON
  – 2 user LEDs LD3 (red) and LD4 (green)

■ 4-digit alphanumeric LCD display including 4 bars display

■ Extension header for MCU connectivity (free ports pins, RESET)

Table 1.   Device summary

Order code	Reference
STM8A-DISCOVERY	STM8A discovery kit

For further information contact your local STMicroelectronics sales office.

www.st.com

1   Description

The STM8A-DISCOVERY helps you discover the STM8AF and STM8AL automotive microcontrollers family features and develop your applications through two dedicated application boards that can be connected together via a LIN network.
The STM8AF board can perform both CAN and LIN communications with the MCU powered at 5 V and is ready to be connected into a network with its integrated transceiver. The STM8AL board manages LIN slave communication through its transceiver and uses a 4-digit alphanumeric LCD display with the MCU powered at 3.3 V, offering low energy power modes.
Both STM8AF and STM8AL boards include push buttons, LEDs, external connectors and allow various configurations to take advantage of the numerous capabilities of the microcontrollers.

2   System requirements

● Windows PC (XP, Vista, 7)
● USB cable (dual type A to mini-B) - included

3   Development toolchains

● IAR: EWSTM8
● STMicroelectronics: STVD

4   Demonstration software

The demonstration software is preloaded in the board Flash memory. It uses the trimmer and the USER push buttons placed on the STM8AF board to switch via the LIN bus the LCD and the LEDs of the STM8AL board. The latest versions of the demonstration source code and associated documentation can be downloaded on the ST website.

5 Revision history

Table 2. Document revision history

Date	Revision	Changes
15-Nov-2012	1	Initial release.

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