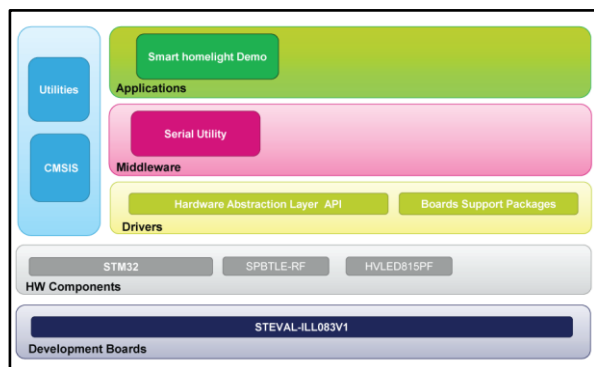


STEVAL-ILL083V1 firmware

Data brief



Description

The STSW-ILL083V1 firmware drives the smart LED lighting logic on the STEVAL-ILL083V1 board.

The software runs on the STM32L0 and includes the drivers required for interfacing with the on-board HVLED815PF LED driver and SPBTLE-RF very low power module for Bluetooth Smart v4.1.

The software is built on STM32Cube software technology to ease portability across different STM32 microcontrollers.

The STEVAL-ILL083V1 can be connected to a smartphone with the LEDBTLE.APK Android™ LED lamp remote control and dimming app available on the Google Play™ store.

Features

- Complete middleware to build applications using the STM32L0 microcontroller, the SPBTLE-RF very low power module for Bluetooth Smart v4.1 and the HVLED815PF off-line LED driver
- Easy portability across different MCU families, thanks to STM32Cube libraries
- AT commands from master to slave
- Free, user-friendly license terms

1 Detailed description

What is STM32Cube?

STM32Cube™ is an STMicroelectronics initiative to help reduce development time, effort and cost. STM32Cube covers the STM32 portfolio.

STM32Cube includes:

- STM32CubeMX, a graphical software configuration tool that allows the generation of C initialization code using graphical wizards
- A comprehensive embedded software platform, delivered per series (such as the STM32CubeF4 for STM32F4 series)
 - STM32Cube HAL, an STM32 abstraction layer embedded software, ensuring maximized portability across the STM32 portfolio
 - A consistent set of middleware components, such as RTOS, USB, TCP/IP and graphics
 - All embedded software utilities, including a full set of examples

How does this software complement STM32Cube?

The proposed software is based on the STM32CubeHAL hardware abstraction layer for the STM32 microcontroller. The package extends STM32Cube by providing a board support package (BSP) for the STEVAL-ILL083V1 and middleware components for serial communication with a PC. The drivers abstract low-level hardware protocols so that middleware components can run without requiring specific hardware parameters.

2 Revision history

Table 1: Document revision history

Date	Version	Changes
10-Feb-2017	1	Initial release.

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