

Data brief

# Embedded software sample for LED matrix driver based on STP16CPC26 with Bluetooth low energy and Android App





### **Features**

- Embedded STM32F0 series software samples for STEVAL-LLL005V1
- 6 preprogrammed demos with different LED patterns
- 10 scrolling speed levels for each demo
- · 10 brightness levels for each demo
- 10 blinking frequency levels for each demo
- · Integrated Bluetooth low energy drivers
- Support for Android app

## **Description**

The STSW-LLL005FW firmware package for the STEVAL-LLL005V1 evaluation board provides 6x10 LED matrix control through on-board buttons and an Android app via Bluetooth low energy communication.

Data between microcontroller and LED driver is transferred through SPI interfaces.

You can add or modify demos to control board behavior and you can also extend the demo for LED configurations other than the 6x10 LED matrix.

The STSW-LLL005FW firmware includes STM32F0 HAL drivers and Bluetooth low energy middleware for ST BlueNRG and BlueNRG-MS devices.

Summary table	
STSW-LLL005FW firmware	STSW- LLL005FW
STEVAL-LLL005V1 evaluation board	STEVAL- LLL005V1
STM32 F0 ARM Cortex-M0 MCUs	STM32F0
Bluetooth low-energy	BlueNRG
Bluetooth low energy network processor	BlueNRG-MS



# **Revision history**

**Table 1. Document revision history** 

Date	Version	Changes
19-Jan-2018	1	Initial release.

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