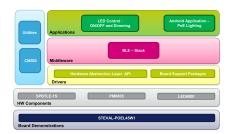


Data brief

Firmware for the STEVAL-POEL45W1 PoE-enabled constant current LED driver



Features

- Firmware implementation based on the SPBTLE-1S Bluetooth module
- Source code freely available with developer-friendly license terms
- PoE Lighting Android application freely available on Google Play

Description

The STSW-POEL45FW is the firmware for the STEVAL-POEL45W1 PoE-enabled constant current LED driver, based on the PM8805 PoE interface, the LED6000 driver and the SPBTLE-1S Bluetooth module.

The firmware communicates with the PoE Lighting Android application and manages the LED driver for on/off modes and dimming by controlling the 500 Hz PWM duty cycle generated by the firmware itself.

The LEDs can be dimmed up to 1% of the maximum brightness without any flicker.

Product summary	
Firmware for the STEVAL-POEL45W1 PoE-enabled constant current LED driver	STSW- POEL45FW
45 W PoE powered LED lighting with BLE control	STEVAL- POEL45W1
Very low power application module for Bluetooth Smart v4.2	SPBTLE-1S
3 A, 61 V monolithic current source with dimming capability	LED6000
IEEE 802.3bt PoE-PD interface with embedded dual active bridge	PM8805



Flowchart

Figure 1. STSW-POEL45FW flowchart Start Configuration of Timer, GPIOs and **BLE Stack** BLE module SPBTLE-1S enables LED driver LED6000 to make the LEDs glow at maximum brightness level BLE **YES** Command Received? NO NO Is Valid Command **YES** ON/OFF or dim the LEDs as per the command received

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Revision history

Table 1. Document revision history

Date	Version	Changes
05-Mar-2019	1	Initial release.

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