

Smart home light based on HVLED815PF, SPBTLE-RF

Data brief



Features

- Primary side regulation, no optocoupler required
- High power factor and low THD
- Quasi resonant operation
- Open/short LED management
- Up to 15 W operation
- Remote on/off and dimming with Android® app
- RoHS compliant

Description

The STEVAL-ILL083V1 evaluation board is based on the HVLED815PF off-line LED driver. It consists of an LED driver board with a connectivity module and the STM32L0 microcontroller, which manages wireless communication and LED brightness control. The microcontroller and connectivity module are supplied by the LED driver through an auxiliary winding.

The embedded SP-BTLE-RF Bluetooth v4.1 module lets you control the STEVAL-ILL083V1 smart home lighting board through an Android™ application and can help reduce development and certification time.

The board can also be rendered visible to cloud applications with the addition of a wireless bridge.

1 Schematic diagrams

Figure 1: STEVAL-ILL083V1 circuit schematic (1 of 3)

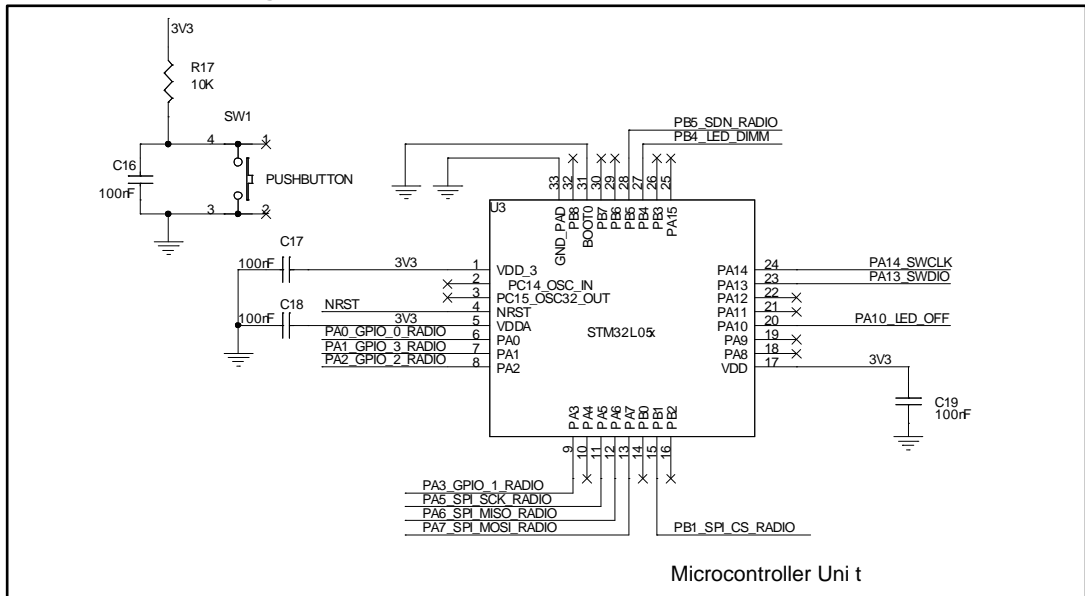


Figure 2: STEVAL-ILL083V1 circuit schematic (2 of 3)

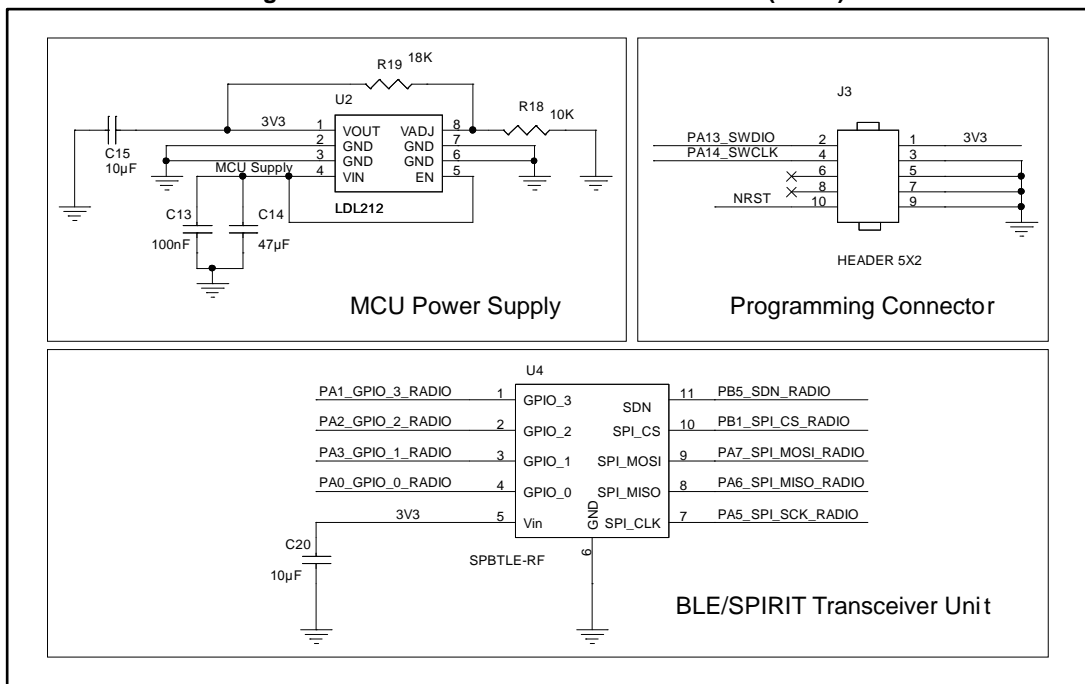
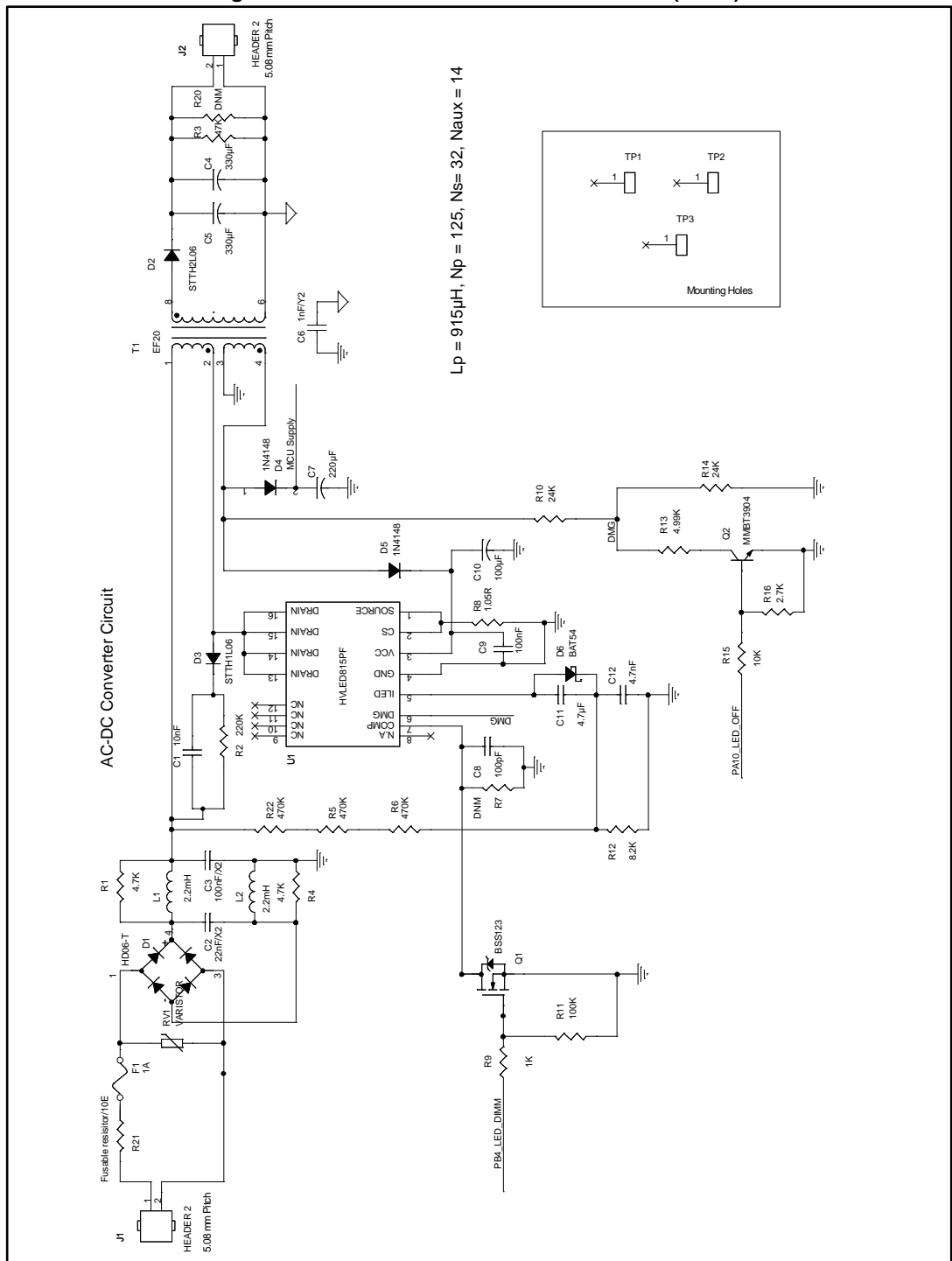


Figure 3: STEVAL-ILL083V1 circuit schematic (3 of 3)



2 Revision history

Table 1: Document revision history

Date	Version	Changes
25-Jan-2017	1	Initial release.

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