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## STEVAL-IDB006V1M

# Bluetooth® Low Energy USB dongle based on the SPBTLE-RF module

Data brief



### **Features**

- USB dongle for direct PC connection based on ETSI, FCC, IC certified BlueNRG-MS module SPBTLE-RF with integrated Balun and chip antenna
- On-board STM23L low power 32-bit ARM<sup>®</sup> Cortex-M3<sup>™</sup> microcontroller
- Firmware and GUI fully compliant with BlueNRG-MS development kits
- Debug connector
- USB interface
- Bluetooth® Low Energy 4.1 compliant, supports both master and slave roles
- RoHS compliant

## **Description**

The STEVAL-IDB006V1M is an evaluation board based on the SPBTLE-RF module. The module is ETSI, FCC and IC certified and uses the BlueNRG-MS, a low power Bluetooth Smart IC which is compliant with the Bluetooth 4.1 specification and supports both master and slave roles. The SPBTLE-RF module integrates ST's BALF-NRG-01D3 balun and a chip antenna. The STEVAL-IDB006V1M is equipped with an STM32L low power microcontroller to control the BlueNRG, and also features a USB connector for PC GUI interaction and firmware update, such as the one available for the BlueNRG-MS evaluation kit.

An SWD connector allows the development of specific firmware on the microcontroller.

Schematic diagrams STEVAL-IDB006V1M

## 1 Schematic diagrams

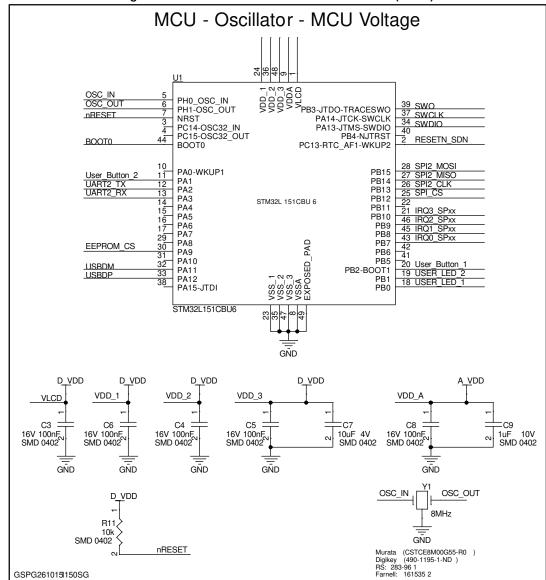


Figure 1: STEVAL-IDB006V1M circuit schematic (1 of 4)



STEVAL-IDB006V1M Schematic diagrams

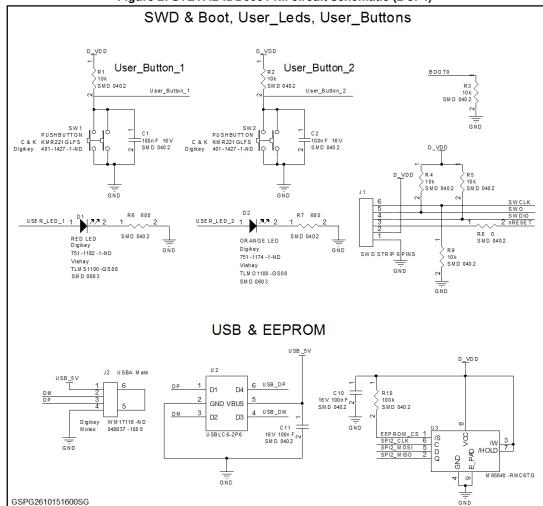


Figure 2: STEVAL-IDB006V1M circuit schematic (2 of 4)

Schematic diagrams STEVAL-IDB006V1M

Figure 3: STEVAL-IDB006V1M circuit schematic (3 of 4)

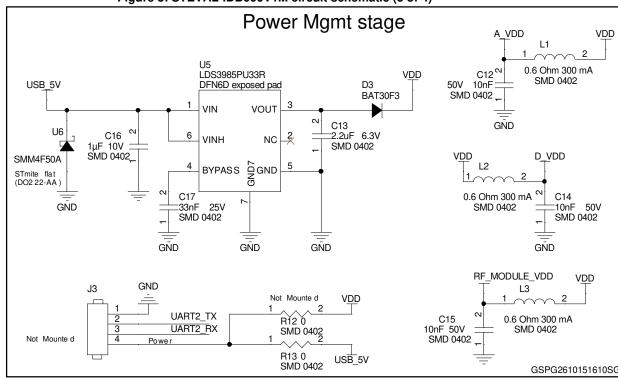
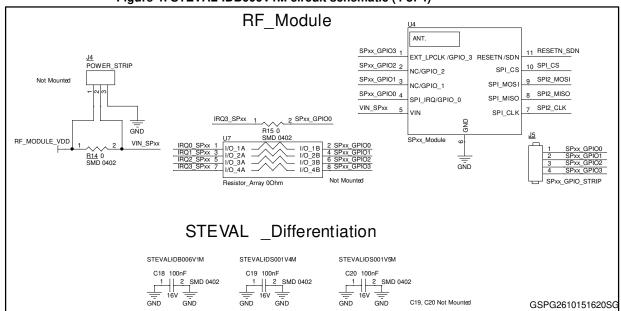


Figure 4: STEVAL-IDB006V1M circuit schematic (4 of 4)



STEVAL-IDB006V1M Revision history

# 2 Revision history

**Table 1: Document revision history** 

| Date        | Version | Changes          |
|-------------|---------|------------------|
| 06-Nov-2015 | 1       | Initial release. |

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