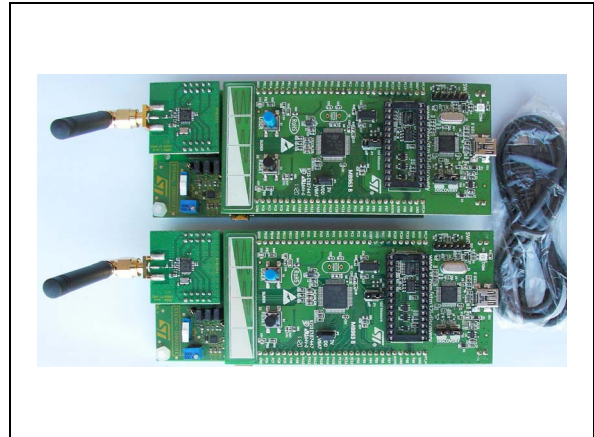


Bluetooth low energy development kit based on the STBLC01

Data brief

Features

- STBLC01 Bluetooth® low energy controller in a standalone RF module
- STM32L Discovery board, including STLINK
- Associated STBLC01 development kit, including documentation, firmware for STM32L and GUI
- Bluetooth protocol stack for STM32L and profiles provided separately
- Bluetooth specification v4.0 compliant master and slave BLE controller
- ISM 2.4 GHz frequency band
- 1 Mbps on-air data rate SPI interface for microcontroller
- Operating supply voltage from 1.9 V to 3.6 V
- 13 mA maximum peak current
- Low power physical layer
- Link layer with embedded security engine
- UART and SPI available as HCI transport layers
- RoHS compliant



Description

The STEVAL-IDB001V1 demonstration board is based on the STBLC01, a very low power Bluetooth low energy (BLE) controller compliant with Bluetooth specification 4.0. The STBLC01 integrates a low power physical layer, a link layer with an embedded security engine, a host controller interface (HCI), and power management. The board includes an STM32L Discovery with embedded low-power STM32L microcontroller to control the STBLC01. The Bluetooth low energy host stack can be provided separately to run in the microcontroller.

1 Schematic diagram

Figure 1. Interface board: power supply

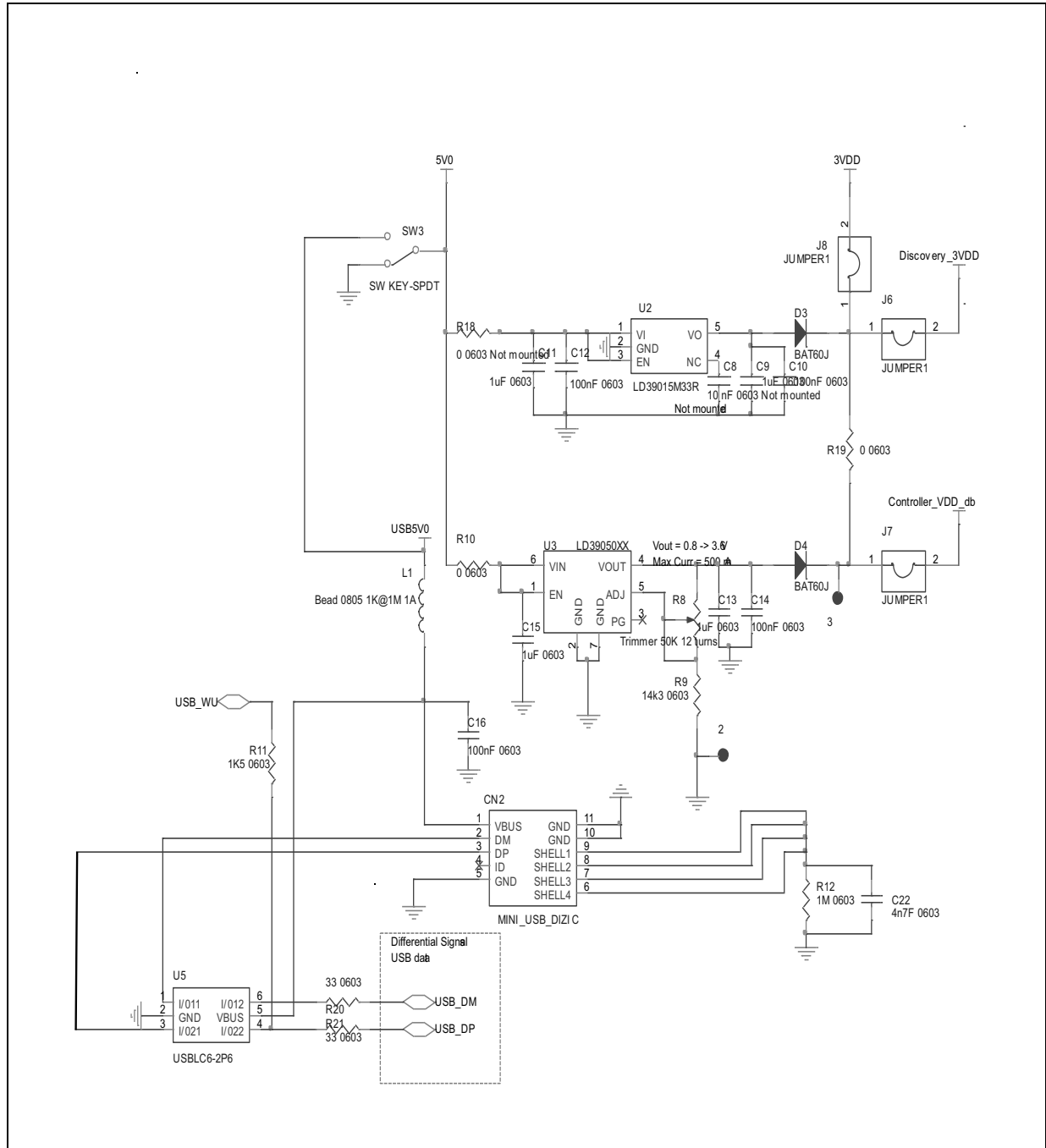


Figure 2. Interface board: Interface

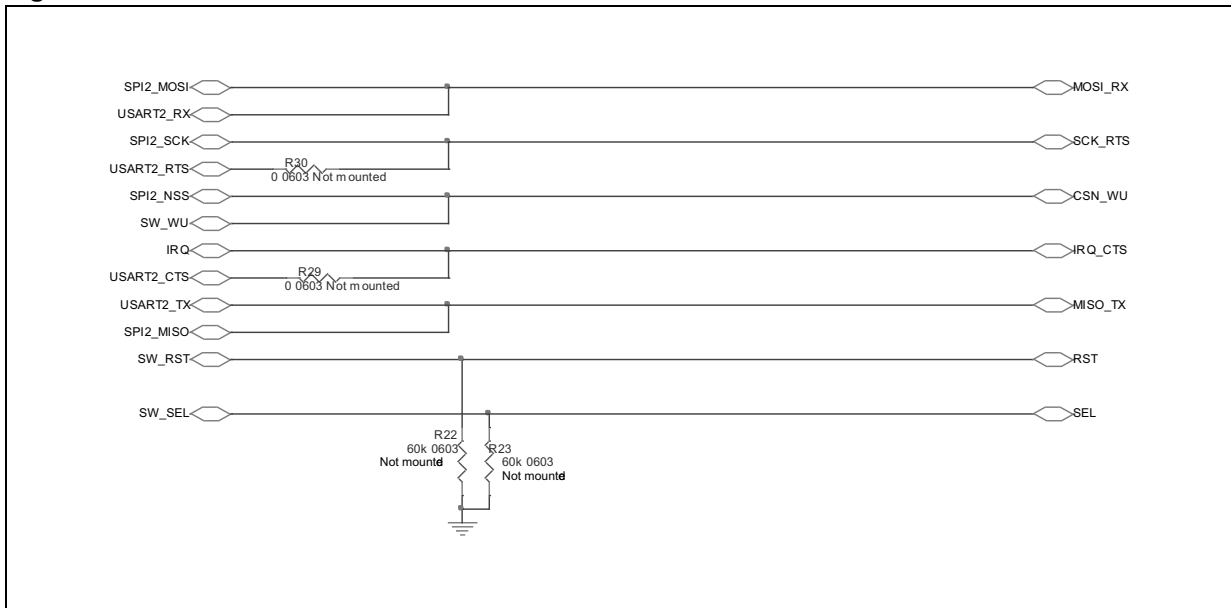


Figure 3. Interface board: sensors

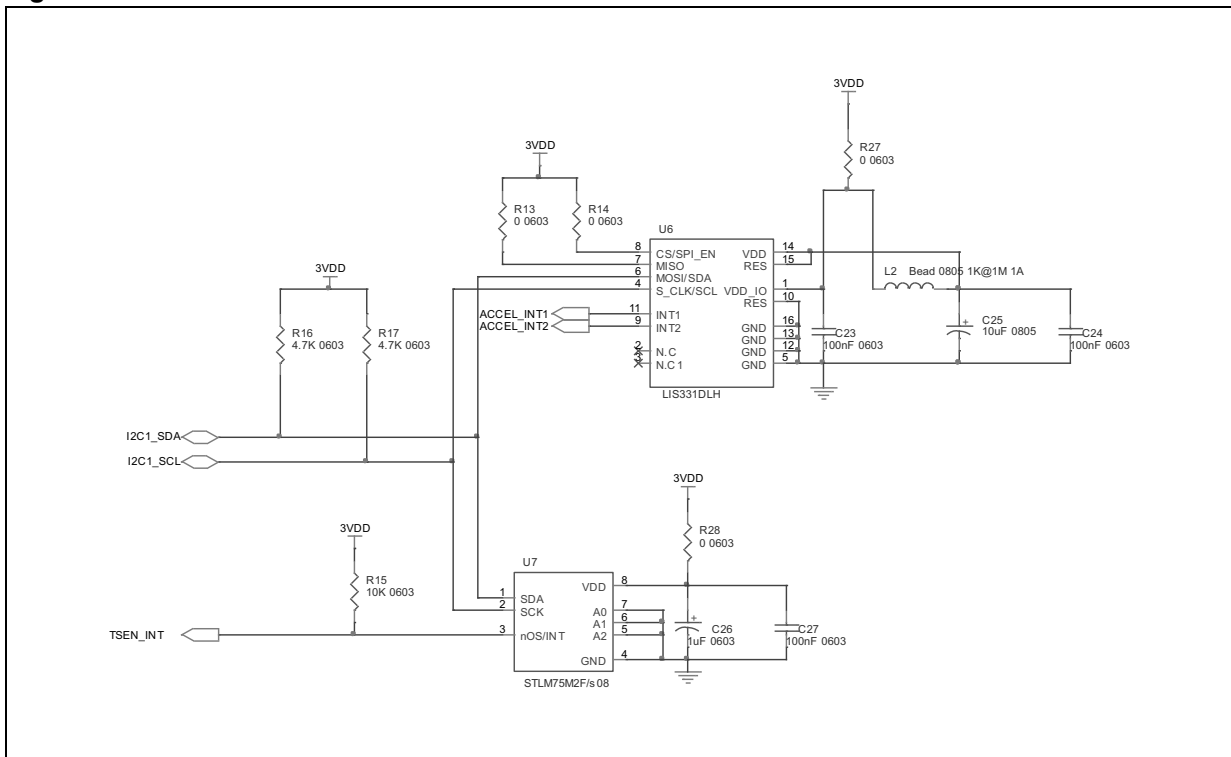


Figure 4. Interface board: interface connectors

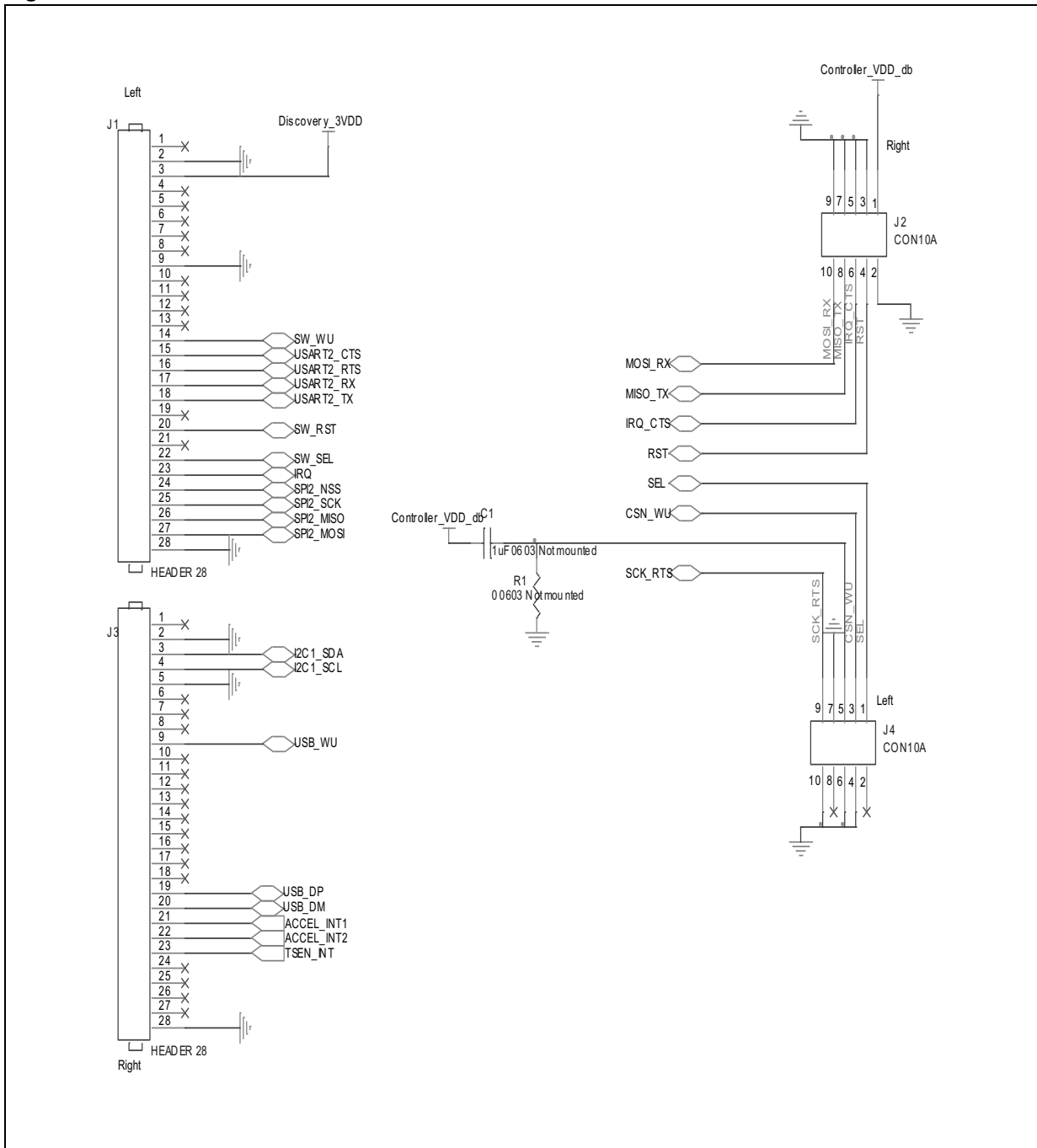
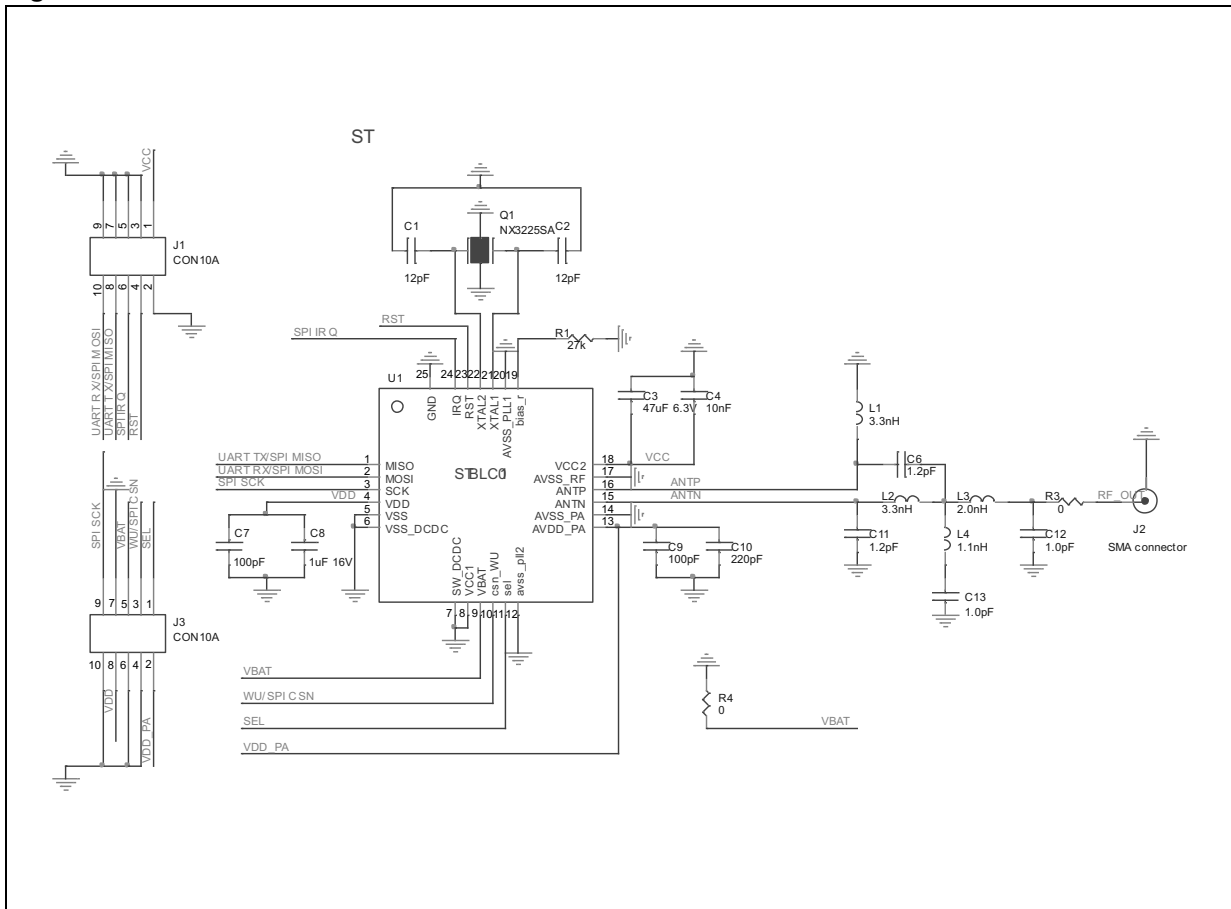


Figure 5. STBLC01 RF module



2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 11-Feb-2013 | 1 | Initial release. |

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