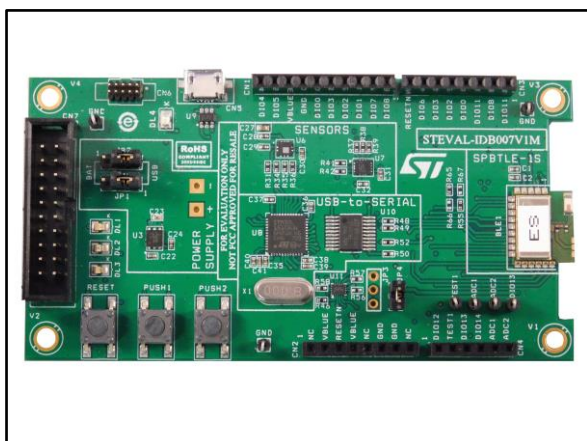


Evaluation platform based on the SPBTLE-1S module

Data brief



- 3D digital accelerometer and 3D digital gyroscope
- MEMS pressure sensor with embedded temperature sensor
- Battery holder
- JTAG debug connector
- USB to serial bridge for providing I/O channel with the BlueNRG-1 device
- Jumper for measuring current for BlueNRG-1 only
- RoHS compliant

Description

The STEVAL-IDB007V1M evaluation platform is based on the SPBTLE-1S, BlueNRG-1 SoC ICs, low power Bluetooth® smart system on chip, compliant with the Bluetooth® v4.2 specification and supporting master, slave and simultaneous master-and-slave roles.

The STEVAL-IDB007V1M also provides a set of hardware resources for a wide range of application scenarios: sensor data (accelerometer, pressure and temperature sensors), remote control (buttons and LEDs) and debug message management via USB virtual COM.

Three power options are available (USB only, battery only and external power supply + USB) for high application development and testing flexibility.

Features

- Bluetooth® SMART board with the SPBTLE-1S certified module based on the BlueNRG-1 Bluetooth low energy system-on-chip
- Associated BlueNRG-1 development kit SW package including firmware and documentation
- Up to +5 dBm available output power
- Bluetooth® low energy v4.2 compliant, supports master, slave and simultaneous master-and-slave roles
- Integrated balun which integrates a matching network and harmonics filter
- SMA connector for antenna or measuring equipment
- 3 user LEDs
- 2 user buttons

Schematic diagrams

Figure 1: STEVAL-IDB007V1M - arduino connectors

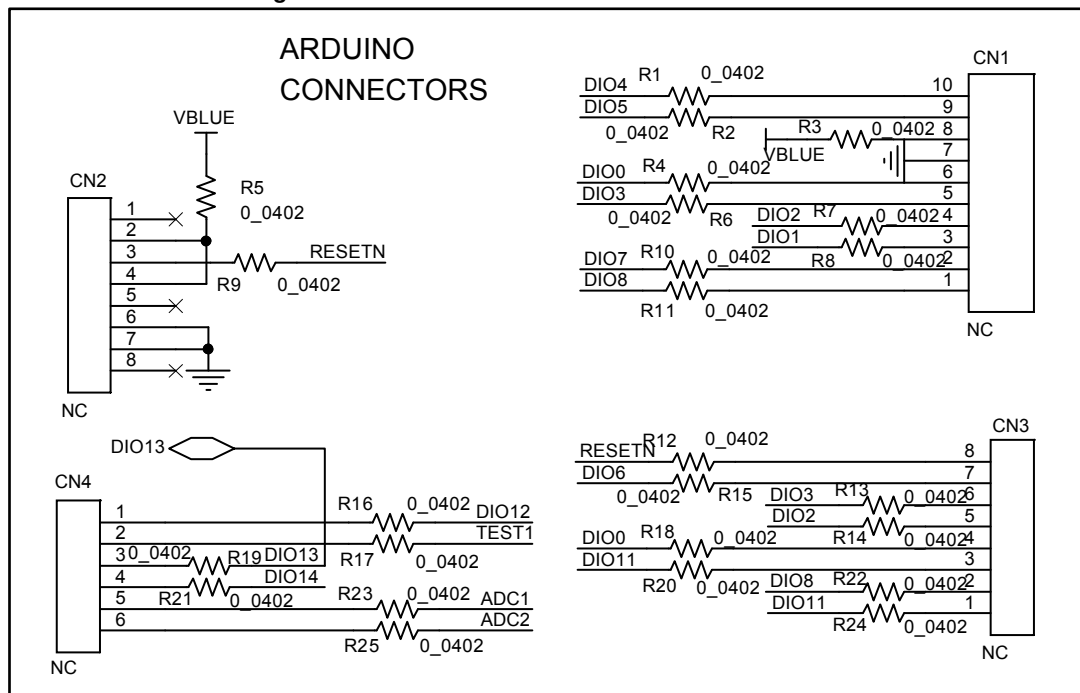


Figure 2: STEVAL-IDB007V1M - JTAG

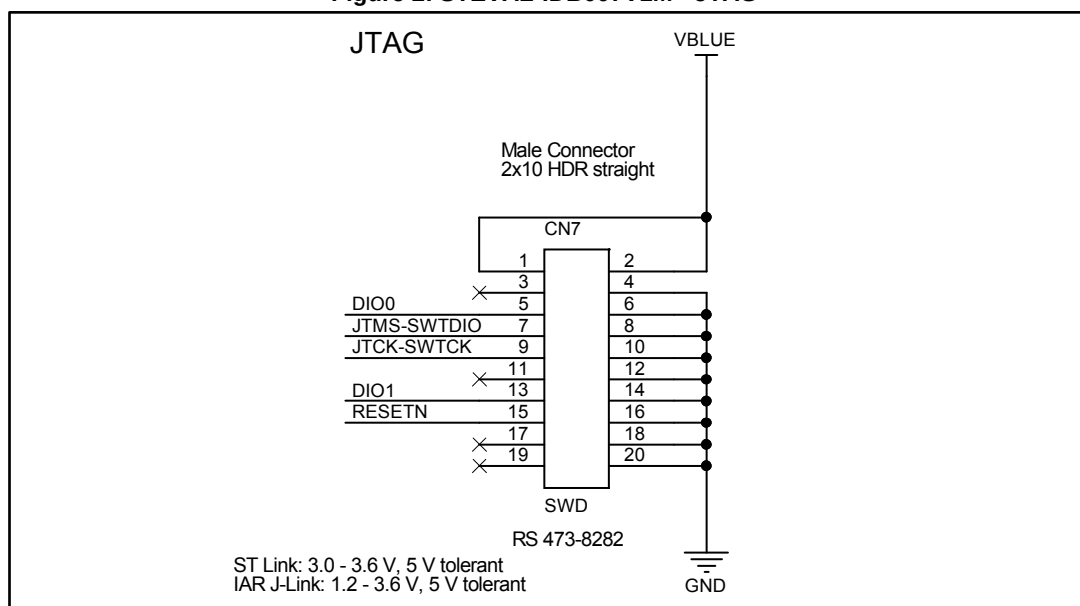


Figure 3: STEVAL-IDB007V1M - SPBTLE-1S module

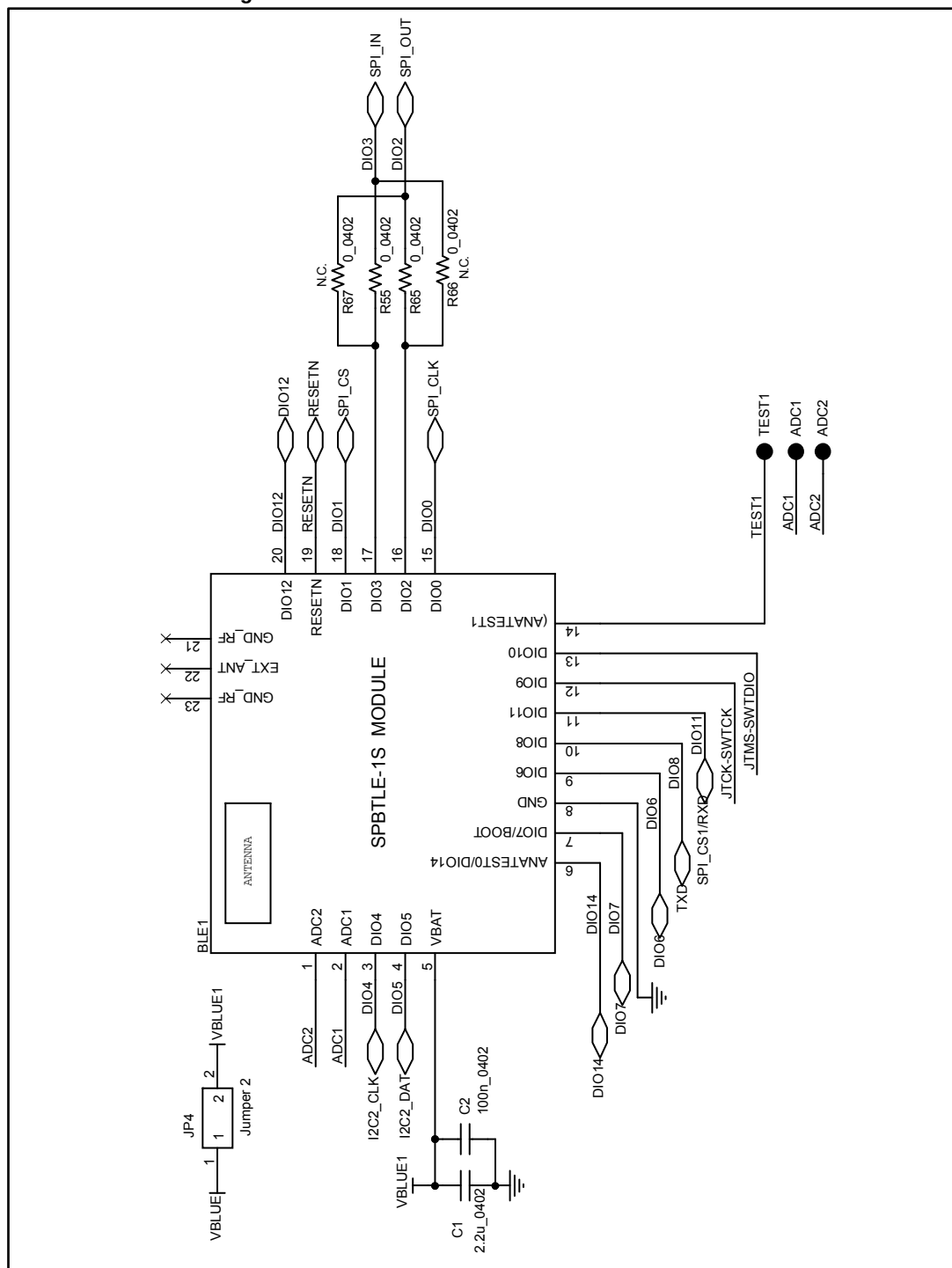


Figure 4: STEVAL-IDB007V1M - power management, sensors

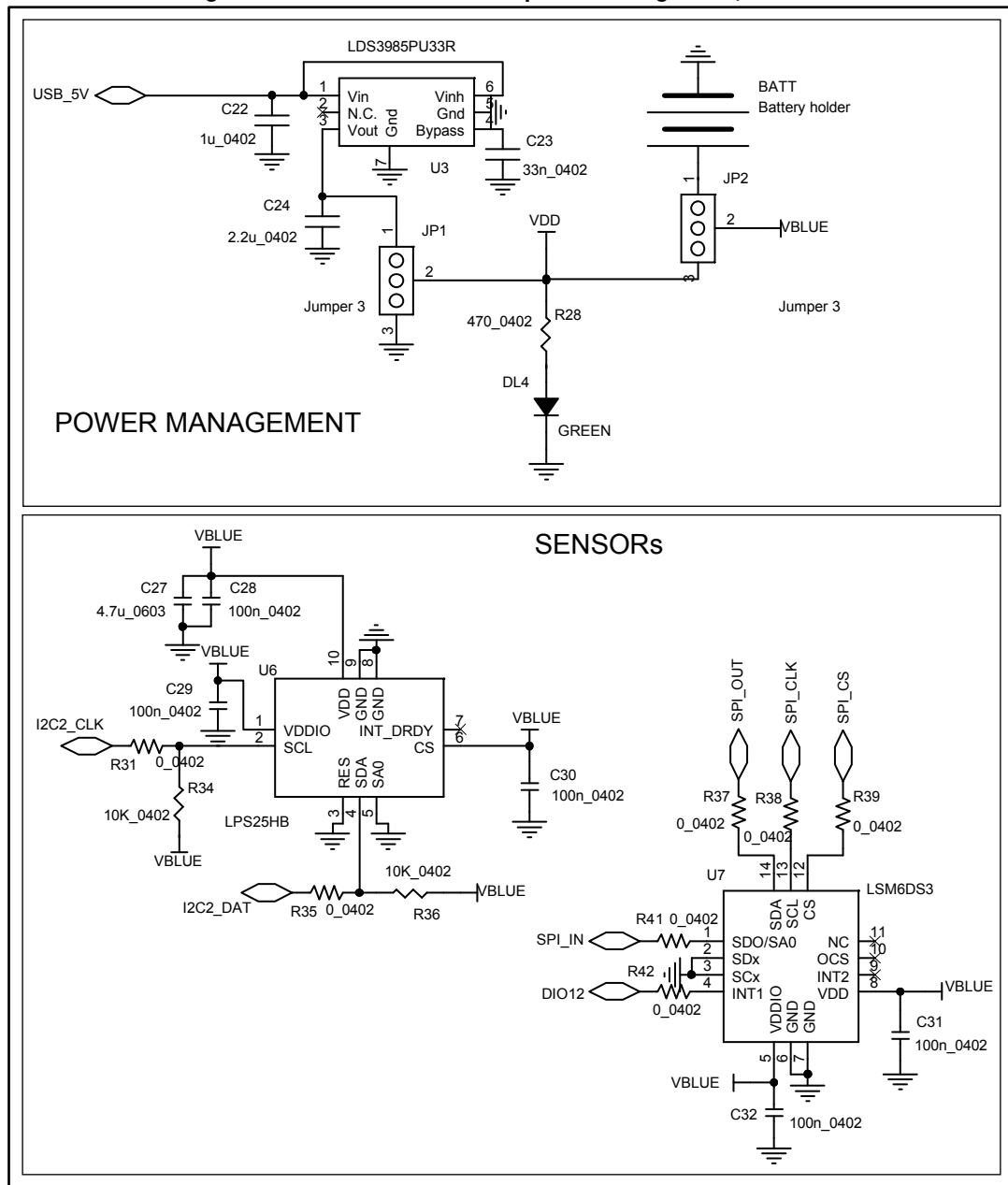


Figure 5: STEVAL-IDB007V1M - buttons and LEDs

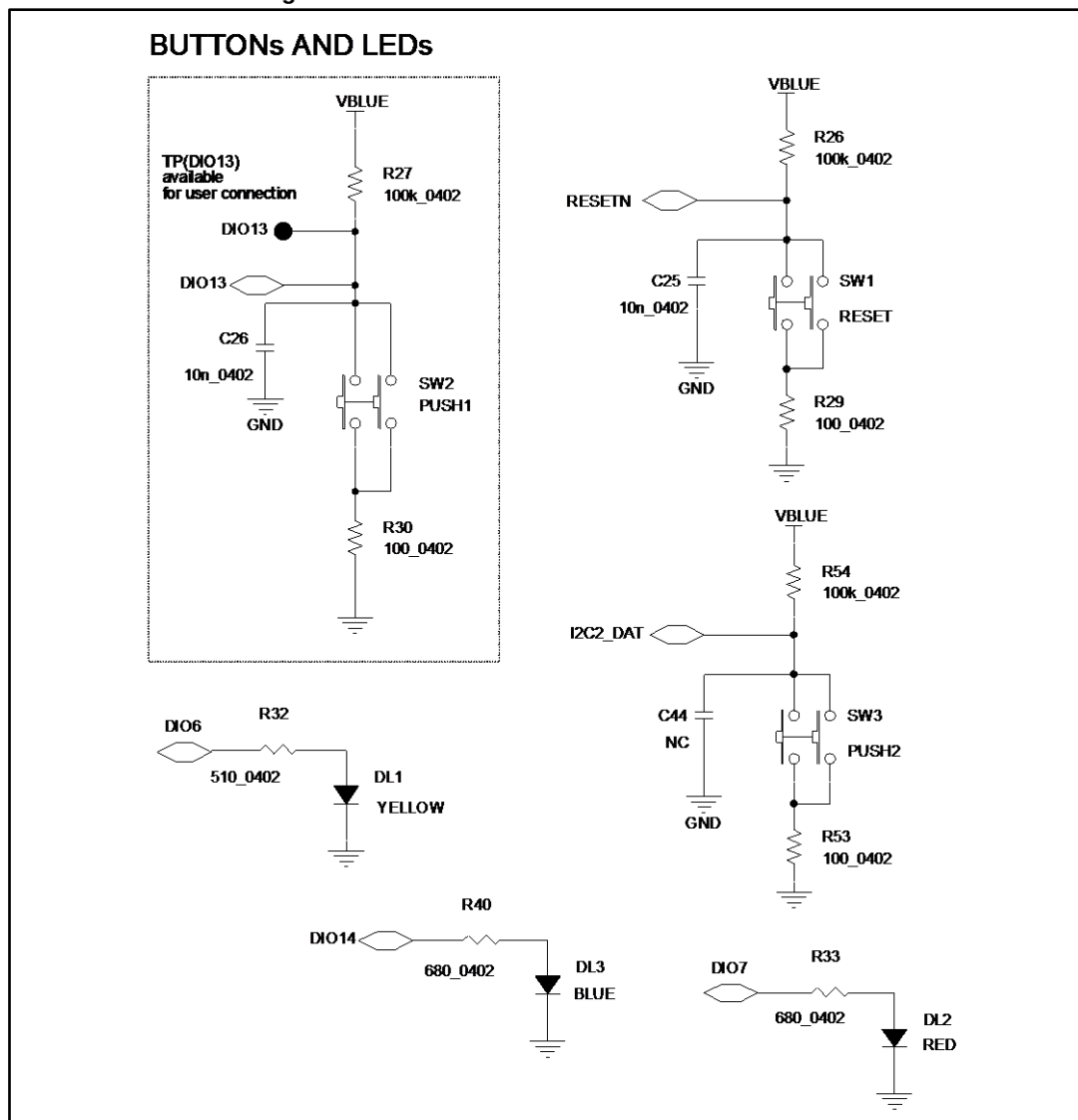


Figure 6: STEVAL-IDB007V1M - micro

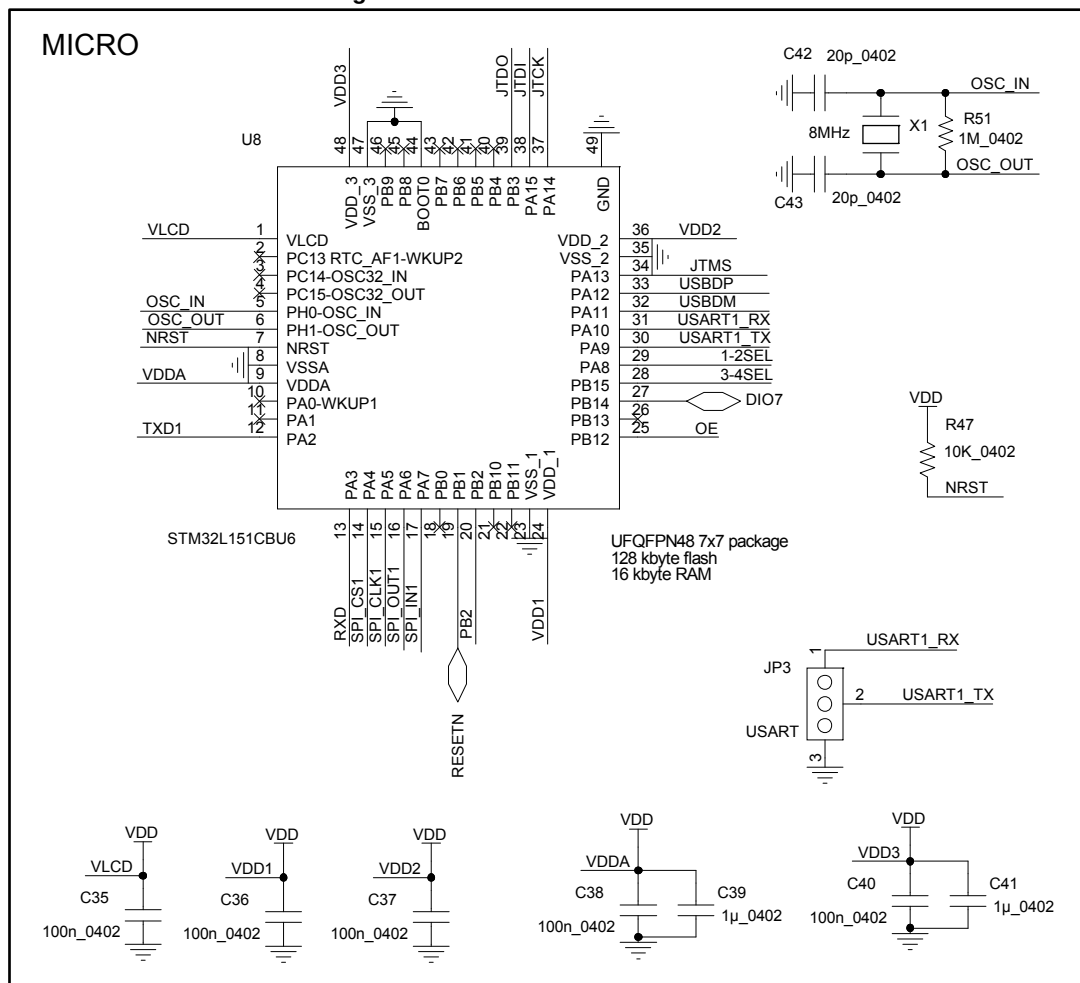


Figure 7: STEVAL-IDB007V1M - USB, level translator, JTAG for micro

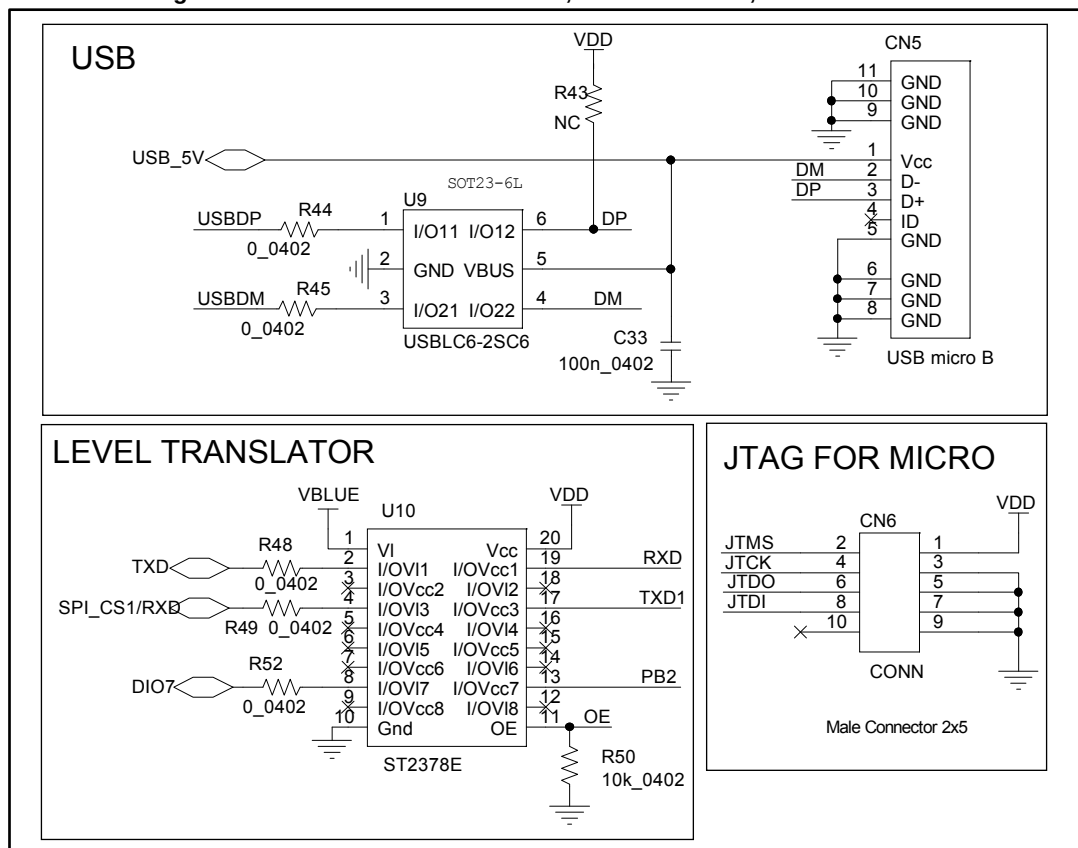
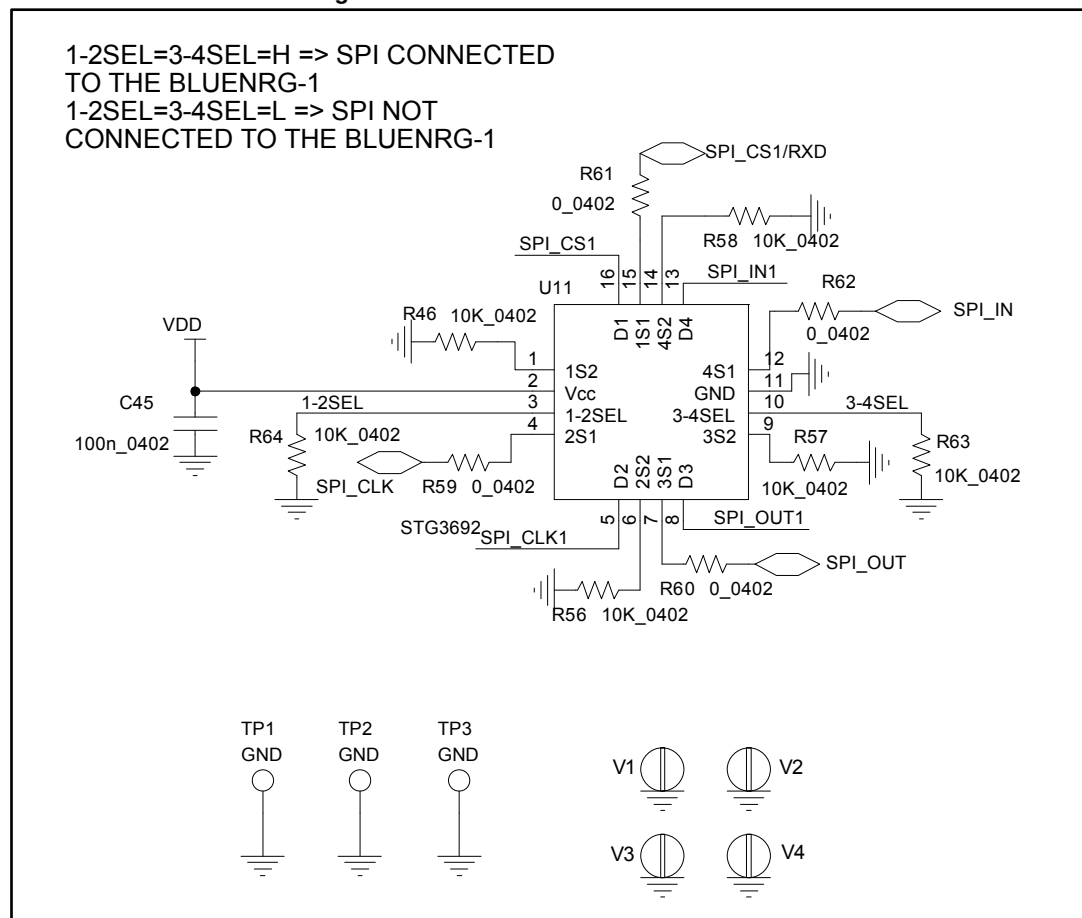


Figure 8: STEVAL-IDB007V1M - EEPROM



Revision history

Table 1: Document revision history

Date	Version	Changes
26-Jul-2017	1	Initial release.

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