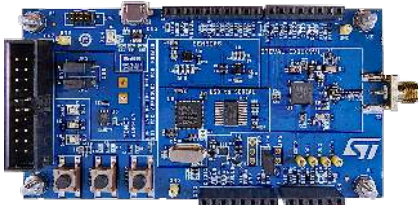


Evaluation platform based on the BlueNRG-248



Features

- Bluetooth® low energy technology board based on the BlueNRG-248 (QFN48) ultra-low-power system on chip
- Associated BlueNRG-2 development kit SW package including firmware and documentation
- Up to +8 dBm available output power (at antenna connector)
- Excellent receiver sensitivity (-88 dBm)
- Very low power consumption: 7.7 mA RX and 8.2 mA TX at +0 dBm
- Bluetooth® low energy technology v5.0 compliant: supports master, slave, simultaneous master-and-slave roles, and the Bluetooth low energy extended data length feature
- SMA connector for antenna or measuring equipment
- 3 user LEDs
- 2 user buttons
- 3D digital accelerometer and 3D digital gyroscope
- MEMS pressure sensor
- WEEE compliant
- RoHS compliant

Description

The [STEVAL-IDB009V1](#) evaluation platform is based on the BlueNRG-248 (QFN48), low power Bluetooth® system on chip with 256 KB Flash and 24 KB RAM. The BlueNRG-2 chip is compliant with the Bluetooth® low energy technology v5.0 specification, supporting master, slave and simultaneous master-and-slave roles, and the Bluetooth low energy extended data length feature.

The STEVAL-IDB009V1 also provides a set of hardware resources for implementing a wide range of application scenarios: sensor data (accelerometer, pressure and temperature sensor), remote control (buttons and LEDs) and debug message management through USB virtual COM. Three power options are available (USB only, battery only, and external power supply plus USB) for high application development and testing flexibility.

Summary table

Evaluation platform based on the BlueNRG-2	STEVAL-IDB009V1
Bluetooth low energy wireless system-on-chip	BlueNRG-2

1 Schematic diagrams

Figure 1. STEVAL-IDB009V1 board schematic

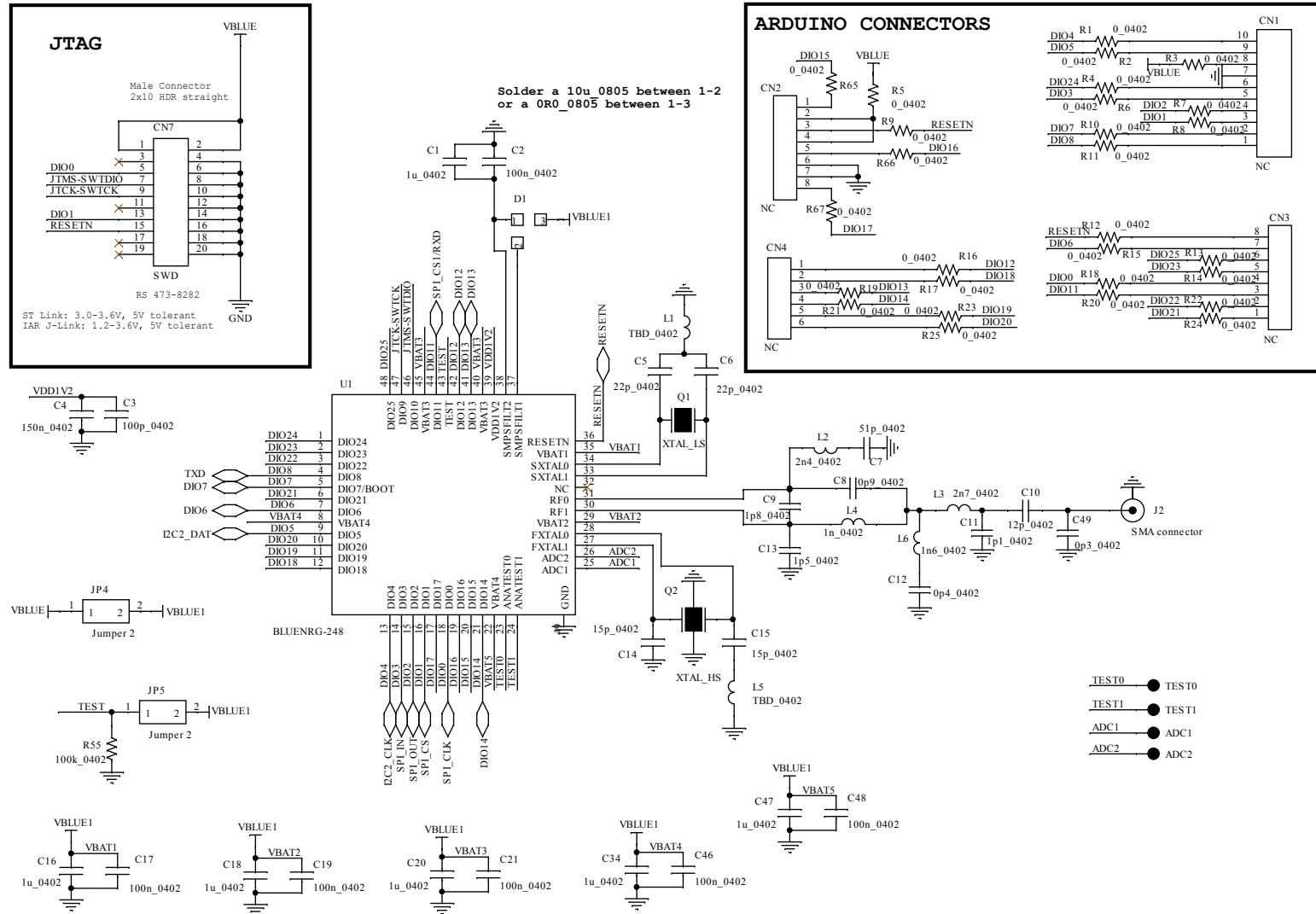


Figure 2. STEVAL-IDB009V1 board schematic (part 2)

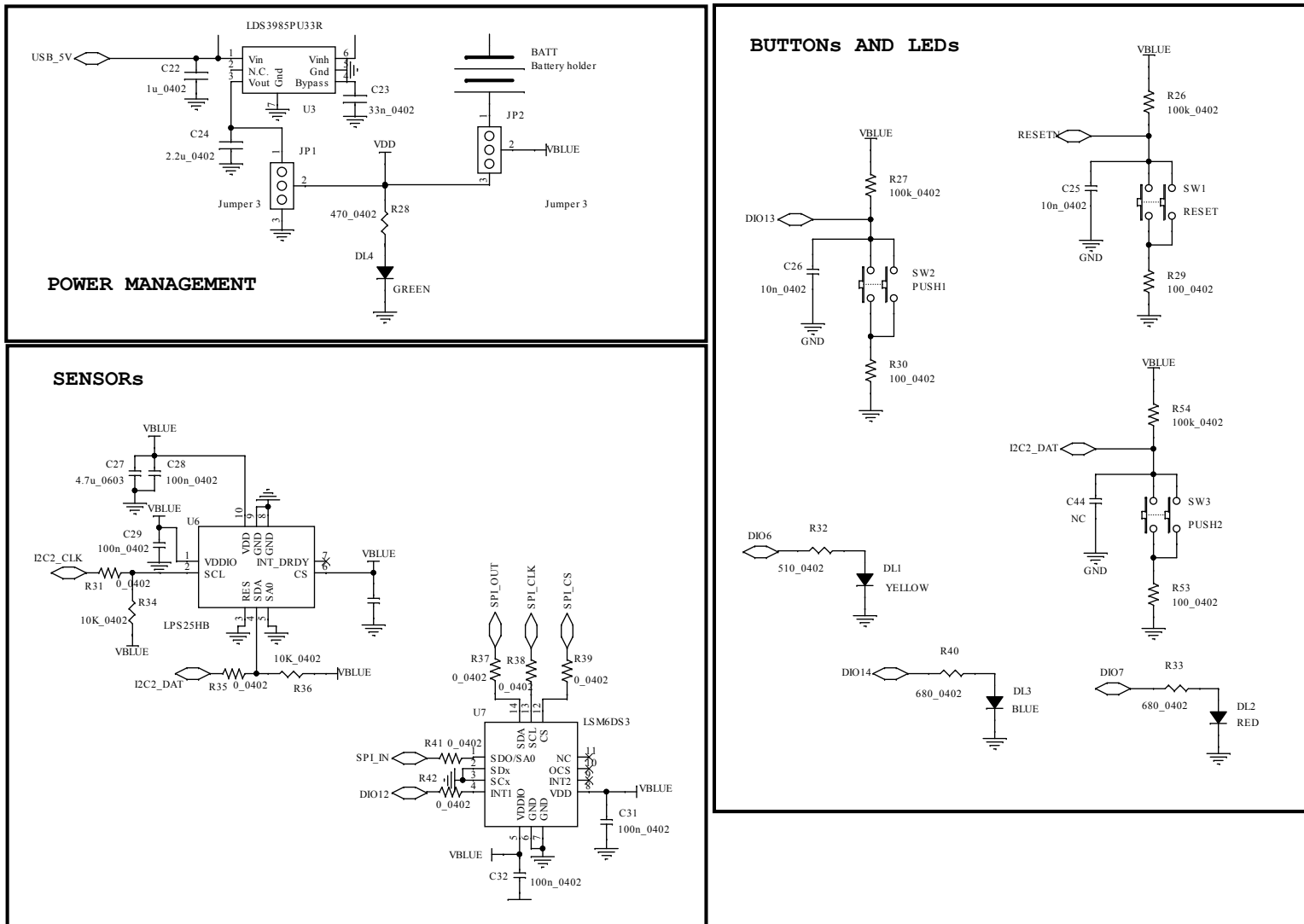
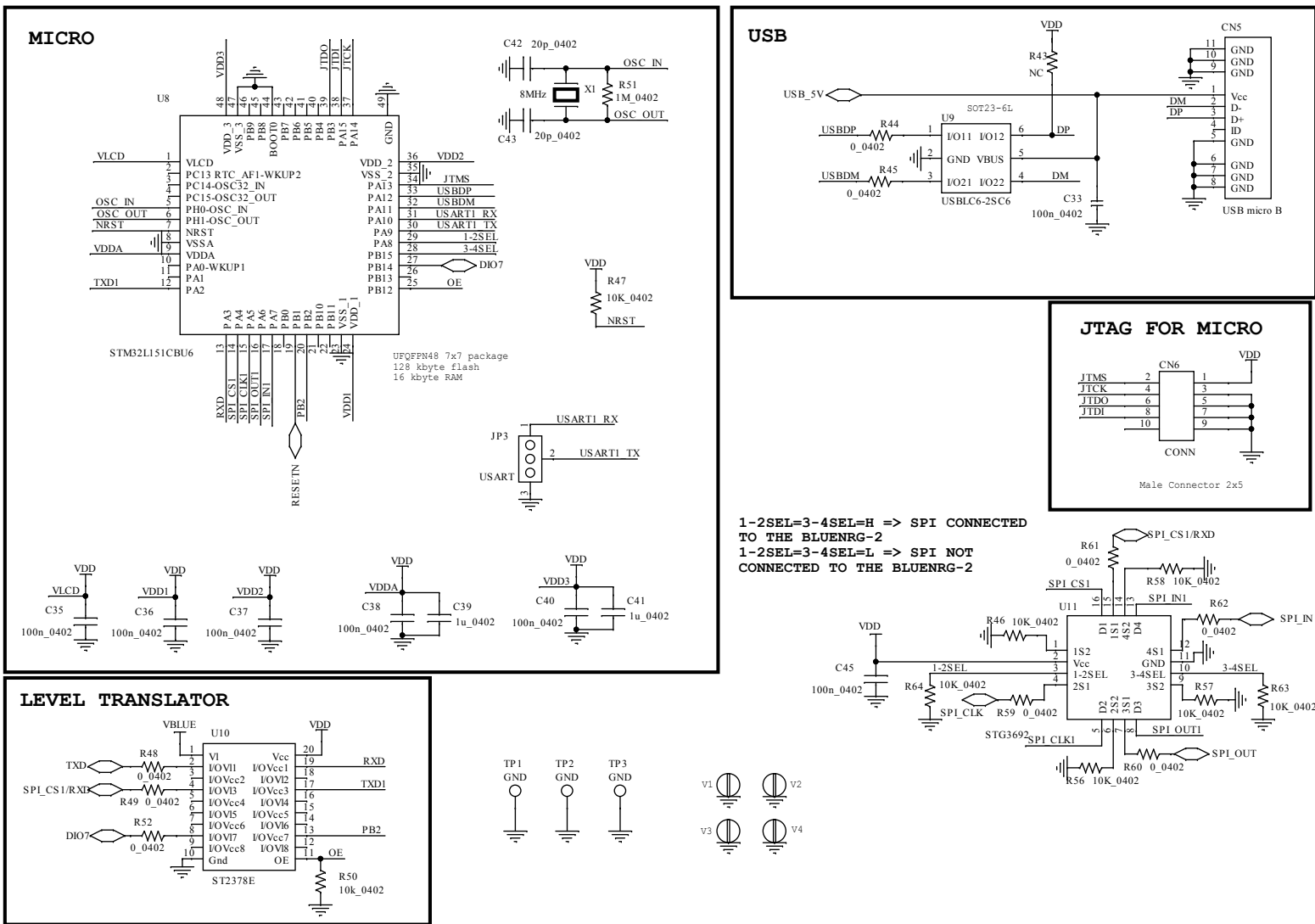


Figure 3. STEVAL-IDB009V1 board schematic (part 3)



Revision history

Table 1. Document revision history

Date	Version	Changes
13-Nov-2018	1	Initial release.
09-Jan-2019	2	Updated: Section 1 Schematic diagrams

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2019 STMicroelectronics – All rights reserved