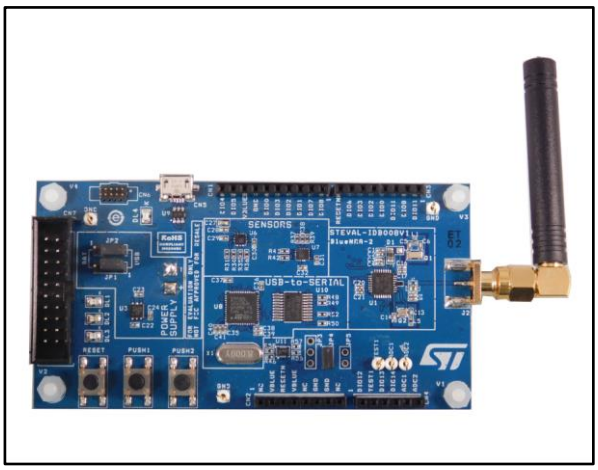
STEVAL-IDB008V1

Evaluation platform based on the BlueNRG-2

Data brief



Features

- Bluetooth® SMART board based on the BlueNRG-2 Bluetooth low energy 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® SMART specification compliant, supports master, slave, simultaneous master-and-slave roles and Bluetooth low energy extended data length feature
- Integrated balun which integrates a matching network and harmonics filter
- SMA connector for antenna or measuring equipment
- 3 user LEDs
- 2 user buttons
- 3D digital accelerometer and 3D digital gyroscope
- MEMS pressure sensor with embedded temperature sensor
- RoHS compliant

Description

The STEVAL-IDB008V1 is an evaluation platform based on the BlueNRG-2, low power Bluetooth® smart system on chip with 256 KB Flash , 24 KB RAM, compliant with the Bluetooth SMART specification, supporting master, slave and simultaneous master-and-slave roles and Bluetooth low energy extended data length feature.

The STEVAL-IDB008V1 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 though USB virtual COM. Three power options are available (USB only, battery only, external power supply + USB) for high application development and testing flexibility.

1 Schematic diagrams

Figure 1: STEVAL-IDB008V1 circuit schematic (1 of 12)

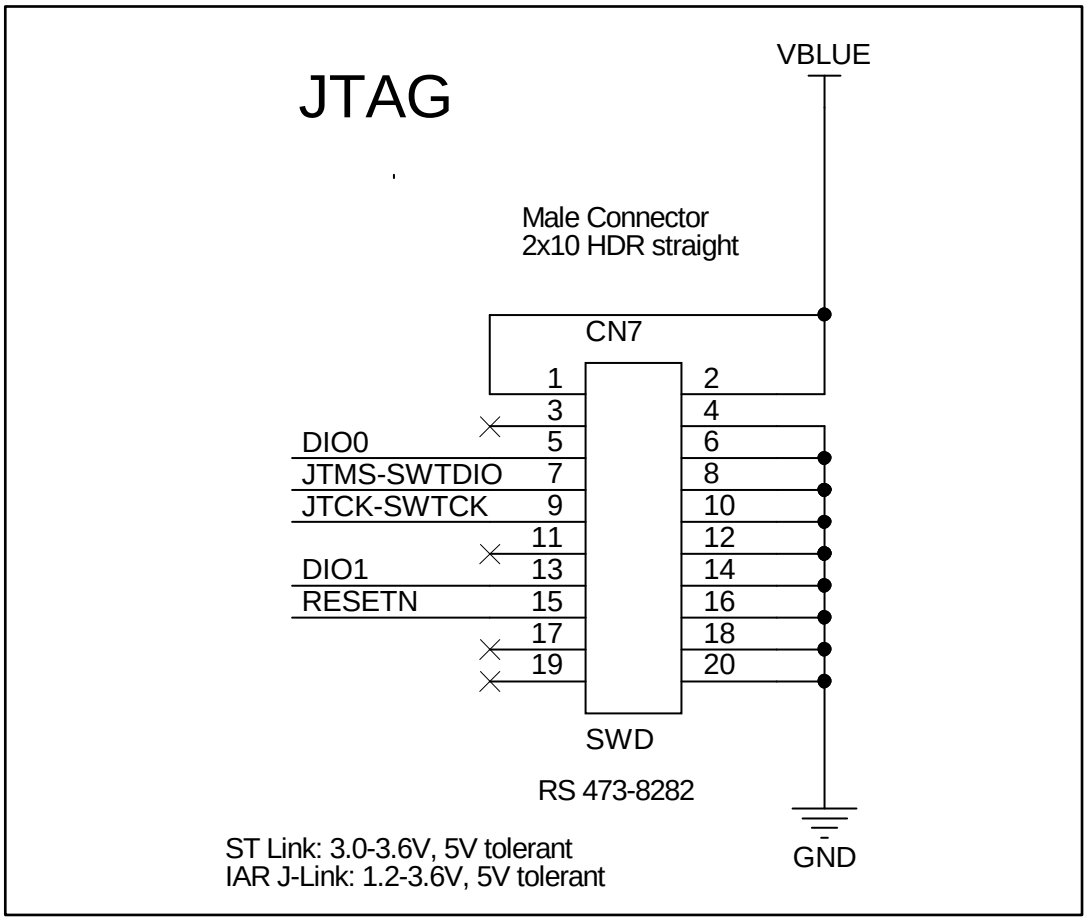


Figure 2: STEVAL-IDB008V1 circuit schematic (2 of 12)

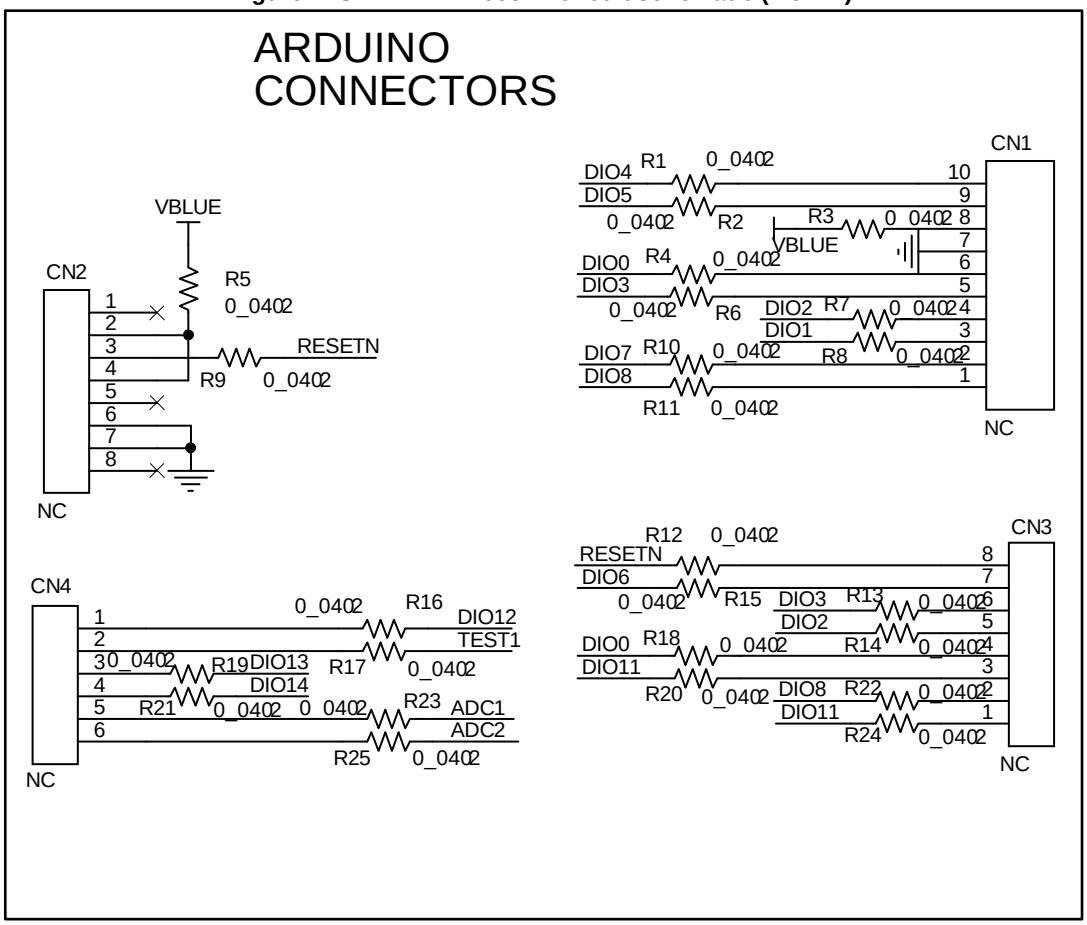


Figure 3: STEVAL-IDB008V1 circuit schematic (3 of 12)

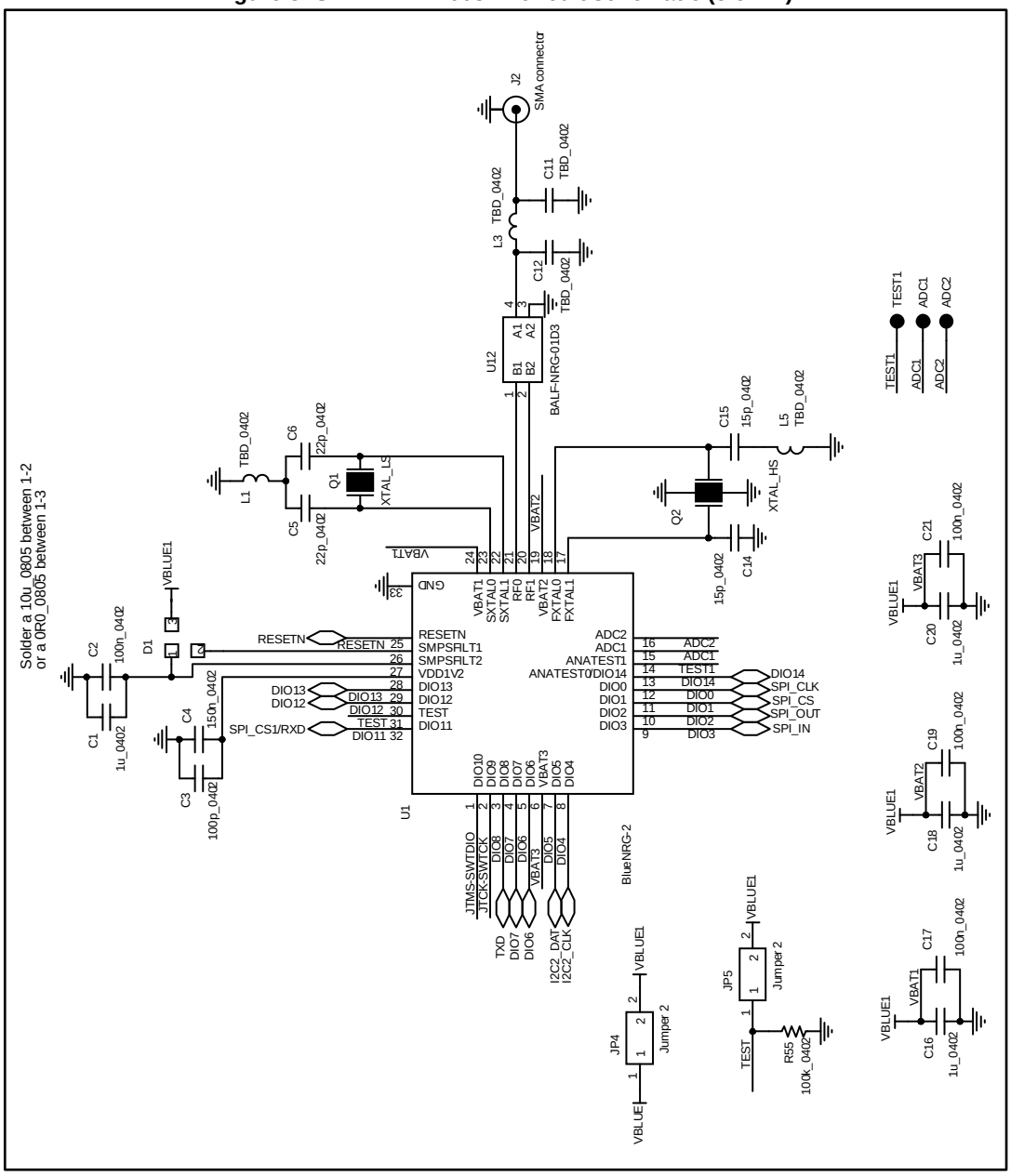


Figure 4: STEVAL-IDB008V1 circuit schematic (4 of 12)

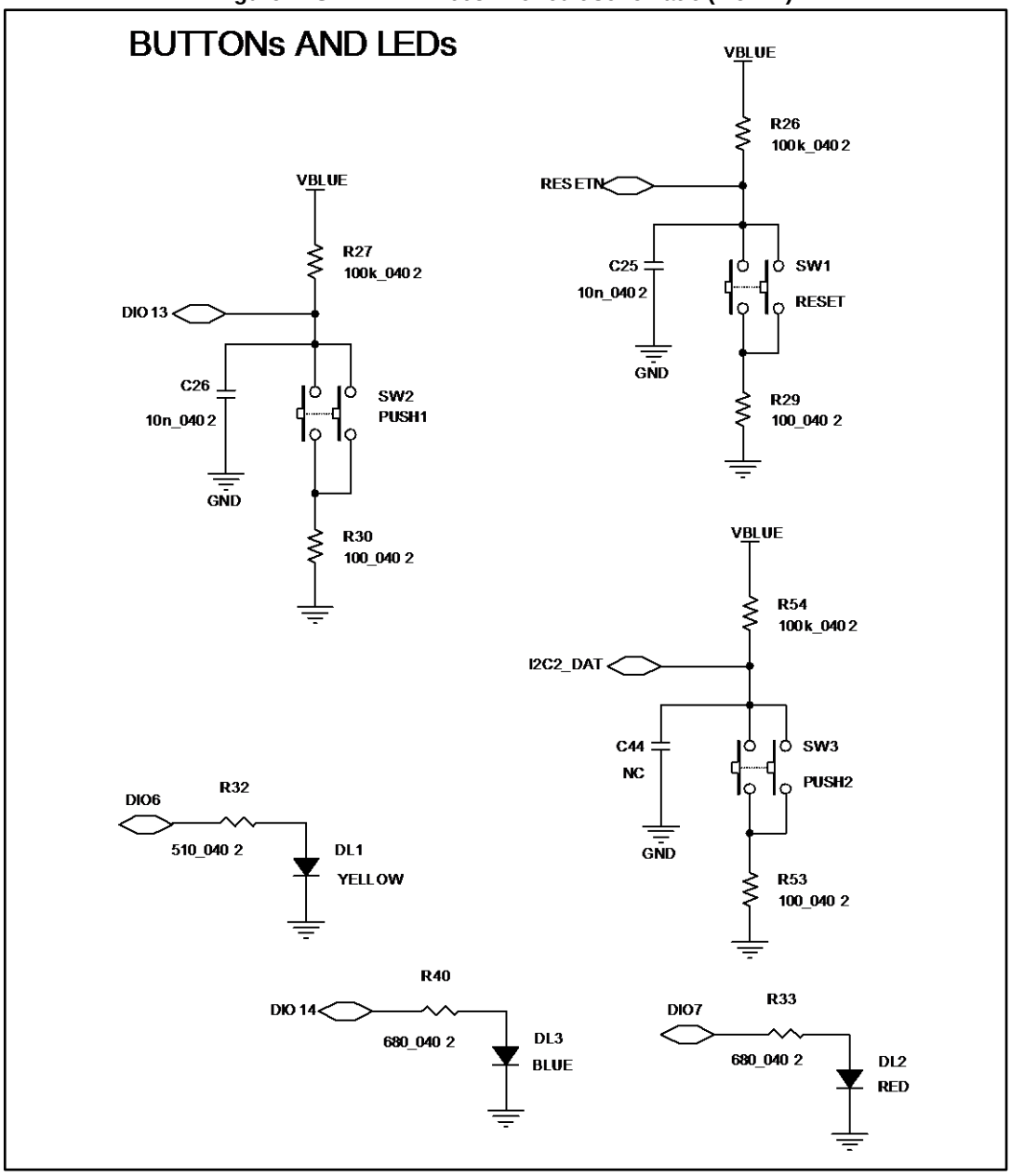


Figure 5: STEVAL-IDB008V1 circuit schematic (5 of 12)

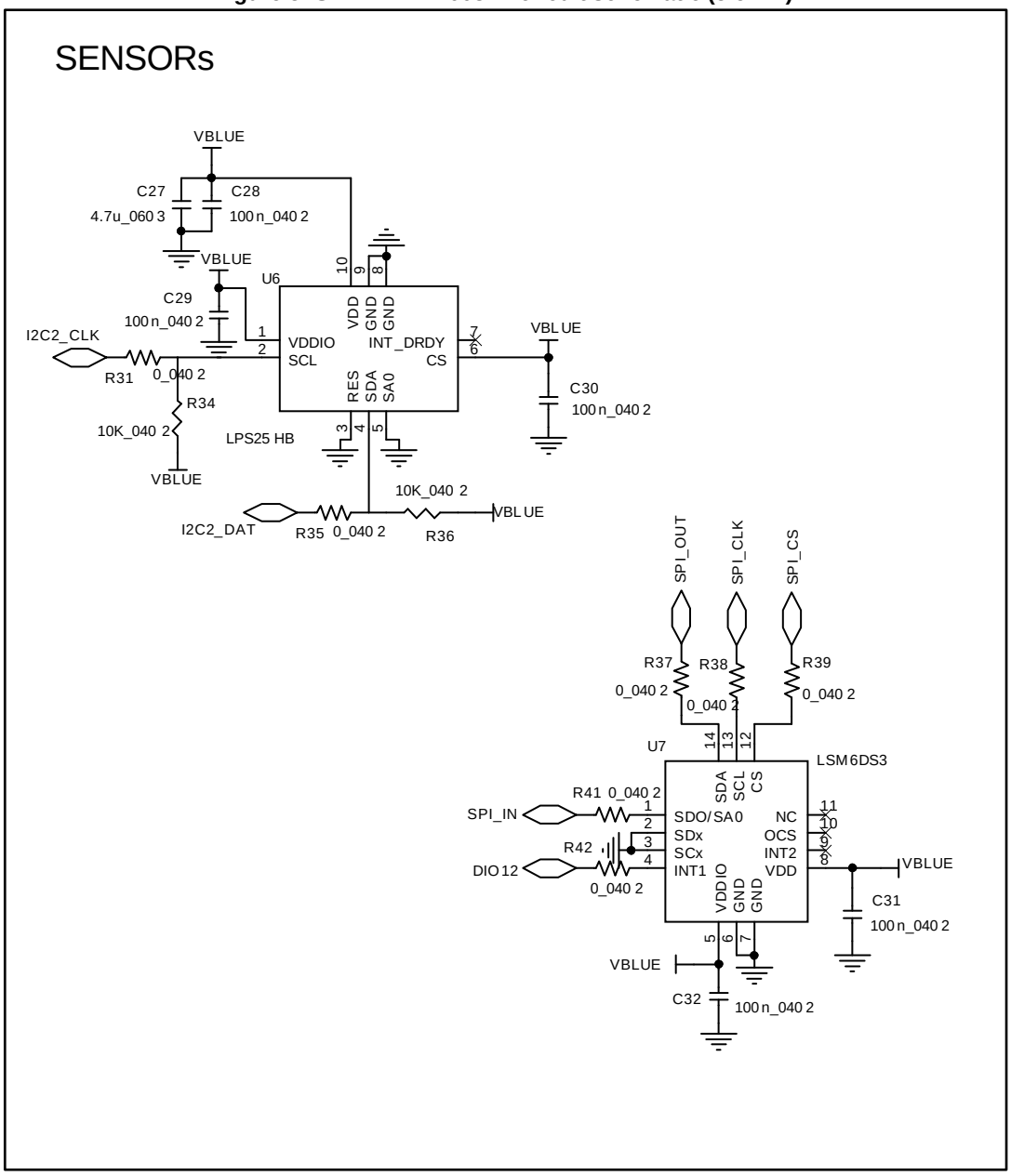


Figure 6: STEVAL-IDB008V1 circuit schematic (6 of 12)

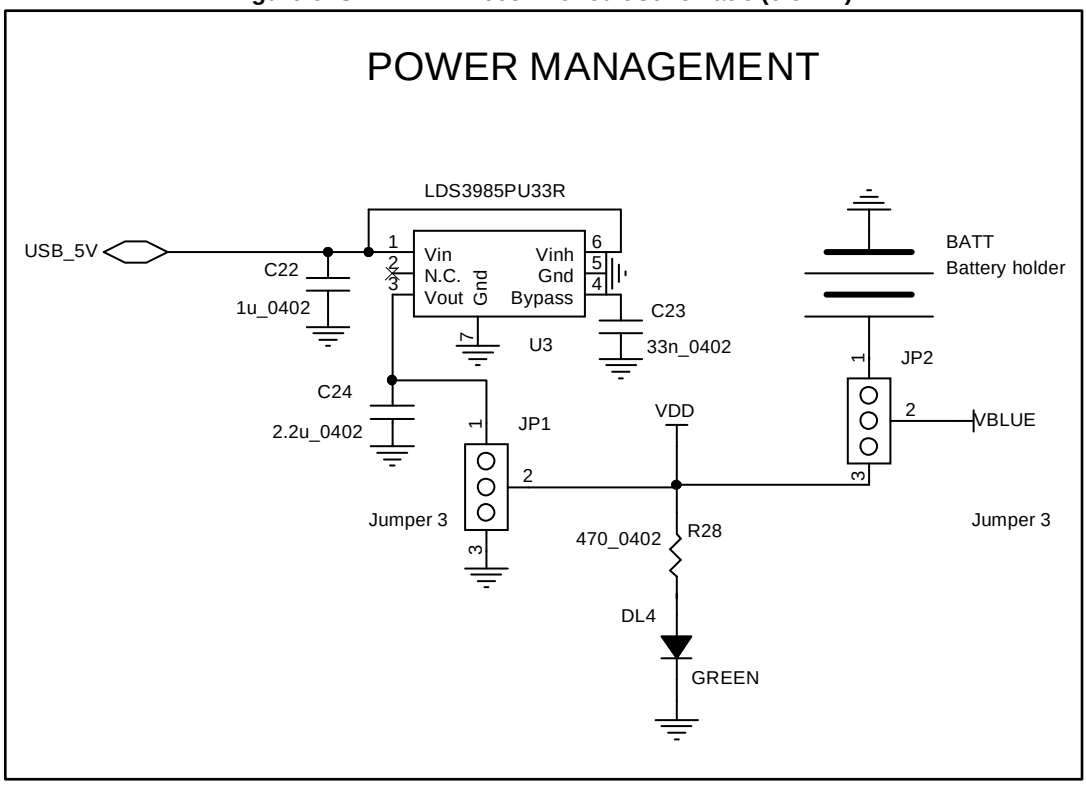


Figure 7: STEVAL-IDB008V1 circuit schematic (7 of 12)

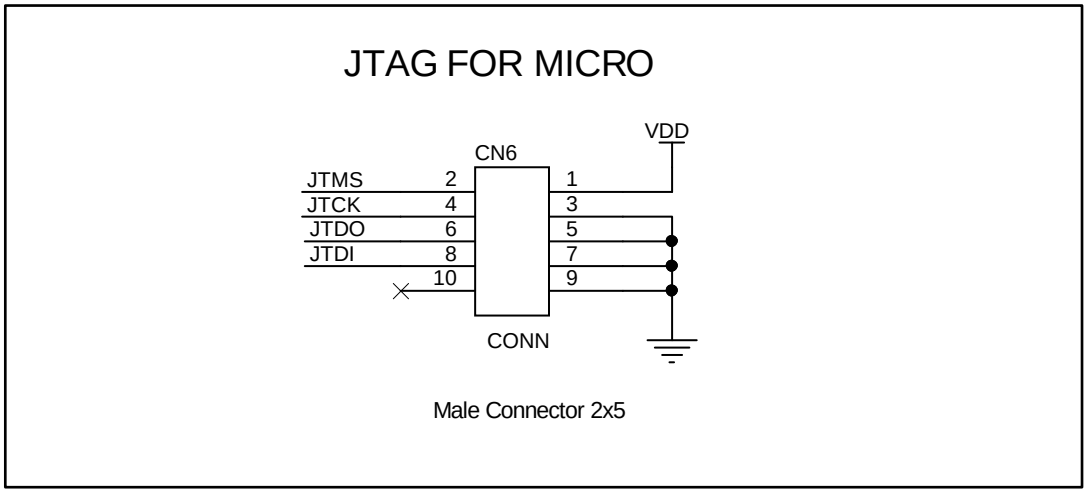


Figure 8: STEVAL-IDB008V1 circuit schematic (8 of 12)

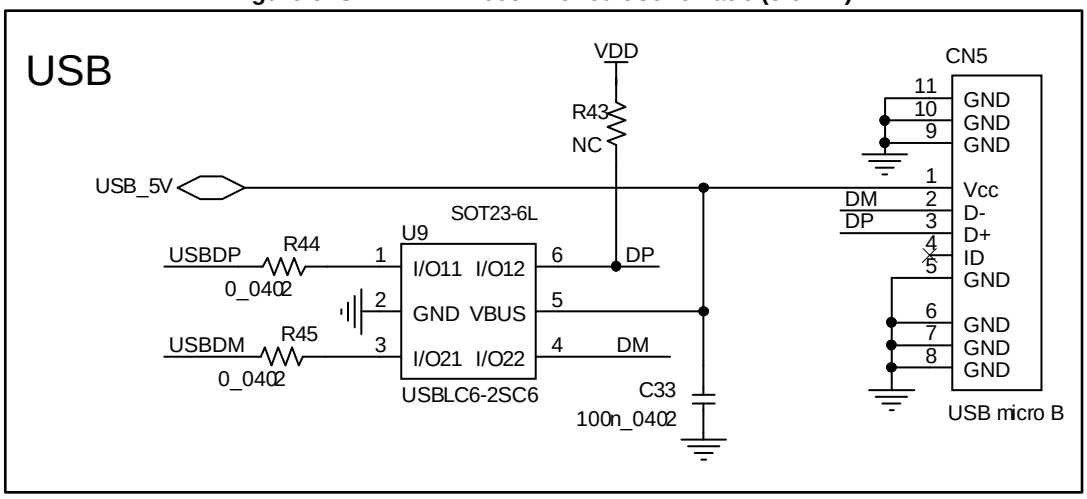


Figure 9: STEVAL-IDB008V1 circuit schematic (9 of 12)

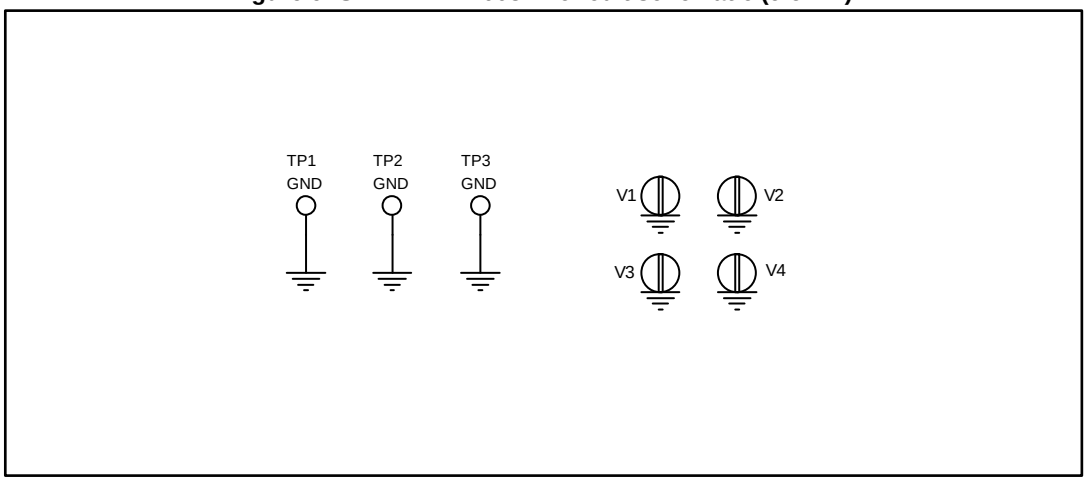


Figure 10: STEVAL-IDB008V1 circuit schematic (10 of 12)

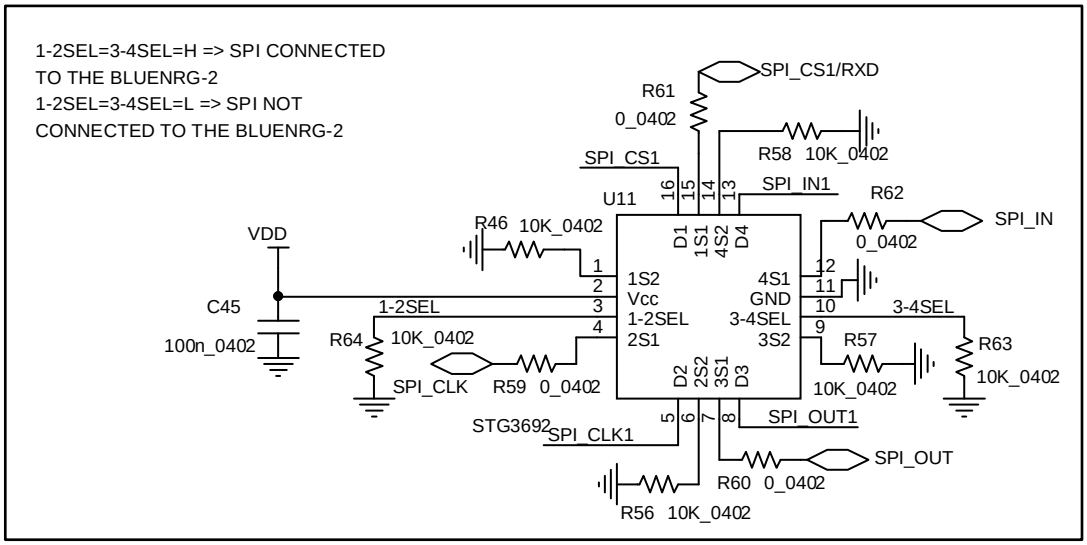


Figure 11: STEVAL-IDB008V1 circuit schematic (11 of 12)

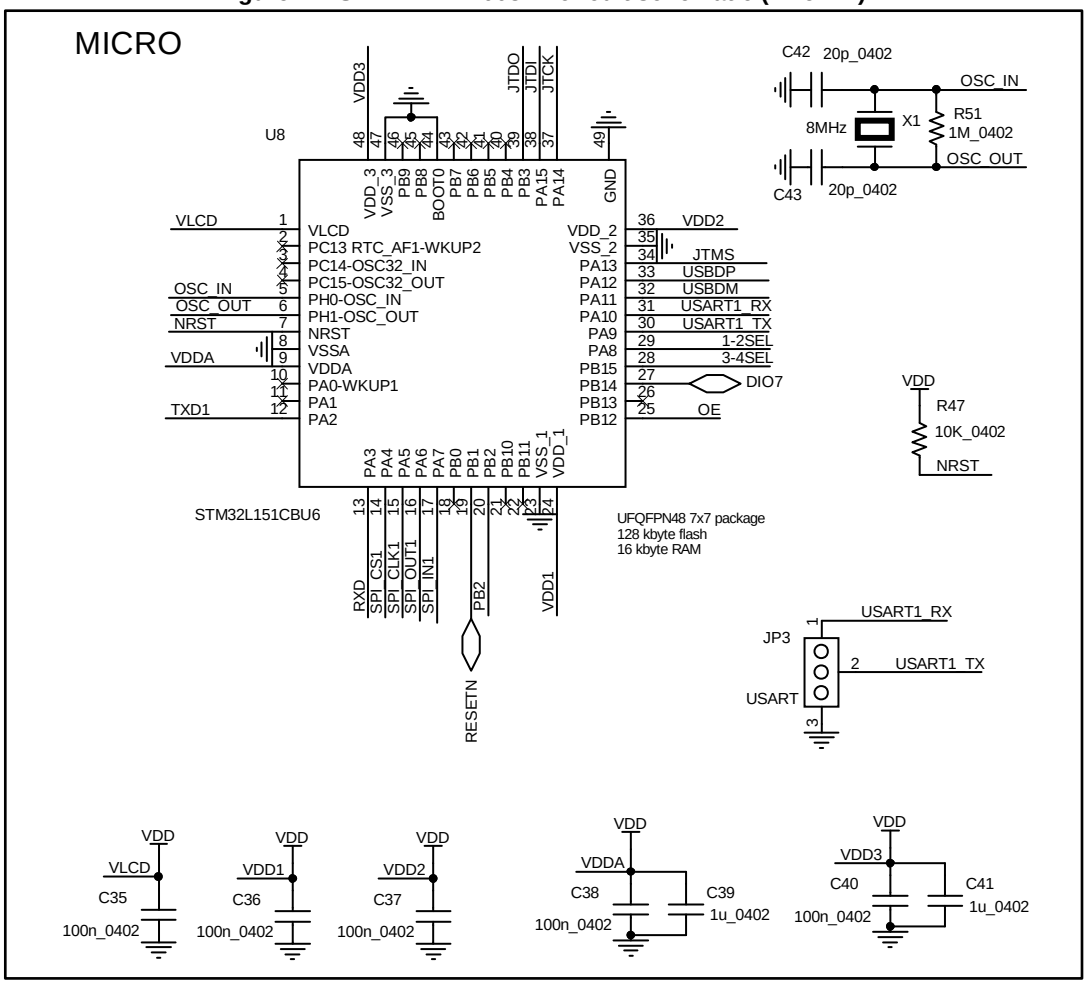
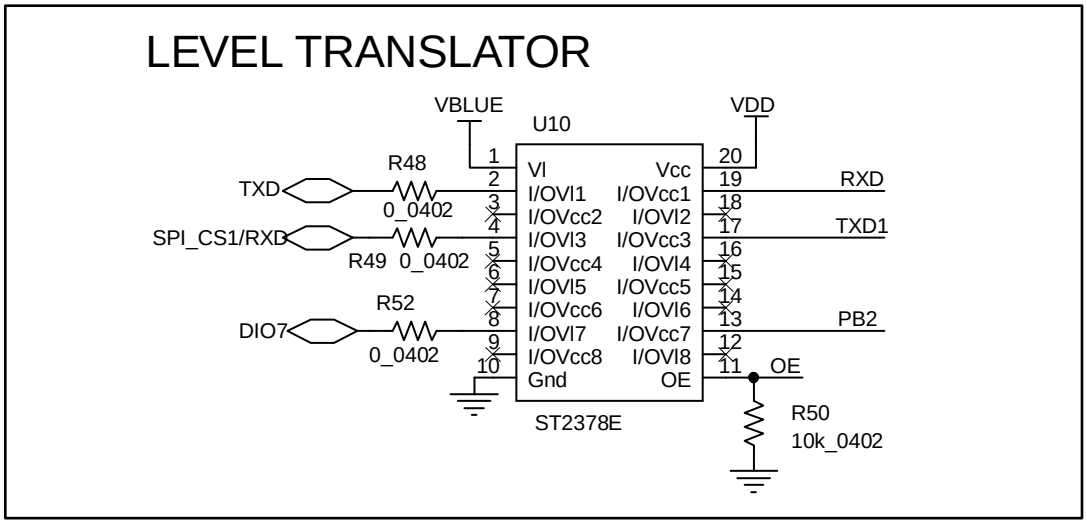


Figure 12: STEVAL-IDB008V1 circuit schematic (12 of 12)



2 Revision history

Table 1: Document revision history

Date	Version	Changes
21-Jun-2017	1	Initial release.

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