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.
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

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-Nov-2018</td>
<td>1</td>
<td>Initial release.</td>
</tr>
<tr>
<td>09-Jan-2019</td>
<td>2</td>
<td>Updated: Section 1 Schematic diagrams</td>
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