STEVAL-IDB003V1

A BlueNRG IC based Bluetooth® Smart USB dongle

Description

The STEVAL-IDB003V1 is an evaluation board based on BlueNRG, a low power Bluetooth® Smart IC, compliant with the Bluetooth® 4.0 specifications and supporting both master and slave roles.

The STEVAL-IDB003V1 features a low power microcontroller STM32L on board. It is primarily meant to interface with BlueNRG but is also available for custom application development. The STEVAL-IDB003V1 has a USB connector for PC GUI interaction and firmware update.

The footprint for a JTAG connector is available on the STEVAL-IDB003V1. When a JTAG connector is soldered (the connector is not mounted on the STEVAL-IDB003V1) it enables users developing a custom firmware on the STM32L microcontroller.

For a detailed explanation on how to use the STEVAL-IDB003V1 please refer user manual UM1686: BlueNRG development kit.

Features

- BlueNRG based Bluetooth® Smart USB dongle based for direct PC connection
- Maximum transmission power +8 dBm.
- Low power STM32L host microcontroller
- Major Features of BlueNRG: 7.3mA (RX mode), 8.2mA (TX mode at 0dBm) maximum peak current, programmable output power from -18dBm to +8dBm, up to 96dB RF link budget
- USB Interface
- Bluetooth® low energy 4.0 compliant, supports both master and slave roles.
- JTAG footprint connector for custom firmware development (JTAG connector not mounted)
- ITunes app available (app name: BlueNRG)
- Google Play app available (app name: BlueNRG)
- RoHS compliant
1 Schematic diagram

Figure 1. STEVAL-IDB003V1 circuit schematic
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Apr-2014</td>
<td>1</td>
<td>Initial release.</td>
</tr>
</tbody>
</table>