

BlueNRG-LP DK SW package



Features

- SW package supporting BlueNRG-LP Bluetooth® low energy (LE) system-on-chip
- Bluetooth LE stack binary library and APIs, events callbacks interface
- Bluetooth LE middleware
- BlueNRG-LP Bluetooth LE demonstration applications
- BlueNRG-LP CMSIS files
- BlueNRG-LP peripheral drivers and related examples
- BlueNRG-LP 2.4 GHz radio proprietary driver and examples
- BlueNRG-LP SDK and HAL drivers
- BlueNRG-LP Navigator PC application
- BlueNRG-LP Radio Initialization Parameters Wizard
- Support for BlueNRG-LP kit platforms

Description

The STSW-BNRGLP-DK software package for the BlueNRG-LP kit platform (STEVAL-IDB011V1) provides a Bluetooth LE binary library with a complete set of APIs and related events callbacks to access the Bluetooth LE functionality offered by the BlueNRG-LP device. The SW package also provides a set of Bluetooth LE demonstration applications regarding some typical Bluetooth low energy working scenarios. Each demonstration application comes with a complete set of header and source files.

The STSW-BNRGLP-DK SW package contains a complete set of peripheral drivers (header and source files), which allow interfacing with the device peripherals (6x PWM, 2x I²C, 2x SPI/I²S, SPI, USART, UART, PDM, 12-bit ADC) and a low level driver to access the proprietary BlueNRG-LP 2.4 GHz radio to send and receive packets without using the Bluetooth link layer.

The 2.4 GHz radio examples are built on top of the low level driver and can be used as reference examples for building other applications that use the BlueNRG-LP radio.

The software package also includes the BlueNRG-LP Navigator PC application, which provides an interactive, simple and user-friendly interface to select and run demonstration applications for the resources available in the BlueNRG-LP DK SW package, without the need for further hardware. It also provides a 3D view of all available BlueNRG-LP kits and information about the related HW components.

The BlueNRG-LP Radio Initialization Parameters Wizard included in the package allows the definition of the proper values required for correct BlueNRG-LP Bluetooth LE stack initialization based on the specific user application scenario. A configuration header file generated from the chosen parameter values is then used in the specific user software application folder.

Product summary

Software package for BlueNRG-LP BLE stack v3.x family	STSW-BNRGLP-DK
Low power Bluetooth® smart system on chip	BlueNRG-LP
Evaluation platform based on BlueNRG-LP	STEVAL-IDB011V1
Applications	Wireless Connectivity

Revision history

Table 1. Document revision history

Date	Version	Changes
16-Jul-2020	1	Initial release.

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