

BlueNRG current consumption estimation tool



Features

- Allows measurement of average current consumption for various use cases
- Excellent correlation with real measurements
- User-friendly, easy to parameterize
- Available input parameters:
 - Advertising/ scanning/ connection(slave or master)
 - General settings: power/ payload/intervals/ battery capacity
- Available output data:
 - Average current estimation
 - Battery life estimation
 - Data rate estimation
- PC-based application
- Output report in PDF
- Save/ restore configuration
- Graphical plot of the current consumption during active phase
- Save plot in png format

Description

The BlueNRG current consumption estimation tool can predict the current consumption under different conditions, as defined by the Bluetooth Low Energy specification, for the BlueNRG and BlueNRG-MS Bluetooth® Low Energy wireless network processors as well as the BlueNRG-1, BlueNRG-2 and BlueNRG-LP Bluetooth® Low Energy systems-on-chip.

This application was developed to provide an accurate estimation of the BlueNRG, BlueNRG-MS, BlueNRG-1, BlueNRG-2 and BlueNRG-LP power consumption and related battery life under various operating conditions.

As a pure simulation tool, it should not, however, be considered as a substitute for real measurements taken on the actual silicon device.

Product summary	
BlueNRG current consumption estimation tool	STSW-BNRG001
Bluetooth® low energy/ wireless system-on-chip	BlueNRG-1
	BlueNRG-2
	BlueNRG-2N
	BlueNRG-LP
	BlueNRG-MS
Evaluation platform based on the BlueNRG-MS, BlueNRG-1, BlueNRG-2, BlueNRG-LP	STEVAL-IDB007V2
	STEVAL-IDB007V1M
	STEVAL-IDB008V2
	STEVAL-IDB008V1M
	STEVAL-IDB009V1
	STEVAL-IDB011V1
	STEVAL-IDB005V1
	STEVAL-IDB006V1

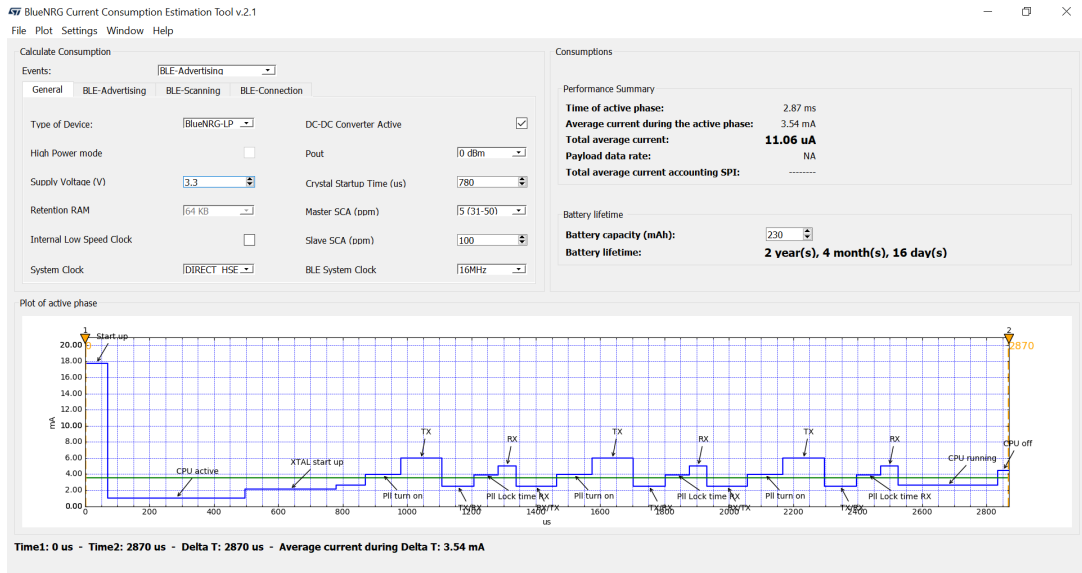
Product summary

Applications

wireless
connectivity

1 STSW-BNRG001 main window

Figure 1. STSW-BNRG001 main window



Revision history

Table 1. Document revision history

Date	Version	Changes
04-Apr-2014	1	Initial release.
08-Jun-2015	2	The document has been updated to refer to both BlueNRG and BlueNRG-MS devices.
30-Jun-2016	3	Added reference to BlueNRG-1
19-Jun-2017	4	Added reference to BlueNRG-2 Updated Figure 1. STSW-BNRG001 main window
28-Jul-2020	5	Updated the cover page and the Figure 1. STSW-BNRG001 main window . Added reference to the BlueNRG-LP.
09-Dec-2020	6	Updated Figure 1. STSW-BNRG001 main window .

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