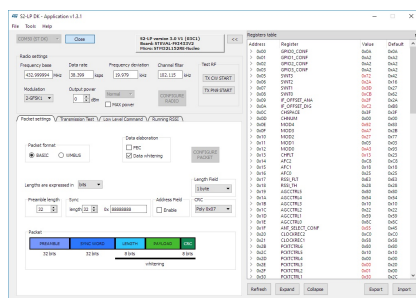# Evaluation SW package based on S2-LP

Features

- S2-LP_DK GUI PC application supporting S2-LP
- S2-LP consumption GUI v1.0.0 PC application
- S2-LP library and examples
- Low level APIs to manage:
  - the NUCLEO-L053R8 or NUCLEO-L152RE motherboards interfacing with the S2-LP daughterboard
  - the STEVAL-IDB007V2 or STEVAL-IDB008V2 motherboards, based, respectively, on the BlueNRG-1 and BlueNRG-2 system-on-chip, interfacing with the S2-LP daughterboard
  - the STEVAL-FKI001V1 evaluation board based on the BlueNRG-1 system-on-chip
  - the STDES-MONARCH based on the BlueNRG-2 system-on-chip
- STM32L053R8/STM32L152RE HAL driver
- Drivers for PC (USB Virtual COM plus mass storage)

Description

The STSW-S2LP-DK is an evaluation SW package based on the S2-LP high performance ultra-low power RF transceiver for RF wireless applications in the sub-1 GHz band. It is designed to operate in the license-free ISM and SRD frequency bands at 433, 868 and 920 MHz, but can also be programmed to operate at additional frequencies in the 413-479, 452-527, 826-958, 904-1055 MHz bands.

The STSW-S2LP-DK package supports the S2-LP kit platforms available on the associated web pages. It provides an S2-LP library with a complete set of APIs to interface with the S2-LP features, as well as a set of applications demonstrating the use of features of the same device. Each demonstration application comes with a complete set of source files.

The S2-LP_DK GUI application provides an interactive PC interface for the registers on the S2-LP. Its main function is to configure the analog radio section and the packet handler in a user friendly manner for the most common applications.

Product summary	
Evaluation SW package based on S2-LP	STSW-S2LP-DK
Ultra-low power, high performance, sub-1GHz transceiver	S2-LP
STM32 Nucleo-64 development board with STM32L053R8/ STM32L152RE MCUs	NUCLEO-L053R8/ NUCLEO-L152RE
Evaluation platform based on the BlueNRG-1 /BlueNRG2	STEVAL-IDB007V2/ STEVAL-IDB008V2
Sub-1 GHz 868/915 MHz RF expansion board based on S2-LP radio for STM32 Nucleo	X-NUCLEO-S2868A2/X-NUCLEO-S2915A1
Sub-1GHz (430-470 MHz)/(860-940 MHz) transceiver development kit based on S2-LP	STEVAL-FKI915V1/ STEVAL-FKI433V2/ STEVAL-FKI868V2
Dual radio BLE and Sub-1GHz development kit for Sigfox™ and LPWAN protocols with BlueNRG-1 and S2-LP	STEVAL-FKI001V1
Bluetooth® low energy/ wireless system-on-chip	BlueNRG-1/ BlueNRG-2
Applications	Wireless Connectivity

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For further information contact your local STMicroelectronics sales office.

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Revision history

Table 1. Document revision history

Date	Version	Changes
15-Nov-2016	1	Initial release.
08-May-2018	2	Updated cover page image, frequency bands and supported hardware in features and description. Added product summary table.
02-Jul-2019	3	Updated cover page image, features and product summary table.
16-Sep-2019	4	Updated cover page features.
05-Mar-2020	5	Updated cover page image, product summary table and features.

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