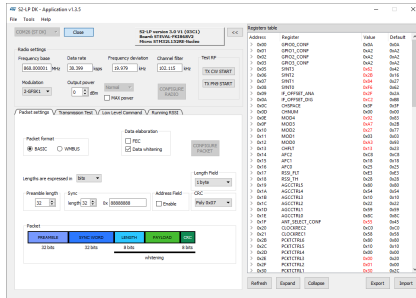## Evaluation SW package based on S2-LP

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 daughter board
  - 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) available at www.st.com

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

DB3120 - Rev 6 - December 2022
For further information contact your local STMicroelectronics sales office.

www.st.com

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.
12-Dec-2022	6	Updated features.

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.