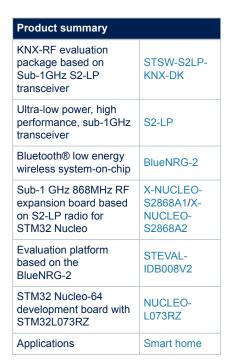


Data brief

Software package for KNX-RF







Features

- Firmware package to start evaluation of KNX-RF connectivity based on the S2-LP transceiver
- KNX-RF Tapko technology stack (evaluation license) running on the BlueNRG-2 Bluetooth[®] LE 5.2 wireless SoC and STM32L0 microcontrollers
- Application example for KNX-RF and Bluetooth® LE 5.2 controller
- Application example for KNX-RF actuator
- Standalone point-to-point KNX-RF communication between two nodes
- · Control and monitoring of KNX-RF devices through KNX ETS5 PC tool
- Combination of KNX-RF and Bluetooth® connectivity in one application
- Sample implementation available on X-NUCLEO-S2868A2 (or X-NUCLEO-S2868A1) expansion boards when connected to STEVAL-IDB008V2 (BlueNRG-2 Bluetooth Low-Energy) or NUCLEO-L073RZ development boards

Description

The STSW-S2LP-KNX-DK is an evaluation package based on the S2-LP high performance ultra-low power RF transceiver and BlueNRG-2 very low power Bluetooth Low Energy (BLE) system-on-chip. It is designed to evaluate KNX-RF communication in the 868 MHz license-free ISM band.

The STSW-S2LP-KNX-DK package provides a software framework including KNX Tapko technologies stack (evaluation version). The package includes application examples which allow simulating point-to-point KNX-RF protocol communication and are compliant with the KNX ETS tool.

This software combines KNX-RF Sub-1 GHz protocol and Bluetooth LE communication in one single application (using S2-LP and BlueNRG-2).



1 Application diagram

BLE KNX-RF controller KNX-RF application Actuator application Main() application Main() application **BLE** application **LED** application UART / VCOM KNX-RF API KNX-RF API KNX-RF KNX-RF BLE Stack Stack (Tapko stack) (Tapko stack) KNX-RF radio driver adaptation layer KNX-RF radio driver adaptation layer 2.4 GHz Radio \$2-LP driver S2-LP driver S2-LPIC S2-LPIC KNX-RF communication

Figure 1. Application diagram

DB4503 - Rev 1 page 2/4



Revision history

Table 1. Document revision history

Date	Revision	Changes
21-June-2021	1	Initial release.

DB4503 - Rev 1 page 3/4



IMPORTANT NOTICE - PLEASE 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 acknowledgement.

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, please 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.

© 2021 STMicroelectronics - All rights reserved

DB4503 - Rev 1 page 4/4