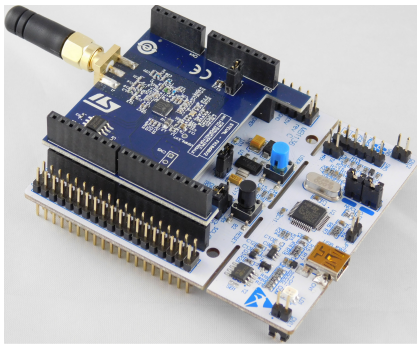


Sub-1GHz (860-940 MHz) transceiver development kit based on S2-LP



Features

- S2-LP narrow band ultra-low power sub-1GHz transceiver in a standalone RF Module tuned for 860-940 MHz frequency bands
- STM32 Nucleo-64 development board with STM32L0 MCU
- Suitable for Wireless M-Bus systems
- Associated S2-LP development kit including, documentation, firmware for STM32L and GUI
- Programmable RF output power up to +16 dBm
- Modulation schemes: 2-FSK, 2-GFSK, 4-FSK, 4-GFSK, OOK, and ASK
- Air data rate from 0.3 to 500 kbps
- Ultra-low power consumption:
 - 6.7 mA RX
 - 10 mA TX @ +10 dBm
- Excellent performance of receiver sensitivity (up to -130 dBm)
- Low duty cycle RX/TX operation mode
- Automatic acknowledgement, retransmission, and timeout protocol engine
- SPI interface for microcontroller
- USB interface
- RoHS compliant

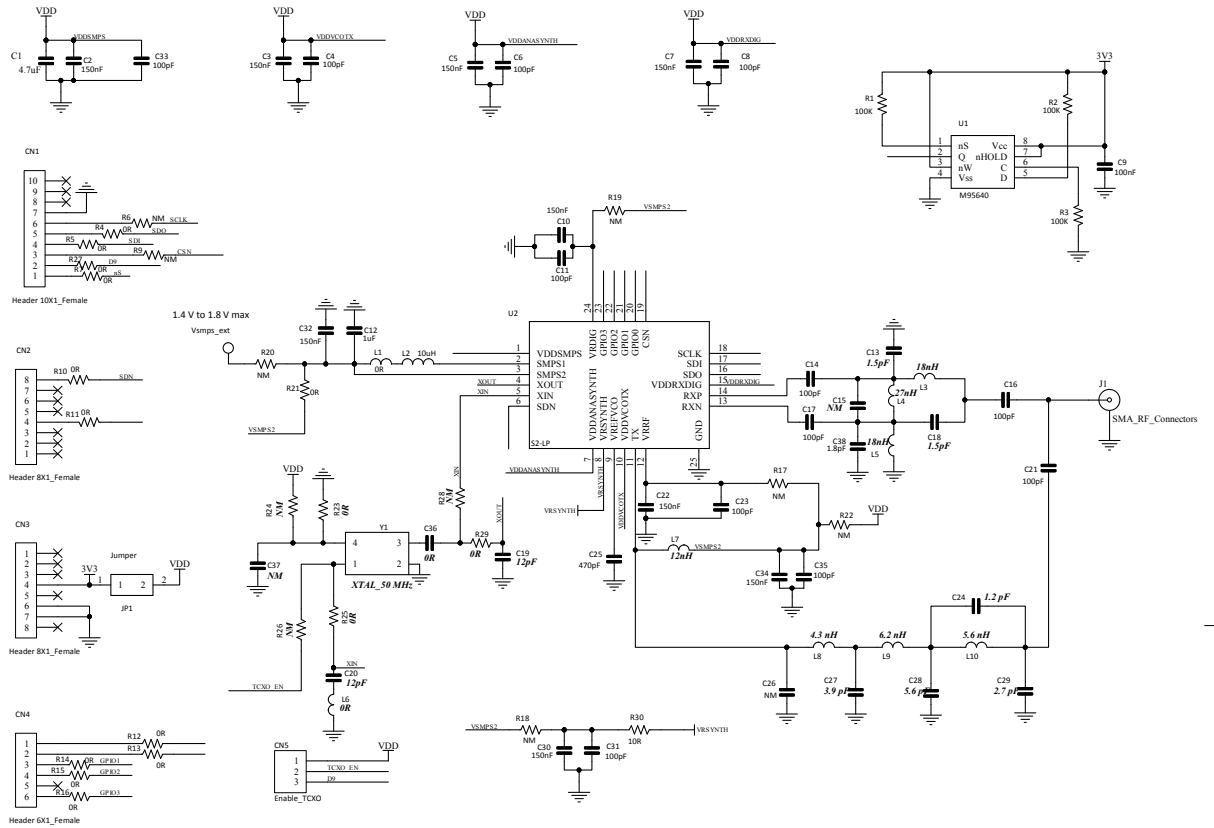
Description

The STEVAL-FKI868V2 evaluation board is based on the [S2-LP](#) sub-1GHz ultra-low power low data-rate transceiver suitable for ISM bands and wireless M-Bus. The [NUCLEO-L053R8](#) motherboard is equipped with an STM32L0 low power microcontroller to control the S2-LP.

The board integrates a ST-LINK/V2-1 debugger/programmer for firmware updating.

Summary table	
STEVAL-FKI868V2 evaluation board	STEVAL-FKI868V2
STM32 Nucleo-64 development board with STM32L053R8 MCU	NUCLEO-L053R8
ultra-low power, high performance, sub-1GHz transceiver	S2-LP
STM32L0 series of ultra-low-power MCUs	STM32L0
ST-LINK/V2 in-circuit debugger/programmer for STM8 and STM32	ST-LINK/V2

1 Schematic diagram

Figure 1. STEVAL-FKI868V2 circuit schematic


Revision history

Table 1. Document revision history

Date	Version	Changes
01-Mar-2018	1	Initial release.
23-Mar-2018	2	Updated title.
05-Jun-2018	3	Updated Figure 1. STEVAL-FKI868V2 circuit schematic

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. 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.

© 2018 STMicroelectronics – All rights reserved