

Sub-1GHz (430-470 MHz) transceiver development kit based on S2-LP





Product summary STEVAL-FKI433V2 Sub-1GHz (430-470 MHz) transceiver development kit based on S2-LP STM32 Nucleo-64 NUCLEO-L053R8 development board with STM32L053R8 MCU S2-LP Ultra-low power, high performance, sub-1GHz transceiver STM32L0 series of STM32L0 ultra-low-power **MCUs** ST-LINK/V2 in-ST-LINK/V2 circuit debugger/ programmer for STM8 and STM32

Features

- S2-LP narrow band ultra-low power sub-1GHz transceiver in a standalone RF module tuned for 430-470 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 at +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

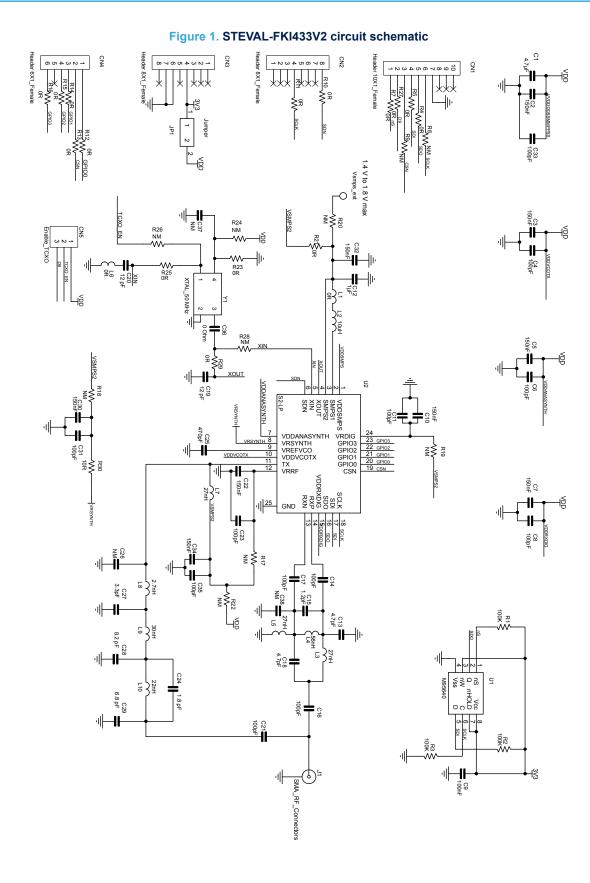
The STEVAL-FKI433V2 evaluation board is based on the S2-LP sub-1GHz ultra-low power low data-rate transceiver suitable for ISM bands and wireless M-Bus.

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.



1 Schematic diagram



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Revision history

Table 1. Document revision history

Date	Version	Changes
02-Mar-2018	1	Initial release.
23-Mar-2018	2	Updated Section 1 Schematic diagram and title.
10-Apr-2018	3	Updated Section 1 Schematic diagram.

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