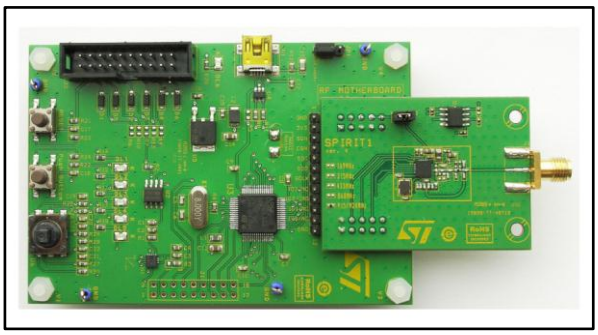
STEVAL-IKR002V3

Sub-GHz transceiver development kit based on the SPIRIT1 (433 MHz band)

Data brief



Features

- 2 SPIRIT1 low power, sub-GHz RF transceiver daughterboards tuned for the 433 MHz band
- 2 STM32L microcontroller-based motherboards
- Suitable for wireless M-BUS systems
- Associated SPIRIT1 software development kit with documentation, STM32L firmware and GUI
- Debug connector
- USB interface
- Modulation schemes: 2-FSK, GFSK, MSK, GMSK, OOK, and ASK
- Air data rate from 1 to 500 kbps
- Very low power consumption (9 mA RX and 21 mA TX at +11 dBm)
- Excellent performance of receiver sensitivity (up to -120 dBm)
- Low duty cycle RX/TX operation mode
- Automatic acknowledgment, retransmission, and timeout protocol engine
- AES 128-bit encryption co-processor
- SPI interface for microcontroller
- RoHS compliant

Description

The STEVAL-IKR002V3 development kit includes 2 RF daughterboards based on the SPIRIT1 low power, sub-GHz low data rate transceiver suitable for ISM bands and wireless M-BUS, and 2 motherboards based on the STM32L low power microcontroller to control the daughterboards.

Each motherboard features a USB connector for PC GUI interaction and firmware updates. A JTAG connector allows the development of specific firmware on the microcontroller.

For further information contact your local STMicroelectronics sales office

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1 Revision history

Table 1: Document revision history

Date	Revision	Changes
23-Aug-2013	1	Initial release.

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