

## Sub Ghz transceiver daughterboard based on the SPIRIT1 (868 MHz band)

Data brief



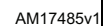
### Description

The STEVAL-IKR001V4 demonstration board is based on the SPIRIT1, a sub GHz low power, low data rate transceiver suitable for ISM bands and wireless M-BUS.

### Features

- SPIRIT1 low power sub GHz transceiver in a standalone RF module tuned for 868 MHz band
- Suitable for wireless M-BUS systems
- Associated SPIRIT1 development kit, including documentation, firmware for STM32L and GUI
- 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 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

**Figure 1. STEVAL-IKR001V4D circuit schematic**



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Jul-2013	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

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