

SPIRIT1 169 MHz low data rate transceiver daughterboard

Data brief

**Description**

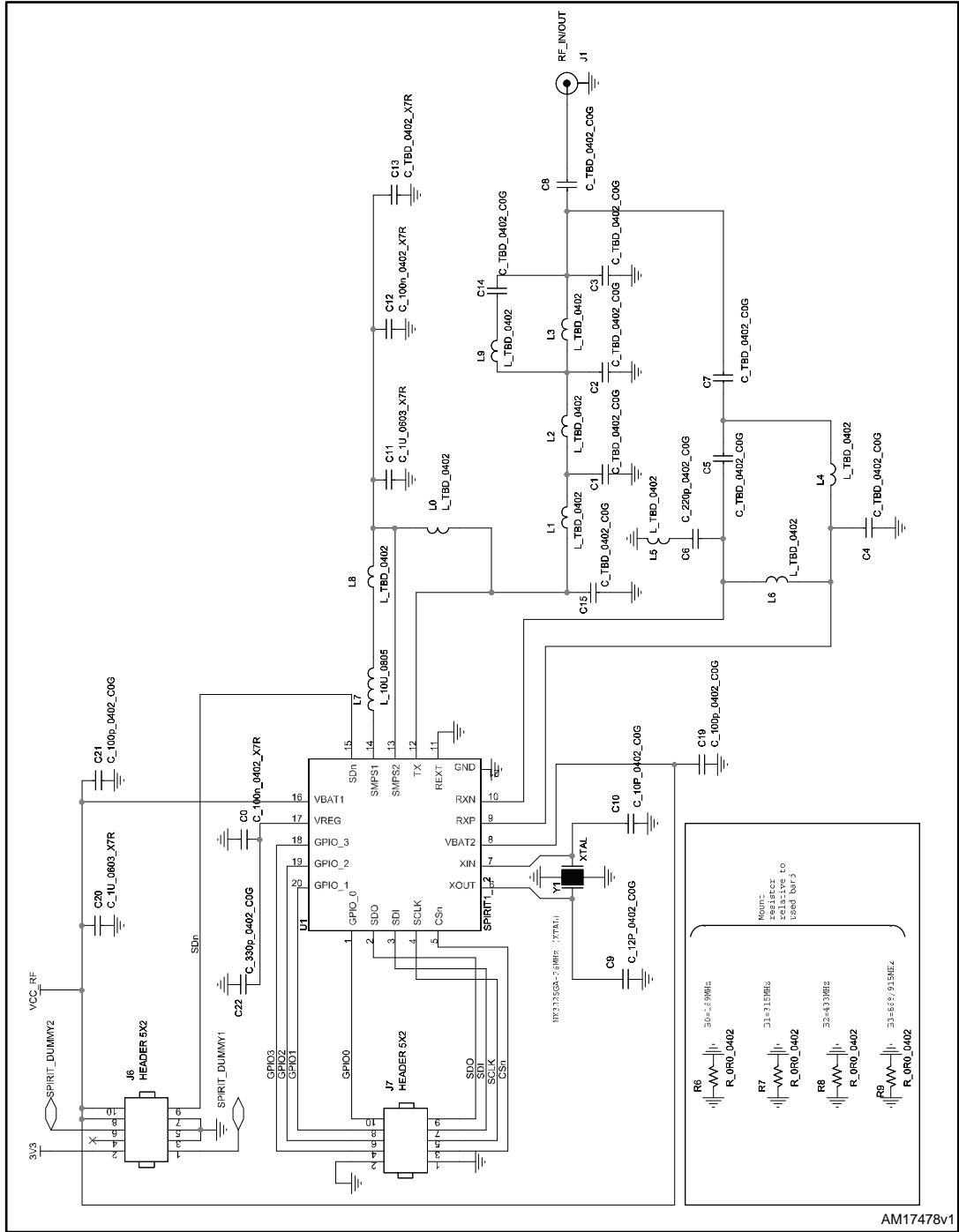
The STEVAL-IKR002V1D product evaluation board is based on the SPIRIT1, a very low-power RF transceiver intended for RF wireless applications in the sub 1 GHz frequency band.

Features

- SPIRIT1 low power sub GHz transceiver in a standalone RF module tuned for 169 MHz
- Modulation schemes: 2-FSK, GFSK, MSK, GMSK, OOK, and ASK
- Programmable air data rate: from 1 to 500 kbps
- Very low power consumption: 9.2 mA RX and 18 mA TX at +11 dBm
- Excellent receiver sensitivity (down to -123 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

1 Schematic diagram

Figure 1: STEVAL-IKR002V1D circuit schematic



2 Revision history

Table 1: Document revision history

Date	Version	Changes
04-Jul-2014	1	Initial release.
14-Oct-2016	2	Updated features on the cover page.