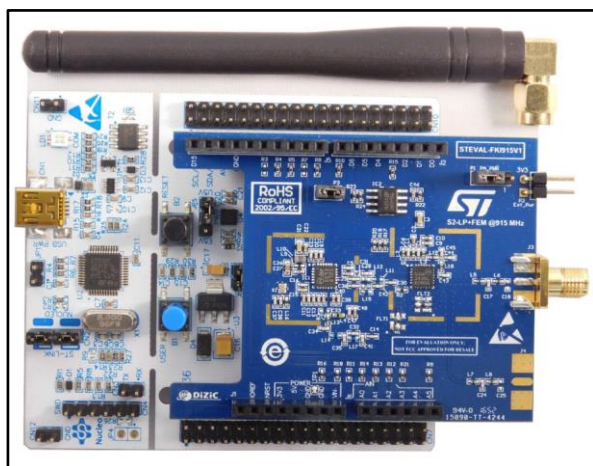


## Sub-1GHz transceiver development kit based on S2-LP

Data brief



### Description

The STEVAL-FKI915V1 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-L152RE main board with an STM32L low power MCU controls the S2-LP and integrates the ST-LINK/V2-1 debugger and programmer for firmware updating.

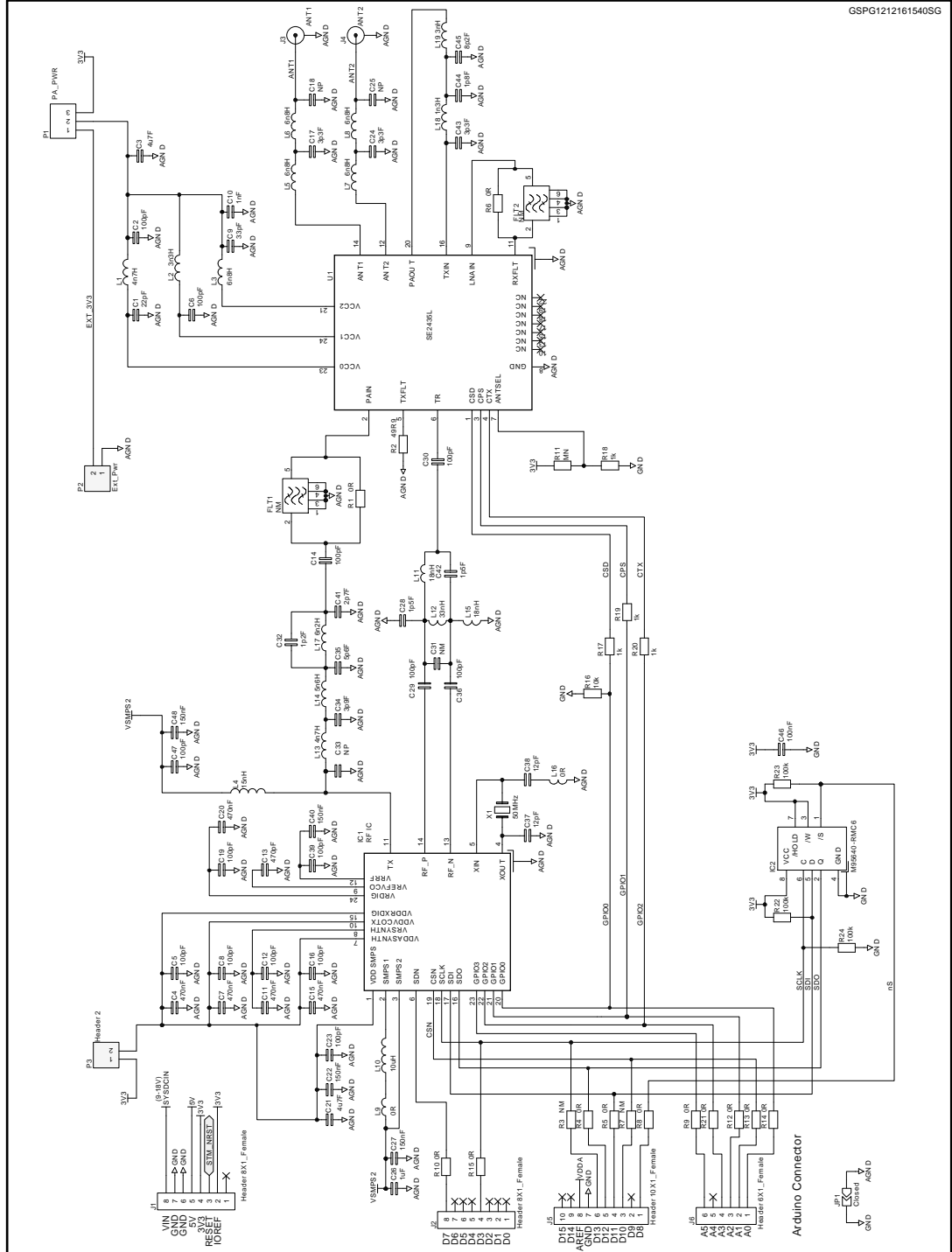
The STEVAL-FKI915V1 includes an external power amplifier from SkyWorks®, which allows the application to reach +27 dBm (500 mW) output power.

### Features

- S2-LP narrow band ultra-low power Sub-1GHz transceiver in a standalone RF Module tuned for 860-940 MHz frequency bands with external power amplifier
- STM32 Nucleo-64 development board with STM32L152RE MCU
- Suitable for Wireless M-Bus systems
- Suitable for SigFox applications
- Associated S2-LP development kit including, documentation, firmware for STM32L and GUI
- Programmable RF output power up to +27 dBm
- Modulation schemes: 2-FSK, 2-GFSK, 4-FSK, 4-GFSK, OOK, and ASK
- Air data rate from 0.3 to 500 kbps
- 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

# 1 Schematic diagram

Figure 1: STEVAL-FKI915V1 circuit schematic



GSPG1212161540SG



## 2 Revision history

Table 1: Document revision history

| Date        | Version | Changes                                |
|-------------|---------|--|
| 14-Dec-2016 | 1       | Initial release.                       |
| 31-Jan-2017 | 2       | Updated board photo on the cover page. |

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