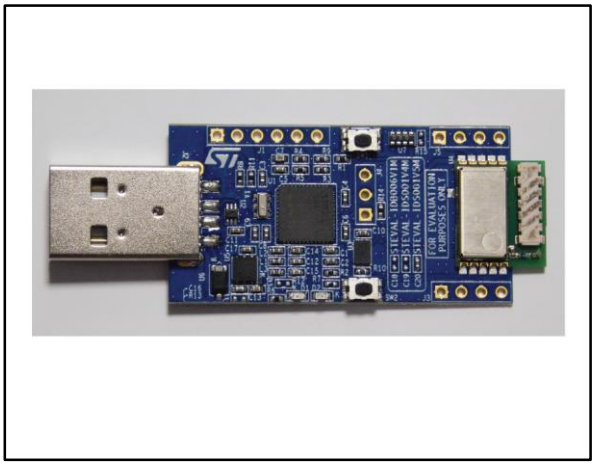
STEVAL-IDS001V4M

868 MHz RF USB dongle based on the SPIRIT1 SPSGRF-868 module

Data brief



Description

The STEVAL-IDS001V4M evaluation board is for the SPSGRF-868 ETSI certified module based on the low-power, low-rate, sub-1GHz SPIRIT1 transceiver. The SPSGRF-868 module integrates the Balun (BALF-SPI-01D3) and a chip antenna, and operates in the 868 MHz ISM band. The board is equipped with an STM32L low power microcontroller to control the SPIRIT1 and it also features a USB connector for PC GUI interaction and firmware updates, like the one available for SPIRIT1 evaluation kit. An SWD connector allows the development of specific firmware on the microcontroller.

Features

- RF SPIRIT1 USB dongle based on SPSGRF-868 for 868 MHz
- SPSGRF-868 module is based on:
  - 868 MHz ETSI certified module based on low-power, low-rate sub-1GHz SPIRIT1 transceiver.
  - Integrated Balun (BALF-SPI-01D3)
  - Chip antenna
- On board STM23L low power 32-bit ARM® Cortex-M3™ microcontroller
- Modulation schemes: 2-FSK, GFSK, MSK, GMSK, OOK and ASK
- Air data rate: from 1 to 500 kbps
- Full compliant in terms of firmware and GUI with the SPIRIT1 development kits
- Debug connector
- USB interface
- RoHS compliant

1 Schematic diagrams

Figure 1: STEVAL-IDS001V4M part 1

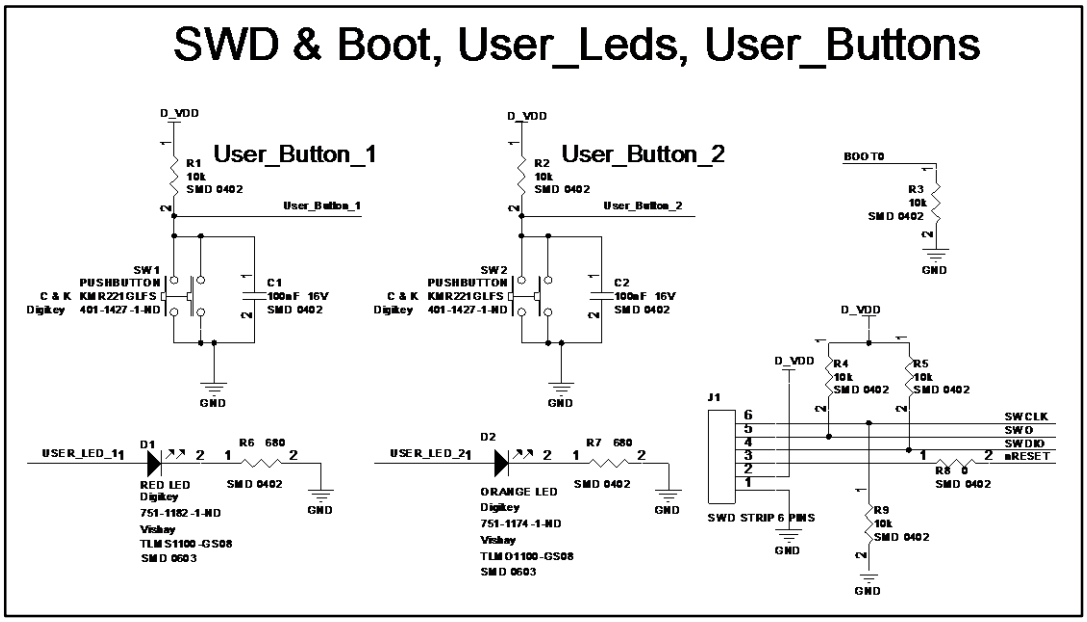


Figure 2: STEVAL-IDS001V4M part 2

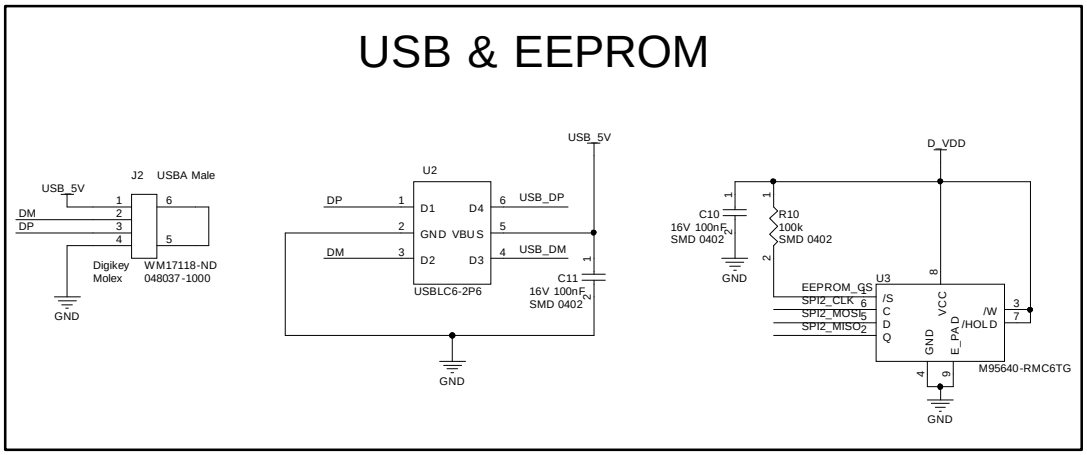


Figure 3: STEVAL-IDS001V4M part 3

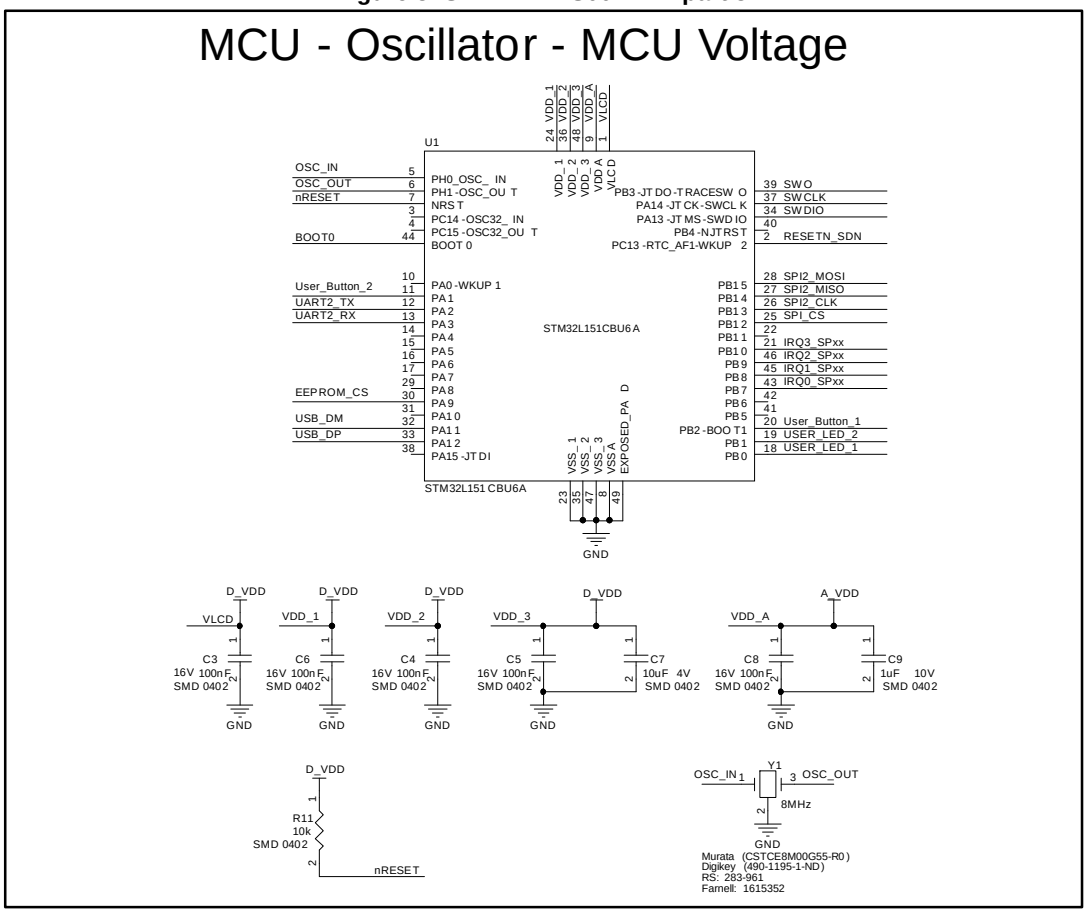


Figure 4: STEVAL-IDS001V4M part 4

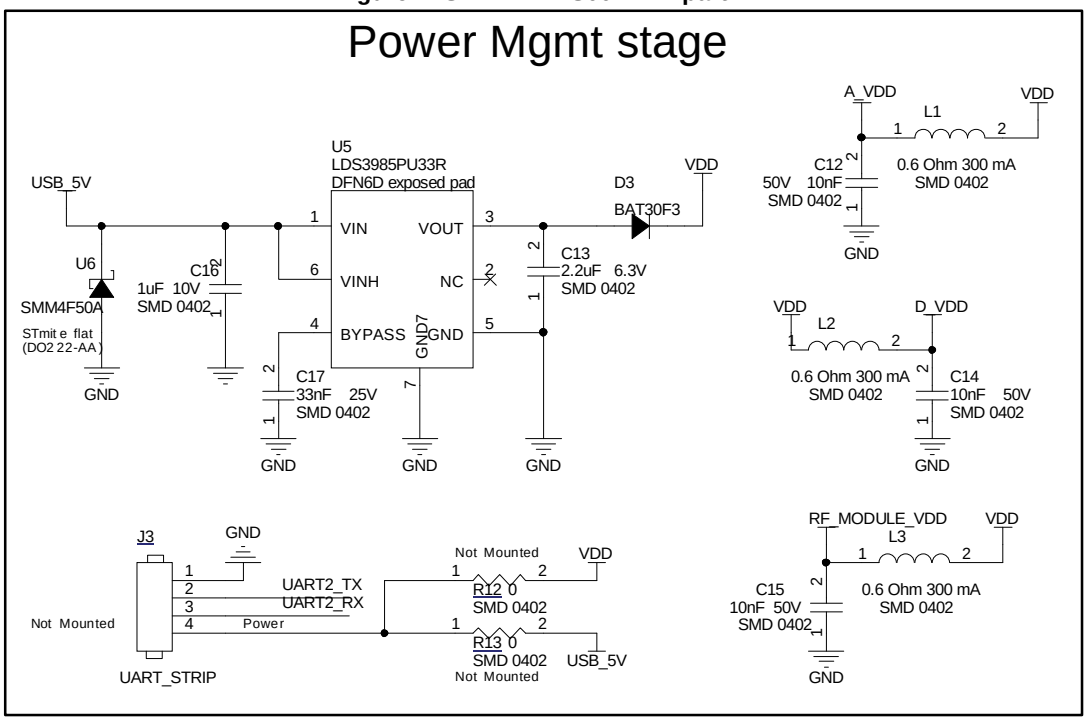
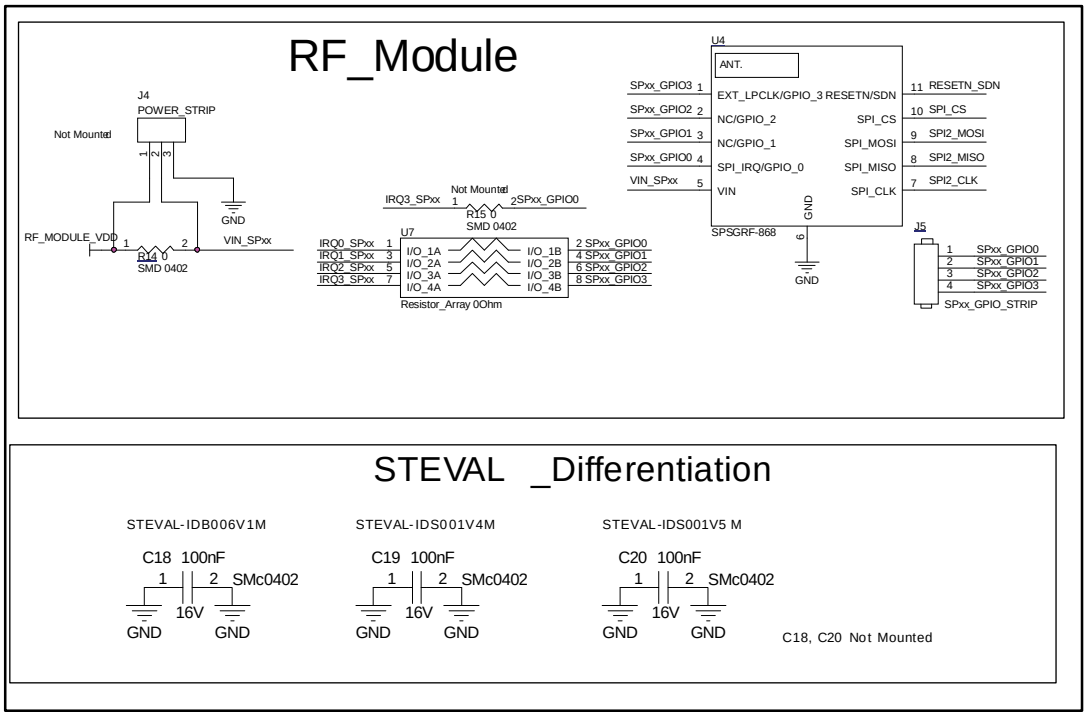


Figure 5: STEVAL-IDS001V4M part 5



2 Revision history

Table 1: Document revision history

Date	Version	Changes
02-Jul-2015	1	Initial release.

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