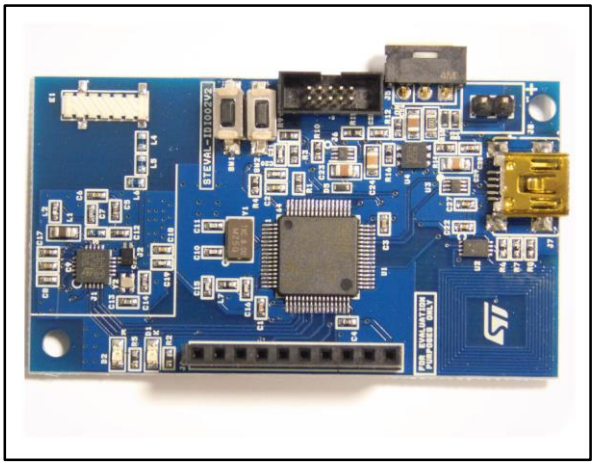
# STEVAL-IDI002V2

## Multi-sensor RF platform 6LoWPAN & NFC interface board

Data brief



## Features

- SPIRIT1-based 868 MHz RF platform
- Low power STM32L series microcontroller
- Contains the M24LR64E dual EEPROM
- Can be powered by USB or Li-Ion battery
- Runs the 6LoWPAN Contiki stack
- SPIRIT1:
  - Supports from 150 MHz to 956 MHz
  - 9 mA receiving & 21 mA transmitting at +11 dbm
  - Built-in AES 128-bit encryption
  - sensitivity up to -118 dbm
- To be used with multi-sensor board STEVAL-IDI003V2
- Can be used to evaluate/develop applications for IoT
- Android App available to connect to STEVAL-IDI004V2
- RoHS compliant

## Description

The STEVAL-IDI002V2 is an evaluation platform for a 6LoWPAN multi-sensor RF network based on the SPIRIT1 Sub-GHz RF transceiver and the STM32L152RBT6 low power Cortex M3 microcontroller. The STM32L152RBT6 runs the open source 6LoWPAN Contiki stack. In addition to the 6LoWPAN stack, an application is provided which communicates with the various sensors on the STEVAL-IDI003V2 daughterboard through a 10-pin connector. Alternatively, this connector can be used to control/interface with any sensor or actuator. This 6LoWPAN multi-sensor RF board communicates with the STEVAL-IDI004V2 IoT wireless bridge evaluation board.

# 1 Schematic diagrams

**Figure 1: STEVAL-IDI002V2 circuit schematic (1 of 7)**

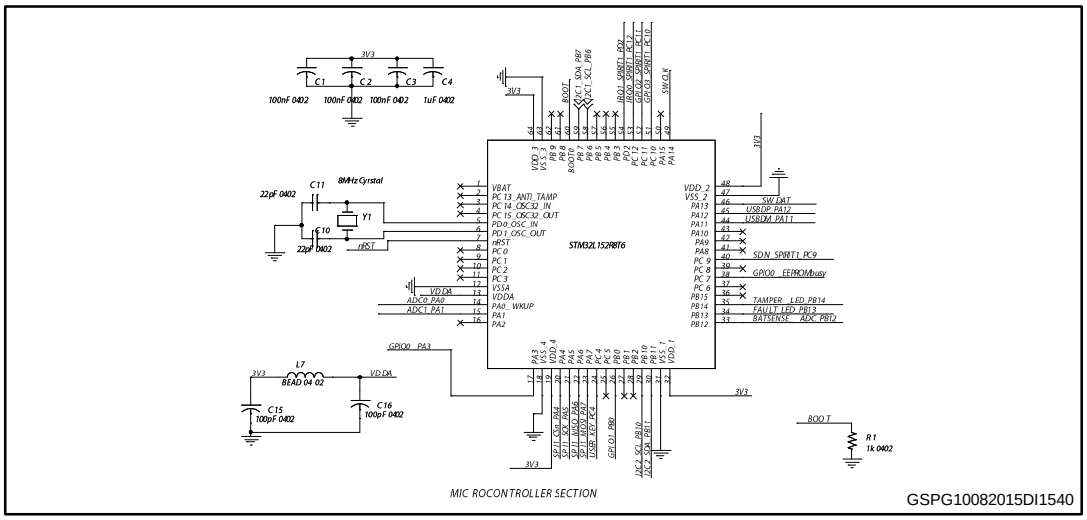



**Figure 2: STEVAL-IDI002V2 circuit schematic (2 of 7)**

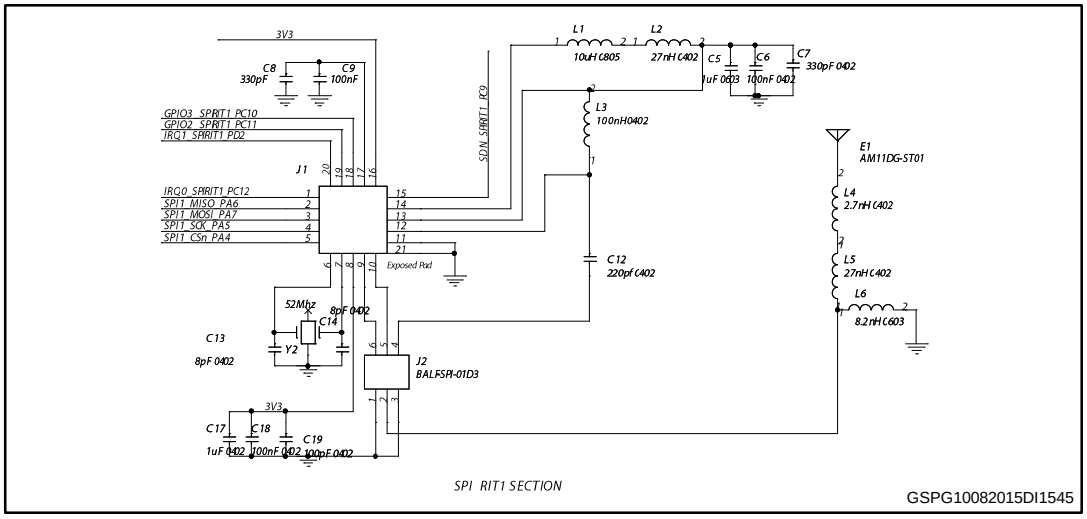


**Figure 3: STEVAL-IDI002V2 circuit schematic (3 of 7)**

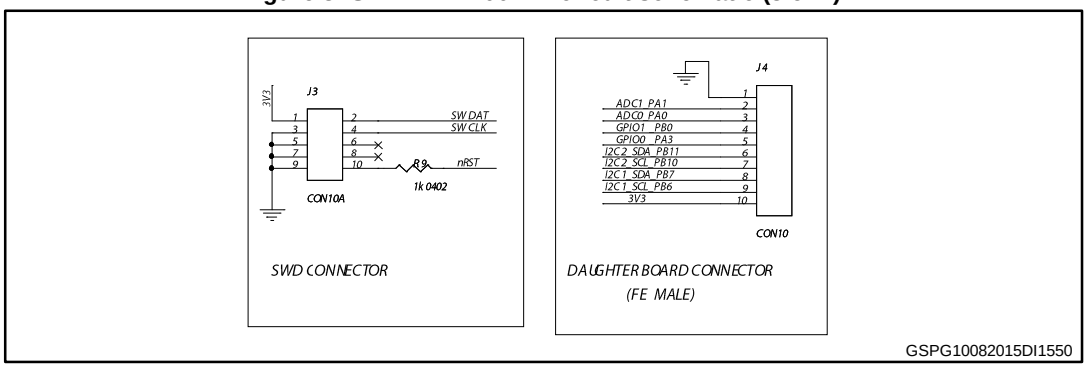



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**Figure 4: STEVAL-IDI002V2 circuit schematic (4 of 7)**

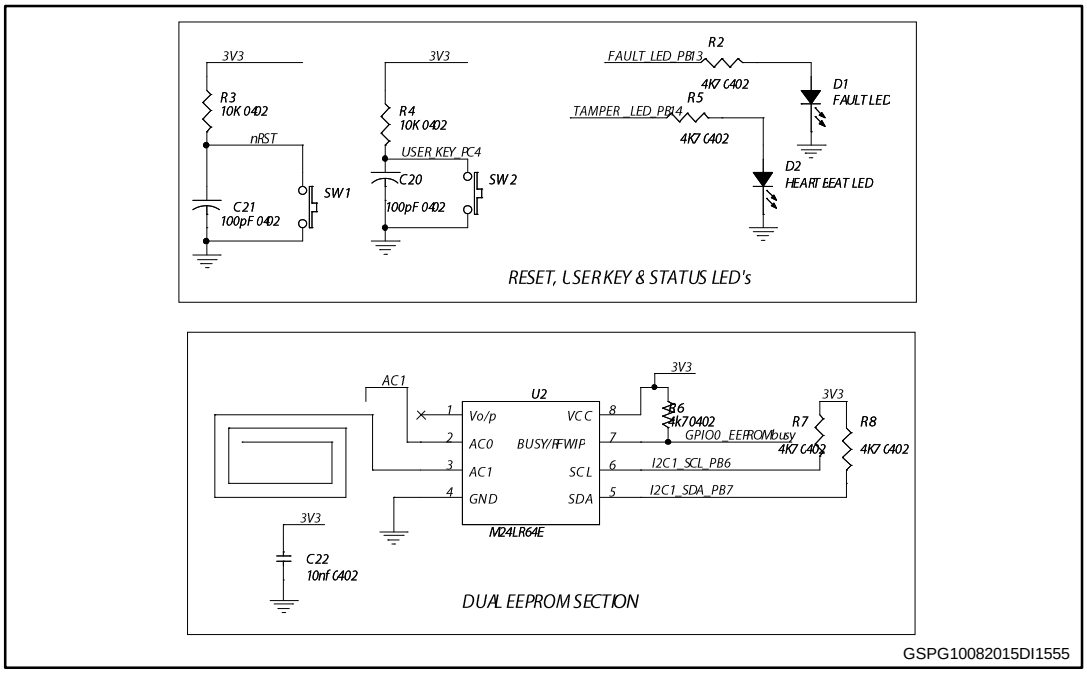


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**Figure 5: STEVAL-IDI002V2 circuit schematic (5 of 7)**

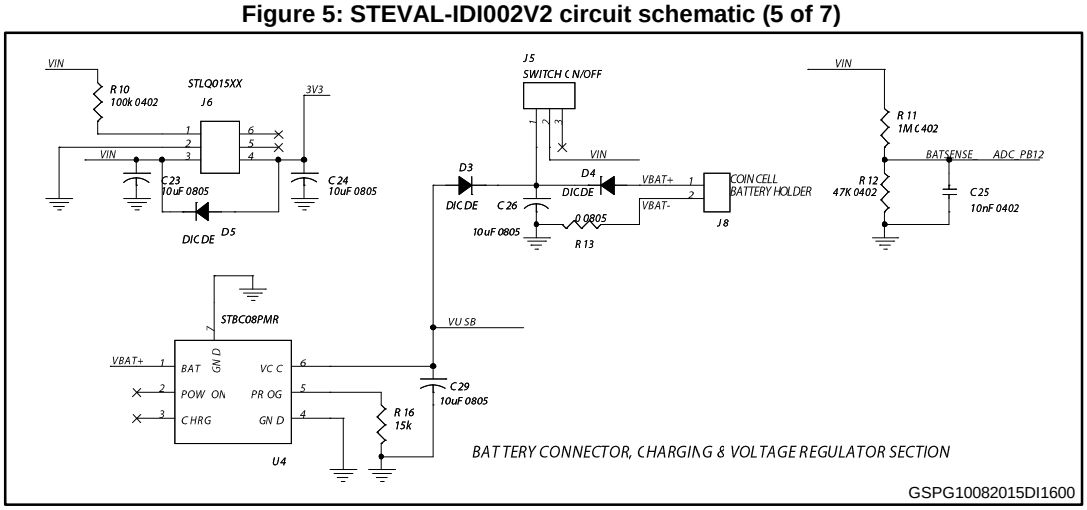


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**Figure 6: STEVAL-IDI002V2 circuit schematic (6 of 7)**

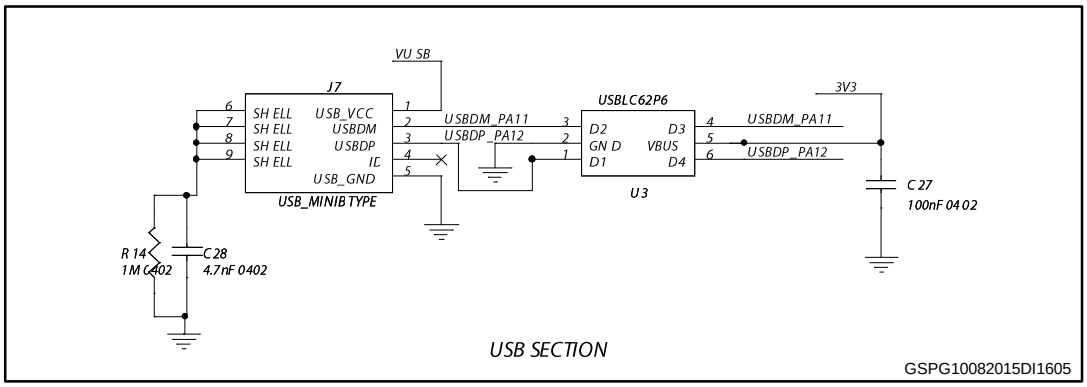
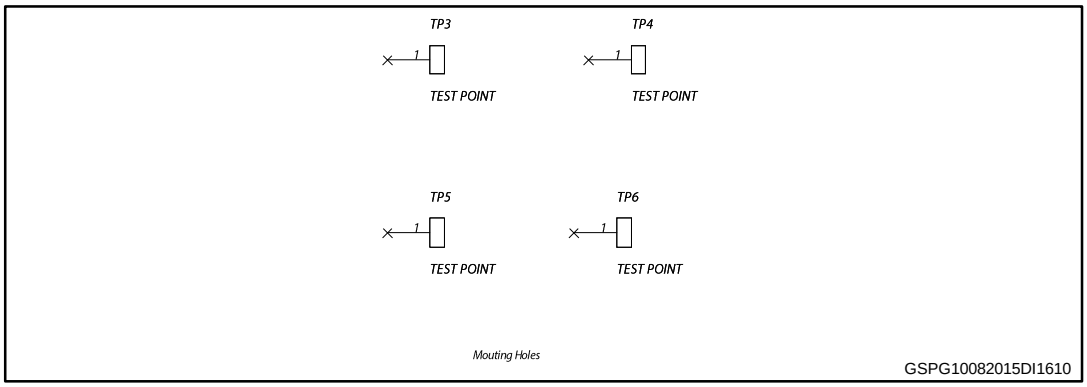



**Figure 7: STEVAL-IDI002V2 circuit schematic (7 of 7)**



# 2 Revision history

**Table 1: Document revision history**

| Date | Version | Changes |
|---|---|---|
| 06-Oct-2015 | 1 | Initial release. |

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