

# NORDIC ID

## NUR development kit v2 quick guide

25<sup>th</sup> of November 2016

Version 1.3

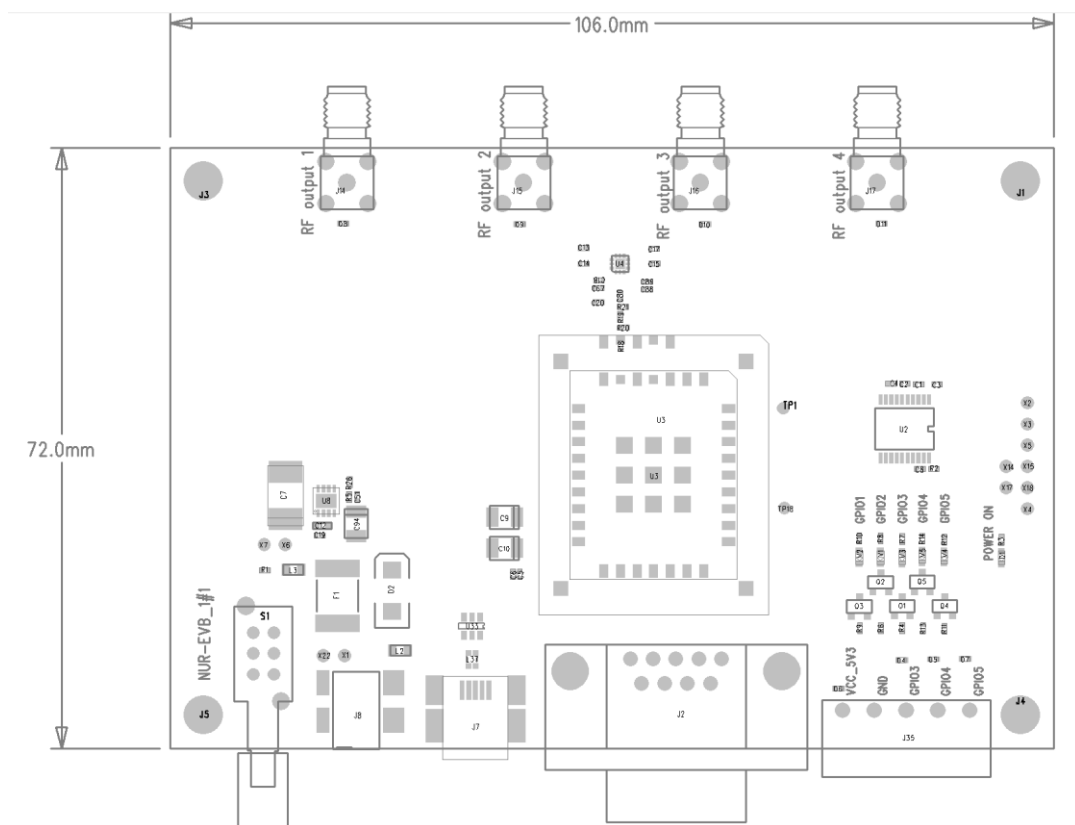
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## 1 Content of development kit

- NUR evaluation board v2
- AC/DC power adapter
- USB-, RS232 serial- and SMA coaxial cables
- Sampo S0 UHF RFID antenna
- SA0506 UHF RFID antenna
- Sample tags
- SDK and documentation

## 2 Component layout



Picture 1. Component layout of the NUR evaluation board v2.

### 3 Technical details

#### 3.1 Power input

There is a DC jack connector (J8) for powering the development board. Output voltage level of the AC/DC power adapter is 5.3V. ON/OFF-switch S1 turns the device ON and OFF.

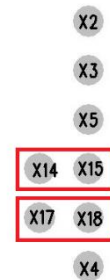
#### 3.2 Communication

J7 is the mini USB connector and J2 is D9 RS232 serial port connector. Jumpers must be installed between X14 and X15 and between X17 and X18 to enable the RS232 on D9-connector.

By removing the jumpers you can contact directly to TTL (3.3V) UART ports.

X18 → TX (data from NUR-module)

X15 → RX (data to NUR-module)



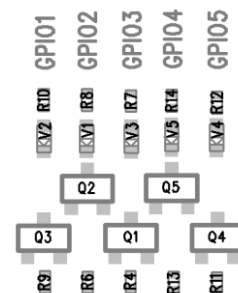
Note that connecting via USB will prevent the serial port communication. One communication method can be used at once.

#### 3.3 GPIO interface

There are 5 LEDs indicating the state of the GPIO.

GPIO state High → LED on

GPIO state Low → LED off



GPIO connector J35 can be used to directly connect to the specific GPIO port. There are GPIO 3,4 and 5 available (GPIO 1 and 2 are dedicated to control the on-board RF-switch). In addition, there are GND and 5.3V lines available from the connector. GPIO voltage level is 3.3V and please note that GPIO pins are not 5V tolerant.

### 3.4 RF interface

There are 4 SMA RF ports on the board. Those ports can be controlled via NUR.API software interface. For testing purposes the RFID configurator and the RFID Demo applications can be used to control the port configurations.

Note that only antenna ports which has antenna attached to it should be enabled. Otherwise you may damage the module.

## 4 Drivers and demo SW

You can download the SDK, USB driver, RFID Demo and RFID Configurator from our support page.

<http://www.nordicid.com/en/home/support/>

There are also documentation and sample codes available.