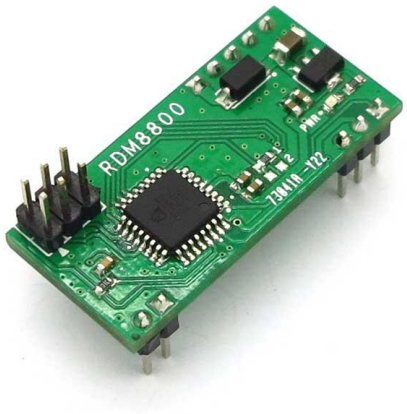
RDM8800 NFC/RFID Module

Overview



RDM8800 card reader is a module based on PN532 chip customized for 13.56MHz NFC RFID card, compatible with RDM6300 interface, which can read data directly from the serial interface.

Unlike ordinary RFID modules, RDM8800 integrates LGT8FF8A chip, compatible with Arduino library, thus we can modify the firmware to suit our own needs. Itead Studio also released the source codes of RDM8800 firmware, and users can make secondary development based on it.

Specifications

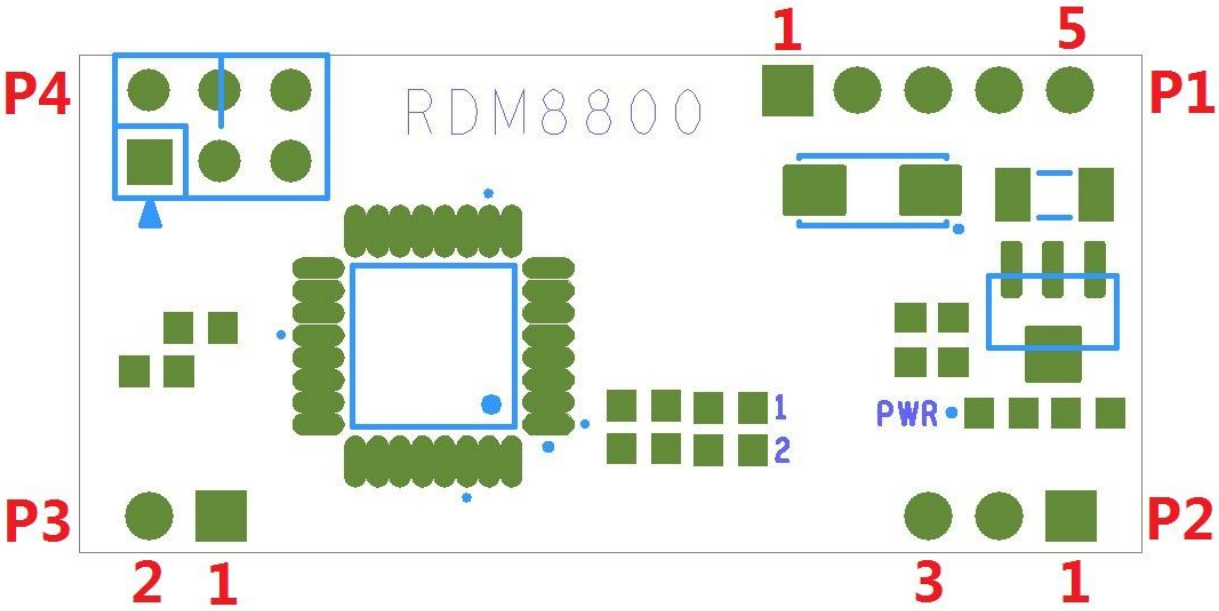
PCB size	38.1mm X 117.78mm X 1.6mm
Input voltage	5V
Interface	UART
Compatibility	With ISO 14443 Type A protocol With ISO 14443 Type B[1] protocol
Baud rate	9600

[1]: Version 1.0 firmware does not support ISO 14443 Type B at present, which requires users to make secondary development.

Electrical characteristics

Parameter	Min.	Typical	Max.	Unit
Supply voltage	4.8	5	5.5	VDC
Consumption current (average)	-	80	-	mA
Logic input voltage	Vss-0.3	3.3	5	VDC

Hardware



pinmap

Pin		Pin name	Description
P1	Pin1	+5V(DC)	Power input
	Pin2	GND	Ground
	Pin3	NC	Unoccupied

	Pin4	RX(TTL)	UART input
	Pin5	TX(TTL)	UART output
P2	Pin1	LED	Interrupt pin
	Pin2	+5V(DC)	Power output
	Pin3	GND	Ground
P3	Pin1	ANT1	Antenna interface
	Pin2	ANT2	
P4	Pin1	SWD	SWD debugging interface
	Pin2	3.3V	Power output
	Pin3	SWC	SWD debugging interface
	Pin4	NC	Unoccupied
	Pin5	RST	Reset
	Pin6	GND	Ground

Data formats

According to V1.0 firmware, there is one type of data output:

Directly output a card N.O.

The serial port will output a 10-digit decimal ACSII code card N.O. directly, which will be followed by a break line "0x0D 0x0A".

For example: the card number is 46553491, the output data will be "0046553491", (HEX: "0x30 0x30 0x34 0x36 0x35 0x35 0x33 0x34 0x39 0x31 0x0D 0x0A").

Interrupt pin

1. LED

   According to V1.0 firmware, once an ID N.O. is read, LED pin will output a 10ms high-level pulse.

Revision record

Version	Description	Written by	Date
v1.0	Initial edition	Stan Lee	10th, Dec., 2013