

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : **RFM811 NFC module**

Date : 2016.04.11

Sample Serial No. : _____

Spec. Version & Revision Date: **V02** 2017.02.13

Received/Approved by

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Revision History

Version	Date	Context
V00	2016.04.11	Initial release
V01	2017.01.11	Feature Updated Remove Tiny Profile and Footprint
V02	2017.02.13	Updated Electronic Characteristics Updated Optional Support Kits

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1. General Description

RFM811 13.56MHz NFC Module

Near field communication (NFC) is a popular technology in recent years, and is becoming a set of standards for smart phones and similar devices to establish radio with each other by touching them together or bringing them into close proximity, usually no more than a few centimeters.



RFM811 is a tiny NFC card reader module, which is designed for the applications for handy terminals or custom-built for system integrators. We offer technology documents and SDK to help customers to make their own things easier.

Users can easily connect it with either UART or USB interface by through FPC connector.

2. Features

- Supports Near Field Communication (NFC) Standards
- Completely Integrated Protocol Handling for **ISO 15693**, **ISO 14443A/B**, **MIFARE** and **FeliCa**.
- Module supports UID reading function, Mifare (APDU command) read/write or ISO15693 read/write (NDEF format) in different models.
- Operation Voltage 5 Vdc.
- Standard 50 Ohm Antenna Output Port.
- UART or USB Interface, easy to change between those modes
- Antenna is option

3. Applications

- Mobile Devices (Tablets, Handsets)
- Secure Pairing (Bluetooth, WiFi, Other Paired Wireless Networks)
- Public Transport or Event Ticketing
- Passport or Payment (POS) Reader Systems
- Product Identification or Authentication
- Medical Equipment or Consumables
- Access Control, Digital Door Locks
- Sharing of Electronic Business Cards

4. Model

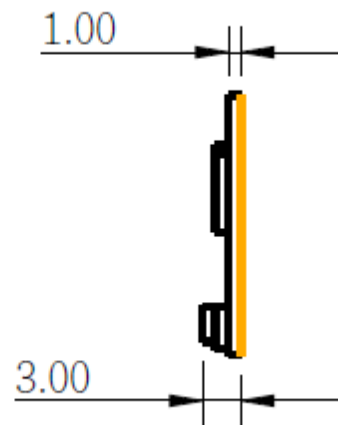
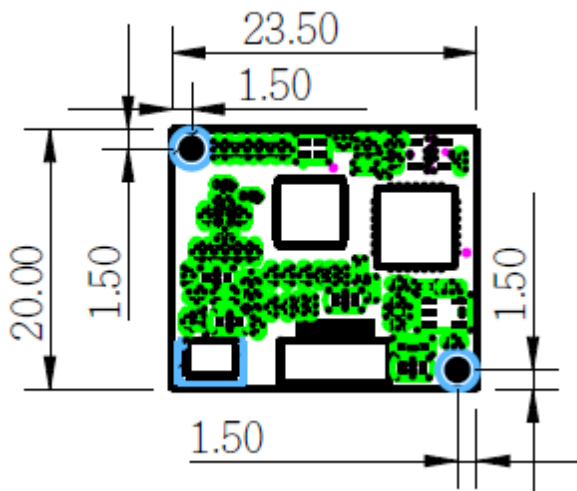
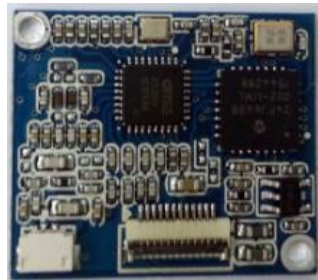
Model	Function	13.56 MHz
RFM811	Read Card UID only	ISO14443 Type A & B / ISO15693/Felica
RFM811M	Mifare read/write (APDU)	MIFARE
RFM811 I	ISO 15693 read/write (NDEF)	ISO15693

5. Physical Characteristics

Mechanical drawing

Unit: mm

Module Dimension	20 mm W x 3.0 mm H x 23.5 mm L
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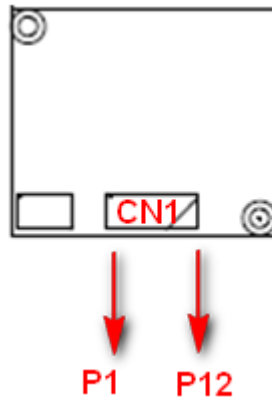


6. Electrical Characteristics

Supply Voltage	DC +5V \pm 5%
Power On	90mA
Operation (Max.)	85mA

7. RFM811 Module FPC Connector

Type	FPC 12pin Pitch 0.5
Pin No.	Function
1	GND
2	VCC
3	D+
4	D-
5	GND
6	UART_RX
7	UART_TX
8	LED1
9	LED2
10	BZ_OUT



8. Environmental

Environmental	
Operation Temperature	-20°C to 70°C
Storage Temperature	-40°C to 80°C
Relative Humidity	20% to 95% (Non-condensing)

9. Optional Support Kits

Antenna, with Various Size

Flat FPC (flexible printed circuitry) cable, to connect RFM811 and interface board

Interface Board (50 mm W x 5.7 mm H x 35 mm L) with output connector

USB or RS-232 Interface Cable, to connect interface board and host

Note: an adopter to supply power to RS-232 interface cable is also available

Due to Champtek's continuing product improvement programs, specifications and features are subjected to change without prior notices.