JMY611H User's Manual

(Revision 3.50)

Jinmuyu Electronics Co. LTD

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Please read this manual carefully before using. If any problem, please mail to: Jinmuyu@vip.sina.com

Contents

1 Product introduction

JMY611H is a RFID read/write module with UART, RS232C or USB port. JMY611H has various functions and supports multi ISO/IEC standard of contactless card. The RF protocol is complex, but the designer combined some frequent used command of RF card and then user could operate the cards with full function by sending simple command to the module. The modules build in SAM slot. It could operate contact smart card according to ISO7816.

The module and outside antenna are linked by 50ohm coaxial cable. The impedance between RF module and antenna was tuned by impedance analyzer, so it has excellent read/write performance and stability. Though the cable can reach 10m, the performance is still good. Normally the cable should be 60cm that is the module's best performance and stability.
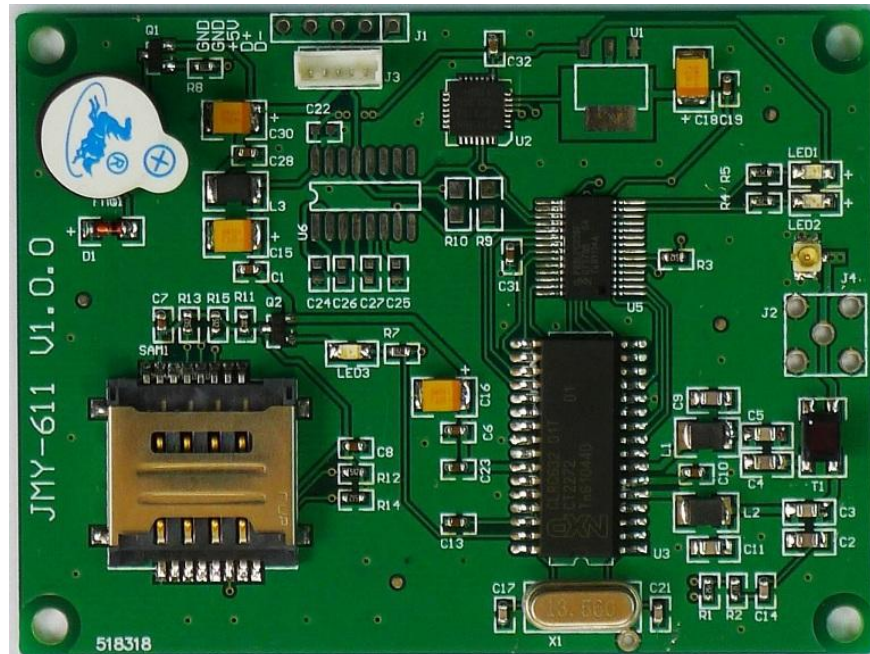
2 Characteristics

- PCD model: NXP CL RC632
- Working frequency: 13.56MHz
- Supported standard: ISO14443A, ISO14443B, ISO15693, ISO7816
- Card supported: Mifare 1K/4K, FM11RF08, Ultra Light, DesFire, Mifare ProX, SR176, SRI512, SRI1K, SRI2K, SRI4K, SRIX4K, T=CL CPU cards(both ISO14443A & ISO14443B) , TI Tag It, I. Code SLI, ST LRI and other tags according to ISO15693, and ISO7816 SAM cards (both T=0 & T=1)
- Anti collision ability: Full function anti collision; be able to process multi-cards; be able to set operate single card only
- Auto detecting card: Supported, default OFF. The default status can be set
- SAM slot: 2 slot
- SAM baud rate: 9600bps/38400bps/19200bps(default)/115200bps/57600bps.
- ISO7816 PPSS set: supported
- EEPROM: 512 Bytes
- Power supply: DC 5V ($\pm$0.5V)
- Interface: UART/RS232C/USB (select when place order)
- Communication rate: UART/RS232C/USB: 19.2Kbps/115.2Kbps
- Max. command length: 254 Bytes
- Interface level: UART/IIC: 3.3V (TTL level; 5V tolerance)
- Static power consumption: 150mA
- Operating distance: 80mm (depending on card)
- Dimension: 80mm*60mm*11mm
- Weight: About 70g
- ISP: Supported
- Operating temperature: -25 to +85 ℃
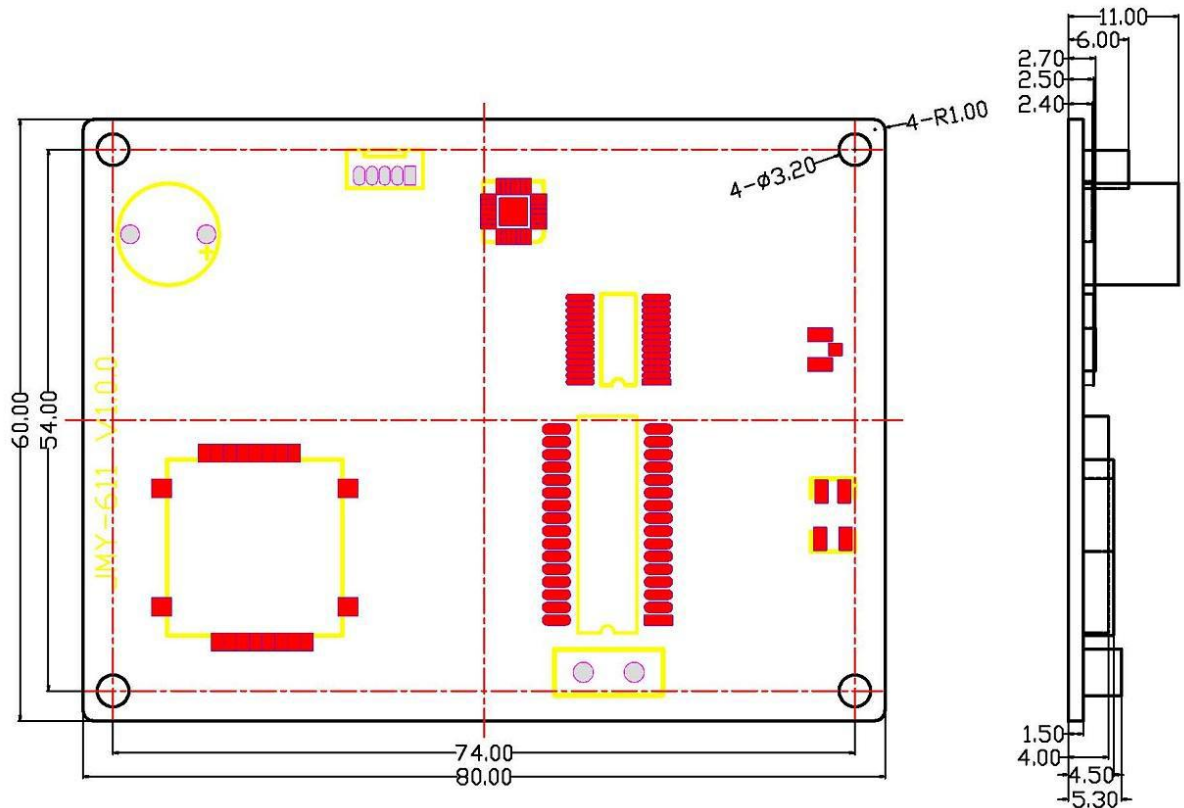- Storage temperature: -40 to +125 ℃
- RoHS: Compliant

3 Physical parameter and pin outs

3.1 Photo

3.2 Dimension

3.3 Pin configurations and pin outs

Pin number	Function	Type	Description
1	TXD/D-	Output	RS232C TXD / USB D-
2	RXD/D+	Input	RS232C RXD / USB D+
3	VCC	Power	VCC
4	GND	Power	GND
5	GND	Power	GND

3.4 Outside Antenna

Normally, as the size of TX600 series antenna may not meet the actual demands, the antenna needs to be customized, especially in some compact systems. The following information for customization is needed: 1. Dimension of the antenna PCB; 2. the position and direction of the antenna outlet and the connector; 3. the description of the antenna periphery. Jinmuyu will design the most proper antenna according to the user's exact requirements.

Antenna model	Size of antenna	Card operating distance
TX600	70mm * 70mm	90mm
TX601	50mm * 50mm	70mm
TX602	30mm * 30mm	60mm

3.5 Model available

- JMY611HT   UART interface, TTL level
- JMY611HS   RS232C (UART interface, RS232 level)
- JMY611HU   USB (USB to RS232C Bridge)

3.6 Model rule

3.6.1 Model format

1	2	3	4
JMY	611	X	X

1: company code; 2: product series code; 3: card operating type; 4: communication port type

3.6.2 Card operating type

M: PCD is RC500, support Mifare Class

A: PCD is RC500, support ISO14443A and Mifare Class

C: PCD is RC531, support ISO14443A, ISO14443B and Mifare Class

G: PCD is RC400, support ISO15693

H: PCD is RC632, support ISO15693, ISO14443A, ISO14443B and Mifare Class

D: PCD is RC500, support ISO14443A and Mifare Class with 511 bytes communication buffer

E: PCD is RC531, support ISO14443AB and Mifare Class with 511 bytes communication buffer

F: PCD is RC632, support ISO15693, ISO14443A, ISO14443B and Mifare Class with 511 bytes communication buffer

3.6.3 Communication port

T: UART

S: RS232C

U: USB