

NFC & MIFARE & ISO14443A & ISO14443B & ISO15693 IC CARD MODULE

JMY6122 IC Card Reader

User's manual

(Revision 1.01)

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



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1 Product Introduction

JMY6122 is a series of RFID read/write module. It 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 impedance between RF module and antenna was tuned by impedance analyzer. And then the module has excellent performance and stability.

The module and antenna is split design. 50ohm coaxial cable are linked the antenna and module.

2 Key Characteristics

- Module split antenna, connected by 50ohm coaxial cable, flexible antenna size and layout
- EMV2010 certification ability
- 4 SAM slots and 512K bytes data FLASH, full fill payment system usage

3 Characteristics

- PCD model: NXP CL RC663
- Working frequency: 13.56MHz
- Supported standard: ISO14443A, ISO14443B, ISO15693, ISO7816
- Card supported: see: [module function configuration table](#)
- 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 state can be set.
- SAM slots: 4, T=0 & T=1 9600, 19200, 38400, 55800, 57600, 115200bps
- Power supply: DC 5V ($\pm 0.5V$)
- Interface: USB HID, RS232C, UART or IIC by order
- Communication rate:
 - IIC: Max.200Kbps
 - UART: 19200bps / 9600bps / 38400bps / 57600bps / 115200bps
 - USB: 2.0 HID class
- Max. command length:
 - JCP04 253 Bytes;
 - JCP05 510 Bytes;
- Interface level: 3.3V (TTL level; 5V tolerance)
- Power consumption: Max. 150mA
- Operating distance: 100mm (M1 typical distance, depending on card quality)
- Dimension: 86.5mm*65mm*11.2mm (without Antenna)
- Weight: About 30g (without Antenna)
- ISP: Supported

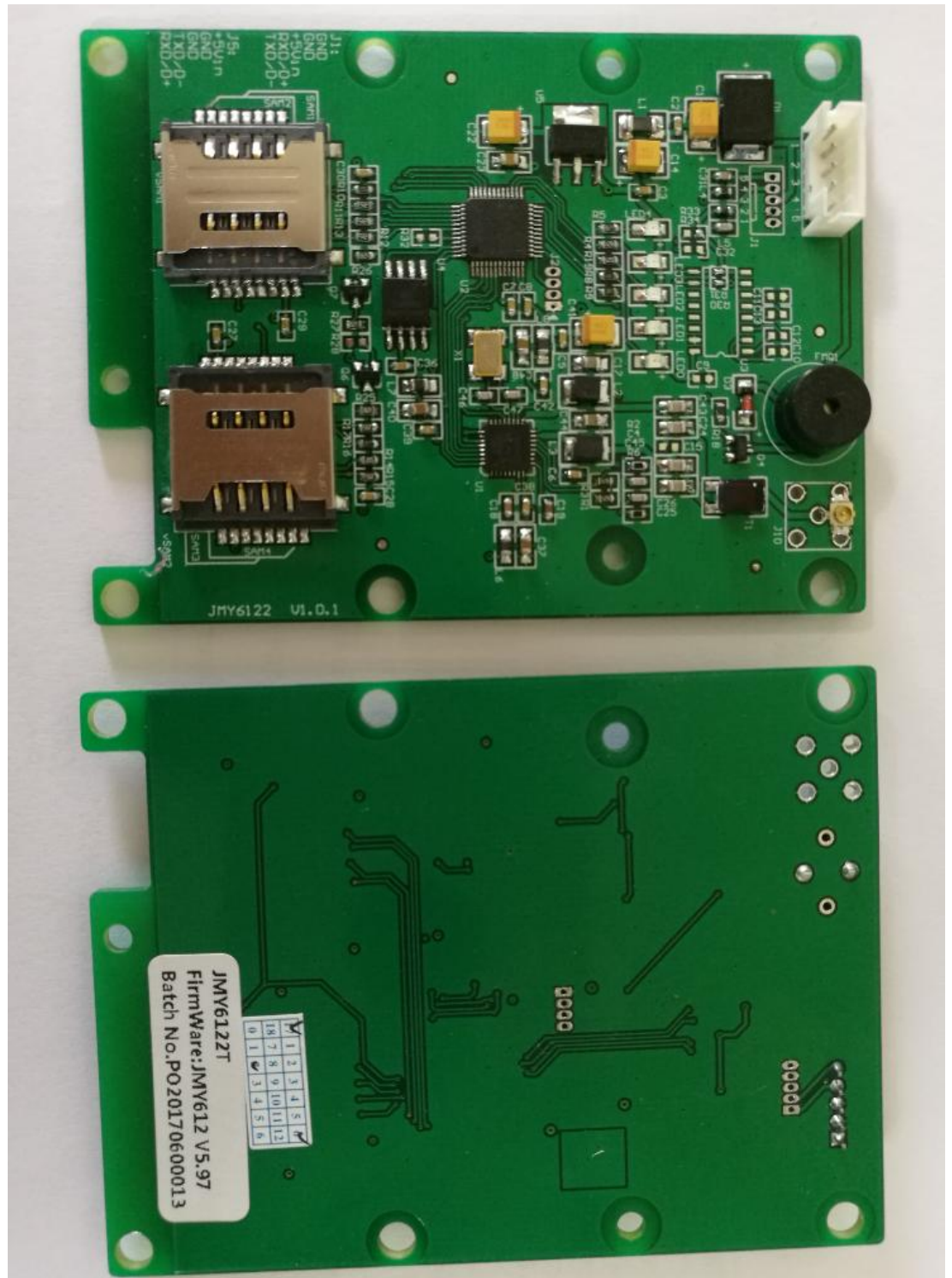


- Operating temperature: -25 to +85 °C
- Storage temperature: -40 to +125 °C
- RoHS: Compliant



4 Physical Parameter and Pin Outs

4.1 Photo





4.3 Pin configurations and Pin outs

Pin number	Function	Type	Description
1	VCC	Power	VCC
2	GND	Power	GND
3	GND	Power	GND
4	TXD	Output	RS232C TXD
5	RXD	Input	RS232C RXD

4.4 Antennas

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.

We provide many models of antenna. Please visit our website to get more information. There are some recommended models in the table:

Antenna model	Size of antenna	Card operating distance
TX600	70mm * 70mm	100mm
TX601	50mm * 50mm	70mm
TX602	30mm * 30mm	50mm
TX604	50mm * 70mm	80mm
TX605	100mm * 150mm	100mm



4.5 Module Function Configuration Table

	JMY6122H
PCD	RC663
JCP04 Communication Protocol	●
JCP05 Communication Protocol	●
MIFARE 1K	●
MIFARE 4K	●
MIFARE Ultra Light	●
MIFARE Ultra Light C	●
MIFARE Mini	●
MIFARE DESfire (Step Commands)	●
MIFARE Plus	●
T=CL TYPE A	●
SR176	●
SRI512	●
SRI1K	●
SRI2K	●
SRI4K	●
SRIX4K	●
T=CL TYPE B	●
I.CODE 1	●
I.CODE SLI	●
I.CODE SLI-S	●
TI Tag-it Series	●
ST LRI Series	●
NFC Active Initiator	-
NFC Active Target	-
NFC Passive Initiator	●
NFC Passive Target	-
NFC Card	-
SAM slots	
ISO7816 (T=0 & T=1)	●
On Chip Data Flash	512 bytes
IIC Interface	JMY6122I
USB Interface	JMY6122U
UART Interface	JMY6122T
RS232C Interface	JMY6122S



5 Communication Protocols

The physical interfaces of module are various. But the data link layer protocols are in accordance with JCP04 and JCP05. Please reference "JMY600 Series IC Card Module General Technical Manual".

For convenience to test the Module, we supply PC software: TransPort to users.

We have interface program source code to help users also. They are KELL projects in C51 or ASM51 format.

Please log in our website: www.jinmuyu.com to download or mail to jinmuyu@vip.sina.com to obtain the resources.