MIFARE & ISO14443A & ISO14443B IC CARD READ/WRITE MODULE

JMY628 IC Card Read/Write Module

User's Manual

(Revision 4.51)

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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

JMY628 is a series of RFID read/write module with UART or IIC communication port. JMY628 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 module and antenna is integrated. The impedance between RF circuit and antenna was tuned by impedance analyzer, and then the module has excellent performance and stability.

2 Key Characteristics

- **Modules integrated antenna, excellent consistency and stability**
- **Light and slim**
- **USB HID interface, convenience to use on PC**
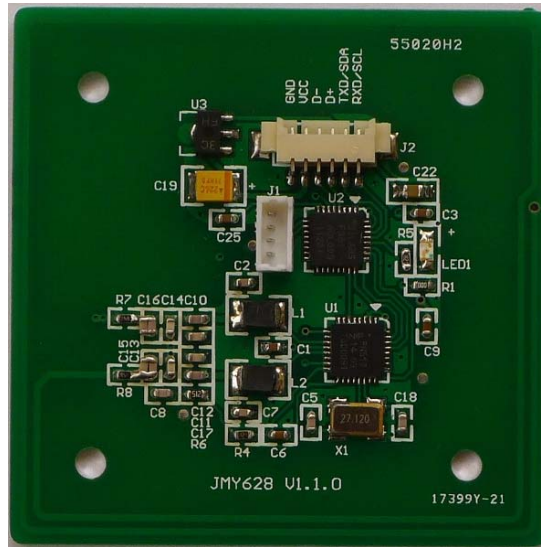
3 Technical parameters

- PCD type: NXP MF RC522 / MF RC523 / PN512
- Working frequency: 13.56MHz
- Supported standard: ISO14443A, ISO14443B
- Card supported: see: module function configuration table
- Anti collision ability: Full function anti collision; be able to set multi-cards or single card
- Auto detecting card: Supported, default OFF, could be set
- Data FLASH: 512 Bytes
- Power supply: DC 5V (±10%)
- Interface: USB HID and UART or IIC on order
- Communication speed: 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: UART / IIC: 3.3V (TTL level; 5V tolerance, by pull up)
- Power consumption: 100mA
- Operating distance: 60mm (M1 typical distance, depending on card quality)
- Dimension: 50.8mm * 50.8mm * 7.5mm
- Weight: About 20g
- ISP: Supported
- RoHS: Compliant
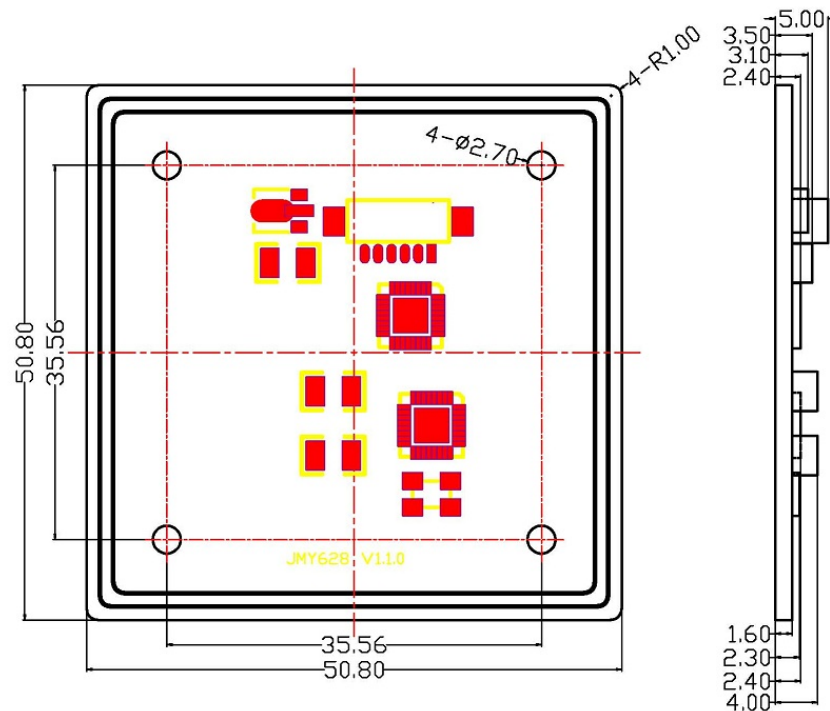- CE certification: in plan (Jan. 17, 2015)

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

4 Physical parameter and pin outs

4.1 Photo

4.2 Dimension

4.3 Pin configurations and pin outs

PIN	Function	Type	Description
1	RXD/SCL	Input	UART RXD / IIC SCL
2	TXD/SDA	Input/output	UART TXD / IIC SDA
3	D+	Input/output	USB D+
4	D-	Input/output	USB D-
5	VCC	Power	VCC
6	GND	Power	GND

4.4 Module function configuration table

	JMY628A	JMY628C	JMY628N
PCD	MF RC522	MF RC523	PN512
JCP04 protocol	●	●	●
JCP05 protocol	●	●	●
MIFARE 1K	●	●	●
MIFARE 4K	●	●	●
MIFARE Ultra Light	●	●	●
MIFARE Ultra Light C	●	●	●
MIFARE Mini	●	●	●
MIFARE DES fire	●	●	●
MIFARE Plus	●	●	●
T=CL TYPE A	●	●	●
SR176		●	●
SRI512		●	●
SRI1K		●	●
SRI2K		●	●
SRI4K		●	●
SRIX4K		●	●
T=CL TYPE B		●	●
NFC upgrade able			●
On Chip Data Flash	512 bytes		
USB interfae	●	●	●
IIC Interface	JMY628AI	JMY628CI	JMY628NI
UART Interface	JMY628AT	JMY628CT	JMY628NT

5 Operate the module

  The physical interfaces of module are various. But the data link layer protocols are in accordance with JCP04 & JCP05. Please reference "JMY600 series general communication protocol manual.pdf". 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 on to our website: http://www.jinmuyu.com to download or mail to jinmuyu@vip.sina.com to obtain the resources.