JMY6073C IC Card Reader

User's manual

(Revision 1.00)

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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

JMY6073C is a RFID read/write module with UART, IIC ports. JMY6073C has various functions and supports multi ISO/IEC standard of contactless card. The RF protocol is complex. 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 has a length of 506 bytes command buffer could send APDU over 256 bytes to T=CL smart cards. The modules support FSDI=8 of ISO14443-4. 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.
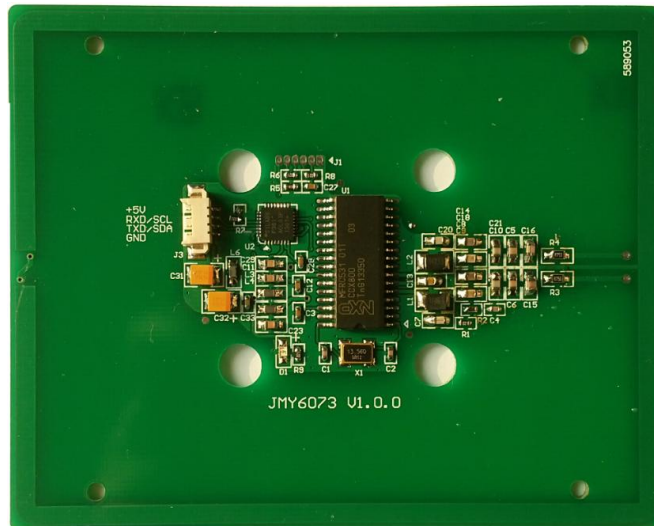
2 Characteristics

- PCD model: NXP RC531
- Working frequency: 13.56MHz
- Supported standard: ISO14443A, ISO14443B
- Card supported: Mifare 1K/4K, FM11RF08, Ultra Light, DesFire, Mifare ProX, SR176, SRI512, SRI1K, SRI2K, SRI4K, SRIX4K, T=CL CPU cards(both ISO14443A & ISO14443B).
- 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.
- EEPROM: 512 Bytes
- Power supply: DC 5V (±0.5V)
- Interface: IIC/UART
- Communication rate: IIC: 400Kbps
                                UART   19.2Kbps/115.2Kbps
- Max. command length: JCP04   254 Bytes;   JCP05   510 Bytes.
- Interface level: UART/IIC: 3.3V (TTL level; 5V tolerance)
- Power consumption: 150mA(Working mode)
- Operating distance: 100mm (depending on card and antenna design)
- Dimension: 100mm*80mm*5mm
- Weight: About 30g
- ISP: Supported
- Operating temperature: -25 to +85℃
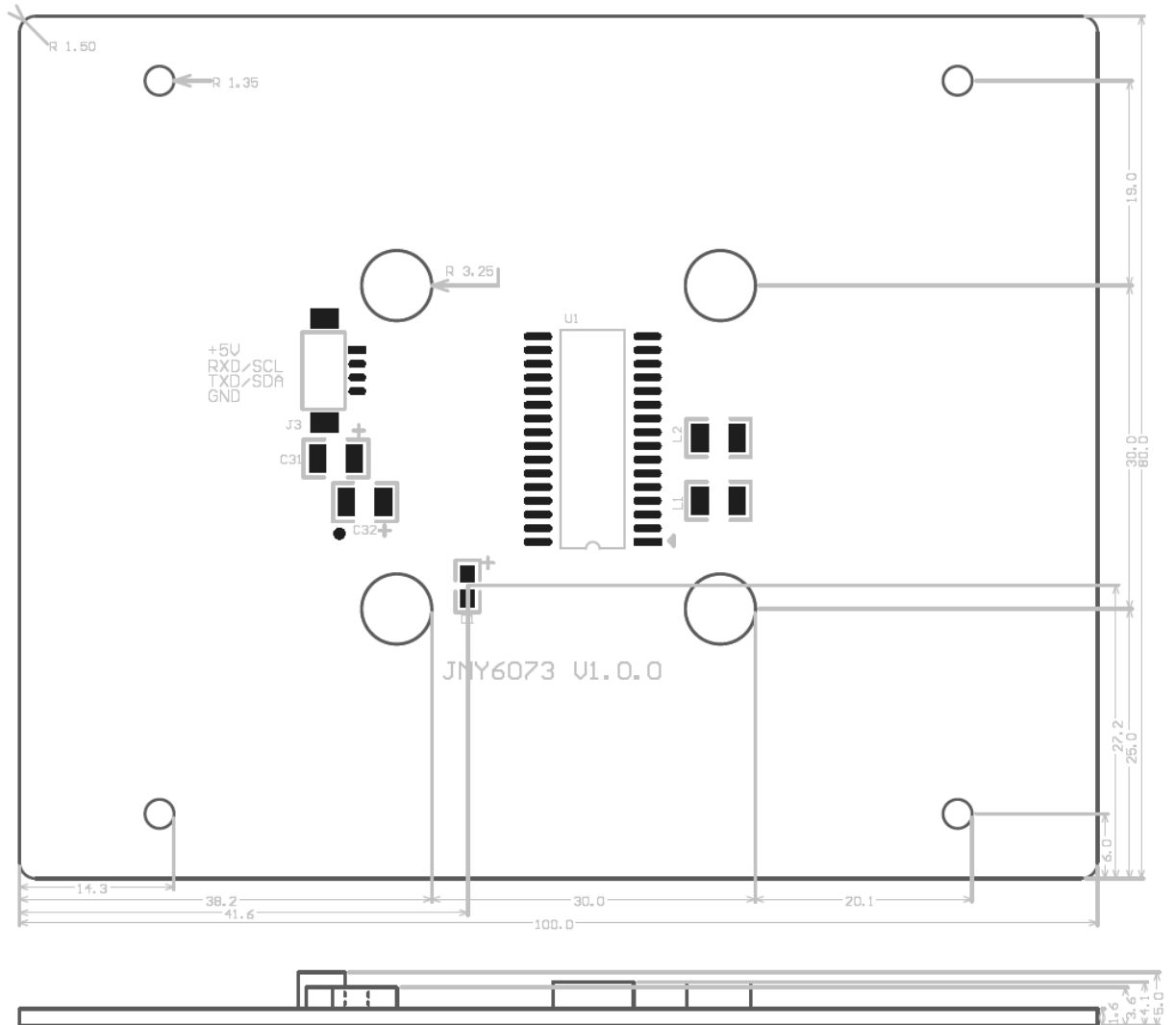- Storage temperature: -40 to +125℃
- RoHS: Compliant

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/SDA	Input/output	UART TXD / IIC SDA
2	RXD/SCL	Input	UART RXD / IIC SCL
3	+5V	Power	+5V
4	GND	Power	GND

3.4 Model available

- JMY6073CI   IIC interface
- JMY6073CT   UART interface, TTL level

3.5 Model rule

3.5.1 Model format

1	2	3	4
JMY	6073	X	X

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

3.5.2 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

3.5.3 Communication port

I: IIC

T: UART

3.5.4 The PCD

	JMY6073C	JMY6073H	JMY6073G
Mifare 1K	●	●	
Mifare 4K	●	●	
Mifare Ultra Light	●	●	
Mifare Ultra Light C	●	●	
Mifare Mini	●	●	
DesFire	●	●	
Mifare Plus	●	●	
T=CL TYPE A	●	●	
SR176	●	●	

SRI512	●	●	
SRI1K	●	●	
SRI2K	●	●	
SRI4K	●	●	
SRIX4K	●	●	
T=CL TYPE B	●	●	
ISO15693 Tags		●	●
Data Flash	512 bytes	512 bytes	512 bytes

3.6 Communication Protocol

Note: for the communication protocol, please refer to " JMY600 SERIES IC CARD RFID R&W MODULE GENERAL TECHNICAL MANUAL V4.51".