

ISO14443A & ISO14443B & ISO15693 & ISO18000-3 & ISO7816 IC CARD READER WRITER

JMY6804 IC Card Reader

User's manual

(Revision BV1.01)

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2025/2/18



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



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1 Product Introduction

JMY6804 is a modular circuit that reads and writes contactless IC cards by sending commands by the user. The feature that distinguishes it from other modules is that there is ferrite material behind the antenna, which can reduce the impact of metal around the module on the card reading performance. It is especially suitable for situations where there are many metal materials in the module installation environment.

JMY6804 has very complete support for contactless CPU cards with T=CL. Except for the small antenna size that leads to low antenna energy, all other parts meet the standards of EMV or PBOC 3.0 for contactless IC card readers, such as FSDI=8.

JMY6804 supports multiple protocols and multiple cards, and also has 2 SAM card slots, supporting ISO7816 (T=0 and T=1). The designer has also optimized the card operation function to achieve a very good card operation speed.

JMY6804 supports IIC, UART, RS232C or USB interfaces. The RF antenna and module are designed in an integrated manner. The impedance analyzer is used to adjust the impedance between the RF circuit and the antenna to match the impedance, which can achieve very good reading and writing performance and very good stability.

32-bit ARM microcontroller ensures that the reader has good performance and reliability

2 Key Characteristics

- Ferrite plate under the antenna, good performance for metal-around environments
- The module's RF communication protocol can pass EMV or PBOC certification, fully meeting the requirements of the payment system
- It supports T=CL cards, supports FSDI=8, and can send and receive APDUs of more than 256 bytes

3 Characteristics

- PCD model: NXP CL RC663
- PCB Layers: 4
- Working frequency: 13.56MHz
- Supported standard: ISO14443A, ISO14443B, ISO15693, ISO7816,NFC
- 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
- SAM slots: 2, T=0 & T=1 9600, 19200, 38400, 55800, 57600, 115200bps
- Data FLASH: 512 Bytes
- Power supply: DC 5V (±10%)
- Interface: USB HID, RS232C, UART or IIC by order
- Communication speed:



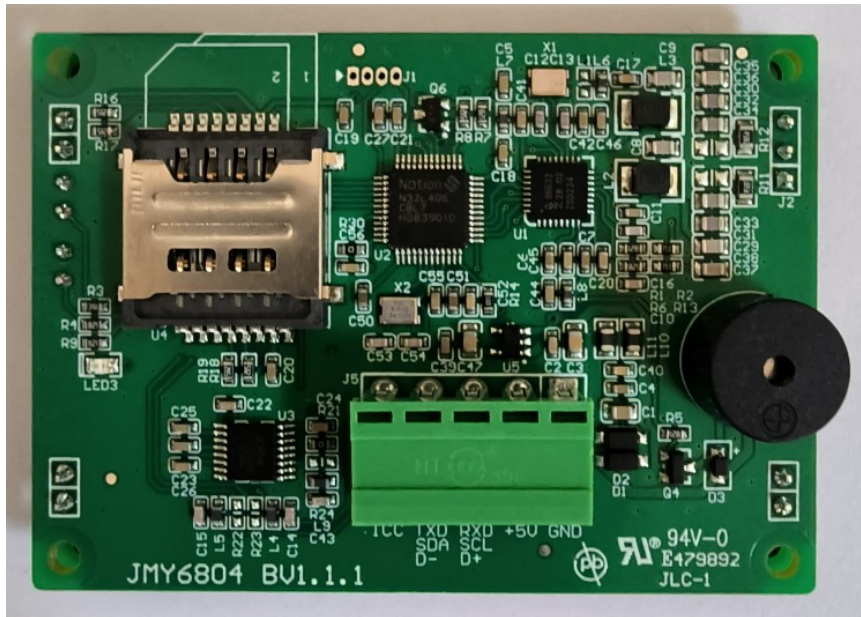
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- IIC: Max.200Kbps
 - UART: 19200bps, 9600bps, 38400bps, 57600bps, 115200bps
 - USB: 2.0 HID class
 - Interface level: UART / IIC 3.3V
 - Max. command length:
 - JCP04: 253bytes
 - JCP05: 510bytes
 - Power consumption: Max. 150mA
 - Operating distance: 70mm (M1 typical distance, depending on card quality)
 - Dimension: 70mm * 50mm * 16.5mm
 - Weight: About 120g
 - ISP: Supported
 - RoHS: By order
 - Operating temperature: -25 to +85°C
 - Storage temperature: -40 to +125°C



4 Physical Parameter and Pin Outs

4.1 Photo

Front

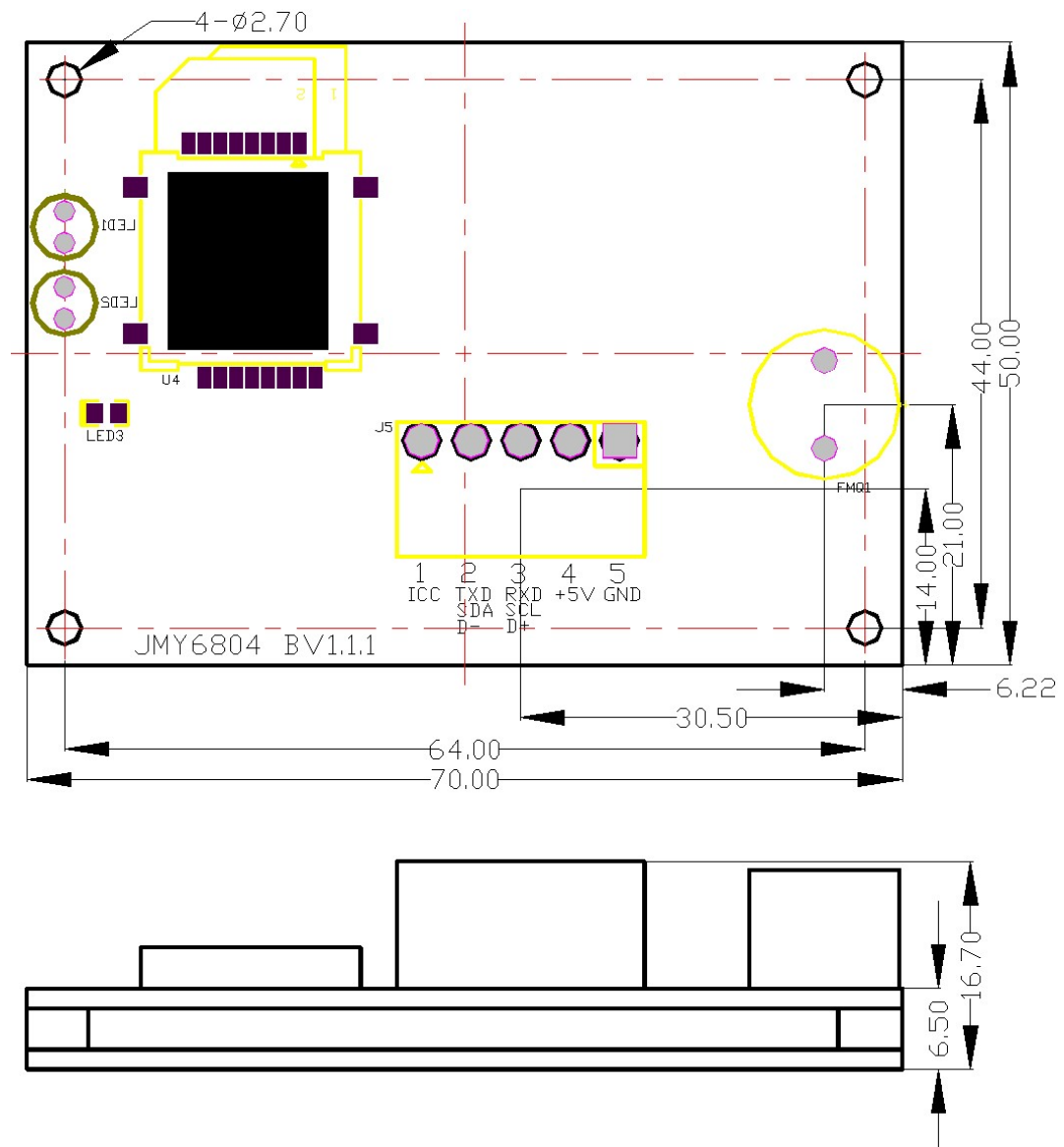


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4.2 Dimension



4.3 Pin configurations and Pin outs

Pin number	Function	Type	Description
1	ICC	Output	Card in/out indication 0: Card IN; 1: Card OUT
2	TXD/SDA	Input/output	RS232C TXD / UART TXD / IIC SDA/ USB D+
3	RXD/SCL	Input	RS232C RXD / UART RXD / IIC SCL/ USB D-
4	VCC	Power	VCC
5	GND	Power	GND



4.4 Module Function Configuration Table

	JMY6804
PCD	RC663
MIFARE 1K	●
MIFARE 4K	●
MIFARE Mini	●
MIFARE Ultra Light	●
MIFARE Ultra Light EV1	●
MIFARE Ultra Light C	●
MIFARE DES fire	●
MIFARE DES fire EV1	●
MIFARE Plus	●
T=CL TYPE A	●
SR176	●
SRI512	●
SRI1K	●
SRI2K	●
SRI4K	●
SRIX4K	●
T=CL TYPE B	●
I.CODE SLI	●
I.CODE SLI-S	●
I.CODE ILT-M	●
TI Tag-it series	●
ST LRI series	●
Felica	●
ISO18000-3MODE3	●
SAM Slot	2
ISO7816 (T=0 & T=1)	●
FLASH in MCU	2K bytes
IIC Interface	JMY6804I
UART Interface	JMY6804T
RS232C Interface	JMY6804S
USB HID Interface	JMY6804UH



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.