

UIC680 SERIES
Contactless Smart Card Reader Module
- RS232 & USB HID Keyboard Interface -
(Support M-Chip & qVSDC)

Thank you for purchasing the UIC680 series products.

The contactless smart card reader module UIC680 is mainly to support the contactless payment systems. The small footprint size of the module makes it easily to integrate to the current transaction system such as Point-of-Sale terminal, kiosk, and vending machine station as the part of the system. The module communicates with a host computer or terminal using a standard RS-232, USB or TTL interface.

FEATURES

- Small footprint PCB size: 50 L* 40 W (mm) without antenna board
- Supports ISO 14443 type A & B standard
- Supports American Express® ExpressPay, MasterCard® PayPass™, Visa® MSD applications
- Reads/writes Philips Mifare® classical contactless smart card
- Provides the options for the direct coupling antenna and the remote antenna
- RS232, USB 2.0 and serial TTL (optional) Interface
- RS232 data pass through function
- TTL F2F magnetic stripe decode data pass through (optional)
- F2F decoder data emulation (optional)
- Firmware upgradeable

AGENCY APPROVAL

- Specifications for FCC Class B, CE Class B



NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void your authority to operate such equipment.

The external cover label must show "contains transmitter module FCC ID: TFJ680TG"

SPECIFICATIONS

| | |
|-----------------------|--|
| Communication | Standard RS232 signal level Compatible with USB 2.0 specification (optional)/TTL 5V signal level (optional) |
| Power Requirements | 5VDC |
| Power Consumption | 330mA in idle mode; 430mA in operating mode |
| Operating Temperature | -10 to 50°C |
| Operating Humidity | 10 to 85% (non condensing) |
| Dimensions | 50L x 40W mm, without antenna board |

PIN ASSIGNMENT

Interface J3 Pin Assignment

| DB9 | Signal | Direction | PCB-J1 | Signal |
|-----|--------|------------------------------|--------|------------------|
| 5 | GND | | 1 | GND |
| 2 | RxD | ← Serial data to host | 2 | TXD1 |
| 3 | TxD | → Serial data from host | 3 | RXD1 |
| | | | 4 | VCC |
| | | Serial Pass-thru or USB data | 5 | TXD2 (or USB D-) |
| | | Serial Pass-thru or USB data | 6 | RxD2 (or USB D+) |
| | Shield | | 7 | Shield |

Extension Port J1 Pin Assignment

| Pin | Signal | Comment |
|-----|-----------------------|---------|
| 1 | GND | |
| 2 | GND | |
| 3 | Extended IO | |
| 4 | Extended IO | |
| 5 | GND | |
| 6 | VCC | 5Vdc |
| 7 | Extended IO | |
| 8 | Extended IO | |
| 9 | Extended IO | |
| 10 | Extended IO | |
| 11 | Extended IO | |
| 12 | Extended IO | |
| 13 | Extended IO | |
| 14 | Extended IO | |
| 15 | Extended IO | |
| 16 | Extended IO | |
| 17 | Extended IO | |
| 18 | Extended IO | |
| 19 | GND | |
| 20 | VCC_33 | 3.3V |
| 21 | Extended IO | |
| 22 | Extended IO | |
| 23 | Extended IO | |
| 24 | Buzzer Control Signal | |
| 25 | Extended IO | |
| 26 | Extended IO | |
| 27 | Extended IO | |
| 28 | Extended IO | |

50 RF Antenna Port J2B Pin Assignment

| Contact number | Signal |
|----------------|-----------|
| 1 | RF output |
| 2 | GND |

Direct Match Antenna Port J2A Pin Assignment

| Contact number | Signal |
|----------------|--------|
| 1 | RX |
| 2 | TX |
| 3 | GND |
| 4 | GND |