

# Contactless Smart Card Reader UIC680FGP

The contactless smart card reader module UIC680FGP 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 with antenna board
- Supports ISO 14443 & ISO 18092 standard
- Supports American Express® ExpressPay, MasterCard® MCL™ (Contactless MagStripe and M/Chip), Visa® PayWave (MSD and qVSDC), and Discover Network Zip Contactless Payments applications,
- Encrypted card data output (optional)
- The direct coupling antenna
- RS232 and USB 2.0 by use of corresponding cables

## Specification

Trade Name	UIC
Model Number	UIC680FGP
OS Version	Linux 4.19.56
Processor	Microchip SAMA5D23
Memory	2Gbit SDRAM / 256Mbit Flash
Indicators	4 running LEDs for payment application
Audio	Buzzer x1 (default) / Speaker x1 (PCB reserved)
Power Supply	5VDC +/- 5%, 500mA
Interface	Standard RS232 signal level Compatible with USB 2.0 specification TTL 3.3 V signal level (optional)
Physical	67.6mm x 63.6mm x 13.4mm (module)
Ingress Protection Rating (IP)	IP65 (enclosure)
Impact Protection Rating (IK)	IK07 (enclosure)
Safety	FCC Class B, CE Class B, BSMI
Payment Reader	Standard: <ul style="list-style-type: none"><li>- ISO 14443 type A and B compliant</li><li>- ISO 15693</li><li>- ISO 18092 compliant</li></ul> Payment Application: <ul style="list-style-type: none"><li>- Visa payWave</li><li>- Mastercard MCL</li><li>- American Express Expresspay</li><li>- Discover DPAS</li><li>- CUP QuickPass</li></ul>

	- NEMA card
Environmental	-30°C to 70°C for Operating -30°C to 80°C for Storage 5 to 90% Relative Humidity, Non condensing
Mount Type	Surface mount

## Pin Assignment

Interface J13 Pin Assignment

DB9	Signal	Direction	PCB-J13	Signal
5	GND		1	GND
2	RxD	← Serial data to host	2	TXD1 Out
3	TxD	→ Serial data from host	3	RXD1 In
			4	VCC
		USB data	5	USB D-
		USB data	6	USB D+
	Shield		7	Shield

## Picture



## FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

**CAUTION:**

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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