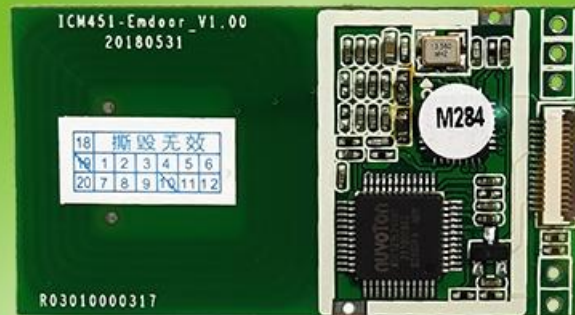# ICM451 Series

IC Module

Overview

ICM451 Series module is multi-protocol card reader module of 13.56MHZ high frequency ,which compliant with ISO/IEC14443A, ISO/IEC14443B, ISO/IEC15693 international standards. It adopts special non-contact communication chip, with stable performance and powerful function, and provides TTL interface. Can be customized according to customer requirements, widely used in access control systems, school management, community management, membership management, asset management, anti-counterfeiting control and other fields.

Models

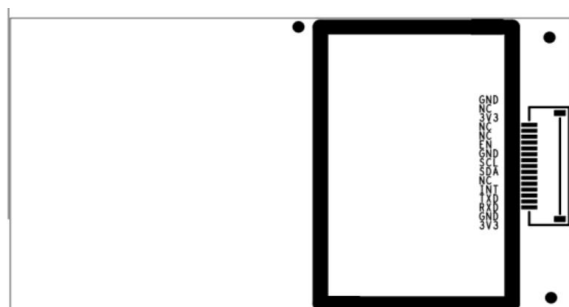| Models	Interface	Voltage	Cards type
ICM451EL-Emdoor(M284)	TTL	3.3V	Get UID of S50/S70/ULT/NTAG/FM11RF08/FM1208/ICODE/DESfire
ICM450A+L-Emdoor(M282)	TTL	3.3V	Get UID of S50/S70/Ultralight/NTag/FM11RF08/FM1208
ICM450BL-Emdoor(M283)	TTL	3.3V	Get UID of S50/S70/Ultralight/NTag/FM11RF08

Features

◇ Antenna integrated, easy to install；

◇ Adopt non-contact communication chip, stable performance and good compatibility；

◇ Provide demo software and secondary development kit；

◇Support ISO/IEC14443A, ISO/IEC14443B, ISO/IEC15693 protocol, can connect to software demonstration.

Specifications

Params	Description
Protocol	ISO/IEC14443A、ISO/IEC14443B、ISO/IEC15693
Frequency	13.56MHz
Baud rate	9600 - 115200bit/s(optional，default 115200bit/s)
Power	Optional：DC 3.3V（±5%）
Working current	<100mA
Communication Interface	Optional：TTL，USB
module embedding	2.54mm pitch pins
Operating distance	0~30mm（Depends on work environments and card types）
Operating temperature	-10℃~+50℃
storage temperature	-20℃~+65℃
Working humidity	15%~90%
size	47.70mm×25mm×1.9mm (tolerance：±1mm)

Size

Pin definition

Pin No.	Name	Description
J14		
1	VCC	Power
2	GND	Ground
3	RXD	Received external data
4	TXD	Transmit external Data
5	INT	Input
6	NC	NOTCONNECTED
7	SDA	Data
8	SCL	Clock
9	GND	Ground
10	EN	Enable
11	NC	NOTCONNECTED
12	NC	NOTCONNECTED
13	VCC	Power
14	NC	NOTCONNECTED
15	GND	Ground

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