

MP30 Hardware User Manual

Rev1.0

Revision History

Revision	Date	Author	Description
1.0	2016.09.22	C.K	1 st Release

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1. Introduction

The MP30 is a OEM read/write module with antenna designed for simple integration. The serial TTL-interface can be directly connected to microprocessor and easily converted to RS232 serial interface device. The typical reading range of the module is up to 20~40mm depending on the antenna of tag.

The MP30 is a RFID module for all popular 13.56MHz RFID/contactless standard protocols. The MP30 supports all major global secured baseband ISO standard including ISO14443A/B,ISO15693 and Mifare family cards.

The MP30 is well suited for mobile devices due to its low power consumption and low operating voltage from 5V. The on-chip 3.3V regulators are provided to stabilize the chip's power, and simultaneously supply the power to the external companion microcontroller up to 120mA.

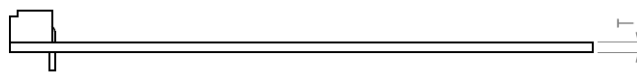
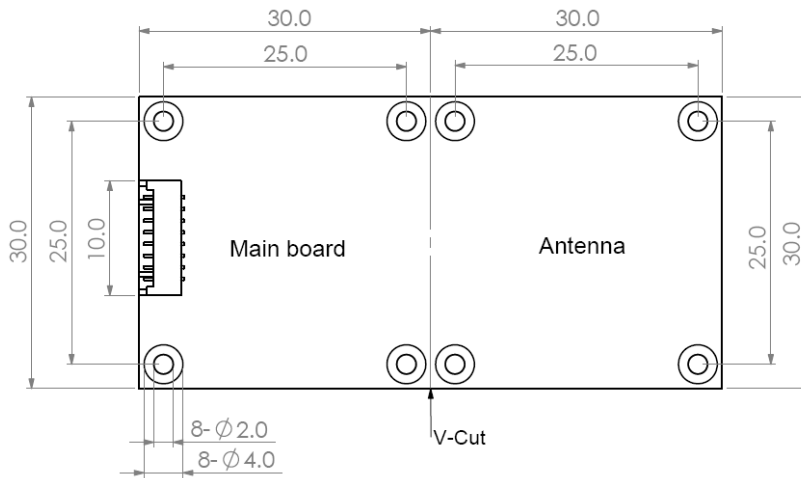
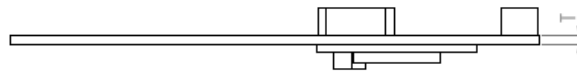
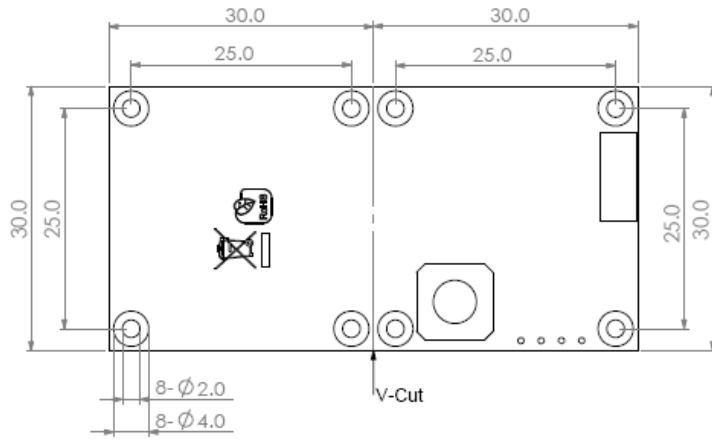
The MP30 support the DLL and easy control this module. That can be using any terminal program (VB.Net,C#...etc)

2. Specifications

Specifications	
Power requirement	5V regulated for operate voltage
Current requirement	Active 120mA @ 5VDC
Interface	MP30R – RS232 Interface MP30L – TTL Interface MP30U – USB Interface MP30H – HID Interface
Baud rate	19200 N 8 1
Protocol	ISO14443A Standard functionality Mifare read and write data Ultralight read and write data Ultralight C read and write data Desfire read and write data Desfire EV1 read and write data

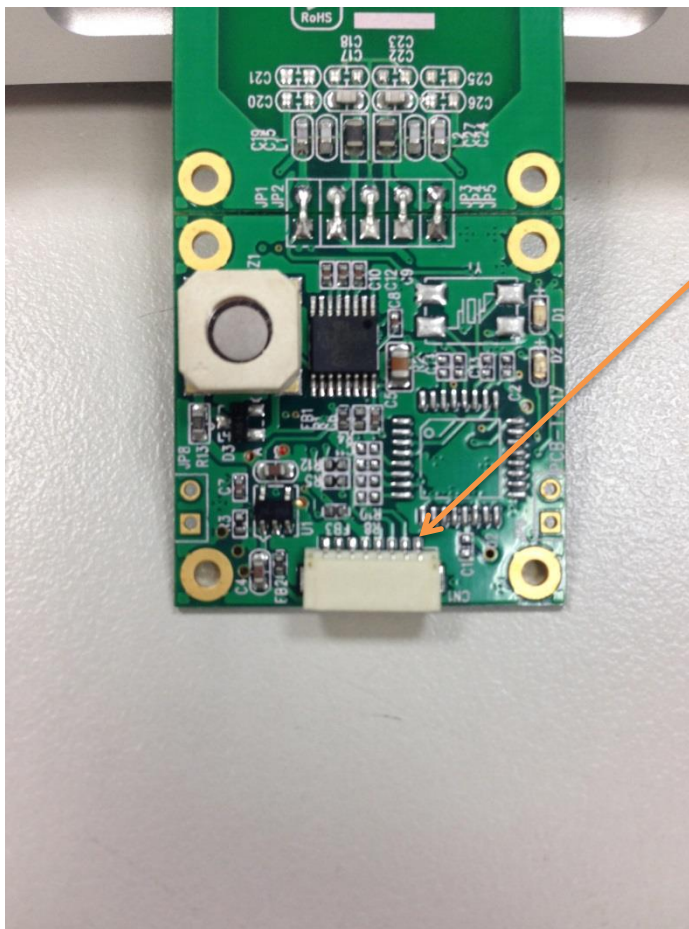
	VISA pay wave read UID Master pay wave read UID T=CL ISO14443B Standard functionality Cepas read UID SRI read and write data VISA pay wave read UID Master pay wave read UID T=CL ISO15693 Standard functionality Tag-IT read and write data I-Code series read and write data SIC5600 read and write data Felica read UID
Frequency	13.56MHz
Read Range	Mifare : 1~3 cm ISO15693 : 2~4cm
Dimensions	SMT: 60(L) x 30(W) x 7.8(H) mm
Weight	7.2g
Environment	Operating temperature : 0°C ~ 60°C Humidity : 10 ~ 90 %relative

3. Package Description



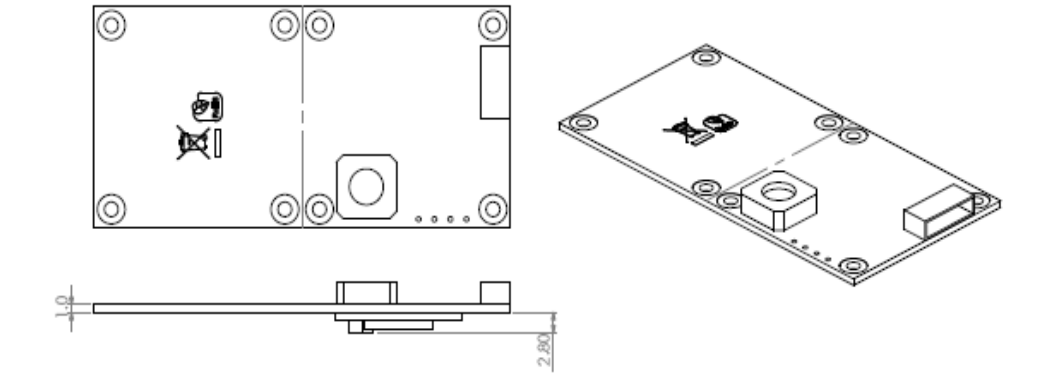
4. Pin Definition

	MP30R-00	MP30L-00	MP30U-00
Interface	RS232	TTL	USB (Visual comport)
Pin numbers	8		
Connector	JST SH 1.0mm		
Pin #1	+5VDD		
Pin #2	TXD	TXD	D-
Pin #3	RXD	RXD	D+
Pin #4	GND		
Pin #5	SHIELD		
Pin #6			
Pin #7			
Pin #8			

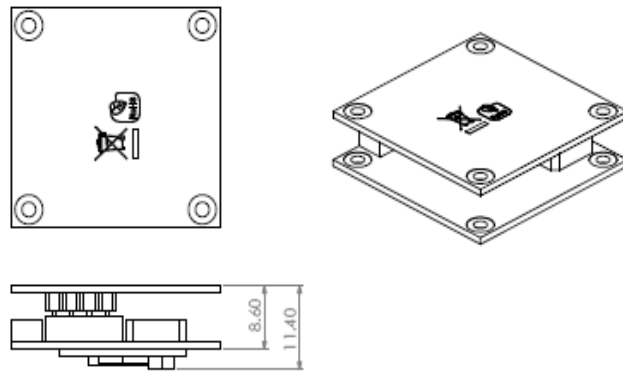


5. Transform Type

Type : 0



Type : 1



Type : 2

