51488 contactless induce module

51488 is induce module which frequency is 125KHZ, professional used to read EM card and TEMIC card. Output though RS232 also WEIGEN CODE 26.
When use as EM card, is R/O, the information from DATA-OUT PIN will output though DATA0&DATA1.
When use as TEMIC card, is R/O, the information from DATA-OUT PIN will output though DATA0&DATA1.

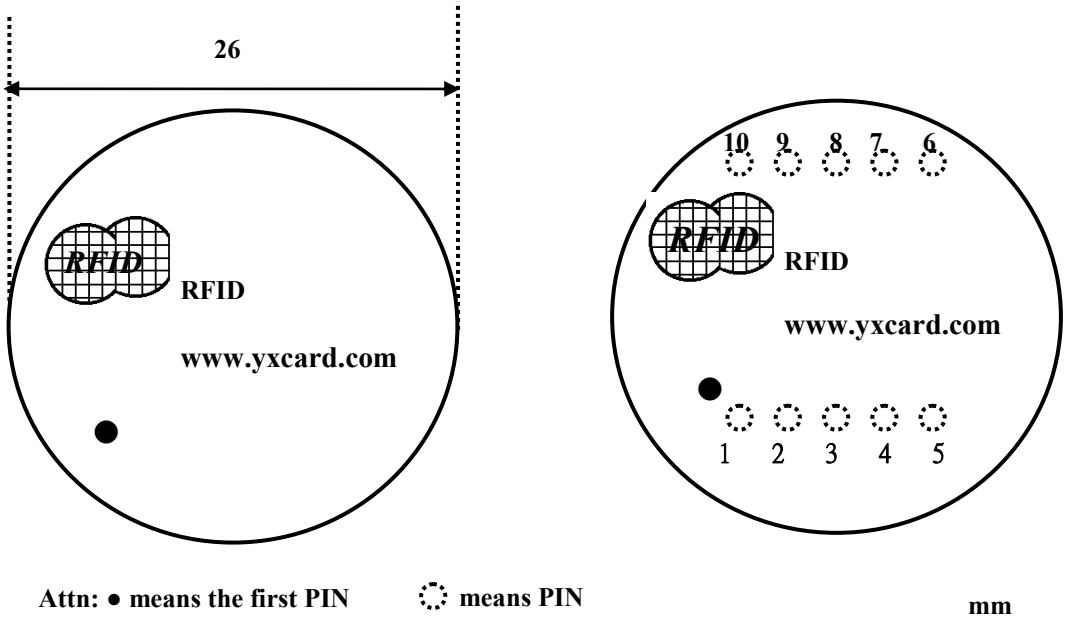
I. Product specification:

module	51488
size	26(diameter)×8.5(thick) m/m
Operating frequency	AM 125KHZ

II. Technical parameter:

Operating voltage	VCC=5V
Consumption current	40mA(5V) nominal
Operating temperature	25mA sink/source
Operating temperature	-40℃～85℃
Storage temperature	-40℃～85℃
Storage humidity	5～95% RH

III. Picture:



Attn: ● means the first PIN **◌ means PIN**

mm

IV. Pin definition:

PIN	NAME	I/O	SYMBLE	MIN	TYP	MAN	DESCRIPTION
1	CP	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Low Pulse 140ms

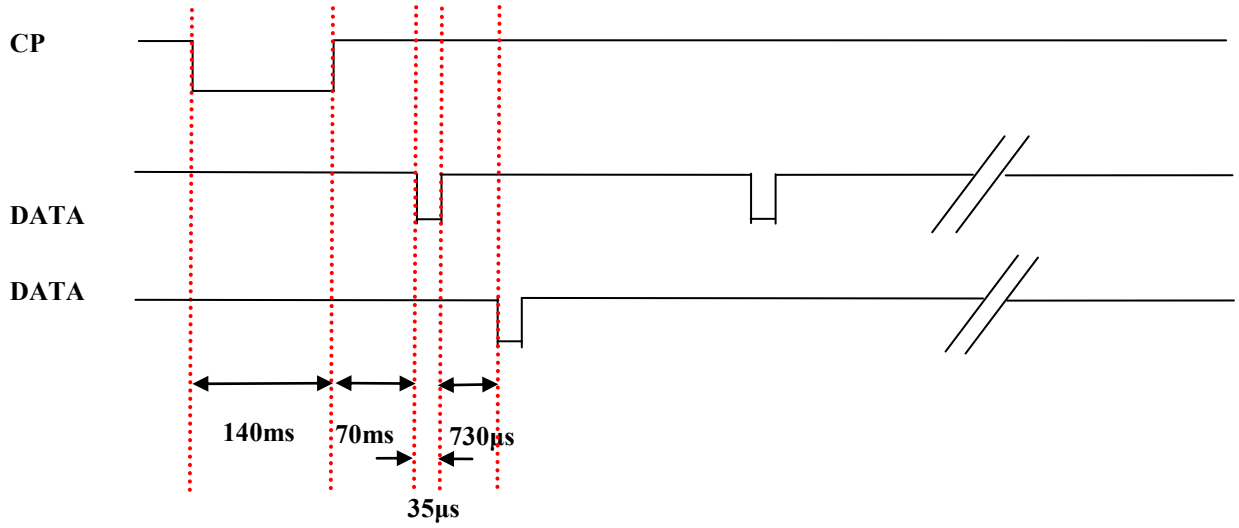
2	CP	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Low Pulse 140ms
3	DATA1	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Digital data output
4	DATA0	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Digital data output
5	WRITE	I					Low active
6	ASCII/WIEGAND	I					HI:ASCII DEFAULT:Wiegand26
7	GLED	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	High active
8	RLED	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Low active
9	VCC		Vcc	3.5V-	5V	5.25V	VCC
10	GND						Ground

V. WEIGEN CODE：

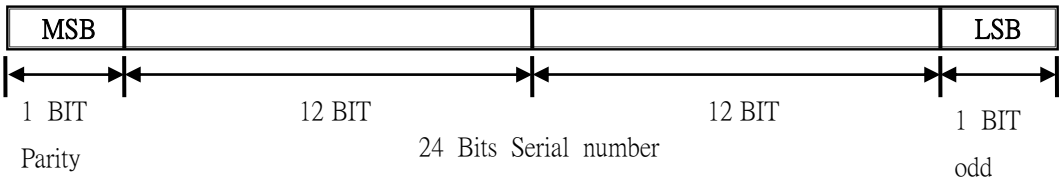
When CARDS came in, CP sends about 140 ms LOW PULSE.

When CARDS came in, CP delivering the signal about 70 ms firstly, and then send D0 & D1 signals.

1. Time sequence chat



2. Output format of data



※ MSB sent first.

※ 12Bits of MSB is even parity; 12Bit of LSB is odd. parity

VI. RS232(ASCII)：

1. Output format

a.9600bps，N，8，2

b.PIN5：TX　through from non-negative direction

c.PIN6：TX through negative-direction.

d. CHECKSUM：Make all of 10 bytes DATA do XOR calculate.

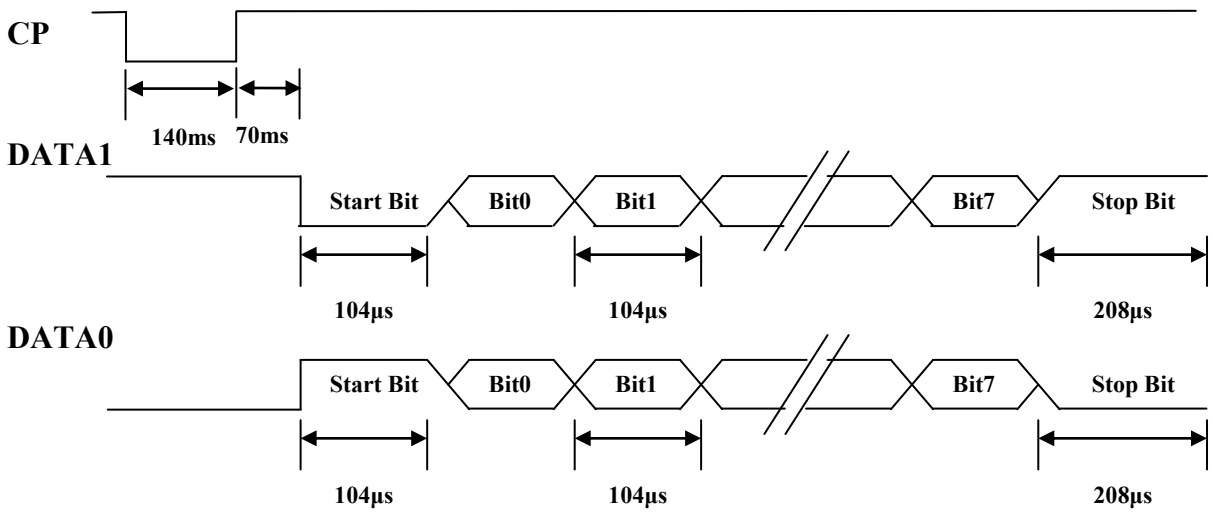
02	10 ASCII Data Characters	Checksum	03

Example：ID Number: 62E3086CED

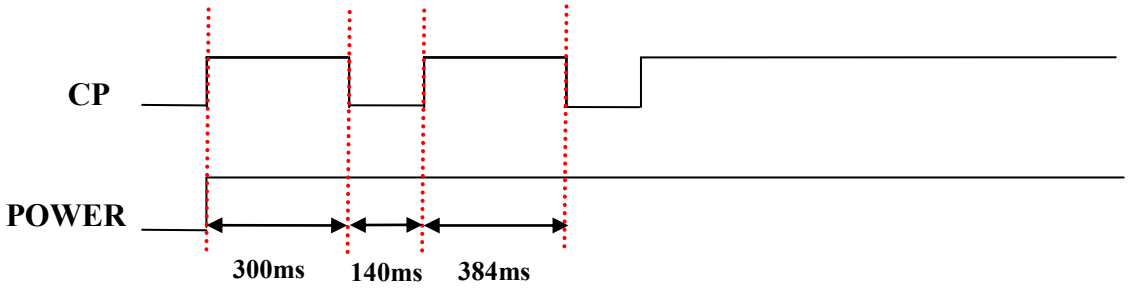
Output data：36H、32H、45H、33H、30H、38H、36H、43H、45H、44H

Checksum：(62H) XOR (E3H) XOR (08H) XOR (6CH) XOR (EDH)=08H

3. Time sequence chat



VII. Reference :



VIII. LED:

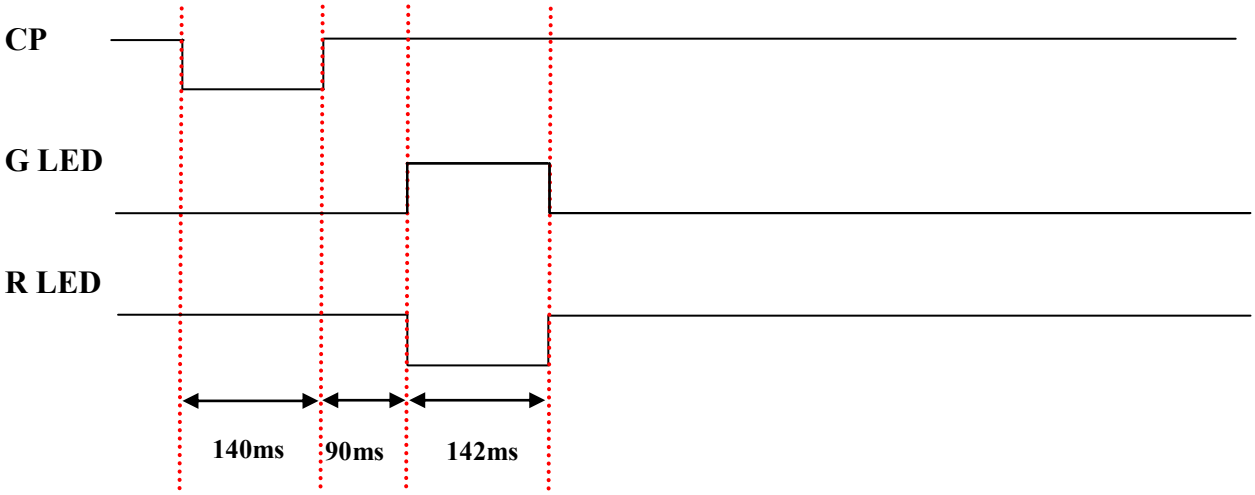
1. Material output format

a. **When CARDS came in, CP delivering the signal about 90 ms first, and then began to**

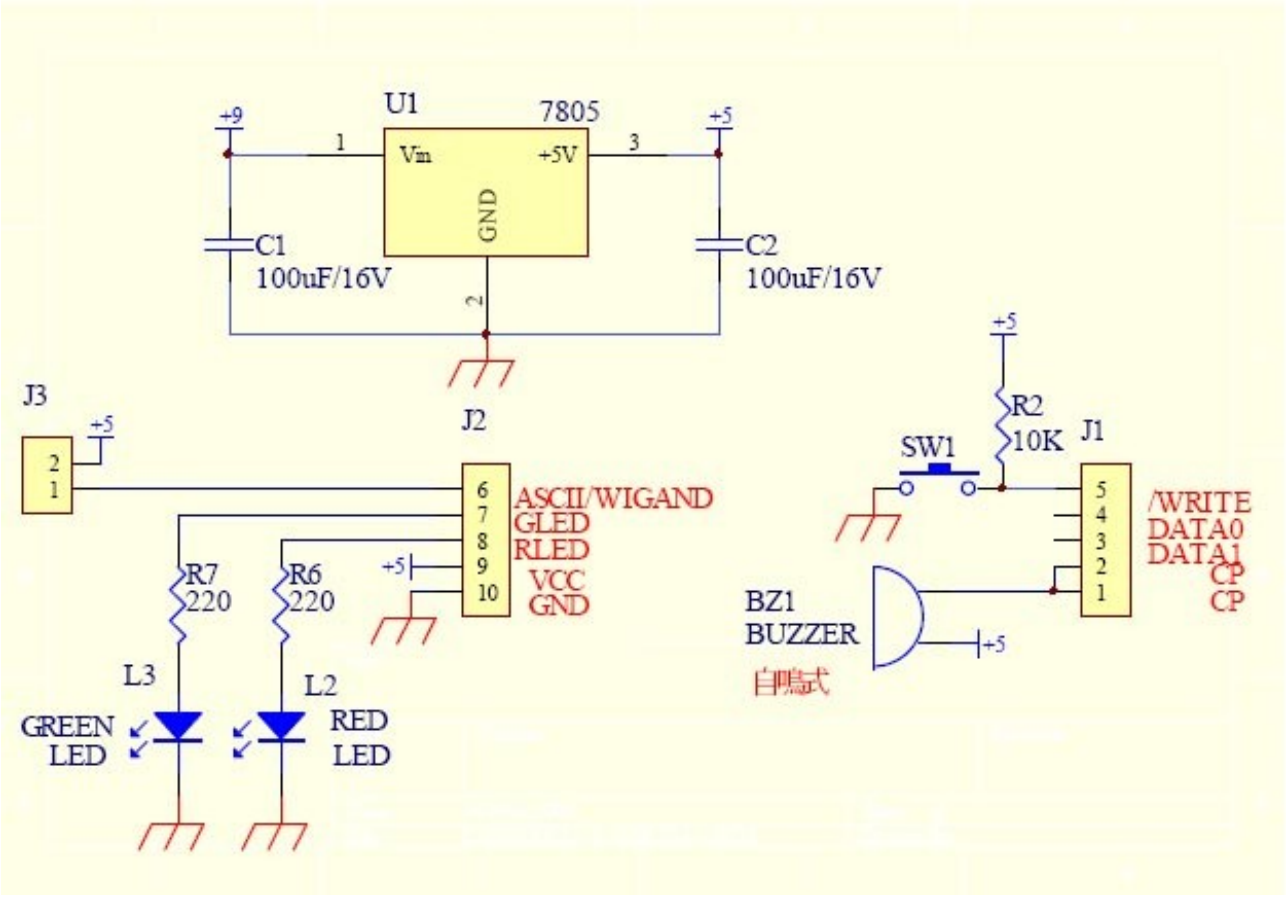
send G LED signals (Normally is LOW)HI PULSE about 142ms

b. **When CARDS came in, CP delivering the signal about 90 ms first, and then began to send R LED signals** (Normally is HI)LOW PULSE about 142ms

2. Timing diagram



IX. Reference application route map:



PS: Please pay attention to WRITE PIN wave form when use TEMIC Card.

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