7941ELow frequency embedded card reader module

User Manual

Revision 1.00

statement:

- The products described in this manual may change due to continuous improvement and upgrading. Needed

  To learn about the latest product feature changes, please contact us to obtain the latest version.

- Although this product has adopted industrial-grade design and undergone rigorous testing. we are reliable

  Sexual confidence. However, we do not recommend this device to be used in the following places

  Equipment failure may threaten human life and safety

  Equipment failure may seriously damage the environment

  Equipment failure may cause significant losses

  If it must be used in this type of environment, please contact us for a safety assessment and add other measures to ensure

Prove it works reliably

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introduce:

7941ECard reading module, which integrates high-performance card reading RF circuit and antenna, optionalwiegandor Uart. Rich application support. Supports a variety of card reading and writing operations.

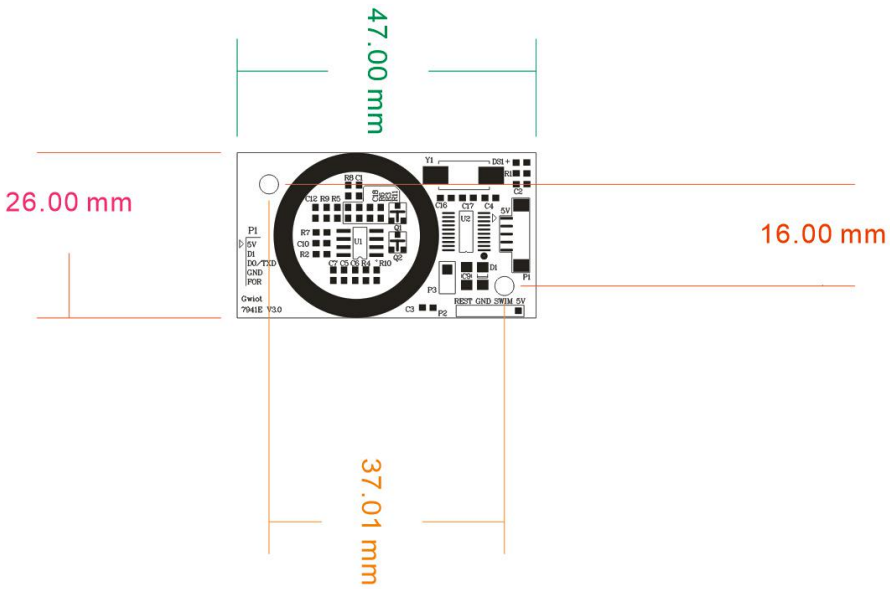
feature:

- Voltage DC 5V
- current 40mA
- support125kHzCard reading and writing
- interface wiegand (customizableTTL),UART
- Small size 47mm(long)*26mm(Width)*5mm(Thick) (Including antenna) Easy to embed
- Industrial grade products - 20Degree to70It can work normally in any environment
- EM4100Card reading distance>8cm

use:

- Attendance fingerprint card reading module
- Access control intercom card reading module

picture:



Interface Description:

5v D1 D0/TXD GND FOR

power supply	DC 5VPower supply, choose linear power supply to get better card reading effect
D1 D0	wieganddata outputDATA1,DATA0 UartThis pin of the
D0/TXD	module is the serial port data output terminal.
FOR	W26/34Format selection (left empty to indicateW26, grounding meansW34)

WiegandInterface output introduction:

- When a card is sensed, the card's serial number will passData0andData1These two data lines are output.
- Data0andData1 In the case of no data output, they are all high level.
- data bits0 existData0The line generates a width of400uslow level.
- data bits1 existData1The line generates a width of400uslow level.
- The length of each bit of data is2400us
- eachMifareThere are a bunch of cards4byte sequence number, we output the last three bytes.
- prepend12Even parity bit, followed by12Odd parity bits, total26bit data. The card number is:
- 6B 3D 12 D6
- The output data is: 3D 12 D6

Weigand 26coding:

0	00111101	00010010	11010110	1
even parity	3D	12	D6	Odd parity

Weigand 34coding:

0	01101011	00111101	00010010	11010110	0
even parity	6B	3D	12	D6	Odd parity

UartInterface output introduction:

Data header	length	Card type	Card number data	BCCcheck	end of data
0x02	0x09	0x01	SN0~SN3	(Except data header and tail Other data besides XOR operation)	0x03

The card types include:

0x02 EM4100
0x01 MIFARE 1K
0x03 MIFARE 4K
0x10 HIDCard
0x11 T5567
0x20 Second generation certificate
0x21 ISO14443B
0x22 FELICA
0x30 15693Label
0x50 CPUCard
0x51 sector information
0xFF keyboard data

For example: the data received by the serial port tool is02 0A 02 2E 00 B6 D7 B5 F2 03then the first byte0x02Indicates the start of data.
second byte0x0AIndicates that the length of the entire data is10bytes, including the start of data and the end of data. third byte0x02Indicates that the card type isEM4100. The fourth byte to the eighth byte (0x2E 0x00 0xB6 0xD7 0xB5)this5Bytes represent the read card number, of which the fourth byte0x2ETo hide the card number. Ninth byte0xF2Represents the second byte to the eighth byteBCCcheck. tenth byte0x03Indicates the end of data.

Precautions

1, Stay away from interference sources. Strong interference signals may affect card reading.

2, Choosing a linear power supply can significantly improve the card reading distance and effect, while the switching power supply has a certain attenuation of the card reading distance. But it does not affect normal and stable work

3, this module3~5VThe range works fine, remember not to use higher voltages

4, the module itself will occur125KhzSignals may cause some interference to analog circuits. The module should be placed at a certain distance from the buzzer. If the distance is too close, the buzzer will sound less.

Product Categories

7941E-X

- WG — WIEGANDFormat output multi-protocol module
- UART — Serial command multi-protocol module
- 7941E — 125KEmbedded card reader module

Service and Contact

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