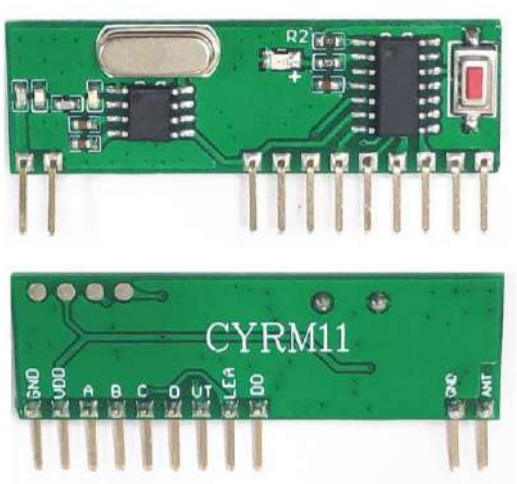
Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CYRM11-XXX

Description:

CYRM11 is an ISM frequency band high quality super heterodyne decoding wireless data transfer receiving module. This module adapts UHF wireless communication technology and low noise large scale integrated circuit, so it has a perfect antistatic protection, high reliability and very competitive in terms of pricing and performance. It can be used in a large number of applications such as remote control garage doors, extendable doors, brake, industrial control, communications, security, home automation, GSM/GPS on-board system and etc fields. The receiving system is an ideal choice for high demand system with a complex environment demand system with a complex environment.



Features:

- Frequency: 315MHz/433.92MHz;
- High sensitivity -110dBm;
- Supply voltage: VCC= 2.6 to 5.5 V;
- 4 Channel output, self setting for Latches and Temporary Storage Mode;
- Support PT2262 (Fixed Code), EV1527 (Learning Code), HCS301 (Rolling Code);
- Support to decode ten encoders at most. When the encoder learning overflow (i.e. more than ten encoder), decoder will start automatically covered and scrapped the encoder that has been studied at the earliest.
- Low power consumption: 5.0V/5mA@433.92MHz, 5.0V/ 4mA/ 315MHz;
- Good selectivity and stray radiation inhibition ability;

- Temperature range -20℃ ~ 70℃;

Application

- Remote gate controls, Brake
- Remote keyless entry (RKE)
- Wireless control Curtain device
- Wireless security systems
- Wireless Industrial Control
- Wireless parking lot barrier

Pin Description

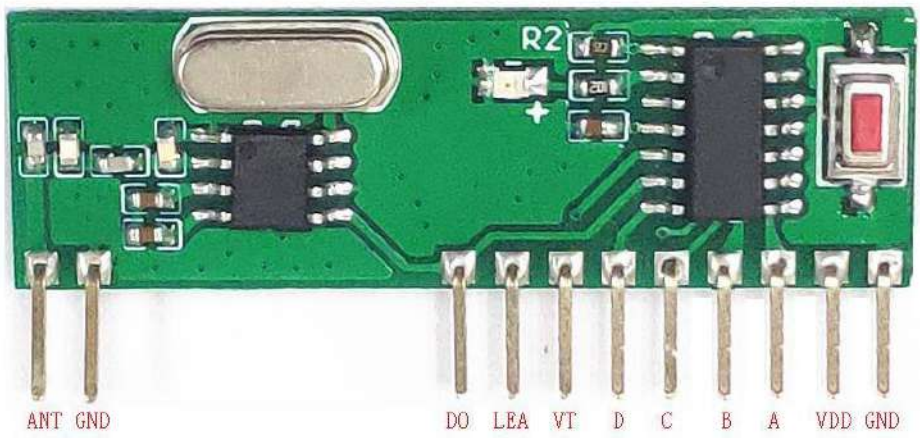


Figure1 CYRM11 Shape & Pins

Pin-out as showed in figure 1 above

Pin	Pin Name	Pin Definition
1	**ANT**	Antenna In
2	**GND**	Ground
3	**DO**	Wireless data testing port
4	**LEA**	Connecting port to learning key. Connect a key to Ground as a learning key.

5	**VT**	Remote Signal Indication. It will flash when received remote signal
6	**D**	D Channel output, self setting for latches and temporary storage mode
7	**C**	C Channel output, self setting for latches and temporary storage mode
8	**B**	B Channel output, self setting for latches and temporary storage mode
9	**A**	A Channel output, self setting for latches and temporary storage mode
10	**VDD**	Positive Power Supply
11	**GND**	Ground

Electrical Characteristics:

Condition: Ta=25℃ Vcc=5.0V Frequency=315MHz

Parameter	**Specification**			**Unit**	**Condition**
	Min	**Typ.**	**Max**		
Carrier Frequency	314.90	315	315.10	MHz	
Modulation		ASK			
Sensitivity		-110		dBm	50 Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Working Voltage	2.6	5	5.5	V	
Working Current		4		mA	
Working Temperature	-20		70	℃	

Condition: Ta=25℃ Vcc=5.0V Frequency=433.92MHz

Parameter	**Specification**			**Unit**	**Condition**
	Min	**Typ.**	**Max**		
Carrier Frequency	433.82	433.92	434.02	MHz	
Modulation		ASK			
Sensitivity		-110		dBm	50 Ohm antenna input directly/1K Kbps

Receiving Bandwidth		200		KHz	
Working Voltage	2.6	5	5.5	V	
Working Current		5		mA	
Working Temperature	-20		70	℃	

How to work with remote

(1) Code pairing and code clearing operations

The CYRM11 receiving module can only work with remote control after learning the code. Press the learning button and release it, learning indicator lights up, then press any button on the remote control. After learning indicator flashes three times and goes out, the process of learning is completed, and the remote control can control CYRM11 module.

If there is no remote control pressed within 10 seconds, the learning light will be off automatically, which means the learning process is exited.

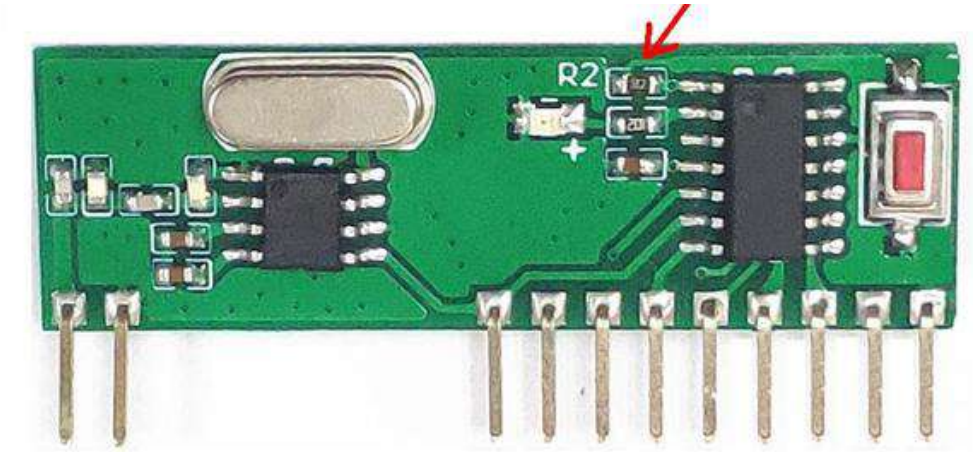
Long press the learning button for 8 seconds, learning indicator lights up. It will flash for three times then off after 8 seconds. Succeed to clear code.

(2) Latch and Temporary mode setting

Latch mode: Press the button on the remote control, CYRM11 will output high level. Release the button, the output port maintains high level.

Temporary mode: Press the remote control button, CYRM11 will output high level. Release the button, it will output low level instead.

How to set latches mode and temporary mode



---Soldering R2 resistor is latch mode (default setting)

---Remove R2 resistor is Temporary Mode (Please inform us if you want temporary mode)

Mechanical Size: (Unit: MM)

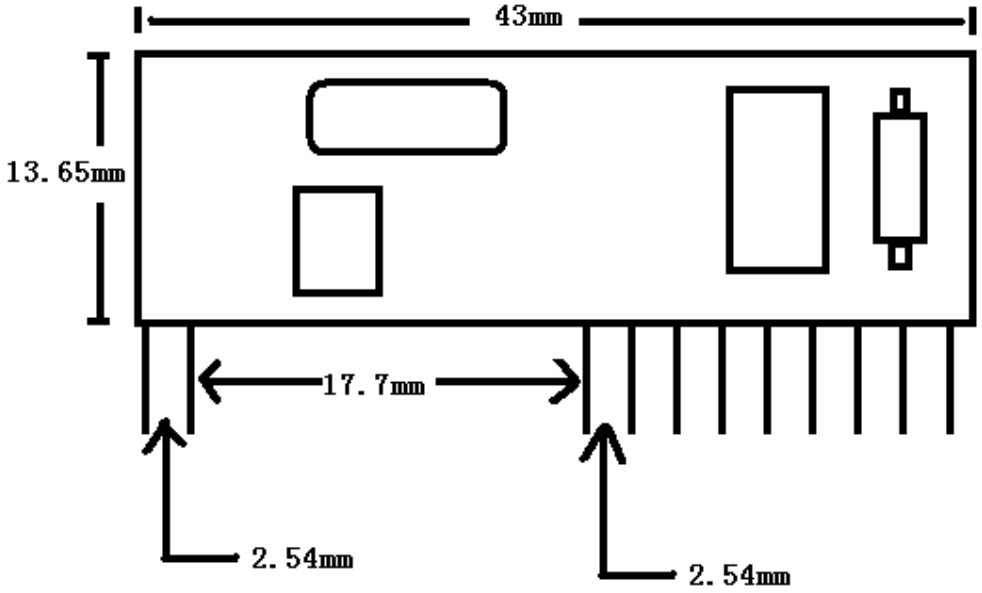


Figure2 CYRM11 Dimension

For more information and assistance, please contact us as follows:

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