

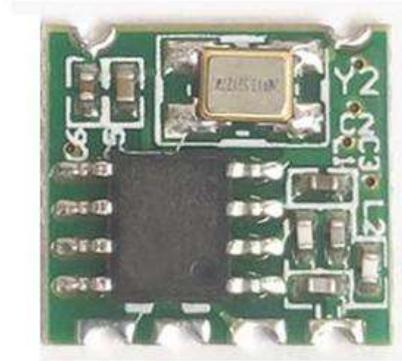


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY41-V2.1

Description:

The CY41-V2.1 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of RF wireless data transferring/receiver chipset, the module has advantages at high receiving sensitivity, small size and low cost. It solves the problem on space for the small-sized product. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development.



Order Information:

Model NO.	Frequency
CY41-V2.1-315	315 MHz
CY41-V2.1-433	433.92 MHz

Features:

- Frequency: 315MHz/433.92MHz (custom frequency is available);
- High sensitivity -110dBm;
- Supply voltage: 3.6V – 5.5V;
- Low power consumption: 5V @ 315MHz, 4.8mA; 5V @ 433.92MHz, 6.8mA;
- Data Rate: 2.4Kbps (Manchester Code);
- Consumption on energy saving mode: min. 50nA;
- Operating temperature: -20°C ~ 70°C, work normally even in the severe temperature environment;
- Good selectivity and stray radiation suppression ability, easy to pass the CE/FCC international certification;
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Dimension: 10.7*10.6*2.1mm

Application

- Car remote control door switch (RKE);
- Remote control door opener;
- Wireless security alarm;
- Wireless door bell;
- Wireless Controller;
- Wireless data transmission;

Pin Description

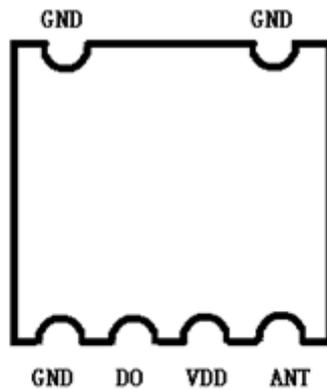


Figure1 CY41-V2.1 Shape & Pins

Pin-out as showed in figure 1 above

Pin	Pin Name	Pin Definition
1	GND	Ground
2	DO	Data Output
3	VDD	Connect to positive power supply
4	ANT	Antenna

Note 1: ANT pin is a 50 ohm antenna input. The length is about:

23cm for 315MHz

17cm for 433.92MHz

**Electrical Characteristics:**

Condition: Ta=25°C Vcc=5V Frequency=315MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	314.9	315	315.1	MHz	
Modulation	ASK				
RF Sensitivity		-110		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Start-up Time			5	ms	
Supply Voltage, VDD	3.6	5.0	5.5	V	
Current	4.6	4.8	5.0	mA	
Decoding output max. voltage	3.3		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

Condition: Ta=25°C Vcc=5V Frequency=433.92MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	
Modulation	ASK				
RF Sensitivity		-110		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Start-up Time			5	ms	
Supply Voltage, VDD	3.6	5.0	5.5	V	
Current	6.5	6.8	7.0	mA	
Decoding output max. voltage	3.5		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

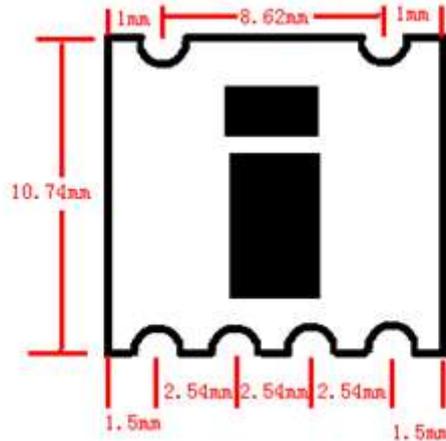
**Mechanical Size: (Unit: MM)**

Figure2 CY41-V2.1 Dimension

Precaution

The driving current of the data output pin of CY41-V2.1 module is relatively weak. If the MCU is driven directly, the I / O port of the microcontroller cannot be connected to a pull-up or pull-down resistor, and the internal pull-up or pull-down resistor of the microcontroller must also be set in a disabled state.

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

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