

### 2.4G wireless transceiver module RF2401

### 1. Description:

RF2401 is a FSK wireless transceiver working in 2.4GHz ISM band. Compared to the 2.4GHz module/chip, the low consumption, high sensitivity, high power output, long distance communication is most attractive. This module adopts the wireless chip which is designed by one of the top Euro RF company. All the features of low cost, small size and stability, 10dBm output power, 7mA @receive mode and -115dBm sensitivity are much better than the existing 2.4G RF module in the market. It can be widely used in many fields. It complies with the FCC and ETSI certification.



#### 2. Feature:

- Frequency arrange: 2400-2483.5 MHz
- Sensitivity up to -115dBm @1.5K
- Output power: -20~10 dBm
- Data rate: 1.5-72 kbps
- FSK modulation
- 1.9-3.6 V power supply
- Low power testing

- Ultra low current shutdown mode current< 10nA</li>
- Low current receiving mode < 8 mA
- Transmitting current: 11 mA @-1dBm
  36 mA @+10 dB
- Working temperature:  $-40 \sim +85 \text{ }^{\circ}\text{C}$
- integrated voltage regulator
- Frequency hopping function



# 3. Application:

Remote control

• Family security alarm and remote keyless entry

• Industry control

• Home automation remote sensing

Personal data record

• Toy control

Sensor network

• Tire Pressure Monitoring

• Health monitoring

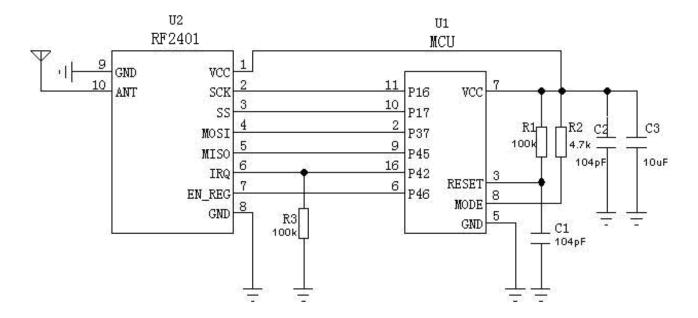
• Tag reader

# 4. Specification:

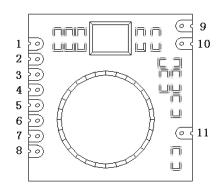
Parameter	MIN	TYP	MAX	Unit	Conditions			
Working Condition								
Working Voltage	1.9	3.3	3.6	V				
Working Temperature	-40		85	$^{\circ}\!\mathbb{C}$				
Current consumption								
Receiving current		7		mA				
Transmitting current		36		mA	@10dBm			
Standby current		< 0.1		uA				
RF parameters								
Frequency range	2400		2483.5	MHZ				
Modulation rate	1.5		72	Kbps	FSK			
RF power rang	-20		10	dBm				
Receiving sensitivity		-115		dBm	@data=1.2kbps			



#### 5. Schematic:



#### 6. Pinout:



Pin NO.	Pin name	I/O	Description
1	VCC		Connect VCC
2	SCK	I	SPI clock input,
3	SS	I	Serial interface select input pin.
4	MOSI	I	Data input for SPI interface
5	MISO	О	Data output for SPI interface t
6	IRQ	O	External interrupt output
7	EN_REG		Master control chip enable signal
8	GND		Connect GND
9	GND		Antenna negative
10	ANT		Connect 50ohm coaxial antenna
11	NC		NC

For detailed datasheet and programming code please contact the related



# sales engineer.

### 7. Machanism Dimension:

