RF-1101S Datasheet



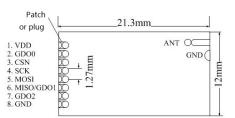
• Introduce

RF-1101S is our latest 433MHz wireless communication module. Currently, it has a stable mass production. It is suitable for a variety of scenarios. The main chip of RF-1101S is CC1101, and it is imported from TI. The resistance and the capacitance are made of imported materials, especially crystals, we use a wide temperature range with high precision crystal, in order to ensure its industrial characteristic.

Parametric Description

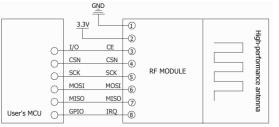
| Num | Parametric Name | Detailed Description | |
|-----|-------------------------|---------------------------------------------------------------------------------------------|------------------------------------------|
| 1 | Main chip | CC1101, from Norway | |
| 2 | Module size | 12* 21.3mm | |
| 3 | Interface | 1*8*1.27mm, you can use the universal plate and DuPont line | |
| 4 | Supply voltage | 1.9-3.6V DC | |
| 5 | Communication voltage | 0.7VDD-5.2VDC, VDD is the supply voltage of module | |
| 6 | Measured distance | 370m@250K | 21.3mm |
| 7 | Maximum power | 10dbm | |
| 8 | Air Rate | 1.2K-500K. Due to the physical properties of the band 433M, Recommended no more than 20Kbps | |
| 9 | Shutdown Current | About 0.6uA. | 12mm 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| 10 | Power Level | Multi-adjustable | CO7-111018 |
| 11 | Transmitting current | About 29.2mA@433MHz | |
| 12 | Receiving current | About 16mA | M/N: RF-1101S |
| 13 | Antenna | Spring antenna | |
| 14 | Communication Interface | Standard SPI Mode 0, the maximum rate is 10Mbps | |
| 15 | Transmitting length | Single data packet is 1-64 bytes | |
| 16 | Receiving length | Single data packet is 1-64 bytes | |
| 17 | RSSI Support | Support | |
| 18 | Reception sensitivity | -117dbm@1.2Kbps | |
| 19 | Work temperature | -30 - +85 ℃ | |
| 20 | Work humidity | Relative humidity :10% - 90% | |
| 21 | Storage temperature | -40 - +125℃ | |
| 22 | Working frequency | 387MHz – 464MHZ | |

• Module pins and dimensions



| Pin Num | Pin Name | Pin Direction | Application |
|---------|----------|---------------|----------------------------------------------------|
| 1 | GND | | Ground |
| 2 | VCC | | Power provide, must be between 1.9 to 3.6(Unit: V) |
| 3 | CE | Input | Control pin |
| 4 | CSN | Input | Chip select pin, for starting an SPI communication |
| 5 | SCK | Input | SPI bus clock |
| 6 | MOSI | Input | Digital input pin |
| 7 | MISO | Output | Digital output pin |
| 8 | GDO2 | Output | Module information output pin |

SCM Connection



Connection description:

GDO2 and GDO0 can be used to output module status information. More configuration details , please read the CC1101 manual.

• Notice:

- 1. Avoid body touch the electronic components.
- 2. Please ensure that the power supply has a smaller ripple , and must avoid frequent significant jitter.
- 3. Antenna mounting structure has a greater impact on module performance , please ensure the antenna exposed.
- 4. Avoid harmonic interference from other wireless devices bands
- 5. Please make the RF module stay away from the crystal.

• Contact us

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