

## HR-1100 RF Module Manual



### ORIENTAL HUARAY GROUP LIMITED

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Tel: 86 755 81782516      Cell phone: 86 15813856667      Fax: 86 755 81782518  
Address: Huaxia Industrial park, Jingbei, Shiyan, BaoAn district, Shenzhen, China      Postal code:  
518108  
Website: [www.ohgrf.com](http://www.ohgrf.com)      E-mail: [sales@ohgrf.com](mailto:sales@ohgrf.com) or [jet.zhang8@gmail.com](mailto:jet.zhang8@gmail.com)

HR-1100 Module is a RF module with your microcomputer control lines, you can make it work as you want. The module does not take with microcomputer itself, it only offer operation interface for you.

### IC: CC1100 Single Chip Low Cost Low Power RF-Transceiver

#### Applications:

Ultra low power UHF wireless transceivers  
315/433/868 and 915MHz ISM/SRD band

systems

AMR – Automatic Meter Reading  
 Consumer Electronics  
 RKE – Two-way Remote Keyless Entry  
 Low power telemetry  
 Home and building automation  
 Wireless alarm and security systems  
 Industrial monitoring and control  
 Wireless sensor networks

## The specification as the following show:

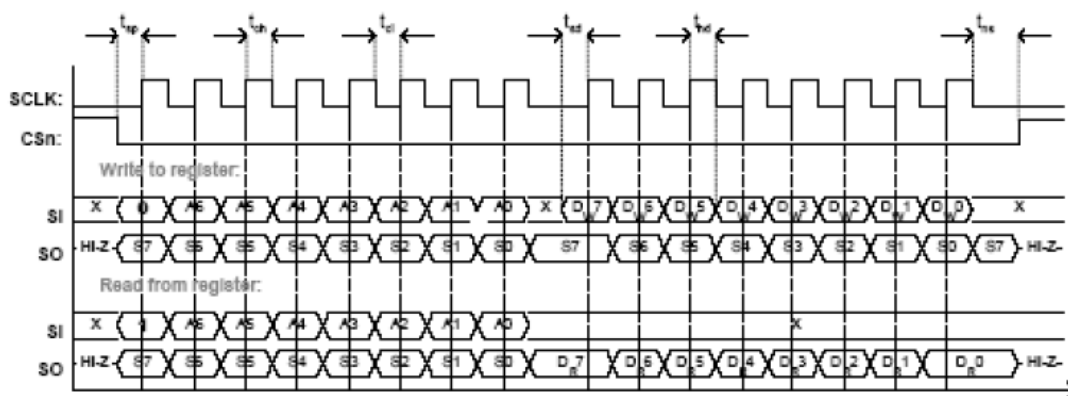
### I 、 Pin Assignment

Pin	Pin Name	Description
1	VCC	Power supply
2	VCC	Power supply
3	GND	Ground
4	GND	Ground
5	SI	Serial configuration interface, data input. (The detailed function showed in the CC1100 Datasheet)
6	SCLK	Serial configuration interface, data input. (The detailed function showed in the CC1100 Datasheet)
7	SO	Serial configuration interface interface, data output. Optional general output pin when CSn is high
8	GDO2	Digital output pin for general use (The detailed function showed in the CC1100 Datasheet)
9	GDO0	Digital output pin for general use (The detailed function showed in the CC1100 Datasheet)

#### 1. Power

The work voltage of the module is 2.5V-3.6V, using 2.8V is the best, but if the working voltage is higher than module`s each working port and microcomputer`s I/O port must be linked with resistance in series to separate them. The range of supplying voltage between them should not discrepant too much.(recommending you use the same power supply)

#### 2. The timing for read and write register:



**Configuration registers write and read operations**

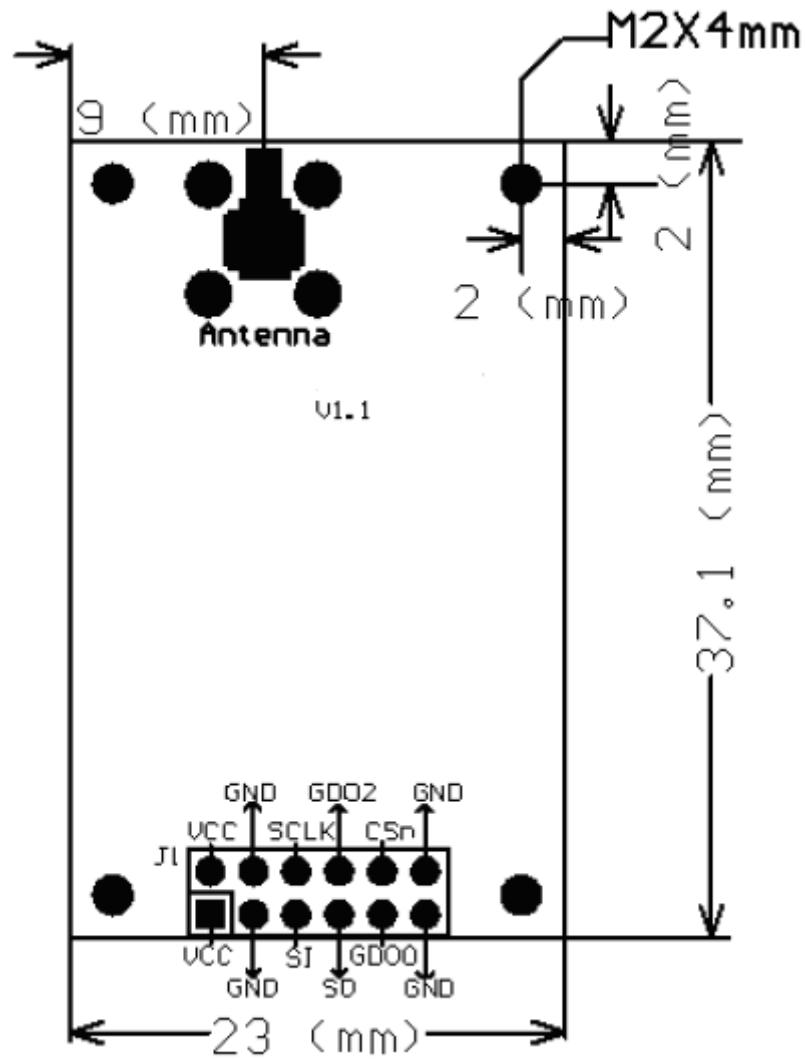
The register starts to work when the state of CSn is low, first you should input read or write command, then you can change the state of the register and read&write register. The way of read&write and address of register consists of single byte read&write, successive read&write or blend to use, we can further decide by register.

**II、Technology Parameter**

Under common temperature the module’s technology parameter as following show:

- Transmit power: >10dbm;
- Receiver sensitivity: <-114dbm(1200bps);
- Phasic noise: <-90dbc/Hz;
- Transmit current: <30±5mA;
- Receive current: <18±5mA;
- Sleeping current: <3uA;

**III、Exterior dimension**



**IV、 Technology support and after service:**

We offer sufficient technology support for free for customers to use the module and second design. We guarantee to keep the broken module in good repair one year for free and offer service forever.