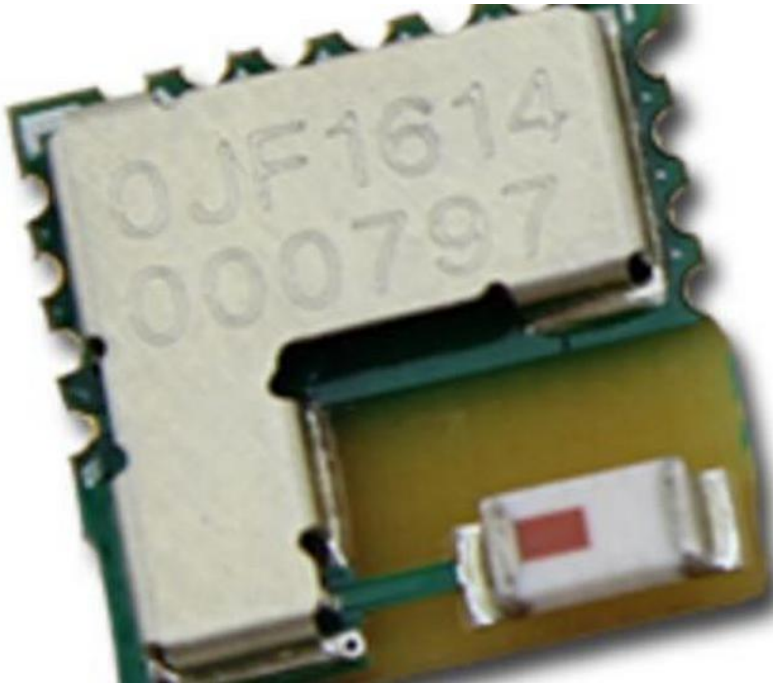
USR-BLE101 Hardware Manual

File version: 1.0.0

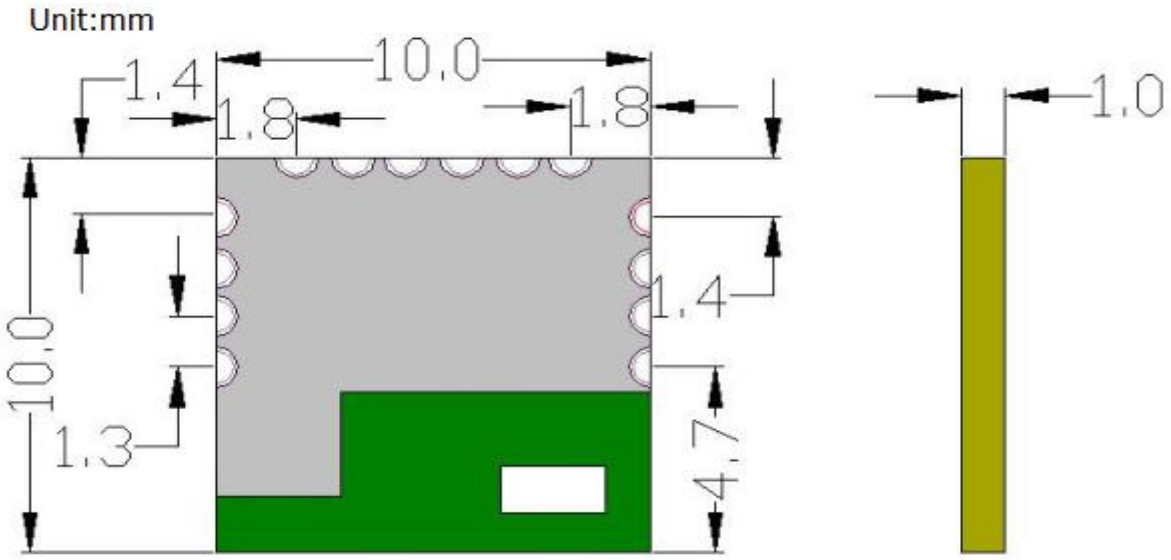


Content

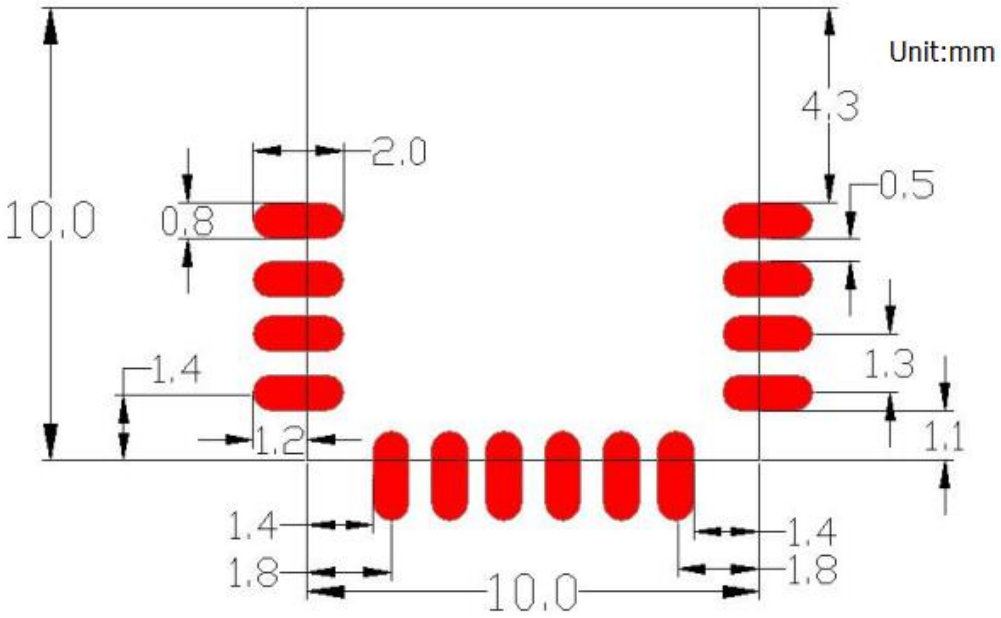
1. Product Overview

1.1. Dimension

Module size: 10*10*1.0mm,error ±0.2mm, pin size as follows:

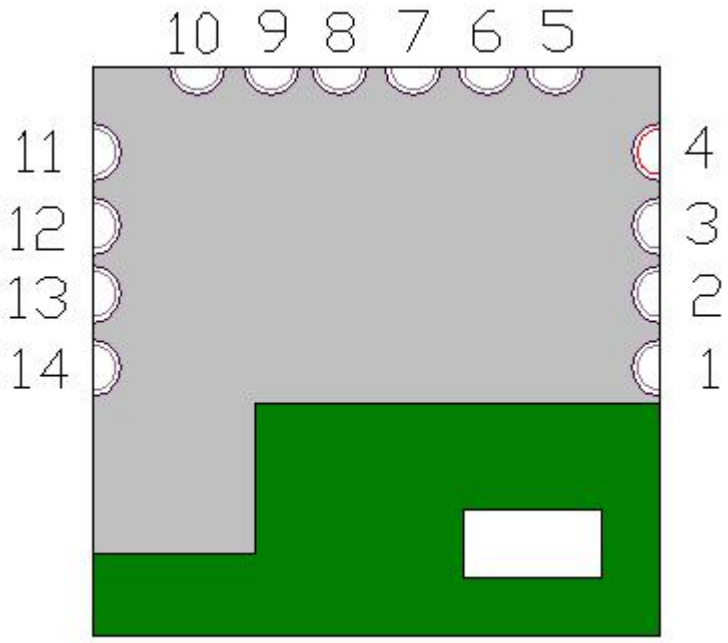


1.2. Encapsulation Size



You can download PCB library from http://www.usriot.com/usr-ble101-library-files/.

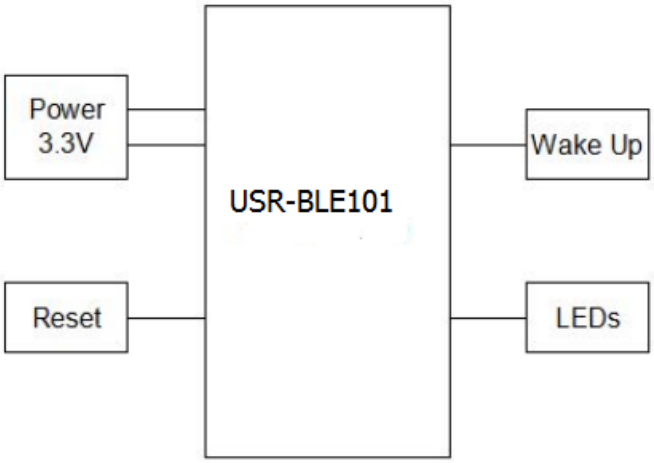
1.3. Pin Defination



PIN	Name	Signal Type	Defination
1	Reload	I	Reload pin to restore factory settings
2	Wake_Up	I	Wake up pin
3	NC	N	Not available
4	AD	O	Battery testing pin
5	NC	N	Not available
6	VCC	P	Range from 1.9v~5.5v digital power
7	SWDCLK	I/O	Clock pin of program debugging
8	SWDIO	I/O	Data pin of program debugging
9	UART_TX	O	UART transmit pin
10	UART_RX	I	UART receive pin
11	LINK	O	Connection status LED pin
12	Reset	I	Module reset pin
13	GND	P	Power Ground
14	VCC	P	Range from 1.9v~5.5v, module power

2. Hardware Design

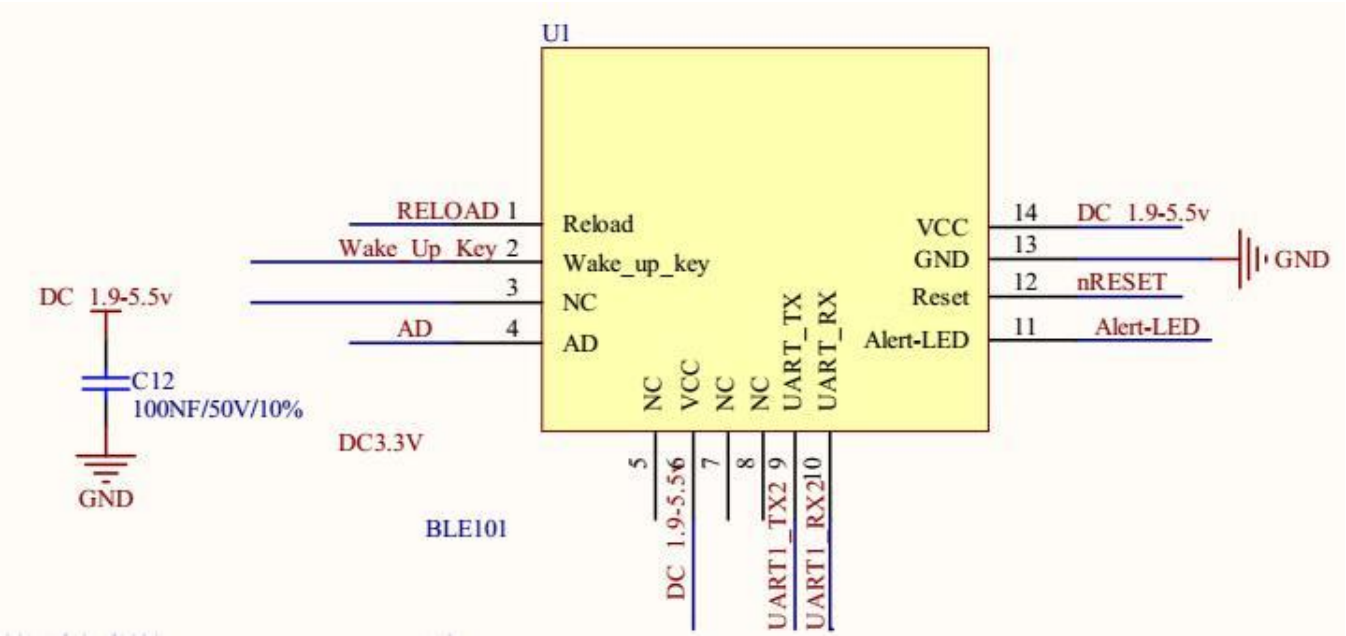
2.1. Typical Connection



2.2. Power Interface

Working voltage VCC range from 1.9V~5.5V, 3.3V is recommended.Power the module by main power pin, pin interface is in parallel with appropriate energy-storage capacitance and high frequency capacitance.

Circuit diagram as follows:



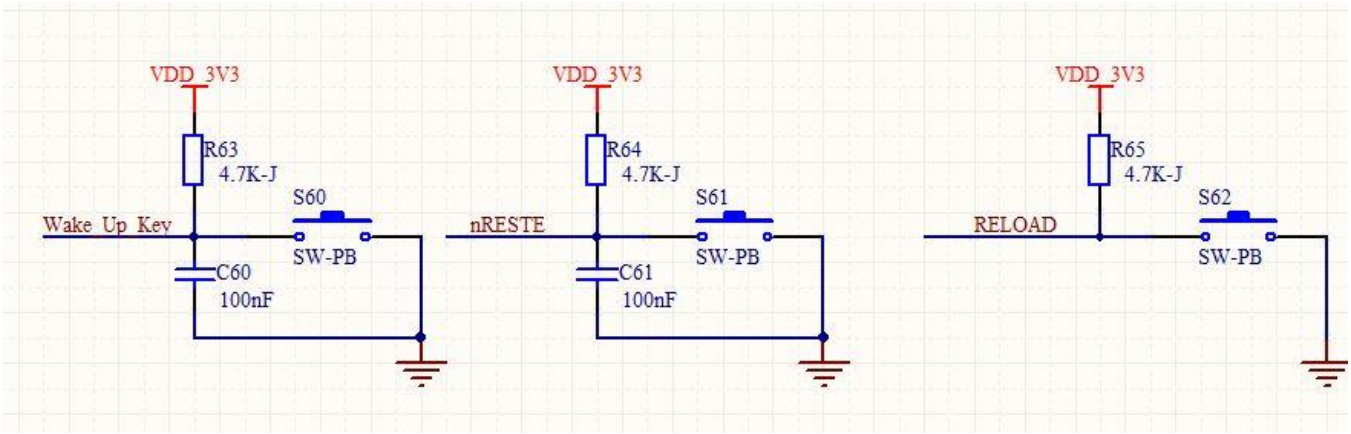
2.3. Reset, Reload and Wake up

nReload:nReload pin can connect to outer button . When press the button, pull down pin to low level, release after 3s, module will restore factory defaults and restart.

nReset: Module reset pin, take affect when low level. There is 10K resistor pull up to 3.3V in module. When module power on or break down, MCU will reset the module, pull down nReset pin as least 0.5s, then release.

Wake_Up Key: Can connect to outer button or setup pin. When press the button to pull down pin to low level,and release after 3s, module will wake up to normal work mode.

Circuit diagram as follows:



3. Contact

Company: Jinan USR IOT Technology Limited
Address: Floor 11, Building No.1, No.1166, Xinluo Street, Gaoxin District, Jinan city, Shandong province, 250101 China
Tel: 86-531-88826739
Web: **www.usriot.com**
Support: **h.usriot.com**
Email: **sales@usr.cn**

4. Disclaimer

This document provide the information of USR-BLE101 products, it hasn't been granted any intellectual property license by forbidding speak or other ways either explicitly or implicitly. Except the duty declared in sales terms and conditions, we don't take any other responsibilities. We don't warrant the products sales and use explicitly or implicitly, including particular purpose merchantability and marketability, the tort liability of any other patent right, copyright, intellectual property right. We may modify specification and description at any time without prior notice.

5. Update History

2017-6-29 V1.0.0 created.