User manual

Sample：WiFi&BLE Module
Model No.：HWB701
Manufacture Company: Shenzhen MOKO Technology Ltd.

Product function：
This product consists of Bluetooth and Wifi modules.Powered by an external PCBA, the supply voltage is DC 3.3V.
This product is used in Slow cooking machine.

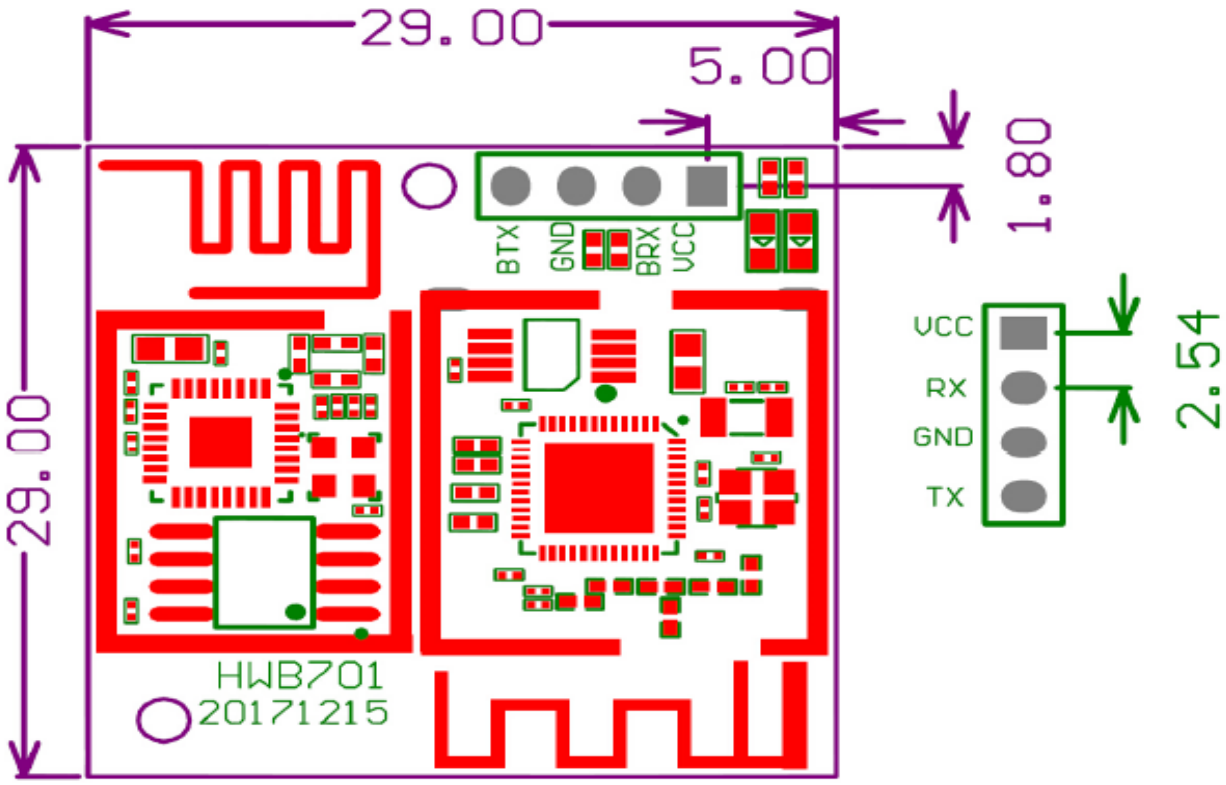
Wifi module:
The maximum power of this WiFi module is 20dbm.
This WLAN device is adapted to 802.11b/g/n/e/i. Operation of each part is based and explained in a module RF Block diagram. The transceiver includes PLL, VCO, LNA, PA, modulator and demodulator. By using the reference signal (26MHz) currently used by the external clock input, stable RF signal and the table baseband clock are generated.
The operating band is 2412-2462MHz for FCC (2.4GHz).
A transmitting part is constituted in the WLAN block of ESP8266EX. The data signal is modulated by CCK / BPSK/QPSK Modulator inside ESP8266EX .

Bluetooth module:
The maximum power of this Bluetooth module is 4dbm.
A transmitting part is constituted in the Bluetooth block of nRF51822.The nRF51 Series 2.4 GHz RF transceiver is designed and optimized to operate in the worldwide ISM frequency band at 2.400 to 2.4835 GHz. Radio modulation modes and configurable packet structure enable interoperability with Bluetooth® low energy (BLE), ANT™, Enhanced ShockBurst™, and other 2.4 GHz protocol implementations.
The transceiver receives and transmits data directly to and from system memory for flexible and efficient packet data management.
The nRF51 Series transceiver has the following features:
• General modulation features
• GFSK modulation
• Data whitening

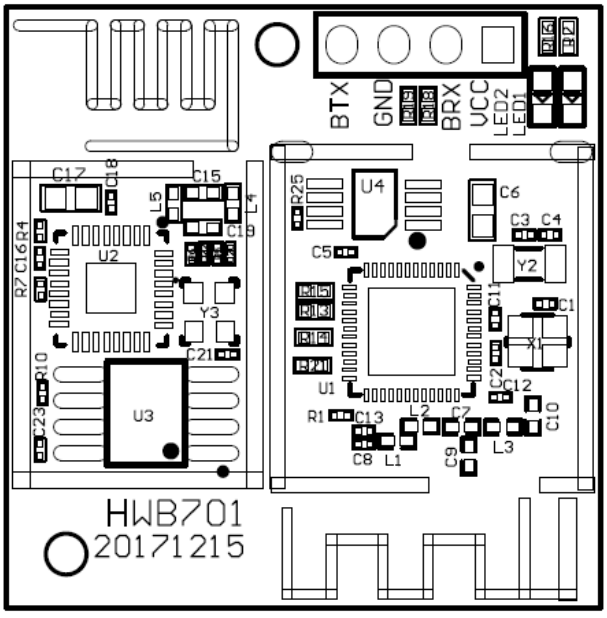
- On-air data rates
- 250 kbps
- 1 Mbps
- 2 Mbps

By using the reference signal (16MHz) currently used by the external clock input, stable RF signal and the table baseband clock are generated.

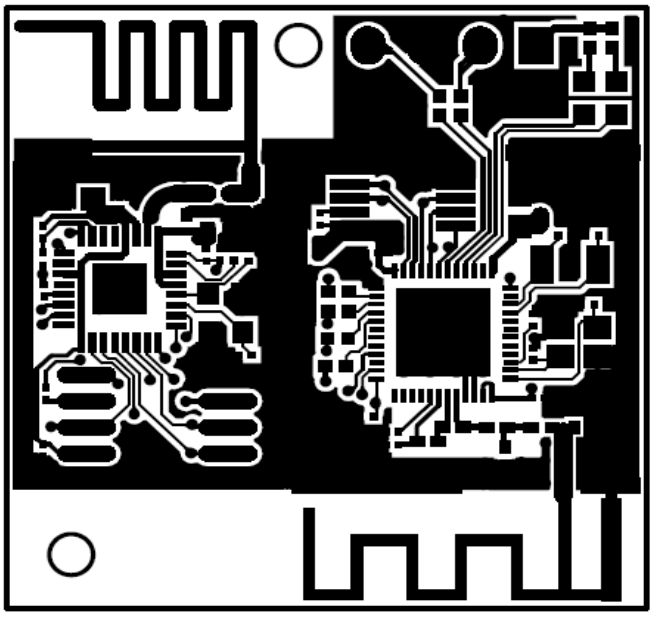
Size



Placement



Layout



FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device .

FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AOPS-HWB701 Or Contains FCC ID: 2AOPS-HWB701"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission and spurious emission according to FCC part 15C : 15.247 and 15.209 requirement, Only if the test result comply with FCC part 15C : 15.247 and 15.209 requirement， then the host can be sold legally.