RAK473/476 Use Guidance

Test the Power Consumption of WiFi Module

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1. Test the power consumption of the module

1.1 Overview

This part introduces how to test the power consumption of WIFI module. (Take RAK473 for example, RAK476 is similar to RAK473)

1.2 Operating instruction

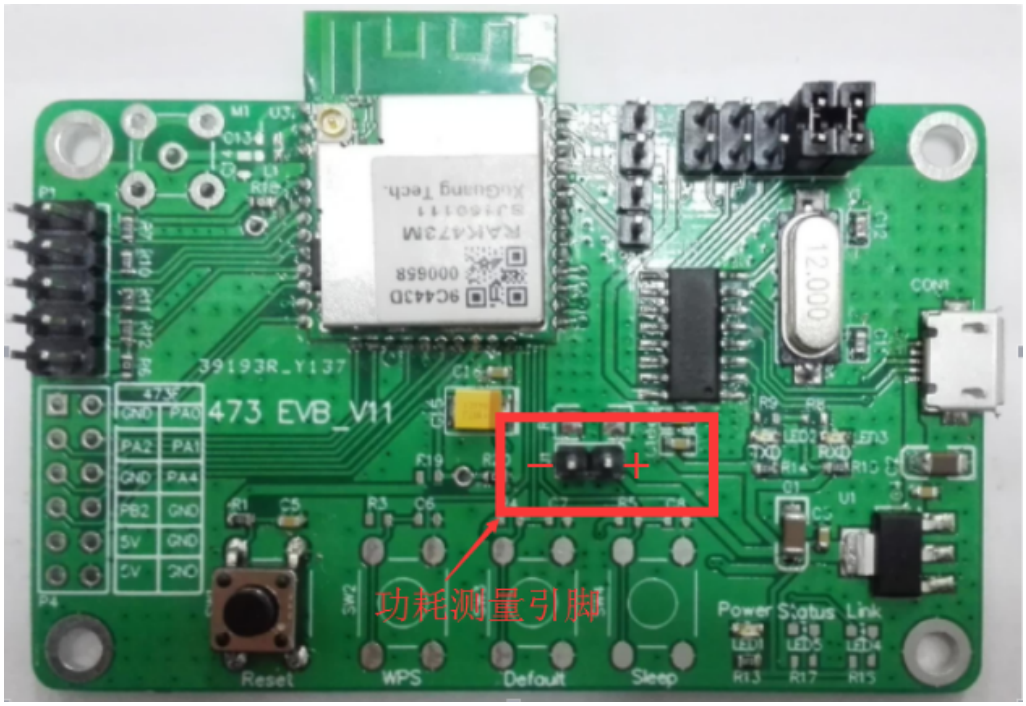
Tips:

1. When sending commands via MCU to control the module, the command is ended with the character "\r\n";
2. When sending commands via the serial port tool to control the module, the command is ended after tapping Enter;
3. In order to look up easily, the information returned by sending commands is shown with ASCII code values. In case of incomplete information display or garbled codes, it may be special characters, Chinese characters and other such kind of information in the returned information, please look up with hexadecimal system.

Please keep in mind the aforementioned, no repeat hereinafter.

1.3 Operating steps

1. In order to be convenient for test, the test borrow WIFI module development pad to carry out test, as shown below. Inside the red box are power consumption measuring pins, connect the multi meter in series connection to the pins.



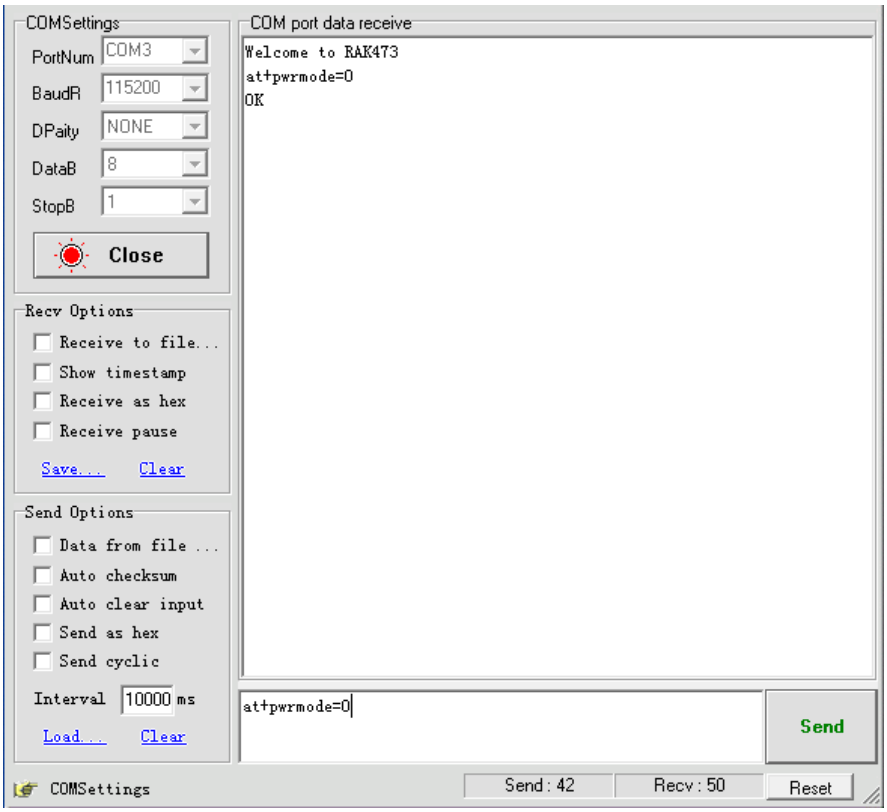
2. Power on the module.

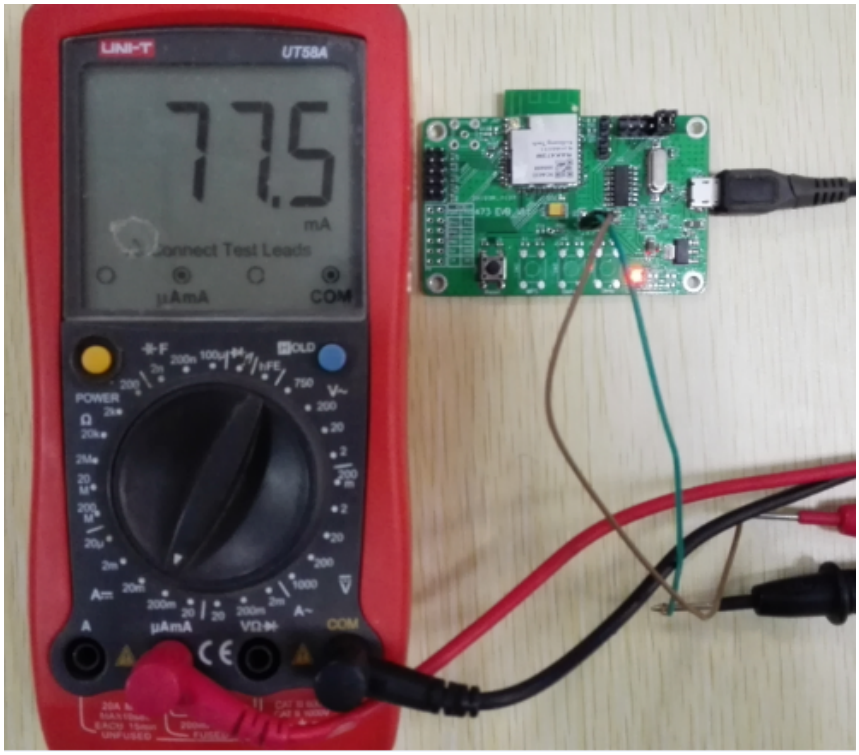
Return：Welcome to RAK473.You can look up the returned information with the hexadecimal system (57 65 6C 63 6F 6D 65 20 74 6F 20 52 41 4B 34 37 33 0D 0A).

3. Set the module to work under power consumption mode 0, under this mode, you will get the test result of about 77mA of the power consumption.

Send: at+pwrmode=0\r\n

Return: OK

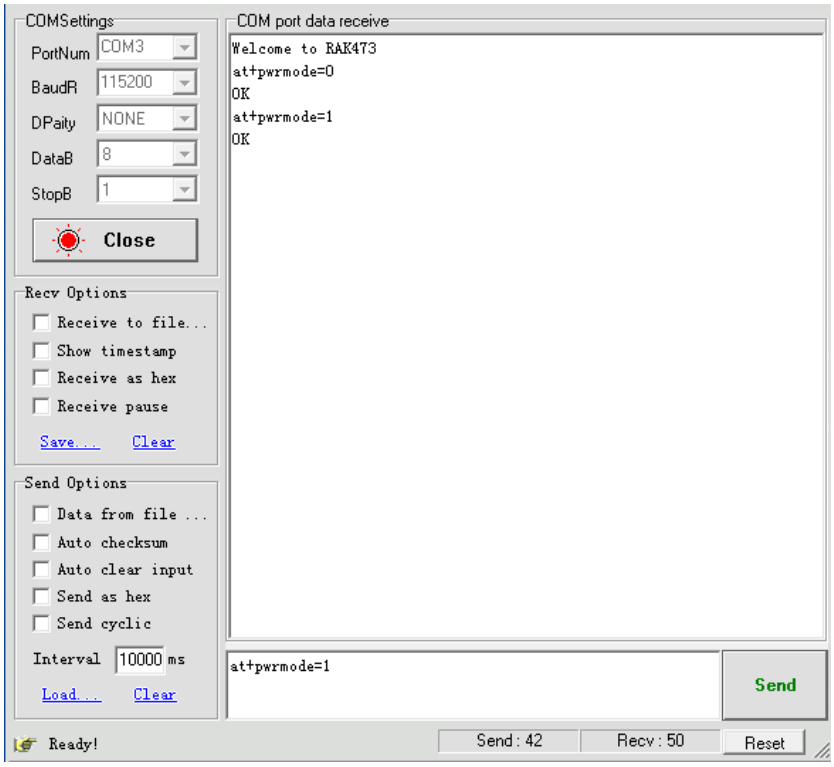




4. Set the module to work under power consumption mode 1, under this mode, you will get the test result of about 35mA of the power consumption.

Send: at+pwrmode=0\r\n

Return: OK



2. Version

Version	Author	Date	Content modification
V1.0	Lianbo Wang	2016/02/02	Create a document
V1.1	Xiaocheng Cao	2016/11/16	Modify some of the details