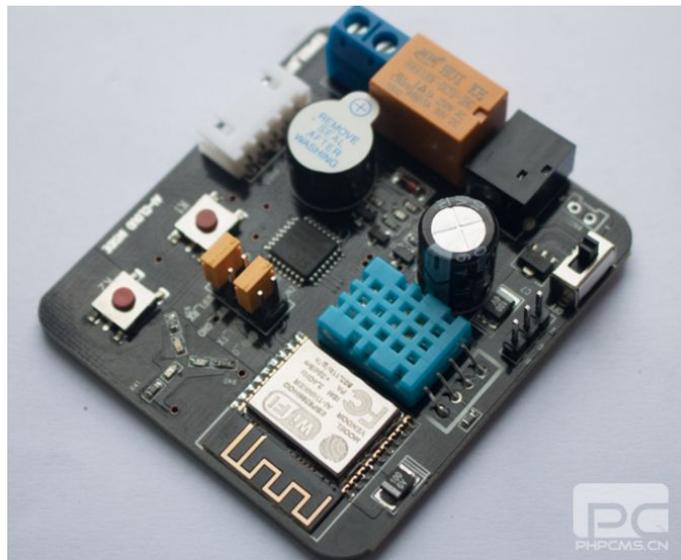# Ai-thinker co.,LTD

T5 Black board Specification

T5 Black board

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1. Product Introduction

Cloud Beta ESP8266 cloud capabilities beta Black board T5 is a based on Lexin ESP8266 of ultra-low power UART-WiFi module, can easily be secondary development, access to cloud services, to achieve mobile phone 3 / 4G Global anytime anywhere control, accelerate product prototyping.

Super-simple things development platform, an open source hardware prototype fast platforms, including firmware and development board, using simple AT commands can be transferred to join the cloud server commands directly send and receive data remotely.

2. Feature:

*Open source, small volume, interactive, programmable, low cost, a key configuration, simple, intelligent, WiFi hardware

*It supports 802.11b / n / g wireless standards;

*MCU platform independent development, high cost;

*Support UART / GPIO data communication interface;

*Support STA / AP / STA + AP coexistence mode;

*Support SmartLink intelligent networking capabilities (provided APP);

*Support wireless upgrade firmware;

*WPS support networked configuration;

*Built onboard antenna;

*Temperature and humidity sensor;

*RGB three-color light adjustable;

*AT command set provides a rich configuration;

*Cloud services are available free of AiCloud debugging;

*3 AA batteries / 5V adapter power supply;

*Dimensions: 61.6mm x 56.2mm

3. Special illustration:

It has GPIO, PWM, I2C, 1-Wire, ADC and other functions, combined with cloud firmware for your prototyping provides the fastest speed Only need to know a few simple AT commands, you can use single-chip network communication, develop fast. It can save a lot of time costs, accelerate product on-line, to get first-mover advantage Protocol code needed to access the cloud, has been included in the module, an instruction to get offers for calls in the SDK API.

4.Test instructions

4.1 .Access 3pcs of batteries.(note sufficient power supply)

4.2. Hold on k2,then repower(below the picture showed)
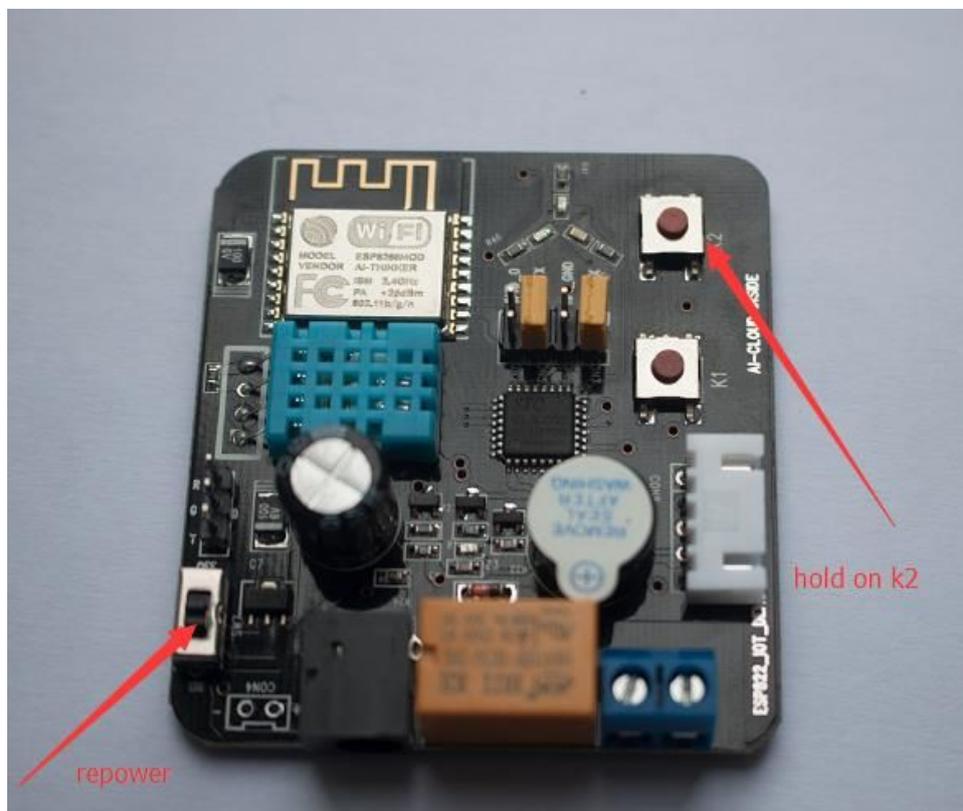
4.3. when repower, you can hear sound, then three colored light will opened, so you can release K2. And heard intermittent sound. Waiting for SmartLink configuration.

4.4 .Open APP(Mobile WiFi must connect Router),below the picture showed

Then open the Smarthome APP, click on "SmartLink" enter your Password: is the current router Password, then click Confirm .
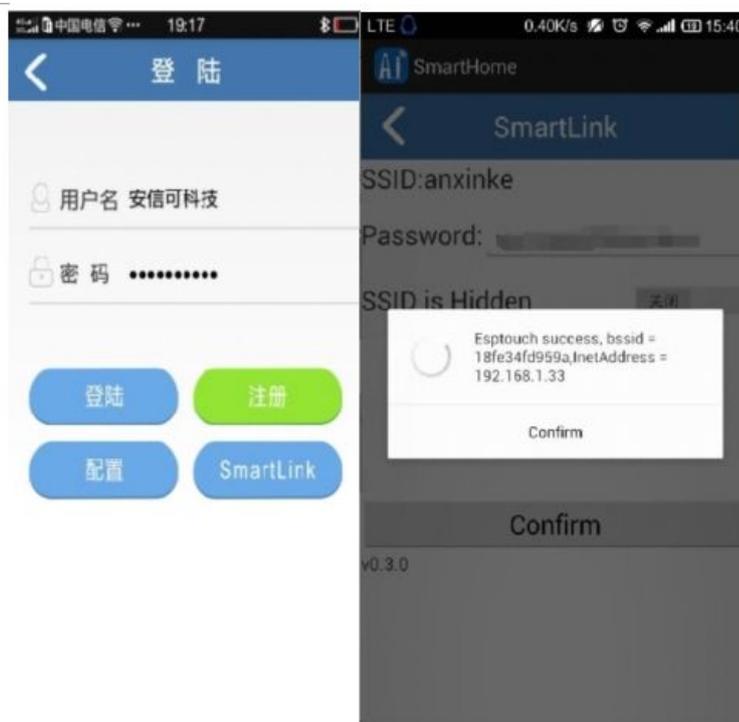
Waiting for a device from online account and password to your phone, after the buzzer to stop frequency response, as shown in figure after feedback back to the IP, you can click on the "Confirm" and return.

Note: if the buzzer didn't stop frequency response that smartlink did not succeed, failure reason and whether the router setting MAC binding, network isolation and so on, please make your own reason. Additional power supply problem in this step has had a huge impact, be sure to guarantee the stability of power supply is enough, then start from the first step to retry.

4.5.Click register. (Below the picture showed)

Device ID and password do not need to manually fill in, just click on the "scan", it automatically gets.

4.6 .After a successful scan access ID and password KEY, register

4.7. After successful registration, user name and password will be automatically recorded. While the server will remember your information. "Login"

4.8. so you can find your Device

4.9. Now you can control .

In this interface, you can switch to test the LED lamp on the board , can also control the brightness of the LED red, green and blue three lights by dragging the panel .And The test panel brightness data can be displayed on the upper left corner of the APP!

Test OK you can turn off WiFi, try with 3/4 G network control.then without any changing setting and routers, can be in 5 s – about 10 s automatically connected to the cloud, directly control!

5.Warm Tip:

1. one module can only be binding one ID, the same ID can control whole family use , can log on to the same ID at the same time.

2. The default is no WiFi signal power up, because the smartlink function needs to work in the STA mode, can be normal test.

3. Under the conditions of normal connection to the cloud, can be long time press K2 keys around 5s release cell phone bound, three times later of Buzzer sounds means solutions to success.