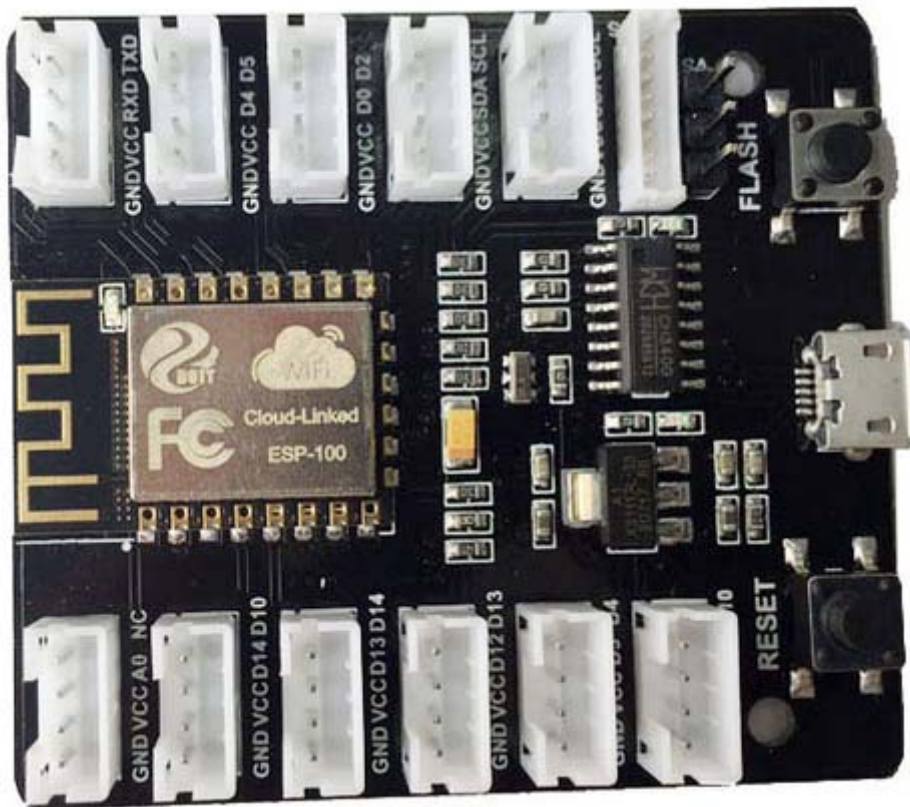




深圳四博智联科技有限公司

ESP8266 Grove Kit User Manual



May 2016



Contents

ESP8266 Grove Kit User Manual	1
1 Introduction.....	1
2 Technical Specifications	1
3 Interface Definition and LED Definition	2
3.1 Interface Definition	2
3.2 LED definition.....	3
3.3 USB Driver.....	3
3.4 Default Firmware	3
4 Technical Support	3



1 Introduction

ESP8266 Grove Kit is designed and developed by Shenzhen Doctors of Intelligence & Technology (SZDOIT).

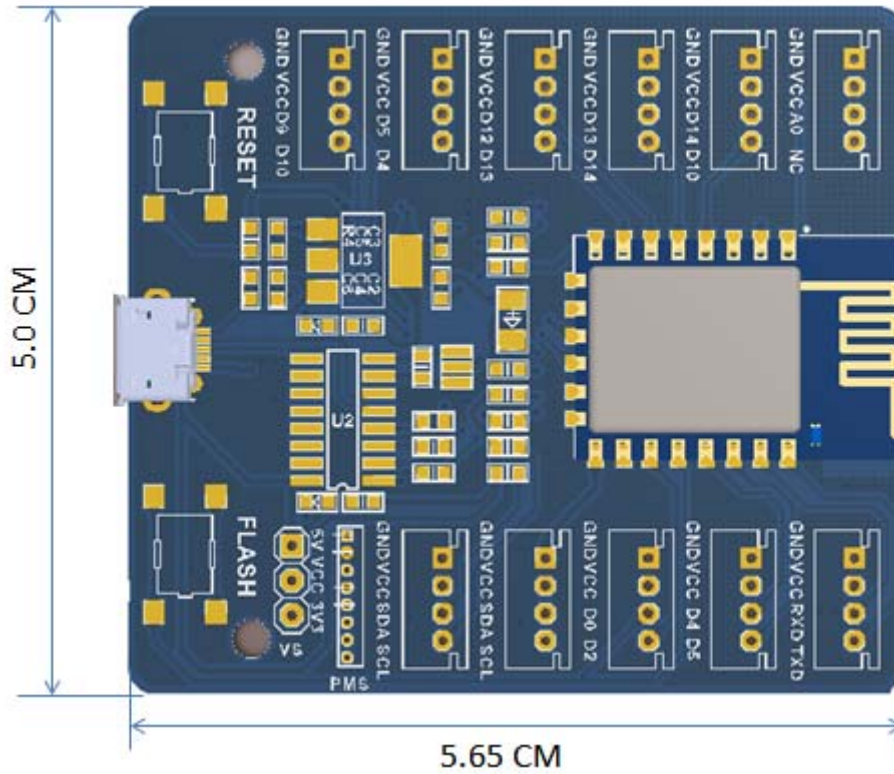
The module is designed based on esp8266 by Espressif Systems, which is a competitive WiFi solution.

The module has the following interface for users, such as UART, IIC, AIO, DIO etc. For more references about Doit ESP8266 module, driver board information, please refer to: <http://www.doit.am> or <http://www.smartarduino.com>.

2 Technical Specifications

- 1, 802.11 b / g / n wireless standards;
- 2, STA / AP, STA+AP modes support ;
- 3, TCP / IP protocol stack, One socket;
- 4, Supports standard TCP / UDP Server and Client;
- 5, Supports serial port baud rate configuration:
1200/2400/4800/9600/19200/38400/57600/74800/115200 bps;
- 6, Supports serial data bits: 5/6/7/8 bits;
- 7, Supports serial parity: none;
- 8, Supports serial stop bits: 1/2 bit;
- 9, ESP8266 GPIO Pinout 0/2/4/5/9/10/12/13/14/15/16 / ADC / EN / UART TX /
UART RX;
- 10, WiFi operation current: continuous transmission operation: $\approx 70\text{mA}$ (200mA
MAX), idle mode: $< 200\mu\text{A}$;
- 11, Serial WiFi transmission rate: 110-460800bps;
- 12, Temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$;
- 13, Humidity: 10%-90% non-condensing;

3 Interface Definition and LED Definition



The connector space is 2.0mm, suitable for grove kits

3.1 Interface Definition

This ESP8266 Grove Kit module board provides interface as shown in PCB view. And each pin functions are silk-printed in circuit board, as follows:

Pin	Function	Remark
GND	Ground	
VCC	Power	
3V3	3.3V	
5V	5.0V	
RXD	ESP8266 RXD	
TXD	ESP8266 TXD	
Dx (0-16)	GPIOx(0-16)	
SCL	GPIO5	
SDA	GPIO4	
RESET	ESP8266 reset (pulled on)	
FLASH	GPIO0 (pulled on)	
PM	PM5003 Series Sensor Interface	a PM2.5 sensor interface



3.2 LED definition

This ESP8266 Grove Kit module has two LEDs. Red color LED is donated to power supply. Blue color LED is a multi-functional LED, and it connects with GPIO16.

3.3 USB Driver

The USB chip is CH340. The driver lies in website:

<http://bbs.smartarduino.com/showthread.php?tid=2038>

3.4 Default Firmware

The default firmware function is serial to wifi. Users can test the communication between microusb (9600,8,N,1) and TCP (192.168.4.1).

4 Technical Support

If you want to get the latest information on this product or other product information, you can visit our website: <http://www.doit.am>.

Technical Support: support@doit.am.