Wio Link



Wio Link is designed to simplify your IoT development, aims to make it easy to develop Internet of Things products and services. It is an ESP8266 based open-source Wi-Fi development board to create IoT applications by virtualizing plug-n-play modules to RESTful APIs with mobile APPs.

Using the Wio Link developers are able to build IoT applications with no hardware programming, no breadboard, no jumper wires, and no soldering. Users can build IoT applications in three steps in about five minutes.

Features

• No hardware programming. No breadboard. No jumper wires. No soldering.

- A lot of Grove modular hardware supported.
- Plug-n-Play Groves
- Visual configuration instead of micro controller programming.
- Update automatically via cloud compiling and OTA.
- Bring Real to Virtual. All sensors become virtual RESTful API.
- Android & iOS APPs to manage Wio Link.
- IFTTT supported by Seeed's Channel

Application ideas

- Smart Home
- Intelligent environmental monitoring
- Funny Toys
- Web of Things
- Internet of Things

Specification

- Wi-Fi Network Protocol: 802.11b/g/n
- Wi-Fi Encryption Technologies: WEP/TKIP/AES
- Expansion (6x Grove Connectors): 3x Digital, 1x Analog, 1x UART and 1x I2C (3.3V I/Os)
- Power Supply:
 - Input Voltage: MicroUSB: 5V; Battery holder: 3.4~4.2V;
 - Output DC Current: 1000mA MAX

- Operating Voltage: 3.3V
- Charge Current: 500mA MAX
- Flash Memory: 4MByte
- Size: 55mm*48mm
- Weight: 26g
- CE/FCC/IC Certified
- Crystal: 26MHz

Hardware Overview



Parts list

- Digital Port 0: GPIO 14
- Digital Port 1: GPIO 12
- Digital Port 2: GPIO 13
- Analog Port : A3
- UART Port: Pin 1 & Pin 3
- I2C Port: Pin 4 & Pin 5
- Status Indicator: Blue LED is the WiFi status indicator, Red LED indicates the

working status

- Configure Button: To configure and manage your Wio Link
- JST2.0: Battery Interface
- Micro USB: To power the board or communicate to the PC
- Reset Button: To reset the MCU
- Power Management: Managing battery charging, etc.
- USB Bridge: USB to UART bridge
- MCU: ESP8266
- Flash:4M byte (W25Q32B)

Get started

In this tutorial, we will build a temperature and humidity monitor and light up the RGB

Led strip with Wio Link.

Step1: Install Android/iOS APP

You need to install the Wio Link APP to manage and configure your Wio Link devices.

Download the Android or iOS APP.

Note: Make sure your Android OS version is 4.1 or advanced. iOS version is 7 or

advanced.

Step2: Create your Account

If you use the Android/iOS App for the first time, you need to sign up an account.

23:24	
Sign Up	
Email	
Password	
Verify Passw	ord
Switch to International	
Cancel	Sign up
SIGN UP	SIGN IN

Note:

- China mainland select China server
- Others select International server

Step3: Connect Wio Link to WiFi AP

• Hold the left/Configure button down until the blue led turn into breathing.



Configure Button

Click "GOT READY" on your phone



Connect your phone to the Wio Link AP



Connect Wio Link to the WiFi AP around you and give it a name



Plug Grove Modules to the Wio Link and Drag the Grove Modules to the Grove



Connects in the APP

 Finally, click "UPDATE" on the top-right corner in the APP, after "Update Ok", then see the APIs of your device, and have a try to light up the LED strip.

Here is the video about above steps.

https://www.youtube.com/watch?v=N-13m8Lvzxs

Get started with IFTTT & DoButton

Before you get started with IFTTT & DoButton, make sure you have already connect Wio Link Account to Your IFTTT Account, if you don't, click here to connect them.

IFTTT

The below video is to show you how to make an Automatic Gardening irrigation without coding using IFTTT & Wio Link

https://vimeo.com/148590984

If you want to make one please click here to get more info about this project.

DoButton

The below video is to show you how to make a remote dog feeder with DoButton &

Wio Link.

https://vimeo.com/146988454

If you want to make one please click here to get more info about this project.

Note :

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

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.