

ESP32

ESP-IDF

1. Install vscode
 1. Install ESP-IDF extension
2. Install git

```
1. $ brew install git
```

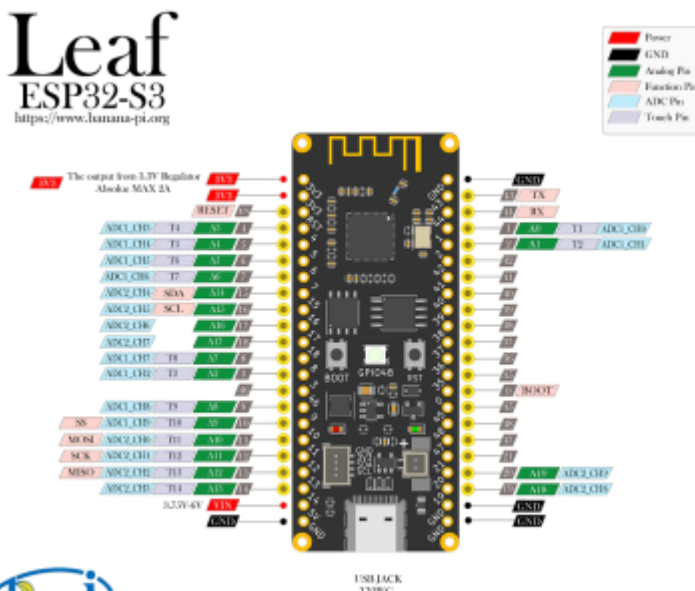
3. Install Python, Download at <https://www.python.org/downloads/>

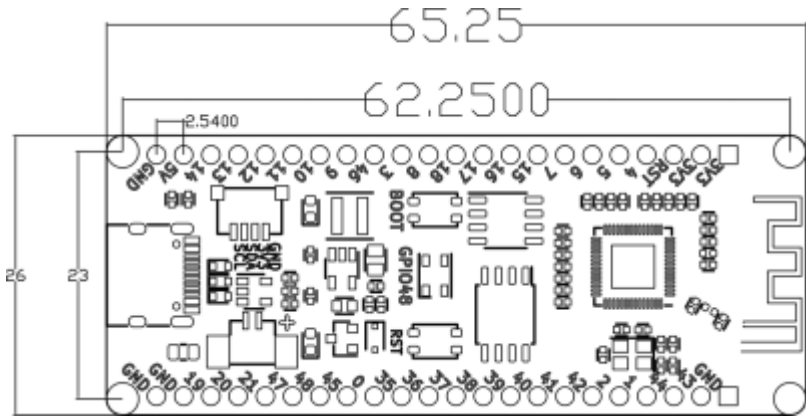
Standard Setup of Toolchain for Mac OS

Pins

- TTGO T-DISPLAY ESP32; 12 * 2 = 24
- ESP32 (30pin); 15 * 2 = 30
- BPI ESP32 S3; 22 * 2 = 44

Banana Pi ESP32 S3 (BPI-Leaf-S3)





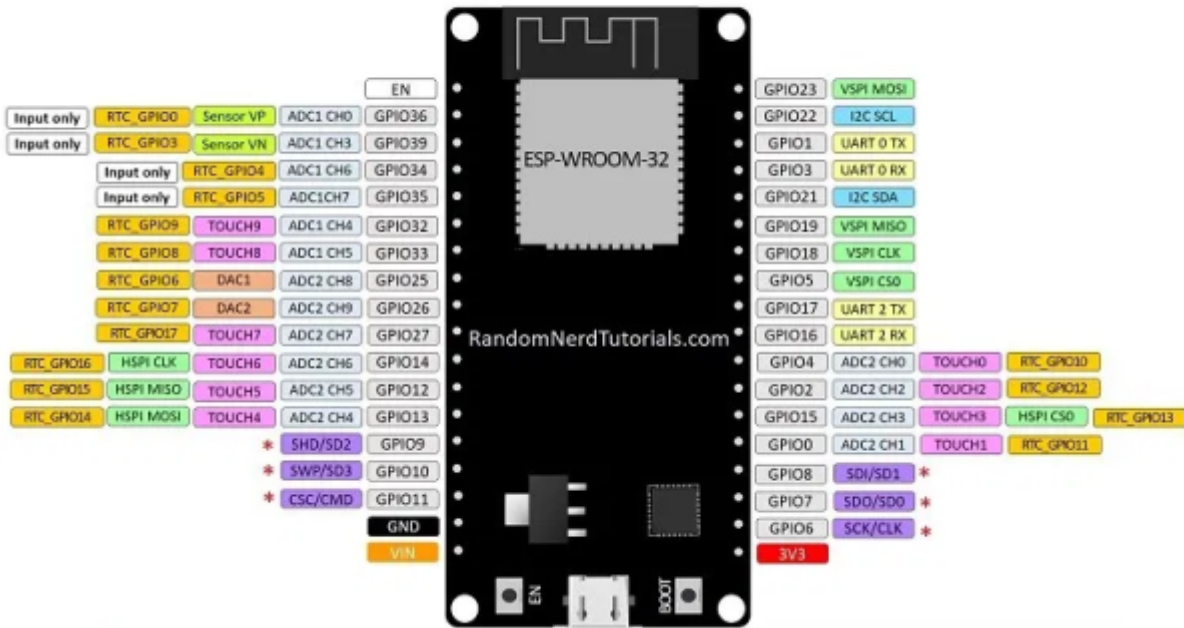
- [바나나 파이 리프 ESP32 S3 실행 가능한 Micropython 저전력 에너지 절약 마이크로 컨트롤러, IoT 개발을 위해 설계 @aliexpress.com](#)
- [BPI-Leaf-S3](#)
- 1 * JST SH 1mm 4-Pin Socket, support I2C
- 1 * MX 1.25mm 2-Pin Socket support charging
- [USB Host @ESPRESSIF](#)
- [USB Host Library Example @github](#)
- [chegewara/EspTinyUSB @github](#)

TTGO T-DISPLAY

- 2 pin JST SH 1.25 connector.
- [LILYGO® TTGO T-Display ESP32 WiFi and Bluetooth Module Development Board For Arduino 1.14 Inch LCD](#)
- [LILYGO® TTGO T-Display ESP32 WiFi and Bluetooth Module Development Board For Arduino 1.14 Inch LCD\(1\)\(1\)\(1\)\(1\)](#)
- [How to power off TTGO T-Display while charging? @reddit](#)
- [Documents on ESP32 and TTGO T-Display](#)
- [LilyGO TTGO T-display ESP32 @Joen's code snippets pages](#)

PINS

ESP32 DEVKIT V1 – DOIT version with 36 GPIOs



* Pins SCK/CLK, SDO/SD0, SDI/SD1, SHD/SD2, SWP/SD3 and CSC/CMD, namely, GPIO6 to GPIO11 are connected to the integrated SPI flash integrated on ESP-WROOM-32 and are not recommended for other uses.

ESP32 DEVKIT V1 – DOIT version with 30 GPIOs

