

# Get started with MicroPython [S2 series]

## Flash MicroPython firmware

The boards were already flashed micropython firmware. If they lost firmware or you need lastest firmware, you can flash MicroPython firmware by yourself.

## Requirements

- Python
- esptool (for flash esp32-s2 firmware.)

```
pip install esptool
```

## S2 Firmware

- Firmware

## Flash firmware

- Make S2 boards into Device Firmware Upgrade (DFU) mode.
  - Hold on **Button 0**
  - Press **Button Reset**
  - Release **Button 0** When you hear the prompt tone on usb reconnection
- Flash using esptool.py

- esptool.py --port PORT\_NAME erase\_flash
- esptool.py --port PORT\_NAME --baud 1000000 write\_flash -z 0x1000 FIRMWARE.bin

### Note

Don't forget to change **PORT\_NAME** and **FIRMWARE.bin**.

In Linux, **PORT\_NAME** is like /dev/ttyUSB0. In windows, **PORT\_NAME** is like COM4.

## Quick reference

- Quick reference for the ESP32

# Get started with Arduino [S2 series]

## Requirements

- [Python](#)
- [Arduino IDE](#)

## Installing Hardware package

- [esp32 arduino package](#)

## Configure Board

- Use lastest [esp32 arduino package](#)
- Choose board **LOLIN S2 MINI** or **LOLIN S2 PICO**

## Upload Code

- Make S2 boards into **Device Firmware Upgrade (DFU)** mode.
  - Hold on **Button 0**
  - Press **Button Reset**
  - Release **Button 0** When you hear the prompt tone on usb reconnection

## Documentation

- [ESP32-S2 and ESP32-C3 Support](#)

# Get started with CircuitPython [S2 series]

## Flash CircuitPython firmware

## Requirements

- [Python](#)

- [esptool](#) (for flash esp32-s2 firmware.)

```
pip install esptool
```

## S2 Firmware

- [Firmware](#)

## Flash firmware

- Make S2 boards into **Device Firmware Upgrade (DFU)** mode.
  - Press and hold the [0] Button
  - Press and release the [Reset] Button
  - Release the [0] Button
- Flash using esptool.py
  - `esptool.py --chip esp32s2 --port PORT_NAME --baud 1000000 write_flash -z 0x0 FIRMWARE.bin`

### Note

Don't forget to change **PORT\_NAME** and **FIRMWARE.bin**.

In Linux, **PORT\_NAME** is like /dev/ttyUSB0. In windows, **PORT\_NAME** is like COM4.

## Quick reference

- [Welcome To CircuitPython](#)