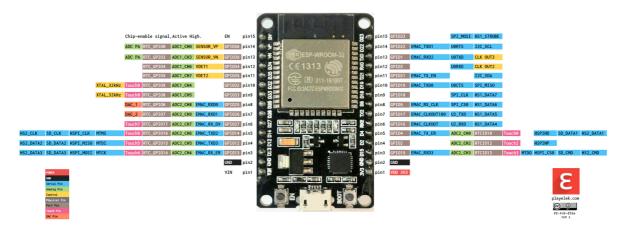
Pinout





Doc Links

• Microcontrollers Lab

Important Notes

- ALL GPIO pins support *pulse-width modulation (PWM)* and *interrupts*.
- GPIO pins 34 39 are for **input only**.
- **DO NOT** use pins 6-11.
- **DO** hold down 'BOOT' button after seeing "Connecting...." in Arduino IDE while uploading a sketch.
- **DO** press 'EN' after seeing "Hard resetting via RTS pin" in Arduino IDE after upload of a sketch completes to activate the program.
- MAX operating current for the GPIO pins (sourcing and sinking) is 40mA.
 - It is recommended that it's kept below 20mA
- The following GPIO pins are in active-high state by default during a reset/boot-up
 - 0 1
 - 0 3
 - 0 5
 - 0 6-11
 - 0 14
 - 0 15

Strapping GPIO Pins

The following GPIO pins are used to configure the bootloader or manipulate the flashing mode of the ESP32 ¹.

Pin	Required Boot State
0	N/A
2	N/A
4	N/A
5	HIGH
12	LOW
15	HIGH

> If you are using the [Arduino IDE](https://www.arduino.cc/en/software) you don't need to worry about initializing these pins.

1. > **Note**: