**ESP32 DEV WROOM BOARD**

The ESP32 dev wroom board is a powerful and versatile microcontroller board suitable for a wide range of projects, its integrated Wi-Fi and Bluetooth capabilities, rich set of features, and extensive development ecosystem**.**

**FEATURES:**

Quick Response(the top frequency is 400KHz).

Cost-effective.

Small size, convenient to install.

**SPECIFICATION:**

Single or Dual-Core 32-bit LX6 Microprocessor with clock frequency up to 240 MHz.

520 KB of SRAM, 448 KB of ROM and 16 KB of RTC SRAM.

Supports 802.11 b/g/n Wi-Fi connectivity with speeds up to 150 Mbps.

Support for both Classic Bluetooth v4.2 and BLE specifications.

34 Programmable GPIOs.

Up to 18 channels of 12-bit SAR ADC and 2 channels of 8-bit DAC

Serial Connectivity include 4 x SPI, 2 x I2C, 2 x I2S, 3 x UART.

Ethernet MAC for physical LAN Communication (requires external PHY).

1 Host controller for SD/SDIO/MMC and 1 Slave controller for SDIO/SPI.

Motor PWM and up to 16-channels of LED PWM.

Secure Boot and Flash Encryption.

**FEATURE:**

ESP-WROOM-32 Module

Two rows of IO Pins (with 15 pins on each side)

CP2012 USB – UART Bridge IC

micro–USB Connector (for power and programming)

AMS1117 3.3V Regulator IC

Enable Button (for Reset)

Boot Button (for flashing)

Power LED (Red)

User LED (Blue – connected to GPIO2)

Some passive components.