

ESP32-WROVER-E Wi-Fi + BLUETOOTH DEVELOPMENT BOARD WITH CAMERA, 40 pins, DRIVER CH340C, USB-C CONNECTOR



ESP32-CAMERA-02

Introduction :

This development board is equipped with a module based on the Xtensia ESP32-D0WD 32-bit dual-core LX6 microprocessor (4 Mbits Flash + 8 Mbits PSRAM) with a clock frequency adjustable from 80 MHz to 240 MHz and integrating 802.11 b/g/n Wi-Fi and Bluetooth 4.2 (BR/EDR/LE) communication functions into a single component.

This complete kit includes a 40-pin development board equipped with an ESP32-WROVER-E module, onto which a 3.1-megapixel OV3660 miniature camera with built-in flash is plugged. The board also features RESET and PROG buttons, four LEDs to indicate the board's status, and a micro-SD card reader (1 GB card included). Comprehensive tutorials on how to use the product are available for download online.

Many Arduino applications are available for the ESP32, and the built-in camera allows developers to create video applications with increased storage capacity through the use of a micro-SD card. This ESP32-based board enables a wide range of wireless applications that combine speed and low power consumption, whether via Wi-Fi or Bluetooth, all integrated into a single component. It can be used to manage wireless sensors, transmit data, music, or images in real time, communicate with a router or a cell phone, or for any other industrial applications.

Technical specifications :

Module: ESP32-WROVER-E-N4R8 dual-core 32-bit RISC-V.

Memory: 4 Mbits Flash + 8 Mbits PSRAM.

Clock frequency: 80 MHz to 240 MHz max. (40 MHz oscillator).

Interfaces: 24 GPIO / UART / ADC / DAC / SDIO / PWM / SPI / I2C / I2S.

Camera: OV3660 with built-in flash, 3.1 million pixels (2048x1536 pixels).

Power supply: 5.0 Vdc (Micro-USB) or 5.0 Vdc / 3.3 Vdc (pins).

Antenna: PCB antenna integrated into the module.

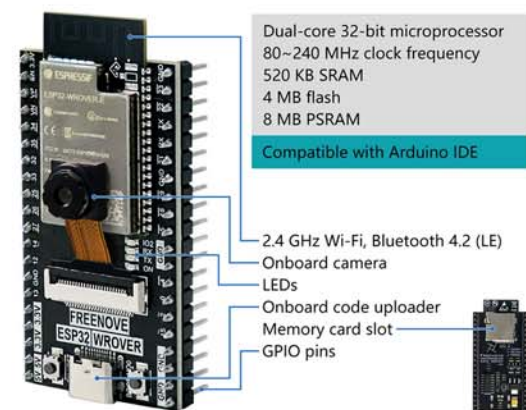
Wi-Fi transmission: IEEE 802.11 b/g/n from 2.412 GHz to 2.484 GHz. 150 Mbps.

Bluetooth transmission: V4.2 BR/EDR and LE standard.

Standby current: 6 mA. Active: 180 mA. With flash: 310 mA.

Operating temperatures: -40°C to +85°C. Humidity: <90%.

Board dimensions: 50.0 x 28.0 mm (40 pins). Weight: 12 g.



Items included :

Development board with ESP32-WROVER-E module.

Subminiature camera.

USB-A to USB-C cable.

1 GB Micro-SD memory card.

USB-A to MicroSD adapter.

Software written in C and Python, and tutorials in English available for download online.

