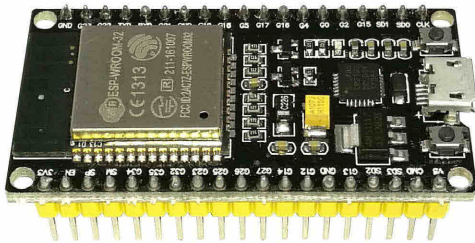# ESP32-DEV-KIT (A-IC-M-00071)

This Board ESP32-DEV-KIT is additionally improved and developed from Board NodeMCU LUA WIFI, the new version has higher speed, more I/O, and added BLUETOOTH 4.2; so, it is more convenient to do various IOT Projects.

Caracteristica	ESP8266	ESP32
Procesador	Tensilica LX106 32 bit a 80 MHz (hasta 160 MHz)	Tensilica Xtensa LX6 32 bit Dual-Core a 160 MHz (hasta 240 MHz)
Memoria RAM	80 kB (40 kB disponibles)	520 kB
Memoria Flash	Hasta 4 MB	Hasta 16 MB
ROM	No	448 kB
Alimentación	3.0 a 3.6 V	2.2 a 3.6 V
Rango de temperaturas	-40°C a 125°C	-40°C a 125°C
Consumo de corriente	80 mA (promedio). 225 mA máximo	80 mA (promedio). 225 mA máximo
Consumo en modo sueño profundo	20 uA (RTC + memoria RTC)	2.5 uA (10 uA RTC + memoria RTC)
Coprocesador de bajo consumo	No	Sí. Consumo inferior a 150 uA
WiFi	802.11 b/g/n (hasta +20 dBm) WEP, WPA	802.11 b/g/n (hasta +20 dBm) WEP, WPA
Soft-AP	Sí	Sí

Wi|Fi

BLUETOOTH

SPECIFICATIONS OF BOARD

- Use MODEL ESP32 "ESP-WROOM-32" from ESPRESSIF that has already provided WIFI (802.11 b/g/n/e/i) and BLUETOOTH 4.2 inside the MODULE, MCU Architecture as Tensilica LX6 DUAL CORE, at a maximum speed of 240 MHz (600 DMIPS), 520 KBYTE RAM, 4 MBTE FLASH PROGRAM with PCB ANTENNA
- Use IC USB TO UART No.CP2102 from SILICON LABS, there is no any problem about connecting to USB PORT on OS; and DOWNLOAD programs from Arduino IDE to board directly
  - Have 32 GPIO; some Pins can do more than 1 task
  - 10-CH CAPACATIVE TOUCH
  - 3-CH UART
  - 18-CH 12-BIT A TO D, 2-CH 8-BIT D TO A
  - 3-CH SPI
  - 2-CH I2C
  - 16-CH PWM
- Support various languages
  - Arduino-ESP32 uses C Language of Arduino IDE for writing
  - LUA Language
  - PYTHON Language
  - JAVA SCRIPT Language
- Power Supply for Board is from PORT USB 5 VDC (500 mA or higher)
- PIN HEADER 19 x 2 (2.54 mm.)
- PCB Size: 55 x 28 mm.
- Use Connector as USB MICRO Type

(***This Board is imported from abroad, there is no any warranty for this model***)

OPTION: Cable USB/MICRO

CABLE USB/MICRO 1M (A-CB-A-00045)

Cable USB is 1 meter long. One terminal is Connector TYPE A for connecting to computer and another one side is Connector MICRO USB TYPE B MALE for connecting to board.

Further Information

- For more information about Circuit and how to install ESP-DEV-KIT, please read https://etteam.com/
- For more information about Driver of CHIP CP2102 USB to UART to be used with Windows 7/8/8.1/10, please read https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers
- For more information about ESP-WROOM-32, please read https://www.espressif.com/en/products/hardware/esp32/overview
- For more information about ESP-IDE, please read https://github.com/espressif/esp-idf/releases