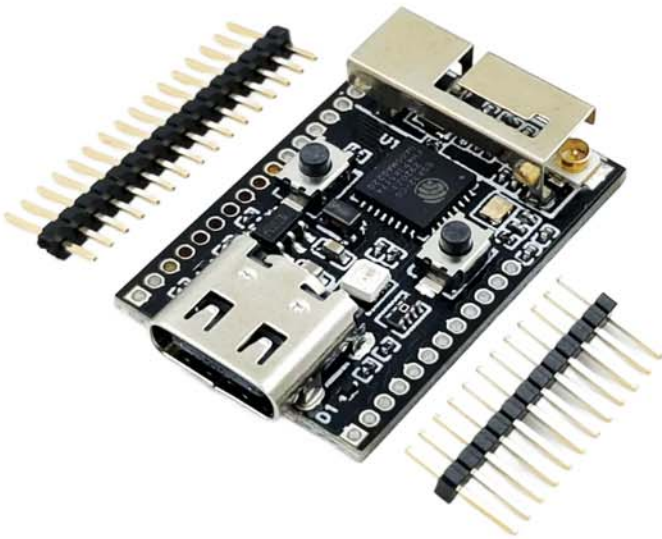




ESP32-C6-DEV28P

## **Introduction :**

This development board is equipped with a module based on the ESP32-C6FH4 single-core 32-bit RISC-V microcontroller (4 Mbits Flash + 528 Kbits SRAM + 320 Kbits ROM), integrating Wi-Fi 6 IEEE 802.11 ax/b/g/n, Bluetooth 5.3 and Zigbee 3.0 communication functions within a single component.

The board has 28 pins and can be powered directly via its USB-C connector. The board features a 40 MHz oscillator to drive the microcontroller, which can reach up to 160 MHz internally. It includes a power and status indicator (RGB LED) as well as two micro-switches to perform a RESET or enter programming mode.

### Technical specifications :

**Microcontroller:** ESP-32-C6FH4 RISC-V 32 bits.

Memory: 4 Mbits Flash + 512 Kbits HP SRAM + 16 Kbits LP SRAM + 320 Kbits ROM.

Clock frequency: up to 160 MHz.

Supported interfaces: UART / GPIO / ADC / SDIO / PWM / SPI / I2C / I2S.

Data rate: 150 Mbps max.

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

Antenna : a small metal antenna soldered to the PCB + IPEX connector.

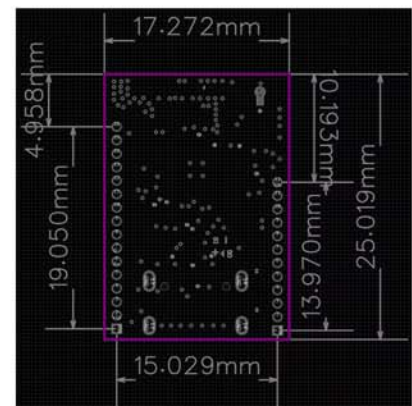
Wi-Fi 6 transmission: 802.11 ax/b/g/n from 2.412 GHz to 2.484 GHz.

Bluetooth transmission: 5.3 LE standard and Mesh + Zigbee 3.0

Maximum gain: +20 dBm (TX) and -106 dBm (RX).

Operating temperatures: -40°C to +105°C. Humidity: <90%.

Board dimensions: 25,019 x 17,272 mm (28 pins). Weight: 3 g.



**Items included :**

**Development board with unwelded pins.**

12+16 gold-plated straight pin header with a 1.28 mm pitch.

Available for download online:

- Arduino or Raspberry Pi IDE software for the ESP32.
- Espressif ESP32-C6 datasheet.
- Espressif ESP-IDF open-source programming guide.

