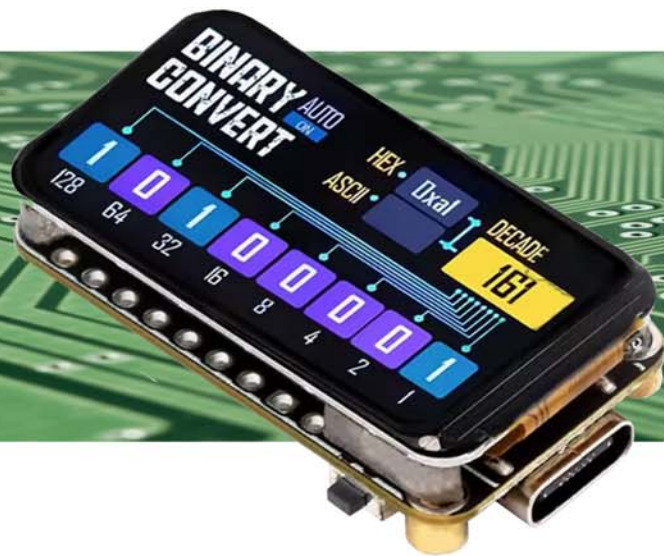


ESP32-C6 WIFI + BLUETOOTH MINI DEVELOPMENT BOARD 18 PINS, LCD COLOR DISPLAY 1.47 INCH, USB-C CONNECTOR



ESP32-DISPLAY01

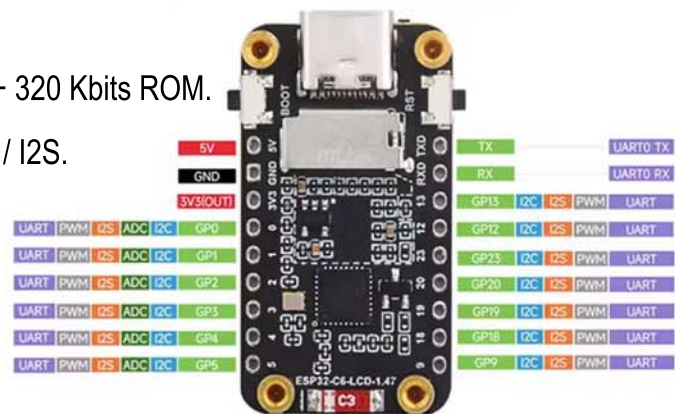
Introduction :

This development board is equipped with a module based on the ESP32-C6FH8 single-core 32-bit RISC-V microcontroller (8 Mbits Flash + 528 Kbits SRAM + 320 Kbits ROM), integrating Wi-Fi 6 IEEE 802.11 ax/b/g/n and Bluetooth 5.3 communication functions within a single component. The board has 18 pins and can be powered directly via its USB-C connector. The board features a 40 MHz oscillator for the microcontroller, which can reach up to 160 MHz internally. This board incorporates a 1.47-inch colour LCD screen (172×320 pixels) and a Micro-SD memory card reader. Two micro-buttons allow the user to perform a RESET or enter programming mode.

There are numerous Arduino applications available for the ESP32, and the 2.54mm-pitch pins on both sides of the board allow developers to easily connect it to another development board or prototype. This board, based on the ESP32 micro-processor, enables a wide range of wireless applications that combine speed with low power consumption, whether using Wi-Fi, Bluetooth or Zigbee, 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 mobile phone, or for any other industrial applications.

Technical specifications :

Microcontroller: ESP-32-C6FH8P4 RISC-V 32 bits.
Memory: 8 Mbits Flash + 512 Kbits HP SRAM + 16 Kbits LP SRAM + 320 Kbits ROM.
Clock frequency: up to 160 MHz, (quartz 40 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 : ceramic onboard PCB.
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 Zigbee 3.0.
Display : ST7789 1.47 inch LCD (172x320 pixels). 262K colours
Operating temperatures: -40°C to +105°C. Humidity: <90%.
Board dimensions: 36,37 x 20,32 mm (18 pins). Weight: 8 g.



Items included :

Development board (welded pins) with LCD display.
Available for download online:

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

