Documentation:
    esp-idf
https://github.com/espressif/esp-idf
    esp32-C6 get-started
https://docs.espressif.com/projects/esp-idf/en/latest/esp32c6/get-started/
    esp32-C6
https://www.espressif.com/zh-hans/products/socs/esp32-C6

If you have any questions, you can contact WeAct Studio

Espressif's ESP32-C6 Wi-Fi + Bluetooth® Low Energy + 802.15.4 SoC

CPU System
- HP RISC-V 32-bit Microprocessor
- LP RISC-V 32-bit Microprocessor
- Cache
- SRAM
- LP Memory
- JTAG
- ROM

Wireless MAC and Baseband
- Wi-Fi Baseband
- Wi-Fi MAC
- Bluetooth LE Baseband
- Bluetooth LE Link Controller
- 802.15.4 Baseband
- 802.15.4 MAC

RF
- 2.4 GHz Balun + Switch
- 2.4 GHz Transmitter
- 2.4 GHz Receiver
- RF Synthesizer

Peripherals
- SPI
- I2C
- GPIO
- LP IO
- TWAI®
- I2S
- UART
- RTC Watchdog Timer
- GDMA
- PCNT
- RMT
- Super Watchdog
- LED PWM
- ETM
- ADC
- LP UART
- PARLIO
- MCPWM
- USB Serial/JTAG
- LP I2C
- SDIO 2.0 Slave
- Brownout Detector
- Temperature Sensor
- eFuse Controller
- System Timer
- General-Purpose Timers
- Main System Watchdog Timers

Power Management
- Power Management Unit

Security
- SHA
- RSA
- ECC
- AES
- Digital Signature
- HMAC
- RNG
- Clock Glitch Filter
- TEE Controller
- Secure Boot
- Flash Encryption
- APM

Modules having power in specific power modes:
- Active
- Active and Modem-sleep
- Active, Modem-sleep, Light-sleep; optional in Light-sleep
- All modes; optional in Deep-sleep

ESP32-C6 功能框图

WeAct Studio

ESP32C6-N4 MINI...V1.0

ANT

RGB@IO8

BOOT   RESET   USB

0 1 2 3 4 5 6 7 8 9 RST 3V3 3V3 GND GND
23 22 21 20 19 18 RX TX 15 14 13 12 5V GND GND