

Blink an LED on the ESP32-C3, Step by Step

Mokxi · one-page lesson plan

OBJECTIVE

Wire an LED to a GPIO pin on an ESP32-C3-DevKitM-1 and blink it. The real RISC-V core runs the firmware on this page before you own the board.

WHAT YOU NEED

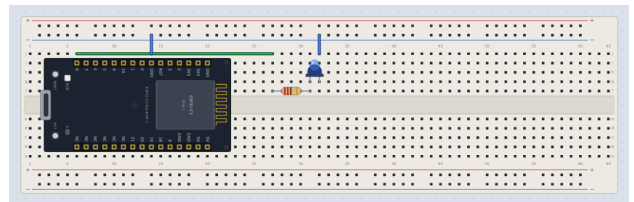
Full-size breadboard, ESP32-C3-DevKitM-1, Resistor, LED

STEPS

- Which board this models — Say the exact board, because more than one ESP32-C3 board exists and they are not interchangeable: this is th...
- Wiring the LED at 3.3 volts, not 5 — This is the one number that genuinely changes between an Arduino Uno and an ESP32-C3: the C3's GPIO pins driv...
- What is different under the same three calls — `digitalWrite()`, `pinMode()` and `delay()` read identically on every board Mokxi models, and that is deliber...
- The code — The sketch is the same shape as the Uno's, because `digitalWrite()`, `pinMode()` and `delay()` are the same A...

FIRMWARE/EXAMPLES/BLINK, THE ESP32-C3 BUILD (THE EXACT PROGRAM RUNNING ABOUT)

```
void setup() {  
  pinMode(LED_BUILTIN, OUTPUT);  
}  
  
void loop() {  
  digitalWrite(LED_BUILTIN, HIGH);  
  delay(500);  
  digitalWrite(LED_BUILTIN, LOW);  
  delay(500);  
}
```



ASSESSMENT IDEA

Have the student move the ESP32-C3 blink sketch to a different GPIO pin, rewire the LED and resistor to match, and demonstrate it running at 3.3 V.

<https://mokxi.com/learn/esp32-blink-led>