**1) Create the project**

1. In VS Code, click **PlatformIO Home → New Project**.
2. Name it (e.g., esp32-blink), pick your board (e.g., **ESP32 Dev Module** or your exact model), **Framework: Arduino**, and **Finish**.

**2) platformio.ini (verify this)**

Open platformio.ini and make sure it looks like this (your board may differ):

[env:esp32dev]

platform = espressif32

board = esp32dev

framework = arduino

monitor\_speed = 115200

**3) Blink code (Arduino framework)**

Create/replace src/main.cpp:

#include <Arduino.h>

// Prefer LED\_BUILTIN if your board defines it.

// If your board doesn’t, uncomment the correct pin below.

// Common pins:

// - ESP32-DevKitC/V1: 2

// - Some ESP32-S2/S3: 13 or 48 (varies)

// - ESP32-C3 DevKitM-1: 8 (often active-low)

//

// #define LED\_PIN 2

#ifndef LED\_BUILTIN

#define LED\_BUILTIN 2 // fallback; adjust if your board uses another pin

#endif

// Set this to true if your LED is active-low (many ESP32-C3 boards)

const bool ACTIVE\_LOW = false;

void setup() {

pinMode(LED\_BUILTIN, OUTPUT);

// Start with LED off (respect active level)

digitalWrite(LED\_BUILTIN, ACTIVE\_LOW ? HIGH : LOW);

}

void loop() {

// toggle

static bool on = false;

on = !on;

digitalWrite(LED\_BUILTIN, (on ^ ACTIVE\_LOW) ? HIGH : LOW);

delay(500); // 0.5s on, 0.5s off

}

**4) Build, upload, and monitor**

* Click **✓ Build**, then **→ Upload**.
* Open **Monitor** (plug icon) to see any serial prints (none in this minimal sketch—optional).