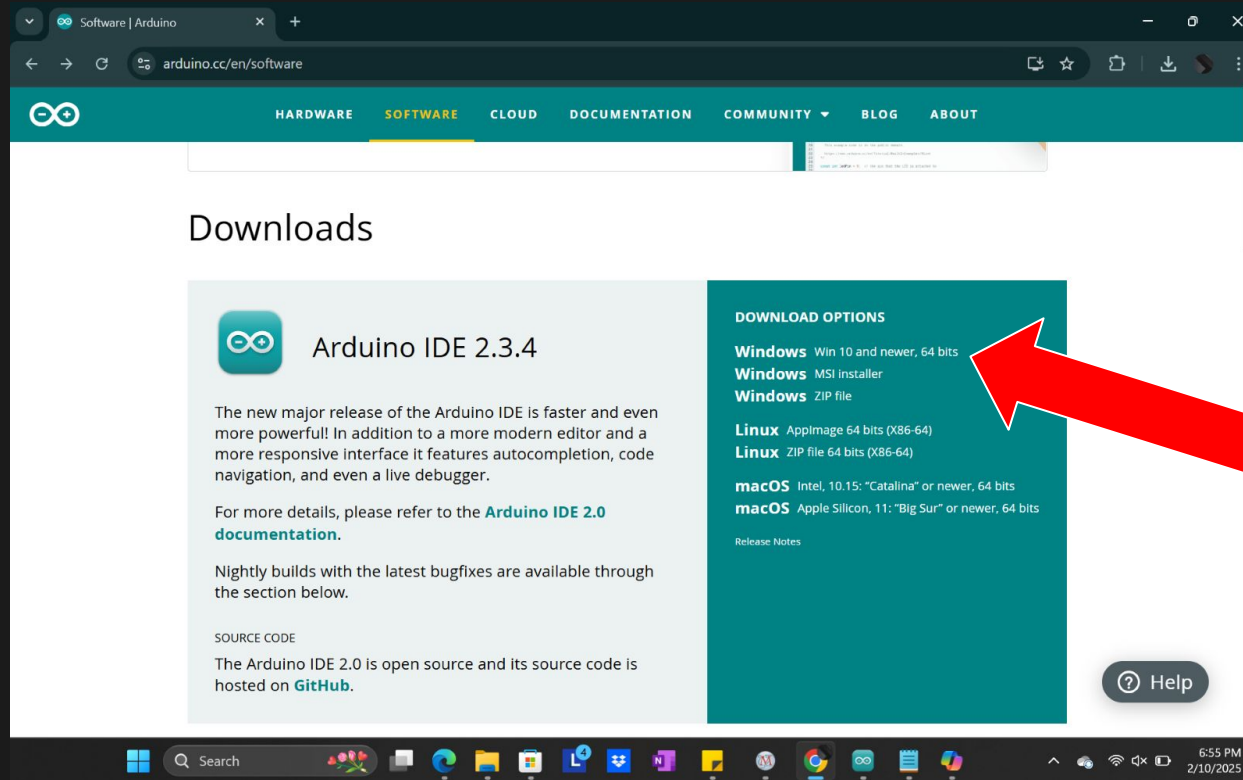


ESP-32 Tutorial Setup: Internal Project Competition

By Matias Guillen




Software | Arduino

arduino.cc/en/software

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Downloads



Arduino IDE 2.3.4

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger.

For more details, please refer to the [Arduino IDE 2.0 documentation](#).

Nightly builds with the latest bugfixes are available through the section below.

SOURCE CODE

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).

DOWNLOAD OPTIONS

Windows Win 10 and newer, 64 bits

Windows MSI Installer

Windows ZIP file

Linux AppImage 64 bits (X86-64)

Linux ZIP file 64 bits (X86-64)

macOS Intel, 10.15: "Catalina" or newer, 64 bits

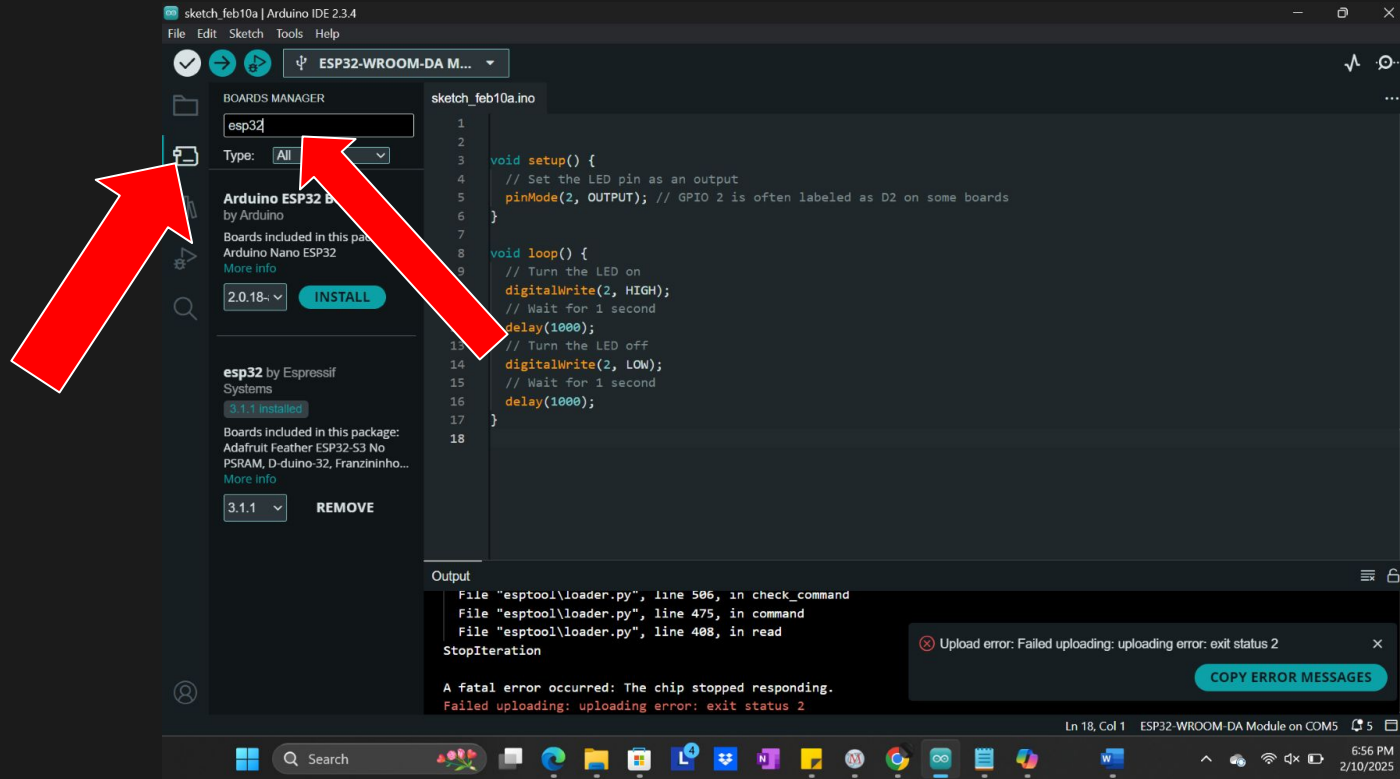
macOS Apple Silicon, 11: "Big Sur" or newer, 64 bits

[Release Notes](#)

[Help](#)

6:55 PM 2/10/2025

Go to arduinos website: <https://www.arduino.cc/>



sketch_feb10a | Arduino IDE 2.3.4

File Edit Sketch Tools Help

ESP32-WROOM-DA M...

BOARDS MANAGER

esp32

Type: All

Arduino ESP32 by Espressif Systems

Boards included in this package: Adafruit Feather ESP32-S3 No PSRAM, D-duino-32, Franzininho...

2.0.18- INSTALL

esp32 by Espressif Systems

3.1.1 installed

Boards included in this package: Adafruit Feather ESP32-S3 No PSRAM, D-duino-32, Franzininho...

3.1.1 REMOVE

```
1
2
3 void setup() {
4   // Set the LED pin as an output
5   pinMode(2, OUTPUT); // GPIO 2 is often labeled as D2 on some boards
6 }
7
8 void loop() {
9   // Turn the LED on
10  digitalWrite(2, HIGH);
11  // Wait for 1 second
12  delay(1000);
13  // Turn the LED off
14  digitalWrite(2, LOW);
15  // Wait for 1 second
16  delay(1000);
17 }
18
```

Output

File "esptool\loader.py", line 506, in check_command
File "esptool\loader.py", line 475, in command
File "esptool\loader.py", line 408, in read
StopIteration

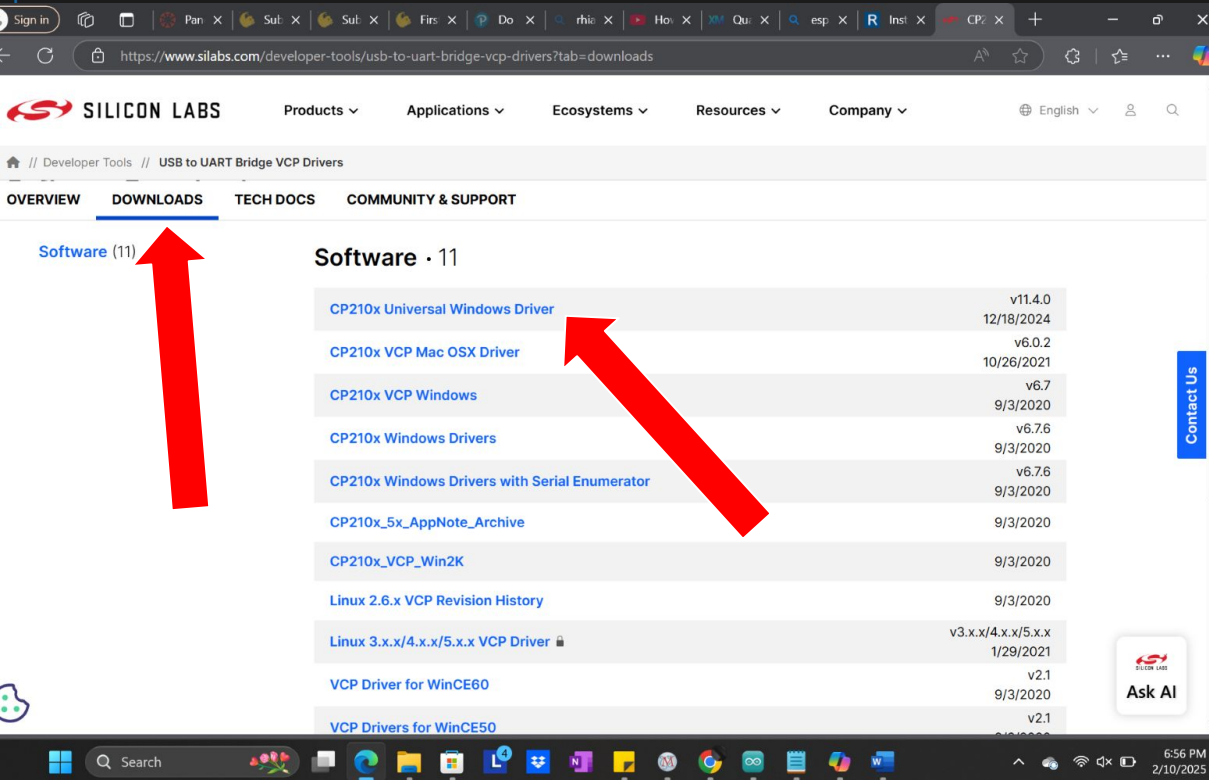
A fatal error occurred: The chip stopped responding.
Failed uploading: uploading error: exit status 2

Upload error: Failed uploading: uploading error: exit status 2

COPY ERROR MESSAGES

Ln 18, Col 1 ESP32-WROOM-DA Module on COM5

Once download go to "Boards manager" and search ESP32



Sign in

https://www.silabs.com/developer-tools/usb-to-uart-bridge-vcp-drivers?tab=downloads

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// Developer Tools // USB to UART Bridge VCP Drivers

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Software (11)

Software · 11

CP210x Universal Windows Driver	v11.4.0
	12/18/2024
CP210x VCP Mac OSX Driver	v6.0.2
	10/26/2021
CP210x VCP Windows	v6.7
	9/3/2020
CP210x Windows Drivers	v6.7.6
	9/3/2020
CP210x Windows Drivers with Serial Enumerator	v6.7.6
	9/3/2020
CP210x_5x_AppNote_Archive	
	9/3/2020
CP210x_VCP_Win2K	
	9/3/2020
Linux 2.6.x VCP Revision History	
	9/3/2020
Linux 3.x.x/4.x.x/5.x.x VCP Driver	v3.x.x/4.x.x/5.x.x
	1/29/2021
VCP Driver for WinCE60	v2.1
	9/3/2020
VCP Drivers for WinCE50	v2.1
	9/3/2020

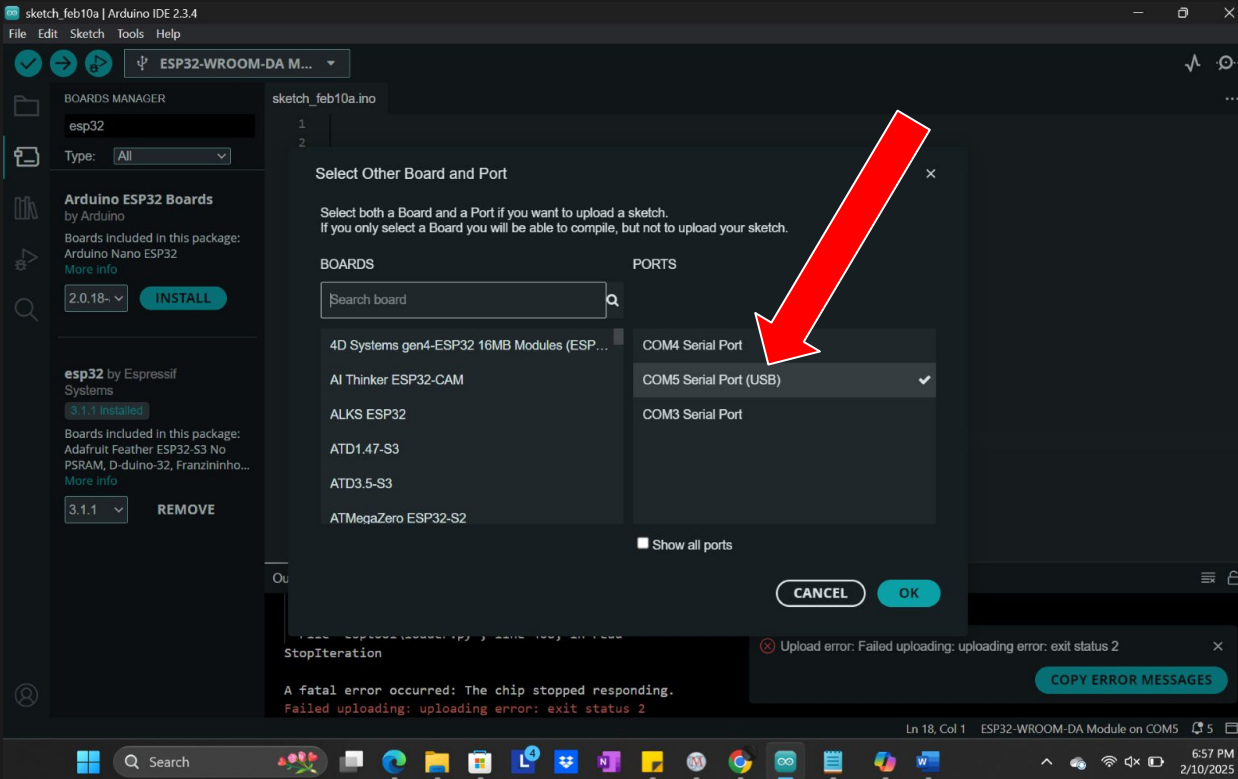
Contact Us

Ask AI

Once download
install the drivers for
the ESP32:

<https://www.silabs.com/developer-tools/usb-to-uart-bridge-vcp-drivers?tab=downloads>

Now that everything is installed proceed to open up the menu and unplug and plug your USB cord (usb to microusb). Ensure that you select the correct COM port that is registered.



Select Other Board and Port

Select both a Board and Port if you want to upload a sketch.
If you only select a Board you will be able to compile, but not to upload your sketch.

BOARDS

esp32 wroom

ESP32-WROOM-DA Module ✓

ESP32S3 Module Octal (WROOM2)

Fri3d Edge 2024 (ESP32-S3-WROOM-1)

uPesy ESP32 Wroom DevKit

PORTS

COM4 Serial Port

COM5 Serial Port (USB) ✓

COM3 Serial Port

☐ Show all ports

CANCEL

OK

Search in the boards search bar "Esp32 wroom". Select the module pointed at.

✗ Upload error: Failed uploading: uplc

Program your ESP-32! Above is a template that can turn on and off the LED. However your board doesn't have this pin. Next slide will show a diagram. Please watch any other videos if you are confused about how to program or setup.

```
sketch_feb10a.ino
1
2 void setup() {
3   // Set the LED pin as an output
4   pinMode(2, OUTPUT); // GPIO 2 is often labeled as D2 on some boards
5 }
6
7 void loop() {
8   // Turn the LED on
9   digitalWrite(2, HIGH);
10  // Wait for 1 second
11  delay(1000);
12  // Turn the LED off
13  digitalWrite(2, LOW);
14  // Wait for 1 second
15  delay(1000);
16 }
17
```

Pinout Diagram for uPesu ESP-WROOM-32

Legend:

- Input only (Orange circle)
- Input / Output (Green circle)
- PWM Output (Waveform)

GPIO pins are not 5V tolerant

Do not Connect (used by internal Flash): SHD/SD2 (GPIO9), SWP/SD3 (GPIO10), CSC/CMD (GPIO11)

Functional Groups:

- 2xSPI:VSPI & HSPI
- 2xADC:ADC1 & ADC2
- DEEP SLEEP GPIO
- TOUCH SENSOR
- I2C
- DAC
- SD
- UART