

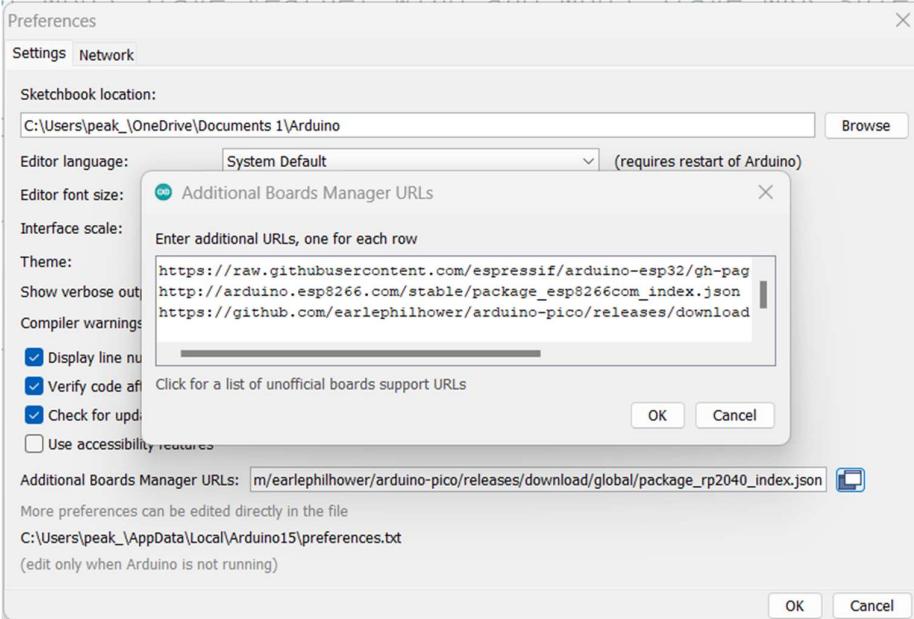
Getting Start ESP32: ESP32 GPIO + ESP32 Interface

Mission 1/12 -- Arduino IDE 2.3.4 Install + Blink Test

1. Read <https://www.cybertice.com/p/5089>
2. Read <https://support.arduino.cc/hc/en-us/articles/360019833020-Download-and-install-Arduino-IDE>
3. Download “arduino-2.3.4-windows.exe”(@20241224) and Install

<p>Downloads</p>  <p>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.</p> <p>For more details, please refer to the Arduino IDE 2.0 documentation.</p>	<p>Download Arduino IDE & support its progress</p> <p>Since the 1.x release in March 2015, the Arduino IDE has been downloaded 78,130,138 times — impressive! Help its development with a donation.</p> <p>\$3 \$5 \$10 \$25 \$50 Other</p> <p>CONTRIBUTE AND DOWNLOAD</p> <p>or</p> <p>JUST DOWNLOAD</p>
Windows, Linux or Mac	Just Download

4. Add ESP32 Board URLs: **File → Preference → <Add 3 Line > → Ok → Ok**



Additional Boards Manager URLs:

https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json

http://arduino.esp8266.com/stable/package_esp8266com_index.json

https://github.com/earlephilhower/arduino-pico/releases/download/global/package_rp2040_index.json

5. Add ESP32 Board: Tools → Boards → Board Manager

Filter = esp32
Select → esp32 by Espressif System → Version 2.0.14 → Install

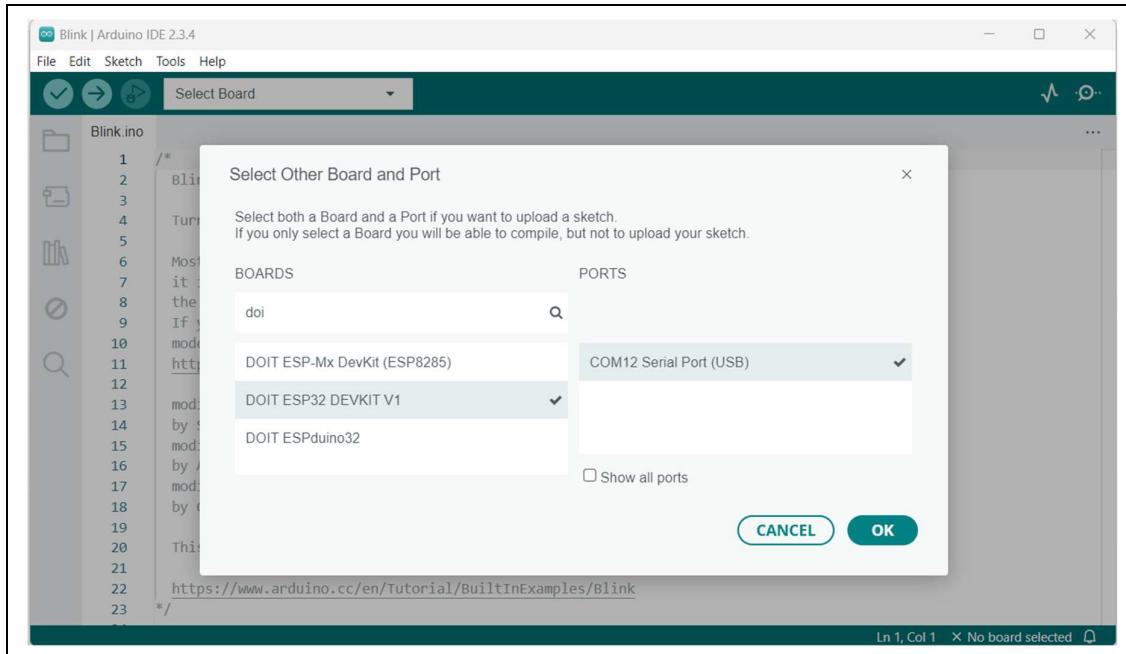
6. Read <https://www.allnewstep.com/b/144>

7. Connect ESP32 Board to PC

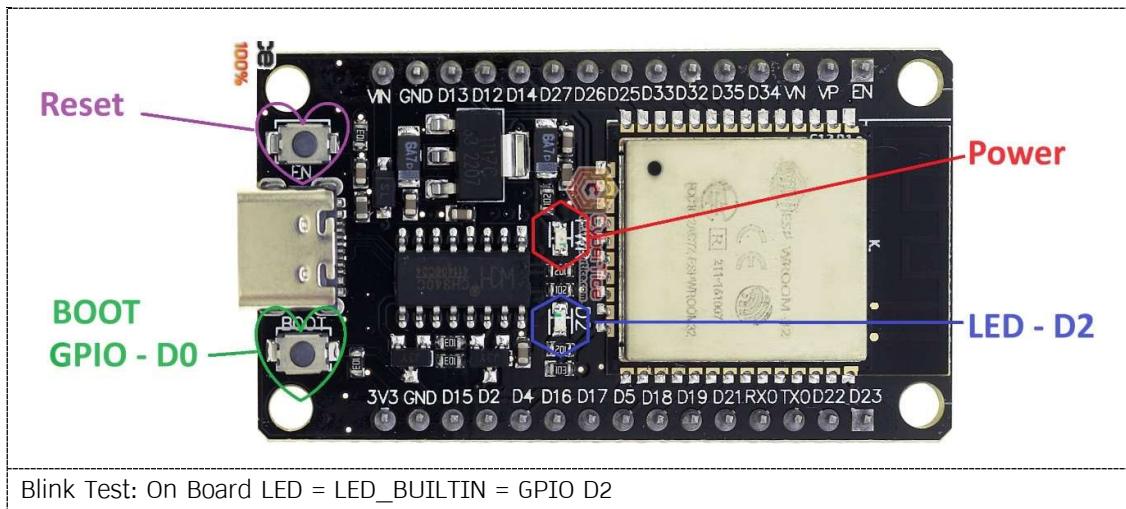
8. Check Comm Port

Search – Device Manager	
	CP2102 Driver >> https://www.silabs.com/interface/usb-bridges/classic/device.cp2102?tab=specs
ESP32 at COM 12	

9. Blink Test Code: **File → Example → 01.Basic → Blink**
10. Select Serial Port: **Tools → Port → Com X**
11. Select Target Board: **Tools → Boards → ESP32 Arduino → DOIT ESP32 DEVKIT V1**

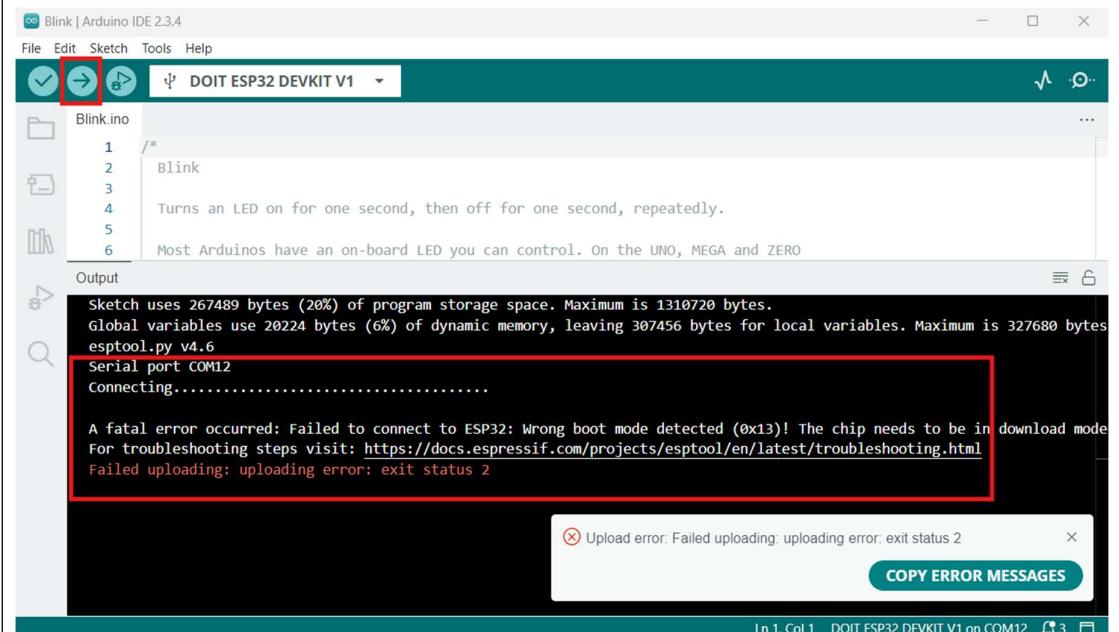


12. Upload Code to Target Board: **Sketch → Upload**
13. ESP32 Pinout Reference <https://randomnerdtutorials.com/esp32-pinout-reference-gpios/>



Note:

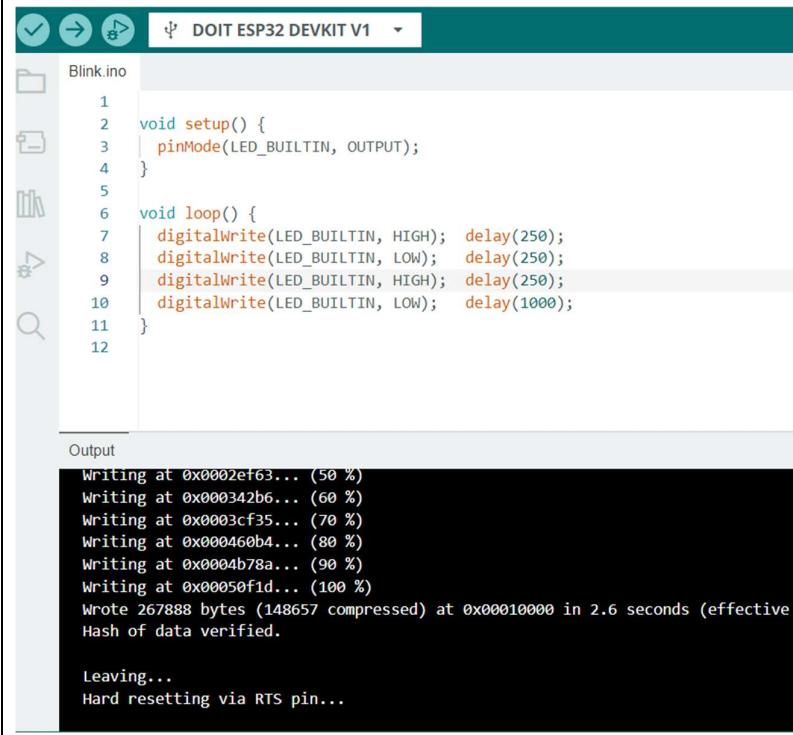
1. สามารถกด ➔ เพื่อ Upload Code ได้



The screenshot shows the Arduino IDE interface with the title "Blink | Arduino IDE 2.3.4". The toolbar at the top has icons for File, Edit, Sketch, Tools, and Help, with the "Upload" icon (a right-pointing arrow) highlighted with a red box. The sketch file "Blink.ino" is open, displaying the standard Blink code. In the bottom-left "Output" window, there is a red box around the error message: "A fatal error occurred: Failed to connect to ESP32: Wrong boot mode detected (0x13)! The chip needs to be in download mode. For troubleshooting steps visit: <https://docs.espressif.com/projects/esptool/en/latest/troubleshooting.html>". Below this, another message says "Failed uploading: uploading error: exit status 2". A small tooltip-like box in the center says "Upload error: Failed uploading: uploading error: exit status 2" with a "COPY ERROR MESSAGES" button.

2. อาจเกิด Upload Error – แก้ไขโดยการกดปุ่ม BOOT ค้างไว้แล้วกด Upload รอจนเริ่มการ Upload ค่อยปล่อยปุ่ม BOOT

3. ลองเปลี่ยนโค้ดเป็นดังรูป แล้ว Upload



The screenshot shows the Arduino IDE interface with the title "Blink.ino" and board selected as "DOIT ESP32 DEVKIT V1". The code in the editor is identical to the one in the previous screenshot. In the bottom-left "Output" window, the upload process is shown with progress bars and text: "Writing at 0x00002ef63... (50 %)", "Writing at 0x0000342b6... (60 %)", "Writing at 0x00003cf35... (70 %)", "Writing at 0x0000460b4... (80 %)", "Writing at 0x00004b78a... (90 %)", "Writing at 0x000050fid... (100 %)", "Wrote 267888 bytes (148657 compressed) at 0x00010000 in 2.6 seconds (effective Hash of data verified.)", "Leaving...", and "Hard resetting via RTS pin...".

ESP32 DEV-KIT V1 - PINOUT DIAGRAM

