I would really be grateful if you start to build the Shutter, that you go to the Photrio thread and say hi. Also please post photos of your completed tester.
Build a shutter tester for Focal Plane shutters - Cheap, Easy & it Works | Page 18 | Photrio.com Photography Forums

Please refer to Photrio for further build help

ESP32 Arduino IDE Software Load. V1.3 12/06/2024

Note:- The guides below must be followed in the correct order
ESP32 Installing CP2102 USB Driver
ESP32 Arduino Software Load
ESP32 Firmware Load

Both Nano & ESP32 use the same computer program, Arduino IDE to display the Shutter Tester output to the computer screen.

Arduino IDE (Integrated Development Module) is a computer program used to communicate with the Arduino processor boards, Nano, for example. The program allows writing & development of Arduino code and has many other features and uses.

One such feature, is the ability of the Arduino module or ESP32 to send data directly to the program for display on the computer screen. This is called 'Serial Monitor'.

This feature is used to display not only the same information as that of the LCD, but also far more, that simply would not be possible with the LCD alone.

Download the software
To get started, download the Arduino 2.x software from
Software | Arduino

Install the software
To watch a tutorial for the install process, watch this video up to 6.04

(284) How To Install Arduino IDE 2.0 On Windows 10/11 [2023 Update] Arduino Uno Complete Guide - YouTube

Note:- The video past 6.04 is not applicable for our use and will not work with ESP32 unless additional definitions are loaded. Details of how to load the definitions, for those wanting to learn programming of the ESP32, can be found at the end of this document.

That is it. The software can be run.

1 Connect the ESP32 board to the computer with a suitable USB cable.

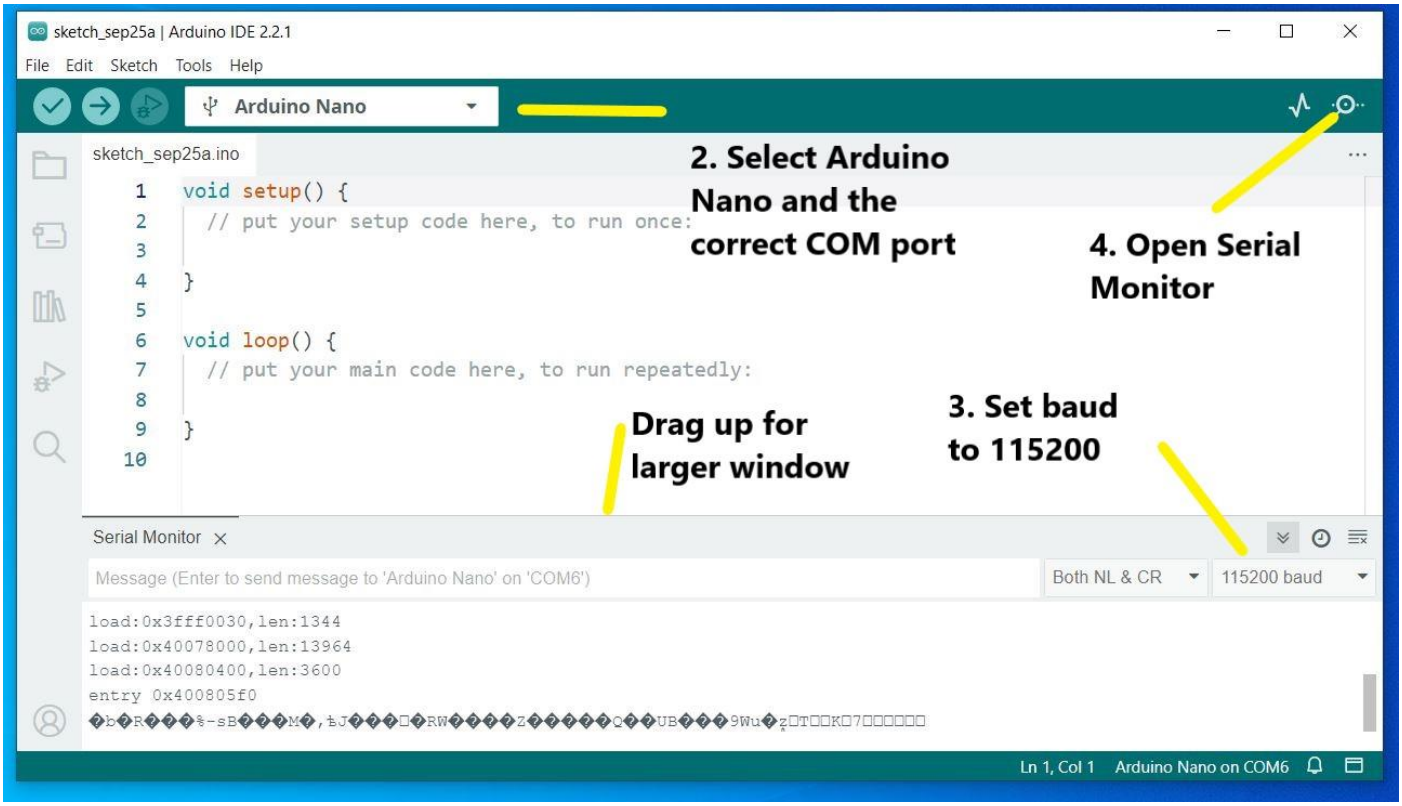
2 Select Arduino Nano and the correct COM port

3 Change the baud to 115200 (This is just a test, **change the baud to 460800 when using with the shutter tester**)

4 Open Serial Monitor window. This opens at the bottom, but can be dragged up to make it larger.

5 Press the Reset button on the ESP32 module and the bootloader output will be seen in the Serial Monitor window.

Success :o)



Stop Here. Setup for the Shutter Tester to display on the Arduinio IDE software is complete.

The below is only for people wanting to progress into the world of using ESP32 on the Arduino platform.

Optional Steps.
This software is only used to display the output from the Shutter Tester via the USB connection and using the 'Serial Monitor' screen in 'Arduino IDE'.

To write and load code to ESP32 processors, additional processor definitions have to be loaded. These are **NOT** necessary for use with the shutter tester, but for those that wish to experiment with the ESP32 and write their own code, details of the additional steps required are detailed below.

Add the ESP32 definitions
To add the extra ESP32 definitions, follow this video

[(296) ESP32 install Arduino IDE 2 in 90 seconds #ESP32 - YouTube]

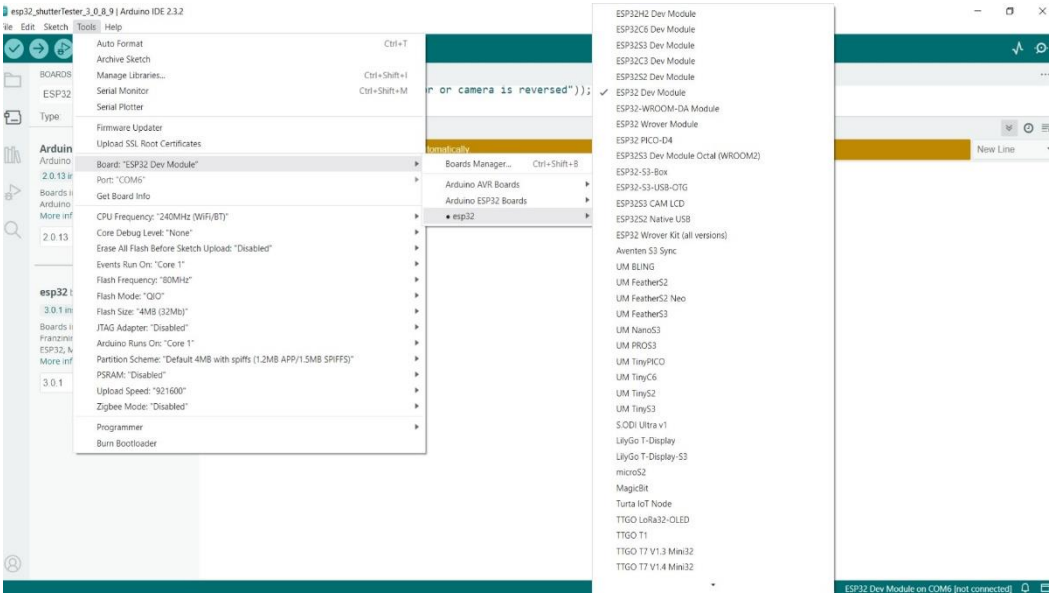
At 1.15 in the video, select **ESP32 Dev Module**. Also ensure the correct COM port is selected.

Load a sketch onto the ESP32
Now go back to the 'How To Install Arduino IDE' software install video and load the Blink sketch as described from 6.04, ensuring **ESP32 Dev Module** is selected for the board.

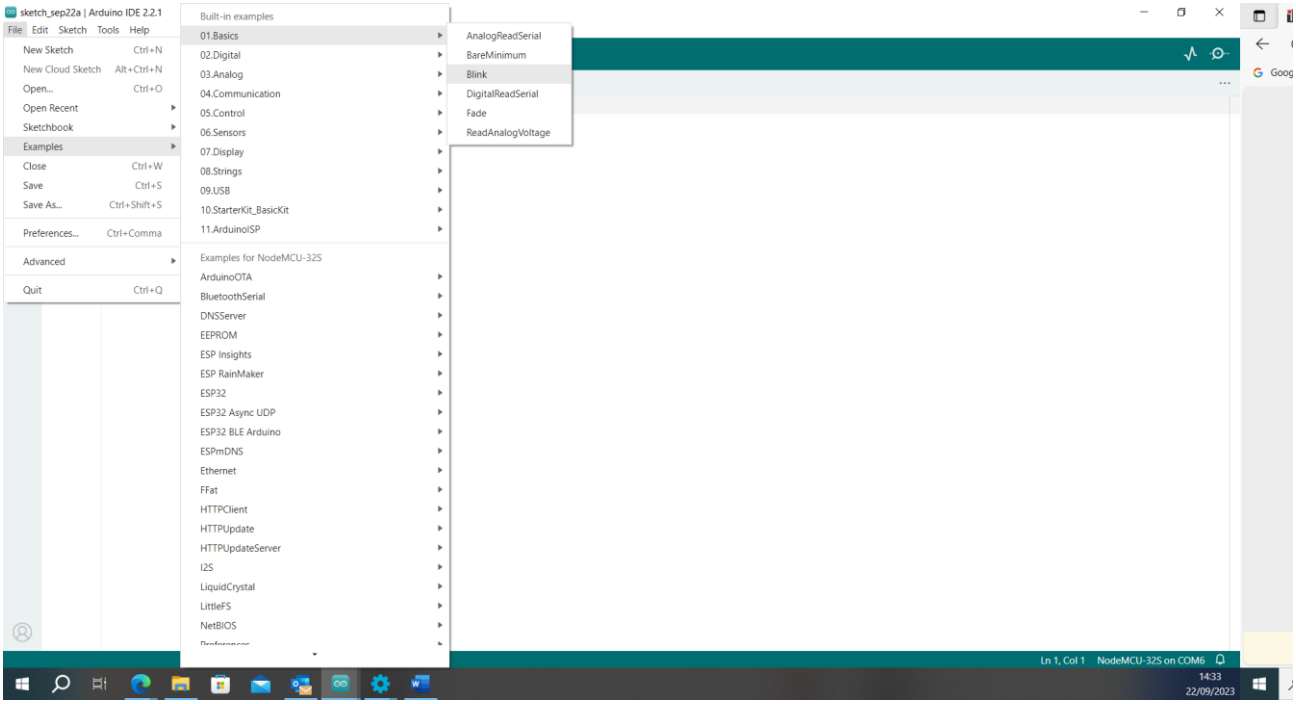
Note:- when 'Connecting' is shown on the lower screen, the Boot button on the ESP32 board must be pressed and held until the code starts to load (around three seconds)

IMPORTANT. THE LATEST ARDUINO IDE UPDATE BROKE THE NodeMCU32-32S setting.
INSTEAD PLEASE SELECT 'ESP32 DEV BOARD' IN BOARD MANAGER, NOT NodeMCU32-S, SHOWN IN THE SCREENSHOT BELOW

Selecting the correct board & COM port.

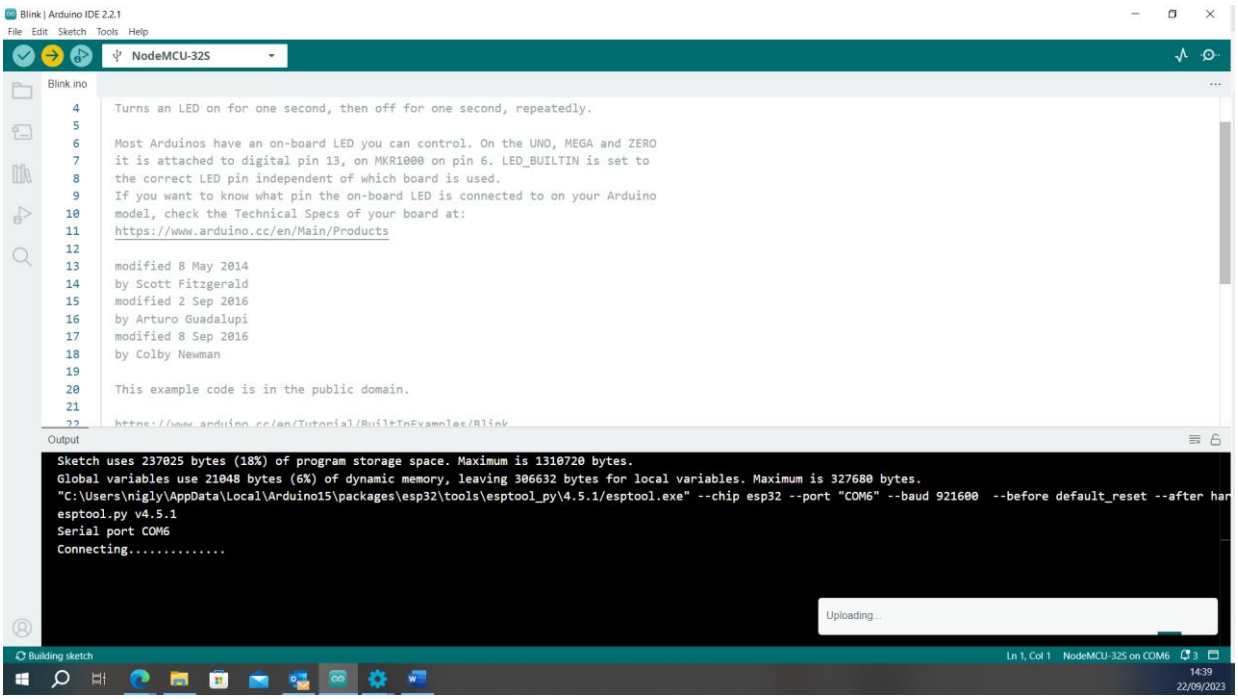


Select the Blink sketch



IMPORTANT. THE LATEST ARDUINO IDE UPDATE BROKE THE NodeMCU32-32S setting.
PLEASE ENSURE 'ESP32 DEV BOARD' IS SHOWN, NOT NodeMCU32-S, AS IN THE SCREENSHOT BELOW

Click the button at the top (yellow) to compile & load the code
When 'Connecting' is shown in the lower screen, press the Boot button on the ESP32 for three seconds.



Code successfully downloaded to the ESP32 board.