ESP32 Arduino IDE Software Load V1.1

Note:- These guides 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.

There are a few extra steps required for the ESP32, after downloading the software. These are to load the additional ESP32 definitions and load a small piece of code (sketch) onto the ESP32. These are described below.

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 (nano in this case) 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.

(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 describes the normal way of loading code onto the Arduino (in Arduino language, a program file is called a 'sketch') by demonstrating how to load the Blink sketch. This cannot be done until the ESP32 definitions are loaded.

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

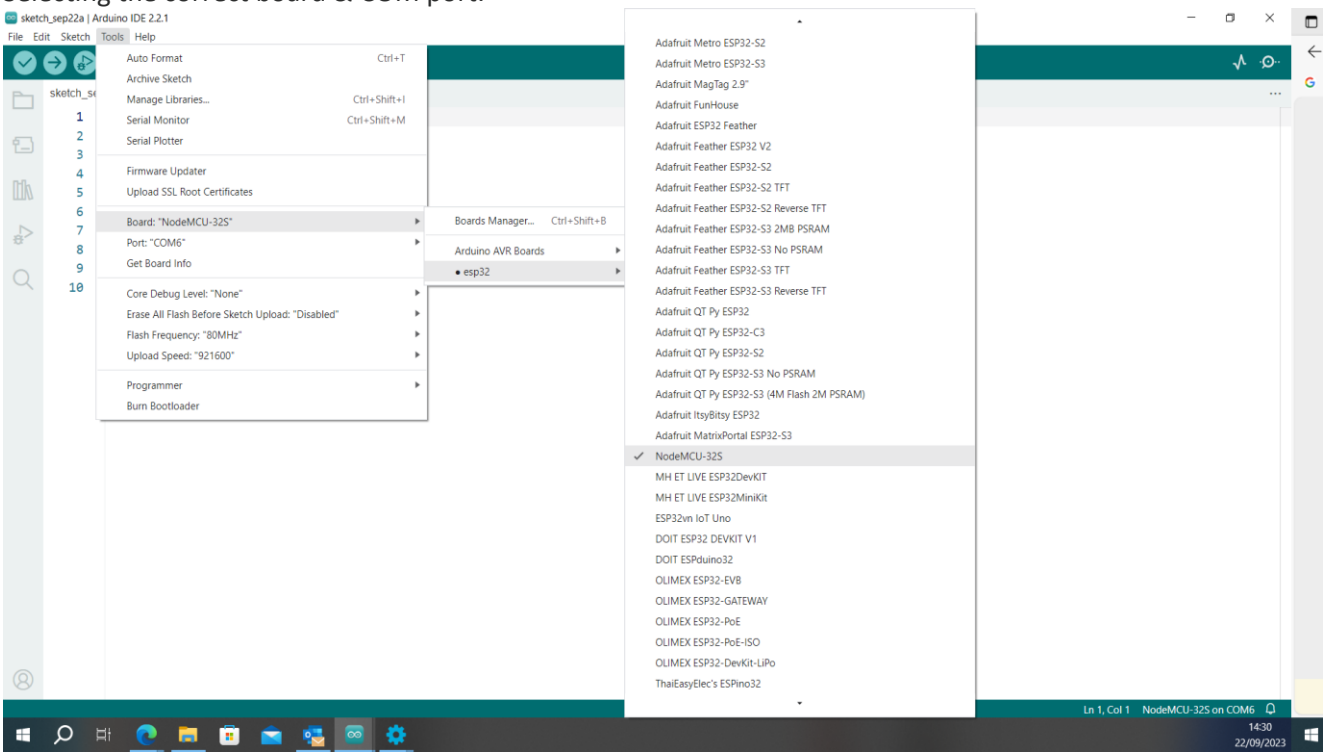
(296) ESP32 install Arduino IDE 2 in 90 seconds #ESP32 - YouTube

At 1.15 in the video, select NodeMCU-32S. Also ensure the correct COM port is selected.

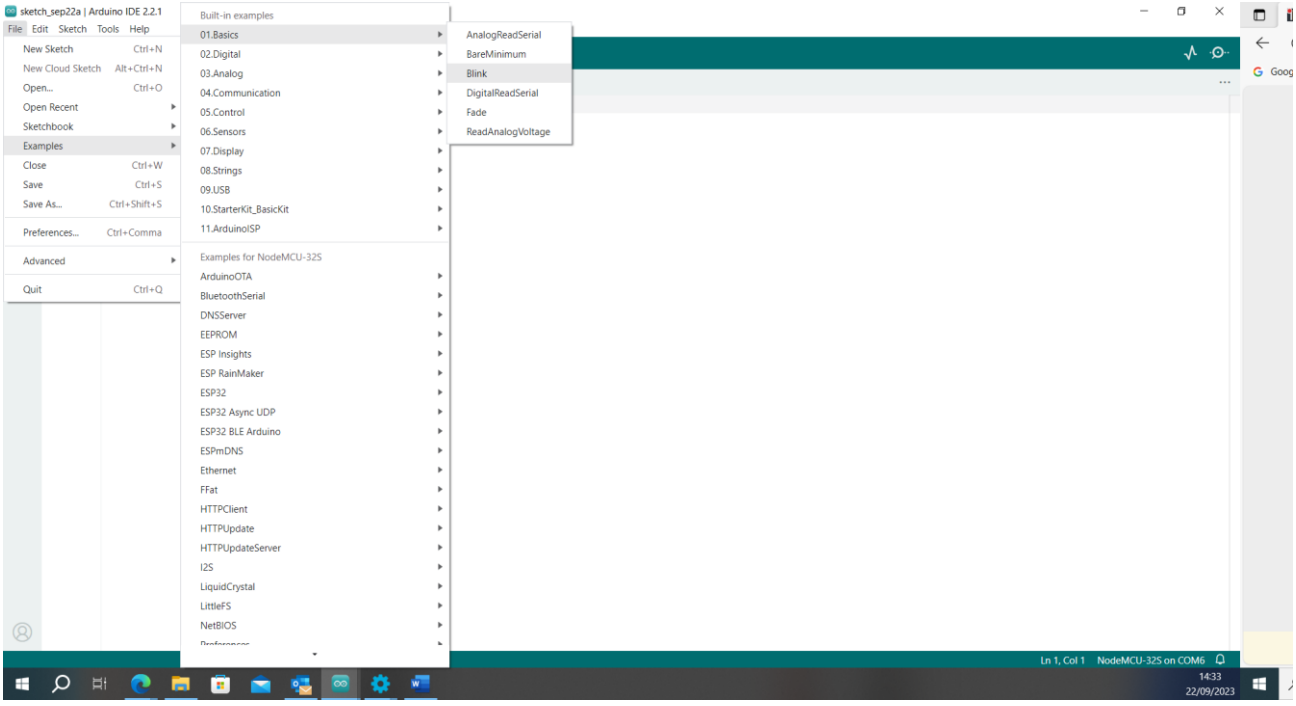
Load a sketch onto the ESP32 ***(do no skip this step)***
Now go back to the 'How To Install Arduino IDE' software install video and load the Blink sketch as described from 6.04, ensuring NodeMCU-32S is selected for the board.

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)

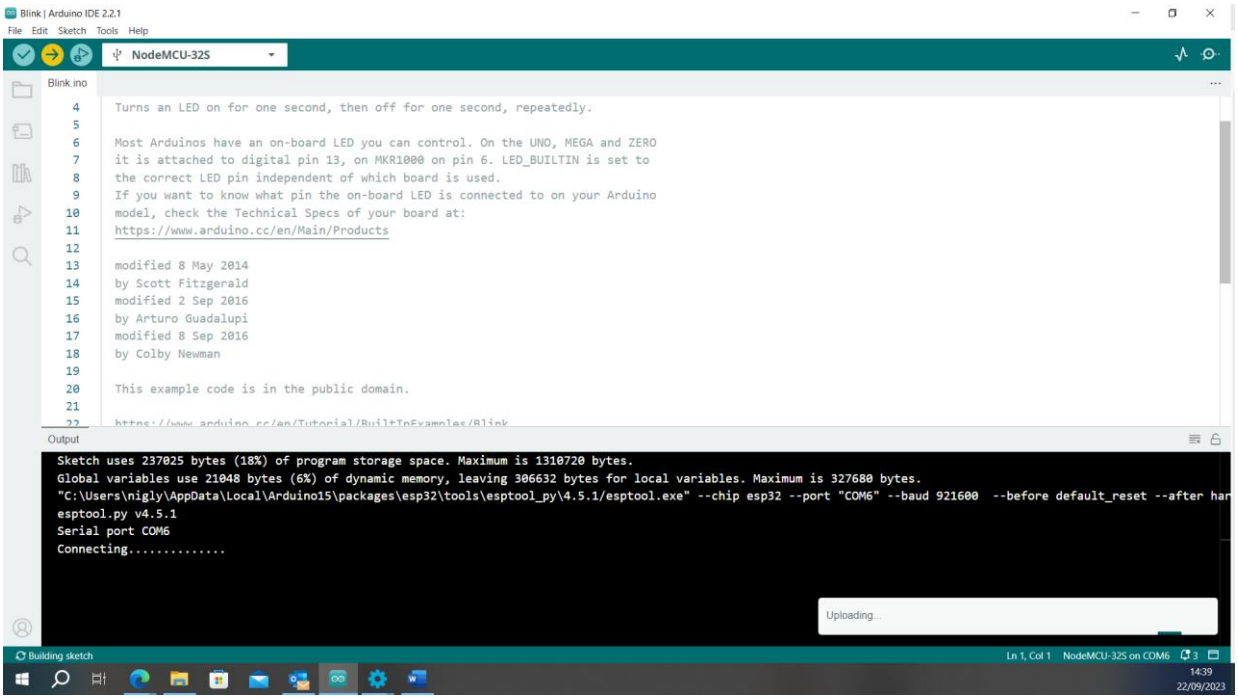
Selecting the correct board & COM port.



Select the Blink sketch



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.