INSTALLATION OF STM32DUINO

Installation of Arduino environment

Firstly it is necessary to use the Arduino IDE development environment.

Download and install Arduino IDE from the link **https://www.arduino.cc/en/Main/Software**

Install the STM32 package

Once Arduino IDE is installed, launch Arduino IDE then go to File > Preferences

Add this link in the "Additional Boards Manager URLs" field:

https://github.com/stm32duino/BoardManagerFiles/raw/main/package_stmicroelectronics_index.json

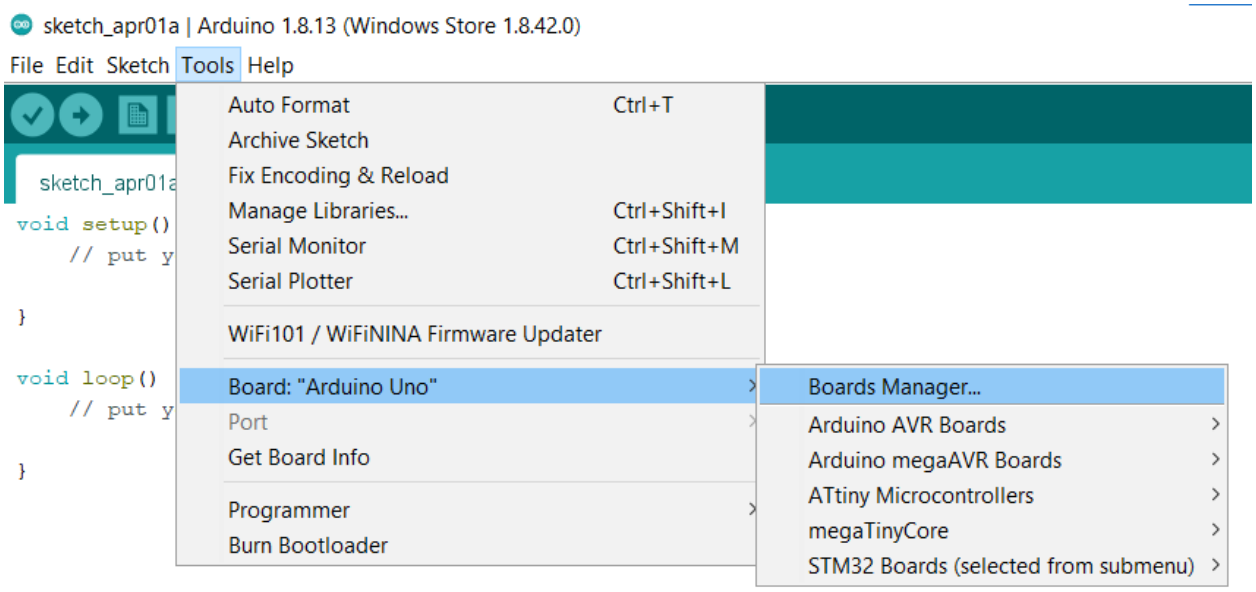
or

http://dan.drown.org/stm32duino/package_STM32duino_index.json

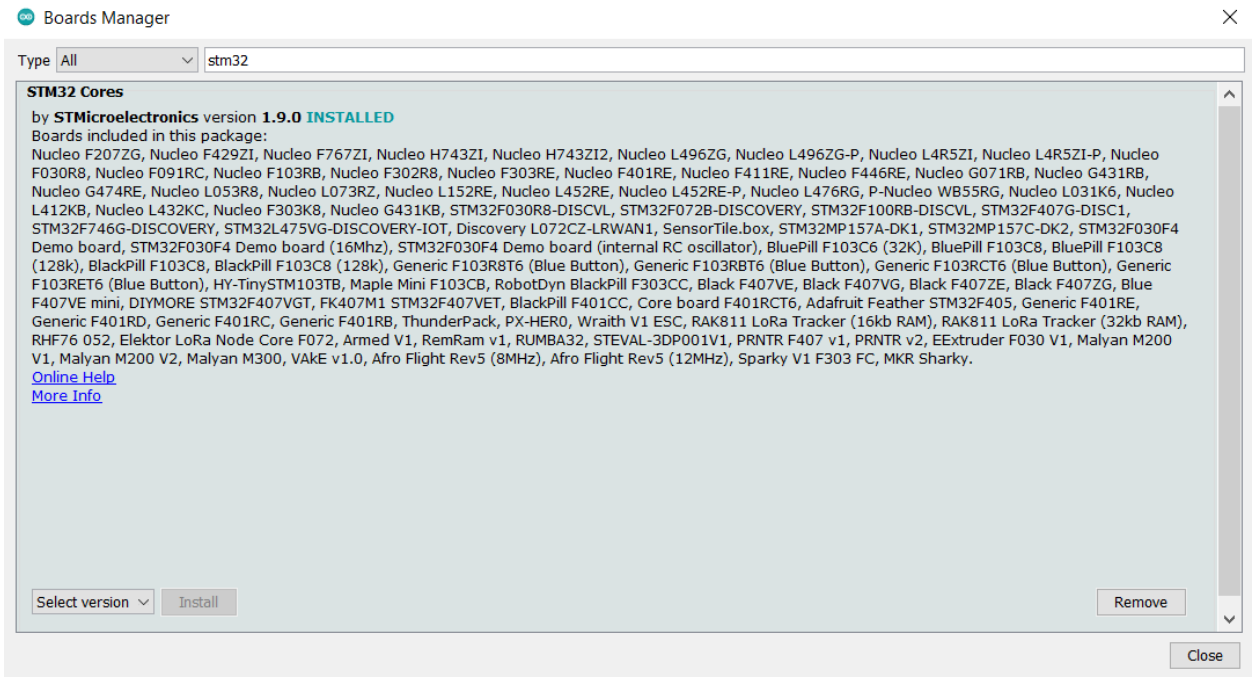
Official_link:
https://github.com/stm32duino/Arduino_Core_STM32

https://youtu.be/FzxLPDNBqng

Then : Tools > Board : ___ > Boards Manager...



Enter in the search bar “STM32” or “stm” and download the package by clicking on install.

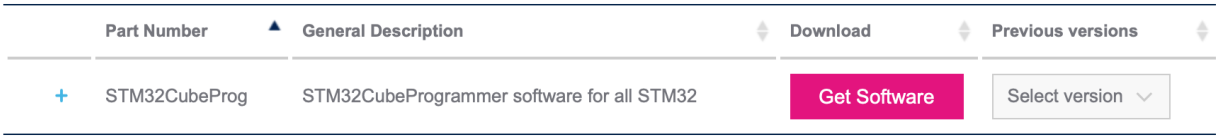


2. STM32 Emulator And Programmer Dongle (Windows only)

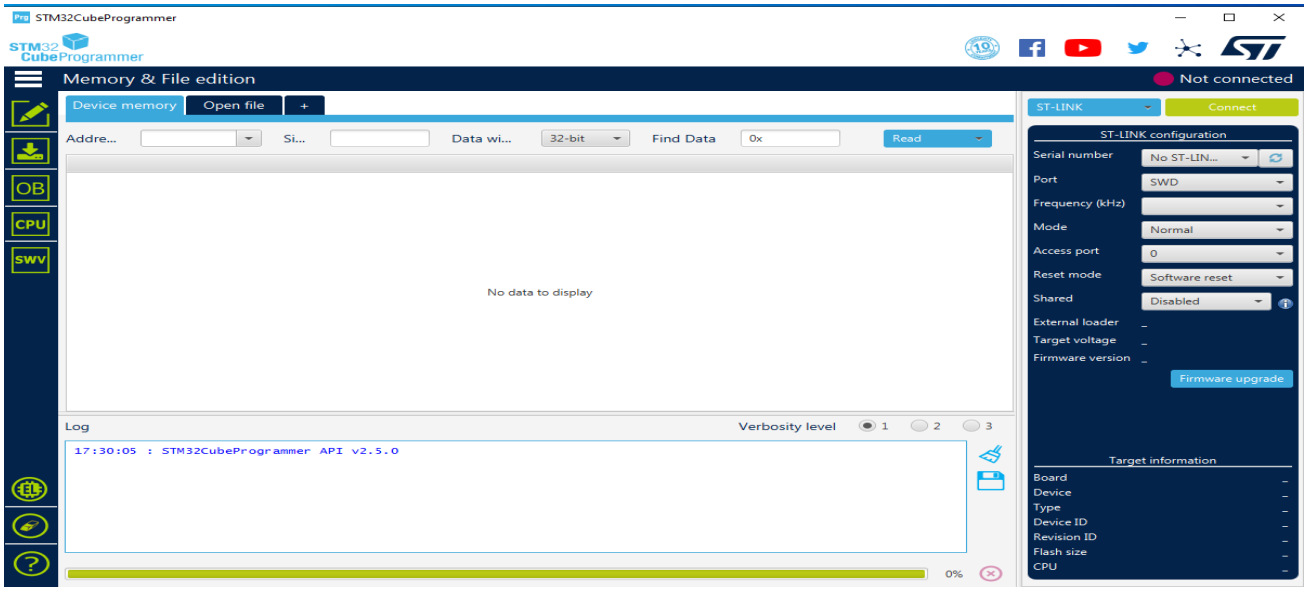
NOTE: Using JLink / ST-Link dongle to program the board will erase the Arduino bootloader.

Install STM32CubeProg

Download and install STM32CubeProg from ST.com: https://www.st.com/en/development-tools/stm32cubeprog.html



Start the STM32CubeProg. It will look like this:

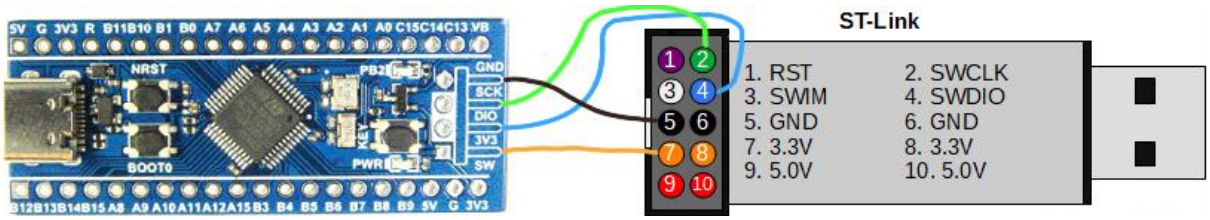


Close the STM32CubeProg.

Connect STM32 Blue Pill to ST-Link compatible Emulator And Programmer dongle

Follow the wiring diagram below to connect the STM32 Blue Pill to ST-Link compatible Emulator And Programmer dongle.

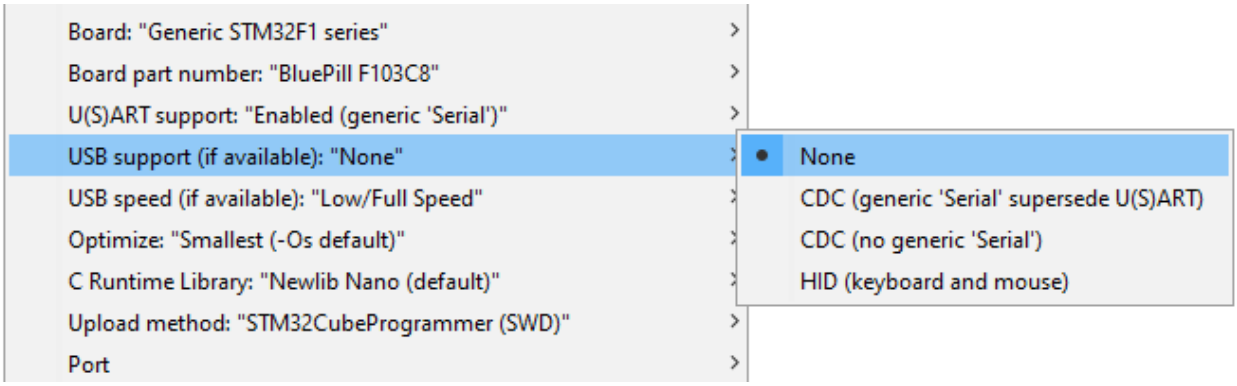
STM32 Blue Pill	**ST-Link compatible Dongle**
GND	GND
SCK	SWCLK
DIO	SWDIO
3V3	3.3V



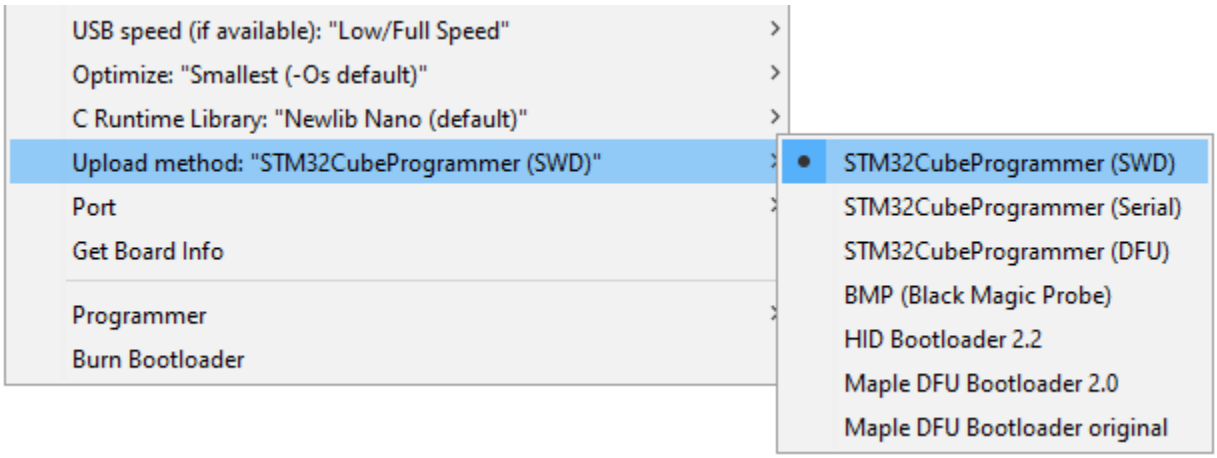
Setup Arduino IDE

Follow instructions above to install the STM32 Add-on to Arduino IDE.

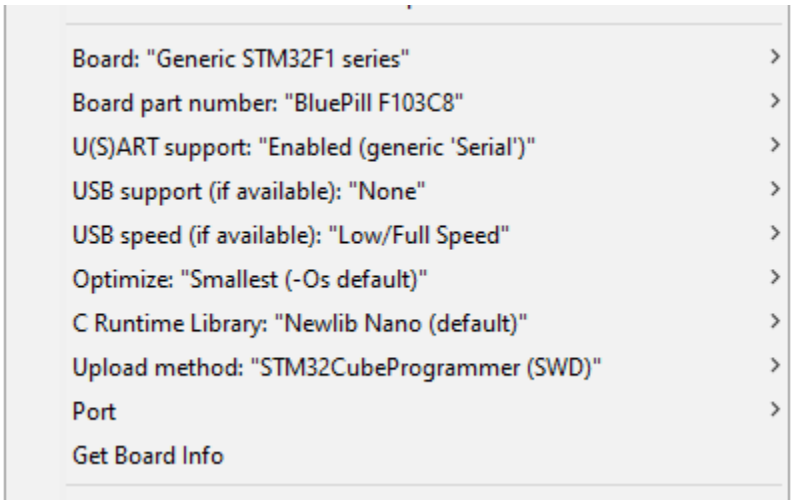
Select **Tools** > **USB Support**, select **None**



Set the Upload method to **STM32CubeProgrammer(SWD)**



These are your Tool configurations:



Note:

To add the three board preference links you provided to the Arduino IDE, follow these steps:

1. Open the Arduino IDE.
2. Go to "File" > "Preferences."
3. In the "Additional Boards Manager URLs" field, enter the following three URLs, separated by commas:

https://dl.espressif.com/dl/package_esp32_index.json,http://arduino.esp8266.com/stable/package_esp8266com_index.json,https://github.com/stm32duino/BoardManagerFiles/raw/main/package_stmicroelectronics_index.json

4. Make sure there are no spaces before or after each URL, and be sure to include the "http://" or "https://" part.
5. Click the "OK" button to save the preferences.
6. Now, go to "Tools" > "Board" > "Boards Manager."
7. In the Boards Manager, you can search for and install the board packages associated with the URLs you added.
8. Search for "esp32" and "esp8266" to install the ESP32 and

ESP8266 boards, and search for "STM32" to install the STM32 boards.

Once you've installed the board packages, you can select the desired board from the "Tools" > "Board" menu.

That's it! You've successfully added and installed the board preference links for ESP32, ESP8266, and STM32 boards in the Arduino IDE.