HOW TO UPDATE FIRMWARE ON RESPIMATIC 100

STEP-BY-STEP PROCEDURE

EQUIPMENT NEEDED

USB Cable

One end with micro-USB connector

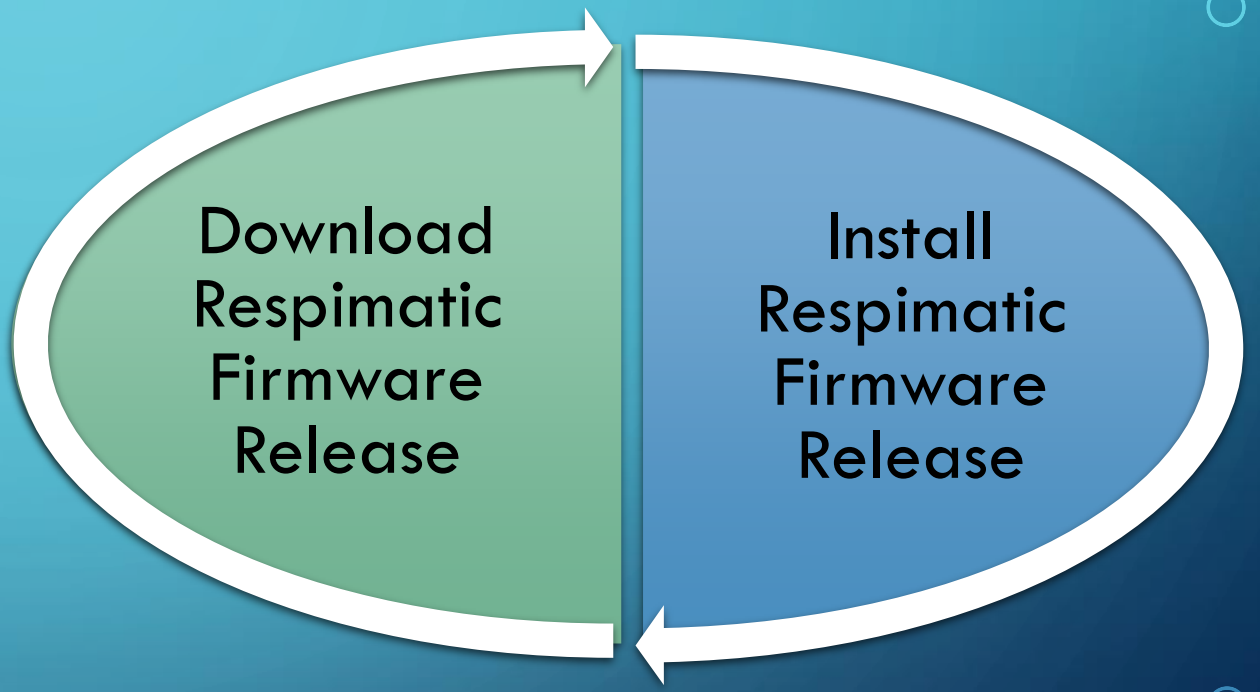
Windows Laptop

Respimatic 100

FIRMWARE UPDATE OVERVIEW

Needs to be done only once

Download Arduino Builder → Install Arduino Builder



Each Firmware release has 2 files – one for each controller in the Respimatic 100 system	
Respimatic100.ino.mega.hex	Dashboard.ino.nodemcu.bin

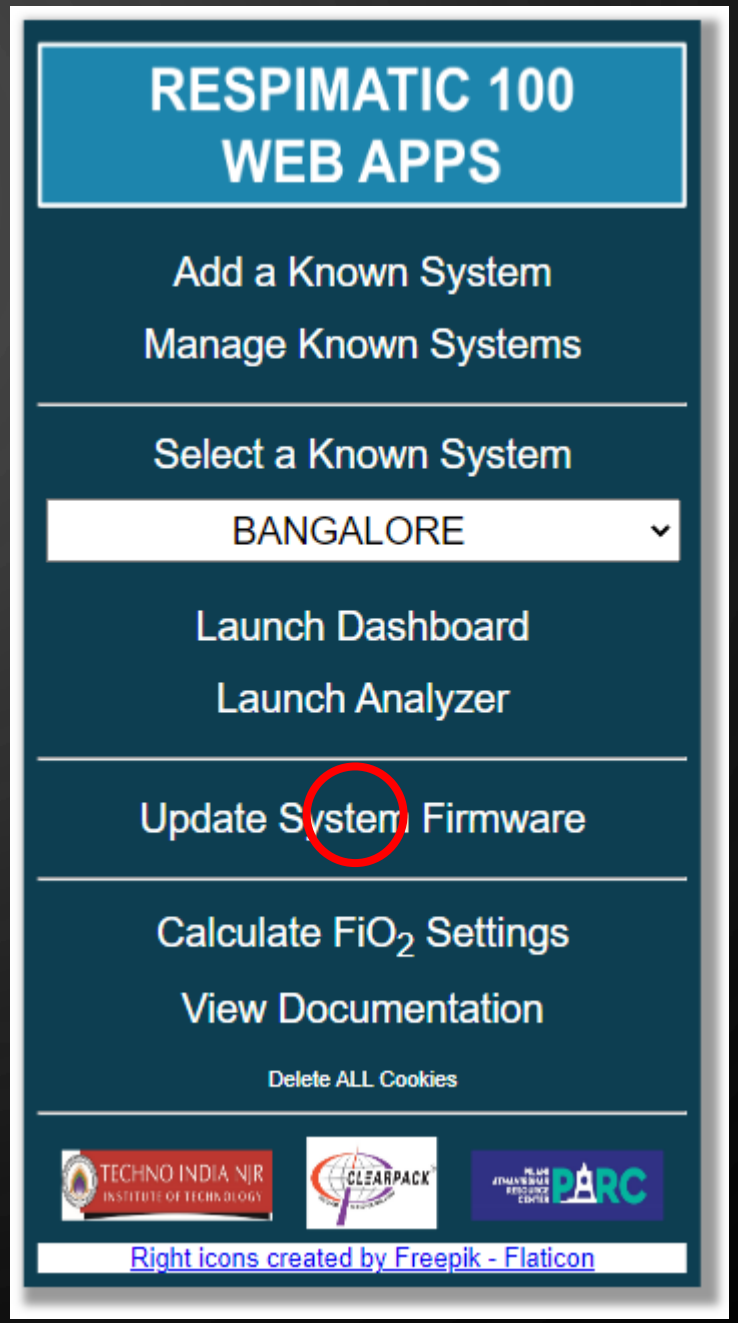
DOWNLOAD ARDUINO BUILDER

DOWNLOAD ARDUINO BUILDER
STEP 1

Open URL https://www.respimatic.com in your browser

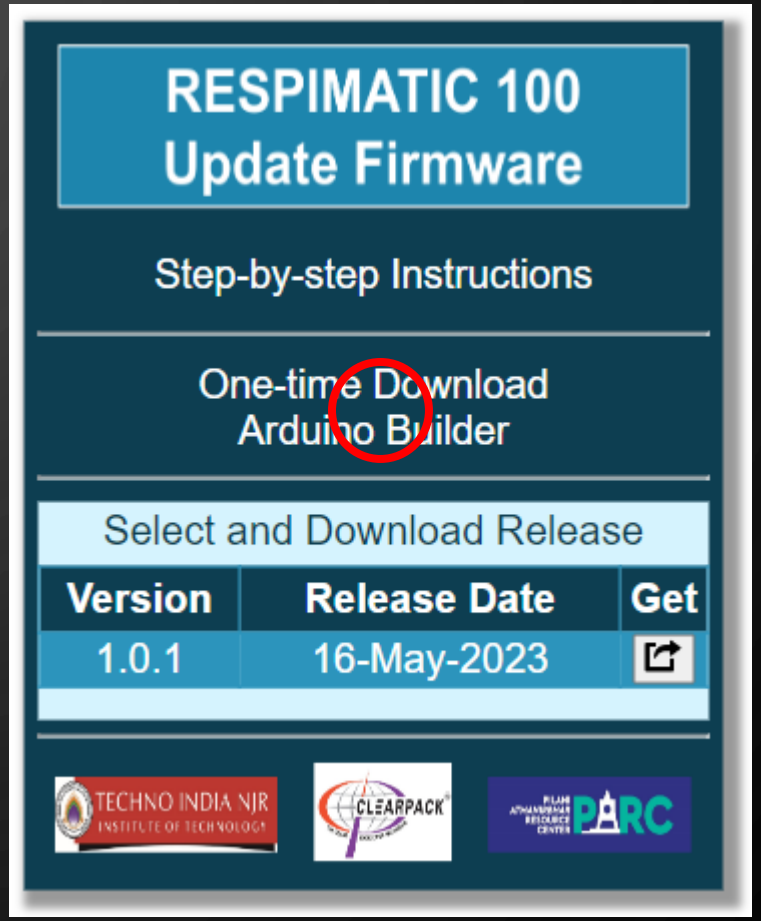
Click on

"Update System Firmware"



DOWNLOAD ARDUINO BUILDER
STEP 2

Click on
"One-time Download
Arduino Builder"

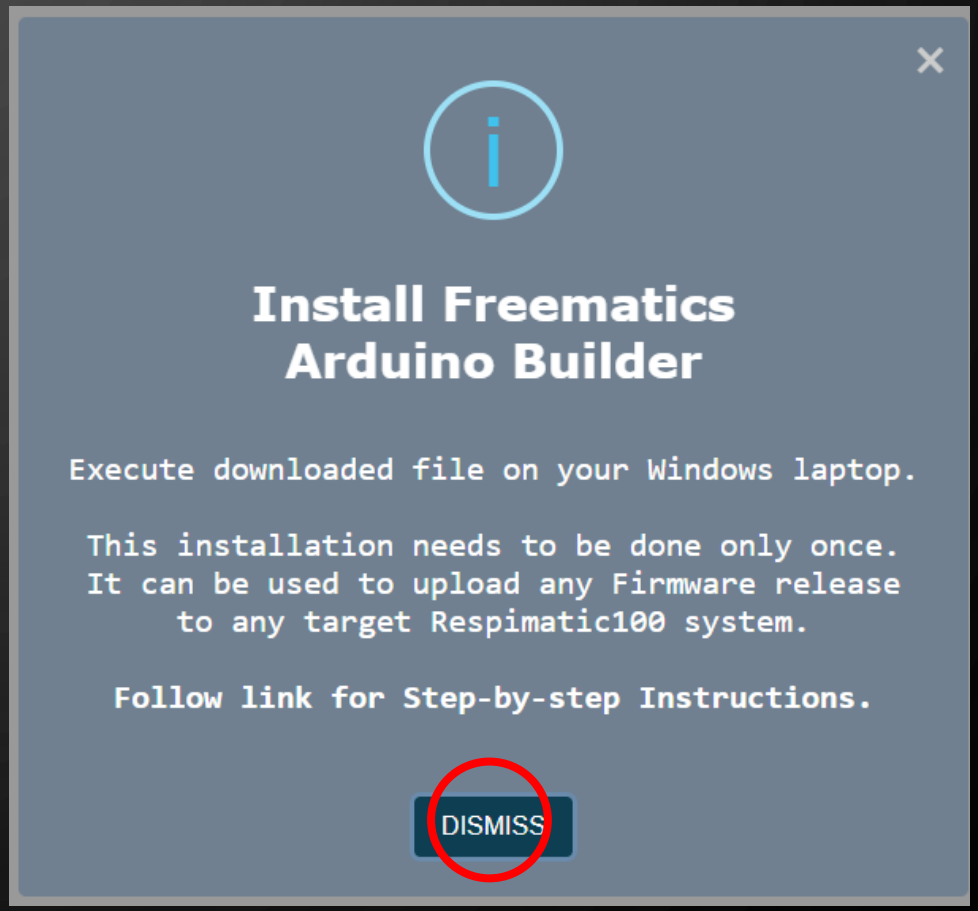


DOWNLOAD ARDUINO BUILDER
STEP 3

The .exe is downloaded to your Downloads folder

Depending upon your settings, a new tab may open in your browser. Delete that tab after download is complete

Read and Dismiss the information popup



INSTALL ARDUINO BUILDER

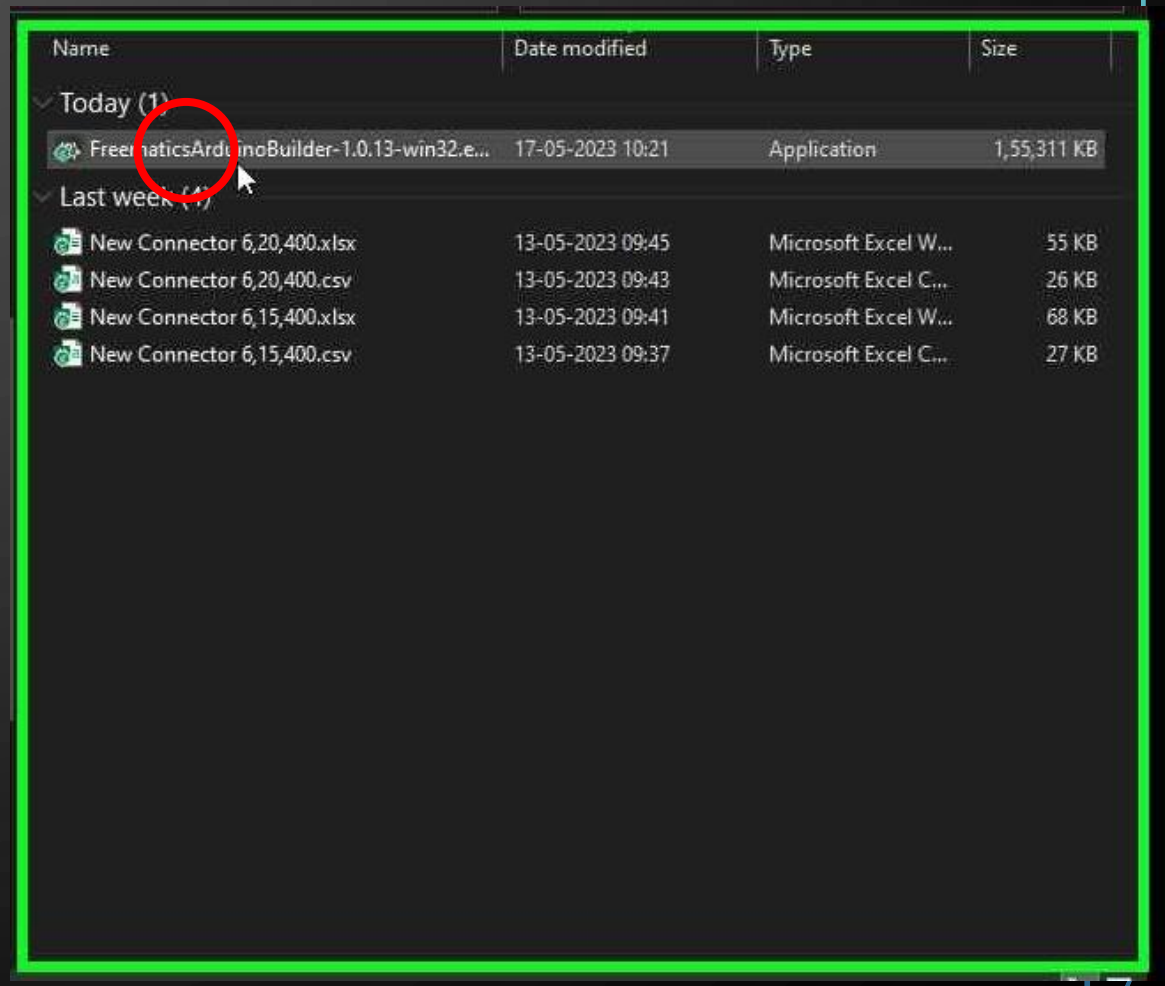
INSTALL ARDUINO BUILDER
STEP 1

Find the downloaded .exe file (in your Downloads folder)

Double Click on the .exe file to execute it

You will need admin privileges on your laptop to execute this file

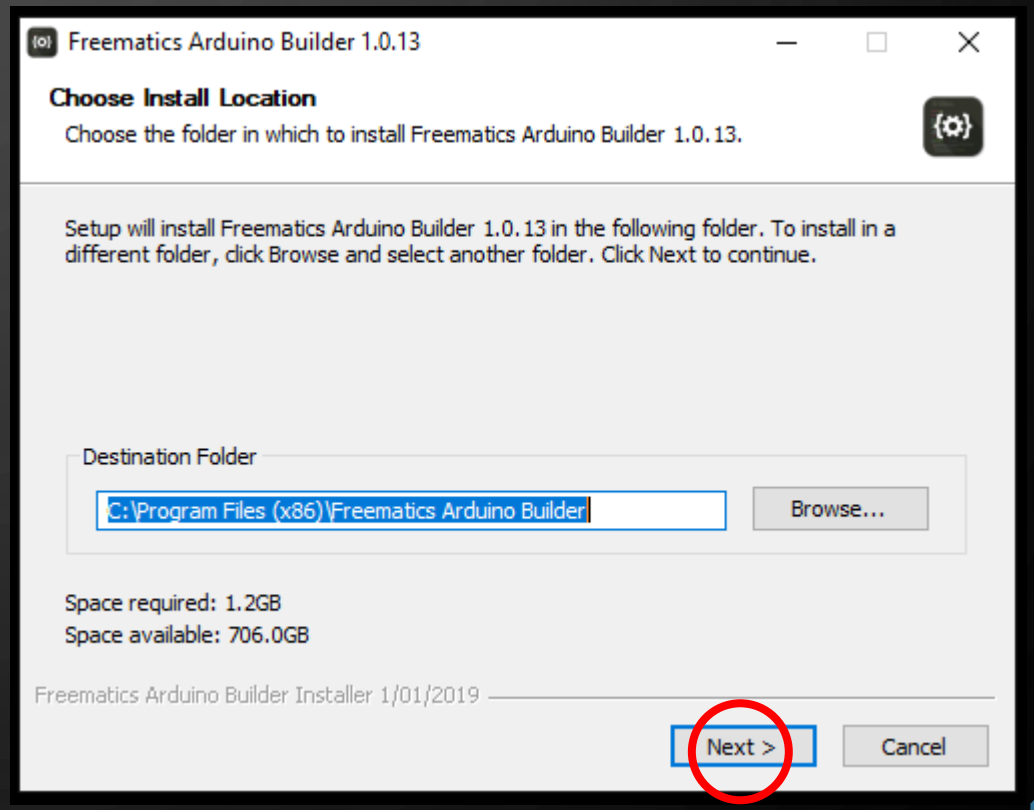
Your laptop's anti-virus software will sanitize the file automatically



INSTALL ARDUINO BUILDER
STEP 2

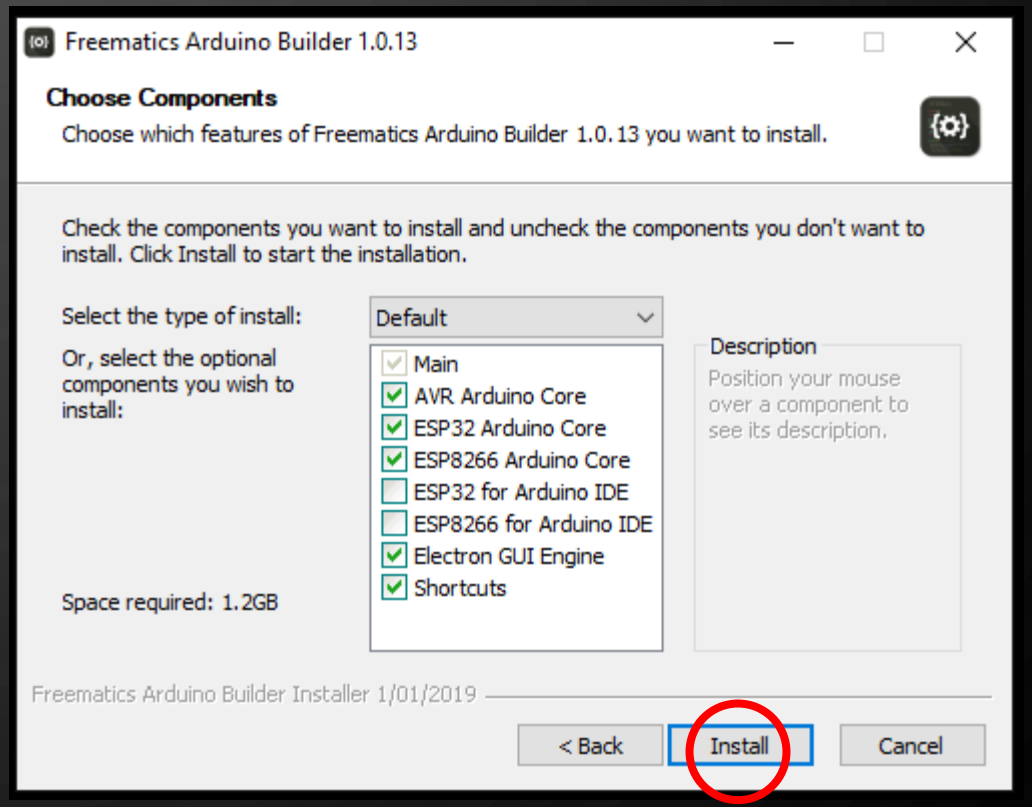
The Arduino Builder installer will guide you step-by-step

Click on “Next”



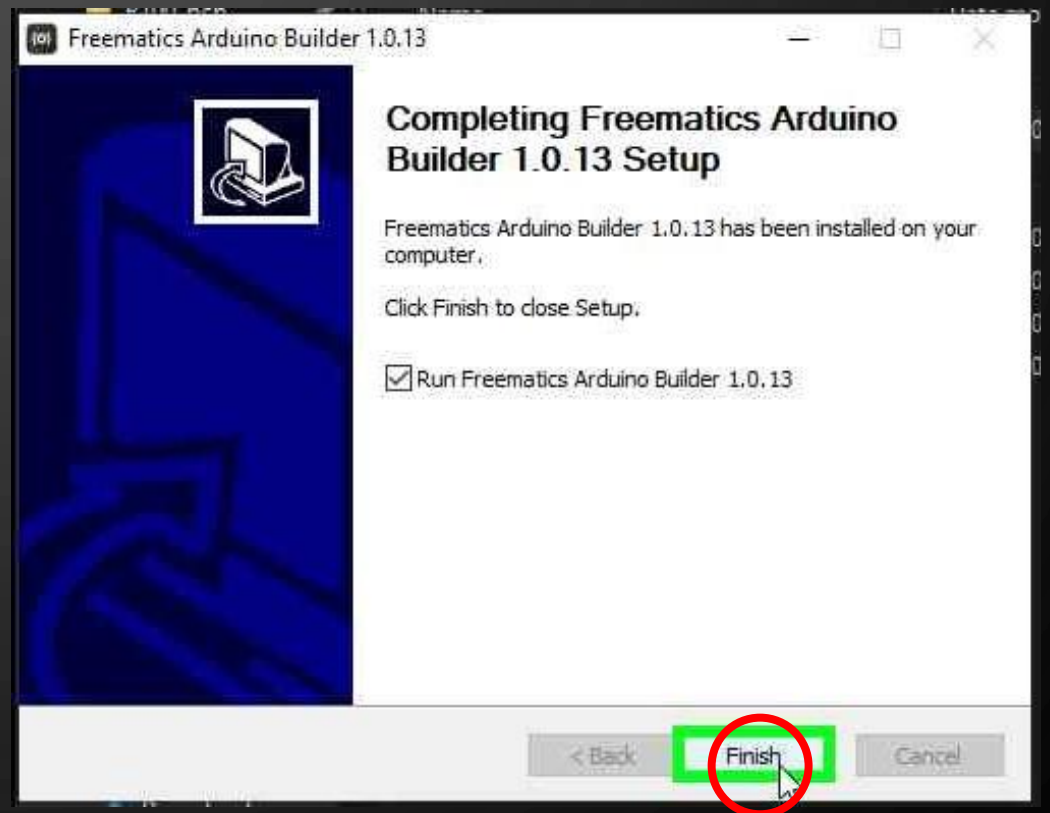
INSTALL ARDUINO BUILDER
STEP 3

Click on “Install”



INSTALL ARDUINO BUILDER
STEP 4

Click on “Finish”



INSTALL ARDUINO BUILDER
STEP 5

Arduino Builder is installed!

You can now delete the .exe file in your Downloads folder

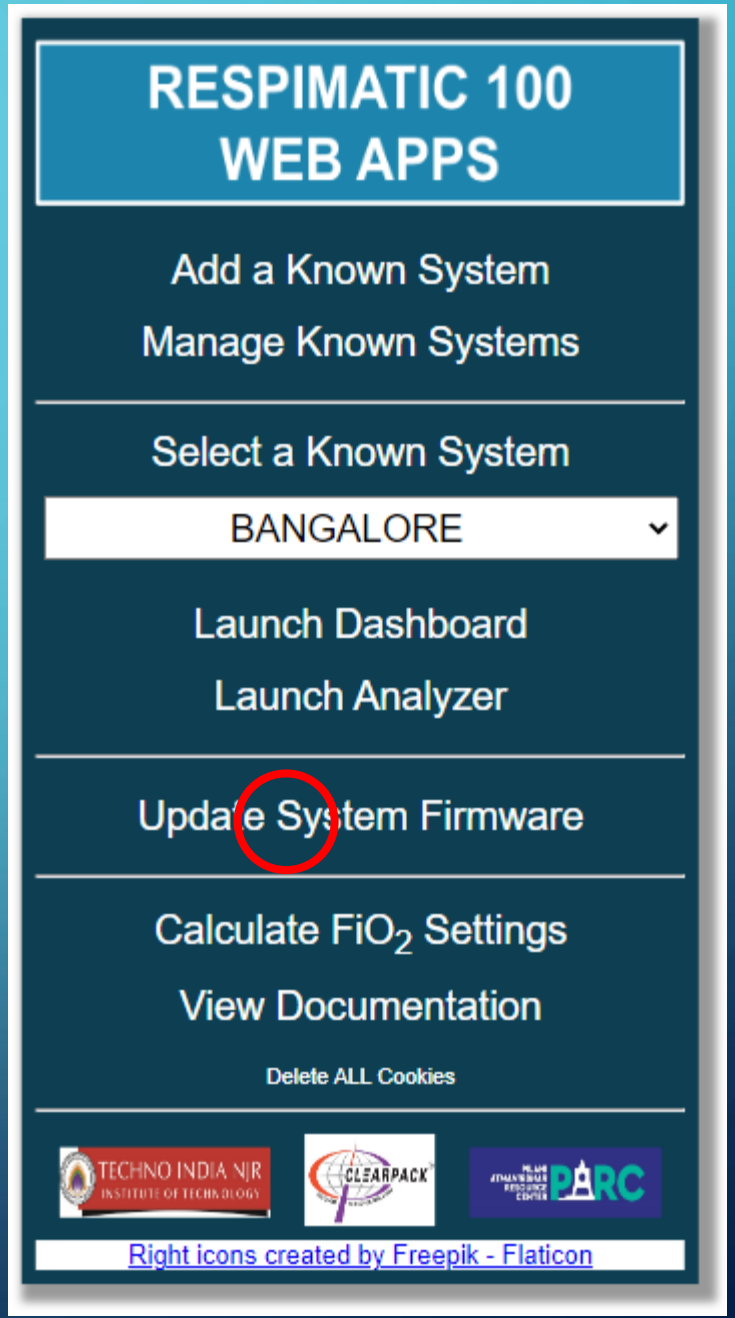
DOWNLOAD A FIRMWARE RELEASE

DOWNLOAD FIRMWARE RELEASE

STEP 1

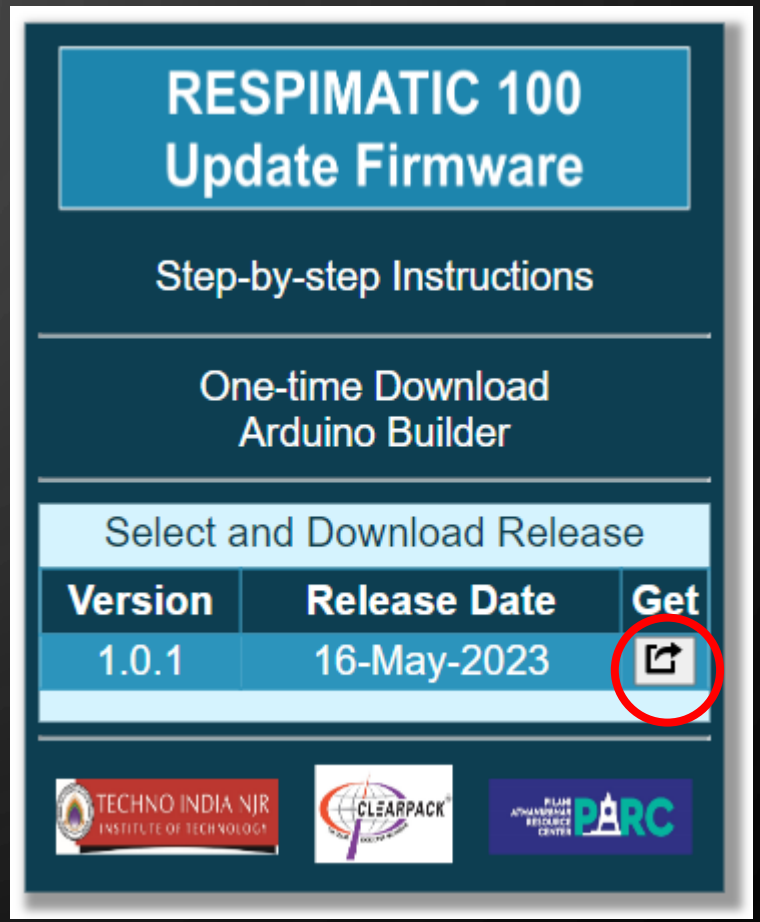
Open URL
https://www.respimatic.com in your browser

Click on
"Update System Firmware"



DOWNLOAD FIRMWARE RELEASE
STEP 2

Click on the download icon button next to the release you wish to download



DOWNLOAD FIRMWARE RELEASE

STEP 3

A .zip is downloaded to your Downloads folder

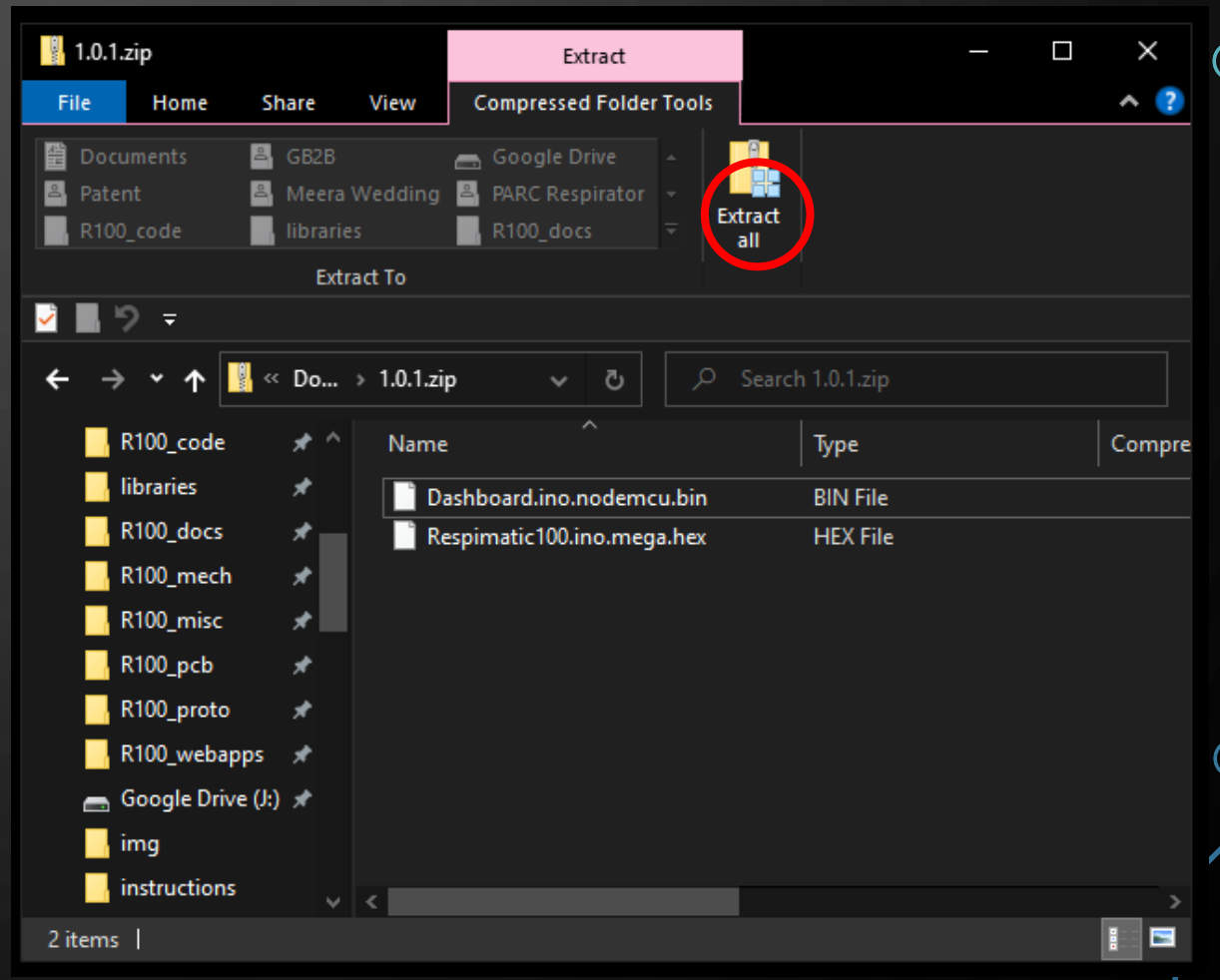
Read and Dismiss the information popup

DOWNLOAD FIRMWARE RELEASE

STEP 4

Double click on the downloaded .zip file to open it

Click on the “Extract All” button



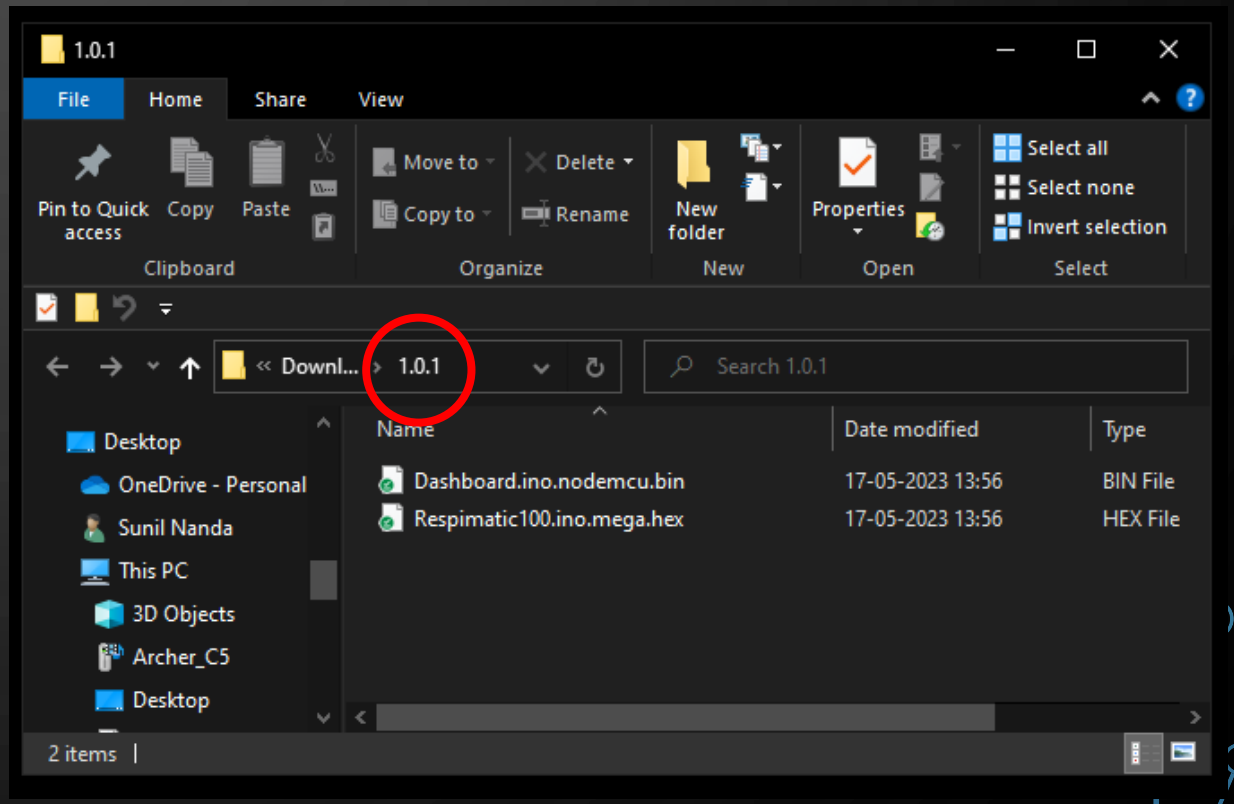
DOWNLOAD FIRMWARE RELEASE
STEP 5

A folder with the same name as the release tag will be created

It should show two files within it

Dashboard.ino.nodemcu.bin	Respimatic100.ino.mega.hex

Release is now downloaded and ready to be uploaded to the Respimatic system

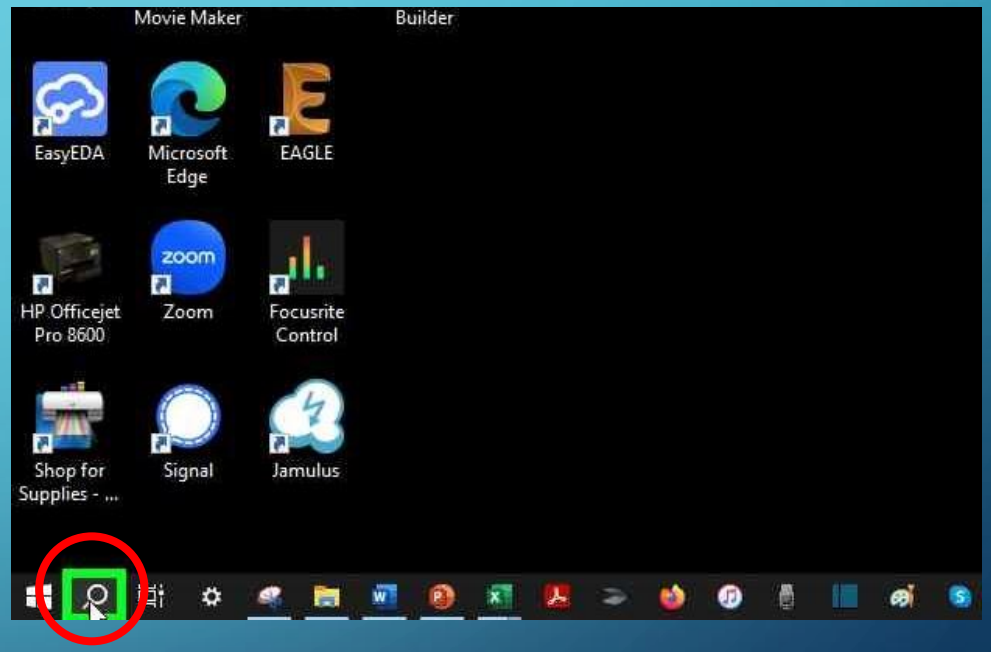


INSTALL FIRMWARE RELEASE

INSTALL FIRMWARE RELEASE

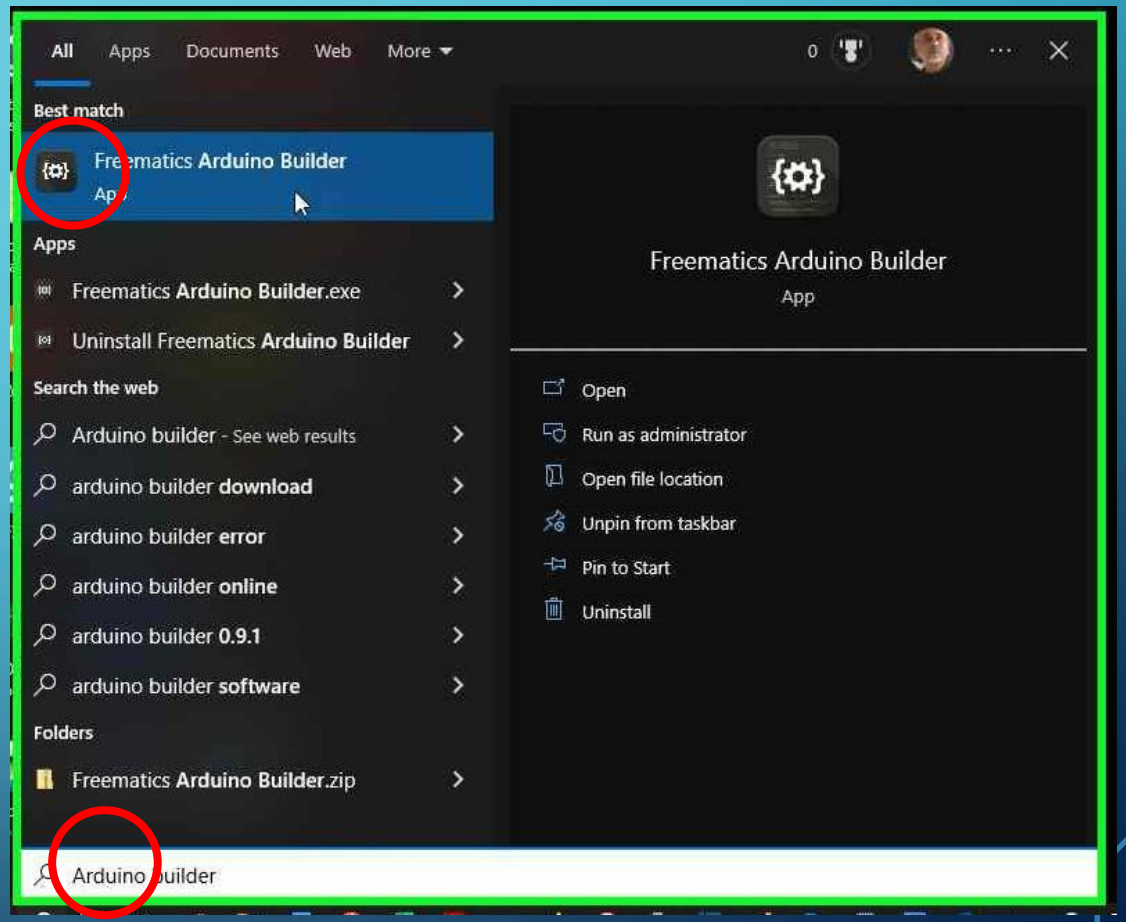
STEP 1

Search for “Arduino Builder” on the laptop



INSTALL FIRMWARE RELEASE
STEP 2

Click on
"Arduino Builder"
in the search window

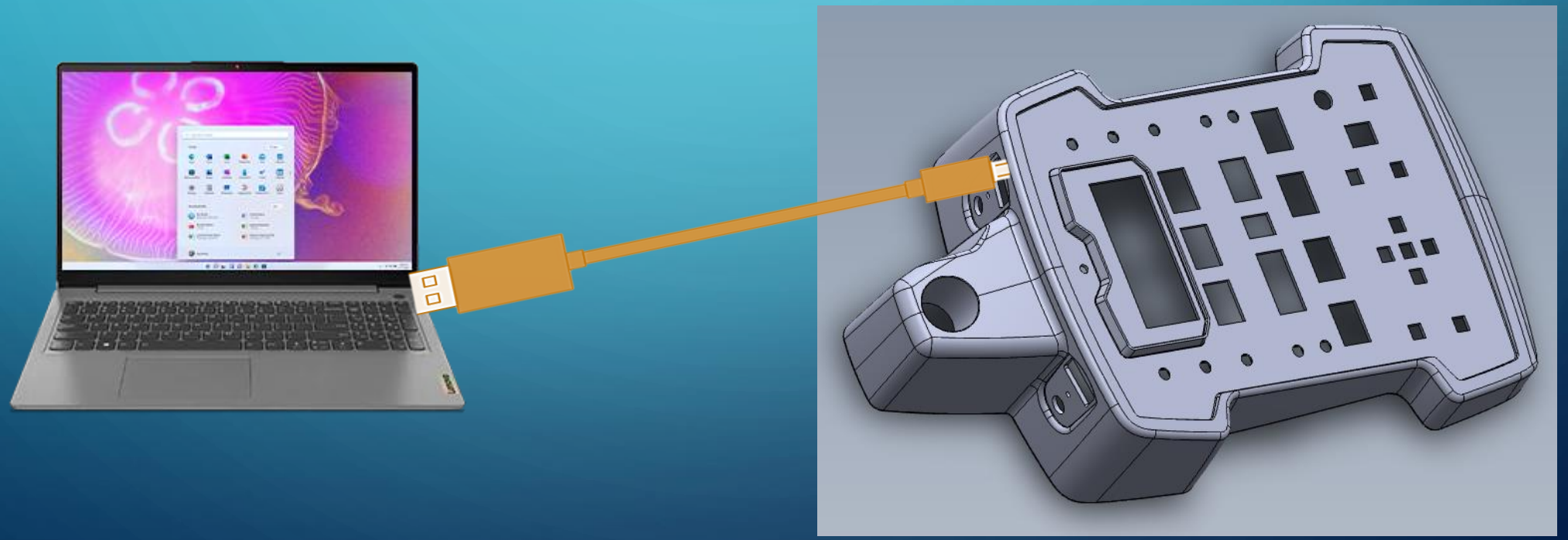


INSTALL FIRMWARE RELEASE
STEP 3

Arduino Builder app window will open

INSTALL FIRMWARE RELEASE
STEP 4

Connect laptop's USB port to the micro-USB port labelled "Controller" on the back of the control panel of the Respimatic system

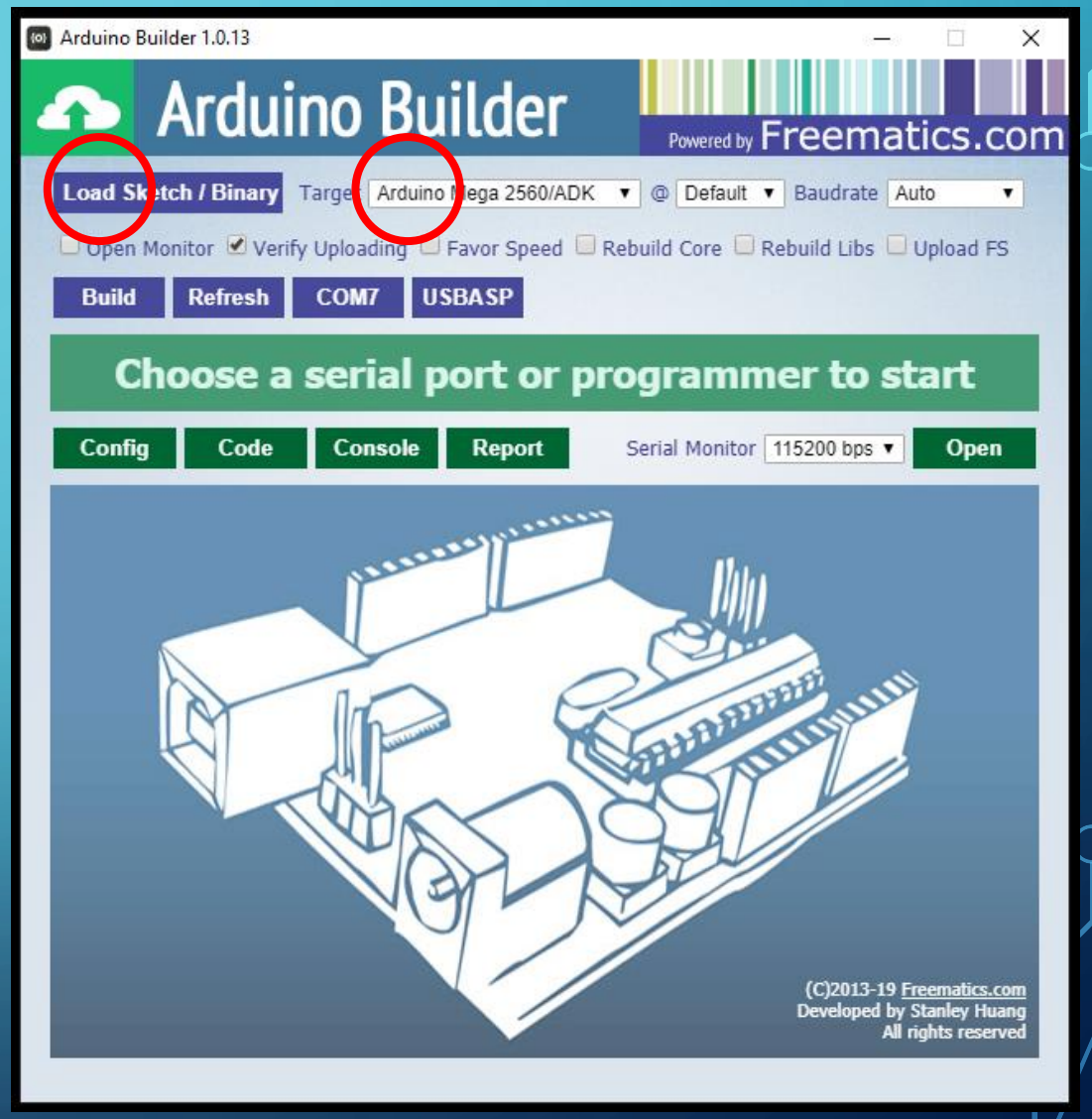


INSTALL FIRMWARE RELEASE

STEP 5

Select “Arduino Mega 2560/ADK” from the dropdown menu in the “Target” field

Check “Verify” box

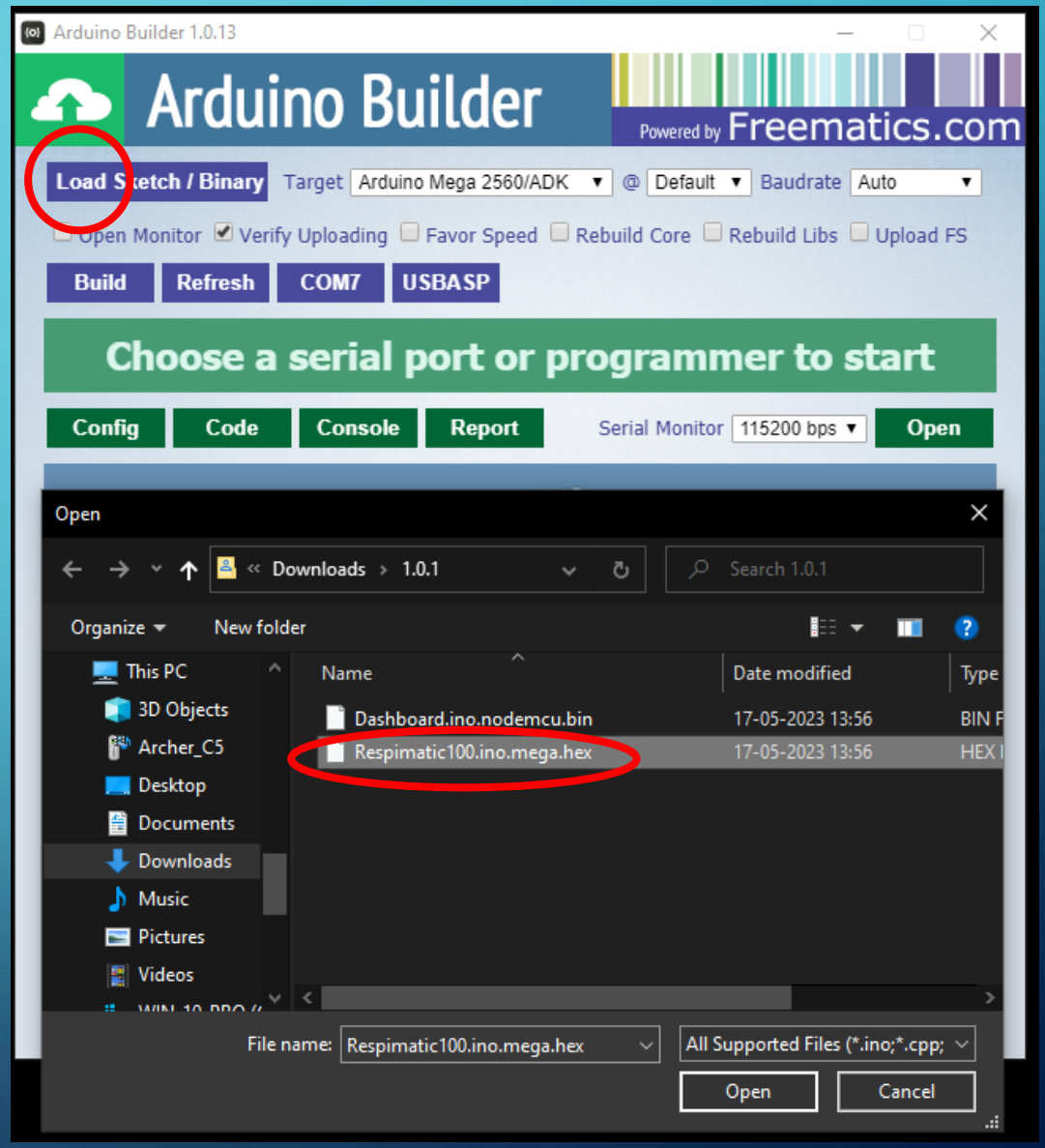


INSTALL FIRMWARE RELEASE

STEP 6

Click “Load Sketch/Binary” button on the Arduino Builder

Select Respimatic.ino.mega.hex from the extracted folder from the downloaded release

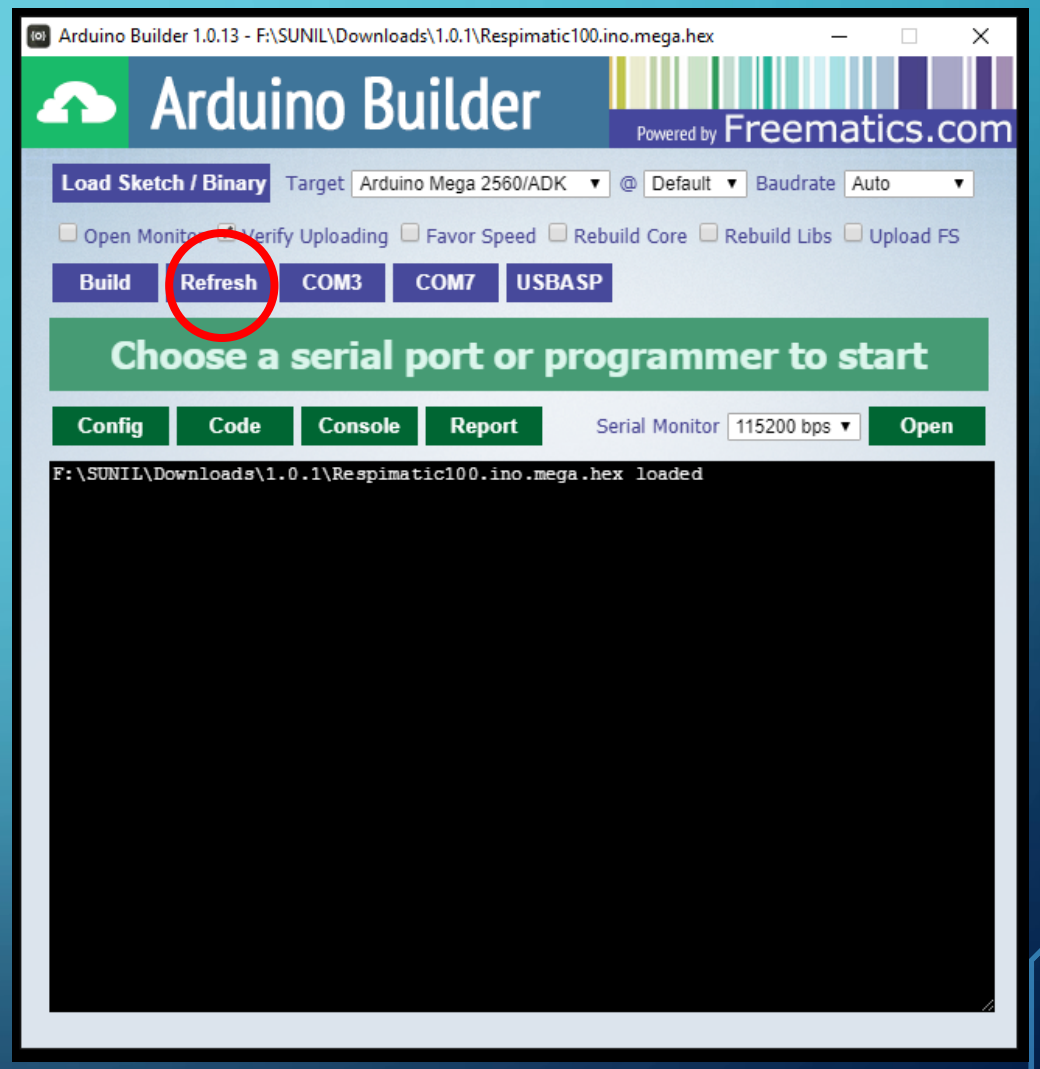


INSTALL FIRMWARE RELEASE

STEP 7

Check “Refresh” button on the Arduino Builder

It refreshes the list of COM ports that the Respimatic system could be connected to



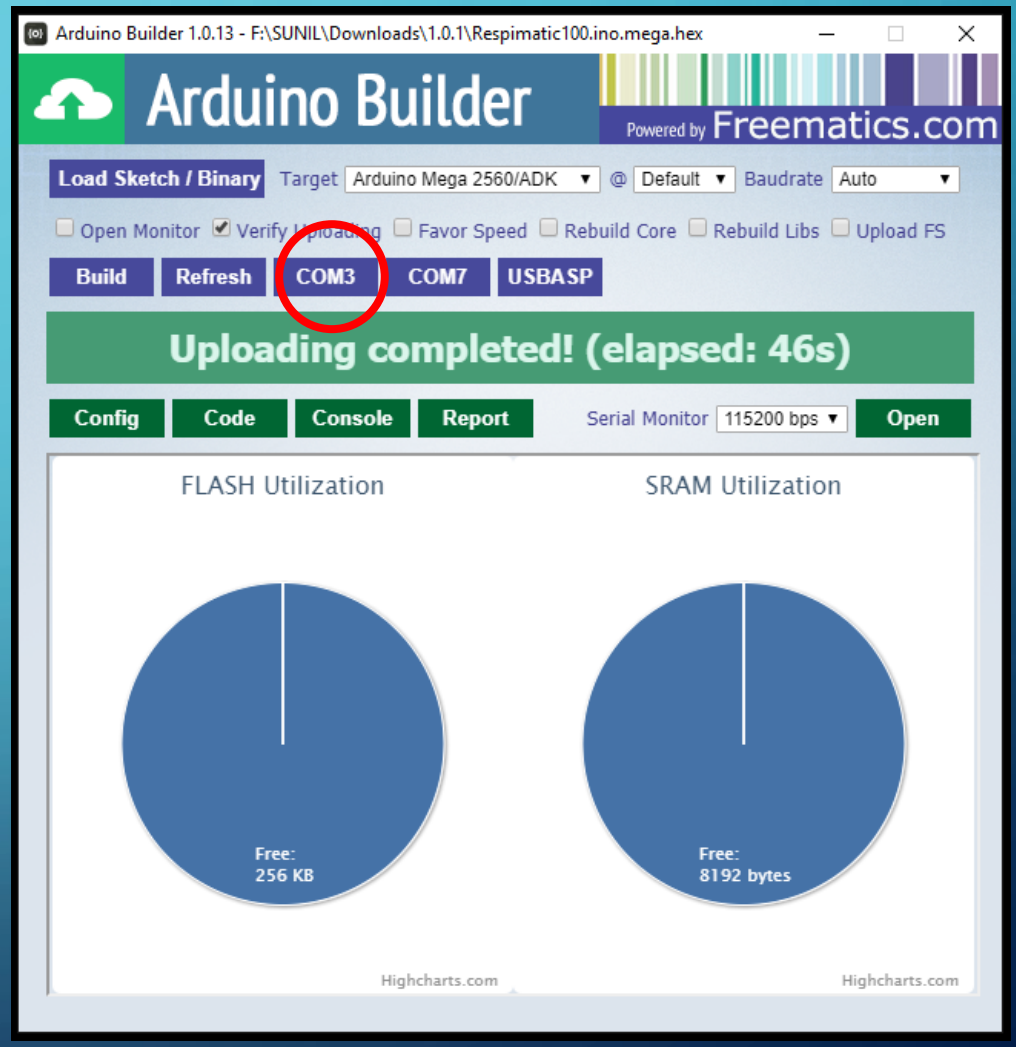
INSTALL FIRMWARE RELEASE

STEP 8

Click the correct COM port i.e. the laptop port that the Respimatic system is connected to (in this example it is COM3)

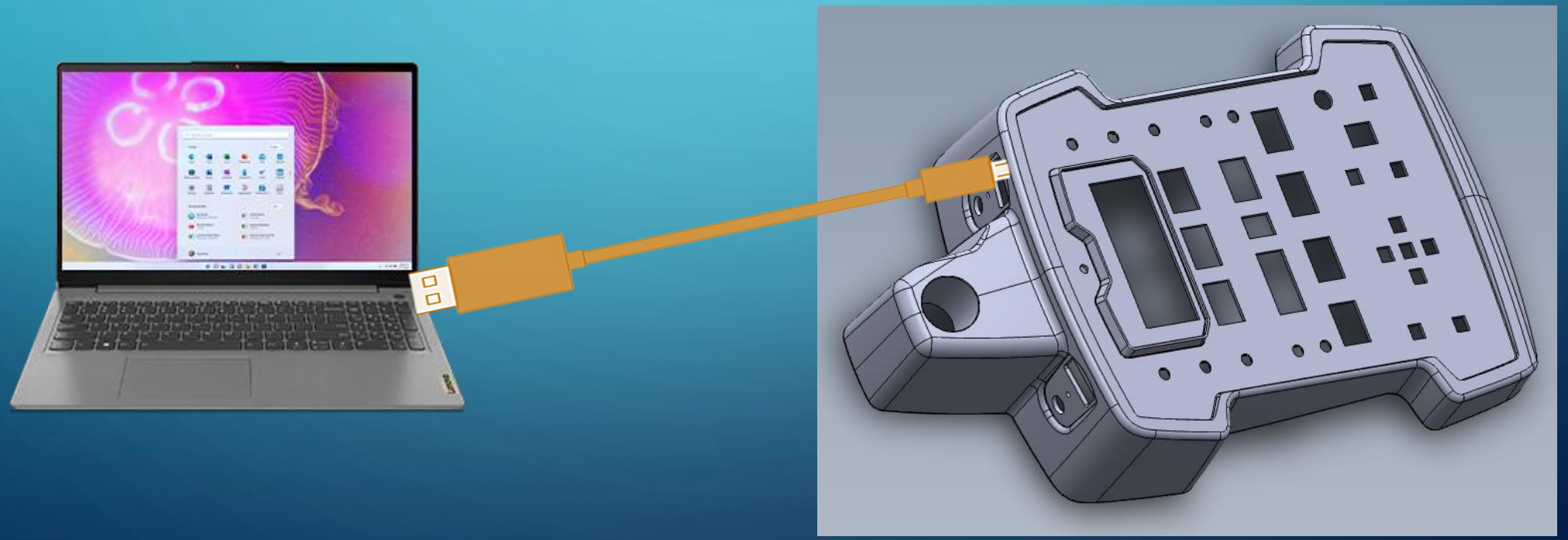
Arduino Builder will now install the selected file on the Respimatic system

Now we need to follow a similar procedure for the other file in the release.



INSTALL FIRMWARE RELEASE
STEP 9

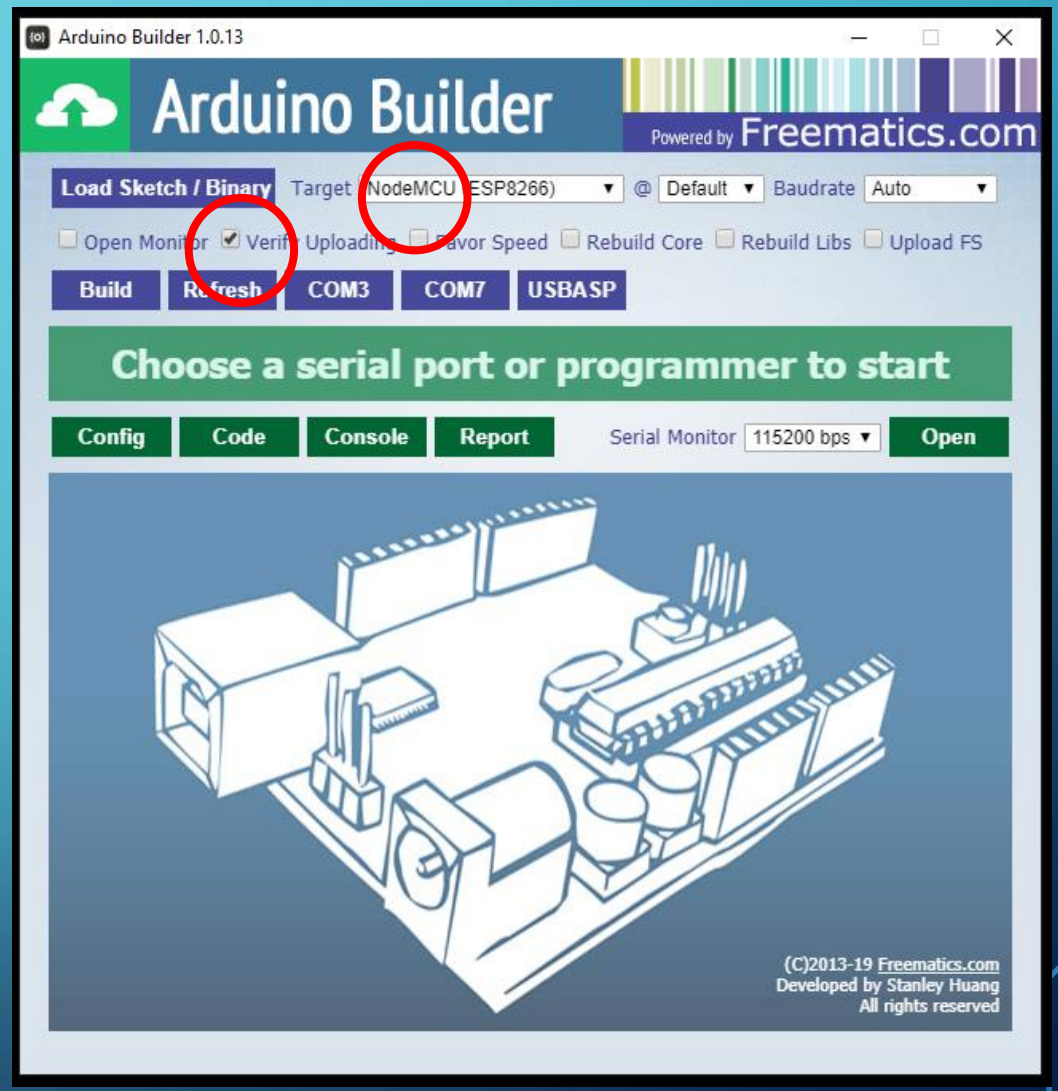
Connect laptop's USB port to the micro-USB port labelled "Wi-Fi" on the back of the control panel of the Respimatic system



INSTALL FIRMWARE RELEASE
STEP 10

Select “NodeMCU (ESP8266)” from the dropdown menu in the “Target” field

Check “Verify” box

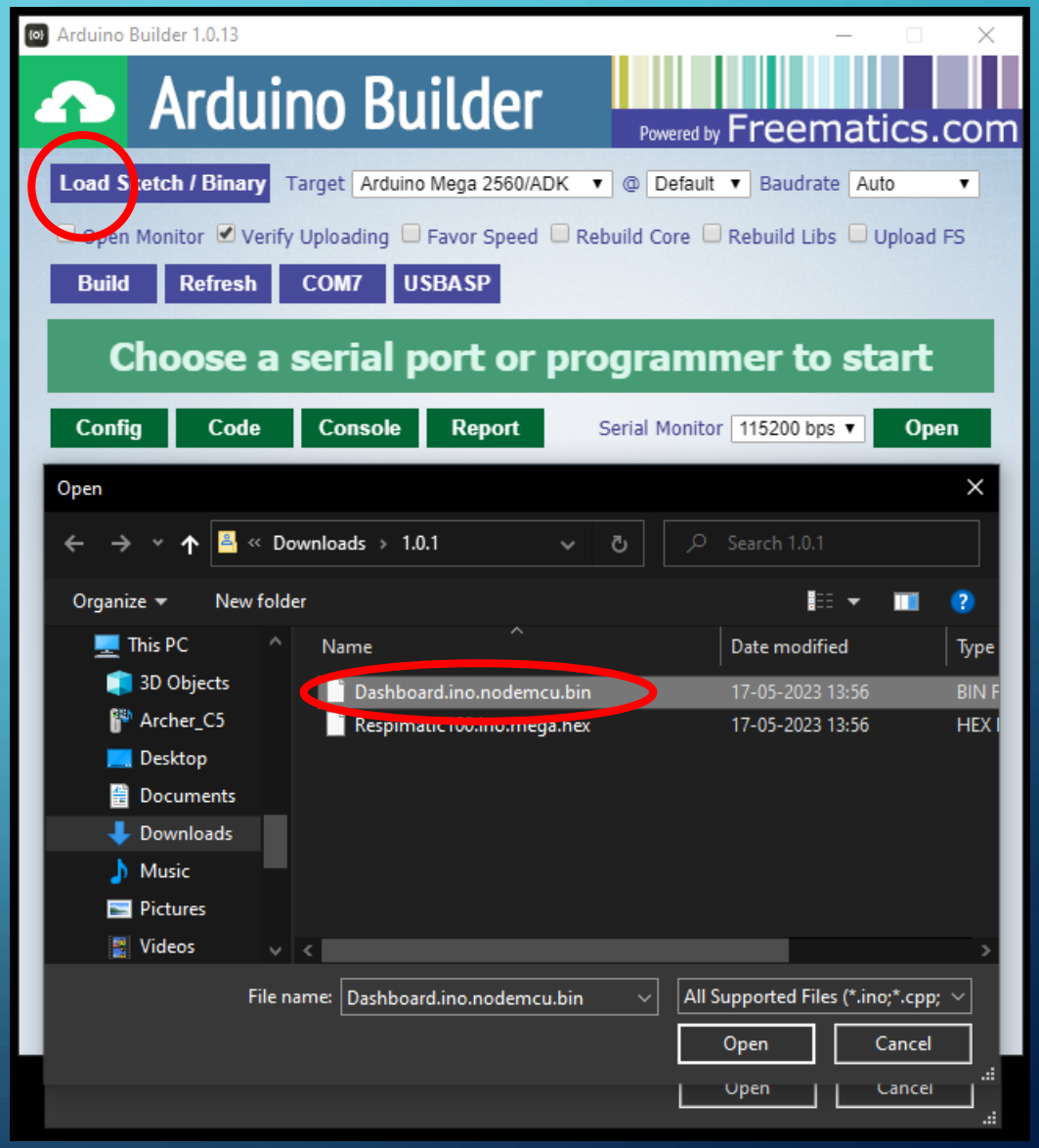


INSTALL FIRMWARE RELEASE

STEP 11

Click “Load Sketch/Binary” button on the Arduino Builder

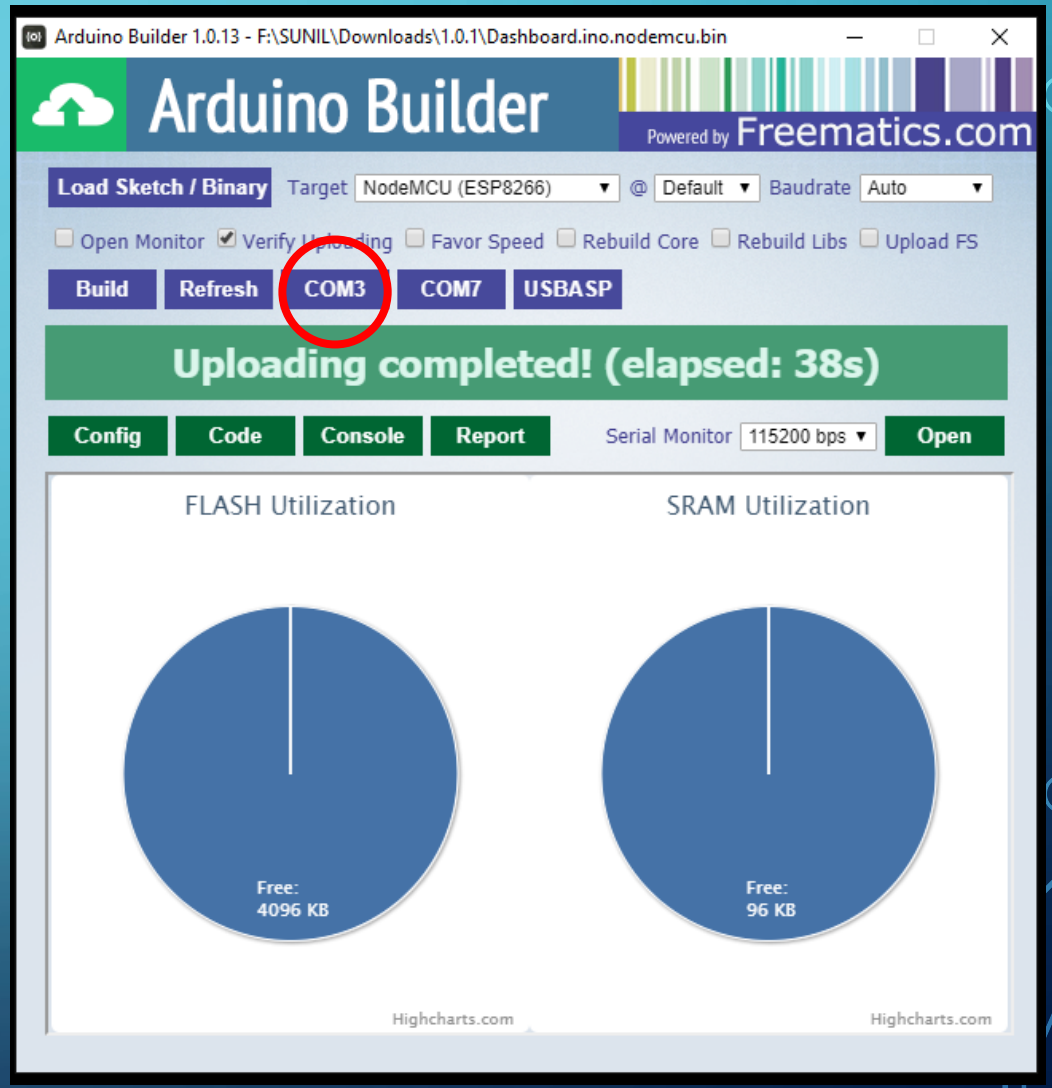
Select Dashboard.ino.nodemcu.bin from the extracted folder from the downloaded release



INSTALL FIRMWARE RELEASE
STEP 12

Click the correct COM port i.e. the laptop port that the Respimatic system is connected to (in this example it is COM3)

Arduino Builder will now install the selected file on the Respimatic system



DONE