



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



Each Firmware release has 2 files – one for each controller in the Respimatic 100 system

Respimatic100.ino.mega.hex

Dashboard.ino.nodemcu.bin

A decorative graphic on the left side of the image, consisting of a series of white lines and circles that resemble a circuit board or a stylized tree structure. The lines are vertical and horizontal, with small circles at the ends, creating a complex, branching pattern.

DOWNLOAD ARDUINO BUILDER

DOWNLOAD ARDUINO BUILDER

STEP 1

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

Click on
"Update System Firmware"

RESPIMATIC 100 WEB APPS

Add a Known System
Manage Known Systems

Select a Known System




BANGALORE ▾

Launch Dashboard
Launch Analyzer

Update System Firmware

Calculate FiO₂ Settings
View Documentation

Delete ALL Cookies



[Right icons created by Freepik - Flaticon](#)

DOWNLOAD ARDUINO BUILDER

STEP 2


Click on
“One-time Download
Arduino Builder”




RESPIMATIC 100 Update Firmware

Step-by-step Instructions

One-time Download
Arduino Builder

Select and Download Release

Version	Release Date	Get
1.0.1	16-May-2023	



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



A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a blue gradient background.

INSTALL ARDUINO BUILDER

INSTALL ARDUINO BUILDER

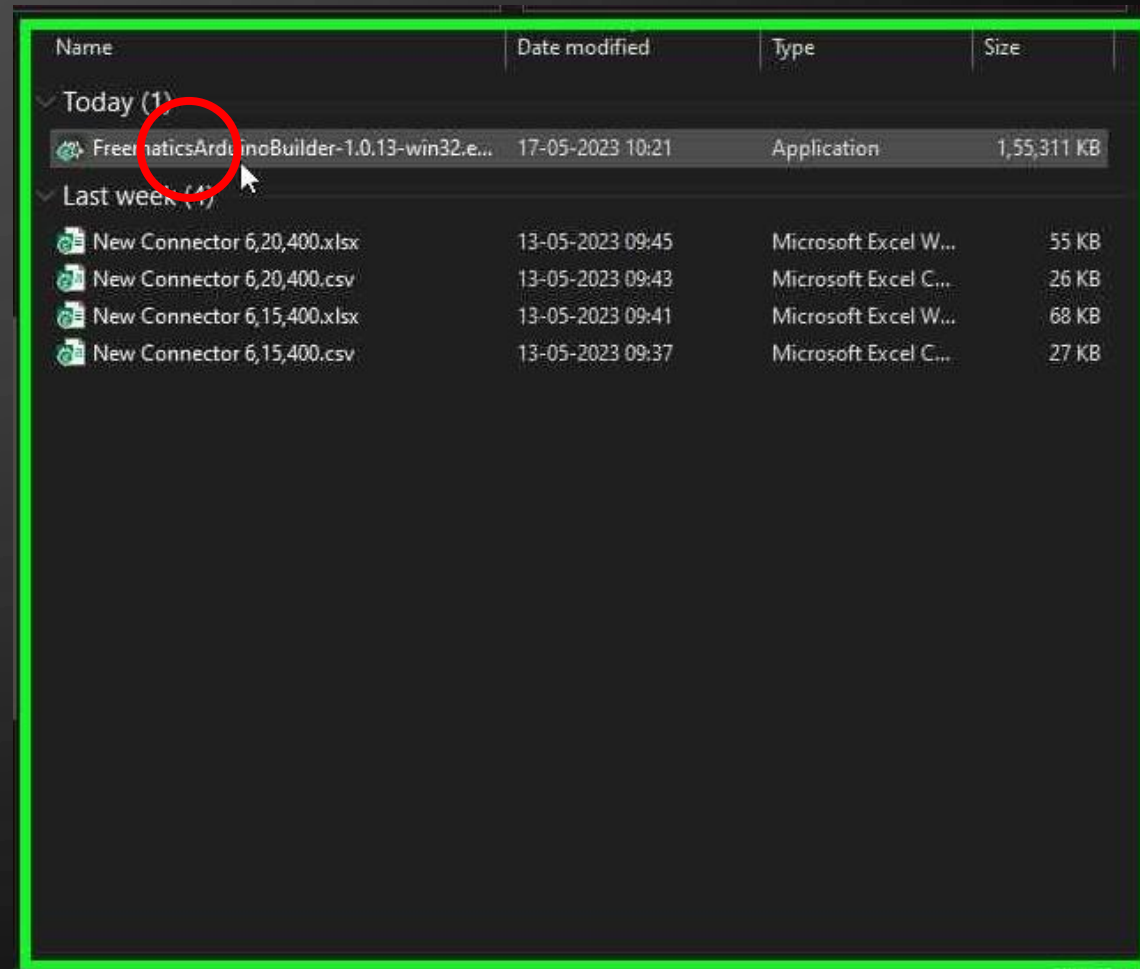
STEP 1

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

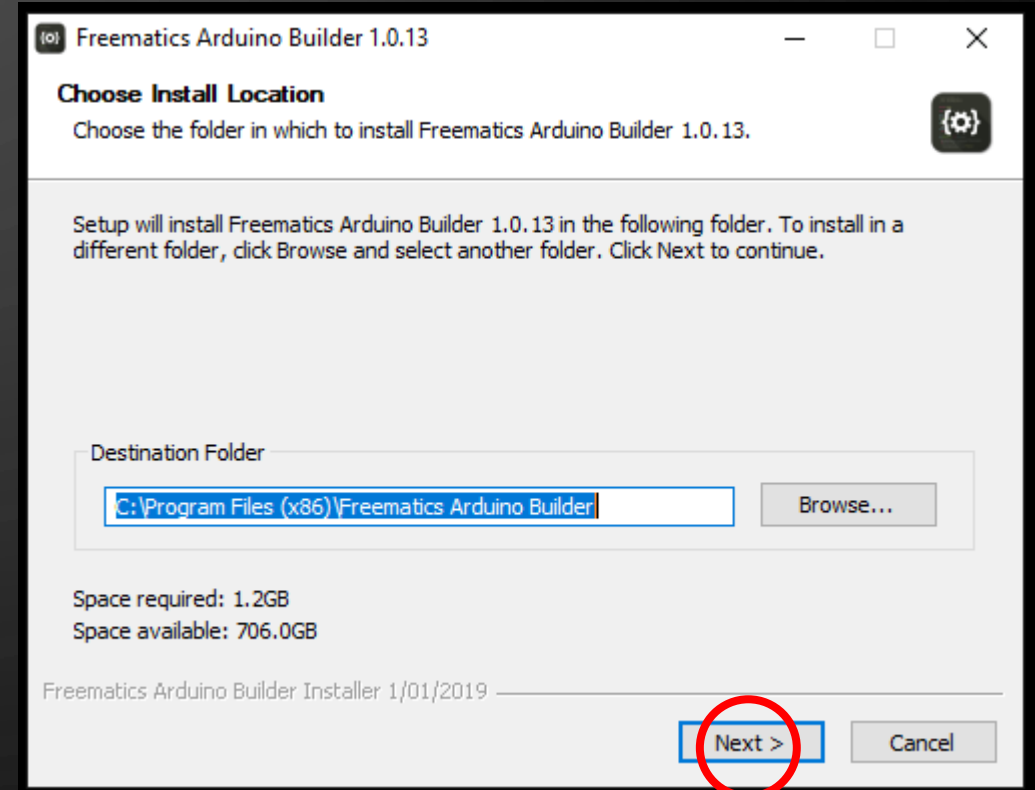


INSTALL ARDUINO BUILDER

STEP 2

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

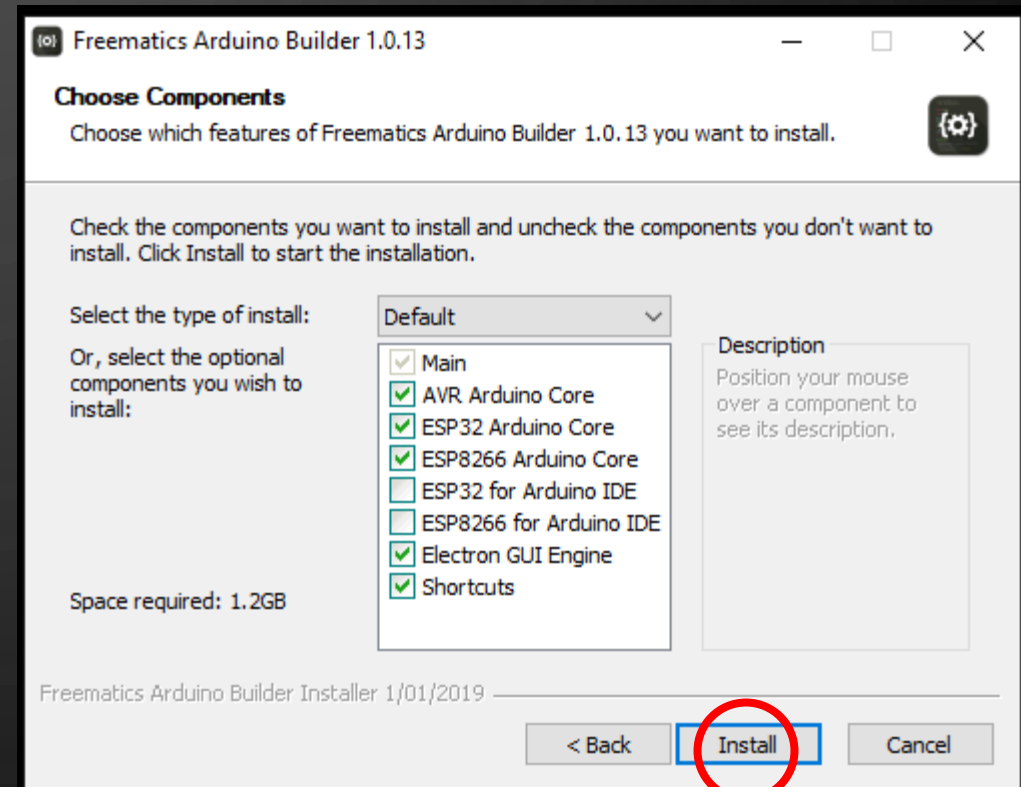
Click on “Next”



INSTALL ARDUINO BUILDER

STEP 3

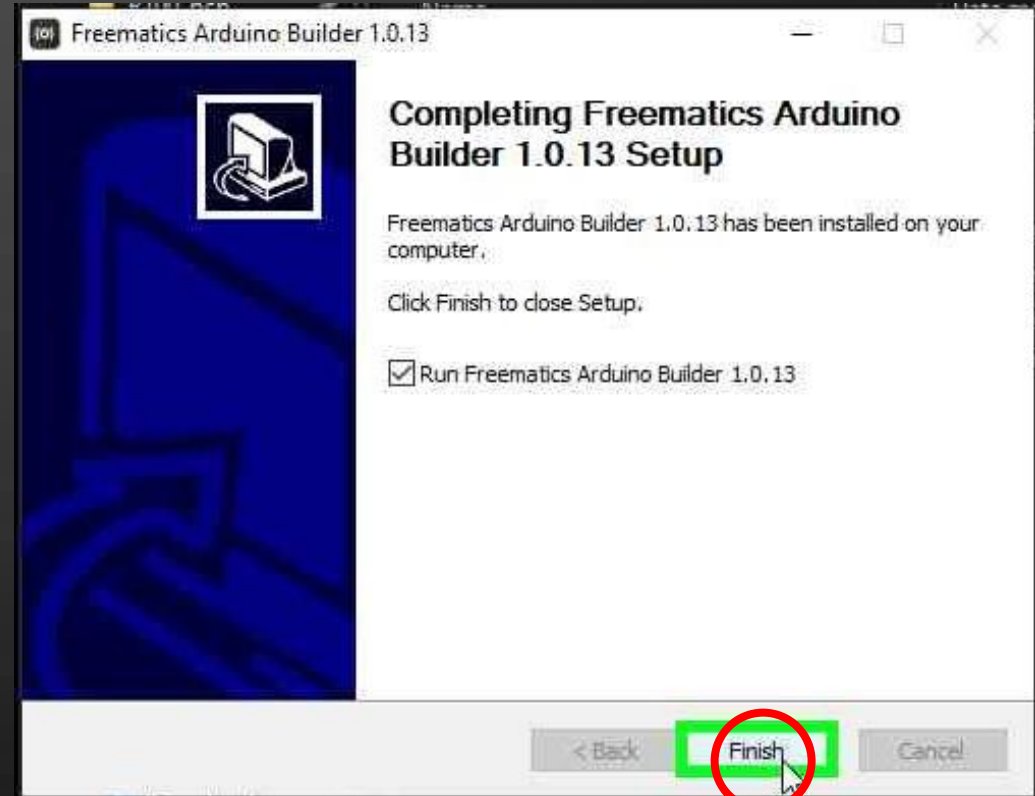
Click on “Install”



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



A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a blue gradient background.

DOWNLOAD A FIRMWARE RELEASE

DOWNLOAD FIRMWARE RELEASE

STEP 1

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

Click on
“Update System Firmware”

RESPIMATIC 100 WEB APPS

Add a Known System
Manage Known Systems

Select a Known System

BANGALORE

Launch Dashboard
Launch Analyzer

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Delete ALL Cookies



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DOWNLOAD FIRMWARE RELEASE

STEP 2


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




RESPIMATIC 100 Update Firmware

Step-by-step Instructions

One-time Download
Arduino Builder

Select and Download Release

Version	Release Date	Get
1.0.1	16-May-2023	



DOWNLOAD FIRMWARE RELEASE

STEP 3

A .zip is downloaded to your
Downloads folder

Read and Dismiss the information
popup

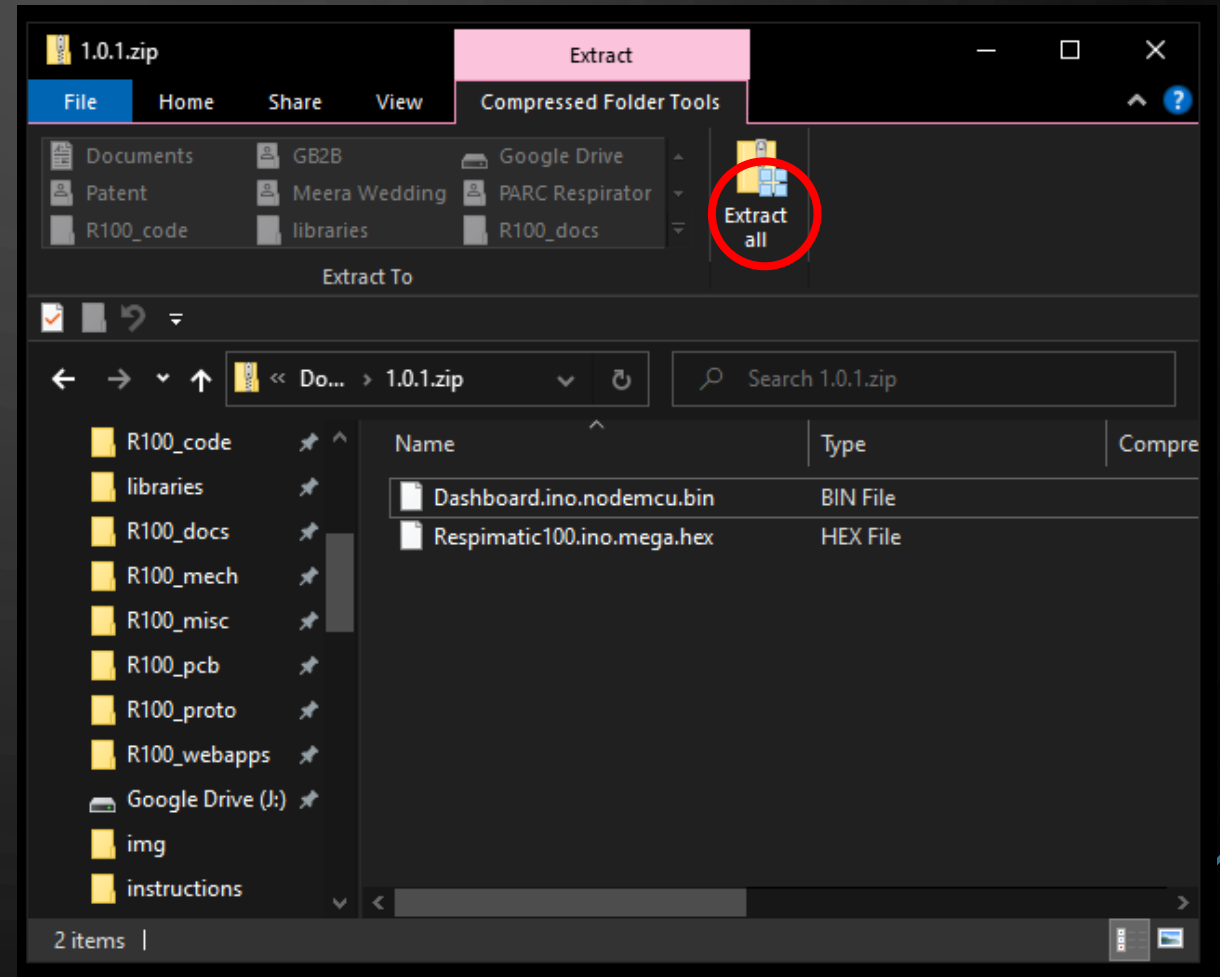


DOWNLOAD FIRMWARE RELEASE

STEP 4

Double click on the
downloaded .zip file to open it

Click on the “Extract All” button



DOWNLOAD FIRMWARE RELEASE

STEP 5

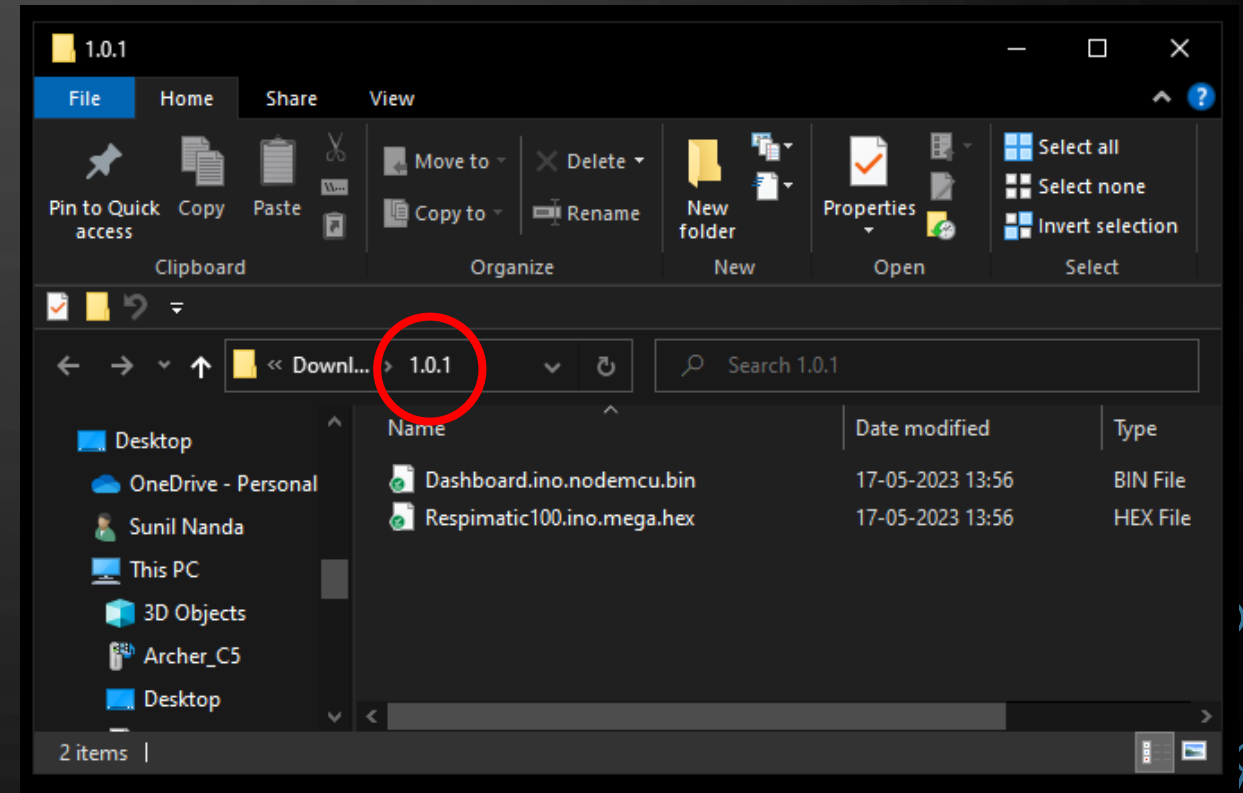
A folder with the same name as the release tag will be created

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



A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a blue gradient background.

INSTALL FIRMWARE RELEASE

INSTALL FIRMWARE RELEASE

STEP 1

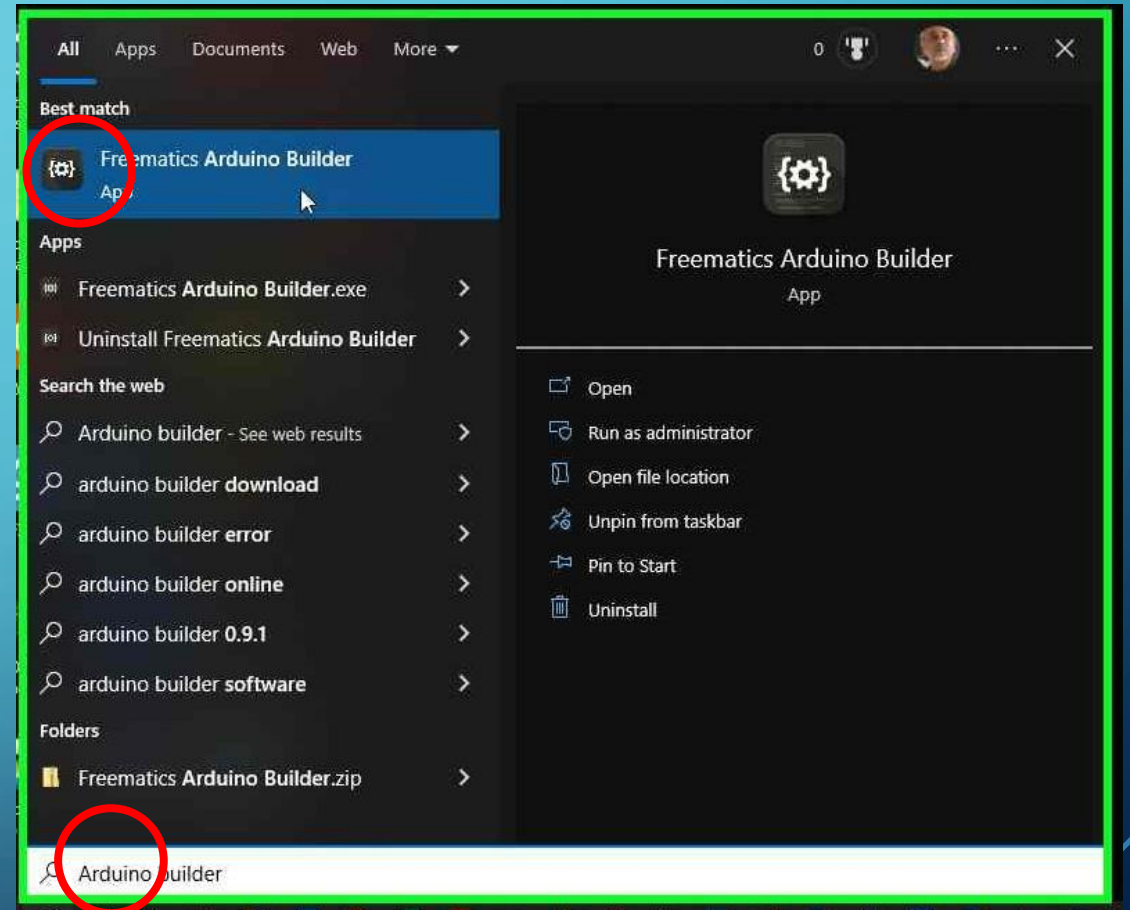
Search for “Arduino Builder”
on the laptop



INSTALL FIRMWARE RELEASE

STEP 2

Click on
“Arduino Builder”
in the search window



INSTALL FIRMWARE RELEASE

STEP 3

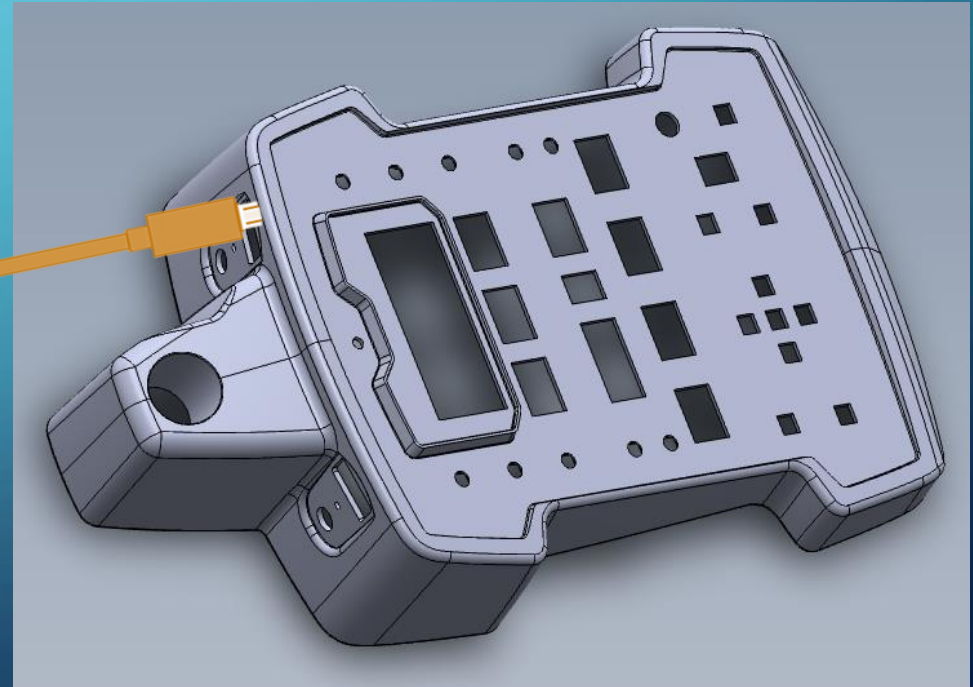
Arduino Builder app
window will open



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

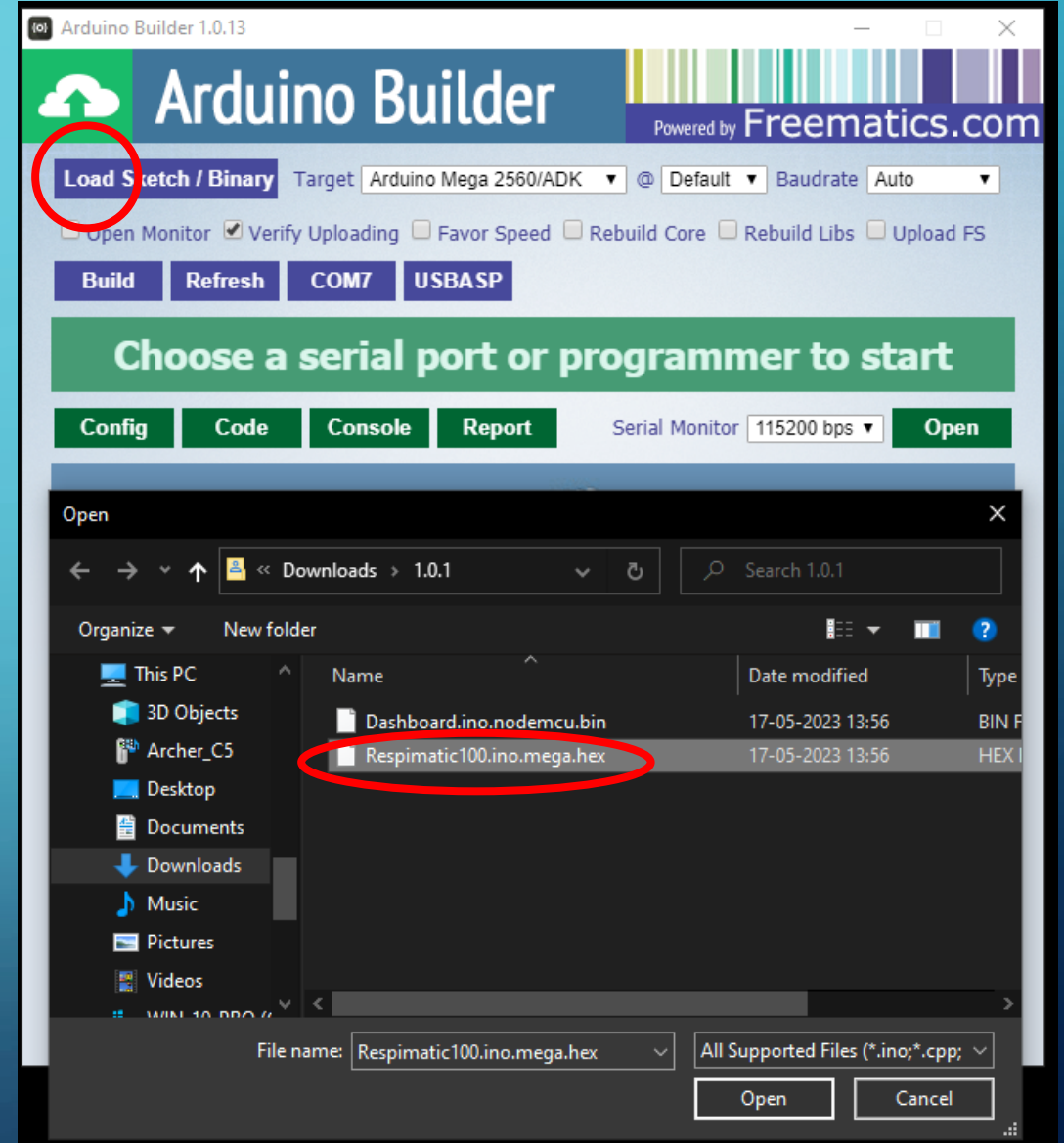


INSTALL FIRMWARE RELEASE

STEP 6

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

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

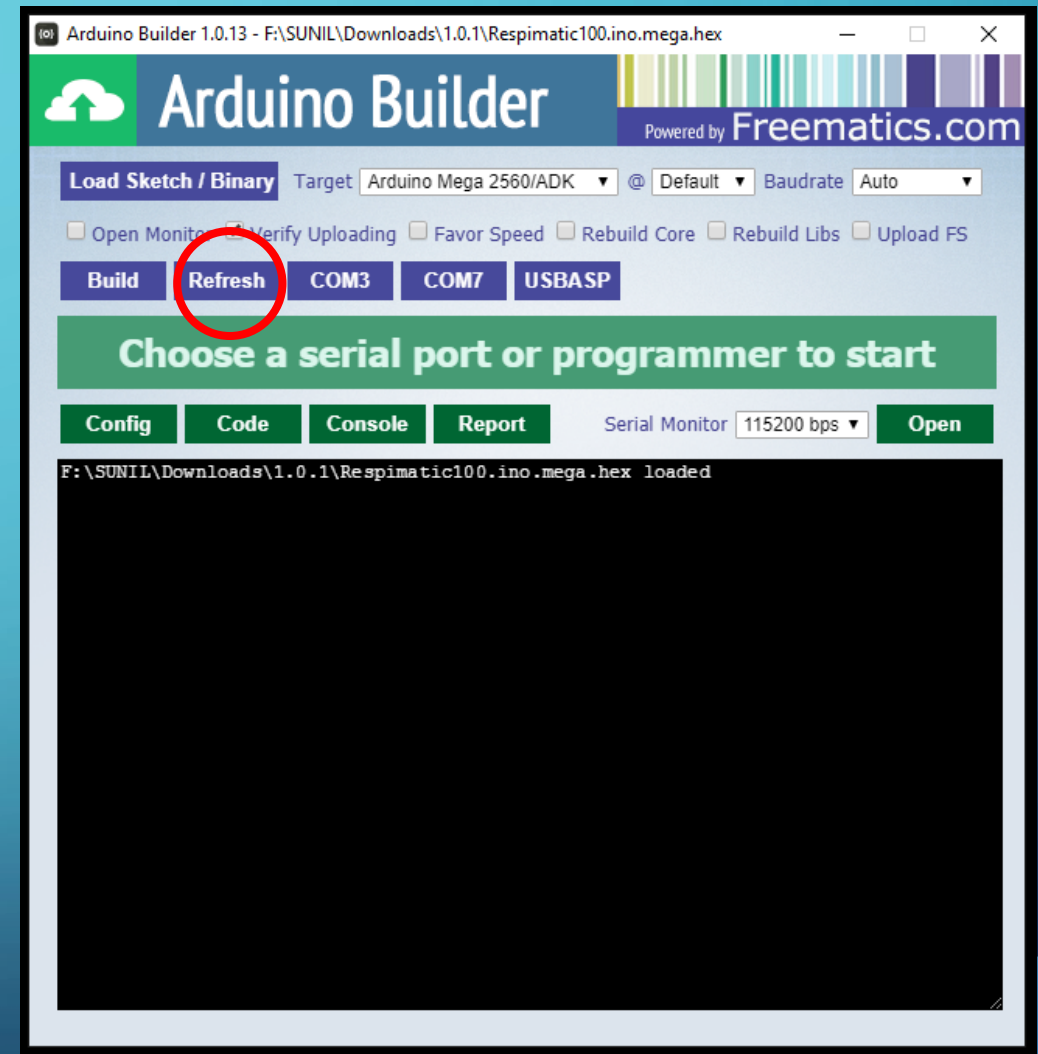


INSTALL FIRMWARE RELEASE

STEP 7

Check “Refresh” button on the
Arduino Builder

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



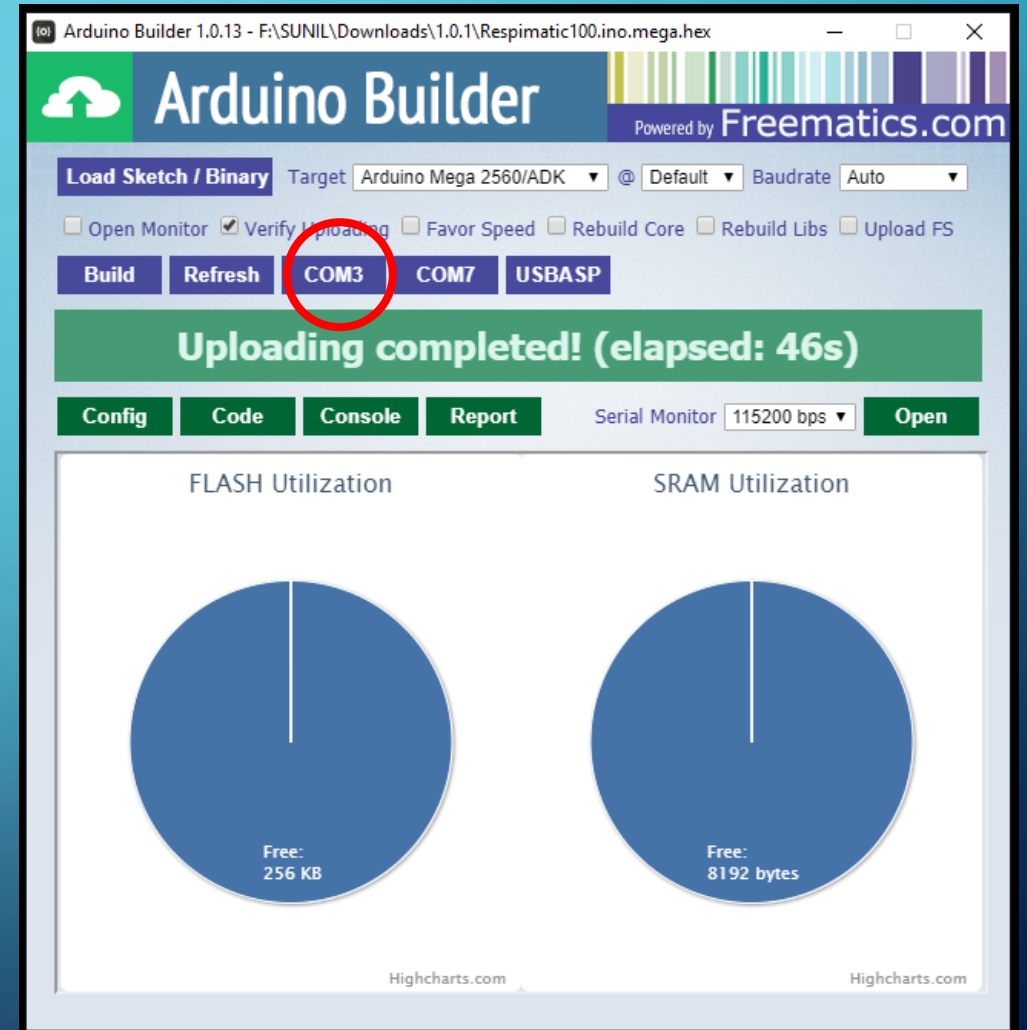
INSTALL FIRMWARE RELEASE

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

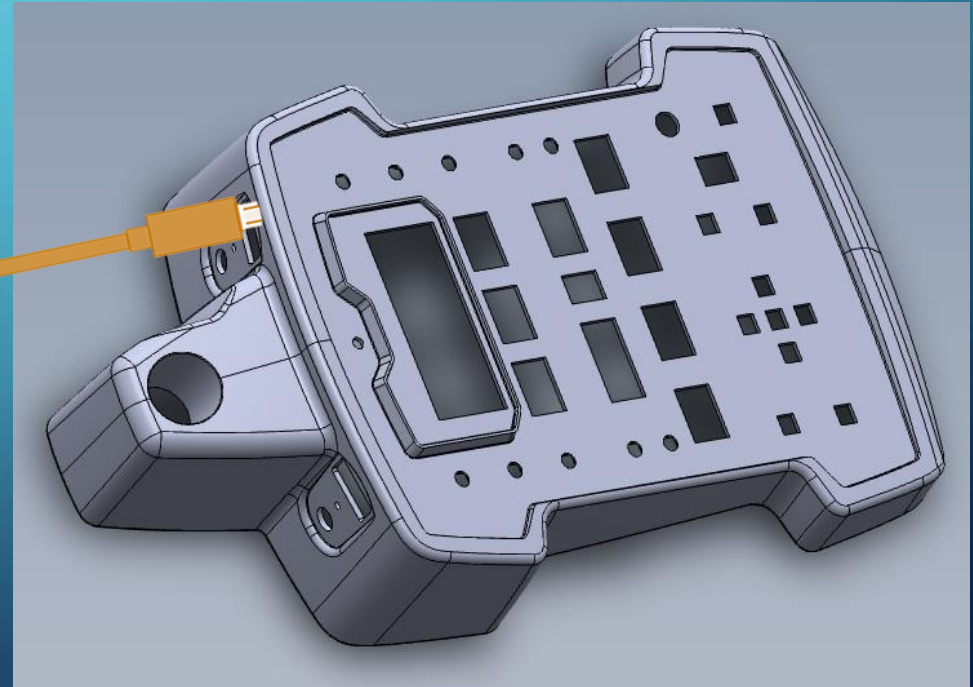
Now we need to follow a similar procedure for the other file in the release.



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

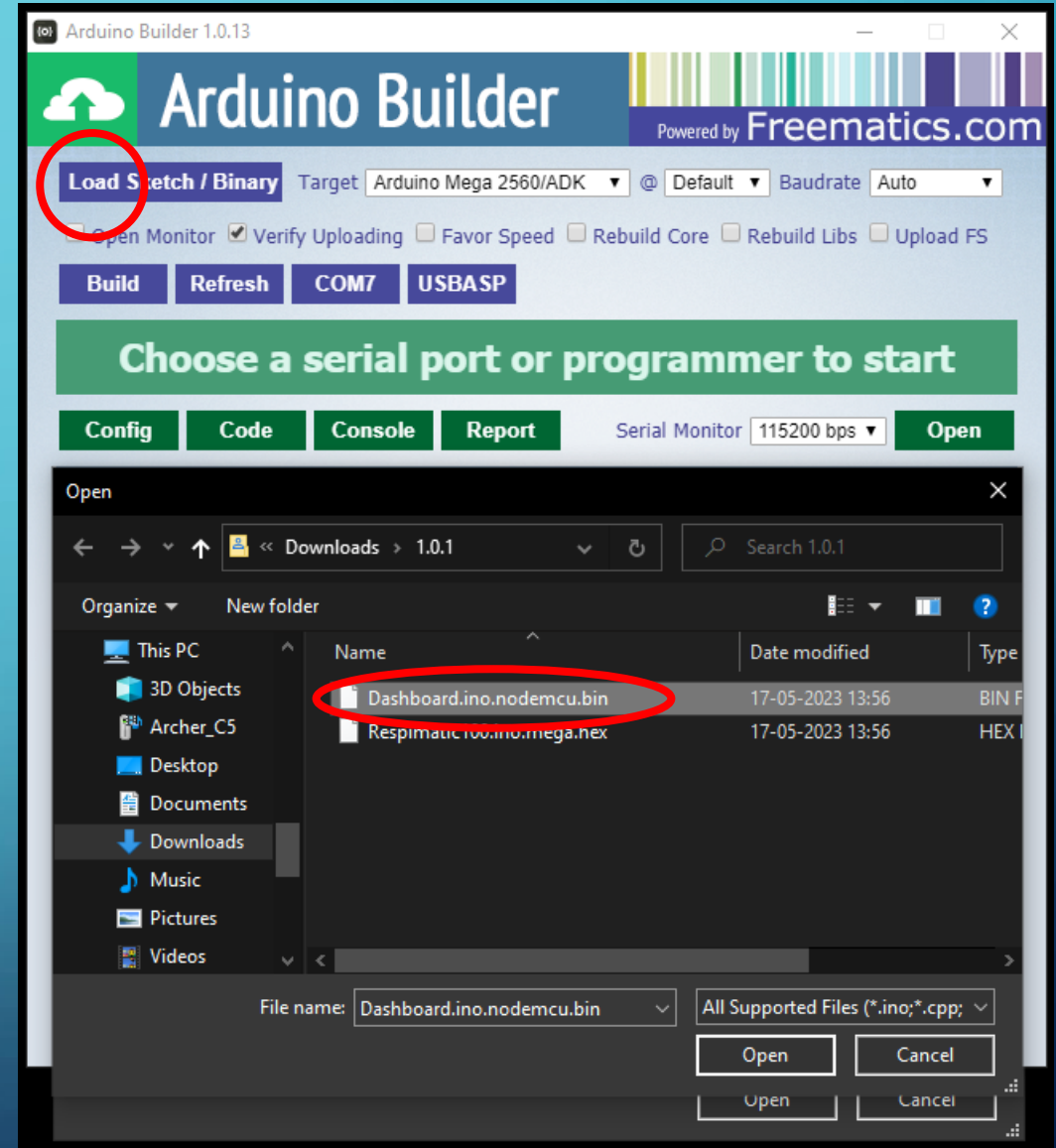


INSTALL FIRMWARE RELEASE

STEP 11

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

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

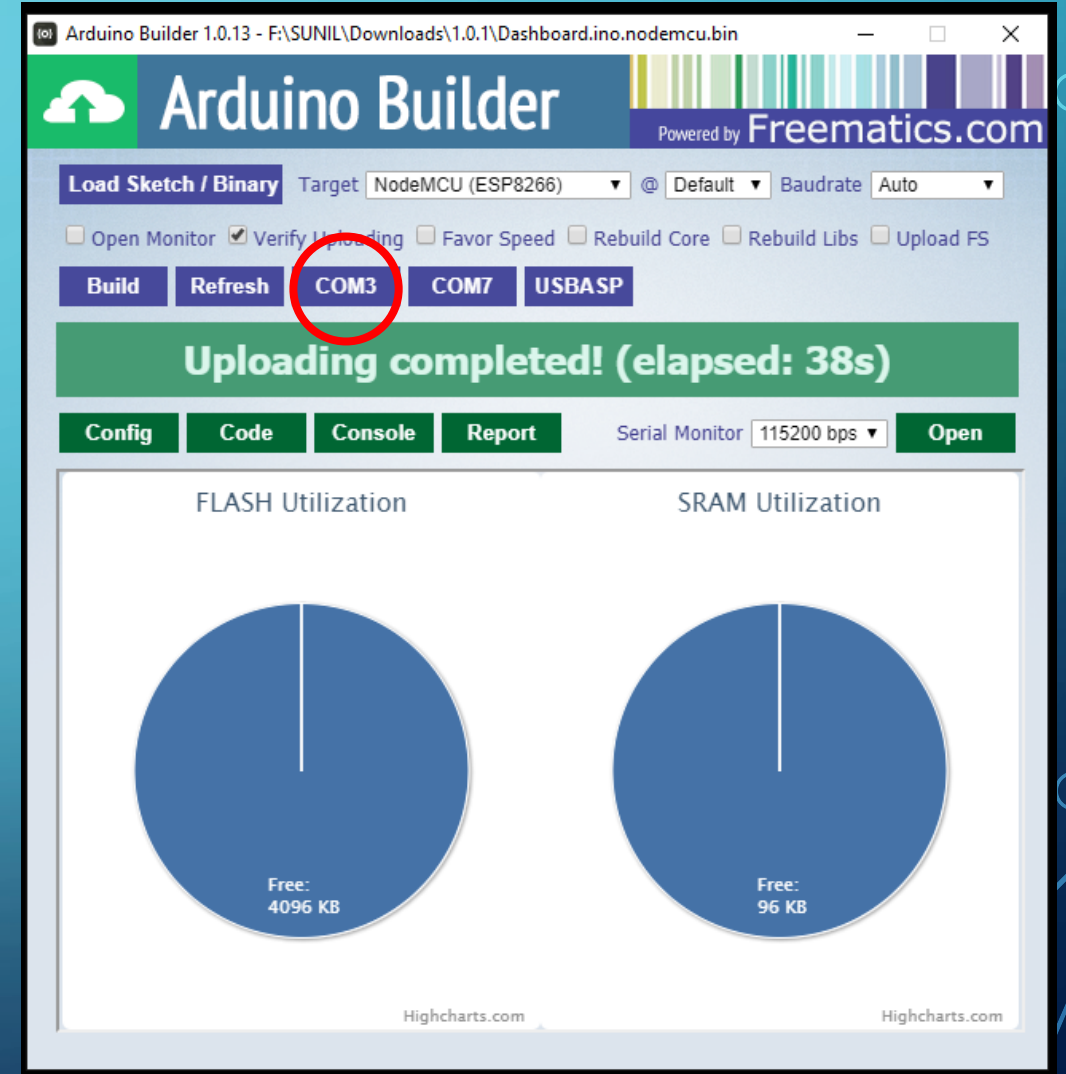


INSTALL FIRMWARE RELEASE

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



The background is a blue gradient with faint concentric circles. In the corners, there are white line-art elements resembling circuit traces or neural network connections, with small circles at the end of the lines.

DONE