INSPIRE-100

How to Update Firmware

STEP-BY-STEP PROCEDURE

TekMedika

EQUIPMENT NEEDED

USB Cable

One end with micro-USB connector

Windows Laptop

INSPIRE-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 INSPIRE-100 system	
INSPIRE-100_master.ino.mega.hex	INSPIRE-100_slave.ino.nodemcu.bin

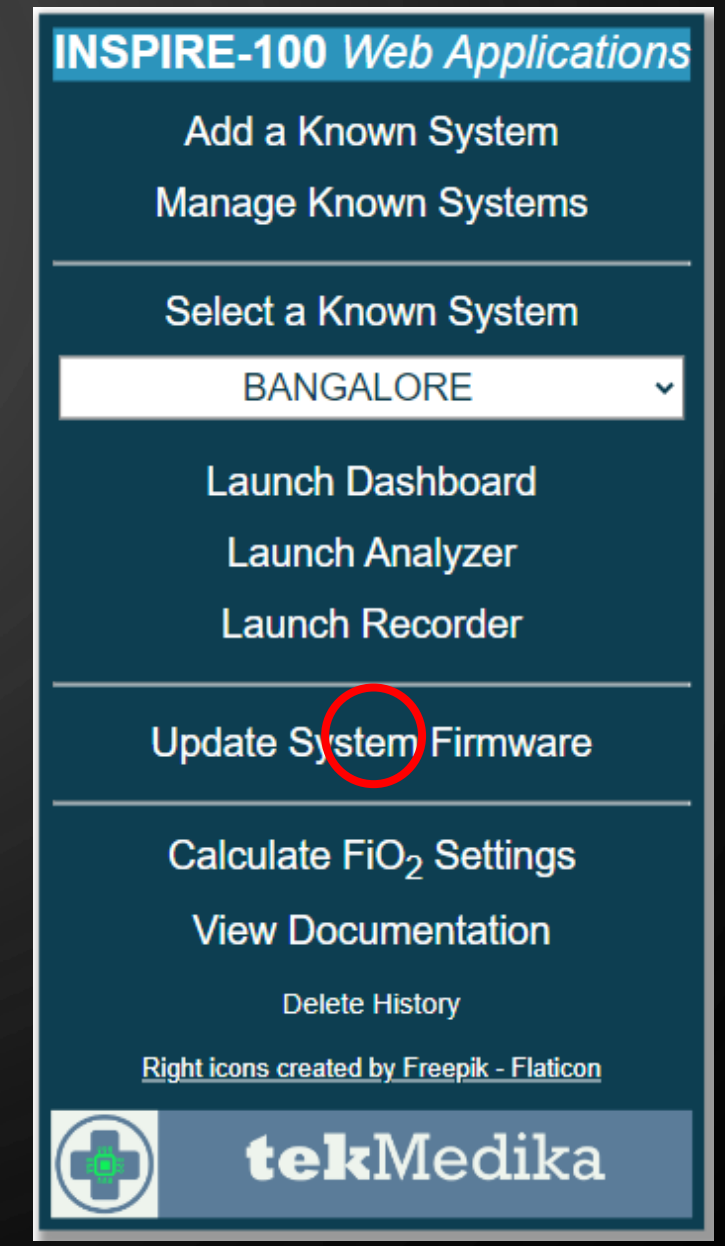
DOWNLOAD ARDUINO BUILDER

DOWNLOAD ARDUINO BUILDER
STEP 1

Open URL in your browser
https://www.inspire-100.com

Click on

“Update System Firmware”



DOWNLOAD ARDUINO BUILDER
STEP 2

Click on

Arduino Builder

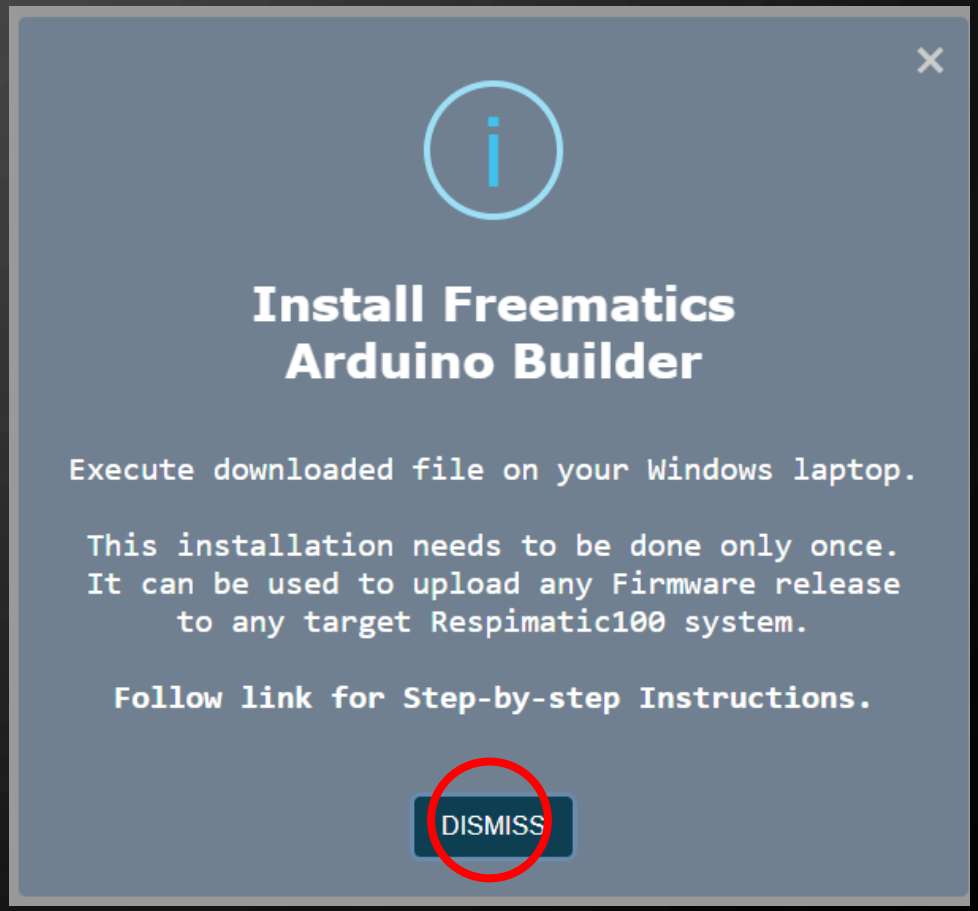
One-time Download

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

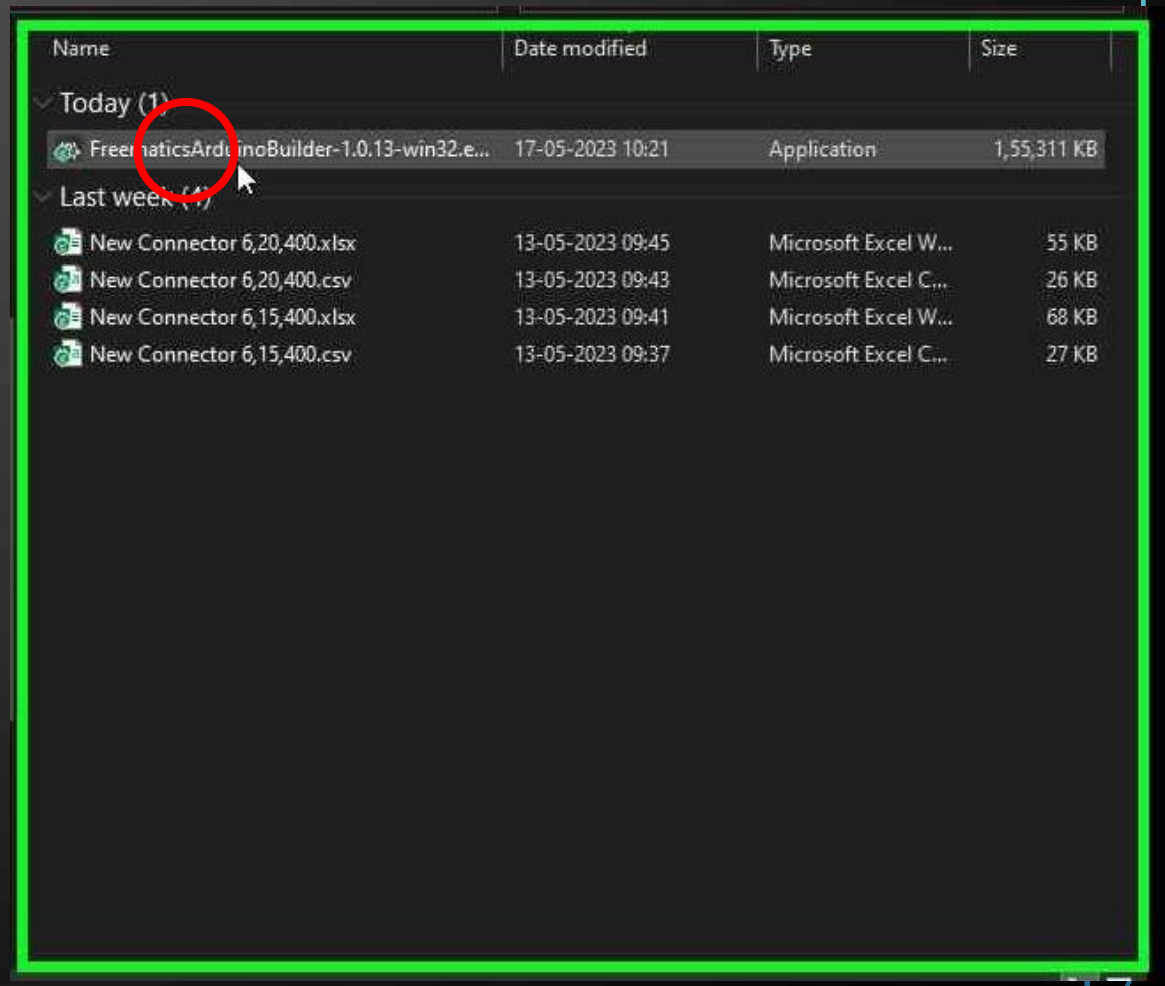
INSTALL ARDUINO BUILDER
STEP 1

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

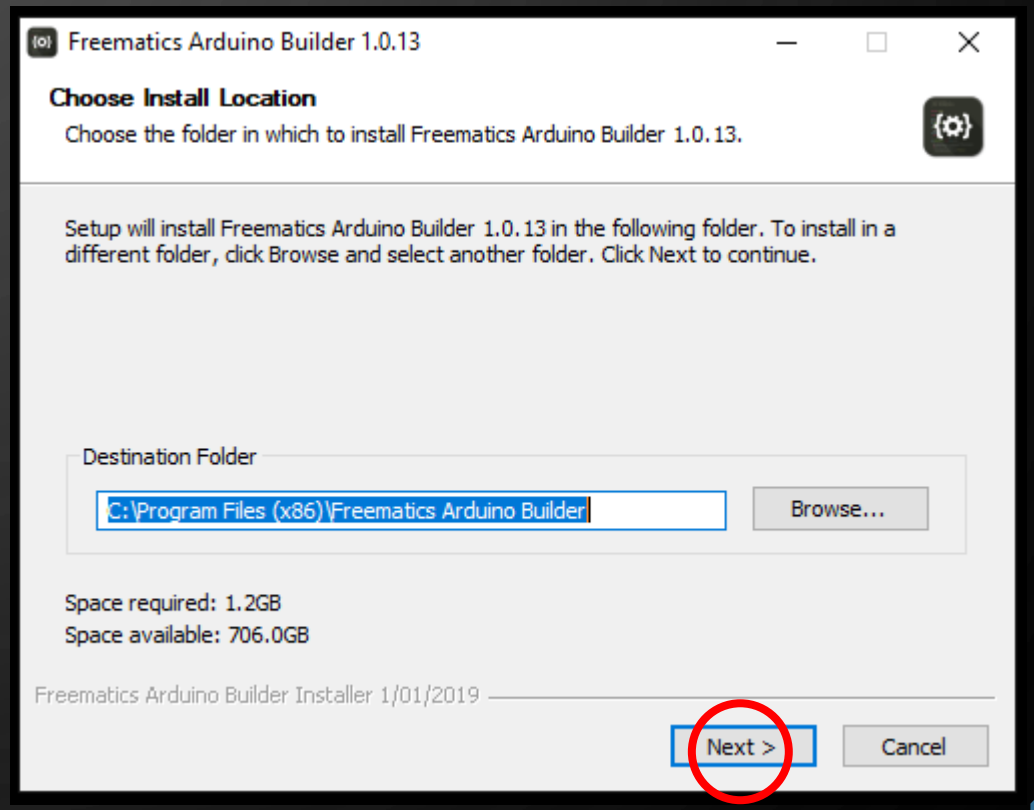
Your laptop's anti-virus software will sanitize the file automatically



INSTALL ARDUINO BUILDER *STEP 2*

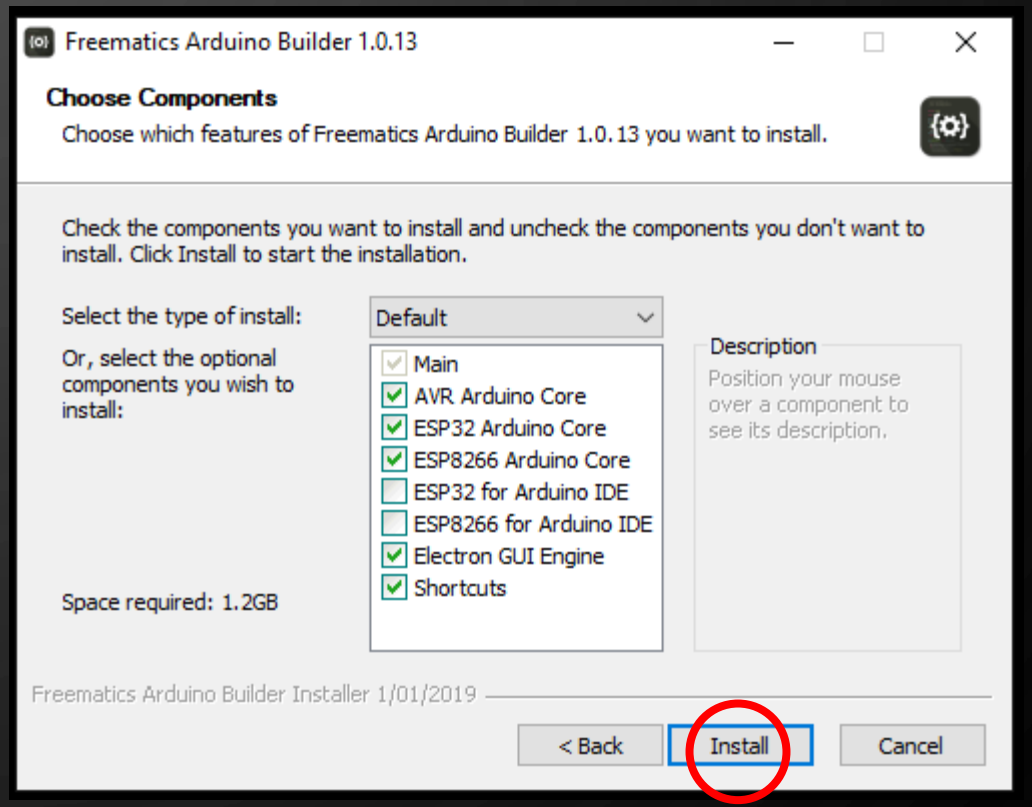
The Arduino Builder installer will guide you step-by-step

Click on “Next”



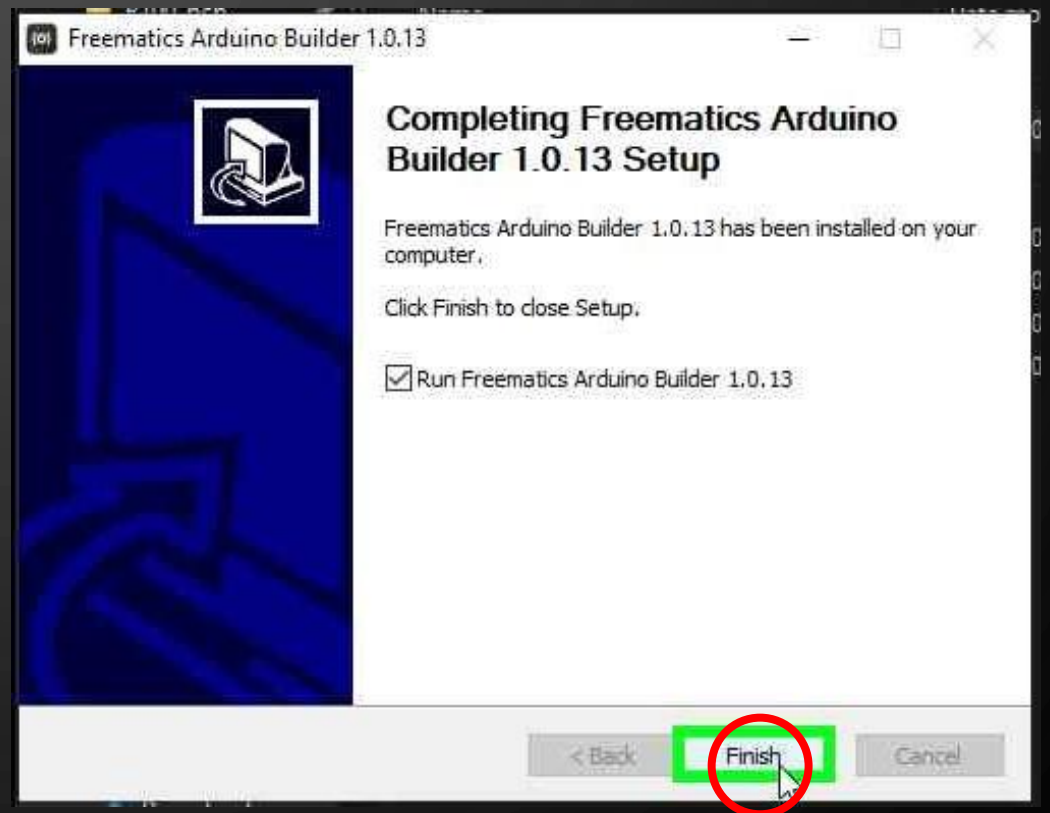
INSTALL ARDUINO BUILDER *STEP 3*

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

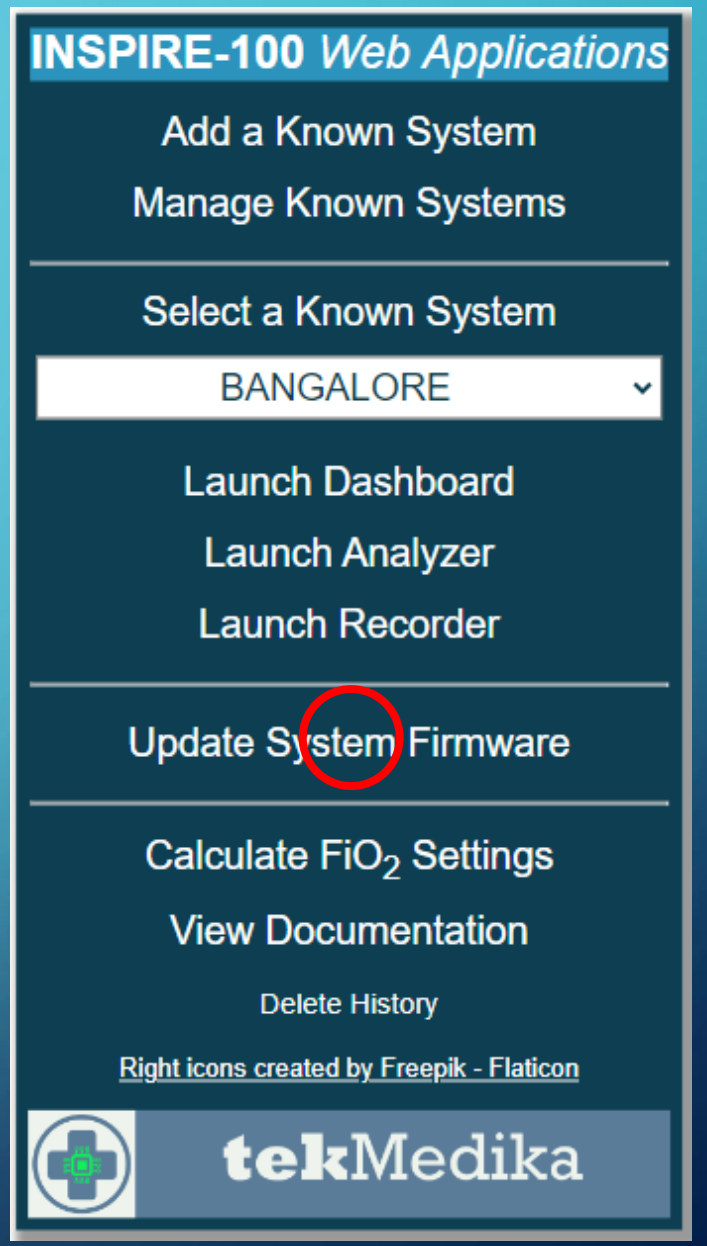
DOWNLOAD A FIRMWARE RELEASE

DOWNLOAD FIRMWARE RELEASE
STEP 1

Open URL in your browser
https://www.inspire-100.com

Click on

“Update System Firmware”



DOWNLOAD FIRMWARE RELEASE
STEP 2

Click on the download icon button next to the release you wish to download (1.0.1 in this example)

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

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

It should show two files within it

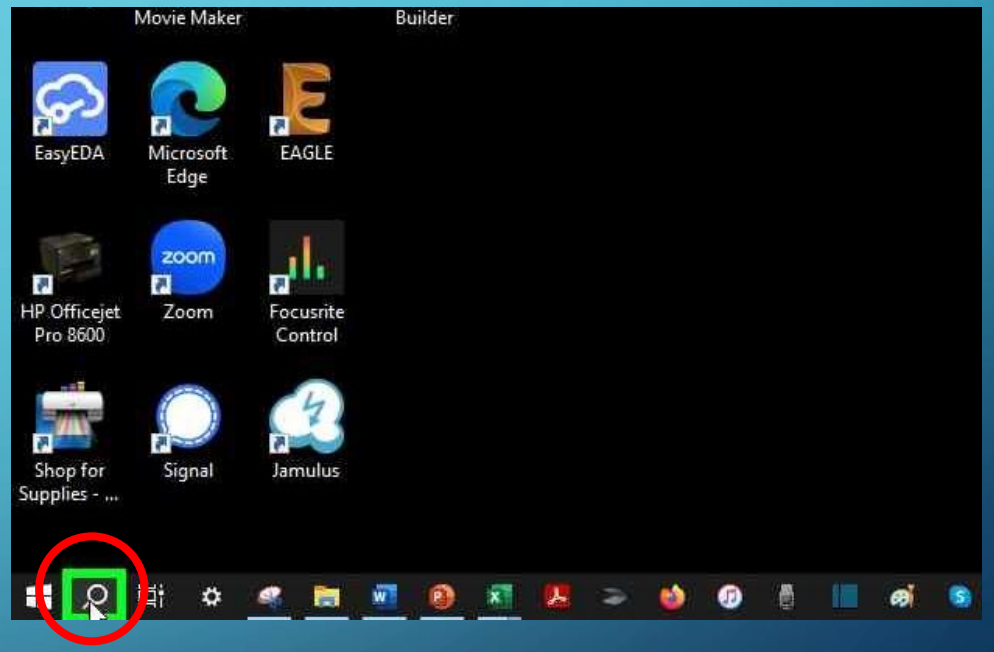
INSPIRE-100_slave.ino.nodemcu.bin	INSPIRE-100_master.ino.mega.hex

Release is now downloaded and ready to be uploaded to the INSPIRE-100 system

INSTALL FIRMWARE RELEASE

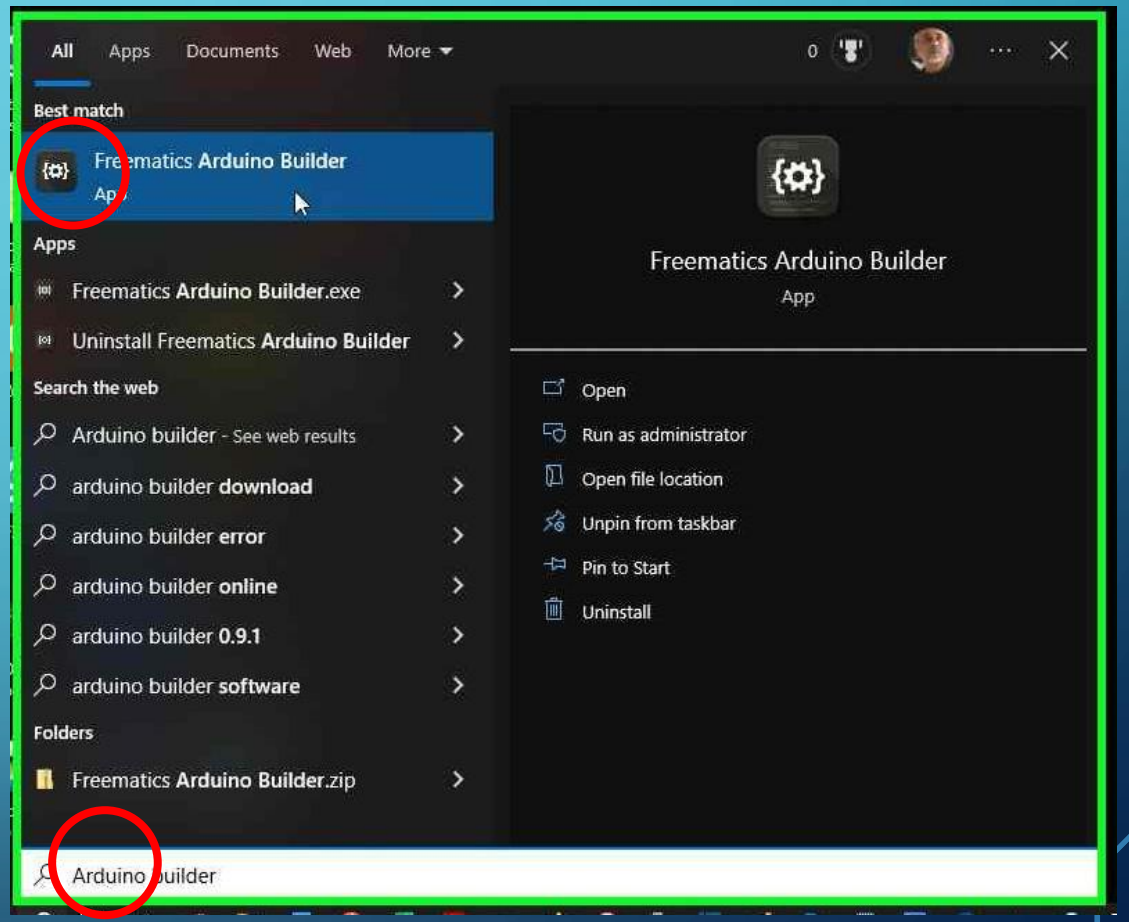
INSTALL FIRMWARE RELEASE
STEP 1

Search for “Arduino Builder” on the laptop



INSTALL FIRMWARE RELEASE
STEP 2

Click on
“Freematics Arduino Builder”
in the search window

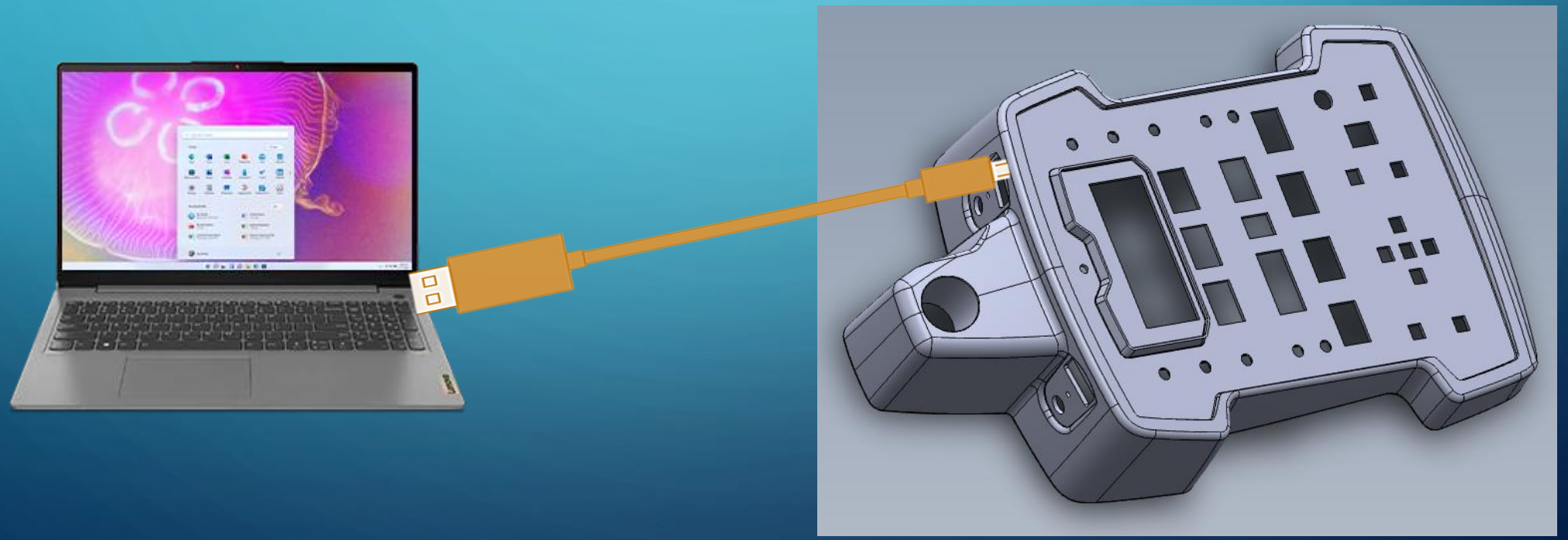


INSTALL FIRMWARE RELEASE
STEP 3

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 INSPIRE 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

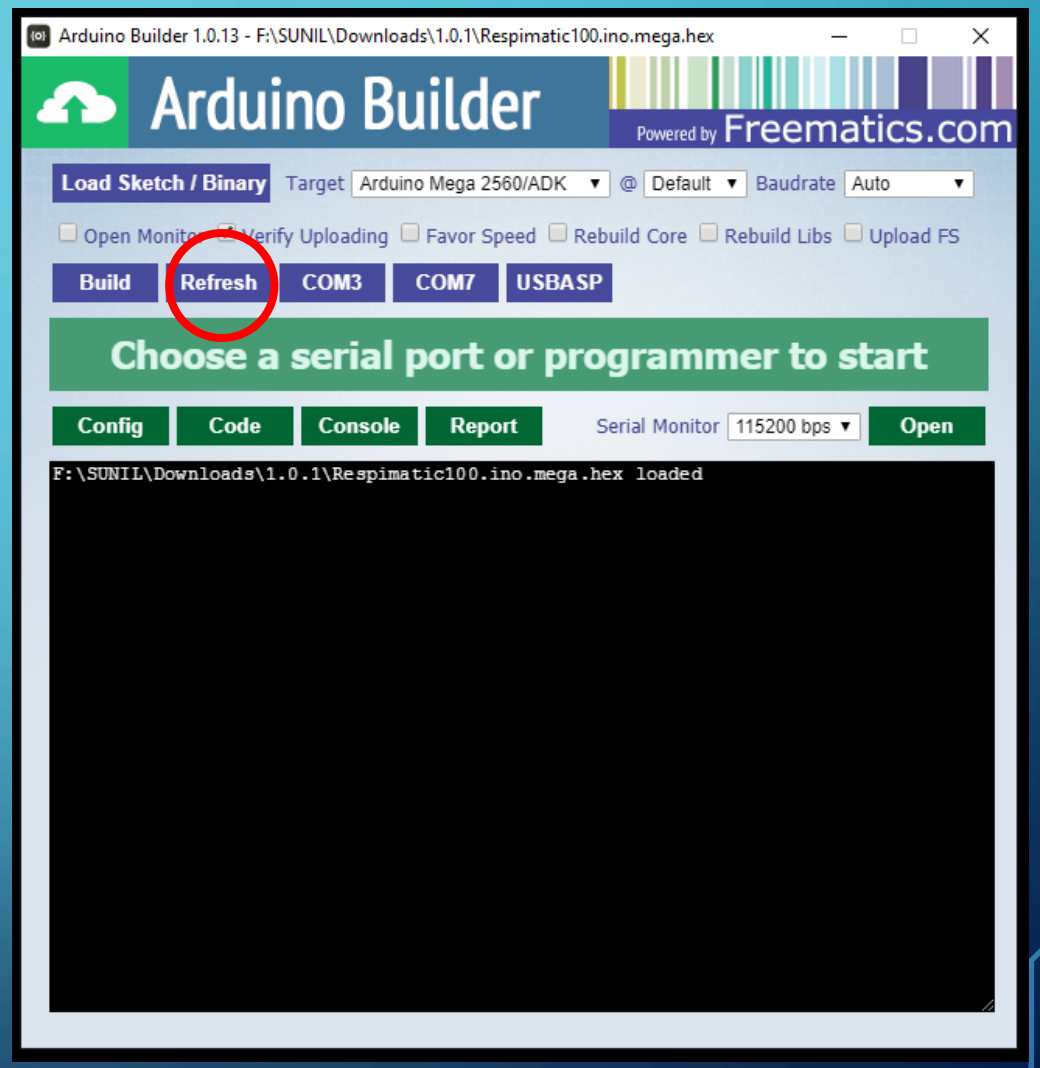
Click “Load Sketch/Binary” button on the Arduino Builder

Select INSPIRE-100_master.ino.mega.hex from the extracted release folder

INSTALL FIRMWARE RELEASE
STEP 7

Check “Refresh” button on the Arduino Builder

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

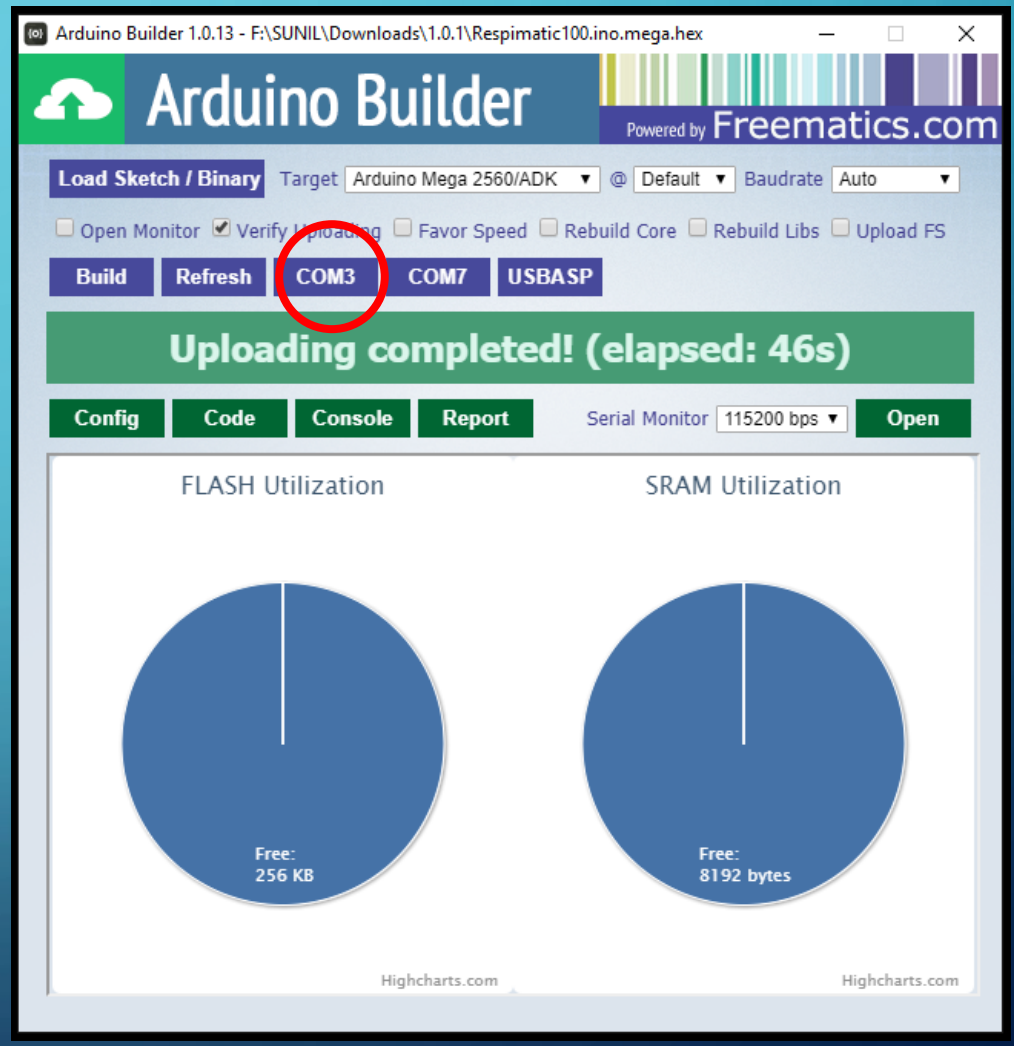


INSTALL FIRMWARE RELEASE
STEP 8

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

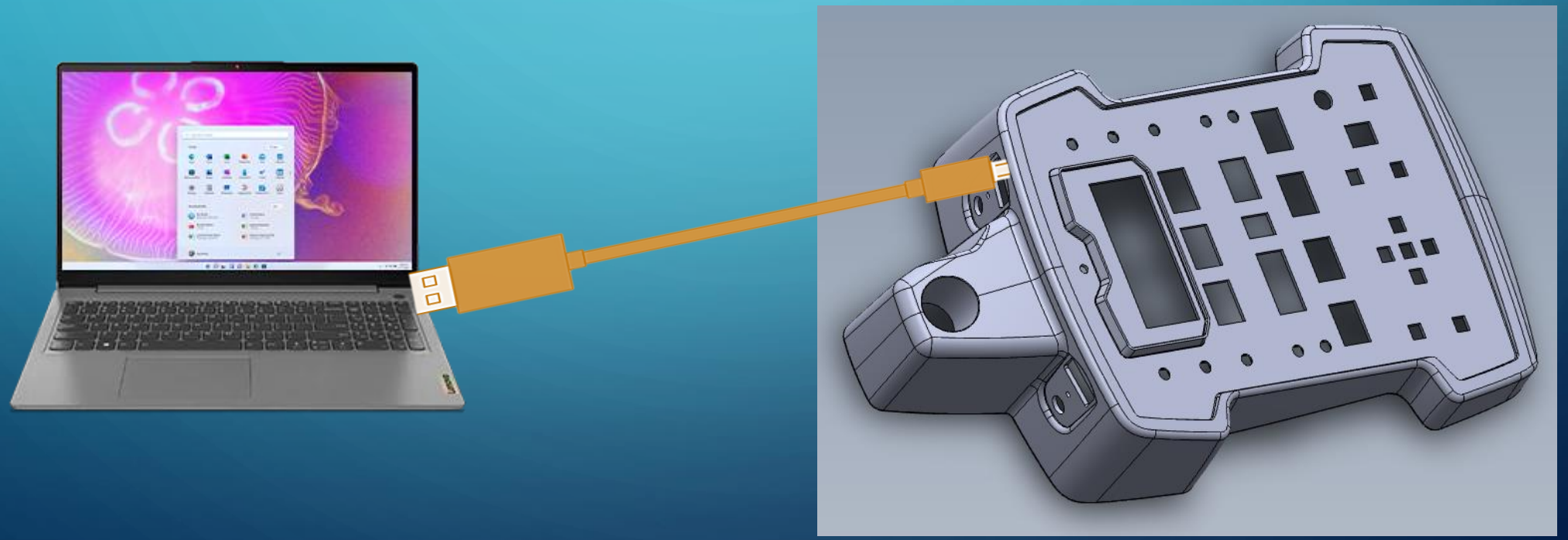
Arduino Builder will now install the selected file on the INSPIRE system

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



INSTALL FIRMWARE RELEASE
STEP 9

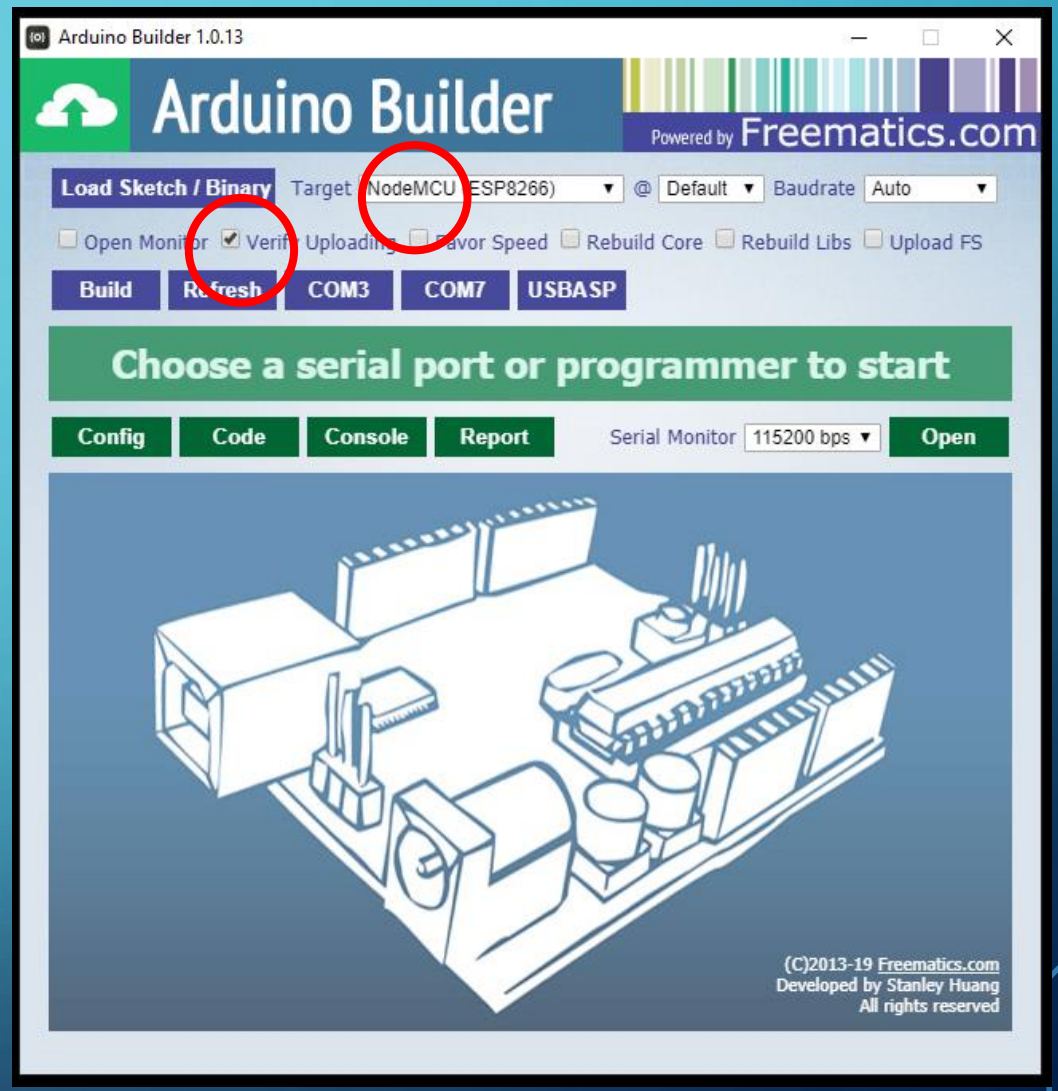
Connect laptop’s USB port to the micro-USB port labelled “Wi-Fi” on the back of the control panel of the INSPIRE system



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

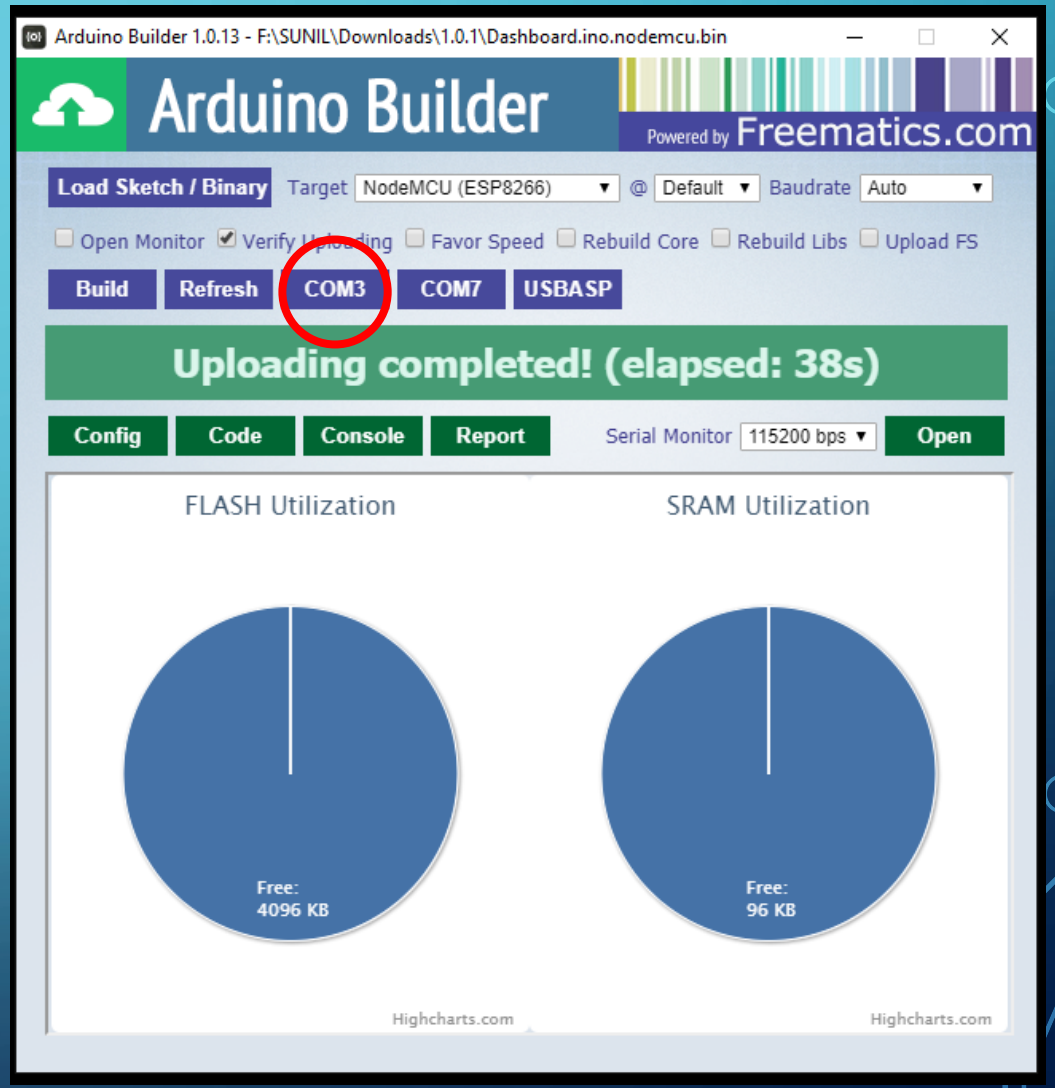
INSPIRE-100_slave.ino.nodemcu.bin

from the extracted folder of the release

INSTALL FIRMWARE RELEASE
STEP 12

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

Arduino Builder will now install the selected file on the INSPIRE-100 system



DONE