tinySA Basic and Ultra Firmware Update; using STM32CubeProgrammer
2024-01-18 actualized version

DISCLAIMER: The original procedure was developed by Don Wines, K5DW for his personal use. It is freely provided for use by anyone else but NO liability will be assumed by Don Wines for any damage, real or otherwise, caused by use of this procedure. If you cannot agree to this, please do not use this procedure. This procedure was developed in Windows 10.

Step 1. Download and install STM32CubeProgrammer from here:

https://www.st.com/en/development-tools/stm32cubeprog.html

(Available installers for Linux, Mac, Win32 and Win64… Current version: 2.15.0)

Step 2. Download latest firmware:

- for the **tinySA Basic** (screen size: 2.8 inch) from here:

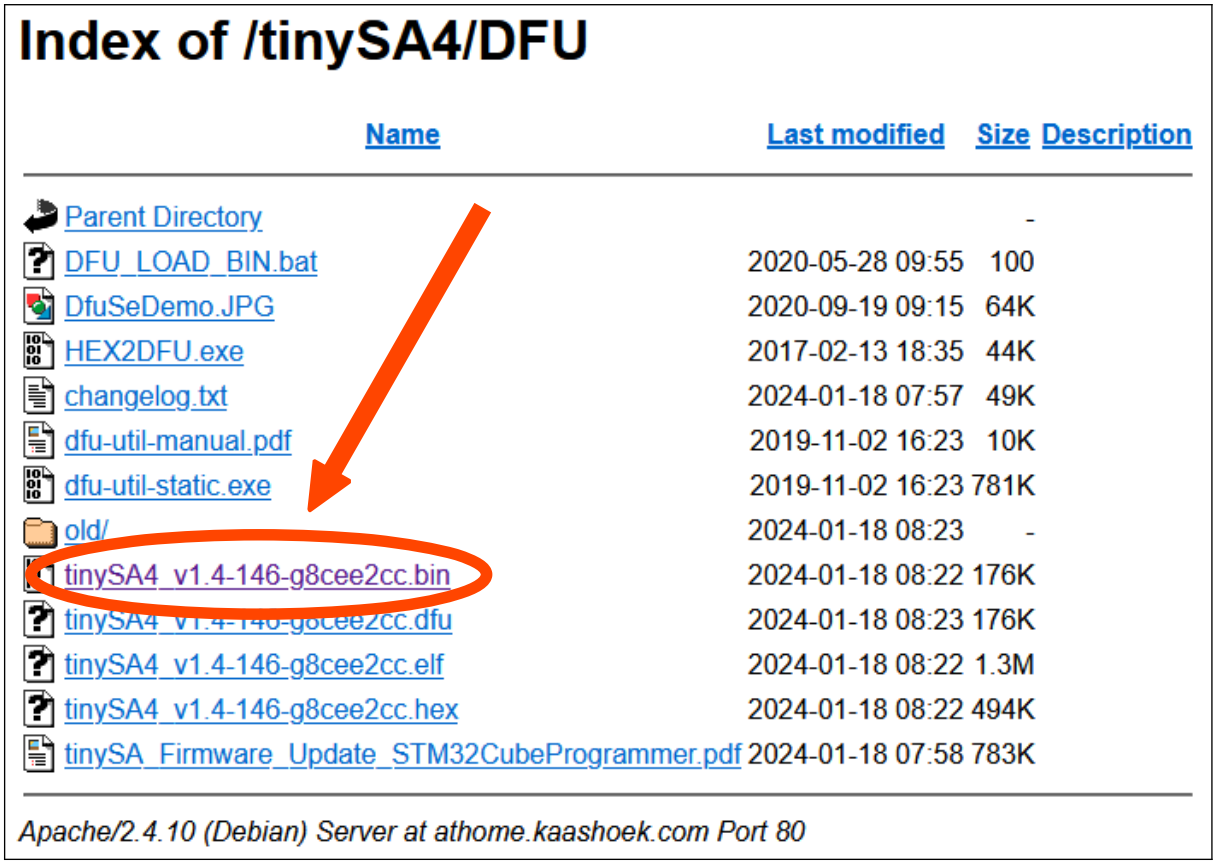
http://athome.kaashoek.com/tinySA/DFU/

- for the **tinySA Ultra** (screen size: 4 inch) from here:

http://athome.kaashoek.com/tinySA4/DFU/

… be sure to select the ***.bin-**file.

For example: tinySA4_v1.4-146-g8cee2cc.bin



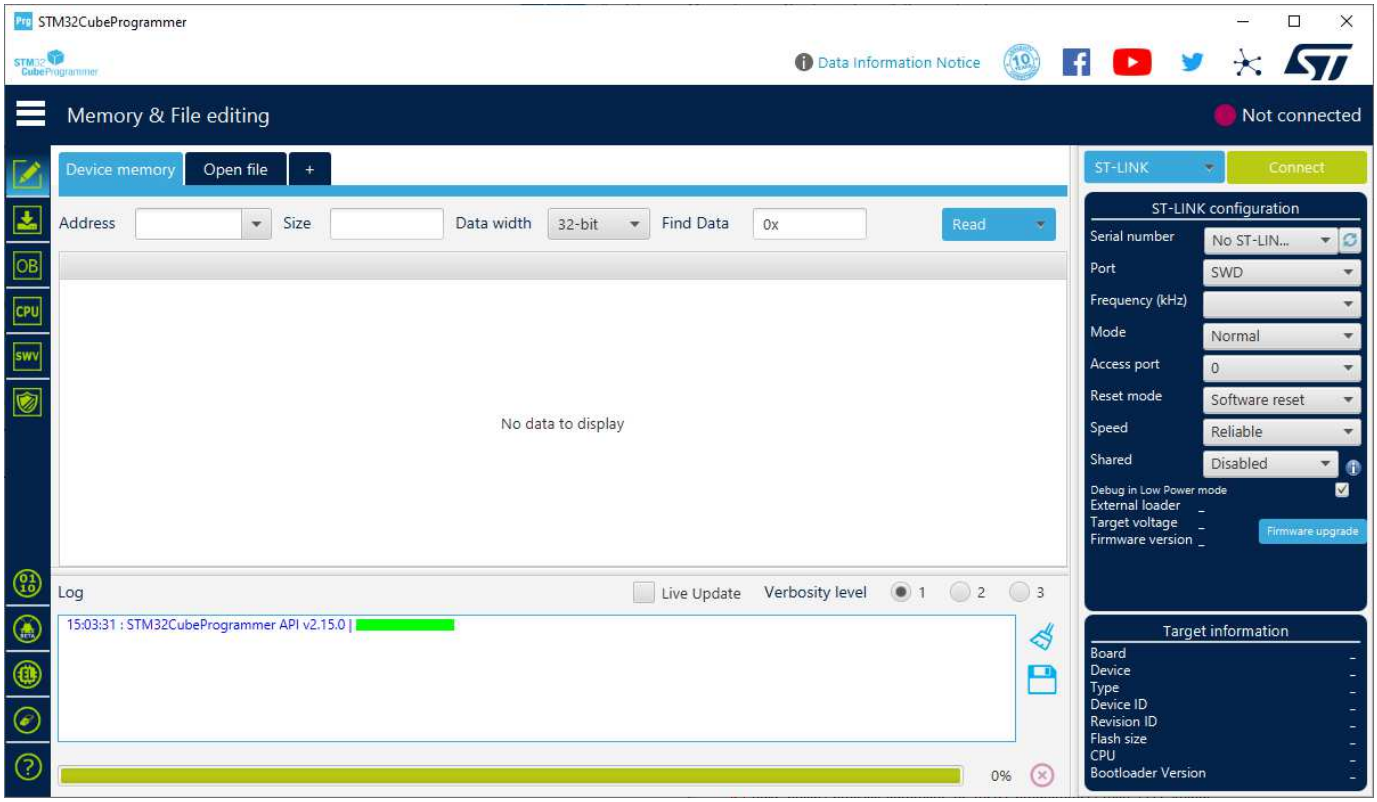
Index of /tinySA4/DFU

Name	Last modified	Size	Description
Parent Directory		-	
DFU_LOAD_BIN.bat	2020-05-28 09:55	100	
DfuSeDemo.JPG	2020-09-19 09:15	64K	
HEX2DFU.exe	2017-02-13 18:35	44K	
changelog.txt	2024-01-18 07:57	49K	
dfu-util-manual.pdf	2019-11-02 16:23	10K	
dfu-util-static.exe	2019-11-02 16:23	781K	
old/	2024-01-18 08:23	-	
tinySA4_v1.4-146-g8cee2cc.bin	2024-01-18 08:22	176K	
tinySA4_v1.4-146-g8cee2cc.dfu	2024-01-18 08:23	176K	
tinySA4_v1.4-146-g8cee2cc.elf	2024-01-18 08:22	1.3M	
tinySA4_v1.4-146-g8cee2cc.hex	2024-01-18 08:22	494K	
tinySA_Firmware_Update_STM32CubeProgrammer.pdf	2024-01-18 07:58	783K	

Apache/2.4.10 (Debian) Server at athome.kaashoek.com Port 80

Save the file to a folder of your choice.

Step 3. Launch the STM32CubeProgrammer. It should look similar to this:

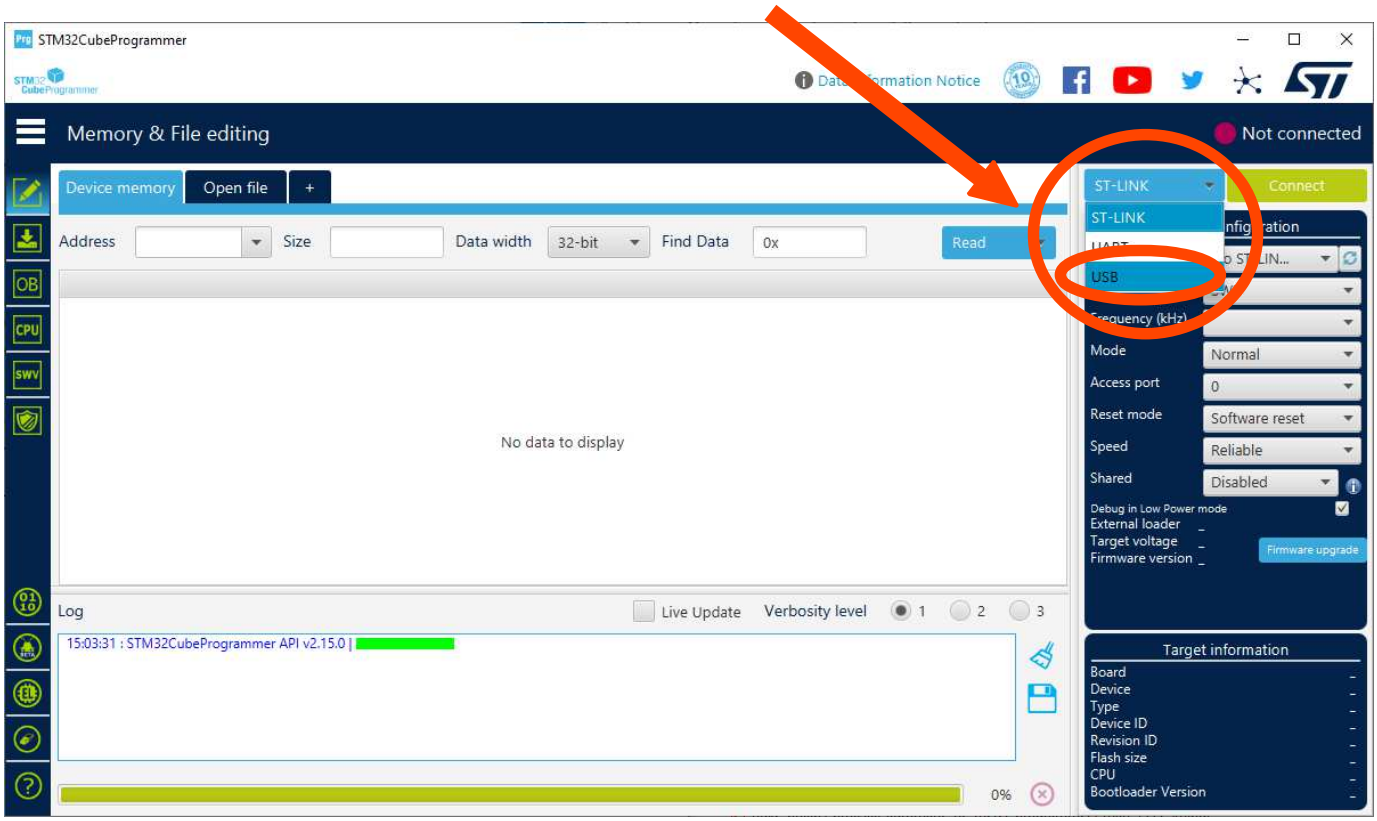


Step 4. Connect Your tinySA to Your computer, power it up, and put it into DFU mode:

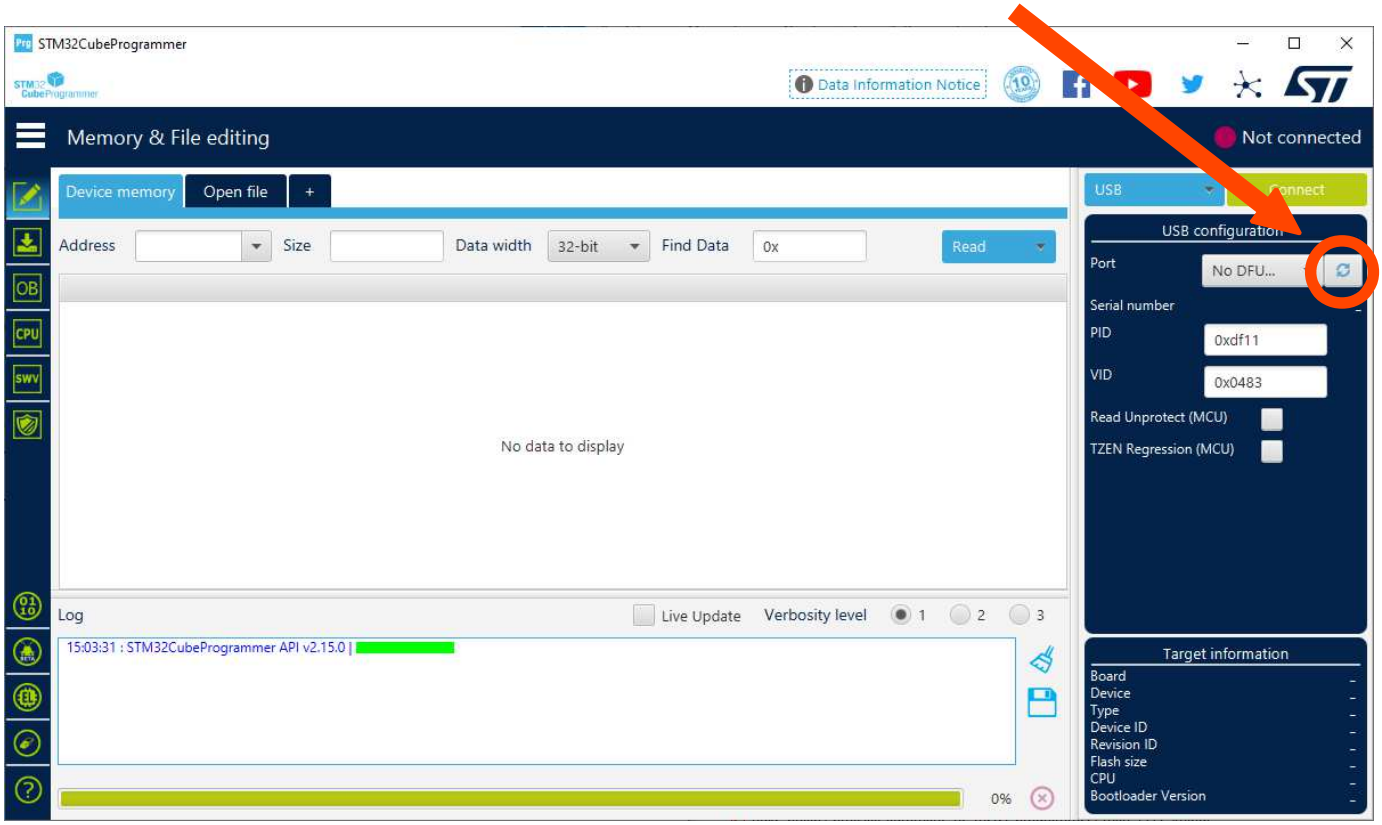
CONFIG > DFU > ENTER DFU

tinySA Ultra: push Jog button during switch “on” (the display remains black)

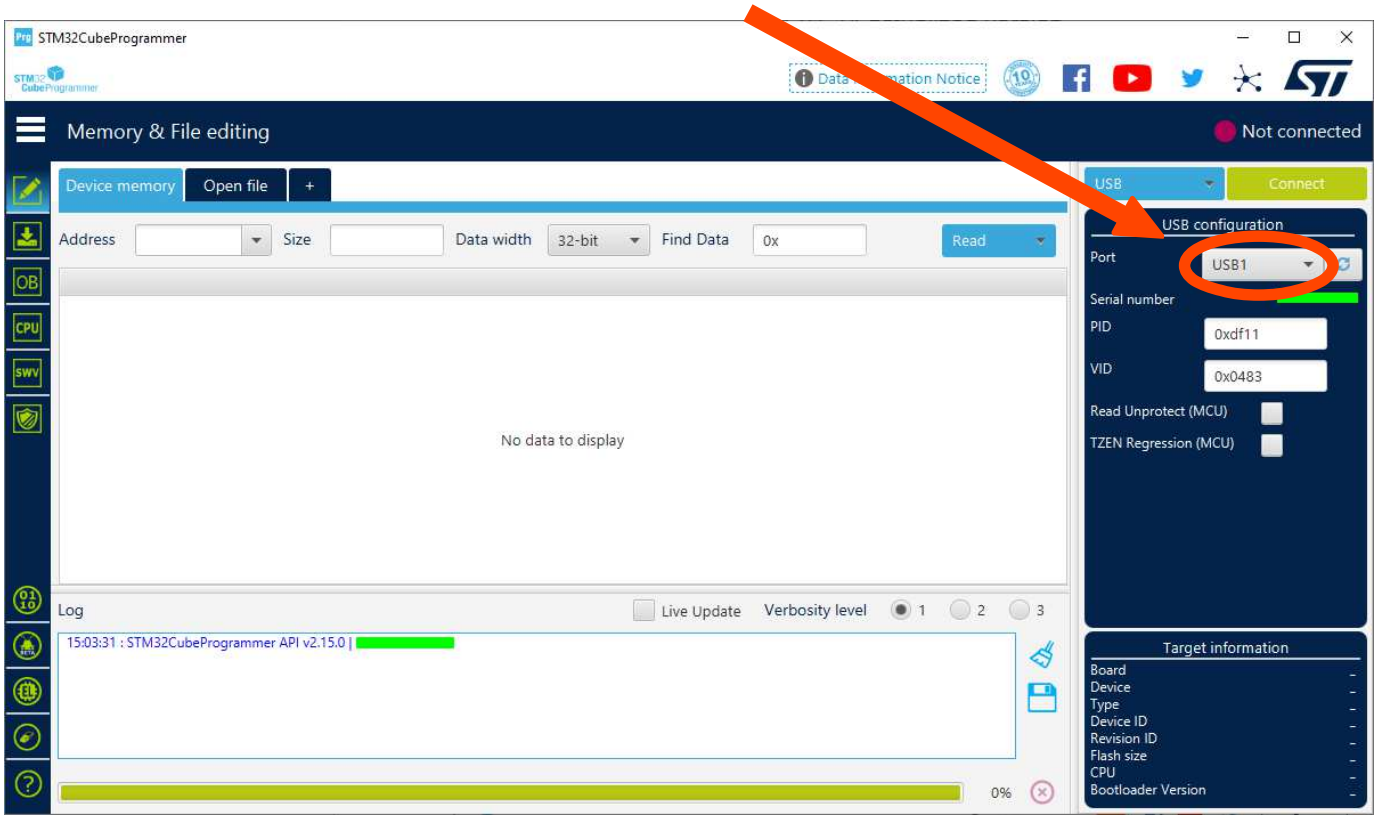
Step 5. In the STM32CubeProgrammer select “USB” from the dropdown-list here:



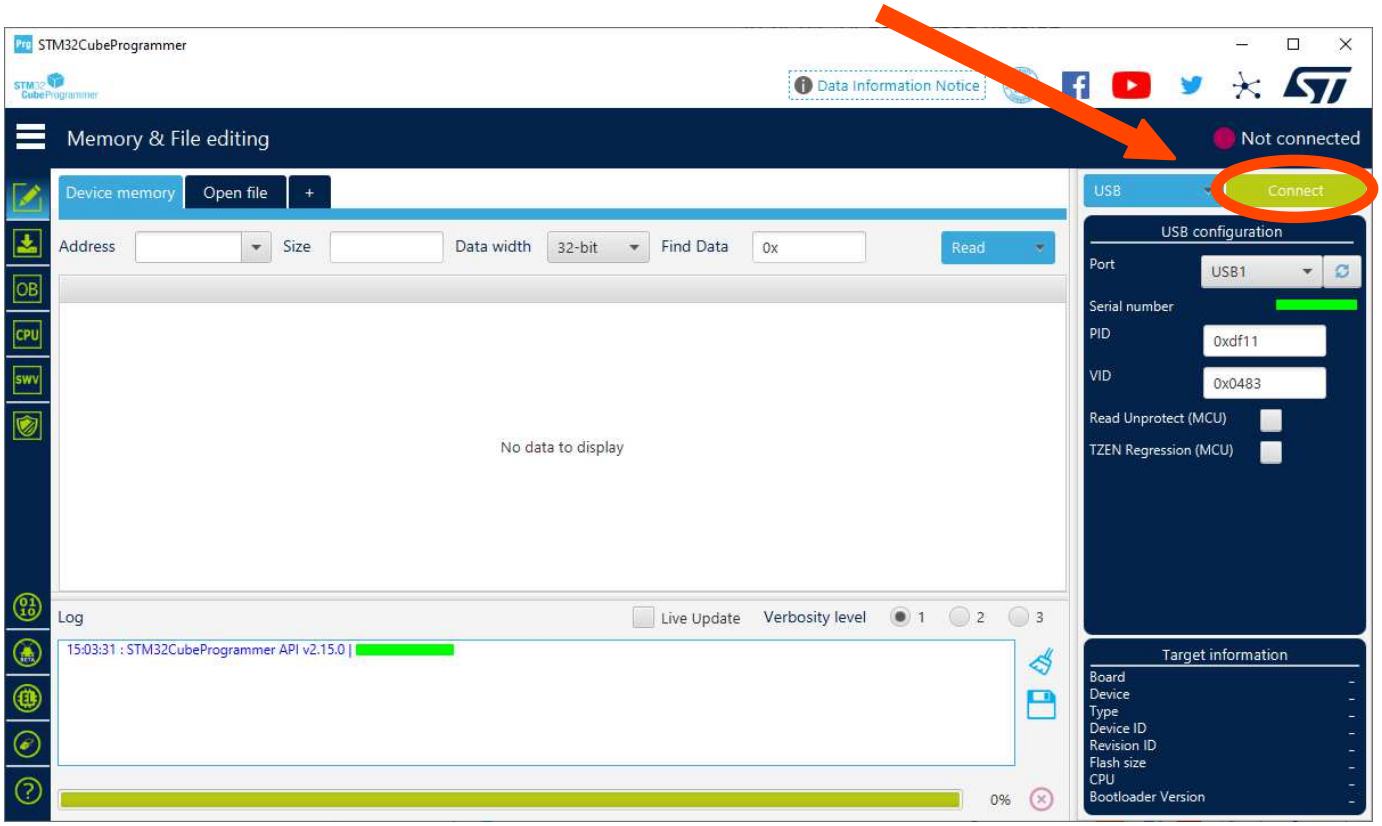
- If the Port-selector says; “No DFU…” (No DFU detected) click the “Refresh” button.



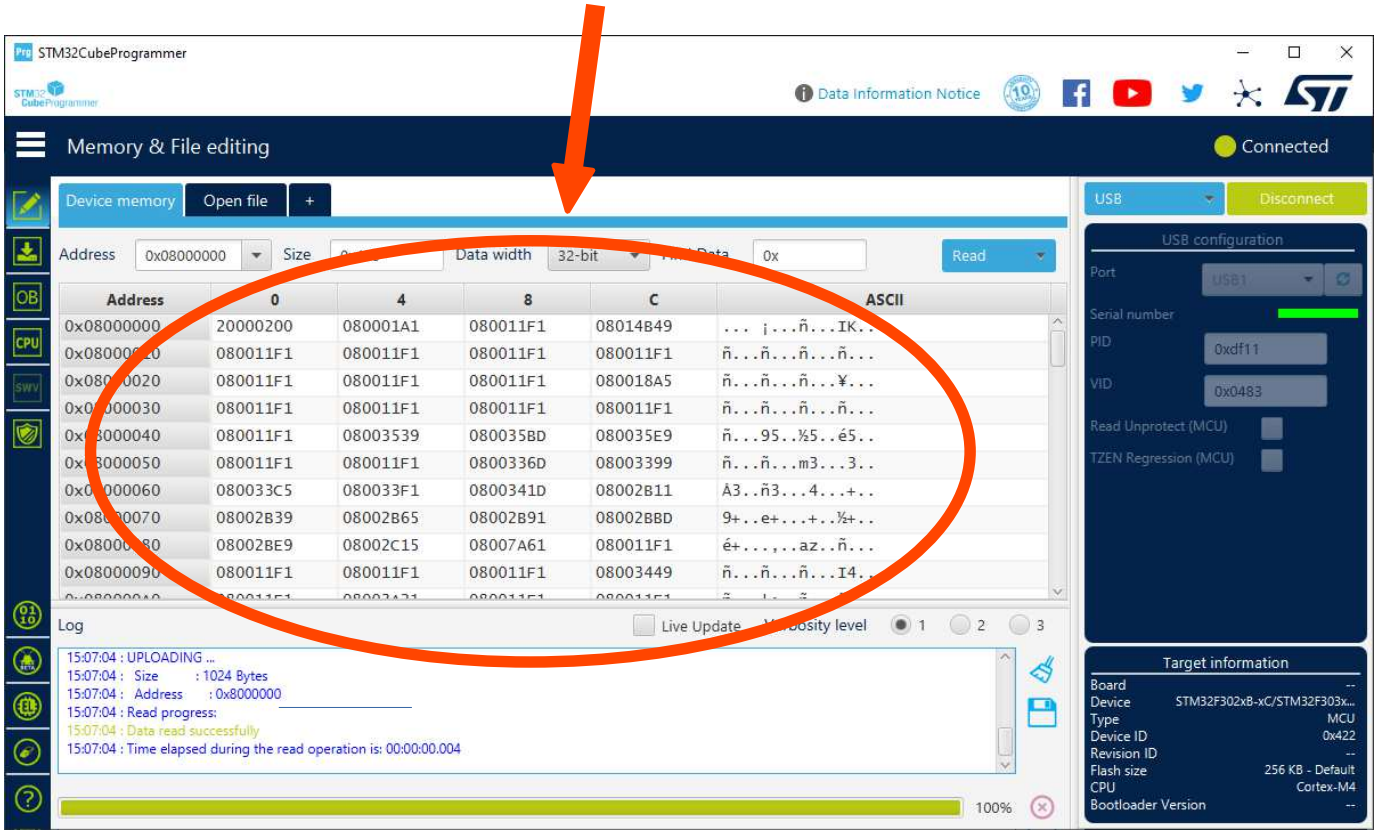
The “Port” selector should change to “USB1” or similar:



Step 6. Connect to the tinySA by clicking the “Connect” button.

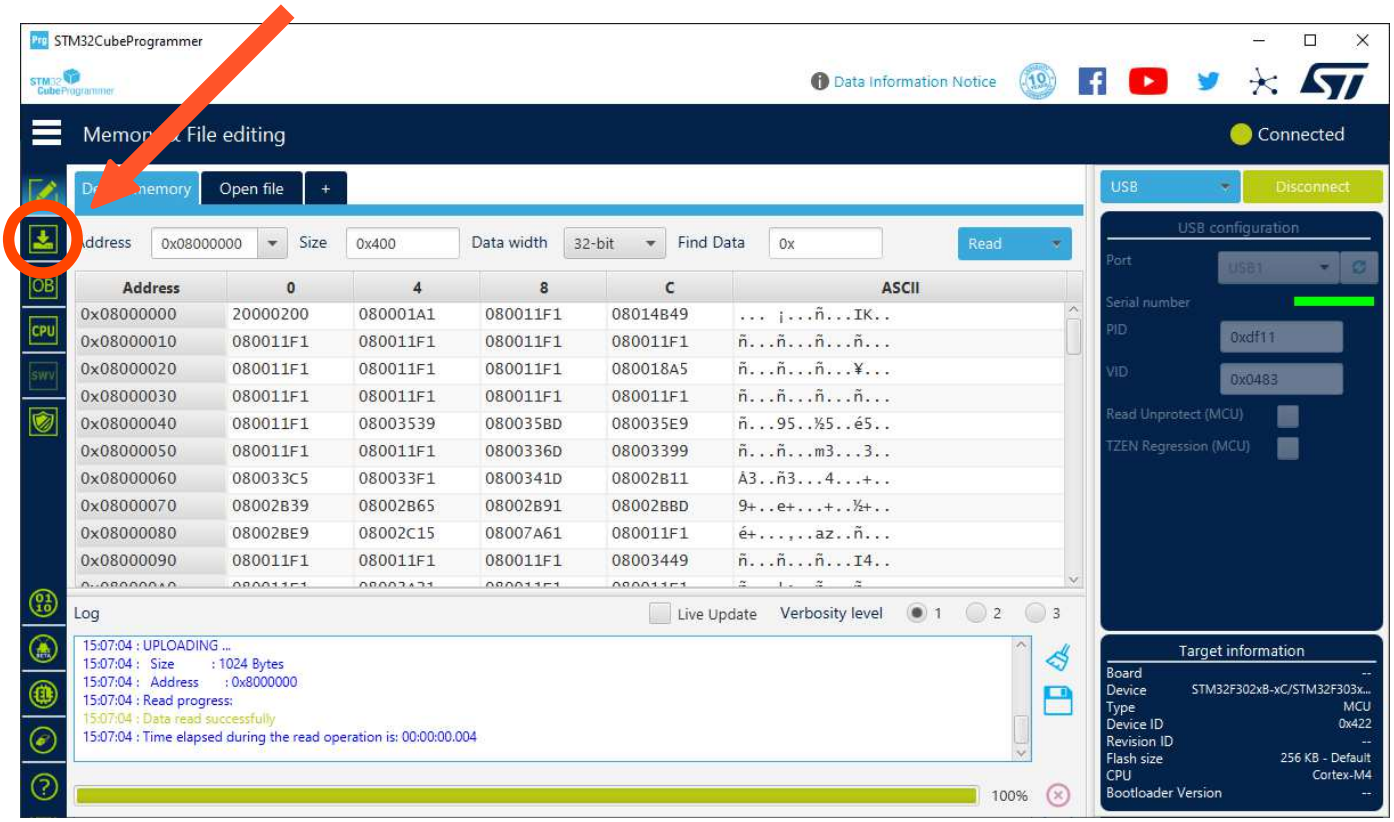


The program should connect to the tinySA and display the current contents of the TinySA's memory:

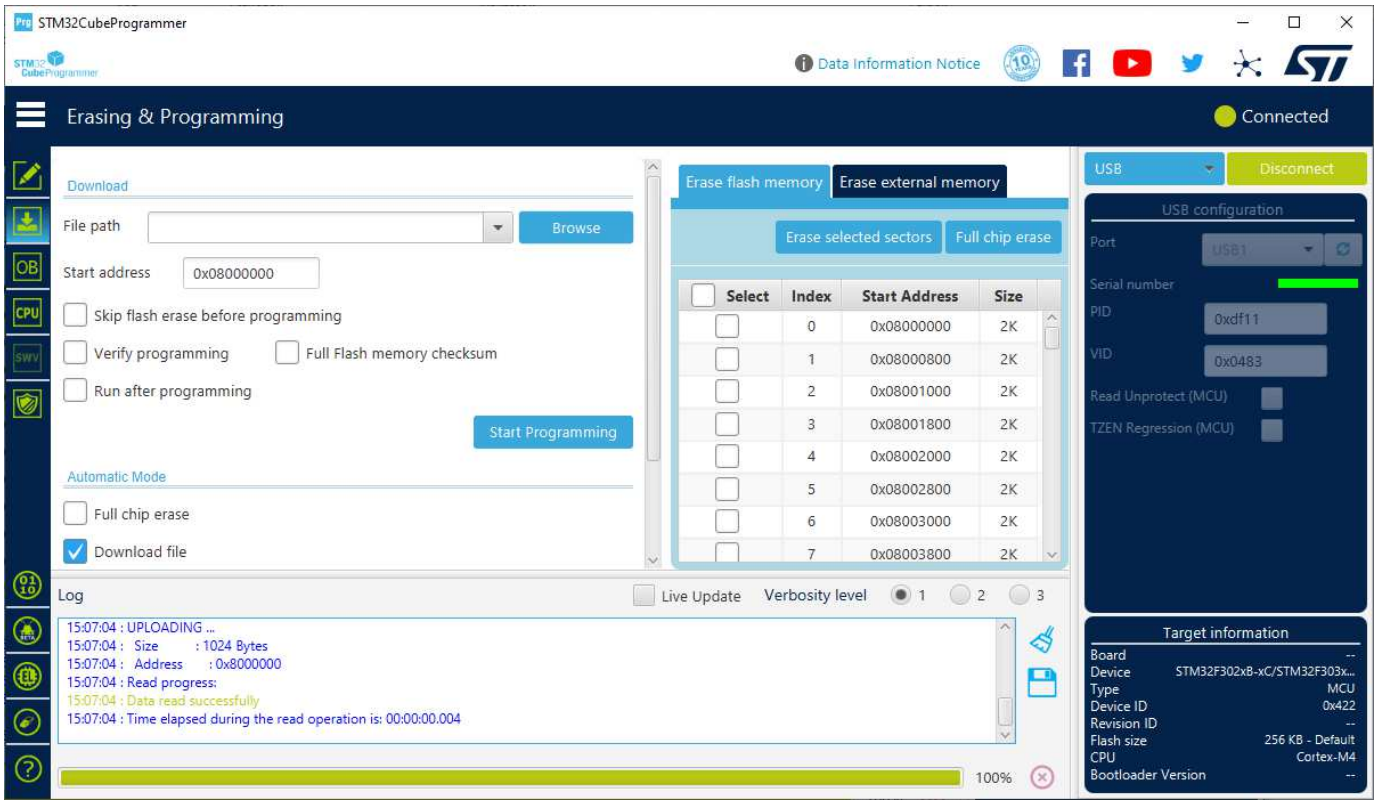


(If the data doesn't display immediately, click the "Read" button and the memory data should then display.)

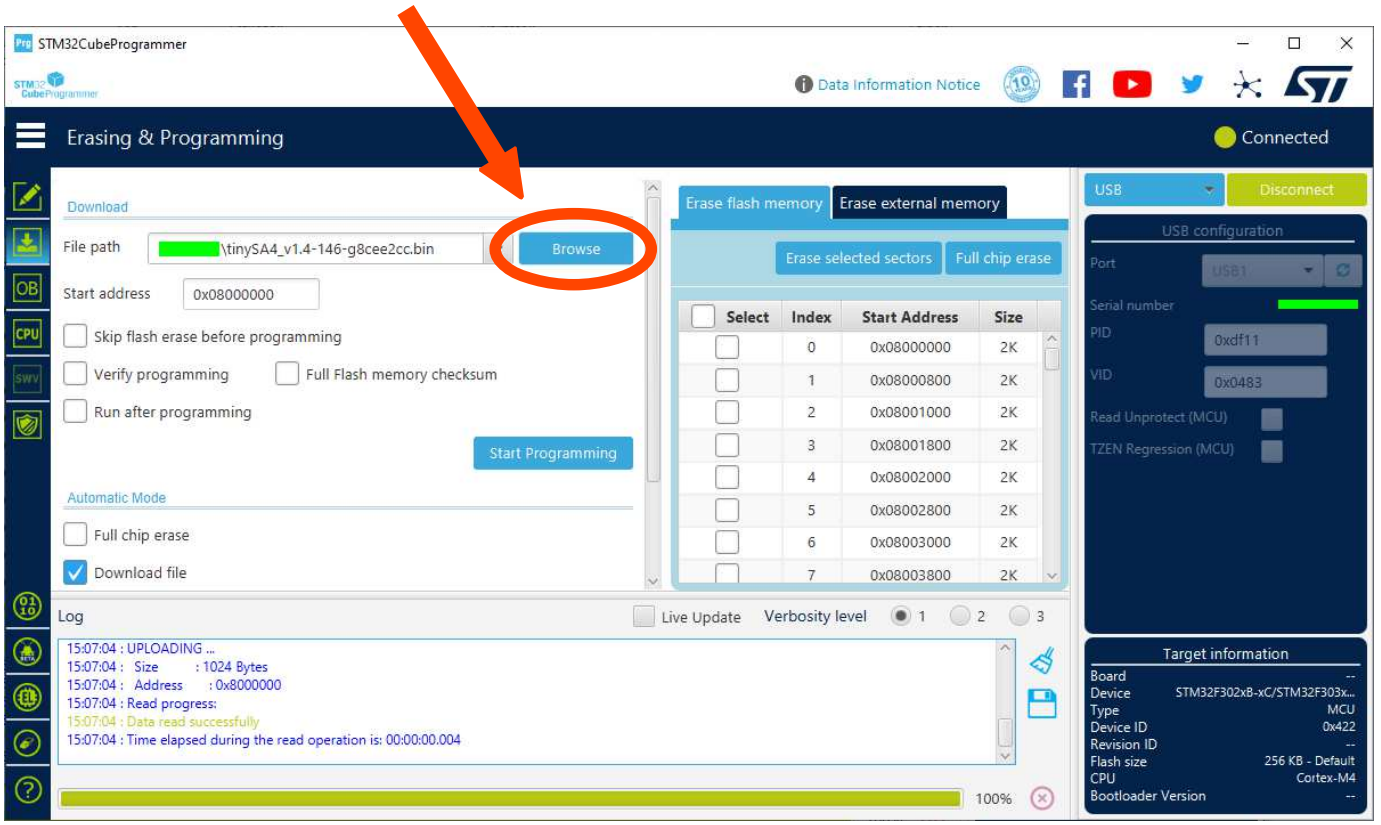
Step 7. Click on the “Erasing & Programming” icon:



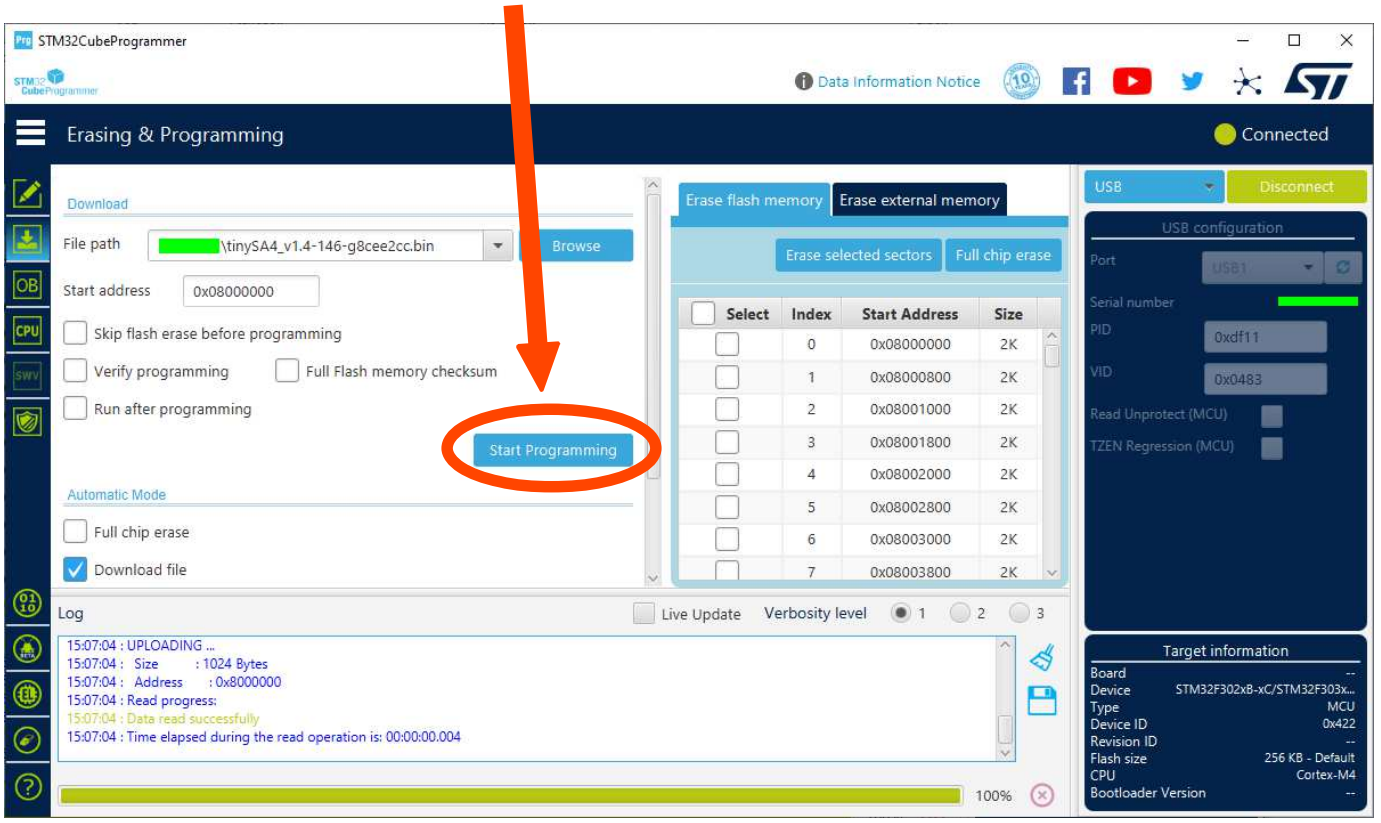
You should be presented with this screen:



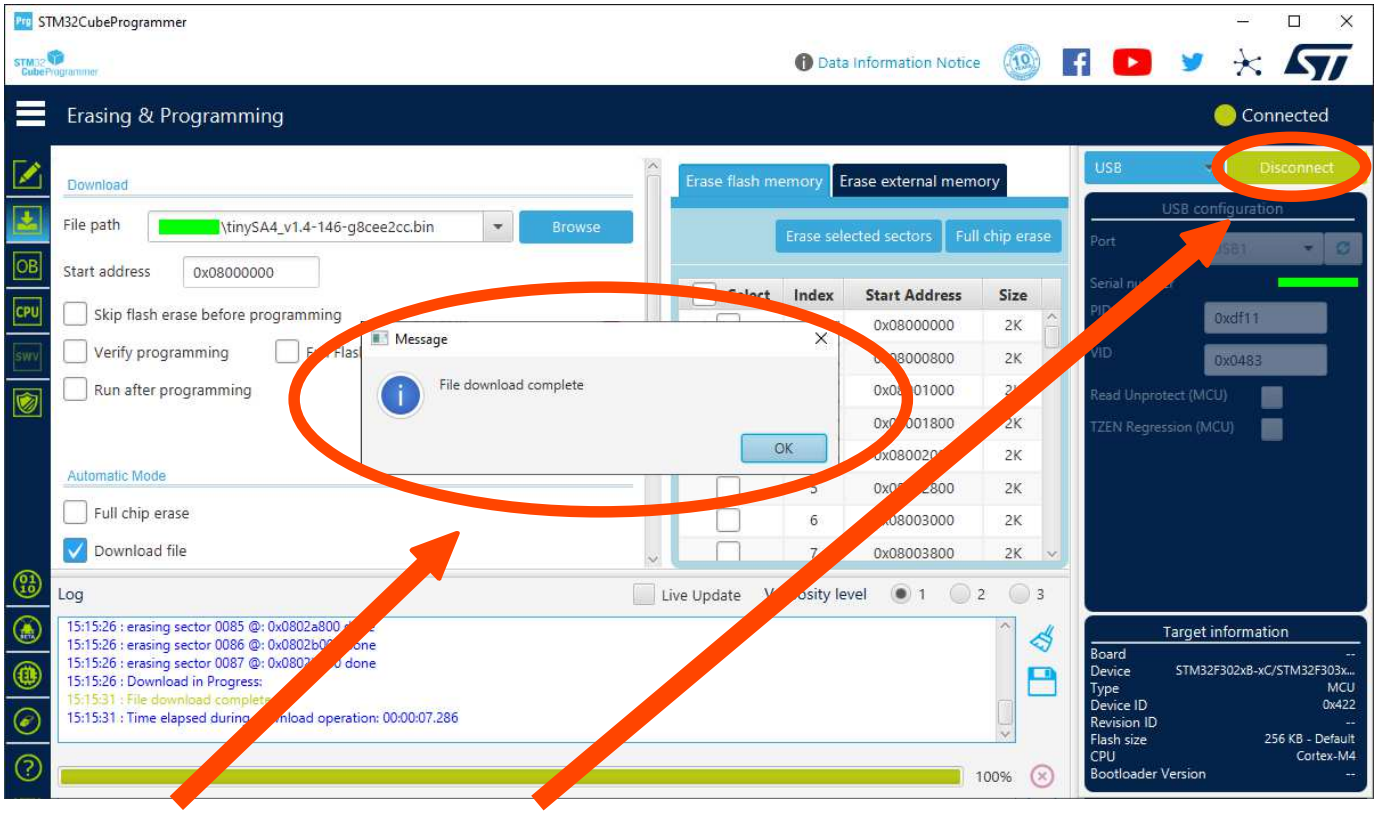
Step 8. Click the “Browse” button and navigate to the ***.bin** firmware-file You saved earlier.



Step 9. Now click the “Start Programming” button to initiate the file download to the tinySA:



After a few seconds the download will complete and you will be presented with this screen:



Click “Ok”, and “Disconnect” button.

Step 10. Now power cycle the tinySA and check the firmware version on Your tinySA:

CONFIG > VERSION

And You are done!

You can find more help, and more firmware update method here:
https://tinysa.org/wiki/pmwiki.php?n=Main.UpdatingTheFirmware

https://groups.io/g/tinysa/topics