

UPDATING FIRMWARE

Equipment needed

- A windows based PC
- USB Type A to Mini B cable
- A copy of 'DfuSe Demo' software
- The latest firmware from Glensound
- A STM32 Device and mains power

Instructions

1. Download and install DfuSE Demo

'DfuSE Demo' is a firmware updating tool that is required for loading new firmware on to the STM32 Device.

It can be downloaded from the STMicroelectronics website found here: <https://goo.gl/AbzhsA>. It is the file named "STSW-STM32080".

Once you have downloaded this file you will need to extract the .exe "DfuSe_Demo_V3.0.5_Setup.exe", then run and install it.

2. Download firmware

The latest firmware for the STM32 Device can be found on the Glensound website, under the respective product page. Once you have downloaded the file, place it in a folder or location of your choice.

Name	Date	Type	Size
 Dark1616S1.1.1.dfu	21/03/2018 11:18	DFU File	47 KB

Figure 1 Example filename

3. Connect To A PC

Connect the STM32 Device to the PC via the USB cable. The Mini USB connector is located on a panel of the STM32 Device.



Figure 2 Front panel USB connector

4. Firmware update preparation

To prepare the STM32 Device for a firmware update;

1. Power on the unit
2. Press and hold down the reset button
3. Press and hold down the identify button
4. Release the reset button and then release the identify button a second after

Your PC should make an audible sound when this process is successful as windows is detecting a new USB device.

5. Loading the firmware

Now open DfuSe Demo.

If the STM32 Device successfully entered DFU mode then it will appear as 'STM Device in DFU Mode' under the 'Available DFU Devices tab'.

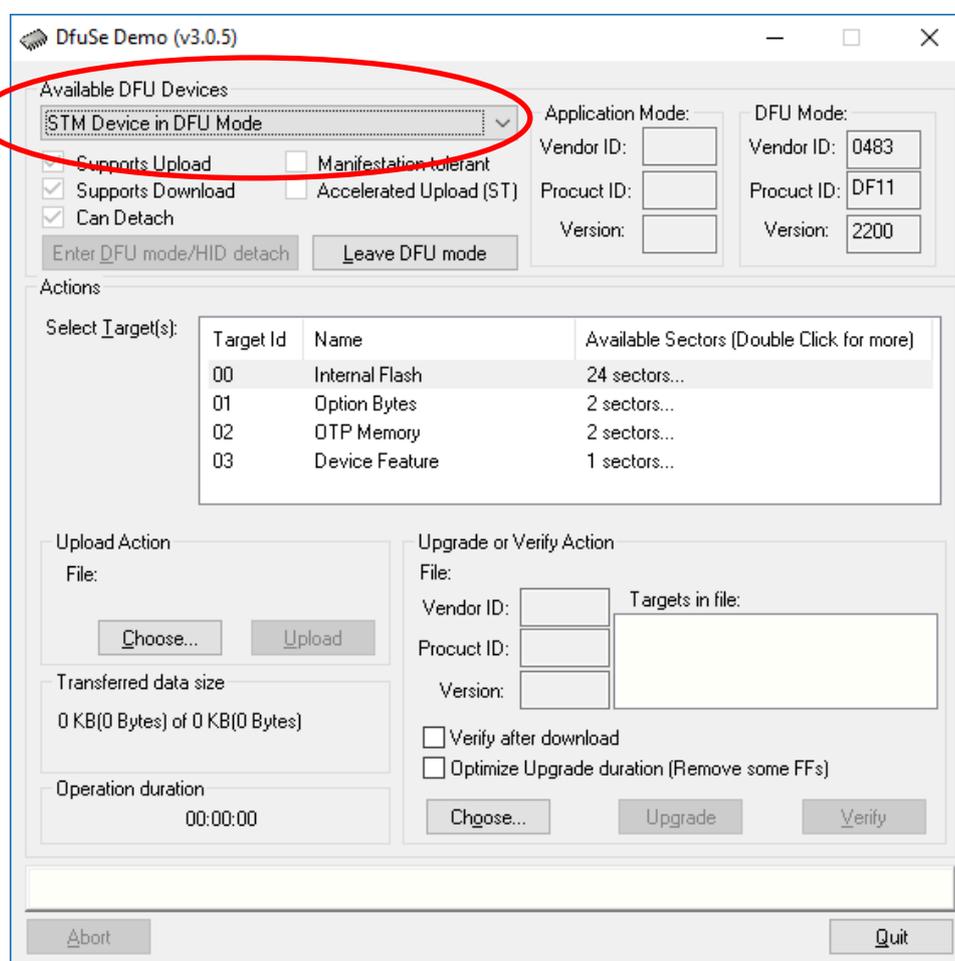


Figure 3 Device successfully recognised

Now the .dfu file needs to be selected so that DfuSe Demo knows the correct firmware to put on to the STM32 Device.

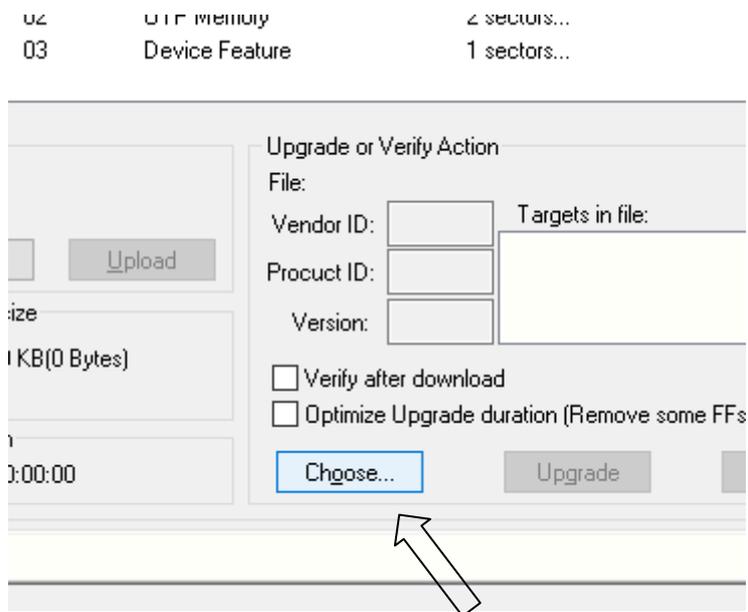


Figure 4 Choose .dfu file

Click choose and then select the .dfu file that you downloaded from the GlenSound website. This will be located in your downloads folder by default.

If the file loads successfully then it will read along the bottom 'File correctly loaded'.

6. Upgrading the STM32 Device firmware

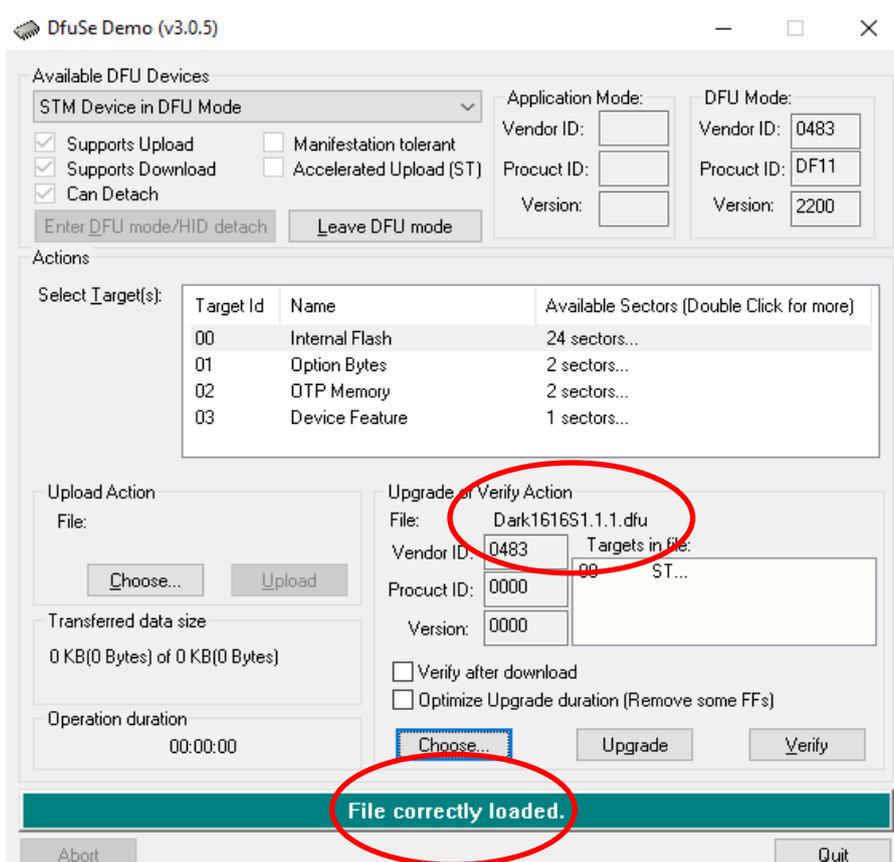


Figure 5 .dfu successfully loaded

The firmware is now ready to be put on to the STM32 Device. Tick the 'Verify after download' box first and then click 'Upgrade'.

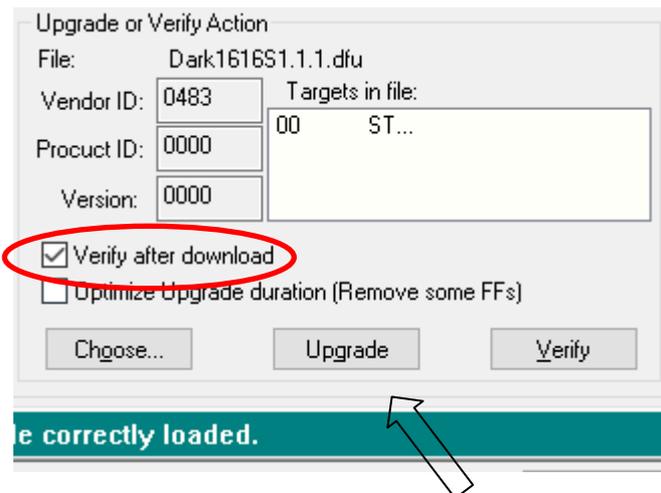


Figure 6 Upgrade

Click yes to proceed.

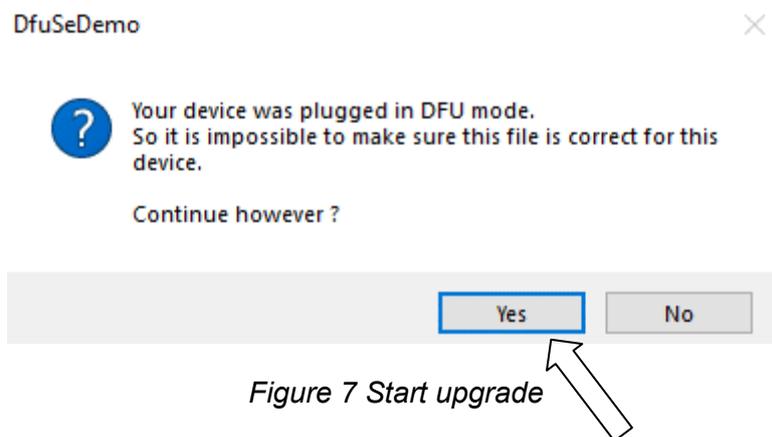


Figure 7 Start upgrade

The progress bar along the bottom will show the status of the operation.

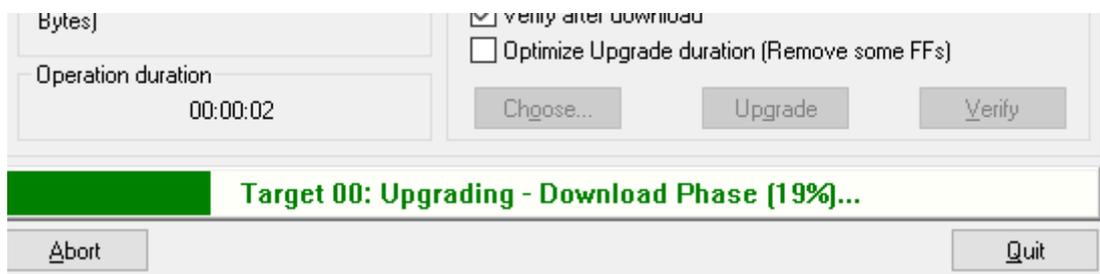


Figure 8 Upgrade status

If the operation was successful, DfuSe Demo will report that “Target 00: Verify Successful!”.

You may also see that it will report how much data was successfully transferred.

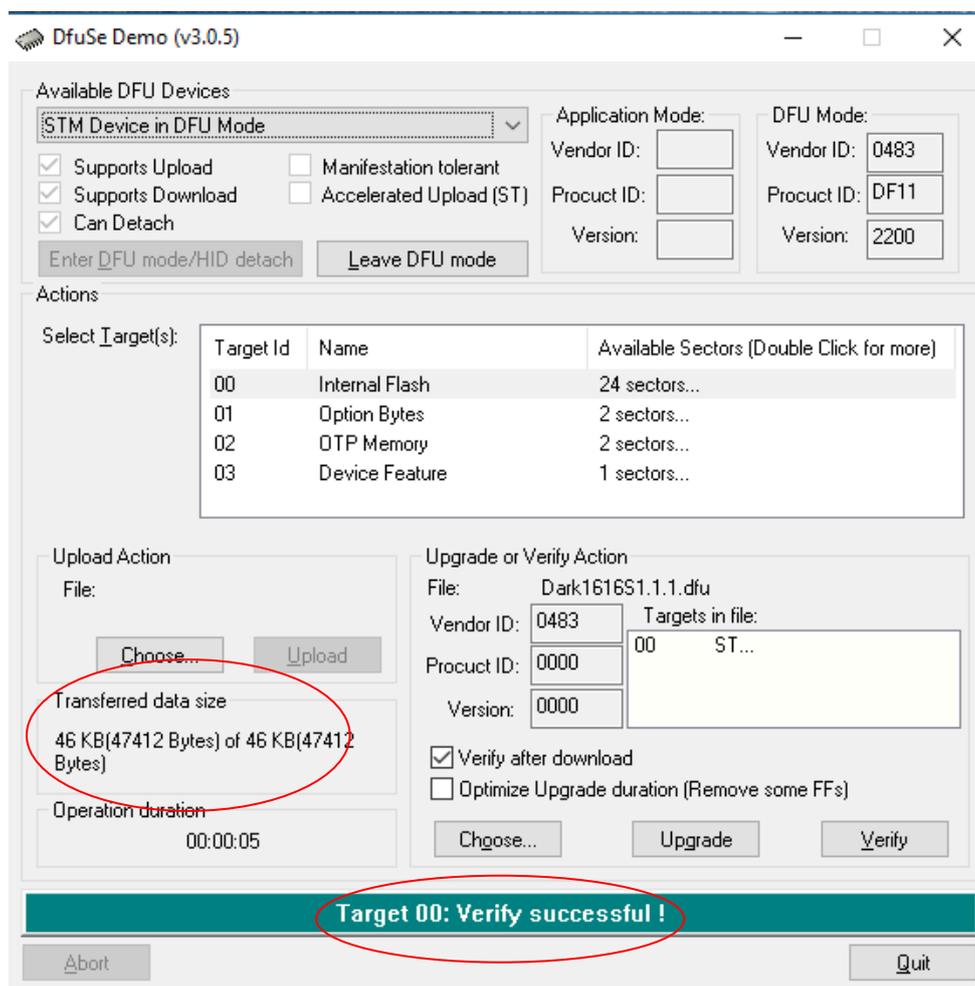


Figure 9 Successful upgrade!

7. Final steps

Now click “Leave DFU mode” to finish the procedure.

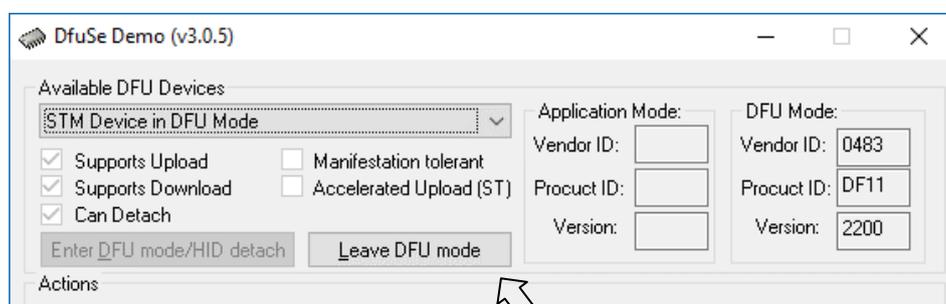


Figure 10 Final step

You may now disconnect the USB cable and continue to use the STM32 Device with the freshly updated firmware!