

Upgrade NanoVNA use DFU

1.: DFU is a SW is for programming the STM32 via the USB (UM0412)
The package contains all binaries and source code for DfuSe USB device
firmware upgrade (DFU) software, including the demonstration, debugging GUIs
and protocol layers.

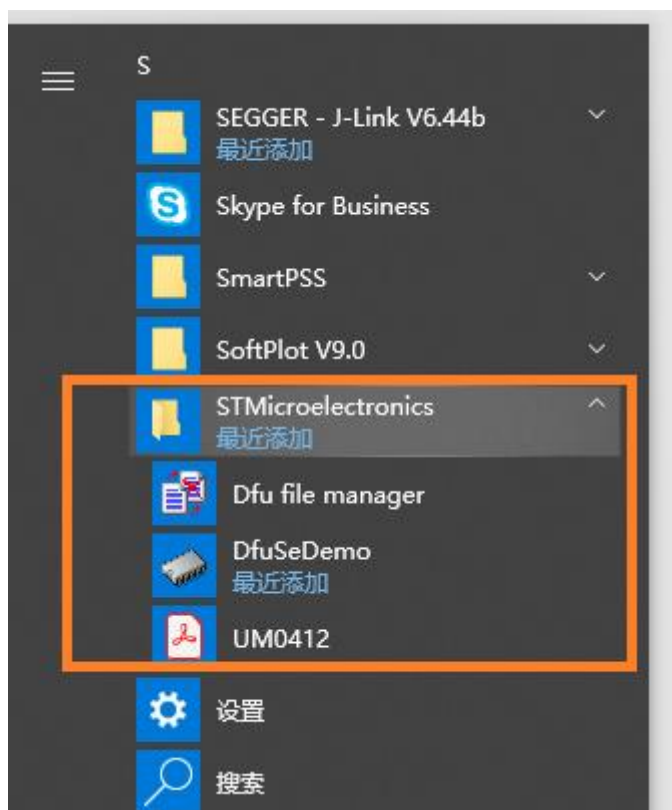
https://www.st.com/en/development-tools/stsw-stm32080.html?s_searchtype=keyword

It includes the DFU driver compatible with the latest Microsoft® OS.

DfuSe utility can be used to interact with the STM32 system memory bootloader
or any In-Application Programming (IAP) firmware, running from the user Flash,
thus allowing internal memories programming through USB.

See this video.

https://www.youtube.com/watch?v=Kx7yWVi8kbU&list=PLnMKNibPkDnF97QnUOFGirl1q0G_4VdDc&index=28



2: Now we use the .DFU file with the DfuSe Demonstration, to program the device.

We provide 3 firmware on the network hard drive, you can choose the appropriate brush in accordance with the relevant tutorials, 3 firmware differences are as follows:

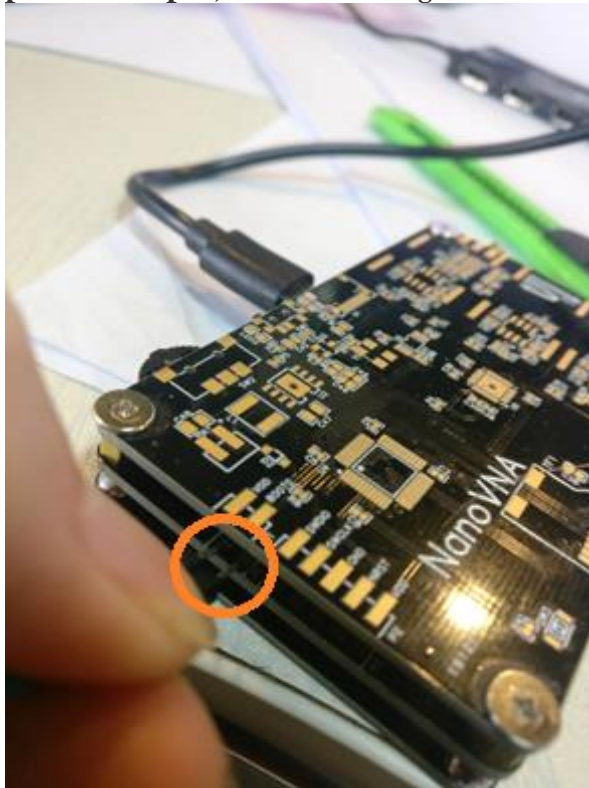
nanoVNA_300_ch: 50K-300MHz, 5*7 Bitmap font, 4 tracks

nanoVNA_900_ch: 50K-900MHz, 5*7 Bitmap font, 4 tracks(Default)

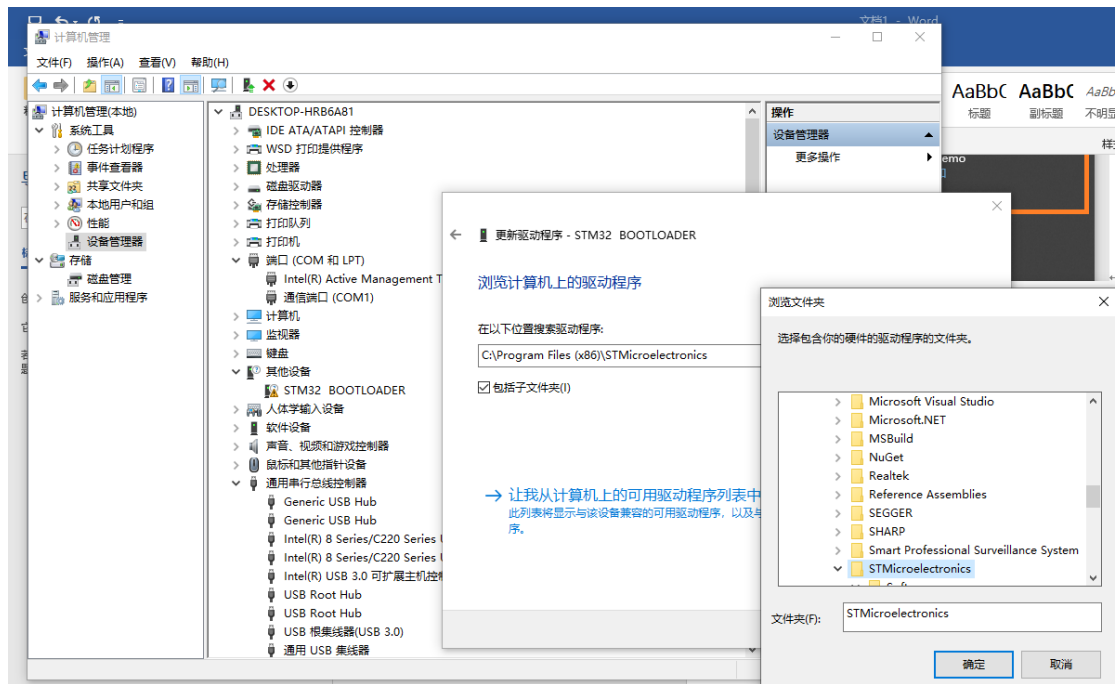
nanoVNA_900_aa: 50K-900MHz, 7*13 Bitmap font, 2 tracks (Antenna Analyzer)

Follows the steps below.

You must put in **DFU mode** your NanoVNA and is necessary connect the **BOOT pin** to **VDD pin**, see below Orange circle.



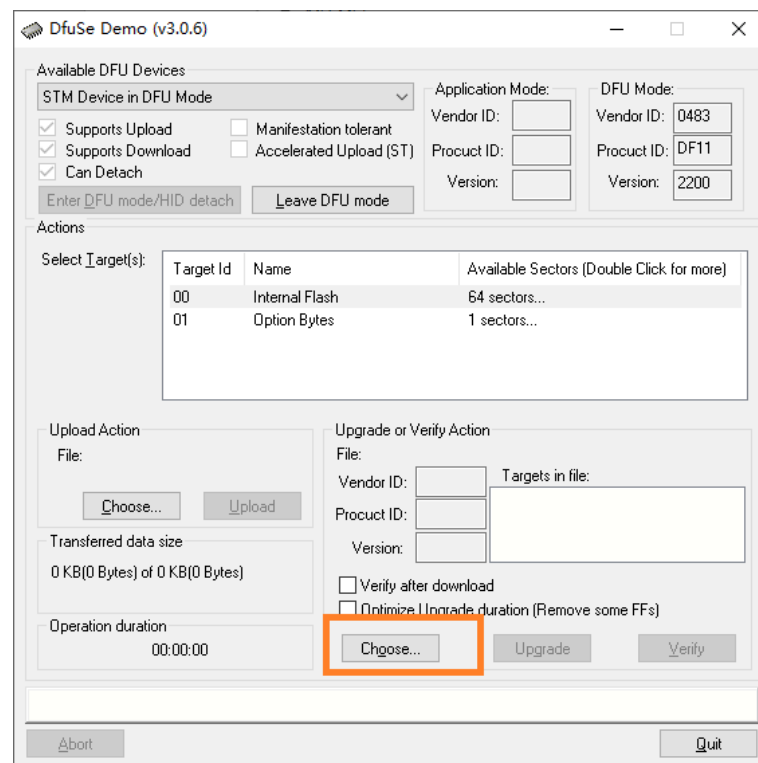
3. Now connect your NanoVNA to the PC and switch it on.



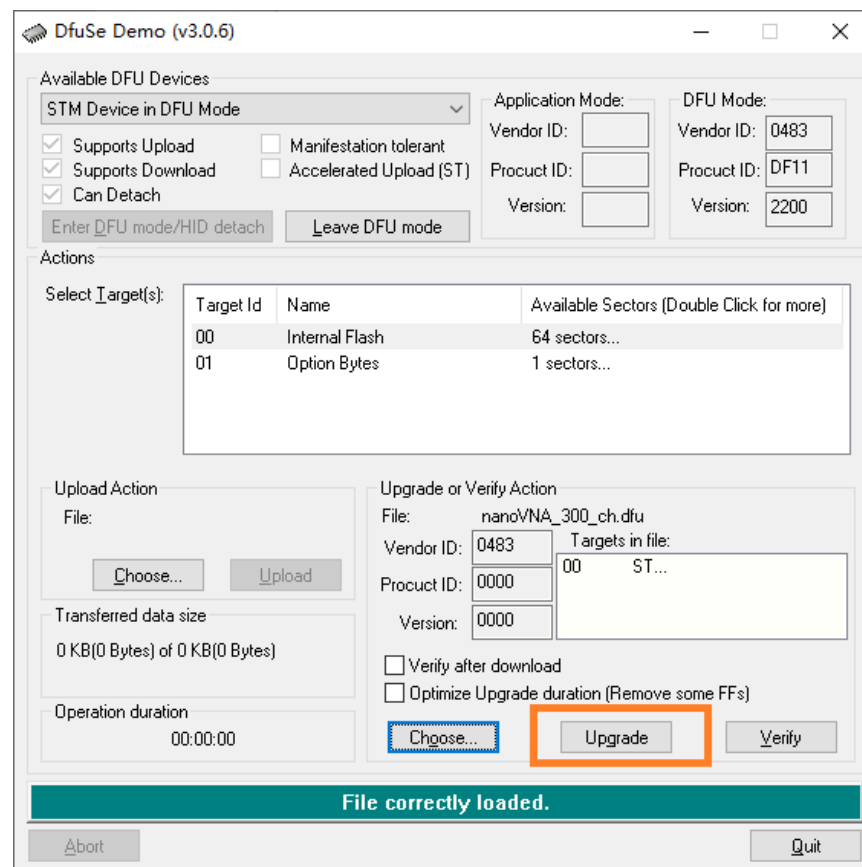
4. Install the driver correctly:

- > 计算机
- > 监视器
- > 键盘
- > 人体学输入设备
- > 软件设备
- > 声音、视频和游戏控制器
- > 鼠标和其他指针设备
- ▼ 通用串行总线控制器
 - Generic USB Hub
 - Generic USB Hub
 - Intel(R) 8 Series/C220 Series USB EHCI #1 - 8C26
 - Intel(R) 8 Series/C220 Series USB EHCI #2 - 8C2D
 - Intel(R) USB 3.0 可扩展主机控制器 - 1.0 (Microsoft)
 - STM Device in DFU Mode**
 - USB Root Hub
 - USB Root Hub
 - USB 根集线器(USB 3.0)
 - 通用 USB 集线器

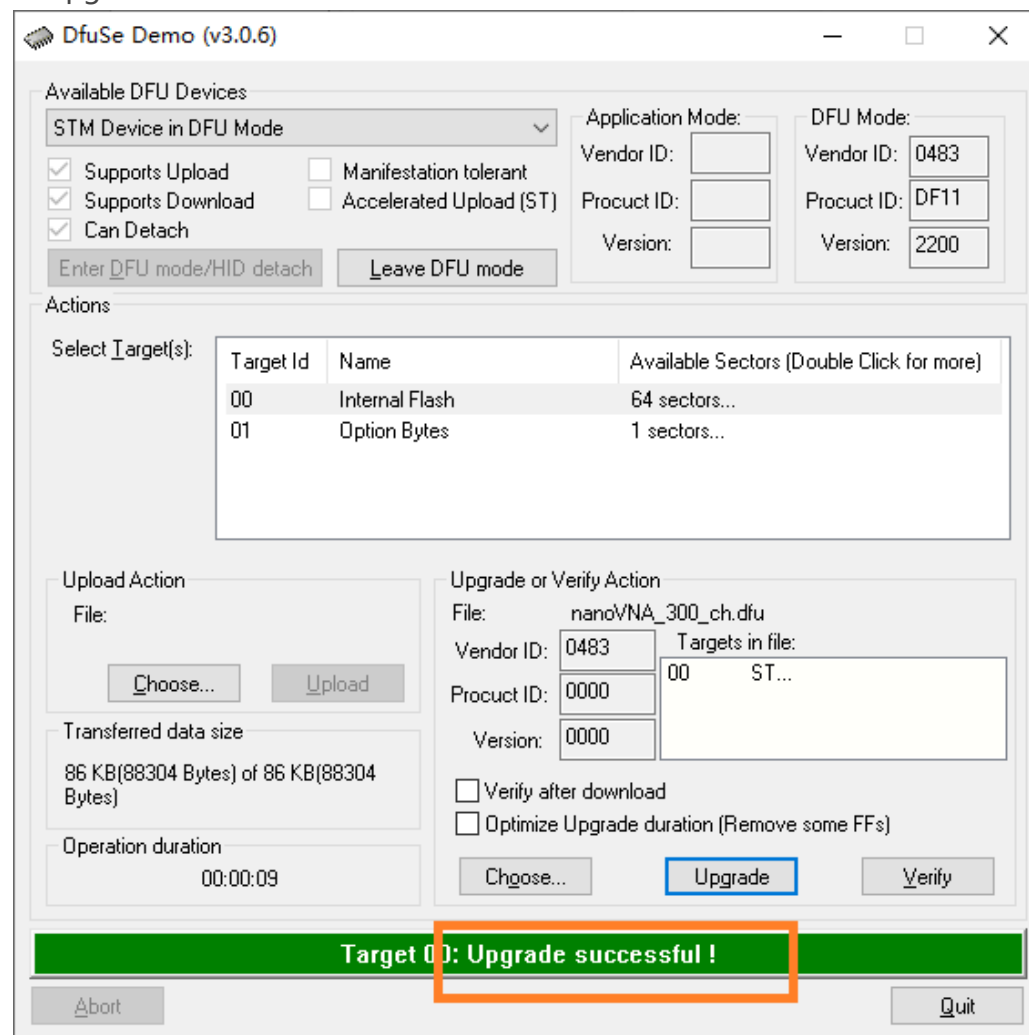
5. Run the DfuSe Demonstration and download .DFU file on your eval-board.



(If you upgrade 4 tracks firmware from 2 tracks firmware, you must first reprogramming "nanoVNA_900_AA_XXXXXXX.dfu" to clear user data.)



6. Upgrade successful!



7, Now remove the boot jumper and reset NanoVNA. Recalibrate the NanoVNA.

<https://gen111.taobao.com/>

2019-5-31