

Using the Aploader driver.

The following example is intended to show how to load a FW file using the Aploader driver installed in a XP 32-bit machine. The HW involved in this example, is one of our TUSB3210 evaluation modules (wich reports itself as a TUSB2136 because of its bootcode, which cannot be changed and it's embedded within the device).

Please follow these steps:

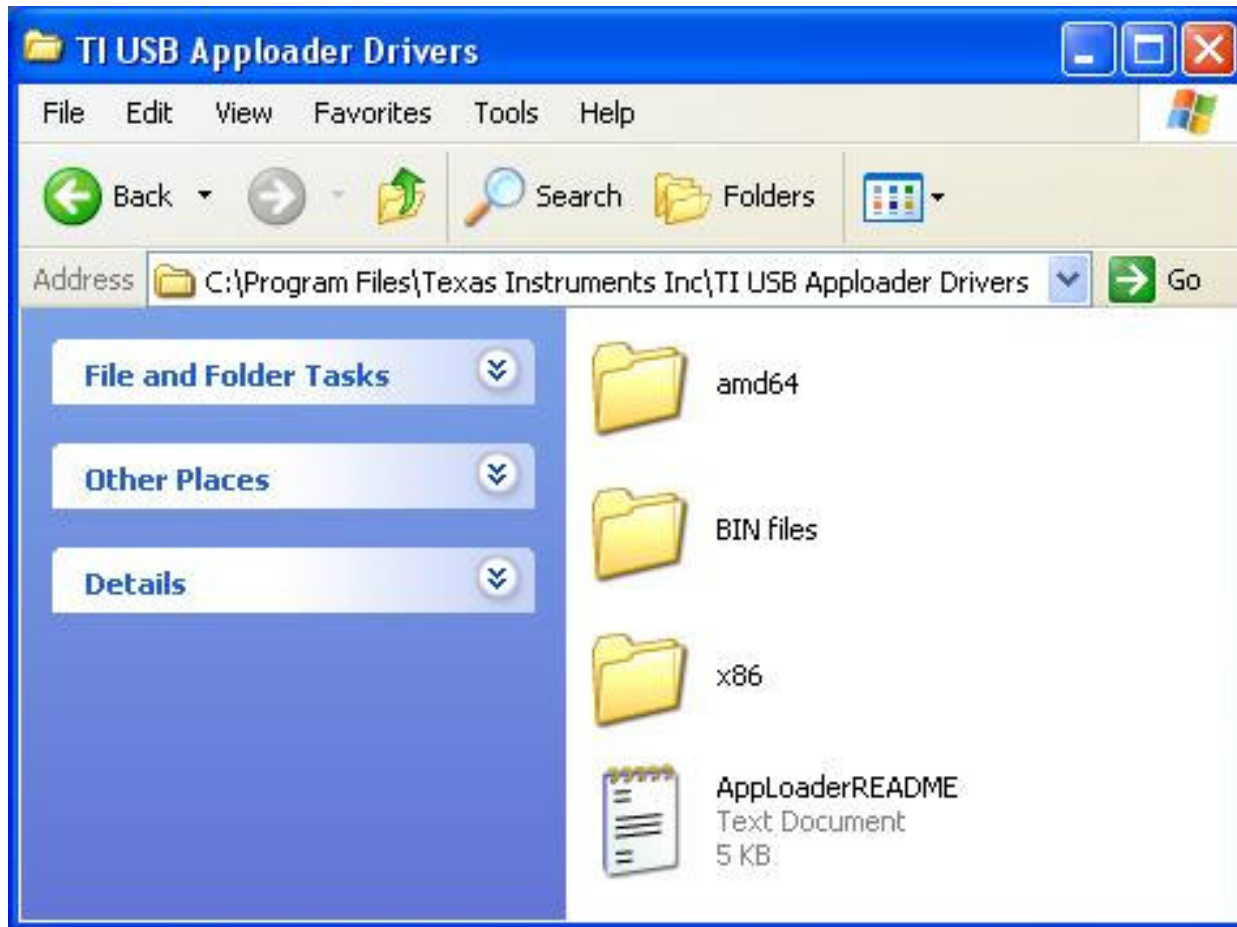
- 1- Run the setup.exe and follow the directions (this is a license wrapper that will install some folder containing the Aploader driver binaries).



2- By default, setup.exe installs the proper Apploader binaries at: C:\Program Files\Texas Instruments Inc\TI USB Apploader Drivers.



- 3- Once the installer finishes, go to the folder where the Apploader binaries are located (by default C:\Program Files\Texas Instruments Inc\TI USB Apploader Drivers).



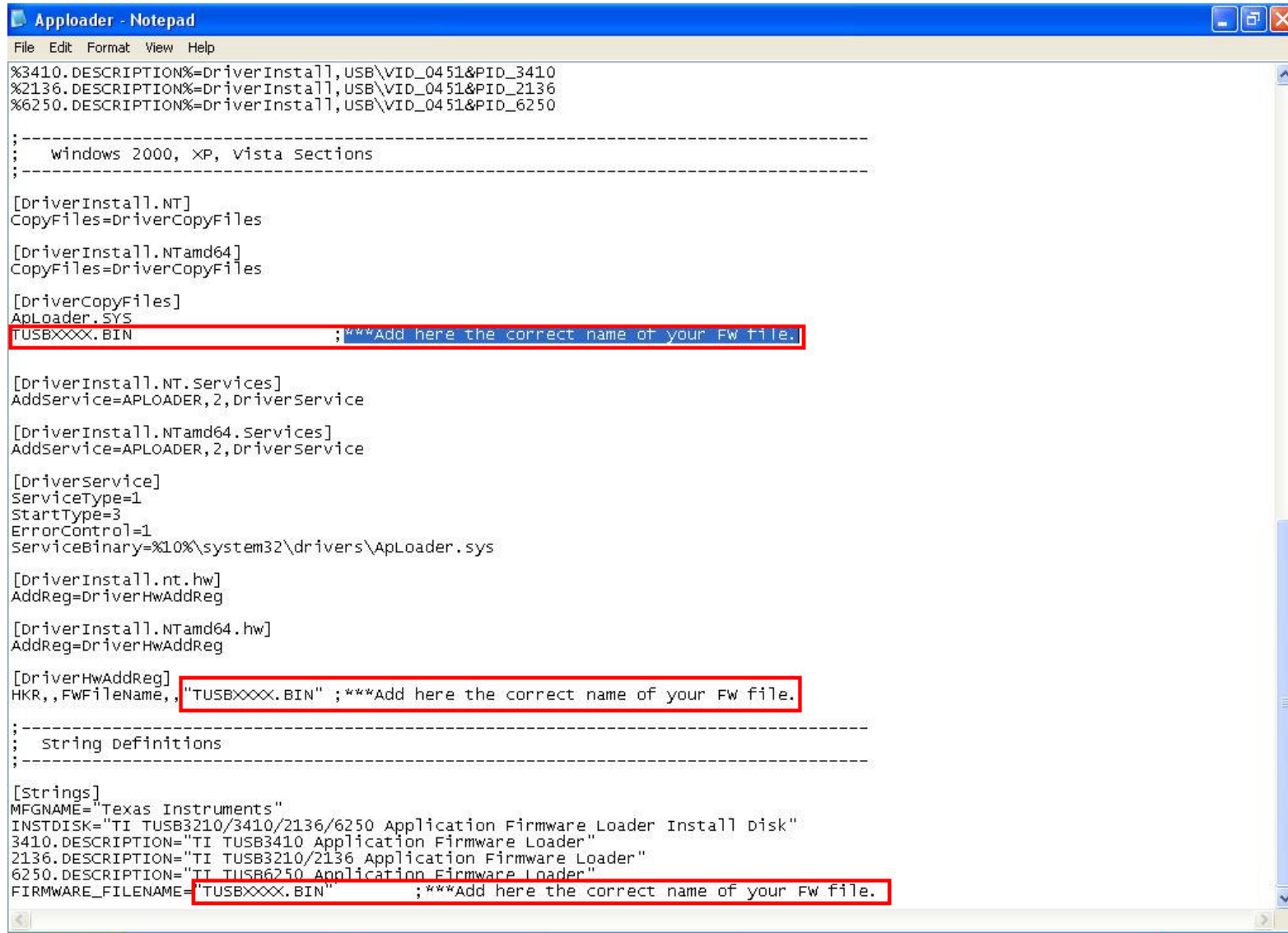
- 4- Create a new folder in C:\ under the name of Aploader, and copy both SYS and INF files within the “x86” folder (located at the “TI USB Aploader Drivers” folder installed by the license wrapper) and also copy the binary file TUSB2136.BIN that is in the “BIN files” folder.

The Aploader folder should look like this:



- 5- Open the Apploader.INF file and edit it with the name of the BIN file you want to load into the TUSB3210 device.

Look for all strings saying *****Add here the correct name of your FW file.** Replace any TUSBXXXX.BIN with the name of your FW file: TUSB2136.BIN



```
Apploader - Notepad
File Edit Format View Help
%3410.DESCRPTION%=DriverInstall,USB\VID_0451&PID_3410
%2136.DESCRPTION%=DriverInstall,USB\VID_0451&PID_2136
%6250.DESCRPTION%=DriverInstall,USB\VID_0451&PID_6250

;-----
; windows 2000, XP, Vista Sections
;-----

[DriverInstall.NT]
CopyFiles=DriverCopyFiles

[DriverInstall.NTamd64]
CopyFiles=DriverCopyFiles

[DriverCopyFiles]
ApLoader.SYS
TUSBXXXX.BIN ;***Add here the correct name of your Fw file.

[DriverInstall.NT.Services]
AddService=APLOADER,2,DriverService

[DriverInstall.NTamd64.Services]
AddService=APLOADER,2,DriverService

[DriverService]
ServiceType=1
StartType=3
ErrorControl=1
ServiceBinary=%10%\system32\drivers\ApLoader.sys

[DriverInstall.nt.hw]
AddReg=DriverHwAddReg

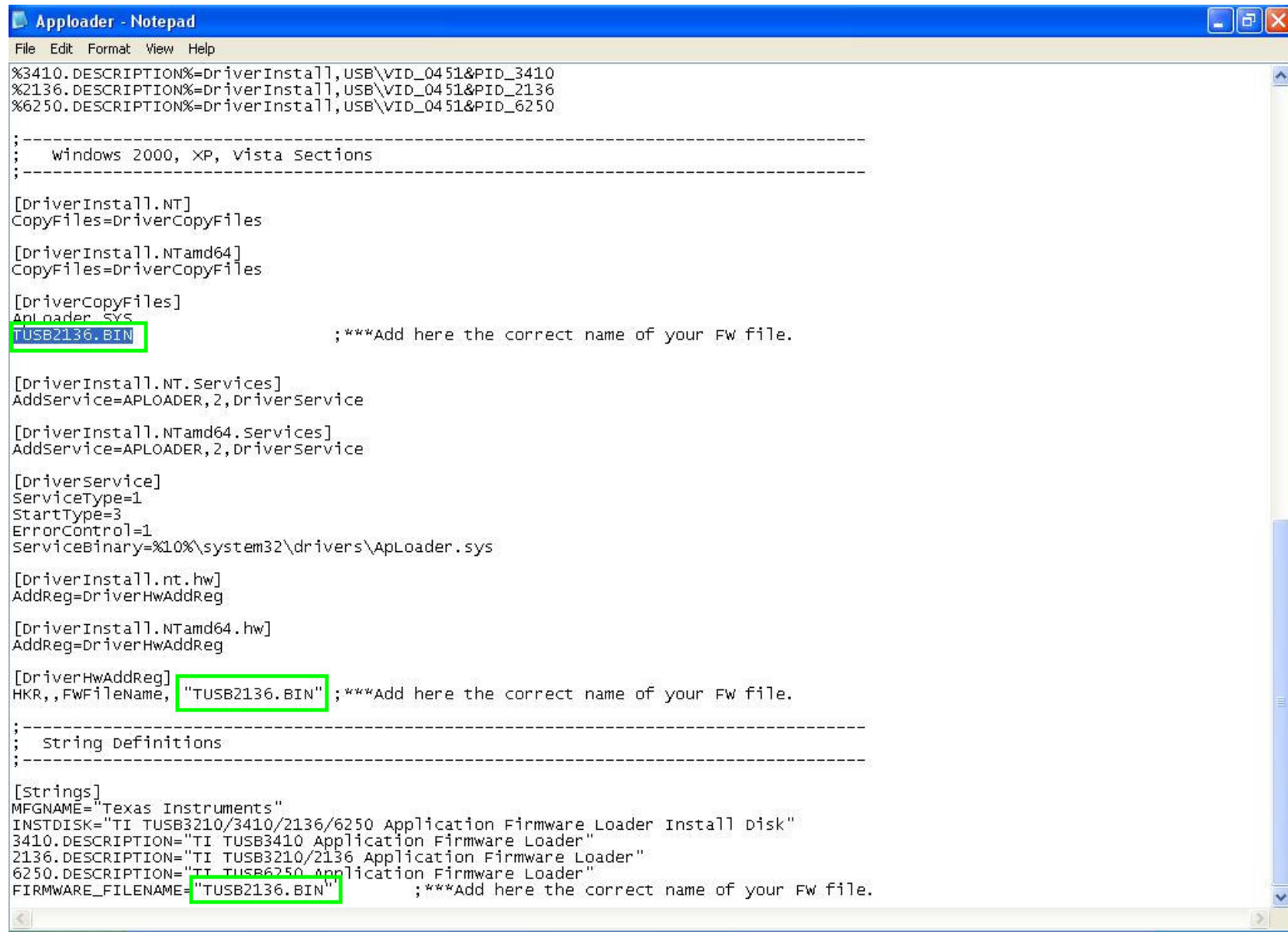
[DriverInstall.NTamd64.hw]
AddReg=DriverHwAddReg

[DriverHwAddReg]
HKR,,FWFileName, "TUSBXXXX.BIN" ;***Add here the correct name of your Fw file.

;-----
; string definitions
;-----

[Strings]
MFGNAME="Texas Instruments"
INSTDISK="TI TUSB3210/3410/2136/6250 Application Firmware Loader Install disk"
3410.DESCRPTION="TI TUSB3410 Application Firmware Loader"
2136.DESCRPTION="TI TUSB3210/2136 Application Firmware Loader"
6250.DESCRPTION="TI TUSB6250 Application Firmware Loader"
FIRMWARE_FILENAME="TUSBXXXX.BIN" ;***Add here the correct name of your Fw file.
```

6- After customizing the INF file should look like this:



```
Apploader - Notepad
File Edit Format View Help
%3410.DESCRPTION%=DriverInstall,USB\VID_0451&PID_3410
%2136.DESCRPTION%=DriverInstall,USB\VID_0451&PID_2136
%6250.DESCRPTION%=DriverInstall,USB\VID_0451&PID_6250

;-----
; windows 2000, XP, Vista sections
;-----

[DriverInstall.NT]
CopyFiles=DriverCopyFiles

[DriverInstall.NTamd64]
CopyFiles=DriverCopyFiles

[DriverCopyFiles]
Aploader.SYS
TUSB2136.BIN ;***Add here the correct name of your Fw file.

[DriverInstall.NT.Services]
AddService=APLOADER,2,DriverService

[DriverInstall.NTamd64.Services]
AddService=APLOADER,2,DriverService

[DriverService]
ServiceType=1
StartType=3
ErrorControl=1
ServiceBinary=%10%\system32\drivers\ApLoader.sys

[DriverInstall.nt.hw]
AddReg=DriverHwAddReg

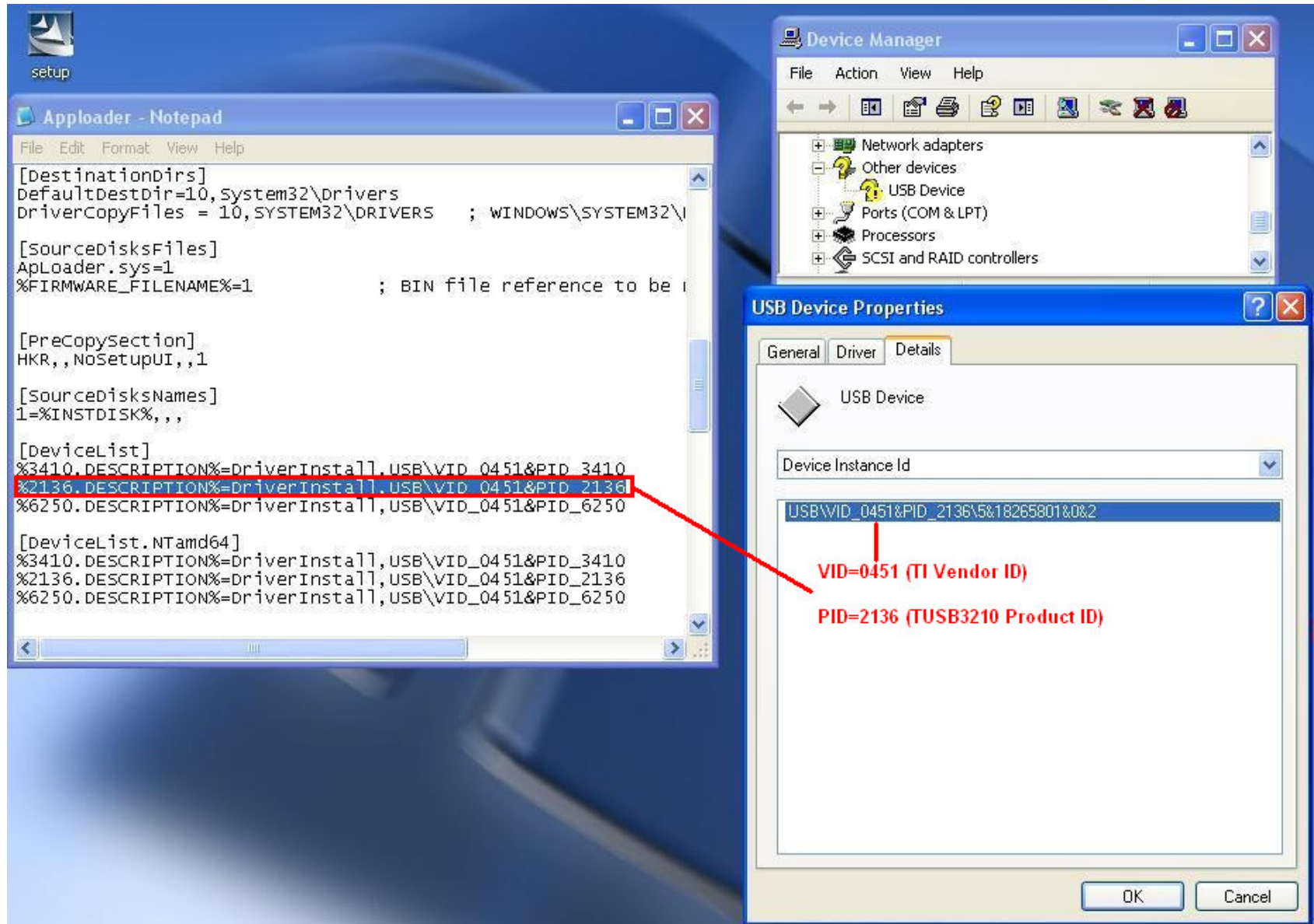
[DriverInstall.NTamd64.hw]
AddReg=DriverHwAddReg

[DriverHwAddReg]
HKR,,FWFileName, "TUSB2136.BIN" ;***Add here the correct name of your Fw file.

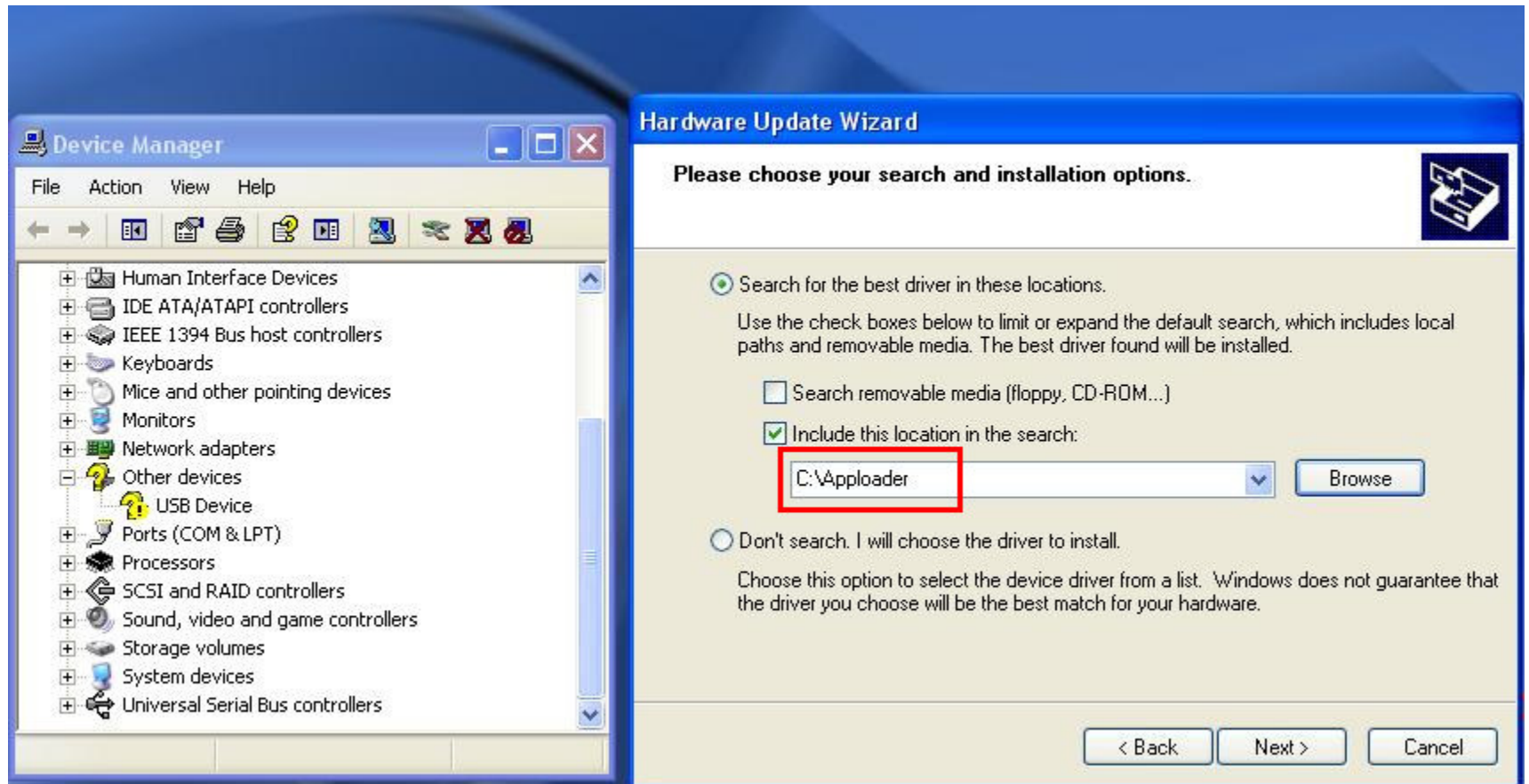
;-----
; String Definitions
;-----

[Strings]
MFGNAME="Texas Instruments"
INSTDISK="TI TUSB3210/3410/2136/6250 Application Firmware Loader Install Disk"
3410.DESCRPTION="TI TUSB3410 Application Firmware Loader"
2136.DESCRPTION="TI TUSB3210/2136 Application Firmware Loader"
6250.DESCRPTION="TI TUSB6250 Application Firmware Loader"
FIRMWARE_FILENAMES="TUSB2136.BIN" ;***Add here the correct name of your Fw file.
```

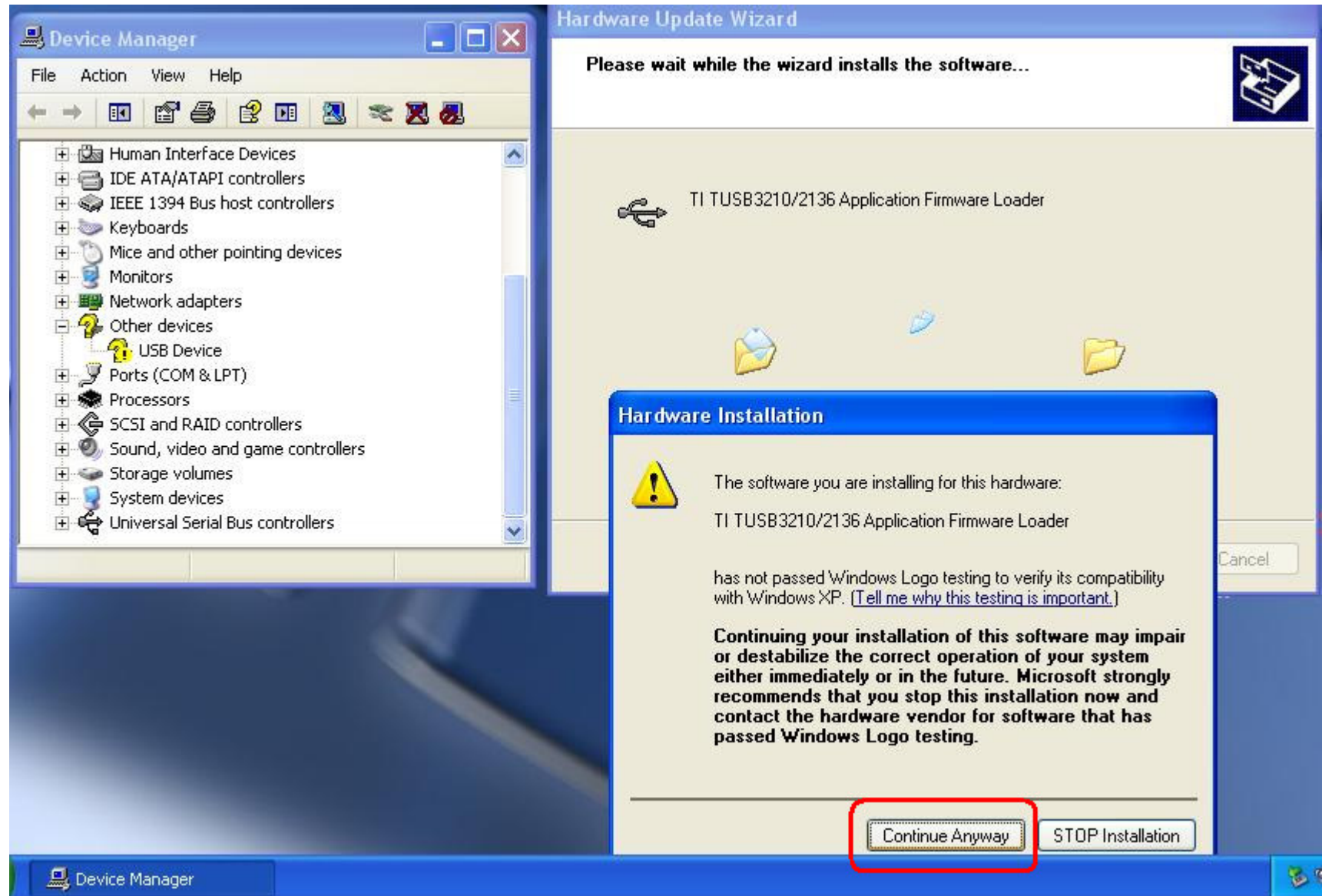
7- Open "Device Manager" and then connect your TUSB3210 device. If there's no EEPROM attached to this device, it should look like:



- 8- By the time the Install Wizard shows up, select “Not this time”, “Install from a specific location”, so you can go now to the C:\Apploader folder which contains the modified INF and your FW file.



- 9- Continue with the driver's installation, and if a "Hardware Installation" Windows shows up saying that the driver is not digitally signed, click on "Continue Anyway".



10- Click on "Finish" to complete the installation.



11- After the driver's installation (do not restart the computer even if a message appears saying it's necessary) the TUSB3210 device will be RE-ENUMERATED in the device manager. The FW you hve loaded in the RAM space will enable the 3210 device to show up under the HID devices.

