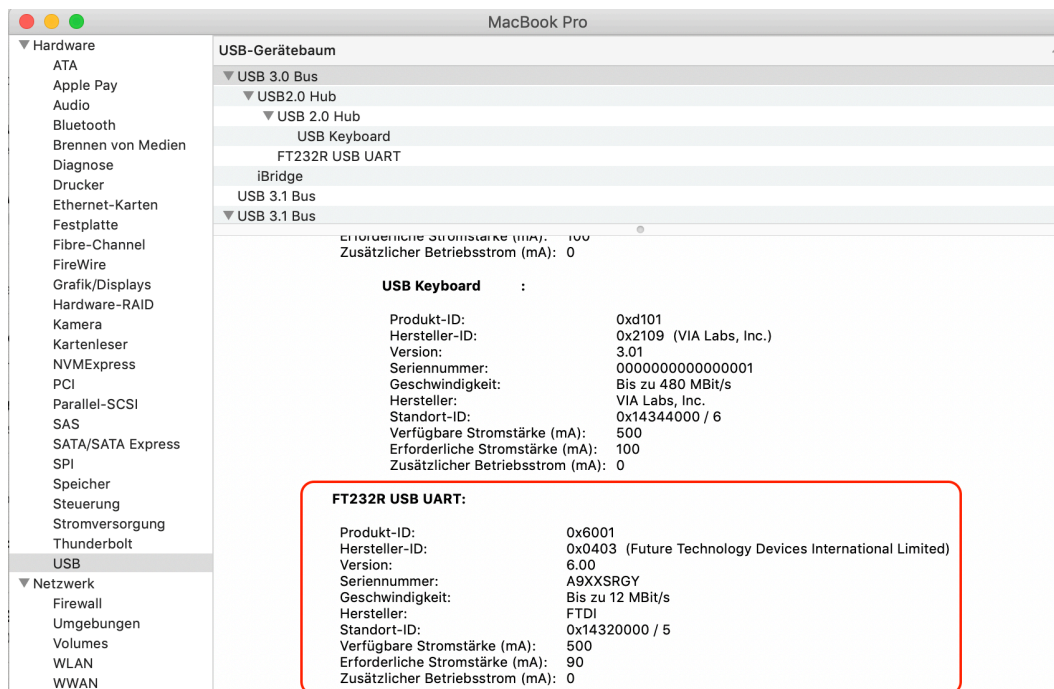


Installing the Utracer Software on a MAC:

I had a hard time getting the GUI to communicate with my USB/FTDI adapter in Mac OSX. Here is what finally worked for me:

1. You need a FTDI driver installed (already included in OSX 10.12 and up) If you do not have one installed, go to your products website for a driver or you can download a driver here: <https://www.ftdichip.com/Drivers/VCP.htm>
2. To check if your driver is installed open the system information of your Mac and go to Hardware/USB (plug in your adapter first!) There should be an entry of your adapter/device like: **FT232R USB UART**



3. Now open the Terminal app. (You should be logged in with admin rights)
4. Type in: `cd /dev` (press enter) and then `ls` (press enter) Now you get a list of all present devices. You should see an entry like this: **tty.usbserial-A9XXSRGY** (in this case A9XXSRGY is the serial of my adapter) Copy that filename into a textfile for later use.

```
rdisk0s1          ttys000          ttyw2
rdisk0s2          ttys1            ttyw3
rdisk1            ttys2            ttyw4
rdisk1s1          ttys3            ttyw5
rdisk1s2          ttys4            ttyw6
rdisk1s3          ttys5            ttyw7
rdisk1s4          ttys6            ttyw8
sdt               ttys7            ttyw9
stderr            ttys8            ttywa
stdin             ttys9            ttywb
stdout            ttysa            ttywc
systtrace         ttysb            ttywd
tty               ttysc            ttywe
tty.Bluetooth-Incoming-Port ttysd            ttywf
tty.MALS          ttyse            uart.BLTH
tty.SOC           ttysf            uart.MALS
tty.usbserial-A9XXSRGY ttysg            uart.SOC
tty0              ttys0            urandom
tty1              ttyt1            xcpm
tty2              ttyt2            zero
tty3              ttyt3
tty4              ttyt4
tty5              ttyt5
tty6              ttyt6
```

5. Next you need to install and then run the utracer GUI with a Windows emulator. https://www.dos4ever.com/uTracer3/uTracer3_current_GUI.html Here is one possible emulator: <https://www.winehq.org/> (I have WINE 1.8.6)
6. Find the ,dosdevices' folder of your GUI software that was created by your emulation software when you first ran the utracer software (In Finder simply type in command+F and then look for ,dosdevices')
7. Click on the folder and press command+C to copy its absolute path into the clipboard (i.e. Users/yourname/Wine\ Files/dosdevices)
8. Go back to Terminal, type in ,cd' plus command+V (there needs to be a space after cd!) to change to the ,dosdevices' directory The whole command should look something like this: cd /Users/yourname/Wine\ Files/dosdevices
9. Next enter: **ln -s /dev/tty.usbserial-A9XXSRGY com1** (replace **A9XXSRGY** with **your own serial!**) This creates the alias linking ,COM1' of the GUI to your adapter. You could also use other COM port numbers but this is the first entry in the GUI.

Note: I found that wrapping the utracer software as a Mac OSX app did not work for me, instead I directly run/open the utracer software with Wine. One time I had to restart the system to make the connection between the software and adapter work again.)

