

USRP IP Configuration

Find computer's IP address:

Click the Windows button, then click **run**. Type **cmd**, command prompt opens.

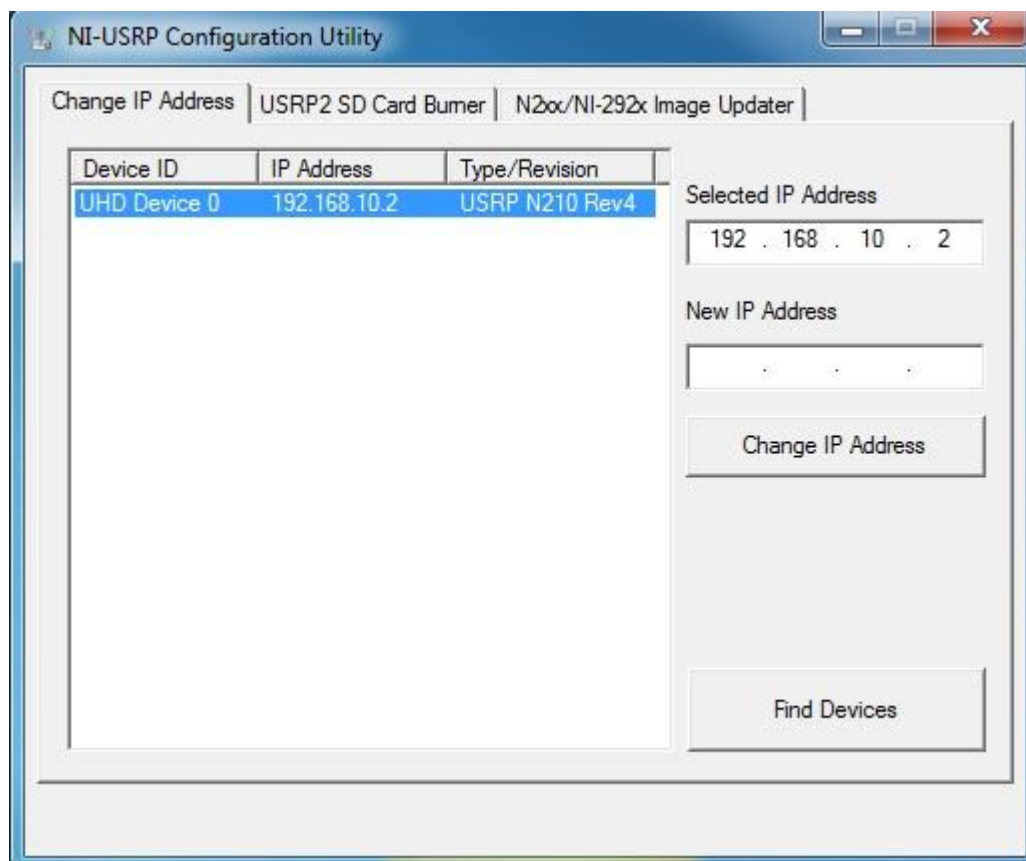
Type **ipconfig /all**, press enter. Ethernet adapter Local Area Connection 2 shows IPv4 address as 192.168.10.1. This is the computers IP address so use different ones for the USRP units.

Set USRP address:

Open the USRP utility by following the path:

Computer -> Local Disc -> Program Files (x86) -> National Instruments -> NI-USRP -> utilities -> USRP-utls.exe

Open the utility. It should open to the change IP address tab. Click **Find Devices**, then click the device with the IP you wish to change.



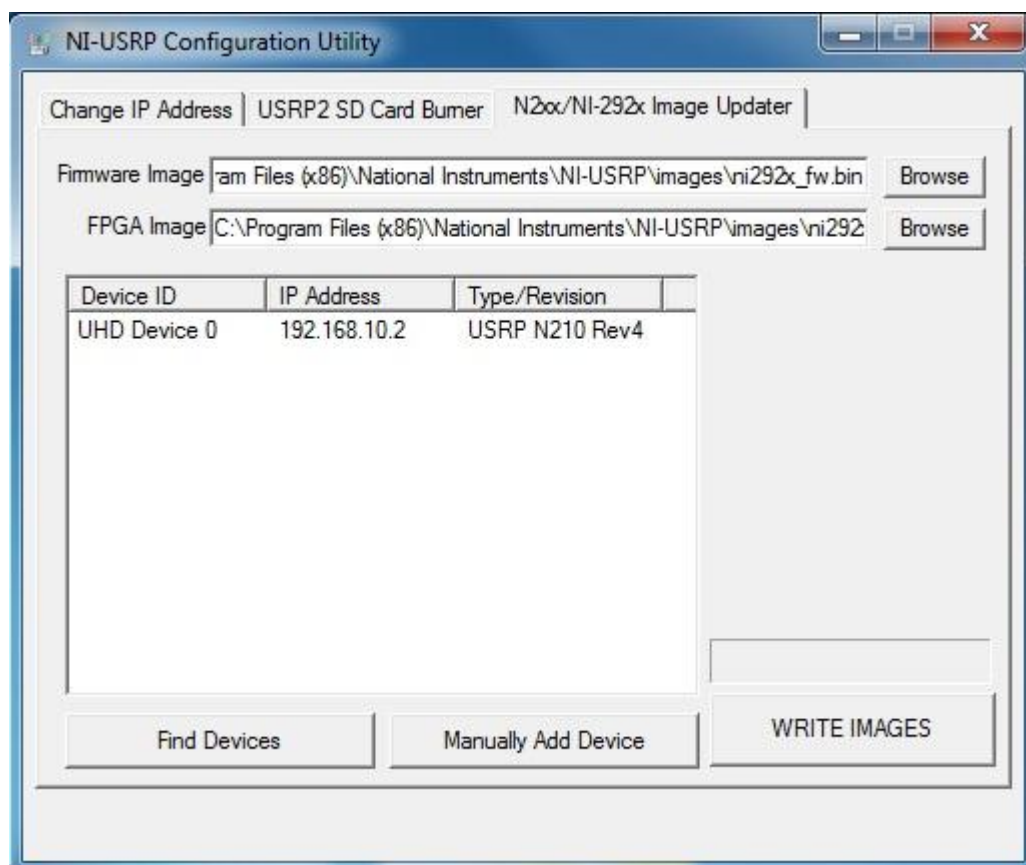
Type new IP address in the box labeled as such. Choose an address with the first 3 segments the same as the computer's IP, but make sure the digits in the last segment are different. Note that there are 256 possible IP addresses (0-255). Make sure each USRP has a distinct IP address.

Click **Change IP Address**, click **OK** on the following to boxes that pop up. Unplug the USRP for a few seconds and plug it back in.

Wait a moment and then click find devices. If the USRP's IP address shows up as the newly chosen IP, you are done. If not you will need to update the image.

Writing Images

Click the tab at the top of the utility that says **N2xx/NI-292x Image Updater**. You will need to browse for a new Firmware Image and a new FPGA image.

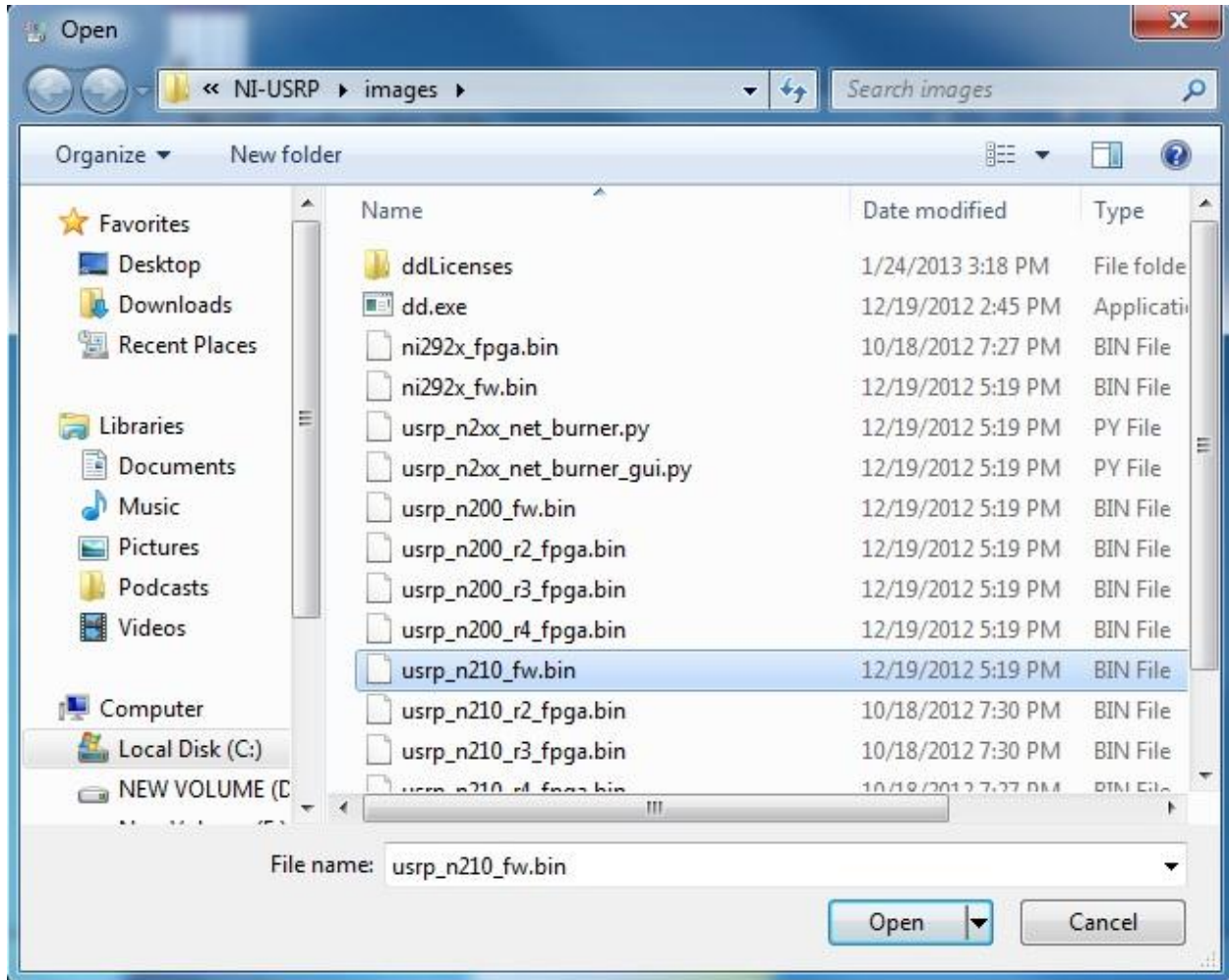


Be aware that though the front of the USRP's box says NI USRP-292x, the firmware may refer to a different name for the device. In the Image Updater tab, look in the center box and note what it says

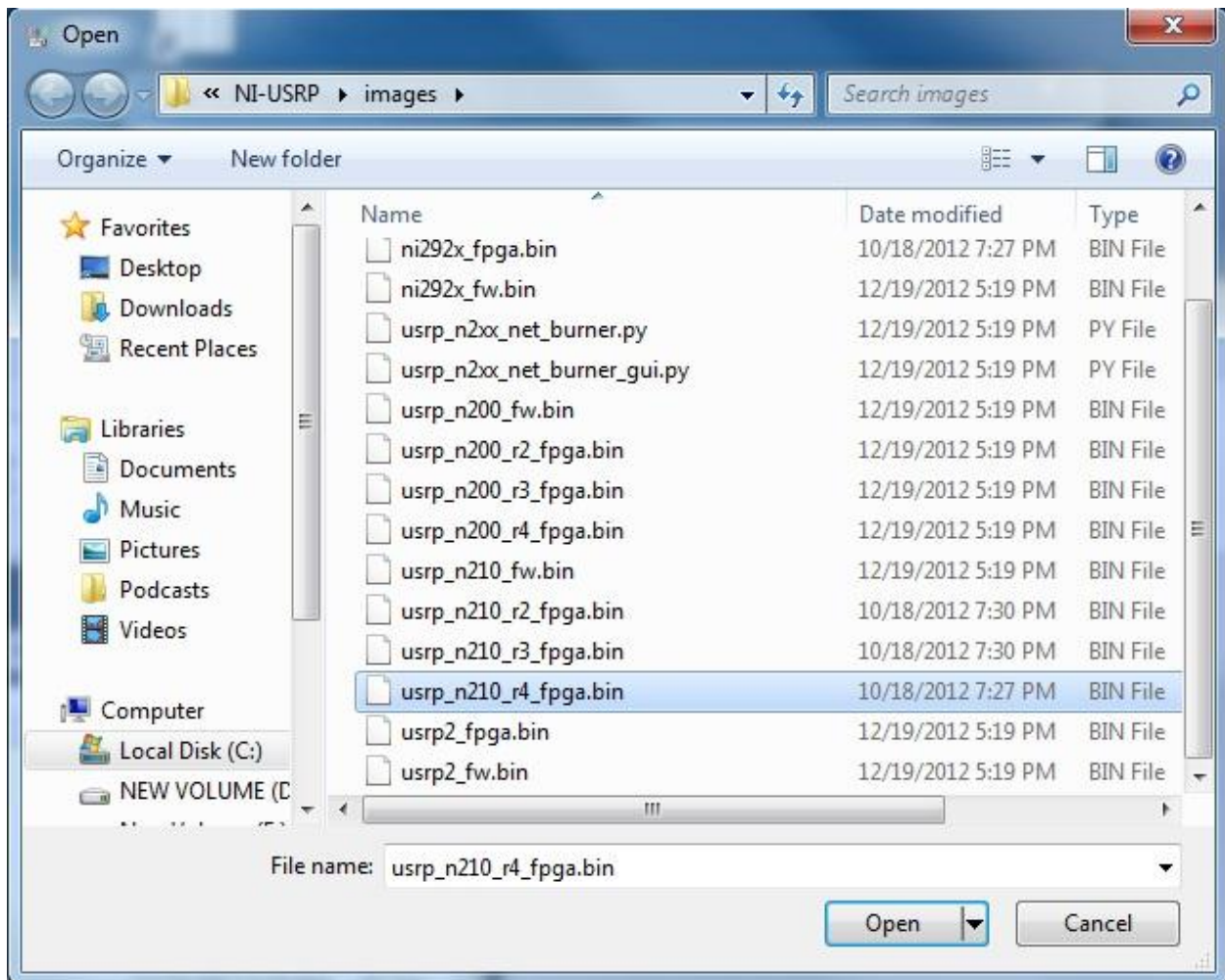
under **Type/Revision**. In this case it is USRP N210 Rev4. The type listed here is your guide to which firmware and fpga files you need to browse to, not what it says on the front of the USRP.

Look at the back of your USRP unit. If anywhere it says revision __, or r:__, take note. If it does have something like that, it may be relevant in finding the firmware file for your USRP. If it doesn't say revision or r:_ anywhere on the back of the USRP don't worry.

Now browse for the firmware image. Click **browse**, and find the file ending in `_fw.bin` that is most similar to the type noted earlier. In this case it is `usrp_n210_fw.bin`.



Now browse for FPGA image file. Click **browse** next to FPGA image, and select the file ending in `fpga.bin` most similar to your Type and revision. If there is a revision number on the back of the USRP unit, use that to choose which file to use (in the case where there are multiple that say r2 or r3, etc.). If there is no revision number on the back of the USRP unit use what it shows in the Image Updater window. In this case it I choose `usrp_n210_r4-fpga.bin`



After selecting Firmware and FPGA images, click **WRITE IMAGES**. If you receive an error about revision numbers matching, confirm that you are using a file that references the correct type (found in image updater) and the correct revision number (found on back of the USRP, and if not, in the image updater window.)

Click **OK** when the burn process has been completed successfully. Now follow the original instructions about changing the IP address. If you are still not successful, try one more time and then call NI.