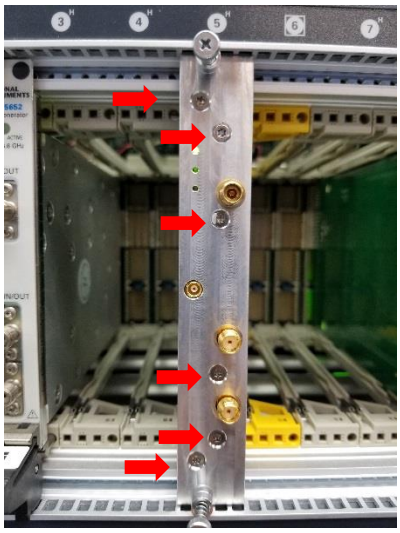
Upgrading Signalcore firmware for SC5520x PXIe

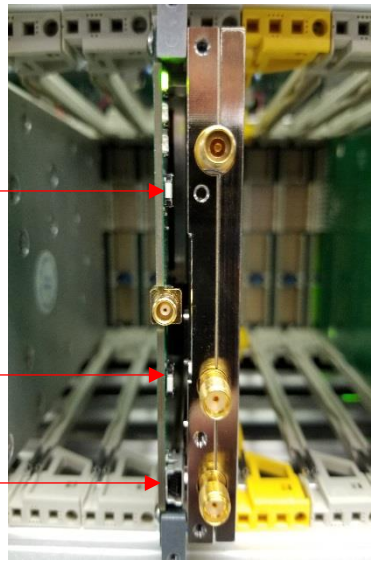
-IMPORTANT: If your device is a PXIe version, please use the sc5520a-pxiexxxxxx.hex firmware binary.

The SC5520A PXIe modules has in field Device Firmware Upgrade (DFU) capability. The following lists step by step instructions to upgrading the firmware on SignalCore devices.

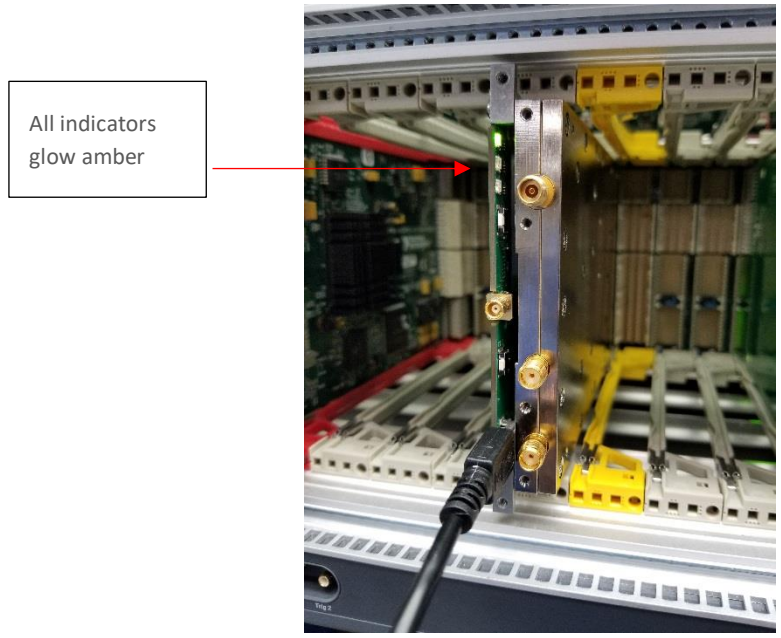
1) Power up the PXIe device and plug the USB connection from USB port into the computer used to perform the upgrade. ONE DEVICE at a time.

   To access the USB port on the PXIe device peel off the front panel overlay and remove the front plate with a T8 screw driver (Save the 6 flathead screws. The overlay will be replaced with a new one later)



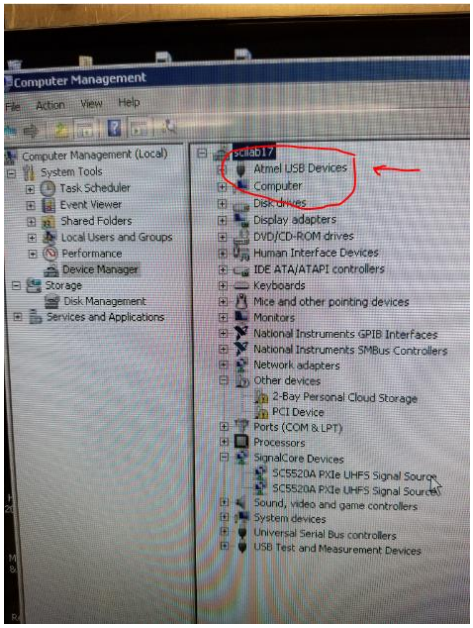


2) USB Boot switch is used to put the device into firmware programming mode. The bottom switch is the reset switch. Both switches are internally pulled high (+3.3V). To put the device into programming mode, press USB BOOT), and while it is held low toggle RESET (press then release) to reset the device. All the status leds indicators should glow amber. Once all the indicators glow amber, release the USB Boot switch.



3) The action of 2) step should put the device into programming mode, and the computer will now indicate that a new USB device is found if the driver for the new found device is not installed. If it a device driver has been installed, the ATMEL USB Device should show up in the Windows device manager. If the computer does not indicate that a new device is found, you can check the device manager in Windows to confirm that. Repeat step

carefully until you see a new device found.



4) If no driver for the ATMEL USB device has been installed, an installation dialog will ask for a driver. If no dialog prompts, then open the device manager in Windows to look for this new device. The device is indicated as an AT32UC3A_DFU usb device. Right mouse click on the device and select "Update Driver", and point the dialog to the Win/dfu-prog-usb-1.2.2 directory which contains the atmel_usb_dfu.inf file. This INF file will instruct the computer to install the correct driver for the SignalCore device in programming mode. The device manager should show the installed device as an ATMEL USB device.

5) On the console screen (Type "CMD" on the START/RUN menu), go to the Win\ directory and type "flashprogrammer.cmd sc5520a-usbxx-xxxxxx.hex", and this should start the process of upgrading the firmware. Note, flashprogrammer.cmd is just a batch file to dfu-programmer executable.

6) On success, the device manager will show the SignalCore device as SC5520A Signal Source again.