Background Information

This document for people who own a Apple Mac Book Pro (2011 Model) who are experiencing problems their external devices such as Hard Disks which interfaces to 1394b port commonly known as the FireWire 800 under Windows 7 Operating System (Applies to both the 32 Bit or 64 Bit version of Windows 7)

The symptoms you will get with an external storage device that connects to 1394b / FW800 is when you transfer big files (Usually bigger than 4GB) will either freeze Windows or if you are lucky, the transfer rate will simply drop to a crawl.

Logically it can only really be one of three things, assuming only one is at fault.

1. 1394b / FireWire 800 Device
2. 1394b / FireWire 800 Port
3. The Operating System

“Scenario 1” was ruled out as I tested my GoFlex Desk Device on a triple booted Apple iMac which worked flawlessly for Linux (Fedora Core 14), Windows (Win 7), OSX (Snow Leopard).

The 1394b port worked when the laptop was placed into “Target Mode” which essentially acts like an external FireWire disk when connected to another computer by 1394b where there were no problems ruling out “Scenario 2”

Now to test “Scenario 3”, I have installed Windows (Win7 64Bit), Mac OSX (Lion 10.7.2) and Linux (Fedora Core 15) natively on my Mac with rEFIt
I repeated the disk transfer test to my external FireWire disk, the only system which failed the test was Windows 7. Technically “Apple” controls their Mac OSX Operating system and the hardware platform that it will run on so there isn’t really much hardware variation unlike a PC Laptop. Thus in theory the cost to test the product to get the level of Quality Assurance should be significantly lower (So where is this Q/A?).

As it stands, BootCamp 4 on 22/11/2011, the driver used for Windows 7 is the default Microsoft Windows 7 Driver which is reported as a LSI 1394 OHCI Driver (2006) and I believe this is the cause of this.

**Requirement**

- Mac Book Pro (2011) model
- Linux installed or Linux LiveCD (Ie Fedora Core LiveCD, Newer is better)
- Win7 Replacement Driver
- External 1394b / FW800 Storage Disk ie Seagate GoFLEX with 1394B / FW800 interface
- Working Windows 7 Installation

**Instructions**

Under Windows, if you look under device manager for the 1394b port or FireWire 800 port, the driver reported is a “LSI 1394 OHCI Driver 2006”. If you boot into Linux or via LiveCD, run a terminal and run “lspci” and look for something which mentions FireWire or 1394.

The Mac Book Pro 2011 should mention something similar to this

04:00.0 FireWire (IEEE 1394): Agere Systems FW643 PCI Express1394b Controller (PHY/Link) (rev 08)

Once you are sure, locate a suitable replacement driver for the chipset, ie for Agere System FW643 I used the “ubCore 1394a to 1394b” drivers from “Unibrain” ([http://www.unibrain.com/products/driverapi/pHist_ubcore.htm](http://www.unibrain.com/products/driverapi/pHist_ubcore.htm))
After you have installed it, under the device manager for Windows 7, you should something similar to this shown in Figure 1.

![Figure 1 – Unibrain 1394b / FW800 Replacement Driver](image)

After the driver is installed, I repeated the file transfer test with the external FireWire device storage and it did not freeze nor did the transfer speed drop down to a crawl.