PCI test

1/ Download Jungo windriver

http://www.jungo.com/st/products/windriver/

(windriver free trial)

Run the installer (For example WD1160X64.EXE for 64bit Windows).

Run the "Driver Wizard" (C:\WinDriver\wizard\wdwizard.exe).

Inside Driver Wizard , choose "new project".

The wizard ask you to select a PCI peripheral.

The peripheral list look like this:

Type	Description	Vendor		Refresh devices list
PCI:	PCI Virtual Device			
ISA:	ISA Device	ISA Device		Generate .INF file
ISA:	Parallel Port	ISA Device		Uninstall INE file
PCI:	AMD - Device ID: 9600	AMD		or in stall three file
PCI:	Asustek - Device ID: 9602	Asustek		
PCI:	ATI - Device ID: 9616	ATI		
PCI:	AMD - Device ID: 9604	AMD		
PCI:	Realtek - Device ID: 8168	Realtek		
PCI:	AMD - Device ID: 9608	AMD		
PCI:	Xilinx - Device ID: 7	Xilinx		
PCI:	ATI - Device ID: 4390	ATI		
PCI:	ATI - Device ID: 4397	ATI		
PCI:	ATI - Device ID: 4398	ATI		
PCI:	ATI - Device ID: 4396	ATI		
USB:	NetGear, Inc Product ID: 9030	NetGear, Inc.		
USB:	Alcor Micro Corp Product ID: 6362	Alcor Micro Corp.		
PCI:	ATI - Device ID: 4397	ATI		
USB:	Logitech, Inc Marble Mouse (4-button)	Logitech, Inc.		
PCI:	ATI - Device ID: 4398	ATI	~	

2/ Downloading the PCIe test to the FPGA

cd s6_pcie_v1_4\implement\results

run impact -batch script.txt

setMode -bscan setCable -p auto addDevice -p 1 -file "./routed.bit" attachflash -position 1 -spi "W25Q128FV" assignfiletoattachedflash -position 1 -file "../routed.mcs" Program -p 1 -dataWidth 1 -spionly -e -v -loadfpga quit

Note that the bit file is implement\results\routed.bit , but the mcs file is implement\routed.mcs

Reboot the PC , let the bios start , then reset after a few second to ensure that the fpga is fully configured when the bios re-run the startup enumeration.

Note that this demo <u>does note use the onboard DDR3 chip</u> (the DDR3 is tested in another demo)

3/ With Linux (Debian)

The PCIe test application board works also with Linux.

Just plug the board , program the flash or FPGA volatile memory.

Ensure that the board is powered since 5s at least when the bios enumeration takes place (press Reset or Restart as needed for this).

Under Linux type "Ispci" or "Ispci | grep -i xilinx"

Terminal (as superuser)				
File Edit View Search Terminal Help				
root@Host-004:/home lspci grep -i xilinx 03:00.0 RAM memory: Xilinx Corporation Default PCIe endpoint ID root@Host-004:/home.				