

PCI test

1/ Download Jungo windriver

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

(windriver free trial)

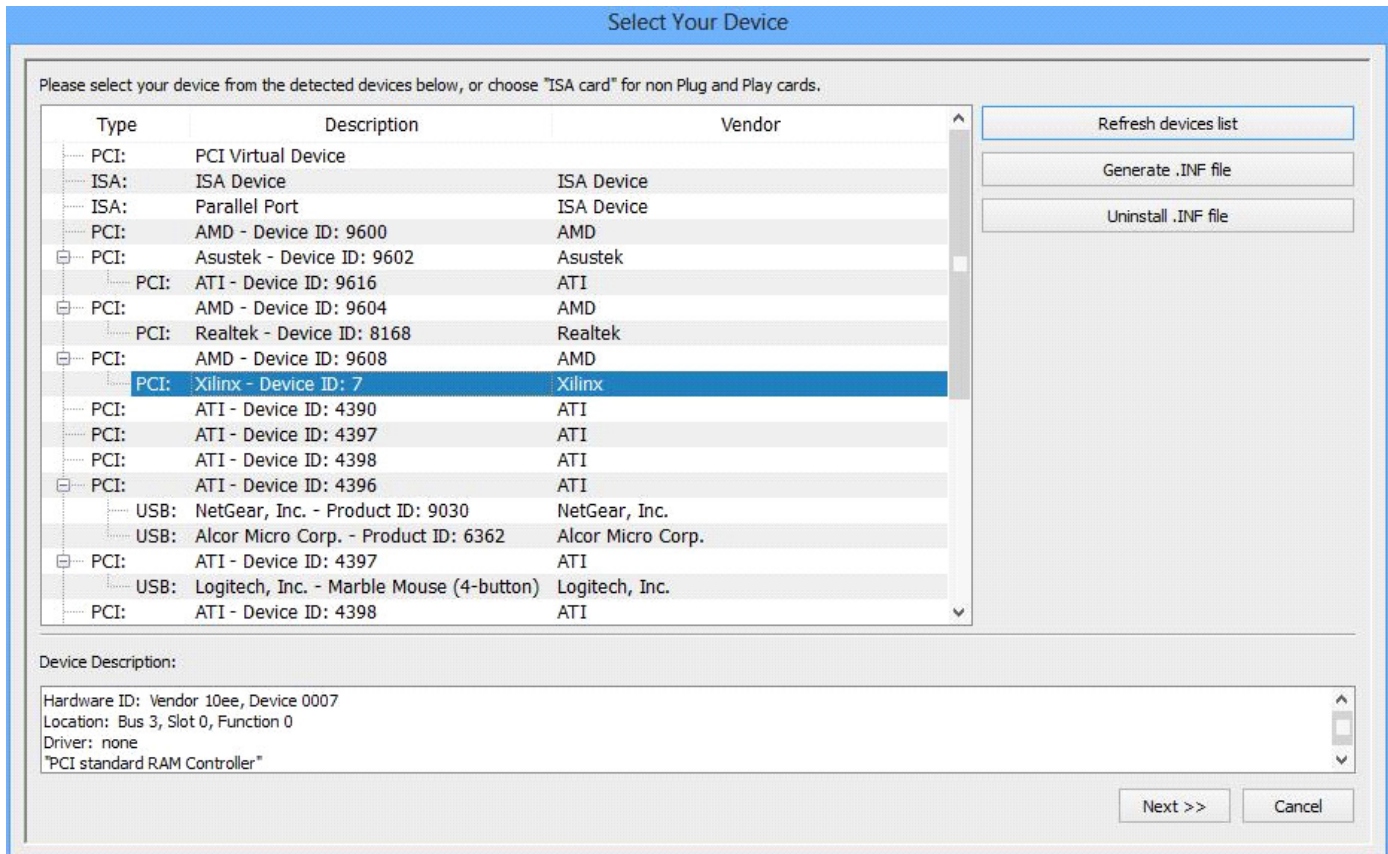
Run the installer (For example WD1160X64.EXE for 64bit Windows).

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:



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 does not use the onboard DDR3 chip (the DDR3 is tested in another demo)

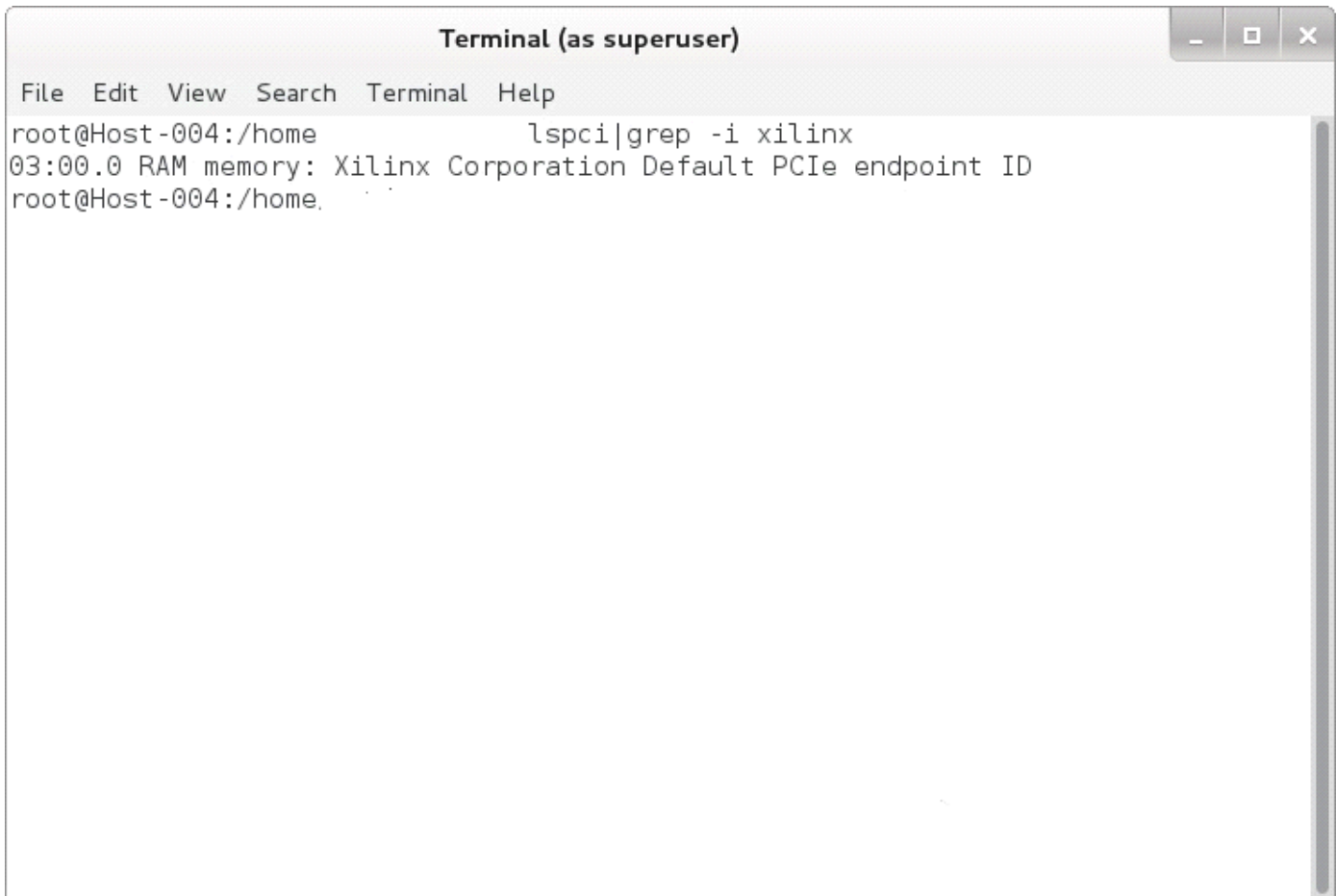
3/ With Linux (Debian)

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 "lspci" or "lspci | 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.
```