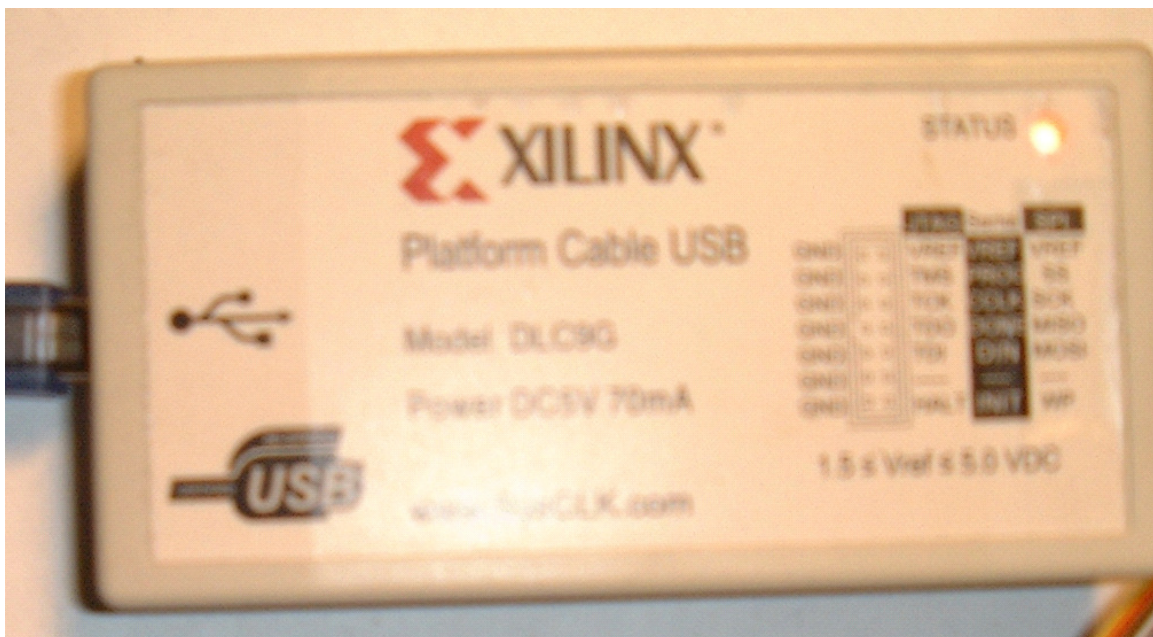


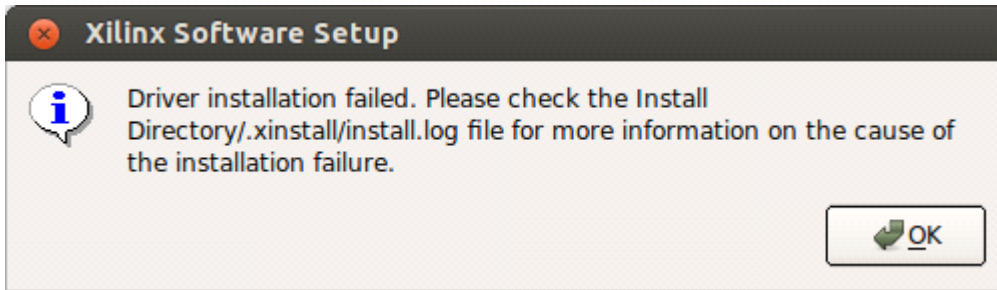
## Connect the Xilinx USB programming Cable in Linux

### A-The programming cable

I report in this document how i succeeded to get my Xilinx USB FPGA programming cable working in Linux (Ubuntu 12.10 Desktop i386)



Usually when i install Xilinx ISE design suite under Linux i get this message



I tried to reinstall as "root" user but it doesnt correct the problem.

I found later that is is because the Xilinx installer try to build "windriver 6.0" which is a library that was not designed for compilation under my Linux environment.

Fortunately, they are linux generic tools that can program the cable automatically when it plugs, then Xilinx programming tools (Like impact or xmd) dont try either to use the windriver library. (and all works correctly)

## B-Installing the cable

Note: All is fully described also at [http://www.george-smart.co.uk/wiki/Xilinx\\_JTAG\\_Linux](http://www.george-smart.co.uk/wiki/Xilinx_JTAG_Linux)

make a new folder named "Ise usb cable" on side of your Xilinx installation (normally /opt).

Give this directory normal user owner and write access

```
carpentier@carpentier-System-Product-Name: /opt
carpentier@carpentier-System-Product-Name:~$ cd /opt/
carpentier@carpentier-System-Product-Name:/opt$ ls
doc_petalinux  ise-usb-driver  petalinux-v12.12-final-full  Xilinx  Xilinx_old
carpentier@carpentier-System-Product-Name:/opt$ ls -l
total 20
drwxr-xr-x  2 carpentier root 4096 Mar 30 17:25 doc_petalinux
drwxr-xr-x  3 carpentier root 4096 Apr  4 16:51 ise-usb-driver
drwxr-xr-x 11 carpentier root 4096 Apr  5 02:05 petalinux-v12.12-final-full
drwxr-xr-x  5 root      root 4096 Apr  4 17:10 Xilinx
drwxr-xr-x  4 carpentier root 4096 Mar 28 13:20 Xilinx_old
carpentier@carpentier-System-Product-Name:/opt$
```

install the "git" download tool and fxload linux usb tool

```
sudo apt-get install gitk git-gui libusb-dev build-essential libc6-dev fxload
```

download and install the Linux usb configuration script

```
cd /opt/Xilinx
```

```
sudo git clone git://git.zerfleddert.de/usb-driver
```

compile the driver (not sure it is required. I think only the setup\_pcusb script is used here)

```
carpentier@carpentier-System-Product-Name: /opt/ise-usb-driver/usb-driver-HEAD-2d1
carpentier@carpentier-System-Product-Name:/opt/ise-usb-driver/usb-driver-HEAD-2d1
19c7c$ ls
config.c      jtagmon.c      Makefile      usb-driver.c
config.h      jtagmon.h      parport.c     usb-driver.h
index.html    libusb-driver-DEBUG.so  parport.h     xpcu.c
jtagkey.c     libusb-driver.rc  README        xpcu.h
jtagkey.h     libusb-driver.so  setup_pcusb
carpentier@carpentier-System-Product-Name:/opt/ise-usb-driver/usb-driver-HEAD-2d1
19c7c$
```

```
sudo make
```

```
./setup_pcusb /opt/Xilinx/13.2/ISE_DS/ISE/
```

That's all. No software installation except standard Linux tools and configuration.

plug the cable , it should light green immediately.

All this is better described in where i found all that:

[http://www.george-smart.co.uk/wiki/Xilinx\\_JTAG\\_Linux](http://www.george-smart.co.uk/wiki/Xilinx_JTAG_Linux)

If something doesn't work check carefully what is said at this Web page and what is done in the setup\_pcusb script. It should work as it worked with me. I use ISE 14.3 for Linux.