

Advantech AE Technical Share Document

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Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	Linux
Abstract	Confirm the Installation of Advantech DAQ Device In Linux		
Keyword	DAQNavi driver, Advantech DAQ, Driver installation, Linux		
Related Product			

■ **Problem Description:**

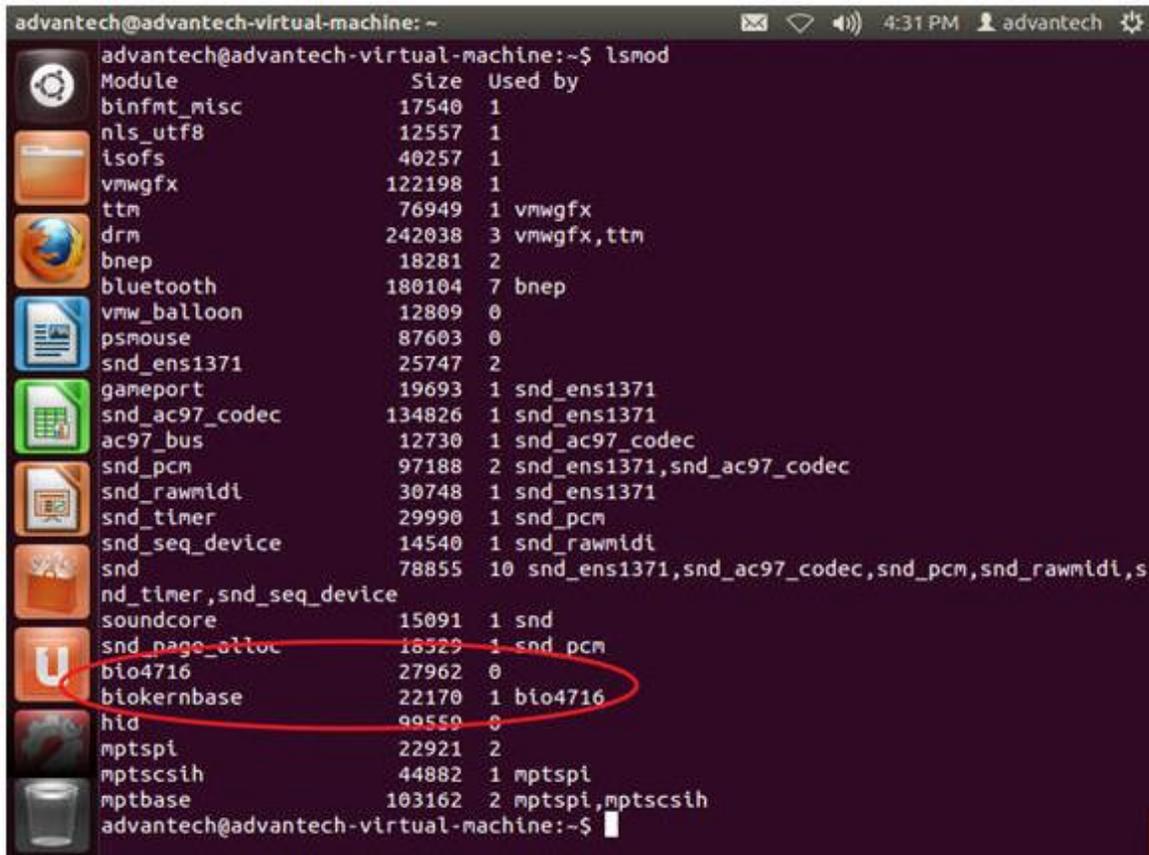
This document will lead you to confirm your device in Linux after the driver is installed.

■ **Brief Solution - Step by Step:**

This should be done in terminal. Here we take USB-4716 for example.

1. Firstly, make sure the DAQ device driver has been loaded by the kernel.

Input the command “**lsmod**” to List all the driver modules, then there will be a list listed, find in the list whether “**biokernbase**” and BioDAQ device name exists or not. Following picture shows that the biokernbase and USB-4716 driver has been installed successfully.



2. Secondly, make sure BioDAQ’s udev rule file exists.

List the path of udev rule file. Enter the following command “**ls /etc/udev/rules.d/**”. If there is no “71-bionic-daq.rules” file existed, you should compile “biokernbase” driver again by root permission.

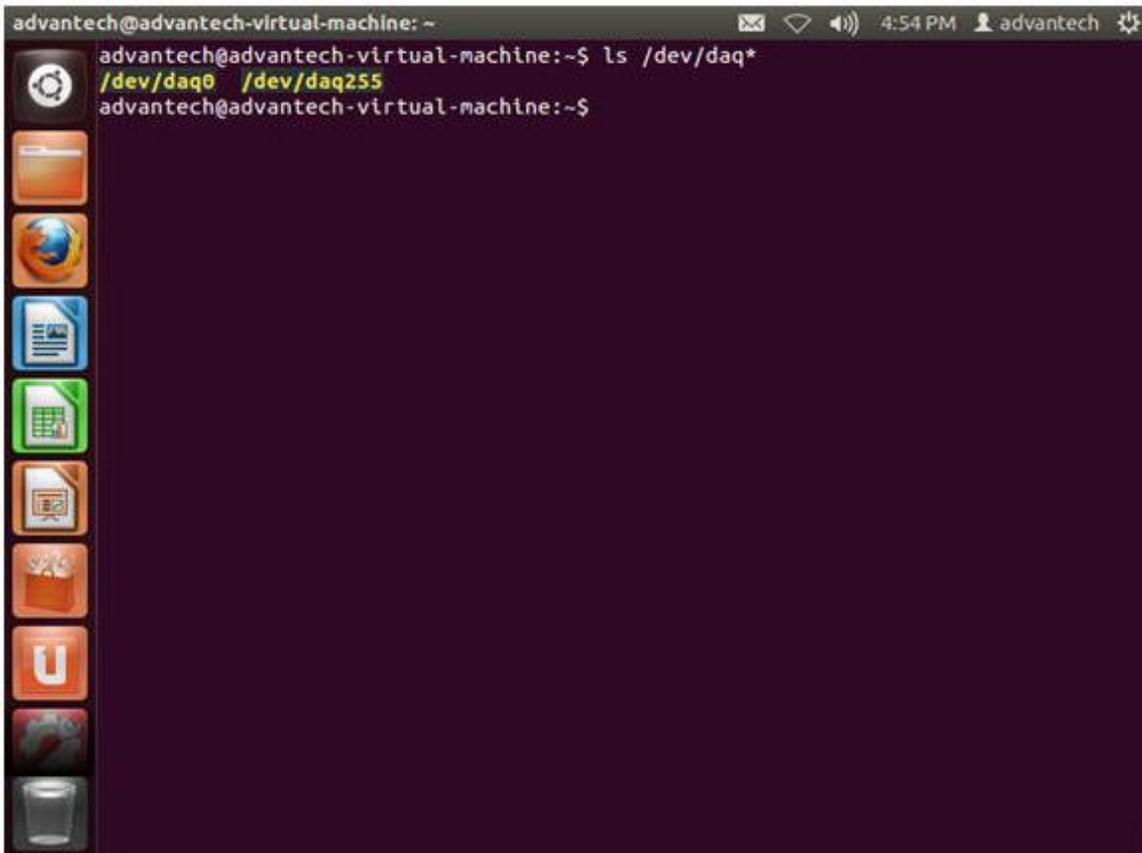
3. Thirdly, make sure the DAQ driver has been successfully matched with the DAQ device.

Enter the command “**ls /dev/daq***” to list all DAQ device nodes. If “/dev/daq255” node exists, this means that biokernbase has been matched successfully. The DAQ device nodes are ranged from 0-254.

If DAQ device node exists, it means that DAQ device driver has been matched successfully then you can run examples or create your applications to control this device.

Here, I installed USB-4716 driver on my computer, the device number is 0. When i input the command "ls /dev/daq* ", the results is as follows.

If you want to know the device name of device number 0, please input the command "cat /sys/class/daq/daq0/desc ".



```
advantech@advantech-virtual-machine: ~  
advantech@advantech-virtual-machine:~$ ls /dev/daq*  
/dev/daq0 /dev/daq255  
advantech@advantech-virtual-machine:~$
```

4. Finally, make sure the DAQ device node has read and write permissions.

List all DAQ device nodes. Enter the following command "ls /dev/daq* -al". If DAQ device node doesn't have read and write permission, please check the BioDAQ's udev rule file as step2.

■ **Reference:**