1 Installing the PEAK Linux Driver

The driver has already been installed on the computer. However, incase needed, the steps below outline how to properly install the driver.

- cd ~/powerball/drivers/peak-linux-driver-7.8
- make clean
- make NET=NO (This ensures the driver is installed as chardev and not netdev)
- sudo make install
- After the package is successfully built, type in sudo modprobe pcan to install the driver.

At this point, the computer needs to be restarted. Then, check for correct installation-

- cat /proc/pcan

The resulting output should look like-

*------------- PEAK-System CAN interfaces (www.peak-system.com) -------------
*-------------------------- Release_20120319_n (7.5.0) ----------------------
*---------------- [mod] [isa] [pci] [dng] [par] [usb] [pcc] -----------------
*--------------------- 1 interfaces @ major 248 found -----------------------
*n -type- ndev --base-- irq --btr-- --read-- --write-- --irqs-- -errors- status
  32  usb -NA- ffffffff 255 0x001c 0000cc3f 0000edd1 00063ce1 00000005 0x0014

Make sure you see two devices named 0 and 1 under the column named n. The device type should show pci and the ndev column should show -NA-.

- Assuming the command prompt is in the home/karsh directory, start a receive test using ./powerball/drivers/peak-linux-driver-7.8/test/receivetest -f=/dev/pcan0. Now, if you turn the device on and off, it should trigger some messages on the screen. If it does, the driver has been successfully installed.
2 Notes on the CANopen package

For proper installation of the CANopen package, see its documentation in /powerball/docs directory. Here are some important pointers:

- Currently, the package only works in 32-bit Ubuntu.
- Use the ROS Groovy version of all the dependencies of the CANopen package.