

This document describes the installation and configuration of Linux drivers to use the 4 port PCI COM board (version 4056WN and 5056WN). The kernel module included is needed.

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## Contents of DOWNLOAD.ZIP:

**Read this document before using any of this software!**

### Driver version 1.3.0.0

snx_V1.3.0.0.tar.gz	Driver module source code
readme	Readme from Sunix
wn_pcserial	Script to configure COM ports
README.PDF	This document

## 1. Updates

The module also supports the 5056WN version of the PCI COM board. The kernel module "snx\_golden" has been renamed to "snx". Make sure all old versions have been deleted! The kernel module prints its version to /var/log/messages on loading.

## 2. Install kernel modules

The module snx.o (or snx.ko) must be build from the sources. The kernel sources need to be installed on the system for that. Run "uname -r" to find out the kernel version and go to [www.kernel.org](http://www.kernel.org) to get the kernel sources.

```
tar xzf snx_V1.3.0.0.tar.gz

cd snx

make install
```

Additional information can be found in the `readme` file.

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## 3. Configure the system

### ***Remove 'setserial' commands***

The command 'setserial' is not required for the 4 port PCI COM board and may lead to problems. Remove - or at least comment out - all lines in the file '/etc/rc.serial' that begin with 'setserial' and would configure /dev/ttyS4 to /dev/ttyS11.

### ***Load module***

To load the module manually, run "modprobe snx".

### ***Used nodes***

With the command ". /snxmknod" the following nodes have been created during installation:

```
crwxrwxrwx 1 root root 245, 0 27. Jan 12:42 /dev/ttySNX0
crwxrwxrwx 1 root root 245, 1 27. Jan 12:42 /dev/ttySNX1
crwxrwxrwx 1 root root 245, 2 27. Jan 12:42 /dev/ttySNX2
..
crwxrwxrwx 1 root root 245, 30 27. Jan 12:42 /dev/ttySNX30
crwxrwxrwx 1 root root 245, 31 27. Jan 12:42 /dev/ttySNX31
```

These nodes can be used to access the COM ports. To use the standard node names (i.e. /dev/ttyS4 for COM 5) they need to be created with the same major and minor node id (i.e. major 245 and minor 0 if mapped to COM 5). This is described in the following chapter.

### ***Automatic Configuration***

Use the script `wn_pciserial` to configure the system automatically. With this script COM 3 to COM 8 (COM 12, etc. depending on the number of PCI COM boards) are mapped to the nodes `/dev/ttyS2` to `/dev/ttyS7` (`/dev/ttyS11`, etc.). The script is written for and tested with Red Hat 9.

Run the following commands to install the script:

```
cp wn_pciserial /etc/init.d
chkconfig --add wn_pciserial
```

When using a Wincor Nixdorf preinstalled Linux (Red Hat 9 i.e.) there will be a script `/etc/init.d/wn_ite887x` in the system. This script is no longer needed if `wn_pciserial` is installed. Disabled `wn_ite887x` by running:

```
chkconfig --del wn_ite887x
```

**Reboot the system after these steps!**

To check the current serial configuration run:

```
service wn_pciserial status
```