

Allied Telesyn AT-2450/2700 Series PCI Ethernet Adapter

Linux driver version 1.11 README

The atnic32 driver supports Allied Telesyn AT-2450/2700 Series PCI Ethernet Adapter cards. The inclosed object file was compiled using the 2.4.18-3 kernel.

The driver has to be re-compiled if it is run under a different Kernel version. See the section on compiling the source code for instructions.

Note: You must remove the pcnet32 module which is automatically loaded by the hardware detection mechanism in order to use this driver. Since the AT-2450 and AT-2700 Series NICs use the AMD Am79C972 (Fast+) and Am79C976 chipsets, AMD's driver is automatically loaded by the OS.

Expanding the Driver Package:

1. Copy the gzip file to a temporary directory on the Linux system.
2. type "gunzip <filename>", where filename is the name of the driver package. This will decompress the tar file.
3. type "tar -xvf <filename>", where filename is the name of the tar file extracted in the previous step. This will extract the driver files from the tar file.

Compiling the source code:

1. Install the kernel source files from the Linux distribution CDs.
2. Type "make clean" to remove the current object file.
3. Type "make" to build the object file (driver). You should end up with a file called "atnic32.o", when successfull.
4. Proceed with driver installation.

Driver Installation:

Note: If you see unresolved symbol messages when loading the driver, you must re-compile it for the current kernel version.

1. Install the driver module using the following command:

```
make install
```

2. Edit the etc/modules.conf file to change the alias for ethX, where x represents the adapter instance. For example:

```
alias eth0 pcnet32
```

change to:

```
alias eth0 atnic32
```

3. Reboot the system for the changes to take effect.

Changing Configuration Settings

To enable "Auto Negotiation" edit the /etc/modules.conf file to add the line "options atnic32 speed_duplex=0" below the "alias eth0 atnic32" line. The table below shows the various options for changing speed and duplex, and forcing the active port in the case of the combo boards. Only ONE of the following lines can be added. Only one interface is activated based on the keyword it represents. If neither option is selected the driver/device defaults to the hardware setting. Each option is selected by the number it represents.

AT-2450F, AT-2450FTX, AT-2700TX, AT-2700/2701FX, AT-2745FX, AT-2700FTX (AMD Am79C972 - Fast+ chipset):

```
options atnic32 speed_duplex=0 #use hardware settings
options atnic32 speed_duplex=1 #100Mbps, Half duplex
options atnic32 speed_duplex=2 #100Mbps, Full duplex
options atnic32 speed_duplex=3 #10Mbps, Half duplex
options atnic32 speed_duplex=4 #10Mbps, Full duplex
options atnic32 speed_duplex=5 #Auto Negotiation
```

Example:

```
alias eth0 atnic32
```

```
options atnic32 speed_duplex=3
```

This entry will override the hardware setting and enable 10Mb / half duplex mode.

Example:

```
alias eth0 atnic32
options atnic32 speed_duplex=0
```

This entry will over-ride the hardware setting for speed and duplex and force the dirver to use the secondary media port.

AT-2450FT (legacy PCI using Am79C970 and Am79C971

```
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options atnic32 full_duplex=1
```

This setting will override the hardware setting and enable full duplex.