

# Release Note



## QNX OS Installation for NetBlaster Fast Ethernet Adapters

### Installing QNX OS 4.24 Driver

The ZNYX software set includes a driver for QNX OS 4.24 for Intel x86 platforms. The driver can be obtained from either the ZNYX web site <http://www.znyx.com> or ftp site <ftp.znyx.com>. The driver file is one file named *Net.znb*.

#### RETRIEVING DRIVERS

1. Go to the ZNYX web site at <http://www.znyx.com> or the ZNYX ftp site at <ftp.znyx.com> and navigate under the Driver Download area to get the QNX OS driver for your adapter. The current driver works for ZNYX models ZX412, ZX414, ZX348Q, ZX346Q, ZX345Q, ZX348, ZX346, and ZX345.
2. Retrieve the file to a QNX OS system.

#### INSTALLING DRIVERS

1. Copy the driver file to the `/bin` directory:

```
cp Net.znb /bin/Net.znb
```

2. You need to start a driver for each interface that you are installing. For a four-channel adapter such as the ZNYX ZX414 or ZX346, you will need to start four instances of the driver. The driver accepts the following parameters:

<code>-p port</code>	Chooses the port (or interface). The default is 0.
<code>-c chip_number</code>	Use to select the DEC-based MAC chip number. The default is 21143, which is used on all the current ZNYX adapters. Use 21140 for older models of the ZX345, ZX346, and ZX348.
<code>-r 10   100</code>	Sets the rate to either 10BaseT or 100BaseTx. Default is to auto-negotiate
<code>-F</code>	Forces full duplex mode. Default is half-duplex. Use in conjunction with <code>-r</code> option.

Normally, one entry for each interface is added to the `/etc/config/sysinit.node`. You must also edit the *Net* command line to include the `-d` option including the number of interfaces. For example, for a ZX414, you would add `-d 4` as well as the following lines after the *Net* command:

```
Net -d 4 &  
Net.znb -p 0 &
```

```
Net.znb -p 1 &  
Net.znb -p 2 &  
Net.znb -p 3 &
```

3. Add the correct *ifconfig* lines to */etc/netstart* to bring up the interfaces. All QNX ethernet interfaces start with *en*; the first numbered 1. For example, if you were installing the four channel ZX414, add:

```
ifconfig en1 name1 netmask mask broadcast bcast up  
ifconfig en2 name2 netmask mask broadcast bcast up  
ifconfig en3 name3 netmask mask broadcast bcast up  
ifconfig en4 name4 netmask mask broadcast bcast up
```

Where *name* is the IP name or address, *mask* is the netmask, and *bcast* is your broadcast address. See your Network Administrator for more information.

4. Reboot the system.

## Removing Drivers

Any instance of the driver can be removed by killing its process. To permanently remove the driver, remove the entries made during installation to the */etc/config/sysinit.node* file, as well as the *ifconfig* entries in */etc/netstart*.

## Release Notes

- QNX OS is currently limited to four networking interfaces. QNX is working on a patch to allow more than 4 interfaces.
- The ZNYX driver supports industry-standard TCP/IP. The proprietary QNX networking protocol is not supported.

## OTHER HELPFUL COMMANDS

- For version information about the driver, you can use:  

```
sin ver
```
- The *netinfo* command is useful for displaying pertinent information and statistics for the adapters. Use *netinfo -l* to display extensive statistics.
- The command: *use Net.znb* will return command line options for the *Net.znb* driver.
- For troubleshooting PCI problems try the command *show\_pci*. This utility is not always shipped with the QNX OS, but is available from the QNX website.



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