

**NAME**

**cxgb** - Chelsio T3 10 Gigabit Ethernet adapter driver

**SYNOPSIS**

To compile this driver into the kernel, place the following lines in your kernel configuration file:

```
device firmware  
device cxgb
```

To load the driver as a module at boot time, place the following line in loader.conf(5):

```
if_cxgb_load="YES"
```

**DESCRIPTION**

The **cxgb** driver supports Transmit/Receive checksum offload, Jumbo Frames, TCP segmentation offload (TSO), Large Receive Offload (LRO), VLAN hardware insertion / extraction, and VLAN checksum offload. For further hardware information, see <http://www.chelsio.com/>.

For questions related to hardware requirements, refer to the documentation supplied with your Chelsio T3 adapter. All hardware requirements listed apply to use with FreeBSD.

Support for Jumbo Frames is provided via the interface MTU setting. Selecting an MTU larger than 1500 bytes with the ifconfig(8) utility configures the adapter to receive and transmit Jumbo Frames. The maximum MTU size for Jumbo Frames is 9000.

For more information on configuring this device, see ifconfig(8).

**HARDWARE**

The **cxgb** driver supports 10 Gigabit and 1 Gigabit Ethernet adapters based on the T3 and T3B chipset:

- ◆ Chelsio 10GBase-CX4
- ◆ Chelsio 10GBase-LR
- ◆ Chelsio 10GBase-SR

**LOADER TUNABLES**

Tunables can be set at the loader(8) prompt before booting the kernel or stored in loader.conf(5).

**DIAGNOSTICS**

**cxgb%d: Unable to allocate bus resource: memory** A fatal initialization error has occurred.

**cxgb%d: Unable to allocate bus resource: interrupt** A fatal initialization error has occurred.

**cxgb%d: Could not find firmware image %s** The appropriate firmware kld module was not installed. This is a fatal initialization error.

## SUPPORT

For general information and support, go to the Chelsio support website at: <http://www.chelsio.com/>.

If an issue is identified with the released source code on the supported kernel with a supported adapter, email the specific information related to the issue to <[support@chelsio.com](mailto:support@chelsio.com)>.

## SEE ALSO

[altq\(4\)](#), [arp\(4\)](#), [netintro\(4\)](#), [ng\\_ether\(4\)](#), [ifconfig\(8\)](#)

## HISTORY

The **cxgb** device driver first appeared in FreeBSD 6.3 and FreeBSD 7.0.

## AUTHORS

The **cxgb** driver was written by Kip Macy <[kmacy@FreeBSD.org](mailto:kmacy@FreeBSD.org)> with substantial support from Scott Long <[scottl@FreeBSD.org](mailto:scottl@FreeBSD.org)>.