NAME

cas - Sun Cassini/Cassini+ and National Semiconductor DP83065 Saturn Gigabit Ethernet driver

SYNOPSIS

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

```
device miibus
device cas
```

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

```
if_cas_load="YES"
```

DESCRIPTION

The **cas** driver provides support for the Sun Cassini/Cassini+ and National Semiconductor DP83065 Saturn Gigabit Ethernet controllers.

All controllers supported by the **cas** driver have TCP/UDP checksum offload capability for both receive and transmit, support for the reception and transmission of extended frames for vlan(4) and an interrupt coalescing/moderation mechanism as well as a 512-bit multicast hash filter.

The **cas** driver also supports Jumbo Frames (up to 9022 bytes), which can be configured 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.

HARDWARE

The chips supported by the **cas** driver are:

- National Semiconductor DP83065 Saturn Gigabit Ethernet
- Sun Cassini Gigabit Ethernet
- Sun Cassini+ Gigabit Ethernet

The following add-on cards are known to work with the **cas** driver at this time:

- Sun GigaSwift Ethernet 1.0 MMF (Cassini Kuheen) (part no. 501-5524)
- Sun GigaSwift Ethernet 1.0 UTP (Cassini) (part no. 501-5902)
- Sun GigaSwift Ethernet UTP (GCS) (part no. 501-6719)
- Sun Quad GigaSwift Ethernet UTP (QGE) (part no. 501-6522)
- Sun Quad GigaSwift Ethernet PCI-X (QGE-X) (part no. 501-6738)

SEE ALSO

altq(4), miibus(4), netintro(4), vlan(4), ifconfig(8)

HISTORY

The **cas** device driver appeared in FreeBSD 8.0 and FreeBSD 7.3. It is named after the **cas** driver which first appeared in OpenBSD 4.1 and supports the same set of controllers but is otherwise unrelated.

AUTHORS

The **cas** driver was written by Marius Strobl <*marius@FreeBSD.org*> based on the gem(4) driver.