### **NAME**

sge - Silicon Integrated Systems SiS190/191 Fast/Gigabit Ethernet driver

### **SYNOPSIS**

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

device miibus device sge

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

if\_sge\_load="YES"

### DESCRIPTION

The **sge** device driver provides support for SiS190 Fast Ethernet controllers and SiS191 Fast/Gigabit Ethernet controllers.

All LOMs supported by the **sge** driver have TCP/UDP/IP checksum offload for transmit and receive, TCP segmentation offload (TSO), hardware VLAN tag stripping/insertion features. Due to lack of documentation Wake On Lan (WOL), Jumbo frame and an interrupt moderation mechanism are not supported yet.

The **sge** driver supports the following media types:

**autoselect** Enable autoselection of the media type and options. The user can manually override the autoselected mode by adding media options to rc.conf(5).

**10baseT/UTP** Set 10Mbps operation.

**100baseTX** Set 100Mbps (Fast Ethernet) operation.

**1000baseTX** Set 1000baseTX operation over twisted pair.

The **sge** driver supports the following media options:

full-duplex Force full duplex operation.

half-duplex

Force half duplex operation.

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

# **HARDWARE**

The **sge** device driver provides support for the following Ethernet controllers:

- SiS190 Fast Ethernet controller
- SiS191 Fast/Gigabit Ethernet controller

# **SEE ALSO**

altq(4), arp(4), miibus(4), netintro(4), ng\_ether(4), rgephy(4), vlan(4), ifconfig(8)

# **HISTORY**

The **sge** driver was written by Alexander Pohoyda *<alexander.pohoyda@gmx.net>*. And enhanced by Nikolay Denev *<ndenev@gmail.com>*. It first appeared in FreeBSD 8.1.