

**NAME**

**sg**e - 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 **sg**e device driver provides support for SiS190 Fast Ethernet controllers and SiS191 Fast/Gigabit Ethernet controllers.

All LOMs supported by the **sg**e 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 **sg**e 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 **sg**e 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 `ifconfig(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](mailto:alexander.pohoyda@gmx.net)>. And enhanced by Nikolay Denev <[ndenev@gmail.com](mailto:ndenev@gmail.com)>. It first appeared in FreeBSD 8.1.