NAME

et - Agere ET1310 10/100/Gigabit Ethernet driver

SYNOPSIS

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

```
device miibus
device et
```

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

```
if_et_load="YES"
```

DESCRIPTION

The **et** driver supports PCI Express Ethernet adapters based on the Agere ET1310 chip.

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

autoselect — Enable autoselection of the media types and options. The user can manually override the autoselected mode by adding media options to the */etc/rc.conf* file.

10baseT/UTP — Set 10Mbps operation. The *mediaopt* option can also be used to select either *full-duplex* or *half-duplex* modes.

100baseTX — Set 100Mbps (Fast Ethernet) operation. The *mediaopt* option can also be used to select either *full-duplex* or *half-duplex* modes.

1000baseT — Set 1000Mbps (Gigabit Ethernet) operation. The *mediaopt* option can only be set to *full-duplex* mode.

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

full-duplex — Force full-duplex operation.

half-duplex — Force half-duplex operation.

Note that the 1000baseT media type is only available if it is supported by the adapter. For more information on configuring this device, see ifconfig(8).

HARDWARE

The **et** driver supports Agere ET1310 10/100/Gigabit Ethernet adapters.

TUNABLES

hw.et.rx_intr_npkts This value controls how many packets should be received before a receive interrupt is generated. The default value is 32. It is recommended to set this value above 38 to prevent the host from being livelocked under a high degree of stress.

hw.et.rx_intr_delay This value delays the generation of receive interrupts in units of ~4 microseconds. It is used together with *hw.et.rx_intr_npkts* to achieve RX interrupt moderation. The default value is 20.

hw.et.tx_intr_nsegs This value controls how many segments (not packets) should be transmitted before a transmit interrupt is generated. The default value is 126. It is recommended to set this value below 280 to prevent the TX ring from underflowing.

hw.et.timer This value controls how often a timer interrupt should be generated. It is used together with *hw.et.tx_intr_nsegs* to achieve TX interrupt moderation. The default value is 1000000000 (nanoseconds).

SEE ALSO

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

HISTORY

The **et** device driver first appeared in DragonFly 1.11. The first FreeBSD release to include it was FreeBSD 8.0.

AUTHORS

The **et** driver was written by Sepherosa Ziehau <*sepherosa@gmail.com*> for DragonFly. It was ported to FreeBSD by Xin LI <*delphij@FreeBSD.org*>.