

**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\_npmts* 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\_npmts* to achieve RX interrupt moderation. The default value is 20.

*hw.et.tx\_intr\_nsecs* 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\_nsecs* to achieve TX interrupt moderation. The default value is 1000000000 (nanoseconds).

## SEE ALSO

altq(4), arp(4), miiibus(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>.