NAME

aue - ADMtek AN986 Pegasus USB Ethernet driver

SYNOPSIS

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

```
device uhci
device ohci
device usb
device miibus
device uether
device aue
```

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

```
if_aue_load="YES"
```

DESCRIPTION

The **aue** driver provides support for USB Ethernet adapters based on the ADMtek AN986 Pegasus chipset.

The LinkSys USB10T adapters that contain the AN986 Pegasus chipset will operate at 100Base-TX and full-duplex.

The Pegasus contains a 10/100 Ethernet MAC with MII interface and is designed to work with both Ethernet and HomePNA transceivers. Although designed to interface with 100Mbps peripherals, the existing USB standard specifies a maximum transfer speed of 12Mbps. Users should therefore not expect to actually achieve 100Mbps speeds with these devices.

The Pegasus supports a 64-bit multicast hash table, single perfect filter entry for the station address and promiscuous mode. Packets are received and transmitted over separate USB bulk transfer endpoints.

The **aue** 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 the */etc/rc.conf* file.
10baseT/UTP	Set 10Mbps operation. The *mediaopt* option can also be used to enable *full-duplex* operation. Not specifying *full duplex* implies *half-duplex* mode.

100baseTX — Set 100Mbps (Fast Ethernet) operation. The *mediaopt* option can also be used to enable *full-duplex* operation. Not specifying *full duplex* implies *half-duplex* mode.

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

full-duplex — Force full duplex operation. The interface will operate in half duplex mode if this media option is not specified.

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

HARDWARE

Adapters supported by the **aue** driver include:

- Abocom UFE1000, DSB650TX_NA
- Accton USB320-EC, SpeedStream
- ADMtek AN986, AN8511
- Billionton USB100, USB100LP, USB100EL, USBE100
- Corega Ether FEther USB-T, FEther USB-TX, FEther USB-TXS
- D-Link DSB-650, DSB-650TX, DSB-650TX-PNA
- Elecom LD-USBL/TX
- Elsa Microlink USB2Ethernet
- HP hn210e
- I-O Data USB ETTX
- Kingston KNU101TX
- LinkSys USB10T adapters that contain the AN986 Pegasus chipset, USB10TA, USB10TX, USB100TX, USB100H1
- MELCO LUA-TX, LUA2-TX
- Netgear FA101
- Planex UE-200TX
- Sandberg USB to Network Link (model number 133-06)
- Siemens Speedstream
- SmartBridges smartNIC
- SMC 2202USB
- SOHOware NUB100

DIAGNOSTICS

aue%d: watchdog timeout A packet was queued for transmission and a transmit command was issued, however the device failed to acknowledge the transmission before a timeout expired.

aue%d: no memory for rx list The driver failed to allocate an mbuf for the receiver ring.

SEE ALSO

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

ADMtek AN986 data sheet, http://www.admtek.com.tw.

HISTORY

The **aue** device driver first appeared in FreeBSD 4.0.

AUTHORS

The **aue** driver was written by Bill Paul <*wpaul@ee.columbia.edu*>.