NAME

sbni - Granch SBNI12 leased line modem driver

SYNOPSIS

device sbni

DESCRIPTION

The **sbni** driver provides support for leased line modems of following models:

- SBNI12-02, SBNI12D-02
- SBNI12-04, SBNI12D-04
- SBNI12-05, SBNI12D-05, ISA and PCI
- SBNI12-10, SBNI12D-10, ISA and PCI

and a kit for data link over a voice band:

- SBNI12-11, SBNI12D-11, ISA and PCI.

In addition to the standard port and IRQ specifications, the **sbni** driver also supports a number of *flags* which can set baud rate, receive level, and low three bytes of Ethernet MAC-address (high three are always 00:ff:01), because Granch modems are presented to the system as Ethernet-like network cards.

The high byte of the *flags* is a bit field, it is used to specify SBNI adapter receive level/baud rate:

Bits 0-3: receive level (0x00..0x0f)

Bits 4-5: baud rate number:

00 - 0 baud rate (2Mb in fast mode/500kb in slow)
01 - 1 baud rate (1Mb/250kb)
10 - 2 baud rate (500kb/125kb)
11 - 3 baud rate (250kb/62.5kb)

Bit 6: use fixed receive level

if bit 6 is set then receive level will be set according to bits 0-3 value, otherwise receive level will be autodetected

Bit 7: use fixed baud rate

if bit 7 is set then baud rate will be set according to bits 4-5 value, otherwise baud rate is set to 2Mb

FILES

The sources for the driver reside in:

/sys/dev/sbni/if_sbni.c
/sys/dev/sbni/if_sbnireg.h
/sys/dev/sbni/if_sbnivar.h

SEE ALSO

arp(4), netintro(4), ifconfig(8)

HISTORY

The **sbni** device driver first appeared in FreeBSD 4.6.

AUTHORS

The **sbni** device driver for FreeBSD 4.x was written by Denis I. Timofeev, partially based on David Greenman's ed(4) driver. Earlier versions (available on *ftp.granch.com*) were written by Alexey V. Zverev.

SBNI12 hardware was designed by Alexey V. Chirkov.