NAME

bwi - Broadcom BCM43xx IEEE 802.11b/g wireless network driver

SYNOPSIS

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

> **device bwi**
> **device wlan**
> **device wlan_amrr**
> **device firmware**

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

> if_bwi_load="YES"

DESCRIPTION

The **bwi** driver provides support for Broadcom BCM43xx based PCI/CardBus network adapters.

It supports **station** and **monitor** mode operation. Only one virtual interface may be configured at any time. For more information on configuring this device, see ifconfig(8).

This driver requires firmware to be loaded before it will work. The *ports/net/bwi-firmware-kmod* port needs to be installed before ifconfig(8) will work.

HARDWARE

The **bwi** driver supports Broadcom BCM43xx based wireless devices, including:

Card	Chip	Bus	Standard
Apple Airport Extreme	BCM4306	PCI	b/g
Apple Airport Extreme	BCM4318	PCI	b/g
ASUS WL-100g	BCM4306	CardBus	b/g
ASUS WL-138g	BCM4318	PCI	b/g
Buffalo WLI-CB-G54S	BCM4318	CardBus	b/g
Buffalo WLI-PCI-G54S	BCM4306	PCI	b/g
Compaq R4035 onboard	BCM4306	PCI	b/g
Dell Wireless 1390	BCM4311	Mini PCI	b/g
Dell Wireless 1470	BCM4318	Mini PCI	b/g
Dell Truemobile 1300 r2	BCM4306	Mini PCI	b/g
Dell Truemobile 1400	BCM4309	Mini PCI	b/g
HP nx6125	BCM4319	PCI	b/g

Linksys WPC54G Ver 3	BCM4318	CardBus	b/g
Linksys WPC54GS Ver 2			
	BCM4318	CardBus	b/g
TRENDnet TEW-401PCplus			
	BCM4306	CardBus	b/g
US Robotics 5411	BCM4318	CardBus	b/g

The **bwi** driver uses the older v3 version of Broadcom's firmware. While this older firmware does support most BCM43xx parts, the bwn(4) driver works better for the newer chips it supports. You must use the **bwi** driver if you are using older Broadcom chipsets (BCM4301, BCM4303 and BCM4306 rev 2). The v4 version of the firmware that bwn(4) uses does not support these chips.

EXAMPLES

Join an existing BSS network (i.e., connect to an access point):

    ifconfig wlan create wlandev bwi0 inet 192.168.0.20 \
        netmask 0xffffff00

Join a specific BSS network with network name "my_net":

    ifconfig wlan create wlandev bwi0 ssid my_net up

Join a specific BSS network with 64-bit WEP encryption:

    ifconfig wlan create wlandev bwi0 ssid my_net \
        wepmode on wepkey 0x1234567890 weptxkey 1 up

SEE ALSO

arp(4), cardbus(4), intro(4), pci(4), wlan(4), wlan_amrr(4), ifconfig(8), wpa_supplicant(8)

HISTORY

The **bwi** driver first appeared in FreeBSD **8.0**.

AUTHORS

The **bwi** driver was written for DragonFly by Sepherosa Ziehau and subsequently ported to FreeBSD.

BUGS

Some card based on the BCM4306 and BCM4309 chips do not work properly on channel 1, 2 and 3.