

NAME

rtw88 - Realtek IEEE 802.11n/ac wireless network driver

SYNOPSIS

The driver will auto-load without any user interaction using `devmatch(8)` if enabled in `rc.conf(5)`.

Only if auto-loading is explicitly disabled, place the following lines in `rc.conf(5)` to manually load the driver as a module at boot time:

```
kld_list="${kld_list} if_rtw88"
```

The driver should automatically load any `rtw88fw(4)` firmware needed for the particular chipset.

It is discouraged to load the driver from `loader(8)`.

DESCRIPTION

The **rtw88** driver is derived from Realtek's Linux `rtw88` driver and provides support for the following chipsets:

- Realtek 802.11n wireless 8723de (RTL8723DE)
- Realtek 802.11ac wireless 8821ce (RTL8821CE)
- Realtek 802.11ac wireless 8822be (RTL8822BE)
- Realtek 802.11ac wireless 8822ce (RTL8822CE)

The driver uses the `linuxkpi_wlan` and `linuxkpi` compat framework to bridge between the Linux and native FreeBSD driver code as well as to the native `net80211(4)` wireless stack.

While **rtw88** supports all 802.11 a/b/g/n and ac the compatibility code currently only supports 802.11 a/b/g modes. Support for 802.11 n/ac is to come.

LOADER TUNABLES

compat.linuxkpi.skbuf.mem_limit

If you are running a 64bit system with more than 4GB of main memory you need to set this tunable to **1** in `loader.conf(5)` and reboot once to make it effective. This tunable will work around a problem with DMA and limit allocations for network buffer memory to the lower 32bit of physical memory and make the driver work.

BUGS

Certainly.

Does not seem to work (reliably) on machines with more than 4GB of main memory. See in the *LOADER TUNABLES* section above.

SEE ALSO

rtw88fw(4), wlan(4), ifconfig(8), wpa_supplicant(8)

HISTORY

The **rtw88** driver first appeared in FreeBSD 13.2.