

btmrvl driver

All commands are used via debugfs interface.

Set/get driver configurations

Path: /debug/btmrvl/config/

gpiogap=[n], hscfgcmd

These commands are used to configure the host sleep parameters:: bit 8:0 -- Gap bit 16:8 -- GPIO

where GPIO is the pin number of GPIO used to wake up the host. It could be any valid GPIO pin# (e.g. 0-7) or 0xff (SDIO interface wakeup will be used instead).

where Gap is the gap in milli seconds between wakeup signal and wakeup event, or 0xff for special host sleep setting.

Usage:

```
# Use SDIO interface to wake up the host and set GAP to 0x80:
echo 0xff80 > /debug/btmrvl/config/gpiogap
echo 1 > /debug/btmrvl/config/hscfgcmd

# Use GPIO pin #3 to wake up the host and set GAP to 0xff:
echo 0x03ff > /debug/btmrvl/config/gpiogap
echo 1 > /debug/btmrvl/config/hscfgcmd
```

psmode=[n], pscmd

These commands are used to enable/disable auto sleep mode

where the option is:

```
1      -- Enable auto sleep mode
0      -- Disable auto sleep mode
```

Usage:

```
# Enable auto sleep mode
echo 1 > /debug/btmrvl/config/psmode
echo 1 > /debug/btmrvl/config/pscmd

# Disable auto sleep mode
echo 0 > /debug/btmrvl/config/psmode
echo 1 > /debug/btmrvl/config/pscmd
```

hsmode=[n], hscmd

These commands are used to enable host sleep or wake up firmware

where the option is:

```
1      -- Enable host sleep
0      -- Wake up firmware
```

Usage:

```
# Enable host sleep
echo 1 > /debug/btmrvl/config/hsmode
echo 1 > /debug/btmrvl/config/hscmd

# Wake up firmware
echo 0 > /debug/btmrvl/config/hsmode
echo 1 > /debug/btmrvl/config/hscmd
```

Get driver status

Path: /debug/btmrvl/status/

Usage:

```
cat /debug/btmrvl/status/<args>
```

where the args are:

curpsmode

This command displays current auto sleep status.

psstate

This command display the power save state.

hsstate

This command display the host sleep state.

txdnldrdy

This command displays the value of Tx download ready flag.

Issuing a raw hci command

Use hcitool to issue raw hci command, refer to hcitool manual

Usage:

```
Hcitol cmd <ogf> <ocf> [Parameters]
```

Interface Control Command:

```
hcitool cmd 0x3f 0x5b 0xf5 0x01 0x00 --Enable All interface
hcitool cmd 0x3f 0x5b 0xf5 0x01 0x01 --Enable Wlan interface
hcitool cmd 0x3f 0x5b 0xf5 0x01 0x02 --Enable BT interface
hcitool cmd 0x3f 0x5b 0xf5 0x00 0x00 --Disable All interface
hcitool cmd 0x3f 0x5b 0xf5 0x00 0x01 --Disable Wlan interface
hcitool cmd 0x3f 0x5b 0xf5 0x00 0x02 --Disable BT interface
```

SD8688 firmware

Images:

- /lib/firmware/sd8688_helper.bin
- /lib/firmware/sd8688.bin

The images can be downloaded from:

git.infradead.org/users/dwmw2/linux-firmware.git/libertas/