NAME

ubtbcmfw - Firmware driver for Broadcom BCM2033 chip based Bluetooth USB devices

SYNOPSIS

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

   device ubtbcmfw

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

   ubtbcmfw_load="YES"

DESCRIPTION

The **ubtbcmfw** is a firmware driver for Broadcom BCM2033 chip based Bluetooth USB devices. It provides minimal access to the parts of the device required to download firmware.

The **ubtbcmfw** driver creates three fixed endpoint device nodes.

The control transfers can only happen on the control endpoint which is always endpoint 0. Control requests are issued by ioctl(2) calls.

Only incoming transfers are supported on an interrupt endpoint. To perform I/O on an interrupt endpoint, read(2) should be used. All I/O operations on an interrupt endpoint are unbuffered. Interrupt endpoint is always endpoint 1.

Only outgoing bulk transfers are supported on a bulk endpoint. To perform I/O on a bulk endpoint, write(2) should be used. All I/O operations on a bulk endpoint are unbuffered. Outgoing bulk endpoint is always endpoint 2.

The control endpoint (endpoint 0) handles the following ioctl(2) calls:

USB_GET_DEVICE_DESC (*usb_device_descriptor_t*)
      Return the device descriptor.

FILES

/dev/ubtbcmfwN.EE   Endpoint *EE* of device *N*.

SEE ALSO

ng_ubt(4), ugen(4), usb(4), bcmfw(8)

HISTORY

The **ubtbcmfw** driver was implemented in FreeBSD 5.0.

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BUGS

Most likely. Please report if found.