NAME

cdceem - USB Communication Device Class Ethernet Emulation Model (CDC EEM) driver

SYNOPSIS

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

> **device uhci**
> **device ohci**
> **device usb**
> **device miibus**
> **device uether**
> **device cdceem**

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

> if_cdceem_load="YES"

DESCRIPTION

The **cdceem** driver provides support for USB devices based on the USB Communication Device Class Ethernet Emulation Model (CDC EEM) specification.

The driver works on both host, and device-side; see usb_template(4) for details.

The USB device appears as a regular network interface on both sides, transporting Ethernet frames.

For more information on configuring this device, see ifconfig(8).

The **cdceem** driver does not support different media types or options.

SYSCTL VARIABLES

The following variables are available as both sysctl(8) variables and loader(8) tunables:

hw.usb.cdceem.debug

> Verbosity level for log messages from the **cdceem** driver. Set to 0 to disable logging or 1 to warn about potential problems. Larger values enable debugging output. Defaults to 1.

hw.usb.cdceem.send_echoes

> If set to 1, the driver will send an Echo EEM packet when the interface is brought up. While responding to Echo is mandatory, some devices cannot handle it. Only use for debugging. Defaults to 0.

hw.usb.cdceem.send_fake_crc
>   If set to 1, the driver will use 0xdeadbeef as the CRC value for outgoing Data EEM packets.
>   Only use for debugging. Defaults to 0.

SEE ALSO

arp(4), cdce(4), intro(4), ipheth(4), netintro(4), urndis(4), usb(4), usb_template(4), ifconfig(8)

Universal Serial Bus Communications Class Subclass Specification for Ethernet Emulation Model Devices, https://usb.org/sites/default/files/CDC_EEM10.pdf.

HISTORY

The **cdceem** device driver first appeared in FreeBSD 12.1.

AUTHORS

The **cdceem** driver was written by Edward Tomasz Napierala *<trasz@FreeBSD.org>* under sponsorship from Hewlett Packard Enterprise.