#### NAME

ucom - USB tty support

#### SYNOPSIS

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

#### device ucom

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

ucom\_load="YES"

### DESCRIPTION

The **ucom** driver attaches to USB modems, serial ports, and other devices that need to look like a tty. The **ucom** driver shows a behavior like a tty(4). This means that normal programs such as tip(1) or ppp(8) can be used to access the device.

### SYSCTL VARIABLES

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

hw.usb.ucom.debug

Debug output level, where 0 is debugging disabled and larger values increase debug message verbosity. Default is 0.

#### hw.usb.ucom.device\_mode\_console

When set to 1, the **ucom** driver will mark terminals as console devices when operating in device mode. Default is 1.

hw.usb.ucom.pps\_mode

Enables and configure PPS capture mode as described below.

### **Pulse Per Second (PPS) Timing Interface**

The **ucom** driver can capture PPS timing information as defined in RFC 2783. The API, accessed via ioctl(2), is available on the tty device. To use the PPS capture feature with ntpd(8), symlink the tty device to */dev/pps0*.

The *hw.usb.ucom.pps\_mode* sysctl configures the PPS capture mode. It can be set in loader.conf(5) or sysctl.conf(5). The following capture modes are available:

- 0 Capture disabled (default).
- 1 Capture pulses on the CTS line.

2 Capture pulses on the DCD line.

## FILES

```
/dev/ttyU* for callin ports
/dev/ttyU*.init
/dev/ttyU*.lock
```

corresponding callin initial-state and lock-state devices

/dev/cuaU\* for callout ports /dev/cuaU\*.init /dev/cuaU\*.lock corresponding callout initial-state and lock-state devices

## SEE ALSO

cu(1), tty(4), uark(4), ubsa(4), ubser(4), uchcom(4), ucycom(4), ufoma(4), uftdi(4), uhso(4), uipaq(4), umcs(4), umct(4), umodem(4), umoscom(4), uplcom(4), usb(4), uslcom(4), uvisor(4), uvscom(4), ttys(5)

# HISTORY

The **ucom** driver was adopted from NetBSD in March of 2002. This manual page was adopted from NetBSD by Tom Rhodes *<trhodes@FreeBSD.org>* in April 2002.

### BUGS

Prior to FreeBSD 6.0 **ucom** created /*dev/ucom*? rather than the uniform device names created today. Old scripts must be adjusted accordingly.