

NAME

hidquirk - HID quirks module

SYNOPSIS

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

```
device hid
```

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

```
hidquirk_load="YES"
```

DESCRIPTION

The **hidquirk** module provides support for adding quirks for HID devices

HQ_HID_IGNORE

device should be ignored by hid class

HQ_KBD_BOOTPROTO

device should set the boot protocol

HQ_MS_BOOTPROTO

device should set the boot protocol

HQ_MS_BAD_CLASS

doesn't identify properly

HQ_MS_LEADING_BYTE

mouse sends an unknown leading byte

HQ_MS_REVZ

mouse has Z-axis reversed

HQ_MS_VENDOR_BTN

mouse has buttons in vendor usage page

HQ_SPUR_BUT_UP

spurious mouse button up events

HQ_MT_TIMESTAMP

Multitouch device exports HW timestamps 0x1b5a01

See `/sys/dev/hid/hidquirk.h` for the complete list of supported quirks.

LOADER TUNABLE

The following tunable can be set at the loader(8) prompt before booting the kernel, or stored in `loader.conf(5)`.

hw.hid.quirk.%d

The value is a string whose format is:

```
"BusId VendorId ProductId LowRevision HighRevision HQ_QUIRK,..."
```

Installs the quirks **HQ_QUIRK,...** for all HID devices matching **BusId** and **VendorId** and **ProductId** which have a hardware revision between and including **LowRevision** and **HighRevision**.

BusId, **VendorId**, **ProductId**, **LowRevision** and **HighRevision** are all 16 bits numbers which can be decimal or hexadecimal based.

A maximum of 100 variables **hw.hid.quirk.0**, **.1**, ..., **.99** can be defined.

If a matching entry is found in the kernel's internal quirks table, it is replaced by the new definition.

Else a new entry is created given that the quirk table is not full.

The kernel iterates over the **hw.hid.quirk.N** variables starting at **N = 0** and stops at **N = 99** or the first non-existing one.

EXAMPLES

To install a quirk at boot time, place one or several lines like the following in `loader.conf(5)`:

```
hw.hid.quirk.0="0x18 0x6cb 0x1941 0 0xffff HQ_MT_TIMESTAMP"
```

HISTORY

The **hidquirk** module appeared in FreeBSD 13.0.

AUTHORS

The **hidquirk** driver was written by Hans Petter Selasky <hselasky@FreeBSD.org> for `usb(4)` subsystem

and adopted to hid(4) by Vladimir Kondratyev <wulf@FreeBSD.org>. This manual page is based on usb_quirk(4) manual page written by Nick Hibma <n_hibma@FreeBSD.org>.