How to Control Blue Status LED

We can control the **blue LED** with editing the trigger mode in sysfs.

The red LED is hard-wired to the power input rail so that cannot be changed.

Simply you can turn on/off that with putting an option using **echo** command.

Turn off

Do **echo none** to turn off.

```
root@odroid:~# echo none > /sys/class/leds/blue\:heartbeat/trigger
```

Turn on

Do **echo MODE** to turn on with MODE.

```
# Turn on that solidly.
root@odroid:~# echo default-on > /sys/class/leds/blue\:heartbeat/trigger

# Heartbeat mode. This is the original state.
root@odroid:~# echo heartbeat > /sys/class/leds/blue\:heartbeat/trigger
```

There are many other modes you can select. But some of them may now work. This is an example for N2.

```
root@odroid:~# cat /sys/class/leds/blue\:heartbeat/trigger
none kbd-scrolllock kbd-numlock kbd-capslock kbd-kanalock kbd-shiftlock kbd-altgrlock kbd-ctrllock kbd-altlock kbd-shiftllock kbd-shiftrlock kbd-ctrlllock kbd-ctrlrlock timer oneshot [heartbeat] backlight gpio cpu0 cpu1 cpu2 cpu3 cpu4 cpu5 default-on transient panic rc_feedback emmc sd
```

netdev trigger

netdev trigger will blink the blue led if there's network traffic.

- Requirement for N2: Ubuntu 18.04 kernel 4.9.230-76, Ubuntu 20.04 kernel 4.9.230-95
- Requirement for C4: Ubuntu 20.04 kernel 4.9.230-29
- Requirement for XU4: Kernel 5.4

Enable netdev trigger:

```
echo netdev > /sys/class/leds/blue\:heartbeat/trigger
```

Set the interface to be monitored:

```
echo eth0 > /sys/class/leds/blue\:heartbeat/device_name
```

Interval in mS for blinking, lower is faster blinking, higher is slower, minimum is around 40

```
echo 40 > /sys/class/leds/blue\:heartbeat/interval
```

Link: Should we monitor if the link is up or down? (Link = Physical cable).

1 we monitor link status, the led behaviour is: on when link is up, flashing when there's activity.
 we don't monitor link status, the led behaviour is: always off, flashing when there's activity.

```
echo  > /sys/class/leds/blue\:heartbeat/link
```

RX/TX Blinking

Enable RX Blinking

```
echo 1 > /sys/class/leds/blue\:heartbeat/rx
```

Enable TX Blinking

```
echo 1 > /sys/class/leds/blue\:heartbeat/tx
```

- If you want to turn the LED off automatically in boot process, add **echo none > /sys/class/leds/blue\:heartbeat/trigger** in **/etc/rc.local** file.

How to control the Red power LED (Applicable for the ODROID-HC4 only)

The Red LED on the HC4 board is not hard-wired and you can turn it off by software.
The GPIO number of the red LED on the HC4 board is 503.

```
# Export GPIO
root@odroid:~# echo 503 > /sys/class/gpio/export

# To set as Output
root@odroid:~# echo out > /sys/class/gpio/gpio503/direction

# Output as low.
root@odroid:~# echo  > /sys/class/gpio/gpio503/value
```

From:
http://wiki.odroid.com/ - **ODROID Wiki**

Permanent link:
http://wiki.odroid.com/common/application_note/led_control

Last update: **2020/12/10 00:43**