

## coreboot - Bug #147

### Backlight level setting is not restored when the display wakes up from sleep on ThinkPad X230

11/03/2017 03:42 PM - Tobis Greer

<b>Status:</b>	Feedback	<b>Start date:</b>	11/03/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>I am using Ubuntu 17.10, it also occurred on 17.04.</p> <p>Whenever the display is sleeping (the laptop is still awake, just the display is off), and when it wakes up again (by moving the mouse, or issuing a keypress); then the backlight setting is at 100% regardless of what it was set at before the display went to sleep.</p> <p>If I press the Fn+F8 key to set it again, one press is enough for the backlight level to go down several increments; back to where it was before the display turned off.</p> <p>This didn't happen with the same Ubuntu install but running the stock BIOS.</p> <p>For context, here is an excerpt from the mailing list:</p> <p>this is a known issue. It actually was there all the time but only got more visible with the introduction of ACPI/OpRegion for the integrated GFX. Here is what I found out so far (on my ArchLinux):</p> <p>w/o OpRegion:</p> <ol style="list-style-type: none"><li>1. `acpi_video` driver gets loaded, systemd restores brightness from last shutdown.</li><li>2. `i915` driver gets loaded, reads the current brightness.</li><li>3. `i915` exposes backlight as `intel_backlight`, systemd restores brightness from last shutdown here as well.</li></ol> <p>Every time `i915` power cycles the backlight, it restores the value it has seen when it was loaded.</p> <p>w/ Opregion the order somehow changes to 2. 1. 3., now `i915` always restores to 100% that it read before systemd restored the brightness.</p> <p>A sane solution would be to extend XBCM in `src/drivers/intel/gma/acpi/configure_brightness_levels.asl` to always notify `i915` when we change the backlight through OpRegion mailbox 3.</p> <p>Happy to provide more logs or details as required. Thanks!</p>			

#### History

##### #1 - 07/25/2018 01:05 PM - Warrick Baijius

This also occurs for me on a T420 running Debian 9.4. Has there been any progress? Is there anything I/we can do to help? I do not have coding knowledge, so my ability to assist will be limited, but I am willing to try.

##### #2 - 08/25/2018 10:32 AM - Alexander Couzens

- % Done changed from 0 to 100

- Status changed from New to Feedback

Hi Tobias,  
Hi Warrick,

thanks for your bug report.

This bug has been fixed in <https://review.coreboot.org/27711>.

However, it introduced another bug, please wait until <https://review.coreboot.org/c/coreboot/+28345> has been merged.

Best Regards,  
lynxis