LG Gram laptop extra features

By Matan Ziv-Av <matan@svgalib.org>

Hotkeys

The following FN keys are ignored by the kernel without this driver:

- FN-F1 (LG control panel) - Generates F15
- FN-F5 (Touchpad toggle) - Generates F21
- FN-F6 (Airplane mode) - Generates RFKILL
- FN-F9 (Reader mode) - Generates F14

The rest of the FN keys work without a need for a special driver.

Reader mode

Writing 0/1 to /sys/devices/platform/lg-laptop/reader_mode disables/enables reader mode. In this mode the screen colors change (blue color reduced), and the reader mode indicator LED (on F9 key) turns on.

FN Lock

Writing 0/1 to /sys/devices/platform/lg-laptop/fn_lock disables/enables FN lock.

Battery care limit

Writing 80/100 to /sys/class/power_supply/CMB0/charge_control_end_threshold sets the maximum capacity to charge the battery. Limiting the charge reduces battery capacity loss over time.

This value is reset to 100 when the kernel boots.

Fan mode

Writing 1/0 to /sys/devices/platform/lg-laptop/fan_mode disables/enables the fan silent mode.

USB charge

Writing 0/1 to /sys/devices/platform/lg-laptop/usb_charge disables/enables charging another device from the USB port while the device is turned off.

This value is reset to 0 when the kernel boots.

LEDs

The are two LED devices supported by the driver:

Keyboard backlight

A led device named kbd_led controls the keyboard backlight. There are three lighting level: off (0), low (127) and high (255).

The keyboard backlight is also controlled by the key combination FN-F8 which cycles through those levels.

Touchpad indicator LED

On the F5 key. Controlled by led device names tpad_led.