

# Nvidia GeForce RTX 3050

**TL;DR:** Utter piece of hot garbage - literally. Don't buy yesterday, today or ever. Linus was right!

## H/W

GeForce RTX 3050 low profile for compact Dell PC. I needed something below 80W of power drain due to limited power supply (that is rated for 80W GPU).

- Model: [MSI GeForce RTX™ 3050 LP 6G](#)
- GeForce RTX 3050 - NV176 (GA106) - Ampere family
- 6GB RAM
- Low profile
- Rated 70W

## Void Linux driver setup

```
xi linux-headers nvidia nvtop
```

1. Make sure `linux-headers` are installed and system is up-to-date (same kernel and headers version).
2. Install `nvidia` package. Also `nvtop` comes handy - should show your card if driver is loaded correctly.
3. Use `xbps-reconfigure -f linux<version>` to see if DKMS driver was built correctly (no warnings about it).

## Sway

Sway requires KMS. For some reason this requires flag for kernel to be enabled:

In `/etc/default/grub` add to kernel list and reload grub with `update-grub`:

```
nvidia-drm.modeset=1
```

You can run `cat /sys/module/nvidia_drm/parameters/modeset` after reboot to see if it got enabled.

Sway needs to be started with `--unsupported-gpu`.

# Minecraft

Minecraft under Sway works with GeForce RTX 3050 but with higher power usage I get glitching on the screen, I can use shades that or FPS limit that does not go over 60W or so. This card is within power budget of the power supply but some people say that this GPU series tend to have spiky power drain! Hopefully this is a driver issue that gets resolved...

# Without drivers

Running GPU without installing drivers and using integrated GPU is not a good idea as by default it will run fans and heat up as it does no do power management by VBIOS! It required blobs to manage power!

# Nouveau

Driver work fine (tested with Minecraft) but GPU is not power managed due to lack of blobs! This makes it 6x slower than internal GPU (Intell UHD Graphics P630)!

Update: There is hope with the GSP firmware: <https://www.phoronix.com/news/Nouveau-GSP-Merged-Linux-6.7>

# Batocera

Worked out of the box with Batocera so no power management issues.

Steam game (Spore) I tried failed to start! Works well with Intell UHD Graphics P630 - could be just this game so further testing needed.

# Kodi

LibreELEC does not support Nvidia on Wayland - stuck at booting. I was able to run Kodi on X11 on Batocera but you don't get HDR that I get from integrated GPU!

Current status: <https://libreelec.tv/2025/08/15/libreelec-omega-12-2-0/>



Future nVidia GPU support remains a grey area and we continue our long-running advice to avoid purchasing nVidia GPU cards for LibreELEC use.

Worse is that now if I want to use Kodi with integrated GPU, the Nvidia card heats up and becomes noisy and it cannot be disabled in any way!

## Summary

- Kodi - no HDR possible (X11), worse than integrated Intel card! Running hot when using integrated GPU (no power mgmt without driver loaded)!
- Batocera - works fine, but Steam game did not work!
- Linxu in general:
  - Without drivers (unused card, using integrated) - drains power and loud due to lack of power management!
  - Nouveau - usable but way slower than integrated card and as above!
  - DKMS - driver works fine but have serious glitching at higher power levels - not very usable!

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