

XDC 2017 Lightning Talk
Nouveau
Status update

OpenGL 4.5 conformance testing

- Current status on the mustpass list for Kepler:
 - Passed: 6422/6516 (98.6%)
 - Failed: 36/6516 (0.6%)
- Most failures in Mesa's common code
- Missing feature in Nouveau: Support for 3D Images on Fermi/Kepler

- Modesetting support landed:
 - 4.8: GP100, GP104
 - 4.10: GP102, GP106, GP107
 - 4.12: GP10B
 - 4.14: GP108
- Graphics acceleration firmwares released a year after launch date (March 2016) except for GP108
- Power management firmware still missing, preventing:
 - Fan management
 - Reclocking

Relations with Nvidia

- NVIDIA changes prevent us from releasing a driver (Maxwell2+):
 - Signed firmwares accessible publicly but not redistributable
 - Reverse engineering of vbios impossible
- NVIDIA prefers developing its own open source driver (**nvgpu**)
- Communication mostly down:
 - Main contact/dev left NVIDIA (Alexandre Courbot)
 - Most important requests left unanswered...
 - ... until more complete code than wanted lands publicly in **nvgpu** weeks later
- Can NVIDIA please understand upstream development increases its value?