

# drm\_hwcomposer: A Brief Update

**Robert Foss** 

**Software Engineer** 

@memcpy\_io robert.foss@collabora.com



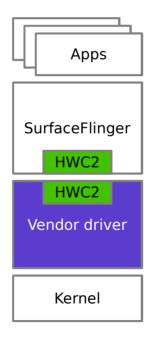
# Agenda

- What is drm\_hwcomposer?
- Where are we now?
- Recent developments
- What comes next?



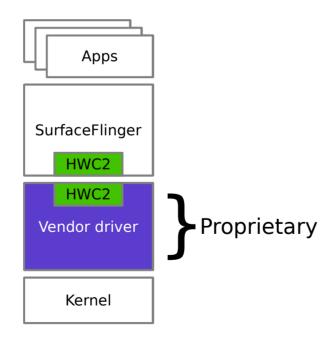


**Android Graphics Stack** 



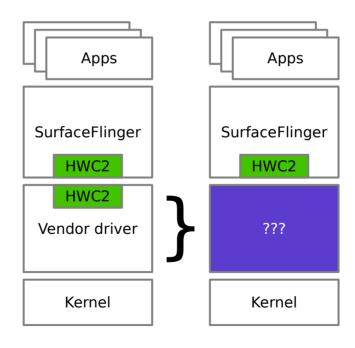


**Android Graphics Stack** 



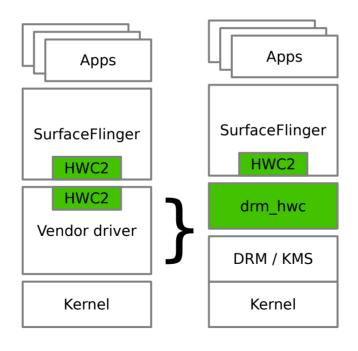


**OSS Graphics Stack** 





**OSS Graphics Stack** 





# Where are we now?



**Shipped products** 

- Pixel C
  - NVidia Tegra X1 Maxwell





- Dragonboard 410c
  - Adreno 306





- Dragonboard 410c
  - Adreno 306
- iMX6
  - Vivante GC3000



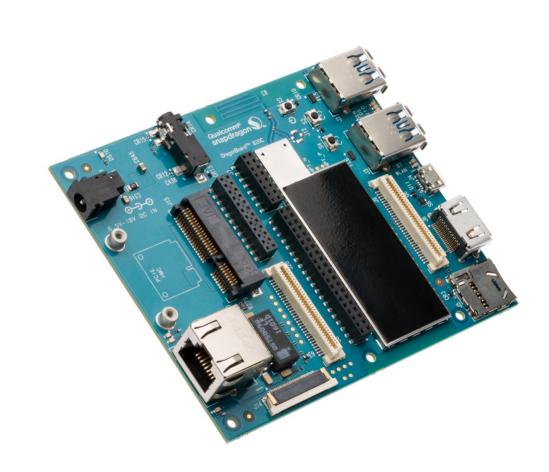


- Dragonboard 410c
  - Adreno 306
- iMX6
  - Vivante GC3000
- HiKey 960
  - ARM Mali G71





- Dragonboard 410c
  - Adreno 306
- iMX6
  - Vivante GC3000
- HiKey 960
  - ARM Mali G71
- Dragonboard 820c
  - Adreno 530







Code moved to freedesktop.org



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- Wiki moved to freedesktop.org



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- Patches accepted with [PATCH hwc] prefix





Issues to be solved

HWC2 series merged



Issues to be solved

- HWC2 series merged
- Multiple overlay testing needed





**Feature Wish List** 

VirtualDisplay support



- VirtualDisplay support
- Making GL composition optional



- VirtualDisplay support
- Making GL composition optional
- YUV plane support



- VirtualDisplay support
- Making GL composition optional
- YUV plane support
  - Output to YUV-only DRM plane



- VirtualDisplay support
- Making GL composition optional
- YUV plane support



- VirtualDisplay support
- Making GL composition optional
- YUV plane support
- DMA writeback support



- VirtualDisplay support
- Making GL composition optional
- YUV plane support
- DMA writeback support
  - For Miracast/Chromecast/MHL & Screenshots



- VirtualDisplay support
- Making GL composition optional
- YUV plane support
- DMA writeback support



- VirtualDisplay support
- Making GL composition optional
- YUV plane support
- DMA writeback support
- Modular buffer importer





- Gustavo Padovan
- Kalyan Kondapally
- Kaveh Nasri
- Marissa Wall
- Rob Clark
- Rob Herring
- Sean Paul
- Tomeu Vizoso
- Zach Reizner



