



Introduction to Vulkan Video

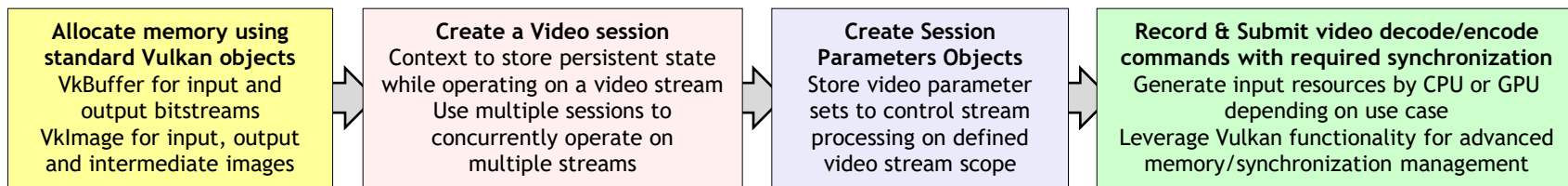
Vulkan Video TSG

Vulkan Video

Tightly integrates hardware accelerated video processing with Vulkan's existing graphics, compute and display functionality

Leverages Vulkan's scheduling, synchronization, and memory utilization framework for fine-grained, low-overhead distribution of stream processing tasks across multiple CPU cores and video codec hardware

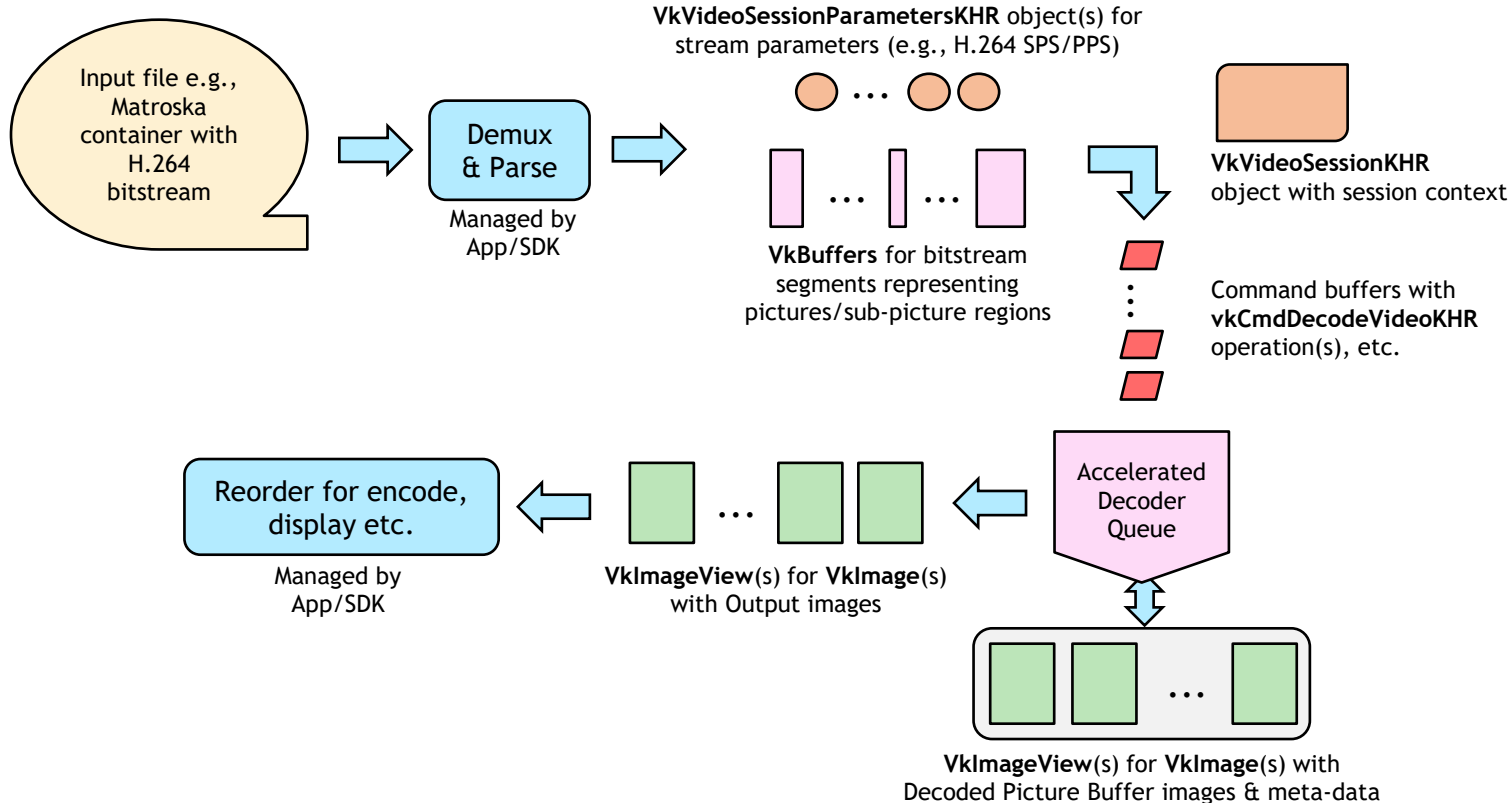
New video decode and encode command queues for low-level stateless management of video codec hardware for efficiency and flexibility on low-power/memory embedded devices to high-performance servers



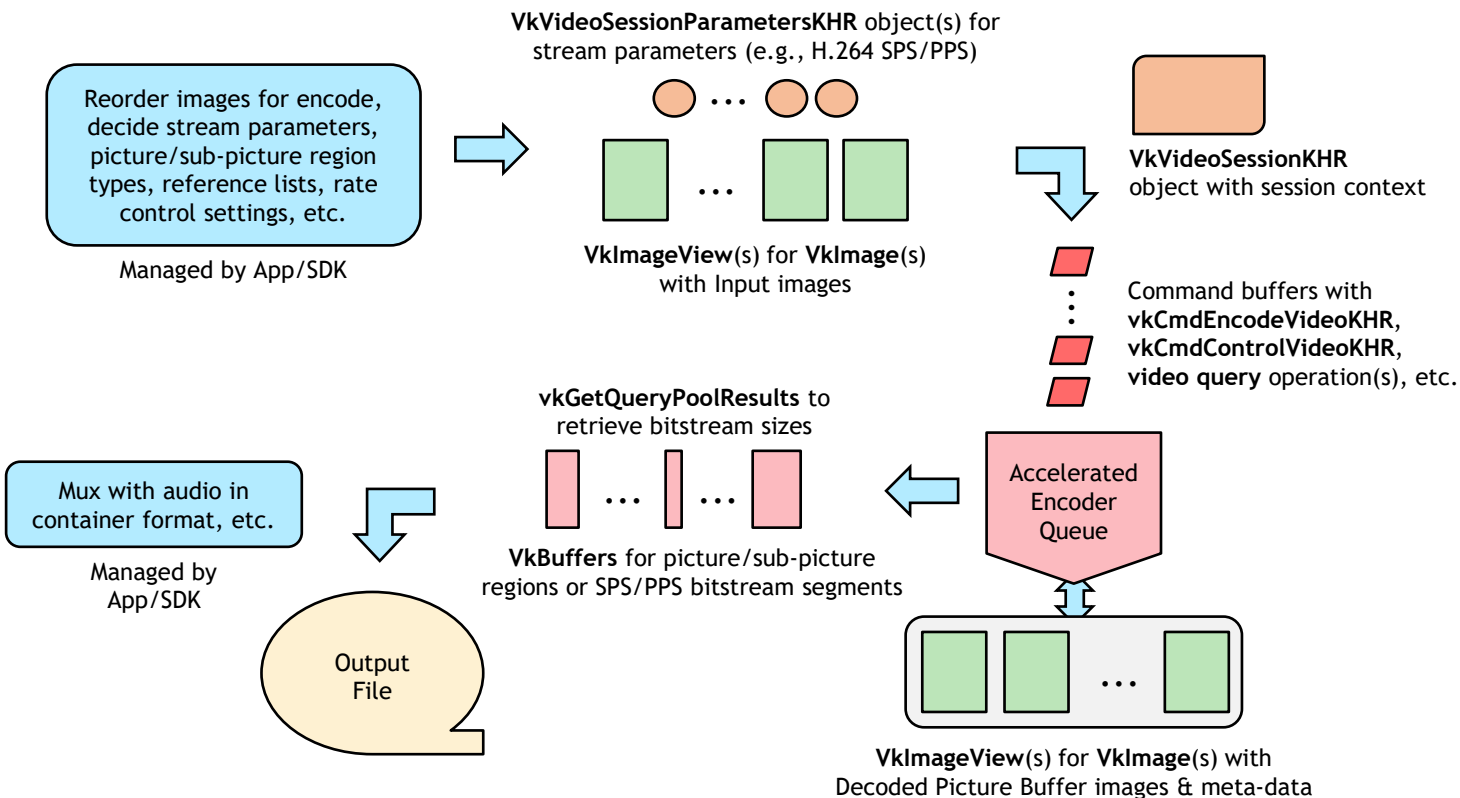
Stages in typical Vulkan Video decode & encode applications



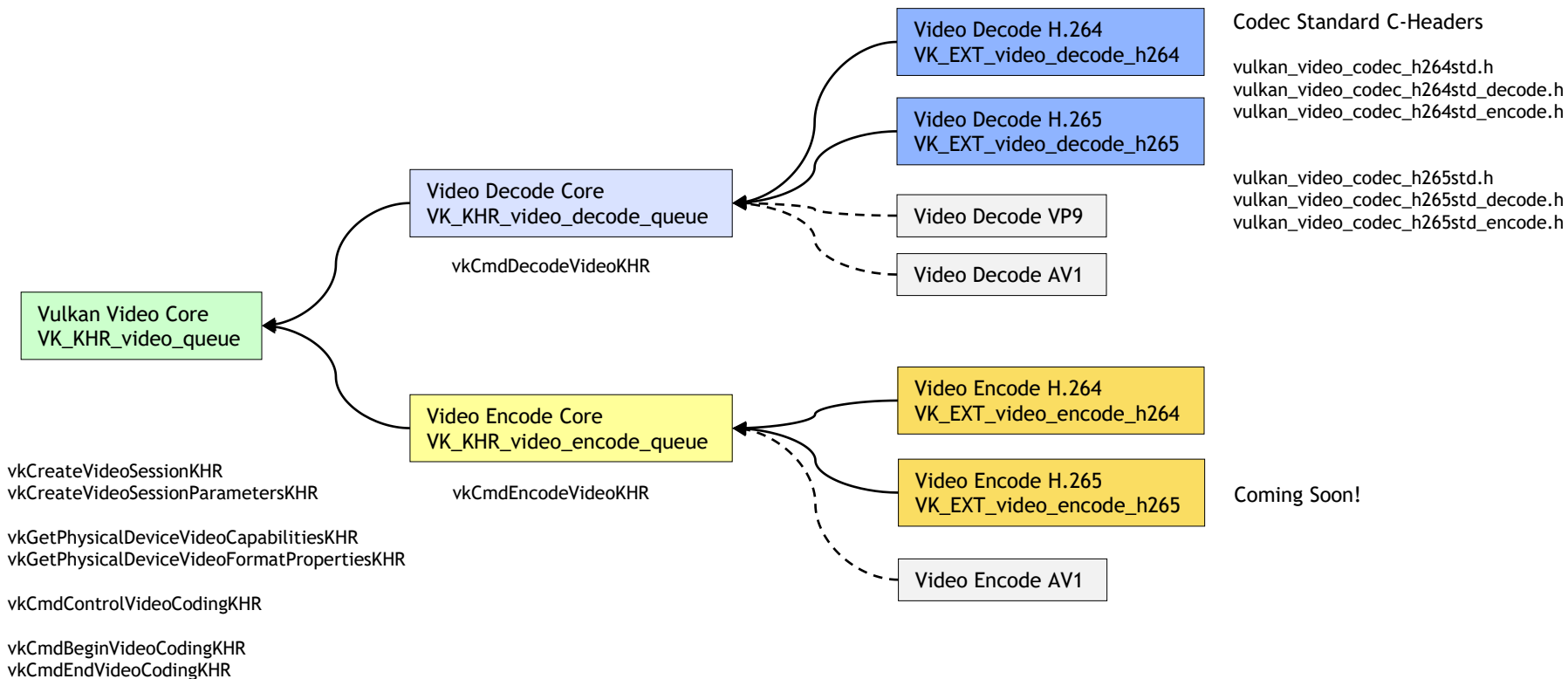
Vulkan Video Decode Process Details



Vulkan Video Encode Process Details



Vulkan Video Core and Codec Extensions



Next Steps

Vulkan Video Provisional Release Blog

- <https://www.khronos.org/blog/an-introduction-to-vulkan-video>

Provisional Vulkan Video extensions specifications

- [VK_KHR_video_queue](#)
- [VK_KHR_video_decode_queue](#)
- [VK_KHR_video_encode_queue](#)
- [VK_KHR_video_decode_h264](#)
- [VK_KHR_video_encode_h264](#)
- [VK_KHR_video_decode_h265](#)

[Khronos Vulkan Video GitHub Issue](#)

NVIDIA [beta Vulkan drivers](#) and [vk_video_decoder](#) sample decode app