

VkBuffer

```
typedef enum VkBufferCreateFlagBits {  
    VK_BUFFER_CREATE_SPARSE_BINDING_BIT = 0x00000001,  
    VK_BUFFER_CREATE_SPARSE_RESIDENCY_BIT = 0x00000002,  
    VK_BUFFER_CREATE_SPARSE_ALIASED_BIT = 0x00000004,  
    VK_BUFFER_CREATE_PROTECTED_BIT = 0x00000008,  
    VK_BUFFER_CREATE_DEVICE_ADDRESS_CAPTURE_REPLAY_BIT,  
    VK_BUFFER_CREATE_DESCRIPTOR_BUFFER_CAPTURE_REPLAY_BIT_EXT,  
    VK_BUFFER_CREATE_DEVICE_ADDRESS_CAPTURE_REPLAY_BIT_EXT,  
    VK_BUFFER_CREATE_DEVICE_ADDRESS_CAPTURE_REPLAY_BIT_KHR,  
} VkBufferCreateFlagBits;
```

```
typedef enum VkBufferUsageFlagBits {  
    VK_BUFFER_USAGE_TRANSFER_SRC_BIT = 0x00000001,  
    VK_BUFFER_USAGE_TRANSFER_DST_BIT = 0x00000002,  
    VK_BUFFER_USAGE_UNIFORM_TEXEL_BUFFER_BIT = 0x00000004,  
    VK_BUFFER_USAGE_STORAGE_TEXEL_BUFFER_BIT = 0x00000008,  
    VK_BUFFER_USAGE_UNIFORM_BUFFER_BIT = 0x00000010,  
    VK_BUFFER_USAGE_STORAGE_BUFFER_BIT = 0x00000020,  
    VK_BUFFER_USAGE_INDEX_BUFFER_BIT = 0x00000040,  
    VK_BUFFER_USAGE_VERTEX_BUFFER_BIT = 0x00000080,  
    VK_BUFFER_USAGE_INDIRECT_BUFFER_BIT = 0x00000100,  
    ...  
} VkBufferUsageFlagBits;
```

```
typedef enum VkSharingMode {  
    VK_SHARING_MODE_EXCLUSIVE = 0,  
    VK_SHARING_MODE_CONCURRENT = 1,  
} VkSharingMode;
```

VkBufferCreateInfo

```
sType = VK_STRUCTURE_TYPE_BUFFER_CREATE_INFO;  
pNext = nullptr;  
→ flags;  
size;  
→ usage;  
→ sharingMode;  
queueFamilyIndexCount;  
pQueueFamilyIndices
```

```
VkResult vkCreateBuffer(  
    VkDevice  
    → const VkBufferCreateInfo* pCreateInfo,  
    const VkAllocationCallbacks* pAllocator,  
    VkBuffer* pBuffer  
);
```

VkDevice

```
void vkDestroyBuffer(  
    VkDevice  
    VkBuffer  
    const VkAllocationCallbacks* pAllocator  
);
```

VkDevice

VkBuffer