

# VkPipeline

## VkGraphicsPipelineCreateInfo

```
sType = VK_STRUCTURE_TYPE_GRAPHICS_PIPELINE_CREATE_INFO;  
pNext = nullptr;  
flags = 0;  
stageCount;  
pStages;←  
pVertexInputState;←  
pInputAssemblyState;←  
pTessellationState;←  
pViewportState;←  
pRasterizationState;←  
pMultisampleState;←  
pDepthStencilState;←  
pColorBlendState;←  
pDynamicState;←  
layout;←  
renderPass;←  
subpass; // subpass number(index) in VkRenderPass  
basePipelineHandle; // VK_NULL_HANDLE  
basePipelineIndex; // 0
```

VkPipelineShaderStageCreateInfo

VkPipelineVertexInputStateCreateInfo

VkPipelineInputAssemblyStateCreateInfo

VkPipelineTessellationStateCreateInfo

VkPipelineViewportStateCreateInfo

VkPipelineRasterizationStateCreateInfo

VkPipelineMultisampleStateCreateInfo

VkPipelineDepthStencilStateCreateInfo

VkPipelineColorBlendStateCreateInfo

VkPipelineDynamicStateCreateInfo

VkPipelineLayout

VkRenderPass

## VkResult vkCreateGraphicsPipelines

```
VkDevice  
VkPipelineCache  
uint32_t  
const VkGraphicsPipelineCreateInfo* pCreateInfos,  
const VkAllocationCallbacks* pAllocator,  
VkPipeline*  
);
```

device;←**VkDevice**

pipelineCache = VK\_NULL\_HANDLE,

createInfoCount,

pCreateInfos,

pAllocator,

**pPipelines**→**VkPipeline**

## void vkDestroyPipeline

```
VkDevice  
VkPipeline  
const VkAllocationCallbacks* pAllocator);
```

device;←

pipeline;←

**VkDevice**

**VkPipeline**