DXVA2\_VideoDesc

描述视频流的格式

SampleFormat

描述视频帧的交错。 包含 [DXVA2\_SampleFormat](https://learn.microsoft.com/zh-cn/windows/desktop/api/dxva2api/ne-dxva2api-dxva2_sampleformat) 枚举中的值。

VideoChromaSubsampling

描述色度定位。 包含 [DXVA2\_VideoChromaSubSampling](https://learn.microsoft.com/zh-cn/windows/desktop/api/dxva2api/ne-dxva2api-dxva2_videochromasubsampling) 枚举中的值。

NominalRange

描述 Y'CbCr 或 RGB 颜色数据的名义范围。 包含 [DXVA2\_NominalRange](https://learn.microsoft.com/zh-cn/windows/desktop/api/dxva2api/ne-dxva2api-dxva2_nominalrange) 枚举中的值

DXVA2\_VideoProcessorCaps

DirectX 视频加速 (DVXA) 视频处理器模式的功能。

DeviceCaps

标识设备的类型。 定义了以下值。

DXVA2\_VPDev\_HardwareDevice

DXVA2\_VPDev\_HardwareDevice

InputPool

设备使用的 Direct3D 内存池。

NumForwardRefSamples

设备需要执行反交错的正向参考样本数。 对于 bob、渐进式扫描和软件设备，值为零。

NumBackwardRefSamples

设备需要执行反交错的后向参考样本数。 对于 bob、渐进式扫描和软件设备，值为零。

Reserved

保留。 必须为零。

DeinterlaceTechnology

标识设备使用的去隔行扫描技术。 此值是以下一个或多个标志的按位 OR 。

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name** | **Value** | **Type** |
| ◢ | g\_D3DPP | {BackBufferWidth=1136 BackBufferHeight=548 BackBufferFormat=D3DFMT\_X8R8G8B8 (22) ...} | \_D3DPRESENT\_PARAMETERS\_ |
|  | BackBufferWidth | 1136 | unsigned int |
|  | BackBufferHeight | 548 | unsigned int |
|  | BackBufferFormat | D3DFMT\_X8R8G8B8 (22) | \_D3DFORMAT |
|  | BackBufferCount | 1 | unsigned int |
|  | MultiSampleType | D3DMULTISAMPLE\_NONE (0) | \_D3DMULTISAMPLE\_TYPE |
|  | MultiSampleQuality | 0 | unsigned long |
|  | SwapEffect | D3DSWAPEFFECT\_DISCARD (1) | \_D3DSWAPEFFECT |
|  | ◢ hDeviceWindow | 0x00000000001b0458 {unused=0 } | HWND\_\_ \* |
|  | unused | 0 | int |
|  | Windowed | 1 | int |
|  | EnableAutoDepthStencil | 0 | int |
|  | AutoDepthStencilFormat | D3DFMT\_UNKNOWN (0) | \_D3DFORMAT |
|  | Flags | 17 | unsigned long |
|  | FullScreen\_RefreshRateInHz | 0 | unsigned int |
|  | PresentationInterval | 1 | unsigned int |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name** | **Value** | **Type** |
| ◢ | g\_VideoDesc | {SampleWidth=960 SampleHeight=640 SampleFormat={SampleFormat=2 VideoChromaSubsampling=5 NominalRange=...} ...} | \_DXVA2\_VideoDesc |
|  | SampleWidth | 960 | unsigned int |
|  | SampleHeight | 640 | unsigned int |
|  | ◢ SampleFormat | {SampleFormat=2 VideoChromaSubsampling=5 NominalRange=2 ...} | \_DXVA2\_ExtendedFormat |
|  | SampleFormat | 2 | unsigned int |
|  | VideoChromaSubsampling | 5 | unsigned int |
|  | NominalRange | 2 | unsigned int |
|  | VideoTransferMatrix | 2 | unsigned int |
|  | VideoLighting | 3 | unsigned int |
|  | VideoPrimaries | 2 | unsigned int |
|  | VideoTransferFunction | 5 | unsigned int |
|  | value | 680338690 | unsigned int |
|  | Format | D3DFMT\_YUY2 (844715353) | \_D3DFORMAT |
|  | ◢ InputSampleFreq | {Numerator=60 Denominator=1 } | \_DXVA2\_Frequency |
|  | Numerator | 60 | unsigned int |
|  | Denominator | 1 | unsigned int |
|  | ◢ OutputFrameFreq | {Numerator=60 Denominator=1 } | \_DXVA2\_Frequency |
|  | Numerator | 60 | unsigned int |
|  | Denominator | 1 | unsigned int |
|  | UABProtectionLevel | 0 | unsigned int |
|  | Reserved | 0 | unsigned int |

DXVA2\_VideoSample samples[2]::

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name** | **Value** | **Type** |
| ◢ | samples | 0x000000000014faf0 {{Start=0x000000012d8813e0 End=0x000000012d8aabf0 SampleFormat={SampleFormat=0x00000002 ...} ...}, ...} | \_DXVA2\_VideoSample[0x00000002] |
|  | ◢ [0x00000000] | {Start=0x000000012d8813e0 End=0x000000012d8aabf0 SampleFormat={SampleFormat=0x00000002 VideoChromaSubsampling=...} ...} | \_DXVA2\_VideoSample |
|  | Start | 0x000000012d8813e0 | \_\_int64 |
|  | End | 0x000000012d8aabf0 | \_\_int64 |
|  | ◢ SampleFormat | {SampleFormat=0x00000002 VideoChromaSubsampling=0x00000005 NominalRange=0x00000002 ...} | \_DXVA2\_ExtendedFormat |
|  | SampleFormat | 0x00000002 | unsigned int |
|  | VideoChromaSubsampling | 0x00000005 | unsigned int |
|  | NominalRange | 0x00000002 | unsigned int |
|  | VideoTransferMatrix | 0x00000002 | unsigned int |
|  | VideoLighting | 0x00000003 | unsigned int |
|  | VideoPrimaries | 0x00000002 | unsigned int |
|  | VideoTransferFunction | 0x00000005 | unsigned int |
|  | value | 0x288d2502 | unsigned int |
|  | ▶ SrcSurface | 0x000000000323ef78 <Information not available, no symbols loaded for d3d9.dll> | IDirect3DSurface9 \* |
|  | ◢ SrcRect | {LT(0x00000000, 0x00000000) RB(0x000003c0, 0x00000280) [0x000003c0 x 0x00000280]} | tagRECT |
|  | left | 0x00000000 | long |
|  | top | 0x00000000 | long |
|  | right | 0x000003c0 | long |
|  | bottom | 0x00000280 | long |
|  | ◢ DstRect | {LT(0x00000000, 0x00000000) RB(0x00000470, 0x00000224) [0x00000470 x 0x00000224]} | tagRECT |
|  | left | 0x00000000 | long |
|  | top | 0x00000000 | long |
|  | right | 0x00000470 | long |
|  | bottom | 0x00000224 | long |
|  | ▶ Pal | 0x000000000014fb30 {{Cr=0x00 '\0' Cb=0x00 '\0' Y=0x00 '\0' ...}, {Cr=0x00 '\0' Cb=0x00 '\0' Y=0x00 '\0' ...}, ...} | \_DXVA2\_AYUVSample8[0x00000010] |
|  | ▶ PlanarAlpha | {Fraction=0x0000 Value=0x0001 ll=0x00010000 } | \_DXVA2\_Fixed32 |
|  | SampleData | 0x00000000 | unsigned long |
|  | ◢ [0x00000001] | {Start=0x000000012d8813e0 End=0x000000012d8aabf0 SampleFormat={SampleFormat=0x00000007 VideoChromaSubsampling=...} ...} | \_DXVA2\_VideoSample |
|  | Start | 0x000000012d8813e0 | \_\_int64 |
|  | End | 0x000000012d8aabf0 | \_\_int64 |
|  | ▶ SampleFormat | {SampleFormat=0x00000007 VideoChromaSubsampling=0x00000005 NominalRange=0x00000002 ...} | \_DXVA2\_ExtendedFormat |
|  | ▶ SrcSurface | 0x000000000323f2b8 <Information not available, no symbols loaded for d3d9.dll> | IDirect3DSurface9 \* |
|  | ▶ SrcRect | {LT(0x00000000, 0x00000000) RB(0x00000100, 0x00000080) [0x00000100 x 0x00000080]} | tagRECT |
|  | ▶ DstRect | {LT(0x0000021d, 0x0000009f) RB(0x0000034c, 0x0000010c) [0x0000012f x 0x0000006d]} | tagRECT |
|  | ▶ Pal | 0x000000000014fbb8 {{Cr=0x00 '\0' Cb=0x00 '\0' Y=0x00 '\0' ...}, {Cr=0x00 '\0' Cb=0x00 '\0' Y=0x00 '\0' ...}, ...} | \_DXVA2\_AYUVSample8[0x00000010] |
|  | ▶ PlanarAlpha | {Fraction=0x0000 Value=0x0001 ll=0x00010000 } | \_DXVA2\_Fixed32 |
|  | SampleData | 0x00000000 | unsigned long |

DXVA2\_VideoProcessBltParams blt::

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name** | **Value** | **Type** |
| ◢ | blt | {TargetFrame=0x000000012d8813e0 TargetRect={LT(0x00000000, 0x00000000) RB(0x00000470, 0x00000224) [0x00000470 x 0x00000224]} ...} | \_DXVA2\_VideoProcessBltParams |
|  | TargetFrame | 0x000000012d8813e0 | \_\_int64 |
|  | ◢ TargetRect | {LT(0x00000000, 0x00000000) RB(0x00000470, 0x00000224) [0x00000470 x 0x00000224]} | tagRECT |
|  | left | 0x00000000 | long |
|  | top | 0x00000000 | long |
|  | right | 0x00000470 | long |
|  | bottom | 0x00000224 | long |
|  | ◢ ConstrictionSize | {cx=0x00000470 cy=0x00000224 } | tagSIZE |
|  | cx | 0x00000470 | long |
|  | cy | 0x00000224 | long |
|  | StreamingFlags | 0x00000000 | unsigned int |
|  | ◢ BackgroundColor | {Cr=0x8000 Cb=0x8000 Y=0xeb00 ...} | \_DXVA2\_AYUVSample16 |
|  | Cr | 0x8000 | unsigned short |
|  | Cb | 0x8000 | unsigned short |
|  | Y | 0xeb00 | unsigned short |
|  | Alpha | 0xffff | unsigned short |
|  | ◢ DestFormat | {SampleFormat=0x00000002 VideoChromaSubsampling=0x00000000 NominalRange=0x00000000 ...} | \_DXVA2\_ExtendedFormat |
|  | SampleFormat | 0x00000002 | unsigned int |
|  | VideoChromaSubsampling | 0x00000000 | unsigned int |
|  | NominalRange | 0x00000000 | unsigned int |
|  | VideoTransferMatrix | 0x00000000 | unsigned int |
|  | VideoLighting | 0x00000003 | unsigned int |
|  | VideoPrimaries | 0x00000002 | unsigned int |
|  | VideoTransferFunction | 0x00000005 | unsigned int |
|  | value | 0x288c0002 | unsigned int |
|  | ◢ ProcAmpValues | {Brightness={Fraction=0x0000 Value=0x0000 ll=0x00000000 } Contrast={Fraction=0x0000 Value=0x0001 ll=...} ...} | \_DXVA2\_ProcAmpValues |
|  | ▶ Brightness | {Fraction=0x0000 Value=0x0000 ll=0x00000000 } | \_DXVA2\_Fixed32 |
|  | ▶ Contrast | {Fraction=0x0000 Value=0x0001 ll=0x00010000 } | \_DXVA2\_Fixed32 |
|  | ▶ Hue | {Fraction=0x0000 Value=0x0000 ll=0x00000000 } | \_DXVA2\_Fixed32 |
|  | ▶ Saturation | {Fraction=0x0000 Value=0x0001 ll=0x00010000 } | \_DXVA2\_Fixed32 |
|  | ◢ Alpha | {Fraction=0x0000 Value=0x0001 ll=0x00010000 } | \_DXVA2\_Fixed32 |
|  | Fraction | 0x0000 | unsigned short |
|  | Value | 0x0001 | short |
|  | ll | 0x00010000 | long |
|  | ▶ NoiseFilterLuma | {Level={Fraction=0x0000 Value=0x0000 ll=0x00000000 } Threshold={Fraction=0x0000 Value=0x0000 ll=0x00000000 } ...} | \_DXVA2\_FilterValues |
|  | ▶ NoiseFilterChroma | {Level={Fraction=0x0000 Value=0x0000 ll=0x00000000 } Threshold={Fraction=0x0000 Value=0x0000 ll=0x00000000 } ...} | \_DXVA2\_FilterValues |
|  | ▶ DetailFilterLuma | {Level={Fraction=0x0000 Value=0x0000 ll=0x00000000 } Threshold={Fraction=0x0000 Value=0x0000 ll=0x00000000 } ...} | \_DXVA2\_FilterValues |
|  | ▶ DetailFilterChroma | {Level={Fraction=0x0000 Value=0x0000 ll=0x00000000 } Threshold={Fraction=0x0000 Value=0x0000 ll=0x00000000 } ...} | \_DXVA2\_FilterValues |
|  | DestData | 0x00000000 | unsigned long |