Enumeration

vImage

An enumeration that acts as a namespace for Swift overlays to vImage.

iOS 13.0+ | iPadOS 13.0+ | Mac Catalyst | macOS 10.15+ | tvOS 13.0+ | visionOS | watchOS 6.0+

```
enum vImage
```

Topics

Type Aliases

`typealias StructuringElement`

A 2D matrix that represents a morphology kernel.

`struct ConvolutionKernel`

Constants that describe 1D convolution kernels.

`struct ConvolutionKernel2D`

A 2D matrix that represents a convolution kernel.

`struct DynamicPixelFormat`

A buffer that contains pixels with a data type that’s unknown at compile time.

`struct Interleaved16Fx2`

A two-channel, 16-bit-per-channel, floating-point interleaved buffer.

`struct Interleaved16Fx4`

A four-channel, 16-bit-per-channel, floating-point interleaved buffer.

`struct Interleaved16Ux2`

A two-channel, 16-bit-per-channel, unsigned-integer interleaved buffer.

`struct Interleaved16Ux4`

A four-channel, 16-bit-per-channel, unsigned-integer interleaved buffer.

`struct Interleaved8x2`

A two-channel, 8-bit-per-channel interleaved buffer.

`struct Interleaved8x3`

A three-channel, 8-bit-per-channel interleaved buffer.

`struct Interleaved8x4`

A four-channel, 8-bit-per-channel interleaved buffer.

`struct InterleavedFx2`

A two-channel, 32-bit-per-channel, floating-point interleaved buffer.

`struct InterleavedFx3`

A three-channel, 32-bit-per-channel, floating-point interleaved buffer.

`struct InterleavedFx4`

A four-channel, 32-bit-per-channel, floating-point interleaved buffer.

`struct MultidimensionalLookupTable`

A multidimensional lookup table.

`struct Options`

Set flags on vImage operations to specify processing options.

`struct PixelBuffer`

An image buffer that stores an image's pixel data, dimensions, bit depth, and number of channels.

`struct Planar16F`

A single-channel, 16-bit-per-channel, floating-point buffer.

`struct Planar16U`

A single-channel, 16-bit-per-channel, unsigned-integer buffer.

`struct Planar8`

A single-channel, 8-bit-per-channel, unsigned-integer buffer.

`struct` `Planar8x2`

A pixel buffer that contains two homogeneous 8-bit planes, for example, CbCr.

`struct` `Planar8x3`

A pixel buffer that contains three homogeneous 8-bit planes, for example, RGB.

`struct` `Planar8x4`

A pixel buffer that contains four homogeneous 8-bit planes, for example, RGBA or CMYK.

`struct` `PlanarF`

A single-channel, 32-bit-per-channel, floating-point buffer.

`struct` `PlanarFx2`

A pixel buffer that contains two homogeneous 32-bit, floating-point planes, for example, CbCr.

`struct` `PlanarFx3`

A pixel buffer that contains three homogeneous 32-bit, floating-point planes, for example, RGB.

`struct` `PlanarFx4`

A pixel buffer that contains four homogeneous 32-bit, floating-point planes, for example, RGBA or CMYK.

`struct` `Size`

A structure that contains width and height values.

Enumerations

`enum` `BlendMode`

Constants that specify an alpha blending mode.

`enum` `BufferType`

Codes that represent vImage buffer types.

`enum` `ChannelOrdering`

Constants that specify the channel ordering of a pixel buffer.

`enum` `CompositeMode`

Constants that specify whether the format of layers is premultiplied or nonpremultiplied.

`enum` `EdgeMode`

Constants that specify edge modes for convolution operations.

`enum Error`

An error that occurs during a vImage operation.

`enum FloodFillConnectivity`

`enum Gamma`

Describes either a used-defined or constant gamma.

`enum MorphologyOperation`

Describes which morphology operation to perform.

`enum ReflectionAxis`

The axis to reflect an image.

`enum Rotation`

The angle to rotate an image.

`enum ShearDirection`

The shear direction.

Protocols

`protocol InitializableFromCGImage`

A pixel format that supports initialization from a Core Graphics image.

`protocol MultiplePlanePixelFormat`

A pixel format that contains multiple homogeneous planes represented by multiple underlying vImage buffers.

`protocol PixelFormat`

A pixel buffer pixel format.

`protocol SinglePlanePixelFormat`

A pixel format that contains a single underlying vImage buffer.

`protocol StaticPixelFormat`

A pixel format that’s known at compile time.