API Collection

Data Types and Constants

Look up type aliases, data types, and constants the vImage library uses.

Overview

The vImage library defines data types for planar and interleaved pixel types, a resampling callback filter, and an affine transform. vImage provides constants that specify errors and flags that you pass to a function to specify a variety of processing options.

Topics

Pixel Formats

`typealias` `Pixel_8`

A type for a planar, 8-bits-per-channel, unsigned pixel.

`typealias` `Pixel_88`

A type for a two-channel, 8-bits-per-channel, unsigned pixel.

`typealias` `Pixel_8888`

A type for a four-channel, 8-bits-per-channel, unsigned pixel.

`typealias` `Pixel_F`

A type for a planar, 32-bits-per-channel, floating-point pixel.

`typealias` `Pixel_FFFF`

A type for a four-channel, 32-bits-per-channel, floating-point pixel.

`typealias` `Pixel_32U`

A type you use for the XRGB2101010 format.

`typealias` `Pixel_16U`

A type for a planar, 16-bits-per-channel, unsigned pixel.

`typealias` `Pixel_ARGB_16U`

A type for a four-channel, 16-bits-per-channel, unsigned pixel.

`typealias` `Pixel_16U16U`

A type for a two-channel, 16-bits-per-channel, unsigned pixel.

`typealias` `Pixel_16Q12`

A type for a signed 16-bit, fixed-point number with 12 bits of fractional precision.

`typealias` `Pixel_16S`

A type for a planar, 16-bits-per-channel, signed pixel.

`typealias` `Pixel_ARGB_16S`

A type for a four-channel, 16-bits-per-channel, signed pixel.

`typealias` `Pixel_16F`

`typealias` `Pixel_16F16F`

`typealias` `Pixel_16S16S`

`typealias` `Pixel_ARGB_16F`

`typealias` `Pixel_FF`

Data Types

`struct` `vImage_Buffer`

An image buffer that stores an image's pixel data, dimensions, and row stride.

`typealias` `vImagePixelCount`

A type for the number of pixels.

`struct` `vImage_AffineTransform`

A structure for values that represent an affine transformation.

`struct` `vImage_AffineTransform_Double`

A structure for values that represent a double-precision affine transformation.

`typealias` `vImage_CGAffineTransform`

A structure for values that represent a Core Graphics–compatible affine transformation.

`typealias` `vImage_Error`

A type for image errors.

`typealias` `vImage_Flags`

A type for processing options.

`typealias` `GammaFunction`

A type for a gamma function.

`typealias` `ResamplingFilter`

A pointer to a resampling filter callback function.

Constants

Error codes

Error codes that vImage functions return when an operation fails.

Core Video Image Format Errors

Processing Flags

Set flags on vImage operations to specify processing options.

Dithering Methods

Specify the dithering method some vImage conversion functions use.

Availability Flags

Obtain the availability of particular vImage features.

Decode Arrays

Specify the decode array constant to use with 16Q12-formatted data.

Buffer Types

Look up buffer type codes vImage conversions provide.

`typealias` `vImageMatrixType`

An enumeration of RGB -> Y′CbCr conversion matrix types.

`typealias` `vImage_WarpInterpolation`

Constants for selecting the interpolation mode

See Also

Related Documentation

vImage Programming Guide