

[Accelerate](#) / [vImage_Buffer](#) / init(cgImage:format:flags:)

Initializer

init(cgImage:format:flags:)

Creates a new buffer with the contents of a Core Graphics image using the supplied image format.

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

```
init(  
    cgImage: CGImage,  
    format: vImage_CGImageFormat,  
    flags options: vImage.Options = .noFlags  
) throws
```

Parameters

cgImage

The source image.

format

The desired image format.

options

The options to use when performing the operation.

Mentioned in

 [Creating and Populating Buffers from Core Graphics Images](#)

Discussion

This function converts the source Core Graphics image that the `cgImage` parameter specifies to the format that the `format` parameter describes.

For example, the following code converts a color image to grayscale and initializes the `vImage` buffer with the planar monochrome image data:

```
let format = vImage_CGImageFormat(  
    bitsPerComponent: 8,  
    bitsPerPixel: 8,  
    colorSpace: CGColorSpaceCreateDeviceGray(),  
    bitmapInfo: CGBitmapInfo(rawValue: CGImageAlphaInfo.none.rawValue))!  
  
// `cgImage` is a color image.  
let buffer = try vImage_Buffer(cgImage: cgImage,  
                               format: format)
```

See Also

Consuming and producing Core Graphics images

`init(cgImage: CGImage, flags: vImage.Options) throws`

Creates a new buffer with the contents of a Core Graphics image.

`func createCGImage(format: vImage_CGImageFormat, flags: vImage.Options) throws -> CGImage`

Creates a Core Graphics image from the `vImage` buffer.