

[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.