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API Collection

# Flattening data

Perform an alpha composite of a four-channel image over a solid background color.

## Topics

### Flattening 4-channel, 8-bit images

```
func vImageFlatten_ARGB8888(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<UInt8>, Bool, vImage_Flags) -> vImage_Error
```

Performs an alpha composite of an 8-bit-per-channel, 4-channel ARGB buffer over a solid background color.

```
func vImageFlatten_RGBA8888(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<UInt8>, Bool, vImage_Flags) -> vImage_Error
```

Performs an alpha composite of an 8-bit-per-channel, 4-channel RGBA buffer over a solid background color.

### Flattening 4-channel, 8-bit images to three channels

```
func vImageFlatten_ARGB8888ToRGB888(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<UInt8>, Bool, vImage_Flags) -> vImage_Error
```

Flattens an 8-bit-per-channel ARGB buffer against a solid background to produce an 8-bit-per-channel RGB result.

```
func vImageFlatten_BGRA8888ToRGB888(UnsafePointer<vImage_Buffer>,
UnsafePointer<vImage_Buffer>, UnsafePointer<UInt8>, Bool, vImage_Flags)
-> vImage_Error
```

Flattens an 8-bit-per-channel BGRA buffer against a solid background to produce an 8-bit-per-channel RGB result.

```
vImageFlatten_BGRA8888ToBGR888
```

Flattens an 8-bit-per-channel BGRA buffer against a solid background to produce an 8-bit-per-channel BGR result.

```
func vImageFlatten_RGBA8888ToRGB888(UnsafePointer<vImage_Buffer>,
UnsafePointer<vImage_Buffer>, UnsafePointer<UInt8>, Bool, vImage_Flags)
-> vImage_Error
```

Flattens an 8-bit-per-channel RGBA buffer against a solid background to produce an 8-bit-per-channel RGB result.

```
vImageFlatten_RGBA8888ToBGR888
```

Flattens an 8-bit-per-channel RGBA buffer against a solid background to produce an 8-bit-per-channel BGR result.

## Flattening 4-channel,16-bit images

```
func vImageFlatten_ARGB16U(UnsafePointer<vImage_Buffer>, UnsafePointer<
vImage_Buffer>, UnsafePointer<UInt16>, Bool, vImage_Flags) -> vImage
_Error
```

Performs an alpha composite of an unsigned 16-bit-per-channel, 4-channel ARGB buffer over a solid background color.

```
func vImageFlatten_RGBA16U(UnsafePointer<vImage_Buffer>, UnsafePointer<
vImage_Buffer>, UnsafePointer<UInt16>, Bool, vImage_Flags) -> vImage
_Error
```

Performs an alpha composite of an unsigned 16-bit-per-channel, 4-channel RGBA buffer over a solid background color.

```
func vImageFlatten_RGBA16Q12(UnsafePointer<vImage_Buffer>, Unsafe
Pointer<vImage_Buffer>, UnsafePointer<Int16>, Bool, vImage_Flags) -> v
Image_Error
```

Performs an alpha composite of a fixed-point 16-bit-per-channel, 4-channel RGBA buffer over a solid background color.

```
func vImageFlatten_ARGB16Q12(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Int16>, Bool, vImage_Flags) -> vImage_Error
```

Performs an alpha composite of a fixed-point 16-bit-per-channel, 4-channel ARGB buffer over a solid background color.

## Flattening 4-channel, 32-bit images

```
func vImageFlatten_ARGBFFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Float>, Bool, vImage_Flags) -> vImage_Error
```

Performs an alpha composite of a 32-bit-per-channel, 4-channel ARGB buffer over a solid background color.

```
func vImageFlatten_RGBAFFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Float>, Bool, vImage_Flags) -> vImage_Error
```

Performs an alpha composite of a 32-bit-per-channel, 4-channel RGBA buffer over a solid background color.

## Flattening 4-channel, 32-bit images to three channels

```
func vImageFlatten_ARGBFFFFToRGBFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Float>, Bool, vImage_Flags) -> vImage_Error
```

Flattens a 32-bit-per-channel ARGB buffer against a solid background to produce a 32-bit-per-channel RGB result.

```
func vImageFlatten_BGRAFFFFToRGBFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Float>, Bool, vImage_Flags) -> vImage_Error
```

Flattens a 32-bit-per-channel BGRA buffer against a solid background to produce a 32-bit-per-channel RGB result.

```
func vImageFlatten_RGBAFFFFToRGBFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafePointer<Float>, Bool, vImage_Flags) -> vImage_Error
```

Flattens a 32-bit-per-channel RGBA buffer against a solid background to produce a 32-bit-per-channel RGB result.