Conversion

Convert an image to a different format.

Topics

Converting any-to-any

- Building a basic image conversion workflow

  Learn the fundamentals of the convert-any-to-any function by converting a CMYK image to an RGB image.

- Converting chroma-subsampled images

  Create vImage buffers with the correct dimensions to convert to and from images with subsampled chroma information.

- Functions that perform any-to-any conversion

  Convert between Core Video or Core Graphics image data of arbitrary color spaces and bit depths.

Type conversion

- Functions that convert between integer planar buffers

  Convert the bit depths of planar integer image data.

- Functions that convert between integer interleaved buffers

  Convert the bit depths of interleaved integer image data.

- Functions that convert from integer planar buffers to noninteger planar buffers

  Convert planar integer image data to fixed- and floating-point format.

- Functions that convert from integer interleaved buffers to noninteger interleaved buffers
  Convert interleaved integer image data to fixed- and floating-point format.
- Functions that convert between noninteger planar buffers
  Convert the bit depths and formats of planar fixed- and floating-point image data.
- Functions that convert between noninteger interleaved buffers
  Convert the bit depths and formats of interleaved fixed- and floating-point image data.
- Functions that convert from noninteger planar buffers to integer planar buffers
  Convert planar fixed- and floating-point image data to integer format.
- Functions that convert from noninteger interleaved buffers to integer interleaved buffers
  Convert interleaved fixed- and floating-point image data to integer format.

Converting between interleaved and planar formats

- Functions that interleave integer planar buffers
  Combine discrete integer planar buffers into an interleaved buffer.
- Functions that interleave noninteger planar buffers
  Combine discrete fixed- and floating-point planar buffers into an interleaved buffer.
- Functions that deinterleave integer interleaved buffers
  Separate integer interleaved buffers into discrete planar buffers.
- Functions that deinterleave noninteger interleaved buffers
  Separate fixed- and floating-point interleaved buffers into discrete planar buffers.

Adding and removing alpha channels

- Functions that add an alpha channel to three-channel buffers
  Add a constant alpha value or planar alpha buffer to an RGB image.
- Functions that remove an alpha channel from four-channel buffers
  Remove the alpha channel from an RGBA or ARGB buffer.

Converting between YCbCr and RGB color spaces

- Functions that convert from YCbCr to RGB

Convert image data represented by luma, blue-difference, and red-difference channels to red, green, and blue channels.

Functions that convert from RGB to YCbCr

Convert image data represented by red, green, and blue channels to luma, blue-difference, and red-difference channels.

See Also

Conversion Between Image Formats

Building a basic image conversion workflow

Learn the fundamentals of the convert-any-to-any function by converting a CMYK image to an RGB image.

Converting color images to grayscale

Convert an RGB image to grayscale using matrix multiplication.

Applying color transforms to images with a multidimensional lookup table

Precompute translation values to optimize color space conversion and other pointwise operations.

Building a basic image conversion workflow

Learn the fundamentals of the convert-any-to-any function by converting a CMYK image to an RGB image.

Converting luminance and chrominance planes to an ARGB image

Create a displayable ARGB image using the luminance and chrominance information from your device's camera.