

[Video Toolbox](#) / Frame processing

API Collection

Frame processing

An interface for accessing a range of different video-processing features.

Overview

A Configuration object defines each processor implementation by passing initialization and configuration parameters for the processor, and a Parameter object provides the parameters for each individual processing operation.

Topics

Frame processor

{ } Enhancing your app with machine learning-based video effects

Add powerful effects to your videos using the VideoToolbox VTFrameProcessor API.

`class VTFrameProcessor`

A class that creates a new frame processor for the configured video effect.

`class VTFrameProcessorFrame`

An object that wraps video frames to send to the processor, as source, reference, or output frames.

`protocol VTFrameProcessorConfiguration`

A protocol that describes the configuration of a processor to use during a video processing session.

```
protocol VTFrameProcessorParameters
```

The base protocol for input and output processing parameters for a frame processor implementation.

Frame rate conversion

```
class VTFrameRateConversionConfiguration
```

An object that enables the frame rate conversion on a frame processing session.

```
class VTFrameRateConversionParameters
```

An object that contains the required input and output parameters to run a frame rate conversion processor on a frame.

Optical flow

```
class VTFrameProcessorOpticalFlow
```

A class to wrap bidirectional optical flow to send to the processor.

```
class VTOpticalFlowConfiguration
```

A configuration object that enables optical flow on a frame processing session.

```
class VTOpticalFlowParameters
```

An object that describes frame-level optical flow parameters.

Motion blur

```
class VTMotionBlurConfiguration
```

A configuration object to enable motion blur on a frame processing session.

```
class VTMotionBlurParameters
```

This object contains both input and output parameters necessary to run the motion blur processor on a frame.

Errors

```
struct VTFrameProcessorError
```

Error codes generated by a frame processor.

```
let VTFrameProcessorErrorDomain: String
```

The error domain of Video Toolbox errors.