

[Metal](#) / MTLComputePassSampleBufferAttachmentDescriptor

## Class

# MTLComputePassSampleBufferAttachmentDescriptor

A configuration that instructs the GPU where to store counter data from the beginning and end of a compute pass.

iOS 14.0+ | iPadOS 14.0+ | Mac Catalyst 14.0+ | macOS 11.0+ | tvOS 14.0+ | visionOS 1.0+

```
class MTLComputePassSampleBufferAttachmentDescriptor
```

## Mentioned in

 [Sampling GPU data into counter sample buffers](#)

## Overview

For more context about configuring sample buffer attachments for compute passes, see [Sampling GPU data into counter sample buffers](#). That article is one of a series in [GPU counters and counter sample buffers](#) about sampling Metal hardware counters for performance measurement.

## Topics

### Configuring the sample buffer attachment

```
var sampleBuffer: (any MTLCounterSampleBuffer)?
```

A specialized memory buffer that the GPU uses to store its counter data during a compute pass.

`var startOfEncoderSampleIndex: Int`

An index within a counter sample buffer that tells the GPU where to store counter data from the start of a compute pass.

`var endOfEncoderSampleIndex: Int`

An index within a counter sample buffer that tells the GPU where to store counter data from the end of a compute pass.

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## Relationships

### Inherits From

`NSObject`

### Conforms To

`CVarArg`  
`CustomDebugStringConvertible`  
`CustomStringConvertible`  
`Equatable`  
`Hashable`  
`NSCopying`  
`NSObjectProtocol`

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## See Also

### Configuring a compute pass

`class MTLComputePassDescriptor`

A description of how to dispatch execution of pass commands and GPU performance sampling.

`enum MTLDispatchType`

The type of dispatch method to use when calling encoded functions.

`struct MTLDispatchThreadgroupsIndirectArguments`

The data layout required for arguments needed to specify the size of threadgroups.

`class MTLComputePassSampleBufferAttachmentDescriptorArray`

A container that stores an array of sample buffer attachments for a compute pass.