| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/awt/image/SampleModel.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/awt/image//class-useSampleModel.html)    [**NO FRAMES**](http://docs.google.com/SampleModel.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**java.awt.image.SampleModel**

| Packages that use [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
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| [**java.awt.image**](#3znysh7) | Provides classes for creating and modifying images. |
| [**javax.imageio**](#2et92p0) | The main package of the Java Image I/O API. |

| Uses of [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) | |
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| Subclasses of [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) | |
| --- | --- |
| class | [**BandedSampleModel**](http://docs.google.com/java/awt/image/BandedSampleModel.html)            This class represents image data which is stored in a band interleaved fashion and for which each sample of a pixel occupies one data element of the DataBuffer. |
| class | [**ComponentSampleModel**](http://docs.google.com/java/awt/image/ComponentSampleModel.html)            This class represents image data which is stored such that each sample of a pixel occupies one data element of the DataBuffer. |
| class | [**MultiPixelPackedSampleModel**](http://docs.google.com/java/awt/image/MultiPixelPackedSampleModel.html)            The MultiPixelPackedSampleModel class represents one-banded images and can pack multiple one-sample pixels into one data element. |
| class | [**PixelInterleavedSampleModel**](http://docs.google.com/java/awt/image/PixelInterleavedSampleModel.html)            This class represents image data which is stored in a pixel interleaved fashion and for which each sample of a pixel occupies one data element of the DataBuffer. |
| class | [**SinglePixelPackedSampleModel**](http://docs.google.com/java/awt/image/SinglePixelPackedSampleModel.html)            This class represents pixel data packed such that the N samples which make up a single pixel are stored in a single data array element, and each data data array element holds samples for only one pixel. |

| Fields in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) declared as [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
| --- | --- |
| protected  [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **Raster.**[**sampleModel**](http://docs.google.com/java/awt/image/Raster.html#sampleModel)            The SampleModel that describes how pixels from this Raster are stored in the DataBuffer. |

| Methods in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) that return [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
| --- | --- |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **PixelInterleavedSampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/PixelInterleavedSampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a new PixelInterleavedSampleModel with the specified width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **MultiPixelPackedSampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/MultiPixelPackedSampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a new MultiPixelPackedSampleModel with the specified width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **BandedSampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/BandedSampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a new BandedSampleModel with the specified width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **PackedColorModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/PackedColorModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a SampleModel with the specified width and height that has a data layout compatible with this ColorModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ComponentSampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/ComponentSampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a new ComponentSampleModel with the specified width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **SinglePixelPackedSampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/SinglePixelPackedSampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a new SinglePixelPackedSampleModel with the specified width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ComponentColorModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/ComponentColorModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a SampleModel with the specified width and height, that has a data layout compatible with this ColorModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **IndexColorModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/IndexColorModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a SampleModel with the specified width and height that has a data layout compatible with this ColorModel. |
| abstract  [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **SampleModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/SampleModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a SampleModel which describes data in this SampleModel's format, but with a different width and height. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ColorModel.**[**createCompatibleSampleModel**](http://docs.google.com/java/awt/image/ColorModel.html#createCompatibleSampleModel(int,%20int))(int w, int h)            Creates a SampleModel with the specified width and height that has a data layout compatible with this ColorModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **PixelInterleavedSampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/PixelInterleavedSampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            Creates a new PixelInterleavedSampleModel with a subset of the bands of this PixelInterleavedSampleModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **MultiPixelPackedSampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/MultiPixelPackedSampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            Creates a new MultiPixelPackedSampleModel with a subset of the bands of this MultiPixelPackedSampleModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **BandedSampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/BandedSampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            Creates a new BandedSampleModel with a subset of the bands of this BandedSampleModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ComponentSampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/ComponentSampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            Creates a new ComponentSampleModel with a subset of the bands of this ComponentSampleModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **SinglePixelPackedSampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/SinglePixelPackedSampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            This creates a new SinglePixelPackedSampleModel with a subset of the bands of this SinglePixelPackedSampleModel. |
| abstract  [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **SampleModel.**[**createSubsetSampleModel**](http://docs.google.com/java/awt/image/SampleModel.html#createSubsetSampleModel(int%5B%5D))(int[] bands)            Creates a new SampleModel with a subset of the bands of this SampleModel. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **BufferedImage.**[**getSampleModel**](http://docs.google.com/java/awt/image/BufferedImage.html#getSampleModel())()            Returns the SampleModel associated with this BufferedImage. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **RenderedImage.**[**getSampleModel**](http://docs.google.com/java/awt/image/RenderedImage.html#getSampleModel())()            Returns the SampleModel associated with this image. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **Raster.**[**getSampleModel**](http://docs.google.com/java/awt/image/Raster.html#getSampleModel())()            Returns the SampleModel that describes the layout of the image data. |

| Methods in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) with parameters of type [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
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| static [Raster](http://docs.google.com/java/awt/image/Raster.html) | **Raster.**[**createRaster**](http://docs.google.com/java/awt/image/Raster.html#createRaster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) db, [Point](http://docs.google.com/java/awt/Point.html) location)            Creates a Raster with the specified SampleModel and DataBuffer. |
| static [WritableRaster](http://docs.google.com/java/awt/image/WritableRaster.html) | **Raster.**[**createWritableRaster**](http://docs.google.com/java/awt/image/Raster.html#createWritableRaster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) db, [Point](http://docs.google.com/java/awt/Point.html) location)            Creates a WritableRaster with the specified SampleModel and DataBuffer. |
| static [WritableRaster](http://docs.google.com/java/awt/image/WritableRaster.html) | **Raster.**[**createWritableRaster**](http://docs.google.com/java/awt/image/Raster.html#createWritableRaster(java.awt.image.SampleModel,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm, [Point](http://docs.google.com/java/awt/Point.html) location)            Creates a WritableRaster with the specified SampleModel. |
| boolean | **PackedColorModel.**[**isCompatibleSampleModel**](http://docs.google.com/java/awt/image/PackedColorModel.html#isCompatibleSampleModel(java.awt.image.SampleModel))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm)            Checks if the specified SampleModel is compatible with this ColorModel. |
| boolean | **ComponentColorModel.**[**isCompatibleSampleModel**](http://docs.google.com/java/awt/image/ComponentColorModel.html#isCompatibleSampleModel(java.awt.image.SampleModel))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm)            Checks whether or not the specified SampleModel is compatible with this ColorModel. |
| boolean | **IndexColorModel.**[**isCompatibleSampleModel**](http://docs.google.com/java/awt/image/IndexColorModel.html#isCompatibleSampleModel(java.awt.image.SampleModel))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm)            Checks if the specified SampleModel is compatible with this ColorModel. |
| boolean | **ColorModel.**[**isCompatibleSampleModel**](http://docs.google.com/java/awt/image/ColorModel.html#isCompatibleSampleModel(java.awt.image.SampleModel))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sm)            Checks if the SampleModel is compatible with this ColorModel. |

| Constructors in [java.awt.image](http://docs.google.com/java/awt/image/package-summary.html) with parameters of type [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
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| [**Raster**](http://docs.google.com/java/awt/image/Raster.html#Raster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) dataBuffer, [Point](http://docs.google.com/java/awt/Point.html) origin)            Constructs a Raster with the given SampleModel and DataBuffer. |
| [**Raster**](http://docs.google.com/java/awt/image/Raster.html#Raster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Rectangle,%20java.awt.Point,%20java.awt.image.Raster))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) dataBuffer, [Rectangle](http://docs.google.com/java/awt/Rectangle.html) aRegion, [Point](http://docs.google.com/java/awt/Point.html) sampleModelTranslate, [Raster](http://docs.google.com/java/awt/image/Raster.html) parent)            Constructs a Raster with the given SampleModel, DataBuffer, and parent. |
| [**Raster**](http://docs.google.com/java/awt/image/Raster.html#Raster(java.awt.image.SampleModel,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [Point](http://docs.google.com/java/awt/Point.html) origin)            Constructs a Raster with the given SampleModel. |
| [**WritableRaster**](http://docs.google.com/java/awt/image/WritableRaster.html#WritableRaster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) dataBuffer, [Point](http://docs.google.com/java/awt/Point.html) origin)            Constructs a WritableRaster with the given SampleModel and DataBuffer. |
| [**WritableRaster**](http://docs.google.com/java/awt/image/WritableRaster.html#WritableRaster(java.awt.image.SampleModel,%20java.awt.image.DataBuffer,%20java.awt.Rectangle,%20java.awt.Point,%20java.awt.image.WritableRaster))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) dataBuffer, [Rectangle](http://docs.google.com/java/awt/Rectangle.html) aRegion, [Point](http://docs.google.com/java/awt/Point.html) sampleModelTranslate, [WritableRaster](http://docs.google.com/java/awt/image/WritableRaster.html) parent)            Constructs a WritableRaster with the given SampleModel, DataBuffer, and parent. |
| [**WritableRaster**](http://docs.google.com/java/awt/image/WritableRaster.html#WritableRaster(java.awt.image.SampleModel,%20java.awt.Point))([SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel, [Point](http://docs.google.com/java/awt/Point.html) origin)            Constructs a WritableRaster with the given SampleModel. |

| Uses of [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) | |
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| Fields in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) declared as [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
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| protected  [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ImageTypeSpecifier.**[**sampleModel**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#sampleModel)            A SampleModel to be used as a prototype. |

| Methods in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) that return [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
| --- | --- |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ImageTypeSpecifier.**[**getSampleModel**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#getSampleModel())()            Returns a SampleModel based on the settings encapsulated within this object. |
| [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | **ImageTypeSpecifier.**[**getSampleModel**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#getSampleModel(int,%20int))(int width, int height)            Returns a SampleModel based on the settings encapsulated within this object. |

| Constructors in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) with parameters of type [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) | |
| --- | --- |
| [**ImageTypeSpecifier**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#ImageTypeSpecifier(java.awt.image.ColorModel,%20java.awt.image.SampleModel))([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) colorModel, [SampleModel](http://docs.google.com/java/awt/image/SampleModel.html) sampleModel)            Constructs an ImageTypeSpecifier directly from a ColorModel and a SampleModel. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/awt/image/SampleModel.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/awt/image//class-useSampleModel.html)    [**NO FRAMES**](http://docs.google.com/SampleModel.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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