| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/StartMovieCapture.html)   [**NEXT CLASS**](http://docs.google.com/Test.html) | [**FRAMES**](http://docs.google.com/index.html?TConversionTool.html)    [**NO FRAMES**](http://docs.google.com/TConversionTool.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## Class TConversionTool

[java.lang.Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)  
 **TConversionTool**

public class **TConversionTool**extends [Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)

| **Constructor Summary** | |
| --- | --- |
| [**TConversionTool**](http://docs.google.com/TConversionTool.html#TConversionTool())() |

| **Method Summary** | |
| --- | --- |
| static short | [**alaw2linear**](http://docs.google.com/TConversionTool.html#alaw2linear(byte))(byte ulawbyte) |
| static int | [**bytesToInt16**](http://docs.google.com/TConversionTool.html#bytesToInt16(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int byteOffset, boolean bigEndian)            Converts 2 successive bytes starting at byteOffset in buffer to a signed integer sample with 16bit range. |
| static int | [**bytesToInt24**](http://docs.google.com/TConversionTool.html#bytesToInt24(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int byteOffset, boolean bigEndian)            Converts 3 successive bytes starting at byteOffset in buffer to a signed integer sample with 24bit range. |
| static int | [**bytesToInt32**](http://docs.google.com/TConversionTool.html#bytesToInt32(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int byteOffset, boolean bigEndian)            Converts a 4 successive bytes starting at byteOffset in buffer to a signed 32bit integer sample. |
| static void | [**intToBytes16**](http://docs.google.com/TConversionTool.html#intToBytes16(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian)            Converts a 16 bit sample of type int to 2 bytes in an array. |
| static void | [**intToBytes24**](http://docs.google.com/TConversionTool.html#intToBytes24(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian)            Converts a 24 bit sample of type int to 3 bytes in an array. |
| static void | [**intToBytes32**](http://docs.google.com/TConversionTool.html#intToBytes32(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian)            Converts a 32 bit sample of type int to 4 bytes in an array. |
| static byte | [**intToUnsignedByte**](http://docs.google.com/TConversionTool.html#intToUnsignedByte(int))(int sample) |
| static void | [**intToUnsignedBytes16**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes16(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian) |
| static void | [**intToUnsignedBytes24**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes24(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian) |
| static void | [**intToUnsignedBytes32**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes32(int,%20byte%5B%5D,%20int,%20boolean))(int sample, byte[] buffer, int byteOffset, boolean bigEndian) |
| static byte | [**linear2alaw**](http://docs.google.com/TConversionTool.html#linear2alaw(short))(short pcm\_val) |
| static byte | [**linear2ulaw**](http://docs.google.com/TConversionTool.html#linear2ulaw(int))(int sample)            Converts a linear signed 16bit sample to a uLaw byte. |
| static short | [**ulaw2linear**](http://docs.google.com/TConversionTool.html#ulaw2linear(byte))(byte ulawbyte) |
| static int | [**unsignedByteToInt**](http://docs.google.com/TConversionTool.html#unsignedByteToInt(byte))(byte b) |
| static int | [**unsignedByteToInt16**](http://docs.google.com/TConversionTool.html#unsignedByteToInt16(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int offset, boolean isBigEndian) |
| static int | [**unsignedByteToInt24**](http://docs.google.com/TConversionTool.html#unsignedByteToInt24(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int offset, boolean isBigEndian) |
| static int | [**unsignedByteToInt32**](http://docs.google.com/TConversionTool.html#unsignedByteToInt32(byte%5B%5D,%20int,%20boolean))(byte[] buffer, int offset, boolean isBigEndian) |

| **Methods inherited from class java.lang.**[**Object**](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true) |
| --- |
| [clone](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#clone()), [equals](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#equals(java.lang.Object)), [finalize](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#finalize()), [getClass](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#getClass()), [hashCode](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#hashCode()), [notify](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notify()), [notifyAll](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notifyAll()), [toString](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#toString()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long)), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### TConversionTool

public **TConversionTool**()

| **Method Detail** |
| --- |

### bytesToInt16

public static int **bytesToInt16**(byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts 2 successive bytes starting at byteOffset in buffer to a signed integer sample with 16bit range.

For little endian, buffer[byteOffset] is interpreted as low byte, whereas it is interpreted as high byte in big endian.

This is a reference function.

### bytesToInt24

public static int **bytesToInt24**(byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts 3 successive bytes starting at byteOffset in buffer to a signed integer sample with 24bit range.

For little endian, buffer[byteOffset] is interpreted as lowest byte, whereas it is interpreted as highest byte in big endian.

This is a reference function.

### bytesToInt32

public static int **bytesToInt32**(byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts a 4 successive bytes starting at byteOffset in buffer to a signed 32bit integer sample.

For little endian, buffer[byteOffset] is interpreted as lowest byte, whereas it is interpreted as highest byte in big endian.

This is a reference function.

### ulaw2linear

public static short **ulaw2linear**(byte ulawbyte)

### linear2ulaw

public static byte **linear2ulaw**(int sample)

Converts a linear signed 16bit sample to a uLaw byte. Ported to Java by fb.

Originally by:

Craig Reese: IDA/Supercomputing Research Center

Joe Campbell: Department of Defense

29 September 1989

### alaw2linear

public static short **alaw2linear**(byte ulawbyte)

### linear2alaw

public static byte **linear2alaw**(short pcm\_val)

### intToBytes16

public static void **intToBytes16**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts a 16 bit sample of type int to 2 bytes in an array. sample is interpreted as signed (as Java does).

For little endian, buffer[byteOffset] is filled with low byte of sample, and buffer[byteOffset+1] is filled with high byte of sample + sign bit.

For big endian, this is reversed.

Before calling this function, it should be assured that sample is in the 16bit range - it will not be clipped.

This is a reference function.

### intToBytes24

public static void **intToBytes24**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts a 24 bit sample of type int to 3 bytes in an array. sample is interpreted as signed (as Java does).

For little endian, buffer[byteOffset] is filled with low byte of sample, and buffer[byteOffset+2] is filled with the high byte of sample + sign bit.

For big endian, this is reversed.

Before calling this function, it should be assured that sample is in the 24bit range - it will not be clipped.

This is a reference function.

### intToBytes32

public static void **intToBytes32**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

Converts a 32 bit sample of type int to 4 bytes in an array. sample is interpreted as signed (as Java does).

For little endian, buffer[byteOffset] is filled with lowest byte of sample, and buffer[byteOffset+3] is filled with the high byte of sample + sign bit.

For big endian, this is reversed.

This is a reference function.

### unsignedByteToInt

public static int **unsignedByteToInt**(byte b)

### unsignedByteToInt16

public static int **unsignedByteToInt16**(byte[] buffer,  
 int offset,  
 boolean isBigEndian)

### unsignedByteToInt24

public static int **unsignedByteToInt24**(byte[] buffer,  
 int offset,  
 boolean isBigEndian)

### unsignedByteToInt32

public static int **unsignedByteToInt32**(byte[] buffer,  
 int offset,  
 boolean isBigEndian)

### intToUnsignedByte

public static byte **intToUnsignedByte**(int sample)

### intToUnsignedBytes16

public static void **intToUnsignedBytes16**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

### intToUnsignedBytes24

public static void **intToUnsignedBytes24**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

### intToUnsignedBytes32

public static void **intToUnsignedBytes32**(int sample,  
 byte[] buffer,  
 int byteOffset,  
 boolean bigEndian)

| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/StartMovieCapture.html)   [**NEXT CLASS**](http://docs.google.com/Test.html) | [**FRAMES**](http://docs.google.com/index.html?TConversionTool.html)    [**NO FRAMES**](http://docs.google.com/TConversionTool.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |