SEGYlib Namespace

Classes

	Class	Description
	SEGYFile	Top level class for reading and writing SEGY files
	SEGYFileHeader	Class for storing and retrieving data stored in the SEGY file Header
	SEGYTrace	SEGYTrace is used to access and set SEGY rev 1 trace data
	SEGYTraceData	SEGYTraceData allows access to the contents of the binary trace data
	SEGYTraceHeader	SEGYTraceHeader is used to access and change contents of the binary trace header data block
	SEGYUtilities	SEGYUtilities for use in reading and writing SEGY files

SEGYFile Class

Top level class for reading and writing SEGY files

Inheritance Hierarchy

System.Object
  SEGYlib.SEGYFile

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
[SerializableAttribute]
public class SEGYFile
```

VB

```
<SerializableAttribute>
Public Class SEGYFile
```

C++

```
[SerializableAttribute]
public ref class SEGYFile
```

F#

```
[<SerializableAttribute>]
type SEGYFile =  class end
```

The **SEGYFile** type exposes the following members.

Constructors

	Name	Description
	SEGYFile	Initializes a new instance of the **SEGYFile** class

Properties

	Name	Description
	currentTrace	last trace read from file
	FileHeader	access to File Header Class
	NumberOfTracesInBuffer	number of traces in Trace list
	Traces	List of traces including data and trace headers

Methods

	Name	Description
	AddTrace	add a trace to the end of the Traces list
	Close	close I/O channels
	CopyAllTraces	make a deep copy of the Traces List
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	GoToStartOfTrace	position the stream reader/writer at the start of the n'th trace
	isSEGY	test to see if input file is a SEGY file
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	MoveFilePointerToStartOfTraces	move file pointer to the end of the file header blocks
	Open	open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file
	ReadAllTraceHeaders	read all trace headers but don't load trace data
	ReadAllTraces	read all trace headers including trace data
	ReadFileHeader	read the file headers
	ReadNextTrace	read the next trace in the file
	ReadNTraces	read the next n traces in the file
	ReadXML	read an SEGY file in XML format
	ReadXMLFileHeader	read an SEGY file header in XML format
	ReadXMLTrace	read an SEGY trace in XML format
	ReindexTracePositions	re-read the file and reindex the trace locations
	RemoveAllTraces	delete all trace storage
	RemoveTrace	remove trace i from the Traces list
	SkipNTracesOnRead	skip ntraces
	ToString	Returns a string that represents the current object. (Inherited from Object.)
	Write(String)	write the entire file to disk

	Write(SEGYFileHeader)	write the file header to disk
	Write(SEGYTrace)	write a trace to disk
	Write(List(SEGYTrace))	write the list Traces to disk
	WriteXML(String)	write the file to XML
	WriteXML(String, SEGYFileHeader)	write the file header to XML
	WriteXML(String, SEGYTrace)	write the trace to XML

Fields

	Name	Description
	isBigEndian	true for big endian file; false little endian

See Also

SEGYlib Namespace

SEGYFile Constructor

Initializes a new instance of the SEGYFile class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYFile()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYFile()
```

F#

```
new : unit -> SEGYFile
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.SEGYFile Properties

The SEGYFile type exposes the following members.

Properties

	Name	Description
	currentTrace	last trace read from file
	FileHeader	access to File Header Class
	NumberOfTracesInBuffer	number of traces in Trace list
	Traces	List of traces including data and trace headers

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.currentTrace Property

last trace read from file

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTrace currentTrace { get; set; }
```

VB

```
Public Property currentTrace As SEGYTrace
      Get
      Set
```

C++

```
public:
property SEGYTrace^ currentTrace {
      SEGYTrace^ get ();
      void set (SEGYTrace^ value);
}
```

F#

```
member currentTrace : SEGYTrace with get, set
```

Property Value

Type: SEGYTrace

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.FileHeader Property

access to File Header Class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYFileHeader FileHeader { get; set; }
```

VB

```
Public Property FileHeader As SEGYFileHeader
      Get
      Set
```

C++

```
public:
property SEGYFileHeader^ FileHeader {
      SEGYFileHeader^ get ();
      void set (SEGYFileHeader^ value);
}
```

F#

```
member FileHeader : SEGYFileHeader with get, set
```

Property Value

Type: SEGYFileHeader

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.NumberOfTracesInBuffer Property

number of traces in Trace list

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int NumberOfTracesInBuffer { get; set; }
```

VB

```
Public Property NumberOfTracesInBuffer As Integer
      Get
      Set
```

C++

```
public:
property int NumberOfTracesInBuffer {
      int get ();
      void set (int value);
}
```

F#

```
member NumberOfTracesInBuffer : int with get, set
```

Property Value

Type: Int32

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.Traces Property

List of traces including data and trace headers

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public List<SEGYTrace> Traces { get; set; }
```

VB

```
Public Property Traces As List(Of SEGYTrace)
      Get
      Set
```

C++

```
public:
property List<SEGYTrace^>^ Traces {
      List<SEGYTrace^>^ get ();
      void set (List<SEGYTrace^>^ value);
}
```

F#

```
member Traces : List<SEGYTrace> with get, set
```

Property Value

Type: List(SEGYTrace)

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.SEGYFile Methods

The SEGYFile type exposes the following members.

Methods

	Name	Description
	AddTrace	add a trace to the end of the Traces list
	Close	close I/O channels
	CopyAllTraces	make a deep copy of the Traces List
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	GoToStartOfTrace	position the stream reader/writer at the start of the n'th trace
	isSEGY	test to see if input file is a SEGY file
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	MoveFilePointerToStartOfTraces	move file pointer to the end of the file header blocks
	Open	open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file
	ReadAllTraceHeaders	read all trace headers but don't load trace data
	ReadAllTraces	read all trace headers including trace data
	ReadFileHeader	read the file headers
	ReadNextTrace	read the next trace in the file
	ReadNTraces	read the next n traces in the file
S	ReadXML	read an SEGY file in XML format
S	ReadXMLFileHeader	read an SEGY file header in XML format
S	ReadXMLTrace	read an SEGY trace in XML format
	ReindexTracePositions	re-read the file and reindex the trace locations
	RemoveAllTraces	delete all trace storage
	RemoveTrace	remove trace i from the Traces list
	SkipNTracesOnRead	skip ntraces
	ToString	Returns a string that represents the current object. (Inherited

		from Object.)
	Write(String)	write the entire file to disk
	Write(SEGYFileHeader)	write the file header to disk
	Write(SEGYTrace)	write a trace to disk
	Write(List(SEGYTrace))	write the list Traces to disk
	WriteXML(String)	write the file to XML
	WriteXML(String, SEGYFileHeader)	write the file header to XML
	WriteXML(String, SEGYTrace)	write the trace to XML

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.AddTrace Method

add a trace to the end of the Traces list

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void AddTrace(
      SEGYTrace trace
)
```

VB

```
Public Sub AddTrace (
      trace As SEGYTrace
)
```

C++

```
public:
void AddTrace(
      SEGYTrace^ trace
)
```

F#

```
member AddTrace :
        trace : SEGYTrace -> unit
```

Parameters

trace
Type: SEGYlib.SEGYTrace
add a trace

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.Close Method

close I/O channels

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void Close()
```

VB

```
Public Sub Close
```

C++

```
public:
void Close()
```

F#

```
member Close : unit -> unit
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.CopyAllTraces Method

make a deep copy of the Traces List

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public List<SEGYTrace> CopyAllTraces()
```

VB

```
Public Function CopyAllTraces As List(Of SEGYTrace)
```

C++

```
public:
List<SEGYTrace^>^ CopyAllTraces()
```

F#

```
member CopyAllTraces : unit -> List<SEGYTrace>
```

Return Value

Type: List(SEGYTrace)
pointer to new List of SEGYTraces

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.GoToStartOfTrace Method

position the stream reader/writer at the start of the n'th trace

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool GoToStartOfTrace(
      int n
)
```

VB

```
Public Function GoToStartOfTrace (
      n As Integer
) As Boolean
```

C++

```
public:
bool GoToStartOfTrace(
      int n
)
```

F#

```
member GoToStartOfTrace :
        n : int -> bool
```

Parameters

n
Type: System.Int32
trace id

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.isSEGY Method

test to see if input file is a SEGY file

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isSEGY()
```

VB

```
Public Function isSEGY As Boolean
```

C++

```
public:
bool isSEGY()
```

F#

```
member isSEGY : unit -> bool
```

Return Value

Type: Boolean
true is the input file has acceptable FileHeader.dataSampleFormatCode and FileHeader.dataSampleFormatCode

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.MoveFilePointerToStartOfTraces Method

move file pointer to the end of the file header blocks

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void MoveFilePointerToStartOfTraces()
```

VB

```
Public Sub MoveFilePointerToStartOfTraces
```

C++

```
public:
void MoveFilePointerToStartOfTraces()
```

F#

```
member MoveFilePointerToStartOfTraces : unit -> unit
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.Open Method

open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int Open(
      string inputFilename
)
```

VB

```
Public Function Open (
      inputFilename As String
) As Integer
```

C++

```
public:
int Open(
      String^ inputFilename
)
```

F#

```
member Open :
        inputFilename : string -> int
```

Parameters

inputFilename
Type: System.String
SEGY file name

Return Value

Type: Int32
0 - not successful; 1 - opened an existing file; 2 - created a new file

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadAllTraceHeaders Method

read all trace headers but don't load trace data

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void ReadAllTraceHeaders()
```

VB

```
Public Sub ReadAllTraceHeaders
```

C++

```
public:
void ReadAllTraceHeaders()
```

F#

```
member ReadAllTraceHeaders : unit -> unit
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadAllTraces Method

read all trace headers including trace data

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void ReadAllTraces()
```

VB

```
Public Sub ReadAllTraces
```

C++

```
public:
void ReadAllTraces()
```

F#

```
member ReadAllTraces : unit -> unit
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadFileHeader Method

read the file headers

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool ReadFileHeader()
```

VB

```
Public Function ReadFileHeader As Boolean
```

C++

```
public:
bool ReadFileHeader()
```

F#

```
member ReadFileHeader : unit -> bool
```

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadNextTrace Method

read the next trace in the file

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool ReadNextTrace()
```

VB

```
Public Function ReadNextTrace As Boolean
```

C++

```
public:
bool ReadNextTrace()
```

F#

```
member ReadNextTrace : unit -> bool
```

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadNTraces Method

read the next n traces in the file

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool ReadNTraces(
      int n
)
```

VB

```
Public Function ReadNTraces (
      n As Integer
) As Boolean
```

C++

```
public:
bool ReadNTraces(
      int n
)
```

F#

```
member ReadNTraces :
        n : int -> bool
```

Parameters

n
Type: System.Int32
number of traces to read

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadXML Method

read an SEGY file in XML format

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static SEGYFile ReadXML(
      string inputXMLFileName
)
```

VB

```
Public Shared Function ReadXML (
      inputXMLFileName As String
) As SEGYFile
```

C++

```
public:
static SEGYFile^ ReadXML(
      String^ inputXMLFileName
)
```

F#

```
static member ReadXML :
        inputXMLFileName : string -> SEGYFile
```

Parameters

inputXMLFileName
Type: System.String
input SEGYFile XML file name

Return Value

Type: SEGYFile
pointer to SEGYFile

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadXMLFileHeader Method

read an SEGY file header in XML format

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static SEGYFileHeader ReadXMLFileHeader(
      string inputXMLFileName
)
```

VB

```
Public Shared Function ReadXMLFileHeader (
      inputXMLFileName As String
) As SEGYFileHeader
```

C++

```
public:
static SEGYFileHeader^ ReadXMLFileHeader(
      String^ inputXMLFileName
)
```

F#

```
static member ReadXMLFileHeader :
        inputXMLFileName : string -> SEGYFileHeader
```

Parameters

inputXMLFileName
Type: System.String
input SEGYFileHeader XML file name

Return Value

Type: SEGYFileHeader
point to SEGYFileHeader

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReadXMLTrace Method

read an SEGY trace in XML format

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static SEGYTrace ReadXMLTrace(
      string inputXMLFileName
)
```

VB

```
Public Shared Function ReadXMLTrace (
      inputXMLFileName As String
) As SEGYTrace
```

C++

```
public:
static SEGYTrace^ ReadXMLTrace(
      String^ inputXMLFileName
)
```

F#

```
static member ReadXMLTrace :
        inputXMLFileName : string -> SEGYTrace
```

Parameters

inputXMLFileName
Type: System.String
input SEGYTrace XML file name

Return Value

Type: SEGYTrace
pointer to SEGYTrace

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.ReindexTracePositions Method

re-read the file and reindex the trace locations

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void ReindexTracePositions()
```

VB

```
Public Sub ReindexTracePositions
```

C++

```
public:
void ReindexTracePositions()
```

F#

```
member ReindexTracePositions : unit -> unit
```

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.RemoveAllTraces Method

delete all trace storage

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool RemoveAllTraces()
```

VB

```
Public Function RemoveAllTraces As Boolean
```

C++

```
public:
bool RemoveAllTraces()
```

F#

```
member RemoveAllTraces : unit -> bool
```

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.RemoveTrace Method

remove trace i from the Traces list

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool RemoveTrace(
      int i
)
```

VB

```
Public Function RemoveTrace (
      i As Integer
) As Boolean
```

C++

```
public:
bool RemoveTrace(
      int i
)
```

F#

```
member RemoveTrace :
        i : int -> bool
```

Parameters

i

Type: System.Int32
trace number to remove from list

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.SkipNTracesOnRead Method

skip ntraces

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool SkipNTracesOnRead(
      int skip
)
```

VB

```
Public Function SkipNTracesOnRead (
      skip As Integer
) As Boolean
```

C++

```
public:
bool SkipNTracesOnRead(
      int skip
)
```

F#

```
member SkipNTracesOnRead :
        skip : int -> bool
```

Parameters

skip
Type: System.Int32
number of traces to skip

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.Write Method

Overload List

	Name	Description
	Write(String)	write the entire file to disk
	Write(SEGYFileHeader)	write the file header to disk
	Write(SEGYTrace)	write a trace to disk
	Write(List(SEGYTrace))	write the list Traces to disk

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.Write Method (String)

write the entire file to disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool Write(
      string outputFileName
)
```

VB

```
Public Function Write (
      outputFileName As String
) As Boolean
```

C++

```
public:
bool Write(
      String^ outputFileName
)
```

F#

```
member Write :
        outputFileName : string -> bool
```

Parameters

outputFileName
Type: System.String
output file name

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
Write Overload
SEGYlib Namespace

SEGYFile.Write Method (SEGYFileHeader)

write the file header to disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool Write(
      SEGYFileHeader fileHeader
)
```

VB

```
Public Function Write (
      fileHeader As SEGYFileHeader
) As Boolean
```

C++

```
public:
bool Write(
      SEGYFileHeader^ fileHeader
)
```

F#

```
member Write :
        fileHeader : SEGYFileHeader -> bool
```

Parameters

fileHeader
Type: SEGYlib.SEGYFileHeader
input file header

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
Write Overload
SEGYlib Namespace

SEGYFile.Write Method (SEGYTrace)

write a trace to disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool Write(
      SEGYTrace trace
)
```

VB

```
Public Function Write (
      trace As SEGYTrace
) As Boolean
```

C++

```
public:
bool Write(
      SEGYTrace^ trace
)
```

F#

```
member Write :
        trace : SEGYTrace -> bool
```

Parameters

trace
Type: SEGYlib.SEGYTrace
input trace header

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
Write Overload
SEGYlib Namespace

SEGYFile.Write Method (List(SEGYTrace))

write the list Traces to disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool Write(
      List<SEGYTrace> traces
)
```

VB

```
Public Function Write (
      traces As List(Of SEGYTrace)
) As Boolean
```

C++

```
public:
bool Write(
      List<SEGYTrace^>^ traces
)
```

F#

```
member Write :
        traces : List<SEGYTrace> -> bool
```

Parameters

traces
Type: System.Collections.Generic.List(SEGYTrace)
List of SEGYTrace instances

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
Write Overload
SEGYlib Namespace

SEGYFile.WriteXML Method

Overload List

	Name	Description
	WriteXML(String)	write the file to XML
	WriteXML(String, SEGYFileHeader)	write the file header to XML
	WriteXML(String, SEGYTrace)	write the trace to XML

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.WriteXML Method (String)

write the file to XML

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool WriteXML(
      string outputXMLFileName
)
```

VB

```
Public Function WriteXML (
      outputXMLFileName As String
) As Boolean
```

C++

```
public:
bool WriteXML(
      String^ outputXMLFileName
)
```

F#

```
member WriteXML :
        outputXMLFileName : string -> bool
```

Parameters

outputXMLFileName
Type: System.String
output XML file name

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class
WriteXML Overload
SEGYlib Namespace

SEGYFile.WriteXML Method (String, SEGYFileHeader)

write the file header to XML

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool WriteXML(
      string outputXMLFileName,
      SEGYFileHeader fileheader
)
```

VB

```
Public Function WriteXML (
      outputXMLFileName As String,
      fileheader As SEGYFileHeader
) As Boolean
```

C++

```
public:
bool WriteXML(
      String^ outputXMLFileName,
      SEGYFileHeader^ fileheader
)
```

F#

```
member WriteXML :
        outputXMLFileName : string *
        fileheader : SEGYFileHeader -> bool
```

Parameters

outputXMLFileName
Type: System.String
output XML file name

fileheader
Type: SEGYlib.SEGYFileHeader
input file header

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class

WriteXML Overload
SEGYlib Namespace

SEGYFile.WriteXML Method (String, SEGYTrace)

write the trace to XML

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool WriteXML(
      string outputXMLFileName,
      SEGYTrace trace
)
```

VB

```
Public Function WriteXML (
      outputXMLFileName As String,
      trace As SEGYTrace
) As Boolean
```

C++

```
public:
bool WriteXML(
      String^ outputXMLFileName,
      SEGYTrace^ trace
)
```

F#

```
member WriteXML :
        outputXMLFileName : string *
        trace : SEGYTrace -> bool
```

Parameters

outputXMLFileName
Type: System.String
output XML file name

trace
Type: SEGYlib.SEGYTrace
input trace

Return Value

Type: Boolean
true is successful

See Also

SEGYFile Class

WriteXML Overload
SEGYlib Namespace

SEGYFile.SEGYFile Fields

The SEGYFile type exposes the following members.

Fields

	Name	Description
	isBigEndian	true for big endian file; false little endian

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFile.isBigEndian Field

true for big endian file; false little endian

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isBigEndian
```

VB

```
Public isBigEndian As Boolean
```

C++

```
public:
bool isBigEndian
```

F#

```
val mutable isBigEndian: bool
```

Field Value

Type: Boolean

See Also

SEGYFile Class
SEGYlib Namespace

SEGYFileHeader Class

Class for storing and retrieving data stored in the SEGY file Header

Inheritance Hierarchy

System.Object

SEGYlib.SEGYFileHeader

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public class SEGYFileHeader
```

VB

```
Public Class SEGYFileHeader
```

C++

```
public ref class SEGYFileHeader
```

F#

```
type SEGYFileHeader =  class end
```

The **SEGYFileHeader** type exposes the following members.

Constructors

	Name	Description
	SEGYFileHeader	constructor

Properties

	Name	Description
	amplitudeRecoveryMethod	attribute defined though segy rev 1 standard
	BinaryFileHeader	access to byte block of Binary File header
	binaryGainRecovered	attribute defined though segy rev 1 standard
	correlatedDataTraces	attribute defined though segy rev 1 standard
	dataSampleFormatCode	attribute defined though segy rev 1 standard

ensembleFold	attribute defined though segy rev 1 standard
ExtendedTextHeader	lead 3200 byte tape header plus any other extended blocks
fixedLengthTraceFlag	attribute defined though segy rev 1 standard
impulseSignalPolarity	attribute defined though segy rev 1 standard
jobIdentificationNumberz	attribute defined though segy rev 1 standard
lengthOfFileHeader	byte length of file header including extended tape header and binary file header
lineNumber	attribute defined though segy rev 1 standard
measurementSystem	attribute defined though segy rev 1 standard
numberOfAuxilaryTracesPerEnsemble	attribute defined though segy rev 1 standard
numberOfDataTracesPerEnsemble	attribute defined though segy rev 1 standard
numberOfExtendedTextualFileHeaderRecordsFollowing	attribute defined though segy rev 1 standard
numberOfSamplesPerDataTrace	attribute defined though segy rev 1 standard
numberOfSamplesPerDataTraceForOriginalFieldRecording	attribute defined though segy rev 1 standard
reelNumber	attribute defined though segy rev 1 standard
sampleIntervalInMicroseconds	attribute defined though segy rev 1 standard
sampleIntervalInMicrosecondsInOriginalFieldRecording	attribute defined though segy rev 1 standard
segyFormatRevisionNumber	attribute defined though segy rev 1 standard
sweepCode	attribute defined though segy rev 1 standard
sweepFrequencyEnd	attribute defined though segy rev 1 standard
sweepFrequencyStart	attribute defined though segy rev 1

		standard
	sweepLength	attribute defined though segy rev 1 standard
	sweepTraceTaperLengthAtEnd	attribute defined though segy rev 1 standard
	sweepTraceTaperLengthAtStart	attribute defined though segy rev 1 standard
	taperType	attribute defined though segy rev 1 standard
	traceNumberSweepChannel	attribute defined though segy rev 1 standard
	traceSortingCode	attribute defined though segy rev 1 standard
	verticalSumCode	attribute defined though segy rev 1 standard
	vibratoryPolarityCode	attribute defined though segy rev 1 standard

Methods

	Name	Description
	Copy	make a deep copy of the Header
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetFileHeaderText	get a string for the extended tape header
	GetFileHeaderTextByLine	get the Text header by 80 character lines
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	isBigEndian	true for big endian and false for little endian
	isFileHeaderASCII	is the file header encoded with ASCII or EBCDIC
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ReadFileHeader	read the file header from disk
	SetFileHeader	set the Text Header by 80 character line
	ToString	Returns a string that represents the current object. (Inherited from Object.)
	WriteFileHeader	write the file header to disk

Fields

	Name	Description
	isSEGYFileHeaderAscii	true if Text Header is ASCII; false if EBCDIC
	positionOfStartOfDataTraces	file position of start of trace data

See Also

SEGYlib Namespace

SEGYFileHeader Constructor

constructor

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYFileHeader()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYFileHeader()
```

F#

```
new : unit -> SEGYFileHeader
```

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.SEGYFileHeader Properties

The SEGYFileHeader type exposes the following members.

Properties

	Name	Description
	amplitudeRecoveryMethod	attribute defined though segy rev 1 standard
	BinaryFileHeader	access to byte block of Binary File header
	binaryGainRecovered	attribute defined though segy rev 1 standard
	correlatedDataTraces	attribute defined though segy rev 1 standard
	dataSampleFormatCode	attribute defined though segy rev 1 standard
	ensembleFold	attribute defined though segy rev 1 standard
	ExtendedTextHeader	lead 3200 byte tape header plus any other extended blocks
	fixedLengthTraceFlag	attribute defined though segy rev 1 standard
	impulseSignalPolarity	attribute defined though segy rev 1 standard
	jobIdentificationNumberz	attribute defined though segy rev 1 standard
	lengthOfFileHeader	byte length of file header including extended tape header and binary file header
	lineNumber	attribute defined though segy rev 1 standard
	measurementSystem	attribute defined though segy rev 1 standard
	numberOfAuxilaryTracesPerEnsemble	attribute defined though segy rev 1 standard
	numberOfDataTracesPerEnsemble	attribute defined though segy rev 1 standard
	numberOfExtendedTextualFileHeaderRecordsFollowing	attribute defined though segy rev 1 standard
	numberOfSamplesPerDataTrace	attribute defined though segy rev 1 standard
	numberOfSamplesPerDataTraceForOriginalFieldRecording	attribute defined though segy rev 1

		standard
	reelNumber	attribute defined though segy rev 1 standard
	sampleIntervalInMicroseconds	attribute defined though segy rev 1 standard
	sampleIntervalInMicrosecondsInOriginalFieldRecording	attribute defined though segy rev 1 standard
	segyFormatRevisionNumber	attribute defined though segy rev 1 standard
	sweepCode	attribute defined though segy rev 1 standard
	sweepFrequencyEnd	attribute defined though segy rev 1 standard
	sweepFrequencyStart	attribute defined though segy rev 1 standard
	sweepLength	attribute defined though segy rev 1 standard
	sweepTraceTaperLengthAtEnd	attribute defined though segy rev 1 standard
	sweepTraceTaperLengthAtStart	attribute defined though segy rev 1 standard
	taperType	attribute defined though segy rev 1 standard
	traceNumberSweepChannel	attribute defined though segy rev 1 standard
	traceSortingCode	attribute defined though segy rev 1 standard
	verticalSumCode	attribute defined though segy rev 1 standard
	vibratoryPolarityCode	attribute defined though segy rev 1 standard

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.amplitudeRecoveryMethod Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort amplitudeRecoveryMethod { get; set; }
```

VB

```
Public Property amplitudeRecoveryMethod As UShort
      Get
      Set
```

C++

```
public:
property unsigned short amplitudeRecoveryMethod {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member amplitudeRecoveryMethod : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.BinaryFileHeader Property

access to byte block of Binary File header

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public byte[] BinaryFileHeader { get; set; }
```

VB

```
Public Property BinaryFileHeader As Byte()
      Get
      Set
```

C++

```
public:
property array<unsigned char>^ BinaryFileHeader {
      array<unsigned char>^ get ();
      void set (array<unsigned char>^ value);
}
```

F#

```
member BinaryFileHeader : byte[] with get, set
```

Property Value

Type: Byte[]

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.binaryGainRecovered Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort binaryGainRecovered { get; set; }
```

VB

```
Public Property binaryGainRecovered As UShort
      Get
      Set
```

C++

```
public:
property unsigned short binaryGainRecovered {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member binaryGainRecovered : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.correlatedDataTraces Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort correlatedDataTraces { get; set; }
```

VB

```
Public Property correlatedDataTraces As UShort
      Get
      Set
```

C++

```
public:
property unsigned short correlatedDataTraces {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member correlatedDataTraces : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.dataSampleFormatCode Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int dataSampleFormatCode { get; set; }
```

VB

```
Public Property dataSampleFormatCode As Integer
      Get
      Set
```

C++

```
public:
property int dataSampleFormatCode {
      int get ();
      void set (int value);
}
```

F#

```
member dataSampleFormatCode : int with get, set
```

Property Value

Type: Int32

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.ensembleFold Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort ensembleFold { get; set; }
```

VB

```
Public Property ensembleFold As UShort
      Get
      Set
```

C++

```
public:
property unsigned short ensembleFold {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member ensembleFold : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.ExtendedTextHeader Property

lead 3200 byte tape header plus any other extended blocks

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public List<byte[]> ExtendedTextHeader { get; set; }
```

VB

```
Public Property ExtendedTextHeader As List(Of Byte())
      Get
      Set
```

C++

```
public:
property List<array<unsigned char>^>^ ExtendedTextHeader {
      List<array<unsigned char>^>^ get ();
      void set (List<array<unsigned char>^>^ value);
}
```

F#

```
member ExtendedTextHeader : List<byte[]> with get, set
```

Property Value

Type: List(Byte[])

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.fixedLengthTraceFlag Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort fixedLengthTraceFlag { get; set; }
```

VB

```
Public Property fixedLengthTraceFlag As UShort
      Get
      Set
```

C++

```
public:
property unsigned short fixedLengthTraceFlag {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member fixedLengthTraceFlag : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.impulseSignalPolarity Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort impulseSignalPolarity { get; set; }
```

VB

```
Public Property impulseSignalPolarity As UShort
      Get
      Set
```

C++

```
public:
property unsigned short impulseSignalPolarity {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member impulseSignalPolarity : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.jobIdentificationNumberz Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint jobIdentificationNumberz { get; set; }
```

VB

```
Public Property jobIdentificationNumberz As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int jobIdentificationNumberz {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member jobIdentificationNumberz : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.lengthOfFileHeader Property

byte length of file header including extended tape header and binary file header

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int lengthOfFileHeader { get; set; }
```

VB

```
Public Property lengthOfFileHeader As Integer
      Get
      Set
```

C++

```
public:
property int lengthOfFileHeader {
      int get ();
      void set (int value);
}
```

F#

```
member lengthOfFileHeader : int with get, set
```

Property Value

Type: Int32

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.lineNumber Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint lineNumber { get; set; }
```

VB

```
Public Property lineNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int lineNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member lineNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.measurementSystem Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort measurementSystem { get; set; }
```

VB

```
Public Property measurementSystem As UShort
      Get
      Set
```

C++

```
public:
property unsigned short measurementSystem {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member measurementSystem : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.numberOfAuxilaryTracesPerEnsemble Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfAuxilaryTracesPerEnsemble { get; set; }
```

VB

```
Public Property numberOfAuxilaryTracesPerEnsemble As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfAuxilaryTracesPerEnsemble {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfAuxilaryTracesPerEnsemble : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.numberOfDataTracesPerEnsemble Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfDataTracesPerEnsemble { get; set; }
```

VB

```
Public Property numberOfDataTracesPerEnsemble As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfDataTracesPerEnsemble {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfDataTracesPerEnsemble : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.numberOfExtendedTextualFileHeaderRecordsFollowing Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfExtendedTextualFileHeaderRecordsFollowing { get; set; }
```

VB

```
Public Property numberOfExtendedTextualFileHeaderRecordsFollowing As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfExtendedTextualFileHeaderRecordsFollowing {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfExtendedTextualFileHeaderRecordsFollowing : uint16 with get,
set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.numberOfSamplesPerDataTrace Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfSamplesPerDataTrace { get; set; }
```

VB

```
Public Property numberOfSamplesPerDataTrace As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfSamplesPerDataTrace {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfSamplesPerDataTrace : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.numberOfSamplesPerDataTraceForOriginalFieldRecording Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfSamplesPerDataTraceForOriginalFieldRecording { get;
set; }
```

VB

```
Public Property numberOfSamplesPerDataTraceForOriginalFieldRecording As
UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfSamplesPerDataTraceForOriginalFieldRecording
{
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfSamplesPerDataTraceForOriginalFieldRecording : uint16 with
get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.reelNumber Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint reelNumber { get; set; }
```

VB

```
Public Property reelNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int reelNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member reelNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sampleIntervalInMicroseconds Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sampleIntervalInMicroseconds { get; set; }
```

VB

```
Public Property sampleIntervalInMicroseconds As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sampleIntervalInMicroseconds {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sampleIntervalInMicroseconds : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sampleIntervalInMicrosecondsInOriginalFieldRecording Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sampleIntervalInMicrosecondsInOriginalFieldRecording { get;
set; }
```

VB

```
Public Property sampleIntervalInMicrosecondsInOriginalFieldRecording As
UShort
      Get
      Set
```

C++

```
public:
property unsigned short sampleIntervalInMicrosecondsInOriginalFieldRecording
{
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sampleIntervalInMicrosecondsInOriginalFieldRecording : uint16 with
get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.segyFormatRevisionNumber Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort segyFormatRevisionNumber { get; set; }
```

VB

```
Public Property segyFormatRevisionNumber As UShort
      Get
      Set
```

C++

```
public:
property unsigned short segyFormatRevisionNumber {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member segyFormatRevisionNumber : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepCode Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepCode { get; set; }
```

VB

```
Public Property sweepCode As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepCode {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepCode : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepFrequencyEnd Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepFrequencyEnd { get; set; }
```

VB

```
Public Property sweepFrequencyEnd As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepFrequencyEnd {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepFrequencyEnd : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepFrequencyStart Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepFrequencyStart { get; set; }
```

VB

```
Public Property sweepFrequencyStart As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepFrequencyStart {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepFrequencyStart : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepLength Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepLength { get; set; }
```

VB

```
Public Property sweepLength As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepLength {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepLength : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepTraceTaperLengthAtEnd Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepTraceTaperLengthAtEnd { get; set; }
```

VB

```
Public Property sweepTraceTaperLengthAtEnd As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepTraceTaperLengthAtEnd {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepTraceTaperLengthAtEnd : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.sweepTraceTaperLengthAtStart Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepTraceTaperLengthAtStart { get; set; }
```

VB

```
Public Property sweepTraceTaperLengthAtStart As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepTraceTaperLengthAtStart {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepTraceTaperLengthAtStart : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.taperType Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort taperType { get; set; }
```

VB

```
Public Property taperType As UShort
      Get
      Set
```

C++

```
public:
property unsigned short taperType {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member taperType : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.traceNumberSweepChannel Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort traceNumberSweepChannel { get; set; }
```

VB

```
Public Property traceNumberSweepChannel As UShort
      Get
      Set
```

C++

```
public:
property unsigned short traceNumberSweepChannel {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member traceNumberSweepChannel : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.traceSortingCode Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short traceSortingCode { get; set; }
```

VB

```
Public Property traceSortingCode As Short
      Get
      Set
```

C++

```
public:
property short traceSortingCode {
      short get ();
      void set (short value);
}
```

F#

```
member traceSortingCode : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.verticalSumCode Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort verticalSumCode { get; set; }
```

VB

```
Public Property verticalSumCode As UShort
      Get
      Set
```

C++

```
public:
property unsigned short verticalSumCode {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member verticalSumCode : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.vibratoryPolarityCode Property

attribute defined though segy rev 1 standard

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort vibratoryPolarityCode { get; set; }
```

VB

```
Public Property vibratoryPolarityCode As UShort
      Get
      Set
```

C++

```
public:
property unsigned short vibratoryPolarityCode {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member vibratoryPolarityCode : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.SEGYFileHeader Methods

The SEGYFileHeader type exposes the following members.

Methods

	Name	Description
	Copy	make a deep copy of the Header
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetFileHeaderText	get a string for the extended tape header
	GetFileHeaderTextByLine	get the Text header by 80 character lines
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	isBigEndian	true for big endian and false for little endian
	isFileHeaderASCII	is the file header encoded with ASCII or EBCDIC
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ReadFileHeader	read the file header from disk
	SetFileHeader	set the Text Header by 80 character line
	ToString	Returns a string that represents the current object. (Inherited from Object.)
	WriteFileHeader	write the file header to disk

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.Copy Method

make a deep copy of the Header

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYFileHeader Copy()
```

VB

```
Public Function Copy As SEGYFileHeader
```

C++

```
public:
SEGYFileHeader^ Copy()
```

F#

```
member Copy : unit -> SEGYFileHeader
```

Return Value

Type: SEGYFileHeader
a deep copy of the SEGYFileHeader structure

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.GetFileHeaderText Method

get a string for the extended tape header

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public string GetFileHeaderText(
      int block
)
```

VB

```
Public Function GetFileHeaderText (
      block As Integer
) As String
```

C++

```
public:
String^ GetFileHeaderText(
      int block
)
```

F#

```
member GetFileHeaderText :
        block : int -> string
```

Parameters

block
Type: System.Int32
extended trace header block number

Return Value

Type: String
a 3200 character string ; null if the block number is invalid

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.GetFileHeaderTextByLine Method

get the Text header by 80 character lines

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public string GetFileHeaderTextByLine(
      int block,
      int line
)
```

VB

```
Public Function GetFileHeaderTextByLine (
      block As Integer,
      line As Integer
) As String
```

C++

```
public:
String^ GetFileHeaderTextByLine(
      int block,
      int line
)
```

F#

```
member GetFileHeaderTextByLine :
        block : int *
        line : int -> string
```

Parameters

block
Type: System.Int32
extended trace header block number

line
Type: System.Int32
linb number (0 to 39)

Return Value

Type: String
an 80 character string ; null if the block number is invalid

See Also

SEGYFileHeader Class

SEGYlib Namespace

SEGYFileHeader.isBigEndian Method

true for big endian and false for little endian

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isBigEndian()
```

VB

```
Public Function isBigEndian As Boolean
```

C++

```
public:
bool isBigEndian()
```

F#

```
member isBigEndian : unit -> bool
```

Return Value

Type: Boolean
true if the file header is big endian

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.isFileHeaderASCII Method

is the file header encoded with ASCII or EBCDIC

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isFileHeaderASCII()
```

VB

```
Public Function isFileHeaderASCII As Boolean
```

C++

```
public:
bool isFileHeaderASCII()
```

F#

```
member isFileHeaderASCII : unit -> bool
```

Return Value

Type: Boolean
true if file header text is ASCII formatted

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.ReadFileHeader Method

read the file header from disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool ReadFileHeader(
      BinaryReader br
)
```

VB

```
Public Function ReadFileHeader (
      br As BinaryReader
) As Boolean
```

C++

```
public:
bool ReadFileHeader(
      BinaryReader^ br
)
```

F#

```
member ReadFileHeader :
        br : BinaryReader -> bool
```

Parameters

br
Type: System.IO.BinaryReader
binary reader stream

Return Value

Type: Boolean
true if successful

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.SetFileHeader Method

set the Text Header by 80 character line

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void SetFileHeader(
      int block,
      int line,
      string str
)
```

VB

```
Public Sub SetFileHeader (
      block As Integer,
      line As Integer,
      str As String
)
```

C++

```
public:
void SetFileHeader(
      int block,
      int line,
      String^ str
)
```

F#

```
member SetFileHeader :
        block : int *
        line : int *
        str : string -> unit
```

Parameters

block
Type: System.Int32
extended block number

line
Type: System.Int32
line number (0 to 39)

str
Type: System.String
input string

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.WriteFileHeader Method

write the file header to disk

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool WriteFileHeader(
      BinaryWriter bw
)
```

VB

```
Public Function WriteFileHeader (
      bw As BinaryWriter
) As Boolean
```

C++

```
public:
bool WriteFileHeader(
      BinaryWriter^ bw
)
```

F#

```
member WriteFileHeader :
        bw : BinaryWriter -> bool
```

Parameters

bw
Type: System.IO.BinaryWriter
output binary writer stream

Return Value

Type: Boolean
true if successful

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.SEGYFileHeader Fields

The SEGYFileHeader type exposes the following members.

Fields

	Name	Description
	isSEGYFileHeaderAscii	true if Text Header is ASCII; false if EBCDIC
	positionOfStartOfDataTraces	file position of start of trace data

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.isSEGYFileHeaderAscii Field

true if Text Header is ASCII; false if EBCDIC

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isSEGYFileHeaderAscii
```

VB

```
Public isSEGYFileHeaderAscii As Boolean
```

C++

```
public:
bool isSEGYFileHeaderAscii
```

F#

```
val mutable isSEGYFileHeaderAscii: bool
```

Field Value

Type: Boolean

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYFileHeader.positionOfStartOfDataTraces Field

file position of start of trace data

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public long positionOfStartOfDataTraces
```

VB

```
Public positionOfStartOfDataTraces As Long
```

C++

```
public:
long long positionOfStartOfDataTraces
```

F#

```
val mutable positionOfStartOfDataTraces: int64
```

Field Value

Type: Int64

See Also

SEGYFileHeader Class
SEGYlib Namespace

SEGYTrace Class

SEGYTrace is used to access and set SEGY rev 1 trace data

Inheritance Hierarchy

System.Object
  SEGYlib.SEGYTrace

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public class SEGYTrace
```

VB

```
Public Class SEGYTrace
```

C++

```
public ref class SEGYTrace
```

F#

```
type SEGYTrace =  class end
```

The **SEGYTrace** type exposes the following members.

Constructors

	Name	Description
	SEGYTrace	constructor

Properties

	Name	Description
	codedTime	trace time in DDDHHHMMSSmmm
	Data	signal amplitude
	groupPositionXGSCDIG	GSCA implemententation of group position
	groupPositionYGSCDIG	GSCA implemententation of group position
	isBigEndian	true if big endian
	isLatLon	is it a lat/lon position or projected
	positionOfTraceInFile	position in bytes
	sourcePositionX	source position X corrected for scaling factors

	sourcePositionY	source position Y corrected for scaling factors
	timeTracedRecorded	DateTime of trace instance
	totalLengthOfTraceData	total number of bytes of trace data in including trace header
	TraceData	access to underlying Trace Data Class
	TraceHeader	access to underlying Trace Header Class

Methods

	Name	Description
	Copy	make a deep copy of a SEGY Trace
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	FixMsecField	transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Intialize	initilize trace structure
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)
	Write	write a trace to a BinaryWriter stream

See Also

SEGYlib Namespace

SEGYTrace Constructor

constructor

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTrace()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYTrace()
```

F#

```
new : unit -> SEGYTrace
```

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.SEGYTrace Properties

The SEGYTrace type exposes the following members.

Properties

	Name	Description
	codedTime	trace time in DDDHHHMMSSmmm
	Data	signal amplitude
	groupPositionXGSCDIG	GSCA implemententation of group position
	groupPositionYGSCDIG	GSCA implemententation of group position
	isBigEndian	true if big endian
	isLatLon	is it a lat/lon position or projected
	positionOfTraceInFile	position in bytes
	sourcePositionX	source position X corrected for scaling factors
	sourcePositionY	source position Y corrected for scaling factors
	timeTracedRecorded	DateTime of trace instance
	totalLengthOfTraceData	total number of bytes of trace data in including trace header
	TraceData	access to underlying Trace Data Class
	TraceHeader	access to underlying Trace Header Class

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.codedTime Property

trace time in DDDHHHMMSSmmm

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public long codedTime { get; set; }
```

VB

```
Public Property codedTime As Long
      Get
      Set
```

C++

```
public:
property long long codedTime {
      long long get ();
      void set (long long value);
}
```

F#

```
member codedTime : int64 with get, set
```

Property Value

Type: Int64

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.Data Property

signal amplitude

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double[] Data { get; set; }
```

VB

```
Public Property Data As Double()
      Get
      Set
```

C++

```
public:
property array<double>^ Data {
      array<double>^ get ();
      void set (array<double>^ value);
}
```

F#

```
member Data : float[] with get, set
```

Property Value

Type: Double[]

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.groupPositionXGSCDIG Property

GSCA implemententation of group position

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double groupPositionXGSCDIG { get; set; }
```

VB

```
Public Property groupPositionXGSCDIG As Double
      Get
      Set
```

C++

```
public:
property double groupPositionXGSCDIG {
      double get ();
      void set (double value);
}
```

F#

```
member groupPositionXGSCDIG : float with get, set
```

Property Value

Type: Double

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.groupPositionYGSCDIG Property

GSCA implemententation of group position

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double groupPositionYGSCDIG { get; set; }
```

VB

```
Public Property groupPositionYGSCDIG As Double
      Get
      Set
```

C++

```
public:
property double groupPositionYGSCDIG {
      double get ();
      void set (double value);
}
```

F#

```
member groupPositionYGSCDIG : float with get, set
```

Property Value

Type: Double

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.isBigEndian Property

true if big endian

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isBigEndian { get; set; }
```

VB

```
Public Property isBigEndian As Boolean
      Get
      Set
```

C++

```
public:
property bool isBigEndian {
      bool get ();
      void set (bool value);
}
```

F#

```
member isBigEndian : bool with get, set
```

Property Value

Type: Boolean

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.isLatLon Property

is it a lat/lon position or projected

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool isLatLon { get; set; }
```

VB

```
Public Property isLatLon As Boolean
      Get
      Set
```

C++

```
public:
property bool isLatLon {
      bool get ();
      void set (bool value);
}
```

F#

```
member isLatLon : bool with get, set
```

Property Value

Type: Boolean

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.positionOfTraceInFile Property

position in bytes

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public long positionOfTraceInFile { get; set; }
```

VB

```
Public Property positionOfTraceInFile As Long
      Get
      Set
```

C++

```
public:
property long long positionOfTraceInFile {
      long long get ();
      void set (long long value);
}
```

F#

```
member positionOfTraceInFile : int64 with get, set
```

Property Value

Type: Int64

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.sourcePositionX Property

source position X corrected for scaling factors

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double sourcePositionX { get; set; }
```

VB

```
Public Property sourcePositionX As Double
      Get
      Set
```

C++

```
public:
property double sourcePositionX {
      double get ();
      void set (double value);
}
```

F#

```
member sourcePositionX : float with get, set
```

Property Value

Type: Double

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.sourcePositionY Property

source position Y corrected for scaling factors

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double sourcePositionY { get; set; }
```

VB

```
Public Property sourcePositionY As Double
      Get
      Set
```

C++

```
public:
property double sourcePositionY {
      double get ();
      void set (double value);
}
```

F#

```
member sourcePositionY : float with get, set
```

Property Value

Type: Double

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.timeTracedRecorded Property

DateTime of trace instance

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public DateTime timeTracedRecorded { get; set; }
```

VB

```
Public Property timeTracedRecorded As DateTime
      Get
      Set
```

C++

```
public:
property DateTime timeTracedRecorded {
      DateTime get ();
      void set (DateTime value);
}
```

F#

```
member timeTracedRecorded : DateTime with get, set
```

Property Value

Type: DateTime

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.totalLengthOfTraceData Property

total number of bytes of trace data in including trace header

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int totalLengthOfTraceData { get; set; }
```

VB

```
Public Property totalLengthOfTraceData As Integer
      Get
      Set
```

C++

```
public:
property int totalLengthOfTraceData {
      int get ();
      void set (int value);
}
```

F#

```
member totalLengthOfTraceData : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.TraceData Property

access to underlying Trace Data Class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTraceData TraceData { get; set; }
```

VB

```
Public Property TraceData As SEGYTraceData
      Get
      Set
```

C++

```
public:
property SEGYTraceData^ TraceData {
      SEGYTraceData^ get ();
      void set (SEGYTraceData^ value);
}
```

F#

```
member TraceData : SEGYTraceData with get, set
```

Property Value

Type: SEGYTraceData

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.TraceHeader Property

access to underlying Trace Header Class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTraceHeader TraceHeader { get; set; }
```

VB

```
Public Property TraceHeader As SEGYTraceHeader
      Get
      Set
```

C++

```
public:
property SEGYTraceHeader^ TraceHeader {
      SEGYTraceHeader^ get ();
      void set (SEGYTraceHeader^ value);
}
```

F#

```
member TraceHeader : SEGYTraceHeader with get, set
```

Property Value

Type: SEGYTraceHeader

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.SEGYTrace Methods

The SEGYTrace type exposes the following members.

Methods

	Name	Description
	Copy	make a deep copy of a SEGY Trace
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	FixMsecField	transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Intialize	initilize trace structure
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)
	Write	write a trace to a BinaryWriter stream

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.Copy Method

make a deep copy of a SEGY Trace

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTrace Copy()
```

VB

```
Public Function Copy As SEGYTrace
```

C++

```
public:
SEGYTrace^ Copy()
```

F#

```
member Copy : unit -> SEGYTrace
```

Return Value

Type: SEGYTrace
pointer to a deep copy of the input trace

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.FixMsecField Method

transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void FixMsecField()
```

VB

```
Public Sub FixMsecField
```

C++

```
public:
void FixMsecField()
```

F#

```
member FixMsecField : unit -> unit
```

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.Intialize Method

initilize trace structure

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void Intialize(
      bool isBigEndian,
      int format
)
```

VB

```
Public Sub Intialize (
      isBigEndian As Boolean,
      format As Integer
)
```

C++

```
public:
void Intialize(
      bool isBigEndian,
      int format
)
```

F#

```
member Intialize :
        isBigEndian : bool *
        format : int -> unit
```

Parameters

isBigEndian
Type: System.Boolean
is the file big endian or little endian

format
Type: System.Int32
format of data word length according to SEGY standard

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTrace.Write Method

write a trace to a BinaryWriter stream

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool Write(
      BinaryWriter bw
)
```

VB

```
Public Function Write (
      bw As BinaryWriter
) As Boolean
```

C++

```
public:
bool Write(
      BinaryWriter^ bw
)
```

F#

```
member Write :
        bw : BinaryWriter -> bool
```

Parameters

bw
Type: System.IO.BinaryWriter
output stream pointer

Return Value

Type: Boolean
true if successful

See Also

SEGYTrace Class
SEGYlib Namespace

SEGYTraceData Class

SEGYTraceData allows access to the contents of the binary trace data

Inheritance Hierarchy

System.Object
  SEGYlib.SEGYTraceData

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public class SEGYTraceData
```

VB

```
Public Class SEGYTraceData
```

C++

```
public ref class SEGYTraceData
```

F#

```
type SEGYTraceData =  class end
```

The **SEGYTraceData** type exposes the following members.

Constructors

	Name	Description
	SEGYTraceData	SEGYTraceData allows access to the contents of the binary trace data

Properties

	Name	Description
	Data	a double precision view of the trace data use this to read and change the contents of the trace data buffer
	DataCopy	Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer
	TraceDataBuffer	access to byte[] trace data block

Methods

	Name	Description
	Equals	Determines whether the specified Object is equal to the current Object.

		(Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Initialize	Initialize the class
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYlib Namespace

SEGYTraceData Constructor

SEGYTraceData allows access to the contents of the binary trace data

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTraceData()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYTraceData()
```

F#

```
new : unit -> SEGYTraceData
```

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.SEGYTraceData Properties

The SEGYTraceData type exposes the following members.

Properties

	Name	Description
	Data	a double precision view of the trace data use this to read and change the contents of the trace data buffer
	DataCopy	Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer
	TraceDataBuffer	access to byte[] trace data block

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.Data Property

a double precision view of the trace data use this to read and change the contents of the trace data buffer

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double[] Data { get; set; }
```

VB

```
Public Property Data As Double()
      Get
      Set
```

C++

```
public:
property array<double>^ Data {
      array<double>^ get ();
      void set (array<double>^ value);
}
```

F#

```
member Data : float[] with get, set
```

Property Value

Type: Double[]

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.DataCopy Property

Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public double[] DataCopy { get; set; }
```

VB

```
Public Property DataCopy As Double()
      Get
      Set
```

C++

```
public:
property array<double>^ DataCopy {
      array<double>^ get ();
      void set (array<double>^ value);
}
```

F#

```
member DataCopy : float[] with get, set
```

Property Value

Type: Double[]

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.TraceDataBuffer Property

access to byte[] trace data block

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public byte[] TraceDataBuffer { get; set; }
```

VB

```
Public Property TraceDataBuffer As Byte()
      Get
      Set
```

C++

```
public:
property array<unsigned char>^ TraceDataBuffer {
      array<unsigned char>^ get ();
      void set (array<unsigned char>^ value);
}
```

F#

```
member TraceDataBuffer : byte[] with get, set
```

Property Value

Type: Byte[]

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.SEGYTraceData Methods

The SEGYTraceData type exposes the following members.

Methods

	Name	Description
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Initialize	Initialize the class
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceData.Initialize Method

Initialize the class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void Initialize(
      int format,
      bool bigendian
)
```

VB

```
Public Sub Initialize (
      format As Integer,
      bigendian As Boolean
)
```

C++

```
public:
void Initialize(
      int format,
      bool bigendian
)
```

F#

```
member Initialize :
        format : int *
        bigendian : bool -> unit
```

Parameters

format
Type: System.Int32
segy rev 1 data format

bigendian
Type: System.Boolean
true if data is big endian

See Also

SEGYTraceData Class
SEGYlib Namespace

SEGYTraceHeader Class

SEGYTraceHeader is used to access and change contents of the binary trace header data block

Inheritance Hierarchy

System.Object

SEGYlib.SEGYTraceHeader

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public class SEGYTraceHeader
```

VB

```
Public Class SEGYTraceHeader
```

C++

```
public ref class SEGYTraceHeader
```

F#

```
type SEGYTraceHeader =  class end
```

The **SEGYTraceHeader** type exposes the following members.

Constructors

	Name	Description
	SEGYTraceHeader	SEGYTraceHeader is used to access and change contents of the binary trace header data block

Properties

	Name	Description
	aliasFilterSlopeDBOctave	refer to SEGY rev 1 documentation
	aliasFrequencyHz	refer to SEGY rev 1 documentation
	bigEndian	true if big endian
	coordinateUnits	refer to SEGY rev 1 documentation
	correlated	refer to SEGY rev 1

		documentation
	crossLineNumber3D	refer to SEGY rev 1 documentation
	dataUse	refer to SEGY rev 1 documentation
	datumElevationAtReceiverGroup	refer to SEGY rev 1 documentation
	datumElevationAtSource	refer to SEGY rev 1 documentation
	dayOfYear	refer to SEGY rev 1 documentation
	delayRecordingTimeMsec	refer to SEGY rev 1 documentation
	deviceTraceIdentifier	refer to SEGY rev 1 documentation
	distanceFromCenterOfSourcePointToCenterOfGroup	refer to SEGY rev 1 documentation
	energySourcePointNumber	refer to SEGY rev 1 documentation
	ensembleNumber	refer to SEGY rev 1 documentation
	gainTypeOfFieldInstruments	refer to SEGY rev 1 documentation
	gapSize	refer to SEGY rev 1 documentation
	geophoneGroupNumberofLastTraceWithinOriginalFieldRecord	refer to SEGY rev 1 documentation
	geophoneGroupNumberOfRollSwitchPositionOne	refer to SEGY rev 1 documentation
	geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord	refer to SEGY rev 1 documentation
	groupCoordinateX	refer to SEGY rev 1 documentation
	groupCoordinateY	refer to SEGY rev 1 documentation
	groupStaticCorrectionMsec	refer to SEGY rev 1 documentation
	highCutFrequencyHz	refer to SEGY rev 1 documentation
	highCutSlopeDBOctave	refer to SEGY rev 1

		documentation
	hourOfDay	refer to SEGY rev 1 documentation
	inLineNumber3D	refer to SEGY rev 1 documentation
	instrumentEarlyOrIntialGainDB	refer to SEGY rev 1 documentation
	instrumentGainConstantDB	refer to SEGY rev 1 documentation
	lagTimeAMsec	refer to SEGY rev 1 documentation
	lagTimeBMsec	refer to SEGY rev 1 documentation
	lowCutFrequencyHz	refer to SEGY rev 1 documentation
	lowCutSlopeDBOctave	refer to SEGY rev 1 documentation
	minuteOfHour	refer to SEGY rev 1 documentation
	muteTimeEndTimeMsec	refer to SEGY rev 1 documentation
	muteTimeStartTimeMsec	refer to SEGY rev 1 documentation
	notchFilterSlopeDBOctave	refer to SEGY rev 1 documentation
	notchFrequencyHz	refer to SEGY rev 1 documentation
	numberOfHorizonatallySummedTracesYieldingThisTrace	refer to SEGY rev 1 documentation
	numberOfSamplesInTrace	refer to SEGY rev 1 documentation
	numberOfVerticallySummedTracesYieldingThisTrace	refer to SEGY rev 1 documentation
	originalFieldRecordNumber	refer to SEGY rev 1 documentation
	overTravel	refer to SEGY rev 1 documentation
	receiverGroupElevation	refer to SEGY rev 1 documentation
	sampleIntervalUsec	refer to SEGY rev 1

		documentation
	scalarAppliedToShotPointNumber	refer to SEGY rev 1 documentation
	scalarForAllElevationsAndDepths	refer to SEGY rev 1 documentation
	scalarToBeAppliedToAllCoordinates	refer to SEGY rev 1 documentation
	scalarUsedToScaleTraceHeaderMSecTimes	refer to SEGY rev 1 documentation
	secondOfMinute	refer to SEGY rev 1 documentation
	shotpointNumber	refer to SEGY rev 1 documentation
	souceStaticCorrectionMsec	refer to SEGY rev 1 documentation
	sourceCoordinateX	refer to SEGY rev 1 documentation
	sourceCoordinateY	refer to SEGY rev 1 documentation
	sourceDepthBelowSurface	refer to SEGY rev 1 documentation
	sourceEnergyDirectionExponent	refer to SEGY rev 1 documentation
	sourceEnergyDirectionMantissa	refer to SEGY rev 1 documentation
	sourceMeasurementExponent	refer to SEGY rev 1 documentation
	sourceMeasurementMantissa	refer to SEGY rev 1 documentation
	sourceMeasurementUnit	refer to SEGY rev 1 documentation
	sourceType	refer to SEGY rev 1 documentation
	subweatheringVelocity	refer to SEGY rev 1 documentation
	surfaceElevationAtSource	refer to SEGY rev 1 documentation
	sweepFrequencyAtEnd	refer to SEGY rev 1 documentation
	sweepFrequencyAtStart	refer to SEGY rev 1

		documentation
	sweepLengthInMsec	refer to SEGY rev 1 documentation
	sweepTaperLenghtAtEndMsec	refer to SEGY rev 1 documentation
	sweepTaperLengthAtStartMsec	refer to SEGY rev 1 documentation
	sweepType	refer to SEGY rev 1 documentation
	taperType	refer to SEGY rev 1 documentation
	timeBasis	refer to SEGY rev 1 documentation
	totalStaticMsec	refer to SEGY rev 1 documentation
	TraceHeaderBuffer	SEGYTraceHeader storage block
	traceIdentificationCode	refer to SEGY rev 1 documentation
	traceNumberWithinEnsemble	refer to SEGY rev 1 documentation
	traceNumberWithinOriginalFieldRecord	refer to SEGY rev 1 documentation
	traceSequenceNumberWithinFile	refer to SEGY rev 1 documentation
	traceSequenceNumberWithinLine	refer to SEGY rev 1 documentation
	traceValueMeasurementUnit	refer to SEGY rev 1 documentation
	traceWeightingFactor	refer to SEGY rev 1 documentation
	transductionConstantExponent	refer to SEGY rev 1 documentation
	transductionConstantMantissa	refer to SEGY rev 1 documentation
	transductionUnits	refer to SEGY rev 1 documentation
	upholeTimeAtGroupMsec	refer to SEGY rev 1 documentation
	upholeTimeAtSourceMsec	refer to SEGY rev 1

		documentation
	waterDepthAtGroup	refer to SEGY rev 1 documentation
	waterDepthAtSource	refer to SEGY rev 1 documentation
	weatheringVelocity	refer to SEGY rev 1 documentation
	xCoordinateOfEnsemble	refer to SEGY rev 1 documentation
	yCoordinateOfEnsemble	refer to SEGY rev 1 documentation
	yearDataRecorded	refer to SEGY rev 1 documentation

Methods

	Name	Description
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Initialize	initialize object
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYlib Namespace

SEGYTraceHeader Constructor

SEGYTraceHeader is used to access and change contents of the binary trace header data block

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYTraceHeader()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYTraceHeader()
```

F#

```
new : unit -> SEGYTraceHeader
```

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.SEGYTraceHeader Properties

The SEGYTraceHeader type exposes the following members.

Properties

	Name	Description
	aliasFilterSlopeDBOctave	refer to SEGY rev 1 documentation
	aliasFrequencyHz	refer to SEGY rev 1 documentation
	bigEndian	true if big endian
	coordinateUnits	refer to SEGY rev 1 documentation
	correlated	refer to SEGY rev 1 documentation
	crossLineNumber3D	refer to SEGY rev 1 documentation
	dataUse	refer to SEGY rev 1 documentation
	datumElevationAtReceiverGroup	refer to SEGY rev 1 documentation
	datumElevationAtSource	refer to SEGY rev 1 documentation
	dayOfYear	refer to SEGY rev 1 documentation
	delayRecordingTimeMsec	refer to SEGY rev 1 documentation
	deviceTraceIdentifier	refer to SEGY rev 1 documentation
	distanceFromCenterOfSourcePointToCenterOfGroup	refer to SEGY rev 1 documentation
	energySourcePointNumber	refer to SEGY rev 1 documentation
	ensembleNumber	refer to SEGY rev 1 documentation
	gainTypeOfFieldInstruments	refer to SEGY rev 1 documentation
	gapSize	refer to SEGY rev 1 documentation
	geophoneGroupNumberofLastTraceWithinOriginalFieldRecord	refer to SEGY rev 1 documentation

geophoneGroupNumberOfRollSwitchPositionOne	refer to SEGY rev 1 documentation
geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord	refer to SEGY rev 1 documentation
groupCoordinateX	refer to SEGY rev 1 documentation
groupCoordinateY	refer to SEGY rev 1 documentation
groupStaticCorrectionMsec	refer to SEGY rev 1 documentation
highCutFrequencyHz	refer to SEGY rev 1 documentation
highCutSlopeDBOctave	refer to SEGY rev 1 documentation
hourOfDay	refer to SEGY rev 1 documentation
inLineNumber3D	refer to SEGY rev 1 documentation
instrumentEarlyOrIntialGainDB	refer to SEGY rev 1 documentation
instrumentGainConstantDB	refer to SEGY rev 1 documentation
lagTimeAMsec	refer to SEGY rev 1 documentation
lagTimeBMsec	refer to SEGY rev 1 documentation
lowCutFrequencyHz	refer to SEGY rev 1 documentation
lowCutSlopeDBOctave	refer to SEGY rev 1 documentation
minuteOfHour	refer to SEGY rev 1 documentation
muteTimeEndTimeMsec	refer to SEGY rev 1 documentation
muteTimeStartTimeMsec	refer to SEGY rev 1 documentation
notchFilterSlopeDBOctave	refer to SEGY rev 1 documentation
notchFrequencyHz	refer to SEGY rev 1 documentation

numberOfHorizonatallySummedTracesYieldingThisTrace	refer to SEGY rev 1 documentation
numberOfSamplesInTrace	refer to SEGY rev 1 documentation
numberOfVerticallySummedTracesYieldingThisTrace	refer to SEGY rev 1 documentation
originalFieldRecordNumber	refer to SEGY rev 1 documentation
overTravel	refer to SEGY rev 1 documentation
receiverGroupElevation	refer to SEGY rev 1 documentation
sampleIntervalUsec	refer to SEGY rev 1 documentation
scalarAppliedToShotPointNumber	refer to SEGY rev 1 documentation
scalarForAllElevationsAndDepths	refer to SEGY rev 1 documentation
scalarToBeAppliedToAllCoordinates	refer to SEGY rev 1 documentation
scalarUsedToScaleTraceHeaderMSecTimes	refer to SEGY rev 1 documentation
secondOfMinute	refer to SEGY rev 1 documentation
shotpointNumber	refer to SEGY rev 1 documentation
souceStaticCorrectionMsec	refer to SEGY rev 1 documentation
sourceCoordinateX	refer to SEGY rev 1 documentation
sourceCoordinateY	refer to SEGY rev 1 documentation
sourceDepthBelowSurface	refer to SEGY rev 1 documentation
sourceEnergyDirectionExponent	refer to SEGY rev 1 documentation
sourceEnergyDirectionMantissa	refer to SEGY rev 1 documentation
sourceMeasurementExponent	refer to SEGY rev 1 documentation

sourceMeasurementMantissa	refer to SEGY rev 1 documentation
sourceMeasurementUnit	refer to SEGY rev 1 documentation
sourceType	refer to SEGY rev 1 documentation
subweatheringVelocity	refer to SEGY rev 1 documentation
surfaceElevationAtSource	refer to SEGY rev 1 documentation
sweepFrequencyAtEnd	refer to SEGY rev 1 documentation
sweepFrequencyAtStart	refer to SEGY rev 1 documentation
sweepLengthInMsec	refer to SEGY rev 1 documentation
sweepTaperLenghtAtEndMsec	refer to SEGY rev 1 documentation
sweepTaperLengthAtStartMsec	refer to SEGY rev 1 documentation
sweepType	refer to SEGY rev 1 documentation
taperType	refer to SEGY rev 1 documentation
timeBasis	refer to SEGY rev 1 documentation
totalStaticMsec	refer to SEGY rev 1 documentation
TraceHeaderBuffer	SEGYTraceHeader storage block
traceIdentificationCode	refer to SEGY rev 1 documentation
traceNumberWithinEnsemble	refer to SEGY rev 1 documentation
traceNumberWithinOriginalFieldRecord	refer to SEGY rev 1 documentation
traceSequenceNumberWithinFile	refer to SEGY rev 1 documentation
traceSequenceNumberWithinLine	refer to SEGY rev 1 documentation

	traceValueMeasurementUnit	refer to SEGY rev 1 documentation
	traceWeightingFactor	refer to SEGY rev 1 documentation
	transductionConstantExponent	refer to SEGY rev 1 documentation
	transductionConstantMantissa	refer to SEGY rev 1 documentation
	transductionUnits	refer to SEGY rev 1 documentation
	upholeTimeAtGroupMsec	refer to SEGY rev 1 documentation
	upholeTimeAtSourceMsec	refer to SEGY rev 1 documentation
	waterDepthAtGroup	refer to SEGY rev 1 documentation
	waterDepthAtSource	refer to SEGY rev 1 documentation
	weatheringVelocity	refer to SEGY rev 1 documentation
	xCoordinateOfEnsemble	refer to SEGY rev 1 documentation
	yCoordinateOfEnsemble	refer to SEGY rev 1 documentation
	yearDataRecorded	refer to SEGY rev 1 documentation

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.aliasFilterSlopeDBOctave Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short aliasFilterSlopeDBOctave { get; set; }
```

VB

```
Public Property aliasFilterSlopeDBOctave As Short
      Get
      Set
```

C++

```
public:
property short aliasFilterSlopeDBOctave {
      short get ();
      void set (short value);
}
```

F#

```
member aliasFilterSlopeDBOctave : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.aliasFrequencyHz Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort aliasFrequencyHz { get; set; }
```

VB

```
Public Property aliasFrequencyHz As UShort
      Get
      Set
```

C++

```
public:
property unsigned short aliasFrequencyHz {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member aliasFrequencyHz : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.bigEndian Property

true if big endian

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public bool bigEndian { get; set; }
```

VB

```
Public Property bigEndian As Boolean
      Get
      Set
```

C++

```
public:
property bool bigEndian {
      bool get ();
      void set (bool value);
}
```

F#

```
member bigEndian : bool with get, set
```

Property Value

Type: Boolean

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.coordinateUnits Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort coordinateUnits { get; set; }
```

VB

```
Public Property coordinateUnits As UShort
      Get
      Set
```

C++

```
public:
property unsigned short coordinateUnits {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member coordinateUnits : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.correlated Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort correlated { get; set; }
```

VB

```
Public Property correlated As UShort
      Get
      Set
```

C++

```
public:
property unsigned short correlated {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member correlated : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.crossLineNumber3D Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint crossLineNumber3D { get; set; }
```

VB

```
Public Property crossLineNumber3D As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int crossLineNumber3D {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member crossLineNumber3D : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.dataUse Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort dataUse { get; set; }
```

VB

```
Public Property dataUse As UShort
      Get
      Set
```

C++

```
public:
property unsigned short dataUse {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member dataUse : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.datumElevationAtReceiverGroup Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int datumElevationAtReceiverGroup { get; set; }
```

VB

```
Public Property datumElevationAtReceiverGroup As Integer
      Get
      Set
```

C++

```
public:
property int datumElevationAtReceiverGroup {
      int get ();
      void set (int value);
}
```

F#

```
member datumElevationAtReceiverGroup : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.datumElevationAtSource Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int datumElevationAtSource { get; set; }
```

VB

```
Public Property datumElevationAtSource As Integer
      Get
      Set
```

C++

```
public:
property int datumElevationAtSource {
      int get ();
      void set (int value);
}
```

F#

```
member datumElevationAtSource : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.dayOfYear Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort dayOfYear { get; set; }
```

VB

```
Public Property dayOfYear As UShort
      Get
      Set
```

C++

```
public:
property unsigned short dayOfYear {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member dayOfYear : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.delayRecordingTimeMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short delayRecordingTimeMsec { get; set; }
```

VB

```
Public Property delayRecordingTimeMsec As Short
      Get
      Set
```

C++

```
public:
property short delayRecordingTimeMsec {
      short get ();
      void set (short value);
}
```

F#

```
member delayRecordingTimeMsec : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.deviceTraceIdentifier Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short deviceTraceIdentifier { get; set; }
```

VB

```
Public Property deviceTraceIdentifier As Short
      Get
      Set
```

C++

```
public:
property short deviceTraceIdentifier {
      short get ();
      void set (short value);
}
```

F#

```
member deviceTraceIdentifier : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.distanceFromCenterOfSourcePointToCenterOfGroup Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int distanceFromCenterOfSourcePointToCenterOfGroup { get; set; }
```

VB

```
Public Property distanceFromCenterOfSourcePointToCenterOfGroup As Integer
      Get
      Set
```

C++

```
public:
property int distanceFromCenterOfSourcePointToCenterOfGroup {
      int get ();
      void set (int value);
}
```

F#

```
member distanceFromCenterOfSourcePointToCenterOfGroup : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.energySourcePointNumber Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint energySourcePointNumber { get; set; }
```

VB

```
Public Property energySourcePointNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int energySourcePointNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member energySourcePointNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.ensembleNumber Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint ensembleNumber { get; set; }
```

VB

```
Public Property ensembleNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int ensembleNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member ensembleNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.gainTypeOfFieldInstruments Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort gainTypeOfFieldInstruments { get; set; }
```

VB

```
Public Property gainTypeOfFieldInstruments As UShort
      Get
      Set
```

C++

```
public:
property unsigned short gainTypeOfFieldInstruments {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member gainTypeOfFieldInstruments : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.gapSize Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort gapSize { get; set; }
```

VB

```
Public Property gapSize As UShort
      Get
      Set
```

C++

```
public:
property unsigned short gapSize {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member gapSize : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.geophoneGroupNumberofLastTraceWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort geophoneGroupNumberofLastTraceWithinOriginalFieldRecord { get;
set; }
```

VB

```
Public Property geophoneGroupNumberofLastTraceWithinOriginalFieldRecord As
UShort
      Get
      Set
```

C++

```
public:
property unsigned short
geophoneGroupNumberofLastTraceWithinOriginalFieldRecord {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member geophoneGroupNumberofLastTraceWithinOriginalFieldRecord : uint16 with
get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.geophoneGroupNumberOfRollSwitchPositionOne Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort geophoneGroupNumberOfRollSwitchPositionOne { get; set; }
```

VB

```
Public Property geophoneGroupNumberOfRollSwitchPositionOne As UShort
      Get
      Set
```

C++

```
public:
property unsigned short geophoneGroupNumberOfRollSwitchPositionOne {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member geophoneGroupNumberOfRollSwitchPositionOne : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord {
get; set; }
```

VB

```
Public Property geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord
As UShort
      Get
      Set
```

C++

```
public:
property unsigned short
geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord : uint16
with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.groupCoordinateX Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int groupCoordinateX { get; set; }
```

VB

```
Public Property groupCoordinateX As Integer
      Get
      Set
```

C++

```
public:
property int groupCoordinateX {
      int get ();
      void set (int value);
}
```

F#

```
member groupCoordinateX : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.groupCoordinateY Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int groupCoordinateY { get; set; }
```

VB

```
Public Property groupCoordinateY As Integer
      Get
      Set
```

C++

```
public:
property int groupCoordinateY {
      int get ();
      void set (int value);
}
```

F#

```
member groupCoordinateY : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.groupStaticCorrectionMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort groupStaticCorrectionMsec { get; set; }
```

VB

```
Public Property groupStaticCorrectionMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short groupStaticCorrectionMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member groupStaticCorrectionMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.highCutFrequencyHz Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort highCutFrequencyHz { get; set; }
```

VB

```
Public Property highCutFrequencyHz As UShort
      Get
      Set
```

C++

```
public:
property unsigned short highCutFrequencyHz {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member highCutFrequencyHz : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.highCutSlopeDBOctave Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short highCutSlopeDBOctave { get; set; }
```

VB

```
Public Property highCutSlopeDBOctave As Short
      Get
      Set
```

C++

```
public:
property short highCutSlopeDBOctave {
      short get ();
      void set (short value);
}
```

F#

```
member highCutSlopeDBOctave : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.hourOfDay Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort hourOfDay { get; set; }
```

VB

```
Public Property hourOfDay As UShort
      Get
      Set
```

C++

```
public:
property unsigned short hourOfDay {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member hourOfDay : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.inLineNumber3D Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint inLineNumber3D { get; set; }
```

VB

```
Public Property inLineNumber3D As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int inLineNumber3D {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member inLineNumber3D : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.instrumentEarlyOrIntialGainDB Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short instrumentEarlyOrIntialGainDB { get; set; }
```

VB

```
Public Property instrumentEarlyOrIntialGainDB As Short
      Get
      Set
```

C++

```
public:
property short instrumentEarlyOrIntialGainDB {
      short get ();
      void set (short value);
}
```

F#

```
member instrumentEarlyOrIntialGainDB : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.instrumentGainConstantDB Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short instrumentGainConstantDB { get; set; }
```

VB

```
Public Property instrumentGainConstantDB As Short
      Get
      Set
```

C++

```
public:
property short instrumentGainConstantDB {
      short get ();
      void set (short value);
}
```

F#

```
member instrumentGainConstantDB : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.lagTimeAMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short lagTimeAMsec { get; set; }
```

VB

```
Public Property lagTimeAMsec As Short
      Get
      Set
```

C++

```
public:
property short lagTimeAMsec {
      short get ();
      void set (short value);
}
```

F#

```
member lagTimeAMsec : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.lagTimeBMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short lagTimeBMsec { get; set; }
```

VB

```
Public Property lagTimeBMsec As Short
      Get
      Set
```

C++

```
public:
property short lagTimeBMsec {
      short get ();
      void set (short value);
}
```

F#

```
member lagTimeBMsec : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.lowCutFrequencyHz Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort lowCutFrequencyHz { get; set; }
```

VB

```
Public Property lowCutFrequencyHz As UShort
      Get
      Set
```

C++

```
public:
property unsigned short lowCutFrequencyHz {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member lowCutFrequencyHz : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.lowCutSlopeDBOctave Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short lowCutSlopeDBOctave { get; set; }
```

VB

```
Public Property lowCutSlopeDBOctave As Short
      Get
      Set
```

C++

```
public:
property short lowCutSlopeDBOctave {
      short get ();
      void set (short value);
}
```

F#

```
member lowCutSlopeDBOctave : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.minuteOfHour Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort minuteOfHour { get; set; }
```

VB

```
Public Property minuteOfHour As UShort
      Get
      Set
```

C++

```
public:
property unsigned short minuteOfHour {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member minuteOfHour : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.muteTimeEndTimeMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort muteTimeEndTimeMsec { get; set; }
```

VB

```
Public Property muteTimeEndTimeMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short muteTimeEndTimeMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member muteTimeEndTimeMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.muteTimeStartTimeMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort muteTimeStartTimeMsec { get; set; }
```

VB

```
Public Property muteTimeStartTimeMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short muteTimeStartTimeMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member muteTimeStartTimeMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.notchFilterSlopeDBOctave Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short notchFilterSlopeDBOctave { get; set; }
```

VB

```
Public Property notchFilterSlopeDBOctave As Short
      Get
      Set
```

C++

```
public:
property short notchFilterSlopeDBOctave {
      short get ();
      void set (short value);
}
```

F#

```
member notchFilterSlopeDBOctave : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.notchFrequencyHz Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort notchFrequencyHz { get; set; }
```

VB

```
Public Property notchFrequencyHz As UShort
      Get
      Set
```

C++

```
public:
property unsigned short notchFrequencyHz {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member notchFrequencyHz : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.numberOfHorizonatallySummedTracesYieldingThisTrace Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfHorizonatallySummedTracesYieldingThisTrace { get; set;
}
```

VB

```
Public Property numberOfHorizonatallySummedTracesYieldingThisTrace As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfHorizonatallySummedTracesYieldingThisTrace {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfHorizonatallySummedTracesYieldingThisTrace : uint16 with get,
set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.numberOfSamplesInTrace Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfSamplesInTrace { get; set; }
```

VB

```
Public Property numberOfSamplesInTrace As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfSamplesInTrace {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfSamplesInTrace : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.numberOfVerticallySummedTracesYieldingThisTrace Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort numberOfVerticallySummedTracesYieldingThisTrace { get; set; }
```

VB

```
Public Property numberOfVerticallySummedTracesYieldingThisTrace As UShort
      Get
      Set
```

C++

```
public:
property unsigned short numberOfVerticallySummedTracesYieldingThisTrace {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member numberOfVerticallySummedTracesYieldingThisTrace : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.originalFieldRecordNumber Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint originalFieldRecordNumber { get; set; }
```

VB

```
Public Property originalFieldRecordNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int originalFieldRecordNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member originalFieldRecordNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.overTravel Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort overTravel { get; set; }
```

VB

```
Public Property overTravel As UShort
      Get
      Set
```

C++

```
public:
property unsigned short overTravel {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member overTravel : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.receiverGroupElevation Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int receiverGroupElevation { get; set; }
```

VB

```
Public Property receiverGroupElevation As Integer
      Get
      Set
```

C++

```
public:
property int receiverGroupElevation {
      int get ();
      void set (int value);
}
```

F#

```
member receiverGroupElevation : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sampleIntervalUsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sampleIntervalUsec { get; set; }
```

VB

```
Public Property sampleIntervalUsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sampleIntervalUsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sampleIntervalUsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.scalarAppliedToShotPointNumber Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short scalarAppliedToShotPointNumber { get; set; }
```

VB

```
Public Property scalarAppliedToShotPointNumber As Short
      Get
      Set
```

C++

```
public:
property short scalarAppliedToShotPointNumber {
      short get ();
      void set (short value);
}
```

F#

```
member scalarAppliedToShotPointNumber : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.scalarForAllElevationsAndDepths Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short scalarForAllElevationsAndDepths { get; set; }
```

VB

```
Public Property scalarForAllElevationsAndDepths As Short
      Get
      Set
```

C++

```
public:
property short scalarForAllElevationsAndDepths {
      short get ();
      void set (short value);
}
```

F#

```
member scalarForAllElevationsAndDepths : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.scalarToBeAppliedToAllCoordinates Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short scalarToBeAppliedToAllCoordinates { get; set; }
```

VB

```
Public Property scalarToBeAppliedToAllCoordinates As Short
      Get
      Set
```

C++

```
public:
property short scalarToBeAppliedToAllCoordinates {
      short get ();
      void set (short value);
}
```

F#

```
member scalarToBeAppliedToAllCoordinates : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.scalarUsedToScaleTraceHeaderMSecTimes Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short scalarUsedToScaleTraceHeaderMSecTimes { get; set; }
```

VB

```
Public Property scalarUsedToScaleTraceHeaderMSecTimes As Short
      Get
      Set
```

C++

```
public:
property short scalarUsedToScaleTraceHeaderMSecTimes {
      short get ();
      void set (short value);
}
```

F#

```
member scalarUsedToScaleTraceHeaderMSecTimes : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.secondOfMinute Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort secondOfMinute { get; set; }
```

VB

```
Public Property secondOfMinute As UShort
      Get
      Set
```

C++

```
public:
property unsigned short secondOfMinute {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member secondOfMinute : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.shotpointNumber Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint shotpointNumber { get; set; }
```

VB

```
Public Property shotpointNumber As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int shotpointNumber {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member shotpointNumber : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.souceStaticCorrectionMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort souceStaticCorrectionMsec { get; set; }
```

VB

```
Public Property souceStaticCorrectionMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short souceStaticCorrectionMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member souceStaticCorrectionMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceCoordinateX Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int sourceCoordinateX { get; set; }
```

VB

```
Public Property sourceCoordinateX As Integer
      Get
      Set
```

C++

```
public:
property int sourceCoordinateX {
      int get ();
      void set (int value);
}
```

F#

```
member sourceCoordinateX : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceCoordinateY Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int sourceCoordinateY { get; set; }
```

VB

```
Public Property sourceCoordinateY As Integer
      Get
      Set
```

C++

```
public:
property int sourceCoordinateY {
      int get ();
      void set (int value);
}
```

F#

```
member sourceCoordinateY : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceDepthBelowSurface Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int sourceDepthBelowSurface { get; set; }
```

VB

```
Public Property sourceDepthBelowSurface As Integer
      Get
      Set
```

C++

```
public:
property int sourceDepthBelowSurface {
      int get ();
      void set (int value);
}
```

F#

```
member sourceDepthBelowSurface : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceEnergyDirectionExponent Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short sourceEnergyDirectionExponent { get; set; }
```

VB

```
Public Property sourceEnergyDirectionExponent As Short
      Get
      Set
```

C++

```
public:
property short sourceEnergyDirectionExponent {
      short get ();
      void set (short value);
}
```

F#

```
member sourceEnergyDirectionExponent : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceEnergyDirectionMantissa Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int sourceEnergyDirectionMantissa { get; set; }
```

VB

```
Public Property sourceEnergyDirectionMantissa As Integer
      Get
      Set
```

C++

```
public:
property int sourceEnergyDirectionMantissa {
      int get ();
      void set (int value);
}
```

F#

```
member sourceEnergyDirectionMantissa : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceMeasurementExponent Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short sourceMeasurementExponent { get; set; }
```

VB

```
Public Property sourceMeasurementExponent As Short
      Get
      Set
```

C++

```
public:
property short sourceMeasurementExponent {
      short get ();
      void set (short value);
}
```

F#

```
member sourceMeasurementExponent : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceMeasurementMantissa Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int sourceMeasurementMantissa { get; set; }
```

VB

```
Public Property sourceMeasurementMantissa As Integer
      Get
      Set
```

C++

```
public:
property int sourceMeasurementMantissa {
      int get ();
      void set (int value);
}
```

F#

```
member sourceMeasurementMantissa : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceMeasurementUnit Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short sourceMeasurementUnit { get; set; }
```

VB

```
Public Property sourceMeasurementUnit As Short
      Get
      Set
```

C++

```
public:
property short sourceMeasurementUnit {
      short get ();
      void set (short value);
}
```

F#

```
member sourceMeasurementUnit : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sourceType Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short sourceType { get; set; }
```

VB

```
Public Property sourceType As Short
      Get
      Set
```

C++

```
public:
property short sourceType {
      short get ();
      void set (short value);
}
```

F#

```
member sourceType : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.subweatheringVelocity Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort subweatheringVelocity { get; set; }
```

VB

```
Public Property subweatheringVelocity As UShort
      Get
      Set
```

C++

```
public:
property unsigned short subweatheringVelocity {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member subweatheringVelocity : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.surfaceElevationAtSource Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int surfaceElevationAtSource { get; set; }
```

VB

```
Public Property surfaceElevationAtSource As Integer
      Get
      Set
```

C++

```
public:
property int surfaceElevationAtSource {
      int get ();
      void set (int value);
}
```

F#

```
member surfaceElevationAtSource : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepFrequencyAtEnd Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepFrequencyAtEnd { get; set; }
```

VB

```
Public Property sweepFrequencyAtEnd As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepFrequencyAtEnd {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepFrequencyAtEnd : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepFrequencyAtStart Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepFrequencyAtStart { get; set; }
```

VB

```
Public Property sweepFrequencyAtStart As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepFrequencyAtStart {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepFrequencyAtStart : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepLengthInMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepLengthInMsec { get; set; }
```

VB

```
Public Property sweepLengthInMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepLengthInMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepLengthInMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepTaperLenghtAtEndMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepTaperLenghtAtEndMsec { get; set; }
```

VB

```
Public Property sweepTaperLenghtAtEndMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepTaperLenghtAtEndMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepTaperLenghtAtEndMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepTaperLengthAtStartMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepTaperLengthAtStartMsec { get; set; }
```

VB

```
Public Property sweepTaperLengthAtStartMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepTaperLengthAtStartMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepTaperLengthAtStartMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.sweepType Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort sweepType { get; set; }
```

VB

```
Public Property sweepType As UShort
      Get
      Set
```

C++

```
public:
property unsigned short sweepType {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member sweepType : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.taperType Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort taperType { get; set; }
```

VB

```
Public Property taperType As UShort
      Get
      Set
```

C++

```
public:
property unsigned short taperType {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member taperType : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.timeBasis Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort timeBasis { get; set; }
```

VB

```
Public Property timeBasis As UShort
      Get
      Set
```

C++

```
public:
property unsigned short timeBasis {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member timeBasis : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.totalStaticMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short totalStaticMsec { get; set; }
```

VB

```
Public Property totalStaticMsec As Short
      Get
      Set
```

C++

```
public:
property short totalStaticMsec {
      short get ();
      void set (short value);
}
```

F#

```
member totalStaticMsec : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.TraceHeaderBuffer Property

SEGYTraceHeader storage block

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public byte[] TraceHeaderBuffer { get; set; }
```

VB

```
Public Property TraceHeaderBuffer As Byte()
      Get
      Set
```

C++

```
public:
property array<unsigned char>^ TraceHeaderBuffer {
      array<unsigned char>^ get ();
      void set (array<unsigned char>^ value);
}
```

F#

```
member TraceHeaderBuffer : byte[] with get, set
```

Property Value

Type: Byte[]

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceIdentificationCode Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short traceIdentificationCode { get; set; }
```

VB

```
Public Property traceIdentificationCode As Short
      Get
      Set
```

C++

```
public:
property short traceIdentificationCode {
      short get ();
      void set (short value);
}
```

F#

```
member traceIdentificationCode : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceNumberWithinEnsemble Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint traceNumberWithinEnsemble { get; set; }
```

VB

```
Public Property traceNumberWithinEnsemble As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int traceNumberWithinEnsemble {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member traceNumberWithinEnsemble : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceNumberWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint traceNumberWithinOriginalFieldRecord { get; set; }
```

VB

```
Public Property traceNumberWithinOriginalFieldRecord As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int traceNumberWithinOriginalFieldRecord {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member traceNumberWithinOriginalFieldRecord : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceSequenceNumberWithinFile Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint traceSequenceNumberWithinFile { get; set; }
```

VB

```
Public Property traceSequenceNumberWithinFile As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int traceSequenceNumberWithinFile {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member traceSequenceNumberWithinFile : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceSequenceNumberWithinLine Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public uint traceSequenceNumberWithinLine { get; set; }
```

VB

```
Public Property traceSequenceNumberWithinLine As UInteger
      Get
      Set
```

C++

```
public:
property unsigned int traceSequenceNumberWithinLine {
      unsigned int get ();
      void set (unsigned int value);
}
```

F#

```
member traceSequenceNumberWithinLine : uint32 with get, set
```

Property Value

Type: UInt32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceValueMeasurementUnit Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short traceValueMeasurementUnit { get; set; }
```

VB

```
Public Property traceValueMeasurementUnit As Short
      Get
      Set
```

C++

```
public:
property short traceValueMeasurementUnit {
      short get ();
      void set (short value);
}
```

F#

```
member traceValueMeasurementUnit : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.traceWeightingFactor Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort traceWeightingFactor { get; set; }
```

VB

```
Public Property traceWeightingFactor As UShort
      Get
      Set
```

C++

```
public:
property unsigned short traceWeightingFactor {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member traceWeightingFactor : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.transductionConstantExponent Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short transductionConstantExponent { get; set; }
```

VB

```
Public Property transductionConstantExponent As Short
      Get
      Set
```

C++

```
public:
property short transductionConstantExponent {
      short get ();
      void set (short value);
}
```

F#

```
member transductionConstantExponent : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.transductionConstantMantissa Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int transductionConstantMantissa { get; set; }
```

VB

```
Public Property transductionConstantMantissa As Integer
      Get
      Set
```

C++

```
public:
property int transductionConstantMantissa {
      int get ();
      void set (int value);
}
```

F#

```
member transductionConstantMantissa : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.transductionUnits Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public short transductionUnits { get; set; }
```

VB

```
Public Property transductionUnits As Short
      Get
      Set
```

C++

```
public:
property short transductionUnits {
      short get ();
      void set (short value);
}
```

F#

```
member transductionUnits : int16 with get, set
```

Property Value

Type: Int16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.upholeTimeAtGroupMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort upholeTimeAtGroupMsec { get; set; }
```

VB

```
Public Property upholeTimeAtGroupMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short upholeTimeAtGroupMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member upholeTimeAtGroupMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.upholeTimeAtSourceMsec Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort upholeTimeAtSourceMsec { get; set; }
```

VB

```
Public Property upholeTimeAtSourceMsec As UShort
      Get
      Set
```

C++

```
public:
property unsigned short upholeTimeAtSourceMsec {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member upholeTimeAtSourceMsec : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.waterDepthAtGroup Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int waterDepthAtGroup { get; set; }
```

VB

```
Public Property waterDepthAtGroup As Integer
      Get
      Set
```

C++

```
public:
property int waterDepthAtGroup {
      int get ();
      void set (int value);
}
```

F#

```
member waterDepthAtGroup : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.waterDepthAtSource Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int waterDepthAtSource { get; set; }
```

VB

```
Public Property waterDepthAtSource As Integer
      Get
      Set
```

C++

```
public:
property int waterDepthAtSource {
      int get ();
      void set (int value);
}
```

F#

```
member waterDepthAtSource : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.weatheringVelocity Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort weatheringVelocity { get; set; }
```

VB

```
Public Property weatheringVelocity As UShort
      Get
      Set
```

C++

```
public:
property unsigned short weatheringVelocity {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member weatheringVelocity : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.xCoordinateOfEnsemble Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int xCoordinateOfEnsemble { get; set; }
```

VB

```
Public Property xCoordinateOfEnsemble As Integer
      Get
      Set
```

C++

```
public:
property int xCoordinateOfEnsemble {
      int get ();
      void set (int value);
}
```

F#

```
member xCoordinateOfEnsemble : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.yCoordinateOfEnsemble Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public int yCoordinateOfEnsemble { get; set; }
```

VB

```
Public Property yCoordinateOfEnsemble As Integer
      Get
      Set
```

C++

```
public:
property int yCoordinateOfEnsemble {
      int get ();
      void set (int value);
}
```

F#

```
member yCoordinateOfEnsemble : int with get, set
```

Property Value

Type: Int32

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.yearDataRecorded Property

refer to SEGY rev 1 documentation

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public ushort yearDataRecorded { get; set; }
```

VB

```
Public Property yearDataRecorded As UShort
      Get
      Set
```

C++

```
public:
property unsigned short yearDataRecorded {
      unsigned short get ();
      void set (unsigned short value);
}
```

F#

```
member yearDataRecorded : uint16 with get, set
```

Property Value

Type: UInt16

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.SEGYTraceHeader Methods

The SEGYTraceHeader type exposes the following members.

Methods

	Name	Description
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Initialize	initialize object
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYTraceHeader.Initialize Method

initialize object

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public void Initialize(
      bool bigEndian
)
```

VB

```
Public Sub Initialize (
      bigEndian As Boolean
)
```

C++

```
public:
void Initialize(
      bool bigEndian
)
```

F#

```
member Initialize :
        bigEndian : bool -> unit
```

Parameters

bigEndian
Type: System.Boolean
[Missing <param name="bigEndian"/> documentation for "M:SEGYlib.SEGYTraceHeader.Initialize(System.Boolean)"]

See Also

SEGYTraceHeader Class
SEGYlib Namespace

SEGYUtilities Class

SEGYUtilities for use in reading and writing SEGY files

Inheritance Hierarchy

System.Object

SEGYlib.SEGYUtilities

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public class SEGYUtilities
```

VB

```
Public Class SEGYUtilities
```

C++

```
public ref class SEGYUtilities
```

F#

```
type SEGYUtilities =  class end
```

The **SEGYUtilities** type exposes the following members.

Constructors

	Name	Description
	SEGYUtilities	Initializes a new instance of the **SEGYUtilities** class

Methods

	Name	Description
S	Bytes2Int	convert bytes to long int
S	ConvertAsciiToEbcdic	convert an ASCII byte array to an EBCDIC byte array
S	ConvertEbcdicToAscii	convert an EBCDIC byte array to an ASCII byte array
S	convertPositionToint	convert a position to a SEGY trace header integer
S	convertToPosition	convert a SEGY trace header positional value to position
	decimalDegreesToDMS	convert decimal degrees to degrees-minutes-seconds

S		
S	degreesToSecondsOfArc	convert decimal degrees to seconds of arc
S	dmsToDecimalDegrees	convert degrees-minutes-seconds to decimal degrees
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
S	Int2Bytes	convert a long int to bytes
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
S	secondsOfArctoDegrees	convert seconds of arc to decimal degrees
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYlib Namespace

SEGYUtilities Constructor

Initializes a new instance of the SEGYUtilities class

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public SEGYUtilities()
```

VB

```
Public Sub New
```

C++

```
public:
SEGYUtilities()
```

F#

```
new : unit -> SEGYUtilities
```

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.SEGYUtilities Methods

The SEGYUtilities type exposes the following members.

Methods

	Name	Description
	Bytes2Int	convert bytes to long int
	ConvertAsciiToEbcdic	convert an ASCII byte array to an EBCDIC byte array
	ConvertEbcdicToAscii	convert an EBCDIC byte array to an ASCII byte array
	convertPositionToint	convert a position to a SEGY trace header integer
	convertToPosition	convert a SEGY trace header positional value to position
	decimalDegreesToDMS	convert decimal degrees to degrees-minutes-seconds
	degreesToSecondsOfArc	convert decimal degrees to seconds of arc
	dmsToDecimalDegrees	convert degrees-minutes-seconds to decimal degrees
	Equals	Determines whether the specified Object is equal to the current Object. (Inherited from Object.)
	Finalize	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object.)
	GetType	Gets the Type of the current instance. (Inherited from Object.)
	Int2Bytes	convert a long int to bytes
	MemberwiseClone	Creates a shallow copy of the current Object. (Inherited from Object.)
	secondsOfArctoDegrees	convert seconds of arc to decimal degrees
	ToString	Returns a string that represents the current object. (Inherited from Object.)

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.Bytes2Int Method

convert bytes to long int

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static long Bytes2Int(
      byte[] byteArray,
      int startPosition,
      int length,
      bool signed,
      bool swap
)
```

VB

```
Public Shared Function Bytes2Int (
      byteArray As Byte(),
      startPosition As Integer,
      length As Integer,
      signed As Boolean,
      swap As Boolean
) As Long
```

C++

```
public:
static long long Bytes2Int(
      array<unsigned char>^ byteArray,
      int startPosition,
      int length,
      bool signed,
      bool swap
)
```

F#

```
static member Bytes2Int :
        byteArray : byte[] *
        startPosition : int *
        length : int *
        signed : bool *
        swap : bool -> int64
```

Parameters

byteArray
Type: System.Byte[]
input byte array

startPosition
Type: System.Int32
starting position

length
Type: System.Int32
length of byte array

signed
Type: System.Boolean
is the value signed

swap
Type: System.Boolean
swap the bytes first

Return Value
Type: Int64
long integer converted from byte array

See Also
SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.ConvertAsciiToEbcdic Method

convert an ASCII byte array to an EBCDIC byte array

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static byte[] ConvertAsciiToEbcdic(
      byte[] asciiData
)
```

VB

```
Public Shared Function ConvertAsciiToEbcdic (
      asciiData As Byte()
) As Byte()
```

C++

```
public:
static array<unsigned char>^ ConvertAsciiToEbcdic(
      array<unsigned char>^ asciiData
)
```

F#

```
static member ConvertAsciiToEbcdic :
        asciiData : byte[] -> byte[]
```

Parameters

asciiData
Type: System.Byte[]
input ASCII-formatted byte array

Return Value

Type: Byte[]
byte array containing EBCDIC formatted text data

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.ConvertEbcdicToAscii Method

convert an EBCDIC byte array to an ASCII byte array

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static byte[] ConvertEbcdicToAscii(
      byte[] ebcdicData
)
```

VB

```
Public Shared Function ConvertEbcdicToAscii (
      ebcdicData As Byte()
) As Byte()
```

C++

```
public:
static array<unsigned char>^ ConvertEbcdicToAscii(
      array<unsigned char>^ ebcdicData
)
```

F#

```
static member ConvertEbcdicToAscii :
        ebcdicData : byte[] -> byte[]
```

Parameters

ebcdicData
Type: System.Byte[]
input EBCDIC array

Return Value

Type: Byte[]
byte array containing ASCII formatted text data

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.convertPositionToint Method

convert a position to a SEGY trace header integer

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static int convertPositionToint(
      double d,
      ushort coordinateSystem,
      double scalarToBeAppliedToAllCoordinates
)
```

VB

```
Public Shared Function convertPositionToint (
      d As Double,
      coordinateSystem As UShort,
      scalarToBeAppliedToAllCoordinates As Double
) As Integer
```

C++

```
public:
static int convertPositionToint(
      double d,
      unsigned short coordinateSystem,
      double scalarToBeAppliedToAllCoordinates
)
```

F#

```
static member convertPositionToint :
        d : float *
        coordinateSystem : uint16 *
        scalarToBeAppliedToAllCoordinates : float -> int
```

Parameters

d
Type: System.Double
input position

coordinateSystem
Type: System.UInt16
segy rev 1 trace header coordinate system

scalarToBeAppliedToAllCoordinates
Type: System.Double
segy rev 1 trace header scalarToBeAppliedToAllCoordinates

Return Value

Type: Int32

an integer value calculated using coordinateSystem and scalarToBeAppliedToAllCoordinates

See Also

SEGYUtilities Class

SEGYlib Namespace

SEGYUtilities.convertToPosition Method

convert a SEGY trace header positional value to position

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static double convertToPosition(
      int x,
      ushort coordinateSystem,
      double scalarToBeAppliedToAllCoordinates
)
```

VB

```
Public Shared Function convertToPosition (
      x As Integer,
      coordinateSystem As UShort,
      scalarToBeAppliedToAllCoordinates As Double
) As Double
```

C++

```
public:
static double convertToPosition(
      int x,
      unsigned short coordinateSystem,
      double scalarToBeAppliedToAllCoordinates
)
```

F#

```
static member convertToPosition :
        x : int *
        coordinateSystem : uint16 *
        scalarToBeAppliedToAllCoordinates : float -> float
```

Parameters

x
Type: System.Int32
segy rev 1 trace header position

coordinateSystem
Type: System.UInt16
segy rev 1 trace header coordinate system

scalarToBeAppliedToAllCoordinates
Type: System.Double
segy rev 1 trace header scalarToBeAppliedToAllCoordinates

Return Value

Type: Double

a decimal position calculated using coordinateSystem and scalarToBeAppliedToAllCoordinates

See Also

SEGYUtilities Class

SEGYlib Namespace

SEGYUtilities.decimalDegreesToDMS Method

convert decimal degrees to degrees-minutes-seconds

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static double decimalDegreesToDMS(
      double dg
)
```

VB

```
Public Shared Function decimalDegreesToDMS (
      dg As Double
) As Double
```

C++

```
public:
static double decimalDegreesToDMS(
      double dg
)
```

F#

```
static member decimalDegreesToDMS :
        dg : float -> float
```

Parameters

dg
Type: System.Double
input decimal degrees

Return Value

Type: Double
DDDMMSS

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.degreesToSecondsOfArc Method

convert decimal degrees to seconds of arc

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static double degreesToSecondsOfArc(
      double degrees
)
```

VB

```
Public Shared Function degreesToSecondsOfArc (
      degrees As Double
) As Double
```

C++

```
public:
static double degreesToSecondsOfArc(
      double degrees
)
```

F#

```
static member degreesToSecondsOfArc :
        degrees : float -> float
```

Parameters

degrees
Type: System.Double
input decimal degrees

Return Value

Type: Double
seconds of arc

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.dmsToDecimalDegrees Method

convert degrees-minutes-seconds to decimal degrees

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static double dmsToDecimalDegrees(
      double DDDMMSS
)
```

VB

```
Public Shared Function dmsToDecimalDegrees (
      DDDMMSS As Double
) As Double
```

C++

```
public:
static double dmsToDecimalDegrees(
      double DDDMMSS
)
```

F#

```
static member dmsToDecimalDegrees :
        DDDMMSS : float -> float
```

Parameters

DDDMMSS
Type: System.Double
input DDDMMSS

Return Value

Type: Double
a decimal position

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.Int2Bytes Method

convert a long int to bytes

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static void Int2Bytes(
      long integer,
      bool signed,
      byte[] byteArray,
      int start,
      int length,
      bool swap
)
```

VB

```
Public Shared Sub Int2Bytes (
      integer As Long,
      signed As Boolean,
      byteArray As Byte(),
      start As Integer,
      length As Integer,
      swap As Boolean
)
```

C++

```
public:
static void Int2Bytes(
      long long integer,
      bool signed,
      array<unsigned char>^ byteArray,
      int start,
      int length,
      bool swap
)
```

F#

```
static member Int2Bytes :
        integer : int64 *
        signed : bool *
        byteArray : byte[] *
        start : int *
        length : int *
        swap : bool -> unit
```

Parameters

integer
Type: System.Int64
input long int

signed
Type: System.Boolean
is the value signed

byteArray
Type: System.Byte[]
output byte array

start
Type: System.Int32
starting position in output array

length
Type: System.Int32
length of output word

swap
Type: System.Boolean
swap the output byte array

Return Value

Type:
byte array converted from long integer

See Also

SEGYUtilities Class
SEGYlib Namespace

SEGYUtilities.secondsOfArctoDegrees Method

convert seconds of arc to decimal degrees

Namespace: SEGYlib
Assembly: SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

Syntax

C#

```
public static double secondsOfArctoDegrees(
      double secOfArc
)
```

VB

```
Public Shared Function secondsOfArctoDegrees (
      secOfArc As Double
) As Double
```

C++

```
public:
static double secondsOfArctoDegrees(
      double secOfArc
)
```

F#

```
static member secondsOfArctoDegrees :
        secOfArc : float -> float
```

Parameters

secOfArc
Type: System.Double
input seconds of arc

Return Value

Type: Double
a decimal position calculated using seconds of arc

See Also

SEGYUtilities Class
SEGYlib Namespace