Typedefs

typedef struct **AWEOSAudioRecordNotification**	**AWEOSAudioRecordNotification_t** Audio recording notification callback argument structure.
typedef void(*	**recordNotificationCallbackFunction**)(**AWEOSAudioRecordNotification_t** *) Audio recording notification callback type.
typedef struct **AWEOSThreadPIDs**	**AWEOSThreadPIDs_t** Internal threading PID structure, meant to be used with **aweOS_getThreadPIDs**.
typedef struct **AWEOSVersionInfo**	**AWEOSVersionInfo_t** Versioning structure returned by **aweOS_getVersion**.
typedef void	**AWEOSInstance** The AWE Core OS Instance instance type. More...
typedef struct **AWEOSConfigParameters**	**AWEOSConfigParameters** AWEOSConfigParameters. More...

Functions

UINT32	**aweOS_getThreadPIDs** (**AWEOSInstance** *pAWEOS, **AWEOSThreadPIDs_t** *threadPIDs) Return the PIDs of all internally spawned AWE Core OS threads. More...
INT32	**aweOS_getParamDefaults** (**AWEOSConfigParameters** *aweParams) Populates an AWEOSConfigParameters structure with defaults. More...
INT32	**aweOS_init** (**AWEOSInstance** **pAWEOS, const **AWEOSConfigParameters** *aweParams, const void *pModuleDescriptorTable, UINT32 moduleDescriptorTableSize) Initialize the AWEOSInstance with the specified configuration parameters. More...
INT32	**aweOS_tuningSocketOpen** (**AWEOSInstance** **pAWEOS, INT32 portNo, UINT32 numInstances) Initialize and open an integrated TCP/IP tuning interface socket. More...
void	**aweOS_tuningSocketClose** (**AWEOSInstance** *pAWEOS) Close a running integrated TCP tuning socket. More...
INT32	**aweOS_tuningLoggingEnable** (**AWEOSInstance** *pAWEOS, char *path, char *baseName, UINT32 verbosity) Enable logging of the tuning packets sent and received by the AWEOSInstance. More...
INT32	**aweOS_loadAWBFromArray** (**AWEOSInstance** *pAWEOS, const UINT32 *pArray, UINT32 arraySize, UINT32 *pErrorOffset) Executes packet commands from an in-memory array. More...
INT32	**aweOS_loadAWBFile** (**AWEOSInstance** *pAWEOS, const char *binaryFile, UINT32 *pErrorOffset) Executes packet commands from an AWB file on the filesystem. More...
INT32	**aweOS_layoutGetChannelCount** (const **AWEOSInstance** *pAWEOS, UINT32 *inCount, UINT32

*outCount)

Returns the number of input and output channels in the loaded layout. More...

INT32 **aweOS_layoutGetBlockSize** (const **AWEOSInstance** *pAWEOS, UINT32 *blockSize)

Returns the block size of the loaded layout. More...

INT32 **aweOS_layoutGetSampleRate** (const **AWEOSInstance** *pAWEOS, FLOAT32 *sampleRate)

Returns the sample rate of the loaded layout. More...

INT32 **aweOS_audioPumpAll** (**AWEOSInstance** *pAWEOS)

Pump one fundamental block size of audio through the loaded layout and all of its sublayouts. More...

INT32 **aweOS_audioImportSamples** (**AWEOSInstance** *pAWEOS, void *inSamples, INT32 inStride, INT32 channel, **SampleType** inType)

Import samples from an audio buffer to a specific channel of the AWEOSInstance's input pin. More...

INT32 **aweOS_audioExportSamples** (**AWEOSInstance** *pAWEOS, void *outSamples, INT32 outStride, INT32 channel, **SampleType** outType)

Export samples to a user buffer from a specific channel of the AWEOSInstance's output pin. More...

INT32 **aweOS_layoutIsValid** (const **AWEOSInstance** *pAWEOS)

Determines if a layout is loaded and valid. More...

INT32 **aweOS_audioIsStarted** (const **AWEOSInstance** *pAWEOS)

Check if this instance has received an Audio Start command. More...

const char * **aweOS_errorToString** (INT32 errorCode)

Convert an error code (INT32) to its corresponding error string. More...

INT32 **aweOS_tuningPacketProcess** (**AWEOSInstance** *pAWEOS)

Process the packet buffer in the AWEOSInstance. More...

INT32 **aweOS_ctrlSetValue** (const **AWEOSInstance** *pAWEOS, UINT32 handle, void *value, INT32 arrayOffset, UINT32 length)

Set a scalar or array value(s) of a module parameter by handle. More...

INT32 **aweOS_ctrlGetValue** (const **AWEOSInstance** *pAWEOS, UINT32 handle, void *value, INT32 arrayOffset, UINT32 length)

Get a scalar or array value(s) of a module parameter by handle. More...

INT32 **aweOS_ctrlSetStatus** (const **AWEOSInstance** *pAWEOS, UINT32 handle, UINT32 *status)

Set the status of a module. More...

INT32 **aweOS_ctrlGetStatus** (const **AWEOSInstance** *pAWEOS, UINT32 handle, UINT32 *status)

Get the status of a module. More...

INT32 **aweOS_ctrlSetValueMask** (const **AWEOSInstance** *pAWEOS, UINT32 handle, void *value, INT32 arrayOffset, UINT32 length, UINT32 mask)

Set a scalar or array value(s) of a module variable by handle with mask. More...

INT32 **aweOS_ctrlGetValueMask** (const **AWEOSInstance** *pAWEOS, UINT32 handle, void *value, INT32 arrayOffset, UINT32 length, UINT32 mask)

	Get a scalar or array value(s) of a module variable by handle with mask. More...
INT32	**aweOS_ctrlGetModuleClass** (const **AWEOSInstance** *pAWEOS, UINT32 handle, UINT32 *pClassID) Get a module's object class from its handle. More...
INT32	**aweOS_destroy** (**AWEOSInstance** **pAWEOS) Destroys the AWEOSInstance and closes all associated threads. More...
INT32	**aweOS_setProfilingStatus** (**AWEOSInstance** *pAWEOS, UINT32 enable) Enable or disable the profiling ability of the AWE Core OS Instance. More...
INT32	**aweOS_getAverageLayoutCycles** (**AWEOSInstance** *pAWEOS, UINT32 idx, UINT32 *averageCycles) Get the average cycles of a running layout, in units of cycles at profileSpeed. More...
void	**aweOS_getVersion** (**AWEOSVersionInfo_t** *versionInfo) Get the version information of the AWE Core OS library. More...
INT32	**aweOS_audioRecordingEnable** (**AWEOSInstance** *pAWEOS, char *path, char *baseName, UINT32 bufferLength, **SampleType** sampleType) Enables recording of all input and output audio of AWEOSInstance. More...
INT32	**aweOS_audioRecordingRegisterNotificationCallback** (**AWEOSInstance** *pAWEOS, **recordNotificationCallbackFunction** recordNotificationCallback, UINT32 recordNotificationMask) Register a callback function for audio recording event notificiations. More...
INT32	**aweOS_audioRecordingDisable** (**AWEOSInstance** *pAWEOS) Disable recording of input and output audio of AWEOSInstance. More...
INT32	**aweOS_wavFileOpen** (const char *file, FLOAT32 *sampleRate, UINT32 *numChannels, UINT32 *sampleSize, UINT32 *numSamples, FILE **fp) Open a .wav file and populate the user arguments with the header information in the file. More...
INT32	**aweOS_wavFileCreate** (const char *file, FLOAT32 sampleRate, UINT32 numChannels, UINT32 sampleSize, FILE **fp) Create a .wav file and populate the header with the passed in arguments. More...
INT32	**aweOS_wavFileWrite** (FILE *fp, void *samples, UINT32 numSamples, UINT32 sampleSize) Write audio data to .wav file created using **aweOS_wavFileCreate**. More...
INT32	**aweOS_wavFileRead** (FILE *fp, void *samples, UINT32 numSamples, UINT32 sampleSize) Read audio data from .wav file opened using **aweOS_wavFileOpen**. More...
INT32	**aweOS_wavFileClose** (FILE *fp) Close the.wav file opened using **aweOS_wavFileOpen** or **aweOS_wavFileCreate**. More...

Detailed Description

The AWE Core OS API header file.