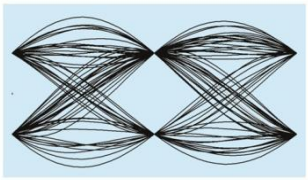

MaxEye Digital Audio Signal Generation

DAB/DAB+/DMB Signal Generation Toolkit

Version 1.0.0

Remote C API User Manual

Contents

1 Introduction 3
2. Installed File Location 3
3. Remote C APIs 3
3.1 MaxEye DAB SG Remote TCP Open Connection 4
3.2 MaxEye DAB SG Remote Set Number of Carriers 5
3.3 MaxEye DAB SG Remote Set Number of Frames 6
3.4 MaxEye DAB SG Remote Set Generation Mode 7
3.5 MaxEye DAB SG Remote Set Hardware Settings 8
3.6 MaxEye DAB SG Remote Set Output Waveform Settings 10
3.7 MaxEye DAB SG Remote Set Carrier Configuration 11
3.8 MaxEye DAB SG Remote Set Waveform Settings 12
3.9 MaxEye DAB SG Remote Set Ensemble Linking Information 15
3.10 MaxEye DAB SG Remote Set Number of Subchannels 16
3.11 MaxEye DAB SG Remote Set Subchannel Configuration 17
3.12 MaxEye DAB SG Remote Set Number of Services 18
3.13 MaxEye DAB SG Remote Set Service Settings 19
3.14 MaxEye DAB SG Remote Set Service Linking Information 21
3.15 MaxEye DAB SG Remote Set Service Linking to Network 22
3.16 MaxEye DAB SG Remote Set Service Information 24
3.17 MaxEye DAB SG Remote Set Number of Services Components 25
3.18 MaxEye DAB SG Remote Set Service Component Settings 26
3.19 MaxEye DAB SG Remote Set Service Component Payload 28
3.20 MaxEye DAB SG Remote Set TS File Path 30
3.21 MaxEye DAB SG Remote Set Output Waveform File Path 31
3.22 MaxEye DAB SG Remote Set Impairments 32
3.23 MaxEye DAB SG Remote Set Play Waveform from File Settings 34

3.24 MaxEye DAB SG Remote Command 35
3.25 MaxEye DAB SG Remote Save Configuration.....36
3.26 MaxEye DAB SG Remote Load Configuration 37
3.27 MaxEye DAB SG Remote TCP Get Error Status.....38
3.28 MaxEye DABT SG Remote Output Indicator.....40
3.29 MaxEye DABT SG Remote TCP Close Connection.....41

1 Introduction

MaxEye Technologies provides generation functions in C for generating the standard complaint signals for various digital audio and video broadcasting standards. This guide explains how to use Remote C API functions to control the DAB-TDMB Signal Generation toolkit Soft Front Panel remotely and to run programming examples by using NI Second Generation Vector Signal Transceiver (AST-1000, PXIe-5840 and PXIe-5820).

Digital Audio Broadcasting (DAB) is a digital radio technology for broadcasting radio stations, used in several countries, particularly in Europe. The DAB family of standards includes DAB and DAB+ for digital radio and DMB for mobile TV. They are flexible, global and open standards and are a means for transmission of terrestrial digital radio signals.

2. Installed File Location

The remote C Documentation file is located in, C:\Program Files (x86)\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Documentation.

(***Note**: - For 32-bit Operating System*, C Documentation is located in C:\Program Files\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Documentation).

The remote C Examples are located in, C:\Program Files (x86)\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Examples\C.

(***Note**: - For 32-bit Operating System*, C Examples is located in C:\Program Files\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Examples\C).

The DAB-TDMB Signal Generation Soft Front Panel (SFP) is located in, C:\Program Files (x86)\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Application.

(***Note**: - For 32-bit Operating System*, Soft Front Panel (SFP) is located in C:\Program Files\MaxEye\Digital Video Toolkits\DAB_TDMB Generation\Application).

You can also find a shortcut to the above location from the windows start menu.
Start->All Programs->MaxEye->Digital Video Toolkits->DAB-TDMB Generation
***Note**: - For Windows 10,* **Start-> MaxEye**.

3. Remote C APIs

The Remote C APIs allow user to configure and control the DAB-TDMB Signal Generation Soft Front Panel (SFP) remotely through Transmission Control Protocol (TCP) network connection. The SFP running in the signal generation hardware acts as a TCP client and the test program running in the remote system built using the remote C APIs acts as a TCP Server. MaxEye DAB/DAB+/DMB

Signal Generation Toolkit provides set of C APIs to establish connection, configure parameters, initiating and stopping the signal generation and to read the output parameters. The DAB-TDMB Signal Generation SFP operates in two modes, remote and local. To control the SFP from remote system the SFP should be in remote mode.

3.1 MaxEye DAB SG Remote TCP Open Connection

NAME MaxEye_DAB_SG_Remote_TCP_Open_Connection

DESCRIPTION Opens the TCP network connection between DAB-TDMB SFP Client and Server application.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_TCP_Open_Connection
(
        char            IPAddress[],
        uint16_t        PortNumber,
        int32_t         TimeoutMs,
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut,
        int32_t         *ErrorCodeOut,
)
```

INPUT PARAMETERS

- PortNumber – Specifies the port number to establish network connection from server to client system. Both server and client applications should have the same port number. The default value is 7074.
- IPAddress – Specifies the IP Address or network name of the remote system.
- TimeoutMs – Specifies TCP Network connection timeout, in milliseconds, that the function waits to complete and return an error. The default value is 20s. A value of -1 indicates to wait indefinitely.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.2 MaxEye DAB SG Remote Set Number of Carriers

NAME MaxEye_DAB_SG_Remote_Set_Number_of_Carriers

DESCRIPTION Configures the number of carriers to the DAB-TDMB Client SFP Application through TCP Network Connection. The DAB-TDMB Signal Generation Toolkit supports generation of multiple DAB-TDMB carriers. The maximum number of carriers supported is 10.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Number_of_Carriers
(
        LVRefNum      *ConnectionIDIn,
        int32_t       NumberOfCarriers,
        int32_t       ErrorCodeIn,
        LVRefNum      *ConnectionIDOut
        int32_t       *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- NumberOfCarriers – Specifies the number of carriers needs to be generated. The default value is 1.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.3 MaxEye DAB SG Remote Set Number of Frames

NAME MaxEye_DAB_SG_Remote_Set_Number_of_Frames

DESCRIPTION Configures the total number of Frames to the DAB-TDMB Remote SFP Application through TCP Network Connection. The generator uses the same frame configuration for all the frames and the payload is continuous across frames.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Number_of_Frames
(
        int32_t         ErrorCodeIn,
        uint32_t        NumberOfFrames,
        LVRefNum        *ConnectionIDIn,
        int32_t         *ErrorCodeOut,
        LVRefNum        *ConnectionIDOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- NumberOfFrames – Specifies the required number of Frames. This parameter defines the length of the waveform to be generated. To generate longer duration of the waveform, increase the Number of Frames. The default value is 1.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any Functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.4 MaxEye DAB SG Remote Set Generation Mode

NAME MaxEye_DAB_SG_Remote_Set_Generation_Mode

DESCRIPTION Configures the Generation Mode to the DAB-TDMB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Generation_Mode
(
        LVRefNum        *ConnectionIDIn,
        uint16_t        GenerationMode,
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut
        int32_t         *ErrorCodeOut,
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- GenerationMode – Specifies the generation mode of the MaxEye DAB-TDMB Signal Generator. The default value is 2. Given below are the possible values.
  - 0 – Generate and Play Waveform (Real-Time)
  - 1 – Generate and Play Waveform
  - 2 – Generate and Save Waveform
  - 3 – Play Waveform from File
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.5 MaxEye DAB SG Remote Set Hardware Settings

NAME MaxEye_DAB_SG_Remote_Set_Hardware_Settings

DESCRIPTION Configures the VST hardware settings to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Hardware_Settings
(
        LVRefNum        *ConnectionIDIn,
        DAB_Hardware    *HardwareSettings,
        int32_t         ErrorCodeIn,
        int32_t         *ErrorCodeOut,
        LVRefNum        *ConnectionIDOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- HardwareSettings – Specifies the Hardware Settings parameters

```
typedef struct
{
        LStrHandle RFSGResource;
        double PowerLevelDBm;
        double ArbPreFilterGainDB;
        double ExternalAttenuationDB;
        LStrHandle RefClockSource;
        double FrequencyHz;
        LStrHandle ClockOutputTerminal;
} DAB_Hardware;
```

- RFSGResource – Specifies the Resource Name. Select the name used in NI Measurement and Automation Explorer (NI MAX) for the NI PXIe-5840 device.
- PowerLevelDBm – Specifies the Average Power level of the signal in dBm. The default value is -10.00dBm
- ExternalAttenuationDB – Specifies the external amplification or attenuation, if any, between the NI RF signal generator and the device under test. Positive values for this property represent amplification, and negative values for this property represent attenuation. The default value is 0.

- ArbPreFilterGainDB – Specifies the AWG Pre-filter Gain. The pre-filter gain is applied to the waveform data before any other signal processing. Reduce this value to prevent overflow in the AWG interpolation filters. Other gains on the NI-RFSG device are automatically adjusted to compensate for non-unity AWG pre-filter gain. The default value is -1 dB
- RefClockSource – Specifies the source of the Reference Clock signal. The default value is 0. Given below are the possible values
  - 0 – OnboardClock
  - 1 – RefIn
  - 2 – PXI_CLK
  - 3 – ClkIn
- FrequencyHz – Specifies the Reference Clock rate, in Hertz (Hz). The default value is 10MHz.
- ClockOutputTerminal – Specifies the terminal where the signal will be exported. The default value is 0. Given below are the possible values
  - 0 – Do not export signal
  - 1 – RefOut
  - 2 – RefOut2
  - 3 – ClkOut
  - 4 – PFI0
  - 5 – PFI1
  - 6 – PFI4
  - 7 – PFI5
  - 8 – PXI_Trig0
  - 9 – PXI_Trig1
  - 10 – PXI_Trig2

For more information about this, please refer NI RFSG Signal Generators help file.

- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib, labview.lib
- DLL – DAB-TDMB Generation.dll

3.6 MaxEye DAB SG Remote Set Output Waveform Settings

NAME MaxEye_DAB_SG_Remote_Set_Output_Waveform_Settings

DESCRIPTION Configures the DAB Output Waveform Settings to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Output_Waveform_Settings
(
        LVRefNum                    *ConnectionIDIn,
        DAB_OutputWaveformSettings  *OutputWaveformSettings,
        int32_t                     ErrorCodeIn,
        LVRefNum                    *ConnectionIDOut,
        int32_t                     *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- OutputWaveformSettings – Specifies the Output Waveform Settings parameters

```
typedef struct
{
        uint16_t OversamplingEnabled;
        uint16_t SampleWidth;
        double OutputSamplingRate;
        double HeadroomDB;
        double MaximumRealTimeBandwidth;
} DAB_OutputWaveformSettings;
```

- HeadroomDB – Specifies the Headroom value. The generator uses this value for scaling the waveform. If PAPR of the signal is higher than the Headroom value then the generator clips the signal. To avoid clipping, the Headroom value should be higher than the PAPR of the signal. The default value is 14 dB.
- OverSamplingEnabled – Specifies whether the Oversampling Property is enabled or not. If this property is set to True then the generator resamples the generated signal based on the value configured by the user for the Output Sampling Rate property.The default value is 0 (False). Given below are the possible values
  - 0 – False
  - 1 – True

- OutputSamplingRate – Specifies the Output Sampling Rate. The generator resamples the generated signal to a sampling rate equal to the Output Sampling Rate only if the Over Sampling Enabled property is set to True.
- SampleWidth – Specifies the sample width to be used to generate waveform file. The default value is 1(16 bit). MaxEye recommend using 16-bits sample width for better signal quality of the generated waveform. Given below are the possible values
  - 0 – 8 bit
  - 1 – 16 bit
- MaximumRealTimeBandwidthHz – The available bandwidth to combine the multi carrier waveform based on the selected hardware.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.7 MaxEye DAB SG Remote Set Carrier Configuration

NAME MaxEye_DAB_SG_Remote_Set_Carrier_Configuration

DESCRIPTION Configures the Carrier Frequency and Signal Bandwidth for each carrier based on carrier index value to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Carrier_Configuration
(
        LVRefNum        *ConnectionIDIn
        int32_t         CarrierIndex,
        double          CarrierFrequencyHz,
        double          SignalBandwidthHz,
        int32_t         ErrorCodeIn,
```

```
                    LVRefNum        *ConnectionIDOut,
                    int32_t         *ErrorCodeOut

                )
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – Specifies the index value of the selected carrier. The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- CarrierFrequencyHz – Specifies the Carrier Frequency for the selected carrier in Hz.
- SignalBandwidth – Specifies signal bandwidth of the selected carrier, in Hz. The toolkit internally uses the Carrier Frequency and Bandwidth property values to compute the overall bandwidth and sampling rate of the signal when more than one carrier is used.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.8 MaxEye DAB SG Remote Set Waveform Settings

NAME	MaxEye_DAB_SG_Remote_Set_Waveform_Settings
DESCRIPTION	Configures the DAB-TDMB Waveform Settings for each carrier based on carrier index to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Waveform_Settings
(
        LVRefNum                    *ConnectionIDIn,
        int32_t                     CarrierIndex,
        DAB_Configuration           *DABConfiguration,
        int32_t                     ErrorCodeIn,
        LVRefNum                    *ConnectionIDOut,
        int32_t                     *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- DABConfiguration – Allows user to configure following parameters.

```
typedef struct
{
        int32_t NumberOfServices;
        int32_t NumberOfSubchannels;
        LStrHandle ETIFilePath;
        uint16_t CreateETIFrameEnabled;
        uint16_t InputMode;
        int32_t EnsembleReference;
        int32_t CountryIdentifier;
        LStrHandle EnsembleLabel;
        uint16_t TransmissionMode;
        int32_t ExtendedCountryCode;
}       DAB_Configuration;
```

- LinkedEnsemblesInformation – The Ensemble linking is done when same Ensemble is transmitted in two different DAB frequencies. When the Ensemble Linking Enabled is set to true the user need to configure additional parameters required for the Ensemble Linking Feature.
- NumberOfServices – Specifies the number of Service needs to be generated. The default value is 1.
- NumberOfSubchannels – Specifies the number of Subchannel needs to be generated. The default value is 1.
- SubchannelConfiguration – User can configure Maximum 10 subchannels for each Carrier. The subchannels carry the data specified in the service components and each service component should be uniquely attached to the subchannel.
- ETIFilePath– Specifies the ETI File Path. When the Input Mode is User and the Create ETI Frame Enabled is set to True the toolkit creates the ETI frame and writes in to this file. When the Input Mode is ETI File then then toolkit reads the ETI frames from this file to create the DAB signal.

- CreateETIFrameEnabled – If this control is set to 1 (True) then the toolkit creates ETI frames as per the standard and writes the data in the file specified by the ETI File Path property. This control is enabled only if the input mode is User.
- InputMode – Select Input mode as **User or ETI mode**. In the User mode all configuration including subchannel and service needs to be completely configured by the user. In the ETI mode, user need to select only the ETI File Path and the toolkit extracts all other configuration from the ETI file. The default value is 1.
  - 0 – ETI
  - 1 – User
- EnsembleReference – This is a 12 bit field used to identify the number of the ensemble. The valid value for Ensemble Reference is from 0 to 4095. Each carrier must have unique ensemble reference for generating multicarrier DAB signal.
- CountryIdentifier – This is a 4 bit Country Identifier as defined by the standard TS 101 756, tables 3 to 7.
- EnsembleLabel – The Ensemble Label is used to identify the ensemble in a textual format. DAB ensembles are groups of broadcasters transmitting multiple digital radio channels on a single radio transmission. The maximum number of characters that can be given as input to this property is 16 including spaces.
- TransmissionMode– Select one of the Transmission Mode as per the requirement. Supported modes are I, II, III, and IV
- ExtendedCountryCode- This is an8 bit Extended Country Code as defined by the standard TS 101 756, tables 3 to 7.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.9 MaxEye DAB SG Remote Set Ensemble Linking Information

NAME MaxEye_DAB_SG_Remote_Set_Ensemble_Linking_Information

DESCRIPTION Configures the DAB-TDMB Ensemble Linking Information for each carrier based on carrier index to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Ensemble_Linking_Information
(
    LVRefNum *ConnectionIDIn,
    int32_t CarrierIndex,
    DAB_Linked_Ensemble_Information *LinkedEnsemblesInformation,
    uint16_t ControlFieldDAB[],
    double Frequency[],
    int32_t ControlLength,
    int32_t FrequencyLength,
    int32_t ErrorCodeIn,
    LVRefNum *ConnectionIDOut,
    int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- LinkedEnsemblesInformation – Allows user to configure following parameters.

```
typedef struct
{
      uint16_t EnsembleLinkingEnabled;
      uint16_t RegionID;
      uint8_t ContinuityFlag;
}     DAB_Linked_Ensemble_Information;
```

- EnsembleLinkingEnabled – The Ensemble linking is done when same Ensemble is transmitted in two different DAB frequencies. When the Ensemble Linking Enabled is set to true the user need to configure additional parameters required for the Ensemble Linking Feature.
- RegionID – Specify the Region ID of the Ensemble to be linked. This an 11 bit identifier used to identify the target region.
- ContinuityFlag – The continuity flag indicates whether continuous (i.e. uninterrupted) audio output is possible or not when switching frequencies. The Flag value 0 meansContinuous audio output not expected, the ensemble is not co-timed and synchronized. Flag value 1 means Ensembles are synchronized and co-timed.

- FrequencyLength & ControlLength- Total Number of Ensemble Links is configured.

- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.10 MaxEye DAB SG Remote Set Number of Subchannels

NAME MaxEye_DAB_SG_Remote_Set_Number_Of_Subchannels

DESCRIPTION Configures the number of Subchannels to the DAB-TDMB Client SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Number_Of_Subchannels
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t NumberOfSubchannels,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- NumberOfSubchannels – Specifies the number of Subchannel needs to be generated. The default value is 1.

- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.11 MaxEye DAB SG Remote Set Subchannel Configuration

NAME MaxEye_DAB_SG_Remote_Set_Subchannel_Configuration

DESCRIPTION Configures the Subchannel Configuration for each carrier based on carrier index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Subchannel_Configuration
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t SubchannelIndex,
        DAB_Subchannel_Configuration *SubchannelConfiguration,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- SubchannelIndex – The default value of the Subchannel Index is 0 which corresponds to the first subchannel.

- SubchannelConfiguration – Allows user to configure following parameters.

```
typedef struct
{
	uint16_t	ProtectionMode;
	int32_t		SubchannelIdentifier;
	uint16_t	SubchannelProtectionLevel;
	int32_t		UEPTableIndex;
	int32_t		EEPNValue;
} DAB_Subchannel_Configuration;
```

- ProtectionMode – Select Subchannel Protection mode as Long form or Short form.
  - 0- Short Form
  - 1- Long Form
- SubchannelIdentifier – Each Subchannel must have unique identifier and the valid value is form 0 to 63.
- SubchannelProtectionLevel – Eight options are available for the Subchannel Protection level.
- UEPTableIndex – Configure the UEP Table Index if Subchannel Protection Mode is selected as Short Form.
- EEPNValue – Configure this value as per the above table. The n value determines the Subchannel size and its data rate.

- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.12 MaxEye DAB SG Remote Set Number of Services

NAME MaxEye_DAB_SG_Remote_Set_Number_Of_Services

DESCRIPTION Configures the number of Services to the DAB-TDMB Client SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Number_Of_Services
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t NumberOfServices,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- NumberOfServices – Specifies the number of Service needs to be generated. The default value is 1.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.13 MaxEye DAB SG Remote Set Service Settings

NAME MaxEye_DAB_SG_Remote_Set_Service_Settings

DESCRIPTION

Configures the Service Configuration for each carrier based on carrier index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Settings
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t ServiceIndex,
        DAB_Service_Configuration *ServiceConfiguration,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceConfiguration – Allows user to configure following parameters.

```
typedef struct
{
    int32_t     ServiceReference;
    LStrHandle  ServiceLabel;
    uint8_t    ServiceLinkingEnabled;
} DAB_Service_Configuration;
```

- Service Reference – This is a unique identifier for a specified Service.
- ServiceLabel – The Service Label is used to identify the service in textual format.
- ServiceLinkingEnabled – This feature is used to indicate the receivers that the same service or similar service is transmitted in other ensembles or FM Stations or DRM stations. Set this control to True to enable the toolkit to include service linking parameters in the transmitted signal.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.

- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.14 MaxEye DAB SG Remote Set Service Linking Information

NAME MaxEye_DAB_SG_Remote_Set_Service_Linking_Information

DESCRIPTION Configures the Service Linking Information for each service based on service index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Linking_Information
(
     LVRefNum *ConnectionIDIn,
     int32_t CarrierIndex,
     int32_t ServiceIndex,
     DAB_Service_Linking_Information *ServiceLinkingInformation,
     int32_t LinkingNetworkSize,
     int32_t ErrorCodeIn,
     LVRefNum *ConnectionIDOut,
     int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceLinkingInformation – Allows user to configure following parameters.

```
typedef struct
{
       Unit16_t ServiceLinkingType;
       uint8_t IdentifierListFlag;
       uint8_t LinkageActuator;
       uint8_t LinkType;
       uint8_t InternationalLinkageSetIndicatorILS;
       uint16_t CountryIdentifierCI;
       uint16_t LinkageSetNumberLSNOrLI;
```

```
        uint16_t RegionId;
} DAB_Service_Linking_Information;
```

- ServiceLinkingType – Specifies the type of the service linking.
- IdentifierListFlag – Identifier list flag indicates whether the Identifiers of the linked services are included in the service linking.
- LinkageActuator– This 1-bit flag indicates whether the service link is active or deactivated/potential future link.
- LinkType– This 1-bit flag indicates whether the link is soft link or hard link.
- InternaltionalLinkageSetIndicatorILS– This 1-bit flag indicates whether the link affects only one country (national) or several countries (international)
- CountryIdentifierCI– Specifies the country code of the one of the participating countries.
- LinkageSetNumberLSNOrLI– This 12-bit field represents a number which shall be common to all Services linked together as a set.
- RegionId– This 11-bit field identifies the region for which the frequency information applies. If the Region ID is "0000 0000 000", no area is specified.
- LinkingNetworkSize– Total Number of Linking Network is Configured.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.15 MaxEye DAB SG Remote Set Service Linking to Network

NAME	MaxEye_DAB_SG_Remote_Set_Service_Linking_To_Network
DESCRIPTION	Configures the Service Linking to Network for each Service based on service index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Linking_To_Network
(
    LVRefNum *ConnectionIDIn,
    int32_t CarrierIndex,
    int32_t ServiceIndex,
    int32_t LinkingNetworkIndex,
    DAB_Service_Linking_Network *LinkingToNetworksSameOrOther,
    int32_t ServiceInformationSize,
    int32_t ErrorCodeIn,
    LVRefNum *ConnectionIDOut,
    int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- LinkingNetworkIndex – The default value of the Linking Network Index is 0 which corresponds to the first Linking Network Index.
- LinkingToNetworkSameOrOther – Allows user to configure following parameters.

```
typedef struct
{
       int8_t        RangeModulationRM;
       uint16_t      ShortHandIndicatorShd;
       uint16_t      NumberOfIdentifiersIdsOrSIds;
} DAB_Service_Linking_Network;
```

- RangeModulationRM – The Range and Modulation value specifies the type of the identifier.
- ShortHandIndicatorShd – The Shd field indicates whether the Ids in the Id list represents single or multiple services. **0** represent a single service and **1** represents multiple services.
- NumberOfIdentifierIdsOrSIds – This specifies the Number of identifiers used in the Id list.
- ServiceInformationSize – Total Number of Service Information is Configured.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.

- ErrorCodeOut – Returns the error code, passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.16 MaxEye DAB SG Remote Set Service Information

NAME MaxEye_DAB_SG_Remote_Set_Service_Information

DESCRIPTION Configures the Service Information for each Service based on service index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Information
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t ServiceIndex,
        int32_t ServiceInformationIndex,
        DAB_Service_Information *ServiceInformation,
        int32_t LinkingNetworkIndex,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceInformationIndex – The default value of the Service Information Index is 0 which corresponds to the first Service Information.
- ServiceInformation – Allows user to configure following parameters.

```
typedef struct
{
        int32_t         IdField;
        int16_t         ExtendedCountryCodeECC;
        uint16_t        ServiceIdentifierSId;
```

```
        uint16_t      ConditionalAccessIdentifierCAId;
        uint8_t       ContinuityFlag;
        uint8_t       ControlFieldDAB;
        double        Frequency;
} DAB_Service_Information;
```

- IdField – ID Field specifies the Identifier Field and the type of identifier depends on the Range and Modulation (R&M) value.
- ServiceIdentifierSId – Specifies the service identifier of the program and the type of service identifier depends on the Range and Modulation (R&D) value.
- ConditionalAccessIdentifierCAId – This 3 bit field specifies the conditional access system used for the service. This value is set to 0 when conditional access is not used.
- ContinuityFlag – This field specifies whether continuous audio output expected or not. The value 0 corresponds to Continuous audio output not expected, the ensemble is not co- timed and synchronized.
- ControlFieldDAB – Control Field specifies whether the linked service is transmitted in geographically adjacent or not adjacent area.
- Frequency – Specifies the frequency of the linked service. The interpretation of this value depends on the Range and Modulation value.
- LinkingNetworkIndex – The default value of the Linking Network Index is 0 which corresponds to the first Linking Network Index.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.17 MaxEye DAB SG Remote Set Number of Services Components

NAME MaxEye_DAB_SG_Remote_Set_Number_Of_ServiceComponents

DESCRIPTION Configures the number of Services to the DAB-TDMB Client SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Number_Of_ServiceComponents
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t ServiceIndex,
        int32_t NumberOfServiceComponents,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- NumberOfServiceComponents – Specifies the number of Service Components needs to be generated. The default value is 1.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.18 MaxEye DAB SG Remote Set Service Component Settings

NAME MaxEye_DAB_SG_Remote_Set_Service_Component_Settings

DESCRIPTION Configures the Service Component for each Service based on service index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Component_Settings
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t ServiceIndex,
        int32_t ServiceComponentIndex,
        DAB_Service_Component_Configuration *ServiceComponentConfiguration,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceComponentIndex – The default value of the Service Component Index is 0 which corresponds to the first Service Component.
- ServiceComponentConfiguration – Allows user to configure following parameters.

```
typedef struct
{
        uint16_t        TransportMechanismId;
        uint16_t        DataServiceComponentType;
        uint16_t        AudioServiceComponentType;
        int32_t         ServiceComponentIdentifier;
        LStrHandle      ServiceComponentLabel;
        int32_t         SubchannelIdentifier;
        int32_t         PrimarySecondaryFlag;
} DAB_Service_Component_Configuration;
```

- TransportMechanismId – Specifies the transport mechanism to be used, the supported modes are MSC – Stream Mode (audio) and MSC – Stream Mode (data).
- DataServiceComponentType – Specifies the data service component type. The current version of the toolkit only supports T- DMB.
- AudioServiceComponentType– Specifies the audio service component type when the Transport Mechanism Id is set to MSC – Stream Mode (audio).

- ServiceComponentIdentifier – Unique identifier for a specified Service Component. Each Service Component must have unique identifier.
- ServiceComponentLabel – Specifies the label for a service component. The Service Component Label is used to identify the service component in textual format.
- SubchannelIdentifier – Specifies the subchannel identifier assigned for this service component. Each service component should be uniquely assigned with the Subchannel to carry the service component information.
- PrimarySecondaryFlag – Specifies the service component is the primary service component of the service or secondary service component.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code, passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.19 MaxEye DAB SG Remote Set Service Component Payload

NAME MaxEye_DAB_SG_Remote_Set_Service_Component_Payload

DESCRIPTION Configures the Service Component Payload for each Service based on service index to the DAB Remote SFP Application through TCP Network Connection.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Service_Component_Payload
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        int32_t ServiceIndex,
        int32_t ServiceComponentIndex,
        DAB_Payload *DigitalVideoPayloadControl,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
```

```
                                int32_t *ErrorCodeOut
                        )
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceComponentIndex – The default value of the Service Component Index is 0 which corresponds to the first Service Component.
- DigitalVideoPayloadControl – Allows user to configure following parameters.

```
typedef struct
{
        uint16_t        PayloadMode;
        uint32_t        PayloadPNOrder;
        uint32_t        PayloadPNSeed;
        LStrHandle      PayloadUserDefinedBits;
        uint16_t        PayloadTestPattern;
        LStrHandle      PayloadFilePath;
        uint16_t        SyncInsertionEnabled;
        int32_t         MPEG2TSNumberOfTSFiles;
} DAB_Payload;
```

➢ PayloadMode – Choose the desired payload source. The default value is 0. Given below are the possible values

- 0 - **PN Sequence** – Configure Payload PN Order and Payload PN Seed properties. The toolkit generates pseudo random sequence based on the **PN Order** and **Seed value**. The generated bit sequence is used as a payload for generating the signal.
- 1 - **User defined bits** – Enter the desired bit pattern in the Payload User Defined Bits property. The generator repeats the entered bit pattern till the number of bits required for the frame, for the given configuration.
- 2 - **Test Pattern** – The possible values for the Test Pattern are All 1s, All 0s, 10101010 and 01010101.This mode is used for generating signal with known test patterns.
- 3 - **Test File** –This mode is used for generating signal with the binary data from the file.
- 4 - **MPEG2TS File(s)** – Select this mode for T- DMB (Select Transport Mechanism Id as MSC - Stream Mode (data) and Data Service Component Type as T- DMB) Configure the MPEG2 TS File Path properties and the toolkit ignores other properties available in the Payload settings/Digital Video Payload Control.
- 5 - **MPEG Layer II Audio** –Select this mode for DAB signal generation using mp2 audio files as payload. Configure Payload File Path property for selecting appropriate MPEG Layer II

Audio file. The bitrate of the subchannel carrying this service component should match with the mp2 audio file bitrate.

- SyncInsertionEnabled – If the Sync Insertion Enabled property is set to True, the toolkit inserts MPEG2 TS packet sync byte (0x47) after every 187 bytes. The length of the TS packet is 188 bytes and the first byte is a sync byte (0x47).
- MPEG2TSNumberOfTSFiles– Configure the required number of TS Files for the selected carrier.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.20 MaxEye DAB SG Remote Set TS File Path

NAME MaxEye_DAB_SG_Remote_Set_TSFilePath

DESCRIPTION Configures the DAB MPEG2TS file path for each carrier based on the carrier index value to the DAB Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Waveform_Settings
(
        LVRefNum      *ConnectionIDIn,
        int32_t       CarrierIndex,
        int32_t       ServiceIndex,
        int32_t       ServiceComponentIndex,
        int32_t       FilePathIndex,
        char          TSFilePath[],
        int32_t       ErrorCodeIn,
        LVRefNum      *ConnectionIDOut,
        int32_t       *ErrorCodeOut
```

)

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- ServiceIndex – The default value of the Service Index is 0 which corresponds to the first Service.
- ServiceComponentIndex – The default value of the Service Component Index is 0 which corresponds to the first Service Component.
- FilePathIndex – For generating multiple channels in one carrier, configure the MPEG2TS file path based on the TS file path index value. The default value of the TSFilePathIndex is 0, corresponds to the first MPEG2TS file path.
- TSFilePath – Select the MPEG2 TS File based on the number of TS files configured for the selected carrier.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.21 MaxEye DAB SG Remote Set Output Waveform File Path

NAME	MaxEye_DAB_SG_Remote_Set_Output_Waveform_File_Path
DESCRIPTION	Configures the path to save the generated waveform to the Client DAB-TDMB SFP Application through TCP Network Connection
FUNCTION PROTOTYPE	`void__cdecl MaxEye_DAB_SG_Remote_Set_Output_Waveform_File_Path`

```
(
        LVRefNum        *ConnectionIDIn,
        char            WaveformFilePath[],
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut,
        int32_t         *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- WaveformFilePath – Specifies the file location where the generated IQ baseband waveform is stored.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.22 MaxEye DAB SG Remote Set Impairments

NAME MaxEye_DAB_SG_Remote_Set_Impairments

DESCRIPTION Configures the Impairments to the Client DAB-TDMB SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Impairments
(
        LVRefNum *ConnectionIDIn,
        int32_t CarrierIndex,
        DAB_Impairements *Impairments,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
```

```
                                int32_t *ErrorCodeOut
                        )
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CarrierIndex – The default value of the Carrier Index is 0 which corresponds to the first carrier. For generating multi carrier signal, configure the parameters for each carrier index.
- Impairments – Allows user to configure following parameters.

```
typedef struct
{
        uint16_t ImpairmentsEnabled;
        uint16_t AWGNEnabled;
        double CarrierToNoiseRatioDB;
        double FrequencyOffsetHz;
        double ClockOffsetPPM;
        DAB_IQImpairements IQImpairments;
        uint16_t SignalLossEnabled;
        double SignalLossTimeOffsetS;
        double SikgnalLossDurationS;
} DAB_Impairements;
```

- ImpairmentsEnabled– Set this property to True to add impairments to the generated signal. Otherwise toolkits ignore these impairments properties.
- AWGNEnabled–- If this property is set to True then the toolkit add Additive White Gaussian Noise (AWGN) to the created waveform based on the value configured in the Carrier to Noise Ratio property. The default value is False.
- CarrierToNoiseRatioDB– This value specifies the Carrier to Noise ratio of the generated signal. The default value is 40dB.
- FrequencyOffsetHz– The toolkit applies frequency offset to the created waveform based on the value configured in this property. The applied frequency offset is relative to the signal generator's carrier frequency. The default value is 0.
- ClockOffsetPPM– The toolkit applies the clock offset to the generated waveform based on this value. The applied clock offset is relative to the clock frequency of the signal generator. The default value is 0.
- IQImpairments– Allows user to configure following parameters.

```
typedef struct
{
        double IDCOffset;
        double QDCOffset;
        double IQGainImbalanceDB;
        double QuadratureSkewDeg;
} DAB_IQImpairements;
```

- IDCOffset– The toolkit adds the DC offset to the in-phase signal component (I) of the complex waveform as a percentage of the root mean square magnitude of the unaltered I signal. The default value is 0.
- QDCOffset– The toolkit adds the DC offset to the quadrature-phase signal component (Q) of the complex waveform as a percentage of the root mean square magnitude of the unaltered Q signal. The default value is 0.
- IQGainImbalanceDB– This value specifies the ratio, in dB, of the mean amplitude of the in-phase (I) signal to the mean amplitude of the quadrature-phase (Q) signal. The default value is 0.
- QuadratureSkewDeg– Quadrature Skew specifies the deviation in angle from 90 degrees between the in-phase (I) and quadrature-phase (Q) signals. The default value for the Quadrature Skew is 0.
- SignalLossEnabled– Set this property to True to add Signal Loss Duration to the generated signal.
- SignalLossTimeOffsetS– Specifies the Signal Loss Time Offset in seconds
- SignalLossDurationS– Specifies the Signal Loss Duration in seconds
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.23 MaxEye DAB SG Remote Set Play Waveform from File Settings

NAME	MaxEye_DAB_SG_Remote_Set_Play_Waveform_File_Settings
DESCRIPTION	Configures the DAB Play Waveform from File Settings to the Client DAB SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Set_Play_Waveform_Settings
(
        LVRefNum *ConnectionIDIn,
        double CenterFrequency,
        int32_t WriteBlockSizeSamples,
        uint16_t SampleWidth,
        char WaveformFilePath[],
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CenterFrequency – Specifies the centre frequency of the DAB signal in Hz.
- WriteBlockSizeSamples – Specifies the size of the block in samples. The waveform is written in the hardware as blocks.
- WaveformFilePath – Specifies the waveform file path to play the waveform
- SampleWidth – Specifies the sample width value. Use the same sample width value used for saving the waveform in the file.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.24 MaxEye DAB SG Remote Command

NAME MaxEye_DAB_SG_Remote_Command

DESCRIPTION Initiates or stops the signal generation

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Command
(
        LVRefNum *ConnectionIDIn,
        DAB_Process_events CommandType,
        int32_t ErrorCodeIn,
        LVRefNum *ConnectionIDOut,
        int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- CommandType – Specifies the command to Start Generation, Stop Generation, Save Configuration and Load Configuration. The default value is 0.
  - 0 – Start Generation
  - 1 – Stop Generation
  - 2 – Save Configuration
  - 3 – Load Configuration

➢ Start Generation: This command starts the generation in SFP.
➢ Stop Generation: This command stops the generation in SFP.
➢ Save Configuration: This command save the configurations into a file.
➢ Load Configuration: This command load the configurations from the selected file.

- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.25 MaxEye DAB SG Remote Save Configuration

NAME MaxEye_DAB_SG_Remote_Save_Configuration

DESCRIPTION Configures the file path to save the configurations in file.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Save_Configuration
(
        LVRefNum        *ConnectionIDIn,
        char            SaveConfigurationFilePath[],
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut,
        int32_t         *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- SaveConfigurationFilePath[] – Specifies the file path to save the configurations in file.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.26 MaxEye DAB SG Remote Load Configuration

NAME MaxEye_DAB_SG_Remote_Load_Configuration

DESCRIPTION Configures the file path to load the saved configurations from file.

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Load_Configuration
(
```

```
        LVRefNum        *ConnectionIDIn,
        char            LoadConfigurationFilePath[],
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut,
        int32_t         *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- LoadConfigurationFilePath[] – Specifies the file path to load the saved configurations from file.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.27 MaxEye DAB SG Remote TCP Get Error Status

NAME MaxEye_DAB_SG_Remote_TCP_Get_Error_Status

DESCRIPTION Receives Error Message from the Remote SFP Application through TCP Network Connection

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_TCP_Get_Error_Status
(
        LVRefNum        *ConnectionIDIn,
        int32_t         ErrorCodeIn,
        LVRefNum        *ConnectionIDOut,
        DAB_Get_Generation_Parameters *GetGenerationParameters,
        int32_t         ErrorStatusLength,
        char            ErrorStatus[],
        int32_t         *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- GetGenerationParameters– Get the Generation parameter from Another System.

```
typedef struct
{
	int32_t GenerationMode;
	double GeneratingFrames;
	double MaximumNumberOfFrames;
	LVBoolean GenerationStatus;
	int32_t ErrorOrWarning;
	LVBoolean GenerationCompleted;
} Get_Generation_Parameters;
```

- GenerationMode – Returns the Generation Mode.
- GenerationFrames – Returns the current frame number being generated to the user.
- MaximumNumberofFrames – Returns the Maximum Number of Frames configured.
- GeneratingStatus – Returns the current status of the generation.
- ErrorOrWarning – Returns the Current Error Status is Warning or Error.
- GenerationCompleted – Returns the status of Current frame is equal to the Maximum Number of Frames Configured.
- LengthofErrorStatus – Specifies the size of the Error Status.
- ErrorStatus – Returns the description of the error occurred.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of an API to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.28 MaxEye DABT SG Remote Output Indicator

NAME MaxEye_DAB_SG_Remote_Get_Output_Indicator

DESCRIPTION Display the Waveform Indicator

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_Get_Output_Indicator
(
	LVRefNum *ConnectionIDIn,
	int32_t ErrorCodeIn,
	LVRefNum *ConnectionIDOut,
	DAB_Remote_Output_Indicator *OutputIndicator,
	int32_t *Completed,
	int32_t *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ConnectionIDOut – Returns the TCP connection reference. Connection ID Out is a network connection reference that uniquely identifies the TCP connection. Use this value to refer to this connection in subsequent function calls.
- OutputIndicator– Display the Waveform Indicator.

```
typedef struct
{
	double CenterFrequencyHz;
	double OutputSamplingRateHz;
	double PlayDurationSec;
	double PAPR;
} DAB_Remote_Output_Indicator;
```

- CenterFreqencyHz– Indicates the center frequency of the multiple carrier waveform.
- OutputSamplingRateHz– Indicates the sampling frequency of the generated IQ baseband waveform.
- PlayDurationSec– Indicates the total duration, in seconds, of waveform generated.
- PAPR– Indicates Peak to Average Power Ratio, in dB

- Completed – Check Whether the Waveform Indicator received.
- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll

3.29 MaxEye DABT SG Remote TCP Close Connection

NAME MaxEye_DAB_SG_Remote_TCP_Close_Connection

DESCRIPTION Closes TCP network connection between DAB SFP Client and Server applications

FUNCTION PROTOTYPE

```
void __cdecl MaxEye_DAB_SG_Remote_TCP_Close_Connection
(
        LVRefNum        *ConnectionIDIn,
        int32_t         ErrorCodeIn,
        int32_t         *ErrorCodeOut
)
```

INPUT PARAMETERS

- ConnectionIDIn – Specifies the TCP connection reference. Connection ID In is a network connection reference that uniquely identifies the TCP connection.
- ErrorCodeIn – Specifies the error code. The ErrorCodeIn can accept error information from previously called C function. Use this information to decide if any functionality should be bypassed in the event of errors from other C APIs.

OUTPUT PARAMETERS

- ErrorCodeOut – Returns the error code**,** passes error or warning information out of a Function to be used by other C APIs.

DEPENDENCIES

- Header – DAB-TDMB Generation.h, extcode.h, fundtype.h, platdefines.h, lv_epilog.h
- Library – DAB-TDMB Generation.lib
- DLL – DAB-TDMB Generation.dll