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# Information technology — MPEG audio technologies —

## Part 2: Spatial Audio Object Coding (SAOC)

## AMENDMENT 4: SAOC Conformance

*Technologies de l'information — Technologies audio MPEG —*
*Partie 2: Codage d'objet audio spatial (SAOC)*
*AMENDEMENT 4: Conformité SAOC*

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# Information technology — MPEG audio technologies —

## Part 2:
## Spatial Audio Object Coding (SAOC)

## AMENDMENT 4: SAOC Conformance

*Add Clause 10, Conformance testing:*

### 10 Conformance testing

#### 10.1 Introduction

This clause specifies conformance criteria for both bitstreams and decoders compliant with the SAOC standard as defined in Clauses 1 to 9 and Annexes A to G. This is done to assist implementers and to ensure interoperability.

#### 10.2 Terms and definitions

The terms and definitions as stated in Clause 3 apply. Furthermore, the following terms and definitions will be used throughout this clause.

**bitstream** data encoded according to the SAOC standard

**conformance test bitstream** bitstream used for testing the conformance of an SAOC decoder.

#### 10.3 SAOC conformance testing

5.5 defines the SAOC profiles and levels. Some conformance criteria apply to SAOC in general, while others are specific to the specific SAOC profile and its levels. Conformance shall be tested for the level of the profile with which a given bitstream or decoder/transcoder claims to comply.

#### 10.4 Bitstreams

##### 10.4.1 Characteristics

The SAOC audio object type (AOT) can be used in combination with various AOTs.

##### 10.4.2 Test procedure

###### 10.4.2.1 Introduction

An SAOC bitstream shall have the syntax and semantics as specified in Clauses 1 to 9 and Annexes A to G. The present subclause defines the conformance criteria that shall be fulfilled by a compliant bitstream. These criteria are specified for the syntactic elements of the bitstream and for some parameters decoded from the SAOC bitstream payload.

#### 10.4.2.2 Configuration header

##### 10.4.2.2.1 SAOCSpecificConfig()/SAOCDESpecificConfig()

| | |
|---|---|
| **bsVersion** | For restrictions, see 10.4.2.5. |
| **bsSamplingFrequencyIndex** | Shall be in the range 0x0..0xc or 0xf. For further restrictions, see 10.4.2.5. |
| **bsSamplingFrequency** | For restrictions, see 10.4.2.5. |
| **bsLowDelayMode** | For restrictions, see 10.4.2.5. |
| **bsFreqRes** | Shall not be encoded with a value of 0. |
| **bsFrameLength** | For restrictions, see 10.4.2.5. |
| **bsNumObjects** | For restrictions, see 10.4.2.5. |
| **bsNumFGOs** | For restrictions, see 10.4.2.5. |
| **bsRelatedTo**[i][j] | No restrictions apply. |
| **bsTransmitAbsNrg** | No restrictions apply. |
| **bsNumDmxChannels** | For restrictions, see 10.4.2.5. |
| **bsTttDualMode** | No restrictions apply. |
| **bsTttBandsLow** | Shall not be encoded with a value larger than the value of numBands as given by Table 33. |
| **bsPdgFlag** | No restrictions apply. |
| **bsOneIOC** | No restrictions apply. |
| **bsDcuFlag** | For restrictions, see 10.4.2.5. |
| **bsDcuMandatory** | No restrictions apply. |
| **bsDcuDynamic** | No restrictions apply. |
| **bsDcuMode** | No restrictions apply. |
| **bsDcuParam** | No restrictions apply. |
| **bsDeLimitFlag** | For restrictions, see 10.4.2.5 |
| **bsDeLimitFgo** | No restrictions apply. |
| **bsDeLimitBgo** | No restrictions apply. |

#### 10.4.2.2.2 SAOCExtensionConfigData()

**bsSaocExtType** No restrictions apply. Note that in case of values indicated as "N/A" in Table 43, the parsing function SAOCExtensionConfigData(**bsSaocExtType**) shall return the value 0, such that possibly present data is read as **bsFillBits** (i.e. skipped) and correct parsing of the bitstream can continue.

**bsSaocExtLen** No restrictions apply.

**bsSaocExtLenAdd** No restrictions apply.

**bsSaocExtLenAddAdd** No restrictions apply.

**bsFillBits** No restrictions apply.

#### 10.4.2.2.3 SAOCExtensionConfigData(0)

The syntactic element SAOCExtensionConfigData(0) shall not be present in case of Low Delay profile. This syntactic element shall not be present in case of Baseline and Dialogue Enhancement profiles of Level 1. Furthermore, this syntactic element shall not be present if the helper variable numSlots has a value that is not listed in ISO/IEC 23003-1:2007, Table 55. Furthermore, if this syntactic element is present, the bitstream shall fulfil the requirements outlined in ISO/IEC 23003-1:2007, 6.1.13. For further restrictions, see 10.4.2.5.

**bsDeLimitFgoEAO** No restrictions apply.

**bsDeLimitBgoEAO** No restrictions apply.

**bsDcuFlag2** No restrictions apply.

**bsDcuMode2** No restrictions apply.

**bsDcuParam2** No restrictions apply.

##### 10.4.2.2.3.1 ResidualConfig()

**bsResidualSamplingFrequencyIndex** Shall fulfil the requirements outlined in ISO/IEC 23003-1:2007, 6.1.13 and Table 88.

**bsResidualFramesPerSAOCFrame** Shall fulfil the requirements outlined in ISO/IEC 23003-1:2007, 6.1.13 and Table 87

**bsNumGroupsFGO** For restrictions, see 10.4.2.5.

**bsResidualPresent**[i] No restrictions apply.

**bsResidualBands**[i] Shall not be encoded with a value larger than the value of **bsTtnBandsLow**[i].

**bsTtnDualMode**[i] No restrictions apply.

**bsTtnBandsLow**[i] Shall not be encoded with a value larger than the value of numBands as given by Table 33.

#### 10.4.2.2.4 SAOCExtensionConfigData(1)

No restrictions apply.

#### 10.4.2.2.5 SAOCExtensionConfigData(2)

The syntactic element SAOCExtensionConfigData(2) shall not be present in case of SAOC-DE profile. Shall fulfil the requirements outlined in Table 51.

#### 10.4.2.2.6 SAOCExtensionConfigData(3)

No restrictions apply.

#### 10.4.2.2.7 SAOCExtensionConfigData(8)

##### 10.4.2.2.7.1 ObjectMetaData()

**bsNumByteMetaData**[i] No restrictions apply.

**bsMetaData**[i][j] Shall be encoded in UTF-8 encoding format.

#### 10.4.2.2.8 SAOCExtensionConfigData(9)

##### 10.4.2.2.8.1 PresetConfig()

**bsNumPresets** No restrictions apply.

**bsNumBytePresetLabel**[i] No restrictions apply.

**bsPresetLabel**[i][j] Shall be encoded in UTF-8 encoding format.

**bsPresetMatrix** No restrictions apply.

##### 10.4.2.2.8.2 PresetMatrixData()

**bsPresetMatrixType** Shall not be encoded with a value of 3.

**bsPresetMatrixElements**[i][j] No restrictions apply.

##### 10.4.2.2.8.3 PresetMatrixData()

**bsPresetUserDataIdentifier**[i] Shall be encoded in UTF-8 encoding format.

**bsPresetUserDataLen** No restrictions apply.

#### 10.4.2.2.9 SAOCExtensionConfigData(10)

The syntactic element SAOCExtensionConfigData(10) shall not be present in case of SAOC-DE profile.

##### 10.4.2.2.9.1 SeparationMetaData()

**bsNumSeparationPairs** No restrictions apply.

**bsSeparationMainObjectID**[i] No restrictions apply.

**bsSeparationSubObjectID**[i] No restrictions apply.

### 10.4.2.3 Bitstream payload

#### 10.4.2.3.1 SAOCFrame()/SAOCDEFrame()

**bsIndependencyFlag** No restrictions apply.



 

#### 10.4.2.3.1.1 SAOCFramingInfo()

**bsFramingType** No restrictions apply.

**bsNumParamSets** For restrictions, see 10.4.2.5.

**bsParamSlot**[i] Shall be in the range 0...**bsFrameLength**.

#### 10.4.2.3.1.2 EcDataSaoc()

**bsXXXdataMode[i][j]** Shall fulfil the requirements outlined in ISO/IEC 23003-1:2007, 6.1.13. Shall not be encoded with the value 2 if EAO mode (residual coding) is applied.

**bsDataPairXXX**[i][j] Shall have the value 0 if setIdx == dataSets-1. No further restrictions apply.

**bsQuantCoarseXXX**[i][j] No restrictions apply.

**bsFreqResStrideXXX**[i][j] No restrictions apply.

#### 10.4.2.3.1.3 SAOCEcDataPair()

**bsPcmCodingXXX**[i][j] No restrictions apply.

#### 10.4.2.3.1.4 SAOCDiffHuffData()

**bsDiffType** No restrictions apply.

**bsCodingScheme** No restrictions apply.

#### 10.4.2.3.1.5 SAOCHuffData1D()

hcodFirstBand_XXX **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of Tables A.2 and A.3, respectively, and shall have a length as defined by the corresponding entry in column "length".

hcod1D_XXX_YY **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of Tables A.4 and A.5, respectively, and shall have a length as defined by the corresponding entry in column 'length'.

**bsSign** No restrictions apply.

#### 10.4.2.3.1.6 SAOCHuffData2DFreqPair()

| | |
|---|---|
| hcodLavIdx | **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of Table A.24, and shall have a length as defined by the corresponding entry in column "length". |
| hcodFirstBand_XXX | **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of Tables A.2 and A.3, respectively, and shall have a length as defined by the corresponding entry in column "length". |
| hcod2D_XXX_YY_FP_LL | **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of the applicable table out of Tables A.11 to A.22, and shall have a length as defined by the corresponding entry in column "length". |
| hcod1D_XXX_YY | **bsCodeW** shall have a value out of a set of values as defined by column "codeword" of Tables A.4 and A.5, respectively, and shall have a length as defined by the corresponding entry in column "length". |
| **bsSign** | No restrictions apply. |

#### 10.4.2.3.2 SAOCExtensionFrame()

No restrictions apply. Note that in case of **bsSaocExtType** having values indicated as "N/A" in Table 43, the parsing function SAOCExtensionFrameData(**bsSaocExtType**) shall return the value 0, such that possibly present data is read as **bsFillBits** (i.e. skipped) and correct parsing of the bitstream can continue.

| | |
|---|---|
| **bsSaocExtLen** | No restrictions apply. |
| **bsSaocExtLenAdd** | No restrictions apply. |
| **bsFillBits** | No restrictions apply. |

#### 10.4.2.3.3 SAOCExtensionFrameData(0)

| | |
|---|---|
| **bsDeLimitEaoUpdate** | No restrictions apply. |
| **bsDeLimitFgoEAO** | No restrictions apply. |
| **bsDeLimitBgoEAO** | No restrictions apply. |
| **bsDcuDynamicUpdate2** | No restrictions apply. |
| **bsDcuMode2** | No restrictions apply. |
| **bsDcuParam2** | No restrictions apply. |

### 10.4.2.4 Transport of SAOC data

#### 10.4.2.4.1 Transport in an MPEG environment

##### 10.4.2.4.1.1 Introduction

In case of transport of SAOC data in an MPEG-4 environment, the following restrictions apply. In case of SAOCSpecificConfig() (or SAOCDESpecificConfig() for SAOC-DE profile) is conveyed out-of-band, any in-band SAOCSpecificConfig() (or SAOCDESpecificConfig() for SAOC-DE profile) shall be identical to the out-of-band one.



 

In case of embedding of MPEG SAOC data in MPEG-2/4 AAC payloads, the following restrictions apply. There must be at least one extension_payload() element with extension_type==EXT_SAOC_DATA (or extension_type==EXT_SAOC_DE_DATA for SAOC-DE profile) in each AAC frame in order to enable immediate implicit signalling.

In case of embedding of MPEG SAOC data in MPEG-1/2 Layer I/II/III bistreams, the following restrictions apply. The first bit of the ancSyncword must be byte-aligned with respect to the first bit of the 0xFFF syncword of the MPEG-1/2 frame header. The AncDataElement() must be completely included in the ancillary data of a single MPEG-1/2 frame. There must be at least one AncDataElement() in the ancillary data of each MPEG-1/2 frame in order to enable immediate implicit signalling.

#### 10.4.2.4.1.2 AncDataElement()

**ancSyncword** Shall be 0x473.

**ancType** No restrictions apply.

**ancStart** No restrictions apply.

**ancStop** No restrictions apply.

**ancLenBytes** No restrictions apply.

**ancLenBytesAdd** No restrictions apply.

**ancCrcWord** Shall have the value as determined by the procedure specified in 8.2.4.

**ancDataSegmentByte** A data block formed by concatenation of ancDataSegmentByte as specified in 8.2.4 shall, if ancType==0x0 or ancType==0x1, constitute one SaocDataFrame() syntax element, padded at the end to obtain an integer number of bytes.

#### 10.4.2.4.1.3 SaocDataFrame(saocHeaderFlag)

**saocHeaderFlag** No restrictions apply.

**saocHeaderLen** No restrictions apply.

**saocHeaderLenAdd** No restrictions apply.

**bsFillBits** No restrictions apply.

**saocTimeAlignFlag** No restrictions apply.

**saocTimeAlign** Shall have an absolute value no larger than two times the number of samples in the MPEG SAOC PCM frame as defined by **bsFrameLength** and **bsSamplingFrequencyIndex** or **bsSamplingFrequency**.

### 10.4.2.4.2 Transport over PCM channels

#### 10.4.2.4.2.1 Introduction

In case of transport of SAOC data over PCM channels, the following restrictions apply. The BuriedData() data shall be embedded in the LSBs of the PCM channels. Typically, 16 bit PCM samples are used. However, also other sample precisions shall be supported, e.g. 20 and 24 bits.

#### 10.4.2.4.2.2 BuriedDataHeader()

**bsBDSyncword** Shall be 0xAA95.

**bsBDChannels** Shall have the value of the number of PCM channels in which the MPEG SAOC data is embedded.

**bsBDFramelength** Shall define a PCM buried data frame size which is exactly the same as the MPEG SAOC PCM frame size defined by **bsFrameLength** and **bsSamplingFrequencyIndex** or **bsSamplingFrequency**.

**bdBDSubframes** Shall fulfil the restrictions outlined for this syntactic element in 8.3.3.

**bsBDReserved** Shall be 0.

**bsBDAlloc**[channel][subframe] Shall not exceed the value of n for n bit PCM samples.

**bsBDHeaderCrc** Shall fulfil the restrictions outlined for this syntactic element in 8.3.3.

**bsBDHeaderPadding** Shall be 0.

#### 10.4.2.4.2.3 BuriedDataFrame()

**bsBDFramePadding** Shall be 0.

#### 10.4.2.4.2.4 BuriedDataElement()

**bsBDType** Each BuriedDataFrame() shall at least contain one BuriedDataElement() with **bsBDType** set to the value of 4 or 5. In the case of file based applications, the first frame shall contain a BuriedDataElement() with **bsBDType** set to the value of 5.

**bsBDID** Shall be set to a value in the range of 0..7, each value shall be used only once in a BuriedDataFrame().

**bsBDLengthIdx** No restrictions apply.

**bsBDLength** Shall fulfil the restriction outlined for this syntactic element in 8.3.3.

**bsBDBytes** Shall contain exactly one SaocDataFrame().

**bsBDDataCrc** Shall fulfil the restrictions outlined for this syntactic element in 8.3.3.

### 10.4.2.5 Restrictions depending on profiles and levels

#### 10.4.2.5.1 Introduction

Depending on the profile and level associated with the present SAOC bitstream, further restrictions may apply.

#### 10.4.2.5.2 Baseline SAOC profile

For the Baseline SAOC profile, the following further restrictions apply.

**bsSamplingFrequencyIndex** Shall be encoded with a value listed in Table AMD1.1.

**bsSamplingFrequency** Shall be encoded with a value listed in Table AMD1.1.

**bsFrameLength** Shall be in the range 3..71.



 

**bsLowDelayMode** Shall be 0.

**bsNumObjects** Shall be encoded with a value listed in Table AMD1.1.

**bsNumDmxChannels** Shall be in the range 0..1.

**bsNumEAO** Shall be encoded with a value listed in Table AMD1.1.

**Table — AMD1.1 — Restrictions for the SAOC baseline profile**

| | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|---|
| **bsSamplingFrequencyIndex** | 0x3..0xc, 0xf | 0x3..0xc, 0xf | 0x3..0xc, 0xf | 0x3..0xc, 0xf |
| **bsSamplingFrequency** | ≤48 000 | ≤48 000 | ≤48 000 | ≤96 000 |
| **bsNumObjects** | 0..7 | 0..15 | 0..31 | 0..31 |
| **bsNumEAO** | N/A | 0..1 | 0..3 | 0..3 |

**bsDcuFlag** No restrictions apply.

#### 10.4.2.5.3 Low Delay SAOC profile

For the Low Delay SAOC profile, the following further restrictions apply.

**bsSamplingFrequencyIndex** Shall be encoded with a value listed in Table AMD1.2.

**bsSamplingFrequency** Shall be encoded with a value listed in Table AMD1.2.

**bsFrameLength** Shall be in the range 3..31.

**bsLowDelayMode** Shall be 1.

**bsNumObjects** Shall be encoded with a value listed in Table AMD1.2.

**bsNumDmxChannels** Shall be encoded with a value listed in Table AMD1.2.

**Table — AMD1.2 — Restrictions for the SAOC low delay profile**

| | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| **bsSamplingFrequencyIndex** | 0x3..0xc, 0xf | 0x3..0xc, 0xf | 0x3..0xc, 0xf |
| **bsSamplingFrequency** | ≤48 000 | ≤48 000 | ≤48 000 |
| **bsNumObjects** | 0..7 | 0..31 | 0..31 |
| **bsNumDmxChannels** | 0 | 0..1 | 0..1 |

**bsDcuFlag** No restrictions apply.

#### 10.4.2.5.4 Dialogue Enhancement SAOC profile

For the Dialogue Enhancement SAOC profile, the following further restrictions apply.

**bsVersion** Shall be 0.

**bsSamplingFrequencyIndex** Shall be in the range 0x3..0xc or 0xf.

**bsSamplingFrequency** Shall be ≤48 000.

**bsFrameLength** Shall be in the range 3..71.

**bsNumObjects** Shall be in the range 0..5.

**bsNumDmxChannels** Shall be in the range 0..2.

**bsNumFGOs** Shall be in the range 0..2.

**bsDeLimitFlag** Shall be 1.

**bsNumEAO** Shall be encoded with a value listed in Table AMD1.3. If it is present, then it shall be equal to bsNumFGOs.

**Table — AMD1.3 — Restrictions for the SAOC Dialogue Enhancement Profile**

| | Level 1 | Level 2 |
|---|---|---|
| **bsNumEAO** | N/A | 0..2 |

**bsDcuFlag** Shall be 0.

### 10.5 SAOC decoder/transcoder

#### 10.5.1 Characteristics

##### 10.5.1.2 General

The SAOC decoder/transcoder can be implemented in two different versions:

— High Quality (HQ) SAOC

— Low Power (LP) SAOC

#### 10.5.2 Test procedure

##### 10.5.2.1 Downmix decoders

An SAOC decoder/transcoder can be used in combination with a downmix decoder. In this case, the downmix decoder shall fulfill the conformance criteria that are applicable to it. Nevertheless, for the conformance test procedure, the PCM coding shall be applied to a downmix signal.

##### 10.5.2.2 SAOC decoder/transcoder test procedure

With regard to the definition and further details of the conformance criterion RMS/LSB being used to test SAOC decoders/transcoders, reference is made to ISO/IEC 14496.

The conformance test procedure for SAOC decoders/transcoders internally creates a reference for comparison, given the conformance test sequence and the output from the decoder under test as outlined in Figure AMD1.3.



 

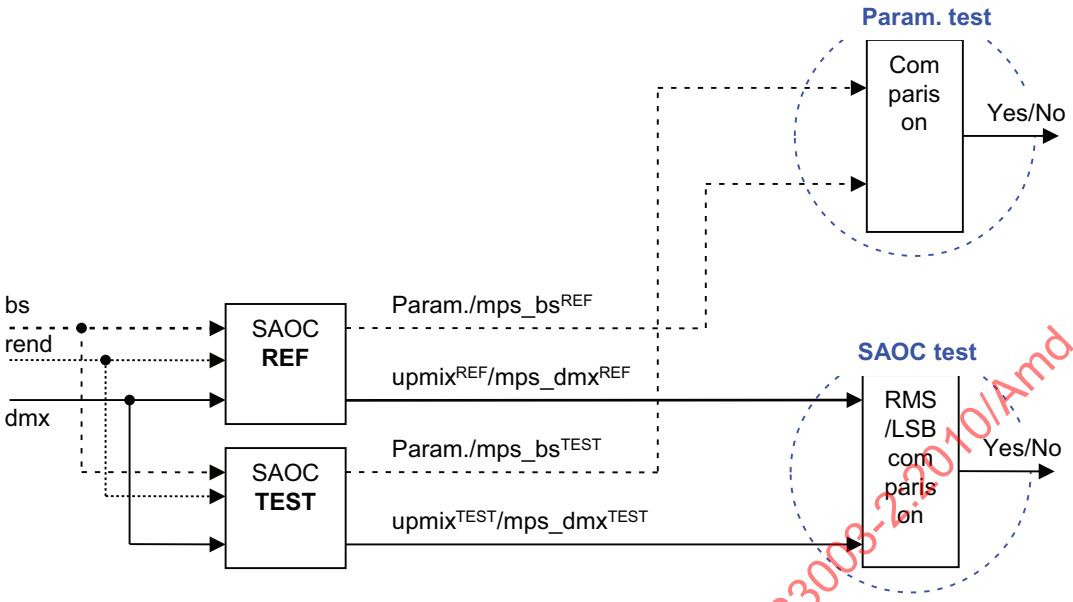


**Figure — AMD1.3 — Block diagram of the SAOC decoding/transcoding conformance test procedure**

The relevant signals and data are:

— Data from the conformance test sequence:

  — bs: SAOC bitstream from the conformance test sequence;

  — rend: rendering information from the conformance test sequence;

  — dmx: SAOC downmix signal from the conformance test sequence.

— Outputs for comparison from the SAOC decoder/transcoder implementation instances:

  — upmix$^{REF}$/dmx_bs$^{REF}$: output from the reference SAOC decoder/transcoder;

  — upmix$^{TEST}$/dmx_bs$^{TEST}$: output from the SAOC decoder/transcoder under test;

  — Param./mps_bs$^{REF}$: Parametric or/and MPS data from the reference SAOC decoder/transcoder;

  — Param./mps_bs$^{TEST}$: Parametric or/and MPS data from the SAOC decoder/transcoder under test.

— Conformance test modes:

  — SAOC test (RMS/LSB comparison): This module calculates the difference signals between the output from the SAOC decoder/transcoder under test and the internal reference. The maximum amplitude of the difference signal (Diff max) as well as the RMS of the difference signal are calculated. The conformance criteria are specified with respect to PCM-sample in the range –32768 ... 32767.

  — Param test (ASCII comparison): This module calculates the difference between the obtained output parameters (e.g. MPS data) from the SAOC decoder/transcoder under test and the internal reference.

### 10.5.3 Test sequences

To test SAOC decoder/transcoder, ISO/IEC JTC 1/SC 29 supplies a number of test sequences. The naming convention of these bitstreams is as follows: The first part of the name (the part preceding the first underscore) specifies the downmix format. The second part of the name (between the first and the last underscore) specifies the properties of the test sequence in question according to Table AMD1.4. For

each test sequence, the SAOC test (RMS/LSB comparison) and/or Param test (ASCII comparison) are applied according to Table AMD1.5.

**Table — AMD1.4 — List of SAOC bitstream elements for conformance test sequences**

| Conformance test sequence | pcm_BLP_x-1-1 | pcm_BLP_x-1-2 | pcm_BLP_x-1-5 | pcm_BLP_x-1-b | pcm_BLP_x-2-1 | pcm_BLP_x-2-2 | pcm_BLP_x-2-5 | pcm_BLP_x-2-b | pcm_BLP_param_4 | pcm_BLP_param_5 | pcm_BLP_param_7 | pcm_BLP_param_10 | pcm_BLP_param_14 | pcm_BLP_param_20 | pcm_LDP_param_4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downmix sampling frequency | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 |
| Downmix sample resolution | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| bsSamplingFrequencyIndex | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| bsLowDelayMode | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| bsFreqRes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 6 | 5 | 4 | 3 | 2 | 7 |
| bsFrameLength | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 7 |
| bsNumObjects | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| bsNumFGOs | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsRelatedTo[i][j] | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| bsTransmitAbsNrg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsNumDmxChannels | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsTttDualMode | n/a | n/a | n/a | n/a | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsTttBandsLow | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsPdgFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsOneIOC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuMandatory | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuDynamic | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuParam | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFlag | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitBgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(8) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(9) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(10) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsFramingType | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table** — *(continued)*

| bsIndependencyFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bsNumParamSets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsParamSlot[i] | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsQuantCoarseXXX[i][i] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAOCExtensionFrameData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

**Table —** *(continued)*

| Conformance test sequence | pcm_LDP_param_5 | pcm_LDP_param_7 | pcm_LDP_param_9 | pcm_LDP_param_12 | pcm_LDP_param_15 | pcm_LDP_param_23 | pcm_BLP_ts_8 | pcm_BLP_ts_15 | pcm_BLP_ts_16 | pcm_BLP_ts_18 | pcm_BLP_ts_24 | pcm_BLP_ts_30 | pcm_BLP_ts_36 | pcm_BLP_ts_48 | pcm_BLP_ts_60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downmix sampling frequency | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 |
| Downmix sample resolution | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| bsSamplingFrequencyIndex | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| bsLowDelayMode | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsFreqRes | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsFrameLength | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 14 | 15 | 17 | 23 | 29 | 35 | 47 | 59 |
| bsNumObjects | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| bsNumFGOs | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsRelatedTo[i][j] | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| bsTransmitAbsNrg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsNumDmxChannels | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsTttDualMode | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsTttBandsLow | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsPdgFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsOneIOC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuMandatory | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuDynamic | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuParam | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFlag | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitBgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(8) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(9) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(10) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsFramingType | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table** — *(continued)*

| bsIndependencyFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bsNumParamSets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsParamSlot[i] | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsQuantCoarseXXX[i][i] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAOCExtensionFrameData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

**Table — *(continued)***

| Conformance test sequence | pcm_BLP_ts_64 | pcm_BLP_ts_72 | pcm_BLP_32khz | pcm_BLP_44khz | pcm_BLP_uqMPS | pcm_BLP_coarse | pcm_BLP_one-IOC | pcm_BLP_PDG | pcm_BLP_EAO | pcm_BLP_DCU | pcm_BLP_MBO | pcm_BLP_MetaData | pcm_BLP_Pre-set | pcm_BLP_Sep-Data | pcm_BLP_NRG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downmix sampling frequency | 48 000 | 48 000 | 32 000 | 44 100 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 |
| Downmix sample resolution | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| bsSamplingFrequencyIndex | 3 | 3 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| bsLowDelayMode | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsFreqRes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsFrameLength | 63 | 71 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| bsNumObjects | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| bsNumFGOs | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsRelatedTo[i][j] | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| bsTransmitAbsNrg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| bsNumDmxChannels | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsTttDualMode | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsTttBandsLow | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsPdgFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsOneIOC | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| bsDcuMandatory | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1 | n/a | n/a | n/a | n/a | n/a |
| bsDcuDynamic | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1 | n/a | n/a | n/a | n/a | n/a |
| bsDcuMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | e | n/a | n/a | n/a | n/a | n/a |
| bsDcuParam | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | e | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFlag | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitBgo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | + | n/a | n/a |
| SAOCExtensionConfigData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a |
| SAOCExtensionConfigData(8) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a |
| SAOCExtensionConfigData(9) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a |
| SAOCExtensionConfigData(10) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a |
| bsFramingType | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table** — *(continued)*

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bsIndependencyFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsNumParamSets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsParamSlot[i] | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsQuantCoarseXXX[i][i] | 0 | 0 | 0 | 0 | g | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAOCExtensionFrameData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | + | n/a | n/a | n/a |
| SAOCExtensionFrameData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | n/a | n/a | n/a | n/a | n/a |

**Table —** *(continued)*

| Conformance test sequence | pcm_DEP_x-3-3 | pcm_DEP_param_4 | pcm_DEP_param_5 | pcm_DEP_param_7 | pcm_DEP_param_10 | pcm_DEP_param_14 | pcm_DEP_param_20 | pcm_DEP_ts_8 | pcm_DEP_ts_15 | pcm_DEP_ts_16 | pcm_DEP_ts_18 | pcm_DEP_ts_24 | pcm_DEP_ts_30 | pcm_DEP_ts_36 | pcm_DEP_ts_48 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downmix sampling frequency | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 |
| Downmix sample resolution | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| bsSamplingFrequencyIndex | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| bsLowDelayMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsFreqRes | 1 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsFrameLength | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 7 | 14 | 15 | 17 | 23 | 29 | 35 | 47 |
| bsNumObjects | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| bsNumFGOs | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsRelatedTo[i][j] | b | b | b | b | b | b | b | b | b | b | b | b | b | b | b |
| bsTransmitAbsNrg | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsNumDmxChannels | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| bsTttDualMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsTttBandsLow | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsPdgFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsOneIOC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDcuMandatory | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuDynamic | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDcuParam | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsDeLimitFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsDeLimitFgo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsDeLimitBgo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAOCExtensionConfigData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(8) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(9) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionConfigData(10) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsFramingType | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table** — *(continued)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bsIndependencyFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| bsNumParamSets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| bsParamSlot[i] | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| bsQuantCoarseXXX[i][i] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAOCExtensionFrameData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SAOCExtensionFrameData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

**Table —** *(continued)*

| Conformance test sequence | pcm_DEP_ts_60 | pcm_DEP_ts_64 | pcm_DEP_ts_72 | pcm_DEP_32khz | pcm_DEP_44khz | pcm_DEP_coarse | pcm_DEP_one-IOC | pcm_DEP_MRC | pcm_DEP_PDG | pcm_DEP_var-Parm | pcm_DEP_EAO | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downmix sampling frequency | 48 000 | 48 000 | 48 000 | 32 000 | 44 100 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | 48 000 | | | | |
| Downmix sample resolution | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | |
| bsSamplingFrequencyIndex | 3 | 3 | 3 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | | |
| bsLowDelayMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsFreqRes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| bsFrameLength | 59 | 63 | 71 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | | | |
| bsNumObjects | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | |
| bsNumFGOs | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| bsRelatedTo[i][j] | b | b | b | b | b | b | b | b | b | c | b | | | | |
| bsTransmitAbsNrg | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsNumDmxChannels | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| bsTttDualMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsTttBandsLow | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsPdgFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | | | |
| bsOneIOC | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | | | |
| bsDcuFlag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| bsDcuMandatory | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsDcuDynamic | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsDcuMode | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsDcuParam | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsDeLimitFlag | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| bsDeLimitFgo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | f | 0 | 0 | 0 | | | | |
| bsDeLimitBgo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | f | 0 | 0 | 0 | | | | |
| SAOCExtensionConfigData(0) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | + | | | | |
| SAOCExtensionConfigData(1) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| SAOCExtensionConfigData(2) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| SAOCExtensionConfigData(3) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| SAOCExtensionConfigData(8) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| SAOCExtensionConfigData(9) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| SAOCExtensionConfigData(10) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | |
| bsFramingType | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | | |