
**Information technology — High
efficiency coding and media delivery
in heterogeneous environments —**

**Part 8:
Conformance specification for HEVC**

**AMENDMENT 1: Conformance testing
for HEVC screen content coding
(SCC) extensions and non-intra high
throughput profiles**

*Technologies de l'information — Codage à haute efficacité et livraison
des médias dans des environnements hétérogènes —*

*Partie 8: Spécification de conformité du codage vidéo à haute
efficacité*

AMENDEMENT 1: .





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NOTE The conformance bitstreams added by this Amendment are available at: <https://standards.iso.org/iso-iec/23008/-8/ed-2/en/amd/-1>.

4.5.7

Replace paragraph 9 with the following:

A decoder that conforms to the High Throughput 4:4:4 16 Intra, High Throughput 4:4:4, High Throughput 4:4:4 10 and High Throughput 4:4:4 14 profiles (as specified in Rec. ITU-T H.265 | ISO/IEC 23008-2:2017, A.3.6), which are collectively referred to as the high throughput profiles, at specific level shall be capable of decoding the specified bitstreams in [Table 4](#).

4.5.7

At the end of 4.5.7, add the following paragraph:

A decoder that conforms to the Screen-Extended Main, Screen-Extended Main 10, Screen-Extended Main 4:4:4, Screen-Extended Main 4:4:4 10, Screen-Extended High Throughput 4:4:4, Screen-Extended High Throughput 4:4:4 10 or Screen-Extended High Throughput 4:4:4 14 profiles (as specified in Rec. ITU-T H.265 | ISO/IEC 23008-2:2017, A.3.7), which are collectively referred to as the screen content coding extensions profiles, shall be capable of decoding the specified bitstreams in [Table 7](#). A decoder that conforms to some screen content coding extensions profiles is also required to be capable of decoding bitstreams that conform to particular other profiles. Thus, in addition to the specified bitstreams in [Table 7](#), a decoder that conforms to a screen content coding extension profile shall also be capable of decoding the bitstreams specified in Table 1 or [Table 4](#) that conform to the decoding requirements specified for the screen content coding extensions profile in Rec. ITU-T H.265 | ISO/IEC 23008-2:2017, A.3.7.

4.6.16.43

At the end of 4.6.16.43, add the following additional subclauses:

4.6.16.44 Test bitstreams #WPP_AND_TILE_10Bit422Test_HIGH_TP_444_10BIT_RExt

Specification: All slices are coded as I or P slices. The value of bit_depth_luma_minus8 is set equal to 2. The value of bit_depth_chroma_minus8 is set equal to 2. The value of chroma_format_idc is set equal to 2. There are 3 pictures in the bitstream. The cabac_bypass_alignment_enabled_flag and extended_precision_processing_flag are set equal to 0.

Functional stage: Test parsing and reconstruction process with various combinations of tools.

Purpose: The purpose of the stream is to exercise the combination of simultaneously using wavefronts and tiles in the specified profile (the High Throughput 4:4:4 10 profile) when cabac_bypass_alignment_enabled_flag and extended_precision_processing_flag are set equal to 0.

4.6.16.45 Test bitstreams # WPP_AND_TILE_AND_CABAC_BYPASS_ALIGN_0_HIGH_TP_444_14BIT_RExt

Specification: All slices are coded as I or P slices. The value of bit_depth_luma_minus8 is set equal to 0. The value of bit_depth_chroma_minus8 is set equal to 0. The value of chroma_format_idc is set equal to 1. There are 3 pictures in the bitstream. The cabac_bypass_alignment_enabled_flag and extended_precision_processing_flag are set equal to 0. The video_full_range_flag is set equal to 1 in VUI.

Functional stage: Test parsing and reconstruction process with various combinations of tools.

Purpose: The purpose of the stream is to exercise the combination of simultaneously using wavefronts and tiles in the specified profile (the High Throughput 4:4:4 14 profile) when cabac_bypass_alignment_enabled_flag and extended_precision_processing_flag are set equal to 0.

4.6.16.46 Test bitstreams #WPP_AND_TILE_AND_CABAC_BYPASS_ALIGN_1_HIGH_TP_444_14BIT_RExt

Specification: All slices are coded as I or P slices. The value of bit_depth_luma_minus8 is set equal to 0. The value of bit_depth_chroma_minus8 is set equal to 0. The value of chroma_format_idc is set equal to 1. There are 3 pictures in the bitstream. The cabac_bypass_alignment_enabled_flag is set equal to 1. The extended_precision_processing_flag is set equal to 0. The video_full_range_flag is set equal to 1 in VUI.

Functional stage: Test parsing and reconstruction process with various combinations of tools.

Purpose: The purpose of the stream is to exercise the combination of simultaneously using wavefronts and tiles in the specified profile (the High Throughput 4:4:4 14 profile) when cabac_bypass_alignment_enabled_flag is set equal to 1 and the extended_precision_processing_flag is set equal to 0.

4.6.16.47 Test bitstreams #WPP_AND_TILE_AND_CABAC_EXT_PREC_1_HIGH_TP_444_14BIT_RExt

Specification: All slices are coded as I or P slices. The value of bit_depth_luma_minus8 is set equal to 0. The value of bit_depth_chroma_minus8 is set equal to 0. The value of chroma_format_idc is set equal to 1. There are 3 pictures in the bitstream. The cabac_bypass_alignment_enabled_flag is set equal to 0. The extended_precision_processing_flag is set equal to 1. The video_full_range_flag is set equal to 1 in VUI.

Functional stage: Test parsing and reconstruction process with various combinations of tools.

Purpose: The purpose of the stream is to exercise the combination of simultaneously using wavefronts and tiles in the specified profile (the High Throughput 4:4:4 14 profile) when cabac_bypass_alignment_enabled_flag is set equal to 0 and the extended_precision_processing_flag is set equal to 1.

4.6.16.48 Test bitstreams #WPP_AND_TILE_HIGH_TP_444_8BIT_RExt

Specification: All slices are coded as I or P slices. The value of bit_depth_luma_minus8 is set equal to 0. The value of bit_depth_chroma_minus8 is set equal to 0. The value of chroma_format_idc is set equal to 1. There are 3 pictures in the bitstream. The cabac_bypass_alignment_enabled_flag and the extended_precision_processing_flag are set equal to 0. The video_full_range_flag is set equal to 1 in VUI.

Functional stage: Test parsing and reconstruction process with various combinations of tools.

Purpose: The purpose of the stream is to exercise the combination of simultaneously using wavefronts and tiles in the specified profile (the High Throughput 4:4:4 profile) when the cabac_bypass_alignment_enabled_flag and the extended_precision_processing_flag are set equal to 0.