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S T A N D A R D S

Digital Video Subcommittee

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**AVC Video Constraints for Cable Television
Part 1- Coding**

ANSI/SCTE 128-1 2020

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Editorial Note: Table numbers in this part of SCTE 128 are not consecutive and retain the table numbers that appeared before SCTE 128 was split into two parts.

1. Introduction

1.1. Executive Summary

This document assists in creation of an AVC coded video elementary stream and is intended for broadcast purposes. There are other applications: time-shifting (e.g., PVR/DVR service), Video-on-Demand service, unicast, multicast, splicing (e.g., Ad-insertion) that could employ the specifications in this document. However, constraints specific to those applications are outside of the scope of this document.

1.2. Scope

This document defines the video coding constraints on ITU-T Rec. H.264 | ISO/IEC 14496-10 [3] video compression (hereafter called "AVC") for Cable Television. In particular, this document describes the constraints on AVC coded video elementary streams in an MPEG-2 service multiplex (single or multi-program Transport Stream).

Note: The carriage of MPEG-2 video in the MPEG-2 service multiplex is described in SCTE 54.

2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References

- [1] SCTE 215-1-1 2018 HEVC Video Constraints for Cable Television Part 1-1 HDR10 Coding

2.2. Standards from Other Organizations

- [2] ISO/IEC 13818-1, (2018), "Information Technology – Generic coding of moving pictures and associated audio – Part 1: Systems."
- [3] ITU-T Rec. H.264 | ISO/IEC 14496-10, (09/2014), "Information Technology – Coding of audio visual objects – Part 10: Advanced Video Coding."
- [4] CTA-608-E (2008), Line 21 Data Services.
- [5] CTA-708-D (2008), Digital Television (DTV) Closed Captioning.
- [6] ATSC A/53 Part 4:2009, Digital Television Standard, MPEG-2 Video System Characteristics.
- [7] ETSI TS 101 154 V2.4.1 Digital Video Broadcasting (DVB): Specification for the use of Video and Audio Coding in Broadcasting Applications based on the MPEG-2 Transport Stream, 2014.
- [8] SMPTE 2016-1-2009: Standard for Television – Format for Active Format Description and Bar Data.
- [9] ISO/IEC 13818-2 (2013), Information Technology – Generic coding of moving pictures and associated audio -Part 2: Video