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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**

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Table of Contents

Title	Page Number
NOTICE.....	2
Table of Contents	3
1. Introduction.....	5
1.1. Executive Summary	5
1.2. Scope	5
2. Normative References	5
2.1. SCTE References	5
2.2. Standards from Other Organizations	5
2.3. Published Materials.....	6
3. Informative References	6
3.1. SCTE References	6
3.2. Standards from Other Organizations	6
3.3. Published Materials.....	6
4. Compliance Notation	7
5. Abbreviations and Definitions.....	7
5.1. Abbreviations.....	7
5.2. Definitions.....	8
6. MPEG-2 Multiplex And Transport Constraints For AVC	9
6.1. Services and Features	9
6.2. MPEG-2 Systems Standard	9
6.2.1. Video T-STD	9
6.3. Assignment of identifiers	9
6.3.1. AVC Stream Type Codes.....	9
6.3.2. Descriptors	9
6.4. AVC Program Constraints	9
6.4.1. SCTE Random Access Point (SRAP) Access Unit Composition	9
6.4.2. SRAP Transport Constraints.....	9
6.4.3. Adaptation Field Private Data	10
6.5. PES constraints.....	10
7. AVC Video Constraints	10
7.1. Possible video inputs	10
7.2. Source coding specification	10
7.2.1. Constraints with respect to AVC	11
8. Carriage Of Captioning, AFD, And Bar Data	17
8.1. Encoding and transport of caption, active format description (AFD) and bar data	17
8.1.1. Caption, AFD and Bar Data Syntax	17
8.1.2. Caption, AFD and Bar Data Semantics	18
8.2. ATSC1_data() Syntax	18
8.2.1. ATSC1_data() Semantics	18
8.2.2. Encoding and Transport of Caption Data	19
8.2.3. Encoding and transport of bar data	19
8.2.4. Encoding and transport of active format description data	21
8.2.5. AFD Syntax	22
8.2.6. AFD Semantics	22
8.2.7. Recommended Receiver Response to AFD.....	23
8.2.8. Relationship Between Bar Data and AFD (Informative)	23
9. Support for AVC Still Pictures	24
APPENDIX A	AU_information in Adaptation Field Private Data (Deprecated)
APPENDIX B (Deprecated)	Encoding Guidelines to Enable Trick Play Support of AVC Streams 26

ANSI/SCTE 128-1 2018

1. Introduction.....	26
1.1. Overview	26
1.2. Technical Requirements	26
2. Discardable Pictures	27
2.1. MPEG-2 Discardable Pictures	27
2.2. AVC Discardable Pictures.....	28
2.3. Discardable Pictures and Trick Play Speeds	28
2.4. Smooth Trick Play and Compression Efficiency	29

List of Figures

Title	Page Number
Figure 2 - Example of achieving a 3x trickplay mode from a common MPEG-2 GOP structure (IBBP)	27
Figure 3 - Example of a compliant MPEG-2 GOP structure (IPPP).....	28
Figure 4 - Coding Structure with 2 Out of Every 3 Pictures as Discardable Pictures	30
Figure 5 - Coding Structure with 10 out of Every 15 Pictures as Discardable Pictures.....	30

List of Tables

Title	Page Number
Table 1 - Numerical Format Definitions	8
Table 5 - Standardized Video Input Formats	10
Table 6 - Sequence Parameter Set Constraints	11
Table 7 - VUI Constraints.....	12
Table 8 - SEI Constraints	13
Table 9A - Level 3.0 Compression Format Constraints (level_idc = 30)	14
Table 9B - Level 4.0 Compression Format Constraints (level_idc = 40)	14
Table 9C - Level 4.2 Compression Format Constraints (level_idc = 42)	15
Table 10 - Level and Computed Values to Support Table 9A, 9B and 9C	15
Table 11 - Time_scale & num_units_in_tick settings for Frame Rates	15
Table 12 - Common Data Syntax.....	17
Table 13 - user_identifier	18
Table 14 - ATSC1_data() Syntax.....	18
Table 15 - user_data_type_code	19
Table 16 - Bar Data Syntax.....	19
Table 17 - Line Number Designation (Informative).....	21
Table 18 - Active Format Description Syntax for AVC video	22
Table 19 - Active Format.....	23
Table 20 - Discardable Picture Percentages and Maximum Achievable Trick Play Speeds by Discard Process.....	29

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 [2] 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

- No normative references are applicable.

2.2. Standards from Other Organizations

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