



**International
Standard**

ISO/IEC 23090-30

**Information technology — Coded
representation of immersive
media —**

**Part 30:
Low latency, low complexity light
detection and ranging (LiDAR)
coding**

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Contents

Foreword.....	viii
Introduction	ix
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
3.1 General terms	1
3.2 High-level syntax and entropy coding terms	4
3.3 Tree structure terms.....	7
3.4 Geometry coding terms.....	7
3.5 Attribute coding terms.....	7
4 Abbreviated terms and symbols	8
4.1 Abbreviated terms	8
4.2 Symbols.....	8
4.3 Mnemonics	9
5 Conventions	9
5.1 General.....	9
5.2 Numerical representation	9
5.3 Arithmetic operators	9
5.4 Logical operators	10
5.5 Relational operators	10
5.6 Bit-wise operators	10
5.7 Assignment operators	11
5.8 Range notation	11
5.9 Mathematical functions	11
5.9.1 General.....	11
5.9.2 IntCos and IntSin.....	12
5.9.3 IntSqrt.....	12
5.9.4 IntRecipSqrt	13
5.9.5 Div	14
5.9.6 Morton	14
5.9.7 FromMorton	14
5.10 Order of operation precedence	15
5.11 Named expressions.....	15
5.11.1 General.....	15
5.11.2 Scope.....	16
5.11.3 Arguments of named expressions.....	17
5.11.4 Sub-expressions	17
5.11.5 Definitions with multiple statements.....	17
5.11.6 Textual definitions	17
5.12 Variables, syntax elements and tables.....	17
6 Point cloud format and relationship to coded and output representations	18
6.1 General format	18
6.2 Attributes	18
6.2.1 General	18

6.2.2 Colour	18
6.2.3 Opacity.....	19
6.2.4 Reflectance.....	19
6.2.5 Normal vector	19
6.2.6 Material identifier	19
6.2.7 Frame number/index.....	19
6.2.8 User defined attributes	20
6.3 Codec-derived attributes.....	20
6.3.1 General	20
6.3.2 Slice identifier.....	20
6.3.3 Slice tag	20
6.3.4 Canonical point order	20
6.3.5 Point Morton order	21
6.4 Coded point cloud format.....	21
6.4.1 Sequence coordinate system	21
6.4.2 Coding coordinate system	22
6.4.3 Coded point cloud sequence.....	22
6.4.4 Coded point cloud frame.....	23
6.4.5 Slice of a coded point cloud frame.....	23
6.4.6 Repetition of slices.....	24
6.4.7 Relationship between tiles and slices	24
6.4.8 Parameter sets.....	25
6.5 Output point cloud format.....	25
6.5.1 General	25
6.5.2 Coordinate system	25
6.5.3 Fixed-point conformance output	25
6.5.4 Attributes	26
6.5.5 Output point cloud sequence	26
6.5.6 Output point cloud frame	26
7 Syntax and semantics	26
7.1 Method of specifying syntax in tabular form	26
7.2 Specification of syntax functions and descriptors	27
7.3 Syntax in tabular form.....	28
7.3.1 General	28
7.3.2 Parameter sets, ancillary data and byte alignment	28
7.3.3 Geometry data unit	35
7.3.4 Attribute data unit	38
7.3.5 Defaulted attribute data unit syntax	40
7.4 Semantics	41
7.4.1 General	41
7.4.2 Parameter sets, ancillary data and byte alignment	41
7.4.3 Geometry data unit	53
7.4.4 Attribute data unit	55
7.4.5 Defaulted attribute data unit semantics	55
8 Decoding process.....	56
8.1 General decoding process	56
8.2 Frame decoding processes	56
8.2.1 General	56
8.2.2 Frame counter	56
8.3 Slice decoding processes	56

8.3.1 General	56
8.3.2 State variables	56
8.3.3 Geometry decoding process	57
8.3.4 Default attribute values	57
8.3.5 Attribute decoding process.....	57
8.3.6 At the end of a slice	57
9 Slice geometry.....	57
9.1 General.....	57
9.2 Sensed point sequence.....	58
9.2.1 General.....	58
9.2.2 State variables and expressions.....	58
9.2.3 Syntax element semantics.....	59
9.2.4 Contextualization of decoding elevation_offset.....	62
9.2.5 Reconstruction of sensed point positions	65
9.2.6 Reconstructed output point positions	74
9.2.7 Reconstructed output low latency attributes values.....	74
9.2.8 Reconstructed point positions for attributes decoding	74
10 Slice attributes	74
10.1 General	74
10.2 Point coordinates	74
10.2.1 General.....	74
10.2.2 Conversion to scaled angular coordinates.....	75
10.3 Syntax element semantics	75
10.4 Raw attribute decoding.....	76
10.5 Attribute decoding using the region-adaptive hierarchical transform	76
10.5.1 General.....	76
10.5.2 Transform tree.....	76
10.5.3 Coefficient order	79
10.5.4 Coefficient scaling.....	80
10.5.5 Transform domain prediction	82
10.5.6 Inverse transform.....	86
10.5.7 Reconstructed attribute values	88
10.6 Attribute decoding using levels of detail	88
10.6.1 General.....	88
10.6.2 Syntax element semantics	89
10.6.3 Reconstruction process	89
10.6.4 State variables.....	89
10.6.5 Levels of detail	90
10.6.6 Predictor search.....	96
10.6.7 Reconstruction of attribute values.....	102
10.6.8 Prediction mode coding.....	103
10.6.9 Scaling	105
10.6.10 Coefficient prediction	105
10.6.11 Transform coefficient weights.....	106
10.6.12 Transform	107
10.7 Attribute quantization parameters	108
10.7.1 Syntax element semantics	108
10.7.2 Per-point regional QP offset.....	109
10.7.3 Attribute coefficient QP	109
10.7.4 Definition of <i>AttrQstep</i>	109

11 Parsing process.....	110
11.1 General	110
11.2 Data unit buffer	111
11.2.1 General.....	111
11.2.2 State	111
11.2.3 Initialization at the start of parsing a data unit.....	112
11.2.4 Initialization at the start of parsing a geometry data unit footer.....	112
11.2.5 Definition of <i>DuNextBit</i>	112
11.3 Chunked bytestream parsing.....	112
11.3.1 General.....	112
11.3.2 Chunk syntax	113
11.3.3 Chunk semantics	113
11.3.4 State	113
11.3.5 Span of chunked bytestream data within a data unit.....	113
11.3.6 The chunk buffer	114
11.3.7 State update at the start of every CBS.....	114
11.3.8 Unpacking a single chunk	114
11.3.9 Definition of <i>ChunkNextAeBit</i>	114
11.3.10 Definition of <i>ChunkNextBpBit</i>	115
11.3.11 Boundary between spliced chunked bytestreams	115
11.3.12 Location of chunked bytestream boundaries	116
11.4 General inverse binarization processes.....	116
11.4.1 Parsing unsigned fixed-length codes (FL).....	116
11.4.2 Parsing signed fixed-length codes (FL+S)	116
11.4.3 Parsing k -th order exp-Golomb codes (EGk)	117
11.4.4 Parsing concatenated truncated unary and k -th order exp-Golomb codes (TU+EGk)	117
11.4.5 Parsing concatenated bounded truncated unary and k -th order exp-Golomb codes (BTU+EGk).....	117
11.4.6 Parsing signed concatenated truncated unary and k -th order exp-Golomb codes (TU+EGk+S).....	118
11.4.7 Parsing signed concatenated bounded truncated unary and k -th order exp-Golomb codes (BTU+EGk+S)	118
11.4.8 Parsing signed concatenated asymmetrically bounded truncated unary and k -th order exp-Golomb codes (ABTU+EGk+S)	119
11.4.9 Parsing truncated unary codes (TU).....	120
11.4.10 Mapping process for signed codes	120
11.4.11 Parsing ASN.1 object identifiers	120
11.5 CABAC parsing processes	121
11.5.1 Initialization	121
11.5.2 Definition of <i>AeReadBin</i>	121
11.5.3 Contextual probability models	121
11.5.4 Arithmetic decoding engine	125
11.6 Sensor Coding State	127
11.6.1 State variable.....	127
11.6.2 Initialization at the start of a GDU	129
11.6.3 Initialization with decoded coarse position of first sensed point.....	130
11.6.4 Update with azimuth_offset.....	131
11.6.5 Update while decoding elevation_offset.....	132
11.6.6 Update with sensed point coarse position.....	132
11.7 Parsing state memorization and restoration	133

11.7.1 General.....	133
11.7.2 Geometry data units.....	133
11.7.3 Attribute data units.....	134
11.7.4 Defaulted attribute data units.....	134
12 OBUF parsing process.....	134
12.1 General	134
12.2 Creation of an OBUF instance.....	134
12.2.1 Creation and initialization of OBUF trees	135
12.2.2 Creation and initialization of an array of OBUF ACPMs	136
12.3 Call and update of an OBUF instance.....	136
12.3.1 Decode and update according to OBUF trees.....	136
12.4 Decode of a bin based on an OBUF ACPM.....	137
Annex A (normative) Profiles and levels.....	139
Annex B (normative) Type-length-value encapsulated bytestream format.....	144
Annex C (informative) Arithmetic encoding engine.....	146
Annex D (informative) Index of named expressions and variables.....	149

Foreword

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Introduction

Advancements in 3D capturing and rendering technologies are enabling new applications and services in the fields of assisted and autonomous driving, cartography, and other industrial processes. Point clouds captured with LiDAR (Light Detection And Ranging) sensors, sometimes coupled with traditional camera sensors, have arisen as one of the main representations for such applications. A point cloud frame consists of a set of 3D points. Every point, in addition to having a 3D position, may also be associated with numerous other attributes such as intensity, colour, timestamp, and classification. Such representations require a large amount of data, which can be costly in terms of storage and transmission and are often used in real-time application which requires fast processing of the point cloud data. This document provides the method for efficiently compressing point cloud representations while ensuring low complexity and low latency constraints can be met.

Information technology — Coded representation of immersive media —

Part 30: Low latency, low complexity light detection and ranging (LiDAR) coding

1 Scope

This document specifies low latency, low complexity light detection and ranging (LiDAR) coding.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 8825-1 | Rec. ITU-T X.690, *Information technology — ASN.1 encoding rules — Part 1: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)*

ISO/IEC 9834-1 | Rec. ITU-T X.660, *Information technology — Procedures for the operation of object identifier registration authorities — Part 1: General procedures and top arcs of the international object identifier tree*

ISO/IEC 9834-8 | Rec. ITU-T X.667, *Information technology — Procedures for the operation of object identifier registration authorities — Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers*

ISO/IEC 23091-2, *Information technology — Coding-independent code points — Part 2: Video*

Recommendation ITU-T T.35, *Procedure for the allocation of ITU-T defined codes for non-standard facilities*