International Standard

ISO/IEC 18181-2

Information technology — JPEG XL image coding system —

Part 2: File format

Technologies de l'information — Système de codage d'images JPEG XL —

Partie 2: Format de fichiers

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Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 General ... **2**

5 File organization ... **2**

6 Data types and numerical values ... **3**

7 Graphical descriptions ... **4**

8 Binary format of a box ... **4**

9 Box types ... **5**

9.1 JPEG XL Signature box (`JXL␣`) ... 5
9.2 File Type box (`ftyp`) ... 5
9.3 Level box (`jxll`) ... 5
9.4 JUMBF box (`jumb`) ... 5
9.5 Exif box (`Exif`) ... 6
9.6 XML box (`xml␣`) ... 6
9.7 Brotli-compressed box (`brob`) ... 6
9.8 Frame Index box (`jxli`) ... 7
9.9 JPEG XL Codestream box (`jxlc`) ... 8
9.10 JPEG XL Partial Codestream box (`jxlp`) ... 8
9.11 HDR Gain Map box (`jhgm`) ... 8
9.12 JPEG Bitstream Reconstruction Data box (`jbrd`) ... 9

Annex A (normative) **JPEG Bitstream Reconstruction procedure** ... **13**

Annex B (normative) **JPEG XL Media Type registration** ... **17**

Bibliography ... **19**

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This third edition cancels and replaces the second edition (ISO/IEC 18181-2:2024), which has been technically revised.

The main changes are as follows:

— 9.11 was added, specifying a new HDR gain map box;

— an informative note was added related to the combination of JUMBF and Brotli compression;

— clarifications were added to Annex A (JPEG bitstream reconstruction procedure).

A list of all parts in the ISO/IEC 18181 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Information technology — JPEG XL image coding system —

Part 2:
File format

1 Scope

This document specifies the transport and container formats for JPEG XL codestreams as specified in ISO/IEC 18181-1. This document specifies how to add metadata and extensions to JPEG XL codestreams. A file as described by this document is called a JPEG XL file.

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 18181-1:2024, *Information technology — JPEG XL image coding system — Part 1: Core coding system*

ISO/IEC 10918-1:1994, *Information technology — Digital compression and coding of continuous-tone still images: Requirements and guidelines*

ISO/IEC 19566-5, *Information technologies — JPEG systems — Part 5: JPEG universal metadata box format (JUMBF)*

IETF RFC 7932, *J. Alakuijala, & Z. Szabadka. Brotli Compressed Data Format. RFC Series. Available from*[1)]

ISO 21496-1, *Digital photography — Gain map metadata for image conversion — Part 1: Dynamic range conversion*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
alternate image
image reconstructed from the *baseline image* (3.2) and the information in the HDR gain map *box* (3.3)

3.2
baseline image
image decoded from the primary JPEG XL codestream contained in a *JPEG XL file* (3.7), ignoring the information in the HDR gain map *box* (3.3)

1) https://www.rfc-editor.org/info/rfc7932.

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