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Information technology — JPEG XS low-latency lightweight image coding system —

Part 1: Core coding system

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Partie 1: Système de codage de noyau

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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 21122-1:2022), which has been technically revised.

The main changes are as follows:

— coding tools for improving the compression rates for screen content images have been added;

— coding tools that enable lossless coding of images with up to 16 bits per sample have been added.

A list of all parts in the ISO/IEC 21122 series can be found on the ISO and IEC websites.

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Information technology — JPEG XS low-latency lightweight image coding system —

Part 1: Core coding system

1 Scope

This document specifies the syntax and an accompanying decompression process that is capable to represent continuous-tone grey-scale, or continuous-tone colour digital images without visual loss at moderate compression rates. Typical compression rates are between 2:1 and 18:1 but can also be higher depending on the nature of the image. In particular, the syntax and the decoding process specified in this document allow lightweight encoder and decoder implementations that limit the end-to-end latency to a fraction of the frame size. However, the definition of transmission channel buffer models necessary to ensure such latency is beyond the scope of this document.

This document:

— specifies decoding processes for converting compressed image data to reconstructed image data;

— specifies a codestream syntax containing information for interpreting the compressed image data;

— provides guidance on encoding processes for converting source image data to compressed image data.

2 Normative references

There are no normative references in this document.

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