
**Information technology — General
video coding —**

**Part 4:
Conformance and reference software
for essential video coding**

Technologies de l'information — Codage vidéo général —

*Partie 4: Conformité et logiciel de référence pour le codage vidéo
essentiel*

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

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*.

A list of all parts in the ISO/IEC 23094 series can be found on the ISO website 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.

Information technology — General video coding —

Part 4:

Conformance and reference software for essential video coding

1 Scope

This document specifies a set of tests and procedures designed to indicate whether encoders or decoders essential video coding (EVC), which contains tests and a reference software designed to verify whether bitstreams and decoders meet normative requirements specified in ISO/IEC 23094-1. An encoder can claim conformance to ISO/IEC 23094-1 if the bitstreams that it generates are conforming bitstreams. Characteristics of coded bitstreams and decoders are defined in ISO/IEC 23094-1. Decoder characteristics define the properties and capabilities of the applied decoding process. The capabilities of a decoder specify which bitstreams the decoder can decode and reconstruct. A bitstream can be decoded by a decoder if the characteristics of the bitstream are within the specified decoder capabilities.

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 23094-1:2020, *Information technology — General video coding — Part 1: Essential video coding*

ISO/IEC 9899, *Information technology — Programming languages — C*

ISO/IEC/IEEE 9945, *Information technology — Portable Operating System Interface (POSIX®) Base Specifications, Issue 7*

3 Terms and definitions

For the purposes of this document, the terms and definitions and symbols specified in ISO/IEC 23094-1 and the following apply.

ISO and IEC maintain terminological 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

bitstream

sequence of bits, in the form of a NAL unit stream or a raw bitstream, that forms the representation of coded pictures and associated data forming one or more coded video sequences

3.2

decoder

embodiment of a process that operates on a bitstream and may conform to the decoding process requirements specified for conformance

Note 1 to entry: The decoder does not include the display process, which is outside the scope of this document