

ANSI/IS&T IT10.2000-2015

American National Standard

for Photography—

*Digital Still Cameras –
JPEG 2000 DSC Profile*



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American National Standard
for Photography –

Digital Still Cameras –
JPEG 2000 DSC Profile

Secretariat

The Society for Imaging Science & Technology (IS&T)

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Foreword (This foreword is not part of American National Standard
ANSI/IS&T IT10.2000-2015.)

This IS&T standard is provided in order to meet the industry need for a fully documented, publicly available profile of the JPEG 2000 standard suitable for use in digital still cameras. This profile enables cameras to write JPEG 2000 files with a full set of digital camera metadata in a way that can be correctly read and interpreted by other devices, including the camera (or other cameras) itself.

Attention is drawn to the possibility that some of the elements of this Standard may be the subject of patent rights. IS&T shall not be held responsible for identifying any or all such patent rights.

This standard contains four annexes. Annexes A and B are normative and are considered part of this standard. Annexes C and D of this IS&T standard are informative and are not considered part of this standard.

Suggestions for the improvement of this standard will be welcome. They should be sent to the IS&T Standards Coordinator, Society for Imaging Science & Technology (IS&T), 7003 Kilworth Lane, Springfield, VA 22151, e-mail: standards@imaging.org.

This standard was processed and approved for submittal to ANSI by IS&T Imaging Technology Committee IT10, Digital Photography. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this edition of the standard, the IT10 Committee had the following members:

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American National Standard for Photography –

Digital Still Cameras – JPEG 2000 DSC Profile

1 Scope

This document specifies a profile of JPEG 2000 suitable for use in digital still cameras (DSC profile). The profile specifies the following items:

- Decoder/Reader conformance requirements for software and hardware devices (including the camera itself) that read images captured on JPEG-2000-based digital still cameras (DSC). This includes both codestream and file format requirements.
- Encoder/Writer conformance requirements for the files created by digital still cameras. This includes both codestream and file format requirements, and specifies:
 - Required file format
 - Metadata format and required/recommended metadata fields
 - Supported colorspace
 - Storage of audio annotations

2 Normative References

The following standards contain provisions, which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid standards.

ITU-T Rec. T.800 | ISO 15444-1:2002, *Information Technology — JPEG 2000 Image Coding System*

ITU-T Rec. T.801 | ISO 15444-2:2002, *Information Technology — JPEG 2000 Image Coding System — Extensions*

ITU-T Rec. T.803 | ISO 15444-4:2002, *Information Technology — JPEG 2000 Image Coding System — Conformance*

W3C, Extensible Markup Language (XML 1.0), REC-xml-19980210

ISO 12232:1998 *Photography – Electronic still picture cameras – Determination of ISO speed*

ISO/DIS 12234-3 *Photography – Electronic still picture imaging – Design rule for camera file system (DCF)*

JEITA CP-3451, *Exchangeable image file format for digital still cameras: Exif version 2.2*, Japan Electronics and Information Technology Industries Association.

ISO 14496-1:2001, *Information Technology — Coding of audio-visual objects — Part 1: System*