

ICS 35.040
CCS L 71



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 30248.1-2013

**Information technology -- JPEG 2000 image coding system --
Part 1: Core coding system**

信息技术 JPEG 2000 图像编码系统 第1部分：核心编码系统
(English Translation)

Issued on: December 31, 2013

Implemented on: July 15, 2014

Issued by: Standardization Administration of China

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Foreword

GB/T 30248 "IT JPEG2000 image coding system" is divided into the following sections.

- Part 1. Core coding system;
- Part 2. Extended;
- Part 3. Motion JPEG2000;
- Part 4. Conformance testing;

- Part 5. Reference software;
- Part 6. Compound image file format;
- Part 8. Security JPEG2000;
- Part 9. interactive tools, APIs and protocols;
- Part 10. three-dimensional data expansion;
- Part 11. Wireless JPEG2000;
- Part 12. ISO base media file format;
- Part 13. an entry-level encoder.

This section GB/T Part of 130,248.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO/IEC 15444-1:2004 "Information technology JPEG2000 image coding system 1 Part I. Core coding system ", but also added the following amendments and technical corrections. ISO/IEC 15444-1:2004/Cor.1.2007, ISO/IEC 15444-1:2004/Cor.2.2008, ISO/IEC 15444-1:2004/Amd.1.2006, only made editorial changes.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) centralized.

This section drafted by. China Electronics Standardization Institute, Communication University of China.

Introduction

References in this section, see Appendix K.

This section of the patent specification in Appendix L.

IT JPEG2000 image coding system Part 1. Core Coding System

1 Scope

GB/T 30248 Part of encoded into binary digital still images, continuous gradation digital still images, discrete digital still image color tone Like, continuous-tone still digital images defines a set of lossless and lossy compression algorithm.

This section.

- Specification from the compressed image data to reconstructed image data decoding process;
- Containing specification for explaining the compressed image data stream syntax;
- Specification of a file format;
- Providing the raw image data from the compression encoding process to the image data of Guidelines;
- Provides guidance in practice how these processes.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 17235.1-1998 Information technology continuous-tone still images - Digital compression and coding - Part 1. Requirements and guidelines (Idt ISO/IEC 10918-1:1994)

GB/T 17235.2-1998 Information technology continuous-tone still images - Digital compression and coding - Part 2. Conformance testing (Idt ISO/IEC 10918-2:1994)

ISO/IEC 646:1991 Information technology - ISO 7 for information interchange coded character set (Information technology-ISO 7-bit coded character set for information interchange)

ISO/IEC 11578:1996 Information technology - OSI remote call (Information technology-Open systems interconnection-remote procedure call (RPC)) Section 151 999 Information technology - 8-bit single-byte coded graphic character sets.. ISO 8859-15 Latin alphabet characters in the first nine (Information technology-8-bit single-byte coded graphic character sets-Part 15. Latin alphabet No.9)

IEC 61966-2-1:1999 Multimedia systems and equipment - Colour measurement and management - Part 2-1. Default RGB Color Management Color Space sRGB (Multimedia systems and equipment-Colour measurement and management-Part 2-1. Colour management-default RGB colour space-sRGB) IEC 61966-2-1:1999/Amd.1.2003 Multimedia systems and equipment - Colour measurement and management - Part 2-1. Colour management Default RGB Color Space sRGB (Amendment 1-Multimedia systems and equipment-Colour measurement and management-Part 2-1. Colour management-default RGB colour space-sRGB) ITU-T Recommendation T.88 (2000) | ISO/IEC 14492:2001 Information technology - binary image lossy/lossless coding (Information technology-Lossy/lossless coding of bi-level images) ITU-T Recommendation T.84 (1996) | ISO/IEC 10918-3:1997 Information technology - compression of continuous-tone still images and programming Code. Extended (Information technology-Digital compression and coding of continuous-tone still images. Extension) ITU-T Recommendation T.84 (1996) /Amd.1 (1999) | ISO/IEC 10918-3:1997/Amd.1.1999 Information technology - even