

ISO/IEC 29199-2:2010-10 (E)

Information technology - JPEG XR image coding system - Part 2: Image coding specification

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviations	8
5	Conventions	8
5.1	Conformance language	8
5.2	Operators	8
5.3	Syntax and semantics notation	14
5.4	Formatting conventions	15
5.5	Global variables	17
5.6	Adaptive VLC deltaDisc tables	22
5.7	Adaptive inverse scanning tables	23
6	Image and codestream structures	23
6.1	General	23
6.2	Image planes and component arrays	23
6.3	Image windowing	24
6.4	Image partitioning	24
6.5	Transform coefficients and frequency bands	25
6.6	Codestream structure	26
6.7	Precision and word length	26
7	Overview of decoder	26
7.1	General	27
7.2	Overview of parsing process	28
7.3	Overview of the decoding process	28
8	Syntax, semantics, and parsing process	30
8.1	General	30
8.2	CODED_IMAGE()	30
8.3	IMAGE_HEADER()	32
8.4	IMAGE_PLANE_HEADER()	40
8.5	INDEX_TABLE_TILES()	48
8.6	PROFILE_LEVEL_INFO()	49
8.7	CODED_TILES()	50
8.8	Adaptive VLC code table selection	83
8.9	Adaptation of CBPLP state variables	90
8.10	Adaptive CBPHP prediction	91
8.11	Adaptive inverse scanning	92
8.12	Adaptive coefficient normalization	95
9	Decoding process	97
9.1	General	97

9.2	Image decoding	97
9.3	Image plane decoding	97
9.4	Tile transform coefficient processing	98
9.5	Coefficient remapping	99
9.6	Transform coefficient prediction	101
9.7	Derivation of quantization parameters	111
9.8	Dequantization	114
9.9	Sample reconstruction	117
9.10	Output formatting	148
Annex A (normative) Tag-based file format		163
Annex B (normative) Profiles and Levels		186
Annex C (informative) Color imagery representation and color management		189
Annex D (informative) Encoder processing		192
Annex E (informative) Patent Rights		206
Bibliography		207