

ISO/IEC 29199-2:2012-03 (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	16
5.5 Global variables	17
5.6 Adaptive VLC deltaDisc tables	23
5.7 Adaptive inverse scanning tables	23
6 Image and codestream structures	24
6.1 General	24
6.2 Image planes and component arrays	24
6.3 Image windowing	24
6.4 Image partitioning	25
6.5 Transform coefficients and frequency bands	26
6.6 Codestream structure	26
6.7 Precision and word length	27
7 Overview of decoder	27
7.1 General	27
7.2 Overview of parsing process	28
7.3 Overview of the decoding process	29
8 Syntax, semantics, and parsing process	30
8.1 General	30
8.2 CODED_IMAGE()	31
8.3 IMAGE_HEADER()	33
8.4 IMAGE_PLANE_HEADER()	42
8.5 INDEX_TABLE_TILES()	50
8.6 PROFILE_LEVEL_INFO()	51
8.7 CODED_TILES()	52
8.8 Adaptive VLC code table selection	85
8.9 Adaptation of CBPLP state variables	92
8.10 Adaptive CBPHP prediction	93
8.11 Adaptive inverse scanning	94
8.12 Adaptive coefficient normalization	97
9 Decoding process	99
9.1 General	99

9.2	Image decoding	99
9.3	Image plane decoding	100
9.4	Tile transform coefficient processing	101
9.5	Coefficient remapping	102
9.6	Transform coefficient prediction	104
9.7	Derivation of quantization parameters	114
9.8	Dequantization	117
9.9	Sample reconstruction	120
9.10	Output formatting	151
Annex A (normative) Tag-based file format		168
Annex B (normative) Profiles and Levels		194
Annex C (informative) Color imagery representation and color management		197
Annex D (informative) Encoder processing		200
Annex E (informative) Patent Rights		215
Bibliography		216