

ISO/IEC 15444-15:2019-10 (E)

Information technology - J PEG 2000 image coding system - Part 15: High-Throughput JPEG 2000

CONTENTS

	<i>Page</i>
1	Scope 1
2	Normative references 1
3	Terms and definitions 1
4	Abbreviations and symbols 1
5	Convention 2
6	Conformance 2
6.1	HTJ2K codestream..... 2
6.2	HTJ2K decoding algorithm..... 2
6.3	JPH file 3
7	HT block decoding algorithm..... 3
7.1	Retrieving bit-streams from HT segments 3
7.2	Quad-based scanning pattern 9
7.3	HT Cleanup decoding algorithm 10
7.4	HT SigProp decoding procedure 20
7.5	HT MagRef decoding procedure..... 22
7.6	Sample output values 22
8	Constrained codestream sets..... 23
8.1	Overview 23
8.2	HTONLY, HTDECLARED and MIXED sets 23
8.3	SINGLEHT and MULTIHT sets 23
8.4	RGN and RGNFREE sets 23
8.5	HOMOGENEOUS and HETEROGENEOUS sets 23
8.6	LOCAL and FRAG sets 24
8.7	Bounded magnitude sets 24
8.8	CPF _N sets..... 25
9	Media types 26
Annex A (normative) – HTJ2K codestream syntax..... 27	
A.1	General 27
A.2	SIZ marker segment 27
A.3	CAP marker segment 27
A.4	COD and COC marker segments 29
A.5	RGN marker segment..... 30
A.6	Corresponding Profile (CPF) marker segment 30
Annex B (normative) – HT data organization 32	
B.1	HT Sets 32
B.2	HT segments 32
B.3	Packets, Z_blk and S_blk..... 32
Annex C (normative) – CxtVLC tables 34	
Annex D (normative) – JPH file format 54	
D.1	General 54
D.2	JP2 Header box 54
D.3	File Type box 54
D.4	Colour Specification box..... 54
D.5	Contiguous Codestream box 55
D.6	Channel Definition box 55

Annex E (normative) – Media type specifications and registrations	57
E.1 General	57
E.2 JPH file	57
E.3 Single HTJ2K codestream.....	57
Annex F (informative) – HT block encoding procedures	59
F.1 Overview.....	59
F.2 Bit-planes, exponents, MagSgn values and EMB patterns.....	61
F.3 Cleanup pass encoding steps	62
F.4 Bit-stuffing and byte-stream termination procedures.....	65
Bibliography	72