

# ISO/IEC 39794-4:2019-12 (E)

## Information technology - Extensible biometric data interchange formats - Part 4: Finger image data

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Abbreviated terms .....	5
5	Conformance .....	6
6	Modality specific information .....	6
6.1	Capture recommendations .....	6
6.1.1	Fingerprint image .....	6
6.1.2	Palm image .....	6
6.2	Image coordinate system considerations .....	7
6.3	Image representation requirements .....	7
6.3.1	General .....	7
6.3.2	Colorspace .....	7
6.3.3	Pixel aspect ratio .....	7
6.3.4	Bit-depth .....	8
6.3.5	Image spatial sampling rate .....	8
7	Abstract data elements .....	8
7.1	Purpose and overall structure .....	8
7.2	Finger image data block .....	9
7.3	Version block .....	9
7.4	Representation blocks .....	10
7.5	Position .....	10
7.6	Impression .....	10
7.7	Image data format .....	11
7.7.1	Supported data format .....	11
7.7.2	PGM encoding definition .....	11
7.8	Image data .....	12
7.9	Capture date/time block .....	12
7.10	Capture device block .....	12
7.10.1	Model identifier block .....	12
7.10.2	Capture device technology identifier .....	12
7.10.3	Certification identifier blocks .....	13
7.11	Quality blocks .....	14
7.12	Spatial sampling rate block .....	14
7.13	Position computed by capture device .....	14
7.14	Original rotation .....	14
7.15	Image rotated to vertical .....	14
7.16	Image has been lossily compressed .....	14
7.17	Segmentation blocks .....	15
7.18	Annotation blocks .....	15
7.19	PAD data block .....	15

7.20	Comment blocks .....	16
7.21	Vendor specific data blocks .....	16
8	Encoding .....	16
8.1	Tagged binary encoding .....	16
8.2	XML encoding .....	16
9	RegisteredBDBformatidentifiers .....	16
Annex A (normative)Formalspecifications .....		17
Annex B (informative) Encoding examples .....		29
Annex C (normative) Conformance testing methodology .....		33
Annex D (normative)Capturedevicecertifications .....		38
Annex E (informative)Conditionsforcapturingfingerprintimagedata .....		62
Annex F (normative)WSQgreyscalefingerprintimagecompressionspecification .....		71
Bibliography .....		97