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

Information technology - Extensible biometric data interchange formats - P art 4: Finger image data

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Abbreviated terms 5

5 Conformance 6

6 Modalityspecificinformation 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)WSQgreyscalefingerimagecompressionspecification 71

Bibliography 97