

ISO/IEC 24778:2008-02 (E)

Information technology - Automatic identification and data capture techniques - Aztec Code bar code symbology specification

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms, definitions, symbols and functions	1
3.1	Terms and definitions	1
3.2	Symbols and functions	2
4	Symbology characteristics	3
4.1	Basic characteristics	3
4.2	Summary of additional features	4
5	Symbol description	4
5.1	Symbol structure	5
5.2	Symbol character structure and sequence	6
5.3	Symbol size and capacity	7
6	General encodation procedures	8
7	Symbol structure	9
7.1	Fixed pattern structures	9
7.2	Mode Message encoding and structure	10
7.3	Data message encoding and structure	11
8	Structured Append	14
9	Reader initialization symbols	14
10	Extended Channel Interpretation	15
10.1	Encoding ECIs in Aztec Code	15
10.2	Code sets and ECIs	15
10.3	ECIs and Structured Append	15
10.4	Post-decode protocol	15
11	User considerations	16
11.1	User selection of encoded message	16
11.2	User selection of minimum error correction level	16
11.3	User selection of Structured Append	16
11.4	User selection of optional symbol formats	16
12	Dimensions	16
13	User guidelines	17
13.1	Human readable interpretation	17
13.2	Autodiscrimination capability	17
13.3	User-defined application parameters	17
14	Reference decode algorithm	17
14.1	Finding candidate symbols	18
14.2	Processing the bullseye image	18
14.3	Decoding the Core Symbol	18

14.4	Decoding the data message	19
14.5	Translating the datawords	20
15	Symbol quality	20
15.1	Symbol quality parameters	20
15.2	Symbol print quality grading	21
15.3	Process control measurements	22
16	Transmitted data	22
16.1	Basic interpretation	22
16.2	Protocol for FNC1	22
16.3	Protocol for ECIs	22
16.4	Symbology identifier	23
16.5	Transmitted data example	23
Annex A (normative) Aztec Runes		24
Annex B (normative) Error detection and correction		26
Annex C (normative) Topological bullseye search algorithm		29
Annex D (normative) Linear crystal growing algorithm		33
Annex E (normative) Fixed Pattern Damage grading		34
Annex F (normative) Symbology identifiers		36
Annex G (informative) Aztec Code symbol encoding example		37
Annex H (informative) Achieving minimum symbol size		41
Annex I (informative) Useful process control techniques		43
Bibliography		45