ISO/IEC 7811-7:2004-07 (E)

Identification cards - Recording technique - Part 7: Magnetic stripe - High coercivity, high density

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Conformance 1

3 Normative references 2

4 Terms and definitions 2

5 Physical characteristics of the identification card 4
5.1 Magnetic stripe area warpage 5
5.2 Surface distortions 5

6 Physical characteristics of the magnetic stripe 6
6.1 Height and surface profile of the magnetic stripe area 6
6.2 Surface roughness 8
6.3 Adhesion of stripe to card 8
6.4 Wear of magnetic stripe from read/write head 8
6.5 Resistance to chemicals 8

7 Performance characteristics for the magnetic material 8
7.1 General 8
7.2 Testing and operating environment 8
7.3 Signal amplitude requirements for magnetic media 9

8 Encoding technique 11

9 Encoding specification 12
9.1 Angle of recording 12
9.2 Nominal bit density 12
9.3 Flux transition spacing variation 12
9.4 Signal amplitude requirements 13
9.5 Bit configuration 13
9.6 Direction of recording 13
9.7 Leading and trailing clock bits 13

10 Data structure 13
10.1 Track format 14
10.2 Coding for error detection and correction 15

11 Decoding 18

12 Location of encoded tracks 18

Annex B (normative) Signal amplitude measurements 21

Annex C (informative) Magnetic stripe abrasivity 22

Annex D (informative) Static magnetic characteristics 23

Annex E (informative) Reed-Solomon code references 25