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**Information technology — 12,65 mm wide  
magnetic tape cartridge for information  
interchange — Helical scan recording —  
Data-D3-1 format**

*Technologies de l'information — Cartouche de bande magnétique de  
12,65 mm de large pour l'échange d'information — Enregistrement par  
balayage en spirale — Format de données-D3-1*



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| Contents  | Page |
|---|------|
| <b>Section 1 - General</b>                          | 1    |
| <b>1 Scope</b>                                      | 1    |
| <b>2 Conformance</b>                                | 1    |
| <b>2.1 Magnetic tape cartridge</b>                  | 1    |
| <b>2.2 Generating system</b>                        | 1    |
| <b>2.3 Receiving system</b>                         | 1    |
| <b>3 Normative References</b>                       | 1    |
| <b>4 Definitions</b>                                | 2    |
| <b>4.1 a.c. erase</b>                               | 2    |
| <b>4.2 algorithm</b>                                | 2    |
| <b>4.3 Average Signal Amplitude</b>                 | 2    |
| <b>4.4 azimuth</b>                                  | 2    |
| <b>4.5 back surface</b>                             | 2    |
| <b>4.6 Beginning of Tape (BOT)</b>                  | 2    |
| <b>4.7 Beginning of Tape Sense Slot</b>             | 2    |
| <b>4.8 byte</b>                                     | 2    |
| <b>4.9 cartridge</b>                                | 2    |
| <b>4.10 character</b>                               | 2    |
| <b>4.11 Codeword Digital Sum (CDS)</b>              | 2    |
| <b>4.12 Cyclic Redundancy Check (CRC) Character</b> | 2    |
| <b>4.13 Data Area Reference Point</b>               | 2    |
| <b>4.14 Data Records</b>                            | 2    |
| <b>4.14.1 Logical Data Record (LDR)</b>             | 2    |
| <b>4.14.2 Processed Data Record (PDR)</b>           | 2    |
| <b>4.14.3 User Data Record (UDR)</b>                | 2    |
| <b>4.15 Digital Sum Variation (DSV)</b>             | 2    |
| <b>4.16 End of Tape (EOT)</b>                       | 3    |
| <b>4.17 End of Tape Sense Slot</b>                  | 3    |
| <b>4.18 Error Correcting Code (ECC)</b>             | 3    |
| <b>4.19 File safe</b>                               | 3    |
| <b>4.20 Fixed Scan Group Header</b>                 | 3    |

|  |          |
|--|----------|
| <b>4.21</b> flux transition position                                 | <b>3</b> |
| <b>4.22</b> flux transition spacing                                  | <b>3</b> |
| <b>4.23</b> Helical Time Code (HTC)                                  | <b>3</b> |
| <b>4.24</b> Internal Leader Header (ILH)                             | <b>3</b> |
| <b>4.25</b> Logical Block Number                                     | <b>3</b> |
| <b>4.26</b> magnetic tape  | <b>3</b> |
| <b>4.27</b> Master Standard Reference Tape                           | <b>3</b> |
| <b>4.28</b> Packet   | <b>3</b> |
| <b>4.29</b> Packet Identifier  | <b>3</b> |
| <b>4.30</b> Packet Trailer   | <b>3</b> |
| <b>4.31</b> physical recording density                               | <b>3</b> |
| <b>4.32</b> Postamble  | <b>3</b> |
| <b>4.33</b> Preamble   | <b>3</b> |
| <b>4.34</b> processed data   | <b>3</b> |
| <b>4.35</b> Reference Fields   | <b>3</b> |
| <b>4.36</b> resolution   | <b>3</b> |
| <b>4.37</b> Scan Group   | <b>3</b> |
| <b>4.38</b> Scan Group Pair  | <b>3</b> |
| <b>4.39</b> Scan Group Start Data (SGSD)                             | <b>3</b> |
| <b>4.40</b> Secondary Standard Reference Tape                        | <b>3</b> |
| <b>4.41</b> Standard Reference Amplitudes (SRA)                      | <b>3</b> |
| <b>4.42</b> Standard Reference Currents (Ir)                         | <b>4</b> |
| <b>4.43</b> Tape Reference Edge                                      | <b>4</b> |
| <b>4.44</b> Test Recording Currents (TRC)                            | <b>4</b> |
| <b>4.45</b> track  | <b>4</b> |
| <b>4.46</b> track angle  | <b>4</b> |
| <b>4.47</b> Typical Field (TF)                                       | <b>4</b> |
| <b>4.48</b> Variable Scan Group Header                               | <b>4</b> |
| <b>4.49</b> zero crossing  | <b>4</b> |
| <b>5 Conventions and Notations</b>                                   | <b>4</b> |
| <b>5.1</b> Representation of numbers                                 | <b>4</b> |
| <b>5.2</b> Names   | <b>5</b> |
| <b>6 Acronyms</b>  | <b>5</b> |
| <b>7 Environment and Safety</b>                                      | <b>5</b> |
| <b>7.1</b> Testing environment                                       | <b>5</b> |
| <b>7.2</b> Operating environment                                     | <b>5</b> |
| <b>7.3</b> Storage environment                                       | <b>5</b> |
| <b>7.4</b> Transportation  | <b>6</b> |
| <b>7.5</b> Safety  | <b>6</b> |
| <b>7.6</b> Flammability  | <b>6</b> |
| <b>Section 2 - Requirements for the Cartridge</b>                    | <b>7</b> |
| <b>8 Dimensional and Mechanical Characteristics of the Cartridge</b> | <b>7</b> |
| <b>8.1</b> Elements of the cartridge                                 | <b>7</b> |
| <b>8.2</b> Reference Planes of the case                              | <b>7</b> |
| <b>8.3</b> Dimensions of the case                                    | <b>7</b> |
| <b>8.3.1</b> Overall dimensions                                      | <b>7</b> |
| <b>8.3.2</b> Locating areas  | <b>8</b> |
| <b>8.3.3</b> Reference points for Plane Y                            | <b>8</b> |
| <b>8.3.4</b> Reference point for Plane Z                             | <b>8</b> |
| <b>8.3.5</b> Locating notches  | <b>8</b> |

|   |           |
|---|-----------|
| <b>8.3.6</b> Mis-insertion protection                                     | <b>9</b>  |
| <b>8.3.7</b> Stacking ribs  | <b>9</b>  |
| <b>8.3.8</b> Recognition notches  | <b>9</b>  |
| <b>8.3.9</b> Write-inhibit mechanism                                      | <b>10</b> |
| <b>8.3.10</b> Label areas of the top side                                 | <b>10</b> |
| <b>8.3.11</b> Label areas of the rear side                                | <b>11</b> |
| <b>8.3.12</b> Label area on the right hand side                           | <b>11</b> |
| <b>8.3.13</b> Label area on the bottom side                               | <b>12</b> |
| <b>8.3.14</b> Central window  | <b>12</b> |
| <b>8.3.15</b> Case opening  | <b>12</b> |
| <b>8.3.16</b> Tapers of the case  | <b>13</b> |
| <b>8.4</b> Flexibility of the case  | <b>13</b> |
| <b>8.4.1</b> Requirements   | <b>13</b> |
| <b>8.4.2</b> Procedure  | <b>13</b> |
| <b>8.5</b> Tape reel  | <b>14</b> |
| <b>8.5.1</b> Locking mechanism  | <b>14</b> |
| <b>8.5.2</b> Axis of rotation of the reel                                 | <b>14</b> |
| <b>8.5.3</b> Metallic insert  | <b>14</b> |
| <b>8.5.4</b> Toothed rim  | <b>14</b> |
| <b>8.5.5</b> Hub of the reel  | <b>15</b> |
| <b>8.5.6</b> Relative positions of hub and case                           | <b>15</b> |
| <b>8.5.7</b> Characteristics of the toothed rim                           | <b>16</b> |
| <b>8.6</b> Magnetic tape  | <b>16</b> |
| <b>8.6.1</b> Tape wind  | <b>16</b> |
| <b>8.6.2</b> Wind tension   | <b>16</b> |
| <b>8.6.3</b> Circumference of the tape reel                               | <b>16</b> |
| <b>8.6.4</b> Moment of inertia  | <b>16</b> |
| <b>8.7</b> Leader block   | <b>17</b> |
| <b>8.7.1</b> Dimensions of the leader block                               | <b>17</b> |
| <b>8.7.2</b> Attachment of the tape to the leader block                   | <b>17</b> |
| <b>8.7.3</b> Latching the leader block                                    | <b>17</b> |
| <b>8.8</b> Reflection density of the case                                 | <b>18</b> |
| <b>8.8.1</b> Requirement  | <b>18</b> |
| <b>8.8.2</b> Test Equipment   | <b>19</b> |
| <b>8.8.3</b> Test method  | <b>18</b> |
| <b>8.9</b> Colour   | <b>19</b> |
| <b>Section 3 - Requirements for the Unrecorded Tape</b>                   | <b>27</b> |
| <b>9</b> Mechanical, physical and dimensional characteristics of the tape | <b>27</b> |
| <b>9.1</b> Materials  | <b>27</b> |
| <b>9.2</b> Tape length  | <b>27</b> |
| <b>9.3</b> Tape width   | <b>27</b> |
| <b>9.4</b> BOT and EOT Sense Slots  | <b>27</b> |
| <b>9.5</b> Discontinuities  | <b>27</b> |
| <b>9.6</b> Thickness  | <b>27</b> |
| <b>9.7</b> Longitudinal curvature   | <b>27</b> |
| <b>9.8</b> Straightness   | <b>28</b> |
| <b>9.9</b> Cupping  | <b>28</b> |
| <b>9.10</b> Out-of-plane distortions                                      | <b>28</b> |
| <b>9.11</b> Coating adhesion  | <b>28</b> |
| <b>9.12</b> Layer-to-layer adhesion                                       | <b>29</b> |

|  |           |
|--|-----------|
| <b>9.13</b> Young's Modulus for the tape   | <b>29</b> |
| <b>9.14</b> Surface roughness  | <b>29</b> |
| <b>9.15</b> Electrical resistance of coated surfaces   | <b>30</b> |
| <b>9.16</b> Tensile strength   | <b>30</b> |
| <b>9.16.1</b> Breaking strength  | <b>30</b> |
| <b>9.16.2</b> Offset yield strength  | <b>30</b> |
| <b>9.17</b> Residual elongation  | <b>31</b> |
| <b>9.18</b> Light transmittance of the tape  | <b>31</b> |
| <b>10 Magnetic Recording Characteristics</b>   | <b>31</b> |
| <b>10.1</b> General  | <b>31</b> |
| <b>10.2</b> Basis for measuring the magnetic recording characteristics of the unrecorded tape. | <b>31</b> |
| <b>10.3</b> Test conditions  | <b>31</b> |
| <b>10.4</b> Typical Field  | <b>32</b> |
| <b>10.5</b> Signal Amplitude   | <b>32</b> |
| <b>10.6</b> Resolution   | <b>32</b> |
| <b>10.7</b> Ease of Erasure  | <b>32</b> |
| <b>10.8</b> Narrow-band Signal-to-Noise Ratio (NB-SNR)   | <b>32</b> |
| <b>10.9</b> Tape Quality   | <b>33</b> |
| <b>10.9.1</b> Missing pulses   | <b>33</b> |
| <b>10.9.2</b> Missing pulse zones  | <b>33</b> |
| <b>Section 4 - Requirements for an Interchanged Tape</b>                                       | <b>34</b> |
| <b>11 Format of a helically recorded track</b>   | <b>34</b> |
| <b>11.1</b> General description of the write data path   | <b>34</b> |
| <b>11.1.1</b> Formation of Packets   | <b>34</b> |
| <b>11.1.2</b> Formation of Scan Groups   | <b>34</b> |
| <b>11.1.3</b> Channel separation   | <b>34</b> |
| <b>11.1.4</b> Interleave buffer  | <b>34</b> |
| <b>11.1.5</b> Sync Blocks  | <b>34</b> |
| <b>11.1.6</b> Randomization  | <b>34</b> |
| <b>11.1.7</b> Logical helical track  | <b>34</b> |
| <b>11.1.8</b> Byte translation   | <b>34</b> |
| <b>11.1.9</b> Recording of tracks  | <b>34</b> |
| <b>11.2</b> Packet format  | <b>36</b> |
| <b>11.2.1</b> Packet definition  | <b>36</b> |
| <b>11.2.2</b> Packet ID  | <b>36</b> |
| <b>11.2.3</b> UDR  | <b>37</b> |
| <b>11.2.4</b> Packet Trailer   | <b>37</b> |
| <b>11.3</b> Scan Group   | <b>38</b> |
| <b>11.3.1</b> Scan Group Start Data (SGSD)   | <b>39</b> |
| <b>11.3.2</b> Helical Time Code (HTC)  | <b>39</b> |
| <b>11.3.3</b> Header   | <b>40</b> |
| <b>11.3.4</b> Data Part  | <b>44</b> |
| <b>11.3.5</b> Trailer  | <b>44</b> |
| <b>11.3.6</b> Types of Scan Group  | <b>44</b> |
| <b>11.3.7</b> Protection of Scan Groups  | <b>47</b> |
| <b>11.4</b> Write data channel   | <b>48</b> |
| <b>11.4.1</b> Scan Group sections  | <b>48</b> |
| <b>11.4.2</b> Interleave Buffer  | <b>49</b> |

|  |           |
|--|-----------|
| <b>11.4.3 Sync Blocks</b>  | <b>52</b> |
| <b>11.4.4 Layout of a logical helical track</b>                      | <b>53</b> |
| <b>11.4.5 Byte translation</b>                                       | <b>54</b> |
| <br>   |           |
| <b>12 Track geometry</b>   | <b>55</b> |
| <b>12.1 General</b>  | <b>55</b> |
| <b>12.2 Helically recorded tracks</b>                                | <b>56</b> |
| <b>12.2.1 Track width</b>  | <b>56</b> |
| <b>12.2.2 Adjacent track pitch</b>                                   | <b>56</b> |
| <b>12.2.3 Track angle</b>  | <b>56</b> |
| <b>12.2.4 Straightness of a track</b>                                | <b>56</b> |
| <b>12.2.5 Track length</b>   | <b>56</b> |
| <b>12.2.6 Azimuth angles</b>   | <b>56</b> |
| <b>12.2.7 Location of positive azimuth tracks</b>                    | <b>56</b> |
| <b>12.2.8 Location of Data Area Reference Point</b>                  | <b>56</b> |
| <b>12.3 Time Code Track</b>  | <b>57</b> |
| <b>12.3.1 Track location</b>   | <b>57</b> |
| <b>12.3.2 Azimuth</b>  | <b>57</b> |
| <b>12.4 Servo Control Track</b>                                      | <b>57</b> |
| <b>12.4.1 Track location</b>   | <b>57</b> |
| <b>12.4.2 Azimuth</b>  | <b>57</b> |
| <b>12.5 Reserved Longitudinal Track</b>                              | <b>57</b> |
| <br>   |           |
| <b>13 Method of recording helical tracks</b>                         | <b>59</b> |
| <b>13.1 Tape condition before recording</b>                          | <b>59</b> |
| <b>13.2 Method of recording</b>                                      | <b>59</b> |
| <b>13.3 Physical Recording Densities</b>                             | <b>59</b> |
| <b>13.4 Nominal Bit Cell Length</b>                                  | <b>60</b> |
| <b>13.5 Long-term Average Bit Cell Length</b>                        | <b>60</b> |
| <b>13.6 Short-term Average Bit Cell Length (STA)</b>                 | <b>60</b> |
| <b>13.7 Rate of Change of the STA</b>                                | <b>60</b> |
| <b>13.8 Bit shift</b>  | <b>60</b> |
| <b>13.9 Read signal amplitude</b>                                    | <b>60</b> |
| <br>   |           |
| <b>14 Servo Control Track</b>  | <b>60</b> |
| <b>14.1 Format</b>   | <b>60</b> |
| <b>14.2 Relative locations of Pulse Pairs and Scan Group Pairs</b>   | <b>60</b> |
| <b>14.3 Polarity of magnetisation</b>                                | <b>60</b> |
| <b>14.4 Read signal amplitude</b>                                    | <b>60</b> |
| <b>14.5 Quality of the Servo Control Track</b>                       | <b>61</b> |
| <br>   |           |
| <b>15 Time Code Track</b>  | <b>61</b> |
| <b>15.1 Format</b>   | <b>61</b> |
| <b>15.1.1 Count bits</b>   | <b>61</b> |
| <b>15.1.2 Supplementary Data</b>                                     | <b>61</b> |
| <b>15.1.3 Phase bit</b>  | <b>61</b> |
| <b>15.1.4 Synchronizing pattern</b>                                  | <b>61</b> |
| <b>15.2 Extent of a Time Code</b>                                    | <b>61</b> |
| <b>15.3 Relative locations of the Time Code and Scan Group Pairs</b> | <b>61</b> |
| <b>15.4 Form of recording</b>  | <b>61</b> |
| <b>15.4.1 Nominal bit density</b>                                    | <b>62</b> |
| <b>15.4.2 Nominal bit cell length</b>                                | <b>62</b> |

|   |            |
|---|------------|
| <b>15.4.3</b> Bit shift   | <b>62</b>  |
| <b>15.5</b> Read signal amplitude                                 | <b>62</b>  |
| <b>15.6</b> Quality of the Time Code Track                        | <b>62</b>  |
| <b>16</b> Tape format   | <b>63</b>  |
| <b>16.1</b> Layout of the magnetic tape                           | <b>63</b>  |
| <b>16.2</b> Data Area   | <b>64</b>  |
| <b>16.2.1</b> Capacity of tape sectors                            | <b>64</b>  |
| <b>16.2.2</b> Sequence of Scan Groups on the tape                 | <b>64</b>  |
| <b>16.2.3</b> Write skips   | <b>66</b>  |
| <b>16.2.4</b> Appended Data                                       | <b>66</b>  |
| <b>16.3</b> EOD   | <b>66</b>  |
| <b>Annexes</b>  |            |
| <b>A - Representation of the CRC used in 11.2 - Packet Format</b> | <b>67</b>  |
| <b>B - Representation of the CRC used in 11.3 - Scan Group</b>    | <b>68</b>  |
| <b>C - Representation of 8-bit bytes by 14-bit patterns</b>       | <b>69</b>  |
| <b>D - Generation of Outer ECC and Inner ECC</b>                  | <b>81</b>  |
| <b>E - Measurement of the geometry of helical tracks</b>          | <b>83</b>  |
| <b>F - Measurement of Bit Shift</b>                               | <b>86</b>  |
| <b>G - Label - Media type</b>                                     | <b>90</b>  |
| <b>H - Reflection density of the case</b>                         | <b>96</b>  |
| <b>J - Measurement of light transmittance of tape</b>             | <b>97</b>  |
| <b>K - Recommendations for transportation</b>                     | <b>100</b> |
| <b>L - Guidelines for handling tape cartridges</b>                | <b>101</b> |
| <b>M - Helical and Longitudinal Time Codes</b>                    | <b>102</b> |
| <b>N - Representation of the CRC used in 11.3.2 - HTC</b>         | <b>104</b> |
| <b>P - Bibliography</b>   | <b>105</b> |

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 14840 was prepared by ECMA (as Standard ECMA-210) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Annexes A to D, F, G, J, M and N form an integral part of this International Standard. Annexes E, H, K, L and P are for information only.

# Information technology - 12,65 mm wide magnetic tape cartridge for information interchange - Helical scan recording - Data-D3-1 format

## Section 1 - General

### 1 Scope

This International Standard specifies the physical and magnetic characteristics of a magnetic tape cartridge, using magnetic tape 12,65 mm wide, so as to provide physical interchangeability of such cartridges. It also specifies the quality of the recorded signals, the recording method and the recorded format, thereby allowing data interchange between drives by means of such magnetic tape cartridges.

This International Standard specifies three types of cartridge which, for the purposes of this International Standard, are referred to as Type A, Type B and Type C.

For Type A, the magnetic tape has a nominal length of 91 m and a nominal capacity of 10 GBytes.

For Type B, the magnetic tape has a nominal length of 204 m and a nominal capacity of 25 GBytes.

For Type C, the magnetic tape has a nominal length of 392 m and a nominal capacity of 50 GBytes.

Together with a Standard for Volume and File Structure this International Standard provides for full data interchange between data processing systems.

### 2 Conformance

#### 2.1 Magnetic tape cartridge

A claim of conformance with this International Standard shall specify the Type of the cartridge. It shall be in conformance with this International Standard if

- the cartridge meets all the requirements of clause 4 and clauses 7 to 10
- the recording on the tape meets the requirements of clauses 11 to 16
- for each recorded Packet the algorithm used for processing the data therein, if the recorded data has been processed, has been registered and the registered identification is included in Byte 13 of the Packet ID of this Packet (see 11.2.2)

#### 2.2 Generating system

A system generating a magnetic tape cartridge for interchange shall be entitled to claim conformance with this International Standard if all the recordings that it makes, on all three Types of cartridge, meet the mandatory requirements of this International Standard. A claim of conformance shall state whether or not one, or more, registered algorithm(s) is (are) implemented and, if so, the registered number(s) of (all) the implemented algorithm(s).

#### 2.3 Receiving system

A system receiving a magnetic tape cartridge for interchange shall be entitled to claim conformance with this Standard if it is able to handle any recording made on the tape according to this International Standard, and for all three Types.

A claim of conformance shall state whether or not one, or more, registered algorithm(s) is (are) implemented and, if so, the registered number(s) of (all) the implemented algorithm(s).

### 3 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

|                    |  |
|--------------------|--|
| ISO 1001:1986      | <i>Information processing - File structure and labelling of magnetic tapes for information interchange.</i>        |
| ISO 1302:1992      | <i>Technical drawings - Method of indicating surface texture.</i>  |
| ISO 683-13:1986    | <i>Heat-treatable steels, alloy steels and free-cutting steels - Part 13: Wrought stainless steels.</i>            |
| ISO/IEC 11576:1994 | <i>Information technology - Procedure for the registration of algorithms for the lossless compression of data.</i> |
| IEC 950:1995       | <i>Safety of information technology equipment, including electrical business equipment.</i>                        |