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STANDARD

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**Information technology — Data interchange
on 12,7 mm, 448-track magnetic tape
cartridges — SDLT1 format**

*Technologies de l'information — Échange de données sur cartouche à
bande magnétique 12,7 mm, 448 pistes — Format SDLT1*



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Contents

1	Scope	1
2	Conformance	1
2.1	Magnetic tape cartridges	1
2.2	Generating systems	1
2.3	Receiving systems	1
3	Normative references	1
4	Terms and definitions	1
4.1	back surface	1
4.2	Beginning-Of-Tape marker (BOT)	1
4.3	block	2
4.4	byte	2
4.5	cartridge	2
4.6	Cyclic Redundancy Check (CRC) character	2
4.7	Error-Detecting Code (EDC)	2
4.8	End-Of-Tape marker (EOT)	2
4.9	Entity	2
4.10	Error-Correcting Code (ECC)	2
4.11	Envelope	2
4.12	Envelope size	2
4.13	flux transition position	2
4.14	flux transition spacing	2
4.15	logical track	2
4.16	magnetic tape	2
4.17	Master Standard Reference Tape	2
4.18	object	2
4.19	page	2
4.20	recording density	2
4.21	physical track	2
4.22	Record	3
4.23	Reference Edge	3
4.24	Reference Field	3
4.25	Secondary Standard Reference Tape	3
4.26	Standard Reference Amplitude (SRA)	3
4.27	Standard Reference Current	3
4.28	Test Recording Current	3
4.29	Typical Field	3
5	Conventions and notations	3
5.1	Representation of numbers	3
5.2	Dimensions	3
5.3	Names	3
5.4	Acronyms	3
6	Environment and safety	4
6.1	Cartridge and tape testing environment	4
6.2	Cartridge operating environment	4
6.3	Cartridge storage environment	4
6.4	Safety	4
6.5	Flammability	4
6.6	Transportation	4

Section 2 - Requirements for the unrecorded tape	5	
7	Mechanical and electrical requirements	5
7.1	Material	5
7.2	Tape length	5
7.3	Tape width	5
7.4	Tape thickness	5
7.5	Discontinuity	5
7.6	Longitudinal curvature	5
7.6.1	Requirements	5
7.6.2	Procedure	5
7.7	Out-of-Plane distortions	5
7.8	Cupping	5
7.9	Roughness of the coating surfaces	6
7.9.1	Roughness of the back coating surface	6
7.9.2	Roughness of the magnetic coating surface	6
7.10	Coating adhesion	6
7.11	Layer-to-layer adhesion	6
7.11.1	Requirements	6
7.11.2	Procedure	6
7.12	Modulus of elasticity	7
7.12.1	Requirement	7
7.12.2	Procedure	7
7.13	Flexural rigidity	8
7.13.1	Requirement	8
7.13.2	Procedure	8
7.14	Tensile yield force	8
7.14.1	Procedure	8
7.15	Electrical resistance	8
7.15.1	Requirement	8
7.15.2	Procedure	8
7.16	Inhibitor tape	9
7.17	Light transmittance of the tape and the leader	9
7.18	Abrasivity	9
7.19	Coefficient of dynamic friction	9
7.19.1	Requirements	9
7.19.2	Procedure for the measurement of the friction between the magnetic surface and the back surface	9
7.19.3	Procedure for the measurement of the friction between the magnetic surface or the back surface and calcium titanate ceramic	10
7.20	Servo	10
7.20.1	Servo Bands	10
7.20.2	Servo Tracks	11
7.20.3	Signal	11
7.20.4	Signal-to Noise Ratio	11
7.20.5	Missing servo mark	11
8	Magnetic recording characteristics	12

8.1	Typical Field	13
8.2	Signal amplitude	13
8.3	Resolution	13
8.4	Overwrite	13
8.4.1	Requirement	13
9	Tape quality	13
9.1	Missing pulses	13
9.1.1	Requirement	13
9.2	Missing pulse zone	13
9.2.1	Requirement	13
9.3	Tape durability	13
Section 3 - Mechanical specifications of the tape cartridge		14
10	General	14
10.1	Bottom side and right side	14
10.2	Back side and left side	15
10.3	Tape reel	16
10.4	Tape leader	17
10.5	Front side	18
10.6	Operation of the cartridge	18
10.7	Tape winding	19
10.8	Moment of inertia	19
10.9	Material	19
Section 4 - Requirements for an interchanged tape		29
11	Tape format	29
11.1	Reference Edge	29
11.2	Direction of recording	29
11.3	Tape layout	29
11.3.1	Data Area	29
11.3.2	Forward Alignment and Directory Area	31
11.3.3	Reverse Alignment Area at EOT	32
12	Data format	33
12.1	Record	33
12.2	Data Bytes	33
12.3	Data Field	33
12.3.1	Pages	34
12.3.2	Pad Bytes	34
12.3.3	Page layout	34
12.3.4	MAP entries	34
12.3.5	EDC	35
12.4	Data Blocks	35
12.4.1	Control Field 1 (CF1)	36
12.4.2	Control Field 2 (CF2)	37
12.4.3	CRC	39
13	Method of recording	39
13.1	Physical recording density	40
13.2	Channel bit cell length	40

13.2.1	Average Channel bit cell length	40
13.2.2	Long-term average Channel bit cell length	40
13.2.3	Short-term average Channel bit cell length	40
13.3	Read signal amplitude	40
13.4	Channel skew	40
14	Block Recording Format	41
14.1	Scrambler	41
14.2	Modulation	41
14.2.1	Modulation process	41
14.2.2	Modulated Data Group	42
14.3	Precoder	42
14.4	Recording Data Block	43
14.4.1	Preamble	43
14.4.2	Sync	43
15	Types and Use of Blocks	43
15.1	Types of Blocks	43
15.2	Use of blocks	43
15.2.1	Track ID Start Blocks	43
15.2.2	End of Track Blocks (EOTR)	44
15.2.3	End of Data of Data Blocks (EOD)	44
15.2.4	ECC Blocks	44
15.2.5	Track ID End Blocks	44
16	Format of Entities	44
17	Format of Envelopes	44
18	Error handling	44
Annexes		
A	- Measurement of light transmittance	45
B	- Procedure for the measurement of abrasivity	48
C	- Generation of the Data Block CRCs	50
D	- Generation of page CRCs	51
E	- ECC generation	52
F	- Allocation of Physical Tracks to Logical Tracks	55
G	- Recommendations for transportation	56
H	- Inhibitor tape	57
J	- Recommendations on tape durability	58
K	- Handling guidelines	59

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of the joint technical committee is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 22051 was prepared by ECMA (as ECMA-320) 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 F form a normative part of this International Standard. Annexes G to K are for information only.

Information technology — Data interchange on 12,7 mm, 448-track magnetic tape cartridges — SDLT1 format

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of a 12,7 mm wide, 448-track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Super Digital Linear Tape 1 (SDLT 1) - and a recording method, thereby allowing data interchange between drives. Together with a labelling standard, for instance ISO 1001 for Magnetic Tape Labelling, it allows full data interchange by means of such magnetic tape cartridges.

2 Conformance

2.1 Magnetic tape cartridges

A magnetic tape cartridge shall be in conformance with this International Standard if it satisfies all mandatory requirements of this International Standard. The tape requirements shall be satisfied throughout the extent of the tape.

2.2 Generating systems

A system generating a magnetic tape cartridge for interchange shall be in conformance with this International Standard if all the recordings that it makes on a tape according to 2.1 meet the mandatory requirements of this International Standard.

In addition, a claim of conformance shall state

- whether or not one, or more registered algorithm(s) are implemented within the system,
- the registered identification number(s) of the implemented compression algorithm(s).

2.3 Receiving systems

A system receiving a magnetic tape cartridge for interchange shall be in conformance with this International Standard if it is able to handle any recording made on a tape according to 2.1.

In addition, a claim of conformance shall state

- whether or not one, or more de-compression algorithm(s) are implemented within the system, and are able to be applied to de-compress data prior to making such data available to the host,
- the registered identification number(s) of the implemented compression algorithm(s).

3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1001:1986, *Information processing — File structure and labelling of magnetic tapes for information interchange*

ISO 1302:2002, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO/IEC 11576:1994, *Information technology — Procedure for the registration of algorithms for the lossless compression of data*