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STANDARD

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22092

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**Information technology — Data interchange
on 130 mm magneto-optical disk
cartridges — Capacity: 9,1 Gbytes per
cartridge**

*Technologies de l'information — Échange de données sur cartouches de
disque optique magnétique de 130 mm — Capacité: 9,1 Gbytes par
cartouche*



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Contents

Section 1 - General	1
1 Scope	1
2 Conformance	1
2.1 Optical Disk Cartridge (ODC)	1
2.2 Generating system	1
2.3 Receiving system	1
2.4 Compatibility statement	1
3 Normative reference	2
4 Terms and definitions	2
4.1 asymmetry	2
4.2 band	2
4.3 case	2
4.4 clamping zone	2
4.5 control track	2
4.6 Cyclic Redundancy Check (CRC)	2
4.7 defect management	2
4.8 disk reference plane	2
4.9 emulation	2
4.10 entrance surface	2
4.11 Error Correction Code (ECC)	2
4.12 format	2
4.13 hub	2
4.14 interleaving	2
4.15 Kerr rotation	3
4.16 land and groove	3
4.17 logical track	3
4.18 mark	3
4.19 mark edge	3
4.20 mark edge recording	3
4.21 optical disk	3
4.22 optical disk cartridge (ODC)	3
4.23 physical track	3
4.24 polarization	3
4.25 pre-recorded mark	3
4.26 read power	3
4.27 recording layer	3
4.28 recording track	3
4.29 Reed-Solomon code	3
4.30 space	3
4.31 spindle	4
4.32 substrate	4
4.33 track pitch	4
4.34 write-inhibit hole	4
4.35 write-once functionality	4
4.36 zone	4

5	Conventions and notations	4
5.1	Representation of numbers	4
5.2	Names	4
6	List of acronyms	4
7	General description of the optical disk cartridge	5
8	General requirements	5
8.1	Environments	5
8.1.1	Test environment	5
8.1.2	Operating environment	5
8.1.3	Storage environment	6
8.1.4	Transportation	6
8.2	Temperature shock	6
8.3	Safety requirements	6
8.4	Flammability	6
9	Reference Drive	6
9.1	Optical system	7
9.2	Optical beam	8
9.3	Read channels	8
9.4	Tracking	8
9.5	Rotation of the disk	8
Section 2 - Mechanical and physical characteristics		9
10	Dimensional and physical characteristics of the case	9
10.1	General description of the case	9
10.2	Relationship of Sides A and B	9
10.3	Reference axes and case reference planes	9
10.4	Case drawings	9
10.5	Dimensions of the case	9
10.5.1	Overall dimensions	9
10.5.2	Location hole	10
10.5.3	Alignment hole	10
10.5.4	Surfaces on Reference Planes P	11
10.5.5	Insertion slots and detent features	12
10.5.6	Gripper slots	12
10.5.7	Write-inhibit holes	12
10.5.8	Media sensor holes	13
10.5.9	Head and motor window	14
10.5.10	Shutter	14
10.5.11	Slot for shutter opener	14
10.5.12	Shutter sensor notch	15
10.5.13	User label areas	15
10.6	Mechanical characteristics	16
10.6.1	Materials	16
10.6.2	Mass	16
10.6.3	Edge distortion	16
10.6.4	Compliance	16
10.6.5	Shutter opening force	16
10.7	Drop test	16
11	Dimensional, mechanical and physical characteristics of the disk	16
11.1	General description of the disk	16
11.2	Reference axis and plane of the disk	16
11.3	Dimensions of the disk	16
11.3.1	Hub dimension	17
11.4	Mechanical characteristics	18

11.4.1	Material	18
11.4.2	Mass	18
11.4.3	Moment of inertia	18
11.4.4	Imbalance	18
11.4.5	Axial deflection	18
11.4.6	Axial acceleration	18
11.4.7	Radial runout	19
11.4.8	Radial acceleration	19
11.4.9	Tilt	19
11.5	Optical characteristics	19
11.5.1	Index of refraction	19
11.5.2	Thickness	19
11.5.3	Birefringence	19
11.5.4	Vertical Birefringence	19
11.5.5	Reflectance	20
12	Interface between cartridge and drive	20
12.1	Clamping method	20
12.2	Clamping force	20
12.3	Capture cylinder	20
12.4	Disk position in the operating condition	21
Section 3 - Format of information		35
13	Track and Header geometry	35
13.1	Track and Header shape	35
13.2	Direction of track spiral	36
13.3	Track pitch	36
13.4	Logical track number	36
14	Track format	36
14.1	Physical track layout	36
14.2	Logical track layout	39
14.3	Radial alignment	39
14.4	Sector number	39
15	Sector format	39
15.1	Sector layout	39
15.2	Sector Mark	40
15.3	VFO fields	41
15.4	Address Mark (AM)	41
15.5	ID fields	41
15.6	Postamble (PA ₁)	42
15.7	Transition Area (TA ₁)	42
15.8	Gap	42
15.9	Auto Laser Power Control (ALPC)	42
15.10	Sync	42
15.11	Data field	43
15.11.1	User data bytes	43
15.11.2	CRC and ECC bytes	43
15.11.3	Bytes for Sector Written Flag (SWF)	43
15.11.4	Resync bytes	43
15.12	Postamble field (PA ₂)	43
15.13	Buffer field	43
15.14	Transition Area (TA ₂)	43
16	Recording code	44
17	Formatted Zone	45
17.1	General description of the Formatted Zone	45

17.2	Division of the Formatted Zone	45
17.2.1	Lead-in Zone	46
17.2.2	Manufacturer Zones	46
17.2.3	User Zone	48
17.2.4	Reflective Zone	48
17.2.5	Control Track Zones	48
17.3	Control Track PEP Zone	48
17.3.1	Recording in the PEP Zone	48
17.3.2	Format of the tracks of the PEP Zone	49
17.4	Control Track SFP Zones	52
17.4.1	Duplicate of the PEP information	53
17.4.2	Media information	53
17.4.3	System Information	54
18	Layout of the User Zone	56
18.1	General description of the User Zone	56
18.2	Divisions of the User Zone	56
18.3	User Area	56
18.4	Defect Management Areas (DMAs)	63
18.5	Disk Definition Structure (DDS)	64
18.6	Rewritable Zone	66
18.6.1	Location	67
18.6.2	Partitioning	67
18.7	Write Once Zone	67
18.7.1	Location	67
18.7.2	Partitioning	67
19	Defect Management in the Rewritable and Write Once Zones	67
19.1	Initialization of the disk	67
19.2	Certification	67
19.2.1	Slipping Algorithm	67
19.2.2	Linear Replacement Algorithm	68
19.3	Disks not certified	68
19.4	Write procedure	68
19.5	Primary Defect List (PDL)	68
19.6	Secondary Defect List (SDL)	69
Section 4 - Characteristics of embossed information		70
20	Method of testing	70
20.1	Environment	70
20.2	Use of the Reference Drive	70
20.2.1	Optics and mechanics	70
20.2.2	Read power	70
20.2.3	Read channels	71
20.2.4	Tracking	71
20.3	Definition of signals	71
21	Signal from grooves	72
21.1	Ratio of Groove to Land	72
21.2	Push-pull signal	72
21.3	Divided push-pull signal	73
21.4	Track location	73
22	Signals from Headers	73
22.1	Sector Mark Signals	73
22.2	VFO signals	73
22.3	Address Mark, ID and PA signals	74
22.4	Timing jitter	74
22.5	Asymmetry	74

23	Signals from Control Track PEP marks	74
Section 5 - Characteristics of the recording layer		75
24	Method of testing	75
24.1	Environment	75
24.2	Reference Drive	75
24.2.1	Optics and mechanics	75
24.2.2	Read power	75
24.2.3	Read Channel	75
24.2.4	Tracking	76
24.2.5	Signal detection for testing purposes	76
24.3	Write conditions	76
24.3.1	Write pulse and power	76
24.3.2	Write magnetic field	76
24.3.3	Pulse power determination	76
24.3.4	Media power sensitivity	77
24.4	Erase conditions	77
24.4.1	Erase power	77
24.4.2	Erase magnetic field	77
24.5	Definition of signals	77
25	Magneto-optical characteristics	77
25.1	Figure of merit for magneto-optical signal	77
25.2	Imbalance of magneto-optical signal	78
26	Write characteristics	78
26.1	Resolution	78
26.2	Narrow-band signal-to-noise ratio	78
26.3	Cross-talk ratio	79
26.3.1	Rewritable track test method	79
26.4	Timing Jitter	79
26.5	Media thermal interaction	79
27	Erase power determination	80
Section 6 - Characteristics of user data		80
28	Method of testing	80
28.1	Environment	80
28.2	Reference Drive	80
28.2.1	Optics and mechanics	80
28.2.2	Read power	80
28.2.3	Read Channel	81
28.2.4	Mark Quality	81
28.2.5	Channel bit clock	81
28.2.6	Binary-to-digital converters	81
28.2.7	Error correction	81
28.2.8	Tracking	81
29	Minimum quality of a sector	81
29.1	Headers	81
29.1.1	Sector Mark	81
29.1.2	ID fields	81
29.2	User-written data	82
29.2.1	Recording field	82
29.2.2	Byte errors	82
29.2.3	Asymmetry	82
29.2.4	Timing jitter	82
30	Data interchange requirements	82

30.1	Tracking	82
30.2	User-written data	82
30.3	Quality of disk	82
Annexes		
A	- Air cleanliness class 100 000	83
B	- Edge distortion test	84
C	- Compliance test	86
D	- Test method for measuring the adsorbent force of the hub	88
E	- CRC for ID fields	90
F	- Interleave, CRC, ECC, Resync for the data field	91
G	- Determination of Resync pattern	97
H	- Read Channel for measuring jitter	102
J	- Timing jitter measuring procedure	103
K	- Definition of write pulse shape	104
L	- Measurement of figure of merit	105
M	- Implementation Independent Mark Quality Determination (IIMQD) for the interchange of recorded media	106
N	- Requirements for interchange	108
P	- Measurement implementation for Cross-track signal	110
Q	- Asymmetry measuring definition	111
R	- Office environment	113
S	- Derivation of the operating climatic environment	114
T	- Transportation	119
U	- Sector retirement guidelines	120
V	- Track deviation measurement	121
W	- Values to be implemented in existing and future standards	125
X	- Measurement of the vertical birefringence of the substrate	126
Y	- Guidelines for the use of Type WO ODCs	128
Z	- Laser power calibration for evaluation of media power sensitivity	129
AA	- 512-byte, 1 024-byte Sector Emulation	133

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 22092 was prepared by ECMA (as ECMA-322) 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 Q form a normative part of this International Standard. Annexes R to AA are for information only.

Information technology - Data interchange on 130 mm magneto-optical disk cartridges - Capacity: 9,1 Gbytes per cartridge

Section 1 - General

1 Scope

This International Standard specifies the mechanical, physical, and optical characteristics of a 130 mm optical disk cartridge (ODC) that employs thermo-magnetic and magneto-optical effects to enable data interchange between such disks.

This International Standard specifies two Types, viz.

Type R/W	provides for data to be written, read and erased many time over the recording surface(s) of the disk.
Type WO	provides for data once written to be read a multiplicity of times. Data shall not be erased nor amended. Multisession (incremental write operations) recording may be performed on type WO disks.

The disk shall be of the same Type if recorded on both sides, A and B. Each side shall have a nominal capacity of 4,58 Gbytes, irrespective of the Type. The format specifies two sector sizes and allows for emulation of two further sizes.

This International Standard specifies

- the conditions for conformance testing and the Reference Drive;
- the environments in which the cartridges are to be operated and stored;
- the mechanical, physical and dimensional characteristics of the cartridge so as to provide mechanical interchangeability between data processing systems;
- the format of the information on the disk, both embossed and user-written, including the physical disposition of the tracks and sectors, the error correction codes, the modulation methods used;
- the characteristics of the embossed information on the disk;
- the thermo-magnetic and magneto-optical characteristics of the disk, enabling processing systems to write data onto the disk;
- the minimum quality of user-written data on the disk, enabling data processing systems to read data from the disk.

This International Standard provides for interchange between optical disk drives. Together with a standard for volume and file structure it provides for full data interchange between data processing systems.

2 Conformance

2.1 Optical Disk Cartridge (ODC)

An ODC shall be in conformance with this International Standard if it meets all mandatory requirements specified therein.

A claim of conformance with this International Standard shall specify the Type implemented.

2.2 Generating system

A claim of conformance with this International Standard shall specify which of Type(s) of R/W and WO is (are) supported. A system generating an ODC for interchange shall be in conformance with this International Standard if it meets the mandatory requirements of this International Standard for the Type(s) supported.

2.3 Receiving system

A claim of conformance with this International Standard shall specify which Type is implemented.

A system receiving an ODC for interchange shall be in conformance with this International Standard if it is able to process any recording made on the cartridge according to 2.1 on the Type(s) specified.

2.4 Compatibility statement

A claim of conformance with this International Standard shall include a statement listing any other Optical Disk Cartridge Standard supported by the system for which conformance is claimed. This statement shall specify the number of the Standard(s), including, where appropriate, the ODC Type(s), or the Types of side, and whether support includes reading only or both reading and writing.

3 Normative reference

The following normative document contains 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 edition of the normative document 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.

IEC 60950-1, *Information technology equipment — Safety — Part 1: General requirements*