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Information technology — 80 mm (1,23 Gbytes per side) and 120 mm (3,95 Gbytes per side) DVD-recordable disk (DVD-R)

Technologies de l'information — Disque enregistrable DVD (DVD-R) de 80 mm *(*1,23 Gbytes *par face) et* 120 mm *(*3,95 Gbytes *par face) de diamètre*

Reference number
ISO/IEC 20563:2001(E)

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Contents

Page

Section 1 — General **1**

1 Scope **1**

2 Conformance **1**

2.1 Optical Disk **1**
2.2 Generating system **1**
2.3 Receiving system **1**

3 Normative reference **1**

4 Terms and definitions **2**

4.1 Adhesive layer **2**
4.2 Channel bit **2**
4.3 Clamping Zone **2**
4.4 Digital Sum Value (DSV) **2**
4.5 Disk Reference Plane **2**
4.6 Dummy substrate **2**
4.7 Entrance surface **2**
4.8 Groove **2**
4.9 Land **2**
4.10 Optical disk **2**
4.11 Physical sector number **2**
4.12 Read-only disk **2**
4.13 Recording layer **2**
4.14 Reed-Solomon code **2**
4.15 Reserved field **2**
4.16 Sector **2**
4.17 Space **2**
4.18 Substrate **2**
4.19 Track **2**
4.20 Track pitch **2**
4.21 Zone **2**

5 Conventions and notations **2**

5.1 Representation of numbers **2**
5.2 Names **3**

6 List of acronyms **3**

6.1 General **3**

7 General description **3**

8 General requirements **4**

8.1 Environments **4**

8.1.1 Test environment **4**
8.1.2 Operating environment **4**
8.1.3 Storage environment **5**
8.1.4 Transportation **5**

8.2 Safety requirements **5**
8.3 Flammability **5**

9 Reference measurement devices **5**

9.1 Pick Up Head (PUH) **5**

9.1.1 PUH for measuring recorded disks **5**
9.1.2 PUH for measuring unrecorded disks **6**

9.2 Measurement conditions **7**

9.2.1 Recorded and unrecorded disk **7**
9.2.2 Recorded disk **8**
9.2.3 Unrecorded disk **8**

9.3 Normalized servo transfer function **8**
9.4 Reference servo for axial tracking **8**
9.5 Reference servo for radial tracking **9**

Section 2 — Dimensional, mechanical and physical characteristics of the disk **10**

10 Dimensional characteristics **10**

10.1 Overall dimensions **12**
10.2 First transition area **12**
10.3 Second transition area **12**
10.4 Clamping Zone **12**
10.5 Third transition area **13**
10.6 R-Information Zone **13**

10.6.1 Sub-divisions of the R-Information Zone **13**

10.7 Information Zone **13**

10.7.1 Sub-divisions of the Information zone **13**

10.8 Track geometry **14**
10.9 Channel bit length **14**
10.10 Rim area **14**
10.11 Remark on tolerances **15**
10.12 Label **15**

11 Mechanical parameters **15**

11.1 Mass **15**
11.2 Moment of inertia **15**
11.3 Dynamic imbalance **15**
11.4 Sense of rotation **15**
11.5 Runout **15**

11.5.1 Axial runout **15**
11.5.2 Radial runout **15**

12 Optical parameters **15**

12.1 Recorded and unrecorded disk parameters **15**

12.1.1 Index of refraction **15**
12.1.2 Thickness of the transparent substrate **16**
12.1.3 Angular deviation **16**
12.1.4 Birefringence of the transparent substrate **16**

12.2 Recorded disk reflectivity **16**
12.3 Unrecorded disk parameters **16**

12.3.1 Polarity of reflectivity modulation **16**
12.3.2 Recording power sensitivity variation **16**

Section 3 — Operational signals 17

13 Operational signals for recorded disk 17

13.1 Measurement conditions 17
13.2 Read conditions 17
13.3 Recorded disk high frequency (HF) signals 17

13.3.1 Modulated amplitude 17
13.3.2 Signal asymmetry 17
13.3.3 Cross-track signal 17

13.4 Quality of signals 18

13.4.1 Jitter 18
13.4.2 Random errors 18
13.4.3 Defects 18

13.5 Servo signals 18

13.5.1 Differential phase tracking error signal 18

14 Operational signals for the unrecorded disk 20

14.1 Measurement conditions 20
14.2 Recording conditions 20
14.3 Basic write strategy for media testing 20
14.4 Servo signals 21

14.4.1 Radial push-pull tracking error signal 21
14.4.2 Cross-track signal before recording (Radial Contrast = RC) 21
14.4.3 Defects 23

14.5 Addressing signals 23

14.5.1 Land Pre-pit signal 23
14.5.2 Groove wobble signal 24
14.5.3 Relation in phase between wobble and Land Pre-pit 24

Section 4 — Data format 25

15 General 25

16 Data Frames 25

16.1 Identification Data (ID) 26
16.2 ID Error Detection Code 27
16.3 Copyright Management Information (CPR_MAI) 27
16.4 Error Detection Code 27

17 Scrambled Frames 27

18 ECC Block configuration 28

19 Recording Frames 30

20 Modulation 30

21 Physical Sectors 31

22 Suppress control of the d.c. component 32

23 Linking scheme 33

23.1 Linking sector 33
23.2 Linking loss area 33

23.2.1 Padding sectors 33

Section 5 — Format of the Information Zone 35

24 General description of the Information Zone 35

24.1 Layout of the Information Zone 35
24.2 Physical sector numbering 35

25 Lead-in Zone and Lead-out Zone 36

25.1 Lead-in Zone 36

25.1.1 Initial Zone 37
25.1.2 Reference Code Zone 37
25.1.3 Buffer Zone 1 38
25.1.4 Buffer Zone 2 38

25.2 Control Data Zone 38

25.2.1 Physical format information 38
25.2.2 Disk manufacturing information 40
25.2.3 Reserved 40

25.3 Lead-out Zone 40

Section 6 — Format of the Unrecorded Zone 40

26 General description of the Unrecorded Zone 40

26.1 Layout of the Unrecorded Zone 41
26.2 ECC block address 41
26.3 ECC block numbering 41

27 Pre-pit Data format 41

27.1 General description 41
27.2 Pre-pit block structure 44
27.3 Pre-pit data block configuration 46

27.3.1 Relative address 46
27.3.2 ECC block address data configuration 47
27.3.3 Parity A and Parity B 47
27.3.4 Field ID0 47
27.3.5 Field ID1 48
27.3.7 Field ID3 to Field ID5 53

28 Data structure of R-Information Zone 55

28.1 Layout of Power Calibration Area and Recording Management Area 55
28.2 Structure of the Power Calibration Area 55
28.3 Data configuration of the Recording Management Area (RMA) 56

28.3.1 Sector format of the Recording Management Area 56
28.3.2 Recording Management Data (RMD) 57

Annexes

A - Measurement of the angular deviation α 63

B - Measurement of birefringence 65

C - Measurement of the differential phase tracking error 67

D - Measurement of light reflectance 71

E - Tapered cone for disk clamping 73

F - Measurement of jitter 74

G - 8-to-16 Modulation with RLL (2,10) requirements 77

H - Border Zone **87**
J - Optimum Power Control **91**
K - Wavelength dependency **92**
L - Light fastness of the disk **93**
M - Measurement of the groove wobble amplitude **94**
N - Measurement methods for the operational signals for an unrecorded disk **96**
P - Variation of the Write Strategy **97**
Q - Measurement method of the Land Pre-Pit signal **98**
R - Note on the Reference Code **99**
S - Running OPC **100**
T - Transportation **101**

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.

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

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.

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.

International Standard ISO/IEC 20563 was prepared by JISC (as Standard JIS X.6245:1999) with document support and contribution from ECMA and was adopted under a special "fast-track procedure", by Joint Technical Committee JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Annexes A to N form a normative part of this International Standard. Annexes P to T are for information only.

Information technology — 80 mm (1,23 Gbytes per side) and 120 mm (3,95 Gbytes per side) DVD-recordable disk (DVD-R)

Section 1 — General

1 Scope

This International Standard specifies the mechanical, physical and optical characteristics of an 80 mm and a 120 mm DVD - Recordable disk to enable the interchange of such disks. It specifies the quality of the pre-recorded, unrecorded and the recorded signals, the format of the data, the format of the information zone, the format of the unrecorded zone, and the recording method, thereby allowing for information interchange by means of such disks. This disk is identified as a DVD - Recordable (DVD-R) disk. Once data has been recorded on a DVD-R disk it cannot be modified. It can be read many times. Further data may be appended.

This International Standard specifies

- 80 mm and 120 mm nominal diameter disks that may be either single or double sided,
- the conditions for conformance,
- the environments in which the disk is to be operated and stored,
- the mechanical and physical characteristics of the disk, so as to provide mechanical interchange between data processing systems,
- the format of the pre-recorded information on an unrecorded disk, including the physical disposition of the tracks and sectors, the error correcting codes and the coding method used,
- the format of the data and the recorded information on the disk, including the physical disposition of the tracks and sectors, the error correcting codes and the coding method used,
- the characteristics of the signals from pre-recorded and unrecorded areas on the disk, enabling data processing systems to read the pre-recorded information and to write to the disks,
- the characteristics of the signals recorded on the disk, enabling data processing systems to read the data from the disk.

This International Standard provides for interchange of disks between 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

A claim of conformance shall specify the type of the disk, i.e. its size and whether it is single-sided or double sided. An optical disk shall be in conformance with this International Standard if it meets the mandatory requirements specified for this type.

2.2 Generating system

A generating system shall be in conformance with this International Standard if the optical disk it generates is in accordance with 2.1.

2.3 Receiving system

A receiving system shall be in conformance with this International Standard if it is able to handle an optical disk according to 2.1.

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.

IEC 60950 *Safety of information technology equipment*

ISO 105-B02 *Textiles - Tests for colour fastness - Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*