INTERNATIONAL STANDARD

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Information technology — 90 mm optical disk cartridges, rewritable and read only, for data interchange

Technologies de l'information — Cartouches pour disques optiques de diamètre 90 mm, *réinscriptibles et à lecture unique, pour échange de données*

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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 JTC1. 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 10090 was prepared by the European Computer Manufacturers Association (as Standard ECMA-154) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC1, *Information technology* in parallel with its approval by national bodies of ISO and IEC.

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

Introduction

This International Standard specifies the characteristics of 90 mm optical disk cartridges (ODCs) of the type providing for data to be written, read and erased many times using the thermo-magnetic and magneto-optical effects.

A part or all of the optical disk may be pre-recorded and be reproduced by stamping or other means. This information is read without recourse to the magneto-optical effect.

This International Standard together with a standard for volume and file structure provides for full data interchange between data processing systems. Interchange involves the ability to write, read and erase data without introducing any error.

Information technology - 90 mm optical disk cartridges, rewritable and read only, for data interchange

Section 1 - General

1 Scope

This International Standard specifies

- the conditions for conformance testing and the Reference Drive;
- the mechanical and physical 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;
- the characteristics of the embossed information on the disk;
- the 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.

2 Conformance

A 90 mm optical disk cartridge is in conformance with this International Standard if it meets all mandatory requirements specified herein.

Annex R specifies the zones of the disk in which the requirements for the signal characteristics given in the body of this International Standard shall be met, and the zones in which a relaxation of these requirements is permitted.

A drive claiming conformance with this International Standard shall be able, in the operating environment, to write on any optical disk cartridge which is in conformance with this International Standard, and to read from any optical disk cartridge which is in conformance with this International Standard.

A drive shall not claim conformance if it cannot accept the full range of media conforming to this International Standard but only a specific sub-set of it.

3 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was 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 edition of the standard listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 950:1991, *Safety of information technology equipment, including electrical business equipment.*