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STANDARD

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25435

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**Data Interchange on 60 mm Read-Only  
ODC — Capacity: 1,8 Gbytes (UMD<sup>TM</sup>)**

*Échange de données sur disque optique de 60 mm en lecture seule —  
Capacité: 1,8 Go (UMD<sup>TM</sup>)*

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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 JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 document 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 25435 was prepared by Ecma TC 31 (as ECMA-365) 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.

## Introduction

Ecma Technical Committee TC 31 was established in 1984 for the standardization of Optical Disks and Optical Disk Cartridges (ODC). Since its establishment, the Committee has made major contributions to ISO/IEC SC 23 toward the development of International Standards for 80 mm, 90 mm, 120 mm, 130 mm, 300 mm, and 356 mm media. Numerous standards have been developed by TC 31 and published by Ecma International, almost all of which have also been adopted by ISO/IEC under the fast-track procedure as International Standards.

The need for further miniaturization had been recognized for use in portable electronic devices as a result of consumer acceptance of products based on previous Ecma CD-ROM and DVD-Read-Only Disk standards, ECMA-130, ECMA-267, ECMA-268 respectively.

In October 2004 a group of companies proposed to TC31 to develop an International Standard for the first 60 mm optical ROM disk. TC31 adopted this project and started the standardization work.

This disk is identified as Universal Media Disc (UMD™). (UMD™ is the trade mark of Sony Computer Entertainment Inc.)

# Data Interchange on 60 mm Read-Only ODC — Capacity: 1,8 Gbytes (UMD™)

## Section 1 — General

### 1 Scope

This International Standard specifies the mechanical, physical and optical characteristics of a 60 mm, read-only ODC having a maximum capacity of 1,8 Gbytes. It specifies the physical format, the quality of the recorded signals, the format of the data and its modulation method, thereby allowing for information interchange by means of such ODCs.

This International Standard specifies two types of ODCs, Type A and Type B:

Type A: Single layer disk with maximum recorded capacity of 0,9 G-bytes;

Type B: Dual layer disk with maximum recorded capacity of 1,8 G-bytes.

Information interchange between systems also requires, at a minimum, agreement between the interchange parties upon the interchange code(s) and the specifications of the structure and labeling of the information on the interchanged ODCs. UMD™ is the trade mark of Sony Computer Entertainment Inc.

## 2 Conformance

### 2.1 Optical disk cartridge

A claim of conformance shall specify the Type of the ODC. An ODC shall be in conformance with this International Standard if it meets the mandatory requirements specified for its Type.

### 2.2 Generating system

A generating system shall be in conformance with this International Standard if the ODC 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 both Types of ODC according to 2.1.

## 3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16143-1:2004, *Stainless steels for general purposes — Part 1: Flat products*

ECMA-287, *Safety of electronic equipment* — 2nd edition (December 2002)