# ECMA - Standardizing Information and Communication Systems

# **Standard ECMA-183**

# Data Interchange on 130 mm Optical Disk Cartridges - Capacity: 1 Gigabyte per Cartridge

### (December 1992)

This ECMA Standard specifies the characteristics of 130 mm optical disk cartridges (ODCs) with a capacity of 1 Gigabyte per cartridge. The standard specifies two related, but different implementations of such cartridges:

# Type R/W

Provides for data to be written, read and erased many times over the whole of both recording surfaces of the disk using the thermo-magnetic and magneto-optical effects.

### **Type WO**

Provides write once, read multiple functionality on both disk surfaces using the thermo-magnetic and magneto-optical effects.

# This ECMA Standard specifies:

- the conditions for conformance testing and the reference drive;
- the environments in which the cartridges are to be operated and stored;

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- the mechanical, physical and dimensional characteristics of the case and 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, and the modulation method used;
- 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.

This ECMA 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. Interchange involves the ability to write, read and erase data without introducing any error.

The following files are provided in this set of CD-ROMs:

File name	Size (Bytes)	Content
ECMA-183.PDF	70224'808	Acrobat PDF file
ECMA-183.PSC	7'059'378	Corresponding PostScript file

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