Standard ECMA-184

Data Interchange on 130 mm Optical Disk Cartridges - 1,3 Gigabytes per Cartridge

(December 1992)

This ECMA Standard specifies the characteristics of 130 mm Optical Disk Cartridges (ODC) with a capacity of 1,3 Gbytes per cartridge. The Standard specifies four related, but different implementations of such cartridges, viz.

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 P-ROM

Provides for a part of both disk surfaces to be pre-recorded and reproduced by stamping or other means. This part of the disk is read without recourse to the magneto-optical effect. All parts which are not pre-recorded, provide for data to meet the requirements of Type R/W.

Type O-ROM

Provides for the whole of both disk surfaces to be pre-recorded and reproduced by stamping or other means. This type of disk is read without recourse to the magneto-optical effect.

Type WO

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

The ECMA Standard specifies
- the conditions for conformance testing;
- the environments in which the cartridges are to be operated and stored;
- the mechanical, physical and dimensional characteristics of the case and of the cartridges, so as to provide mechanical interchangeability between the 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.

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

File name	Size (Bytes)	Content
ECMA-184.PDF	7'734'586	Acrobat PDF file
ECMA-184.PSC	7'468'284	Corresponding PostScript file

Printed copies of this Standard can be ordered, free of charge, from documents@ecma.ch..