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Information technology — 12,7 mm 128-track magnetic tape cartridge for information interchange — Parallel serpentine format

Technologies de l'information — Cartouches de bande magnétique de 12,7 mm*, 128 pistes pour l'échange d'information — Format serpentant parallèle*

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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.

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 117913 was prepared by ECMA (as ECMA-278) 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.

Annexes A, B, C and D form a normative part of this International Standard. Annexes E to G are for information only.

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Information technology — 12,7 mm 128-track magnetic tape cartridge for information interchange — Parallel serpentine format

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of a magnetic tape cartridge, using a magnetic tape 12,7 mm wide, so as to provide physical interchange of such cartridges between drives. It also specifies the quality of the recorded signals, the recording method and the recorded format known as Parallel Serpentine, thereby allowing data interchange between drives by means of such cartridges. The format supports variable length Logical Records, high speed search, and the use of the algorithm for data compression specified in International Standard ISO/IEC 15200.

Information interchange between systems also requires, at a minimum, agreement between the interchange parties upon the interchange code(s) and the specification of the structure and labelling of the information on the interchanged cartridge.

Together with a standard for volume and file structure, e.g. International Standard ISO 1001, this International Standard provides for full data interchange between data processing systems.

2 Conformance

2.1 Magnetic tape cartridge

A tape cartridge shall be in conformance with this International Standard if it meets all the mandatory requirements specified herein. The tape requirements shall be satisfied throughout the extent of the tape.

2.2 Generating system

A generating system shall be in conformance with this International Standard if it generates a tape according to 2.1.

2.3 Receiving system

A receiving system shall be in conformance with this International Standard if it can read all tapes 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.

ISO 1001: 1986, *Information processing — File structure and labelling of magnetic tapes for information interchange*.

IEC 60950:1999, *Safety of information technology equipment.*

ISO/IEC 15200:1996, *Information technology— Adaptive Lossless Data Compression algorithm (ALDC).*

ISO/R 527:1966, *Plastics — Determination of tensile properties.*

ISO/IEC 646:1991, *Information technology — ISO 7-bit coded character set for information interchange.*

ISO 683-13:1986, *Heat-treatable steels, alloy steels and free-cutting steels — Part 13: Wrought stainless steels.*

ANSI MH10.8M-1993, *Materials Handling — Unit Loads and Transport Packages — Bar Code Symbols*.

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