INTERNATIONAL STANDARD

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Information technology — Data interchange on 8 mm wide magnetic tape cartridge — Helical scan recording — HH-1 format

Technologies de l'information — Échange de données sur cartouche de bande magnétique de 8 mm *de large — Enregistrement par balayage en spirale — Format HH-1*

Reference number
ISO/IEC 15718:1998(E)

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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. 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 15718 was prepared by JISC (as Standard JIS X.6143-1997) with document support and contribution from ECMA (ECMA-247) 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 to E form an integral part of this International Standard. Annexes F and G are for information only.

Information technology — Data interchange on 8 mm wide magnetic tape cartridge — Helical scan recording — HH-1 format

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of an 8 mm wide magnetic tape cartridge 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 - called HH-1 format - thereby allowing for full data interchange between drives by means of such magnetic tape cartridges.

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

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 drive

A drive generating a magnetic tape cartridge for interchange shall be in conformance with this International Standard if all recordings on the tape meet the mandatory requirements of this International Standard.

A claim of conformance shall state which of the following optional features are implemented and which are not

- the performing of a Read-After-Write check and the recording of any necessary rewritten frames;
- the generation of ECC3 Blocks.

In addition a claim of conformance shall state

- whether or not, registered data compression algorithm(s) are implemented within the system and are able to compress data received from the host, and
- the registered identification number(s) of the implemented algorithm(s).

2.3 Receiving drive

A drive receiving a magnetic tape cartridge for interchange shall be in conformance with this International Standard if it is able to handle any recording made on the tape according to this International Standard. In particular it shall

- be able to recognize rewritten frames and to make available to the host, data and File Marks from only one of these frames;
- be able to recognize a ECC3 Block, and ignore it if the system is not capable of using ECC3 check bytes in a process of error correction;
- be able to recognize compressed data, identify the algorithm used, and make the algorithm registration number available to the host;
- be able to make compressed data available to the host.

In addition a claim of conformance shall state

- whether or not the system is capable of using ECC3 check bytes in a process of error correction;
- whether or not one or more decompression algorithm(s) are implemented within the system, and are able to be applied to compressed data prior to making such data available to the host;
- the registered identification number(s) of the data compression algorithm(s) for which a complementary data decompression algorithm is implemented.
- whether or not the system is capable of updating the System Log(s) if the Write-inhibit Hole state so permits.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 527-1:1993, *Plastics — Determination of tensile properties — Part 1: General principles.*

ISO 1302:1992, *Technical drawings — Method of indicating surface texture.*

ISO/IEC 11576:1995, *Information technology — Procedure for the registration of algorithms for the lossless compression of data.*

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