INTERNATIONAL STANDARD

ISO/IEC 22051

First edition
2002-10-01

Information technology — Data interchange on 12,7 mm, 448-track magnetic tape cartridges — SDLT1 format

Technologies de l'information — Échange de données sur cartouche à bande magnétique 12,7 mm, 448 pistes — Format SDLT1

Reference number
ISO/IEC 22051:2002(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

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 3.

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 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.

ISO/IEC 22051 was prepared by ECMA (as ECMA-320) 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 F form a normative part of this International Standard. Annexes G to K are for information only.

Information technology — Data interchange on 12,7 mm, 448-track magnetic tape cartridges — SDLT1 format

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of a 12,7 mm wide, 448-track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Super Digital Linear Tape 1 (SDLT 1) - and a recording method, thereby allowing data interchange between drives. Together with a labelling standard, for instance ISO 1001 for Magnetic Tape Labelling, it allows full data interchange by means of such magnetic tape cartridges.

2 Conformance

2.1 Magnetic tape cartridges

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

2.2 Generating systems

A system generating a magnetic tape cartridge for interchange shall be in conformance with this International Standard if all the recordings that it makes on a tape according to 2.1 meet the mandatory requirements of this International Standard.

In addition, a claim of conformance shall state

– whether or not one, or more registered algorithm(s) are implemented within the system,

– the registered identification number(s) of the implemented compression algorithm(s).

2.3 Receiving systems

A system 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 a tape according to 2.1.

In addition, a claim of conformance shall state

– whether or not one, or more de-compression algorithm(s) are implemented within the system, and are able to be applied to de-compress data prior to making such data available to the host,

– the registered identification number(s) of the implemented compression algorithm(s).

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*

ISO 1302:2002, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO/IEC 11576:1994, *Information technology — Procedure for the registration of algorithms for the lossless compression of data*