

INTERNATIONAL
STANDARD

ISO/IEC
13421

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**Information technology — Data
interchange on 12,7 mm, 48-track magnetic
tape cartridges — DLT 1 format**

*Technologies de l'information — Échange de données sur cartouches
pour bandes magnétiques de 12,7 mm, 48 pistes — Format DLT 1*



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ISO/IEC 13421:1993(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 13421 was prepared by the European Computer Manufacturers Association (ECMA) (as Standard ECMA-182) 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 to J are for information only.

Patents

During the preparation of the ECMA standard, information was gathered on patents upon which application of the standard might depend. Relevant patents were identified as belonging to Digital Equipment Corporation. However, neither ECMA nor ISO/IEC can give authoritative or comprehensive information about evidence, validity or scope of patent and like rights. The patent holders have stated that licences will be granted under reasonable and non-discriminatory terms. Communications on this subject should be addressed to

Digital Equipment Corporation
334 South Street
Shrewsbury
Massachusetts 01545-4112
USA

Introduction

International Standards ISO 9661 and ISO/IEC 11559 specify data interchange on 12,7 mm, 18-track magnetic tape cartridges.

International Standard 13421 concerns a cartridge of a type different from that of those International Standards. Whilst the magnetic tape is also 12,7 mm wide, it is recorded on 48 physical tracks. Also the format is different from that of these previous International Standards. It is characterized by the fact that the physical tracks, recorded and read in pairs, constitute two groups, the first recorded and read in forward direction, the second in reverse direction.

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Information technology — Data interchange on 12,7 mm, 48-track magnetic tape cartridges — DLT 1 format

Section 1 - General

1 Scope

This International Standard specifies the physical and magnetic characteristics of a 12,7 mm wide, 48-track magnetic tape cartridge, to enable interchangeability of such cartridges. It also specifies the quality of the recorded signals, a format - called Digital Linear Tape 1 (DLT 1) - and a recording method. Together with a labelling standard, e.g. ISO 1001, 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 entitled to claim 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.

2.3 Receiving systems

A system receiving a magnetic tape cartridge for interchange shall be entitled to claim conformance with this International Standard if it is able to handle any recording made on a tape according to 2.1.

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 listed below. Members of IEC and ISO maintain registers of currently valid international standards.

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

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

4 Definitions

For the purpose of this International Standard, the following definitions apply.