# INTERNATIONAL STANDARD

# 180/IEC 1864

Fourth edition 1992-06-15

Information technology — Unrecorded 12,7 mm (0,5 in) wide magnetic tape for information interchange — 32 ftpmm (800 ftpi), NRZ1, 126 ftpmm (3 200 ftpi) phase encoded and 356 ftpmm (9 042 ftpi), NRZ1

Technologie de l'information — Bande magnétique vierge de 12,7 mm (0,5 in) de large, pour l'échange d'information — 32 ftpmm (800 ftpi), NRZ1, 126 ftpmm (3 200 ftpi) par codage de phase et 356 ftpmm (9 042 ftpi), NRZ1



## **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 1864 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Sub-Committee SC 11, Flexible magnetic media for digital data interchange.

This fourth edition cancels and replaces the third edition (ISO 1864:1985), of which it constitutes a technical revision.

Annexes A and B form an integral part of this International Standard.

Annex C is for information only.

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Information technology — Unrecorded 12,7 mm (0,5 in) wide magnetic tape for information interchange — 32 ftpmm (800 ftpi), NRZ1; 126 ftpmm (3 200 ftpi) phase encoded and 356 ftpmm (9 042 ftpi), NRZ1

#### 1 Scope

This International Standard specifies the characteristics of 12,7 mm (0,5 in) wide magnetic table with reel, to enable magnetic and mechanical interchangeability of such tape between information processing systems.

This International Standard applies solely to magnetic tape for digital recording using the NRZ1 method of recording at 32 ftpmm and 356 ftpmm (800 ftpi and 9 042 ftpi) or the phase-encoded method of recording at 126 ftpmm (3 200 ftpi) in which the direction of magnetization is nominally longitudinal.

NOTE 1 Some numeric values in the SI and/or Imperial measurement system in this International Standard have been rounded off and therefore are consistent with, but not exactly equal to, each other. Either system may be used, but the two should be neither intermixed nor reconverted. The original design was made using the Imperial measurement system.

### 2 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 209-1:1989, Wrought aluminium and aluminium alloys — Chemical composition and forms of products — Part 1: Chemical composition.

ISO 468:1982, Surface roughness — Parameters, their values and general rules for specifying requirements.

ISO 1863:1990, Information processing — 9-track, 12,7 mm (0,5 in) wide magnetic tape for information interchange using NRZ1 at 32 ftpmm (800 ftpi) — 32 cpmm (800 cpi).

ISO/IEC 3788:1990, Information processing — 9-track, 12,7 mm (0,5 in) wide magnetic tape for information interchange using phase encoding at 126 ftpmm (3 200 ftpi), 63 cpmm (1 600 cpi).

150 5652:1984, Information processing — 9-Track, 12,70 m (0.5 in) wide magnetic tape for information interchange — Format and recording, using group coding 60246 cpmm (6 250 cpi).

ISO 6098:1984 Information processing — Self-loading cartridges for \$\mathbb{Q}\$,7 mm (0.5 in) wide magnetic tape.

ASTM D 2000, Rubber products in automotive applications, classification, system for.

#### 3 Definitions

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

- **3.1 magnetic tape:** A tape that will accept and retain the magnetic signals intended for input, output and storage purposes on computers and associated equipment.
- 3.2 Master Standard Reference Tape: A tape selected as the standard for signal amplitude.

NOTE 2 A Master Standard Reference Tape has been established at the US National Institute of Standards and