Superseded by AS 2241-1991

AS 2241—1979
UDC 681.327.64

Add 681.3.04: → use 636

Australian Standard 2241—1979

Information Processing

9-TRACK, 12.7 mm (0.5 in) WIDE MAGNETIC TAPE FOR INFORMATION INTERCHANGE RECORDED AT 63 rpmm (1600 rpi), PHASE ENCODED

[Title allocated by Defence Cataloguing Authority:
TAPE ELECTRONIC DATA PROCESSING (9-Track, 63 RPMM (1600 RPI), Phase Encoded, for Information Interchange) ...
NSC 7440]

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

d

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Banks Automation Committee
Australian Bureau of Statistics
Australian Computer Users Association
Australian Public Service Board
CSIRO, Division of Computing Research
Department of Defence
Life Offices Association for Australasia
Manufacturers of Data Processing Equipment
National Library of Australia
Office Equipment Industry Association of Australia
Qantas Airways Limited
Telecom Australia
Universities and Colleges

This standard, prepared by Committee MS/20, Computers and Information Processing, was approved on behalf of the Council of the Standards Association of Australia on 17 January 1979, and published on 1 May 1979.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

This standard was issued in draft form for public review as DR 76108.

AUSTRALIAN STANDARD

INFORMATION PROCESSING

9-TRACK, 12.7 mm (0.5 in) WIDE MAGNETIC TAPE FOR INFORMATION INTERCHANGE RECORDED AT 63 rpmm (1600 rpi), PHASE ENCODED

AS 2341—1979

First published 1979

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 1630 5

PREFACE

This standard was prepared under the authority of the Association's Committee on Computers and Information Processing. It is identical with and has been reproduced from International Standard ISO 3788, drawn up by ISO/TC 97, Computers and Information Processing.

This standard specifies a format and recording standard for 9-track magnetic tape recorded at 63 rows per millimetre to facilitate magnetic and mechanical interchangeability of 12.7 mm tape between information processing systems that utilize the standard 7-bit code as defined in AS 1061.

Numeric values in the SI system in this standard may have been rounded during conversion from imperial measurements, and are therefore consistent with, but not exactly equal to, the values in the original design which were given using the imperial system. In use, the two should be neither intermixed nor reconverted. However, following the practice in the International standard, imperial values have been given in parentheses.

For the purpose of this Australian standard, the text of ISO 3788 given herein should be modified as follows:

(a) *Terminology:* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.

(b) *Decimal comma:* The decimal point should replace the decimal comma wherever it appears.

(c) *Cross references:* The references to International Standards should be replaced by references to Australian standards as follows:

Reference to International Standard	*Appropriate Australian Standard*
ISO 646, 7-bit coded character set for information processing interchange	AS 1776, 7-bit coded character set for information processing interchange
ISO 962, Information Processing—Implementation of the 7-bit coded character set and its 7-bit and 8-bit extensions on 9-track, 12.7 mm (0.5 in) magnetic tape	AS 1061, Implementation of the 7-bit coded character set on 9-track 12.7 mm (0.5 in) magnetic tape
ISO 1001, Information Processing—Magnetic tape labelling and file structure for information interchange	AS 1068, Magnetic tape labelling and file structure for information interchange
ISO 1864, Information Processing—Unrecorded 12.7 mm (0.5 in) wide magnetic tape for information interchange—8 and 32 rpmm (200 and 800 rpi) NRZI and 63 rpmm (1600 rpi) phase-encoded	AS 1011, Unrecorded magnetic tape for information interchange—8 and 32 rpmm NRZI and 63 rpmm phase-encoded
ISO 2022, Code extension techniques for use with the ISO 7-bit coded character set	AS 1953, Code extension techniques for use with the standard 7-bit coded character set

STANDARDS ASSOCIATION OF AUSTRALIA

Information processing — 9-track, 12,7 mm (0.5 in) wide magnetic tape for information interchange recorded at 63 rpmm (1 600 rpi), phase encoded

1 SCOPE AND FIELD OF APPLICATION

This International Standard provides a format and recording standard for 9-track, 12,7 mm (0.5 in) wide magnetic tape and reels to be used for information interchange among information processing systems, communication systems, and associated equipment utilizing the 7-bit coded character set specified in ISO 646 or its 7-bit or 8-bit extensions specified in ISO 2022.

NOTES

1 Certain other aspects of coding requirements, such as significance of binary digits, sequence of characters, filling of unused positions and magnetic labelling for use on magnetic tape, are the subject of ISO 962 and ISO 1001.

2 Details of unrecorded tape and reels are specified in the complementary publication, ISO 1864.

2 REFERENCES

ISO 962, *Information processing — Implementation of the 7-bit coded character set and its 7-bit and 8-bit extensions on 9-track, 12,7 mm (0.5 in) magnetic tape.*

ISO 1001, *Information processing — Magnetic tape labelling and file structure for information interchange.* [1]

ISO 1864, *Information processing — Unrecorded 12,7 mm (0.5 in) wide magnetic tape for information interchange — 8 and 32 rpmm (200 and 800 rpi), NRZI and 63 rpmm (1 600 rpi), phase encoded.*

3 DEFINITIONS

NOTE — The material contained in clauses 3 and 4 of this International Standard is duplicated from ISO 1864 for unrecorded magnetic tape. The latter document shall be considered to be correct, that is, the primary document, so far as any differences between the comparable clauses of the two documents are concerned.

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

3.1 magnetic tape : Tape which will accept and retain magnetic signals intended for input, output and storage purposes on computers and associated equipment.

3.2 reference tape : A tape which has been selected for given properties for use in calibration.

3.3 secondary reference tape : A tape intended for routine calibrating purposes, whose performance is known and stated in relation to that of a reference tape.

3.4 signal amplitude reference tape : A reference tape selected as a standard for signal amplitude.

NOTE — A master standard (computer amplitude reference) has been established at the U.S. National Bureau of Standards (NBS), based on reference tapes and heads. Secondary signal amplitude reference tapes are available from NBS under the part number SRM 3200.

3.5 reference field : The minimum field applied to the signal amplitude reference tape which causes an output signal equal to 95 % of the maximum output at 126 flux transitions per millimetre (3 200 ftpi).

3.6 reference edge : The edge further from an observer, or nearer the top of a page, when a tape is lying flat with the magnetic surface uppermost and the direction of movement for recording from left to right. (See figures 1, 2 and 3.)

3.7 in contact : An operating condition in which the magnetic surface of a tape is in contact with a magnetic head.

3.8 track : A longitudinal area on the tape along which a series of magnetic signals may be recorded.

1) At present at the stage of draft. (Revision of ISO/R 1001.)