MAGNETIC TAPE CASSETTES FOR INFORMATION INTERCHANGE
(3.810 mm [0.150 in] TAPE AT 32 bpm [800 bpi], PE)

CATEGORY: HARDWARE STANDARD
SUBCATEGORY: INTERCHANGE CODES AND MEDIA
Foreword

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Ernest Ambler, Acting Director

Abstract

This FIPS PUB announces the adoption of the American National Standard X3.48–1977, Magnetic Tape Cassettes for Information Interchange (3.810-mm [0.150-in] Tape at 32 bpm [800 bpi], PE). This standard specifies the physical, magnetic, and recorded characteristics of a 3.810 mm (0.150 in) magnetic tape cassette in order to provide for data interchange between information processing systems at a recording density of 32 bits per millimeter (800 bits per inch) using phase encoding techniques. The magnetic tape cassette consists of a twin hub co-planar type cassette containing 3.810 mm (0.150 in) wide magnetic tape. It is one of a series of Federal Standards implementing the Standard Code for Information Interchange (ASCII) on magnetic tape media.

Key words: Communications; computers; computer system hardware; data processing; data processing equipment; information systems; magnetic tape recording; magnetic tapes; magnetic tape transports; standards.

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ANNOUNCING THE STANDARD FOR

MAGNETIC TAPE CASSETTES FOR INFORMATION INTERCHANGE

(3.810 mm [0.150 in] TAPE AT 32 bpm [800 bpi], PE)


Name of Standard. Magnetic Tape Cassettes for Information Interchange (3.810 mm [0.150 in] Tape at 32 bpm [800 bpi], PE) (FIPS PUB 51).


Explanation. This standard specifies the physical, magnetic, and recorded characteristics of a 3.810 mm (0.150 in) magnetic tape cassette in order to provide for data interchange between information processing systems at a recording density of 32 bits per millimeter (800 bits per inch) using phase encoding techniques. The magnetic tape cassette consists of a twin hub co-planar type cassette containing 3.810 mm (0.150 in) wide magnetic tape. It is one of a series of Federal Standards implementing the Standard Code for Information Interchange (ASCII) on magnetic tape media.

Approving Authority. Secretary of Commerce.


Cross Index.

a. FIPS PUB 1, Federal Standard Code for Information Interchange (ASCII).

b. FIPS PUB 35, Code Extension Techniques in 7 or 8 Bits.


d. At the time of publication of this FIPS PUB, a standard for dual track complementary return-to-bias four state recording (CRB) for a 3.810 mm (0.150 in) magnetic tape cassette was being developed by the American National Standards Institute. This voluntary industry standard, when available, will be considered for adoption as a FIPS.

Applicability. This standard is applicable to the acquisition and use of all magnetic tape cassette recording and reproducing equipment employing 3.810 millimeter (0.150 inch) wide magnetic tape.
at recording densities of 32 bits per millimeter (800 bits per inch) using phase encoding. Federal information processing systems employing such equipment, including associated software, shall provide the capability to accept and generate recorded magnetic tape cassettes in compliance with the requirements set forth in this standard.

Specifications. This standard adopts the requirements set forth in the American National Standard X3.48-1977, Magnetic Tape Cassettes for Information Interchange (3.810-mm [0.150-in.] Tape at 32 bpm [800 bpi], PE).

Implementation Schedule. All applicable equipment ordered on or after the date of this FIPS PUB must be in conformance with this standard unless a waiver has been obtained in accordance with the procedure described below. Exceptions to this standard are made in the following cases:

a. For equipment installed or on order prior to the date of this FIPS PUB.

b. Where procurement actions are into the solicitation phase (i.e., Request for Proposals or Invitation for Bids has been issued) on the date of this FIPS PUB.

Special Information. Federal standards and/or specifications for unrecorded magnetic tape cassettes will be developed and issued by the General Services Administration. Until such time as these are available, American National Standard X3.48–1977, Magnetic Tape Cassettes for Information Interchange (3.810-mm [0.150-in.] Tape at 32 bpm [800 bpi], PE), should be cited in Federal procurements.

Also, GSA will provide terminology for use of this standard in Federal ADP acquisitions. This terminology will be incorporated in the Federal Property Management Regulations (Title 41, Subtitle C, Chapter 101, Subpart 101–32.13, Code of Federal Regulations).

Qualifications. None.

Waiver Procedure. Heads of agencies may waive the provisions of the implementation schedule. Proposed waivers relating to the procurement of non-conforming equipment will be coordinated in advance with the National Bureau of Standards. Letters should be addressed to the Associate Director for ADP Standards, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234. They should describe the nature of the waiver and set forth the reasons therefor.

Sixty days should be allowed for review and response by the National Bureau of Standards. However, the final decision for granting the waiver is a responsibility of the agency head.

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