INTERNATIONAL STANDARD 1113

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Information processing — Representation of the 7-bit coded character set on punched tape

Traitement de l'information — Représentation sur bande perforée du jeu de caractères codés à 7 éléments

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 1113 was developed by Technical Committee ISO/TC 97, *Computers and information processing.* This second edition was circulated to the member bodies in February 1978.

It has been approved by the member bodies of the following countries :

Australia	Germany, F. R.	South Africa, Rep. of
Belgium	Iran	Spain
Brazil	Italy	Switzerland
Canada	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
Denmark	Poland	U.S.S.R.
France	Romania	

No member body expressed disapproval of the document.

This second edition cancels and replaces the first edition (ISO 1113-1973).

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Information processing — Representation of the 7-bit coded character set on punched tape

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the representation of the 7-bit coded character set on punched tape 25,4 mm (1 in) wide.

2 REFERENCES

ISO 646, *7-bit coded character set for information processing interchange.*

ISO 1154, *Information processing — Punched paper tape — Dimensions and locations of feed holes and code holes.*

ISO 1729, *Information processing — Unpunched paper tape — Specification.*

3 SPECIFICATIONS

(See also figures 1 and 2.)

3.1 Punched tape

The tape to be used (of paper or other material) shall correspond to the requirements in ISO 1729 regarding the physical characteristics of 25,4 mm (1 in) wide punched tape.

3.2 Layout of the tracks

The tape shall contain a track of small holes constituting a feed hole track, parallel to the edges of the tape. On either side of this track there shall be respectively 3 and 5 code tracks in which holes may be punched. The positions and dimensions of the holes and the positions of the tracks are specified in ISO 1154.

3.2.1 *Reference edge*

The reference edge shall be that on the side of the feed hole track which has three code holes.

3.2.2 *Numbering of the code tracks*

The code tracks shall be numbered consecutively from 1 to 8 starting from the reference edge. The feed hole track shall be between code tracks 3 and 4.

3.3 Character set

The character set shall be the 7-bit character set specified in ISO 646.

3.4 Representation of coded characters

3.4.1 Each position where a code hole can be punched shall be assigned to the representation of a bit. The absence of a hole shall represent binary ZERO. The presence of a hole shall represent binary ONE.

3.4.2 Each transverse row of holes shall contain the representation of only one character with its parity bit.

3.4.3 Bits b_1 to b_7 of a character from the 7-bit code table shall be assigned respectively to tracks 1 to 7.

3.5 Parity bit

To allow protection against errors in the tape punching, an extra bit called a "parity bit" shall be added to each coded character.

This bit shall be placed in track 8. Its value shall be chosen so that the number of binary ONES in the same row is even (even parity).

3.6 Character sequence and direction of movement of tape

The direction of movement of the punched tape shall be opposite to the character sequence.

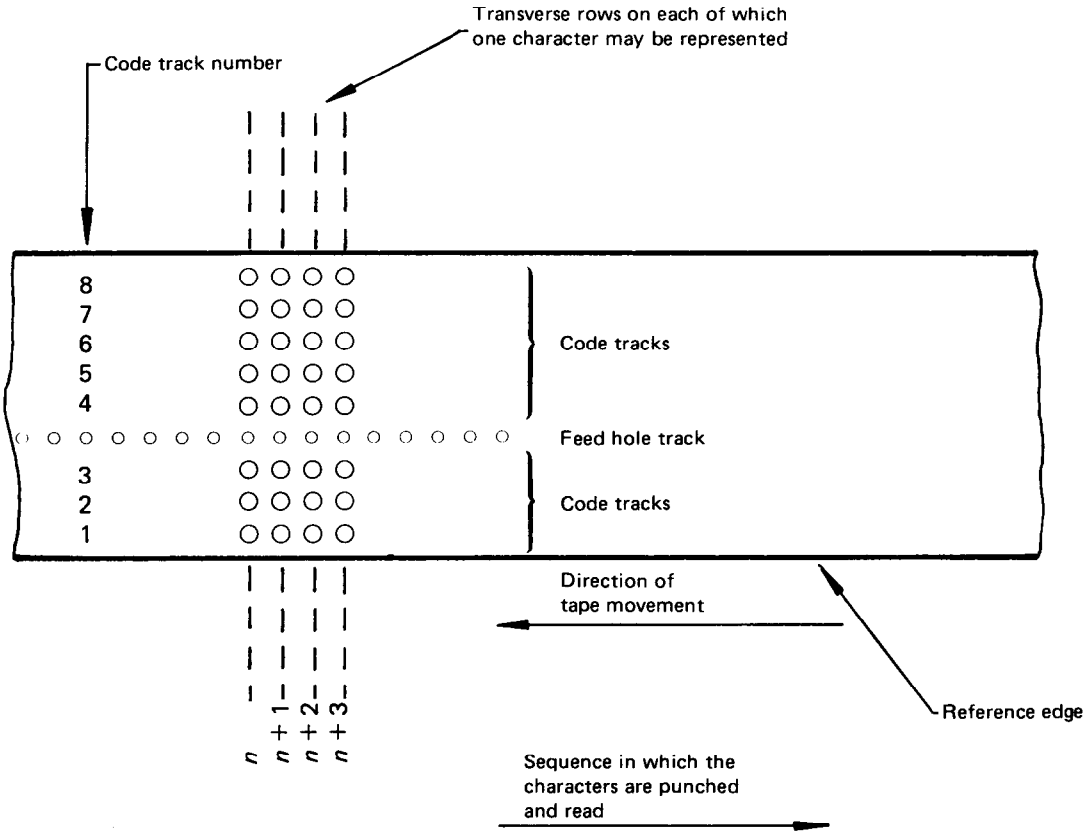

FIGURE 1 – **Character and track layout**

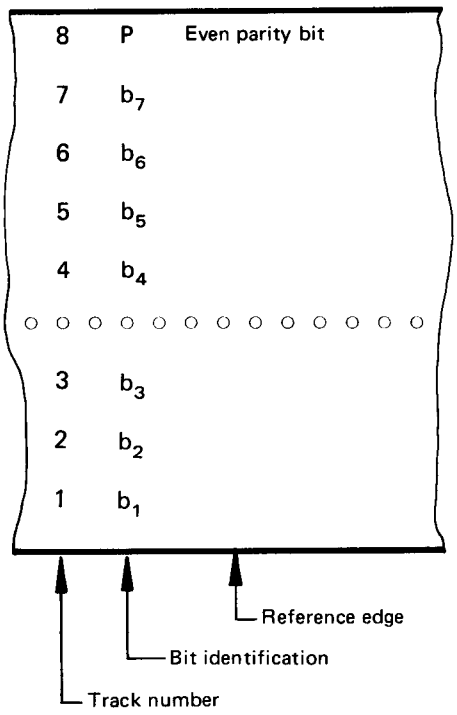

FIGURE 2 – **Bit-to-track assignment**