INTERNATIONAL STANDARD ISO 3561

Information processing — Interchangeable magnetic six-disk pack — Track format

Traitement de l'information — Chargeur interchangeable à six disques magnétiques — Schéma de piste

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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 3561 was drawn up by Technical Committee ISO/TC 97, *Computers and information processing*, and was circulated to the Member Bodies in March 1975.

It has been approved by the Member Bodies of the following countries :

Belgium	Japan	Turkey
Czechoslovakia	New Zealand	United Kingdom
France	Poland	U.S.S.R.
Germany	Romania	Yugoslavia
Hungary	South Africa, Rep. of	
Italy	Switzerland	

No Member Body expressed disapproval of the document.

Information processing — Interchangeable magnetic six-disk pack — Track format

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the track format characteristics for the six-disk pack to be used for data interchange (see ISO 2864). The 7-bit coded character set specified in ISO 646 has been adopted, though, by agreement between the interchange parties, the 7-bit or 8-bit extensions specified in ISO 2022 may be used.

2 GENERAL REQUIREMENTS

2.1 Rotation speed and clock period

The total tolerance on rotation speed and clock period shall not exceed ± 2,4 % (see annex A).

2.2 Mode of recording

The mode of recording shall be double frequency where the start of every bit cell is a clock transition. A ONE is represented by a transition between two clock transitions.

At the nominal rotation speed of 2 400 rev/min, the all-ZERO pattern consists of $1,25 \times 10^6$ transitions per second nominally, and an all-ONES pattern consists of $2,50 \times 10^6$ transitions per second nominally.

2.3 Index

The index is a point which defines the beginning and the end of a track. Its location is specified as a true position in 5.1.2.5 of ISO 2864.

2.4 Track capacity

The capacity of a track is $31\ 250\ {}^{+\ 768}_{-\ 733}$ bits.

2,5 Track layout

Figure 1 shows the general track layout (see also annex B).

3 DEFINITIONS

3.1 sector : A track is divided into sectors. A sector may be further subdivided.

3.2 home address : The home address contains information which defines the physical location and characteristics of a track.

3.3 count : The count contains information which defines the physical location and characteristics of a sector.

3.4 key : Part of a sector in which information is recorded; its use is optional.

3.5 data block : Part of a sector in which information is recorded.

3.6 gap : The space between the various divisions of a track.

3.7 byte (or octet) : Eight serial bits, identified B8 to B1 with B8 as the most significant and recorded first.

3.8 hexadecimal notation :

$(00)_{16}$ denotes a byte (or octet) with B8 to B1 = 00000000

$(FF)_{16}$ denotes a byte (or octet) with B8 to B1 = 11111111

$(0E)_{16}$ denotes a byte (or octet) with B8 to B1 = 00001110

$(CC)_{16}$ denotes a byte (or octet) with B8 to B1 = 11001100

4 DETAILED DESCRIPTION OF TRACK LAYOUT

4.1 Sector 0

The first sector following index is unique in that it contains a home address and will therefore be described separately.

4.1.1 *Index gap* (see figure 2)

This is a gap preceding the home address and shall be written so that the start of the home address is located within 30 ± 7 bytes from index. It is also a requirement that when this gap is initially written, 30 bytes of $(00)_{16}$ shall precede the home address. The first 14 bytes of $(00)_{16}$ may, as a result of interchange, be unreadable (see annex C).

4.1.2 *Home address* (see figure 2)

The home address consists of 14 bytes as follows :

4.1.2.1 Synchronization (6 bytes) as follows :

$(00)_{16}$ $(00)_{16}$ $(00)_{16}$ $(00)_{16}$ $(FF)_{16}$ $(0E)_{16}$

4.1.2.2 F — Flag (1 byte). This is used to indicate defective and alternative tracks. The significance of the bits in this byte is as follows :

The first two bits (B8 and B7) are always ZERO. B6 to B3 are reserved for future standardization and are all ZERO.