# INTERNATIONAL **STANDARD**

ISO/IEC 11694-4

> Second edition 2001-10-15

# **Identification cards** — Optical memory cards — Linear recording method —

Part 4: Logical data structures

Cartes d'identification — Cartes à mémoire optique — Méthode saire
s de don. d'enregistrement linéaire —

Partie 4: Structures de données logiques



Reference number ISO/IEC 11694-4:2001(E)

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Printed in Switzerland

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# **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 11694 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 11694-4 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Identification cards and related devices*.

This second edition cancels and replaces the first edition (ISO/IEC 11694-4:1996), which has been technically revised.

ISO/IEC 11694 consists of the following parts, under the general title *Identification cards* — *Optical memory cards* — *Linear recording method*:

- Part 1: Physical characteristics
- Part 2: Dimensions and location of the accessible optical area
- Part 3: Optical properties and characteristics
- Part 4: Logical data structures

Annexes A and B form a normative part of this part of ISO/IEC 11694.

# Introduction

This part of ISO/IEC 11694 is one of a series of standards describing the parameters for optical memory cards and the use of such cards for the storage and interchange of digital data.

The standards recognize the existence of different methods for recording and reading information on optical memory cards, the characteristics of which are specific to the recording method employed. In general, these different recording methods will not be compatible with each other. Therefore, the standards are structured to accommodate the inclusion of existing and future recording methods in a consistent manner.

This part of ISO/IEC 11694 is specific to optical memory cards using the linear recording method. Characteristics which apply to other specific recording methods shall be found in separate standards documents.

This part of ISO/IEC 11694 defines the logical data structures and the extent of compliance with, addition to, and/or deviation from the relevant base document ISO/IEC 11693. a rappetien ocheanage of the

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# Identification cards — Optical memory cards — Linear recording method —

## Part 4:

# Logical data structures

## 1 Scope

This part of ISO/IEC 11694 specifies the logical data structures for optical memory cards necessary to allow compatibility and interchange between systems using the linear recording method.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 11694. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 11694 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 11693:2000, Identification cards — Optical memory cards — General characteristics

ISO/IEC 11694-1:2000, Identification cards — Optical memory cards — Linear recording method — Part 1: Physical characteristics

ISO/IEC 11694-2:2000, Identification cards — Optical memory cards — Linear recording method — Part 2: Dimensions and location of the accessible optical area

ISO/IEC 11694-3:2001, Identification cards — Optical memory cards — Linear recording method — Part 3: Optical properties and characteristics

#### 3 Terms and definitions

For the purposes of this part of ISO/IEC 11694, the terms and definitions given in ISO/IEC 11693, ISO/IEC 11694-1, ISO/IEC 11694-2, ISO/IEC 11694-3 and the following apply.

#### 3.1

#### data bit

area which represents data on an optical memory card; mark which has a different reflectivity and/or phase difference from the background reflectivity

NOTE One mark can define one or two data transitions dependent on the modulation method selected.