## INTERNATIONAL STANDARD

**ISO/IEC** 10536-1

Second edition 2000-04-15

# Identification cards — Contactless integrated circuit(s) cards — Close-coupled cards —

Part 1:

### **Physical characteristics**

Cartes d'identification — Cartes à circuit(s) intégré(s) sans contact — Cartes à couplage de proximité —

Partie 1: Caractéristiques physiques



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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 10536 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 10536-1 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 10536-1:1992), which has been technically revised.

ISO/IEC 10536 consists of the following parts, under the general title *Identification cards — Contactless integrated circuit(s) cards — Close-coupled cards*:

- Part 1: Physical characteristics
- Part 2: Dimensions and location of coupling areas
- Part 3: Electronic signals and reset procedures
- Part 4: Answer to reset and transmission protocols

Annexes A and B of this part of ISO/IEC 10536 are for information only.

#### Introduction

ISO/IEC 10536 is one of a series of International Standards describing the parameters for identification cards as defined in ISO/IEC 7810 and the use of such cards for international interchange.

This part of ISO/IEC 10536 describes the physical characteristics of close-coupled cards.

This part of ISO/IEC 10536 does not preclude the incorporation of other standard technologies on the card, such as those referenced in the informative annex A.

Contactless card Standards cover a variety of types as embodied in ISO/IEC 10536 (Close-coupled cards), ISO/IEC 14443 (Proximity cards), ISO/IEC 15693 (Vicinity cards). These are intended for operation when very near, nearby and at a longer distance from associated coupling devices respectively.

ISO/IEC 10536 is intended to allow operation of Close-coupled cards in the presence of other contactless cards conforming to ISO/IEC 14443 and ISO/IEC 15693 standards.

### Identification cards — Contactless integrated circuit(s) cards — Close-coupled cards — Part 1: Physical characteristics

#### 1 Scope

This part of ISO/IEC 10536 specifies the physical characteristics of close-coupled cards (CICC). It applies to identification cards of the card type ID-1 operating either in a slot or on the surface of a coupling device.

This part of ISO/IEC 10536 shall be used in conjunction with later parts of ISO/IEC 10536.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 10536. 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 10536 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 7810, Identification cards - Physical characteristics.

ISO/IEC 10373, Identification cards - Test methods.

IEC 61000-4-2, Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 2: Electrostatic discharge immunity test.