

STANDARD

10536-2

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**Identification cards — Contactless
integrated circuit(s) cards —**

Part 2:

Dimensions and location of coupling areas

*Cartes d'identification — Cartes à circuit(s) intégré(s) sans contact —
Partie 2: Dimensions et emplacement des surfaces de couplage*



Reference number
ISO/IEC 10536-2:1995(E)

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.

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.

International Standard ISO/IEC 10536-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Identification cards and related devices*.

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

- *Part 1: Physical characteristics*
- *Part 2: Dimensions and location of coupling areas*
- *Part 3: Electronic signals and reset procedures*

Annexes A to C of this part of ISO/IEC 10536 are for information only.

Identification cards — Contactless integrated circuit(s) cards —

Part 2:

Dimensions and location of coupling areas

1 Scope

This part of ISO/IEC 10536 specifies the dimensions, location, nature and assignment of each of the coupling areas to be provided for interfacing slot or surface card coupling devices (CCDs) with contactless integrated circuit(s) cards (CICCs) of the ID-1 card type.

This part of ISO/IEC 10536 does not specify:

The dimensions, location and assignment of coupling elements on the CICC;

The dimensions, location and assignment of coupling elements on the CCD;

The means of generating coupling fields.

This part of ISO/IEC 10536 is to be used in conjunction with ISO/IEC 10536-1.

Annex A shows the determination of the X and Y axes which are used in relating the field locations to the CICC.

Annex B shows examples of coupling elements in both a CICC and a CCD.

The dimensions used throughout this part of ISO/IEC 10536 are shown as nominal and expressed in millimetres; the figures shown are not drawn to scale.

NOTE 1 Other types of contactless integrated circuit(s) cards, formats or interfaces, which offer a variety of operating distances, may be developed in the future, which will call for additions to be made to this part of ISO/IEC 10536 or, will require other International Standards to be prepared.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 10536. At the time of publication, the editions indicated were valid. All standards are subject to revision and 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 standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 7810: 1995, *Identification cards - Physical characteristics*.

ISO/IEC 10536-1: 1992, *Identification cards - Contactless integrated circuit(s) cards - Part 1: Physical characteristics*.

3 Definitions, abbreviations and symbols

3.1 Definitions

For the purposes of this part of ISO/IEC 10536, the definitions given in ISO/IEC 10536-1 and the following definitions apply.

3.1.1 inductive coupling area

An area through which there is a prescribed concentration of magnetic flux that positively contributes to the driving of the coupling element.

3.1.2 capacitive coupling area

An area through which capacitive coupling between a CICC and a CCD may occur.

3.2 Abbreviations

3.2.1 CICC

Contactless Integrated Circuit(s) Card as defined in ISO/IEC 10536-1.

3.2.2 CCD

Card Coupling Device as defined in ISO/IEC 10536-1.

3.3 Symbols

3.3.1 ID-1 As defined in ISO/IEC 7810

3.3.2 X As defined in annex A

3.3.3 Y As defined in annex A