DRAFT
International Standard

ISO/IEC
DIS
7816-10

Identification cards — Integrated circuit(s) cards with contacts —

Part 10: Electronic signals and answer to reset for synchronous cards

Cartes d'identification — Cartes à circuit(s) intégré(s) à contacts —

Partie 10: Signaux électroniques et réponse à la mise à zéro des cartes synchrones

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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 document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

This document 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 7816-10:1999) which has been editorially revised.

The main changes compared to the previous edition are as follows:

— more items are listed to the table of abbreviations,

— normative references and the bibliography have been updated.

A list of all parts of ISO/IEC 7816 series can be found on the ISO website.

Annex A and Annex B of this document are for information only.

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Introduction

This document is one of a series of standards describing the parameters for integrated circuit(s) cards with contacts and the use of such cards for international interchange.

These cards are identification cards intended for information exchange negotiated between the outside and the integrated circuit in a card. As a result of an information exchange, the card delivers information (computation results, stored data) and/or modifies its content (data storage, event memorization).

During the preparation of this document, information was gathered concerning relevant patents upon which application of this standard might depend. The first edition of this document lists a patent from Bull S.A. Paris/FRANCE. That patent has expired and is no longer enforceable.

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Identification cards — Integrated circuit(s) cards with contacts —

Part 10:
Electronic signals and answer to reset for synchronous cards

1 Scope

This document specifies the power, signal structures, and the structure for the answer to reset between an integrated circuit(s) card with synchronous transmission and an interface device such as a terminal.

The specifications in ISO/IEC 7816-3 apply where appropriate, unless otherwise stated here.

It also covers signal rates, operating conditions, and communication with the integrated circuit(s) card.

This document specifies two types of synchronous cards: type 1 and type 2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1177, *Information processing — Character structure for start/stop and synchronous character oriented transmission*

ISO/IEC 7816-2, *Identification cards — Integrated circuit cards — Part 2: Cards with contacts — Dimensions and location of the contacts*

ISO/IEC 7816-3, *Identification cards — Integrated circuit cards — Part 3: Cards with contacts — Electrical interface and transmission protocols*

3 Term and definition

For the purposes of this document, the following term and definition applies.

3.1
interface device, noun
terminal, communication device or machine to which the integrated circuit(s) card is electrically connected during operation

[SOURCE: ISO/IEC 7816-3]

4 Symbols and abbreviated terms

For the purposes of this document, the following notation applies:

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