
**Identification cards — ICC-managed
devices —**

Part 2:
**Physical characteristics and test
methods for cards with devices**

*Cartes d'identification — Dispositifs contrôlés par carte à circuit
intégré (ICC) —*

*Partie 2: Caractéristiques physiques et méthodes d'essai des cartes
avec les dispositifs*



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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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IEC JTC 1, *Information technology, SC 17, Cards and personal identification*.

ISO/IEC 18328 consists of the following parts, under the general title *Identification cards — ICC-managed devices*:

- *Part 1: General framework*
- *Part 2: Physical characteristics and test methods for cards with devices*
- *Part 3: Organization, security and commands for interchange*

Identification cards — ICC-managed devices —

Part 2:

Physical characteristics and test methods for cards with devices

1 Scope

This part of ISO/IEC 18328 defines physical characteristics and test methods for cards with devices, including but not limited to power supplying devices, displays, sensors, microphones, loudspeakers, buttons or keypads. This part of ISO/IEC 18328 also covers aspects of coexistence of technologies of devices on the card and other machine readable card technologies.

Additional requirements related to biometric capture devices are defined in ISO/IEC 17839-2. Such requirements may be applied in addition to the ones defined in this part of ISO/IEC 18328.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7810, *Identification cards — Physical characteristics*

ISO/IEC 7816-1, *Identification cards — Integrated circuit cards — Part 1: Cards with contacts — Physical characteristics*

ISO/IEC 14443-1, *Identification cards — Contactless integrated circuit cards — Proximity cards — Part 1: Physical characteristics*

ISO/IEC 17839-2¹⁾, *Identification cards — Biometric system on card — Part 2: Physical characteristics*

ISO/IEC 18328-1¹⁾, *Identification cards — ICC-managed devices — Part 1: General framework*

1) To be published.