

Second edition  
2004-06-01

---

---

## Identification cards — Integrated circuit cards —

### Part 9: Commands for card management

*Cartes d'identification — Cartes à circuit intégré —  
Partie 9: Commandes pour la gestion des cartes*

---

---

Reference number  
ISO/IEC 7816-9:2004(E)



This is a preview of "ISO/IEC 7816-9:2004". [Click here to purchase the full version from the ANSI store.](#)

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO/IEC 7816-9:2004". [Click here to purchase the full version from the ANSI store.](#)

## Contents

	Page
Foreword .....	iv
Introduction .....	v
1 Scope.....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Abbreviations and notation.....	1
5 Life cycle .....	2
5.1 File life cycle .....	2
6 Commands for card management.....	3
6.1 CREATE FILE command .....	3
6.2 DELETE FILE command.....	3
6.3 DEACTIVATE FILE command.....	4
6.4 ACTIVATE FILE command.....	5
6.5 TERMINATE DF command.....	5
6.6 TERMINATE EF command.....	6
6.7 TERMINATE CARD USAGE command .....	7
Annex A (informative) Examples of security attributes used for download.....	8
Bibliography .....	12

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

ISO/IEC 7816-9 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

This second edition, together with the second editions of ISO/IEC 7816-4, ISO/IEC 7816-5, ISO/IEC 7816-6 and ISO/IEC 7816-8, after an in-depth reorganization of these five parts, cancels and replaces ISO/IEC 7816-4:1995, ISO/IEC 7816-5:1994, ISO/IEC 7816-6:1996, ISO/IEC 7816-8:1999 and ISO/IEC 7816-9:2000. It also incorporates the Amendments ISO/IEC 7816-4:1995/Amd.1:1997, ISO/IEC 7816-5:1994/Amd.1:1996 and ISO/IEC 7816-6:1996/Amd.1:2000 and the Technical Corrigendum ISO/IEC 7816-6:1996/Cor.1:1998.

ISO/IEC 7816 consists of the following parts, under the general title *Identification cards — Integrated circuit cards*:

- *Part 1: Cards with contacts — Physical characteristics*
- *Part 2: Cards with contacts — Dimensions and location of the contacts*
- *Part 3: Cards with contacts — Electrical interface and transmission protocols*
- *Part 4: Organization, security and commands for interchange*
- *Part 5: Registration of application providers*
- *Part 6: Interindustry data elements for interchange*
- *Part 7: Interindustry commands for Structured Card Query Language (SCQL)*
- *Part 8: Commands for security operations*
- *Part 9: Commands for card management*
- *Part 10: Cards with contacts — Electronic signals and answer to reset for synchronous cards*
- *Part 11: Personal verification through biometric methods*
- *Part 15: Cryptographic information application*

This is a preview of "ISO/IEC 7816-9:2004". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

ISO/IEC 7816 is a series of International Standards specifying integrated circuit cards and the use of such cards for interchange. These cards are identification cards intended for information exchange negotiated between the outside world and the integrated circuit in the card. As a result of an information exchange, the card delivers information (computation result, stored data), and/or modifies its content (data storage, event memorization).

- Five parts are specific to cards with galvanic contacts and three of them specify electrical interfaces.
  - ISO/IEC 7816-1 specifies physical characteristics for cards with contacts.
  - ISO/IEC 7816-2 specifies dimensions and location of the contacts.
  - ISO/IEC 7816-3 specifies electrical interface and transmission protocols for asynchronous cards.
  - ISO/IEC 7816-10 specifies electrical interface and answer to reset for synchronous cards.
  - ISO/IEC 7816-12 specifies electrical interface and operating procedures for USB cards.
- All the other parts are independent from the physical interface technology. They apply to cards accessed by contacts and/or by radio frequency.
  - ISO/IEC 7816-4 specifies organization, security and commands for interchange.
  - ISO/IEC 7816-5 specifies registration of application providers.
  - ISO/IEC 7816-6 specifies interindustry data elements for interchange.
  - ISO/IEC 7816-7 specifies commands for structured card query language.
  - ISO/IEC 7816-8 specifies commands for security operations.
  - ISO/IEC 7816-9 specifies commands for card management.
  - ISO/IEC 7816-11 specifies personal verification through biometric methods.
  - ISO/IEC 7816-15 specifies cryptographic information application.

ISO/IEC 10536 specifies access by close coupling. ISO/IEC 14443 and 15693 specify access by radio frequency. Such cards are also known as contactless cards.