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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 16649.4-2010

**Identification Cards -- Integrated circuit cards -- Part 4:
Organization, security and commands for interchange**

识别卡 集成电路卡 第4部分：用于交换的结构、安全和命令

(English Translation)

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Foreword

GB/T 16649 in the general title "Identification cards - Integrated circuit card" under the current 14 by the following components.

--- Part 1. Cards with contacts - Physical characteristics;

--- Part 2. Dimensions and location of the contacts Cards with contacts;

--- Part 3. Cards with contacts - Electronic signals and transmission protocol;

--- Part 4. for structural, security and command exchange;

--- Part 5. National numbering system and registration procedure for application identifiers;

--- Part 6. inter-industry data elements;

- Part 7. card for Inter Structured Query Language (SCQL) trade order;
- Part 8. Security related inter-industry commands;
- Part 9. Commands for card management;
- Part 10. Cards with contacts synchronization signals and answer to reset the card;
- Part 11. Personal verification through biometric methods (under development);
- Part 12. Cards with contacts - USB electrical interface and operating procedures;
- Part 13. In a multi-application environment, application management commands (under development) is used;
- Part 15. Application of password information.

This section GB/T Part of 416,649.

Results for Exchange. This section is identical with the international standard ISO/IEC 7816-4:2005 "Identification cards - Integrated circuit cards - Part 4 Configuration, security and order "(in English).

For ease of use, this section made the following editorial changes.

- a) Remove international standards preface;
- b) to the "File" to "in this section." this section of the Appendix A, Appendix B, Appendix C, Appendix D is informative appendix.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) centralized.

Introduction

GB/T 16649 series of international standards is to provide an IC card parameters and switching IC card use. IC card is in information exchange (on the exchange of information between the outside world and agreed by the integrated circuit card) identification card. As a result of the exchange of information, the card transfer letter Information (results, data storage), and/or change its content (data storage, the result memory).

--- There are four provisions of the charged portion of the contact card, which has three parts also provides electrical interface.

GB/T 16649.1 defines the physical characteristics of the card with contacts;

GB/T 16649.2 defines the size and location of the contacts;

GB/T 16649.3 provides asynchronous card electrical interface and transmission protocols;

GB/T 16649.10 provides synchronous card electrical interface and answer to reset.

--- All other parts are independent of the physical interface technology. They are used by contact and/or radio access card.

GB/T 16649.4 specified components, security and commands for interchange;

GB/T 16649.5 defines the application provider's registration;

GB/T 16649.6 provides for the exchange of inter-industry data elements;

GB/T 16649.7 provides commands for Structured Card Query Language;

GB/T 16649.8 provides commands for safe operation;

GB/T 16649.9 specifies commands for card management.

Identification cards - Integrated circuit card Part 4. The structure for the exchange of security and order

1 Scope

GB/T 16649 in the provisions of this section.

--- Exchange at the interface of command - response to the content;

--- Get card data elements and data object methods;

--- Used to describe the structure and content of the operational characteristics of the card of historical bytes;

--- When processing a command interface structure within the premises to see the card applications and data;

--- Way to access files and data card;

--- Security architecture defined in the card file and data access privileges;

--- Within the card identification and selection methods and mechanisms applied;

--- Secure messaging method of packet transmission;

--- The algorithm to access the card used. This section does not describe these algorithms.

This section does not cover the card and/or outside of the internal implementation.

This section is independent of the physical interface technology. It applies to access through contacts and close coupled RF, etc. cards.

2 Normative references

The following documents contain provisions which, through reference GB/T 16649 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 16649.3 Identification cards contact IC cards - Part 3. Electronic signals and transmission protocol (GB/T 16649.3-2006, ISO/IEC 7816-3:1997, IDT) GB/T 16649.6 Identification cards Contact IC card - Part 6. inter-industry data elements (GB/T 16649.6-2001, idt ISO/IEC 7816-6:1996) GB/T 16263.1-2006 Information technology - ASN.1 encoding rules Part 1. Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER) specification (ISO/IEC 8825-1:2002, IDT)

3 Terms and Definitions

The following terms and definitions apply to this section.

Access rules accessrule Comprising an operation mode for access and security conditions to be met before the operation of the data elements.

Reset the answer file Answer-to-Resetfile Optional card file represents the basic operating characteristics.