

ICS 35.240.15

CCS L 64



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

GB/T 29271.4-2019

**Identification cards -- Integrated circuit card programming
interfaces -- Part 4: Application programming interface (API)
administration**

Issued on: August 30, 2019

Implemented on: March 1, 2020

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Foreword

7.5 and Chapter 8);

Introduction

1 Scope

2 Normative references

2.2008 (ISO /IEC 7816-15:2004 Identification cards-Integrated circuits-Part 15.
Cryptographic

Foreword

GB/T 29271 "Identification Card IC Card Programming Interface" is divided into the following six parts:

--- Part 1. Architecture;

--- Part 2. Universal card interface;

--- Part 3. Application interface;

--- Part 4. Application Programming Interface (API) management;

--- Part 5. Test procedures;

--- Part 6. Registration management procedures for an interoperable authentication protocol.

This part is the fourth part of GB/T 29271.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the redrafting method to modify the use of ISO /IEC 24727-4:2008 "Identification card IC card programming interface Part 4

Points. Application Programming Interface (API) Management.

The technical differences between this part and ISO /IEC 24727-4:2008 and their reasons are as follows.

---About the normative reference documents, this part has made technical adjustments to adapt to China's technical conditions, adjustments

The situation is reflected in Chapter 2, "Regulatory Citations", and the specific adjustments are as follows.

* Added reference to GB/T 16649.15 (GB/T 16649.15-2010, ISO /IEC 7816-15.2004, IDT) (see 5.8,

7.5 and Chapter 8);

* Replace ISO /IEC 24727-1 with GB/T 29271.1 equivalent to the international standard (see 5.1, Chapter 7 and 8.1);

* Replace ISO /IEC 24727-2 with GB/T 29271.2 equivalent to international standards (see Chapter 5, Chapter 6, 8)

Chapters, Appendix A and Appendix F);

* Replace ISO /IEC 24727-3 with GB/T 29271.3 modified to international standards (see Chapter 5, Chapter 6, 7)

Chapter, Chapter 8, Appendix A, Appendix F, Appendix H, Appendix I and Appendix L);

* Move the reference ISO /IEC 19784-1.2006 to a normative reference and use equivalent international standards

Replaced by GB/T 30267.1-2013 (see 7.5);

* Added reference to ISO /IEC 24727-2.2008/Amd1.2014 (see 5.8);

* Added reference to ISO /IEC 7816-15.2004/Amd2.2008 (see 8.1, G.2.16 and G.4.1);

* Move ISO /IEC 24727-5 appearing in international standards to normative references (see 5.1 and Figure 1).

--- Increase abbreviations ACD, ACR, AR, DID, GCI, ICC, IFD, Kenc, Kmac, PCD and SAL.

This section also made the following editorial changes.

---Incorporate into the International Standard Technical Corrigendum ISO /IEC 24727-4COR1.2011 (see Appendix B, B.1, B.2, B.3, Appendix

Record C. C.1, C.2, Appendix D and Appendix E);

--- Incorporate the contents of the International Standard Amendment ISO /IEC 24727-4/Amd1.2014 (see 5.8, Chapter 8, Appendix F~Appendix L);

--- Figure unified from the beginning of Figure 1, no longer use the original icon serial number;

--- The table is uniformly numbered starting from Table 1, and the original table serial number is no longer used;

---Adjusted the order of abbreviations;

--- Add the title of the suspension segment number appearing in the international standard, and adjust the title number of the following article in order;

- The first sentence of Appendix D "ISO 24727-4-IFDAPI{iso(1)standard(0)iso24727(24727)part4(4)ifdapi (74)}", changed to "GB/T 29271.4-IFDAPI{1.2.156.5006.29271.4.74}";
- Appendix 8 of the 8th line "ISO 24727-COMMON {iso (1) standard (0) iso24727 (24727)}", changed to "GB/T 29271-COMMON {1.2.156.5006.29271}";
- "revMajISO 24727-4-IFDAPI" in the 11th and 12th lines of Appendix D, "revMinISO 24727-4-IFDAPI", "revMajGB T29271-4-IFDAPI" "revMinGB T29271-4-IFDAPI";
- The first sentence of Appendix E "ISO 24727-4-TCAPI{iso(1)standard(0)iso24727(24727)part4(4)tcapi (73)}", changed to "GB/T 29271.4-TCAPI{1.2.156.5006.29271.4.73}";
- Appendix 8 of the eighth line "ISO 24727-COMMON {iso (1) standard (0) iso24727 (24727)}", changed to "GB/T 29271-COMMON {1.2.156.5006.29271}";
- "G.2" in the first sentence of I.2.2.3.1 of Appendix I, changed to "I.2.2.3";
- Appendix I, I.2.2.3.3, the last 7th line "iso(1)standard(0)iso24727(24727)part3(3)annex-a(0)", Changed to "1.2.156.5006.29271.3.0";
- "CARD-APPLICATION myservice" in Table I.1 of Appendix I, changed to "CARD-APPLICATIONmyser-Vice";
- The fourth line of Appendix J "ISO /IEC 24727-4-PE{iso(1)standard(0)iso24727(24727)part4(4)clause (8.1.3)}", changed to "GB/T 29271.4-PE{1.2.156.5006.29271.4clause(8.4)}";
- Appendix J, line 9 "ISO 24727-COMMON {iso (1) standard (0) iso 24727 (24727)}", changed to "GB/T 29271.4-COMMON{1.2.156.5006.29271}";
- The title of K.1 of Appendix K was changed to "example" and deleted "extracted from EU standard CEN/T S15480-3";
- Removed references.

Introduction

GB/T 29271 defines a programming interface for the interaction between a set of integrated circuit cards (ICCs) and external applications, including the use of multiple departments.

Use the service. The organization and operation of ICC is in accordance with GB/T 16649.4-2010.

GB/T 29271 is related to ICC applications with interoperability requirements between different application areas.

GB/T 9387.1.1998 is used as a layered structure for client applications to card-side application connections. That is, the application interface assumes this exists

A protocol stack. through which commands can be used to exchange information and transactions between cards. The message structure for transmitting these commands is

Definition in GB/T 16649. The semantic reference of the application interface access command application protocol data unit (APDU, in GB/T 29271.2

There are descriptions) and the following criteria.

--- GB/T 16649.4-2010 Identification card IC card - Part 4. Structures, safety and commands for exchange

--- GB/T 16649.8-2002 Integrated circuit cards with identification contacts - Part 8. Inter-industry

--- GB/T 16649.9-2010 Identification card IC card - Part 9. Commands for card management

The goal of GB/T 29271 is to maximize the applicability and solution space of software tools for client applications that support cards.

Provide application interface support. This work includes. support cards when cards become more powerful, peers exist, and future applications

The evolution of the slice system minimizes the impact on existing solutions that meet the requirements of the GB/T 29271 standard.

In line with this part, the interoperability implementation of GB/T 29271.3 and GB/T 29271.2 can be realized. This section does not define the implementation details

Section; can be assumed to be in compliance with an acceptable security policy. The specific security policy is not within the scope of GB/T 29271.

Identification card IC card programming interface

Part 4. Application Programming Interface (API) Management