

ICS 35.240.15

CCS L 70



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

GB/T 41801.3-2022

**Information technology - Biometric System-on-Card - Part 3:
Logical information interchange mechanism**

Issued on: October 14, 2022

Implemented on: May 1, 2023

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

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 3 of GB/T 41801 "Biometric Identification System on Information Technology Cards". GB/T 41801 has been released the following parts.

- Part 1. Basic requirements;
- Part 2. Physical characteristics;
- Part 3. Logical information exchange mechanism.

This document is revised and adopted ISO /IEC 17839-3:2016 "Information Technology Identification Card Biometric Identification System Part 3"

Part. Logical Information Exchange Mechanism.

Compared with ISO /IEC 17839-3:2016, this document has made the following structural adjustments.

- Changed the position of Appendix B and Appendix C, and exchanged the position of Appendix D and Appendix E.

The technical differences between this document and ISO /IEC 17839-3:2016 and their reasons are as follows.

- Replace ISO /IEC 24787 with the normatively cited GB/T 30266 (see 6.1, 6.3, 6.4.2), and GB/T 16649.4 instead

ISO /IEC 7816-4 (see 6.2, 6.3, 6.5.1, Chapter 7, 9.3.1, 9.3.3), GB/T 16649.11 replaces ISO /IEC 7816-11 (see

6.3, 6.5.1, 9.3.1), GB/T 16649.3 replaces ISO /IEC 7816-3 (see 9.2) to adapt to the technical conditions of our country;

---The PBO directive in this document meets the requirements of GB/T 16649.11-2019, so ACBio in Chapter 8 of the original text of the international standard is deleted

Use case descriptions of related commands and use cases descriptions of ACBio related commands in Appendix B.

The following editorial changes have been made to this document.

--- For harmonization among standards, the name of the standard is changed to "Biometric Identification System on Information Technology Card Part 3.Logical Information"

Information Exchange Mechanism;

--- Added acronyms DF, FCI, NVM, WTX.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

A biometric identification system on card (BSoC) is a portable card-sized device that includes the following units. biometric acquisition, data processing

management, storage, comparison, and decision-making. The use of BSoCs conforming to such specifications is governed by information flow and security mechanisms, which are detailed in this document.

detailed regulations.

GB/T 41801.1 describes two types of BSoC. Type S1 is a card with good bending toughness, which fully complies with GB/T 14916

requirements, the S2 model differs somewhat in size and flexibility, the rest of the requirements (including the use of a non-contact ICC interface) remain the same.

The logical interface and security mechanisms depend on whether the BSoC is of type S1 or S2, and the specifications described in this document apply to both types of BSoC.

GB/T 41801 "Biometric Identification System on Information Technology Card" is proposed to consist of three parts.

--- Part 1.Basic requirements. The purpose is to specify the functional architecture of on-card biometric systems, two types of on-card

Definition of biometric identification system implementation and related content of sensors and power supply of biometric identification system on card.

--- Part 2. Physical properties. The purpose is to specify the physical characteristics of biometric identification systems on cards, including biometric identification cards size, location and size of biometric capture devices, mechanical persistence, etc.

--- Part 3. Logical information exchange mechanism. The purpose is to establish the logical data structure and registration process of the biometric identification system on the card. procedures, discovery services, operational procedures, and feedback mechanisms during biometric collection.

Information Technology Card Biometric Identification System

Part 3. Logical Information Exchange Mechanisms

1 Scope

This document establishes BSoC's logical data structures, registration procedures, and commands and data structures defined for BSoC using other standards,

Specifies the discovery service, operational procedures, and feedback mechanisms during biometric collection.

This document does not define the following.

--- Commands and data structures applicable to BSoC external devices;

--- Commands and data structures applicable to the BSoC internal logic interface.

This document applies to the design, production, testing and use of biometric identification cards.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 16649.3 Identification Cards Integrated Circuit Cards with Contacts Part 3. Electrical Signals and Transmission Protocols (GB/T 16649.3-

2006, ISO /IEC 7816-3.1997, IDT)

GB/T 16649.4 Identification Card Integrated Circuit Card Part 4. Structure, Security and Command for Switching (GB/T 16649.4-

2010, ISO /IEC 7816-4.2005, IDT)

GB/T 16649.11 Identification Card Integrated Circuit Card Part 11. Authentication by Biometric Identification Method

(GB/T 16649.11-2019, ISO /IEC 7816-11:2017, MOD)

GB/T 30266 Information technology identification card biometric comparison (GB/T 30266-2013, ISO /IEC 24787.

2010, IDT)

ISO /IEC 14443-4 Cards and identification security devices Contactless proximity objects Part 4. Transmission protocol (Cards and protocol)

ISO /IEC 18328-3 Identification card management devices Part 3. Architecture, security and commands for switching (Identification

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Card biometric system-on-card; BSoC

A card-sized device including biometric acquisition, data processing, storage, comparison and decision-making functions constitutes a complete biometric

Sign verification system.

[Source. GB/T 41801.1-2022, 3.1]