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

GB/T 14916-2022

Replacing GB/T 14916-2006

Identification cards - Physical characteristics

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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 for Standardization Documents" drafting.

This document replaces GB/T 14916-2006 "Physical Characteristics of Identification Cards". Compared with GB/T 14916-2006, except for structural adjustments and

Apart from editorial changes, the main technical changes are as follows.

- a) Added normative reference documents such as GB/T 15120.1, GB/T 15120.9, ISO /IEC 14443-1 (see Chapter 2);
- b) Added "3FF" "4FF" "Integrated Circuit" "Integrated Circuit Card" "Contacts" "Patch Layer" "Personalized Card" "As Expected" terms and definitions (see 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18 and 3.19);
- c) Added the definition of dimensions and tolerance indicators for 3FF and 4FF cards (see 5.2);
- d) Deleted flammability (see 8.2 of the.2006 edition);
- e) Added dynamic bending stress (see 8.14);
- f) Changed the opacity indicator, redefined the wavelength range and the value of the opacity (see 8.9, 8.10 of the.2006 edition);
- g) The evaluation criteria for integrated circuit cards are added, including requirements for X-rays, static electricity, mechanical strength, dynamic twisting stress, etc. (see Clause 9 chapter);
- h) The card interface device has been added (see Chapter 10).

This document is modified to adopt ISO /IEC 7810.2019 "Physical Characteristics of Identification Cards".

Compared with ISO /IEC 7810.2019, this document has made the following structural adjustments.

--- Add 3.12 (3FF) and 3.13 (4FF), delete 3.12 in ISO /IEC 7810.2019;

---3.14 corresponds to 3.13 in ISO /IEC 7810.2019;

---3.16 corresponds to 3.14 in ISO /IEC 7810.2019;

---3.17 corresponds to 3.16 in ISO /IEC 7810.2019;

---3.18 corresponds to 3.17 in ISO /IEC 7810.2019;

---3.19 corresponds to 3.18 in ISO /IEC 7810.2019.

The technical differences between this document and ISO /IEC 7810.2019 and their reasons are as follows.

a) Change "four types of cards" in the second sentence of the scope of Chapter 1 of ISO /IEC 7810.2019 to "six types of cards", because this document adds

3FF, 4FF;

b) Regarding terms and definitions (see Chapter 3), this document adds the definitions of "3FF" and "4FF", and deletes the definition of "light-blocking reference object" to adapt to my country's technical conditions;

c) The relevant indicators and sources of 3FF and 4FF cards (see 5.2) are added in "Card Size and Tolerance" to adapt to the technical conditions of our country;

d) Redefine the wavelength range of "opacity" and the value of opacity (see 8.9) to adapt to the technical conditions of our country;

e) This document replaces ISO /IEC 7811-1 (see 8.10, 8.12, 9.9) with normative references GB/T 15120.1, and uses normative

The quoted GB/T 15120.9 replaces ISO /IEC 7811-9 (see 8.12, 9.9);

f) Replaced ISO /IEC 7816-2 (see 9.6) with the normatively quoted GB/T 16649.2 to adapt to the technical conditions of our country;

g) Replaced IEC 61000-4-2 (see 10.2) with the normatively quoted GB/T 17626.2 to adapt to the technical conditions of our country.

The following editorial changes have been made to this document.

a) Modified the expression format of the preamble;

b) "ID-000" in the terminology in Chapter 3 is changed to "2FF" in line with China's national conditions, and all places involving "ID-000" in the document are revised

Change to "2FF";

c) In the notes to Chapter 8 "Toxic", delete the statement about referring to international standards. Since the card material is toxic and involves many areas, it is not

Can be generalized, so 8.2 delete the description of "note".

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document describes the characteristics of identification cards and their use in information exchange.

This document specifies the physical characteristics of identification cards, including card materials, construction, characteristics and dimensions of six cards.

ISO /IEC 10373-1 and ISO /IEC 24789-2 specify the tests used to check that a card complies with the parameters specified in this document

procedures.

This document specifies the requirements for cards and card interface equipment used for identification. Considering both human and machine factors and expounding the most small request.

The purpose of this document is to provide criteria for judging card performance. This document does not take into account the usage of the card prior to testing.

This document applies to the design, manufacture, application and testing of identification cards.

Note 1. This document is measured using the International System of Units.

Note 2. Flexible cards are not within the scope of this document. See GB/T 28177 series standards for flexible card standards.

2 Normative references

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

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

GB/T 15120.1 Identification card recording technology Part 1. Embossing (GB/T 15120.1-2013, ISO IEC 7811-1.

2002, IDT)

GB/T 15120.9 Identification card recording technology Part 9.Tactile identifier marking
(GB/T 15120.9-2019,

ISO /IEC 7811-9.2015, MOD)

GB/T 16649.2 Identification card Integrated circuit cards with contacts Part 2.Dimensions
and positions of contacts (GB/T 16649.2-

2006, ISO /IEC 7816-2.1999, IDT)

GB/T 17626.2 Electromagnetic Compatibility Test and Measurement Technology
Electrostatic Discharge Immunity Test (GB/T 17626.2-2018,

IEC 61000-4-2.2008, IDT)

ISO /IEC 7816-1 Identification card integrated circuit card Part 1.Card physical
characteristics with contacts (Identification

Note. GB/T 16649.1-2006 Identification Card Integrated Circuit Card with Contact Part
1.Physical Characteristics (ISO /IEC 7816-1.1998, MOD)

Note. GB/T 17554.1-2006 Identification card test method Part 1.General characteristic test
(ISO /IEC 10373-1.1998, MOD)

ISO /IEC 14443-1 Contactless proximity objects for cards and identification security devices
- Part 1.Physical characteristics (ISO /

ISO /IEC 15693-1 Cards and identification security equipment Contactless proximity objects
Part 1.Physical characteristics (Cardsand