

ICS 35.240.15

CCS L 64



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

GB/T 22351.3-2008

**Identification cards -- Contactless integrated circuit(s) IC cards
-- Vicinity cards -- Part 3: Anti-collision and transmission
protocol**

识别卡 无触点的集成电路卡 邻近式卡 第3部分：防冲突和传输协议

(English Translation)

Issued on: August 6, 2008

Implemented on: January 1, 2009

Issued by: Standardization Administration of China

Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms, definitions, abbreviations and symbols
2 Defines four data elements
5 VICC memory organization structure
6 Security status
7 Overall protocol description
8 9 Anti-collision
9 Time Specification
10 Commands
Appendix A (informative) Standards Compliance
Appendix B (Informative Appendix) VCD conflict prevention PN
Annex C (informative) Cyclic Redundancy Check (CRC)
References

Foreword

GB/T 22351 in the "Identification cards - Contactless integrated circuit cards Proximity card" always be entitled divided into the following four parts.

- Part 1. Physical characteristics;
- Part 2. Air Interface and initialization;
- Part 3. Anti-collision and transmission protocol;
- Part 4. Extended command set and security features.

This section GB/T 22351 Part 3.

This part identical with ISO/IEC 15693-3:2001 "Identification cards - Contactless integrated circuit cards Proximity cards - Part 3. Anti Conflict and Transfer Agreement "(in English).

For ease of use, the ISO/IEC 15693-3:2001 This section also made the following editorial changes.

- a) instead of as a decimal by decimal comma ",", ".,";

b) Remove the preface to international standards by modifying the ISO/IEC 15693-3:2001 Introduction.

This part of the Annex A, Annex B and Annex C is informative appendices.

This section proposed by the People's Republic of China Ministry of Information Industry.

This part of the National Information Technology Standardization Technical Committee centralized.

Introduction

GB/T 22351 series of standards is one of the identification cards used are described GB/T 14916-defined parameters and identification card of international exchange.

This section GB/T 22351 describes Proximity card anti-collision and transmission protocol.

This section GB/T 22351 standard does not exclude other technical cards, such as A standard referenced in the data appendix.

Non-contact IC card standard covers ISO/IEC 14443 (proximity cards) and GB/T 22351 (proximity cards) included in each Types of cards. They are associated with work in the case of close coupling devices and more distant.

This part of the release mechanism to draw attention to the fact that this part may involve the use of related patents.

This part of the issuing authority for the relevant patent scope, validity and verification of data is not made any comments.

The patent holder has to ensure that international standards of the issuing authority, he is willing to reasonable and non-discriminatory terms and conditions with any applicant, Authorization for Use on license negotiations. In this regard, the patent holder has filed a statement published in the international standards bodies. Relevant information Material can be obtained from the following address.

JP2561051-CircuitStructureofInductive OMRONCorporation ContactlessRespondingUnit IntellectualPropertyGroup JP2981517, JP2129209-ReadtoVerify 20lgadara, Shimokainji WrittenData Nagaokakyo-City Kyoto617-8510 Japan US5793324

TexasInstrumentsDeutschlandGMBH TIRIS EP831618 HaggartyStrasse1 EP837412 8050Freising EP845751 Germany Please note that in addition to the already identified patents, some of the contents of this section may involve patents. This part of the body should not release Bear the responsibility to identify these patents.

GB/T 22351.3-2008/ISO/IEC 15693-3:2001 Identification cards - Contactless integrated circuit cards Proximity cards Part 3. Anti-collision and transmission protocol

1 Scope

GB/T 22351 in the provisions of this section.

- Agreements and orders;
- Other initialization parameters required for communication between the VICC and VCD;
- Byte format in the initial stage of communication between VICC and VCD used, frame and timing;
- Detection method and with several card (anti-collision) is one method of communication;
- Easily select several cards and acceleration on the basis of guidelines for the application of an alternative method.

2 Normative references

The following documents contain provisions which, through reference GB/T 22351 in this section constitute provisions of this section. For dated references, all subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encouraged to reach an agreement in accordance with this section Parties to study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 16649.5 Identification cards IC card contacts - Part 5. Application identifier numbering system registration procedure (GB/T 16649.5-2002, neq ISO/IEC 7816-5:1994) GB/T 16649.6-2001 Identification cards Contact IC card - Part 6. inter-industry data elements (idt ISO/IEC 7816-6:1996) GB/T 22351.1-2008 Identification cards - Contactless integrated circuit cards Proximity cards - Part 1. Physical characteristics (ISO/IEC 15693-1:2000, IDT) ISO/IEC 7816-6:1996/Amd. 1 Identification cards Contact IC card - Part 6. inter-industry data elements 1 no amendments ISO/IEC 10373-7 Identification cards - Test methods - Part 7. Proximity card ISO/IEC 13239 IT systems between radio communication and information exchange between high-level data link control (HDLC) procedure ISO/IEC 15693-2:2000 Identification cards - Contactless integrated circuit cards Proximity cards - Part 2. Air Interface and Initialization

3.1 Terms and Definitions

The following terms and definitions apply to this part of the GB/T 22351 of.

3.1.1

It used to prepare and dialogue process in the energy field in the VCD and one or more VICC between algorithms.

3.1.2

Specified by the 8-bit data b1 to b8, arranged from the most significant bit (the MSB, b8) to the least significant bit (LSB, b1).

3.2 Symbol

The following symbols apply to this part of the GB/T 22351 of.

GB/T 22351.3-2008/ISO/IEC 15693-3:2001