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

中华人民共和国金融行业标准

JR/T 0001-2009

Replace JR / T 0001-2001

**Specification on point of sale (POS)
terminal for bank card
银行卡销售点（POS）终端规范**

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Foreword

This Specification replaces JR/T 0001-2001 *Specification of Point of Sale (POS) Terminal with Magnetic Stripe Card in Bank*.

This standard, in comparison with JR/T 0001 -2001, has the major changes as follows:

—The title of the standard is revised from *Specification of Point of Sale (POS) Terminal with Magnetic Stripe Card in Bank* to *Specification on Point of Sale (POS) Terminal for Bank Card*;

—Contents of ICC will be added in respect of terminal display, information transmission from terminal to backstage and voucher printing, etc., and the contents of judging bank card medium are added in the transaction process;

—Improve safety requirements of POS terminal and add descriptions of MAC encryption algorithm and length requirements for keys based on various banks' experiences;

—Unify transaction processing and transaction interface elements;

—Unify transaction response codes and text messages of screen prompts for cashier;

—Unify voucher elements and give transaction voucher sample;

—Add descriptions of balance check, offline transaction and additional pre-authorized transaction, but as an optional transaction as accepting institution.

In this Standard, Annex A, Annex B and Annex C are informative Annexes.

The standard is proposed by the People's Bank of China.

This Standard is centralized by the National Financial Standardization Technical Committee.

This standard is drafted by: Technology Department of People's Bank of China and China Financial Computerization Corporation.

The units involved in the drafting of this standard are: Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, Bank of Communications, China Merchants Bank, China UnionPay Co., Ltd., and Bank Card Test Center, Zhongchao Credit Card Industry Development Co., Ltd.

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This standard was firstly issued in March, 2001 and this is the first revision.

Specification on point of sale (POS) terminal for bank card

1 Scope

The requirements for hardware, software and safety, application functions, transaction interface, transaction processing process, message format and voucher elements of POS terminal of specially engaged merchant's bank magnetic strip card are provided in the Standard, not involving the provisions of bank magnetic strip card and ICC transaction host.

The Standards is applicable to POS terminal equipment accepting various kinds of bank card within the territory of the People's Republic of China.

2 Normative references

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB 2312 Code of Chinese graphic character set for information interchange; Primary set
GB 4943 Safety of information technology equipment (GB 4943-2001, eqv IEC 60950:1999)

GB 9254 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement (GB 9254-1998, CISPR 22: 1997, IDT)

GB 13000.1 Information technology-Universal multiple- Octet coded character set(UCS)- Part 1: Architecture and basic multilingual plane (GB 13000.1-1993, ISO/IEC 10646.1-1993, IDT)

GB/T 14916 Identification cards - Physical characteristics (GB/T 14916-2006, ISO/IEC 7810:2003, IDT)

GB/T 15120 (All parts) Identification cards-Recording technique (GB/T 15120 (All parts)-1994, ISO 7811: 1985, IDT)

GB/T 15694.1 Identification cards — Identification of issuers — Part 1: Numbering system (GB/T 15694.1-1995, idt ISO/IEC 7812-1:1993)

GB/T 17552 Identification cards--Financial transaction cards

GB/T 17618 Information technology equipment--Immunity characteristics--Limits and methods of measurement (GB/T 17618-1998, idt CISPR 24:1997)

GB 18030 Information technology -- Chinese coded character set

GB/T 19584 Specification on magnetic stripe data content and application for bank card

GB/T 21078.1 Banking—Personal Identification Number management and security—Part 1:Basic principles and requirements for online PIN handling in ATM and POS systems (GB/T 21078.1-2007, ISO 9564-1:2002, MOD)

JR/T 0008 Bank identification number and card number for bank card

JR/T 0025 (All parts) China financial integrated circuit card specifications

ISO 9564-3 Banking -- Personal Identification Number (PIN) management and security -- Part 1: Basic principles and requirements for online PIN handling in ATM and POS systems

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1

Bank card

The payment tools issued by financing institutions such as commercial banks, etc. to the society, with whole or part functions of consumer credit, transfer and settlement of accounts as well as cash deposit and withdrawal, etc.

3.2

Magnetic stripe card

Magnetic recording medium card has three tracks to record magnetically encoded information.

Notes: Physical features shall conform to GB/T 14916 standard, records of magnetic strip shall conform to standards including GB/T 15120, GB/T 15694.1, GB/T 17552 and GB/T 19584.

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