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

GB/T 30001.5-2013

**Information technology - Mobile payment based on radio
frequency - Part 5: Test methods for the radio frequency
interface**

信息技术 基于射频的移动支付 第5部分：射频接口测试方法

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Foreword

GB/T 30001 "Information technology based on radio frequency mobile payment" is divided into five parts.

--- Part 1. RF interface;

--- Part 2. technical requirements for the card;

--- Part 3. Technical Requirements;

--- Part 4. application management and security;

--- Part 5. RF interface test methods. This section GB/T 30001 Part 5. This section drafted in accordance with GB/T 1.1-2009 given rules. Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. This part of the National Information Technology Standardization Technical Committee (SAC/TC28) and focal points. This section drafted by: China Electronics Standardization Institute, Beijing Tongfang Microelectronics Co., Ltd., Shanghai Fudan Microelectronics Group shares Parts Limited, Xi'an Electric Jietong wireless network communications Co., Ltd., China UnionPay Co., Ltd., Beijing Intelligent Technology have Watchdata Ltd., Wuhan Tianyu Information Industry Co., Ltd., China Mobile Communications Corporation, China Telecom Corporation, the joint network through China Xin Holdings Limited. The main drafters of this section. Liu Wenli, Zhao Bo, Feng Jing, Qian Jin, Geng force, Gao Lin, Zhang Guoqiang, Li Wei, Tan Ying, Li Wei, Dong Fenghua. IT RF-based mobile payment Part 5. RF interface test methods

1 Scope

China's national test methods for the radio frequency interface of mobile payment. It is Part 5 of GB/T 30001 and specifies the methods by which a device or a card is tested for conformance to the radio frequency interface of Part 1. This is the longest part of the series and the one that determines whether the rest of it means anything. An interface standard states what a compliant device must do; a test method standard states how to find out whether it does. Without the second, conformance is a declaration, and a market of many manufacturers producing devices that must interoperate with terminals built years apart cannot rest on declarations. The testing is unusually demanding because what is being measured is a magnetic field and its modulation in a small volume of air. The result depends on the position and orientation of the device relative to the reference antenna, on the presence of anything metallic nearby, and on the calibration of the test apparatus - so the standard has to fix the reference equipment, the test bench geometry, the positions at which measurements are made, and the calibration, before it can specify a single measurement. It then covers both directions and both sides: the field the device produces or is exposed to, the load modulation it generates, its sensitivity to the reader's modulation,

its timing, and its behaviour during initialisation, anticollision and the transmission protocol. The result is a document that a test laboratory implements as a bench and a procedure, and that a manufacturer designs against - which is why an interface part and a test part are published together and why the test part is larger. Issued on 10 October 2013 and in force since 1 May 2014.

This section GB/T 30001 requirements in line with GB/T RF-based mobile payment cards and devices in RF 30001.1-2013 Interface test methods. NOTE. Several test methods described in this section may be implemented individually. Card and the device does not require a predetermined sequence through all the tests. Unless otherwise specified in this section apply only to the test GB/T 30001.1-2013 payment cards and mobile devices.

2 Normative references

The following documents for the application of this document is essential. Where dated references, only the dated edition applies to this document. Who does not note date reference documents, the latest edition (including any amendments) applies to this document.

GB/T 14916 Identification cards - Physical characteristics (GB/T 14916-2006, ISO / IEC 7810.2003, IDT)

GB/T 30001.1-2013 Information technology - to pay part of the first RF-based mobile. RF interface

3.1 Terms and Definitions

GB/T 30001.1-2013 and as defined in the following terms and definitions apply to this document.

3.1.1 Reference standard basestandard Test method to verify compliance with the standard object.

3.1.2 Work operateasintended Subjected to some potentially destructive influence, any integrated circuit card still remain in line with

GB/T 30001.1-2013 Reference standard operating and response 1). NOTE. If there are other technologies with a single card, the card based on these technologies according to their standards should be working properly. 1) This section does not define RFMPC full functional testing. These test methods only require a minimum verification function. Under appropriate circumstances, you can enter a Step supplemental application-specific functionality criteria.

3.1.3 Test Method testmethod In order to verify the identification card standard method of testing carried out its features.

3.2 Abbreviations and symbols The following abbreviations and symbols apply to this document. CRC_A cyclic redundancy check error detection code A (CyclicRedundancyCheckerrordetectioncode) DC DC (DirectCurrent)

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