

Australian Standard™

**Identification cards—Contactless
integrated circuit(s)—
Proximity cards**

Part 3: Initialization and anticollision

This Australian Standard was prepared by Committee IT-012, Information Systems, Security and Identification Technology. It was approved on behalf of the Council of Standards Australia on 4 March 2003 and published on 31 March 2003.

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-012, Information Systems, Security and Identification Technology. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

It is identical with, and has been reproduced from ISO/IEC 14443-3:2001, *Identification cards—Contactless integrated circuit(s) cards—Proximity cards, Part 3: Initialization and anticollision*.

The objective of this Standard is to describe polling for proximity cards entering the field of a proximity coupling device, the byte format and framing, the initial Request and Answer to Request command content, methods to detect and communicate with one proximity card among several proximity cards (anticollision) and other parameters required to initialize communication between a proximity card and a proximity coupling device.

This Standard is Part 3 of AS 14443, *Identification cards—Contactless integrated circuit(s) cards—Proximity cards*, which is published in parts as follows:

- Part 1: Physical characteristics
- Part 2: Radio frequency power and signal interface
- Part 3: Initialization and anticollision (this Standard)
- Part 4: Transmission protocol

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, while an informative annex is only for information and guidance.

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<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO/IEC		AS	
14443	Identification cards—Contactless integrated circuit(s) cards—Proximity cards	14443	Identification cards—Contactless integrated circuit(s) cards—Proximity cards
14443-2	Part 2: Radio frequency power and signal interface	14443.2	Part 2: Radio frequency power and signal interface
14443-4	Part 4: Transmission protocol	14443.4	Part 4: Transmission protocol

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AUSTRALIAN STANDARD

Identification cards — Contactless integrated circuit(s) cards — Proximity cards —**Part 3:
Initialization and anticollision****1 Scope**

This part of ISO/IEC 14443 describes:

- polling for proximity cards (PICCs) entering the field of a proximity coupling device (PCD);
- the byte format, the frames and timing used during the initial phase of communication between PCDs and PICCs;
- the initial Request and Answer to Request command content;
- methods to detect and communicate with one PICC among several PICCs (anticollision);
- other parameters required to initialize communications between a PICC and PCD;
- optional means to ease and speed up the selection of one PICC among several PICCs based on application criteria.

Protocol and commands used by higher layers and by applications and which are used after the initial phase are described in ISO/IEC 14443-4.

This part of ISO/IEC 14443 is applicable to PICCs of Type A and of Type B (as described in ISO/IEC 14443-2).

NOTE Part of the timing of data communication is defined in ISO/IEC 14443-2.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 14443. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 14443 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 7816-3:1997, *Information technology — Identification cards — Integrated circuit(s) cards with contacts — Part 3: Electronic signals and transmission protocols.*

ISO/IEC 7816-5, *Identification cards — Integrated circuit(s) cards with contacts — Part 5: Numbering system and registration procedure for application identifiers.*

ISO/IEC 7816-6:1996/Amd.1:2000, *Identification cards — Integrated circuit(s) cards with contacts — Part 6: Interindustry data elements — Amendment 1: IC manufacturer registration.*