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Identification cards — Physical characteristics

AMENDMENT 1: Additional requirements for integrated circuit cards with contacts

Cartes d'identification — Caractéristiques physiques

AMENDEMENT 1

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and security devices for personal identification*.

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Identification cards — Physical characteristics

AMENDMENT 1: Additional requirements for integrated circuit cards with contacts

Normative references

Remove footnote 1) from reference ISO/IEC 10373-1.

Add the following new Clause 4 and renumber subsequent clauses:

4 Physical characteristics

4.1 General

An ID-1 card shall fulfil the physical requirements given in 4.2 to 4.5 after the insertion of an IC with contacts into the card body.

4.2 Surface profile of contacts

No point of the entire IC contact surface shall be higher than 0,10 mm above or lower than 0,10 mm below the adjacent surface of the card.

A card issuer may require more stringent tolerances in accordance with its application-specific requirements.

NOTE Additional surface flatness requirements of the IC contact surface, near the IC contact surface, and on the side opposite the IC contact surface can be needed to avoid surface personalization voids caused by surface irregularities.

4.3 Mechanical strength (of a card and contacts)

The card should resist damage to its surface and to any components contained in it and should remain intact during normal use, storage and handling.

Each contact surface and contact area (entire galvanic surface) shall not be damaged by applying pressure to each contact surface and contact area equivalent to a steel ball of diameter 1 mm with a force of 1,5 N. After applying such pressure, the integrated circuit shall continue to provide an Answer to Reset response which conforms to the base standard.

4.4 Electrical resistance (of contacts)

The contact resistance of a card connector assembly should be sufficiently low to enable a good contact between card and reader contacts.

4.5 Electromagnetic interference (between magnetic stripe and integrated circuit)

If the card carries a magnetic stripe, the integrated circuit shall continue to provide an Answer to Reset response which conforms to the base standard after reading, writing or erasing the magnetic stripe. Conversely, the writing or reading of the IC shall not cause a malfunction of the magnetic stripe or its associated reading, writing or handling mechanisms.