

IDENTIFITSEERIMISKAARDID

Katsemeetodid

**Osa 3: Kontaktidega kiipkaardid ja seotud
liideseseadmed**

Identification cards

Test methods

**Part 3: Integrated circuit cards with contacts and related
interface devices
(ISO/IEC 10373-3:2010)**

EVS

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-ISO/IEC 10373-3:2011 „Identifitseerimiskaardid. Katsemeetodid. Osa 3: Kontaktidega kiipkaardid ja seotud liideseseadmed“ sisaldab rahvusvahelise standardi ISO/IEC 10373-3:2010 „Identification cards — Test methods — Part 3: Integrated circuit cards with contacts and related interface devices“ identset ingliskeelset teksti.

Standard EVS-ISO/IEC 10373-3:2011 on jõustunud sellekohase teate avaldamisega EVS Teataja 2011. aasta oktoobrikuu numbris.

Standard on kättesaadav Eesti Standardikeskusest.

This Estonian Standard EVS-ISO/IEC 10373-3:2011 consists of the identical English text of the International Standard ISO/IEC 10373-3:2010 „Identification cards — Test methods — Part 3: Integrated circuit cards with contacts and related interface devices“.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

The standard is available from the Estonian Centre for Standardisation.

Käsitlusala

See ISO/IEC 10373 osa defineerib kontaktidega kiipkaartide ja seotud liideseseadmete karakteristikute katsemeetodeid standardis ISO/IEC 7816 antud määratluse kohaselt. Iga katsemeetodi puhul on antud viide ühele või mitmele põhivandardile, milleks võib olla ISO/IEC 7810 või üks või mitu täiendavat standardit, mis defineerivad identifitseerimiskaardi rakendustes kasutatavaid infosalvestustehnoloogiaid.

MÄRKUS Vastuvõetavuse kriteeriumid ei moodusta osa sellest standardi ISO/IEC 10373 osast, aga on leitavad ülalmainitud rahvusvahelistest standarditest.

See ISO/IEC 10373 osa määratleb katsemeetodeid, mis on eriomased kontakt-kiibitehnoloogiale. ISO/IEC 10373-1 määratleb katsemeetodeid, mis on tavalised ühe või enama kaarditehnoloogia jaoks, ja sama standardi teised osad määratlevad teisi tehnoloogiakatseid.

Selles ISO/IEC 10373 osas määratletud katsemeetodid on mõeldud eraldi ja sõltumatult teostamiseks. Üks konkreetne kaart ei pea järjest kõiki katseid läbima. Selles ISO/IEC 10373 osas määratletud katsemeetodid põhinevad standardil ISO/IEC 7816-3.

Selles ISO/IEC 10373 osas defineeritud katsemeetodite abil kindlaks määratud kaartide ja IFD-de vastavus ei välista rikkeid väljal. Töökindluse katsetamine on väljaspool selle ISO/IEC 10373 osa käsitlusala.

Scope

This part of ISO/IEC 10373 defines test methods for characteristics of integrated circuit cards with contacts and related interface devices according to the definition given in ISO/IEC 7816. Each test method is cross-referenced to one or more base standards, which can be ISO/IEC 7810 or one or more of the supplementary International Standards that define the information storage technologies employed in identification card applications.

NOTE Criteria for acceptability do not form part of this part of ISO/IEC 10373, but will be found in the International Standards mentioned above.

This part of ISO/IEC 10373 defines test methods which are specific to integrated circuit technology with contacts. ISO/IEC 10373-1 defines test methods which are common to one or more card technologies and other parts define other technology specific tests.

Test methods defined in this part of ISO/IEC 10373 are intended to be performed separately and independently. A given card is not required to pass through all the tests sequentially. The test methods defined in this part of ISO/IEC 10373 are based on ISO/IEC 7816-3.

Conformance of cards and IFDs determined using the test methods defined in this part of ISO/IEC 10373 does not preclude failures in the field. Reliability testing is outside the scope of this part of ISO/IEC 10373.

<p>See ISO/IEC 10373 osa ei defineeri ühtegi katset, et saavutada kontaktidega kiipkaartide täielik funktsioneerimine. Katsemeetodid nõuavad ainult seda, et miinimumfunktsionaalsus oleks õigeks tunnistatud. Miinimumfunktsionaalsus on määratletud alljärgnevalt.</p> <ul style="list-style-type: none"> — Mis tahes kaardis olev skeem jätkab Algseadistuse tagasisidele Vastuse kuvamist, mis on vastavuses põhistandardiga. — Mis tahes kontaktid, mis on ühenduses ükskõik missuguse kaardis oleva integreeritud skeemiga, jätkavad põhistandardiga vastavuses oleva elektritakistuse näitamist. 	<p>This part of ISO/IEC 10373 does not define any test to establish the complete functioning of integrated circuit cards. The test methods require only that the minimum functionality be verified. Minimum functionality is defined as follows.</p> <ul style="list-style-type: none"> — Any integrated circuit present in the card continues to show an Answer to Reset response which conforms to the base standard. — Any contacts associated with any integrated circuit present in the card continue to show electrical resistance which conforms to the base standard.
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Identification cards — Test methods —

Part 3: Integrated circuit cards with contacts and related interface devices

1 Scope

This part of ISO/IEC 10373 defines test methods for characteristics of integrated circuit cards with contacts and related interface devices according to the definition given in ISO/IEC 7816. Each test method is cross-referenced to one or more base standards, which can be ISO/IEC 7810 or one or more of the supplementary International Standards that define the information storage technologies employed in identification card applications.

NOTE Criteria for acceptability do not form part of this part of ISO/IEC 10373 but will be found in the International Standards mentioned above.

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Test methods defined in this part of ISO/IEC 10373 are intended to be performed separately and independently. A given card is not required to pass through all the tests sequentially. The test methods defined in this part of ISO/IEC 10373 are based on ISO/IEC 7816-3.

Conformance of cards and IFDs determined using the test methods defined in this part of ISO/IEC 10373 does not preclude failures in the field. Reliability testing is outside the scope of this part of ISO/IEC 10373.

This part of ISO/IEC 10373 does not define any test to establish the complete functioning of integrated circuit cards. The test methods require only that the minimum functionality be verified. Minimum functionality is defined as follows.

- Any integrated circuit present in the card continues to show an Answer to Reset response which conforms to the base standard.
- Any contacts associated with any integrated circuit present in the card continue to show electrical resistance which conforms to the base standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7810:2003, *Identification cards — Physical characteristics*

ISO/IEC 7816-3:2006, *Identification cards — Integrated circuit cards — Part 3: Cards with contacts — Electrical interface and transmission protocols*

ISO/IEC 7816-4:2005, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*

3 Terms and definitions

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

- 3.1**
card
integrated circuit card with contacts as defined in ISO/IEC 7816
- 3.2**
DUT
device under test
card or IFD that is subject to testing
- 3.3**
etu-factor
parameters negotiable by protocol and parameters selection (PPS), described in ISO/IEC 7816-3:2006, 6.3.1
- 3.4**
IFD
interface device related to integrated circuit cards with contacts as defined in ISO/IEC 7816-3
- 3.5**
normal use
use as an identification card, as defined in ISO/IEC 7810:2003, 4.1, involving equipment processes appropriate to the card technology and storage as a personal document between equipment processes
- 3.6**
test method
method for testing characteristics of identification cards and related interface devices for the purpose of confirming their compliance with International Standards
- 3.7**
test scenario
defined typical protocol and application specific communication to be used with the test methods defined in this part of ISO/IEC 10373
- 3.8**
typical protocol and application specific communication
communication between a DUT and the corresponding test-apparatus based on protocol and application implemented in the DUT and representing its normal use

4 General items applicable to the test methods

4.1 Test environment

Unless otherwise specified, testing of physical, electrical and logical characteristics shall take place in an environment of temperature $23\text{ °C} \pm 3\text{ °C}$, of relative humidity 40 % to 60 %.

4.2 Pre-conditioning

Where pre-conditioning is required by the test method, the identification cards to be tested shall be conditioned to the test environment for a period of 24 h before testing unless otherwise specified.