SLOVENSKI STANDARD

SIST EN 62132-4:2006

oct 2006

Integrirana vezja – Merjenje elektromagnetne odpornosti pri frekvencah od 150 kHz do 1 GHz – 4. del: Metoda z neposredno priključitvijo RF energije (IEC 62132-4:2006)

Integrated circuits – Measurement of electromagnetic immunity 150 kHz to 1 GHz – Part 4: Direct RF power injection method (IEC 62132-4:2006)

ICS 31.200; 33.100.20

Referenčna številka
SIST EN 62132-4:2006(en)

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62132-4

May 2006

ICS 31.200

English version

Integrated circuits - Measurement of electromagnetic immunity 150 kHz to 1 GHz Part 4: Direct RF power injection method
(IEC 62132-4:2006)

Circuits intégrés -
Mesure de l'immunité électromagnétique
150 kHz à 1 GHz
Partie 4: Méthode d'injection directe
de puissance RF
(CEI 62132-4:2006)

Integrierte Schaltungen -
Messung der elektromagnetischen
Störfestigkeit im Frequenzbereich
von 150 kHz bis 1 GHz
Teil 4: Verfahren direkter Einspeisung
der HF-Leistung
(IEC 62132-4:2006)

This European Standard was approved by CENELEC on 2006-02-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 62132-4:2006 E

Foreword

The text of document 47A/733/FDIS, future edition 1 of IEC 62132-4, prepared by SC 47A, Integrated circuits, of IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62132-4 on 2006-02-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2006-12-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-02-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62132-4:2006 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 61000-4-6	- [1)]	Electromagnetic compatibility (EMC) Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	-	-
IEC 61967-4	- [1)]	Integrated circuits - Measurement of electromagnetic emissions, 150 kHz to 1 GHz Part 4: Measurement of conducted emissions - 1 ohm/150 ohm direct coupling method	EN 61967-4	2002 [2)]
IEC 62132-1	2006	Integrated circuits - Measurement of electromagnetic immunity, 150 kHz to 1 GHz Part 1: General conditions and definitions	EN 62132-1	2006
CISPR 16-1-2	2003	Specification for radio disturbance and immunity measuring apparatus and methods Part 1-2: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Conducted disturbances	EN 55016-1-2	2004

[1)] Undated reference.

[2)] Valid edition at date of issue.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

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62132-4

Première édition
First edition
2006-02

Circuits intégrés – Mesure de l'immunité électromagnétique 150 kHz à 1 GHz –

Partie 4: Méthode d'injection directe de puissance RF

Integrated circuits – Measurement of electromagnetic immunity 150 kHz to 1 GHz –

Part 4: Direct RF power injection method

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INTEGRATED CIRCUITS – MEASUREMENT OF ELECTROMAGNETIC IMMUNITY 150 kHz TO 1 GHz –

Part 4: Direct RF power injection method

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62132-4 has been prepared by subcommittee 47A: Integrated circuits, of IEC technical committee 47: Semiconductor devices.

The text of this standard is based on the following documents:

FDIS	Report on voting
47A/733/FDIS	47A/741/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 62132 consists of the following parts, under the general title *Integrated circuits – Measurement of electromagnetic immunity, 150 kHz to 1 GHz:*

Part 1: General conditions and definitions

Part 2: (G-) TEM cell method [1]

Part 3: Bulk current injection (BCI) method [1]

Part 4: Direct RF power injection method

Part 5: Workbench Faraday cage method

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

[1] Under consideration.

INTEGRATED CIRCUITS – MEASUREMENT OF ELECTROMAGNETIC IMMUNITY 150 kHz TO 1 GHz –

Part 4: Direct RF power injection method

1 Scope

This part of IEC 62132 describes a method to measure the immunity of integrated circuits (IC) in the presence of conducted RF disturbances, e.g. resulting from radiated RF disturbances. This method guarantees a high degree of repeatability and correlation of immunity measurements.

This standard establishes a common base for the evaluation of semiconductor devices used in equipment functioning in an environment subject to unwanted radio frequency electromagnetic waves.

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.

IEC 61967-4, *Integrated circuits – Measurement of electromagnetic emissions, 150 kHz to 1 GHz – Part 4: Measurement of conducted emissions – 1 Ω/ 150 Ω direct coupling method*

IEC 62132-1:2006, *Integrated circuits – Measurement of electromagnetic immunity, 150 kHz to 1 GHz – Part 1: General conditions and definitions*

IEC 61000-4-6, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

CISPR 16-1-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus. Ancillary equipment. Conducted disturbances*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62132-1 apply.