

Integrated circuits - Measurement of electromagnetic emissions - Part 8: Measurement of radiated emissions - IC stripline method

EESTI STANDARDI EESSÕNA

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English Version

Integrated circuits - Measurement of electromagnetic emissions -
Part 8: Measurement of radiated emissions - IC stripline method
(IEC 61967-8:2023)

Circuits intégrés - Mesure des émissions
électromagnétiques - Partie 8: Mesure des émissions
rayonnées - Méthode de la ligne TEM à plaques (stripline)
pour circuit intégré
(IEC 61967-8:2023)

Integrierte Schaltungen - Messung von
elektromagnetischen Aussendungen - Teil 8: Messung der
abgestrahlten Aussendungen - IC-Streifenleiterverfahren
(IEC 61967-8:2023)

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European foreword

The text of document 47A/1152/FDIS, future edition 2 of IEC 61967-8, prepared by SC 47A "Integrated circuits" of IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61967-8:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-03-07
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INTERNATIONAL STANDARD

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**Integrated circuits – Measurement of electromagnetic emissions –
Part 8: Measurement of radiated emissions – IC stripline method**

**Circuits intégrés – Mesure des émissions électromagnétiques –
Partie 8: Mesure des émissions rayonnées – Méthode de la ligne TEM à plaques
(stripline) pour circuit intégré**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Integrated circuits – Measurement of electromagnetic emissions –
Part 8: Measurement of radiated emissions – IC stripline method**

**Circuits intégrés – Mesure des émissions électromagnétiques –
Partie 8: Mesure des émissions rayonnées – Méthode de la ligne TEM à plaques
(stripline) pour circuit intégré**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INTEGRATED CIRCUITS –
MEASUREMENT OF ELECTROMAGNETIC EMISSIONS –****Part 8: Measurement of radiated emissions –
IC stripline method**

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IEC 61967-8 has been prepared by subcommittee 47A: Integrated circuits, of IEC technical committee 47: Semiconductor devices. It is an International Standard.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) frequency range of 150 kHz to 3 GHz was deleted from the scope;
- b) extension of upper usable frequency to 6 GHz or higher as long as the defined requirements are fulfilled.

The text of this International Standard is based on the following documents:

Draft	Report on voting
47A/1152/FDIS	47A/1153/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 61967 series, under the general title *Integrated circuits – Measurement of electromagnetic emissions* can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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INTEGRATED CIRCUITS – MEASUREMENT OF ELECTROMAGNETIC EMISSIONS –

Part 8: Measurement of radiated emissions – IC stripline method

1 Scope

This part of IEC 61967 defines a method for measuring the electromagnetic radiated emission from an integrated circuit (IC) using an IC stripline. The IC being evaluated is mounted on an EMC test board (PCB) between the active conductor and the ground plane of the IC stripline arrangement.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-131, *International Electrotechnical Vocabulary (IEV) – Part 131: Circuit theory*

IEC 60050-161, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electro-magnetic compatibility*

IEC 61967-1, *Integrated circuits – Measurement of electromagnetic emissions – Part 1: General conditions and definitions*

IEC 61000-4-20, *Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61967-1, IEC 60050-131 and IEC 60050-161, and the following apply.

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- IEC Electropedia: available at <https://www.electropedia.org/>
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3.1

transverse electromagnetic mode

TEM mode

waveguide mode in which the components of the electric and magnetic fields in the propagation direction are much less than the primary field components across any transverse cross-section

3.2

TEM waveguide

open or closed transmission line system, in which a wave is propagating in the transverse electromagnetic mode to produce a specified field for testing purposes