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INTERNATIONAL STANDARD



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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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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.

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INTEGRATED CIRCUITS – MEASUREMENT OF ELECTROMAGNETIC EMISSIONS –

Part 8: Measurement of radiated emissions – IC stripline method

1 Scope

~~The measurement procedure of~~ This part of IEC 61967 defines a method for measuring the electromagnetic radiated emission from an integrated circuit (IC) using an IC stripline ~~in the frequency range of 150 kHz up to 3 GHz~~. 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: Electromagnetic compatibility*

IEC 61967-1, *Integrated circuits – Measurement of electromagnetic emissions, ~~150 kHz to 1 GHz~~* – Part 1: General conditions and definitions

~~IEC 61967-2: Integrated circuits – Measurement of electromagnetic emissions, 150 kHz to 1 GHz – Part 2: Measurement of radiated emissions – TEM cell and wideband TEM cell method~~

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

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

FOREWORD

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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

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IEC 60050-131, *International Electrotechnical Vocabulary (IEV) – Part 131: Circuit theory*

IEC 60050-161, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic 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*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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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Cette deuxième édition annule et remplace la première édition parue en 2011. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) la plage de fréquences de 150 kHz à 3 GHz a été retirée du domaine d'application;
- b) la fréquence utile supérieure est étendue à 6 GHz ou plus dans la mesure où les exigences définies sont remplies.

Le texte de la présente Norme internationale est issu des documents suivants:

Projet	Rapport de vote
47A/1152/FDIS	47A/1153/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de la présente Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications.

Une liste de toutes les parties de la série IEC 61967, publiées sous le titre général *Circuits intégrés – Mesure des émissions électromagnétiques*, se trouve sur le site web de l'IEC.

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CIRCUITS INTÉGRÉS – MESURE DES ÉMISSIONS ÉLECTROMAGNÉTIQUES

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

1 Domaine d'application

La présente partie de l'IEC 61967 définit une méthode de mesure des émissions électromagnétiques rayonnées d'un circuit intégré (CI) à l'aide d'une ligne TEM à plaques (stripline) pour circuit intégré. Le CI à évaluer est monté sur une carte d'essai CEM (carte à circuit imprimé) entre le conducteur actif et le plan de masse du dispositif de la stripline pour CI.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60050-131, *Vocabulaire Électrotechnique International – Partie 131: Théorie des circuits*

IEC 60050-161, *Vocabulaire Électrotechnique International – Chapitre 161: Compatibilité électromagnétique*

IEC 61967-1, *Circuits intégrés – Mesure des émissions électromagnétiques – Partie 1: Conditions générales et définitions*

IEC 61000-4-20, *Compatibilité électromagnétique (CEM) – Partie 4-20: Techniques d'essai et de mesure – Essais d'émission et d'immunité dans les guides d'onde TEM*