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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 44937.8-2025

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

集成电路 电磁发射测量 第8部分：辐射发射测量 IC带状线法
(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 8 of GB/T 44937 "Electromagnetic Emission Measurement of Integrated Circuits". GB/T 44937 has the following publications.

part.

---Part 1: General Conditions and Definitions;

---Part 2: Radiation Emission Measurement TEM Cell and Broadband TEM Cell Method;

---Part 3: Surface Scanning Method for Radiation Emission Measurement;

---Part 4: Conducted emission measurement using the 1ohm/150ohm direct coupling method;

---Part 5: Conducted Emission Measurement Stand Faraday Cage Method;

---Part 6: Conducted Emission Measurement Using Magnetic Field Probes;

---Part 8: Radiated Emission Measurement IC Stripline Method this document is equivalent to IEC 61967-8:2023 "Measurement of electromagnetic emission from integrated circuits - Part 8: Measurement of radiated emission from ICs".

"Bar line method".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This document is under the jurisdiction of the National Integrated Circuit Standardization Technical Committee (SAC/TC599).

Introduction

To standardize electromagnetic emission measurement for integrated circuits, and to provide different electromagnetic emission measurement methods for integrated circuit manufacturers and testing institutions.

GB/T 44937, "Measurement of Electromagnetic Emissions of Integrated Circuits," specifies the general conditions, definitions, and different measurement methods for electromagnetic emission measurements of integrated circuits.

The experimental procedures and requirements for quantitative methods are proposed to consist of nine parts.

---Part 1: General Conditions and Definitions. The purpose is to define the general conditions and definitions for electromagnetic emission measurements of integrated circuits.

---Part 1-1. General Conditions and Definitions of Near-Field Scanning Data Exchange Format. The purpose is to specify the near-field scanning data exchange format.
Format.

---Part 2: Radiation Emission Measurement using TEM Cells and Broadband TEM Cells. The aim is to define the TEM cell and broadband TEM cell methods.

Test procedures and requirements for the TEM chamber method.

---Part 3: Surface Scanning Method for Radiation Emission Measurement. The purpose is to specify the test procedures and requirements for the surface scanning method.

---Part 4: Conducted Emission Measurement - 1ohm/150ohm Direct Coupling Method. The purpose is to define the 1ohm/150ohm direct coupling method.

Test procedures and test requirements.

---Part 4-1. Application Guidelines for Conducted Emission Measurements using the 1ohm/150ohm Direct Coupling Method. The aim is to provide guidance on the application of the 1ohm/150ohm direct coupling method.

Application guidelines for the coupling method.

---Part 5: Conducted Emission Measurement Stand Faraday Cage Method. The purpose is to define the test procedures for the stand Faraday cage method.

and testing requirements.

---Part 6: Conducted Emission Measurement Using Magnetic Field Probes. The purpose is

to specify the test procedures and requirements for the magnetic field probe method.

---Part 8: Radiated Emission Measurement - IC Stripline Method. The purpose is to specify the test procedures and requirements for the IC stripline method.

Electromagnetic emission measurement of integrated circuits Part 8: Radiated Emission Measurement IC Stripline Method

1 Scope

This document describes a method for measuring electromagnetic radiation emissions from integrated circuits (ICs) using a stripline. The IC being evaluated is mounted on the IC stripline junction.

On the EMC test board (PCB) between the effective conductor and the ground plane of the structure.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

Vocabulary(IEV)-Part 131: Circuittheory] Note. GB/T 2900.74-2008 Electrical Engineering Terminology - Circuit Theory (IEC 60050-131:2002, MOD) Note. GB/T 4365-2024 Electromagnetic compatibility (IEC 60050-161:2021, MOD) IEC 61967-1 Measurement of electromagnetic emissions from integrated circuits-Part 1: General conditions and definitions Note. GB/T 44937.1-2025 Electromagnetic emission measurement of integrated circuits - Part 1: General conditions and definitions (IEC 61967-1:2018, IDT) IEC 61000-4-20 Electromagnetic compatibility - Part 4-20. Test and measurement techniques - Emission and immunity in transverse electromagnetic (TEM) waveguides Note. GB/T 17626.20-2014 Electromagnetic compatibility testing and measurement techniques - Emission and immunity tests in transverse electromagnetic wave (TEM) waveguides (IEC 61000-4-20:2010, IDT)

3 Terms and Definitions

The terms and definitions defined in IEC 61967-1, IEC 60050-131 and IEC 60050-161, as well as the following terms and definitions, apply to this document.

A waveguide mode in which the electric and magnetic field components in the transmission direction are much smaller than the components in the principal direction on the cross