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

GB/T 42968.8-2023

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

集成电路 电磁抗扰度测量 第8部分：辐射抗扰度测量 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 42968 "Measurement of Electromagnetic Immunity of Integrated Circuits". GB/T 42968 has released the following part.

---Part 1: General conditions and definitions;

---Part 8: Radiated immunity measurement IC stripline method.

This document is equivalent to IEC 62132-8:2012 "Measurement of electromagnetic immunity of integrated circuits - Part 8: Measurement of radiated immunity of ICs" "Strip Line Method".

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

Introduction

To standardize the electromagnetic immunity measurement of integrated circuits and provide different electromagnetic immunity measurements for integrated circuit manufacturers and testing institutions Method, GB/T 42968 "Measurement of Electromagnetic Immunity of Integrated Circuits" specifies the general conditions, definitions and the test procedures and test requirements for different measurement methods are planned to be composed of 7 parts.

---Part 1: General conditions and definitions. The purpose is to specify general conditions and definitions for electromagnetic immunity measurements of integrated circuits.

---Part 2: Radiated immunity measurement TEM chamber and broadband TEM chamber methods. The purpose is to specify TEM cells and broadband Test procedures and test requirements for TEM chamber method.

---Part 3: Large current injection (BCI) method. The purpose is to specify the test procedures and test requirements for the large current injection method.

---Part 4: Radio frequency power direct injection method. The purpose is to specify the test procedures and test requirements for the direct injection method of radio frequency power.

---Part 5: Bench Faraday cage method. The purpose is to specify the test procedures and test requirements for the bench Faraday cage method.

---Part 8: Radiated immunity measurement IC stripline method. The purpose is to specify the test procedures and test requirements for the IC stripline method.

---Part 9: Radiated immunity measurement surface scanning method. The purpose is to

specify the test procedures and test requirements for the surface scanning method.

Integrated circuit electromagnetic immunity measurement Part 8: Radiated Immunity Measurement IC Stripline Method

1 Scope

This document describes the immunity of integrated circuits (ICs) to radio frequency (RF) radiated electromagnetic disturbances in the frequency range 150kHz~3GHz Measurement methods.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 42968.1-2023 Measurement of electromagnetic immunity of integrated circuits Part 1: General conditions and definitions (IEC 62132-1.

2015,IDT)

Note: There is no technical difference between the quoted content of GB/T 42968.1-2023 and the quoted content of IEC 62132-1:2006.

(IEV)-Chapter131.Circuittheory] Note. GB/T 2900.74-2008 Electrical terminology circuit theory (IEC 60050-131:2002, MOD).

Note: GB/T 4365-2003 Electrical terminology electromagnetic compatibility (IEC 60050-161:1990 A1.1997 A2.1998, IDT).

IEC 61000-4-20 Electromagnetic compatibility test and measurement techniques Emission and immunity tests in transverse electromagnetic (TEM) waveguides [E-Note. GB/T 17626.20-2014 Electromagnetic compatibility test and measurement technology Emission and immunity tests in transverse electromagnetic wave (TEM) waveguides (IEC 61000-4-20:2010, IDT).

3 Terms and definitions

The following terms and definitions defined in GB/T 42968.1-2023, IEC 60050-131 and IEC 60050-161 apply to this document.

A waveguide mode in which the electric and magnetic field components in the direction of transmission are much smaller than the main field components in the cross-section.

TEM waveguide TEM waveguide an open or closed transmission line system in which electromagnetic waves are transmitted as transverse electromagnetic waves (TEM) to produce characteristics that meet test needs.

Set the scene.