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GB/T 4937.28-2026

Semiconductor devices - Mechanical and climate test methods - Part 28: Electrostatic discharge (ESD) sensitivity testing - Charged device model (CDM) - device level

半导体器件 机械和气候试验方法 第28部分：静电放电（ESD）敏感度测试 带电器件模型（CDM） 器件级

(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 28 of GB/T 4937, "Mechanical and Climatic Testing Methods for Semiconductor Devices". GB/T 4937 has been published.

The following section.

---Part 1: General Provisions;

---Part 2: Low Pressure;

---Part 3: External Visual Inspection;

---Part 4: Highly Accelerated Steady-State Damp Heat Test (HAST);

---Part 8: Sealing;

---Part 9: Marking Durability;

---Part 10: Mechanical Impact Devices and Components;

---Part 11: Rapid Temperature Change in Two-Liquid Tank Method;

---Part 12: Sweep Frequency Vibration;

---Part 13: Salt Spray;

---Part 14: Lead Strength (Lead Wire Secureness);

---Part 15: Solder Heat Resistance of Through-Hole Mounting Devices;

---Part 16: Particle Collision Noise Detection (PIND);

---Part 17: Neutron Irradiation;

---Part 18: Ionizing Radiation (Total Dose);

---Part 19: Chip Shear Strength;

---Part 20: Combined effects of moisture and soldering heat on molded surface mount devices;

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---Part 20-1.Handling, Packaging, Marking, and Shipping of Surface Mount Devices Sensitive to the Combined Effects of Moisture and Solder Heat;

---Part 21: Solderability;

---Part 22: Bond Strength;

---Part 23: High-Temperature Operating Life;

---Part 24: Accelerated Moisture Resistance Test with Unbiased Strong Accelerated Stress;

---Part 25: Temperature Cycling;

---Part 26: Electrostatic Discharge (ESD) Sensitivity Testing Human Model (HBM);

---Part 27: Electrostatic Discharge (ESD) Sensitivity Testing Machine Model (MM);

---Part 28: Electrostatic Discharge (ESD) Sensitivity Testing of Charged Device Models (CDMs) at the Device Level;

---Part 29: Latch Test;

---Part 30: Pretreatment of Unsealed Surface Mount Devices Prior to Reliability Testing;

---Part 31: Flammability of Molded Devices (Internal Causes);

---Part 32: Flammability of Molded Devices (Externally Caused);

---Part 33: Accelerated Moisture-Resistant, Non-Biased High-Pressure Cooking;

---Part 34: Power Cycling;

---Part 35: Acoustic Microscopy Inspection of Plastic-Encapsulated Electronic Components;

---Part 36: Steady-state acceleration;

---Part 37: Plate Drop Test Method Using Accelerometers;

---Part 38: Soft Fault Testing Methods for Semiconductor Devices with Storage;

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---Part 40: Plate Drop Test Method Using Strain Gauges;

---Part 41: Test methods for the reliability of non-volatile memory;

---Part 42: Temperature and Humidity Storage;

---Part 44: Test methods for single-event effects (SEE) by neutron irradiation on semiconductor devices.

This document is equivalent to IEC 60749-28:2022 "Semiconductor devices - Mechanical and climatic testing methods - Part 28: Electrostatic discharge".

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