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

GB/T 29847-2025

Replacing GB/T 29847-2013

Test methods for copper foil used for printed boards

印制板用铜箔测试方法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 29847-2013 "Test methods for copper foil for printed boards". Compared with GB/T 29847-2013, except for the structural adjustment In addition to the integration and editorial changes, the main technical changes are as follows.

a) Added the terms "pinhole" and "penetration point" (see 3.5, 3.6); deleted the term "profile factor" (see 3.1 of the 2013 edition);

The terms "treatment" and "arithmetic mean deviation of profile" are changed to "surface treatment" and "surface roughness" (see 3.1, 3.2, 2013 edition) 3.2, 3.3); the definition of the term "micro roughness" has been changed (see 3.3, 3.4 of the 2013 edition);

b) The sampling method has been changed (see Chapter 5, Chapter 5 of the 2013 edition);

c) The permissible error of magnifying glass or microscope instruments has been changed (see Chapter 6, 6.1.2 of the 2013 edition);

d) Added discoloration points in surface inspection (see 6.1.3.4);

e) The pinhole inspection (penetrant method) has been modified (see Chapter 6, 6.2 of the 2013 edition);

f) Deleted "the total thickness and outline factor of treated or untreated copper foil" in the appearance and size test methods (see 6.3 of the 2013 edition);

- g) Increased roughness (laser method) (see 6.7);
- h) Deleted bending fatigue and ductility (see 7.2 of the 2013 edition);
- i) increased bending resistance (see 7.2);
- j) increased flexural resistance (see 7.3);
- k) Deleted "Peel strength measurement after thermal stress" (see 7.3.3.3 of the 2013 edition);
- l) Deleted "Peel strength measurement after exposure to process solution" (see 7.3.3.4 of the 2013 edition);
- m) Added "peel strength after solvent resistance" (see 7.4.3.3);
- n) Added "solder heat resistance" (see 7.5);
- o) Added "high temperature oxidation resistance" (see 8.7);
- p) Deleted "Purity of copper foil or copper plating" (see 9.1 of the 2013 edition);
- q) Added "Chemical composition of copper foil" (see 8.8).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed and coordinated by the National Technical Committee for Semiconductor Equipment and Materials Standardization (SAC/TC203).

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This document was first published in 2013 and this is the first revision.

1 Scope

This document describes the test methods for the appearance, dimensions, physical properties, processing properties, and other properties of copper foil for printed boards.

This document applies to the testing of copper foil for rigid or flexible printed boards.

2 Normative references

GB/T 2036

GB/T 3131

GB/T 4723

GB/T 5121.1

GB/T 5121.2

GB/T 5121.3

GB/T 5121.4

GB/T 5121.5

GB/T 5121.6

GB/T 5121.7

GB/T 5121.8

GB/T 5121.9

GB/T 5121.10

GB/T 5121.11

GB/T 5121.15

GB/T 5121.16

GB/T 5121.27

GB/T 13557-2017

3 Terms and definitions

The terms and definitions defined in GB/T 2036 and the following apply to this document.

3.1 Surface treatment surface treatment

An electrical, mechanical or chemical process applied to the surface of copper foil.

Note. Used to improve surface oxidation resistance, corrosion resistance or adhesion to laminate substrates and other properties.

3.2 Surface roughness

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