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

GB/T 13555-2017

**Copper-clad polyimide film laminates for flexible printed
circuits**

挠性印制电路用聚酰亚胺薄膜覆铜板

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 13555-1992 "printed circuit with flexible copper clad polyimide film." This standard compared with GB/T 13555-1992, the main changes.

--- The standard name changed to "flexible printed circuit with polyimide film CCL";

--- Added Chapter 3 terms and definitions;

4.1 product models increased from 2 models to 5 models;

5.2 increased the thickness of the adhesive layer and tolerance requirements, delete GB/T 13555-1992 in

4.3 copper foil and polyimide The recommended combination of films;

6.1.1 respectively, the copper foil surface, the basement membrane surface and the secondary surface requirements;

6.1.2 increased product size and tolerance requirements;

6.2 Peel strength, dimensional stability and bending fatigue requirements; Delete GB/T 13555-1992 Table

8 After immersion solvent and simulated plating conditions Peel strength retention rate requirements; increased thermal stress (floating welding), folding resistance, resistance Pharmaceutical and water absorption requirements; increase the performance requirements of adhesive-free products;

--- Chapter 8 added a roll of product joints and core tube requirements;

--- Added Chapter 9 ordering documents requirements. Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents. This standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This standard by the National Standardization Technical Committee printed circuit board (SAC/TC47) centralized. This standard is drafted in. Jiujiang Folaikesi Co., Ltd. Participated in the

drafting of this standard. China Electronics Standardization Institute, Michaelicon Tektronix (Changzhou) Products Services Ltd., Technology Co., Ltd., Guangdong Sheng Yi Technology Co., Ltd. The main drafters of this standard. Wang Hua Zhi, Liu Ying, Cao Yi, Gao Yanru, Zhang Panxin, Fan Heping, Yang Bei, Xiong Yun, Yang Yan, Yang Hong. This standard replaces the standards previously issued as.

--- GB/T 13555-1992. Polyimide film copper clad laminate for flexible printed circuit

1 Scope

GB/T 13555-2017 is the Chinese national standard on copper-clad polyimide film laminates for flexible printed circuits, in the field of electronics. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 December 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2019. Classification: ICS 31.180, CCS L30. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the flexible printed circuit with polyimide film CCL terminology, classification, requirements, inspection rules, packaging, marking, storage And transportation and so on. This standard applies to flexible printed circuit with polyimide film CCL (hereinafter referred to as flexible polyimide CCL).

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document. Printed circuit terminology GB/T 2036

GB/T 5230 electrolytic copper foil

GB/T 13542.6 Films for electrical insulation - Part 6. Polyimide film for electrical insulation Test method for flexible copper clad laminates for printed circuit boards GB/T

3 Terms and definitions

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

3.1 Secondary surface adhesivesurface Etching or other methods to remove copper foil adhesive layer after the basement membrane surface.

3.2 Vertical machinedirection; MD In the continuous manufacture of flexible polyimide CCL lengthwise direction, consistent with the material when the continuous production direction.

3.3 Transversely transversed; TD The width direction of the flexible polyimide copper clad laminate is perpendicular to the MD direction. 4 product classification, identification, structure and grading

4.1 Classification Flexible polyimide CCL according to the application of the production process and the type of adhesive can be divided into five different models. Its model and special According to the provisions of Table 1.