



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

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**General guidelines for the construction analysis of components  
for space applications**

宇航用元器件结构分析通用指南

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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 of Standardization Documents" drafted:

Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents:

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General guide for structural analysis of aerospace components

## 1 Scope

This document provides the general process and method of structural analysis of aerospace components, and provides samples, analytical test process, structural unit analysis

Information to be considered, such as solution and structural element identification method, structure discrimination basis, etc:

This document applies to semiconductor integrated circuits, semiconductor discrete devices, optoelectronic devices, resistors, capacitors, electrical connectors, relays, switches

Structural analysis of components such as switches, fuses, quartz crystals, sound meter devices, filters, radio frequency components, etc.; refer to other categories of components implement:

## 2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations

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

GB/T 19000 Quality Management System Fundamentals and Terminology

## 3 Terms, Definitions and Abbreviations

### 3.1 Terms and Definitions

GB/T 19000 as well as the following terms and definitions apply to this document:

Structural construction

Each part of the component and its collocation, including physical form, material, process and interface, etc:

Using inspection, test analysis and other methods, as well as review, recalculation, simulation and other methods, the design, process and material elements of components

are obtained:

Analysis and evaluation of its functional performance satisfaction, inherent reliability status, process quality capability, application environment adaptability, potential hazards and other factors:

A unit in which the physical structure or function of a component can be distinguished:

Structural unit characteristics that affect the inherent reliability and service reliability of components:

The following abbreviations apply to this document:

CA: Construction Analysis

DPA: DestructivePhysicalAnalysis FA: Failure Analysis