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

GB/T 46560-2025

**Establishment and implementation requirements for the
process control system (PCS) of space components**

宇航用元器件过程控制体系（PCS）的建立和实施要求

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1 Scope

GB/T 46560-2025 is the Chinese national standard covering the process control system that governs how a space-grade electronic component is made. In space electronics the process is the product, because the part cannot be inspected once it has launched. Issued on 2 December 2025, it has been in force since 1 April 2026.

This document specifies the general and specific requirements for the establishment and implementation of process control systems for aerospace components. This document applies to the procurement, production, and other product realization processes of domestic component manufacturers, as well as screening, quality consistency inspection, and usage. This document outlines the process control and related activities involved in product assurance and delivery, including certification, supervision, and acceptance. The

requirements specified in this document apply to aerospace components. This is a supplement to the quality management system requirements applicable to parts manufacturing plants.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 19000 Quality Management Systems. Fundamentals and Vocabulary

GB/T 19001 Quality Management System Requirements

GB/T 27921 Risk Management and Risk Assessment Techniques

GB/T 29076 Requirements for Zeroing Out Quality Problems in Aerospace Products

GB/T 32304 Electrostatic Protection Requirements for Aerospace Electronic Products

GB/T 41041-2021 Control Requirements for Restricted and Prohibited Components in Aerospace

3 Terms and Definitions

The terms and definitions defined in GB/T 19000 and the following terms and definitions apply to this document.

3.1 Using process control as the primary means, this achieves the interrelation or interaction between production process capabilities and the capabilities of aerospace components. Group elements.

Note. This includes a document control system centered on PID (Process Control Points), a personnel control system centered on Quality Engineers (QE), and a risk management system centered on inconsistency control. Control system.

3.2 A document used to define the product baseline for technical status control and to set specific requirements for the control of the manufacturing process of components.

3.3 User Organizations that receive component products or services.

3.4 Quality Engineer (QE) Personnel selected by the manufacturer and authorized by the user to represent the user in supervising the quality management of the component production process.

5.5 Improvement

11 Appendix A (Informative) PCS Construction Guidelines 12 A.1 Establishment of organizational structure and working mechanisms 12 A.2 PCS Work Planning 13 A.3 PCS Construction 13 A.4 PCS Trial Run

14 Appendix B (Informative) PCS Review Procedure 15 B.1 PCS Review Preparation 15 B.2 PCS review implementation

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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. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Aerospace Technology and Its Applications (SAC/TC425). This document was drafted by: China Academy of Space Technology, China Aerospace Science and Technology Corporation, Xi'an Institute of Space Radio Technology, Rizhao Municipal Market Supervision Administration, Xi'an Microelectronics Technology Research Institute, the 58th Research Institute of China Electronics Technology Group Corporation, and Guizhou Aerospace Electronics AVIC Optoelectronic Technology Co., Ltd., China Zhenhua (Group) Xinyun Electronic Components Co., Ltd., Chengdu Hong Ke Electronics Technology Co., Ltd., and Beijing 718 Yousheng Electronics Co., Ltd. The main drafters of this document are: Li Qiang, Zhang Yanwei, Wang Yue, Pu Ruimin, Yu Bin, Chen Lu, Mao Xiping, Shao Jingjing, Li Hai'an, Zhang Hongqi, and Jia Xiao. Wang Zheng, Ning Yongcheng, Wang Xu, Kuang Qianwei, Chang Mingchao, Zhang Min, Su Zhe, Kou Chunmei, Huang Hao, Zhang Lei, Zhang Bo, Xu Qin, Yang Bo. Process Control System (PCS) for Aerospace Components Establishment and implementation requirements