



# AEROSPACE STANDARD

AS5553™

REV. B

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Superseding AS5553A

(R) Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition

## RATIONALE

This standard was originally created in response to a significant and increasing volume of EEE parts entering the aerospace supply chain, posing significant performance, reliability and safety risks. This document has subsequently been expanded to address counterfeit risk mitigation on a global scale across multi-sector electronic supply chain industries and to provide uniform requirements, practices and methods to mitigate the risks of receiving and installing counterfeit EEE parts.

## FOREWORD

To meet customer requirements, electronics industry organizations must produce, and continually improve products to meet or exceed customer and regulatory authority requirements on performance, safety, and reliability. The globalization of the aerospace industry and the resulting diversity of regional/national requirements and expectations have complicated this objective. Industry faces the challenge of assuring the quality and integration of product purchased from suppliers throughout the world and at all levels within the supply chain. Aerospace suppliers and contractors face the challenge of delivering product to multiple customers having varying quality expectations and requirements.

This document standardizes requirements, practices, and methods related to: parts management, supplier management, procurement, inspection, test/evaluation, and response strategies when suspect or confirmed counterfeit EEE parts are discovered.

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## 1. SCOPE

### 1.1 Purpose and Application

This standard is for use by organizations that procure and/or integrate EEE parts and/or assemblies containing such items. The requirements of this standard are generic and intended to be applied/flowed down, as applicable, through the supply chain to all organizations that procure EEE parts and/or assemblies, regardless of type, size, and product provided. The mitigation of counterfeit EEE parts in this standard is risk-based and these mitigation steps will vary depending on the application, desired performance, and reliability of the equipment/hardware.

The requirements of this document are intended to supplement the requirements of a higher level quality standard (e.g., AS/EN/JISQ9100, ISO-9001, ANSI/ASQC E4, ASME NQA-1, AS9120, AS9003, and ISO/TS 16949 or equivalent) and other quality management system documents. They are not intended to stand alone, supersede, or cancel requirements found in other quality management system documents, requirements imposed by contracting authorities, or applicable laws and regulations unless an authorized exemption/variance has been obtained. This document is not intended to make a legal determination of fraud, and appropriate legal counsel should be consulted for further action.

### 1.2 Additional Guidance

ARP6328 has been developed to provide additional guidance. ARP6328 contains a significant amount of guidance information that the Organization should consider in conjunction with implementing all elements of AS5553 in the Organization's counterfeit part risk mitigation plan/processes. For example, the ARP includes examples of inspections and tests that could be applied to EEE parts purchased from non-authorized sources to determine if the parts could be suspect counterfeit. The ARP also references other related standards such as AS6496 and AS6081.

NOTE: Appendices contained in previous revisions of AS5553 are now included in ARP6328.

## 2. REFERENCES

### 2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

#### 2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), [www.sae.org](http://www.sae.org).

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|---------|---|
| AS6081  | Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition – Distributors.                      |
| ARP6328 | Guideline for Development of Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition Systems            |
| AS6496  | Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition - Authorized/Franchised Distribution |
| AS9100  | Quality Management Systems - Requirements for Aviation, Space and Defense Organizations   |

NOTE: Also available as EN9100 and JISQ9100.