



SAE International's counterfeit electronic parts risk mitigation standards. Protection in a suite of standards.

The proliferation of counterfeit electronic parts poses significant performance, reliability, and safety risks. In 2008, SAE International was tasked by NASA and the DoD for solutions in keeping illegitimate electronic parts out of the aerospace industry. With its rich, 100-year global standards development history, SAE International served as a neutral forum where representatives from industry, government, and defense could address this industry-wide, global challenge. Today, it introduces a ground-breaking suite of standards that includes a mitigation control plan, supplier assessments, and product authenticity verification.

Do you **PURCHASE** electronic components for integration into aerospace assemblies or equipment?

▶ Implement a control plan to reduce the risk of counterfeit parts entering your inventory.

Use SAE AS5553 Counterfeit Electronic Parts; Avoidance, Detection, Mitigation.

Adopted by NASA and the DoD, this document standardizes methods for electronic counterfeit part mitigation outlining processes for electronic design/parts management, supplier management, procurement, part verification, materials control, and response strategies when suspect parts are found. *(Published 2009)*

▶ Evaluate whether your distributors can detect counterfeit parts from entering *their* inventories.

Use SAE ARP6178 Counterfeit Electronic Parts; Tool for Risk Assessment of Distributors.

This recommended practice was created to provide organizations with a tool to assess a supplier's ability to prevent counterfeit electronic components. Used by Missile US Defense Agency, it allows companies to evaluate the safety of buying from a particular distributor. *(Available late 2011)*

Go a step farther: Specify suppliers comply with **AS6081** to meet AS5553 flow-down requirements.

Do you **DISTRIBUTE**, supply, or sell electronic parts and/or components to the aerospace market?

▶ Tell your customers that you have a system in place to mitigate the risk of counterfeit parts.

Certify to SAE AS6081 Counterfeit Electronic Parts; Avoidance Protocol, Distributors.

This standard describes a program that certifies distributors/suppliers to the requirements of AS5553. While it assists distributors in implementing a risk mitigation program, it maintains certified distributors of electronic components whose use of these controls is designed to ensure delivery of authentic products. *(Available late 2011)*

If, as a distributor you receive electronic parts from sources other than the original manufacturer, consider using ARP6178 in conjunction with AS6081 to self-assess *your* suppliers.

Do you **TEST** electronic components or certify distributors to AS6081?

▶ Accreditation ensures standardized testing of suspect electronic parts.

Use SAE AS6171 Test Methods Standard; Counterfeit Electronic Parts.

This document ensures consistency of test methods across the supply chain by defining test methods for counterfeit electronic part detection. To be used for accreditation of distributors with in-house test capabilities or independent third-party test facilities who will be verifying compliance to AS6081. *(Available early 2012)*

Do you purchase electronic parts for high-risk performance applications in **MARKETS OTHER THAN AEROSPACE?**

AS5553 is a solution for addressing fake component issues across the electronics industry and any market sector—medical, computer, security, or phone—where failure of an electronic part is not an option. The requirements of AS5553 are generic and intended to be applied to all organizations that procure electronics parts.

STOP illegitimate electronic parts from entering the supply chain, your inventory, your design.

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