



EXPERTS IN EMERGENCY SOURCING SOLUTIONS

Your Firm's Guide to SAE AS6081

SAE AS6081 is a recently developed a fraudulent/counterfeit electronic parts standard which sets forth practices and requirements for distributors in regards to detection, mitigation and disposition practices involving Electrical, Electronic, and Electromechanical (EEE) components which are to be purchased or sold from or on the open market/unauthorized sources. These practices and requirements are intended to mitigate the threat posed by counterfeit and fraudulent EEE parts to the international supply chain. This standard was initiated by the aerospace and defense industry

as the need for a trusted supply base of independent distributors to procure this material in a consistent and safe manor became apparent. The rate of counterfeit material has seen exponential growth in the past 5 years and continues to rise. In 2010 the U.S. Military reported its supply chain could posse's more than 1 million counterfeit components. Below are 13 critical points that offer a brief overview of the value of invoking AS6081 when purchasing parts from an unauthorized supplier of the material you are purchasing.

SAE AS6081 REQUIREMENTS for all Certified AS6081 Companies

1. Quality Management System - Firms must maintain certification to a quality management system standard such as ISO 9001, SAE AS9120 or equivalent standard issued by a certification body which is accredited for the specific standard.

2. Fraudulent/Counterfeit Parts Mitigation Policy - Management is required to define and document its policy which is designed to prevent the purchase, acceptance, and distribution of fraudulent/counterfeit parts. The firm must also have a policy in place regarding the disposition and reporting of parts determined to be suspect, fraudulent, and /or confirmed counterfeit.

3. Fraudulent/Counterfeit Electronic-Parts Control Plan - Distributors must develop and implement a fraudulent/counterfeit electronic parts control plan which details the processes used for risk mitigation, disposition, and reporting or fraudulent/counterfeit parts.

4. Customer Related Contract Review, Agreement, and Execution -

- a. Distributors must notify customers within 5 days if commitments cannot be satisfied.

- b. Firms are also required to disclose both the company name and location of their supplier in writing at the time of each individual quotation - this is a major change from previous standards.
- c. AS6081 also mandates that products must be warrantied for a term of at least one year.

5. Supplier Approval and Source Selection - Distributors must assess potential suppliers in order to determine the risk of receiving fraudulent/counterfeit parts.

In order to facilitate this, distributors must develop and implement:

- a. A register of approved suppliers - criteria used to select approved sources should include historical experience with procuring product from the particular source and documented evidence that the supplier has acceptable terms for product liability, among others.
- b. A ranking system of suppliers which uses weighted criteria establishing a rating for each supplier.

6. Purchase Order Requirement - The firm must communicate and document contract provisions from its customer, that establish purchasing controls for fraudulent/counterfeit part avoidance on all purchase orders placed with its vendors.

7. Supply Chain Traceability - Distributors shall document processes that require the retention of records which provide supply chain traceability through any existing intermediaries back to the OCM wherever such traceability exists.

a. If it is impossible to provide traceability back to the OCM, customer approval is **required** before the order can be shipped.

8. Preservation of Product - During internal processing and shipment, the product must be preserved in order to maintain conformity to requirements.

This involves:

- a. cleaning
- b. special handling (for sensitive products)
- c. proper marking and labeling
- d. shelf life control
- e. ESD protocols among other facets.

9. Verification of Purchased Product -

Distributors are required to verify the authenticity of a purchased product. When a customer has contractually specified that a supplier must be AS6081-certified, and wish to invoke the AS6081 process, they indicate:

a. A minimum level of testing and inspection shall include at minimum the AS6081 Level A testing processes. These include documentation and packaging inspection, external visual inspection, solvent tests to detect remarking, and evaluation of the finish on the part's leads.

b. In consultation with the customer, the distributing firm may also impose additional inspection and testing requirements based on the perceived level of risk regarding the possibility of counterfeiting.

c. AS6081 also specifies sample sizes which must be tested, which are determined by both the lot size and the type of test to be performed. These samples sizes range from one device to inspection of the entire lot.

10. Control of Nonconforming Product - It must be ensured that product which does not conform to product requirements is identified, segregated and controlled to prevent its unintended use or delivery. A document procedure must be established to define the controls and related responsibilities and authorities for dealing with nonconforming product.

11. Reporting - All occurrences of suspect, fraudulent and confirmed counterfeit parts must be reported within 60 days of identification, both to internal organizations and to customers. Applicable Government authorities (e.g., GIDEP or ERAI) must be notified as well.
<http://www.gidep.org/> or <http://www.era.com>

12. Personnel Training - Relevant personnel must be trained (as appropriate to their function) in the avoidance, detection, mitigation, and disposal of suspect, fraudulent, and counterfeit parts. Additionally, all personnel involved with the direct handling of electronic parts must be trained in counterfeit detection techniques.

13. Internal Audit - Periodically, firms must conduct internal audits to determine whether the company's quality management system not only conforms to the requirements of AS6081, but is effectively implemented and maintained.

To purchase a copy of the SAE AS6081 standard go to
<http://standards.sae.org/as6081/>

Pricing ranges from \$54.00 for SAE members up to \$68.00 for the list price.

