

ABT Counterfeit Electronics – Supplier Requirements

1. Purpose

1.1. To protect our customers, our suppliers, and ourselves from the risk of procuring and using counterfeit products.

2. Scope

2.1. This document applies to all electronic components purchased by ABT in assemblies or as individual components. ABT suppliers are required to purchase from OCM, OEM, or authorized distributors whenever possible. Independent Distributors should be used only after alternate parts, redesign, schedule adjustments, etc... have been considered. Written ABT approval is required for all Independent Distributor purchases affecting ABT product.

2.2. Suppliers shall secure a C of C for all components. These documents will be provided to ABT and maintained as detailed within the applicable ABT Purchase Order &/or ABT Supplier Quality Manual - SQA-001 and in compliance with ISO9001:2008 or AS9120 quality system requirements.

3. Rationale

3.1. This requirement was created in response to customer requests, industry best practices, and increasing volume of counterfeit electronic components entering the aerospace and defense supply chain. Counterfeit components result in significant performance, reliability, cost, and safety risks throughout the supply chain.

3.2. This document is intended to flow down applicable requirements to ABT suppliers and sub-suppliers.

4. Reference documents

SAE AS5553 - Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition

SAE AS6081 - Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition - Distributors

SAE AS9120A – QMS -Requirements for Aviation, Space, & Defense Distributors

ABT Supplier Quality Manual - SQA-001

5. Definitions (reference also SAE AS5553)

C of C - Certification of Conformance - A document provided by a supplier formally declaring that all buyer purchase order requirements have been met. The document may include information such as manufacturer, distributor, quantity, lot and/or date code, inspection date, etc., and is signed by a responsible party for the supplier.

Counterfeit Part/Component (per SAE AS5553) - A suspect part that is a copy or substitute without legal right or authority to do so or one whose material, performance, or characteristics are knowingly misrepresented by a supplier in the supply chain. Examples of counterfeit parts include, but are not limited to:

- a. Parts which do not contain the proper internal construction (die, manufacturer, wire bonding, etc.) consistent with the ordered part.
- b. Parts which have been used, refurbished or reclaimed, but represented as new product.
- c. Parts which have different package style or surface plating/finish than the ordered parts.
- d. Parts which have not successfully completed the Original Component Manufacturer's (OCM)'s full production and test flow, but are represented as completed product.
- e. Parts sold as upscreened parts, which have not successfully completed upscreening.
- f. Parts sold with modified labeling or markings intended to misrepresent the part's form, fit, function, or grade.
- g. Parts which have been refinished, upscreened, or uprated and have been identified as such, are not considered counterfeit.

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ERAI (Electronic Resellers Association International) - A global trade association that monitors, investigates, reports, and mediates issues affecting the global supply chain of electronics, including supply of counterfeit and substandard parts.

GIDEP (Government–Industry Data Exchange Program) - A cooperative activity between government and industry participants seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities and equipment

OCM - Original Component Manufacturer

OEM - Original Equipment Manufacturer

Independent Distributor - A distributor that purchases new parts with the intention to sell and redistribute them back into the market. Purchased parts may be obtained from original equipment manufacturers (OEMs) or contract manufacturers (typically from excess inventories), or from other independent distributors. Re-sale of the purchased parts (re-distribution) may be to OEMs, contract manufacturers, or other Independent Distributors. Independent Distributors do not have contractual agreements or obligations with OCMs.

Authorized/Franchised Distributors - Those distributors having a contractual agreement with OCM/OEM identifying them as “Authorized” or otherwise in a like manner to buy, stock, re-package, sell, and distribute their product lines.

Non-authorized supplier - Brokers, Non-Franchised distributors, Independent Distributors or any organization other than OCM, OEM or Authorized/Franchised Distributor.

6. Supplier Responsibility

6.1. All suppliers are required to take the following actions:

- 6.1.1. Implement and enforce a written Counterfeit Parts Prevention and Control Plan designed to preclude, detect, and remove any counterfeit components from all deliveries to ABT.
- 6.1.2. Maintain a register of approved suppliers including the scope of the approval, to minimize the risk of counterfeit parts supply.
- 6.1.3. Maintain a product acceptance/inspection plan compliant with IDEA-STD-1010
- 6.1.4. Maintain a database of counterfeit components received, source data, test/inspection results, and reporting methods used (ERAI, GIDEP, law enforcement, etc...).
- 6.1.5. ABT requires that suppliers review AS5553 and AS6081 as “best practice” and confirm that internal procedures are compliant and effective.
- 6.1.6. Actively cooperate with ABT in the implementation of this requirement to eliminate counterfeit components from all products.
- 6.1.7. Conduct flow down of applicable requirements stated herein and defined in SAE AS5553 and AS6081 to suppliers and sub-suppliers.
- 6.1.8. Comply with counterfeit part reporting guidelines as detailed in AS5553, Appendix G - Reporting
- 6.1.9. Provide written acknowledgement and confirmation of compliance to ABT (Ref. Section 10. Compliance Sign-off)

7. Use of Unauthorized Suppliers

7.1. The use of Non-Authorized suppliers without express written consent by ABT is hereby strictly prohibited. Should part obsolescence, cost, lead time, customer commitments, etc... necessitate

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otherwise the following process is required:

7.1.1. Supplier shall contact the supply chain representative (typically the Buyer) at the affected ABT facility requesting to utilize a non-authorized source.

7.1.2. Supplier shall provide specific details in writing regarding the reason for the request, proposed source qualifications, details on component pedigree, date/lot code, and a suggested verification/test plan. Visual inspection, part marking inspection, and C of C inspection shall be included as critical verification steps in all instances.

Note: **Unless otherwise approved by our customer,** the verification plan **will include as a minimum** the following default requirements for active and passive components:

- Visual Microscopy Inspection of all parts in the order under 10X minimum magnification (100% of the lot)
- X-Ray inspection (100% of the lot)
- XRF/RoHS (2 parts per lot date code)
- Resistance to Solvents testing (2 parts per lot date code)
- Heated Solvent testing (Dynasolve Immersion, 2 parts per lot date code)
- Scrape testing (2 parts per lot date code)
- Solderability testing per IPC/EIA J-STD-002 (2 parts per lot date code)
- De-lid, Die Penetrant, Die Verification (2 parts per lot date code)
- Scanning Electron Microscopy (1 part per lot date code)

7.1.3. Supplier shall provide all details in writing on a supplier request form document which includes a customer sign off and approval section.

7.1.4. ABT Buyer will forward requests to Contracts (customer), Supply Chain, Quality, and Engineering representatives as needed.

7.1.5. ABT affected parties shall review the request and either approve, reject, or return with comments &/or additional or alternative verification requirements.

7.1.6. Should ABT provide approval, the supplier shall provide Certification of Conformance, verification documentation, and any test results promptly to ABT.

7.1.7. Supplier is not approved to deliver product(s) to ABT until signed approval is provided and certification of conformance and test results are provided and confirmed to be compliant to the details agreed upon in the approved supplier request form.

8. Counterfeit Detection/Containment/Reporting

8.1. If counterfeit/suspect counterfeit components are detected by ABT:

8.1.1. Components/parts are subject to immediate impound and quarantine pending further investigation.

8.1.2. ABT will notify any customers potentially affected by the components per appropriate quality system instructions.

8.1.3. Findings will be reported to the supplier, ERAI, GIDEP, and appropriate law enforcement agencies when warranted.

8.1.4. Supplier may be placed on probation status or dis-qualified.

8.1.5. Counterfeit parts will not be returned to the supplier to prevent them from re-entering the market

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9. General

9.1. Future revisions to this policy will be documented in the ABT Supplier Quality Manual (SQA-001) and included in Purchase Order Terms and Conditions (PRF-001), and Quality Clauses (PRF-002). Current version may also be viewed at the ABT supplier website (<http://www.borisch.com/supplier/>). Purchase Order acceptance/acknowledgement will serve as supplier compliance to this requirement.

10. Compliance Sign-off (for new supplier approval and re-approval of inactive or previously disqualified suppliers):

Business Name::	Date:
Name (Print):	Signature:
Title:	
Comments/Response:	