

**Pentek, Inc.**

## **Procedure for avoiding, detecting, mitigating, and disposition of counterfeit electronic parts.**

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### **Definitions**

#### **Suspect Part:**

A part in which there is an indication by visual inspection, testing, or other information, that it may have been misrepresented by the supplier or manufacturer and may meet the definition of counterfeit part.

#### **Counterfeit Part:**

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:

- Parts which do not contain the proper internal construction consistent with the ordered part.
- Parts which have been used, refurbished or reclaimed, but represented as new product.
- Parts which have different package style or surface plating/finish than the ordered parts.
- Parts which have not successfully completed the OCM's full production and test flow, but are represented as completed product.
- Parts sold as upscreened parts, which have not successfully completed upscreening.
- Parts sold with modified labeling or markings intended to misrepresent the part's form, fit, function or grade.
- Parts which have been refinished, upscreened, or uprated, and have been identified as such, are not considered counterfeit.

#### **OCM:**

Original equipment manufacturer.

#### **ADO:**

Authorized distributors only.

#### **ISO:**

The international organization for standardization

## Purchasing

The suppliers of material or services are evaluated and selected based on (a) their ability to supply product or services that (a) meets requirements and (b) their risk of supplying counterfeit parts. Parts are always purchased directly from OCMs or from manufacturer's authorized suppliers for Pentek's ADO customers. For non ADO customers, independent distributors are used only after consideration of alternate parts and a reasonable search for material from franchised/authorized sources has been conducted and approval has been obtained from the quality manager and supply chain manager.

Pentek's supply chain maintains a listing of approved suppliers within its system.

Procurement assurance processes for avoiding counterfeit product begins when the customer requests a quotation for a product. In this way Pentek is alerted to a customer's ADO requirement.

Pentek investigates through reporting sources such as ERAI (erai.com) for alerts of suspect counterfeiting incidents. When independent distributors are used for non ADO customers, special precautions are taken. These precautions are approved by the Pentek quality manager and include, but not limited to:

- Marking inspection
- Verify engraving or silk-screening type
- Check for component wear
- Component is compared to a photo of the approved component
- If a ball grid array (BGA) component then inspection with a microscope

Supplier's approval and source selection considerations include:

- The supplier is ISO certified.
- The supplier is on the customers list of approved vendors for the specific material - automatic approval.
- Length of time the supplier has been in business- consideration.
- The sources demonstrated adherence to applicable provisions of AS5553- consideration.
- Membership in associations with rigorous business, ethical, and quality standards intended to avoid acquiring and reselling counterfeit goods.

Purchasing may place a trial order. Purchasing orders the material or item, receiving inspects the material. If the results are not acceptable, the product is controlled according to nonconforming procedures.

Supply chain and quality management evaluates suppliers to assure that approved/ongoing sources of supply are maintaining effective processes for mitigating the risks of supplying counterfeit electronic parts and to evaluate overall performance using the following criteria:

Criteria include:

- Meeting specifications
- On time delivery
- Correct quantity
- Quality and condition (including absence of counterfeit evidence)
- Competitive pricing

When a product or service provided does not meet the requirements of the order, purchasing or quality may initiate a supplier corrective action request.

Purchasing documents specify contract/purchase order requirements to minimize the risk of being provided counterfeit parts. These documents may contain, where or when appropriate:

- Requirements for approval of product, procedures, processes, services, and equipment.
- Pentek quality management system requirements.
- If applicable, requirements for design, test, examination, inspection and related instructions for acceptance by the company.
- Requirements for the supplier to notify the company of changes in product or process definition, and to obtain approval where required.
- Product traceability, when applicable.

Purchasing staff reviews the information to make sure it is complete, and reviews the approved supplier list to make sure the specified supplier has been evaluated and accepted. If not evaluated and accepted, the supplier cannot be used unless the supply chain manager decides to initiate a trial order pursuant to the above section.

### **Verification of Purchased Product**

Purchased product is verified before use to assure detection of counterfeit parts prior to formal acceptance. The rigor of the verification process shall be commensurate with product risk. Product risk is determined by the criticality of the part and the assessed likelihood of receiving a counterfeit part. Receiving checks the order against purchasing documents to verify the identification, quantity and condition of the items in the order.

Verification may include:

- Obtaining objective evidence of the quality of the product from suppliers through documentation, certificate of conformity, test reports etc.
- Inspection or audit at the supplier's premises.
- Review of required documentation.
- Visual inspection of products upon receipt.
- X-ray, non-destructive evaluation and destructive testing.

## **Material Control**

If material is identified to be counterfeit, Pentek will contact the supplier/vendor furnishing the material and provide any Pentek data supporting the counterfeit nature of the material. Pentek will discuss options with the supplier for disposition of the affected material in order to prevent re-entry into the supply chain. This may include:

- Upon mutual agreement, destruction of the material by Pentek to render it unusable in any form and documentary evidence provided to the supplier.
- Return material to the supplier and request evidence of disposition to prevent re-entry into the supply chain.
- Reporting the incident to any agencies/bodies about the incident in order that other users at large may become aware of the existence of the material in question and review their own supply chain for any risks as applicable.