



TITLE: Counterfeit Electronic Parts Avoidance Plan	
DOCUMENT #: 1040175	REV #: A
DOCUMENT CLASS: K-Purchase PRC	
RESPONSIBLE DEPT: Purchasing	REF: QMS 7.4

1.0 Purpose of this Document

- 1.1 The purpose of this document is to describe the procedure for preventing the purchase and / or use of Counterfeit Parts using the requirements outlined in SAE AS5553, The Standard for Counterfeit Electronic Parts, Avoidance, Detection, Mitigation, and Disposition as a guide.

2.0 Application

- 2.1 This document applies to procurement activities at K&L Microwave Inc. where applicable.

3.0 Reference Document

- 3.1 AS5553, Rev A, Fraudulent/Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition

4.0 Definitions and Acronyms:

- 4.1 **Suspect Part** - A part in which there is an indication that it may have been misrepresented by the Supplier or Manufacturer and may meet the definition of a Fraudulent Part or Counterfeit Part provided below.
- 4.2 **Fraudulent Part** - Any suspect part misrepresented to the Customer as meeting the Customer's requirements.
- 4.3 **Counterfeit Part** - A fraudulent part that has been confirmed to be a copy, imitation, or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with the intent to mislead, deceive, or defraud. The Counterfeit Parts include but are not limited to:
 - 4.3.1 Parts which do not contain the proper internal construction (die, manufacturing, wire bonding, etc.) consistent with the ordered part;
 - 4.3.2 Used, refurbished, or reclaimed parts represented as new product;
 - 4.3.3 Parts with a different package style, type, or surface plating / finish than the required or order product;
 - 4.3.4 Parts not successfully completing the full production and / or test flow of the Original Equipment Manufacturer (OEM) that are represented as completed product;
 - 4.3.5 Parts sold or delivered as up-screened product that has not successfully completed the up-screening process;
 - 4.3.6 Parts sold or delivered with modified labeling or markings intended to misrepresent the form, fit, function, or grade of the intended product.

Note: Refurbished, up-screened, or updated parts identified accordingly are not considered counterfeit product.

4.4 **Aftermarket Manufacturer**

- 4.4.1 A manufacturer authorized by the OEM to produce or provide replacement parts. The parts supplied are produced from materials originating from the OEM to the aftermarket manufacturer or produced by an aftermarket manufacturer using the OEM tooling or intellectual property.



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- 4.4.2 The manufacturer produces parts using semiconductor dice or wafers manufactured by and traceable to an OEM that were properly stored until use. The parts are subsequently assembled, tested, and qualified using processes meeting the technical specifications without violating the intellectual property rights, patents, or copyrights of the OEM.
- 4.4.3 The manufacturer produces parts by emulation, reverse engineering, or redesign using processes matching the OEM specification. The parts must meet the Customer needs without violating the OEM intellectual property rights, patents, or copyrights.

Note: The Aftermarket Manufacturer must label or otherwise identify the parts to ensure the "as shipped" product is not mistaken for the product manufactured by the OEM.

- 4.5 **Approved Supplier** - Suppliers who have been assessed and placed on K&L's ASL.
- 4.6 **Authorized (Franchised) Distributor** - A distributor which is authorized by the Original Component/Equipment Manufacturer (OCM/OEM) to distribute product in accordance with the terms of an OCM contractual agreement.
- 4.7 **Authorized Supplier** - Aftermarket manufacturers and OEM authorized sources of supply for a specific part.
- 4.8 **Broker** - In the independent distribution market, brokers may be referred to as an Independent Distributor.
- 4.9 **Certificate of Conformance (C of C)** - A document provided by the supplier formally declaring the purchase order requirements are met. The document may include information relative to the manufacturer, distributor, Quantity, lot and/or date code, etc., and is signed by a responsible individual.
- 4.10 **Government Industry Data Exchange Program (GIDEP)** - A cooperative activity between the Government and industry participants seeking to reduce or eliminate resource expenses by sharing technical information essential for research, design, development, production, and operational phases of the life cycle of the system, facility, or equipment.
- 4.11 **Packaging** - Component packaging refers to the manner the electronic parts are packaged in preparation for use. There are four basic types of packaging: (A) Bulk, (B) Tray, (C) Tube, and (D) Reel.
- 4.12 **Refinished** - Using a plating process method after manufacture to alter the original plating composition on a parts lead or lead wire.
- 4.13 **Refurbished** - Subjecting parts to a process to brighten, polish, or renovate the item in an effort to restore the item to a "like new" condition. Refurbished parts may have the leads realigned and tinned.
- 4.14 **Up-rated** - Assessment resulting in an extension of a parts rating to meet performance requirements for an application where the part is used outside the specification range of the manufacturer.



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4.15 **Up-screened** - Additional part testing performed to produce parts verified beyond the specification parameters of the manufacturer.

4.16 **Used** - Electrically charged parts pulled / removed from a previous application.

Note: Other definitions are available for review in Section 3.4 of the AS5553 Standard.

5.0 Training

5.1 Relevant employees, including Program Management, Purchasing, Material Planning, Quality Assurance, In-process Inspection, Production and Engineering will be trained as appropriate to their function in the awareness, avoidance, detection, mitigation and disposition of suspect/ fraudulent/counterfeit EEE parts.

5.1.1 AS5553 including Appendixes A through F will be used as the basis for the training.

5.2 New hires will be trained during New Employee Orientation. Annual refresher training will occur.

5.3 Training will be recorded and forwarded to HR.

6.0 Responsibility

6.1 All employees of K&L Microwave are responsible to comply with the requirements and processes identified in this document. Engineering, Purchasing, Materials and Quality Assurance staff may have specific roles and/or actions as it relates to complying with the requirements identified in this document.

6.2 Engineering is responsible to ensure the drawing, specification, process, or other description identifies the part number, manufacturer, or other related information so the correct part or product is identified.

6.3 Purchasing is responsible to procure the correct electronic part using the applicable drawing, specification, description, or other information to meet the intended use, from authorized sources.

6.4 Material Planning may be responsible to examine, inspect, select, kit, and/or maintain the parts to identify or mitigate the receipt and/or use of counterfeit parts.

6.5 Purchasing is responsible to flow down the following clauses: on all purchase orders:

6.5.1 On all purchase orders:

"Counterfeit Parts Avoidance: In order to mitigate counterfeit parts entering the Supply Chain, K&L Microwave Inc. will only accept parts from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM) or through authorized distributors of such. Independent distributors, brokers, or other secondary sources shall not be used for items on this purchase order. It is the seller's responsibility to protect the integrity of this and any procurement activity with K&L Microwave Inc."

6.5.2 On distributor and electronic parts purchase orders:



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"EEE Parts Supply Chain Traceability: The seller shall maintain a method of item supply chain traceability that ensures tracking of the supply chain back to the manufacturer of all Electrical, Electronic, and Electromechanical (EEE) parts being delivered per this contract. This supply chain traceability method shall clearly identify the name and location of all of the supply chain intermediaries from the manufacturer to the direct source of the product for the seller and shall include the manufacturer's batch identification for the item(s) such as date codes, lot codes, serializations, or other batch identifications."

- 6.6 Suppliers may access information pertaining to Counterfeit Electronic Parts Avoidance at www.klmicrowave.com. Information can be found in the "About" tab on the Supply Chain Management drop down in the "Supplier Policy Manual" and "Terms and Conditions" links.

7.0 Procedure / Process Description

- 7.1 Purchasing must evaluate a potential source of supply to assess the risk of receiving counterfeit parts. Assessment may be a survey, audit, and/or a review of the supplier quality data to determine performance.
- 7.2 **Purchasing will only obtain parts directly from an OCM/OEM, approved distributor, authorized resale organization, or franchised aftermarket supplier. (These companies are reviewed and approved by the Original Component Manufacturer.)**

NOTE: K&L Microwave purchasing may procure parts from an independent distributor or part broker only as a last resort. Prior to buying parts from these sources, Purchasing must review the proposed purchase to receive approval from the Director of Supply Chain and the Director of Quality Assurance. Purchasing must also contact Quality Engineering and Product Line Management to determine if the Customer must be contacted and approval sought as outlined by the contract. If Customer approval is contractually required, the documented approval will be filed with the associated purchasing records in accordance with the Records Retention Policy.

- 7.3 Some Customers maintain a list of suppliers, original equipment manufacturers, third parties and other approved sources for component parts. Many Customers are willing to share this information as a way to avoid the purchase of counterfeit components or parts.
- 7.4 Purchasing will develop a process to assure sources of supply maintain effective process controls to mitigate the risk of supplying counterfeit parts. Assurance may be a survey, audit, product alert review, or a review of the supplier quality data to verify performance.
- 7.5 Purchasing will flow down requirements from the Counterfeit Parts Procedure, as applicable, to the supplier. Purchasing must perform some level of risk assessment if the supplier or subcontractor does not maintain a documented counterfeit part control plan compliant to the AS5553 Standard.
- 7.6 Purchasing will assess the risk if parts must be procured from a source other than the OEM or authorized supplier. Purchasing must document a reason whenever a part is procured from a source other than the OEM or authorized supplier.
- 7.7 If parts are purchased from a supplier other than an OEM, approved distributor, authorized resale organization, or franchised aftermarket supplier, additional controls must be implemented.



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- 7.7.1 Purchasing will code the order for 100% inspection upon receipt.
- 7.7.2 Receiving Inspecting must examine the part documentation and packaging, and visually inspect 100% the product to verify that the part requirements are met and to detect or identify suspect, fraudulent, or counterfeit parts.
- 7.7.3 Additional testing and analysis will be performed (using Appendix E of AS5553 as a guide) to detect or identify suspect, fraudulent, or counterfeit parts prior to acceptance. This testing may be performed at K&L Microwave or by an authorized testing lab.
- 7.7.4 Identified suspect, fraudulent, or counterfeit parts are documented in the Corrective Action System and are segregated to a nonconforming part location with controlled access. Suspect, fraudulent, or counterfeit parts identified after acceptance are documented in the Corrective Action System and are also segregated to a nonconforming part location with controlled access.
- 7.7.5 Purchasing will aid Supplier Quality to disposition the suspect, fraudulent, or counterfeit parts.
 - 7.7.5.1 Parts must remain under positive control and will not be returned to the supplier in order to prevent them from re-entering the supply chain. NOTE: Samples may be released for evaluation/analysis.
 - 7.7.5.2 Purchasing and Supplier Quality determine if a supplier corrective action is appropriate or required.

8.0 Reporting

- 8.1 All occurrences of suspect and/or fraudulent/counterfeit parts must be reported to Management. Using the documented details related to the fraudulent/counterfeit part detection, Management determines if the legal department must become involved to properly and legally address receipt of the fraudulent/counterfeit part with the supplier.
- 8.2 Management is responsible to report the fraudulent/counterfeit part occurrence internally, to Customers, to the Government, the Government-Industry Data Exchange Program (GIDEP), and other industry reporting programs.
- 8.3 Guidelines for Reporting Counterfeit Parts are listed in Appendix G of the AS5553 Standard. K&L Microwave Management is responsible to determine the action to pursue if a fraudulent/counterfeit part is identified, detected, and/or verified. Management should consult all corporate legal resources available to avoid, minimize, or mitigate risks related to fraudulent/counterfeit parts. Appendix G of the AS5552 Standard lists the contact information.

9.0 Records

Supplier and Manufacturer's Certificates and Test Data
Nonconforming Records
Training Records