



TITLE: Counterfeit Parts Avoidance Plan	
DOCUMENT #: 1040175	REV #: E
DOCUMENT CLASS: K-PURCH 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 electronic and non-electronic parts and materials using the applicable requirements outlined in the Reference Documents listed in 3.0 below.

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 | Fraudulent/Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition |
| 3.2 | DFARs 252.246-7007/8 | Contractor Counterfeit Electronic Part Detection and Avoidance System / Sources of Electronic Parts |
| 3.3 | IDEA STD 1010 | Acceptability of Electronic Components Distributed in the Open Market |
| 3.4 | SAE AS6174 | Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel |

4.0 Definitions and Acronyms:

- 4.1 **Suspect Part/Material** - A part or material 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/Material or Counterfeit Part/Material provided below.
- 4.2 **Fraudulent Part/Material** - Any suspect part or material misrepresented to the Customer as meeting the Customer's requirements.
- 4.3 **Counterfeit Part/Material** - A fraudulent part or material 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 and Materials include but are not limited to:
 - 4.3.1 Parts/materials which do not contain the proper internal construction (die, manufacturing, wire bonding, chemical composition, etc.) consistent with the ordered part;
 - 4.3.2 Used, refurbished, or reclaimed parts/materials represented as new product;
 - 4.3.3 Parts/materials with a different package style, type, or surface plating/finish than the required or order product;
 - 4.3.4 Parts/materials 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/materials sold or delivered with modified labeling or markings intended to misrepresent the form, fit, function, or grade of the intended product.



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

Note: Refurbished, up-screened, or updated parts/materials 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.
- 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 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 **ERAI** - A global information services organization that monitors, investigates, and reports issues affecting the global electronics supply chain. Provides services and in-depth information that enable its members to perform industry-specific risk mitigation on suspect counterfeit, high-risk, and non-conforming parts and identify problematic suppliers and customers.
- 4.11 **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.
- 4.12 **Obsolescence** - The status given to a part, component or material when it is no longer available from its original manufacturer.



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

- 4.13 **Obsolescence Management** - proactive process used to mitigate obsolescence risk and procedures for reacting to and solving obsolescence impacts as they occur.
- 4.14 **Packaging** - Component packaging refers to the manner the electronic parts are packaged in preparation for use.
- 4.15 **Refinished** - Using a plating process method after manufacture to alter the original plating composition on a parts lead or lead wire.
- 4.16 **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.
- 4.17 **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.
- 4.18 **Up-screened** - Additional part testing performed to produce parts verified beyond the specification parameters of the manufacturer.
- 4.19 **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 Selected employees, which may include personnel from Program Management, Purchasing, Material Planning, Quality Assurance, Production and Engineering, will be trained, as appropriate to their function, in the awareness, avoidance, detection, mitigation and disposition of suspect/fraudulent/counterfeit electronic and non-electronic parts, components and materials.
 - 5.1.1 Presentations based on AS5553 (including Appendixes A through F), IDEA STD 1010, and SAE AS6174 will be used as the basis for the training.
- 5.2 Refresher training will occur for appropriate personnel when this document is revised or to address new information regarding counterfeit products or trends.
- 5.3 Appropriate new hires will be trained as part of their orientation to their job position.
- 5.4 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



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

product is identified.

- 6.3 Purchasing is responsible to procure the correct electronic or non-electric part, component or material 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 Quality Assurance is responsible for monitoring GIDEP and ERAI. K&L shall continuously monitor GIDEP and ERAI, as applicable, and will take appropriate action for parts on hand or in products supplied to customers that contain suspected or confirmed counterfeit parts. Additionally, GIDEP shall be reviewed prior to accepting parts from brokers/unauthorized distributors.
- 6.6 Quality Assurance, Purchasing, Sales and Engineering are responsible for implementing an Obsolescence Management program as described below:
 - 6.6.1 Notifications of impending obsolescence may be obtained through GIDEP, ERAI or supplier communications.
 - 6.6.2 Engineering will assess the impact of the obsolescence issue and provide possible resolutions to the obsolescence:
 - 6.6.2.1 Redesign
 - 6.6.2.2 Minor modification
 - 6.6.2.3 Alternates on BOM or AMPL
 - 6.6.2.4 No substitution available
 - 6.6.3 Purchasing will investigate Life-Time-Buy (if available) versus Redesign or if no substitution is available.
 - 6.6.4 Sales will notify customer of potential obsolescence issue and possible resolutions.
- 6.7 Purchasing is responsible to flow down the following clauses: on all purchase orders:
 - 6.7.1 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."
 - 6.7.2 On distributor and electronic parts purchase orders:

"EEE Parts Supply Chain Traceability: The seller shall maintain a method of item



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

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."

- 6.8 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/materials. Assessment may be a survey, audit, and/or a review of the supplier quality data to determine performance.
- 7.2 **Purchasing will obtain parts/materials 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.)**
- 7.2.1 Parts/materials obtained from approved distributors, authorized resale organizations, and franchised aftermarket suppliers will be authentic OCM/OEM parts/materials or authorized replacements.
- 7.2.2 If an approved distributor, authorized resale organization, or franchised aftermarket supplier wants/needs to provide a broker-supplied part/material, they must submit a formal request to K&L prior to supplying the part/material.
- 7.2.3 K&L will in turn request customer approval to use a broker-supplied part/material.
- 7.2.4 If customer approval is granted, the part/material will be inspected/tested/analyzed per section 7.8 of this procedure.
- 7.2.5 Documented approval from the Customer will be filed with the associated purchasing records in accordance with the Records Retention Policy
- 7.3 **Parts/materials shall not be purchased through brokers/non-franchised distributors/independent distributors unless there is no other means for procurement due to obsolescence, and such purchase is approved by the customer.**
- 7.3.1 K&L Microwave Purchasing may procure parts from an independent distributor/part broker (7.3 above) only as a last resort.
- 7.3.2 Prior to buying parts from these sources, Purchasing must receive approval from the Director of Supply Chain and the Director of Quality. Purchasing will also work with Sales to obtain approval from the Customer.
- 7.3.3 Documented approval from the Customer will be filed with the associated purchasing



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

records in accordance with the Records Retention Policy.

- 7.4 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.
- 7.5 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.
- 7.6 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 and this procedure.
- 7.7 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.
- 7.8 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.
 - 7.8.1 Purchasing will code the order for 100% inspection upon receipt. This will ensure product is held at incoming inspection for review.
 - 7.8.2 Incoming inspection will screen the shipment by examining the part documentation and packaging, and visually inspecting the product to detect or identify suspect, fraudulent, or counterfeit parts.
 - 7.8.3 Additional inspection, testing and analysis will be performed (using Figures 1, 2, and 3 of this procedure and Appendix E of AS5553 as a guide) to detect or identify suspect, fraudulent, or counterfeit parts prior to acceptance. This inspection, testing, and analysis will be done when making authorized purchases from an independent distributor and/or part brokers. This testing will be performed by an authorized testing lab.
 - 7.8.4 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.
 - 7.8.5 Purchasing will aid Supplier Quality to disposition the suspect, fraudulent, or counterfeit parts.
 - 7.8.5.1 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.
 - 7.8.5.2 Purchasing and Supplier Quality determine if a supplier corrective action is appropriate or required.



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

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. Management will notify customers immediately if K&L becomes aware of or suspects a part that has been procured is suspect or confirmed counterfeit.
- 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 AS5553 Standard lists the contact information.

9.0 Records

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