

# COUNTERFEIT & SUB-STANDARD COMPONENT PREVENTION PROGRAM

## 1. Counterfeit Prevention Process Development

- a. As a major contributor to the creation and current revision of the IDEA-STD-1010 standard, "Acceptability of Electronic Components Distributed in the Open Market," World Micro (WMC) has implemented the IDEA Inspection Process into its QMS for all open market incoming material. WMC incorporates the IDEA-1005-D "InspectionProcess Guidelines Check List" into its internal process controls.
- b. World Micro is an active participant in and involved with the G-19D Sub-Committee responsible for the development of the Counterfeit Mitigation Standard (AS6081) to be used by distributors. Gary Beckstedt, World Micro's director of global quality, is a key contributor to and supporter of this process and is fully committed to it.

## 2. Supplier Certification

- a. World Micro understands that counterfeit prevention begins with the supplier certification process and implements the necessary safeguards to pro-actively mitigate its risk by effectively managing its supplier base.

## 3. Incoming Material Inspection Process

- a. World Micro holds to the philosophy that counterfeit prevention is not limited to the scope of the quality department, but that responsibility for prevention also lies within the sales, purchasing, warehousing, and shipping departments. To maintain effective counterfeit mitigation and compliance with ISO standards (ISO9001, AS9120, ISO13485) WMC's incoming material inspection processes reflect that philosophy through the following:

### i. Sales Department:

1. WMC stresses the critical importance of gathering all data from its customers necessary to best determine their requirements and document those requirements to ensure proper flow-down through every level of the organization.

### ii. Purchasing Department:

1. WMC limits the scope of its purchasing to a trusted supplier base that is regularly audited to maintain the high-standards customers expect.

### iii. Incoming Inspection:

1. Initial inspections are performed upon receipt of material to verify purchased product is consistent with customer requirements and that all required documentation and traceability required by customers as well as statutory and regulatory requirements are satisfactorily met.

#### iv. Quality Inspection

1. All parts received undergo a strict multi-tiered quality inspection process that includes the following, based on customer requirements:
  - a. Packaging , labeling, and documentation
  - b. Visual inspection under high-powered microscopy
  - c. Resistance to solvents testing
  - d. Mechanical measurements
  - e. X-Ray Analysis
  - f. XRF Analysis
  - g. Solderability testing
  - h. Heated solvents testing
  - i. Decapsulation

#### v. Final Inspection

1. Prior to shipment to customer, all material undergoes a final verification of special customer requirements, supplier documentation, traceability documents as required, and final visual inspection to confirm parts being shipped have successfully completed the incoming material inspection process.

### 4. Containment of Non-Conforming Product

- a. At any step in the inspection processes listed above, products may be identified as non-conforming. Products are considered non-conforming if any of (but not limited to) the following conditions apply:
  - i. Customer requirements have not been met
  - ii. Statutory and/or regulatory requirements have not been met
  - iii. Failure at incoming inspection (*e.g. wrong part received, parts not received with required traceability, parts damaged*)
  - iv. Failure at quality inspection (*e.g. reworked parts, sub-standard parts, fraudulent parts, suspect counterfeit parts, etc...*)
  - v. Failure at final inspection (*i.e. re-verification of customer and regulatory requirements against parts received for shipment*)
- b. Non-Conforming Process
  - i. Any material that is identified as non-conforming is immediately quarantined pending verification.
  - ii. All stakeholders are notified of the non-conformance for appropriate action.
  - iii. A comprehensive report is generated with full descriptions of observations made, along with test data and photographic evidence detailing the non-conforming condition.
  - iv. The non-conforming parts are held in a designated non-conforming area until final disposition can be determined by the Material Review Board.
  - v. The responsible supplier is notified of the non-conformance. Depending on the severity and/or frequency of occurrences with the responsible supplier, a supplier corrective action request is made and the supplier's certification is re-evaluated.