



MPI Supply Chain Quality Requirements

The following requirements apply to all suppliers of material purchased by MPI. Exceptions for a particular clause are identified within the clause

- A. The supplier shall grant Right of Access to MPI, our customers, and to any regulatory authority, to all applicable areas of all builds at any level of the supply chain involved in the order and to all applicable records
- B. The supplier shall notify MPI of changes in product and/or process, change of critical supplier, and change of manufacturing facility location. **This requirement pertains to custom parts ONLY. Commercial off-the-shelf (COTS) electronic components are exempt**
- C. The supplier shall maintain a Quality Management System (QMS). Preferred QMS systems include ISO-9000, ISO-13485, AS9100, or any other equivalent, industry recognized; QMS modeled after military, medical, commercial, and/or international specifications
- D. Since MPI does NOT grant MRB Authority for product REPAIR, the supplier shall notify MPI whenever parts are rejected AND are dispositioned for REPAIR. The supplier can perform REWORK at will without having to notify MPI for approval. **REPAIR** is defined as ***“The act of restoring the functional capability of a defective article in a manner that precludes compliance of the article with applicable drawings or specifications.”*** **REWORK** is defined as ***“The act of reprocessing non-complying articles, through the use of original or alternate equivalent processing, in a manner that assures compliance of the article with applicable drawings or specifications.”*** **This requirement pertains to custom parts ONLY. COTS electronic components are exempt from this requirement**
- E. The supplier shall maintain test and inspection records for all delivered lots. The term of the record retention shall be specified in the MPI PO. If no term is specified, the vendor shall maintain ALL Quality records for a period of not less than **one** year
- F. Printed Circuit Board workmanship shall be verified based on the criteria of IPC-A-600, class 3, current revision, unless indicated to the contrary on the customer documentation or MPI PO

- G. Suppliers of **custom** components shall provide MPI with a First Article Report (FAI) with the
1. First shipment of a new part
 2. A revision change to an existing part, or
 3. Whenever an existing part/revision has not been built in more than 2 years

The FAI shall be modeled after the AS9102 format although an FAI of the vendors choosing is acceptable provided that the PO does not specifically call out an AS9102 format. If the PO requires an AS9102 FAI, the ONLY acceptable format for the FAI shall be the AS9102 format. **This requirement pertains to custom parts ONLY. COTS electronic components are generally exempt from this requirement unless the MPI PO specifically invokes it**

- H. The supplier shall perform an appropriate level of inspection and test. For custom product, a 100% outgoing inspection is preferred. In lieu of 100% inspection, the supplier may perform a C=0, 0.65 AQL, or tighter inspection. Unless defined to the contrary by PO, testing shall be performed only at a 100% level. Test sampling is **NOT** acceptable. **This requirement does NOT pertain to COTS components which shall be inspected and tested in accordance with best commercial practices**
- I. A Certificate of Compliance (C of C) shall be provided with each shipment of product. As a minimum, the C of C shall define the manufacturers name and part number, the part revision (if the part is rev controlled), the quantity, the MPI PO number, the part serial numbers (if parts are serialized), a statement detailing the compliance of the parts to the relevant drawings, specifications, etc, a RoHS declaration (for RoHS components), along with the name, signature, and date of the person authorizing the release of the material
- J. Any special requirements not addressed in this document shall be detailed in the MPI PO
- K. Suppliers of electronic components shall have a Counterfeit Electronic Component Detection and Avoidance system in place to prevent the introduction of counterfeit components into the supply chain. The system shall be modeled after AS5553, including all paragraph 4.1 requirements. The system shall also be compliant with DFARs 252.246-7007. **This requirement pertains ONLY to suppliers of electronic components.**

- K1. To better control counterfeit electronics, MPI does NOT accept electronic components from Original Component Manufacturers (OCM) and/or Franchised Distributors (FD) that were formerly shipped to a different customer and were subsequently returned to the OCM and/or FD. Exceptions may be made on a case by case basis, with approval from MPI's customers, via MPI's Procurement Group
- L. Conflict Minerals (3TG) Requirements - Microboard Processing Incorporated (MPI) is fully committed to support the initiatives set forth by the Dodd-Frank Act, to ensure that T3G "conflict minerals" (Gold, Tantalum, Tin, and Tungsten) used in components which we purchase from our suppliers do not directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries, committing atrocities and human rights abuses. MPI requires our suppliers to support this initiative by:
1. Agreeing to conduct your business in conformance with the Electronic Industry Citizenship Coalition (EICC) code of conduct requirements
 2. Exclusively sourcing from smelters/refineries which have been independently audited and certified as "conflict-free" of the T3G minerals
 3. Implementing a system that allows you to determine the origin of conflict minerals (gold, tantalum, tin, or tungsten) in the products that you manufacture or contract to manufacture
- M. Unless stated to the contrary in the PO or provided drawings, workmanship criteria for printed circuit assemblies and cable/harness assemblies shall be in accordance to IPC-A-610, and IPC-WHMA-A-620, class 3, respectively
- N. Many MPI programs are subject to ITAR rules and regulations; therefore, ALL documentation supplied by MPI shall be treated in accordance with the requirements defined by the various ITAR CFR's. For the latest ITAR regulations, suppliers are encouraged to visit the US Department of State Directorate of Defense Trade Controls web page at https://www.pmdtdc.state.gov/regulations_laws/itar.html
- O. Suppliers who use sub-contractors to perform some/all aspects of the overall build of custom products are responsible for flowing down all MPI requirements to the sub-tier suppliers. The supplier MPI issued the PO to is ultimately responsible for the compliance of the finished part to all MPI requirements

P. Supplier personnel shall be made aware of the following:

1. Their contribution to product/service conformity
2. Their contribution to product safety
3. The importance of ethical behavior