



SUPPLIER QUALITY ASSURANCE CLAUSES - PURCHASE ORDER ATTACHMENT NO. 1

These clauses as set forth are in addition to all other clauses, instructions, and terms and conditions of purchase contained in this order or made a part thereof by reference.

It is understood that acceptance of this referenced Purchase Order by the Seller constitutes full agreement to the imposed terms of the Quality Assurance Clauses, and that noncompliance shall be cause for rejection of submitted material/services by Microchip.

Reference standards shall be of the revision level in effect on the date of the purchase order unless otherwise specified.

1.0 SELLER'S BASIC CERTIFICATE OF CONFORMANCE

- 1.1 Drawing/s applicable to the procured product shall be maintained by the Supplier for a minimum of five years or until it is superseded by a higher revision.
- 1.2 The Supplier shall be responsible for process control activities, inspections, and tests to ensure that all articles conform to applicable drawings and specifications. These process control activities, inspections and tests shall include receiving, material processing, fabrication, assembly, and shipping phases. The subcontractor shall maintain records of process control activities, inspections and tests performed. The records shall be maintained by the Supplier for a minimum of five years.
- 1.3 All materials and / or manufactured articles must comply with DFARS 252.225-7014 "Preference for Domestic Specialty Metals, Alternate 1". The DFARS clause requirements shall also be flowed down and apply to all parts supplied by any subcontractor/contractor/supplier from any tier of the supply chain.
- 1.4 All parts must be free of pure tin, cadmium or zinc. Pure tin may not be used in the design or fabrication of components or assemblies supplied under this order. Tin alloys must contain <97% pure tin.
- 1.5 The Seller shall provide a separate, unique C of C with the following information at a minimum:
 - 1.5.1 Customer Name, i.e., Microchip
 - 1.5.2 Purchase Order #
 - 1.5.3 Part Number
 - 1.5.4 Revision
 - 1.5.5 Serial Number/s
 - 1.5.6 Lot Date Code
 - 1.5.7 Quantity
 - 1.5.8 Statement of conformance, e.g., "The items furnished per Buyer's procurement document have been manufactured, tested, and inspected in accordance with the requirements of the PO and applicable specifications/drawings and the results of such tests and inspections meets the requirements thereof." (or equivalent wording)

2.0 LIMITED LIFE MATERIAL

- 2.1 Electronic parts shall be from a single Lot Date Code (LDC).

- 2.2 Electronic parts shall not be from a LDC older than 2 years from the date of the PO. Older LDC's must be reported to the Buyer for submittal to Microchip Engineering for possible approval.
- 2.3 Chemicals shall have 75% or greater of their shelf life remaining from the date of the PO.
- 2.4 Silver coated copper wire, QQW343xxx, M22759/xxx, per the J-STD-001 Space Addendum, carries a 10 year shelf life. Microchip prefers to use nothing older than 5 years. Anything older will require approval from Microchip.

3.0 CONFIGURATION CHANGE CONTROL

- 3.1 The Seller shall notify Microchip of any proposed changes to controlled designed parts, materials, fabrication methods, or processes and obtain Microchip's approval prior to change implementation.
- 3.2 The Seller shall also advise Microchip of proposed changes to facility location, or ownership.
- 3.3 The seller shall utilize Microchip's AVL (approved vendor list) when one exist for the product being fabricated. EX: PCBA's. Any variation from the AVL must be approved by Microchip prior to the change being made.
- 3.4 Special Processing - Where a customer designated, or approved processor is required to be used, and communicated through contract, purchase order, SCD, etc... supplier may not use alternate processors without written approval from the Microchip buyer.

4.0 HANDLING AND PACKAGING

- 4.1 Material on this order susceptible to damage from electrostatic or electromagnetic sources must be handled and packaged in compliance with ANSI/ESD S20.20 or equivalent.
- 4.2 Material on this order susceptible to physical damage must be packaged in a manner which will prevent part-to-part contact during handling, shipping and storage.
- 4.3 Shock sensitive material shall be packaged to protect it from damage and shall be prominently marked, "Handle with care - contents are shock sensitive."

5.0 SELLER'S ACCEPTANCE/INSPECTION VERIFICATION TEST DATA

- 5.1 Items shipped against this order shall be accompanied by certified copies of test and inspection data showing actual results, compared to specification requirements, which verify product conformance. Where the product is serialized, the data must be by serial number. Copies of all such data shall be retained by the Seller for a minimum of 7 years unless otherwise specified by this order.
- 5.2 First Article Inspection - Seller to provide 100% first piece inspection/test data on all drawing and related specification characteristics, dimensions, functional parameters or notes on 3 random identified parts/items, or as amended by Microchip's direction, in the first shipped production lot to verify conformance to all technical requirements. Any subsequent design changes must be supported by first piece data on all affected characteristics on the next production lot. For mechanical items the first article line entries shall be numbered and correspond to numbered (ballooned) characteristics on the specification. A copy of the marked-up (ballooned) drawing shall accompany the first article. (See SAE AS9102 as a guideline.)



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6.0 NONCONFORMING MATERIAL PROCESSING

6.1 Nonconforming product shall not be submitted to Microchip without the express written permission from Microchip's Buyer.

6.2 Resubmission of rejected material

All items rejected by Microchip and subsequently resubmitted by the Seller shall bear adequate indication of such resubmission of the items, or on the shipping document. Specific reference shall be made to Microchip's rejection report number and clear evidence given that corrective action has been taken to prevent recurrence of the original cause of rejection. In addition, the material should be identified as either "reworked/resubmitted" or "replaced/resubmitted."

7.0 SOLDERABILITY

7.1 Components and devices designed for assembly by soldering must pass the solderability requirements of MIL-STD-202 Method 208. Pcb's must pass Category 2 solderability testing per IPC-J-STD-003.

8.0 MICROCHIP SOURCE INSPECTION

8.1 Microchip reserves the right to inspect any, or all, materials, witness services, or verify system compliance at the Seller's facility for the term of this Purchase Order.

9.0 PCB REQUIREMENTS

9.1 Printed wiring boards shall be designed in accordance with IPC 2221 Class 3, and fabricated in accordance with IPC 6011 and IPC 6012DS, MIL-PRF-31032/1 or /2 or MIL-PRF-55110.

9.2 When TOR requirements are required by contract the Supplier shall meet all requirements of "Supplier Flowdown of TOR Requirements 899-00168-002".

10.0 RIGHT OF ACCESS

10.1 Microchip, their customers, and regulatory authorities shall have the right of access to all facilities involved in the order and to all applicable records.

11.0 CONTRACTUAL FLOW DOWNS

11.1 Requirements in the purchasing documents shall be flowed down to sub-tier suppliers.

12.0 COUNTERFEIT PARTS PREVENTION

12.1 a) Definitions for purposes of this Clause:

12.1.1 "Authentic" shall mean (i) genuine; (ii) from the legitimate source claimed or implied by the marking and design of the product offered; and (iii) manufactured by, or at the behest and to the standards of, the manufacturer that has lawfully applied its name and trademark for that model/version of the material.

12.1.2 "Authorized Source" means (i) the original manufacturer, (ii) the original manufacturer's authorized distributor, or (iii) any other source where MICROCHIP has approved in writing and in advance of the Seller's purchase from such source.

12.1.3 "Counterfeit Parts" shall mean a good, item, component module, assembly, or product whose origin, material, source of manufacture, performance, or characteristics are misrepresented. This term includes, but is not limited to, (i) items that have been (re)marked to disguise them or falsely represent the identity of the manufacturer, (ii) defective, substandard, or re-graded items

and/or surplus items scrapped by the original manufacturer, and (iii) previously used or reclaimed parts misrepresented as new and unused. "Independent Distributor" shall mean a person, business, or firm that is neither authorized nor franchised by an Original Component Manufacturer ("OCM") or Original Equipment Manufacturer ("OEM") to sell or distribute the OCM/OEM's products but which intends to sell, broker, and/or distribute such OCM/OEM products. Independent Distributors may be also referred to as unfranchised distributors, unauthorized distributors, and/or brokers.

12.1.4 "Parts" shall mean a good, item, component, module, assembly or product. This includes mechanical parts such as sheet metal, machined parts, fasteners and the surface treatments applied to said parts.

12.2 SELLER represents and warrants that only new and authentic materials are used in Parts intended to be delivered to Microchip and that the Work delivered contains no Counterfeit Parts. No other material than a new and authentic part are sold. To mitigate the possibility of the inadvertent use of Counterfeit Parts, SELLER shall only purchase authentic parts directly from the Authorized Source. SELLER must make available to MICROCHIP, at MICROCHIP's request, documentation that authenticates traceability to chain of control of the components to that applicable OEM/OCM. Purchase of parts/components from Independent Distributors (Brokers) is not authorized unless first approved in writing by MICROCHIP Procurement Representative and Supplier Quality Engineering. SELLER must present complete and compelling support for its request and include in its request all actions to ensure the parts/components thus procured are genuine items. MICROCHIP's approval of SELLER request(s) does not relieve SELLER's responsibility to comply with all Contract requirements, including the representations and warranties in this paragraph.

12.3 SELLER shall maintain a documented policy and procedures (an appropriate documented approach) that provides for prior notification and customer (MICROCHIP) approval before parts are procured from sources other than OEMs/OCMs or through the OEM/OCM's authorized distribution chain. SELLER shall provide copies of such records for MICROCHIP's inspection upon MICROCHIP's request for up to seven (7) years beyond the last purchase or contract termination.

12.4 If SELLER sells or otherwise furnishes MICROCHIP with any Counterfeit items, MICROCHIP shall have the right to impound such parts, and SELLER shall promptly replace such items with parts acceptable to MICROCHIP. In such case, SELLER shall be liable to MICROCHIP for all reasonable costs relating to impoundment, removal, replacement and proof of physical destruction. MICROCHIP may withhold payment for any Counterfeit parts and may turn such items over to government authorities for investigation.

12.5 SELLER acknowledges that any willful act to falsify, conceal or alter a material fact, or any false, fraudulent or fictitious statement or representation in connection with goods or services provided to MICROCHIP may be punishable in accordance with applicable law and, in some circumstances, could result in civil and/or criminal penalties.

12.6 Each of the rights and remedies reserved by MICROCHIP in this requirement shall be cumulative and additional to any other or further remedies provided in law or equity or in any contract between SELLER and MICROCHIP. A waiver of breach of any provision hereof shall not constitute a waiver of any other breach.

12.7 SELLER agrees to comply with MICROCHIP Purchasing Policy 07-01-2012 Counterfeit Parts Avoidance or SAE-AS5553 Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition and IDEA-STD-1010-B Acceptability of Electronic Components Distributed in the Open Market



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whichever is more stringent.

- 12.8 SELLER shall flow the requirements of this paragraph 12 to its subcontractors and suppliers at any tier for the performance of this Contract.

13.0 OCM/OEM CERTIFICATE OF COMPLIANCE

- 13.1 Original Component Manufacturer's or Original Equipment Manufacturer's Certificate of Compliance for each mechanical part included in the final assembly shall also have material certification and surface treatment certification as part of the C of C's. These C-of-C's shall meet the requirements of Clauses 1.5, 1 through 1.5.7 and Clause 12.0.
- 13.2 Certificates of Compliance meeting all of the requirements of Clause 13.1 with the addition of Original Component Manufacturer's or Original Equipment Manufacturer's CAGE Codes.
- 13.3 Original Component Manufacturer's, Original Equipment Manufacturer's or authorized Distributor's Certificate of Compliance for each electronic component/device included in the final assembly shall be retained by the seller. SELLER shall provide copies of such records for MICROCHIP's inspection upon MICROCHIP's request for up to seven (7) years beyond the last purchase or contract termination.

14.0 Commercial off-the-shelf products (COTS) Purchase Order Flow downs

- 14.1 COTS products are products designed and manufactured for sale to all customers. They are not designed under a specific contract for a specific customer. When creating a purchase order (PO) for such products or PCBA's, power supplies, oscillators, other types of modules or sub-assemblies that contain electronic components or stand-alone electronic components and intended for use in a COTS product the following clauses shall be attached to the PO. Clause: 1.5, 3.0, 4.0, 8.0, 10.0, 12.0, 13.3, 15.0

15.0 Calibration Control

- 15.1 Supplier shall maintain all inspection and test equipment used during in-process and final inspection for verification of products supplied to Microchip under calibration control.
- 15.2 Supplier shall maintain and control the associated in-process and test facilities per its QMS procedures with calibration traceable to an international or national standard, and performed in accordance with ANSI/ISO/IEC 17025, current revision, or equivalent quality management system.

16.0 Communication to Personnel

- 16.1 The Supplier shall ensure that all personnel supporting the requirements of this Purchase Order shall be aware of the following:
- their contribution to product or service conformity;
 - their contribution to product safety;
 - the importance of ethical behavior.

17.0 Quality Records

- 17.1 The supplier shall identify, maintain and disposition Quality Records in accordance with their QMS procedures or applicable Quality System (e.g. ISO9001, AS9100). Quality records shall be retained for a period

of no less than five (5) years, unless otherwise defined for specific commodities herein, from completion of the purchase contract or as specified by Microchip with individual PO's/Contracts. This requirement shall be flowed down to all sub-tiers. Quality Records are, but not limited to the following:

- First article inspection reports
- Test results
- Evidence of inspection
- Raw Material and Process certifications
- Nonconforming Material Reports
- Documented Information
- All applicable records shall be made available upon request, or during an audit by Microchip or Microchip's customers or government entities.
- Records must be stored in an area that prevents loss, damage or deterioration. All data stored by electronic means shall be secured with back-up procedures, and audited to verify the integrity of the data.
- The supplier shall follow their documented processes for disposition of records, unless the following conditions arise, which would require the supplier to contact the Microchip buyer for disposition of those records:
- Termination of business activity
- Supplier or their sub-tier request to waive or modify retention periods

18.0 Quality Management System

18.1 All suppliers are required to have a documented Quality Management System. At minimum, Microchip expects the quality management system be implemented to meet the requirements of ISO 9001.

18.2 Microchip will explicitly specify on any purchase orders and/or individual specifications if suppliers are required to have their QMS certified by an accreditation body to industry-known registration standards such as ISO9001 or equivalent (e.g. TS16949, AS9100 etc.). If so specified, suppliers will be required to provide evidence of current certification. Note Suppliers must immediately notify the Microchip buyer if they fail to maintain their certification/registration.