

## Printed Circuits LLC - Purchase Order Quality Clauses

The following purchase order Quality Clauses when referenced on the purchase order, shall apply to all goods and services furnished by the seller to Printed Circuits LLC (hereafter referred to as PCi).

- Q01 Right of Entry** - Printed Circuits LLC, its customers and government or regulatory authorities reserve the right of entry to your facility and all other facilities involved in the order, including sub-tier suppliers. These representatives shall have access to all procedures, practices, processes, associated documents and records related to quality assurance, quality control and configuration control. PCi reserves the right to determine and verify quality of work, records and material. Such visits shall not preclude subsequent rejection of product and do not absolve the supplier of its product integrity responsibilities.
- Q02 Quality System Requirements** - The seller shall maintain a quality management system that complies with the latest version requirements of ISO 9001 or an equivalent system that provides adequate inspection to verify that the product/service supplied is in full compliance with the purchase order requirements and all applicable specifications. Compliance with these requirements are subject to audit by PCi. The seller shall notify PCi of their QMS certifications and/or compliance status changes. The seller shall flow down to all sub-tier suppliers the applicable requirements in the purchasing documents, including key characteristics.
- Q03 Quality Records** - Seller shall maintain quality records, including traceability throughout all stages of manufacturing/processing. The quality records must be legible, reproducible, and identifiable to the purchase order. Quality Records shall be stored and maintained in manner so they are readily retrievable and in a suitable environment to minimize deterioration or damage and to prevent loss. This requirement applies to PCi suppliers and any sub-tier suppliers. The retention period for Quality Records is three (3) years minimum unless otherwise specified. Record retention longer than three (3) years will be specified on the purchase order. PCi, our customers, Government, and Regulatory Agency representative shall have access to review all quality records as they pertain to this order.
- Q04 Corrective Action** - Acceptance of this Purchase Order obligates seller to perform, upon request, a written corrective action investigation when PCi receives discrepant material. A corrective action report shall be furnished, within ten (10) days, which is specific and conclusive to prevent recurrence of the discrepancy.
- Q05 Specification Revisions and Notification of Changes** - The product being manufactured and/or service performed must be completed per Purchase Order and Engineering drawing requirements. The specification revision used shall be the current revision unless otherwise specified on the purchase order. Seller shall notify and obtain approval from PCi for any changes in product, process or manufacturing location. Seller shall not subcontract work to other suppliers without written approval from PCi. When such approval is granted, all terms and conditions of the PCi purchase order shall be applicable to sub-tier suppliers.
- Q06 Certificate of Compliance (CofC) and Traceability Documents** - Certification documents are required from supplier and sub-tier supplier, and shall be identified with and include the following (as applicable):
- The PCi purchase order number
  - Services or processes that have been performed
  - Quantity, Lot and/or Serial Numbers
  - Part Number and Revision as specified on the purchase order
  - Each applicable material, process specification and/or Technical sheet, including the revision of each as called out on the drawing and purchase order.
  - Signature, Title and Date by an authorized representative of the Seller
- All traceability Documentation / Certifications must accompany each shipment and must be legible. **The supplier shall have traceability for all raw materials and processing lots throughout the manufacturing process, inventory storage points, and within all levels of the supply chain back to the original source.**
- Q07 Test Reports** - Each shipment must be accompanied by one (1) legible and reproducible copy of actual test results identifiable with test parameters and product submitted. These reports must contain the Test / Inspection Stamp of the individual performing the task, or the signature and title of the authorized representative of the agency performing the test.
- Q08 Control of Nonconforming Product** - Nonconforming product shall be segregated, tagged and controlled to prevent unintended use. If it is discovered that nonconforming product has been delivered to PCi, PCi shall be immediately notified of such nonconformities. PCi grants no MRB authority to the seller.
- Q09 Material Suppliers** - Material suppliers shall provide a material certificate of conformance to requirements specified in the purchase order.

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- Q10 Materials Receiving Inspection** - Seller certifies that receiving inspection has been performed on purchased materials to ensure compliance with all drawings and specifications, and that test reports and/or raw material certifications are on file available for review by PCi upon request.
- Q11 Material Safety Data Sheets (MSDS)** - MSDS shall be included in each shipment of materials or chemicals that contain hazardous materials or require special attention for safe handling.
- Q12 Limited Shelf Life Material** - The seller shall identify each item, package or container of limited-calendar-life material with the cure or manufacture date, storage temperature, special handling conditions and requirements, in addition to the normal identification requirement of name, part number, specification number, type, size, quantity and manufacturing recommended shelf life. This identification, including special handling conditions and requirements shall be recorded on certifications and shipping documents for the material.
- Q13 DFARS Requirements** - If suppliers product fall under the specialty metal clause of 252.225.7008 or 7009, supplier must comply with the Berry Amendment (DFARS) supplement 252.225.7708 or 7009, Preference for Domestic Specialty Metals which include raw materials/components made with any steel, metal alloys consisting of nickel, iron nickel, and cobalt base alloys, titanium and titanium alloys, zirconium and zirconium based alloys. The supplier must provide PCi with a certification of compliance with each shipment documenting that the product complies with 252.225.7008 or 7009, Alt 1 specialty metal requirements. If you have any questions, please visit the government webpage at <http://acg.osb.mil/dpap/dars/djarspgi/vuttrny/index/htm> or contact your PCi buyer.
- Q14 DODD - FRANK Compliance (Conflict Minerals)** - the term Conflict Minerals is defined as minerals derived from those mined in the Democratic Republic of the Congo (DRC) or adjoining countries and which directly or indirectly finance or benefit armed groups in that region. These minerals are : gold (Au), tantalum (Ta) from columbite-tantalite, tin (Sn) from cassiterite, and tungsten (W) from wolframite.
- (a) The seller certifies that there are no Conflict Minerals present in the product being provided and
  - (b) The seller shall submit with each shipment made against this purchase order a separate certification that includes:
    - (1) a statement that seller has taken responsible steps to ensure that product being provided does not contain Conflict Minerals,
    - (2) the name of the country of origin and the name of the smelter from which the minerals were mined,
    - (3) a statement that the materials furnished to PCi are in conformance with DODD-FRANK FINANCIAL REFORM BILL ACT (SECTION 1502); US LAW 111-203. TITLE XV.
- This certificate shall also affirm that supporting documentation is on file and will be made available to PCi or regulatory agencies upon request. Supporting documents shall be maintained for a minimum of three (3) years, unless otherwise specified on the purchase order, and remain legible, identifiable, readily retrievable and stored in a manner to prevent damage and/or deterioration. The certification shall reference the metal, PCi purchase order number, part number and/or lot traceability number, description and quantity shipped.
- Q15 Counterfeit Parts Prevention** - the seller shall have a program in place to prevent the delivery of counterfeit parts and materials to PCi. All parts and materials delivered to PCi shall be procured only form a franchised distributor, OEM (Original Equipment Manufacturer) ore OCM (Original Component Manufacturer). If it is determined in a specific instance that this is not possible, a written request must be submitted to PCi Purchasing within 5 working days of this determination. The seller is responsible for the flow down of this requirement to its sub-tier contractors and their compliance to it. Further guidance on counterfeit parts avoidance can be found in SAE documents AS5553 (Electronics) and AS6174 (Material).
- Q16 Export/Import Compliance** - Each party shall perform under this Agreement in compliance with all applicable export control laws and regulations, including without limitation the US Department of Commerce's Export Administration Regulations (EAR) and, to the extent applicable, the US Department of State's International Traffic in Arms Regulations (ITAR). Seller agrees that no technical data, information or other items provided by PCi will be provided to a foreign subsidiary or parent company of the Seller and/or foreign national employees of Seller, without the express written authorization of PCi and the Seller obtaining the appropriate export license, technical assistance agreement, or other requisite documentation for ITAR controlled technical data or items. Seller shall immediately notify PCi if it becomes listed on any Excluded or Denied Party List of an agency of the US Government or has its export privileges denied, suspended or revoked.

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- Q17 Certificate of Calibration** - the supplier shall submit for each item calibrated, one reproducible record of actual calibration results, including applicable graphic and tabular data. Records shall be traceable to the individual item tested, by part number, serial number and customer's order number for the item shipped. The organization's calibration certificate shall include a unique calibration tracking number, tolerance range, and when applicable, environmental conditions for each parameter calibrated. The certificate shall also state the operating error per specification, the degree of correction of out of tolerance condition and remaining uncorrected out of tolerance condition, if applicable.
- Q18 Source Inspection** - PCi will inspect the material submitted on this purchase order at the seller's facility. Source inspection approval or acceptance by the PCi Quality representative shall not constitute final approval or acceptance by PCi of the items covered by this purchase order, nor shall it relieve the seller of their responsibility to furnish acceptable product.
- Q19 RoHS Compliance** - The Restriction of the Use of Certain Hazardous Substances (RoHS) Directive, 2002/95/EC of February 13, 2003, was enacted by the European Community to minimize the impact of the end-of-life electrical and electronic equipment on the environment. The directive bans the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic products sold in the European Union beginning July 1, 2006. Seller is requested to certify the RoHS compliance status of the items supplied under this purchase order and provide information as needed to confirm process capability and traceability. The identification scheme employed must clearly differentiate compliant parts from their predecessors. In lieu of specific reporting requirements, Seller will provide material declarations based on the latest version of the IPC-1752 standard.
- Q20 Handling, Packaging, Preservation and Delivery** - The seller shall use appropriate methods of handling, packaging, and preservation to prevent damage of product in process and during delivery.  
**Hazardous Materials** - as defined by the EPA, shall be packaged and clearly identified in such a manner as to include any and all special handling, packaging, storage, environmental, or other requirements imposed by statute or regulation.