

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 PC LLC).

- Q01 Right of Entry** - Printed Circuits, its customers and government and/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 perform quality surveys and inspections as well as access to all procedures, practices, processes, associated documents and records related to quality assurance, quality control and configuration control of the PCi product. PC LLC 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 PC LLC. The seller shall notify PC LLC 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 PC LLC 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. Seller shall contact PC LLC for guidance on disposal of quality records related to this order. PC LLC, 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 PC LLC receives discrepant material. A corrective action report shall be furnished, within thirty (30) days, which is specific and conclusive to prevent recurrence of the discrepancy.
- Q05 Specification Revisions** - 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.
- Q05.1 Control of Product & Equipment** - Seller shall notify and obtain approval in writing from PC LLC prior to any changes to product, equipment, manufacturing processes, suppliers, work transfers, and facilities. Seller shall not subcontract work to other suppliers without prior written approval from PC LLC. When such approval is granted, all terms and conditions of the PC LLC 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):
- a. The PC LLC purchase order number
 - b. Identify the service(s) or process(es) that were performed
 - c. Quantity, Lot and/or Serial Numbers
 - d. Part Number and Revision as specified on the purchase order
 - e. Each applicable material, process specification and/or Technical sheet, including the revision of each as called out on the drawing and purchase order.
 - f. Signature, Title and Date by an authorized Quality 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** - Seller shall notify PC LLC in writing of nonconforming products or processes prior to shipment, and shall ensure that nonconforming product is segregated, tagged and controlled to prevent unintended use or shipment. If it is discovered that nonconforming product has been delivered to PC LLC, the Seller shall immediately notify PC LLC of such nonconformities. PC LLC grants no MRB authority to the seller.

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- Q09 Material Suppliers** - Material suppliers shall provide a material certificate of conformance to requirements specified in the purchase order.
- 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 PC LLC upon request.
- Q11 Safety Data Sheets (SDS)** - SDS 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 PC LLC 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 PC LLC buyer.
- Q14 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 PC LLC 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 PC LLC 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, PC LLC 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 PC LLC. All parts and materials delivered to PC LLC shall be procured only from a franchised distributor, OEM (Original Equipment Manufacturer) or OCM (Original Component Manufacturer). The seller must provide counterfeit component/parts awareness training to its personnel. The seller is responsible for the flow down of this requirement to its sub-tier contractors and their compliance to it. If suspect or counterfeit component/parts are identified/received they must be contained, evaluated, dispositioned and disposed of such that they cannot reenter the supply chain. Any receipt of suspect or counterfeit components or parts in support of this purchase order must be reported to PC LLC immediately. 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 PC LLC 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 PC LLC 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 PC LLC 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** - PC LLC will inspect the material submitted on this purchase order at the seller's facility. Source inspection approval or acceptance by the PC LLC Quality representative shall not constitute final approval or acceptance by PC LLC 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.
- Q21 DPAS Rated Orders** - This is a rated order certified for national defense, emergency preparedness, and energy program use, and the Supplier shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).
- Q22 Measuring & Test Equipment** - It is the suppliers responsibility to ensure that all equipment used for inspection and testing of Printed Circuits LLC supplied parts are maintained and that calibration is traceable to National Institute of Standards and Technology (NIST) requirements. The suppliers calibration system shall meet the requirements of ANSI/NCSL Z540.1-1994 or ISO/IEC 17025.
- Q23 Personnel Qualification** - Personnel are required to be aware of their contribution to product conformity, product safety, and ethical behavior. Personnel performing inspection and testing operations shall meet the technical and educational requirements for their assigned duties. Evidence of training, qualification or certification are maintained and personnel are provided continual training to maintain job proficiency. Training of personnel shall be documented and maintained up to date.
- Q24 Foreign Object Debris/Damage (FOD) Prevention** - The Seller shall maintain a FOD prevention program. Prior to closing inaccessible or obscured areas and compartments during assembly, the Supplier shall inspect for foreign objects/materials and ensure no FOD exists. The supplier shall ensure tooling, jigs, fixtures, and test or handling equipment, are maintained in a state of cleanliness and repair sufficient to prevent FOD. By delivering items, the supplier shall be deemed to have certified that such items are free from any foreign materials that could result in FOD. The supplier's quality program shall include FOD preventive practices and packaging.
- Q25 Destruction of Export Controlled and Official Use Only Information** - export controlled manufacturing information provided to the Seller by PC LLC must be destroyed when no longer needed. Manufacturing information includes documents, electronic media, models and materials (including scrap and in-process scrap). Destruction must make said items unrecognizable and must be disposed of using normal waste processing.
- Q26 Honeywell / Sandia PQR 1050 Requirements** - Seller must meet all requirements listed in sections 5 and 6 of specification PQR 1050 Supplier Quality Program, IV (current revision).