



QUALITY ASSURANCE PROVISIONS

F74020

Q-1 QUALITY PROGRAM and INSPECTION SYSTEM REQUIREMENTS:

- A.** The Seller shall provide and maintain a Quality Control System acceptable to the Buyer. All supplies and services specified in the Purchase Order shall be subject to appropriate control of quality as necessary to assure compliance with the referenced drawings and specifications. Records of all inspections, tests, and other verifiable documentation of quality shall be kept complete and available for the Buyer's review.
- B.** MIL-I-45208 A "Inspection System Requirements"
- C.** ISO Quality Management System Requirements or equivalent
- D.** AS9100 Quality Management System Requirements or equivalent
- E.** The Seller shall provide such facilities, right of entry and assistance as required by the Buyer's Quality Assurance representatives in the performance of their functions. The Buyer's Quality Assurance representatives may perform audits and maintain surveillance of the Seller's facility to assure compliance with the Quality Program and evaluate the degree of capability and the continuing application of such ability to comply with these requirements. This function shall also apply to sub-suppliers within the Seller's cognizance.
- D.** The supplier shall ensure that persons at their facilities are aware of: Their contribution to product or service conformity; their contribution to product safety; the importance of ethical behavior.

Q-2 CHANGE CONTROL:

The Seller specifically agrees that no changes shall be made in design, configuration, material, manufacturing process, testing method, location, or testing sequence, without providing the Buyer with prior written notification for evaluation and approval.

Q-3 MERCURY EXCLUSION:

The Seller shall assure that products furnished have not come in contact with or contain functional mercury in any form.

Q-4 CERTIFICATE OF COMPLIANCE:

The Seller shall submit with each shipment of material a signed (Signature of responsible party may be original or electronic) Certificate of Compliance, which certifies the following: "All material and/or services supplied are in conformance with the requirements of the Purchase Order. Test reports, inspection records, or other verifiable documentation of quality are maintained at the point of manufacture and are available for review by the Buyer and/or Government/Customer representatives." The Supplier shall use their company letterhead and own format.

Q-5 NOTICE OF REJECTION:

Resubmitted of previously rejected supplies, including lots rejected on the basis of sampling inspection, shall be accompanied by the statement "Re-submitted Lot" on the Seller's shipping document and shall reference the Buyer's rejection report number (if applicable). Such re-submittal shall be made on a separate Seller shipping document.

Q-6 ELECTRONIC COUNTERFEIT PARTS:

If suspect/counterfeit parts are furnished under this purchase order and are found in any of the goods delivered hereunder, such items will be impounded by the Buyer. The Seller shall promptly replace such suspect/counterfeit parts with parts acceptable to the Buyer and the Seller shall be liable for all costs relating to the removal and replacement of said parts. Buyer reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts. Obtaining certificate of conformance from the Original Equipment/Component Manufacturer (OEM/OCM) validates part authenticity. Seller will have set guidelines of SAE AS5553 (Counterfeit Part Risk Mitigation Control Plan) to better manage this risk and to prevent the incursion of counterfeit electronic parts from entering the supply chain.

Q-7 ELECTROSTATIC DISCHARGE (ESD):

Any sensitive devices subject to damage from electrostatic discharge shall be handled and packaged to provide protection from ESD damage. Only conductive non-static materials shall be used in packaging for shipment. All packaging shall be clearly marked as containing ESD sensitive devices.

Q-8 SUPPLIER NOTIFICATION OF CHANGE:

The Supplier shall notify the seller thirty (30) days in advance when there is a change in the company name, location, executive management, product, commodities, or whenever a change directly affects quality. In the event there is an interim manager in place, notification of delegation is required within two (2) weeks upon such placement. Notification is required within two (2) weeks when an interim post is replaced by a permanent position.

Q-9 BUYER'S SOURCE INSPECTION:

- A. At the option of the Buyer, all items covered by this Purchase Order are subject to in-process and/or final inspection by the Buyer's inspector at the point of manufacture. This shall include surveillance of the products, the Seller's quality system, procedures, and facilities. The Seller shall furnish at no cost to the Buyer the necessary facilities and equipment and perform tests as required by the Buyer to demonstrate conformance to the Purchase Order and referenced documents. The Buyer shall arrange for source inspection during the manufacture or processing of the material on the Purchase Order. The Seller shall notify the Buyer in sufficient time to permit adequate inspection scheduling. When this option is exercised by the Buyer, evidence of source inspection shall accompany each shipment. Final acceptance shall be made by the Buyer at destination, unless otherwise specified in the Purchase Order.
- B. The Buyer Source Inspection during the manufacturing and test/inspection cycles is required. The Seller shall provide a manufacturing/inspection/test schedule to enable the Buyer to provide source surveillance at the pre-determined points. The Seller shall notify the Buyer in sufficient time to permit adequate inspection scheduling.
- C. The Buyer Source inspection is required on the final product. The Seller shall notify the Buyer in sufficient time to permit adequate inspection scheduling. Notification will be required by notifying the buyer. The request must include the following information: Name of the Company, Contact information, Location of inspection, Part Number, PO Number, Revision Level, Quantity, Desired date/Time of source inspection.

Q-10 PACKING AND PACKAGING REQUIREMENTS:

The Seller shall assure that the supplies on the Purchase Order are packed and packaged using materials of a grade, size, and weight which shall provide adequate physical protection from damage and contamination during handling and transport to the point of delivery. When required by the Purchase Order and/or referenced documents, the Seller shall pack and package supplies to specific packing and packaging specifications. Suppliers of bare printed circuit boards shall use moisture barrier bags vacuum packaged/sealed, each package containing desiccant and humidity indicator. Unit packs of all these methods shall include a humidity indicator with activated desiccant. Suppliers of electronic components that are listed as Moisture Sensitive Devices (MSD) will have MSD packaging. The package is to be sealed in moisture barrier bags with enclosed desiccant, humidity indicator card and a moisture sensitivity level label.

Q-11 NONCONFORMING MATERIAL (MATERIAL REVIEW BOARD) AUTHORITY:

- A. The Seller is **not** granted MRB authority on discrepant materials except scrap. All MRB activities that require a deviation from the drawing requirements shall be submitted to the Buyer's MRB activity for disposition and approval prior to shipment.
- B. For material supplied and owned by The Seller, the Supplier is not granted MRB authority on discrepant materials. Further, any request for Rework or Scrap of SELLER-supplied material shall be routed through the Buyer and given permission in writing prior to reworking or scrapping the discrepant material.
- C. The supplier is responsible for notifying purchasing of nonconforming processes, products, or services, pre and post-delivery, and obtaining approval for their disposition.

Q-12 SUB-TIER REQUIREMENTS:

Suppliers that receive Purchase Orders from The Seller will flow down these instructions given herein to any sub-tier suppliers. The Supplier shall establish, maintain, monitor, and control the use of quality data metrics and preventative maintenance. These records shall be made available to The Seller upon request. The Seller shall provide such facilities, right of entry and assistance as required by the Buyer's Quality Assurance representatives in the performance of their functions.

Q-13 (Intentionally left blank).

Q-14 FOREIGN OBJECT DAMAGE (FOD) PREVENTION:

The Supplier shall establish and maintain an effective Foreign Object Damage (FOD) Prevention Program using NAS412 as a guideline. This standard establishes general workmanship practices and standard terms for the prevention of FOD to aerospace products.

Q-15 CORRECTIVE ACTION REQUIREMENTS:

Where the Seller is requested to submit a Corrective Action Report, the Seller shall submit a response within 14 (14) days of receipt of such request unless an extension is otherwise provided by The Buyer. Any Corrective Action Report submitted to The Seller shall be in the format specified by The Buyer. If after submittal to The Seller, the Seller determines the need for revision, the Seller shall immediately notify The Buyer of such revision changes. In the event the Seller is unable to respond within the allotted ten-day time frame, the Seller shall submit a request for extension which shall include the reason for the extension request and time needed to complete the Corrective Action Report. The Buyer reserves the right to withhold acceptance of shipments either at source or destination until the Seller Corrective Action Report is submitted and approved.

Q-16 ROOT CAUSE ANALYSIS:

A full Root Cause Analysis shall be submitted upon request by The Seller for nonconforming material discovered at any point during product realization at Seller's facility or Buyer's facility. The Root Cause Analysis shall include immediate corrective action, containment, and preventative action. Objective evidence shall be supplied upon request by the Buyer.

Q-17 CALIBRATION:

- A.** The contractor's calibration system shall comply with NCSL Z540-1, ISO 17025, or Mil-STD-45662. All certifications shall state at a minimum that all standards used are traceable to the National Institute of Standards and Technology, date of calibration, date of expiration, list of standards used, and the technician's signature.
- B.** A Certificate of Calibration is required, which shall include the following:
- Calibrating company's name
 - Equipment nomenclature or description
 - Condition received (e.g. "In Tolerance" or "Out of Tolerance")
 - Date of calibration
 - Date of calibration expiration
 - Statement of uncertainty (e.g. "All test ratios meet or exceed 4:1 unless otherwise stated.")
 - Calibration procedure number
 - Environmental conditions
 - Traceability Report (e.g. MT&E used to calibrate, NIST number, and calibration date)
 - Calibration Certificate Quality Statement
 - Signature of technician
 - Statement of compliance to ANSI/NCSL Z540-1, ISO 9001, ISO 10012, and ISO 17025

Q-18 ORIGINAL EQUIPMENT MANUFACTURER'S/FRANCHISED DISTRIBUTOR:

All Product supplied to this purchase order shall be procured from an original equipment manufacturers (OEM) Franchised Distributor (unless the product can be procured directly from the OEM of the product). A Certificate of Compliance validating this statement shall be maintained by the Franchised Distributor/OEM. If a product must be obtained from a non-franchised distributor, the supplier shall obtain an authorization from the buyer (procuring activity/sourcing) with approval from the cognizant quality activity.

Q-19 PARTS, MATERIALS, AND ESD PACKAGING PRODUCTS:

The Seller Receiving inspection acceptance criteria shall be based upon Purchase Order part identification, quantity, physical damage to parts or materials, and ESD packaging materials where required by manufacturer or distributor.

Q-20 DOCUMENT AVAILABILITY:

Inspection records, test reports, and/or other verifiable evidence of Quality, indicating conformance to all applicable specifications, are maintained at the point of manufacture and/or fabrication and are available for review by authorized Buyer and/or Government/Customer representatives. The minimum retention of records required by the Seller is ten (10) years unless otherwise specified.

Q-21 GOVERNMENT, CUSTOMER or REGULATORY AUTHORITIES SOURCE INSPECTION:

- A. When government, customer, Regulatory Authorities inspection is required prior to shipment from Seller's facility. Upon receipt of the Purchase Order, the Seller shall promptly notify the Government, Customer, or Regulatory authorities' representative so that appropriate planning for Government, Customer or Regulatory authorities' inspection can be accomplished.
- B. During performance on this order, the Seller's quality control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized Government, Customer or Regulatory authorities' representatives at any time. Government, Customer or Regulatory authorities' inspection or release of product prior to shipment is not required unless the Seller is otherwise notified in writing by the Buyer's procurement activity.
- C. Upon receipt of the Purchase Order, the Seller shall furnish a copy to the Government, Customer or Regulatory authorities' representative who normally services the Seller's plant, or, if none or cannot be located, the Buyer shall be notified immediately. Government, Customer or Regulatory authorities Inspection does not relieve the Seller of contractual responsibilities to the Buyer. The Seller shall provide such facilities and assistance as may reasonably be required by the Buyer to assure product integrity.

Q-22 PHYSICAL AND CHEMICAL ANALYSIS:

Each shipment of items defined in this Purchase Order shall be accompanied by the actual chemical and physical test report for each part number, serial number, lot, or batch, as applicable. Test reports shall reference the Buyer's Purchase Order number, complete part number, revision letter, nomenclature, and specification number.

Q-23 LOT TRACEABILITY:

All items on this Purchase Order are subject to traceability at the Seller's facility, which is defined as the ability to trace the history, application, use, and location of an individual item or characteristic lot of items through the systematic assignment, recording, and correlation of control identification numbers.

Q-24 STATEMENT OF WORK, INSPECTION, AND TEST PLAN:

The Seller shall prepare an Inspection and Test Plan covering the material in this Purchase Order. The plan may be in any form appropriate to the circumstances but shall include, as a minimum, a description of the general and sequential controls in effect to maintain quality requirements throughout the manufacturing cycle. The plan shall be maintained under change control by the Seller. The plan shall be submitted to the Buyer in writing for approval by the Buyer's Quality department prior to the start of manufacturing.

Q-25 CERTIFIED INSPECTION/TEST DATA:

- A. Certified test data (or a true copy thereof) of the organization performing the test(s) shall be submitted for each shipment. On the individual test data files, the following is required: Part Number, Serial Number and test date.
- B. The Seller shall submit three (3) copies of the proposed test procedure and data sheet to the Buyer not less than 30 calendar days in advance of the Seller's scheduled date for testing for Buyer evaluation and approval. One copy shall be returned to the Seller with a statement of approval or disapproval with concerns and/or recommendations. In the event of the latter, the Seller shall re-submit the revised methods and forms for evaluation prior to approval.
- C. Test data confirming that "100% Continuity check was performed" shall be submitted for each shipment and shall indicate acceptance by Seller's Acceptance Stamp and date performed. Test Data shall be provided with each shipment unless Standard Quality Provision 11 is imposed.
- D. Certified special mechanical testing and/or data(s) shall be submitted for each shipment. Test Data shall be provided with each shipment unless Standard Quality Provision 11 is imposed.
- E. Crimp pull test required for cable assembly per IPC/WHMA-A-620, Table 19-9, Clause 19.7.2.
- F. 100% VSWR and Insertion Loss testing required on all RF cables. Test Data shall be provided with each shipment unless Standard Quality Provision 11 is imposed.

G. 100% Insulation Resistance and Hi-Pot testing required.

Q-26 SPECIAL CERTIFICATIONS:

The Seller shall obtain the following certification. Seller shall provide a copy of it with each shipment unless Standard Quality Provision 11 is imposed:

A. Material Certification

B. Special Processes Certification

Q-27 INSPECTION AND/OR PRODUCTION TOOLING:

The Seller shall be responsible for the control, protection, calibration, and care (other than normal wear) of all production and inspection tooling and equipment furnished by the Buyer for use in performance of Purchase Order requirements. All tooling shall be subject to Buyer surveillance and/or inspection upon notice. Loaned tooling, or replacement tooling of equal quality, shall be returned to the Buyer in an acceptable condition upon demand.

Q-28 WORKMANSHIP STANDARDS:

The purchased product on this Purchase Order is subject to workmanship specification requirements. In case of conflict between Buyer and Seller drawings and/or specifications, the Buyer shall be notified for direction on which drawings and/or specifications shall take precedence.

Q-29 (Intentionally left blank).

Q-30 IDENTIFICATION:

- A. The Seller shall legibly and permanently identify each part, assembly, and material in the methods and with the information prescribed by the detail document. For example, the Purchase Order number, gage or tool number, cure date (for limited shelf-life items), Buyer part number, etc., shall be included as required by the Buyer's drawing and/or specification. Parts, assemblies, and materials not having sufficient space for, or which could be damaged by marking shall be identified by a tag attached to the part or container.
- B. Materials with a limited shelf life shall reflect the Manufacturing (or Cure) Date and Expiration Date on the container (e.g., epoxies, paint, adhesives, etc.). A minimum of 85% of shelf life shall remain upon receipt at the Buyer's facility. The package is to be sealed in moisture barrier bags with enclosed desiccant, humidity indicator card and a moisture sensitivity level label.

Q-31 LEAD FREE PRODUCT:

By accepting this purchase order, the Seller shall certify the product(s) or service(s) supplied to The Seller is free from Lead (Pb) contamination. If Lead is a component of the Seller's processes, the Buyer shall be contacted for written directions.

Q-32 DATA SHEETS REQUIRED:

- A. Material Safety Data Sheets are required for the product identified on this Purchase Order. MSDS sheets shall be included in an envelope that is identified on the outside as the MSDS sheets with the Packing List.
- B. Technical Data Sheets are required for the product identified on this Purchase Order. Technical Data Sheets shall be included in an envelope that is identified on the outside as the Technical Data Sheets with the Packing List.

Q-33 CONFIGURATION CERTIFICATION:

The supplier shall not accept changes either verbally or via email from anyone other than the buyer. The Supplier is required to provide "As Built Configuration Data" with a minimum requirement of Part Number, Serial Number, and Revision Level.

Q-34 INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (ITAR):

Seller agrees to comply with all export regulations and the international traffic-in-arms regulations (ITAR) including but not limited to, part 122 entitled "Registration of Manufacturing and Exporter" and part 130 entitled "Political Contributions, Fees and Commissions." In the event Seller is supplying defense article hereunder, Seller agrees to maintain a valid and current Directorate of Defense Trade Controls (DDTC) registration. Seller shall provide its DDTC registration status (whether registered or not with) and expiration date to Purchaser and promptly advise of any updates or changes to such information, in the format requested by purchaser.

Q-35 FIRST ARTICLE INSPECTION, REPORT, AND APPROVAL:

Verification of First Article Inspection results for acceptance of the First Article Sample does not constitute acceptance of any other item, nor relieve the Seller of obligation to furnish items which conform to all requirements of this Purchase Order.

- A. A First Article inspection shall be performed by the Seller prior to submittal of material on this Purchase Order. A detailed report of inspection results and the article inspected shall be submitted to the Buyer. The First Article report shall include, at a minimum, the results of the dimensional measurements and when applicable, results of mechanical test, functional tests, and non-destructive tests. The Buyer's representative may witness the First Article Inspection. At least forty-eight (48) hours in advance of the First Article Inspection, the Seller shall advise the Buyer for scheduling of Source Inspection.
- B. The Seller shall furnish the Buyer with a First Article Inspection Report to the latest drawing revision and applicable certifications of the items required under the Purchase Order with the initial production shipment only.
- C. The Seller shall obtain acceptance of the First Article Inspection from the Buyer prior to the manufacture or fabrication of any production units.
- D. The Seller shall obtain acceptance of the First Article from the Buyer for each production lot(s). The First Article Inspection is required for each production lot(s). The format shall be determined by the Seller.
- E. The AS9102 First Article Inspection (FAI) shall be performed by the Seller in accordance with the requirements of AS9102 using all 3 forms (Form 1: Part Number Accountability; Form 2: Product Accountability– Raw Material Specifications, and Special Process(s), Functional Testing; and Form 3: Characteristics Accountability, Verification and Compatibility Evaluation).

Q-36 PRINTED CIRCUIT BOARD TEST REQUIREMENTS:

- A. Net-list electrical test: The Seller shall perform an electrical test using 'netlist' information supplied. Add statement to COC stating that "Net-List Testing Has Been Performed."
- B. The Seller shall assure and certify the PCB on this Purchase Order has been manufactured in accordance with IPC-A-600 latest revision.
- C. A Coupon and Cross Section Report is required with each shipment with the same production lot(s) run in accordance with IPC-TM-650, method 2.1.1 and shall be submitted with the shipment.
- D. All printed circuit board fabricated by the supplier shall meet the requirements of IPC-6012 (Qualification and Performance Specification for Rigid Printed Boards) Specification Printed Circuit Board/Printed Wiring Board General Specification.

Q-37 SOLDER CERTIFICATION:

The Supplier shall furnish with the shipment a certification stating that the soldered electrical and electronic assemblies were fabricated and inspected by trained assemblers and inspectors to the applicable requirements of J-STD-001, current revision. Acceptability for electrical/electronic assemblies shall be in accordance with IPC-A-610, current revision.

Revision History

REV.	DCN#	DATE	DESCRIPTION	ORIGINATOR
A		05-01-2017	Initial release	José R. Marroquín
B	DCN 23-006	08-22-2023	Added clauses Q-1, D and Q-11, C	José R. Marroquín
C	DCN-25-005	10-09-2025	Affected right of access clauses were updated to include customers and regulatory authorities	José R. Marroquín