



**QUALITY ASSURANCE REQUIREMENTS**  
**Spectrum Systems (Mercury Systems, Inc., Cypress, CA)**

**1. SUPPLIER QUALITY REQUIREMENTS**

**1A. Spectrum Systems SURVEILLANCE**

All phases of this procurement may be subject to the surveillance by the Spectrum Systems Quality Assurance Department.

**1B. Spectrum Systems SOURCE INSPECTION**

Spectrum Systems Product Assurance shall perform Source Inspection on this Purchase Order. Supplier is in no way relieved of the final responsibility to furnish materials as specified in the contract or purchase order and the documents applicable thereto.

**2. CERTIFICATION OF COMPLIANCE/CONFORMANCE**

A statement of conformance to Purchase Order must accompany each shipment or partial shipment. The following statement of conformance may be used as a guide: "We certify that all materials, processes, parts and assemblies shipped herewith conform to specifications as called out on the customer order, and associated documents, and have been approved, whenever necessary by cognizant government agencies. We further certify that the chemical, physical, electrical and inspection test specifications covering the material and processes used in the parts and assemblies will be filed as required."

**SUPPLIER'S AUTHORIZED**

**SIGNATURE** \_\_\_\_\_  
**TITLE** \_\_\_\_\_  
**FIRM** \_\_\_\_\_  
**NAME** \_\_\_\_\_  
**P.O.** \_\_\_\_\_  
**NUMBER** \_\_\_\_\_ **DATE** \_\_\_\_\_

**3. CONTRACTOR INSPECTION SYSTEM**

The Supplier shall maintain an inspection system in accordance with FAR 52.246-1 (Contractor Inspection Requirements). The system shall also provide for the maintenance of records and date of all inspections and tests performed and shall make these records available for examination and verification by Spectrum Systems upon request.

**4. QUALITY PROGRAM**

Supplier shall maintain a Quality Management System which conforms to requirements of AS9100 or ISO 9001 or has been approved by Spectrum Systems. Any adverse changes to the QMS such as loss of certification or major change in processes shall immediately be communicated to Spectrum Systems.

**5. GOVERNMENT SOURCE INSPECTION (GSI)**

Government Source Inspection is required on this Purchase Order, prior to shipment from Supplier's plant. The cognizant Government Representative who normally services your plant shall be notified seven (7) days in advance of the required inspection.

Upon receipt of this order, furnish a copy of the Government Representative who normally services your plant or, if none, to the nearest Government Inspection Office in your locality. In the event the Representative or office cannot be located, our Purchasing Agent should be notified immediately.

**6. EVIDENCE OF GOVERNMENT SOURCE INSPECTION (GSI)**

Each shipment against this Purchase Order shall include 2 copies of Supplier's packing list(s). These packing lists must be stamped by Government Representative evidencing that Government quality assurance has been performed.

**7. DD FORM 250 REQUIREMENTS**

Supplier shall execute DD Form 250, "Material Inspection and Receiving Report (MIRR), Appendix I, Material Inspection and Receiving Report Instructions", for each shipment in accordance with ASPR Paragraph 7-104-62. The MIR shall be prepared in sufficient detail to serve as an inventory document at the time of inspection and acceptance.

**8. CERTIFICATION OF CALIBRATION**

Calibrations shall be performed in accordance with ISO 10012, ISO/IEC 17025, or ANSI/NCSL Z540. Calibrate per equipment manufacturers requirements or as otherwise stipulated on the PO.

A Certificate of Calibration must accompany the shipment. Calibration standards used for calibrating Spectrum Systems equipment must be calibrated with standards traceable to the National Institute of Standards and Technology (NIST). Therefore, each calibration certificate must provide the certificate of traceability number that provides for traceability to the NIST. Calibration labels shall be affixed to the equipment to indicate calibration status. Refer to PO for additional requirements as applicable.

Calibrations records associated with the item(s) calibrated shall be maintained for a period not less than seven (7) years unless a longer retention period is specified on the PO.

**9. REPAIR REPORT**

A Repair Report shall be generated for each reworked/repaired item. Supplier will supply an itemized listing of all reworked or replaced items by part number, name and quantity. The list will be signed by the firm's authorized representative.

**10. SUPPLIER RECORDS AND RECORD RETENTION REQUIREMENTS**

Supplier shall maintain inspection test data traceable to each item shipped and shall make this data available to the Spectrum Systems Product Assurance Representative upon request. This data shall reflect the inspection/test operations performed and the results obtained.

The data/records associated with the item(s) ordered shall be maintained at the Supplier's facility for a period not less than seven (7) years unless a longer retention period is specified on the PO. The data/records shall remain legible, readily identifiable, and retrievable for review during reasonable business hours. Supplier shall provide advance notice to Spectrum Systems regarding the intent to destroy any records prior to the end of the specified record retention period. Supplier records shall include any item deemed necessary to show the manufacture and compliance of product and could include dimensional layouts, first article inspections (when contractually required), and records pertaining to the process and process controls. (i.e. - part routers, inspection and test data, and any special process control records.)

**11. NONCONFORMING MATERIAL**

Supplier shall notify Spectrum Systems of nonconforming product and shall not ship nonconforming product to Spectrum Systems without prior written approval from the Spectrum Systems buyer. The defective material must be identified with clear nonpermanent marking or tagged as such if approved for shipment. A copy of the buyer's authorization to ship the product must accompany the material. The Supplier shall establish and maintain an effective system for controlling all nonconforming material, including procedures for the identification, segregation, presentation, and disposition of reworked, scrapped, or repaired supplies.

**12. AGE AND SHELF-LIFE CONTROLLED ITEMS**

Supplier shall ensure all age and shelf-life controlled items delivered are marked with the date of manufacture (or cure date) or the expiration date to each article of this order for which limited shelf life has been established. Supplier shall not deliver any items with less than 80% of remaining shelf life.

**13. ITEM IDENTIFICATION**

13A. Supplier documents and units must reflect the exact part number ordered as well as the applicable Spectrum Systems item number annotated on the Spectrum Systems Purchase Order. No "substitutes" or "equal" items are permitted without prior approval of Spectrum Systems.

NOTE: If Supplier has questions regarding part numbers or any other factor affecting the procurement (e.g., the part is no longer manufactured, part has been



changed/redesigned, etc.). Supplier must notify the Spectrum Systems Purchasing Department.

13B. Identify all parts per drawing requirements, using part number, revision letter and serial number (as applicable). The serial number shall be referenced on all test inspection data. All marking shall be permanent and capable of passing tests specified in MIL-STD-202, Method 215 or MIL-M-13231B, microcircuits per MIL-STD-883C, Method 2015 and diode and transistors per MIL-STD-750, Method 1022.

#### 14. DATE OF MANUFACTURE

The supplier shall identify the date of manufacture for each assembly or part by rubber stamp impression, attached tag or other suitable equivalent.

#### 15. LOT CONTROL

Lot control and identification is required per drawing requirements.

#### 16. TEST DATA

A copy of all final test data which substantiated acceptance of products for this purchase order is to accompany shipment. The supplier is required to furnish the actual test data by serial number for electrical characteristics when such products are serialized.

#### 17. PRINTED WIRING BOARDS

**17A.** Supplier is to perform micro-section inspection on a minimum of one board per 50 if coupons are not available. Thickness measurements shall be recorded and must meet drawing specifications.

**17B.** Supplier is to perform continuity test on all multilayer boards in accordance with MIL-PRF-31032.

**17C.** Printed wiring boards are to be designed IAW IPC-D-275 and manufactured IAW MIL-PRF-31032.

#### 18. ESD

Electronic parts that are susceptible to damage by electrostatic discharge (ESD) and/or electromagnetic forces (EMF) must be handled and packaged in accordance with the requirements of ANSI/ESD S20.20. The use of faraday cage packaging or bags is required even when antistatic material is also being used.

#### 19. ECP's

Spectrum Systems shall be notified, and approval granted prior to initiating any engineering change proposal or deviation to the design of this product.

#### 20. REGISTERED COMPONENTS

Procedure of MIL-STD-1535A paragraph 4.5.2 must be complied with.

#### 21. ACCESS CLAUSE

During performance on this purchase order, your quality control or inspection system and manufacturing processes are subject to review, verification and analysis by authorized Government representatives. Government inspection or release of product prior to shipment is not required unless otherwise notified.

#### 22. SUB-TIER EVALUATION AND FLOW DOWNS

Evaluation of sub-tier contracts shall be conducted and flowed down to the extent specified by the Standards and Specifications referenced in the Purchase Order. The Supplier shall ensure any subcontractors utilized are capable of meeting all PO requirements and shall maintain responsibility for all subcontracted efforts.

The Supplier shall flow down to sub-tiers all applicable requirements of the Purchase Order to ensure conformance with all specifications, drawings, quality systems requirements, regulations, and public laws and other requirements as may be specified in the Purchase Order to include key characteristics, where required.

#### 23. JAN PARTS

JAN parts ordered to MIL-S-19500, MIL-M38510, MIL-H-38534 and MIL-I-38535 must be accompanied with the Manufacturer Certification of Traceability and each Supplier's Certificate of Conformance.

#### 24. DEFENSE PRIORITIES & ALLOCATIONS SYSTEM

This is a rated order certified for national defense use, and you are required to follow all the provisions of the Defense Priorities and Allocations System regulations (15 CFR 350).

#### 25. FIRST ARTICLE REQUIREMENT

Supplier(s) shall comply with the circumstances under which a first article report is required. Whenever possible, suppliers shall submit a first article report in accordance with AS9102. Accepting an FAI that is anything other than an AS9102 first article report is at the discretion of the Mercury Systems Quality Department.

Failure to supply this report may result in delay of payment or hold on product until report is received.

Supplier shall submit an FAI report when one of the following circumstances applies.

Suppliers shall perform an AS9102 FAI on new product representative of first production run. Partial or FAI shall be performed on affected characteristics when the following events occur.

- First time delivery to Mercury of a specific part number,
- A change in design affecting fit, form, functions of the part,
- A change in manufacturing source, process, inspection methods, location of manufacture, tooling or materials that can potentially affect fit, form, function
- A change in numeric control program or translation to another media that can potentially affect fit, form, function
- A natural or manmade event that may adversely affect the manufacturing process
- A lapse in production of two years or more