



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

The coded Requirements listed within this Attachment are applicable to material furnished under the Purchase Order upon which they are referenced. If a code referenced on the Purchase Order cannot be located within this document, notify the appropriate EEI Manufacturing Services Purchasing agent for clarification prior to shipment of product. Failure to comply with these requirements, when referenced on the Purchase Order, may be cause for rejection of material at EEI Manufacturing Services Receiving Inspection. In the event of conflict between the requirements listed herein and Purchase Order text, the Purchase Order shall prevail.

#### **SQ1 QUALITY SYSTEM**

The subcontractor/supplier shall have and maintain a documented quality system in accordance with one of the following: ISO 9001 (latest revision), AS9100 (latest revision), or EEI Manufacturing Services approved equivalent. The quality system shall be subject to audit and approval by EEI Manufacturing Services or its customers.

#### **SQ2 SOLDERABILITY/J-STD-001**

All soldering operations shall comply with J-STD-001, Class 3. Inspection and training records shall be retained by the supplier for a minimum of 7 years and made available to EEI on request.

#### **SQ3 SOLDERABILITY/J-STD-002**

Solderable component leads or surfaces (including wire) must meet the requirements for solderability per J-STD-002 (Solderability Tests for Component Leads, Terminations, Lugs, Terminals, and Wires). Leads, pins and terminals of components or parts susceptible to oxidation shall be protected by adequate packaging to minimize oxidation during storage and shipment.

#### **SQ4 GOLD LEADED PARTS:**

Terminals and through-hole component leads with 100  $\mu$ m or more of gold thickness: Gold shall be removed from at least 95% of all surfaces to be soldered. Surface mount components: Gold shall be removed from at least 95% of all surfaces to be soldered regardless of gold thickness. Removal process must be in accordance with J-STD-001 (latest rev).

#### **SQ5 CONTROL OF ESD**

All ESD sensitive components shall be handled, packaged, marked, and shipped to EEI Manufacturing Services in accordance with the requirements specified in ANSI/ESD-S20.20.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

#### **SQ6 TEST/INSPECTION DATA**

Each completed part/assembly delivered, must be functionally and/or electrically tested, as applicable. Each item tested must be identified with, as a minimum, part number, revision, and a unique serial number. The test data, which has the actual results of each parameter tested, will also have the part number, revision, and the associated serial number. A copy of any test/inspection data with each shipment covering the parts shipped must be included. Any calculations, assumptions or failure analysis used to substantiate test results must be detailed.

#### **SQ7 MOISTURE SENSITIVE DEVICES**

The supplier must determine the moisture sensitive level (MSL) of parts in accordance with J-STD-020 - Moisture/Reflow Sensitivity Classification for Non-Hermetic Solid State Surface Mount Devices. It shall be ensured that plastic encapsulated components that are moisture or reflow sensitive are adequately received, stored, processed, packaged, and marked to prevent degradation due to moisture in accordance with J-STD-033 - Standard for Handling, Packing, Shipping and Use of Moisture/Reflow Sensitive Surface Mount Devices or equivalent.

#### **SQ8 HAZARD WARNING LABELS**

Each individual container of toxic substances or hazardous chemicals to be delivered hereunder shall bear a label from the manufacturer, importer, distributor, or supplier with the chemical name and hazard warning as defined by O.S.H.A. Hazard communication Standard 29 CFR 1910, 1200 and state employee "Right to know" laws.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

### **SQ9 PRINTED CIRCUIT BOARDS (PCB)**

PCBs shall meet the requirements of IPC-6012 and IPC-600. IPC class will be provided via the supplied PCB drawing.

### **MANUFACTURING LAYOUT DATA APPROVAL**

Supplier shall provide Gerber format layout files in the “as-delivered” configuration for approval before PWB manufacturing process begins.

- “as-delivered” configuration example:
  - PWB is to be delivered single up with processing rails then the Gerber submitted for approval shall also be single up with rails.

### **PURCHASING CONTROLS**

The EEI Buyer must provide the Supplier with all required design data upon award of the PO or any subsequent design revision related to the awarded PO. The EEI Buyer shall be the point of contact for any concerns related to the PO or required design data.

The Supplier must confirm to the EEI Buyer that all the required design data is received and that the PCBs on PO shall be built in accordance with the design data provided. If the Supplier has any technical / engineering questions, concerns, and/or inquiries related to the ability to produce PCBs in accordance with the design data provided, The Supplier shall communicate these to the EEI Buyer no later than fifteen (15) business days after confirming to the EEI Buyer receipt of the required design data or, for DX rated orders no more than ten (10) business days.

Any requests to waive requirements of the PO or design must first be confirmed by the EEI Buyer. Such waiver, upon approval by EEI and communicated to supplier by EEI Buyer, shall only be applicable to each PO.

### **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

## **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

### **STANDARD ARRAY GUIDELINES**

The Array design(s) shall meet these standard guidelines. Any exceptions to these guidelines must be noted; **ALL** Array design(s) shall be presented to the EEI Buyer in a timely fashion for approval prior to production. PCBs on an Array should be nested for best economical option. PCBs on an Array that are not approved by EEI will result in a Non-Conformance Report and may require rework or replacement. In the event of a conflict between these EEI guidelines and the requirements of the PWB data package, the PWBs data package shall take precedence.

#### **PWBs with an overall thickness of 0.090" and greater:**

- Shall have no rails and be provided as single-up PWBs.

#### **PWBs with an overall thickness under 0.090":**

- Arrays shall have straight edges along the long axis to allow for conveyor processing.
- Arrays outline must be square or rectangular.
- Rails shall be 0.50" added to the long axis of the PCB outline to allow for component placement and machine clearances.
- Added Rails shall include fiducial marks and tooling holes.
- V-Score Rails and Array detachment is preferred. Mouse-bite tabs must have tooling clearance of 0.47" within the routing path on at least one side. Avoid locating tabs within 0.06" to 0.08" of component locations and traces.

## **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

## **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

### **TRACEABILITY & RECORD/COUPON RETENTION**

Traceability of all materials shall be maintained to each PCB production lot / date code. PCBs must be traceable to each panel. The supplier should know the exact location for each PCB in each panel produced. Each PCB delivered must be marked In Accordance With (IAW) the drawing data provided. All reports, test data, and coupons (including but not limited to Conformance Coupons, Cross Sections, and Micro Sections) associated with each order shall be retained by the supplier for a minimum period of seven (7) years after the completion of this purchase agreement/order (PO) or as otherwise specified by EEI Manufacturing Services (EEI).

### **DELIVERABLES**

The following items shall be considered deliverables and included with each shipment:

- Packing Slip referencing the EEI part number, drawing part number, and quantity shipped
- Certificate of Conformance signed and referencing a lot number and date code.
- Micro-Section Analysis Report
- Cross-Section Analysis Report
- Electrical Test Data
- Group A Test Data per applicable specification(s)
- Solderability Test Data
- Raw Material Manufacturers' Certificate of Compliance
- Dimensional Inspection Drawing (i.e., Ballooned / Bubble drawing)
- AS9102 First Article Inspection Report (see requirement below)
- Sample Board (see requirement below)

### **AS9102 FIRST ARTICLE INSPECTION**

On the first production run delivered to EEI the Supplier shall complete and provide a First Article Inspection Report (FAIR) in AS9102 format (latest version). A copy of this FAIR shall be provided with each subsequent shipment thereafter. Exceptions or deferrals beyond the first production run delivery will only be allowed with prior approval from EEI Quality Manager.

## **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

## **SQ9 PRINTED CIRCUIT BOARDS (PCB) Continued**

### **SAMPLE BOARD**

On the first production run delivered to EEI the Supplier shall provide one (1) Sample Board. This Sample Board is for the purposes of manufacturing set-up. The Sample Board may be a test failure if the Sample Board is dimensionally correct to the design data provided including physical features such as pads, thru holes, and/or fiducials. The Sample Board shall be packaged separately and clearly identified as "SAMPLE" and is not part of the order quantity. Any deviation from this requirement shall require EEI approval first prior to shipment.

### **PACKAGING & MOISTURE CONTROL REQUIREMENTS**

IPC-1602 (latest revision) Standard for Printed Board Handling and Storage shall be followed for all packaging and moisture control guidelines. This includes, but is not limited to the following:

- PCBs shall be sufficiently dry to allow for assembly processing without a need to pre-bake prior to packaging and shipping to EEI.
- Rigid-Flex and Flex PCBs shall be packaged in a manner to preserve integrity during shipment.
- Rigid PCBs shall be packaged in a vacuum sealed moisture barrier bag, with desiccant, and a humidity indicator card.
- PCBs shall be packaged flat and in a manner that prevents physical damage, corrosion, abrasion, deterioration, delamination, contamination, and moisture absorption.
- Lot Code / Date Codes shall not be mixed per bag. Unique date codes must be packaged and marked separately.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

#### **SQ10 CALIBRATION OF MEASUREMENT AND TEST EQUIPMENT**

The supplier must maintain a calibration system that is in compliance with either ISO-10012-1, or ANSI/NCSL Z 540-1. Calibration records must show traceability of the standards used for calibration to the National Institute of Standards and Technology (NIST).

#### **SQ11 DATE CODE AGE**

The supplier shall not supply electrical, electronic, or electromechanical (EEE) parts having lot date codes older than 4 years without first obtaining approval from EEI Quality Department.

#### **SQ12 FOREIGN OBJECT DEBRIS/DAMAGE (FOD) PROGRAM**

EEI Manufacturing Services suppliers have a documented FOD program. The FOD program shall ensure work is accomplished in a manner preventing foreign object debris or damage in deliverable items. EEI Manufacturing Services supplier's shall maintain material handling, parts protection, work area housekeeping, tool accountability, hardware accountability, parts, and materials in a manner sufficient to preclude the risk of FOD incidents. The supplier's FOD Program shall be subject to audit and EEI Manufacturing Services or EEI Manufacturing Services customers review and/or approval. MIL-STD-980 may be used as a guide to establish and implement the Supplier's FOD program.

#### **SQ13 TIME AND TEMPERATURE SENSITIVE MATERIAL**

Shipping arrangements of time and/or temperature sensitive materials must ensure that manufacturer recommendations for handling/preservation are maintained from supplier to EEI receiving department. Delivery date/time to EEI receiving department must therefore be scheduled during EEI Manufacturing's normal business hours defined as 7:00 AM – 6:00 PM Monday through Thursday, excluding holidays. Time and temperature storage conditions must be documented and accompany each shipment. The outer-most shipping box must be marked to indicate time and/or temperature sensitive material and storage range temperature.

#### **SQ14 STATISTICAL PROCESS CONTROL (SPC)**

The supplier shall implement and maintain a documented SPC program. The program shall include provisions for selection and identification of key characteristics and/or processes, statistically based control charting, demonstration of continuous improvement, corrective action, training, and flow down to sub-tier suppliers when the key characteristic and/or process is controlled by a sub-tier supplier. CpK for critical to quality (CTQ) requirements when called out on the drawing, SOW, or purchase order shall be  $CpK \leq 1.33$  unless otherwise stated.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

### **SQ15 X-OUT BOARDS - ALLOWED**

There is no limit to the number of X-out boards permitted so long as: All arrays containing the X-out boards are segregated and packed separately from arrays not containing X-out boards. X-out boards packaged together must be labeled as such.

### **SQ16 WORKMANSHIP**

All work must be accomplished in a documented and controlled process that complies with the workmanship requirements of IPC-A-610, Class 3. All objective evidence of the required work, inspections, and training shall be retained by the supplier and made available to EEI on request.

### **SQ17 FIRST ARTICLE INSPECTION REPORT (FAIR) AS9102**

The Supplier is responsible for assuring completion of the First Article Inspection Report (FAIR) per AS9102 for all drawing(s) design characteristics. Raw Material, plating, and any special process certs shall be provided and referenced on the FAIR. EEI or Customer FAIR approval does not relieve the supplier of the responsibility and/or liability for full compliance with all contract requirements. Information on completing the AS9102 FAIR can be found on the SAE website or by contacting EEI QA.

A First Article Inspection Report (or delta report) shall be required for any of the following conditions:

- 1) There is a change in drawing revisions, inspection methods, tooling, or materials with the potential to affect form, fit, or function. A First Article Update (Delta FAI) is required for the affected by the change only.
- 2) An item is new from the supplier to EEI.
- 3) There has been a 2-year or greater lapse in production (not applicable for distributors). If subsequent shipments are from the same lot/date code as a previous shipment, a copy of the previously submitted First Article report is acceptable.
- 4) A change in or to the facilities utilized to produce the item has taken place, including any natural or man-made event, which may adversely affect the manufacturing process, or as deemed necessary by EEI.
- 5) Initial First Article rejection for re-inspection of those characteristics affected.

EEI reserves the right to exercise the requirement of additional and/or periodic/repeat FAI requirement on a part number basis to assure continued product conformity. Also, EEI reserves the right to validate multiple production lots if needed to determine overall process capability.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.





EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

## **SQ18 DISTRIBUTOR'S QUALITY MANAGEMENT SYSTEM**

The Distributor SHALL comply with all of the following requirements:

### **PROCUREMENT CONTROLS:**

- Shall maintain an approved and/or qualified manufacturers list or for source(s) listed on the purchase order.
- Shall have available and use the Government Qualified Products List (QPL) and the Government Qualified Manufacturers List (QML).
- Shall procure all Military specification parts from QPL sources.
- Shall define and stipulate in Distributor's purchase order to the manufacturer, applicable EEI and/or Military specifications and related requirements.
- Distributor certifies that materials and/or parts furnished to EEI are from a manufacturer for whom the Distributor is an authorized and/or Franchised Distributor. For obsolete (Out of Production) items, materials and/or parts furnished to EEI are from sources that (1) were approved at the time of item manufacture (drawing-based items), and (2) can validate the authenticity of the item, based on part number and/or manufacturer's identification marking (MIL spec. items). ***Otherwise, the Distributor shall notify the EEI prior to acceptance of the Purchase Order, so a decision can be made on the purchase.***

### **MANUFACTURING SOURCE CONTROLS:**

- Shall require the original manufacturer to submit inspection/test data for material purchased when required by the purchase order. NOTE: ***If test data is not available, the Distributor shall notify the EEI Buyer prior to acceptance of the Purchase Order, so a decision can be made on the purchase.***
- Shall maintain material certifications on file or furnished to EEI, if requested.
- Shall determine the adequacy and qualifications of the manufacturers represented.
- Shall have an effective corrective action system. Shall take corrective action in response to EEI Supplier Corrective Actions (SCARs) issue to the Distributer, notwithstanding the source of deficiency (distributor or manufacturer).
- Shall maintain files containing physical and electrical test reports, which verify conformance to applicable specifications (where applicable). Files shall be maintained and available to EEI upon request for a period of not less than 7 years from completion of all deliveries on the purchase order.
- Distributors that perform or sub-contract Value-Added assembly, processes, fabrication, or product-altering operations of any kind shall have written authorization from the Original Equipment Manufacturer (OEM) and/or EEI on file.

## **SQ18 DISTRIBUTOR'S QUALITY MANAGEMENT SYSTEM (Continued)**

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

## **SQ18 DISTRIBUTOR'S QUALITY MANAGEMENT SYSTEM (Continued)**

### **ELECTROSTATIC CONTROL:**

- All ESD sensitive components shall be handled, packaged, marked, and shipped to EEI Manufacturing Services in accordance with the requirements specified in ANSI/ESD-S20.20.
- Shall have an ESD Control Program Plan available for review. It is recommended the ESD Control Program Plan follow the guidelines of MIL-HDBK-263, titled "ESD Control Handbook for Protection of Parts, Assemblies and Equipment's".

### **RECEIVING CONTROLS:**

- Shall Identify received material and maintain traceability records to manufacturer's part number, lot number, and date code for all electronic and electrical parts, raw material and mechanical machined parts, semiconductor devices, integrated circuits, and passive electrical components.
- Shall Identify and segregate nonconforming material.

### **STOCK ROOM CONTROLS**

- Shall practice the "first in first out" principle of stock control.
- Shall maintain shelf-life controls over all applicable materials.
- Shall have a method of removing superseded and unacceptable supplies.
- Shall identify and segregate non-conforming material from acceptable material.
- Shall provide for and maintain adequate environmental control of all material in its stock room.
- Shall insure that moisture sensitive components (in accordance with J-STD-020A) are received, stored, processed, packaged, and marked in accordance with J-STD-33 or equivalent.

### **SHIPMENT CONTROLS**

- Shall ensure that all materials shipped against the purchase order are handled, identified, packaged & shipped in accordance with the purchase order requirements and associated specifications.
- Date coded material: Supplier shall provide manufacturer's lot or date code information for each item shipped against this purchase order. Documentation accompanying each shipment shall state how many of each lot number(s), date code(s) or serial number that is being provided. Date Code or serial number must be visible on intermediate packaging to include reels, tubes, or other packaging.

### **RECEIVING CONTROLS**

- Shall identify received material in accordance with the other sections of this clause and maintain traceability records to manufacturer's part number, lot number, and date code for all components.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

### **SQ19 BROKERED PARTS – COUNTERFEIT PREVENTION**

- Brokered purchases are only permitted with prior written approval from the EEI buyer, and only when no franchised parts are available.
- The broker shall have a documented and active counterfeit detection procedure in place that is approved by EEI in writing in advance of any purchase. The policy must include appropriate testing, and inspection practices that include die verification, marking and packaging inspections, and part traceability.
- Parts shall be tested by a facility that is compliant to or follows SAE AS5553.
  - Testing shall include, but not be limited to:
    - Die verification (one component per lot or date code) by method of decapsulization and/or X-ray inspection.
    - Electrical testing of a sample of each lot and date code.
    - Solderability testing in accordance with J-STD-002 from each lot and date code.
    - Marking permanency (JEDEC JESD22-B107)
- Parts shall be delivered with a CoA (Certificate of Authenticity), a test report from a facility that, and a photograph of the die verification for each part and lot or date code.
- Components shall be new/unused parts only.
- Any changes or deviations from this requirement must be approved in writing from EEI prior to delivery of material.

### **SQ 20 CUSTOMER FURNISHED MATERIALS**

This requirement applies to material that has not originally been procured by EEI Manufacturing and is being supplied to EEI for integration into deliverable products. In order for EEI to be able to use these types of supplied parts, EEI needs to assure the parts being supplied are useable for manufacturing and that all necessary packaging, handling, storage, documentation, marking, configuration, quantity, and certifications are fit for use. The following requirements shall apply:

- (a) SMT components must come packaged either on reels, continuous strip-tape with a 12" leader, or in the appropriate tube or matrix tray.
- (b) SMT and Through Hole components should be furnished for auto insertion, in good condition & packaged to prevent damage from ESD, moisture, and/or physical breakage. Fine Pitch/Ultra Fine Pitch components are required to be in factory packaged matrix trays.
- (c) All moisture sensitive components shall be supplied in accordance with IPC/JEDEC J-STD-033.
- (d) EEI Manufacturing Services will not proceed with the manufacturing process with Furnished Material kits that have shortages unless written permission is given to either "ship short" or to charge back for installing as a secondary operation.

### **SQ 20 CUSTOMER FURNISHED MATERIALS** (Continued)

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

### **SQ 20 CUSTOMER FURNISHED MATERIALS** (Continued)

- (e) A Packing slip is required and shall list each unique part (Customer part number, Manufacturer name and Manufacturer part number must be clearly identified) and quantity of each clearly marked.
- (f) A technical documentation package (TDP) shall be provided with each kit. The TDP shall include (as necessary) assembly drawings, and bill of material (BOM) with reference designators.
- (g) Any loose parts received in bulk may result in a price adjustment.
- (h) Reasonable overages should be provided to prevent in-process shortages.
- (j) A copy of the original manufacturer's Certificate of Conformance shall be provided that at a minimum contains the manufacturer's part number, quantity, and any applicable lot/batch code.

### **SQ 21 PACKAGING**

Parts and/or material furnished shall be preserved, packed, and packaged in a "best commercial" manner to prevent deterioration and/or damage during handling and shipping. Specific requirement deviating from "best commercial" method shall be defined within the purchase order. Parts and/or material provided shall be identified with the part number, revision, and manufacturer's cage code in accordance with MIL-STD-130 and/or drawing/specification requirements. Packing slips and lowest level of packaging shall be marked as a minimum with the following: 1) Manufacturer 2) Manufacturer Part Number 3) Customer Part Number 4) Date Code 5) Quantity

### **SQ22 SPECIAL PROCESSES, SUBTIER SUPPLIERS, SUBCONTRACTORS, AND PROCESSORS**

The Seller shall utilize only Purchaser or NADCAP (National Aerospace and Defense Contractors Accreditation Program) approved special process sources as directed by EEI Manufacturing Services Quality Assurance Organization or as otherwise directed by EEI customers for approved special processors. This is included but not limited to all heat treatment, welding, brazing, soldering, organic and inorganic coatings, plating, surface coating, magnetic particle inspection, penetrant inspection, eddy current, ultrasonic examination, radiographic examination, conditioning and finishing required by this purchase order. If, due to geographical location, an approved special process source is not available, the Seller shall contact the Purchaser's Procurement Organization for a specific source to be used.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

### **SQ23 PROHIBITED MATERIALS**

Seller agrees to comply with regulations that prohibit certain materials from use in high reliability electronic systems and flight hardware.

EEI flows down the following list as identified materials being prohibited from use in its hardware: 1. Pure Tin Plating, 2. Cadmium Plating, 3. Zinc Plating.

### **SQ24 TRACEABILITY**

Raw Materials: All materials shall be traceable to manufacturer or production lot or date code. Documentation shall be in place to provide bi-directional traceability of materials from receipt to the highest assembly level.

Assembly: Material and processes used must be traceable by record to the contractually imposed drawings and functional test configurations used during manufacture. Each unit of product delivered must be uniquely identifiable to the contractor's traceability records. Such records shall be retained by the contractor for a period of seven (7) years after the completion of this purchase agreement/order or as otherwise specified by EEI Manufacturing Services.

### **SQ25 CHEMICAL AND MECHANICAL PROPERTIES DOCUMENTATION (CERTS)**

The Seller shall submit with each shipment for each melt, heat lot or run, evidence attesting to chemical and/or mechanical property requirements of the applicable drawing, specification, and purchase order.

Evidence of compliance shall be transmitted in the following specified format:

- (a) Chemical composition, by an actual composition analysis test report, except that wrought aluminum may be certified to the specific chemical ranges.
- (b) Chemical composition, by a Certificate of Compliance to the specification requirements. All applicable material specifications must be identified on this document.
- (c) Mechanical properties, by an actual test results report.
- (d) Mechanical properties, by a Certificate of Compliance to the specification requirements. All applicable material specifications must be identified on this document.

### **SQ26 X-OUT BOARDS**

No X-out boards are permitted unless approved by EEI in writing.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

### **SQ 27 ENVIRONMENTAL**

Seller shall comply with federal, state, and local environmental laws and regulations. Seller shall establish and implement a Hazardous Materials Management Plan (HMMP) IAW National Aerospace Standard (NAS) 411. A hazardous Materials Management Program Plan shall be prepared IAW DI-MISC-81398 and NAS 411 if no plan has been provided on previous contracts or if significant changes occur. To the greatest extent possible, the Seller shall avoid the use of hazardous materials found on 5 lists know as EPA 17, Class 1 ODC's, EPCRA 302, 313, & 313A. Priority for avoidance shall be given to chemicals identified as one of the EPA 17 and Class 1 ODC's. Use of any chemical from these 5 lists, or products containing such chemical shall be approved in writing by the Buyer prior to use through approval of the annual HMMP Progress Reports. HMMP Progress Reports shall be prepared IAW DI-MISC-81397 and NAS 411. These reports shall be submitted 60 DAC and annually on the anniversary of any previous annual reports or more frequently if significant changes have occurred. A statement of nonuse of any of the above-listed chemicals shall suffice for a report.

### **SQ28 EEI MANUFACTURING SOURCE INSPECTION**

EEI Manufacturing Services source inspection at supplier's facility is required prior to shipment of any parts/material on this purchase order. Supplier shall notify the EEI Manufacturing Services buyer of the required date for EEI Manufacturing Services source inspection. Adequate time for arrangement must be allowed.

### **SQ29 GOVERNMENT SOURCE INSPECTION**

All items on this purchase order are subject to Government source inspection at the Seller's plant prior to shipment. Seller shall provide the Government Representative ten (10) days, advanced notification of the event. Upon receipt of this purchase order, Seller shall promptly notify the Government Representative who normally services your plant and provide the representative with a copy of the purchase order so that appropriate planning for Government inspection can be accomplished.

If no Government Representative services the Seller's plant, the seller shall notify the nearest Defense Contract Administration Service Office or other appropriate Government contract office. In the event a representative or office cannot be located, Seller shall notify the Purchaser's Procurement office immediately.

### **SQ 30 APPROVED SOURCES**

When the purchase order, drawing, contract, or bill of material (BOM) identifies approved sources, only the approved sources can be used. When required, on DOD and Military contracts, only parts from Qualified Products Lists (QPLs) or Qualified Manufacturers Lists (QMLs) may be used IAW Appendix 2 of DOD Clause 4120.24-M. There are no substitutes, better than parts, or part deviations allowed unless approved in writing from EEI.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

**SQ 31 SHELF LIFE OF MATERIALS / MANUFACTURER DATE**

Age sensitive material shall have a minimum of 75% shelf life remaining from its manufactured date/cure date prior to shipment to EEI. Age sensitive material shall be conspicuously labeled with manufactured/cure date and manufacturer's batch/lot number. Failure to properly label the materials may result in rejection.

**SQ 32 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 and provide its DDTC registration status and expiration date to Purchaser.

**SQ 33 WAIVER OF CERTIFICATE OF CONFORMANCE REQUIREMENT**

Supplier is required to supply item ordered that meets characteristics and specifications of part number ordered but Certificate of Conformance documentation is not a requirement.

**SQ 34 METAL SUPPLIERS**

All fabricated, machined, plated, or otherwise processed metal items must be clean and free of debris, shavings, clippings, filings, or residues. This requirement must be flowed down to any sub-tier suppliers performing related processing. Exceptions apply only as noted specifically on the drawing provided or the purchase order detail.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.



EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
**Supplier Quality Flow-Down Clauses**  
Revision AC

## **SQ35 ELECTRONICS COUNTERFEIT MATERIAL AVOIDANCE PROCESS REQUIREMENTS**

### **Definitions**

Unless defined in a document with a higher order of precedence than this Quality Note the following definitions shall apply herein:

- a. "Counterfeit Item" is defined to include, but is not limited to, (i) an item that is an illegal or unauthorized copy or substitute of an Original Equipment Manufacturer ("OEM") or Original Component Manufacturer ("OCM") item; (ii) an item that does not contain the proper external or internal materials or components required by the OEM or OCM or that is not constructed in accordance with OEM or OCM design, but is represented as such; (iii) an item or component thereof that is used, refurbished or reclaimed but the Seller represents as being a new item; (iv) an item that has not successfully passed all OEM or OCM required testing, verification, screening and quality control but that Seller represents as having met or passed such requirements; or (v) an item with a label or other marking intended, or reasonably likely, to mislead a reasonable person into believing a non-OEM or OCM item is a genuine OEM or OCM item when it is not.
- b. "Authorized Distributor" is defined as a distributor with which the OM has a contractual agreement to stock, repackage, sell, and distribute its product lines. Authorized Distributors normally offer the product for sale with full manufacturer flow-through warranty.

### **Supplier's Risk Mitigation**

Supplier shall maintain a Counterfeit Item risk mitigation process internally and with its suppliers using SAE AS5553 as a guide and be able to produce for review by EEI.

The Supplier shall participate in the Government Industry Data Exchange Program (GIDEP) monitoring and acting on GIDEP reports which affect product delivered to the Buyer. When suspect or confirmed counterfeit item(s) associated with this purchase order are discovered the Supplier shall issue a GIDEP report and shall ensure suspect counterfeit items are not delivered to EEI.

If Supplier does find counterfeit components in the process of supplying components to EEI, the Supplier shall immediately notify EEI.

The supplier shall purchase material directly from OEMs or OCMs or from Authorized Distributors of OEMs or OCMs and shall obtain approval from the EEI Buyer if items required to satisfy this order cannot be procured from these sources.

Supplier shall present complete and compelling support for any request to procure from sources other than OEMs or OCMs or their Authorized Distributors and include in the request all actions completed to ensure the parts thus procured are not Counterfeit Items.

Supplier is not authorized to deliver any item procured from sources other than OEMs or OCMs, or their Authorized Distributors without prior written authorization from the EEI Buyer.

The supplier shall segregate and provide traceability identifiers (i.e., Date Code / Lot Code., Serial number) for all items delivered to EEI which contain an item procured from sources other than OEM"s or OCM"s or their Authorized Distributors.

Supplier shall flow down to, and ensure compliance with this requirement by, lower tier suppliers providing items for delivery to EEI.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.





EEI Manufacturing Services  
703 Grand Central Street, FL 33756  
727.461.4755  
[www.eeimfg.com](http://www.eeimfg.com)

PURCHASE ORDER ATTACHMENT  
***Supplier Quality Flow-Down Clauses***  
Revision AC

**SQ36 Engineering Change Management**

Supplier must notify buyer in writing of changes in product and/or process, changes of its own suppliers, changes of manufacturing facility location and obtain buyer's written approval.

**SQ37 Access to Facilities**

The Supplier agrees to permit access to the Supplier's facility for surveying/auditing, if needed. The survey/audits may include personnel from the Buyers, Buyer's customer representative and/or regulatory authorities, and must include access to all records applicable to Buyer's product or orders.

This document contains confidential and proprietary information of **EEI Manufacturing Services**. Neither this document nor the information contained herein are to be reproduced, distributed, used, or disclosed, either in part or in whole without the specific written consent and authorization of **EEI Manufacturing Services**.