

# Supplier Quality Clauses

## Part 1: General Quality Requirements

Requirement Name	Requirement
<b>Quality Management System</b>	The supplier shall maintain a quality system meeting the requirements of ISO 9001 or AS9100. Third-party registration by an accredited registrar is preferred. Suppliers declaring compliance with no formal accredited registration may require review. For suppliers not meeting these specifications, POC will review and determine if system implemented is sufficient based upon the nature and levels of control required by the parts, materials, or services.
<b>Design and/or Process and/or Material Changes</b>	The supplier shall not implement any changes to POC drawings and/or specifications and/or materials without written approval from POC in the form of a POC-approved Request for Deviation/Waiver (POC form F-021), available from POC Purchasing or Quality Assurance.
<b>Submission of Nonconforming Material to POC</b>	Items not in conformance with the requirements of the Purchase Order, POC drawings, specifications, and industry standards referenced therein, or that cannot be corrected through continuation of the original manufacturing process or by rework, shall not be submitted without prior written approval from POC in the form of an approved Request for Deviation/Waiver (form F-021), available from POC Purchasing or Quality Assurance. Submittals shall include supplier-recommended disposition(s) with sufficient technical, quality, and reliability justification.
<b>Resubmission of Material</b>	Nonconforming items returned from POC which are subsequently resubmitted by the supplier shall include indication of resubmission on the accompanying paperwork and shipping documents. Reference shall be made to the POC rejection documentation and evidence presented to demonstrate that the causes for rejection have been corrected.
<b>Notification of Previous Delivery of Defective Material</b>	In the event the supplier / special processor determines that material previously delivered to POC was defective, written notification to the POC Purchasing representative is required within thirty (30) calendar days.
<b>First Article Inspection</b>	POC may perform First Article inspection per SAE AS9102 under the following conditions: 1) new supplier; 2) new part number; 3) revision change; 4) same manufacturer but lapse between production runs; 5) verification of implementation of corrective & preventive actions; 6) new facility; or 7) change of ownership.
<b>Corrective Action</b>	When requested by POC, the supplier shall investigate nonconformities to determine the root cause(s) of failures, and take effective action(s) as appropriate to correct the items and prevent future failures. Unless otherwise requested by POC, such corrective action(s) may be documented in the supplier's format.
<b>Calibration</b>	The supplier shall only utilize inspection and test equipment for acceptance that has been calibrated to the requirements of ANSI/NCSL Z540.1-1994 or other recognized standards.
<b>Preservation &amp; Packaging</b>	Unless otherwise specified, the supplier shall use best commercial practices for preservation and packaging of items supplied to POC.
<b>Flow Down of Requirements</b>	The supplier shall insure that requirements be flowed down to sub-tier suppliers, including key characteristics, materials selection, first article inspection, process control where required.
<b>Traceability</b>	The supplier shall maintain internal traceability to the raw material level, and shall be able to provide such traceability within a reasonable time frame if requested by POC.
<b>Record Retention</b>	Suppliers and special processors, as well their subcontractors, shall maintain records to substantiate product compliance to the POC purchase order requirements and must be capable of furnishing copies of these records upon request of POC, POC customers, and government / regulatory representatives as applicable. Such records shall be maintained for a minimum of 10 years after date of delivery to POC.
<b>Counterfeit Parts &amp; Materials</b>	Supplier shall have a counterfeit parts avoidance, detection, mitigation, and disposition program meeting the requirements of Aerospace Standard AS5553. Seller shall only deliver authentic components, devices, pieces, material, modules, assemblies, subassemblies, goods, etc. that are manufactured by or obtained from original equipment manufacturers (OEMs), original component manufacturers (OCMs), or authorized distributors. Seller shall make available to POC documentation that authenticates and provides traceability of the Parts to the applicable OEM or OCM.
<b>Refurbished and Re-used Items</b>	Supplier shall not provide refurbished or re-used EEE parts, components, hardware, or materials.
<b>Change of Facility or Ownership</b>	The supplier shall notify POC when manufacturing operations being performed in support of this purchase order are moved to another facility with a separate street and/or city address. Supplier shall also notify POC if ownership of the supplier has changed.
<b>POC-Furnished Material</b>	If applicable, supplier shall certify that material used in fabrication is the material furnished by POC. Certification shall reference POC's Purchase Order of the material being supplied.
<b>MSDS Sheets</b>	Material Safety Data Sheets are required for the product identified on this line of the Purchase Order. Please include these sheets in an envelope that is identified on the outside as the MSDS sheets with the packing list.
<b>Surveillance &amp; Right of Entry</b>	Representatives of POC, its customers, Government, and/or regulatory agencies (if applicable) reserve the right to visit the supplier and its suppliers with the intent of performing surveillance activities including inspections, surveys, audits, resolution of product quality issues, etc.
<b>Foreign Object Detection</b>	All materials, parts, and assemblies must be protected from the intrusion of foreign object debris that could potentially cause damage. As appropriate, the supplier shall develop and implement a Foreign Object Damage/Foreign Object Debris Prevention Program guided by National Aerospace Standard 412
<b>Electro-static Discharge Sensitive (ESDS) Materials</b>	If applicable, the supplier shall maintain an ESD Program meeting the requirements of ANSI/ESD S20.20 for the control, handling, packaging, and identification of ESDS parts and materials.
<b>Certificate of Conformance</b>	A legible "Certificate of Conformance" (C of C) statement shall be provided with each shipment submitted to POC. The C of C shall be in the supplier's format and may either be a separate document or may be included within the packing list. The C of C statement shall state that the items were produced in conformance with requirements as specified in the POC purchase order. As a minimum, the C of C shall note 1) the manufacturer or distributor's name and address; 2) the POC purchase order number; 3) the part number(s) and revision(s) when applicable; 4) traceability information including serial numbers, lot codes, or date codes as appropriate; 5) shelf-life expiration dates if applicable; and 6) signature of the supplier's authorized representative.

# Supplier Quality Clauses

## Part 2: Specific Quality Clauses

Quality Clause	Quality Clause Name	Quality Clause Requirement
01	Inspection and Test Data	The supplier shall provide inspection and test data with the subject item(s). Such test data shall include individual or summary parameter measurements as appropriate.
02	POC Source Inspection	POC inspection is required prior to shipment from supplier's facility. POC shall be notified a minimum of 24 hours prior to intended shipment when items are ready for POC source inspection. To schedule, contact the POC buyer or Quality Assurance. Please provide 1) the POC purchase order number; 2) the POC part number(s); 3) the quantity of each part number; and 4) the date(s) source inspection is being requested for.
03	Government Source Inspection	Government inspection is required prior to shipment from supplier's facility. Upon receipt of purchase order, the supplier shall notify the government representative(s) who normally service the supplier's facility, for coordination and scheduling of inspection(s).
04	First Article Inspection	Supplier shall perform a First Article Inspection (FAI) on one piece chosen at random from the first lot presented for POC acceptance. The FAI shall be performed and documented per the requirements of SAE AS9102, or the supplier's equivalent format. A copy of the FAI report shall be submitted to POC with the shipment. If discrepancies are noted during the FAI, the supplier shall promptly notify the POC purchasing representative for guidance. <b>NOTE: First article inspection is not required for supplier part numbers, OEM parts and materials, commercial off-the-shelf items (nuts, bolts, wire, piece parts), QPL parts, etc.</b> Generally FAI's apply to items fabricated to POC drawings. If uncertain, contact POC purchasing representative for guidance.  Full or delta FAI's shall be required as appropriate for: 1) Revision change since the previous FAI (delta). 2) Changes to supplier's process (delta or full depending on change(s)). 3) Break in production exceeding 18 months (full). 4) Change of facility (full).
05	Limited-Life Materials: Remaining Life & Labeling Requirements	The supplier shall not submit limited-life material(s) with <u>less than 75%</u> of the useful life remaining without written approval from POC in the form of a POC-approved Supplier Deviation / Waiver (POC form F-021, available from POC Purchasing and Quality Assurance). The supplier shall label <u>each individual container</u> of limited-life materials with 1) the supplier lot number; 2) the date of manufacture; 3) the date of expiration; and 4) storage conditions (if applicable and/or modifies expiration date).
06	Material Safety Data Sheets Required	<i>(Moved to Part 1: General Requirements)</i>
07	Calibration Services	Calibration services shall calibrate and provide test reports in accordance with ANSI/NCCL Z540.1-1994 or other recognized standards.
08	POC-Furnished Material (If Applicable)	<i>(Moved to Part 1: General Requirements)</i>
09	Elastomeric Materials Information	Documentation noting the manufacturer, cure date, raw material identification, expiration date (if applicable) and applicable specification numbers (military and/or industry, as applicable) shall accompany each shipment. The information may be included on the Certificate of Conformance or on a separate document. If the information has already been supplied to POC on a previous shipment, the supplier may reference the previous shipment (POC PO number) on the Certificate of Conformance.
10	Tool Proofing	Acceptance of production tooling on this Purchase Order shall be contingent upon inspection and acceptance by POC. The tooling and dimensional samples produced by this tooling must conform to the tolerance limits of engineering drawings and specifications stated on the Purchase Order. A POC Quality Representative may conduct this inspection at the Supplier's facilities or the items may be shipped to POC for inspection, as directed by the Buyer. Dimensional samples should be identified with the tool number.
11	POC Furnished Tooling	Tooling (fixtures, jigs, molds, etc.) and test equipment fabricated by the supplier at POC expense, or furnished by POC, shall be considered property of POC. POC is responsible for routine and periodic maintenance and calibration of such items. Suppliers are responsible for insuring appropriate protection during transport, storage, and use. Some amount of wear and tear is expected through usage. Said tooling, or replacement tooling of equal quality, shall be returned in an acceptable condition upon demand or notice.
12	Hardware	<i>(Deleted, supplier to provide part number as ordered.)</i>
13	Process Control	<i>(Moved to Part 1: General Requirements)</i>
14	Nondestructive Testing	<i>(Deleted, Code 01 applies)</i>
15	Acceptance Sampling	Acceptance sampling inspection may be utilized during performance of this order. Prior to use, the sampling plan must be submitted and approved by POC Quality Assurance. The use of a sampling plan in no way effects POC's right to reject any unit(s) of product found defective.
16	Resubmission of Product	<i>(Moved to Part 1: General Requirements)</i>
17	POC-Directed Source	The Supplier shall use only those sources of goods or services that have been approved by POC. Such direction is generally provided on the POC purchase order.
18	Solderability	Component leads, terminations, lugs, terminals, and wires shall be capable of meeting the solderability requirements of IPC/EIA J-STD-002. Printed wiring boards shall be capable of meeting the solderability requirements of IPC/EIA J-STD-003.

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Quality Clause	Quality Clause Name	Quality Clause Requirement
19	Material from Different Lots	The Supplier may furnish material from different heats, lots, or batches, as applicable. Where shipments contain parts with different cure dates or are from different heats, lots, or batches, sub-lot separation with a separate certification for each sub-lot is required.
20	Single Lot / Date Code Traceability	Parts and materials provided against this line item shall be from one lot, manufactured and/or processed at the same time, and shall be traceable to the same raw material lot(s). For example, machined parts shall be manufactured in the same production run and utilize raw material from the same lot.
21	Mercury Exclusion	The items supplied under this Purchase Order shall contain no metallic mercury or mercury compounds and must be free from mercury contamination. During manufacturing, testing, or inspection, the items supplied shall not come in contact with mercury or any of its compounds nor with any mercury-containing devices employing only a single boundary of containment. Note: A single boundary of containment is one not backed by a second seal or barrier to prevent contamination in the event of an accidental rupture of the primary seal or barrier. In the event this requirement cannot be met, contact the POC Buyer.
22	Specialty Metals	1) This order is subject to the requirements of DFARS 252.225-7009 Restriction of Acquisition of Article Containing Specialty Metals or <b>DFARS 252.225-7014 Preference for Domestic Specialty Metals and Alternate 1</b> found at: <a href="http://www.acq.osd.mil/dpap/dars/dfars/html/current/252225.htm">http://www.acq.osd.mil/dpap/dars/dfars/html/current/252225.htm</a> . 2) A statement certifying compliance to DFARS 252.225-7009 or DFARS 252.225-7014 <u>shall be included</u> for each shipment of the item delivered. This statement shall be signed with the title of the signer noted and may be included as a part of the Certificate of Conformance. The statement shall identify the material or item by lot, date of manufacture, and/or serial number, revision date, and/or grade, as applicable. The Supplier shall provide the available location of objective evidence to support the origin of raw material to POC and the Customer/Government. Provide the available location of objective evidence to support the origin of raw material to POC and the Customer/Government.
23	Raw Material Test Reports or Certifications	For raw materials (metals) utilized to fabricate POC parts, the supplier shall provide <u>either</u> 1) raw material test reports containing detailed physical and chemical analysis and data; <u>or</u> 2) evidence of conformance (raw material Certificate of Conformance) to <u>recognized specifications</u> (ASTM, Mil-Spec, WS spec, etc.). <u>Additional Shipments:</u> For additional shipments utilizing the same raw materials, the supplier may either 1) provide additional copies of the same raw material test reports or certifications; or 2) clearly note in their shipment documentation that the test reports or certifications have been provided with previous shipment (provide identification information). The supplier shall insure that sufficient traceability information to the raw material level is maintained.
24	Refurbished or Reused Electrical Components	<i>(Moved to Part 1: General Requirements)</i>
25	Date Codes > 5 Years	Shipment of electronic components with manufacturing date codes in excess of 5 years is not allowed. Should it not be possible to meet this requirement, supplier must contact POC purchasing representative for direction.
26	Software	<i>(Deleted)</i>
27	Test Data	<i>(Consolidated into Clause 01)</i>
28	Supplier Failure Analysis & Repair Report	<i>(Consolidated into Part 1: General Requirements (ref. Corrective Action))</i>
29	Traceability – Part Serial Number (If Applicable)	Each part, component, or assembly specified on this Purchase Order shall be identified with a distinct serial number. Serial numbers shall not be duplicated for one part, component, or assembly number when manufactured in sequential lots and noted on shipment documentation.
30A	Printed Circuit Boards, Class 3	Unless otherwise specified on the POC fabrication drawing, printed circuit boards (PCB's) shall meet the workmanship requirements of IPC-A-600, Class 3. When specified on the Purchase Order, independent testing is required prior to shipping the printed wiring boards. All test results and test specimens shall accompany shipments.
30B	IPC-6012	Fabricate to the requirements of IPC-6012, Class 3 per IPC-6011. Acceptance requirements shall be in accordance with IPC-A-600, Class 3.
30C	Soldering Workmanship, Class 3	Soldering and assembly workmanship shall be in accordance with the requirements of IPC/EIA J-STD-001, Class 3. Acceptance requirements shall be in accordance with IPC-A-610, Class 3.
30D	Soldering Program, Class 3	The manufacturer shall be responsible for maintaining certified personnel, facilities, and processes in accordance with the latest revision of IPC/EIA-J-STD-001, IPC-A-610 Class 3 or higher or NASA-STD-8739.3 (whichever is applicable). All trainer certifications must be an IPC (registered) approved certificate. The manufacturer further agrees to submit to POC surveys / audits to verify compliance.
30E	Printed Circuit Boards, Class 2	Unless otherwise specified on the POC fabrication drawing, printed circuit boards (PCB's) shall meet the workmanship requirements of IPC-A-600, Class 2. When specified on the Purchase Order, independent testing is required prior to shipping the printed wiring boards. All test results and test specimens shall accompany shipments.
30F	Soldering Workmanship, Class 2	Soldering and assembly workmanship shall be in accordance with the requirements of IPC/EIA J-STD-001, Class 2. Acceptance requirements shall be in accordance with IPC-A-610, Class 2.
30H	Harnesses and Cables	Class 3 Requirements and Acceptance for Cable and Wire Harness Assemblies. The manufacture shall be responsible for maintaining certified personnel, facilities, processes, and procedures in accordance with the latest revision of IPC-WHMA-620. Trainers must possess IPC (registered) approved certificates. The manufacturer further agrees to POC surveys / audits to verify compliance.
31	Complex Electronic Device Documentation Controls	<i>(Deleted)</i>

# Supplier Quality Clauses

Quality Clause	Quality Clause Name	Quality Clause Requirement
<b>32</b>	ESD Sensitive Devices	<i>(Consolidated into Clause 01)</i>
<b>33</b>	Printed Wiring Boards	When specified on the Purchase Order, independent testing is required prior to shipping the printed wiring boards. All test results and test specimens shall accompany this shipment.
<b>34</b>	MIL-PRF-55110 Testing	<i>(Deleted)</i>
<b>35</b>	PWB Supplier Certification	Suppliers of printed wiring boards must be certified to MIL-PRF-55110, MIL PRF 31032, or MIL-P-50884 as applicable.
<b>36</b>	Parts Obsolescence Program	<p>1) The Supplier represents that it has procured or will maintain, during the performance of this order, sufficient components and materials necessary to perform this order, including obtaining commitments from its suppliers required to meet all option requirements.</p> <p>2) The Supplier represents that it has or will flow down and manage this requirement with its suppliers to ensure they can meet the Supplier's obligations.</p> <p>3) For a period of 24 months after completion of this order, the Supplier agrees to maintain an obsolescence procedure adequate to ensure that the Supplier and its suppliers can provide the Buyer adequate notice that components and material necessary to supply additional new-order quantities of the articles furnished hereunder can be purchased through the Supplier by placing on order within 90 days of receiving said notice. Further, the Supplier agrees to supply the Buyer with such additional articles or components of said articles which are due to be discontinued subject to the Buyer agreeing to compensate the Supplier for its reasonable cost plus profit for such additional orders.</p>
<b>37</b>	Material Authenticity: Counterfeit Parts Protection	<i>(Consolidated into Clause 01)</i>
<b>38</b>	Government Contract Orders (DPAS)	When DPAS rating is flowed down in the purchase order, the supplier is required to flow down the rating to the EEE parts suppliers for priority allocation.
<b>39</b>	Vision Tests (Eye Exams)	<i>(Deleted)</i>
<b>40</b>	Nadcap-Approved Special Processors Required	The supplier shall utilize Nadcap-approved special processors to perform special processes as defined by Nadcap (primarily codes CP for chemical processes and HT for heat treating). Nadcap-approved special processors are listed in the eAuditnet Online QML at: <a href="https://www.eauditnet.com/eauditnet/ean/user/login.htm">https://www.eauditnet.com/eauditnet/ean/user/login.htm</a>
<b>41</b>	FAR 52.222-99	<i>(Deleted)</i>
<b>42</b>	For Subcontracts Exceeding \$1,000,000	<i>(Deleted)</i>
<b>43</b>	Export Control	Export Control Notice. This P.O. may contain technical data whose export, transfer, and /or disclosure may be controlled by the U.S. International Traffic and Arms Regulation (ITAR) 22 CFR part 120-130 or the Export Administration Regulations Commerce.
<b>44A</b>	IPC-A-600, Class 2 Acceptability of Printed Circuit Boards	<i>(Replaced by Clause 30E)</i>
<b>44B</b>	IPC-A-610, Class 2 Acceptability of Electronic Assemblies	<i>(Replaced by Clause 30F)</i>
<b>45</b>	Special Processors, Certifications, and Reports	<p><b>Special Process Definition:</b> Special processes including plating, painting, passivation, heat treating, welding, NDT, etc. as defined by Nadcap. The Nadcap website is located at: <a href="https://www.eauditnet.com/eauditnet/ean/user/login.htm">https://www.eauditnet.com/eauditnet/ean/user/login.htm</a>.</p> <p><b>Special Processor Selection:</b> Suppliers are encouraged to utilize Nadcap-approved special processors wherever possible. Otherwise, special processors shall be capable of certifying their processes to the applicable industry specification(s) as required by the POC drawing.</p> <p><b>Certification Requirements:</b> The supplier shall furnish a special process certification <u>in addition to</u> the certificate of conformance as required by the general requirements. The certification shall specify the applicable special process specification(s) (plating, heat treat, passivation, etc.), type, class, etc. as specified on the POC drawing or industry specification.</p> <p><b>Test Report Requirements:</b> The certification or attachment(s) shall also include actual measurements as applicable to verify conformance to the POC or specification requirements.</p>
<b>46</b>	POC-Directed Special Processors	<p><b>Special Processor Selection:</b> The supplier must use special processors as directed by POC. The POC purchase order should note eligible special processors. If not, contact POC Purchasing for direction before proceeding.</p> <p><b>Certification Requirements:</b> The supplier shall furnish a special process certification <u>in addition to</u> the certificate of conformance as required by the general requirements. The certification shall specify the applicable special process specification(s) (plating, heat treat, passivation, etc.), type, class, etc. as specified on the POC drawing or industry specification.</p> <p><b>Test Report Requirements:</b> The certification or attachment(s) shall also include actual measurements verifying conformance to the POC or specification requirements.</p>

# Supplier Quality Clauses

Quality Clause	Quality Clause Name	Quality Clause Requirement
50	Turnkey Circuit Card Assemblies (CCA's)	<p>The supplier is required to satisfy the following:</p> <ol style="list-style-type: none"> <li>1) All general requirements as noted in Part 1;</li> <li>2) All notes as documented on pertinent POC fabrication, specification and source control, and assembly drawings.</li> <li>3) All documents referenced within the PO, drawing package, and BOM including test and inspection procedures; and</li> <li>4) <u>The following specific quality clauses: 01, 04, 19, 25, 29, 36, 43</u></li> <li>5) All EEE parts with date code longer than 4 years from the date of assembly must perform at least a 1-piece solderability testing (in accordance with or equivalent to Quality Clause 18) with evidence including photos provided to POC QA and Project Lead for review and approval before any assembly can be produced using such parts.</li> <li>6) All materials shelf life should be within the specified expiration dates provided by the manufacturers.</li> </ol>