

Procurement Quality Clauses

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SDL PROCUREMENT QUALITY CLAUSES

SDL Internal Notes

QA1 Receiving Inspection (Select one)

- a. Required Send to QA
- b. Required Send to Machine Shop
- c. Inspection Not Required Send to Originator
- d. Inspection Not Required Send to Stockroom

QA2 Additional SDL Screening Required

Internal note for additional testing upon receipt at SDL (i.e. fastener screening)

External (Supplier) Notes

QA3 Certificate of Conformance (Select one)

- a. **Basic**: Seller shall deliver a Certificate of Conformance reflecting compliance to all purchase order requirements.
- Manufacturer: Seller shall deliver a Certificate of Conformance reflecting compliance to all PO/contract requirements which shall include the manufacturer's name and serial/lot/date/heat codes.
- c. Extended Full Chain of Custody: Seller shall deliver Certificate(s) of Conformance from the manufacturer including full chain of custody documentation back to the manufacturer. Certificate of Conformance shall include the manufacturer's name, part number, date of manufacture and serial/lot/date/heat codes for traceability of delivered items.

QA4 Certificate of Chemical/Physical Analysis

Seller shall deliver a Certificate of Chemical/Physical Analysis listing ASTM conformance characteristics, actual test results, and indication that the material properties fall within acceptable ranges. This certificate shall identify manufacturer heat/lot/date codes of materials tested and include an authorized stamp or signature of testing or quality assurance personnel.

QA5 Single Date/Lot Code

Materials procured on this order shall be filled with single manufacturer date and/or lot code for each line item part number.

OA6 Shelf Life Expiration Date

Material delivered for this procurement must have at least 75% of manufacturer certified useful life remaining, unless otherwise stated on the Purchase Order. Seller shall ensure material and/or container are identified with the applicable expiration date or shelf life, special storage conditions (i.e. temperature for storage), etc.

QA7 ESD Handling

Supplier shall ensure that components sensitive to Electrostatic Discharge (ESD) are handled, labeled, and shipped in ESD protective packaging that will provide protection to the voltage levels prescribed by the OEM, and per requirements equivalent to ANSI/ESD S20.20.

QA8 Stop Work and Notification of Anomalies or Test Failure

In the event of anomalies or test failure, the seller shall stop work immediately and notify SDL within 24 hours. Work shall not proceed without authorization from SDL.

QA9 Supplier Shall Not Subcontract Effort

The seller shall not subcontract effort related to this procurement without written approval from SDL.

QA10 Vendor Processing Record

The seller shall complete, sign, and return the SDL Vendor Processing Record (QF0904) to document work performed.

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QA11 Workmanship Requirements

Manufacturing and assembly work shall be conducted by IPC or NASA certified operators and inspectors to the following standards (as applicable):

- IPC J-STD-001: Requirements for Soldered Electrical and Electronic Assemblies, Class 3 workmanship
- IPC J-STD-001-S: Space and Military Applications Electronic Hardware Addendum to J-STD-001, Class 3 workmanship
- NASA-STD 8739.1: Workmanship Standard for Polymeric Application on Electronic Assemblies
- NASA-STD-8739.4: Workmanship Standard for Crimping, Interconnecting Cables, Harnesses, and Wiring

QA12 Pre-Enclosure Inspection

Pre-enclosure inspection is required for items on this order. The seller shall stop and provide access for SDL and/or government customers to inspect work before closure, sealing, foaming, or encapsulation occurs preventing visual inspection at specified levels of assembly.

QA13 Calibration

Calibration and procedures shall comply with ANSI Z540, ISO 17025, ISO 10012, or ISO 9001 and be traceable to NIST. Certificate of calibration shall accompany calibrated equipment.

QA14 EIDP Required

An End Item Data Package (EIDP) shall be required for this procurement. EIDP contents will be as specified in the PO/contract.

QA15 Coupons Required

Seller shall provide a minimum of two coupons per Printed Wiring Board (PWB) panel for coupon testing. Seller shall not ship PWBs to SDL until coupons have passed testing conducted by third party service provider. Coupons shall be shipped to company as specified in the PO/Contract.

QA16 Quality System Certification (Select all that apply)

Seller shall maintain a quality management system that is certified to the current version requirements of:

- a. ISO 9001
- b. AS9100
- c. Other as Specified in PO/Contract

QA17 Records Retention (Select one)

All manufacturing records shall be maintained by the supplier, be readily retrievable, and be provided to SDL upon request for the number of years specified. These records include inspection data, test reports, evidence of compliance to requirements, and manufacturer traceability.

- a. 5 years
- b. 7 years
- c. 10 years
- d. 15 years
- e. Other as Specified in PO/Contract

QA18 Manufacturing and Test Reports Required (Select all that apply)

The supplier shall provide copies of required manufacturing and test reports with delivered product.

- a. Dimensional Inspection
- b. As-Built Drawing Package
- c. Chemical/Physical Analysis as Specified
- d. Others as Specified in PO/Contract

QA19 Material Review Board (MRB)

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Seller is not authorized to deliver material not conforming to requirements. Supplier shall not approve repairs or use-as-is dispositions without written approval from SDL.

QA20 Right of Entry and Audit by SDL and Customers

Upon request, Seller shall provide for right of entry to all manufacturing facilities and support for audit of processes and documentation relative to procured materials. This right of entry and audit shall be granted for SDL representatives and/or SDL government customers.

QA21 Government or SDL Source Inspection Required

Government or SDL source inspection is required prior to authorization for shipment on this procurement.

QA22 Counterfeit Materials Mitigation

Parts and materials delivered on this procurement shall be from the original manufacturer or from a distributor authorized by the manufacturer.

QA23 Prohibited Materials (Select all that apply)

The following materials shall not be present in any delivered materials for this procurement:

- a) Zinc
- b) Cadmium
- c) Electrodeposited Tin
- d) Any form of Pure Tin (> 97%)
- e) Silicone, or adhesives containing silicone
- f) Mercury or compounds of mercury
- g) Corrosive sealants, adhesives, fluxes, or coatings
- h) PVC
- i) Beryllium or selenium except internal to hermetically sealed devices
- j) Corrosive solder fluxes unless detailed cleaning procedures are specified that include verification methods to ensure removal of residual contaminants
- k) Fluorocarbon polyimide wire insulation 'Kapton®' is to be controlled for arc tracking
- Materials which exhibit or are known to exhibit natural radioactivity such as uranium, potassium, radium, thorium, or any alloys thereof
- m) Magnesium

QA24 Date/Lot Code (Select one)

Seller shall not deliver parts or materials having a date/lot code older than:

- a) 2 years
- b) 3 years
- c) 5 years
- d) Other as Specified in PO/Contract

QA25 Multiple lot/date codes

Seller shall not mix date codes/lot numbers of the same part number within the same individual package. In addition, the individual part containers shall be marked with the lot/date code and quantity.

QA26 Quality Clause flow down

All applicable quality clauses shall be flowed down to lower-tier suppliers to ensure compliance with specifications, quality system requirements (i.e. ISO 9001, AS9100, or other), or other requirements specified in the purchase order.