

QUALITY CLAUSES

- QA-1 RIGHT OF ENTRY: SELLER hereby grants to ANDREA SYSTEMS LLC, its customers, and any applicable regulatory agencies, the right to enter on its premises as well as other necessary places, during normal business hours, for the purpose of inspection of SELLER's facilities and systems to ensure SELLER's compliance with the terms and requirements of this order, including the quality of the contracted work, records, and materials.
- QA-2 QUALITY: SELLER shall maintain a quality management system which is acceptable and appropriate for the items supplied hereunder and shall comply with general industry standards. Items supplied shall meet the requirements in the applicable technical specifications and documentation (drawings, specifications, standards, etc.). It shall be the sole responsibility of SELLER to monitor that the technical specifications regarding materials, methods, form, fitness, and function are observed, whether or not the items have been manufactured by SELLER or by any of SELLER's subcontractors.
- QA-3 The SELLER's inspection system to be documented and available for review by the buyer throughout the life of the order / contract.
- QA-4 FLOW DOWN: SELLER shall flow down all requirements of this purchase order to its subcontractors.
- QA-5 CERTIFICATE OF CONFORMANCE: SELLER must provide a Certificate of Conformance stating that material / items supplied under this purchase order meet all applicable purchase order requirements. This certificate shall include the Andrea Systems LLC purchase order number, requested part number, nomenclature and condition. The certificate shall bear the legible signature and title of an authorized agent of the SELLER. This Certificate of Conformance shall accompany the shipment. All objective evidence which substantiates SELLER's certification shall be retained on file at SELLER's facility. This data shall be readily available at any time for on-site review by Buyer. When other additional quality requirements so specify, appropriate data shall be provided with each shipment. When requested by Buyer, SELLER shall provide, at no cost within 30 days of any such request, legible photocopies of inspection / test results or substantiating objective evidence for any Certificate of Conformance.
- NOTE: If the SELLER is providing an alternate part number, the SELLER must include documentation traceable to the Original Equipment Manufacturer (OEM) stating that the material is a suitable substitute.
- QA-6 SHIPMENT: SELLER shall ship all items with same requested date complete unless otherwise noted.
- QA-7 METHOD OF SHIPMENT: SELLER shall ship via Ground unless other method requested in writing. Unauthorized shipping charges will be deducted from invoice.
- QA-8 DELAY IN DELIVERY: If SELLER is unable to meet the requested date, SELLER shall notify Andrea Systems LLC's Purchasing Agent immediately, in writing, stating the reason for the delay and the new delivery date. If SELLER becomes aware of any circumstances that are likely to give rise to delay in delivery, SELLER shall immediately notify ANDREA SYSTEMS LLC in writing stating the - reason for the delay and a new time of delivery, which shall be subject to written acceptance by ANDREA SYSTEMS LLC. In case of delay in delivery, ANDREA SYSTEMS LLC reserves the right to cancel the purchase order without liability to SELLER or any other third party. ANDREA SYSTEMS LLC reserves the right to cancel the order should the SELLER not respond promptly to ANDREA SYSTEMS LLC's expedited notices.
- QA-9 SUBSTITUTION OF PARTS AND NONCONFORMING PRODUCT: Substitutions of parts and/or processes are not acceptable without prior written consent of Andrea Systems. Any nonconforming material must have the approval of Andrea Systems LLC prior to use.
- QA-10 ACCEPTANCE: Unless otherwise specifically agreed to in writing, the following terms and conditions shall apply to the SELLER's acceptance of this Purchase Order and ANDREA SYSTEMS LLC's acceptance of ordered items. The acceptance of this order by SELLER shall be conclusive evidence of the SELLER's approval, consent, and agreement to the terms and conditions herein. Any terms and conditions listed on any SELLER document which are in addition to or in conflict with these terms are objected to and shall not become part of this transaction.
- QA-11 TECHNICAL DOCUMENTS: Drawings, samples, data carriers, and other documents provided by ANDREA SYSTEMS LLC, or developed on behalf of ANDREA SYSTEMS LLC in compliance with an ANDREA SYSTEMS LLC purchase order do not become the SELLER's property and may not be delivered to, or used for or by SELLER or any third parties. ANDREA SYSTEMS LLC's technical documents are protected by copyright, must remain confidential, and may not be copied or reproduced without ANDREA SYSTEMS LLC's written consent.
- QA-12 Subcontractors and Vendors shall maintain verifiable and objective evidence of all inspections and tests performed, results obtained and dispositions of nonconforming articles. These records shall be identified to associated articles and shall be retained by the seller and made available for review to the buyer and/or authorized representatives of the buyer upon request. Records shall be retained in a safe, accessible location for a period of 10 years following final payment for the article.
- Records held for the required retention period (10 years) shall not be destroyed without the Buyer's written concurrence. Additional retention/storage time, if required by the buyer will be subject to negotiation.
- QA-13 TRACEABILITY: The SELLER to have a documented traceability system for mechanical / electronic parts and supplies.
- QA-14 DISTRIBUTOR: A distributor shall have a quality control system including pre-packing and pre-shipping inspection / tests activities, and that the data from these activities be made available to the buyer.
- QA-15 ELECTROSTATIC SENSITIVE DEVICES (ESD): The supplier shall handle / package Electrostatic Sensitive Devices (ESD) in accordance with DOD-STD-1696, MIL-STD-1686 or ANSI-S20.20.
- QA-16 Certification that lead finish for all electronic components meets one of the following requirements: a) Tin / Lead alloys containing >3% Lead: b) Non Tin plated (i.e., Nickel / Gold, Nickel / Palladium / Gold or Nickel / Palladium).
- NOTES: 1) Pure tin may NOT be used as an undercoat. 2) Other finishes require prior approval. 3) This includes all components supplied on electronic assemblies.
- QA-17 SOLDERABILITY: The solderability of parts shall meet the requirements of MIL-STD-750 Method 2026 for semiconductors, MIL-STD-883 Method 2003 for microelectronics, MIL-P-55110 for rigid printed wiring boards, MIL-P-50884 for flexible and rigid-flex printed wiring boards, MIL-STD 202 Method 208 with only one hour of team aging (insulation removed) for wire, and MIL-STD-202 Method 208 for all other parts not listed above. Where the part specification does not require solderability testing, the solderability shall be tested to MIL-STD-202 Method 208. Electroplated tin-lead finishes shall be fused and shall conform to MIL-P-81728. As an exception, magnet wire need not be solderability tested.
- QA-18 PRINTED WIRING BOARDS: The SELLER shall provide objective evidence assuring that the printed wiring board meets the in-process inspection, Group A and Group B Inspection of MIL-P-55110D / Amendment 4.
- QA-19 ANDREA SYSTEMS LLC TEST / INSPECTION REPORTS REQUIRED: SELLER must provide with each shipment the manufacturer's test report certifying items furnished comply with applicable specification(s). The test report will include the lot or serial number and specification(s), including revision level(s), for which the item has been tested. The test report must have actual results from an examination / test.
- QA-20 SPECIAL PROCESSES: ANDREA SYSTEMS LLC shall maintain contractual visibility over the SELLER's selection of NADCAP-approved Special Process Suppliers. The NADCAP Approved Supplier selected must be certified for the entirety of the Purchase Order.
- QA-21 RAW MATERIAL ANALYSIS: The SELLER shall conduct, and provide the buyer with, a copy of a chemical and physical analysis of raw material used in the supplier's production and / or of raw material shipped to the buyer.
- QA-22 MATERIAL SAFETY DATA SHEET: SELLER must provide two copies of Material Safety Data Sheet (MSDS) with shipment.
- QA-23 SHELF LIFE REQUIREMENTS: Shelf Life Requirements for manufacturing / cure date shall be legible on each container and certificate of conformance with a minimum of 75% useful shelf life remaining upon arrival at ANDREA SYSTEMS LLC.
- QA-24 TEST AND MEASURING EQUIPMENT CALIBRATION: Supplier to calibrate in accordance with ISO-10012-1, ANSI / NCSL Z540-1 and provide Certificate of Compliance and test data. Supplier shall be ISO9001 registered and / or ISO / IEC 17025 accredited.
- QA-25 FIRST ARTICLE INSPECTION (FAI) REQUIRED IAW SAE AS9102: SELLER to provide a documented FAI to ensure delivered items are in compliance with requirements of the purchase order and associated drawings, specifications or other defined engineering requirements.
- QA-26 INSPECTION PLAN: The SELLER to submit a documented Inspection Plan in accordance with MIL-I-45208A to ANDREA SYSTEMS LLC for review and approval.
- QA-27 INSPECTION / TEST RECORDS: The SELLER to maintain inspection / test records or other records as to functional, chemical, and / or physical properties of the items being procured per this document for a period of seven (7) years.
- QA-28 SUBCONTRACTOR INSPECTION: The SELLER shall clearly identify parts, supplies, and/or associated documentation with indications of inspection status, and accomplish this with a system that is distinctly different from ANDREA SYSTEMS LLC's and the Government's inspection identification.
- QA-29 GOVERNMENT SOURCE INSPECTION (GSI) REQUIREMENT: Government inspection is required prior to shipment from SELLER's plant. Upon receipt of this order, promptly notify Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished.
- QA-30 Supplier must report to ASLLC in writing if a product has been released by them and subsequently found not to conform to applicable design data.

QUALITY CLAUSES CONTINUED

QA-31 COUNTERFEIT PARTS PREVENTION - Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM)
All parts supplied shall be in accordance with standard AS5553 for Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition

1a) Work is defined as parts delivered under the purchase orders that are the lowest level of separately identifiable items (ex: articles, components, goods, and assemblies). "Counterfeit Work" means Work that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method.

1b) SELLER agrees and shall ensure that Counterfeit Work is not delivered to Andrea Systems.

1c) SELLER shall only purchase products to be delivered or incorporated as Work to Andrea Systems directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain. Work shall not be acquired from independent distributors or brokers unless approved in advance in writing by Andrea Systems.

1d) SELLER shall immediately notify Andrea Systems with the pertinent facts if SELLER becomes aware or suspects that it has furnished Counterfeit Work.. When requested by Andrea Systems, SELLER shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.

1e) SELLER shall flow down 1a-1d to lower tier suppliers.

OCM/OEM and Independent Distributors shall provide Certificates of Conformance (QA-5) and acquisition traceability. Acquisition traceability consists of the name and location of all supply chain intermediaries from OCM/OEM to SELLER. Failure to deliver this information will be cause for rejection at the SELLER's expense.

QA-32 CONTRACTS ISSUED TO INDEPENDENT DISTRIBUTORS
All parts supplied shall be in accordance with standard AS5553 for Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition

1a) Test and Inspection Requirements

"The seller shall establish and implement test and inspection activities necessary to assure the authenticity of purchased product, including:

- Traceability and documentation verification
- Visual examination
- Member of EARI, IDEA and GIDEP

Tests and inspections shall be performed in accordance with clearly delineated accept/reject criteria provided or approved by Andrea Systems LLC. The seller shall prepare and provide to the Andrea Systems LLC records evidencing tests and inspections performed and conformance of the product to specified acceptance criteria.

Tests and inspections shall be performed by persons that have been trained and qualified concerning types and means of electronic parts counterfeiting and how to conduct effective product authentication." Person(s) shall be certified to IDEA ICE 3000 and CCAP-101. Facility certification to ANSI/ESD S20.20 is required. Membership to ERAI, GIDEP and IDEA is mandatory.

1b) Supply Chain Traceability

"The seller shall maintain a method of item traceability that ensures tracking of the supply chain back to the OCM/OEM parts included in assemblies and subassemblies being delivered per this order. This traceability method shall clearly identify the name and location of all of the supply chain intermediaries from the manufacturer to the direct source of the product for the seller, and shall include the manufacturer's batch identification for the item(s) such as date codes, lot codes, serializations, or other batch identifications."

1c) Certificate of Conformance

"The seller shall approve, retain, and provide copies of Electrical, Electronic, and Electromechanical (EEE) part Manufacturer Certificates of Conformance (CoC).

Manufacturer CoCs shall, at minimum, include the following:

- a. Manufacturer name and address
- b. Manufacturer and/or buyer's part number and dash number
- c. Batch identification for the item(s) such as date codes, lot codes, serializations, or other batch identifications.
- d. Signature or stamp with title of seller's authorized personnel signing the certificate.

NOTE: Distributors shall, in addition to the above, include their name for each part shipped."

1d) Quality Management System

"The seller shall have a quality management system that complies with Society of Automotive Engineers (SAE), AS9120 Quality Management Systems – Aerospace – Requirements for Stocklist Distributors. Independent certification/registration is required unless otherwise specified by buyer.

Organizations that obtain certification/registration to AS9120 and subsequently change certification/registration bodies (CRB), lose registration status, or are put on notice of losing registration status, shall notify the buyer's procuring organization(s) within three days of receiving such notice from its CRB."

1e) Product Impoundment and Financial Responsibility

"If counterfeit parts are furnished under this purchase agreement, such items shall be impounded. The seller shall promptly replace such items with items acceptable to the, Andrea Systems LLC and the seller may be liable for all costs relating to impoundment, removal, and replacement. Andrea Systems LLC may turn such items over to US Governmental authorities (Office of Inspector General, Defense Criminal Investigative Service, Federal Bureau of Investigation, etc.) for investigation and reserves the right to withhold payment for the items pending the results of the investigation."

1f) Federal Penalties Associated with Fraud

"This purchase order and activities hereunder are within the jurisdiction of the United States Government. Any knowing and willful act to falsify, conceal or alter a material fact, or any false, fraudulent or fictitious statement or representation in connection with the performance of work under this purchase order may be punishable in accordance with applicable Federal statutes.

Seller employees engaged in the performance of work under this purchase order shall be informed in writing prior to performance of work that there is a risk of Federal criminal penalties associated with any falsification, concealment, or misrepresentation in connection with work performed under this purchase order.

Seller shall include the following statement preprinted on each Certificate of Conformance initiated by the seller and provided to the buyer in conjunction with this purchase order:

NOTE: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under Federal Statute.

Seller shall include all provisions of this contract clause, including this sentence, in all lower tier contracts under this order. Any inability or unwillingness of a lower-tier supplier to comply with this provision should be documented in writing and submitted to Andrea Systems LLC.

QA-33 FOD (Foreign Object Damage/Debris)

Seller must have a FOD awareness and prevention process in place in accordance with National Aerospace Standard NAS-412 and ensure that product being delivered to Andrea Systems LLC is free from FOD. Any FOD related defect must be handled as Non-conforming product in accordance with QA-9.

QA-34 AS9100 Section 7.1.3 as applicable is enforced on this purchase order.