

**QUALITY ASSURANCE FORM****Number:** PI-0705006**Rev:** A**Author:** S. Oluwole**Date:** 4/23/2015**Title:** Supplier Quality Clauses**Page:** 1 of 11

Revision	Date	Change Author	Change Summary
A	04/23/2015	S. Oluwole	

In case of any conflict with this document and any other requirements, the order of precedence is as follows:

1. Comark Purchase Order
2. Drawings, Specifications, and or Electronic Files
3. This document

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*The following clauses are incorporated into all Comark Purchase Orders.*

**GC1. Supplier Qualification**

All suppliers shall be qualified according to the Comark supplier qualification process defined in our ISO9001 Quality Management System. Suppliers may be asked to complete a Supplier Quality Survey Questionnaire and/or successfully pass an on-site survey. The Supplier shall allow Comark personnel access to perform an on-site survey for qualification with the understanding that sensitive and proprietary information is reserved by the Supplier.

**GC2. Customer / Government Access**

The supplier shall provide, if required, access to any of the subcontractor's facilities where any of the work is being performed. This access shall be granted to the U.S. Government, Foreign Government, Commercial Customer, Comark Quality Assurance Representative (QAR) as appropriate for the specific contract. The QAR shall be afforded unrestricted opportunity to evaluate and verify subcontractor's compliance to this Purchase Order (PO). The subcontractor shall make available for reasonable use by the QAR the equipment necessary for validation purposes. Subcontractor personnel shall be made available for operation of such equipment as required.

**GC3. ISO 9000:2008 or AS9100:2009 QMS**

Supplier compliance and/or certification to AS9100:2009, ISO9000:2008 or equivalent are preferred, but not mandatory. At a minimum there shall be adequate process controls to ensure the Supplier can meet the Purchase Order requirements.

**GC4. Quality System Performance**

Evidence of unacceptable Quality Procedures may result in suspension of contract deliveries pending demonstration of appropriate corrective actions.

**GC5. Record Retention**

The Supplier shall maintain records that provide objective evidence of compliance to the PO requirements. The records shall be maintained for a period of at least three years from completion of purchase order. The Supplier may send records to Comark to be maintained.

Note: Clause GC5 takes precedence over this requirement if it is defined on the purchase order.

**GC6. Sub-Tier Supplier Requirements**

Seller shall establish in its sub-tier supplier purchase order (s) requirements necessary to assure that quality clauses are flowed to sub-tier suppliers and that each item delivered has been controlled, manufactured, tested and inspected in compliance with the requirements of the Order by and between Seller and Buyer. A copy (with redacted pricing) of each sub-tier purchase order (s) shall be available for review by Buyer upon its request.

**GC7. Non-conforming Material**

All parts and material delivered against this Order shall conform to the requirements of the Order. Seller shall not apply the following nonconforming material dispositions without Buyer approval;

- Repair or,

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- Use-As-Is or,
- Or any other Disposition that alters the released configuration baseline

Seller Nonconformance Reports, or other design modification requests, are to be submitted to the Buyer for processing. Buyer approved nonconformances reports shall be included within Seller submitted contract deliverables.

The Supplier shall report any nonconformance that may affect already delivered product.

- Notification shall include a clear description of the discrepancy, identification of suspect parts (mfg. dates, serial numbers, qty, etc.), and dates delivered.
- A containment plan and interim corrective action shall be provided to assure no further defective product will be received at Comark.

**GC8. Customer Furnished Material**

- If this PO includes the use of material provided by Comark as Customer Furnished Material (CFM), then the following Quality Clause is applicable.
  1. All CFM must be handled with care and appropriately stored.
  2. Whenever CFM is determined to be non-conforming, follow your company's normal procedure for handling non-conforming material. In addition, promptly notify Comark that the material is nonconforming. Send a copy of your non-conformance/defect report via e-mail to the Buyer or Materials Department contact, and Comark Quality Assurance.

**GC9. Packaging**

The supplier shall:

- Package all items in such a manner as to prevent damage during shipment and subsequent storage at Comark.
- Assure that shipping containers intended to be carried by an individual must not exceed 35 pounds total.
- Work with the appropriate Comark site to establish packaging configuration.

**GC10. Lot Date Codes**

Shall not exceed three years from date of receipt at Comark. Lot Date Codes for individual piece parts used as part of an assembly for Comark shall not exceed three years from date of assembly.

**GC11. Electrostatic Discharge (ESD)**

Appropriate handling and packaging is required for electrostatic sensitive material. The supplier shall:

- Have an ESD program in accordance with MIL-STD-1686, MIL-HDBK-263, ANSI/ESD-20-20, Comark approved equivalent that provides protection of ESD sensitive devices during all phases of manufacture, test, storage and shipment.
- Package ESD sensitive items in packaging materials specifically designed for use with ESD sensitive materials.
- Label each package as "ESD SENSITIVE".

**GC12. Hazardous Materials**

For any hazardous material, a material safety data sheet (MSDS) will be required to be delivered with product.

**GC13. Adhesives, Paints, Compounds, Raw Materials, Liquids, Thermal Insulating Fabrics**

For adhesives, paint, compounds, raw materials, liquids, thermal insulating fabrics, date of manufacture, shelf life, expiration date, Material Safety Data Sheets (MSDS) and Certificate of Conformance are required to be delivered with product.

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(E.g. items not intended to be part of the product such as solder splashes, wire stripping shavings, screwdriver, paperclip, etc.): The Supplier shall have sufficient Foreign Object controls within their facilities/operations to prevent Foreign Objects from entering into the product.

**GC15. IPC Certification**

- Printed circuit/wiring boards, assemblies, and cables shall be built using J-STD and IPC **certified** personnel.
- Unless otherwise stated on the drawing or purchase order:
  - Soldering shall be performed by personnel certified to J-STD-001. Printed wiring boards shall be certified to, IPC A-610 as applicable, class 2 – Acceptability of Printed Boards
  - Printed Wiring Assemblies shall be certified to IPC-A-610, class 2 – Acceptability of Electronic Assemblies

**GC16. End of Life (EOL)**

The supplier shall have a formal system for the identification of and mitigation of risk associated with EOL. Supplier to notify Comark as early as possible in the EOL process.

**GC17. Counterfeit Part Mitigation**

The supplier shall have a formal program for the prevention of Counterfeit Parts/Part Substitution being used in Comark product. Report Possible or Confirmed issues to Comark as soon as identified.

**GC18: Prohibited Materials (as applicable to material/product on the specific Purchase Order)**

The following materials are prohibited:

- D10 B: Dodd-Frank Wall Street Reform and Consumer Protection Act- Section 1502 Conflict Minerals: Provided product shall not contain conflict minerals (tin, tantalum, gold, tungsten) from the Democratic Republic of Congo and adjoining countries which include; Angola, Burundi, Central African Republic, The republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia.

**GC19. Receiving Inspection**

Material shipped against this Purchase Order is subject to Receiving Inspection.

**GC20. Workmanship**

Unless otherwise specified, material shipped against this Purchase Order shall be free of pits, cracks, dents, scratches, burrs, sharp edges, foreign matter, or any other evidence of poor workmanship that shall render the unit unsuitable for its intended use. Additional requirements are defined in terms and conditions.

**GC21. Purchase Order Changes**

Once the PO is accepted, any supplier initiated change requests shall be initiated via e-mail to the buyer. Comark initiated changes should be communicated to the Supplier via a purchase order revision.

**GC22. Product and Manufacturing Change Control**

- No change in specification or materials is allowed to item(s) on this order without written approval from Comark.
- No change in manufacturing process that may affect fit, form and function is allowed to item(s) on this order without written approval from Comark

**GC23. Electronic Components Packaging**

All electronic components parts shall be packaged such that they are kept from damage

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## Special Quality Clauses

*These apply when referenced and incorporated into the PO or PO line item as indicated by the clause number(s) located on the face of the Purchase Order. In case of conflict between Special and General Clauses, Special Clauses take precedence.*

### SC1. ITAR Registration

Unless otherwise specified, custom product, parts and components, and the related technical data and information or services related to Comarks military programs are controlled for export purposes pursuant to the International Traffic in Arms Regulations (“ITAR”). It is a violation of the ITAR to export or re-export these products, any of their parts or components, or technical data related to them without first receiving authorization to do so from the U.S. Department of State.

### SC2. Comark Source Inspection / Shipment Pre-Approval

- Is required prior to shipment from your plant. This may be an on-site source inspection or may involve a review of all supporting quality documentation prior to shipment.
- Comark shall be notified a minimum of one week in advance of the time the materials are ready for review.
- Supplier shall submit all supporting documentation, per the drawing and Purchase Order requirements. Documentation shall be electronically submitted to the Buyer or Source Inspector. Documentation shall be submitted immediately after source inspection notification.

### SC3. Government Source Inspection

If Government source Inspection is required prior to shipment from your plant, upon receipt of this PO, promptly notify the Government representative who normally services your plant. Where a representative is not currently defined, contact your Comark Buyer for assistance.

### SC4. Certification of Conformance

Supplier shall

- Furnish certification that product shipped complies with all requirements of the PO, drawings, and specifications.
- Include the following: Comark purchase order number, order part number and revision level, and quantity shipped.
- Serialized articles shall be identified by serial number
- Lot controlled articles shall be identified by lot number.
- The words “Certification of Conformance” or “C of C” shall be clearly visible on the certificate.
- For post verification activity, the C of C shall be signed as verification of conformance.

### SC5. Certification of Calibration

For instruments, gauges and measuring standards, electronic or mechanical, a Certificate of Conformance to ANSI/ASQ Z540.1 or ISO 10012 is required.

### SC6. Certification of Chemical/Physical Test

Supplier shall

- Furnish results of chemical/physical tests conducted on materials submitted.
- Test reports shall identify applicable material specification, test results, and material lot control number.

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Special processes include, but are not limited to plating, coating, passivation, and heat treating. With each shipment of line items that requires special processing has been performed, the Seller shall include certification stating that the process performed complied with an identified industry specification.

Heat treat certifications shall be accompanied by time/temperature charts and a summary description of the heat treat time and temperature data indicating the furnace and heat treat lot number. The Certification shall state the name of the processor, date of processing, and the printed or typed name and signature of the responsible representative of the processor. A legible Special Process Certification verifying conformance to the drawing requirements shall be submitted with each Order line item shipment for review and approval by the Buyer. At a minimum, the Special Process Certification shall include the Order number, the part description, the Part/Drawing Number with Revision Letter, The Name and Location of the special processor, and the special process being performed (must match drawing note including the specification, class, type and color where applicable). Must make reference to the applicable Comark part number.

**SC8. IPC Certification (PCB, PWA, cable assemblies)**

Unless otherwise stated on the drawing or purchase order: Printed wiring boards and Assemblies shall be certified to IPC-A-610, class 2.

**SC9. Painted Surface(s) Requirements**

This product requires a painted surface finish. A painted coupon sample must be approved by Comark prior to painting the end-item product. Comark will review this painted coupon sample, and if it meets requirements, authorize the supplier to paint the product. End-item product is not to be painted without Comarks approval of the sample coupon.

**SC10. Record Retention**

The supplier shall maintain records in accordance with the applicable Quality System Standard. The records shall be maintained for a period of not less than 7 years from completion of purchase order.

**SC11. Test Reports**

Articles on this PO may require electrical, mechanical, environmental, functional, or other tests in accordance with Supplier, Comark and/or Government specifications. Supplier shall furnish test reports containing at a minimum:

- a. Comark Purchase Order Number
- b. Item name, drawing number and revision
- c. Test specification description, number and revision as applicable
- d. Number of units tested
- e. Serial numbers of units tested as applicable
- f. Test requirement including the criteria for pass/fail
- g. Quantitative test results shall be used whenever possible.

**SC12. Welding Requirements for Procedures, Repairs, and Material Records**

Weld procedures and personnel performing the welding shall be qualified in accordance with the requirements of the specification identified on the engineering drawing and/or Statement of Work, as applicable. Seller shall provide, for review and approval by Buyer, copies of all weld procedures, weld procedure qualification records, and welder performance qualification records to be used in performance of the Order as part of the quote. Where the above needs to be developed, the Seller shall inform the Buyer in writing.

**QUALITY ASSURANCE FORM****Number:** PI-0705006**Rev:** A**Author:** S. Oluwole**Date:** 4/23/2015**Title:** Supplier Quality Clauses**Page:** 9 of 11**SC13. Lot Date Code Identification**

Electrical and electronic components that have manufacturer lot date code identification shall be packaged to provide segregation of manufacturers and lot date code by quantity to assure traceability can be maintained.

**SC14. First Article Inspection (FAI)**

The Seller shall:

- Perform a FAI in accordance with AS9102 Aerospace First Article Inspection Requirements. Alternative approaches to AS9102 shall be approved by Comark in writing prior to the FAI being performed by the supplier. Alternative approaches must contain all of the data required by AS9102
  - Comark reserves the right to witness the FAI at the supplier's facility
- Perform a delta FAI on Revisions to a Comark drawing.
- If the FAI is on an assembly, include all parts in the assembly that are not Unmodified COTS items.
- Be aware that Comark recognizes that these FAI's may occur on pre-production parts. Comark may require a delta-FAI post implementation of production tooling and equipment.
- An FAI is not required for CFM (Customer Furnished Material) or Unmodified COTS items

**Note:** Once an FAI is completed, any re-order of the part at the same configuration level by the same supplier and per the same process does not require performing another FAI.

**SC15. First Piece Inspection**

When this clause is cited on a Purchase Order, the supplier shall provide first piece dimensional and test inspection data. The first piece shall be from the initial lot, batch, or run. 100% of the dimensions shall be measured as part of the first piece inspection. First piece inspection data shall be sent to Comark at least once for each purchase order. Subsequent purchase orders shall require another first piece inspection datasheet. Any revision changes to a drawing that affect any dimensions shall necessitate additional first piece inspection data for an open purchase order.

This requirement applies to the top level drawing characteristics. Any additional requirements will be flowed to the supplier from Comark LLC.

**SC16. Critical / Key Dimensions, Characteristics or Requirements**

The supplier shall:

- Note that Critical / Key dimension, characteristic, requirement and/or components shall either be identified on the drawing or as part of the purchase order notes.
- Provide Critical / Key dimension, characteristic and/or requirement inspection/test results with each shipment.
  - Data shall be supplied on 100% of the identified dimension, characteristic and/or requirement
- Obtain written Comark approval for the source of Critical/Key Processes/Component(s) prior to the first delivery if supplied by a sub-tier supplier.

**SC17. Inspection and Test Plan**

The supplier shall

- Submit an inspection and test plan to Comark. The plan should include the following:
  - Flow chart or Control Plan that identifies, as a minimum, the manufacturing process steps, inspection performed at each operation, and the reaction plan should a non-conformance be identified

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**SC18. Inspection & Test Data Submission**

End-item products ordered through this PO shall be inspected to the statistically valid C=0 Sampling Plan below (see Table 1). The Index Value (Associated AQL) is 1.0. Alternative sampling plans may be used provided that they provide equal or greater protection. Regardless of the plan, one or more defects discovered during inspection shall invoke procedures for control of nonconforming material.

Where testing is a requirement per drawing or Purchase Order requirements, the sample size shall be 100%.

		C=0 SAMPLING PLANS INDEX VALUES (ASSOCIATED AQLS)															
		.010	.015	.025	.040	.065	.10	.15	.25	.40	.65	1.0	1.5	2.5	4.0	6.5	10.0
LOT SIZE		SAMPLE SIZE															
2 to 8		*	*	*	*	*	*	*	*	*	*	*	*	5	3	2	2
9 to 15		*	*	*	*	*	*	*	*	*	*	13	8	5	3	2	2
16 to 25		*	*	*	*	*	*	*	*	*	20	13	8	5	3	3	2
26 to 50		*	*	*	*	*	*	*	*	32	20	13	8	5	5	5	3
51 to 90		*	*	*	*	*	*	80	50	32	20	13	8	7	6	5	4
91 to 150		*	*	*	*	*	125	80	50	32	20	13	12	11	7	6	5
151 to 280		*	*	*	*	200	125	80	50	32	20	20	19	13	10	7	6
281 to 500		*	*	*	315	200	125	80	50	48	47	29	21	16	11	9	7
501 to 1200		*	800	500	315	200	125	80	75	73	47	34	27	19	15	11	8
1201 to 3200		1250	800	500	315	200	125	120	116	73	53	42	35	23	18	13	9
3201 to 10,000		1250	800	500	315	200	192	189	116	86	68	50	38	29	22	15	9
10,001 to 35,000		1250	800	500	315	300	294	189	135	108	77	60	46	35	29	15	9
35,001 to 150,000		1250	800	500	490	476	294	218	170	123	96	74	56	40	29	15	9
150,001 to 500,000		1250	800	750	715	476	345	270	200	156	119	90	64	40	29	15	9
500,001 and over		1250	1200	1112	715	556	435	303	244	189	143	102	64	40	29	15	9

\*Indicates entire lot must be inspected  
NOTE: The Acceptance Number in all cases is ZERO.

Table 1

**SC19. PPAP and APQP**

- Product associated with this order require conformance to the Production Part Approval Process (PPAP) and/or Advanced Product Quality Planning (APQP). The purpose of this process is to establish confidence in a supplier and their production processes, by demonstrating that all Comark engineering design record and specification requirements are properly understood by the supplier and that the process has the potential to produce moderate to high volume product consistently meeting requirements.
- When this code is invoked Comark will assign a resource to tailor PPAP and/or APQP requirements for the product.

Where testing is a requirement per drawing or Purchase Order requirements, the sample size shall be 100%.

**QUALITY ASSURANCE FORM****Number:** PI-0705006**Rev:** A**Author:** S. Oluwole**Date:** 4/23/2015**Title:** Supplier Quality Clauses**Page:** 11 of 11**SC20. Quality Assurance Data Package Requirements**

Seller shall prepare a Quality Acceptance Data Package (QADP) for this order and shall submit to Buyer for review and approval prior to shipping the product. Data packages shall be collated and contain a table of contents. One copy of data package to be presented electronically. One hard copy of data package shall be shipped with the product. All documents within the QADP are to be marked with the applicable part number.

**SC21. Quality Program Plan**

When this clause is cited on the purchase order, the supplier shall submit a Quality Program Plan in accordance with requirements defined in purchase order and/or specification.

**SC22. Lot Control and Traceability**

The supplier shall

- Assure traceability to the manufacturing process via date code, lot codes or unique job number.

**SC23. Baseline Control**

When this clause is cited on the purchase order, a Comark approved supplier manufacturing configuration baseline is required. This baseline will be presented to Comark for approval. A previously approved baseline will satisfy this requirement. Comark may allow shipment of product prior to formal approval of baseline package providing supplier is working with Comark to establish one. The baseline package requested of the supplier shall be as follows:

- a. A single drawing under the supplier's engineering change control system listing supplier's assembly drawing(s), component piece part drawings, material drawings, critical processing specifications and critical manufacturing operations. Each document listed will include the document name, part number/specification number, and revision level and revision date. This baseline drawing shall have its own name, number, revision level, and revision date for future change control. This drawing can either be in the form of a manufacturing flow chart (preferred) or a simple listing.
- b. Acceptance (in writing) by Comark of the above specified documentation shall be considered as freezing the design and forming a configuration baseline of the part being purchased. The supplier's approved baseline identification, revision level and revision date will subsequently be reflected on the purchase order, and carried forward on future purchase orders by the Comark Purchasing Department.