

Quality Assurance Provisions (Q-Notes)

GENERAL

This document defines quality systems requirements for those suppliers, vendors, and subcontractors (hereinafter referred to as the “Seller”) providing materials, products, or service to Amplitech Inc. (hereinafter referred to as the “Buyer”).

AQN CODE	Q-Note Revision	Q-Note Title
<u>QM</u>	A	SUPPLIER’S QUALITY MANAGEMENT SYSTEM
<u>WS</u>	A	WORKMANSHIP STANDARDS
<u>CC</u>	A	CERTIFICATE OF CONFORMANCE
<u>MA</u>	A	MATERIAL REVIEW AUTHORITY
<u>SI</u>	A	SOURCE INSPECTION
<u>RA</u>	A	RIGHT OF ACCESS
<u>CS</u>	A	CALIBRATION SYSTEM
<u>SL</u>	A	SHELF-LIFE CONTROLLED MATERIALS
<u>RM</u>	A	RAW MATERIAL REPORTS
<u>ER</u>	A	ENVIRONMENTAL PRODUCT REQUIREMENTS
<u>SC</u>	A	SUPPLIER CORRECTIVE ACTION REQUEST
<u>RR</u>	A	RECORDS
<u>PH</u>	A	PACKAGING/HANDLING
<u>SF</u>	A	SUPPLIER FLOW DOWN
<u>C1</u>	A	CHANGES
<u>FD</u>	A	FOREIGN OBJECT DAMAGE (FOD) AWARENESS

Note: In the event of any conflict, the requirements specified on the component or part specification/drawing or elsewhere on the purchase order take precedence over this document.



QM - SUPPLIER'S QUALITY MANAGEMENT SYSTEM

Seller shall maintain a documented quality management system that conforms to:

- a. ISO 9001 or AS9100, as appropriate Compliance to the Quality System requirements shall be validated by submittal of a current 3rd party certification.
- b. A Quality Management system acceptable to Amplitech Inc. Self-defined and documented quality systems are subject to review, audit, and acceptance by Amplitech Inc.

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WS - WORKMANSHIP STANDARD

Unless specified otherwise on the applicable drawings or specifications, Supplier shall ensure that materials and workmanship conform to the

following requirements:

- (a) IPC-A-610, Class 2 (for all electrical and electronic assemblies and for PWAs reworked per IPC-7711/7721);
- (b) IPC-A-600 Class 2 (for PWBs);
- (c) IPC/WHMA-A-620 Class 2 (for cable and wire harness assemblies);
- (d) IPC-7711/7721 (for rework, repair and modification of electronic assemblies and PWAs);
- (e) IPC J-STD-001 with Space Addendum (for all electrical and electronic assemblies and for PWAs reworked per IPC-7711/7721);
- (f) the current version of ANSI/ESD S20.20, MIL-STD-1686 or MIL-PRF-81705 (for electrostatic discharge sensitive material);

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CC - CERTIFICATE OF CONFORMANCE

Where applicable, the Seller shall ensure they have the Buyers documents that matches the revision noted on the Purchase Order. Seller shall affirmatively certify Seller and Sellers sub-tier supplier performed and completed all of the requirements of the Purchase Order by submitting a Certificate of Conformance (C of C) with each shipment to include a signature of an authorized representative. Note: Electronic signature is acceptable (i.e. PDF E-Sign or equivalent).

The exact format of the Certificate of Conformance may vary. Requirements can be identified within the Certificate of Conformance, Packing Slip, and/or material packing but shall contain the following minimum information:

- a. Seller's name.
- b. Manufacturers name (when different from the Seller).
- c. Buyer's part number and Revision as specified on the purchase order.
- d. Change notices shall be included if they are not part of the revision level.
- e. Serial Number (as applicable).
- f. Date code (as applicable).
- g. Lot/batch number (as applicable).
- h. Signature of authorized representative and date.

If the C of C is being provided by a distributor and the units are bought to an AML, the C of C must additionally reference the original manufacturer's name and the manufacturer's part number.

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MA - MATERIAL REVIEW AUTHORITY

Material review authority shall not extend to “repair” and/or “us as is” for Seller published or customer specified requirements without prior written authorization from the applicable Amplitech Inc. representative.

Post-Delivery Nonconformance: When nonconforming conditions are determined to include material already delivered to Amplitech, the Seller shall notify Amplitech immediately by issuing a Notice of Escape.

Note: Per IPC-T-50H, “Terms and Definitions for Interconnecting and Packaging Electronic Circuits”, the official definitions of Rework and Repair are:

Rework: The act of reprocessing noncomplying articles, through the use of original or alternate equivalent processing, in a manner that assures compliance of the article with the applicable drawings or specifications. Example: Removal of solder bridges

Repair: The act of restoring the functional capability of a defective article. In common usage, repair may restore the hardware to compliance with the applicable drawing or specification. In stringent (military) usage, rework is in compliance whereas repair restores functionality without being in compliance. Example: Addition of a jumper wire

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SI - SOURCE INSPECTION

Amplitech reserves the right to perform source inspections at Seller's facility. If deemed required, Seller shall:

- (a) schedule inspections through Amplitech Inc. Quality Assurance or Purchasing organizations,
- (b) provide the source inspector with a suitable working area, necessary tools and Documents (i.e. Purchase Order, Outline Drawing)
- (c) inform Amplitech Inc. as to the readiness of the product to be source inspected a minimum of 48 hours in advance of availability. Notification can be in the form of an email. Reference; Purchase Order number, and part number in subject of email. Reference Qty and date available in the body of email. Seller shall not ship items without evidence of an approved Source Inspection report.

Source Inspection may include the following: inspection, test, surveillance, In Process Inspection Points, serial number verification, review of the production/process (Travelers, Planning, Instructions, etc.) and documentation prior to shipment.

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RA – RIGHT OF ACCESS

Seller shall grant the buyer the right to access.

(a) Amplitech Inc. reserves the right to perform inspections, audits, evaluations, reviews, and/or witness the execution of the processes being performed at the supplier's facilities in support of this purchase order.

(b) Amplitech Inc. reserves the right to bring our customers or government representatives to the above-mentioned activities.

(c) This requirement applies to the supplier's sub-tiers and shall be flowed down accordingly.

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CS - CALIBRATION SYSTEM

Supplier shall calibrate, maintain and care for measurement and test equipment used in the performance of this PO in accordance with ANSI/NCSL Z540-1 or ISO 10012.1, and shall immediately notify Viasat in the event such equipment is found to be out of calibration.

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SL - SHELF-LIFE CONTROLLED MATERIALS

Materials shall have:

- (a) an effective date of manufacture,
- (b) an expiration date and
- (c) at least 75% of their limited life remaining when received by Amplitech Inc. Supplier shall include Safety Data Sheets with the first shipment of such materials.

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RM - RAW MATERIAL REPORTS

The seller shall have available upon request reports of mechanical properties and chemical compositions to show evidence of conformance to all applicable specifications for all raw material used in fabrication. With shipment of chemical orders, supplier shall forward a safety data sheet ("SDS").

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ER - ENVIRONMENTAL PRODUCT REQUIREMENTS

Seller shall comply with all environmental product requirements set forth in the drawings, specifications, or special note(s) in the PO. If required, Supplier shall comply with all current EU Directives such as:

- (a) ROHS Directive ("RoHS"),
- (b) REACH Regulation ("REACH"),
- (c) WEEE Directive,
- (d) Packaging Directive,
- (e) US TIPPA packaging requirements,
- (f) Battery Directive,
- (g) California Proposition 65, and
- (h) other prohibited or restricted substances.
- (i) Ozone Depleting Substances

Product must meet US TSCA prohibited hazardous chemicals and provide statement of compliance. Any required regulatory markings or notifications shall meet the corresponding regulatory agency requirements.

The Seller shall ensure that its manufacturing processes do not add any non-compliant RoHS or REACH substances to Amplitech Inc. products. Seller shall supply required certifications upon request.

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SC - SUPPLIER CORRECTIVE ACTION REQUEST

When requested, the Seller shall conduct, and document a thorough root cause analysis of the defects/failures found and implement and document effective corrective actions (and preventive actions where necessary). The report shall be in Buyer's format or equivalent. An Eight Disciplines (8D) method may be required per the Supplier Corrective Action Request (SCAR), the Seller Supplier shall use the Buyer's Eight Disciplines (8D) Form or equivalent.

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RR - RECORDS

Seller shall establish a documented process and procedure to control and maintain all records for minimum of ten (10) years after the order completion. Records shall provide evidence of conformity to requirements and to the effective operation within the quality management system and shall be available for review by the Buyer and regulatory authorities in accordance with contract and regulatory requirements unless otherwise indicated.

Records shall be indexed, legible and stored in a manner permitting easy access, retrieval, and protection.

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PH - PACKAGING/HANDLING

The Seller shall handle and package material in a manner that will assure protection against corrosion, oxidation, deterioration, Electrostatic Discharge (ESD) damage with a preference for ANSI ESD S20.20. Foreign Object Debris (FOD), and physical damage during shipment. Bulk packaging may only be used when the component lead integrity is maintained, and material is protected against damage. ESD protective packaging shall be used for all electronic components.

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SF - SUPPLIER FLOW DOWN

The Seller shall flow down all applicable requirements of the purchase order to their suppliers and sub-tiers to ensure compliance with all specifications, drawings, quality systems requirements (i.e. ISO 9001, AS9100 or other), regulations, public laws and other requirements that may be specified in the purchase order.

Seller is responsible for all aspects of Seller's sub-tier supplier conformance including the Quality and Delivery performance of their sub-tier suppliers. Seller's procurement and quality system shall manage sub-tier procurements through:

- (a) Verification of requirements.
- (b) Monitoring processes and performance to requirements.
- (c) Identification, management, elimination, and/or mitigation of Seller's sub-tier supplier risks.

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C1 - CHANGES

In the event the Seller anticipates any changes in design, manufacture, materials, performance, processes, Quality Assurance procedures, manufacturing location, test, or service incorporated after initial Purchase Order must be submitted to Amplitech Supply Chain representative for approval. Seller format for submittal is acceptable.

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FD - FOREIGN OBJECT DAMAGE (FOD) AWARENESS

The Seller shall develop and maintain a FOD policy and program consistent with National Aerospace FOD Prevention, Inc. ("NAFPI") or an acceptable to Amplitech. Self-defined and documented program are subject to review, audit, and acceptance by Amplitech. The policy shall as a minimum provide for effective housekeeping, management of material, inspection of In process and final assemblies. The supplier shall provide a copy of the policy to Amplitech for review upon request.

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