QUALITY CLAUSES

Form QA-0006 Rev -

Standard Quality Requirements (Quality Codes) for Purchased Items

Introduction

These quality codes serve as the basic quality requirements for the Company to assure the achievement of applicable requirements and end customer satisfaction. Unless otherwise indicated on the PO, only those requirements whose quality codes are listed on the applicable PO apply to the purchase.

Definitions

In this document, the term "**purchase order**," often abbreviated "PO" (without periods) is the Company's procurement action document. References to "PO" in this procedure shall apply to any alternative procurement action document such as an electronic request.

Quality Code 1 (QC1)- General

Requirements

a. Unless otherwise specified, the information on purchase orders supersedes conflicting information on other purchase documentation. The hierarchy follows:

   (1) Purchase Order (procurement action document)
   (2) Codes listed on the PO
   (3) Quality requirements in design documentation

   Additional quality codes and clauses may be made a part of procurement actions (subcontracts, purchase orders, etc.), either directly or by reference. Quality codes describe quality requirements which may be imposed regarding procurement actions. These requirements generally will not be described in any other document and are exclusive to the Company only. Suppliers are to comply with the requirements of all quality codes as noted on the Company PO. Quality codes listed on the Company PO do not apply to other companies associated with X-Microwave, LLC.

b. Quality requirements, codes and clauses are intended to be in addition to, not in derogation of, procurement action requirements.

c. Quality codes 2 and higher are related to specific activities or actions to be accomplished by the Supplier which may be derived from the Company contractual obligations, industry specifications and/or standards associated with the products and/or services being procured.

d. A quality clause (statement of requirement) may be noted on the procurement action when a specific quality code does not address a specific requirement.

e. If a Supplier cannot comply with any applicable quality requirement listed within a quality code or quality clause on a procurement action, then resolution and/or changes to the requirements must be obtained prior to acceptance of the Company procurement action. The primary point-of-contact for Suppliers is the Company's Purchasing Manager.

f. As the direct Supplier to the Company and the representative of the Manufacturer, Distributors are responsible for compliance with all procurement action requirements. The applicable requirements of all quality codes, quality clauses, and any technical requirements listed on the PO will apply to both the Distributor and the Manufacturer of the product.

g. Supplier is expected to operate according to a formalized quality management system. Suppliers shall be rated by the Company according to the following criteria.

- Preferred – The supplier has obtained an industry recognized quality system certification such as ISO 9001, AS9100, ISO9001, MIL-Q-9858, ISO10012-1, ANSI-Z-540, FAA Part 145, etc., and has provided appropriate evidentiary documentation to the Company, or the Company has conducted a successful on-site audit of the supplier's facility and processes sufficient to demonstrate conformance with such a standard.

- Approved – The supplier has not necessarily obtained an industry recognized quality system certification but has demonstrated consistent and repeated competence in supplying defect free product on time and over time.

- Conditional - The supplier has been nominated by a member of the Company's Supplier Approval Group as a supplier without passing the criteria to be listed as either Approved or Preferred. The supplier has been added to the Company's database. The supplier can only be in the Conditional status for a year without further action to be promoted to Approved or Preferred.

h. All data, documents, and any certificates of conformance from the Supplier and sub-tiers shall be in English or contain an English translation.

i. Supplier will maintain quality records for products, equipment or services provided to the Company for a minimum of 5 years after the requirements of the procurement action have been fulfilled.

j. When required, first piece/article inspection (FPI/FAI) reports are to be maintained for an indefinite period of time.

k. Suppliers will notify the Company when changes occur that will affect their management system (address/location, quality system approval level/type). To maintain an accurate Approved Manufacturer's List, the Company may conduct periodic reviews (e.g., surveys, questionnaires, on-site visit) to ensure a Supplier's information is correct and current.

l. Direct Suppliers to the Company will flow down applicable quality and procurement action requirements to their sub-tier Suppliers to ensure the integrity of the specified requirements are maintained throughout the supply chain (e.g., first piece/article inspection, customer approved special processes, key characteristics, record retention.). Ref: AS9100D Section 8.4.1

m. Supplier will notify the Company, or issue a recall notice, when discrepancies in the Supplier's process or product are discovered or suspected which may affect the form, fit, or function of product Supplier has delivered or will deliver to the Company.

n. Supplier is to provide root cause analysis and corrective action when a Supplier Corrective Action Request (SCAR) is issued because of non-conforming products, services, on-site survey/evaluation, or documentation and delivery problems.

o. Supplier is **NOT** granted Material Review Board (MRB) authority for any product that is manufactured to a Company drawing/specification or the Company's Customer's drawing/specification. Any deviations to engineering drawings/specifications must have the Company and/or the Company's Customer approval prior to shipment of product. MRB disposition received from the Company or the Company's Customer is a conditional acceptance of the item(s) and does not relieve the Supplier of any contractual responsibilities if the Company or the Company's Customer is dissatisfied with the product.

p. Shelf-life information (i.e., expiration date, cure date) of product/materials subject to degradation with age or varying temperatures must be clearly stated on the certificate of conformance/packing slip or product/packaging. Product/materials shall have a minimum of 75% shelf life remaining at time of receipt by the Company. If the Supplier desires to provide product with less than 75% shelf life, Supplier is required to obtain approval from the Company Purchasing Manager prior to shipment.

q. Products/materials which are volatile or toxic in nature shall be properly packaged in accordance with the applicable Code of Federal Regulations. Containers will be plainly marked as to the contents with appropriate warnings, precautions, instructions, and storage conditions. Appropriate documentation (MSDS, handling, etc.) will accompany each shipment.

r. Product/material categorized as Electrostatic Sensitive Devices (ESD) shall be packaged and labeled in accordance with the appropriate specification/drawing requirements (i.e., MIL-STD-1686; MIL-STD-129) for the product/material being provided to the Company.

s. Product/material categorized as Moisture Sensitive shall be packaged in a Moisture Barrier Bag (MBB) that provides moisture and ESD protection and is heat sealable. (MIL-PRF-81705 Type 1, IPC/JEDEC J-STD-033 or equivalent)

t. If Supplier has received product from the Company (customer furnished material) as related to an issued procurement action, Supplier is required to maintain traceability (i.e., lot/batch identification, part marking) of the product through the processes when possible. Product life cycle is inclusive of special processes (electroplating, chemical film, paint/primer, welding, cutting, bending, etc.) testing and assembly.

u. Suppliers will ensure that persons fulfilling this purchase order are aware of: Their contribution to product or service conformity, their contribution to product safety, and the importance of ethical behavior.

QUALITY CODE 2 (QC2) – Certification of Conformance Required

Requirements

Dependent upon the type of product procured by the Company, the Supplier is required to provide with each shipment of product a Certificate of Conformance or equivalent that contains the following:

1) The Company purchase order number

2) Part number and/or description of the ordered item

3) Revision number/letter of the item being provided, when applicable

4) Signature and/or stamp of the Supplier's representative.

NOTE: A Certificate of Conformance document that includes the company letterhead and a Certificate of Conformance statement may be deemed acceptable, at the Company's discretion, in lieu of providing a Supplier representative's signature and/or stamp.

Distributors – A Manufacturer Certificate of Conformance is the preferred document for the ordered item. If a Manufacturer Certificate of Conformance is not provided with the shipment of product, the Company reserves the right to receive from the Distributor, at the time of or after receipt of product, a Manufacturer's Certificate of Conformance.

QUALITY CODE 3 (QC3) – Site Visit

Requirements

The Company, our Customers and Government regulatory agencies may visit the Supplier's facility and/or their sub-tier Suppliers for the purpose of verifying contract compliance and product conformity (e.g., source inspection, witness testing, product audit, quality system audit). Supplier will provide the necessary support to the visiting personnel. Arrangements for such visits will be coordinated through the Company Purchasing Manager.

QUALITY CODE 4 (QC4) – First Article Inspection

Requirements

First Piece/Article Inspection report is required for the ordered item/service. Report should contain at a minimum, the following:

a) Engineering drawing number, configuration, and revision,

b) Notation of applicable material and process specifications used,

c) Notation and verification of all dimensions and applicable notes on the drawing(s),

d) Notation of any document generated during the FPI/FAI process related to any nonconforming condition,

e) Copies of certificates of conformances for all materials, processes, parts used in the production of the ordered item(s), where applicable.

If the quantity of the ordered item consists of more than one piece, the item from which the First Piece/Article Inspection report was generated shall be identified (e.g., tagged, bagged, labeled).

The Company reserves the right to request/receive documented evidence of compliance to specification requirements (e.g., training, qualifications) for any employee or subcontractor that performed a special process associated with an ordered item.

QUALITY CODE 5 (QC5) – Demonstrated Compliance

Requirements

Supplier is to provide a copy of the raw material test data (e.g., chemical, physical, heat treatment) for the ordered product that demonstrates compliance with applicable specifications (QQ-N-; AMS-; SAE-; etc.) and/or drawing requirements. If the Company procurement action and/or provided drawing do not call out any material specification for the material type being ordered, then the Supplier may provide material to a specification of their choice.

QUALITY CODE 6 (QC6) – Source Inspection

Requirement

Source Inspection by the Company and/or the Company Customer is required prior to shipment of product. Supplier is to contact the Company Procurement representative in advance of product shipment to make arrangements for source inspection activity.

QUALITY CODE 7 (QC7) – Acceptance Testing at Supplier's Facility

Requirement

The Company and/or the Company Customer are to witness acceptance testing at Supplier facility. Supplier is to contact the Company Procurement representative in advance of acceptance testing activities to make arrangements for witnessing of testing.

QUALITY CODE 8 (QC8) – C of Cs and Proof of Qualifications for Special Processes

Requirements

Supplier is to furnish certificates of conformance for special processes or testing (e.g., NDT, spectral scans, coatings such as electroplating, chemical film, paint) that includes the specification(s) associated with the performed process(es).

The Company reserves the right to request/receive documented evidence of compliance to specification requirements (e.g., training, qualifications) for any employee or subcontractor that performed a special process associated with an ordered item.

QUALITY CODE 9 (QC9) – Selective Evaluation

Requirement

The Government imposes Selective Evaluation on this order. During performance of this order, supplier quality control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized Government representatives.

QUALITY CODE 10 (QC10) – Raw Material Certification

Requirement

Supplier is required to provide an independent lab/test report that validates the raw material being provided conforms to the mill certification/test report and applicable specifications.

QUALITY CODE 11 (QC11) – Proof of Calibration

Requirement

For each item or service a Supplier provides that is used to monitor conditions or validate dimensions, the Supplier is required to provide a certificate of calibration that meets the requirements of ANSI-Z-540 or ISO 10012-1. Equipment or calibration standards are to be traceable to the National Institute of Standards and Technology (NIST). Certificates of calibration will include a due date of the last day of the month for which the calibration was performed (e.g., calibration performed on June 12. Due date = June 30).

QUALITY CODE 12 (QC12) – Rework or Repair Documentation

Requirement

Supplier is to provide copies of applicable documents (teardown reports, analysis, work orders, repair reports, etc.) as related to the analysis, testing rework, or repair of product on this purchase order.

QUALITY CODE 13 (QC13) – Environmental, Health & Safety Terms and Conditions

Requirement

The Company's Environmental Health and Safety Terms and Conditions apply to the services/work to be performed under this Purchase Order.

QUALITY CODE 14 (QC14) – Manufacturer's C of C Required

Requirement

Distributor is to provide the Manufacturer's Certificate of Conformance for ordered item. The certificate of conformance should, at a minimum, contain:

1) Part number and/or description of the ordered item,
2) Revision number/letter, date code, batch number, date of manufacture, expiration date, etc., of the item being provided, when applicable,
3) Signature and/or stamp of the Manufacturer's representative.

QUALITY CODE 15 (QC15) – Logbook Record for Maintenance Work

Requirement

Supplier is to provide a maintenance record entry (e.g. – logbook entry) for the service/work that will be performed.

QUALITY CODE 16 (QC16) – Certificate of Calibration for Item

Requirement

A certificate of calibration that meets the requirements of ANSI-Z-540, ISO 10012-1 or other applicable standard is required to be provided for this item. Equipment or calibration standards are to be traceable to the NIST.

QUALITY CODE 17 (QC17) – Single Lot

Requirement

Line items to be delivered must be from the same manufacturing lot and contain a single lot code.

QUALITY CODE 18 (QC18) – Test Report

Requirement

Test Report(s) for Line items must accompany the delivery. If possible, test data will be traceable to individual components.

QUALITY CODE 19 (QC19) – Serialization

Requirement

Items delivered must be individually serialized preferably with the marking on the item, or on individual packaging if product marking is not possible.

QUALITY CODE 20 (QC20) – Potentially Suspect/Counterfeit Material

Requirements

The Company has identified the ordered item to be electronic in nature which is now classified by the U.S. DOD (Department of Defense) as a potential high risk for being suspect/counterfeit material. Procurement of this product type may now only be obtained via the Manufacturer direct or their authorized distributor.

The supplier is to provide a Certificate of Conformance based on their type of organization:

A. If an OEM / OCM - Provide an OEM / OCM Certificate of Conformance

B. If an Authorized Franchised Distributor – Provide an Authorized Franchise Distributor Certificate of Conformance

The Certificate of Conformance should, at a minimum, contain the following information:

1) The Company procurement action number,

2) Part number and/or description of the ordered item,

3) Revision number/letter of the item being provided, when applicable,

4) Signature and/or stamp of the Supplier's representative.

NOTE: A Certificate of Conformance document that includes the company letterhead and a Certificate of Conformance statement may be deemed acceptable, at the Company's discretion, in lieu of providing a Supplier representative's signature and/or stamp.

Distributors – A Manufacturer Certificate of Conformance is the preferred document to be provided for the ordered item. If a Manufacturer Certificate of Conformance is not provided with the shipment of product, the Company reserves the right to receive from the Distributor, at the time of or after receipt of product, a Manufacturer's Certificate of Conformance.

QUALITY CODE 21 (QC21) – Qualified Products List Item

Requirements

The Company has identified the ordered item is subject to meeting the requirements of a QPL (Qualified Products List). As such, the ordered item may only be provided via the Manufacturer direct, or their authorized distributor as posted/published in the applicable QPL.

Supplier is to provide a Certificate of Conformance that, at a minimum, contains the following information:

1) The Company PO number,

2) Part number and/or description of the ordered item,

3) Revision number/letter and/or Date/lot code of the item being provided, when applicable,

4) Signature and/or stamp of the Supplier's representative.

Distributors – A Manufacturer Certificate of Conformance is the preferred document to be provided for the ordered item. If a Manufacturer Certificate of Conformance is not provided with the shipment of product, the Company reserves the right to receive from the Distributor, at the time of or after receipt of product, a Manufacturer's Certificate of Conformance.

QUALITY CODE 22 (QC22) – Requirement for Test Specimen

Requirement

A fully functional unit or units of the subject product shall be provided to the Company as test specimens using the same production methods and machines that are designated for the production run. Such test specimen(s) may be used for destructive tests or for design approval, inspection/verification, investigating or auditing. When required, the Supplier shall provide information to the Company regarding storage conditions of any such test specimen.