

Space Micro Quality Clauses Rev. H, 1 July 2020

SMIQC-1: Space Micro shall always and upon reasonable notice to seller, be allowed access to seller's facility for the purpose of inspection, progress evaluation, witnessing of fabrication, tests, packaging, etc.

SMIQC-2: The United States Federal Government has the right to inspect any or all the work included in this purchase order at any time or place. This oversight shall be performed at such times (including any stage of manufacture or performance of services) and places (including subcontractors' plants) as may be necessary to determine that the supplies or services conform to contract requirements

SMIQC-3: Government contract quality assurance performed for foreign governments or international agencies shall be administered according to the foreign policy and security objectives of the United States. Such support shall be furnished only when consistent with or required by legislation, executive orders, or agency policies concerning mutual international programs.

SMIQC-4: Prompt action shall be taken to detect and correct unacceptable conditions that have resulted or could result in the production of nonconforming products. The supplier's corrective action system shall cover all phases of manufacturing system activities from material procurement through delivery of articles to Space Micro including corrective action with seller's suppliers. Seller shall respond promptly to Space Micro requests for reports describing action taken to correct the cause of deficiencies found in articles submitted to Space Micro and to prevent their recurrence on subsequent submittals.

SMIQC-5: Deviations from drawings, specifications, or other purchase order requirements must be reported to the buyer for review and approval. If approved, Space Micro will provide written authorization for shipment of non-compliant material. Failure to comply may result in rejection of the shipment and will reflect on the supplier's quality rating.

SMIQC-6: The supplier shall comply with one of the following standards for the calibration of measuring and test equipment:

- ANSI/NCSL Z540.1-1994 (R2002, or later) Calibration Laboratories and Measuring and Test Equipment -General Requirements
- ANSI/NCSL Z540.3-2006 (or later) Requirements for the Calibration of Measuring and Test Equipment
- ISO 17025-2002 (or later) General requirements for the competence of testing and calibration laboratories

SMIQC-7: The supplier shall provide a certificate of calibration with traceability to NIST standards for the equipment being purchased on this purchase order.

SMIQC-8: Authorized Distributor/OEM Certificate of Compliance (COC): The supplier shall provide the Authorized Distributor/OEM certification of compliance, certifying that the product shipped to Space Micro complies with all requirements of the purchase order (including all referenced documents). The certificate shall reference Space Micro's purchase order number (if directly from the Authorized Distributor/OEM), quantity, product description, and drawing/part number including revision and serial numbers (when applicable). The certification must be signed and dated by an authorized representative of the Authorized Distributor/OEM.

SMIQC-9: All parts supplied for this purchase order shall have a lot/date code, which is no older than five (5) years (PEMs may not exceed 3 years).

SMIQC-10: Each line item in this order shall be supplied from a single lot date code.

SMIQC-11: ESD: The supplier shall maintain an ESD control program suitable to protect the most sensitive components of this P.O. Conformance to ESD handling processes from ANSI ESD S20.20 is preferred.

SMIQC-12: Components on this order are susceptible to damage caused by static electricity and are considered electrostatic discharge sensitive (ESDS). Component packaging shall be static dissipative and shall identify the components as ESDS.

SMIQC-13: Counterfeit Parts: The supplier shall provide only new and authentic materials. Parts shall be purchased only from the Original Component Manufacturer (OCM), Original Equipment Manufacturer (OEM), or through the OCM/OEMs authorized distributor.

SMIQC-14: MRAM: Components on this order are susceptible to damage caused by magnetic fields. Component packaging shall be in specially marked nonmagnetic containers that incorporate visual management methods.

SMIQC-15: Red Plague Control Plan: Items on this order are susceptible to Red Plague (cuprous/cupric oxide corrosion). Item shall be shipped in sealed water-vapor-proof packaging with activated desiccant and Irreversible (Maximum) Humidity Indicator Card (i-HIC).

SMIQC-16: GIDEP: The supplier shall participate in the GIDEP program and respond to GIDEP notifications to prevent non-conforming materials from reaching the customer.

SMIQC-17: PRE-CAP: Space Micro pre-cap inspection is required. Please notify Space Micro Purchasing one (1) weeks before items are ready for inspection.

SMIQC-18: Space Micro source inspection is required. Please notify Space Micro two (2) days before items are ready for inspection.

SMIQC-19: Only manufacturers listed on the NASA list of approved fastener manufacturers may fabricate fasteners supplied on this purchase order.

SMIQC-20: Age sensitive materials with shelf life requirement: The seller shall certify that the item on the purchase order is age sensitive. The certificate must identify the material and specify the cure date or date of manufacture, the expiration date and special storage and handling requirements.

SMIQC-21: Where age sensitive materials are incorporated into assemblies, the certificate must identify the assemblies, the Space Micro purchase order number, the assembly date, and the cure date and manufacturer's identification of the age sensitive material. This information shall also, when applicable, be identifiable with component parts and/or subassemblies within the assembly to which it applies

SMIQC-22: Shelf Life: Materials delivered to Space Micro shall be greater than 80% of the remaining shelf life.

SMIQC-23: DFAR Fasteners:

- All fasteners must be of a single lot
- Complete Material Test Reports shall be provided for all fasteners
- Documentation showing traceability shall be provided (chain of custody back from last supplier, through all intermediate suppliers to the original manufacturer and raw material source)
- Documentation shall show all threaded fasteners are deemed acceptable based on System 21, of ASME B1.3

SMIQC-24: Provide Material Certifications

SMIQC-25: Provide SDS

SMIQC-26: Flight Workmanship Standards: The supplier shall comply with the following standards: Fabrication and assembly shall conform to IPC-A-610 Class 3; Soldered and electrical assembly workmanship shall conform to IPC-J-STD-001 and IPC-J-STD-001S.

SMIQC-27: Test Data: Supplier shall provide data for all inspections, tests and verifications of operations performed.

SMIQC-28: Completed circuit card assemblies shall be packaged, labeled and vacuum sealed individually and then vacuum sealed together in an outer bag containing desiccant.

SMIQC-29: Environmental qualification testing (shock, vibration, temperature, EMI/EMC etc.) shall be conducted using test equipment calibrated and certified to internationally recognized standards traceable to the NIST or equivalent.

SMIQC-30: FAI: First article inspection shall be conducted by the supplier. The sample shall have been fabricated using the same parts, materials, processes, and location proposed for full production. Reports of acceptable first article inspection shall accompany the first article delivered and shall include all dimensional measurements and results of electrical, mechanical, and non-destructive inspections and tests and shall show that the part meets all requirements. CAUTION: Commencement of the production run prior to first article acceptance by Space Micro is at the supplier's risk.

SMIQC-31: Fabricate per IPC/WHMA-A-620, Requirements and Acceptance for Cable and Wire Harness Assemblies, Class 3

SMIQC-32: Operators and Inspectors working on this PO shall have valid certifications for the applicable workmanship specifications cited in the PO and drawings.

SMIQC-33: Valid workmanship certifications of the operators and inspectors working on this PO shall be provided to Space Micro prior to fabrication.

SMIQC-34: ATP: Authorization to Proceed with manufacturing post documentation validation is required to be obtained from SMI Quality Assurance. CAUTION: Commencement of the production run prior to receiving authorization to proceed by Space Micro is at the supplier's risk and may be cause for product rejection.