

Lockheed Martin Space Quality Clauses

Lockheed Martin (LM) hereinafter shall mean Lockheed Martin Space. Notwithstanding any other provisions, all articles furnished hereunder are subject to the General Provisions of the Procurement Document and the following Special Provisions Quality Assurance Clause(s) when indicated by Quality Code(s).

Articles defined in the Procurement Document will not be accepted by Lockheed Martin if the Supplier fails to submit certification, documentation, test data, and reports specified herein.

Quality Clause Cross Reference Instructions:

Scroll down to find the LM Quality Code, Quality Clause title and text, or use the Microsoft find function in Word to locate the Quality Clause Text. Go to "Edit" and "Find". Type the Quality Code and select "Find Next".

If you have any questions regarding the use of this list, please contact the subcontract administrator as identified on the procurement document.

Quality Clauses

Q-Code	QI D	Title	Long
--------	---------	-------	------

			onsite survey and approval. The Manufacturer's Quality System will be subject to review and approval at all times by Lockheed Martin.
QQLS	1	PRODUCT ASSURANCE EXHIBIT "S" APPLIES	The applicable Product Assurance requirements are contained in Exhibit "S" to the Statement of Work previously provided to the Supplier.
QT4A	1	QMS—QUALITY SYSTEM REQUIREMENTS (SAE AS9120)	<p>The Supplier's Quality System shall conform to the requirements of the elements described in SAE AS9120, Quality Management Systems – Aerospace Requirements for Stocklist Distributors. Certification registration by an accredited registrar may be accepted. Supplier declaring system compliance to AS9120 with no formal accredited registrar will be surveyed for approval. The Supplier's system will be subject to survey and approval at all times by Lockheed Martin.</p> <p>This Quality System Requirement is not applicable to this product's Original Equipment Manufacturer (OEM)/Original Component Manufacturer (OCM).</p> <p>Approval to a higher level Quality Management System may also be accepted.</p>
QT4B	1	QMS—QUALITY SYSTEM REQUIREMENTS (SAE AS9003)	<p>The Manufacturer's Quality System shall conform to the requirements described in SAE AS9003, Inspection and Test Quality System; and be approved in EXOSTAR at the time of production. Third party registration by an accredited registrar under the International Accreditation Forum may be accepted; if the Manufacturer</p>

			<ol style="list-style-type: none"> 1. Highlight the special process 2. Select special processors 3. Select <u>yourself</u> as the special processor <ol style="list-style-type: none"> a. If your name does not show up as an approved processor, contact your LM buyer to have the hierarchy table updated. <p>For additional information on how to use the ship-to-module, view the downloadable guide here.</p>
--	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

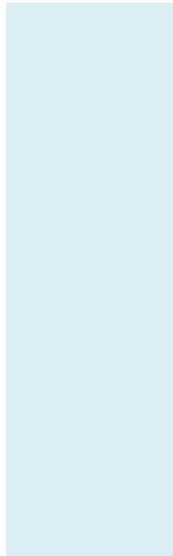
SUPPLIER REQUIREMENTS

QAQC04	Q	QAQC04 FLOWDOWN REQUIREMENTS
--------	---	------------------------------

QM8	Q	PRINTED WIRING BOARD FABRICATION REQUIREMENTS	Fabrication requirements per 3GPS-RQ-09-0080, for rigid boards, or 3GPS-RQ-09-0081, for flex and rigid flex boards, are invoked on this order. In the event of a conflict between 3GPS-RQ-09-0080 or 3GPS-RQ-09-0081 and the drawing, the drawing shall take precedence.
QPS	Q	ENGINEERING PURCHASE SPECIFICATION (EPS) APPLY	The supplier shall: (1) Procure materials, processes and/or production services only from LM-approved suppliers listed in the LM Engineering Purchasing Specifications (EPS). (2) Perform only to the revision of

QQD4K3	Q	<p>QUALITY PROGRAM REQUIREMENTS (ANSI/NCSL Z540.1)</p>	<p>The Contractor's Calibration System shall conform to the requirements of the elements described in ANSI/NCSL Z540.1, either part 1 or part 2, and is subject to review and approval at all times by Lockheed Martin.. Third party registration by an accredited registrar will be accepted. Contractor declaring system compliance to ANSI/NCSL Z540.1 with no formal accredited registrar, will be reviewed. The Contractor's system will be subject to review and approval at all times by Lockheed Martin. The Contractor's signed certification must state (1) traceability to the National Institute of Standards and Traceability, (2) tool or gage number, and (3) Contract number.</p>
QQD4K6	Q	<p>ISO 17025 – TEST FACILITY REQUIREMENTS</p>	<p>The Contractor's Laboratory shall conform to the requirements of the elements described in ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories. Third party registration by an accredited registrar will be accepted. A Contractor declaring compliance to ISO/IEC 17025 with no formal accredited registrar will be reviewed by Lockheed Martin. The Contractor's system will be subject to review and approval at all times by Lockheed Martin. The Contractor shall maintain test control systems that confirm Lockheed Martin hardware meets test requirements listed on the order. Lockheed Martin may inspect all deliverable items before, during or after test, before shipment or during final inspection and acceptance at destination. Lockheed Martin may require repair or rework of any deliverable item that fails to meet requirements. Rejected items may be submitted during or after testing but must be confirmed acceptable, by the Buyer, before shipment may occur.</p>
QQS5A	Q	<p>Foreign Object Elimination (FOE)</p>	

QB11	Q	CERTIFICATE OF COMPLIANCE FOR LEAD CONTENT	<p>Electronic, electrical, electro-mechanical and/or mechanical piece parts, and assemblies (including internal hardware) shall NOT have tin plating or tin finishes with <3% lead (Pb) content by weight. This requirement also applies to component leads, terminals, carriers, bodies, cages brackets, housings, mechanical items and fasteners (nuts, bolts, screws, rivets, washers, etc.).</p> <p>The supplier's Certificate of Conformance represents that the product, and each sub-tier supplier's product(s) contained therein, meet this requirement.</p> <p>The Supplier shall insert the substance of this clause, including this sentence, in all lower-tier subcontracts for work performed under this contract.</p>
QB5	Q	MATERIAL AND PROCESS CONFORMANCE	<p>The Contractor shall submit with each shipment, a Certificate of Conformance, shall be dated and bear the signature and title of an authorized Contractor's Representative, stating that the materials furnished to Lockheed Martin are in conformance with applicable requirements of the Contract, drawings and specifications and that supporting documentation is on file and will be made available to Lockheed Martin or Government Representatives upon request. Certification shall include name of Contractor for materials being supplied, quantity shipped, and</p>



- Serial and/or lot numbers of the hardware processed (if required)
- Material process specification & revision number
- Certification stating the special process was performed per the drawing/specification requirements
-

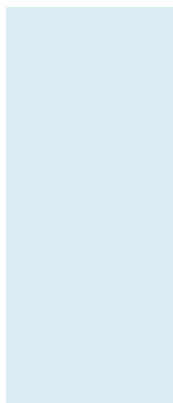
QA9	Q	LM PQA	The submittal documents the original process, the proposed change, and the verification methods to be used to ensure the change performs and influences the product only as expected.
-----	---	--------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>performed by the organization to determine if the nonconformance needs to be reported to the customer (see below), and to determine if the nonconformance is minor and can be re-worked to a condition that completely conforms to the drawing or specification requirements.</p> <p>Note: preliminary review does not negate the requirement to identify, segregate, document, report and disposition nonconformances.</p> <p>Nonconformances shall be reported to the customer under the following conditions. When notification is required, notification shall be within 3 working days after the nonconformance is discovered.</p> <ul style="list-style-type: none"> · The problem is detected during one of the following: <ol style="list-style-type: none"> 1. Certification, acceptance, or qualification testing 2. Other “significant” test as specified by the customer 3. Turnaround, maintenance, overhaul, and repair of flight, ground test operation or shipping and receipt of hardware delivered to the customer including any test involving hardware previously accepted by the customer and returned for repair, modification, etc. · And it is: <ol style="list-style-type: none"> 1. Flight hardware 2. Flight Hardware Spares 3. Equipment that is representative of flight hardware (flight-like hardware), including prototype and qualification hardware 4. Ground Support Equipment (GSE) that is safety critical
QB4F	Q	FAILURE ANALYSIS REPORT	<p>The Contractor shall perform a failure analysis on item(s) returned under this Contract and shall provide to Lockheed Martin, as a minimum, the following information with the shipment or as directed by contract:</p> <ol style="list-style-type: none"> 1) Date of report; 2) Contract number; 3) Contractor's name and address; 4) Part name, number, revision level, and serial/number; 5) MARS number (if specified by Contract); 6) Specific and contributory causes of failure; 7) List of parts required to repair item(s); 8) Corrective action taken to preclude recurrence and effectivity by date or serial number of corrective action; 9) Signature and title of Contractor's Quality Representative approving the failure analysis report.
QD1	Q	PRELIMINARY REVIEW AUTHORITY	<p>The supplier is delegated Preliminary Material Review authority (PMR) for hardware nonconformances. This authority is limited to dispositions of Rework to engineering requirements, return to previous operation for reprocessing, Scrap (unless material was supplied by Lockheed Martin), Repair to a Lockheed Martin approved standard repair instruction (SRI), and</p>

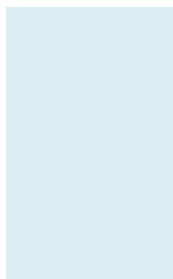


Return to Subtier Supplier. This authority does not extend to the use of a Material Review Board (MRB) for

TESTING / TEST SAMPLES		
Q32	Q	Part Qualification Tests shall be conducted in accordance with the applicable device specification. Data derived from the qualification tests shall be submitted to LM for review/approval. Part number marking on the Qualification unit packaging shall incl
	PART QUALIFICATION TESTS	



			electronic approval method.
QD26	Q	ORDNANCE	In addition to actual test reports, the suppliers certification statement signifies the material being delivered conforms to the specification or contract with regards to all qualitative attributes such as, but not limited to, workmanship, material, appearance, color, quality, visual, method of construction, packaging, preparation for delivery, labeling, or marking.

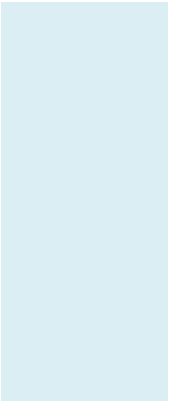


Q0M	Q	PART AND DATA MARKED W/UNIQUE SERIAL NUMBER	The supplier shall permanently identify each part with a serial number. The supplier's control system shall ensure that each serial number is not duplicated. Inspection and test records shall also be identified by the serial number of each inspected or tested part.
Q0W	Q	MANUFACTURER MARKING	The supplier shall mark/identify the name, address or cage code of the manufacturer on the shipper, the smallest unit container, or outer shipping container. Use of other manufacturers or distributors does not relieve the supplier of meeting all of this order.
QAQC20	Q	AQC20 PACKAGING REQUIREMENTS	Organization's Quality Control organization shall be responsible for ensuring that items provided under this Contract/Purchase Order are packaged in such a manner that the dimensional integrity is preserved, contamination and corrosion are prevented, and no physical damage occurs or, when specified, that

QC7	Q	SENSITIVE FLIGHT/GROUND EQUIPMENT	SENSITIVE FLIGHT/GROUND EQUIPMENT, HANDLE WITH EXTREME CARE.
QC8	Q	ELECTROSTATIC SENSITIVE DEVICES	Devices delivered under this Contract are Electrostatic Sensitive. The Contractor shall assure that devices delivered are packaged to provide electrostatic protection and identified as ESD in accordance with applicable Procurement Specification.
QD27	Q	MATERIAL SAFETY AND SHIPPING DATA	<p>A. Safety Data Sheet Supplier shall submit a Safety Data Sheet (SDS) (formerly MSDS or Material Safety Data Sheet) with the shipment. Articles defined in this Purchase Agreement are subject to Lockheed Martin inspection at destination and will not be accepted by Lockheed Martin if the contractor fails to ship the above data.</p> <p>B. Shipping Data Supplier shall submit the proper shipping classification, flash point, and information necessary to properly ship the articles in compliance with CFR Title 49. Articles defined in this Purchase Agreement are subject to Lockheed Martin inspection at destination and will not be accepted by Lockheed Martin if the contractor fails to ship the above data.</p>
QDTS	Q	DOCK TO STOCK PROCESS	This hardware has been designated to be included in the Dock to Stock process. This hardware will bypass receiving inspection and go straight to stock upon receipt as long as the part number on the Purchase Order (PO) matches the packing slip and there is no gross damage to packaging. As an approved dock to stock supplier to LM, this process does not wave contractual requirements called out within the PO. The Ship-to module in P2P must also be filled out to be accepted. Exostar Help Guides: http://www.myexostar.com/LMCO-Procure-to-Pay/P2P-Support-Guides/
QM16	Q	DOCUMENTATION ACCEPTANCE (DROP SHIPMENT)	Articles ordered under this contract are to be drop shipped to a destination other than Lockheed Martin. Final acceptance is contingent on the submittal and approval of the Quality data.
QNOWGC	Q	ELECTRONIC DATA SUBMITTALS PROHIBITED	Work Group Collaboration – shall not be used for this purchase order item. All quality records shall be supplied along with hardware.
QPC	Q	UNRELEASED DOCUMENTATION CONTROL	When procurement is to LM unreleased documentation, supplier shall impound hardware upon completion of the build pending receipt of LM released documentation via a Procurement change notice. Once documentation is official released, supplier may ship hardware.
QXH	Q	NON-FLIGHT ITEM IDENTIFICATION	Identify each item on this order as a Non-

		DOCUMENTATION DATA	list is not applicable shipment documentation, the seller shall record the required identification on the seller's invoice.
RETENTION / TRACEABILITY			
Q6Z	Q	LOT DATE CODE FOUR YEARS	Supplier shall, for each part identity, provide all parts with a lot-date-code no more than four (4) years prior to the date of the Purchase Order to LM.
Q6Z7	Q	LOT DATE CODE SEVEN YEARS	Supplier shall, for each part identify, provide all parts with a lot-date-code no more than seven (7) years prior to the date of the Purchase Order to LM.

QT7	Q	DOCUMENTATION TWELVE YEARS SUPPLIER RETAIN TEST DOCUMENTATION SEVEN YEARS	
-----	---	------------------------------------------------------------------------------------------	--



data, the allowable tolerance limits, and the actual dimension measured as objective evidence that each characteristic and feature has been inspected and accepted by the Organization's quality and inspection function. When testing is required, the parameters and results of the test shall be recorded in the same manner. The First Article Inspection Report must show evidence of acceptance by the Organization's quality assurance representative. The First Article(s) shall be produced on production equipment and using processes which will be utilized on production runs. Additionally, the Organization shall perform additional

QZ144	Q	A268112	A268112, PAWS 14 - Phase I and Phase II Proofing of Supplier Test Stations Used for Acceptance of Hardware
QZ145	Q	A268113	A268113, PAWS 16 - Test Station Service Equipment Logs
QZ146	Q	A268114	A268114, PAWS 19 - Supplier Special Tooling Requirements
QZ147	Q	A268115	A268115, PAWS 20 - Traceability of Raw Materials in Serialized Hardware Items
QZ148	Q	A268117	A268117, PAWS 26 - Limited Life Items and Limited Shelf Life Materials
QZ149	Q	A268118	A268118, PAWS 27 - Traceability and Serialization Control
QZ15	Q	SMP010780U04	SMP010780U04, PRINTED CIRCUIT BOARDS

QZ170	Q	D068737	D068737, RF Termination Unit -- PAQR
QZ171	Q	D101595	D101595, Checklist for Subcontractor Requests for Waiver Authorization
QZ172	Q	D101597	D101597, Supplier and Waiver Information Requirements/Subcontractor Quality Assurance Rqmts
QZ173	Q	D123320	D123320, Subcontractor Applications for Authorization to Process Waiver Requests - Tracticl Programs
QZ174	Q	D274806	D274806, Checklist for Program Phases of Product Qual Program Rqmts
QZ179	Q	D274835	D274835, Special PAWS - Product Quality Provision for Suppliers of Propulsion Devices
QZ18	Q	SMP012700U05	SMP012700U05, Letter of Agreement Between Lockheed Missil47998 0.96 Tf1 0 0 1 397.13 477.1 9(ett)4(er)

QZ215	Q	D824158-13	D824158-13, DRD - Diode Array
QZ216	Q	D824158-14	D824158-14, DRD - FTS RF Mixer Assembly
QZ217	Q	D824158-16	D824158-16, DRD - Quartz Crystal
QZ218	Q	D824158-17	D824158-17, DRD - Filters
QZ219	Q	D824158-18	D824158-18, DRD - FTS Transformers & Inductors
QZ220	Q	D824158-19	D824158-19, DRD - Relays
QZ221	Q	D824158-20	D824158-20, DRD - Resistor Network
QZ222	Q	D824158-21	D824158-21, DRD - Resistors
QZ223	Q	D824158-22	D824158-22, DRD - VSLI Command Sequencer
QZ224	Q	D824158-24	D824158-24, DRD - Transformers & Inductors
QZ225	Q	D824158-25	D824158-25, DRD - FTS Thermistors
QZ226	Q	D824158-27	D824158-27, DRD - Capacitors
QZ227	Q	D824158-29	D824158-29, DRD - RF Termination Unit (EMC)
QZ228	Q	D824158-30	D824158-30, DRD - Hybrid, Optically Coupled Isolator
QZ229	Q	D824158-32	D824158-32, DRD - Special Package Power Transistor & Diode
QZ23	Q	F120009	F120009, Product Assurance Program Plan (PAPP) for LMSC Field Operations at Boost Propulsion Subcontractor Facilities
QZ230	Q	D824158-33	D824158-33, DRD - Memory & Linear Microcircuits
QZ231	Q	D824158-34	D824158-34, DRD - RF Termination (KDI)
QZ232	Q	D824158-35	D824158-35, DRD - Quad Fet Switch Driver
QZ234	Q	D900341	D900341, Technical Program Management Requirements for Trident II Boost Propulsion Subcontracts
QZ235	Q	D900341 CHKLIST	D900341, CHECKLIST - Technical Program Management Requirements Checklist for Trident II Boost Propulsion Follow-On Production
QZ237	Q	D914110	D914110, LOA - LMSC & Ensign Bickford Co. Pertaining to Procurement Rqmts for Flexible Confined Detonating Cord PN 3063530 Detonating Cord WS 15120 Linear Shaped Charge WS 17888MOU Between Ensign Bickford Aerospace & Defense Company and LMSSC Inspection Stamping at Ensign Bickford Aerospace & Defense Company
QZ24	Q	F120012	F120012, Product Quality Program Rqmts for Trident I Fleet Ballistic Missile Weapon System Propulsion Subcontractors/Suppliers
QZ241	Q	D915701	D915701, PA Quality Rqmts for Electronic Components/Subassemblies.
QZ244	Q	D915702	D915702, PA Quality Requirements for Major Commodities
QZ246	Q	D915703C	D915703C, PA Quality Requirements for Trident II (D5) Connectors
QZ248	Q	D915703-1C	D915703-1C, PA Quality Requirements for G & H PMM Connectors
QZ249	Q	D915704	D915704, PA Quality Rqmts for Nose Cap & Nose Fairing Manufacture
QZ25	Q	F120014	F120014, LOA Btw LMSC & Teledyne Wah-Chang Albany Pertaining to Procurement Rqmts for D5 PBCS Manifold
QZ250	Q	D915705	D915705, PA Quality Requirements for Trident II Batteries
QZ251	Q	D915706C	D915706C, PA Quality Rqmts for Printed Circuit Boards, Multilayer Boards, Rigid Flex Master Interconnect Board & Flex Cables
QZ252	Q	D915709P	D915709P, PAQR - Black Box Subcontractor Piece Part Rqmts
QZ256	Q	D915711	D915711, Addendum 2 - to Supplier Tech Program Management LMSC/915710A

	Updated: QZ92	Per FBM Request
6/14/2007	Edited: QCF	Edit to wording per FBM Request
6/28/2007	Edited: QCF	Returned to original wording
8/20/2007	Update: QTP	Removed reference to Addendum 1 and 2
10/31/2007	Added: QTD2	Per FBM Request
1/31/2008	Added: QZ317	SMP010708U07 – FBM program specific
2/21/2008	Added: QT12	Seller Rating Test Documentation Twelve Years - per Special Programs Request
	Edited: Q0W	Changed the word "record" to "mark/identify" - per Central Procurement Request
7/28/2008	Added: QZ318 Added: QA5	SMP010713U08 – FBM program specific Certification of Conformance Required By LMSSC

	Added: QA10	CLASS 1 or CLASS 2 Changes; GPS3 Program Specific
	Added: QSQAP	QPS3 Quality Assurance Plan; GPS3 Program Specific
	Edited: QAQC09	Included approval requirements for Calibration System.
10/5/2009	Added: QT4F	Counterfeit EEE Part Avoidance, Detection, Mitigation, Disposition (SAE AS5553)
2/16/2010	Edited: QZ72, QZ318	Edited clause text to align with document text
	Edited: QZ109	Edited clause title and text to align with document text
5/4/2010	Added: QM8	3GPS-RQ-09-0080 and 3GPS-RQ-09-0081 for GPS111 for PWB
	Added: QB12	Certificate of Compliance for Subcontract Tin Mitigation
	Updated: QA7	Requirement clarification
5/11/2010	Edited: Q0W	Minor language edits

	Updated: QZ320 Added: Q4M	QZ320 updated to replace SMP010762U08 with SMP10764U09 (per FBM request) Q4M code added for supplier requirement clarification. Q4M is NOT to be flowed on PO; the sole purpose is to provide information to suppliers that are Q4M approved. *An additional update to the doc was made to remove "Systems Company" from Lockheed Martin Space references.
06/01/2020	Updated: QC2	QC2 updated to require a minimum 1" font size and placement of time and temperature sensitive label.
07/13/2020	Updated: QZ299 Edited: QOPR	QZ299 updated to remove Rev reference QOPR edited to QPOR to correct the typo.
08/20/2020	Updated: QPOR	Updated text to contain Supplier Quality Field Representative instead of QPAR
09/25/2020	Added QSC	Quality System Changes and Customer Findings
09/30/2020	Updated: QSC	Updated text to clarify VRIC definition
01/05/2021	Updated: QZ318	Updated text, changed Perkin Elmer Opto Electronics to Excelitas Technologies
01/28/2021	Added: QEDSS	Electronic Data Supplier Submittal
	Added: QSPS	Special Process Code for Classified Procurement - Requested by Special Programs
2/24/2021	Updated: QEDSS	Updated text