



NOTE TO SUPPLIERS

The quality clauses in this document constitute a part of the DRS TEM purchase order requirements. The supplier is responsible for reviewing and meeting the clauses that apply to each item ordered. Each new or amended purchase order should be reviewed to ensure that all quality clause requirements are understood and can be met. Questions regarding these requirements should be directed to the DRS TEM Buyer listed on the purchase order or to DRS TEM Supplier Quality Assurance at sga@drs-tem.com.

QUALITY CLAUSE STRUCTURE

The clauses are categorized into 100, 200, 300, and 400 series numbers as follows:

- 100-Series (QC1xx) – Standard requirements for all DRS divisions. All of the 100-series requirements apply to each purchase order.
- 200-Series (QC2xx) – Common DRS clauses that are commodity-specific.
- 300-Series (QC3xx) – Common DRS clauses that are process-specific.
- 400-Series (TEMA4xx) – Clauses that are specific to DRS Test & Energy Management, LLC.

If there is a conflict between applicable quality clauses, then the higher number clause will take precedence (e.g. a QC200-series clause takes precedence over a QC100-series clause).

In case of a conflict between requirements, the order of precedence shall be: 1) Purchase Order, 2) Drawing/Print, and 3) Procurement Quality Requirements. The supplier is encouraged to contact their DRS TEM Buyer if there are any questions relating to product requirements.

APPLICABILITY OF QUALITY CLAUSES

The table in the appendix lists applicable quality clauses by commodity. To determine which requirements apply, locate the commodity you are selling to DRS TEM in this table.



**DRS COMMON SUPPLIER QUALITY CLAUSES (100, 200, 300-series)
Revision A**

QC100 – Quality Management System

The seller shall maintain a Quality Management System that complies with the requirements of ISO 9001 or a Quality Management System approved by DRS. Suppliers that are registered by an RAB accredited registrar are preferred.

QC101 – Identification, Preservation, Packaging, and Packing

All shipments to DRS must be packaged to avoid damage and deterioration and must be shipped to the address specified on the PO unless otherwise noted. Packaging and packing shall be in accordance with good commercial practices unless otherwise specified on the PO. Parts shall not be intermingled unless otherwise specified. Each box or container shall be labeled and have as a minimum the following information: (1) Part number and revision, (2) PO number, (3) PO Line Item, (4) Quantity and (5) Manufacturer's identification.

QC102 - Source of Supply

Suppliers are responsible to ensure compliance for materials used to manufacture parts supplied to DRS Technologies. Suppliers will only purchase materials from Original Equipment Manufacturers (OEM's), Original Component Manufacturers (OCM's), standard catalogues, or the OEM/OCM authorized franchised distributors. Purchasing from independent brokers or other sources is not authorized unless approved in writing by DRS Technologies.

Suppliers of electronic components will have an established counterfeit avoidance program. That program will include a process for component authentication/testing with verified traceability to the OCM. Supplier programs that are not certified to CCAP 101 or audited to SAE AS5553 will be approved in writing by DRS prior to providing electronic components or production assemblies with electronic components.

QC103 – Measuring & Test Equipment

It is the seller's responsibility to ensure all equipment, including Customer Furnished Equipment and Government Furnished Equipment, used to test and inspect DRS supplied parts are maintained and traceable to the National Institute of Standards and Technology (NIST) requirements. A calibration system in accordance with ISO 10012-1, ANSI/NCSL Z540-1, or equivalent will be used by the supplier.

QC104 – Control of Quality Records

All records related to the manufacturing, testing and inspection of parts supplied to a DRS Technologies purchase order will be maintained for a minimum of 7-years unless otherwise specified by the individual DRS company.



QC105 – Supplier Material Review Board (MRB) Authority

The Supplier does not have MRB authority to accept or repair non-conforming product. Any nonconformances on final deliverable product to the purchase order, drawing, specifications or applicable documents must be submitted to DRS for approval prior to shipment.

QC106 – Shelf Life

No materials with a shelf-life date will be shipped to a DRS Technologies purchase order with less than 80% of the full shelf-life as determined by the original manufacturer unless previously approved in writing by DRS. The expiration dates shall be clearly recorded on the packaging and the shipping documents.

QC107 – Temperature Sensitive Material

The Seller must indentify each shipment of temperature sensitive material with the manufacture date, storage temperature and recommended shelf life, in addition to the normal identification requirements of Name, Type, Size, Lot Clause and Quantity. Identification and special handling conditions must be recorded on the shipping document.

QC108 – Test and Analysis Data

The data from any qualification testing, functional testing, analysis test and/or lot acceptance test required for the manufacturing of DRS parts shall be maintained for a minimum of 7 years and available upon request from the buyer.

QC109 – Certification of Special Processes

If drawings and/or specifications listed in this purchase order require special processes at the seller or the seller's sub-tier, these processes shall be documented, reviewed and approved by DRS Technologies prior to production. Approval of special processes by DRS does not absolve the supplier from supplying conforming product.

These processes include, but not limited to, the following: Bonding, brazing, casting, chemical surface treatments, composites, conformal coating, contamination control, destructive physical analysis (DPA), dye penetration inspection, forging, heat treating of metals, painting, plating, pressure testing, magnetic particle inspections, radiographic inspection, soldering, ultrasonic inspection, welding, or any other process defined in the purchase order.

QC110 – Notification Responsibility

The Supplier shall inform DRS immediately where there is a reason to suspect that products previously supplied to DRS may not be in accordance with the DRS drawing, specification or purchase order requirement. The Supplier shall promptly inform DRS of any circumstance related to materials, manufacturing, processing methods, design, etc. which may make a product susceptible to premature failure or otherwise place the safe operation of that product at risk. The notification shall describe the nature of the discovered anomaly, its applicability to DRS part number(s), quantities affected and the probable impact to the proper



function/performance of the item supplied. DRS shall also be immediately notified in writing of any change to the Supplier's Quality Management team responsible for DRS products, other significant change in the Supplier's organization, change in financial condition, change in location or change in ownership of the Supplier.

QC111 – Control of Lower-Tier Suppliers

The Supplier shall flow-down all applicable DRS purchase order requirements, including, but not limited to Terms and Conditions and Quality Clauses to Sub-Tiers performing work involving this purchase order.

QC112 – Supplier Corrective Action Request

A Supplier Corrective Action will be forwarded by DRS to a Supplier when corrective action is required. Upon notification of the non-conformance, the supplier shall take immediate containment action and complete the analysis of cause and proposed corrective action within 10 days. Failure to respond in a timely manner may result in the removal of Supplier from the Approved Suppliers Listing. Upon notification of the non-conformance shipments may be suspended until containment processes are enacted.

QC200 – Quality Management System

The seller shall maintain a QMS that complies with the requirements of TS16949. Suppliers registered by an RAB accredited registrar are preferred.

QC201 – Quality Management System

The seller shall maintain a QMS that complies with the requirements of AS9100. Suppliers registered by an RAB accredited registrar are preferred.

QC202 – First Article Inspection

A first article inspection in accordance with AS9102 is required for this purchase order if one of the following apply:

- (1) First time submission (part or new supplier)
- (2) Revision change affecting form, fit, or function
- (3) A process change used to manufacture the part
- (4) Change in manufacturing location (facility)
- (5) More than 24 months have passed since the supplier last produced part
- (6) As requested by DRS

All first article inspections performed by the seller will be accompanied with a First Article Inspection Report (FAIR) showing conformance to all drawing or performance requirements specified by DRS.



QC203 – Source Inspection

Parts and materials supplied to this purchase order require source inspection by DRS Technologies or government representative prior to shipment. The supplier will notify the individual DRS company in advance when parts and materials will be ready for source inspection. It is the supplier's responsibility to ensure part conformance to specified requirements prior to requesting source inspection.

QC204 – Solderability

Any solderable parts supplied to DRS manufactured must meet the solderability requirements of the applicable ANSI/J-Standards.

QC205 – Electrostatic Discharge Control (ESD)

All electrostatic sensitive devices shall be packaged, marked and handled in compliance with ANSI/ESD S20.20 (or equivalent).

QC206 – Printed Circuit Boards

PCB's will comply with IPC-A-600 unless otherwise specified.

Note: The supplier will default to Class 3 requirements if the class is not otherwise specified on the PO or other buyer supplied documents.

QC207 – Circuit Card Assemblies

CCA's will comply with IPC-A-610, Acceptability of Electronic Assemblies, unless otherwise specified.

Note: The supplier will default to Class 3 requirements if the class is not otherwise specified on the PO or other buyer supplied documents.

QC208 – Circuit Card Assemblies

CCA's will comply with IPC-J-STD-001, Requirements for Soldered Electrical and Electronic Assemblies unless otherwise specified.

Note: The supplier will default to Class 3 requirements if the class is not otherwise specified on the PO or other buyer supplied documents.

QC209 – Wiring Harnesses

Cables and Wiring Harnesses will comply with IPC/WHMA-A-620 unless otherwise specified.

Note: The supplier will default to Class 3 requirements if the class is not otherwise specified on the PO or other buyer supplied documents.



QC210 – Rework Authorization of Circuit Card Assemblies

The seller may rework CCA's supplied to this purchase order in accordance with IPC-7711A.

QC211 – Moisture Sensitive Components

The supplier shall ensure packaging and handling of all moisture sensitive components, as classified by, and in accordance with IPC/JEDEC J-STD-033 or other documented procedure.

QC300 – Certificate of Compliance (C of C)

All parts supplied to this purchase order will be accompanied by a C of C. The C of C will be dated and signed by the responsible company representative certifying the supplied parts meet all purchase order, specification, and drawing requirements from the buyer. Certifications must include the following:

- (1) DRS PO Number
- (2) DRS Part Number, Revision, Serial Numbers and Lot Clauses where applicable.
- (3) Quantity Shipped
- (4) Name of approved lower-tier supplier and descriptions of service provided (if applicable)
- (5) Authorized signature and date.

QC301 – Certificate of Analysis (C of A)

A Certificate of Analysis is required to accompany all materials supplied to this purchase order. The C of A will include:

- (1) Manufacturer's name
- (2) Country of origin/melting/smelting
- (3) Specification number
- (4) Material grade
- (5) Material condition
- (6) Size
- (7) Heat lot
- (8) Date Clause
- (9) Chemical analysis
- (10) Physical properties applicable to the procured material



QC302 – Certificate of Test (C of T)

All parts supplied to this purchase order will be accompanied by a C of T. The C of T will be dated and signed by the responsible company representative certifying the supplied parts meet all purchase order, specification, and drawing requirements from the buyer. Certifications must include the following:

- (1) DRS PO Number
- (2) DRS Part Number, Revision, Serial Numbers and Lot Clauses where applicable
- (3) Quantity Shipped
- (4) Name of approved lower-tier supplier and descriptions of service provided (if applicable)
- (5) Authorized signature and date
- (6) Test Results
- (7) Name and Address of the tester or independent laboratory
- (8) Date and run time if applicable

QC303 – Unique Identification (UID) marking requirements

Unique Identification (UID) marking on labels, decals or metal plates shall be per MIL-STD130M. The UID marking shall have a minimum Grade of B when verified per ISO/IEC 15415. Sampling of the verification of the UID marking requirements shall be per ANSI/ASQC Z1.4 using General Inspection Level II and Single Sampling Plans for Reduced Inspection at an AQL of 1.0. The first and last UID marking on labels, decals or metal plates of the lot shall be part of the samples that are verified.

Deliverable: A Certificate of Conformance stating that the labels, decals or metal plates were manufactured in accordance with MIL-STD-130M and verified per ISO/IEC 15415. The Certificate of Conformance shall also state the Grade that was achieved when verified per ISO/IEC 15415. A legible and reproducible copy of the verification that was performed on the labels, decals or metal plates of the sample shall be included with each shipment.



TEM-SPECIFIC SUPPLIER QUALITY CLAUSES (400-series)

Revision --

TEMA403 – International Traffic in Arms Regulation (ITAR) Requirement

Any supplier conducting business with DRS TEM that involves the transfer of United States Government technical information in any format is required to be registered with the U.S. Department of State. Registration and information is available at http://www.pmdtdc.state.gov/regulations_laws/itar_official.html.

TEMA404 – Solderability

All parts that require soldering shall meet industry standards for hand and machine soldering. The supplier shall ensure that all parts comply with IPC/EIA J-STD-002.

Franchised Suppliers

- Components aged in excess of five years from the manufacture date code must be sealed in factory packaging with the original manufacturer's certificate of conformance. Parts in excess of five years that have been unsealed shall be evaluated by the supplier for solderability and determined complaint prior to shipment.

Non-Franchised Component Suppliers

- Supplier must be certified to meet the requirements of CCAP-101 or SAE 5553.
- Components that are less than five years old, are sealed in the original factory packaging, and have the original certificate of conformance are acceptable as is.
- Components with date codes in excess of five years from the original manufacturers date code shall require re-tinning. Components that require re-tinning shall be tested and certified to IPC/EIA J-STD-002 sec 4.3.1 test "E" for leaded components and 4.3.2 test "F" for leadless components. Ball Grid Arrays (BGA) shall comply with IPC/EIA J-STD-013.
- Date codes shall be verified as valid Original Component Manufacturers (OCM) date codes.
- Blank verification shall be performed on all programmable devices.
- Full electrical functional testing shall be performed. The test report shall state the quantity tested, the pass/fail quantities, and that devices meet the requirements of the OCM specification and/or data sheet.
- Full inspection shall be performed to verify that the mechanical characteristics of the device, such as leads, part configuration, and body meet the OCM specification/data sheet. A statement that the devices operate as stated on the specification/data sheet shall be included with the certificate of compliance.
- Applicable test reports and certifications shall be included with all shipments. These shall include reference to date/lot codes and quantity of each date/lot code shipped.



TEMA407 – Flux Usage

The use of organic fluxes (J-STD-004 Composition OR) or high-activity fluxes (as defined in J-STD-004) on DRS TEM product is prohibited. ROLO fluxes are preferred.

TEMA409 – Calibration Services and Calibrated Equipment

Suppliers of calibration services shall have a system that meets the requirements of ISO 17025:2005, ISO 9001:2008, or A2LA accreditation. Supplier shall be able to demonstrate traceability of standards used to the National Institute of Standards and Technology (N.I.S.T). For each item calibrated, supplier shall provide a certificate of calibration that includes calibration date, due date, traceable standards used, and any significantly out-of-tolerance condition. The certificate shall be signed by a representative of the company responsible for Quality Assurance.

For new equipment calibrated by the supplier, a certificate of calibration shall be provided that includes calibration date, due date, and standards traceability. The certificate shall be signed by a representative of the company responsible for Quality Assurance.

TEMA418 – Printed Circuit Boards

Product Quality Requirements (PQR) for Rigid Printed Boards, Flexible Printed Boards including Rigid-Flex and High Density Interconnect (HDI) Layers or Boards is located in Document Nos. PE52265 and PE50795. These documents may be obtained by contacting the DRS TEM Buyer listed on the purchase order or by sending a request to DRS TEM Supplier Quality Assurance at sqa@drs-tem.com.

TEMA420 – Part/Assembly Marking

Parts must be marked as required by the purchase order, drawing, and any supporting documentation. If marking is not indicated on the associated documentation, then parts shall be bagged/tagged, or shall have a tag attached identify the part(s).

Character size, color, marking method, and location shall be dictated by the drawing. If not specified on the drawing, then MIL-STD-130 shall apply.

TEMA421 – Circuit Card Assemblies – Additional Requirements for Contract Manufacturers Quality System

The Contract Manufacturer's (CM) Quality system shall focus on measuring and improving customer satisfaction, root cause identification and closed-loop resolution of non-conformances for materials and services within their supply base. The supplier shall also maintain active controls over its suppliers and in-house operations.



Quality Plan

The CM shall submit a Quality Plan identifying key processes and inspection points prior to production. CM shall notify DRS TEM of any planned process changes prior to implementation in order to comply with the DRS TEM No Change Clause.

Yield Reporting

The CM shall establish in-process and final inspection activities as a basis of measuring in-process and final yields for each part number produced. Yield results and nonconformance detail shall be reported to the DRS TEM Supplier Quality department at a frequency agreed upon prior to the start of a production run. Yield calculations shall include all nonconformance categories.

Counterfeit Component Avoidance – Source of Supply

The supplier shall maintain an active counterfeit avoidance program. The program shall focus on preventing the use of counterfeit, non-authentic, altered, or used components.

This program will include a process for component authentication/testing with verified traceability to the OCM. Supplier programs that are not certified to CCAP 101 or audited to SAE AS5553 will be approved in writing by DRS prior to providing electronic components or production assemblies with electronic components.

Facility Surveillance, Source Inspection, and First Article Inspection

Facility Surveillance. DRS TEM shall have the right to inspect product at any time during the manufacturing process at the CM or sub-tier supplier's facility. DRS TEM will give reasonable advance notice of each visit.

Source Inspection. DRS TEM shall have the right to perform source inspection at the CM facility prior to shipment. Acceptance during source inspection shall not relieve the CM of responsibility for defects discovered after shipment.

First Article Inspection. DRS TEM shall have the right to witness First Article Inspection activities performed by the CM for each part number.

The following items shall be submitted as part of the First Article Inspection Report in addition to the requirements of QC202:

- Cleanliness testing data (for ionic contamination). Test data shall be provided for one assembly per lot/production run. Testing shall be performed per IPC-TM-650 for Class 3.
- Ball Grid Array (BGA) X-Rays



Certificate of Conformance – additional requirements

- Cleanliness testing data to be attached if required by the purchase order.
- Testing data for ICT or FVT to be attached if required by the purchase order.

CCA Process Requirements

Solder Chemistry/Cleaning Chemicals. The use of ROLO flux is preferred. Use of Type OR or high-activity flux is prohibited.

DRS TEM shall be provided a list of all solders, fluxes, chemicals, glues and adhesives for approval. After approval, these shall not be changed without authorization by DRS TEM Supplier Quality.

Raw PCB Requirements

Raw circuit cards purchased for use in DRS TEM product shall comply with the following:

- Boards shall be purchased only from sources approved by DRS TEM.
- Boards sealed in the manufacturers packaging shall be baked prior to assembly if stored for more than thirty days.
- Boards not received in the manufacturers packing or opened for any reason and the exposure time not documented shall be baked prior to assembly.
- Suppliers shall maintain a bake log of all boards and list them by part number, revision, date code, manufacturer’s cage code, and the drying parameters used
- Assembly shall take place within 24 hours of baking.

Material Control

All components supplied under this order shall comply with the following:

Components both active and passive shall not have a date code more than five years old. All parts with date codes of more than five years old shall require approval by DRS.

Raw circuit cards bought for DRS assemblies shall have the appropriate test data and cross sections available for testing and review by DRS.

All data and samples shall be archived for a period of not less than five years from the completion of the contract.



TEMA422 – Sidecar™ Cable Testing Requirements

Testing requirements for Sidecar™ cables may be obtained by contacting the DRS TEM Buyer listed on the purchase order or by sending a request to DRS TEM Supplier Quality Assurance at sqa@drs-tem.com.

TEMA423 – Repair Authorization Process

Requests for MRB Disposition shall be submitted by using form no. TEM-024-02. Request should be submitted to sqa@drs-tem.com.

Requests to perform repairs on circuit card assemblies (CCAs) should include the proposed IPC-7721 repair method(s).



APPENDIX
QUALITY REQUIREMENTS BY COMMODITY CODE



**Quality Requirements
by Commodity Code**

LEGEND
 X = required
 A= required if applicable
 B = applies to Build-To-Print items only

DRS COMM CODE	DRS CORPORATE COMMODITY DESCRIPTION	DRS Common Quality Clauses	QMS - TS16949	QMS - AS9100	First Article Inspection	Source Inspection	Solderability	ESD	PCB - IPC-A-600	CCA - IPC-A-610	CCA - IPC-J-STD-001	Wiring Harnesses - IPC/WHMA-A-620	Rework Authorization for CCAs	Moisture Sensitive Components	Certificate of Conformance (COC)	Certificate of Analysis (COA)	Certificate of Test (COT)	UID Marking Requirements	ITAR Requirement	Solderability Requirements	Flux Usage	Calibration Services and Calibrated Equipment	PCB Requirements	Part/Assembly Marking	CCA Additional Requirements for CMs	Sidecar Cable Testing Requirements	Repair Authorization Process
		QC100 to 112	QC200	QC201	QC202	QC203	QC204	QC205	QC206	QC207	QC208	QC209	QC210	QC211	QC300	QC301	QC302	QC303	TEMA 403	TEMA 404	TEMA 407	TEMA 409	TEMA 418	TEMA 420	TEMA 421	TEMA 422	TEMA 424
105	Assembly-Filters	X			B										X				A					X			
109	Assembly-Electro/Mechanical Assemblies	X			B		X	X			X	X		X	X				A	X	X			X			
111	Assembly-(Component-Passives)	X			B										X				A					X			
114	Connector Assemblies	X			B										X				A					X			
117	Assembly-Magnetics	X			B										X				A					X			
122	Assembly-Cable/Harness Assemblies	X			B						X	X			X				A					X		B	
123	Assembly-Industrial Controls	X			B										X				A					X			
124	Assembly-Cabinets/Enclosure/Chassis	X			B										X				A					X			
125	Assembly-Displays	X			B										X				A					X			
133	Assembly-Tube Assemblies	X			B										X				A					X			
205	Electrical-filters	X			B		X	X						X	X				A	X	X			X			
208	Electrical-Wire/Cable/Rope	X			B										X				A					X			
211	Electrical-(Component-Passives)	X			B		X	X						X	X				A	X	X			X			
212	Electrical-Switches/Relays/Contactors/Solenoids	X			B		X	X						X	X				A	X	X			X			
213	Electrical-Printed Circuit Boards	X			B		X	X	X					X	X				A	X	X		B	X			
214	Electrical-Connectors	X			B		X	X						X	X				A	X	X			X			
215	Assembly-Electro/Mechanical Assemblies	X			B		X	X						X	X				A	X	X			X			
215	Electrical-Circuit Protection Devices	X			B		X	X						X	X				A	X	X			X			
216	Electrical-Motors/Fans/Blowers	X			B		X	X						X	X				A	X	X			X			
217	Assembly-Electro/Mechanical Assemblies	X			B		X	X						X	X				A	X	X			X			
217	Electrical-Magnetics	X			B		X	X						X	X				A	X	X			X			
225	Electrical-Displays	X			B										X				A					X			
227	Electrical-Batteries	X			B										X				A					X			
234	Electrical-Test Equipment/ATE	X			B										X				A			X		X			
236	Electrical-Heaters	X			B										X				A					X			
237	Electrical-Cooling Equipment/HVAC	X			B										X				A					X			
238	Electrical-Automotive/Vehicle Components	X			B										X				A					X			
249	Electrical-Pumps/Motors	X			B										X				A					X			
301	Hardware-hardware	X			B										X				A					X			
302	Hardware-Hose/Fittings	X			B										X				A					X			



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DRS COMM CODE	DRS CORPORATE COMMODITY DESCRIPTION	DRS Common Quality Clauses																									
		QC100 to 112	QC200	QC201	QC202	QC203	QC204	QC205	QC206	QC207	QC208	QC209	QC210	QC211	QC300	QC301	QC302	QC303	TEMA 403	TEMA 404	TEMA 407	TEMA 409	TEMA 418	TEMA 420	TEMA 421	TEMA 422	TEMA 424
307	Hardware-Composites/Plastic/Rubber Products	X			B										X				A						X		
308	Hardware-Wire/Cable/Rope	X			B										X				A						X		
314	Hardware-Connectors	X			B										X				A						X		
501	Mechanical-hardware	X			B										X				A						X		
502	Mechanical-Hose/Fittings	X			B										X				A						X		
504	Mechanical-Gaskets/Rubber	X			B										X				A						X		
505	Mechanical-Filters	X			B										X				A						X		
507	Mechanical-Composites/Plastic/Rubber Products	X			B										X				A						X		
508	Mechanical-Wire/Cable/Rope	X			B										X				A						X		
516	Mechanical-Motors/Fans/Blowers	X			B										X				A						X		
523	Mechanical-Industrial Controls	X			B										X				A						X		
524	Mechanical-Cabinets/Enclosure/Chassis	X			B	B									X				A						X		
527	Mechanical-Batteries	X			B										X				A						X		
531	Mechanical-Metal Fabrication	X			B	B									X				A						X		
535	Mechanical-Valves/Clamps	X			B										X				A						X		
538	Mechanical-Automotive/Vehicle Components	X			B	B									X				A						X		
540	Mechanical-Bearing	X			B										X				A						X		
543	Mechanical-Engines	X			B										X				A						X		
549	Electrical-Pumps/Motors	X			B										X				A						X		
560	Mechanical-Cases	X			B										X				A						X		
564	Mechanical-Nameplate/Decal (Identification)	X			B										X				A						X		
572	Mechanical-Printed Materials	X			B										X				A						X		
573	Mechanical-Chemicals	X			B										X				A						X		
637	MTO-Cooling Equipment/HVAC	X			B										X				A						X		
671	MTO-Office Supplies/Facilities	X			B										X				A						X		
705	Optical-Filters	X			B										X				A						X		
708	Optical-Wire/Cable/Rope	X			B										X				A						X		
709	Optical-Electro/Mechanical Assemblies	X			B										X				A						X		
714	Optical-Connectors	X			B										X				A						X		
723	Optical-Industrial Controls	X			B										X				A						X		



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		QC100 to 112	QC200	QC201	QC202	QC203	QC204	QC205	QC206	QC207	QC208	QC209	QC210	QC211	QC300	QC301	QC302	QC303	TEMA 403	TEMA 404	TEMA 407	TEMA 409	TEMA 418	TEMA 420	TEMA 421	TEMA 422	TEMA 424
731	Optical-Metal Fabrication	X			B										X				A					X			
734	Optical-Test Equipment/ATE	X			B										X				A					X			
755	Optical-Glass	X			B										X				A					X			
756	Optical-Laser	X			B										X				A					X			
865	Outside Services-Engineering Services	X			B										X				A					X			
969	Raw Materials-Consumables	X			B										X				A					X			
101A	Assembly-hardware	X			B										X				A					X			
102A	Assembly-Hose/Fittings	X			B										X				A					X			
102B	Assembly-Hose/Fittings	X			B										X				A					X			
109A	Assembly-Electro/Mechanical Assemblies	X			B		X	X	X	X	X	X	X	X	X				A	X	X		B	X	B	B	
121A	Assembly-CCA's	X			B	B	X	X	X	X	X		X	X	X				A	X	X		B	X	B	B	
122A	Assembly-Cable/Harness Assemblies	X			B	B	X	X			X	X		X	X				A	X	X			X		B	
123A	Assembly-Industrial Controls	X			B										X				A					X			
208V	Electrical-Wire/Cable/Rope	X			B										X				A					X			
210A	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
210B	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
210C	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
210D	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
210E	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
210F	Electrical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
211A	Electrical-(Component-Passives)	X			B		X	X						X	X				A	X	X			X			
211B	Electrical-(Component-Passives)	X			B		X	X						X	X				A	X	X			X			
214A	Electrical-Connectors	X			B		X	X						X	X				A	X	X			X			
215A	Electrical-Connectors	X			B		X	X						X	X				A	X	X			X			
220A	Electrical-Electro Mechanical Components	X			B		X	X						X	X				A	X	X			X			
220B	Electrical-Electro Mechanical Components	X			B		X	X						X	X				A	X	X			X			
220C	Electrical-Electro Mechanical Components	X			B		X	X						X	X				A	X	X			X			
301A	Hardware-hardware	X			B										X				A					X			
301V	Hardware-hardware	X			B										X				A					X			
302A	Hardware-Hose/Fittings	X			B										X				A					X			



**Quality Requirements
by Commodity Code**

LEGEND
 X = required
 A= required if applicable
 B = applies to Build-To-Print items only

DRS COMM CODE	DRS CORPORATE COMMODITY DESCRIPTION	DRS Common Quality Clauses	QMS - TS16949	QMS - AS9100	First Article Inspection	Source Inspection	Solderability	ESD	PCB - IPC-A-600	CCA - IPC-A-610	CCA - IPC-J-STD-001	Wiring Harnesses - IPC/WHMA-A-620	Rework Authorization for CCAs	Moisture Sensitive Components	Certificate of Conformance (COC)	Certificate of Analysis (COA)	Certificate of Test (COT)	UID Marking Requirements	ITAR Requirement	Solderability Requirements	Flux Usage	Calibration Services and Calibrated Equipment	PCB Requirements	Part/Assembly Marking	CCA Additional Requirements for CMs	Sidcar Cable Testing Requirements	Repair Authorization Process
		QC100 to 112	QC200	QC201	QC202	QC203	QC204	QC205	QC206	QC207	QC208	QC209	QC210	QC211	QC300	QC301	QC302	QC303	TEMA 403	TEMA 404	TEMA 407	TEMA 409	TEMA 418	TEMA 420	TEMA 421	TEMA 422	TEMA 424
333A	Hardware-Tube Assemblies	X			B										X				A					X			
350A	Hardware-Springs	X			B										X				A					X			
470A	Hardware-Computer HD/SFTW/Main	X			B										X				A					X			
502A	Mechanical-Hose/Fittings	X			B										X				A					X			
505A	Mechanical-Filters	X			B										X				A					X			
507A	Mechanical-Composites/Plastic/Rubber Products	X			B										X				A					X			
507B	Mechanical-Composites/Plastic/Rubber Products	X			B										X				A					X			
523A	Mechanical-Industrial Controls	X			B										X				A					X			
535A	Mechanical-Valves/Clamps	X			B										X				A					X			
550A	Mechanical-Springs	X			B										X				A					X			
564A	Mechanical-Nameplate/Decal (Identification)	X			B										X				A					X			
564B	Mechanical-Nameplate/Decal (Identification)	X			B										X				A					X			
572A	Mechanical-Printed Materials	X			B										X				A					X			
709A	Optical-Electro / Mechanical Assemblies	X			B		X	X						X	X				A	X	X			X			
710A	Optical-(Component-Actives)	X			B		X	X						X	X				A	X	X			X			
711A	Optical-(Component-Passives)	X			B		X	X						X	X				A	X	X			X			
730A	Optical-Machine Tools	X			B										X				A					X			
755A	Optical-Glass	X			B										X				A					X			
866	Calibration Service Providers																		A			X					
930A	Raw Materials-Machine Tools	X			B										X				A					X			
930B	Raw Materials-Machine Tools	X			B										X				A					X			
969A	Raw Materials-Consumables	X			B										X				A					X			