



Document Name:	Quality Flow Down Requirements for Suppliers
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1.0 PURPOSE

This document establishes basic AP / ACSS Quality Flow Down Requirements for the Seller necessary to ensure that the supplies/services purchased from the Seller meets the required quality levels.

2.0 SCOPE

This document applies to Supplier Quality, Purchasing, Order Administration, and any business function affected by Purchase Orders (PO).

Inputs:	Outputs:
Synthesize VQR codes across Avionics	This document, QA-SOP-005, outlines VQR codes to be used across Avionics. VQR codes described herein govern both AP and ACSS.

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3.0 REFERENCES

3.1 Internal References

POL-3.1-1	AS9100 QMS Manual (ACSS)
INF-14.1-6	Supplier Assessment
0621Q	Supplier Control
INS-10-3	Maintaining ERP System Part Data
QA-SOP-004	Supplier Quality Manual
F01- QA-SOP-005	Avionics VQR Codes

3.2 Industry Documents

AS9100(D)	Quality Management Systems – Requirements for Aviation, Space and Defense Organizations
AS9110(C)	Quality Management Systems – Requirements for Aviation Maintenance Organizations

4.0 DEFINITIONS

“BUYER”	Refers to Purchase Order issuance from either Aviation Products, Inc. (AP), or Aviation Communication & Surveillance Systems (ACSS). Issuing the Purchase Order (physically or electronically) invokes this document.
“SELLER”	The vendor/supplier and/or distributor performing the work/supplying materials, parts, assemblies, subassemblies, systems, subsystems, or services pursuant to the Purchase Order (PO) or Supplier Control Plan (SCP) as applicable.

5.0 VARIABLE QUALITY REQUIREMENTS (VQR)

These additional specific requirements apply only when called out on the PO by specific VQR Code number. Refer to QA-SOP-004, Section 5.0, “General Requirements,” on Revision Status of Specifications. Any VQR listed in 5.0 with an * after the code is considered a VQR that requires validation during Receiving Inspection. For information on VQR codes called out by commodity, see Section 5.1 below:

5.1 QUALITY SYSTEM

CODE Q1	QUALITY MANAGEMENT SYSTEM REQUIREMENTS – The Sellers’ Quality Management System shall conform, as a minimum, to the requirements of QA-SOP-004, Section 5.0, “General Requirements.”
CODE Q2	AS9100 REGISTERED – The Seller’s Quality System shall be AS9100 registered by a Certification Body listed by the ANSI-ASQ National Accreditation Board (ANAB). The Sellers’ Quality Management System shall conform, as a minimum, to the requirements of QA-SOP-004, Section 5.0, “General Requirements.”
CODE Q3	ISO 9001 COMPLIANT – The Seller’s Quality System shall be ISO 9001 compliant. The Sellers’ Quality Management System shall conform, as a minimum, to the requirements of QA-SOP-004, Section 5.0, “General Requirements.”

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CODE Q4	ADDITIONAL QUALITY MANAGEMENT SYSTEM REQUIREMENTS – For Software Developers, conformance to AS9115 is required.
CODE Q5	The seller shall ensure that personnel are aware of their contributions to product or service conformity, product safety and the importance of ethical behavior.

5.2 CALIBRATION

CODE C1	CALIBRATION SYSTEM REQUIREMENTS – The Seller shall comply with the provisions of “Calibration System General Requirements,” ANSI/NCSL Z540 with guidance provided by ISO 10012 or ISO 17025.
CODE C2	Calibration Lab Notification - Notification to the APD Calibration Lab is required upon receipt of material. (Material may require entry into the calibration system.)

5.3 PRODUCT DEVELOPMENT

CODE D1	SYSTEMS REQUIREMENTS – Seller shall comply with the appropriate version of ARP 4754, “Software Considerations in Airborne Systems and Equipment Certification”.
CODE D2	SOFTWARE REQUIREMENTS – Seller shall comply with the appropriate version of RTCA-DO-178, “Certifications Considerations for Highly-Integrated or Complex Aircraft Systems.”
CODE D3	HARDWARE REQUIREMENTS – Seller shall comply with the appropriate version of RTCA-DO-254, “Design Assurance Guidance for Airborne Electronic Hardware.”

5.4 CUSTOMER REQUIREMENTS

CODE V1	D1-4426 REQUIREMENT – This PO has a D1-4426 Boeing Approved Process Sources requirement. Seller must comply with the latest revision of this specification and be a Boeing approved source.
CODE V2	Accounting Notification - Notification to APD Accounting is required upon receipt of material. (Material may require the application of an asset tag)
CODE V3	Government Furnished Property to Sub Contractor - The following clause of the Federal Acquisition Regulation (FAR), and the Department of Defense FAR Supplement as in effect in the Prime Contract on the date of this Purchase Order is incorporated herein by reference and made a part hereof with the same force and effect as if it were given full text: FAR 52.245 2 Government Property (Fixed Price Contracts). NOTE: Describe assets quantity, P/N, and description on Purchase Order.

5.5 CRITICAL MATERIAL

CODE M1	THIS PROCUREMENT INVOLVES EITHER AIRWORTHINESS/PRODUCT SAFETY CRITICAL, OR FLIGHT SAFETY CRITICAL ITEMS OR MATERIALS – Parameters requiring critical items or materials documentation are specified on
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	Buyer's drawings, specifications, or PO's. These parameters shall be quantitatively documented in detail, and shall be positively traceable to the materials, parts, or services supplied against this Buyer's PO. Design or process changes shall not be made without written authorization from Buyer. In the interest of air safety, and if/when required by Buyer, the Seller shall assist in the analysis of materials that are involved in accident investigations. Strict compliance is mandatory.
CODE M2	PROCUREMENT OF AIRWORTHINESS/PRODUCT SAFETY CRITICAL, OR FLIGHT SAFETY CRITICAL ITEMS OR MATERIALS – A copy of the quantitative data shall be supplied with the material for each shipment. Strict compliance is mandatory.
CODE M3	FAA PRIORITY PART DESIGNATION – Parts, assemblies, or end equipment procured by this PO have been identified to the FAA as "Priority Parts", as defined in FAA Order 8120.2, Chapter 12, latest revision. These parts may receive special emphasis during FAA surveillance activities.

5.6 FIRST ARTICLE

CODE F1*	A FIRST ARTICLE CONFIGURATION INSPECTION (FACI) IS REQUIRED PRIOR TO DELIVERY OF THE FIRST PRODUCTION UNIT – This inspection will be accomplished with both Seller and Buyer participation on a unit acceptable and ready for shipment. Buyer Purchasing is to be notified at least 72 hours in advance of FACI readiness.
CODE F2*	A FAIR IN ACCORDANCE WITH SAE AS9102, AEROSPACE FIRST ARTICLE INSPECTION REQUIREMENT – A FAIR is required on one (1) unit minimum, randomly selected from the first production unit(s) for each part number. The FAIR must accompany the unit with shipment. The FAIR and associated item must be segregated in the event of shipment with an associated production lot. In addition, a FAIR is required if a period of 24 months has elapsed in production since the last purchase of the item, or if it is the first time an item is shipped. A delta FAIR is required in the event of changes in design, configuration and manufacturing location. The shipping documents and container must clearly identify the first article. Approval of the FAIR is required prior to acceptance of any production lots. Acceptance of the FAIR by ACSS does not automatically guarantee acceptance of future lots. In the event that the seller creates an internal Bill of Material (BOM) based on the BOM, a BOM comparison is a required FAI artifact.

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5.7 AGE LIFE MATERIAL

CODE A1*	AGE LIMIT: DATE OF MANUFACTURE – The items supplied under this PO are subject to age and/or temperature control. The cure date and/or temperature limitation must appear on each container. A temperature indicator (e.g., Thermodot, Blue Cube) must be included in the shipping container for frozen material. Frozen items must be shipped in a cold pack capable of sustaining the necessary temperature for 72 hours with an additional 24-hour buffer. If the material is frozen, a freeze sticker is required on the outside of the shipping container with the following information included: 1. Date and time contents are shipped from the Seller. 2. Freeze or refrigeration temperature requirements.
CODE A2*	AGE LIMIT: DATE OF MANUFACTURE – Age limited material supplied with a label other than from the original manufacturer will not extend the age limit beyond the original manufacture age limit.
CODE A3*	REMAINING LIFE OF MATERIAL - Materials shipped against this Purchase Order shall have not less than three quarters of the shelf life remaining at time of shipment. Materials or containers shall be marked with the date of manufacture. Where storage at other than room conditions would extend life in storage, recommended storage conditions shall be marked on the material or container.
CODE A4*	TWO YEAR LIMITED LIFE - Materials shipped against this Purchase Order shall have not less than two years shelf life remaining at time of shipment. Materials or containers shall be marked with the expiration date. Where storage at other than room conditions would extend life in storage, recommended storage conditions shall be marked on the material or container.
CODE A5*	Age of Electrical Components - All electronic components, with the exception of aluminum electrolytic capacitors, shall be from lots manufactured no more than five (5) years from the date ordered. Exceptions to this must be approved by Components Engineering.
CODE A6*	Age of Aluminum Electrolytic Capacitors - All aluminum electrolytic capacitors shall be from lots manufactured no more than five (5) years from the date ordered. Exceptions to this must be approved by Components Engineering.

5.8 INSPECTION/TEST DATA

CODE 10*	QUALITY CONFORMANCE INSPECTION DATA – One copy of quality conformance inspection data pertinent to the device inspection lot must be supplied by manufacturer with each shipment of these devices.
CODE 11*	CERTIFIED QUANTITATIVE TEST RESULTS – Certified copies of quantitative test results, obtained from all electrical or mechanical tests of each device covered by this PO, shall be made available on demand.
CODE 12*	REPORT REQUIREMENT – Materials supplied on this PO shall be accompanied by a certified report, signed by responsible inspection personnel, showing actual mechanical dimensions recorded from each individual component and shall be identified with each individual component.
CODE 13*	FINAL TEST STAMP REQUIREMENT – The following shall be stamped, in contrasting permanent ink, on each unit by the Seller before shipment. a. The letters F.T. indicating the successful completion of functional test.

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	<p>b. The date of F.T. completion.</p> <p>c. The test technician stamp of who completed the F.T. on the unit.</p> <p>d. The inspection stamp of who performed final inspection on the unit. Stamps shall be placed as near to the unit nameplate as possible.</p>
CODE 14*	RECORDS TRANSMITTAL REQUIREMENT – The manufacturing records for inspection, test, and assembly operations performed on the unit shall be included with each item shipped from the Seller's location. Final test and inspection acceptance of manufacturing records will be indicated by use of controlled stamp impressions. Original records will be returned to the Seller after acceptance of the unit.
CODE 15*	MANUFACTURING TEST STAMP REQUIREMENT – The Seller shall stamp the following, in contrasting permanent ink, on each unit: stamped letters (such as "ICT" or "E Test"), indicating successful completion of manufacturing test (e.g., ICT, Flying Probes, etc.). Stamp shall be placed in a location where it is assured that subsequent manufacturing steps will not conceal verification.
CODE 16	COUNTERFEIT PARTS RISK MITIGATION - In an effort to reduce the risk of counterfeit parts entering the Buyer's supply chain and finished products, the Seller shall comply with the Standard AS5553, Fraudulent/Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition, and the inspection and test requirements of Appendices A, B, C and D of this document. For non-electrical parts, the C of Cs shall include FAIR documentation compatible with AS9102, copies of all material certifications, inspection and test documentation required by the Buyer's drawing and/or PO requirements, and a statement of compliance with the quality codes called out on the Buyer's PO.
CODE 17*	MANUFACTURERS IDENTIFICATION MARKING - Manufacturer must mark parts produced with unique symbol or logo in an unobservable area of each piece. Marking will allow APD to distinguish manufacturer from other producers of part. Contact APD if unsure of location available for symbol or logo. Small parts may be bagged and tagged for marking purposes.
CODE 18	APD Paint Inspection - All surfaces need to meet the cosmetic inspection criteria defined in WI 0543Q4, unless inspection criteria is clearly defined on the drawing.
CODE 19	Test Report Requirements for Subcontractors and Vendors - The seller shall comply with APD document number 905-E1695-44 (latest revision).

5.9 CERTIFICATE OF CONFORMANCE

CODE 31	ON-DEMAND CERTIFICATE OF CONFORMANCE REQUIREMENT – The Seller is not required to supply a C of C with each shipment, but shall maintain the information necessary, including lot number and date codes, to create a C of C on demand, the same amount of time as in section 3.17.1, and indefinitely for Airworthiness/ Product Safety (AW/PS), Production-Critical components. The C of C must be provided to the Buyer or the Buyer's Quality Assurance Representative within 24 hours of this request.
CODE 32*	CERTIFIED STATEMENT OF CONFORMANCE – A statement certifying that material/parts and processes conform to applicable specifications shall accompany shipment and be enclosed with the packing slip. For C of C and signature requirements, see CERTIFICATION REQUIREMENTS in QA-SOP-004.

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CODE 33*	THE SELLER SHALL SUPPLY CERTIFICATES OF CONFORMANCE FOR ALL SPECIAL PROCESSES PERFORMED AS A PART OF THIS PO - "Special Processes" (e.g., painting, welding, brazing, heat-treating, plating, and nondestructive testing) performed as a part of this PO shall be performed by ACSS approved sources. A list of ACSS approved sources is available from the Buyer's Purchasing Department. For POs, one certificate may be issued to cover entire PO quantity and be supplied with initial shipment provided all parts are processed at the same time using the same process.
CODE 34*	C OF C REQUIREMENT – When material is supplied by Buyer, the Seller's C of C shall include a statement that the components (Buyer's part number and serial numbers) have been fabricated from material supplied by Buyer and shall include the Buyer Vendor Consignment Notice (VCN) number.
CODE 35*	C OF C REQUIREMENT – Raw material used in the fabrication of parts on this PO shall be traceable to a physical and chemical analysis by an independent laboratory. The tests shall conform to the current material specification lot acceptance tests. A copy of the actual analysis shall accompany each delivery. The Seller shall provide a C of C that includes a statement that the parts delivered have been fabricated from material certified by the independent laboratory and shall list the laboratory by name and report number.
CODE 36	(No Longer Used).
CODE 37*	C OF C REQUIREMENT – The Seller shall supply C of Cs for all "Special Processes" (e.g., painting, welding, brazing, heat treating, plating and nondestructive testing) performed as part of this PO. One certificate may be issued to cover the entire PO quantity and be supplied with the initial shipment provided that all parts are processed at the same time using the same process.
CODE 38*	C OF C REQUIREMENT – The Seller shall supply C of Cs that the printed wiring board being supplied conforms to the circuit width and spacing as defined by the master pattern artwork and the applicable specifications supplied by the Buyer. Initial lots shall be inspected 100%, with subsequent lots inspected utilizing a sample in accordance with MIL-STD-105, General Inspection, Level II and shall meet an AQL of 2.5% defective.
CODE 39*	FAA FORM 8130-3 – The Seller shall provide a FAA Form 8130-3 "Airworthiness Approval Tag" with each individual unit.
CODE 40*	C OF C REQUIREMENT – The Seller shall supply C of Cs for Parts/devices from the actual Original Equipment Manufacturer (OEM). A certified, signed statement that parts/devices conform to applicable specifications shall accompany shipment and be enclosed with packing slip.
CODE 41	C OF C REQUIREMENT - Applicable ONLY for an approved Contract Manufacturer with an approved quality management system. POs placed to contract manufacturers for materials are considered as conforming to Avionics quality management system flow down. The Buyer does not require a copy of the OEM's C of C be shipped with materials. But a copy of the OEM's C of C must be provided when requested by the Buyer.
CODE 42*	FAA FORM 8130-3 – The Seller shall provide FAA Form 8130-3 "Airworthiness Approval Tag" with each bulk lot shipment.
CODE 43*	C OF C REQUIREMENT - A certificate of compliance providing lot identity, customer order identity, test, methods and conditions of processing performed

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	shall be provided with all dash 883X material shipped. In addition, group A subgroup test summary attributes data shall be furnished.
CODE 44	Independent Distributor Parts Notification - The seller must have traceability and notify buyer of hardware (LRUs, CCAs, subassemblies, components) delivered with components purchased from an Independent Distributor (non-Original Component Manufacturers and/or Franchised Distributors) IAW section 4.39 of WI0631P1 Purchase Order Quality Terms and Condition Flow Down. Seller must include as part of the C of C with each shipment the following information for each individual hardware containing component(s) from an Independent Distributor: Part number, serial number and/or lot number.
CODE 45	Reasonableness and Quality Check Required - No Certification of Conformance is required. The Deliverable Report must state that the Reasonableness and Quality Check was performed in accordance with Federal Aviation Administration Advisory Circular AC 20-141B, Airworthiness and Operations Approval of Digital Flight Data Recorder Systems, or an alternative method to demonstrate compliance with the applicable Regulations for the continued airworthiness and operational approval for the digital flight data recorder system. Alternate methods may include those defined in the International Civil Aviation Organization (ICAO) Regulations or the European Safety Aviation Agency (EASA) Regulations.
CODE 46*	8130-3 Form Required - Supplier shall provide a signed 8130-3 form for EACH unit sent in the shipment. For New and Zero Hour equipment processed by a Production Facility, the 8130-3 form must be signed by an FAA approved DMIR. For Return to Service equipment processed by an FAA approved Repair Station, the 8130-3 form must be signed by the appropriate authorized individual. An 8130-3 form will be required for all parts that list a TSO, PMA, or spares/replacement components of a TSO'd or PMA'd item.
CODE 47*	Special Packaging - The subcontractor shall package all items with 3 M oxidation arrest paper in a sealed, airtight, clear plastic bag. If the size of the part is less than 3.3" X 3.3" or 10.0 square inches, the package may contain one strip and no more than 10 pieces per sealed bag. All other parts shall be individually packaged with one strip in each sealed bag. A desiccant packet is an acceptable alternate for the 3 M oxidation arrest paper inside of a sealed, airtight, clear plastic bag.

5.10 MATERIAL CERTIFICATION

CODE P1*	CERTIFIED TEST REPORTS – Certified actual, quantitative chemical and/or detailed mechanical test reports including a copy of the material producer's certificate for raw material shipped to Buyer and/or used against this PO must accompany shipments and be included with the packing slip. Reports must validate compliance to current raw material procurement specifications as required on the PO. For POs, one certification may be issued to cover entire PO quantity and be supplied with initial shipment provided the same certified material is used throughout the order.
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5.11 SPARES

CODE E1	SPARE PART PURCHASE – This PO is for an out of production spare part delivery requirement. Parts supplied must meet PO and current print requirements and be from an approved source. Seller must provide a C of C similar to industry standard form “Part or Material Certification Form” or FAA 8130-3 Airworthiness Approval tag or equivalent. Form is available from ACSS by request.
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5.12 WORKMANSHIP

CODE W1	ANSI/J-STD-001 – The Seller shall comply with all criteria of ANSI/J-STD-001 Solder Acceptability Standard.
CODE W2	IPC-A-610 – The Seller shall comply with all criteria of IPC-A-610 as stated in ACSS Mspec M7012784.
CODE W3	Workmanship - All materials supplied by the subcontractor shall meet the requirements of the latest revision of the APD Workmanship Standards Manual 010-10060-001. All flow down requirements shall apply.
CODE W4	<p>Printed Circuit Board (PCB) Requirements. The following clauses apply unless otherwise specified on the drawing.</p> <p>Single / Double Sided boards:</p> <ul style="list-style-type: none"> All boards will meet/exceed IPC- 6011/6012/6013 Class 3. All boards will have Matte finish green solder mask on both sides unless otherwise specified. All circuits must be completely covered with mask. There shall be no mask on pads or in component holes. Solder mask must be compatible with conformal coatings utilized by APD. All boards will be started with 1 oz. copper laminate unless otherwise specified. All boards will be legended on both sides per IPC-6011/6012/6013 with yellow ink, color no. 13655 per FED STD 595 unless otherwise specified. Legend ink is not permitted on pads or in component holes. All shipments of PWBs to APD will include a certification of compliance with the following statements: Quantity of Boards shipped, Purchase order boards are shipped against, Boards comply with IPC-6011/6012/6013 Class 3. The APD test coupon that is located on each artwork board layer which depicts a group of representative plated through holes and lines, shall be submitted with each production lot of boards produced. Each coupon shall be serialized to each production panel and each board made to the production lot produced for tracking purposes. If the artwork package does not have an APD coupon on it, the latest revision IPC coupon may be substituted. One coupon per lot shall be submitted for evaluation. Include samples of smallest pad/drilled hole size. A certification of electrical test, including parameters of the test performed shall be included with each applicable order.

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- Unless otherwise stated, all finished all Tooling hole tolerances will be ± 0.003 ". When holes are specified as tooling holes, pads may be removed from artwork.
- The PWB drawing revision level must be permanently marked (etched or legended) on the side of each printed circuit board near the PWB part number.
- Surface Mount PWBs via holes must be open. Preferred mask method utilizes 24 mil. aperture centered on via. Supplier may plug vias if previously authorized by APD. Via plugging must be stated on the certificate of compliance. All vias must be completely plugged and not create protrusions which interfere with solder pasting.
- If boards are nickel and gold plated or HASL plated, measurements of plating thickness must be submitted along with the lot's certificate of compliance.

Multilayer/Surface Mount Boards / Microvia

- All boards will meet/exceed IPC-6011/6012/6013 Class 3.
- All boards will receive Matte finish green solder mask on both sides unless otherwise specified. All circuits must be covered completely with mask. There shall be no mask on pads or in component holes. Solder mask must be compatible with conformal coatings utilized by APD.
- All boards will be started with 1 oz. copper laminate unless otherwise specified.
- All boards will be legended on both sides per IPC-6011/6012/6013 with yellow ink, color no. 13655 per FED-STD-595 unless otherwise specified. Legend ink is not permitted on pads or in component holes.
- A certification of electrical test, including parameters of the test performed, shall be included with each order.
- Kovar welding will not be allowed.
- All shipments of PWBs to APD will include a certification of compliance with the following statements: Quantity of boards shipped, Purchased order boards are shipped against, Boards comply with applicable IPC Standard and Class.
- All shipments of PWBs to APD will include coupons. The APD test coupon that is located on each artwork board layer which depicts a group of representative plated through holes and lines (connecting with all layers). Each coupon shall be serialized to each production panel produced and each board shall be serialized to each panel. One coupon for each panel of boards produced shall be submitted for evaluation. (If the artwork has no coupon, the latest revision IPC coupon may be substituted.) Include samples of smallest pad/drilled hole size.
- Unless otherwise stated, all finished all Tooling hole tolerances will be ± 0.003 ". When holes are specified as tooling holes, pads may be removed from artwork.
- The PWB drawing revision level must be permanently marked (etched or legended) on the side of each printed circuit board near the PWB part number.

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	<ul style="list-style-type: none"> • All multilayers require evidence of POSITIVE etchback at final X-section. Evidence of POSITIVE etchback is not required for ceramic CCA's Reference IPC-A-600. • Surface Mount PWBs via holes must be open. Preferred mask method utilizes 24 mil. aperture centered on via. Supplier may plug vias if previously authorized by APD. Via plugging must be stated on the certificate of compliance. All vias must be completely plugged and not create protrusions which interfere with solder pasting. • If boards are nickel and gold plated or HASL plated, measurements of plating thickness must be submitted along with the lot's certificate of compliance.
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5.13 SPEC/SOURCE CONTROL DRAWINGS

CODE 61	SOURCES OF SUPPLY – Only materials from ACSS AML 8000528-001 may be supplied on this PO, unless the buyer provides written authorization to deviate from the AML. Sources of Supply listed in the AML take precedence over Sources of Supply listed in the Drawing when in conflict. Note: <i>All other requirements of the PO and drawing MUST be met, unless the Buyer provides written authorization to deviate. Both documents can be accessed through the ACSS supplier website at: www.acsscusterservices.com/supplierservices.</i>
CODE 62	SOURCES OF SUPPLY FOR PRINTED CIRCUIT TECHNOLOGIES – Only Printed Wiring Technologies from approved “Sources of Supply” per the AML may be supplied on this PO, unless the Buyer provides written authorization to deviate from the AML. Sources of Supply listed in the AML take precedence over Sources of Supply in the Drawing when in conflict. Note: <i>All other requirements of the PO and drawing MUST be met, unless the Buyer provides written authorization to deviate. All three (3) documents can be accessed through the ACSS supplier website at: www.acsscusterservices.com.</i>
CODE 63	ADVANCE WRITTEN NOTICE OF ASSEMBLY HOUSE CHANGE – The Seller identified on the face of this PO shall provide the Buyer advanced written notice of any change in assembly house location prior to changing assembly house location.
CODE 64	ADVANCE WRITTEN NOTICE OF PRODUCT PROCESS CHANGE – The Seller identified on the face of this PO shall provide the Buyer advanced written notice of any product process build changes that impact form, fit, function, safety, or quality before the process changes are made.
CODE 65	PARTS LIST CONTROLLED ITEM – The revision listed on this PO is the Parts List (PL) document revision and is the controlling document for the item. The associated item drawing revision is the minimum drawing revision (MIN DWG REV) as listed on the PL document. Seller is responsible to manufacture to the PL revision listed on this PO and the minimum item drawing revision as specified on the PL.
CODE 66	IC SELLERS REGISTERED WITH STACK INTERNATIONAL – For integrated circuit sellers that are registered with Stack International (.com), integrated circuits delivered shall comply with the document: Stack 0001; General Requirements for Integrated Circuits Joint Company Standard.

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CODE 67	ADVANCE WRITTEN REQUEST FOR DESIGN OR PROCESS CHANGE – When Seller desires to change Buyer's design/drawing or change the Seller's build process that was used to make the product Buyer used previously to qualify this product, Seller must make request in writing. Buyer's written agreement response is required before proceeding with the change.
CODE 68	ADVANCE WRITTEN NOTICE OF DESIGN HOUSE CHANGE – The Seller identified on the face of this PO shall provide the Buyer advanced written notice of any change in design house location prior to changing location.
CODE 69	APPROVED INDUSTRY STANDARD LIST – The Approved Industry Standard List (AISL) defines the approved revisions of industry standards called out in ACSS documentation. If a drawing requires a standard not listed in the AISL, the supplier must use the latest release of that standard and contact ACSS to add the standard to the AISL. Note: All other requirements of the PO and drawing MUST be met, unless the Buyer provides written authorization to deviate. The document can be accessed through the ACSS supplier website at: http://supplierservices.acss.com .
CODE 70	SELLERS NON-CONFORMING MATERIAL- Seller's non-conforming material shall be submitted to the buyer on an NCMR (or equivalent), buyer shall review the non-conformance, disposition, sign, and return the NCMR back to the seller. <ul style="list-style-type: none"> • Buyer's quality/manufacturing engineers shall be the authority for the seller's NCMR sign off. • The buyer's hardware engineer's involvement and signature shall be required for DVA dispositions.
CODE 71	Drawings for Purchase Orders - The drawings required for this purchase order have been reviewed for associated APD specifications and/or drawings.
CODE 72	APD Contract Manufacturing Specification 0631Q - Supplier shall conform to the Contract Manufacturing Specification for APD assemblies, 0631Q (latest revision).
CODE 73	APD requirements for Industry Specifications - Supplier shall conform with the latest revision of all Industry Specifications noted on APD drawings, contracts, or purchase orders (i.e., IPC, ANSI, MIL-STD, etc.). Latest revision is defined as the revision level at the time of purchase order acceptance.
CODE 74	APD Design Specifications 905-E1721-07 and 905-E1741-07 - Supplier shall conform with the requirements of APD Design Specifications 905-E1721-07 (latest revision), or 905-E1741-07 (latest revision), whichever is applicable.
CODE 75	APD Paint Specification 21412 - Supplier shall conform with the requirements of APD specification 21412 (latest revision). All manufactured parts or assemblies that receive organic coatings must have the coatings applied and meet the inspection requirements of this specification.
CODE 76	Fabricated Parts - All APD drawings for fabricated parts comply with ASME Y 14.5 unless otherwise specified on the individual drawing.
CODE 77	Documentation - Documentation for any engineering change, modification, and/or discrepant material (MRB) shall be supplied with shipment in order to allow inspection of items at Buyer's facility.

5.14 SAMPLES (COUPONS)

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CODE B1*	PROCESS COUPON REQUIREMENT – Process coupons of the material used for fabrication, which have accompanied the components through the processes, shall be delivered with the finished components. Coupons shall be large enough for analysis and shall be identified (preferably stamped) with the finished component part number, serial number (as applicable) and related process. See Paragraph 5.16 for definition of processes. Coupons shall be supplied for each component serial or lot of material, as appropriate, and for each process performed on this contract, unless limited by the PO.
CODE B2*	RAW MATERIAL COUPON REQUIREMENT – Raw material coupon (large enough for analysis) of the material used for fabrication shall be delivered with each finished component. Coupon shall be identified (preferably stamped) with finished component part number and serial number. When raw material can be certified as being identical (from the same lot) only one coupon needs to be supplied per shipment – when authorized by Buyer.
CODE B3*	COUPON REQUIREMENT – Each panel shall have at least one corresponding serialized coupon that shall be submitted to Buyer with the order. The coupon shall be serialized in such a manner as to be identifiable with the boards from the same panel. If shown on the master drawing, one coupon of the flex only portion from each rigid-flex panel shall also be supplied. Coupons shall not be packaged in the same bag as the board but may be grouped in a single bag. When supplied, coupons that were used for Quality Control Inspection (QCI) testing shall be appropriately identified.
CODE B4*	TEFLON PRINTED WIRING BOARD CONFORMANCE TEST COUPON REQUIREMENTS - The Seller shall perform, or have performed by an ACSS approved third party, inspection of cross sectioning of corresponding coupons for independent verification. Inspections shall be performed at 50 to 100X with 200x used for referee verification. Referee cross sections can be inspected for acceptance of rejected panels.
CODE B5*	Lot Test Coupon - A test coupon identifiable to the lot of material supplied shall be furnished.

5.15 SOURCE INSPECTION AND DELEGATION

CODE S1	RIGHT OF ENTRY AND REVIEW REQUIREMENT - During performance on this PO, Seller quality control or inspection system and manufacturing processes are subject to review, verification and analysis by authorized Government representatives. Government inspection or release of product prior to shipment is not required unless Seller is otherwise notified. Seller shall provide a copy of this PO to its Government representative upon Government request. The Customer or the Government has the right to inspect any or all of the work included in this PO at the Seller's plant.
CODE S2	GOVERNMENT SOURCE INSPECTION REQUIREMENT - Government inspection is required prior to shipment from Seller's plant. Upon receipt of this PO, Seller shall promptly notify the Government representative who normally services its plant so that appropriate planning can be accomplished for Government inspection. All work on this order is subject to inspection and test by the Government at any time and place. The Government quality representative who has been delegated quality assurance functions on this procurement shall be

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	notified immediately upon receipt of this PO. The Government representative shall also be notified 48 hours in advance of the time articles or materials are ready for inspection or test.
CODE S3	SOURCE INSPECTION REQUIREMENT - Buyer (and/or Buyer's Customer) Source Inspection may be required prior to shipment from Seller's plant. If Source Inspection is required, Seller shall notify Buyer's Purchasing Department 72 hours in advance of inspection need. If Buyer's customer requires Source Inspection, Buyer will notify Seller in writing. The Seller shall make available to the Buyer's (or Buyer's Customer) Quality Assurance Representative any necessary specifications, documents, facilities, and assistance. Source Inspection Report shall accompany material shipment.
CODE S4	SOURCE INSPECTION REQUIREMENT - Buyer (and/or Buyer's Customer) Source Inspection is required prior to shipment from your plant. Seller shall notify ACSS Purchasing Department 72 hours in advance of inspection need. If Buyer's customer requires Source Inspection, Buyer will notify Seller in writing. The Seller shall make available to the Buyer's (or Buyer's Customer) Quality Representative any necessary specifications, documents, facilities, and assistance. Source Inspection Report shall accompany material shipment.
CODE S5	DELEGATION OF INSPECTION AUTHORITY - The Buyer hereby delegates to the Seller the authority to perform all in-process inspections and final acceptance inspection for the product described in the PO. The Seller shall maintain records for such and make them available to the Buyer upon request. Seller shall not delegate to sub-tier suppliers without prior approval by the Buyer. Sellers with this delegation authority are subject to FAA/ACSS-customer surveillance.
CODE S6	DELEGATION OF DIRECT SHIP AUTHORITY - The Buyer hereby delegates to the Seller the authority to direct ship material to designated customers. Seller shall submit a C of C to the customer with the material and a copy to the Buyer. Sellers with the delegation authority are subject to FAA/ACSS-customer surveillance.

5.16 STATISTICAL PROCESS CONTROL

CODE P1	STATISTICAL QUALITY PLANS APPROVAL - Statistical Quality Control plans shall be approved by Buyer prior to use; 100-percent inspection/tests shall be used if approval has not been obtained.
CODE P2	Statistical Process Control and Key Characteristics - The seller shall define a methodology to determine product key characteristics and process key characteristics. Management of KCs and KPs shall be in accordance with AS9103A. Statistical Process Control (SPC) shall be used to monitor KCs and KPs, and evidence shall be presented when requested. If necessary, seller shall define actions plans and corrective actions to improve product and process variation.
CODE P3	STATISTICAL PROCESS CONTROL REQUIREMENT - Statistical Process Control shall be implemented and utilized by the Seller in the manufacture of all products identified on this PO.

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CODE P4	FLOWDOWN OF VARIATION REDUCTION PROCESS - Buyer's part number requires flow down of Variation Reduction Process (reference CODE P2) requirements to sub-tier supplier.
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5.17 TOXIC SUBSTANCES

CODE T1	TOXIC SUBSTANCES CONTROL - All materials shipped under this PO must be in compliance with the Toxic Substances Control Act (TSCA). All applicable rules and orders there under, including but not limited to, that each chemical that is part of, or contained within such goods, is listed on the TSCA Inventory of Chemical Substances.
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5.18 LOT DATA

CODE L1*	SAME LOT REQUIREMENT - All devices on this PO shall be from the same lot and bear the same lot identification code – unless authorized by Avionics.
CODE L2*	TRACEABILITY - Unique identification of individual product or batches is required. The Seller's system shall provide for: - identification to be maintained throughout the product life - all the products manufactured from the same batch of raw material or from the same manufacturing batch to be traced, as well as the destination of all products of the same batch - for an assembly, the identity of its components and those of the next higher assembly to be traced - for a given product, a sequential record of its production to be retrieved.
CODE L3*	SUPPLIED SERIAL NUMBERS -This part requires APD issued serial numbers. If no serial numbers were supplied with this order, contact APD procurement.
CODE L4*	CCA Serialization Requirements - The seller shall identify all Circuit Card Assemblies with a globally unique serial number IAW WI 0801M3.
CODE L5*	Each item of material shall have lot identification. "Lot" is defined as product of a single facility, produced at essentially the same time by essentially the same process from essentially the same material.

5.19 DATE CODES

CODE G1*	DATE CODE REQUIREMENT - The Seller identified on this PO shall supply date codes and their associated quantities on the Seller's packing slip or the label of the ESD parts packaging.
CODE G2*	DATE CODE REQUIREMENT - The date codes marked on components supplied on this PO shall be no older than six (6) months at time of shipment.
CODE G3*	DATE CODE REQUIREMENT - The date codes marked on components supplied on this PO shall be no older than one (1) year at time of shipment.

5.20 LOT TRAVELER

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CODE H1*	LOT TRAVELER REQUIREMENT - A copy of the lot traveler, showing inspection points and Quality Control approval shall be submitted. If Buyer source inspection is invoked on the PO, the lot traveler shall be submitted for final source inspection and will not require shipment with the order.
CODE H2*	ITEM TRAVELER REQUIREMENT - A copy of the Seller's manufacturing process traveler showing inspection points and Quality Control approval shall be included for each item in the lot.

5.21 RISK MANAGEMENT

CODE R1	RISK MANAGEMENT REQUIREMENT - The Seller shall develop and execute a risk mitigation plan for risk factors identified by Buyer.
CODE R2	<p>APQP (Advanced Product Quality Planning) - In accordance with AS9145, Seller shall begin implementation of APQP at the time of order or prior to start of production. Seller shall submit an APQP PPAP package IAW AS9145, as defined by elements listed below, a minimum of five (5) days prior to shipping for review and approval. The APQP Package shall be submitted to the buyers' Supplier Quality Engineer or Purchasing Point of Contact and approved prior to the shipment of hardware. If an approved package is on file for this part number with no changes in location, process, design, or lapse in production of more than two (2) years, a resubmittal is not required. As defined by AS9102 guidelines, if changes or lapse in production has occurred, Seller shall submit a delta APQP package validating only those conditions, such as changes in location, process, or design, that have changed since the last package approval. Seller shall not ship parts from a production run for Avionics inspection prior to Avionics acceptance of the associated APQP Package.</p> <ul style="list-style-type: none"> • Design Failure Mode and Effect Analysis (DFMEA) (only applicable if seller has design authority) • Key Characteristics (KC) • Process Flowchart(s) • Process Failure Mode and Effects Analysis (PFMEA) • Control Plan(s) • Measurement Systems Analysis (Gage R&R) • First Article Inspection Report IAW AS9102, Form 3 (if not already required by contract)
CODE R3	Value Stream Mapping - The seller shall establish and maintain a Value Stream Map (VSM) for all products identified on the PO. At a minimum, the VSM should contain: physical flow of parts/assemblies, information flow, customer demand, production rate, resources required at each process step, available time, efficiency, lot size, lead time, and any other information deemed relevant for the VSM.
CODE R4	PFMEA and Risk Mitigation - The supplier will provide a PFMEA (Process Failure Mode and Effects Analysis) for all products identified on the PO, as well as a PFMEA for special processes and those processes where risk needs to be managed and mitigated. The supplier will provide a revised PFMEA whenever there is a major change in the process or every two years thereafter at the current revision of the product at that point in time. This should include a gap

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	analysis from when the original PFMEA was submitted by the supplier. The PFMEA is a living document which will provide the recommended and implemented actions to minimize risk to the customer if any of the key process inputs to the process fails, and for the ten failure modes with the highest RPN values. The PFMEA methodology and approach must be in accordance with the IAQG standard or its equivalent. Avionics quality engineering personnel, at their discretion, shall perform review and approval of new and updated PFMEAs.
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5.22 GLOBAL QUALITY CODES

CODE X1	ACSS CCAs shall have the following applicable codes: Q2, Q5, F2, 11, 16, 32, 35, 41, W1, W2, 61, 62, 63, 64, 67, 69, 70, S1, S3, P2, L2, R2, R3, and R4.
CODE X2	AP CCAs shall have the following applicable codes: Q2, Q5, C1, F2, 11, 16, 17, 32, 41, W1, W3, 63, 64, 67, 70, 72, 73, S1, S2, S3, P2, L2, L4, R2, R3, and R4.
CODE X3	ACSS PCBs shall have the following applicable codes: Q1, Q5, F2, 11, 16, 17, 32, 35, 41, W1, W4, 63, 64, 67, 70, 73, S1, S3, P2, and L2.
CODE X4	AP PCBs shall have the following applicable codes: Q1, Q5, C1, F2, 11, 16, 17, 32, 35, 41, W1, W4, 63, 64, 67, 70, 73, S1, S3, P2, and L2.
CODE X5	ACSS Mechanical parts shall have the following applicable codes: Q1, Q5, F2, 11, 16, 32, 35, 41, 61, 63, 64, 67, 69, 70, S1, S3, P2, and L2.
CODE X6	AP Mechanical parts shall have the following applicable codes: Q1, Q5, C1, F2, 11, 16, 17, 18, 32, 35, 41, 63, 64, 67, 70, 73, S1, S3, P2, and L2.

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6.0 APPENDICES

6.1 Appendix A: Independent Distributor Purchase Order Clause – Active Components & Hybrids

NOTE: Supplier must comply with Standard AS5553, Fraudulent/Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition for all parts and materials used in products delivered to Buyer. The following Appendices shall also apply based on commodity type.

Independent Distributor's procedures shall meet the requirements of IDEA-STD-1010 and AS6081. Quality Management System shall be certified to AS9120 and/or AS9100.

Inspections and tests shall be conducted in accordance with IDEA-STD-1010 and AS6081. IDEA-STD-1010 and the inspection and tests defined below shall take precedence over AS6081 for conflicts in inspection methodology and defect criteria. Manufacturer specifications and parameters shall be used for part requirements as applicable. Recorded evidence of all testing performed shall be included with each shipment. When available, OEM/OCM and/or AD Certificates of Conformance (C of Cs) shall also accompany each shipment.

The following inspections and tests are required for active components as applicable based on device package type.

- *Visual Microscopy Inspection of all parts in the order is required to a magnification level capable of identifying nonconformities related to part size. This includes visual inspection requirements for packaging.*
 - *General external visual inspection requirements shall be 100% of the lot*
 - *Sampling inspection of detailed external visual requirements, including mechanical dimension measurements, shall be as defined by the Seller's internal procedures based on industry standards as a guide*
- *X-Ray inspection (100% of the lot)*
- *XRF/RoHS (3 parts per lot date code)*
- *Solderability testing per IPC/EIA J-STD-002 (3 parts per lot date code), exception for Ball Grid Array (BGA) parts, Column Grid Array (CGA) parts, and gold plated terminations on parts*
- *Scanning Electron Microscopy (1 part per lot date code)*
- *Solvent Testing for Remarking (3 parts per lot date code)*
- *Solvent Testing for Resurfacing w/acetone, (same 3 parts per lot date code)*
- *Scrape testing - only applicable to parts that cannot be heated solvent tested (same 3 parts per lot date code)*
- *Solvent Testing for Resurfacing (If pass acetone test) - Heated Solvent testing w/ Dynasolve 750, (same 3 parts per lot date code)*
- *De-lid and Die Verification (3 parts per lot date code)*
- *Flash and programmable memory devices shall be verified (100%) for clean memory, not pre-programmed*

If suspect/counterfeit parts are furnished under this subcontract and are found in any of the goods delivered hereunder, such items will be impounded by Buyer. The Seller shall promptly replace such suspect/counterfeit parts with parts acceptable to the Buyer and the Seller shall be liable for all costs relating to the removal and replacement of said parts as specified in the subcontract requirements or Distributor's insurance policies. Buyer reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts. Seller shall report all occurrences of Counterfeit parts to GIDEP and ERAI.

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6.2 Appendix B: Independent Distributor Purchase Order Clause: Passive Components and Connectors

Independent Distributor procedures shall meet the requirements of IDEA-STD-1010 and AS6081. Quality Management System shall be certified to AS9120 and/or AS9100.

Inspections and tests shall be conducted in accordance with IDEA-STD-1010 and AS6081. IDEA-STD-1010 and the inspection and tests defined below shall take precedence over AS6081 for conflicts in inspection methodology and defect criteria. Manufacturer specifications and parameters shall be used for part requirements as applicable. Recorded evidence of all testing performed shall be included with each shipment. When available, OEM/OCM and/or AD Certificates of Conformance (C of Cs) shall also accompany each shipment.

The following inspections and tests are required for passive components and connectors as applicable based on device package type:

- *Visual Microscopy Inspection of all parts in the order is required to a magnification level capable of identifying nonconformities related to part size. This includes visual inspection requirements for packaging.*
 - *General external visual inspection requirements shall be 100% of the lot*
 - *Sampling inspection of detailed external visual requirements, including mechanical dimension measurements, shall be as defined by the Seller's internal procedures based on industry standards as a guide*
- *X-Ray inspection for non-glass diodes and tantalum capacitors (100% of the lot)*
- *XRF/RoHS (3 parts per lot date code)*
- *Solderability testing per IPC/EIA J-STD-002 (3 parts per lot date code), exception for Ball Grid Array (BGA) parts, Column Grid Array (CGA) parts, and gold plated terminations on parts*
- *Scanning Electron Microscopy (1 part per lot date code)*
- *Solvent Testing for Remarking (3 parts per lot date code)*
- *Solvent Testing for Resurfacing w/acetone, (same 3 parts per lot date code)*
- *Scrape testing - only applicable to parts that cannot be heated solvent tested (same 3 parts per lot date code)*
- *Solvent Testing for Resurfacing (If pass acetone test) - Heated Solvent testing w/ Dynasolve 750, (same 3 parts per lot date code)*

All electrical test reports shall contain a read/record data table showing the measured values of each device tested. Electrical test shall be performed after parts have passed the inspection and tests listed above. Sample value measurements required per ANSI/ASQ Z1.4 at ambient temperature, 1% AQL level II. Component value tests are defined in the following chart:

a. COMPONENT	b. TEST
a. Resistors	b. DC resistance
c. Capacitors	d. Capacitance
e. Inductors	f. Inductance
g. Transformers (open framed/wiring)	h. Winding-to-winding isolation, winding continuity, winding inductance, turns or voltage ratio

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i. Connectors	j. Continuity on a 1% AQL sample of pins/connections
k. Relays	l. Contact and coil resistance

If suspect/counterfeit parts are furnished under this subcontract and are found in any of the goods delivered hereunder, such items will be impounded by Buyer. The Seller shall promptly replace such suspect/counterfeit parts with parts acceptable to the Buyer and the Seller shall be liable for all costs relating to the removal and replacement of said parts as specified in the subcontract requirements or Distributor's insurance policies. Buyer reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts.

Seller shall report all occurrences of Counterfeit parts to GIDEP and ERAI.

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6.3 Appendix C: Independent Distributor Purchase Order Clause – COTS Assemblies

Independent Distributor procedures shall meet the requirements of IDEA-STD-1010 and AS6081. Quality Management System shall be certified to AS9120 and/or AS9100.

Manufacturer specifications and parameters shall be used for part requirements as applicable. Recorded evidence of all testing performed shall be included with each shipment. When available, OEM/OCM and/or AD Certificates of Conformance (C of Cs) shall also accompany each shipment.

The following inspections and tests are required for general COTS assemblies, hard drives, network equipment and peripheral cards:

General COTS Assemblies

- *Packaging inspection (part number, evidence of tampering, etc.)*
- *Mechanical dimensions (3 parts minimum per lot)*
- *Visual Inspection (100%) for indications of prior usage/refurbishment/counterfeiting including damage to:*
 - *Components visible on circuit cards when applicable*
 - *Interface connector(s)/contact(s)*
 - *Crimped, cut, spliced, pinched, and/or broken wire(s) where applicable*
- *Manufacturer label bar code information verification*

Hard Drives

- *Packaging inspection (part number, evidence of tampering, etc.)*
- *Mechanical dimensions (3 parts minimum per lot)*
- *Visual Inspection (100%) for indications of prior usage/refurbishment/counterfeiting including damage to:*
 - *Components visible on circuit cards when applicable*
 - *Interface connector(s)/contact(s)*
 - *Casing*
- *Manufacturer label bar code information verification*
- *100% Power on test*
- *100% Read/write benchmark*
- *100% Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.) data pull (when applicable)*
 - *Verification of serial number*
 - *Total power on hours*
- *Serial numbers recorded*

Network Equipment

- *Packaging inspection (part number, evidence of tampering, etc.)*

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- Mechanical dimensions (3 parts minimum per lot)
- Visual Inspection (100%) for indications of prior usage/refurbishment/counterfeiting including damage to:
 - Components visible on circuit cards when applicable
 - Interface connector(s)/contact(s)
 - Casing
- Manufacturer label bar code information verification
- 100% Power on test
- 100% Test RJ-45 ports (when applicable)
- Serial numbers recorded

Peripheral Cards


- Packaging inspection (part number, evidence of tampering, etc.)
- Mechanical dimensions (3 parts minimum per lot)
- Visual Inspection (100%) for indications of prior usage/refurbishment/counterfeiting including damage to:
 - Components visible on circuit cards when applicable
 - Interface connector(s)/contact(s)
- Manufacturer label bar code information verification

If suspect/counterfeit parts are furnished under this subcontract and are found in any of the goods delivered hereunder, such items will be impounded by Buyer. The Seller shall promptly replace such suspect/counterfeit parts with parts acceptable to the Buyer and the Seller shall be liable for all costs relating to the removal and replacement of said parts as specified in the subcontract requirements or Distributor's insurance policies. Buyer reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts.

Seller shall report all occurrences of Counterfeit parts to GIDEP and ERAI.

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6.4 Appendix D: Test Lab Purchase Order Clause – Mechanical Parts and Materials

Manufacturer specifications and parameters shall be used as applicable for part and material requirements. Recorded evidence of all testing performed shall be included with each shipment.

The following inspections and tests are required for mechanical parts and materials by an accredited third party testing facility:

- *Packaging inspection (part number, evidence of tampering, etc.)*
- *Part/Packaging marking inspection for evidence of remarking or alterations (part number, mfg. name, trademark or logo, lot or date code, grade, etc.) - sample of 3 pieces per lot for part markings.*
- *Mechanical parts external visual inspection (100%) for damage, wear, contamination, or use.*
- *Mechanical parts dimensional inspection – selected critical dimensions shall be verified per manufacturer specifications on a sample of 3 pieces per lot.*
- *Plating Verification (e.g., XRF) - sample of 3 pieces per lot.*
- *Base material verification (certification of composition/chemical analysis, heat treatment, hardness testing, tensile strength, torque testing, magnetic particle, etc. as applicable per material specification) - sample of 1 piece per lot.*
- *Mechanical Item Test Verification (if required by the item specification) - sample of 1 piece per lot.*

Seller shall report all occurrences of Counterfeit parts to GIDEP and ERAI.

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6.5 Appendix E: List of QVR that require validation during Receiving Inspection

<u>FIRST ARTICLE</u>	<u>AGE LIFE MATERIAL</u>	<u>INSPECTION/TEST DATA</u>	<u>CERTIFICATE OF CONFORMANCE</u>
CODE F1*	CODE A1*	CODE 10*	CODE 32*
CODE F2*	CODE A2*	CODE 11*	CODE 33*
	CODE A3*	CODE 12*	CODE 34*
	CODE A4*	CODE 13*	CODE 35*
	CODE A5*	CODE 14*	CODE 37*
	CODE A6*	CODE 15*	CODE 38*
		CODE 17*	CODE 39*
			CODE 40*
			CODE 42*
			CODE 43*
			CODE 46*
			CODE 47*
<u>MATERIAL CERTIFICATION</u>	<u>SAMPLES (COUPONS)</u>	<u>LOT DATA</u>	<u>DATA CODES</u>
CODE P1*	CODE B1*	CODE L1*	CODE G1*
	CODE B2*	CODE L2*	CODE G2*
	CODE B3*	CODE L3*	CODE G3*
	CODE B4*	CODE L4*	
	CODE B5*	CODE L5*	
<u>LOT TRAVELER</u>			
CODE H1*			
CODE H2*			

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REVISION HISTORY

Revision 1.0	Summary of change: Original issue. This document supersedes, and subsequently obsoletes, INF-14.1-2. Date: 20-FEB-23 Authored by: Chris Toth, Quality Engineering Lead
Revision 2.0	Summary of change: Re-numbered codes to a two-digit format to accommodate SAP limitations. Date: 25-JUL-23 Revised by: Wolfgang Niesing, Director of Quality
Revision 3.0	Summary of change: Section 5.0 and 5.1 updated. "Any VQR listed in 5.0 with an * after the code is considered a VQR that requires validation during Receiving Inspection." Appendix E was created. Date: 12-NOV-24 Revised by: Paolo Messina, Quality Manager
Revision 4.0	Summary of change: Update CODE 11 so that test results "shall be made available on demand" instead of "shall accompany each shipment" Date: 19-FEB-25 Revised by: Chris Toth, Supplier Quality Engineer
Revision 5.0	Summary of change: Add 5.22 Global quality codes. Update formatting. Date: 27- MAR-2025 Revised by: Chris Toth, Supplier Quality Engineer
Revision 6.0	Summary of change: Full review of this document to eliminate all the L3H references as well as updating the global quality code requirements. Update Approvers. Date: 14-APRIL-2025 Revised by: Chris Toth, Supplier Quality Engineer

APPROVALS



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6.0.docx

Approvers (2)

Level 1 (2)	
✓ Approved 4/8/2025 3:45 PM ET	 Brown, Jimbo (US) - (Acron Aviation) Manager, Quality Mgmt
✓ Approved 4/11/2025 12:24 PM ET	 Niesing, Wolfgang (US) - (Acron Aviation) Director, Quality Mgmt 616/285-4245

END OF DOCUMENT

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