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THIS INFORMATION/EQUIPMENT IS EAR CONTROLLED

THIS INFORMATION/EQUIPMENT IS CONTROLLED BY THE U.S. DEPARTMENT OF COMMERCE EXPORT ADMINISTRATION REGULATIONS 15 CFR 730-774, ECCN EAR99. EXPORT OR DISCLOSURE TO FOREIGN PERSONS MAY VIOLATE U.S. FEDERAL REGULATIONS.

These Supplier Quality Assurance (QA) Provisions establish requirements for a Supplier's quality program. They pertain to the inspections and tests necessary to substantiate product conformance to drawings, specifications and any other Purchase Order (PO) requirements. The section labeled GENERAL REQUIREMENTS is applicable to **each** Purchase Order. The COMMODITY REQUIREMENTS section is applicable only to the specific commodity being furnished. The SPECIAL REQUIREMENTS section is applicable only if specifically required by the L3Harris Request for Quote (RFQ), PO or Statement of Work (SOW). To the extent of any inconsistency between the PO and these QA Provisions or other documentation; the following hierarchy shall be in effect:

DOCUMENT HIERARCHY

1. Purchase Order
2. Authorized Change
3. Subcontract
4. Statement of Work
5. AML information via Agile
6. L3Harris Drawing (Source control Drawing (SOCD), Specification control Drawing (SCD), etc.)
7. Military specification
8. General/Manufacturer's technical specification
9. QA-560-01

AUTHORIZED CHANGE HIERARCHY

1. Waiver/Deviation via Supplier Support Request (SSR)
2. Material Review Board
3. Engineering Change Order (ECO)
4. Rejection and Disposition Notice (RDN)


NOTE: VERBAL CHANGES ARE NEVER AUTHORIZED

The L3Harris buyer, who provides the RFQ, PO or SOW, is the primary point of contact for any issue or question regarding L3Harris specification (including this document) or the material on order. L3Harris Supplier Quality Assurance may provide information, clarification or direction as necessary. Copies of any of the referenced L3Harris documentation can be obtained upon request from the buyer.

GENERAL REQUIREMENTS (Applicable to All PO's)

Supplier Responsibilities:

You are required to maintain a quality program that assures that all supplies and services furnished to L3Harris conform to contractual requirements. You are to perform, or require your sub-tier suppliers to perform, all inspections and tests necessary to substantiate product conformance to all drawings, specifications and PO requirements. Your quality program shall be documented and available for review by L3Harris throughout the life of the PO.

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SPECIFICATION PERFORMANCE ASSURANCE - NOTIFICATION OF CHANGES IN SUPPLIER'S FACILITY/FACILITIES LOCATION

Supplier agrees to notify L3Harris immediately in writing via Supplier Support Request form (SSR), or for electronic components a Product Change Notification (PCN), should there be any change in the location of the Supplier's facility or facilities. In the event of any change in the location of the Supplier's facility or facilities, L3Harris, pursuant to this Article, reserves the right to request and receive first article samples for our evaluation before any material shipments are made to L3Harris. L3Harris also reserves the right to visit Suppliers facilities in order to independently validate Supplier's process and quality controls. The Supplier also agrees to flow down the substance of this clause to its Suppliers.

SPECIFICATION PERFORMANCE ASSURANCE – NOTIFICATION OF CHANGES IN SUPPLIER'S PROCESS: MACHINING, FINISHING, FABRICATION, MANUFACTURING, ASSEMBLY AND/OR TEST METHOD

Supplier agrees to notify L3Harris immediately in writing via SSR should there be any change in the Supplier's process, processes and/or test methods used to produce, fabricate, machine, finish, manufacture, assemble, test, mark, package and label any and all articles, materials, parts or work, whether to L3Harris' documentation or to Supplier's documentation, and provided to L3Harris by the Supplier under this order. In the event of a process change, L3Harris, pursuant to this Article, reserves the right to request and receive first article samples for our evaluation before any material shipments impacted by process change(s) are made to L3Harris. Any change in chemical compounds shall be communicated to L3Harris to determine if a chemical compatibility study is required. L3Harris also reserves the right to visit Suppliers facilities in order to independently validate Supplier's process and quality controls. The Supplier also agrees to flow down the substance of this clause to its Suppliers.

SPECIFICATION PERFORMANCE ASSURANCE – NOTIFICATION THAT NONCONFORMING, INCORRECT OR SUSPECT MATERIAL HAS BEEN DELIVERED / SHIPPED TO L3HARRIS


Supplier agrees to immediately provide notification once it's determined that either nonconforming, incorrect or suspect material has been delivered / shipped to L3Harris. Seller shall submit Supplier Support Request per L3Harris procedure MS-899 at earliest practicable moment upon discovery of suspect material. Supplier shall also notify L3Harris Buyer, Commodity Manager, or Supplier Quality Engineer via e-mail or telephone immediately upon discovery of suspect material. Supplier is responsible to obtain L3Harris' documented acknowledgement of their notification(s) to L3Harris regarding suspect material discovered in the supply chain. Supplier shall obtain L3Harris acknowledgement within 24 hrs. max after providing the notification

Quality Planning:

Your quality program shall provide for the review of L3Harris PO and documentation, including drawings, for stated and referenced quality requirements. Your program shall ensure that proper planning exists to satisfy those requirements.

Advanced Product Quality Planning:

All suppliers may be required to implement L3Harris PPAP (L3Harris Production Part Approval Process) to focus resources on upfront quality planning and the quantitative assessment of process capabilities as they relate to L3Harris design specifications. This requirement is controlled by documents PUR-008 L3Harris

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Production Part Approval Process (L3Harris PPAP) Guide, PUR-008-F1 L3Harris Production Part Approval Process (L3Harris PPAP) Workbook, and PUR-008-F2 L3Harris Process Approval Workbook, which are consistent with the AIAG (Automotive Industry Action Group) APQP (Advanced Product Quality Planning and Control Plan) and PPAP (Production Part Approval Process).

A complete L3Harris PPAP Package submittal will include:

- Critical to Quality (CTQ) characteristics
- Revision Control
- Process Flowchart(s)
- Failure Mode & Effects Analysis (FMEA)
- Control Plan(s)
- Measurement System Analysis (Gage R&R)
- First Article Inspection
- Short-Term Process Capability Analysis
- Long-Term Process Capability Analysis (SPC)
- Packaging Agreement

Existing suppliers to L3Harris may be required to submit a comprehensive plan for L3Harris PPAP implementation within an acceptable timeframe, as determined by the responsible Commodity Manager.

Source Inspection:

L3Harris, upon providing reasonable prior notice, reserves the right to source inspect, at the supplier's facility, any product being produced for this division. The source inspectors deployed may be L3Harris employees or sub-contractors working on L3Harris' behalf. Defects identified through the source inspection process will be captured in the L3Harris quality system and will affect the supplier's quality rating and performance scorecard.

Inspection and Testing Documentation:


Inspection and testing of materials, work in process and end items shall be described by clear and complete instructions. These instructions shall include acceptance and rejection criteria.

Records:

You and your sub-tier suppliers shall maintain records of all essential inspections and tests. These records should indicate what was observed, the number of observations, the number and type of deficiencies, the quantity accepted and rejected and the nature of any corrective action taken. Records shall also include material, process and finish certifications when applicable. Records are to be maintained for four years and made available to L3Harris upon request.

Corrective Action:

You and your sub-tier suppliers are to take prompt action to correct conditions that have or could result in the shipment of nonconforming material. You are required to investigate and respond promptly to requests from L3Harris for corrective action. In addition to identifying the defect's root cause, the corrective action shall include both reworking defective material and preventing the defect from recurring.

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Drawings, Documentation and Changes:

You shall have procedures, which assure that the latest applicable drawings, specifications and PO instructions, as well as authorized changes, are used to fabricate, inspect and test the material, which you supply, or use in the end item fabrication process. All changes in design or material, which affect form, fit or function, as defined by L3Harris documentation, must be approved by L3Harris via SSR prior to shipment from your plant.

Measuring and Test Equipment:

You shall acquire and maintain gauges and other inspection and test equipment to assure that material conforms to the PO. These devices shall be calibrated at established intervals, before they become inaccurate, against certified standards that have known relationships to national standards. You must maintain records of calibration for all measuring and test equipment. Reference ISO 9001:2015, ANSI/NCSL Z540.1, or MIL-STD-45662A (canceled).


Material Control:

The quality program shall assure that raw materials furnished to L3Harris or used in the fabrication of products conform to the applicable physical, chemical and other technical requirements. You shall maintain records, certifications or copies of test data showing compliance to L3Harris requirements. You are responsible for furnishing such data from your process or from your sub-tier suppliers upon request L3Harris. Electrostatic sensitive items supplied against this PO must be manufactured, packaged and handled under an established electrostatic discharge control program. Reference MIL-STD-1686B paragraphs 5.1 and 5.4 through 5.13.

COMPONENT PART AUTHENTICITY:

Seller's Risk Mitigation

- Seller shall deploy a Counterfeit Item risk mitigation process internally and with its sub tier suppliers. Seller's process shall be modeled after or exceed SAE AS6174, AS6081 and AS5553 recommendations and requirements.
 - Seller shall provide evidence of counterfeit item risk mitigation process implementation such as certifications by an accredited auditing organization and /or applicable supplier Quality Management System documentation.
- If Seller is a US or Canada based entity, Seller shall participate in the Government Industry Data Exchange Program (GIDEP) monitoring and acting on GIDEP reports which affect product delivered to the Buyer.
- Seller shall purchase material directly from Authorized Suppliers. Any deviation to this policy shall require prior approval from L3Harris. Seller is required to submit a Supplier Support Request per L3Harris procedure MS-899 for review and final disposition. Upon L3Harris request, Seller shall provide all documentation regarding the chain of custody of material back to the original manufacturer or an Authorized supplier.
- L3Harris reserves the right to require additional 3rd party testing and submission of test reports via Supplier Support Request per L3Harris procedure MS-899 to supplement evidence obtained by the seller to confirm authenticity of material.

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- If seller is an OEM, any materials approved by L3Harris for procurement from non-authorized suppliers shall not release the seller from any product warranty or service obligations as defined in the terms & conditions in effect at the time of the request.
- Seller shall flow down to their sub tier suppliers and subcontractors, at any level, these requirements.
- When requested by L3Harris, Seller shall provide OCM/OEM documentation that authenticates traceability and chain of custody of the affected items to the applicable OCM/OEM.
- Seller shall immediately notify L3Harris with the pertinent facts if Seller suspects items delivered in accordance with the L3Harris purchase order contain suspect or confirmed counterfeit items. Seller shall submit Supplier Support Request per L3Harris procedure at earliest practicable moment upon discovery of suspect material. Supplier shall also notify L3Harris Buyer, Commodity Manager, or Supplier Quality Engineer via e-mail or telephone immediately upon discovery of suspect material. Supplier is responsible to obtain documented L3Harris acknowledgement of supplier notification(s) regarding suspect material discovered in the supply chain. Supplier shall obtain L3Harris acknowledgement within 24 hrs. after providing the notification.
- Counterfeit parts are deemed to have no monetary value. Counterfeit material is considered to be non-conforming product and a Supplier Corrective Action Request (SCAR) will be issued to the seller. The US government has dictated through legislation NDAA 2012 section 818 that suspect counterfeit material shall not be reintroduced into the supply chain.

Definitions


Unless defined in a document with a higher order of precedence than this Quality Note the following definitions shall apply:

- “*Counterfeit Item*” is defined to include, but is not limited to, (i) an item that is an illegal or unauthorized copy or substitute of an Original Equipment Manufacturer (“OEM”) or Original Component Manufacturer (“OCM”) item; (ii) an item that does not contain the proper external or internal materials or components required by the OEM or OCM or that is not constructed in accordance with OEM or OCM design, but is represented as such; (iii) an item or component thereof that is used, refurbished or reclaimed but the Seller represents as being a new item; (iv) an item that has not successfully passed all OEM or OCM required testing, verification, screening and quality control but that Seller represents as having met or passed such requirements; or (v) an item with a label or other marking intended, or reasonably likely, to mislead a reasonable person into believing a non-OEM or OCM item is a genuine OEM or OCM item when it is not.
- “**Authorized Supplier**” is defined as a Franchised Distributor, OEM, OCM or After Market Manufacturer with whom the Original Manufacturer has a contractual agreement to stock, repackage, sell and distribute its product lines as defined in SAE AS6174, AS6081 and AS5553. Authorized Suppliers must offer the product for sale with full manufacturer flow-through warranty.

Nonconforming Material:

You shall maintain a positive system for controlling nonconforming material, including procedures for the identification, segregation and disposition of reworked or repaired material. Repair of nonconforming material shall be in accordance with procedures acceptable to L3Harris. All nonconforming material must be positively identified to prevent use, shipment and intermingling with good material. Nonconforming material should be held in a designated area. Any request for acceptance of nonconforming material shall be coordinated by the L3Harris Buyer.

L3Harris reserves the right to contract with a third-party inspection house to sort/rework Supplier’s defective

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material to maintain L3Harris production requirements. All costs associated with the sorting/rework will be the responsibility of the supplier. The Supplier agrees that any and all warranties provided for remain in full force and effect and said warranties shall not be deemed void should L3Harris or L3Harris' third party perform the aforementioned sort/rework. The supplier will be notified by L3Harris Quality Personnel prior to the sorting/rework that this activity is required and Supplier will have the opportunity to supply their own personnel to complete this activity within the timeframe specified by L3Harris.

In the event that non-conforming material is received from you, L3Harris may request that you complete a Supplier Corrective Action Request (SCAR) report. It is your responsibility to investigate the non-conformance, determine its root cause, and report your findings to the L3Harris buyer along with your corrective action taken.

Completed Item Inspection and Test:

The quality program shall assure that completed items are tested and inspected. Inspection status shall be known at all times. When all characteristics cannot be verified at final inspection or test, in-process verifications shall be utilized. If the product is reworked or repaired, any characteristics affected must be verified as conforming to requirements by test and/or inspection as appropriate. Repairs that are not totally compliant with the drawings and specifications are not permitted unless specifically authorized by the responsible L3Harris Buyer. All products successfully completing final inspection and test shall be positively controlled and identified as well as traceable to inspection and test records.

Marking, Packaging and Shipping:

Custom (L3Harris design) made items valued over \$25.00 each shall be permanently marked with Supplier Identification (not Cage Code) and date of manufacture when size and finish allow (do not stamp painted surfaces). Items too small to be marked shall have part number and date marked on the package.

For general packaging information see: Appendix A. For commodity specific packaging information see: COMMODITY REQUIREMENTS section.

Compliance to any additional packaging requirements specified on a drawing is required.

All international wooden shipping crates and pallets must meet the latest ISPM-15 specification (International Standard for Phytosanitary Measures Number 15). All domestic wooden shipping crates and pallets are strongly encouraged to meet the latest ISPM-15 specification (International Standard for Phytosanitary Measures Number 15).

All text markings whether on product or on packaging shall be legible in accordance with the following guidance:

Target - Class 1,2,3


- Markings legible when viewed without magnification. Markings are distinct, of uniform height, and of a color that contrasts with the background.

Acceptable - Class 1,2,3

- Marking legible but blurred.

Defect - Class 1,2,3

- Marking not legible.
- Any missing letter segments are considered a defect.

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Distributor Requirements:

Distributors must conform to applicable paragraphs of these requirements. They are required to purchase product from Authorized suppliers and to use quality considerations in the selection of suppliers. Distributors shall implement process controls which ensure L3Harris receives the part number ordered from approved manufacturers. They must ensure that material does not degrade in transit through their facility to L3Harris and take precautions to guard against physical and electrostatic damage. Distributors shall aid L3Harris with technical support and to obtain formal written corrective action when requested of the item's manufacturer upon request.

SPECIFICATION PERFORMANCE ASSURANCE - NOTIFICATION OF CHANGES IN DISTRIBUTOR'S SUPPLIER'S PROCESS

Distributor agrees to notify L3Harris in writing via SSR ninety (90) days prior to implementation of any change in the process, processes and/or test methods the Distributor's Suppliers uses to produce, fabricate, machine, finish, manufacturer, assemble, test, mark, package and label any and all articles, materials, parts or work, whether to L3Harris' documentation or to Distributor's Supplier's documentation, and provided to L3Harris by the Distributor under this order. In the event of a process change, L3Harris, under this Article, reserves the right to request and receive first article samples for our evaluation. L3Harris also reserves the right to visit Suppliers facilities in order to independently validate Supplier's process and quality controls. The Supplier also agrees to flow down the substance of this clause to its Suppliers.

COMMODITY REQUIREMENTS (Applicable to Specific Commodity Only)

TERMINATIONS, PRINTED WIRING BOARDS, COMPONENT LEADS AND WIRES may be solderability tested within 30 days of receipt, after eight hours of steam aging, to the solderability requirements of the L3Harris drawing. If no Solderability requirements are specified on the drawing, the testing will be performed to MIL-STD-202 Method 208, MIL-STD-883 Method 2003.6 or MIL-STD-750 Method 2026. Failure to meet these solderability requirements will be cause for rejection.

PRINTED WIRING BOARDS –PWB's are to be packaged in moisture barrier bags


- MVTR .005g/100 sq in/24 hrs. or less
- Puncture resistance of 15 lbs. minimum

Package shall contain maximum of ten (10) boards/panels per package if boards/panels are equal to or greater than 10 square inches. Package shall contain a maximum of fifty (50) boards per package if boards are less than 10 square inches. Each package shall contain a desiccant package and a humidity indicator (30%- 50%). Pinholes/rips/tears to the packaging are NOT acceptable. A slip-sheet should be placed between each board. All packages of boards must be labeled with the L3Harris p/n and qty.

The date code on PWB's shipped to L3Harris must be within 6 months from the date of manufacture. If boards have a date code older than 6 months from date of manufacture they require an SSR approval prior to shipment, otherwise they will be returned for replacement.

For each production lot, the supplier must complete the referenced tests and maintain on file, for a minimum period of four years (unless otherwise stated on the PO) from date of manufacture, a data package consisting of:

- Solderability testing per IPC-S-804, ANSI/J-STD-003, or equivalent.

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- Results of cleanliness test prior to solder mask application and after solder mask application. (2,000,000 Ohm-CM).
- Results of continuity/short testing.
- Results of Impedance Testing (when required). Impedance requirements are typically called out on the detail drawing stack up.
- Copper and dielectric thickness test results by cross-section method.

FLEXIBLE WIRING BOARDS- For bare flex, please follow the following requirement:

FWB's are to be packaged in moisture barrier bags

Package shall contain maximum of ten (10) flexes/panels per package if flexes/panels are equal to or greater than 10 square inches. Package shall contain a maximum of fifty (50) flexes/panels per package if flexes/panels are less than 10 square inches. Each package shall contain a desiccant package and a humidity indicator (30%- 50%). Pinholes/rips/tears to the packaging are NOT acceptable. A slip-sheet may be placed between each flex. All packages of flexes must be labeled with the L3Harris p/n and qty.

The date code on FWB's shipped to L3Harris must be within 6 months from the date of manufacture. If boards have a date code older than 6 months from date of manufacture they require an SSR approval prior to shipment, otherwise they will be returned for replacement.

For each production lot, the supplier must complete the referenced tests and maintain on file, for a minimum period of four years (unless otherwise stated on the PO) from date of manufacture, a data package consisting of:


- Solderability testing per IPC-S-804, ANSI/J-STD-003, or equivalent.
- If solder mask is used, Results of cleanliness test.
- Results of continuity/short testing.
- Results of Impedance Testing (when required). Impedance requirements are typically called out on the detail drawing stack up.
- Copper and dielectric thickness test results by cross-section method.

SHELF LIFE MATERIALS shall be marked with the expiration date on each individual container or a certificate furnished to include guarantee period of usable life, PO number and quantity covered by the certification. Product shall have 75% remaining shelf life from the initial date of certification when referenced to the receipt date at L3Harris.

ALL CHEMICALS OR HAZARDOUS MATERIAL shall include a Material Safety Data Sheet (MSDS) with each lot of material delivered, unless the supplier can confirm that the current MSDS is already on file at L3Harris.

CABLE ASSEMBLIES shall conform to the requirements of the current version of L3Harris cable specification 10052-9000. L3Harris cable specification 10052-9000 supersedes any and all references to **QC-3000** on cable drawings ONLY. The current revision of L3Harris cable specification 10052-9000 is the governing quality document on all existing cable drawings without a workmanship specification.

Kitting and Mechanical Assemblies shall conform to the current version of L3Harris specification MQC-322. All threaded junctions shall be tightened per industry or manufacturers' specified torque values. For any instances where a torque value is not specified, the vendor is to be ready to recommend torque value(s) and submit such recommendation(s) to L3Harris via the 'SSR' process for approval.

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ELECTRONIC COMPONENTS:

Electronic Component Part Procurement (supplemental):

All electronic components shall be procured from Authorized Suppliers to ensure only authentic parts from the Original Component Manufacturer are received. Any deviation to this policy requires prior approval from L3Harris and additional part validation per L3Harris specification 10075-3800 and test requirements per L3Harris specification 10075-3500. These requirements shall be noted on the L3Harris request for quote and purchase order documents. Suppliers are required to submit validation reports per L3Harris Supplier Support Request procedure 14-ENG-02.899 for L3Harris material disposition instructions prior to shipment.

Tape and Reel Requirements

All tape and reel components shall be packaged in a fashion so that they meet all requirements to the latest current EIA standards. (ANSI/EIA-481 [including -01 thru -03]): Embossed Carrier Taping of Surface Mount Components for Automatic Handling). This includes carrier tape leader length requirements unless otherwise specified on the PO.

Moisture Sensitive Requirements

All components defined as moisture sensitive per IPC/JEDEC Standard J-STD-033: Handling, Packing, Shipping and Use of Moisture/Reflow, sensitive Surface Mount Devices (latest current revision level) and/or defined as such by the Manufacturers Data Sheet, shall be packaged and labeled in accordance with the requirements of this specification.

Electro Static Discharge (ESD)

All Components specified being ESD sensitive by the Original Component Manufacturer datasheet, shall be packaged and handled in accordance with the latest current MIL-STD-2073-1 (Method 50 and 51): Standard Practice for Military Packaging and ANSI standard ANSI/ESD-S-20.20: Protection of Electrical and Electronic Parts, Assemblies, and Equipment.

Component Age Restrictions

The maximum age of parts supplied to L3Harris shall not exceed 6 years of age per the manufacturer’s date code. Where Manufacturer’s specifications state a shorter shelf life, it will take precedence to this requirement (example: silver finish is 1 year maximum). Use of parts exceeding than the maximum age requirements will require supplier submission of a Supplier Support Request and L3Harris approval prior to shipment.

RE-BALLING OF BGA’s: (Rework or conversion from Lead Free to Lead or Lead to Lead Free)


Re-balled BGA’s shall comply with 10075-3600 Re-Balled (Pb) Integrated Circuit Process Requirements or 10075-3650 Re-Balled (Pb Free) Integrated Circuit Process Requirements as appropriate.

FLEX ASSEMBLIES

Flex Assemblies shall be packaged and handled (at a minimum) in accordance with the most current MIL-STD-2073-1 (Method 50 and 51): Standard Practice for Military Packaging and ANSI standard ANSI/ESD-S-20.20: Protection of Electrical and Electronic Parts, Assemblies, and Equipment unless otherwise noted in drawing.

Flex assemblies should be placed in inner packaging that separates the assemblies to prevent damage, shifting of contents, and/or release of contents.

The table below provides suggested guidelines that should be considered when packaging a production flex assembly.

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Volume	Suggested Packaging Type	Suggested Material	Notes
Prototype	Individual	N/A	N/A
Low-Medium	Clamshell w/Foam Die Cuts	<u>Thermoform:</u> RPET, PET, PVC, HIPS <u>Foam:</u> Anti-Stat Poly-ethylene or Anti-Stat Polyurethane	<ul style="list-style-type: none"> Die-cuts should allow for minimal handling and easy removal of the flex assembly without strain of weaker joints. Thumb releases or increased hole sizing may be employed to achieve this result. Design shall be review by L3Harris before implementation.
Medium-High	Thermoformed Tray (w/ Anti-Stat Additive)	RPET, PET, PVC, HIPS	<ul style="list-style-type: none"> Design shall be reviewed by L3Harris before implementation.

If a packaging strategy is other than the aforementioned, design should be reviewed with Buyer prior to PO placement.

Please contact the Buyer and/or Stockroom Material Planning to determine standard pack quantities and suggested package dimensions

All deviations to these requirements must be approved by L3Harris via SSR prior to shipment.

PRINTED CIRCUIT BOARD ASSEMBLIES

Printed Circuit Board Assemblies shall be packaged and handled (at a minimum) in accordance with the most current MIL-STD-2073-1F (Method 50 and 51): Standard Practice for Military Packaging and ANSI standard ANSI/ESD-S-20.20: Protection of Electrical and Electronic Parts, Assemblies, and Equipment unless otherwise noted in drawing.


Printed Circuit Board Assemblies should be individually packaged to prevent damage and shifting of contents.

Please contact the Buyer and/or Stockroom Material Planning to determine standard pack quantities and suggested package dimensions.

All deviations must be approved by L3Harris via SSR prior to shipment.


SPECIAL REQUIREMENTS: (Applicable Only when Specifically Required by the PO)

- A. Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government representative who normally services your plant so that appropriate planning for Government inspection can be accomplished.
- B. On receipt of this order, promptly furnish a copy to the Government representative who normally services your plant or, if none, to the nearest Army, Navy, Air Force, or Defense Supply Agency inspection office. In the event the representative or office cannot be located, the L3Harris buyer should be notified immediately.
- C. Articles on this order must be manufactured under an organized quality program that satisfies the requirements of AQAP-2110. All requirements of this contract may be subject to GQA (Government Quality Assurance). You will be notified of any GQA activity to be performed. This quality program is subject to continuous evaluation, review and verification by L3Harris.
- D. Data must be provided showing that all equipment is capable of meeting specifications when subjected to the environmental extremes/requirements listed on the L3Harris drawing, RFQ, PO or SOW with shipment of the material.
- E. Proposed Factory/Quality Assurance Acceptance Test Procedures shall be submitted to L3Harris for approval, 30 days prior to conducting the tests.

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- F. Factory/Quality Assurance Acceptance Test Procedures and the actual test data recorded during acceptance testing shall be provided with each item/equipment delivered at the time of delivery of the equipment. One hundred percent (100%) of the items delivered shall be tested.
- G. A Certificate of Compliance shall be provided with each lot of delivered material. The C of C must be signed by a responsible company officer and state that all material is in full compliance with applicable drawings and specifications and shall include reference to the L3Harris PO number.
- H. Material supplied on this order shall meet the workmanship requirements of MIL-HDBK-454 requirement 9.
- I. Articles on this order must be processed using a Quality System registered to ISO 9001:2015. Send a copy of Registration Certificate.
- J. The items provided on the order must be calibrated to a procedure that is traceable to NIST. Send Calibration Certificate stating so with the item delivered.
- K. Suppliers FSCM (cage code) number must appear on each board. Test coupons and group A test data shall be included in each shipment.
- L. First Article Inspection Report (FAIR) is required for all first time purchases as specified on the Purchase Order
- M. The manufacturing lot or date code of critical components shall be traceable from the assembly level serial number. The lot code of critical components shall be traceable back from the production work order then the finished goods serial number. Critical components include but not limited to: PCBs, battery cells, molded plastic housings. **If required, additions, modifications, or clarifications to above listed items will be documented in SOW or L3Harris PPAP.
- N. The serial number of critical components shall be traceable from the assembly level serial number. Critical components include but not limited to: PCBs, serialized subassemblies, ** If required, additions, modifications, or clarifications to above listed items will be documented in SOW or L3Harris PPAP.

NOTE: THERE SHALL BE NO COSTS WHATSOEVER TO L3HARRIS FOR ANY OF THE ACTIONS OR ITEMS DESCRIBED ABOVE BY THIS DOCUMENT UNLESS SUCH COSTS ARE SPECIFICALLY DELINEATED AND DESCRIBED ON THE FACE OF THIS PO AS ACTUAL, PRICED LINE ITEMS.

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Appendix A

PACKAGING REQUIREMENTS


The following shall be adhered to for every part shipped by the supplier.

General:

- 1.1. Supplier shall apply the Standard Practice for Commercial Packaging per ASTM D3951, use best commercial practice and shall assure that proper methods of marking, packaging preservation and shipping are utilized to identify the item and prevent damage.
- 1.2. Supplier is responsible for ensuring packaging system will pass a pre-shipment qualification test (i.e. ISTA 3A or ASTM D4169). Testing documentation to be presented to L3Harris upon request.
- 1.3. Supplier shall verify that all required documentation is included in the package: L3Harris Part Number, L3Harris Part Number Barcode, Manufacturer Part Number, and L3Harris PO Number.
- 1.4. Please contact Buyer and/or Stockroom Material Planning to determine standard pack quantities (in the ERP (Enterprise Resource Planning) system.)
- 1.5. All deviations must be approved by L3Harris Package Engineer via SSR prior to shipment.
- 1.6. When required by contract, suppliers shall package all products as defined within a Supplier Packaging Agreement that was established as part of the L3Harris Production Part Approval Process (L3Harris PPAP). All material must be packaged in accordance with this agreement. It is the supplier's responsibility to ensure that each delivery be inspected and all Supplier Packaging Agreement requirements have been met prior to shipment.
- 1.7. Shipping containers shall be adequate for the type of load to be carried. Appropriate design and materials should be utilized to ensure packaged product will arrive into L3Harris intact and with packaging in acceptable condition. Unacceptable conditions can be defined, but not limited, to the following: damage or loss of product, product not contained within the packaging upon receipt, excessive package crushing or punctures due to insufficient board weight.
- 1.8. Specially designed product specific packaging should be used where applicable.
- 1.9. Cushioning and/or dunnage materials shall be applied as necessary to secure the packaged items from free movement. Dunnage / cushioning material should be easy to remove and dispose of.
- 1.10. Packaging material shall provide protection of the surfaces from moisture, dirt, or abrasive action.
- 1.11. Intermediate and over pack containers shall be free from obvious defects and shall be consolidated within shipping containers to the maximum extent possible.
- 1.12. Where consideration for safety of the contents and/or the container necessitates it not be stacked or tipped, the container shall be marked with "up" arrows and/or direct marking indicating special handling. Containers in which exceptionally delicate or fragile articles are packed shall be marked as such. These marks shall appear on all exposed surfaces of the container.
- 1.13. Appropriate considerations should be made for all packaging that will be in contact with ESD sensitive products, i.e. conductive or anti-static.
- 1.14. Packages are not to exceed 40 lbs. without prior L3Harris written approval.

Secondary / Tertiary Packaging:

- 1.1. Packaged product shall be sufficient in strength to support, without buckling, identical loaded cartons when stacked to a maximum of 96 in.

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Pallet Design:


- 1.1. All pallets and crates to be constructed using appropriate materials, fasteners, design and structural integrity to adequately support and protect the product within throughout its entire intended distribution cycle, including any known cross-docking.
- 1.2. All material to be structurally sound and free from defect. Wood materials to be free from the following: tar, grease, paint, excessive splits, nails raised above the deck surface, protruding from the side of the stringers, and free standing nails.
- 1.3. The supplier is responsible for part construction and performance in compliance with the requirements of this document and in accordance with industry best practices.
- 1.4. When deemed necessary, cushioned pallets and crating should be utilized and designed to adequately protect product.
- 1.5. When applicable, any bond separation should be a result of failure from bonded materials only, not bonding agent. All glue to have 100% glue coverage.
- 1.6. All nailed components to be securely attached in a manner to prevent separation.
- 1.7. All material to be in compliance with ISPM-15.
- 1.8. All stringers or blocks that provide clearance for pallet jack/fork truck tines to be securely and permanently attached to pallet base. No loosening or detaching from pallet base throughout intended distribution cycle is permissible.
- 1.9. All crate walls must be designed to be solid wall construction, rather than slotted, to allow the crate to be shipped internationally after arriving into L3Harris.
- 1.10. Skid-Mates are not permitted on any pallet or crate. Prior L3Harris Package Engineering approval is required for any exceptions.
- 1.11. All pallets and crates utilized to transport product from supplier to L3Harris, or from supplier directly to L3Harris customer, must be designed to accommodate a standard US pallet jack. Pallet jack requires minimum 3-1/2" vertical clearance for entry into pallet, so stringer or block height must be 3-1/2" to comply.
- 1.12. Pallets should accommodate four-way-entry whenever possible.

Pallet Configuration:

- 1.1. The tops of palletized boxes should be flat whenever possible.
- 1.2. If the top of the palletized box cannot be flat, additional stretch-wrap shall be applied over the top of the boxes such that the entire top surface has been wrapped.
- 1.3. Pallet height not to exceed 45 inches, without prior written approval of L3Harris.
- 1.4. No pallet overhang permitted without prior written approval of L3Harris.
- 1.5. Stretch wrap or banding must be sufficient to ensure load integrity from supplier to point of consumption at L3Harris.
 - 1.5.1. Banding shall be flush against the boxes to eliminate the risk of bands being cut during transit.
 - 1.5.2. Edge protectors shall be placed where bands come in contact with container edge.

Hazardous Materials:

- 1.1. Hazardous goods must be packaged and labeled to comply with all current hazardous materials package construction and marking regulations (including but not limited to: DOT 49 CFR 105-180,

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UN TDG SCOE, IMDG code, ICAO Doc 9284-AN/905, IATA DGR, etc.) at the time of shipment.

- 1.2 Regarding Lithium based batteries, all deliveries to L3Harris (Rochester Facility) are to be shipped via ground or vessel. When air cargo transport is identified on the L3Harris purchase order, IATA regulations must be followed - contact your L3Harris commodity manager and/or buyer for direction.

Labeling:

- 1.1. When required by L3Harris, all packaging shall conform to L3Harris QMS Document 10075-3300, Component and Packaging Barcode Guidelines.

Sustainability:

- 1.1 Materials shall be in-line with current industry standards around sustainability.
- 1.2 100% recyclable material should be used whenever possible.
- 1.3 A product shall never be shipped using peanuts, newspaper, or the like.

Appendix B

Packaging Guideline Examples

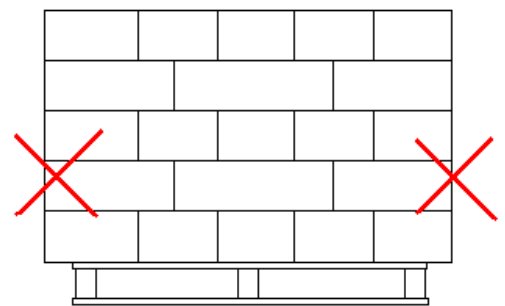
Palletization Examples:



Edge protectors and banding overhang



Stretch wrap over pallet load



Unacceptable Pallet