Q-1 First Article A 10/01/2021

When Q1 is listed on the purchase order, inspection and acceptance of the First Article by the Buyer's representative shall be required prior to the delivery the first lot of a new part. Additionally, if it has been 24 months or more since the last time the product was produced or if there has been a change to the form, fit or function of the product then a new First Article is required prior to shipment of the product.
The manufacturer/seller shall notify the Buyer of the opportunity to witness the performance of the First Article inspection Testing. Manufacturer / seller shall notify LP EPS™ buyer 7 days prior to planned First Article Inspection date to permit scheduling. LP EPS™ Witness will take place within 2 days from agreed schedule, or the First Article inspection may proceed without LP EPS™ participation. A formal First Article Inspection/Test Report shall be generated that documents the following: (Refer to AS9102 and ASME Y14.41 for guidance)

- 100% inspection verification of all drawing characteristics including Drawing number and revision
- Each characteristic shall be listed including the applicable drawing tolerance
- The corresponding actual measurement results shall be recorded
- The report shall be be reviewed and accepted by the Seller's authorized Quality Assurance representative.

A change in manufacturing source or inspection methods, location, tooling or materials as well as a change in numerical control program or impact from a natural disaster shall be cause for manufacturer/seller to notify LaunchPoint™ for determination of the need for a new First Article. Additionally, LaunchPoint™ may require the the performance of a new First Article as part of corrective action for a part with repetitive rejection history.

Q-2 Source Inspection A 10/01/2021

When Q2 is listed on the purchase order, Source Inspection is required prior to shipment of the product. The manufacturer/seller shall furnish at no cost to the buyer the necessary facilities, equipment and support to perform verification or validation of the inspections and tests required to demonstrate conformance to the purchase order or subcontract requirements. Manufacturer / seller shall notify LP EPS™ buyer 7 days prior to verification needed to permit scheduling. Inspection will take place within 2 days from agreed schedule, or source inspection requirement shall be waived with inspection acceptance upon receipt at LP EPS™ regardless of destination.

Q-3 Manufacturing Plan Submittal for Designated Parts A 10/01/2021

When a Manufacturing Plan is imposed by call out of this Quality Clause, the manufacturer is required to generate and submit a manufacturing plan that shall contain a process flow diagram which shall include sequential fabrication and process steps as well as inspection and test steps in the order required to fabricate hardware compliant to the imposed engineering requirement.

The Manufacturing Plan shall be submitted to LP EPS™ for review and approval 14 days prior to the start of production or as stated in the purchase order. Processing of hardware in advance of LP ESP™ approval is at the manufacturer's own risk and may result in rejection of hardware if changes are required based on inadequacies or omissions in processing, fabrication, inspection or test.

Upon approval of the plan, the manufacturer shall control all manufacturing, processing, testing and inspections as stated in the approved plan. No Deviations, including re-selection of manufacturer sub-tier processors, is permitted without LP EPS™ prior approval. Details of the Inspection and test operations shall include direct callout of the engineering criteria and tolerance callouts.

Q-4 Part Marking Requirements A 10/01/2021

Seller shall mark parts and assemblies manufactured to LP EPS design documentation. This marking shall be in compliance with Mil-Std-130 (current version at time of purchase order).

Unless otherwise stated in the engineering requirements, the external provider shall apply the following:

- LP EPS Engineering Drawing number
- Date of Manufacture, lot/date code or other control identifier number traceable to build documentation
- Manufacturer's CAGE Code or LP EPS assigned Vendor ID number as stated on the Purchase Order
- Serial Number(s) if imposed on LP EPS Engineering or invoked on Purchase Order.

Q-5 Raw Material Documentation A 10/01/2021

A. Shipment of materials, whether raw, semi-finished, or finished, shall be accompanied by a Certificate of Conformance from the seller stating at a minimum:

1. Material identification by specification number and material conditions,where applicable.
2. The raw material manufacturer's or mill's lot or batch number.
3. List the country of melt (for specialty metals per DFARS, 252.225-7014)
3. A statement of raw material conformance to applicable requirements.
4. The name and locations of the raw material manufacturer or mill.
5. Comply with DFARs Buy American Act

B. All the items in Q-5-A with the addition of actual chemical/physical test results that substantiate compliance with the applicable raw material and or specification requirements shall be provided.

Q-6 Control of Special Process A 10/01/2021

A. The External Provider is responsible to ensure that all special processes performed either by the provider or their sub-tier suppler on LaunchPoint™ designed machined/fabricated parts, including mechanical parts and printed wiring board assemblies shall meet the applicable process specifications imposed by design. Where specifications require dimensional results for validation, the supplier shall provide objective evidence that the process requirements are being met. Objective evidence may be in the form of XRF dimensions or plating alloy thickness measurements for each plating process layer. No PASS/FAIL general certificate will be acceptable for dimensional results. The use of cross sectioning is acceptable provided evidence of the homogeneous lot make up can be verified and that actual parts or coupons processed simultaneously with the the deliverable parts are used. Other verification test techniques may be submitted to LP EPS for approval prior to use for process validation.

The external provider shall notify LaunchPoint™ prior to any special process subtier source selection change. Sub-tier special process source suppliers must have an approved quality system approved by the supplier. Certifications required by the imposed special process specifications must be maintained and are subject to audit or periodic assessment by LaunchPoint™.

B. External Provider developed special processes shall be documented and controlled directly by the external provider. A certificate of conformance shall be provided that states conformance to the special process including the applicable control revision of the documented process.

The External Provider shall notify LaunchPoint™ prior to any change in the baseline special process being utilized in the performance of the special process on parts/materials under LP EPS purchase order. LaunchPoint™ has the right to terminate any remaining special process services based on non-acceptance of the proposed special process changes. Documentation of all changes in special process specifications by the external provider must be maintained and are subject to audit or periodic assessment by LaunchPoint™.

Q-7 Inspection / Test Data A 10/01/2021

When LaunchPoint™ engineering documentation or procurement documents require inspection / Test data to be recorded during performance of acceptance of the product, either a paper or electronic copy of the recorded data, showing evidence of the Seller's verification and acceptance of performance, shall accompany each shipment.

Data shall document the requirements of LP EPS engineering documentation or procurement document and, at a minimum, be identified with:

1. LP EPS Purchase Order / Subcontract number and change notice number.
2. Part Number
3. Lot numbers, serial numbers, or date codes of the items inspected / tested.
4. Drawing / specification and revision used.
5. Type of test performed.
6. Identification number of test equipment used.
7. Actuals readings/data shall be reported and shall directly tie to the item being verified. The inspection / test data sheet shall include the engineering characteristics and their tolerance.
8. Total quantity of items inspected/tested, quantity of items accepted and quantity of items rejected.
9. Any codes, keys, or other information necessary to interpret the Seller data shall be included.
10. When sampling is authorized, the Sampling Plan AQL, Sample size and Accept / Reject criteria shall be reported in the report.
11. When inspections/tests are performed which utilized control software, the seller shall maintain a system of revision control and shall state the applicable revision used. Provider shall maintain the control software revisions history for a period of not less than 7 years. LaunchPoint™ reserves the right to review and evaluate the revision history at any time.

Q-8 **Certificate of Conformance** **A** **10/01/2021**

External Providers shall provide a Certificate of Conformance for each separate shipment with the following minimum requirements:

- Identification or Logo and address
- Date
- LP EPS Purchase Order number and change number if applicable
- P.O. Line Item number
- Quantities
- Product traceability must include a unique identifier such as a serial number, manufacturing lot number, job number or work order number that is traceable to the manufacturer's build, testing and inspection records or traceable to Vendors procurement, as applicable
- Shelf Life material date of manufacture and date of expiration
- Part Number
- Part Revision (not applicable to COTS)
- Part description (Optional for COTS)
- Statement attesting to the conformance of the product to the PO or subcontract requirements. For COTS items, the statement of conformance to the manufacturer's product/material specification is acceptable.
- Name/Title and signature (electronic acceptable) of an appropriate authorizing representative
- The C of C may be incorporated into the packing slip.
- LP EPS authorized nonconformance document number when applicable.

Q-9 Quality Management System A 10/01/2021

A) Manufacturer - with Design Authority shall be AS 9100 or ISO 9001 Certified

B) Manufacturer - Build to Print ,mechanical, (LP EPS™ Design) shall be AS 9100 or ISO 9001 Certified

C) Manufacturer - Build to Print, Electrical and Electronic fabrication and assembly vendors shall be ISO9001 certified & IPC 600, IPC 6011 and IPC 6012 compliant. Solder Workmanship shall be in accordance with IPC-A-610 or J-STD_001 or equivalent approved by LaunchPoint EPS™. The manufacturer shall have a documented Counterfeit Prevention program in place that includes, training, procurement traceability of parts to the OEM/OCM,verification methods to detect counterfeit parts, monitoring of counterfeit parts reporting from external sources. Suspect or detected counterfeit parts shall be quarantined and reported to LP EPS™ and thru GIDEP or OASIS

D) Distributors - approved by the Manufacturer shall be AS 9100 or ISO 9001 or ISO 9120 Certified

E) Distributors shall be ISO 9001 or ISO 9120 Certified. The distributor shall have a documented Counterfeit Prevention program in place that includes, training, procurement traceability of parts to the OEM/OCM, verification methods to detect counterfeit parts, monitoring of counterfeit parts reporting from external sources. Suspect or detected counterfeit parts shall be quarantined and reported to LP EPS™ and thru GIDEP or OASIS.

F) Special Process Services shall be ISO 9001 or ISO 9003 Certified

G) Raw Material providers shall be ISO 9001 Certified (Metals and non-organics)

H) Shelf Life Material providers shall be ISO 9001 Certified or Quality Plan approved by LP EPS. All shipments to be include formal Certificate of Compliance.

I) Software providers shall be ISO 9001 Certified. AS9100/AS9006 certified preferred.

J) Providers of proprietary materials or services shall be ISO9001 compliant or provide a copy of the provider's quality plan or process verification plan for approval.

K) Manufacturer - Build to Print, Cable and Wire Harness fabrication and assembly vendors shall be ISO9001 certified & IPC /WHMA-A-620 or equivalent workmanship standard approved by LaunchPoint EPS™. The manufacturer shall have a documented Counterfeit Prevention program in place that includes, training, procurement traceability of parts to the OEM/OCM,verification methods to detect counterfeit parts, monitoring of counterfeit parts reporting from external sources. Suspect or detected counterfeit parts shall be quarantined and reported to LP EPS™ and thru GIDEP or OASIS.

Q-10 Handling and Packaging of Electro Static Devices A 10/01/2021

The Vendor shall maintain ESD controls during fabrication, handling and storage of parts and assemblies containing Electro Static Sensitive items pr ANSI-ESD-S20.20. Initial layer of packaging shall be ESD protective and shall include the appropriate ESD Warning symbol ESD marking is required on inner layer of protective packaging. ESD protective caps shall be used on equipment eternal connectors or contacts that connect to ESD parts and assemblies within the equipment.

NOTE: Any ESD components or assemblies received by Buyer that are not in an ESD protective package shall be subject to return to seller.

Q-11 Calibration Services — A 10/01/2021

Providers of Calibration Services shall be in accordance with ISO 17025 Certified or ANSI/NCSL Z540. A Certificate of Calibration or Certificate of Test shall be issued with each item that meets the requirements of the above standards including :

- As found results
- Final Results
- Acceptance criteria
- List of equipment used including calibration date(s)
- Traceability to the applicable national standards
- Unique certificate tracking number.

Q-12 Storage and Shelf Life Controlled Items — A 10/01/2021

The provider shall identify material and articles that have definite characteristics of quality degradation or drift with age and/or the environment. Where shelf life is either a specified requirement or is needed to ensure useful life performance, the provider shall identify the date of manufacture and date at which the useful life will be expended. For materials and articles where environmental storage conditions must be met to ensure the useful life, the provider shall state on the label the storage conditions, i.e. temperature, humidity, etc, required to achieve the useful life. The provider shall ship the materials such a manor as to ensure that these environmental conditions are maintained during during transit.
In no case shall the materials or articles be supplied with less than 75% of it's useful life remaining without Buyer written approval.

Q-13 Prohibited Material (Electrical, Electronic & Electromechanical Parts — A 10/01/2021

All constructions and finishes containing pure cadmium or pure zinc shall be prohibited.
Constructions and finishes containing pure tin shall be prohibited unless they contain a minimum of 3 weight percent alloying element(s), i.e. lead, silver etc.
Provider shall submit a certificate with each shipment stating "No Prohibited Materials are Present" in there deliverables. Statement of fact may be made/included within the body of the Packing Slip

Q-14 Counterfeit Parts Prevention, Detection & Mitigation A 11/19/2021

1. Vendor shall have a Counterfeit Parts Awareness training for vendor employees as appropriate.
2. Attempt to purchase of parts only from authorized distributors or the OEM to the greatest extent possible.
3. Maintain part traceability to the manufacturer or it's authorized distributor from acquisition to shipping.
4. Suspect and counterfeit parts are quarantined to prevent the inadvertent reintroduction of of such parts into the supply chain. They shall never be returned to the source.
5. Work with sub-tier vendors to investigate the identity and source of suspect and counterfeit parts.
6. Perform the appropriate level of inspection and testing for verification. Usually testing is not necessary when purchasing directly from the manufacturer or authorized distributors.
7. Vendor is encourage to participate in GIDEP (Government Industry Data Exchange Program) or ECIA (Electronic Components Industry Association).
8. Vendor must notify LaunchPoint EPS™, within 48 hours, whenever counterfeit parts are found or suspected and assist in the appropiate investigation.

Q-15 **Printed Circuit Board Assembly Alternate Component Selection & Approval** **A** **11/19/2021**

This Quality Clause documents the details of the process and rules by which the PCBA manufacturer may select & purchase components in case the components on the original LP EPS™ initial released BOM are unavailable due to shortages/stock issues,
and how the design and tracking documentation shall be updated as a result.

1. **Integrated circuits and Power Supplies**

LaunchPoint™ will have a number of "approved alternates" columns in the original BOM listing specific manufacturer part numbers for alternate ICs approved by the LP EPS designer. The PCBA manufacturer will notify the LP EPS designer if an alternate part is chosen and this part number will be documented on the manufacturers "approved" BOM.

2. **Passives**

   a. **Resistors**

   Designer will provide a list of alternate part numbers and/or a list of specifications for resistance, tolerance, power rating and footprint/package that the PCBA manufacturer may use to find any alternate part. This part number will then be documented/sent to the designer for approval, and the approval will be documented via the board manufacturer's issue tracker.

   b. **Capacitors**

   Designer will provide a list of alternate part numbers and/or a list of specifications for capacitance, tolerance, voltage, temperature coefficient, and package/footprint that the PCBA manufacturer may use to find any alternate part. This part number will then be documented/sent to the designer for approval, and the approval will be documented via the board manufacturer's issue tracker.

   c. **Inductors/Ferrites**

   Designer will provide a specific list of approved alternate parts that the manufacturer may choose from. Manufacturer will document which part was selected and notify the LP designer.

PCBA manufacturer will provide an invoice and updated BOM which shows the final set of components purchased for the assembly as soon as said invoice is received by PCBA manufacturer from approved component vendors. BOM must include component lot traceability.

Once invoice is received, LP EPS™ Designer will update and commit to version control of the design files with any specific alternate part number that was selected to be highlighted in the bill of materials file if already present in the "approved alternates" columns, or if a new alternate was approved based on specifications (passives), the Designer will add a new column with the new selected part listed as an approved alternate. For tracking purposes, a final invoice and BOM along with a PDF conversion of the PCBA manufacturer's DFM/issue tracking documentation will be saved along with design files for formal change incorporation.

Requests for retroactive changes to purchase orders primarily due to increases as required by alternate component selections (PCBA manufacturer will notify LP EPS™ in advance) may be made and documented on a case-by-case basis.

Any alternate component selection that requires a change in design files (i.e. package footprints, traces) **or** an alternate component selection that has different specifications than originally desired (i.e. wider tolerance) will require approval of an Engineering Change Request (ECR) and a review of any updated design files before being sent to the vendor in a purchase