

Template Number and Title:	Revision				
SQE010 – Purchase Order Quality Notes	J				
Purpose:					
Define quality requirements for externally provided processes, products, and services.					
Scope:					
Korry production purchase orders.					
Approvals					
Owner:					
Supplier Quality Engineering					
Major:					
Supplier Quality Manager, Purchasing Manager					
Significant:					
Supplier Quality Manager, Purchasing Manager					
Minor:					
Supplier Quality Engineer					

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Q1 Control of Quality

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q2 Report of Discrepancy

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q3 First Article Inspection & Key Characteristic Control

A First Article Inspection (FAI) shall be completed in accordance with AS9102 and submitted prior to shipment of parts to Korry. The supplier holding the contract / purchase order is responsible for assuring the completion of the FAI Report for all finished part characteristics, including those generated by sub-tier suppliers.

A Full or Partial First Article Inspection shall be performed for all or affected characteristics when any of the following occurs:

- a. First time build:
- b. Change in design;
- c. Change in manufacturing source, process, inspection method;
- d. Change in manufacturing location;
- e. Change in tooling or materials;
- f. Change in numerical control program or translation to another media;
- g. Natural or man-made event which may adversely affect manufacturing process:
- h. Lapse in production for two years or as specified by Korry.

Korry Electronics may request a complete FAI to be performed in lieu of a partial FAI at any time.

FAI reports shall be submitted via Net-Inspect (<u>www.net-inspect.com</u>) unless otherwise specified. The FAI must have "Korry Electronics Co. - Everett" selected as the customer, or the submitted First Article Inspection Report will be rejected. The supplier shall submit the First Article Inspection Report in Net-Inspect prior to shipping parts to Korry. Unless otherwise specified, Korry will review and approve FAI Report upon receipt of subject parts.

The first article samples are to be tagged or otherwise identified. Material certifications for any raw material used and certifications for all outside processes must also be submitted with FAI report. Drawings with Key Characteristics flagged shall be managed by the Seller in a process compliant with AS9103. Key Characteristics are identified by the following drawing symbol:

KEY

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Records of Key Characteristic control will be periodically reviewed by Korry Supplier Quality. Submission of records with the shipment may be required by additional note on the Korry Purchase Order.

Q4 Chemical and Physical Test Reports

Suppliers of custom formulated materials and chemicals shall include with each shipment one legible and reproducible copy of all chemical and physical test reports. The test report shall contain at a minimum:

- a. Reference to the applicable test procedure;
- b. Test data with evaluation against the requirement;
- c. Korry's Purchase Order number; and
- d. Signature and title of the authorized representative for the agency performing the test.

Note: Commercial (off-the-shelf) materials purchased to the OEM's part number are exempt.

Q5 Functional Test Reports

Suppliers who perform functional testing per Korry requirements shall include with each shipment one legible and reproducible copy of the functional test report. The test report shall contain at a minimum:

- a. Reference to the applicable test procedure;
- b. Test data with evaluation against the requirement;
- c. Traceability to the unique part that was evaluated; and
- d. Signature and title of the authorized representative for the agency performing the test.

Q6 Printed Circuit Boards

A potted micro-section compliant to IPC-6012 Class III requirements (unless otherwise specified on the drawing) must be retained for each production lot.

When the printed circuit boards are procured through an Electronics Manufacturing Service (EMS) provider; their procurement function shall ensure this flow-down is documented by contract or purchase order. The cross sections shall be retained by the by Printed Circuit Board Fabricator.

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Q7 Product Identification and Traceability

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q8 Certificate of Conformance Including Mil Spec Parts

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q8 Certificate of Conformance for Calibration Vendors

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q9 Preservation and Packaging - Basic

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q10 Right of Entry

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q11 Special Processes (NADCAP)

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q11 Special Processes (Non NADCAP)

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q12 FAA Contract Maintenance Providers

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q12A Non FAA Governed Contract Maintenance Providers

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

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Q13 Identification of Shelf Life

Korry Electronics Company purchase orders may be orders for shelf life sensitive materials. These parts will be identified in the part's extended description: "Shelf Life Req'd – refer to QA & purchasing regts Q13A" and represented by Q13 on the Korry contract / purchase order.

The supplier shall ensure shelf life sensitive materials have at least two-thirds of their shelf life remaining at the time of delivery. The material's expiration date shall be recorded on the Certificate of Conformance.

Refer to section 3.25 of Supplier Quality Manual (D55255) for additional delivery documentation requirements. This requirement also applies to any raw material that has been converted by the supplier (i.e. cut pressure sensitive adhesive).

Any exceptions to these requirement, requires the supplier to obtain prior approval in the form of a modified purchase order from Korry prior to shipment in accordance with section 3.2 of Supplier Quality Manual (D55255).

Note: many old extended descriptions call out Q-note Q13A or possibly Q13B. Interpret Q13A and B as Q13.

Q14 Certified Supplier

Items on this purchase order are subject to the requirements of the KORRY ELECTRONICS CO Dock to Stock Certified Supplier Program. Supply Agreement Certification requirements apply to this purchase order. Shipping documents shall show evidence of the shipment being a Dock to Stock Certified Supplier Shipment via the authorized dock to stock acceptance "star" stamp.

Note: the Seller is responsible for administering the star stamp usage at their site. The person applying the star stamp is certifying that the Seller's product conforms to Korry PO and technical requirements.

When conforming to Q3 (First Article Inspection), Seller will NOT use the KORRY ELECTRONICS CO Quality stamp on Certificate of Conformance, packing list, or any other provided documentation. KORRY ELECTRONICS CO Receiving Inspection shall be the sole authority for final approval.

Q15 Product Obsolescence Requirements

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

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Q16 Traceability (multi-level)

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q17 Contract Manufacturer Key Performance Indicators

The Seller shall:

- Have a documented process to assure components perform;
- Have a documented process to identify and record component replacements:
- Have a documented process to identify and correct component replacements that are indicative of replacement trends, equipment needing repair or other potential component problems; and
- Submit reports of component replacements and corrective actions to the buyer at least quarterly.

This data will be used at Korry to show compliance to our Electronic Components Management Plan (ECMP) and meet the requirements of TS 62239, IEC (shown here for reference only):

4.5.3 Plan owner in-house continuous monitoring

The plan owner shall have a process to assure the required performance of components prior to delivery of the equipment. This process includes various levels of processing, assembly and test of the equipment.

A process for identification, recovery and recording of component removals or replacements during in-house processing and testing shall be documented. Significant component replacement trends, equipment repair actions or a pattern of component replacements that are indicative of a potential component problem shall be investigated to determine the root cause. Appropriate corrective actions shall be conducted.

Q18 Preservation and Packaging for Electronics

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

Q19 Flowdown of Supplier Quality Requirements

Obsolete. Refer to Korry Supplier Quality Manual (D55255).

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Q20 Flowdown of Electronics Component Management Plan requirement

The Seller shall develop and comply with an electronic component management plan (ECMP) that meets the applicable requirements of TS 62239 (current revision). This quality note is considered satisfied if this supplier meets the requirements of D35524-001 Subcontractor Assembly Facility Requirements Flowdown per ECMP for Korry Electronics Co. either by developing an internal procedure that complies with it or by adopting D35524-001 as the Supplier's ECMP.

A copy of the current revision of D35524-001 is available at the following web page: www.korry.com/customer-service#supplier

Q21 Special Requirements for Distributors

Korry limits procurement from distributors to Authorized Distribution only. Korry defines a distributor as authorized* if they are listed as such on the web site: www.sourceesb.com

*Note: the term "authorized" (approved by OEM) rather than "franchised" (special business relationship with OEM) is used for the purpose of consistency with www.sourceesb.com

Korry specifies the OEM source. The Seller acting as a distributor (or value-added distributor) must be identified as authorized by www.sourceesb.com for that OEM to meet the requirement of this Q-note. The Seller must procure from Korry-specified OEM sources, no substitutions are allowed.

Korry may authorize specific distributors to act as an extension of the Korry purchasing department. These "Korry Authorized Distributors" are verified by on-site audit. Korry Authorized Distributors are allowed to source parts from the original manufacturer or from the manufacturer's authorized distributors (only) on behalf of Korry.

The seller of complex assemblies which contain purchased parts acquired from distribution must adhere to the same restriction on use of distributors as Korry. The seller must source components and materials from the Original Manufacturer, Authorized Distributor, or Korry Electronics Co. (only).

Korry prohibits brokering, which can be defined as:

- a. Sourcing from Non-Authorized Distributors; or
- b. Sourcing from Distributors who buy from other Distributors (multiple handoffs beyond OEM).

If Korry finds evidence or suspicion of brokering then this will likely lead to the Seller's removal from Korry's approved supplier list.

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Record of Revision History

Date YYYY-MM-DD	Revision	Description	Approved By (sign and date current rev)
Prior	none	Various.	Ken Thornock
3/1/13	None	Added Q17, key performance indicators for contract manufacturers.	Jack Lee
9/6/13	A	Reformat. Q1: clarified requirements for suppliers who lack registered quality systems. Q3: clarified requirements for AS9102 conformance. Q6: removed reference to "for military orders only". Apply Q6 to any time included on purchase order. Q8: clarified purpose of certificate of conformance signature. Listed minimum data requirements. Forbade representing multiple lots as a single lot. Q13A: added allowance for shipping with less than 2/3 of shelf life if PO modified. Q16: updated language allowing use for any subcontracted electronic assembly. Q18: (new) Preservation and packaging for electronics Q19: (new) Flowdown of Korry Supplier Quality Requirements to sub-tier suppliers.	Jack Lee
2/24/14	В	Added "not technical data" footer	Jack Lee
3/22/14	С	Q19: added requirement to flowdown the AS5553 compliant counterfeit plan to the Seller's sub-tier suppliers Q20: (new) TS62239 compliant electronic component management plan In Minor approval block titles, replaced Stamp Control Authority with Supplier Quality Assurance.	Hal Verrell Shirley Bailey
9/18/14	D	Q1: added AS5553 requirement. Increased record retention interval to 11 years. Q3: added AS9103 requirement. Added Net-Inspect. Q8: removed exceptions for distributor CoC submittal and for restocking. Added that signature must be Quality representative. Q13: simplified into a single note (combined part A & B) Q5, 7, 16: tweaked wording for clarity. Q17: rewritten for better TS62239 compliance Q18: added J-STD-1/IPC610 class 3. Q19: moved AS5553 to Q1, added AS9103 to Q3, deleted Q20 reference. Q20: removed redundant AS5553 reference. Q21: (new) Special Requirements for Distributors	Jack Lee

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3/2/2016	E	Q1: Added ISO16949 and 13485, clarified AS5553 Q2: Updated requirements for Deviation Requests Q8: Added Mil Spec Requirements (traceability) Q16: Added OEM Certification Retrieval Time	Shaun Wurzner 3/2/2016 Mike Hughes
5/19/2016	F	Updated Q4, Q6, and Q8. Reference Redline documents for details.	Shaun Wurzner 5/19/17
9/18/2017	G	Updated record retention, Added Q11 Special Process NADCAP; OTHER and added Q12 FAA Contract Provider, Q12A-Other. Additional minor edits (Reference Redlines)	Shaun Wurzner 9/18/17
2019-05-20	Н	Changed Logo	Matthew Gravert 5/29/19
2021-04-16	J	Due to release of comprehensive Supplier Quality Manual (D55255), Korry has obsoleted Qnotes: Q1, Q2, Q7, Q8, Q9, Q10, Q11, Q12, Q15, Q16, Q18, and Q19. These requirements are now covered by various sections within D55255.	Matthew Gravert 4/16/21

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