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UNIVERSAL QUALITY NOTE

All sections of this Quality Note are a requirement of this Purchase Order unless otherwise approved in writing by the cognizant Pearson Electronics Procurement Agent.

Criteria Requirement
Quality Management System
Quality Flow Down to Sub-Tier Sellers
Product and Process Control and Quality Record Retention
Documentation – Revision and Configuration Control
Government and other Customer Inspection
Manufacturer's Part Numbers
No Changes Without Approval
Prohibition of Pure Tin
Foreign Object Elimination
Nonconforming Material
Electrostatic Discharge Control Program
Special Process Control Requirements
Component Lead/Termination Solderability IPC/EIA-J-STD-002
Quality Note CC
Soldering Requirements – Quality Note CX

1. Quality Management System

- 1.1 Sellers quality management system shall be in compliance with the current revision of AS9100, ISO 9001 or have a Pearson Electronics approved Quality Management System.
 - 1.1.1 Sellers certified to AS9100 or ISO 9001 shall be evidenced by a third party certification.

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- 1.1.2. Sellers certified to AS9100 or ISO 9001 must provide evidence of certification and are required to provide evidence of recertification prior to their current certification expiring.
- 1.1.3 New Sellers that are not certified to AS9100 or ISO 9001 must pass a Pearson Electronics Quality Management System audit.
- 1.1.4 Sellers approved based on successful completion of a Pearson Electronics Quality Management System audit must provide evidence of compliance to AS9100 or ISO 9001 by a third party auditor. Sellers that are not certified to AS9100 or ISO 9001 must pass a Pearson Electronics Quality Management System audit. Sellers may be re-audited by Pearson Electronics as required to remain an approved seller..
- 1.2. Distributors (non-value added) quality management system shall be in compliance with the current revision of AS9120, ISO 9001 or have a Pearson Electronics approved Quality Management System.
 - 1.2.1. Distributors certified to AS9120 or ISO 9001 shall be evidenced by a third party certification.
 - 1.2.2. Distributors certified to AS9120 or ISO 9001 must provide evidence of certification and are required to provide evidence of recertification prior to their current certification expiring.
 - 1.2.3. Distributors that are not certified to AS9120 or ISO 9001 must pass a Pearson Electronics Quality Management System audit.

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1.2.4. Distributors approved based on successful completion of a Pearson Electronics Quality Management System audit must provide evidence of compliance to AS9120 or ISO 9001 by a third party auditor, or be re-audited by Pearson Electronics within three (3) years to remain an approved supplier.

2. Quality Flow Down to Sub-Tier Sellers

2.1. The seller's Quality System shall assure all relevant Purchase Order requirements are flowed down to their sub-tier suppliers. The seller's sub-tier suppliers are responsible to comply with the same specifications and requirements specified on this Purchase Order.

3. Product and Process Control and Quality Record Retention

- 3.1. Seller's Product, Process Control and Quality Records shall be retained at the seller's location a minimum of five years, unless a longer retention period is specified on this Purchase Order or Drawing. The records shall be adequate to ascertain the quality level of production processes. This includes chemical and physical test results of Raw Material used in the manufacture of the item on this Purchase Order or Drawing. Quality records shall be provided upon request from the Pearson Electronics Procurement Agent.
- 3.2. The supplier shall keep records of any sampling plan requirements called out on a Pearson Electronics Technical Data Package. This will include lot quantity, sample size, sampling size requirement, and values for each part required by Technical Data Package.

4. Documentation – Revision and Configuration Control

4.1. The seller shall assure he has the revision of the drawing matching the revision noted on this Purchase Order. If an item on this Purchase Order is controlled by a drawing that lists or references a Parts List (PL) or a Generation Breakdown (GB), the seller must assure that he has the revisions in effect for the date of this

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Purchase Order. The seller should contact the Procurement Agent whose name is on the Purchase Order for the current drawing revision level listing of the subsidiary drawings on the PL or GB.

4.2. The seller shall only accept changes in the revision status of any of these drawings by means of a duly executed Purchase Change

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Order. The seller shall not accept changes via verbal or email direction from anyone other then the Procurement Agent.

4.3. If an item on this Purchase Order invokes by reference a military specification, military standards, or other revision controlled requirement documents, the revisions in effect are as of the date of this Purchase Order.

5. Government Inspection

- 5.1. The United States Government has the right to inspect any or all work included in this order at the seller's plant in fulfillment of a US Government contract.
- 5.2. If formal US Government Source Surveillance (GSS) is not imposed per Quality Note DL, notification to the government Representative who normally services your facility is not required.
- 5.3. In the event US Government Inspection is required, the Seller, working with the Pearson Electronics Procurement Agent, will provide notification to the US Government.
- 5.4. Pearson Electronics commercial customers, Federal Prime Contractor and/or regulatory authority representatives shall have right of access to quality management system documentation, all applicable records and all facilities involved in this Purchase Order.

6. Manufacturer's Part Numbers

6.1. If an item on this Purchase Order is controlled by a drawing that references a "Suggested Source of Supply" and/or "Manufacturer Part Number", this shall not to be construed as a guarantee that the suggested seller and/or manufacturer's part number meets the requirements of the drawing. It is the Sellers responsibility to assure that the "Suggested Source of Supply" and/or "Manufacturer Part Number" meets all drawings required on this Purchase Order.

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7. No Changes Without Approval

- 7.1. Except for first time purchases, items furnished under this Purchase Order shall be identical in form, fit and function to a product previously approved by the Pearson Electronics Procurement Agent.
- 7.2. The seller shall notify the responsible Pearson Electronics Procurement Agent of any proposed changes including changes in design, materials, parts, fabrication methods or processes, major plant rearrangement, or plant relocation and changes that will impact form, fit and/or function. Prior to fulfilling a Pearson Electronics purchase order, Pearson Electronics must approve any/all changes with notification provided to the seller by the responsible Procurement Agent.

8. Prohibition of Pure Tin

- 8.1 The uses of Pure Tin Plated finishes are strictly PROHIBITED. Any Tin Plating or Tin Solder processes shall contain NO LESS than 3 percent LEAD composition, unless specifically authorized in writing by the Pearson Electronics Procurement Agent. These restrictions apply for all types and levels of procurements, with the supplier responsible for communicating these restrictions to subcontractors or sub-tier suppliers as required.
- 8.2. EXEMPTION: If a Pearson Electronics Technical Data Package (Pearson Electronics Drawing or Military Specification) referenced on this order specifies the use of pure tin finishes this prohibition is NOT applicable.
 - 8.2.1. NOTE: If the Pearson Electronics Technical Data Package specifies a Seller Part Number which contains pure tin, then the purchase order or Pearson Electronics Technical Data Package must specifically authorize the use of pure tin for the specified part number(s).

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8.2.2. NOTE: Tin -plated finishes may be used if: (a) the seller has a written tin control plan in accordance with GEIA-STD-0005-2 that has been approved in writing by Pearson Electronics, and (b) the tin usage conforms with requirements of the plan. Lead-free solder processes may be used if: (a) the seller has a written Lead-Free control plan in accordance with GEIA-STD-0005-1 that has been approved in writing by Pearson Electronics, and (b) the lead-free solder usage conforms to the requirements of the plan.

9. <u>Foreign Object Elimination</u> – Quality Note SA (latest revision at time of Purchase Order award).

- 9.1 In addition to the requirements in quality note SA, the following applies:
- 9.2 The material supplied on this purchase order shall be manufactured in an environment that is free of foreign objects. Material supplied shall be free of foreign objects. The seller's program shall utilize effective FOD prevention practices. The program shall be proportional to the sensitivity of the design of the product(s) to FOD, as well as, to the FOD generating potential of the manufacturing methods.
 - 9.2.1 The seller's program shall include FOD preventive practices in packaging. There shall be no foreign objects received in packaging and packaging containers. Foreign objects can include staples used for closure of unit packaging, foam peanuts used for cushioning and Styrofoam (can break down and particles cling to parts) used for cushioning. In general, no packaging material shall be used that will leave any residue from the packaging material on the parts as a result of packaging or unpacking the product.
- 9.3. The written procedures or policies developed by the seller shall be subject to review upon request by the Pearson Electronics

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Procurement Agent and/or government representative, who may issue a formal request for corrective action if the seller's procedures or policies do not accomplish their objectives.

10. Nonconforming Material

- 10.1. The seller shall not ship nonconforming material without prior written approval from the Pearson Electronics Procurement Agent and the appropriate Supplier Quality Manager.
- 10.2. Requests for authorization to ship nonconforming material shall be made within 5 days of occurrence and addressed in writing to the Pearson Electronics Procurement Agent and the Pearson Electronics Supplier Quality Manager/Quality Engineer.
- 10.3. Nonconforming material, if authorized via PDR, shall be shipped to Pearson Electronics, with a notation of the PDR on Seller's packing list and shall be accompanied with a copy of the Pearson Electronics PDR and the seller's rejection document.
- 10.4. If it is determined that nonconforming material has been delivered to Pearson Electronics the seller shall notify the Pearson Electronics Procurement Agent and the Pearson Electronics Supplier Quality Manager. Such notification shall include, but, not be limited to Purchase Order number(s) part number(s), quantity of affected parts, date of shipment, packing list number, etc.
- 10.6 Nonconforming material rejected by Pearson Electronics and determined to be seller responsibility requires the seller to respond to the Pearson Electronics Procurement Agent's request for root cause and corrective action. Failure to respond within the time frame requested could affect future procurement and/or status as an approved seller.

11. <u>Electrostatic Discharge Control Program</u> – Quality Note MA (latest revision at time of Purchase Order award)

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1211. The supplier shall comply with the requirements of Quality Note MA, latest revision.

12. Special Process Control Requirements

A Special Manufacturing Process is a process where it is not possible to assure, by typical verification techniques, that product integrity is achieved by the process. The Seller shall certify that these processes such as but not limited to plating, painting soldering, radiography, welding, heat-treating, cleaning, electroplating, anodizing, chemical films, etc. were performed in accordance with specification requirements. The certificate shall identify the products processed, the Procurement Agent's Purchase Order number, and the applicable specifications (including revision letters or numbers) to which the processes conform and the date and the name of the agency that performed the process if other than the Seller.

- 12.1 Plating, Surface Finishes and Conditioning Requirements Quality Note JY (latest revision at time of Purchase Order award) If an item on this Purchase Order contains plating, a surface finish and/or conditioning, the seller shall comply with the requirements or exemptions of Quality Note JY.
- 12.2 Painting Requirements,- Quality Note CT (latest revision at time of Purchase Order award)- If material supplied on this Purchase Order requires painting in accordance with any of the Pearson Electronics paint specifications listed in Quality note CT, then it shall comply with the requirements or exemptions of Quality note CT.

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- 12.3. Welding & Brazing Requirements Quality Note HK (latest revision at time of Purchase Order award) If an item on this Purchase Order contains welding or brazing, the seller shall comply with the requirement or exemptions of Quality Note HK.
- 12.4. Non Destructive Testing (NDT) Requirements Quality Note TC (latest revision at time of Purchase Order award) If an item on this Purchase Order contains Non Destructive Testing, the seller shall comply with the requirements or exemptions of Quality Note TC.
- 12.5 Heat Treating Requirements Quality Note SJ (latest revision at time of Purchase Order award) If an item on this Purchase Order contains Heat Treating, the seller shall use a NADCAP approved processor for the required Heat Treating process. Refer to website http://www.eauditnet.com for the list of NADCAP approved processors.
- 12.6. When a Special Process is used, as outlined above in 12.1 to 12.5, where there are no defined Special Process requirements in the drawing, the supplier shall have a controlled Special Process process/procedure and evidence that it has been provided to the Pearson Electronics Supplier Quality Manager.
- 13. Component External Lead/Termination Solderability IPC/EIA-J-STD-002 Quality Note CC (latest revision at time of Purchase Order award)
 - 13.1. If an item on this Purchase Order contains solderable external leads/terminations, the seller shall comply with the solderability requirements of Quality Note CC.
- 14. <u>Soldering Requirements</u> Quality Note CX (latest revision at time of Purchase Order award)
 - 14.1. If an item on this Purchase Order requires soldering, the seller shall comply with the soldering requirements and conditions stated in Quality Note CX.