

REVISION HISTORY			
<u>REV</u>	<u>DATE</u>	<u>ORIGIN</u>	<u>REASON FOR CHANGE(S)</u>
B	9/8/2010	Michael Gurevich, Matt Ambrosius, Scott Ubl	Previously not assigned, updated with REACH requirements
C	29SEP16	Eric Steif	Added clarification language to COC requirements
D	5/04/18	Daniel Crouse	Added PCN language

Q-CODE Q3E QUALITY REQUIREMENTS

The following are the quality requirements for product purchased under Q-code Q3E. Unless a written waiver is received from Plexus, the supplier agrees to abide by all the requirements of the drawing and the quality requirements listed below.

First production run/Pre 1st Shipment - Before a product can be released for production the supplier will be required to meet the documentation and quality requirements as follows:

- A. **First Article Inspection Requirement** – The **First Article Inspection (FAI)** is a complete inspection of the parts/assemblies to evaluate conformance to all specifications. Supplier will execute a FAI and provide the results to Plexus with each shipment in which the requirement is to be executed. All dimensions must be within print tolerance. Any dimension which is not within print specification must be approved by Plexus in writing before product can be shipped.
- B. **Additional FAI Requirements**
 - Only one part or assembly will be selected and inspected as part of the FAI Requirement.
 - Only one part or assembly should accompany the FAI report unless otherwise requested.
 - Raw materials must have direct traceability with the chemical and physical properties submitted to Plexus.
 - All dimensions, characteristics, notes, features and labeling (part marking), specified material requirements, etc must be included in the report.
 - Completion of all specified tests with results included.
 - Include the corresponding balloon/bubble print which correlates the print requirements to the FAI results.
- C. **Material Certificate** – The material certification must include the verification of all the **materials** called out on the drawing or specifications, this includes any surface finishing and or 3rd party operations (Some examples include plating and/or or paint. The certificate must include a statement of declaration certifying that the materials used to manufacture this item meet the specifications and a list of actual materials used (the list must correlate to the callouts on the drawing or specification).
- D. **Certificate of Compliance** – Must include a statement of overall compliance to all the applicable specifications (statement is not required to list, but shall cover all the applicable specifications such as; drawing, PO, customer specifications, Plexus G9000-3, IPC specification, etc). It also must include the following information for traceability:
 - Name of Supplier (if different than the actual OEM)
 - Name of Manufacturer
 - Manufacturer's Part Number
 - The manufacturer Lot # or Date Code, (Each shipment, COC and packing slip must contain only one lot or date code)
 - Location or place of Manufacture
 - If the product has a shelf life, the shelf life and expiration date must be included (note: the remaining shelf life must be greater than 50% of the stated shelf life)
 - Plexus part number ordered on the PO
 - EC level or Revision level as specified on the PO for the Plexus part number ordered
 - PO number

- E. EU RoHS Certificate of Compliance (ROHS CoC) (<http://www.rohs.eu/english/index.html>)- For assemblies that are required to be EU RoHS compliant the supplier must provide a RoHS CoC at the homogeneous level for the purchased part number with the first shipment. Parts used on RoHS compliant assemblies will be labeled as such either on a Plexus PO note or a drawing note, a specification or an applied practice called out on the drawing. If the assembly is compliant due to an EU RoHS exemption, identify the exemption on the certificate.
- In addition to current EU RoHS restricted substances the vendor must certify that the following GEHC restricted substances are not present or identify the concentrations at which they are present:
 - Arsenic/Arsenic Compounds
 - Asbestos
 - Benzene
 - Ozone Depleting Substances (CFCs, HCFCs, HFCs, carbon tetrachloride, etc., Class I & Class II HCFCs)
 - Polychlorinated Biphenyls (PCBs)
 - The preferred format for the RoHS CoC is the [IPC-1752-1 class 4](#) form.
 - It is desirable that the supplier also provide material content data for substances in the [JIG A and JIG B](#) lists or material declaration showing full formulation.
 - If material declaration showing full formulation or [IPC-1752-1 class 4](#) form is not available the preferred format for RoHS CoC is the [IPC-1752-1 class 1](#) form.
- F. IPC Full Material Substance Declaration
The supplier is required to demonstrate compliance to [EU REACH EC 1907/2006](#) by communicating the presence of a REACH Substance of Very High Concern (SVHC) if present in the Article. The supplier must provide the IPC 1752-2 Class 5/6 for each Article. This disclosure must include 99.99% of the substance weight contributing to the total weight of the Article. Please note the following:
- The Supplier is required to demonstrate compliance to REACH EC 1907/2006 by communicating the presence of a REACH Substance of Very High Concern (SVHC) if present in the Article
 - The completed Declaration forms will be submitted as part of the FAI
 - On-going controls and documentation to ensure conformance, including sub-tier Suppliers and self-audits must be maintained
 - Article Defined: Articles are parts, products and packaging. “Article means an object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition;” (REACH, Article 3(3)). An Article is an object composed of one or more substances or preparations given a specific shape, surface or design. Substances or preparations may be added to give an Article its special properties.
- G. Quality Code Q21 Requirements– For all shipments of Programmed parts also complete the requirements of Q21.
- H. Quality Code Q22A Requirements – For all shipments of PCBs also complete the requirements of Q22A.
- I. All cartons, packing slips and certificates must have part number, EC level or revision, quantity and P.O. number listed on them.

Subsequent Shipments- The documentation and quality requirements for all subsequent shipments will be as follows:

- A. First Article Inspection Requirement – Supplier will execute a **FAI** and provide the results to Plexus with each shipment for a new design revision change or following any subsequent change that invalidates the previous first article inspection or a new design revision change. The FAI must include the results as defined in A, B, C, E, and F above, which include a new submittal for the following:
- a. Material Certification – same requirements as C above.



- b. EU RoHS Certificate of Compliance. –same requirements as E above.
- c. EU REACH regulation (EC) 1907/2006 Compliance Certificate –same requirements as F above.

- B. Certificate of Compliance – same requirements as D above.
- C. Quality Code Q21 Requirements – For all shipments of Programmed parts also complete the requirements of Q21.
- D. Quality Code Q22A Requirements – For all shipments of PCBs also complete the requirements of Q22A.
- E. All cartons, packing slips and certificates must have part number, EC level or revision, quantity and P.O. number listed on them.

The above listed documentation must be submitted with each shipment. Material received without the completion and proper execution of the Quality Requirement allows Plexus the right to return the material.

Product change notification

Upon acceptance of conforming product, documentation, and the requirements of this Q-code, the supplier's manufacturing process shall be considered "qualified". All changes require written approval from Plexus prior to implementation. Product or Process change notification requests (PCNs) shall be submitted to pcns@plexus.com.