

<u>REV</u>	<u>DATE</u>	<u>ORIGIN</u>	<u>REVISION HISTORY</u> <u>REASON FOR CHANGE(S)</u>
A	06/16/03	Scott M. Ubl	New
B	08May14	Scott M. Ubl	Change COC to match Q22A and font
C	29Sep16	Eric Steif	Added clarification language to COC requirements
D	5/04/18	Daniel Crouse	Added PCN language
E	30Oct18	Joyce Conn	Added hyper-corrosion requirement for ENIG boards

### Q-CODE Q23 QUALITY REQUIREMENTS

The following are the quality requirements for product purchased under Q-code Q23. Unless, a written waiver is received from Plexus, the supplier agrees to abide by the quality requirements listed below.

**1st Shipment** - The documentation and quality requirements for the 1st shipment are as follows:

- A. First Article Inspection Report - All dimensions and specifications on drawing must be verified and within print tolerance. Plexus must approve any dimension that is not within print specification in writing before product can be shipped.
- B. Cross-Section (with inspection data) per IPC-6012 section 3.6.2
- C. Hyper-corrosion – For ENIG boards, process controls shall be implemented as per Plexus PCB specification G9000-3. Results and applicable cross-sections shall be retained by the supplier and provided to Plexus on request.
- D. Ionic Contamination Test Report – Lot must be tested for ionic contamination levels and acceptable results provided with the shipment.
- E. Contamination testing report and certification. – Lot must be tested per IPC TM 650 2.3.28, and a certification provided that the lot meets all levels of cleanliness requirements specified in the PCB documentation (i.e. Chloride, Sulfides and Bromide levels) including the results.
- F. PCB for Solderability Sample - Complete and physically intact PCB or Array as supplied for the Part Number. This should be segregated and boldly identified. The box containing the solderability sample must also be identified as such.
- G. 100% Electrical Testing Certificate or Stamp. Including an Impedance Report on impedance designs.
- H. 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). The statement of compliance **must also** include the name and location of the facility that manufactured the Printed Circuit Board.
- I. All cartons, packing slips, reports and C.O.C.'s 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 are as follows:

- A. Cross-Section (with inspection data) per IPC-6012 section 3.6.2 (not required for PCB's less than 8 layers)
- B. Hyper-corrosion – For ENIG boards, process controls shall be implemented as per Plexus PCB specification G9000-3. Results and applicable cross-sections shall be retained by the supplier and provided to Plexus on request.
- C. Ionic Contamination Test Report – same as D above.
- D. Contamination testing report or certification. – Lot must be tested (same as E above) or a process certification provided that all product in the shipment meets the cleanliness requirement levels specified in the PCB documentation.

- E. 100% Electrical Testing Certificate or Stamp – same as G above.
- F. Certificate of Compliance – Same as H above.
- G. A Solderability Sample as defined in F when a revision is made that affects the physical shape or the outerlayer artwork.
- H. All cartons, packing slips, reports and C.O.C.'s 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. Any shipment received without this documentation will be considered defective.

### **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](mailto:pcns@plexus.com).