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DATE

**REV** 

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# REVISION HISTORY REASON FOR CHANGE(S)

A 06Nov18 Daniel Crouse

**ORIGIN** 

New

## **Q-CODE Q42J QUALITY REQUIREMENTS**

The following are the quality requirements for product purchased under Q-code Q42J. These requirements are specific to our customer ViaSat Inc. This includes but is not limited to granting the right of access to the supplier's facilities and all applicable records to Plexus, their customer ViaSat Inc and regulatory authorities with the acceptance of this Purchase Order, flow down all applicable requirements to sub-tier suppliers including key characteristics and retention of all records (all documentation and cross sections) for a minimum of 10 years that support the manufacturing or material per the requirements of this Plexus customer. Unless a written waiver is received from Plexus, the supplier agrees to abide by the quality requirements listed below for Acceptance of Printed Circuit Boards/Printed Wiring Boards.

In addition to the PO requirements and requirements set forth below, all parts and products produced against this purchase order must also comply with ViaSat Quality Assurance Procurement Provisions (PR000512). This document can be located at the following: <a href="https://www.viasat.com/supplier-quality-documents">https://www.viasat.com/supplier-quality-documents</a>.

#### **ALL Shipments:**

<u>Shipments and handling of Export Controlled Items, Data, or Services</u> – Supplier will be required to meet the documentation and quality requirements as follows:

The Supplier agrees to comply with The Arms Export Control Act, 22 U.S.C 2751-2794, the International Traffic in Arms Regulation (ITAR), 22 C. F. R. 120 - 130, the Export Administration Act, 50 U.S.C. app 2401-2420, and the Export Administration Regulations, 15 C.F.R. 730-774 for this product, all specifications, and associated documentation. This includes, but is not limited to:

- Export controlled items, data, or services, or any element thereof, will not be exported from the United States without U.S. Government authority and the express written authorization of a Plexus ITAR Empowered Official.
- Export controlled items, data, or any element thereof, will not be transferred or disclosed to foreign
  persons including transfer to foreign persons employed by or associated with, under contract to Sub-tier
  suppliers including transportation carriers.
- Import Licenses will be provided with all shipments where applicable.

<u>First Production Run/Pre 1<sup>st</sup> Shipment/Change to Product</u> - Before a product can be released for production the supplier will be required to meet the documentation and quality requirements as follows:

- **A.** <u>First Article Inspection Requirement -</u> Supplier will execute the Aerospace First Article Inspection requirements of the SAE standard, AS9102 and provide the results to Plexus with each shipment in which the requirement is to be executed.
- B. Additional First Article Inspection Requirements:
  - Only one part or assembly will be selected and inspected as part of the First Article Inspection.



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- Only one part of assembly should accompany the FAIR unless otherwise requested.
- Raw materials must have direct traceability with the chemical and physical properties submitted to Plexus.
- Special processes utilized by the supplier will require written approval from Plexus prior to performing
  for review and approval. If approved, a certificate of conformance is required that includes the
  applicable name of, specification number, type and class of material or process used.

# C. <u>For all shipments of Printed Circuit Boards/Printed Wiring Boards, the following requirements must be completed for Acceptance for the 1<sup>st</sup> Shipment:</u>

- 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/parts can be shipped.
- B. Cross-Section Report, including data, results and pictures. The physical cross section is not to be sent.
- <u>C. Hyper-corrosion</u> 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.
- o **D. Contamination Test Report.**
- <u>E. PCB for Solderability Sample</u> Qty 2 complete and physically intact PCBs or Arrays as supplied for the Part Number. These should be segregated and boldly identified. The box containing the solderability samples must also be identified as such.
- o **F. 100% Net List Certificate**, including test data results on the certification.
- G. Certificate of Compliance Must state compliance to all applicable specifications (drawing, PO, customer specifications, Plexus G9000-3, IPC specifications, etc. . .). The statement of compliance Must include the name and location of the facility that manufactured the Printed Circuit Board/Printed Wiring Board.
- H. Interconnect Stress Testing (IST) IST testing and A/B coupon testing to be completed by supplier and IST Report provided with shipment.
- I. All cartons, packing slips, reports and certificates must have Plexus Part Number, EC level or Revision, quantity and PO Number listed on them.

<u>Subsequent Shipments</u> — The documentation and quality requirements for all subsequent shipments will be as follows and need to include all date codes included in shipment, even if previously shipped:

<u>A. First Article Inspection Requirement – Supplier will execute First Production Run requirements</u> and provide the results to Plexus with each shipment following any subsequent change that invalidates the previous First Article Inspection result per AS9102. In addition, products/parts held in inventory by the supplier for 2 or more years or not received by Plexus in 2 or more years **Must** have the **First Production Run requirements** performed to assure no revision change or product/part deterioration during storage.

**B.** Cross-Section Report, including data, results and pictures. The physical cross section is not to be sent. **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. Contamination Test Report.

**E. PCB for Solderability Sample** – Qty 2 complete and physically intact PCBs or Arrays as supplied for the Part Number when a revision is made that affects the physical shape or the outer layer artwork. These should be

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egated and boldly identified. The box containing the solderability samples must also be identified as such. **F. 100% Net List Certificate**, including test data results on the certification.

- **G. Certificate of Compliance** Must state compliance to all applicable specifications (drawing, PO, customer specifications, Plexus G9000-3, IPC specifications, etc. . .). The statement of compliance **Must** include the name and location of the facility that manufactured the Printed Circuit Board/Printed Wiring Board.
- **H.** Interconnect Stress Testing (IST) IST testing and A/B coupon testing to be completed by supplier and IST Report provided with shipment.
- **I.** In addition to all other requirements listed, all required documentation, labels, packaging and packing slips must have Plexus part number, EC level or Revision, quantity and PO number listed on them.

When the revision of the product/part changes, **First Production Run requirements** Must be completed as a new part Before the shipment of product/part to Plexus.

The above listed required documentation must be submitted with each shipment. Shipments received without the completion and proper execution of these Quality Requirements is considered non-conforming and Plexus reserves the right to return to the supplier at the supplier's expense.

### **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". Supplier shall provide Plexus with a detailed transition plan at least six (6) months prior to the introduction of Any intended change to: (1) parts, materials, processes or critical equipment; or (2) manufacturing, processing or testing functions, including those of its subcontractors and/or subtier suppliers. Suppliers shall obtain Plexus's written approval Prior to implementing such changes. Product or Process change notification requests (PCNs) shall be submitted to pcns@plexus.com and Plexus Buyer.