

<u>REV</u>	<u>DATE</u>	<u>ORIGIN</u>	<u>REVISION HISTORY</u> <u>REASON FOR CHANGE(S)</u>
A	11Feb19	Rachel Perry	New
B	26Mar19	Rachel Perry	Added Programmed Part Section
C	23Jan20	Rachel Perry, Shaun Muscolo	Clarified Requirements further for Calibration Expiration Dates for tooling/equipment used for recording measurements and other updates through-out document.

Q-CODE Q3X QUALITY REQUIREMENTS
For Acceptance of Custom Engineered Components

The following are the quality requirements for product purchased under Q-code Q3X. 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 and regulatory authorities, flow down all applicable requirements to sub-tier suppliers including key characteristics, and retention of all records as specified in the PO Message Header that support the manufacturing or material per the requirements of this Plexus customer. Product is controlled by the SAE standard AS9100 and, unless a written waiver is received from Plexus, the supplier agrees to abide by the quality requirements listed below.

Shipments and handling of Export Controlled Items, Data, or Services – Supplier must meet 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, associated with, or under contract to Sub-tier suppliers, including transportation carriers.
- Import Licenses will be provided with all shipments where applicable.

First Production Run (1st Shipment)/Change to Product/2 years or more since last built Before suppliers product can be released for production, supplier must meet documentation and quality requirements as follows:

- A. First Article Inspection Requirement** - Supplier will execute the Aerospace First Article Inspection requirements of the SAE standard, AS9102 and provide the results to Plexus.
- Special processes used by the supplier require written approval from Plexus prior to use. If approved, supplier must provide a certificate of conformance that includes the name of, specification number, type and class of material or process used.
 - Supplier will select and inspect one part or assembly as part of the First Article Inspection.

*Notice: This document is considered “UNCONTROLLED” when it exists in any printed form.
See the Partner - Supplier section of the Plexus Web page for the current master of this Q-code.
<http://www.plexus.com>

- All dimensions and specifications on drawing must be verified and be within print tolerance. Plexus must approve any dimension that is not within print specification in writing before product/parts/assembly can be shipped.
 - The FAIR must also include all applicable inspection tooling/equipment numbers, and calibration expiration due dates for the tools and equipment used for the measurements recorded.
 - A bubble diagram (balloon drawing) indicating all applicable features, characteristics and notes must be provided as part of the FAIR submission.
- B. Materials Certificates and Process Certificates** - Material certifications must include a statement declaring that the items are manufactured from the material specified. This may be included with the Certificate of Compliance. Raw materials must have direct traceability with the chemical and physical properties submitted. Process certifications are to be provided as applicable (anodization, clear coating, paint, etc). Materials used must have the remaining shelf life as specified in the PO Message Header.
- C. Manufacturer Certificate of Compliance – must include the following information for traceability** -
- State compliance to all applicable specifications (drawing, PO, customer specifications, IPC specifications, etc).
 - Name of Supplier (if different than the actual Manufacturer/OEM/OCM).
 - Name of Manufacturer/OEM/OCM and Location or place of the facility that manufactured the part/product/assembly.
 - Manufacturer's/OEM's/OCM's Part Number.
 - The Manufacturer/OEM/OCM Lot Number. Each shipment, COC and Packing Slip Must Contain Only One Lot Number. When a lot number is not used by supplier, and Date Code is, Packing Slip Must Contain Only One Date Code. The minimum-required date code format shall identify the 2-digit workweek, 2-digit year (WWYY). If the part marking contains a lot and date code, those markings must be traceable to the COC.
 - Plexus Part Number.
 - EC level or Revision level as specified on the PO for the Plexus Part Number ordered.
 - Plexus PO Number.
 - If the product has a shelf life, the manufacture or cure date, batch number, the shelf life and expiration date must be included (note: the remaining shelf life must be as specified in the PO Message Header). Any special handling and/or storage requirements must also be included.
- D. Distributor Certificate of Compliance** – When the Manufacturer of the part is not the same as the supplier (e.g. a Distributer, Rep, etc), a separate Manufacturer COC must be included along with the shipment. The Manufacturer COC must be traceable to the product/parts/assemblies supplied. When the Manufacturer is the direct Supplier, this requirement is fulfilled with Item C.
- E. Additional Requirements for Cable and Wire Harness Assemblies** - Comply with IPC/WHMA-A-620. All mechanical crimp connections shall be verified as satisfactory by a crimp pull test, industry-accepted “go/no go” gauging of crimp tool, or crimp barrel measurements. Crimp pull tests shall be conducted on crimp samples only, and not performed on deliverable hardware. Statement confirming results of testing performed must be provided in separate certificate or can be included on CoC.
- F. Additional Requirements for Programmed Parts** - Pre-1st Shipment – Before the
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product/parts will be released for production, supplier is required to coordinate and receive approval from Plexus of a supplier originated First Article Form, AS9102.

- In addition to the Certificate of Compliance listed in **C** above, the CoC should include the revision of the software and/or checksum that corresponds to the approved supplier originated First Article Form, AS9102.
- Products/Parts must be identified per ANSI J-STD-020 and packaged in accordance with ANSI J-STD 033.

NOTE: If there are any prior approved exceptions, deviations and/or concessions, please include copies.

- G.** All cartons, required documentation, labels, packaging and packing slips must have Plexus Part Number, EC level or Revision, quantity and PO Number listed on them.

Subsequent Shipments – The documentation and quality requirements for all subsequent shipments must be as follows:

- A. First Article Inspection Requirement** – Supplier will execute **First Production Run requirements** and provide the results to Plexus with each shipment following any subsequent change that invalidates the previous First Article Inspection result per AS9102 (**Delta FAIR**). 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. Same requirements as **A** above.
- B. Materials Certificates and Process Certificates** – Same requirements as **B** above.
- C. Certificate of Compliance** – Same requirements as **C** and **D** above.
- D. Additional Requirements for Cable and Wire Harness Assemblies** - Same requirements as **E** above.
- E. Additional Requirements for Programmed Parts** - Same requirements as **F** above.

NOTE: If there are any prior approved exceptions, deviations and/or concessions, please include copies.

- F.** In addition to all other requirements listed, all required documentation, labels, packaging and packing slips must include Plexus part number, EC level or Revision, quantity and PO number.

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.

With the acceptance of this Purchase Order, 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". All changes require written approval from Plexus prior to implementation. Product or Process change notification requests (PCNs) shall be submitted to pcns@plexus.com.