Effective Date: 04/14/2020

Q237: **Requirements for Printed Wiring Boards (PWB)/Flex Circuits**

The following requirements are imposed for the procurement of printed wiring boards and multilayer flex circuits:

1. When specified on this Purchase Contract in conjunction with Q100, Buyer in-process source inspection is required as follows:
   - Detail stage source inspection unless automated optical inspection is performed or waived by Aerojet Rocketdyne Quality Engineering responsible personnel in writing.
   - After etch before soldermask, unless waived by Aerojet Rocketdyne Quality Engineer in writing.
   - Final Source Inspection shall be performed (single sided, double sided, multilayer, rigid flex) after route and test.

2. All coupons, cross sections, Production Control Analysis (PCA) board specimens must be traceable to individual printed wiring boards and must accompany each shipment.

   A copy of the PWB supplier’s test reports analysis for microsections (“Group A”) must accompany the test coupons and microsections shipped to Aerojet Rocketdyne. Serial numbers must also be on the packer.

   Multilayer boards and flex circuits require Aerojet Rocketdyne Engineering Material & Processing (M&P) laboratory approval prior to any further assembly operations (i.e. next assy. level, heatsinks, etc.). Test coupons and microsections shall be delivered for analysis and approval by Aerojet Rocketdyne Engineering M&P laboratory prior to subsequent assembly operations. Send samples to:

   Aerojet Rocketdyne
   Attention: Engineering M&P Laboratory Lab Samples
   9001 Lurline Avenue
   Chatsworth, CA 91311

   When shipments are split, or when the cross-sections are gang-mounted, note the date of original shipment on the packer.
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3. When PCA test boards are required per lot, ship the PCA board(s) to Aerojet Rocketdyne receiving location with the first delivery from the lot.

4. A Defense Supply Center (DSC)/Defense Logistics Agency (DLA) approved laboratory or Aerojet Rocketdyne approved assembly facility lab is an acceptable alternate to Aerojet Rocketdyne Engineering M&P evaluation. The report from the DSC DLA approved laboratory or Aerojet Rocketdyne approved assembly facility lab must be evaluated by Aerojet Rocketdyne Engineering prior to assembly. All data shall be submitted in accordance with the data requirements document (DRD).