

RL-SQC-304 Rev 1.0

Printed Circuit Board Assembly (PCBA) Requirements - B

DOCUMENT PROPERTIES

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DOCUMENT APPROVAL

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Printed Circuit Board Assembly (PCBA) Requirements



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Printed Circuit Board Assembly (PCBA) Requirements



Group Electronics - General



Printed Circuit Board Assembly (PCBA) Requirements



- 1. Printed Circuit Board Assembly (PCBA) Data Package
 - a. Certificate of Compliance per RL-SR-001 Supplier Quality Manual
 - b. All manufacturer reports/results.
 - i. The following shall be provided if the PCB was produced or procured by the PCBA subcontractor.
 - The PCBA manufacturer shall include the items listed below:
 - a. Micro Sections
 - i. Final micro-sections coupon analysis shall be provided to Rocket Lab
 - ii. Coupon design shall be in accordance to IPC-2221 and the specified finished PCB characteristics.
 - b. If applicable, a complete list of the test results performed at the bare-board level or on the unpotted and potted harnesses.
 - c. Results of ionic contamination testing
 - d. All deviation and waiver reports, including all MRB actions taken on the PCBs or materials.
 - e. All raw material reports and supplier certifications, if any
 - c. The PCBA Data Package shall comprise the following document:
 - i. As Built List (ABL)
 - Part number and Lot or Date code Information for all components shall be recorded to the PCBA batch
 - ii. Material certificates
 - 1. Material used shall be traceable to the manufacturer's lot number through date code
 - iii. List of Assembly Materials (solder, ink, wire, flux, etc.)
 - Lot and expiration date records shall be kept and provided upon request of Rocket Lab
 - iv. Deviations from drawings and parts lists and objective evidence for the approval
 - v. Copies of all redlined drawings and parts lists
 - vi. Evidence of approval from Rocket Lab for all nonconformances with disposition of Use As Is and/or Repair
 - vii. Rework documentation shall be kept and provided upon request of Rocket Lab
 - viii. Surface Mount Process Reflow Profile shall be kept and provided upon request of Rocket Lab
 - ix. X-Ray Images of CGA, BGA and BTC components shall be kept and provided upon request of Rocket Lab
 - High resolution photo documentation of all sides of the completed PCBA shall be kept and provided upon request of Rocket Lab
 - xi. If required, documentation for PCB or Component bake out
 - xii. Unless otherwise specified, Flying Probe Data shall be submitted as part of the PCBA Data Package
- 2. Handling and Packaging
 - a. Handling shall be in compliance with the requirements documented in appendix B of IPC-A-610

Clause



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- b. Unless otherwise specified in the drawing, PCBAs shall be individually packed in static shielding packaging.
- c. External packaging shall protect the PCBAs from movement, shock events and physical damage during shipping and handling.
- d. Sealed bags containing PCBAs shall be wrapped in anti-static foam, bubble wrap, or other suitable static dissipative cushioning material.
- e. External packing shall be chosen to prevent tears, puncture opening, and/or other discrepancies upon receipt.
- 3. Polymeric Applications
 - a. All polymeric Applications shall meet the requirements of NASA-STD-8739.1

1 Glossary

Glossary Term

No content found.

2 Revision History

Rev	Author	Date	Change Log / ECN
1	@Logan Webster	i 14 Nov 2O23	First Release - Baseline

3 Document Properties

Document Type	Supplier Quality Clause (Doc Type) (see page 1)
Summary	SQC detailing PCBA requirements related to data package, handling, packaging and polymeric applications.
References	
Notes	N/A
Parent Manual	RL-QM-010
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