




# RL-SQC-303 Rev 1.0

## Printed Circuit Board Assembly (PCBA) Requirements – A

### DOCUMENT PROPERTIES

Document Type	<a href="#">Supplier Quality Clause (Doc Type)</a> (see page 1)
Security Level	Approved for Limited External Use
Export Classification	Not Subject to Regulation – No Technical Data

### DOCUMENT APPROVAL

Author	Reviewer	Approver	Date Released	Status
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**TABLE OF CONTENTS**

**1 Glossary ..... 3**

**2 Revision History ..... 3**

**3 Document Properties ..... 3**

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<b>Group</b>	Electronics - General
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## Clause

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.
      1. The PCBA manufacturer shall include the items listed below:
        - a. Micro Sections
          - i. Final micro-sections coupons for both A and B or A/B coupons shall be submitted to Rocket Lab.
          - ii. Micro-Section Analysis Report for both A and B or A/B coupons shall be submitted to Rocket Lab.
          - iii. Coupons shall reflect coupon design in 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)
      1. Part number and Lot or Date code Information for all components shall be recorded to the Reference Designator of the PCBA
    - ii. Material certificates
      1. Material used shall be traceable to the manufacturer's lot number through date code and serial number
    - iii. List of Assembly Materials (solder, ink, wire, flux, etc.)
      1. Lot and expiration date records shall be kept and provided upon request of Rocket Lab
    - iv. Assembly Documents
    - v. If applicable, a complete shortage list (parts and/or activities)
    - vi. Deviations from drawings and parts lists and objective evidence for the approval
    - vii. Copies of all redlined drawings and parts lists
    - viii. Copies of all Non-Conformance reports if the resulting disposition was Rework, Repair, or Use As Is
    - ix. Evidence of approval from Rocket Lab for all non-conformances with disposition of Use As Is and/or Repair
    - x. Rework documentation
    - xi. Surface Mount Process Reflow Profile
    - xii. X-Ray Images of CGA, BGA and BTC components
    - xiii. X-Ray radiation dose experienced by the PCBA
    - xiv. High resolution photo documentation of all sides of the completed PCBA
    - xv. If required, documentation for PCB or Component bake out

- xvi. 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
    - b. Unless otherwise specified in the drawing, PCBAs shall be packed individually 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	📅 14 Nov 2023	First Release - Baseline

## 3 Document Properties

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