



CoExcel Solutions

SourceBoard® | Defense Supply Chain Solutions

Supplier Quality Clauses — Printed Circuit Board Assemblies

Applicable in Addition to CX-SQ-100 for All RFQs/POs Involving PCBAs, Bare Boards, and Related Electronic Assembly Processes

Document No.	CX-SQ-200
Revision	A

This document establishes the Supplier Quality Clauses (“PC Clauses”) that CoExcel Solutions, LLC (“CoExcel”) flows down for all Requests for Quotation (RFQ) and Purchase Orders (PO) involving printed circuit board assemblies (PCBAs), rigid bare boards, and related electronic assembly processes. These clauses apply in addition to — and do not replace — the General Supplier Quality Clauses set forth in CX-SQ-100. In the event of any conflict between CX-SQ-100 and CX-SQ-200 with respect to PCBA or bare-board Product, CX-SQ-200 governs.

Summary Requirements Matrix

Area	Recommended Requirement
Quality Management	AS9100-certified QMS
Assembly Workmanship	IPC J-STD-001, Class 3
Finished PCBA Acceptance	IPC-A-610, Class 3
Rigid Bare Board	IPC-6012, Class 3
Bare-Board Acceptance	IPC-A-600, Class 3
ESD Control	ANSI/ESD S20.20
Moisture-Sensitive Devices	IPC/JEDEC J-STD-033
Rework and Repair	IPC-7711/7721
First Article Inspection	AS9102, when required
Counterfeit Prevention	SAE AS5553



Detailed Clauses

Applicable clause codes will be cited on the RFQ or PO face; where no specific citation is given, PC01 through PC10 apply in full to all PCBA, bare-board, and related electronic assembly line items by default.

PC01 Quality Management System

Supplier shall maintain a quality management system certified to AS9100 (current revision). A current copy of Supplier's AS9100 certificate shall be on file with CoExcel prior to award and shall be kept current for the duration of the supplier relationship.

PC02 Assembly Workmanship

Electronic assemblies shall be manufactured and inspected in accordance with IPC J-STD-001, Class 3 (Space and Military Applications), including solder joint, component mounting, and workmanship criteria applicable to the highest reliability class.

PC03 Finished PCBA Acceptance

Visual and dimensional acceptability of finished printed circuit board assemblies shall be evaluated per IPC-A-610, Class 3 acceptance criteria. Any condition not meeting Class 3 acceptance shall be dispositioned through CoExcel's Material Review process prior to shipment.

PC04 Rigid Bare Board

Rigid printed circuit boards shall be fabricated and qualified in accordance with IPC-6012, Class 3, covering performance, reliability, and qualification requirements applicable to high-reliability and military/aerospace end use.

PC05 Bare-Board Acceptance

Bare (unpopulated) printed circuit boards shall be inspected and accepted in accordance with IPC-A-600, Class 3 acceptability criteria prior to assembly or shipment.

PC06 ESD Control

Supplier shall maintain and demonstrate a certified electrostatic discharge (ESD) control program compliant with ANSI/ESD S20.20, covering personnel grounding, workstation controls, packaging, and handling of all ESD-sensitive devices and assemblies from receipt through shipment.

PC07 Moisture-Sensitive Devices

Handling, packing, shipping, and floor-life control of moisture- and reflow-sensitive surface-mount devices shall comply with IPC/JEDEC J-STD-033, including moisture barrier bagging, desiccant, humidity indicator cards, dry-pack labeling, and bake-out/re-dry procedures where floor-life limits are exceeded.

PC08 Rework and Repair

Any rework or repair of printed circuit board assemblies shall be performed in accordance with IPC-7711/7721 by personnel trained and, where applicable, certified to the applicable IPC standard. Unauthorized rework or repair outside these standards is prohibited without CoExcel's prior written approval.

PC09 First Article Inspection

Where required by the PO, Supplier shall perform and submit a First Article Inspection (FAI) report compliant with AS9102 (Forms 1, 2, and 3, as applicable) for the first production PCBA and upon subsequent triggering events, including design



change, process or location change, break in production exceeding the period stated on the PO, or change in component/material source.

PC10 Counterfeit Prevention

Supplier shall maintain a counterfeit electronic parts avoidance and detection program consistent with SAE AS5553, procuring all electronic piece parts from Original Component Manufacturers (OCMs), OCM-authorized sources, or franchised distribution with full lot traceability. Use of independent distributors or brokers requires CoExcel's prior written approval and additional inspection/testing as specified by CoExcel.

Supporting Objective Quality Evidence

Upon request, Supplier shall provide the following in support of PC01–PC10 compliance:

- Current AS9100 certificate of registration
- Operator training/certification records for IPC J-STD-001 and IPC-A-610 (e.g., IPC Certified IPC Trainer/Certified Interconnect Specialist records or equivalent)
- ESD program audit records or ANSI/ESD S20.20 compliance verification records
- Moisture-sensitive device handling logs (bake-out records, floor-life tracking, dry-pack documentation)
- Rework/repair records identifying operator certification and IPC standard applied
- AS9102 First Article Inspection reports (Forms 1, 2, and 3), when invoked
- Component traceability records evidencing OCM/authorized/franchised source of procurement for all electronic piece parts