



ENGINEERING RESOURCES / RFQ PREPARATION

PCB / PCBA RFQ preparation checklist

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A complete PCB / PCBA RFQ package contains revision-matched board manufacturing files, a fabrication drawing and stackup, plus a BOM, placement data and assembly drawing when assembly is required. Add test and acceptance requirements, quantity tiers, target schedule, sourcing responsibilities and delivery details. Mark missing inputs and name the person who can resolve them.

HOW TO USE

1. Record the project baseline, release owner and requested quote tiers.
2. Check each input only when ready; record gaps, owners and next actions.
3. Confirm the release package with the recipient before sharing files.

This is general engineering planning guidance, not a supplier capability declaration. Confirm formats, feasibility and handling arrangements with the recipient before releasing files.

PROJECT SHEET

Fill in digitally or print and write.

Project / revision

Contact / release owner

Quantity tiers

Target date

Destination country

IPC class and standard revision

Open items / next action

JUMP TO A SECTION

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Online checklist: pcbcontractmanufacturing.com/resources/

Project brief: pcbcontractmanufacturing.com/quote/

Capability review: pcbcontractmanufacturing.com/capabilities/

Contact: sales@wellpcb.net



01 Board fabrication files

Check when ready. Record unresolved inputs on the project sheet.

Why it changes the quote: Work, materials or review affected by these inputs.

Common mistake: An omission or mismatch to resolve before release.



Gerber or ODB++ package

INCLUDE Provide the layer data and board outline in Gerber or an agreed ODB++ export, with a file manifest and units.

WHY IT CHANGES THE QUOTE The geometry defines the board to be quoted; missing layers or an unclear outline leave tooling and processing assumptions unresolved.

COMMON MISTAKE Sending a screenshot, an incomplete export or files from different revisions instead of a coherent manufacturing package.



Drill data

INCLUDE Include drill files and tool information; distinguish plated and non-plated holes and identify slots, units and coordinate origin.

WHY IT CHANGES THE QUOTE Hole types and dimensions affect drilling, plating and inspection scope.

COMMON MISTAKE Omitting the drill file or assuming the recipient can infer slot and plating requirements from copper layers.



Stackup and fabrication drawing

INCLUDE Specify the layer order, material requirements, finished thickness, copper, surface finish, dimensions and critical tolerances. Identify controlled-impedance requirements and panel constraints where relevant.

WHY IT CHANGES THE QUOTE Materials, stackup and acceptance limits determine the process and verification work included in the quote.

COMMON MISTAKE Giving conflicting notes in the drawing and stackup, or using an impedance target without identifying the affected nets and reference layers.



Panelization and separation

INCLUDE Provide the proposed panel drawing or assign panel design ownership. Identify rails, tooling holes, fiducials, separation method and component clearance constraints; request review before release.

WHY IT CHANGES THE QUOTE Panel layout affects material use, assembly support and depanelization work.

COMMON MISTAKE Assuming a board outline defines an assembly-ready panel or leaving separation and edge-clearance requirements unstated.



02 Assembly and test inputs

Check when ready. Record unresolved inputs on the project sheet.

Why it changes the quote: Work, materials or review affected by these inputs.

Common mistake: An omission or mismatch to resolve before release.

☐ BOM with MPNs and approved alternates

INCLUDE List manufacturer names, manufacturer part numbers (MPNs), reference designators, quantities per board and do-not-fit items. Identify approved alternatives separately from proposed substitutions.

WHY IT CHANGES THE QUOTE Exact parts and approved alternatives determine sourcing scope and material assumptions.

COMMON MISTAKE Using only a distributor code or generic value, or listing an alternate without an approval status.

☐ Centroid / pick-and-place data

INCLUDE Provide component reference, X/Y position, rotation and board side. State units, origin and orientation conventions; match the placement list to the BOM.

WHY IT CHANGES THE QUOTE Placement data supports assembly programming and exposes discrepancies that need engineering review.

COMMON MISTAKE Mixing coordinate origins or rotations, or including references that are absent from the released BOM.

☐ Assembly drawing

INCLUDE Show orientation, polarity, do-not-fit positions, fiducials and mechanical or cable instructions. Include solder-paste layers and stencil requirements; specify conformal coating and masking areas if required.

WHY IT CHANGES THE QUOTE Stencil preparation, coating and work beyond automated placement change the assembly scope.

COMMON MISTAKE Assuming placement data defines polarity, paste apertures, coating exclusions or all manual assembly steps.

☐ Test requirements

INCLUDE Separate inspection from functional testing. Supply versioned firmware or programming files, programming steps, fixtures, test procedure, pass/fail criteria and reports; identify who supplies each input.

WHY IT CHANGES THE QUOTE Fixture preparation, programming and test execution change the work that must be quoted.

COMMON MISTAKE Requesting a tested board without a test procedure or measurable pass/fail criteria.



03 Build plan and sourcing responsibilities

Check when ready. Record unresolved inputs on the project sheet.

Why it changes the quote: Work, materials or review affected by these inputs.

Common mistake: An omission or mismatch to resolve before release.

☐ Quantity and quantity tiers

INCLUDE State the board or assembled-unit count for each requested quote tier. Distinguish the current build from possible repeat orders and state whether quantities refer to boards or panels.

WHY IT CHANGES THE QUOTE Build quantities change material purchasing, setup allocation and packaging assumptions.

COMMON MISTAKE Treating a forecast as a committed order or leaving the unit of quantity ambiguous.

☐ Target schedule

INCLUDE Give the desired delivery date and destination, expected file-release date and any review milestones. Mark which dates are flexible.

WHY IT CHANGES THE QUOTE The recipient needs to assess material availability, review work and transport against the requested timing.

COMMON MISTAKE Confusing dispatch with arrival, or treating a requested date as an agreed delivery commitment.

☐ IPC class and acceptance requirements

INCLUDE State the requested IPC class and the applicable standard and revision on the drawing or purchase requirements. If undecided, record it as an open question.

WHY IT CHANGES THE QUOTE Acceptance requirements affect process review, inspection and documentation scope; feasibility must be confirmed for the project.

COMMON MISTAKE Writing Class 3 without identifying the applicable standard, or assuming a class selection confirms supplier capability.

☐ Sourcing responsibility

INCLUDE Identify turnkey, consigned or mixed supply per BOM line. Assign purchasing, substitution approval, traceability records, excess material and shortage decisions to named owners.

WHY IT CHANGES THE QUOTE Responsibility for materials determines which purchasing and handling work belongs in the quote.

COMMON MISTAKE Marking parts customer-supplied without specifying quantities, condition, packaging or when they will be available.



04 Revision control and delivery handoff

Check when ready. Record unresolved inputs on the project sheet.

Why it changes the quote: Work, materials or review affected by these inputs.

Common mistake: An omission or mismatch to resolve before release.



Revision / version and release owner

INCLUDE Use a project identifier and revision across the BOM, drawings and manufacturing files. Include a manifest, open-item list and contact authorized to approve changes.

WHY IT CHANGES THE QUOTE A stable baseline defines what is priced and allows engineering changes to be evaluated separately.

COMMON MISTAKE Sending several folders called final without identifying which files are approved for quotation or production.



Destination and export documents

INCLUDE State the destination country, delivery location, packaging needs and requested shipping or export documents. Confirm who supplies product descriptions and any required classification information.

WHY IT CHANGES THE QUOTE Packing, transport and documentation responsibilities affect the quoted delivery scope.

COMMON MISTAKE Requesting delivered pricing without a destination or assuming every document is automatically included.



NDA and evidence review

INCLUDE Flag a wish to discuss an NDA before sharing proprietary files. Confirm the recipient, contracting and manufacturing entities, secure transfer channel and handling arrangements; request applicable original certificates or reports if needed.

WHY IT CHANGES THE QUOTE Confidentiality and evidence review may need to happen before the recipient can assess the complete package.

COMMON MISTAKE Uploading confidential files before confirming arrangements, or treating an NDA checkbox as an executed agreement.



Packaging, ESD and identification

INCLUDE Specify ESD protection, moisture-sensitive handling where applicable, unit or panel packing, labels and traceability identifiers. Identify returnable packaging or customer-supplied packing materials.

WHY IT CHANGES THE QUOTE Protection, labeling and packing instructions define handling and delivery work.

COMMON MISTAKE Requesting generic packaging without defining protection, identification or how boards should be separated.