

Want a quick response to your PCB assembly RFQ?

Submit the full package of details!

Design projects that are actually completed with time to spare are few. We do what we can but breaking new ground invariably uncovers a few snakes in the brush and dealing with them takes time. That means that the next step, production scale-up, starts out behind schedule. At that point you need to get your assembly quotes back ASAP so your choice could be made and the trigger pulled to get product flowing.



Some contract assembly companies could give you a working number within a few days, but it would come with a list of caveats and unknowns and escalator clauses. Do you really want to commit to the program manager, to the CEO, or worse to the Marketplace, with a number that guarantees a loss of profit (bid too low) or a loss of sales (bid too high)? “Not if it could be avoided” says you!

So let’s start by pulling together the documentation that engineering has plus the implementation that marketing envisions plus the scale-up time the boss has in mind.

Kit build (labor only) or turn-key (labor and all materials) or a blend?

Build, release, and EAU quantities

BoM, bill of materials including off-the-shelf

part number, source, tolerances, alternatives, and count. Note those OEM provided.

If a component is obsolete should it be broker sourced, replaced, or re-engineered?

OEM, assembly house, or outside service to program ICs?

PCB Gerber files including

board spec, quality level, panelization (x-outs OK?), certs (RoHS, ITAR, etc.).

3D CAD drawings with specs of custom parts (including the PCB) and current sources (if any).

Assemblies supplied still in an array, as individual boards, or in final enclosures?

Final assembly procedures are required:

conformal coating (type), potting, ultrasonic staking.

Post assembly procedures are required:

burn-in, temperature cycling (powered or unpowered), cycles and duration.

QC testing: limited, full bed-of-nails, test hardware & software provided?

Golden sample and schematic available for test setup and aesthetic comparison?

What packaging is required (ESD, padded, consumer boxed, quantity per carton, etc.)?

Per cent shipment overage/underage acceptable?

Quality and professionalism do not cost, they pay. Even with this list questions might occur, but you will experience fewer breaks in your day to track down people for missing details and you will get a more realistic cost, faster, and be on to other challenges.