



CAPABILITY STRUCTURE

Rigid PCB Manufacturing Capability

Public capability overview for rigid printed circuit boards, organized for project DFM and controlled release.

Capability note: This document defines capability categories without publishing unsupported extreme values. Project limits are confirmed by DFM.

Product scope Single-sided, double-sided and multilayer rigid PCB	Definition Material, stack-up, copper, geometry, drilling and surface finish
Quality Fabrication data, netlist, inspection and project acceptance requirements	Release basis Approved fabrication drawing and manufacturing DFM

1. Manufacturing Capability Categories

Category	Project definition
Product construction	Layer count, finished thickness, laminate and copper definition
Circuit geometry	Trace, space, pad, annular ring and solder-mask features
Drilling	Finished plated and non-plated holes, slots and position requirements
Outline	Routing, scoring, panel rails, breakaway features and finished dimensions
Surface finish	Project-approved finish, contact use and assembly compatibility
Solder mask / legend	Color, openings, registration, markings and cosmetic requirements
Thermal / reliability	Named project tests, preconditioning and acceptance criteria
Quality records	Electrical test, inspection evidence, traceability and change control

2. Capability Notes

- Capability depends on material, copper, layer count, panel size and feature density.
- Finished-hole requirements must be separated from drill-tool dimensions.
- Thermal and reliability claims require a named test method and acceptance criteria.
- Delivery commitments remain part of order review, not the technical capability table.



FABRICATION DATA AND RELEASE

Rigid PCB Manufacturing Capability

Public capability overview for rigid printed circuit boards, organized for project DFM and controlled release.

Data package	Required content
Fabrication drawing	Dimensions, datums, notes, tolerances, stack-up and finish
Layer data	Controlled artwork for copper, mask, legend and mechanical layers
Drill data	Tool definitions, plated status, slots and controlled-depth features
Netlist	Reference netlist or approved electrical test source
Panel requirements	Array, rails, tooling, fiducials and breakaway method
Assembly interface	Component constraints, connector areas and controlled impedance needs

3. Manufacturing Review

Review group	Acceptance basis
Material	Laminate and copper system is available and suitable for the use condition
Geometry	Critical features match the selected construction and copper
Drilling	Hole definitions distinguish drilled size from finished size
Finish	Surface finish and mask are compatible with assembly and contact use
Testing	Electrical, dimensional and project-specific evidence is defined

The released PCB is governed by one fabrication drawing, one controlled data package and the approved manufacturing review.

Identify standard and advanced requirements during quotation so material, panelization, testing and inspection can be planned together.