NOVATRONIC PCB

DOWNLOADABLE DOCUMENT 03

DFM SUBMISSION CHECKLIST

Ensure a Complete, Accurate and Manufacturable PCB Submission

PURPOSE

Use this checklist to ensure all design data is submitted for a comprehensive DFM review. A complete DFM review identifies potential manufacturing issues before production and ensures a reliable and cost-effective build.

HOW TO USE

- Submit with all required manufacturing data.
- Answer all DFM review items accurately.
- Review manufacturer findings and actions.
- Approve DFM before authorizing production.

SECTION	ITEM		DFM REVIEW FOCUS	SUPPLIED	DFM REVIEW STATUS				NOTES / MANUFACTURER FINDINGS
					CRITICAL	MAJOR	MINOR	N/A	
1 COPPER FEATURES	1.1	Minimum Track Width	Minimum achievable.	☐	☐	☐	☐	☐	
	1.2	Track Spacing	Minimum achievable.	☐	☐	☐	☐	☐	
	1.3	Annular Rings	Minimum achievable.	☐	☐	☐	☐	☐	
	1.4	Copper-to-Edge Clearance	Minimum achievable.	☐	☐	☐	☐	☐	
	1.5	Acid Traps / Slivers	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	1.6	Copper Balance	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	1.7	Etch Compensation	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	1.8	CAM Modifications	Any CAM changes?	☐	☐	☐	☐	☐	
2 HOLES & VIAS	2.1	Minimum Drill Size	As per capability.	☐	☐	☐	☐	☐	
	2.2	Aspect Ratio	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.3	Drill-to-Copper Clearance	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.4	PTH Plating Capability	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.5	Blind / Buried Vias	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.6	Microvias	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.7	Via-in-Pad	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.8	Filled / Capped Vias	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.9	Backdrilling	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	2.10	Press-fit Holes	Reviewed and acceptable.	☐	☐	☐	☐	☐	
3 STACK-UP & MATERIALS	3.1	Stack-up Model	Achievable and acceptable.	☐	☐	☐	☐	☐	
	3.2	Material Availability	Available or substitute.	☐	☐	☐	☐	☐	
	3.3	Core Material	Achievable.	☐	☐	☐	☐	☐	
	3.4	Prepreg Material	Achievable.	☐	☐	☐	☐	☐	
	3.5	Copper Weights	Achievable.	☐	☐	☐	☐	☐	
	3.6	Board Thickness	Achievable.	☐	☐	☐	☐	☐	
	3.7	Sequential Lamination	Lamination sequence acceptable.	☐	☐	☐	☐	☐	
	3.8	Material Substitutions	Any proposed substitutes?	☐	☐	☐	☐	☐	
4 CONTROLLED IMPEDANCE	4.1	Impedance Targets	Within capability.	☐	☐	☐	☐	☐	
	4.2	Impedance Tolerance	As per specification.	☐	☐	☐	☐	☐	
	4.3	Trace Width / Spacing	As per model.	☐	☐	☐	☐	☐	
	4.4	Dielectric Thickness	As per model.	☐	☐	☐	☐	☐	
	4.5	DK Used	As per model.	☐	☐	☐	☐	☐	
	4.6	Coupon / TDR Test	Required / Reviewed.	☐	☐	☐	☐	☐	
5 FINISH, MASK & LEGEND	5.1	Surface Finish	Within capability.	☐	☐	☐	☐	☐	
	5.2	Solder Mask Dams	Adequate.	☐	☐	☐	☐	☐	
	5.3	Mask-to-Pad Registration	Acceptable.	☐	☐	☐	☐	☐	
	5.4	Via Tenting / Filling	Acceptable.	☐	☐	☐	☐	☐	
	5.5	Legend Clearance	Adequate.	☐	☐	☐	☐	☐	
	5.6	Surface Finish Capability	Achievable.	☐	☐	☐	☐	☐	
	5.7	Selective Plating	Reviewed.	☐	☐	☐	☐	☐	
	5.8	Gold Fingers	Reviewed.	☐	☐	☐	☐	☐	
6 MECHANICAL	6.1	Board Outline	Reviewed and acceptable.	☐	☐	☐	☐	☐	
	6.2	Slots / Cut-outs	Reviewed.	☐	☐	☐	☐	☐	
	6.3	Routing Tolerances	Within capability.	☐	☐	☐	☐	☐	
	6.4	V-Score	Reviewed.	☐	☐	☐	☐	☐	
	6.5	Castellations	Reviewed.	☐	☐	☐	☐	☐	
	6.6	Bevels	If specified.	☐	☐	☐	☐	☐	
	6.7	Countersinks	If specified.	☐	☐	☐	☐	☐	
7 PANELIZATION & FABRICATION	7.1	Panel Utilization	Acceptable.	☐	☐	☐	☐	☐	
	7.2	Tooling Rails	Adequate.	☐	☐	☐	☐	☐	
	7.3	Breakaway Tabs	Adequate.	☐	☐	☐	☐	☐	
	7.4	Fiducials	Adequate.	☐	☐	☐	☐	☐	
	7.5	Coupons	Included.	☐	☐	☐	☐	☐	
	7.6	X-outs	Clearly marked.	☐	☐	☐	☐	☐	
	7.7	Array Requirements	As specified.	☐	☐	☐	☐	☐	
8 SPECIAL / HIGH RELIABILITY	8.1	IPC Class Requirement	Class 2 / Class 3 confirmed.	☐	☐	☐	☐	☐	
	8.2	HDI / Advanced Technology	Reviewed.	☐	☐	☐	☐	☐	
	8.3	High Aspect Ratio	Within capability.	☐	☐	☐	☐	☐	
	8.4	Heavy Copper	Within capability.	☐	☐	☐	☐	☐	
	8.5	RF Materials	Within capability.	☐	☐	☐	☐	☐	
	8.6	Controlled Depth	Within capability.	☐	☐	☐	☐	☐	
	8.7	Special Testing	Available.	☐	☐	☐	☐	☐	
	8.8	Microsection	Available.	☐	☐	☐	☐	☐	

9 DFM FINDINGS SUMMARY

ITEM No.	SEVERITY (Critical / Major / Minor)	DFM FINDING / RECOMMENDATION	DESIGN CHANGE REQUIRED	CUSTOMER ACTION REQUIRED
1				
2				
3				
4				
5				

10 MANUFACTURER DECLARATION

We have reviewed the submitted data and confirm that we are capable of manufacturing this PCB according to the provided documents, drawings and requirements and have identified all DFM concerns, required changes, exceptions and proposed deviations prior to production.

DFM REVIEWED BY: _____ DATE: _____

POSITION: _____ DEPARTMENT: _____

DFM ACCEPTANCE

DFM ACCEPTED – PROCEED TO MANUFACTURE

Approved By (Customer): _____

Date: _____

DFM REJECTION

DFM REJECTED – CUSTOMER ACTION REQUIRED

Reason / Action Required: _____

Target Resolution Date: _____