

## PCB Manufacturing Technical Specifications

Seq	Item		Technical Specification		Remarks	
			Imported			
1	Number of Layer		1-24 Layers			
2	Base Material		FR4, Teflon,Rogers,Aluminum Based			
3	Finish Board Thickness		0.13 mm - 4.5 mm (5 mil - 177 mil)			
4	Minimum Core Thickness		0.08mm ( 3 mil)			
5	Copper Thickness		Min. 1/4 OZ, Max. 6 OZ		Selective Area Available, Thicker Cu On Request	
6	Min. Trace Wide& Line Space	Single Sided	0.08mm ( 3 mil)			
		Double Sided	0.08mm ( 3 mil)			
7	Min. Hole Diameter	Drilling /PTH	Dia0.10mm ( 4 mil)			
		Punching	Dia0.90 mm ( 36 mil )			
8	Dimension Tolerance	Hole Position	±0.05 ( 2 mil )			
		Conductor Width(W)	±1mil Deviation of Master A/W			
		Hole Diameter(H)	NPTH: ±0.03 mm ( 1 mil )			
			PTH: ±0.05 mm ( 2 mil )			
		Outline Dimension	±0.10 mm ( 4 mil )			
		Conductors & Outline ( C - O )	±0.13 mm ( 5 mil )			
Warp and Twist	0.50%					
9	Surface Treatment On Land Area		Hard Gold, Immersion Gold, Immersion Silver and HASL Leaded and Lead Free, Entek and Immersion Tin			
10	V-Cutting	Panel Size	457.2mm X 1200 mm ( max. )			
		Board Thickness	0.30 mm (12mil) min.			
		Remain Thickness	0.40 +/-0.10mm ( 16+/-4 mil )			
		Tolerance	±0.1 mm(4mil)			
		Groove Width	0.38 mm (15mil) max.			
		Groove to Groove	10 mm (394mil) min.			
		Groove to Trace	0.38 mm(15mil) min.			
11	Slot	Slot size tol.L≥2W	PTH Slot: L : ±0.10(4mil) W : ±0.05(2mil)		(1)L=Length of slot (2)W=Width of slot (3)Min.drill bit size for multi-hit is 0.60mm	
			NPTH slot(mm) L : ±0.08(3mil) W : ±0.05(2mil)			
12	Min Spacing from hole edge to hole edge	0.30-1.60 (Hole Diameter)	0.10mm(4mil)			
		1.61-6.50 (Hole Diameter)	0.13mm(5mil)			
13	Minimum spacing between hole edge to circuitry pattern		PTH hole: 0.13mm(5mil)			
			NPTH hole: 0.10mm(4mil)			
14	Image transferRegistration tolerance	Circuit pattern vs.index hole	±0.08(3mil)			
		Circuit patten vs. 2nd drill hole	±0.10(4mil)			
15	Registration tolerance of front/back image		0.05mm(2mil)			
16	Multilayers	Layer-layer misregistration	4layers:	0.10mm(4mil)max.		
			6layers:	0.13mm(5mil)max.		
			8layers:	0.15mm(6mil)max.		
			8-22 Layers	0.25mm(10mil)max.		
		Min.Spacing From Hole Edge to Innerlayer Pattern		0.15mm(6mil)		
		Min.Spacing From Outline to Innerlayer Pattern		0.225mm(9mil)		
		Min. board thickness		4layers:0.20mm(8mil)		
				6layers:0.50mm(20mil)		
				8layers:0.75mm(30mil)		
		Board thickness tolerance		4layers:+/-0.10mm(4mil)		
6layers:+/-0.13mm(5mil)						
8-12 layers:+/-0.15mm(6mil)						
14-22 layers: +/-0.20mm (8mil)						
17	Insulation Resistance		10KΩ~20MΩ(typical:5MΩ)			
18	Conductivity		<50Ω(typical:25Ω)			
19	Test voltage		250V			
20	Impedance control		Typical: 50Ω+/-10%			