

Multilayer PCB Manufacture Capabilities

No.	Item	Standard	Advanced
1	Materials	Materials	FR-4 Middle, High Tg, Halogen Free, High CTI, High Speed
2	Basic parameters	Layers	4-42L
3		Max.Board size	1100*660mm
4		Min.Board size	5*5mm
5		Max.Board thickness	6mm
6		Min.Board thickness	0.3mm
7		Tolerance of board thickness(>1.0mm)	±10%
8		Tolerance of board thickness(≤1.0mm)	±0.1mm
9		Drilling	Min.Drilling hole(mech)
10	Min.Drilling hole(laser)		0.1mm
11	Finish hole tolerance(PTH)		±0.075mm
12	Finish hole tolerance(NPTH)		±0.05mm
13	Hole position deviation		±0.075mm
14	Min.Distance between via and conductors		0.2mm
15	Min.Drilling spacing between holes(the same network)		0.2mm
16	Min.Drilling spacing between holes(for different networks)		0.3mm
17	Aspect ratio(mech drill)		10:1
18	Inner layer	Min.Line width/space	4/4mil
19		Max.Copper thickness	10oz
20		Min.Copper thickness	0.5oz
21	Outer layer	Min.Line width/space	4/4mil
22		Max.Copper thickness	10oz
23		Min.Copper thickness	0.5oz
24		Min.BGA pad size	12mil(8mil for electrical soft gold board)
25		Finish Line tolerance	±1.5mil
26	Testing method	Electrical testing	Flying needle test, needle bed test
27	Surface treatment	Surface treatment	HASL/LF HASL, ENIG, ENEPIG, Immersion Silver, Immersion Tin, Plating Tin, Plating Silver, Electrolytic Nickel Gold, Soft Gold, Hard Gold, Gold Finger, OSP, Carbon Ink.
28		Mixed surface treatment	GF+OSP, GF+HASL, OSP+ENIG, IAG+GF, Isn+GF

29	Routing	Routing Tolerance(Laser)	±0.05mm	±0.05mm
30		Routing Tolerance(CNC)	±0.15mm	±0.1mm
31	Others	Via treatment method	Through hole window opening, through hole cover oil, through hole plug oil, through hole plug resin/copper paste	Through hole window opening, through hole cover oil, through hole plug oil, through hole plug resin/copper paste
32		Warp and Twist	≤0.7%	≤0.5%
33		Controlled Impedance	±10%	±5%
34		Special process	Gold fingers, half-holes, metal edging, stepped grooves, etc.	Gold fingers, half-holes, metal edging, stepped grooves, etc.