



深圳睿达电路科技有限公司

READA PCB TECHNOLOGY CO.,LTD

PCB Manufacturing Capability

Item		Mass production	Sample production
Base material		FR-4,CEM-3,AL, PI (SY, KB, ILM,ITEQ,BOYU etc)	FR4,RO4003/4350/3003,Panasonic M6, ISOLA, Polyimide
Layer Count		1-16L	2-40L
Layer Registration Tolerance		≤3mil	≤2mil
Max.board size		600*1200MM	600*1500MM
Min. Board size		10*10mm(Thickness>0.4mm)	10*5mm(Thickness>0.4mm)
Min.thickness for inner layer Base material /Cu		6mil 1/3oz without copper	4mil 1/3oz without copper
Finished thickness	Single/Double	0.4-3.5mm(min :0.6mm for HAL)	0.25-4.5mm(min:0.6mm for HAL)
	Multilayer	0.4~6.0mm	0.4-6.0mm
Twist & Warp	Single/Double/Multilayer	0.75%	0.50%
Hole size	Ratio	1:8	1:12
	Hole Size tolerance	PTH: 0.075mm NPTH: 0.05mm	PTH: 0.05mm NPTH: 0.05mm
	Hole location tolerance	PTH: 0.075mm NPTH: 0.075mm	PTH: 0.05mm NPTH: 0.05mm
	Mechanical Drilling	0.2mm-6.0mm Ratio 1: 6(Min. distance between holes 14mil)	0.15mm-6.0mm Ratio 1: 8(Min. distance between holes 14mil)
	Laser Drilling	0.1mm (4mil)	0.075mm (3mil)
Outline tolerance	Punching	+/-0.1MM	+/-0.05MM
	Routing	+/-0.13MM	+/-0.1MM
	V-CUT	+/-0.1MM	+/-0.05MM
	Depth routing	+/-0.1MM	+/-0.1MM
	Beveling	+/-0.1MM	+/-0.1MM
Board thickness tolerance	≤20mil	±3mil (2L)	±2mil (2L)
	20mil<x<40mil	±4mil (2L)	±3mil (2L)
	40mil<x<62mil	±4mil (2L,Multilayer)	±3.5mil (2L,Multilayer)
	≥62mil	±10% (2L,Multilayer)	±8% (2L,Multilayer)
Min.Line width/space (Finished)	1/3OZ	2.5/2.5mil(min)	2.5/2.5mil(min)
	H/Hoz	3.0/3.0mil(min)	3/3mil(min)
	1/1oz	4/4.0mil(min)	3.0/3.5mil(min)
	2/2oz	6.0/5.0mil(min)	5.0/4.0mil(min)
	3/3oz	8.0/6.0mil(min)	7.0/5.0mil(min)
	4/4oz	10.0/8.mil(min)	9.0/7.0mil(min)
	5/5OZ	12/10mil(min)	11/9mil(min)
	6/6OZ	14/12mil(min)	13/12mil(min)
Dielectric Layer Thickness tolerance	Single sheet	±10%	±8%
	2 Sheets or above	±10%	±10%
Impedence	Single	50-100 ohm+/-10%	50-90 ohm+/-10%
	Difference	60-120 ohm+/-10%	60-120 ohm+/-10%
Impedence line width/space	Tolerance	±10%	±8%
Line width/space	Tolerance	±20%	±15%

BGA	Distance	6mil	4mil
	Pad size	10mil(min)	8mil(min)
Soldermask	Soldermask bridge	4mil(min)	3mil(min)
	Soldermask thickness	10um(min)	10um(min)
	Exposure Accuracy	1.5mil	1.0mil
	Soldermask color	Green,Black, white, Blue,Yellow, RED	Green,Black, white, Blue,Yellow, RED
	Plugged via size	0.2-0.5MM	0.2-0.5MM
Min.distance between Hole wall to Conductor	4Lsize<15"*20"	5mil	4mil
	4Lsize≥20"	5.5mil	5mil
	6L	6mil	6mil
	8L	7mil	6.5mil
	>8L	8mil	7.0mil
Copper thickness		Outer layer 1/2 ~6oz Inner layer 1/3 ~3oz	Outer layer 1/2 ~12oz Inner layer 1/3 ~6oz
Surface	Gold Plating	Ni: 0.080-0.160mil Au: 0.0002-0.05mil	Ni: 0.080-0.160mil Au: 0.0002-0.05mil
	Immersion Gold	Ni: 0.080-0.200mil Au: 0.001-0.003mil	Ni: 0.080-0.200mil Au: 0.001-0.003mil
	OSP	0.2-0.6um	0.2-0.6um
	HAL LF	Tin: 0.120mil(min)	Tin: 0.120mil(min)
	HAL	Tin: 0.120mil(min)	Tin: 0.120mil(min)
	Immersion Tin	Tin: 0.032mil(min)	Tin: 0.032mil(min)
	Immersion Ag	Ag: 0.008-0.016mil	Ag: 0.008-0.016mil
	Carbon Ink	Resistance value: 25-100 ohm	Resistance value: 25-100 ohm
	ENIG+Carbon	Ni: 0.080-0.200mil Au: 0.001-0.003mil Resistance value: 25-100 ohm	Ni: 0.080-0.200mil Au: 0.001-0.003mil Resistance value: 25-100 ohm
	ENIG+Gold plating+OSP ENIG+OSP	Ni: 0.080-0.200mil Immersion gold: 0.001-0.003mil Plating Gold: 0.003-0.060mil OSP: 0.2-0.6um	Ni: 0.080-0.200mil Immersion Gold: 0.001-0.003mil Plating gold: 0.005-0.070mil OSP: 0.2-0.6um

Made by: LI JIAN GEN

Approved by :

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