

FR4 PCB-Production Capability

Material		(ROHS, Halogen Free & Reach Compliance) FR-4 (Tg130-180): ShengYi, ITEQ, KB, Huazheng High Speed FR4, Ceramics & Teflon, Rogers
Layer count		1~24
HDI Stack up		1+N+1, 2+N+2, 3+N+3(with copper filling)
Final board thickness		0.15-3.2mm
Aspect Ratio	Laser via	3: 4
	PTH	10: 1
Copper thickness		1/3~6oz
Impedance Control	Single Ended	+/- 10%
	Differential	+/- 10%
Line/Space	Inner Layer	2.5/2.5mil
	External Layer	2.5/2.5mil
Min Drill Bit size		8mil
Hole size tolerance	PTH	+/-2mil
	NPTH	+/-1mil
Hole Position Tolerance		+/-2mil
Profile Tolerance	Puching	+/-3mil
	Routing	+/-4mil

Soldermask	Line to pad	4mil
	Registration	+/-2mil
Warpage		0.5%
Surface Finish	HASL(LF HASL)	SMD 40-2000u", GND 30-800u"
	ENIG	Au 1-5u", Ni 80-200u"
	OSP	
	Immersion Tin	0.8-1.2um
	Immersion Silver	0.15-0.45um
	Hard Gold Plating	Au 1-50u", Ni 80-200u"
	Peelable Mask	5mil
Remarks	Carbon ink	0.3mil
	Mixed Surface Finishes	OSP+ENIG, OSP+HASL
	Heavy Copper	External layers up to 12oz
	Long PCB	max 1.5m for DS
	(High R) Carbon	Available
	Gold finger	Available
	Jump V-Cut	Available
	PCB Edge plating	Available
	Countersink & Counterbore	Available
	Sequential lamination	Available
	Step Routing	Available