



FPC製程能力表 FPC Capability

編號 NO.	分類 Division	項目 Item	能力 Capability	註記 Note
1	生產層數 Layer Count		1~14L	
2	板材 Material	類型 Type	有膠Adhesive、無膠Adhesive-free、ED Cu、RA Cu、高頻low	
		品牌 Brand	生益Shengyi、台虹Taiflex、松下Panasonic、杜邦DuPont	
3	板子尺寸 Board Dimention	最大成品尺寸 Finished Dimensions(Maximum)	250*700mm	
		最小成品尺寸 Finished Dimensions(Minimum)	10*10mm	
		最大成品板厚 Max. Board Thickness	0.75mm	
		最小成品板厚 Min. Board Thickness	0.075mm	
		板厚公差(1~2L) Board Thickness tolerance	0.03mm	
		板厚公差(>3L) Board Thickness tolerance	0.05mm	
4	鑽孔 Drilling	鑽孔尺寸範圍 Drilling size range	0.1mm~6.5mm	
		孔徑公差 hole tolerance	±0.01mm	
		孔位精度 True position size	±0.05mm	
		最小孔徑 Minimum size	0.1mm	
5	電鍍 Copper Plating	孔銅厚度-2L Cu Thickness in Through hole	8-25um	
		孔銅厚度-多層板 Cu Thickness in Through hole	12-25um	
		填孔 Via in pad Fill Material	Copper paste	
6	蝕刻 Etching	10Z, Min. Trace/Space (Singel side)	75/75 um	
		1/20Z, Min. Trace/Space (Singel side)	50/50 um	
		1/30Z, Min. Trace/Space (Singel side)	45/45 um	
		10Z, Min. Trace/Space (Double side)	75/75 um	
		1/20Z, Min. Trace/Space (Double side)	65/65 um	
		1/30Z, Min. Trace/Space (Double side)	50/50 um	
7	覆蓋膜 Coverlay	覆蓋膜材質 Coverlay Material	PI	
		覆蓋膜貼合公差 Coverlay Tolerance	Standard: ±0.5mm, Advanced: ±0.3mm	
		覆蓋膜最小開窗 Coverlay Color	0.35X0.35mm	
		覆蓋膜開窗距離線路 Coverlay Tolerance	0.30mm	
		覆蓋膜顏色 Coverlay Color	Yellow、White、Black、Red、Green	
		覆蓋膜溢膠量 Coverlay Tolerance	≤0.10mm	
8	補強板Stiffener	補強材質 Stiffener Material	CVL、PI、FR4、SUS	
		補強貼合公差 Stiffener Tolerance	Standard: ±0.3mm, Advanced: ±0.2mm	
		補強材質厚度 Stiffener Material Thickness	PI(0.05~0.225mm)、FR4(0.1~2mm)、SUS(0.1~0.5mm)	
		補強材質最小尺寸 Stiffener Material Minimum	5mm X 5mm	
9	防焊 Solder Mask	防焊顏色 Solder Mask Color	Yellow、White、Black、Red、Green	
		防焊偏移 Solder Mask Deviation	Standard: ±0.075mm, Advanced: ±0.05mm	
		防焊間距 Mask spacing	0.1mm(min)	
		防焊最小開窗 Minimum Opening	0.3mm X 0.3mm	
		防焊偏位公差 Solder Mask Hotbake Tolerance	Standard: ±0.35mm, Advanced: ±0.3mm	
		防焊厚度公差 Solder Mask Hotbake Thickness	20±10um	
10	文字 Silkscreen	文字公差 Silkscreen Tolerance	Standard: ±0.35mm, Advanced: ±0.3mm	
		最小文字尺寸 Silkscreen Minimum Size	0.1mm	
		最小文字高度 Silkscreen Minimum Height	1.0mm	
11	沖壓 Punching	Dimensions	0.1mm	
		Minimum Angle R Tolerance	0.2mm	
		NPTH to NPTH	Standard: ±0.075mm, Advanced: ±0.05mm	
		NPTH to Dimensions	Standard: 1.5mm, Advanced: 1.0mm	
		Trace to Dimensions	0.2mm	
		Minimum Punching hole	0.5mm	
		NPTH Tolerance	±0.5mm	
12	表面處理 Surface treatment	電鍍金 Hard gold plating	Au 0.025~0.75um	
		化金 Immersion gold	Au 0.025~0.075um	
		鍍鉕金 ENEPIG	Ni 5~10 um, Au 0.05~1.0um, Pa 0.05~1.0um	
		OSP(ENTEK)	0.2um~0.5um	
13	BGA PAD	Ball Pitch	12mil	
14	電測 Electrical Test	飛針測試Second line	YES	
		治具測試Fixture	YES	
15	阻抗 Impedance		+/- 10%	
16	電磁膜 EMI	厚度 Thickness	15um	
		貼合公差 EMI Tolerance	±0.3mm	
17	背膠 Adhesive	材料 Material	TASA、3M	
		厚度 Thickness	50um、100um	
		貼合公差 EMI Tolerance	±0.3mm	
18	高階製程 Advanced Process		HDI, Airgap	