山旭集团
SHANXU GROUP

浙江山旭精密电路有限公司
Zhejiang Shanxu Precision Circuit Co.,Ltd

Technology Ability

类型 Type	加工能力 Capability	样品 Sample	批量 Mass
最高层数 Maximum Layer Count	16 层 16 layers	1-16 层 1-16 layers	1-12层 1-12 layers
表面处理 Surface Treatment	碳油、喷锡、沉金、沉银， OSP. 金手指，选择性沉金，电镀金、蓝胶 Carbon Ink、 HASL、 Immersion Gold、 Immersion Silver、 OSP、Gold Fingers、SelectiveImmersion Gold、 Electroplated Gold、 Pealable solder mask		
板厚范围 Board thickness	0.2-3.2mm	0.1mm-3.2mm	0.2-3.2mm
板材类型Material	FR-4、CEM-1、CEM-3		
半孔工艺最小半孔孔径 Min Half-hole Diameter	0.5mm	0.5mm	0.5mm
机械孔最小成品孔径 Min Mechanical Hole Finished Diameter	0.15mm	0.15mm	0.2mm
最小槽孔孔径 (机器钻)Min Slot Hole Diameter (Machine Drilling)	0.5mm	槽孔孔径的公差为 ±0.1mm Tolerance of slot hole diameter: ±0.1mm	
最小孔径 (镭 Minimum Hole Diameter (Laser Drilling)射钻)	0.1mm	激光钻孔的公差为 ±0.01mm Tolerance of laser drilling: ±0.01mm	
机械钻孔最小孔径 Min Mechanical Drilling Diameter	≥0.2m	机械钻孔最小的孔距需 ≥0.2mm, 不同网络孔距 ≥0.25mm Minimum hole spacing for mechanical drilling: ≥ 0.2mm, different network hole spacing: ≥ 0.25mm	

邮票孔孔径 Stamp hole diameter	0.5mm	邮票孔孔距 0.25mm, 加在外框中间，最小孔票孔排列数需 =3 个 Stamp hole pitch: 0.25mm, located in the middle of the outer frame,minimum number of stamp holes in a row: 3

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塞孔孔径 Plugged hole diameter	≤ 0.5mm	大于 0.5mm 过孔表面焊盘盖油 Hole surface solder pad cover oil for through holes larger than 0.5mm	
过孔单边焊环 Solder ring of VIA with one side	3.2mil	Via 最小 3.2mil, 器件孔最小 6mil, 加大过孔焊环对过电流有帮助 Min Via 3.2mil, Min component hole 6mil, increasing solder ring is helpful for overcurrent	
纵横比Aspect ratio	10:01		
最小线宽线距 Min line width and spacing	≥ 3/3mil(0.076mm)	≥ 3/3mil(0.076mm)	
最小蚀刻字体字宽 Min etched silk width	≥ 8mil(0.2mm)	8mil(成品铜厚 1OZ),10mil(成品铜厚 2OZ),12mil(成品铜厚 3OZ)8mil (finished copper thickness 1OZ), 10mil (finished copper thickness 2OZ), 12mil (finished copper thickness 3OZ)	
最小 BGA Min BGA	≥ 0.2mm	≥ 0.2mm	≥ 0.25mm
成品内外层铜厚 Copper thickness of finished inner and	1-4OZ	1-4OZ	1-4OZ
走线与外形间距 Trace and outline spacing	≥ 10mil(0.25mm)		
阻焊类型 Solder mask color	感光油墨 Photosensitive ink	白色、黑色 (亮光，哑光) 、蓝色、绿色、黄色、红色等	
阻焊桥 Solder mask bridge	绿色油≥ 0.08mm 杂色油≥ 0.1mm 黑白油≥ 0.12mm Green ≥ 0.08mm, mixed color ≥ 0.1mm, black and white oil ≥ 0.12mm		

项目 Project	类型 Type	加 工 能 力 Capability	样品 Sample	批量 Mass
	最小字符宽 Min Legend Width	≥ 0.6mm		

字符Legend	最小字符高 Min Legend Height	≥ 0.8mm		
	最小字符线宽 Min Legend line width	≥ 5mil		
	贴片字符框距离阻焊间距 SMD legend frame distance from solder mask distance	≥ 0.2mm		
	字符宽高比 Legend width-to-height ratio	1:06		
外形Outline	最小锣槽 Min routing groove	0.80mm	无铜锣槽 0.8mm no copper routing groove 0.8mm	
	V-CUT	电脑 V-CUTComputer V-CUT		
拼版 Panelization	拼版：无间隙拼版间隙 Panelization: gapless panelization gap	0mm 间隙拼 0mm gapless panel		
	拼版：有间隙拼版间隙 Panelization with gap	1.6mm		
	半孔板拼版规则 Half-hole board panelization rules		1. 一面或两面半孔板采用 V-CUT 或邮票连接 1. One or two half-hole boards use V-CUT or stampe connections; 2. 三面或四面半孔板采用四角加连接位的拼版方式 2.Three or four half-hole boards use corner plus connection position panelization method;	
	多款合拼出货 Multiple boards combined for production		多款合拼出货需采用可行的V-CUT 或邮票孔连接方式连接 Multiple boards combined to use viable V-CUT or stampe hole connection methods for connection	
	抗剥强度 Anti-peeling strength	≥ 2.0N/cm		
	阻燃性 Flame retardance	94V-0		
	阻抗类型	单端、差分、共面 Single-	单端或共面单端阻抗可控制：45~85 欧，差分或共面差分阻抗Single-ended or coplanar single-ended impedance can be	

工艺 Technology	Impedance type	ended,differential, and coplanar	controlled: 45~85 ohms,differential or coplanar differential impedance can be controlled: 85~110 ohms .Special processes
	特殊工艺 Special processes	树脂塞孔、盘中孔、混压板、PTFE、盲埋孔、绑定 IC Resin plugging holes, central hole, mixed-pressure boards, PTFE, blind buried holes, bonded ICs	