



HX CIRCUIT

HX Circuit Technology Co.,Ltd

Quick-turn service especially for small and medium-sized volume
20 years experience in PCB industry



HX CIRCUIT

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Stable quality



Pursue 0% complaint on quality

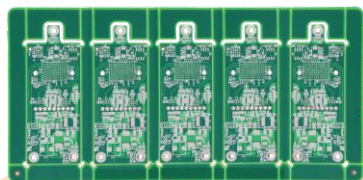
- ➊ All department implements according to ISO and the related dept has to provide 8D report if any board scrapped or defective.
- ➋ All the outgoing boards have to be 100% electronic tested, impedance tested and soldering.
- ➌ Visual inspected, we make the inspect microsection before shipment.
- ➍ Train the mindset of employees and our enterprise culture, make they are happy with their work and our company, it's helpful for them to produce good quality products.
- ➎ High quality raw material(Shengyi FR4, ITEQ, Taiyo soldermak ink etc.)
- ➏ The AOI could inspect the whole set, boards are inspected after each process.

Quick Turn service and On time delivery



On time delivery rate is more than 95%

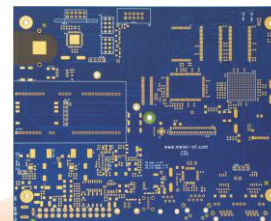
- ➊ 24hours fast turn for double side prototype PCB, 48hours for 4-8layers prototype PCB.
- ➋ 1hour for quotation. 2hours for engineer question. Feedback complaint within 2hours.
- ➌ 7*24hours for technical support.
- ➍ 7*24hours for order service.
- ➎ 7*24hours manufacturing operations.



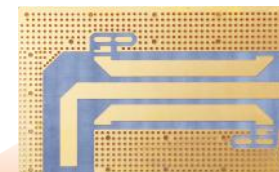
Surface finish: LF-HASL
Product layer: 18L
Min trace width/spacing: 4/4mil
Finished copper thickness: 1.0(oz)
Min hole size: 0.2(mm)
Material: Shengyi Tg170
Special requirement: High Layer



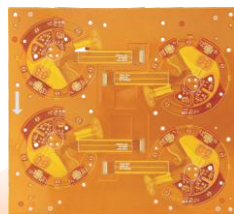
Surface finish: Immersion Gold
Product layer: 4L
Finished copper thickness: 1.0(oz)
Board size: 257*190(mm)
Material: FR4
Special requirement: Blue peelable



Surface finish: Immersion Gold
Product layer: 8L
Min hole size: 0.2(mm)
Board thickness: 1.5(mm)
Board size: 165*135(mm)
Material: Shengyi
Special requirement: Via Plugging with copper



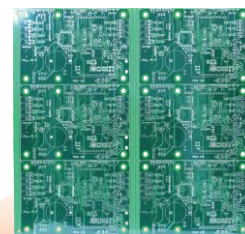
Surface finish: Immersion Gold
Product layer: 2L
Finished copper thickness: 2.5(oz)
Board thickness: 3.2(mm)
Board size: 100*155(mm)
Material: Tefolon



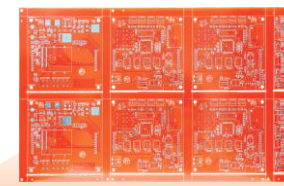
Surface finish: Immersion Gold
Product layer: 2L Flex PCB
Finished copper thickness: 1.0(oz)
Board size: 70.45*44.5(mm)
Panel size: 118*128(mm)
Min hole size: 0.2(mm)
Special requirement: Flex PCB, 3M tape required.



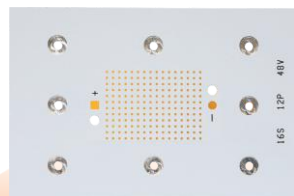
Surface finish: LF-HASL
Product layer: 1L
Finished copper thickness: 1.0(oz)
Board thickness: 2.0(mm)
Board size: 132*112(mm)
Material: Aluminum
Special requirement: 3.0 W/m-k Thermal conductivity



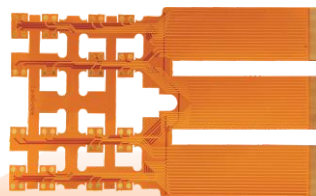
Surface finish: Immersion Tin
Product layer: 6L
Finished copper thickness: 1.0(oz)
Board thickness: 1.6(mm)
Board size: 264*252(mm)
Special requirement: Tape required



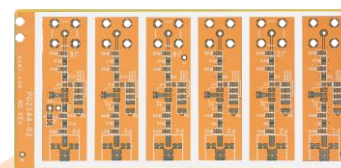
Surface finish: LF-HASL
Product layer: 2L
Finished copper thickness: 3.0(oz)
Board thickness: 1.57(mm)
Board size: 340*212(mm)
Special requirement: 2+4+2(3 different PCBs in one panel)



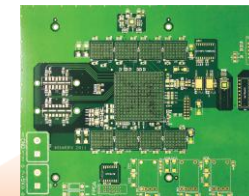
Surface finish: Immersion Gold
Product layer: 1L
Board thickness: 5.0(mm)
Material: Aluminum
Special requirement: 2.0 W/m-k Thermal conductivity
Countersink 4.85(mm)



Surface finish: Immersion Gold
Product layer: 2L Flex PCB
Finished copper thickness: 1.0(oz)
Finished board thickness: 0.25(mm)
Board size: 91.5*144.43(mm)



Surface finish: HAL
Product layer: 2L
Finished copper thickness: 1.0(oz)
Board thickness: 1.6(mm)
Board size: 105*50(mm)
Material: FR4(Tg150)
Special requirement: Clear solder mask



Surface finish: Immersion Gold
Product layer: 20L
Min trace width/spacing: 4/4mil
Finished copper thickness: 1.0(oz)
Min hole size: 0.2(mm)
Material: Shengyi Tg170
Special requirement: High Layer

Exhibition



Customer first
Fast and efficient
Continuous innovations and grow together



Sales Team

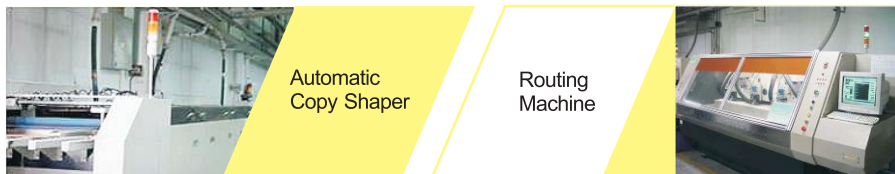
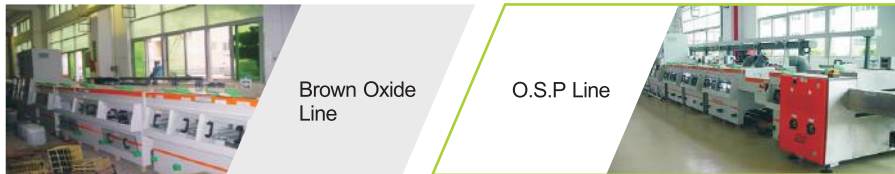


Featured service

Leadtime	Layer					
	2L	4L	6L	8L	10-18L	>20L
The quickest	1 Day	2 Days	3 Days	3 Days	4-6 Days	8 Days
Standard	6 Days	8 Days	9 Days	10 Days	11-14 Days	17 Days



PCB Equipment



Certification



SGS



SGS



ISO9001



ISO14001



BV

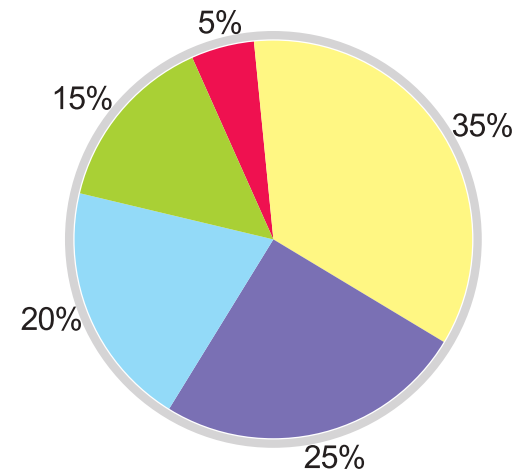


UL

Process Capability

Series	Item		Technical Specification				
			Standard		Advanced		
1	Number of layer		1-8 Layers		10-30 Layers		
2	Base Material		FR4, Aluminum Based		ShengyiTG170, IT180, Teflon, Rogers, FPC		
3	Finish Board Thickness		0.30 mm~5.0mm		0.20mm~6.0mm		
4	Minimum Core Thickness		0.15mm(6 mil)		0.10mm(4 mil)		
5	Copper Thickness		Min. 1/2 OZ,Max.4OZ		Min.1/4OZ,Max.15OZ		
6	Hole Copper Thickness		Min.20um (0.8mil)		Min.25um (1mil)		
7	Panel size		700*500(Max)		600*1000mm(Max)		
8	Min.Trace Wide&Line Space		0.13mm(5 mil)		0.1mm(4mil)		
9	Min.Hole Diameter	Drilling/PTH Blind hole	ø0.30mm (12 mil)		0.2mm(8 mil) 0.1~0.15mm (4mil)		
10	Aspect ratio		06:01		12:01		
11	Solder mask	color bridge	Green, Black, White, Yellow, Blue, Red, Matte Green, Matte Black, Clear, min 0.13mm(5 mil) min 0.1mm(4mil)				
12	Dimension	Hole Position	0.075(3 mil)		0.05(2 mil)		
	Tolerance	Conductor Width(W)	20% Deviation of Master A/W		1mil Deviation of Master A/W		
		Hole Diameter(H)	NPTH:±0.05mm(2 mil) PTH:±0.075(3 mil)		NPTH:±0.05mm(2mil) PTH:±0.05mm(2 mil)		
		Outline Dimension	0.15mm (6 mil)		0.10 mm(4 mil)		
		Conductors&Outline(C-O)	0.15mm (6 mil)		0.13 mm(5 mil)		
		Warp and Twist	0.75%		0.50%		
13	Surface Treatment		Leadfree HASL	3um (min)	Leadfree HASL	3um (min)	
			OSP	0.2~0.5um	OSP	0.2~0.5um	
			Immersion Silver	0.15~0.5um	Immersion Silver	0.15~0.5um	
			Immersion Tin	0.8~1.2um	Immersion Tin	0.8~1.2um	
			Immersion Gold	Au 1~3u"	Immersion Gold	Au 1~10u"	
					Hard Gold	Au 5~50u"	
					selective gold	Au 3~150u"	
					Ni/Pd/Au	Pd 4u" Au 4u"	
14	V-cut	Board Thickness	min0.40mm(20mil), min.0.30mm(12mil)				
		Remain Thickness	1/3 board thickness				
		Tolerance	±0.13mm(5 mil) ±0.1mm(4mil)				
		Groove Width	0.50 mm(20 mil) max., 0.38mm(15mil) max.				
		Groove to Groove	20mm(787 m il) min., 10mm(394mil) min.				
		Groove to Trace	0.45mm(18 mil) min., 0.38mm(15mil) min.				
15	Slot	Slot size to L≥2W	PTH Slot:L:±0.13(5mil)W:±0.08(3 mil) PTH SlotL:±0.10(4mil)W:±0.05(2 mil) NPTH slot(mm)L:±0.08(3mil)W:±0.05(2 mil)				
16	Min Spacing from hole edge to hole edge	0.30~1.60(Hole Diameter) 1.61~6.50(Hole Diameter)	0.15mm(6 mil) 0.13mm(6 mil) 0.1mm(4 mil) 0.13mm(5 mil)				
17	Minimum spacing between hole edge to circuitry pattern	PTH hole:0.20mm(8mil)	PTH hole:0.13mm(5mil) PTH hole:0.13(5mil)				
			NPTH hole:0.10mm(4mil) NPTH hole:0.10(4mil)				
18	Multilayers	Layer-layer misregistration	4layers: 0.15mm(6mil)max. 6layers: 0.20mm(8mil)max. 8layers: 0.25mm(9mil)max. 4layers: 0.15mm(6mil)max. 6layers: 0.20mm(8mil)max. 8layers: 0.25mm(9mil)max. 0.15mm(6mil) 0.225mm(9mil) 0.15mm(6mil) 0.225mm(9mil) 4layers:0.40mm(16mil) 6layers:0.60mm(24mil) 8layers:1.0mm(40mil) 4layers:±0.13mm(5mil) 6layers:±0.15mm(6mil) 8~12 layers:±0.20mm(8mil)				
		Min.Spacing From Hole Edge to Innerlayer Pattern	0.225mm(9mil)				
		Min.Spacing From Outline to Innerlayer Pattern	0.38mm(15mil)				
		Min. board thickness	4layers:0.40mm(16mil) 6layers:0.60mm(24mil) 8layers:1.0mm(40mil) 4layers:±0.13mm(5mil) 6layers:±0.15mm(6mil) 8~12 layers:±0.20mm(8mil)				
		Board thickness tolerance	4layers:0.30mm(112mil) 6layers:0.50mm(20mil) 8layers:0.75mm(30mil) 4layers:±0.10mm(4mil) 6layers:±0.13mm(5mil) 8~12 layers:±0.15mm(6mil)				
		19	Insulation Resistance	Ω~20MΩ(typical:5MΩ) 10K			
		20	Conductivity	Ω(typical:25Ω) ~50			
		21	Test voltage	250V			
22	Impedance control	Ω±10% Typical: 50					

Product Distribution



■ 2 Layers ■ 4 Layers ■ 6 Layers ■ above 8 Layers ■ HDI

Application

