

PRODUCT TECHNICAL CAPABILITIES

eurocir group



2026



BARCELONA PLANT (SPAIN)

FR4 2L PTH / IMS (Aluminium substrate) / SINGLE SIDE

Raw Material: FR4 – Cem1 – IMS

Certificates: ISO9001 – IATF16949

Lead time Production 4 weeks + 3 days transport in Europe

PRODUCTION CAPACITY	
PCB TECHNOLOGY	SQM/month
FR4 2 LAYERS	3500
IMS (Alu. Substrate)	4000
SINGLE SIDE	5000



FR4 2 LAYERS PLATED THROUGH HOLE (I)

No.	Item	capability	special
1	NO.OF LAYER	2	2
2	FINISHED BOARD SIZE (MAX)	485 mm×600mm	505X620mm
3	FINISHED BOARD SIZE (MIN)	200mm×150mm	
4	BOARD THICKNESS (MAX)	3.2mm	4.5mm
5	BOARD THICKNESS (MIN)	1.0mm	0.8mm
7	FINISHED BOARD THICKNESS TOLERANCE (BOARD THICKNESS≥0.8MM)	±10%	
9	WARPAGE (min)	≤0.5%	
10	PTH DRILL HOLE DIAMETER (MAX)	6.7mm	
11	DRILL HOLE DIAMETER (MIN)	0,4mm	0,30mm
12	FINISHED VIA DIAMETER (MIN)	0,3mm	



FR4 2 LAYERS PLATED THROUGH HOLE (II)

No.	Item	capability
13	BASE COPPER THICKNESS OF OUTER LAYER (MIN)	0.012mm
14	BASE COPPER THICKNESS OF OUTER LAYER (MAX)	0.105mm
19	ASPECT RATIO OF PLATED HOLE (MAX)	8:1
20	HOLE DIAMETER TOLERANCE (PTH)	$\pm 0.05\text{mm}$ (HASL 0,075mm)
21	HOLE DIAMETER TOLERANCE (NPTH)	$\pm 0.05\text{mm}$
22	HOLE POSITION TOLERANCE (COMPARED WITH CAD DATA)	$\pm 0.075\text{mm}$
23	COPPER THICKNESS FOR PTH WALL	$\geq 0.025\text{mm}$



FR4 2 LAYERS PLATED THROUGH HOLE (III)

No.	Item	capability
24	OUTER LAYER DESIGN LINE WIDTH / SPACE (MIN)	1/1OZ 0.200mm/0.200mm 2/2OZ 0.250mm/0.250mm 3/3OZ 0.300mm/0.300mm
26	TOLERANCE AFTER ETCHING	$\leq \pm 20\%$
28	IMAGE TO IMAGE TOLERANCE(MIN)	$\pm 0.100\text{mm}$



FR4 2 LAYERS PLATED THROUGH HOLE (IV)

No.	Item	capability
29	IMAGE TO HOLE TOLERANCE(MIN)	$\pm 0.100\text{mm}$
30	PATTERN TO OUTLINE(OUTER LAYERS)(min)	$\pm 0.200\text{mm}$
32	HOLE TO HOLE POSITION TOLERANCE (MIN)	$\pm 0,075\text{mm}$
33	THE MINIMUM DISTANCE(HOLE TO HOLE)	$\pm 0,350\text{mm CAF}$
34	HOLE TO BOARD EDGE TOLERANCE	$\pm 0,175\text{mm}$
35	SOLDER MASK REGISTRATION	$\pm 0,100\text{mm}$
36	SOLDER MASK THICKNESS (MIN)	$\geq 10\mu\text{m}$



FR4 2 LAYERS PLATED THROUGH HOLE (V)

No.	Item	capability
37	SOLDER MASK BRIDGE(MIN)	Finish Copper H/H >0,180mm Finish Copper 2H/2H > 0,200mm Finish Copper 3H/3H > 0,250mm
38	INK PLUGING HOLE DIAMETER (min) INK PLUGING HOLE DIAMETER (MAX)	0,3mm 0,7mm
39	COMPONENT MARK WIDTH CMIN)	0,100mm
40	COMPONENT MARK REGISTRATION	0,100mm
40	LETTER WIDTH(MIN) OF SOLDER MASK OPENING	0,150mm
41	NICKEL THICKNESS FOR ENIG	3 – 8 μ m
42	GOLD THICKNESS FOR ENIG	0,06 – 0,15 μ m



FR4 2 LAYERS PLATED THROUGH HOLE (VI)

No.	Item	capability
44	SOLDER THICKNESS ON XFP (HAL) (MIN)	100u in (2.54u m)
45	SOLDER THICKNESS ON PADS EXCEPT XFP (MIN)	40u in (1.0 u m)
46	CARBON INK RESISTANCE	20Ω\□
47	SPACE FOR CARBON CONDUCTOR (MIN)	15mil (0.375mm)
52	ROUTING DIMENSION TOLERANCE (EDGE TO EDGE) (MIN))	±4mil (± 0.101mm)
53	ROUTING DIMENSION TOLERANCE (HOLE TO EDGE) (MIN)	±4mil (±0.101mm)
54	RADIUS BY ROUTING (INTERNAL ANGLE) (MIN)	≥16mil (0.4mm)



FR4 2 LAYERS PLATED THROUGH HOLE (VII)

No.	Item	capability
56	SLOT WIDTH (MIN)	0.5mm
57	SLOT TOLERANCE (PTH) ($L \geq 2W + 0.15\text{mm}$)	$\pm 0.10\text{mm}$
58	SLOT TOLERANCE (PTH) ($L < 2W + 0.15\text{mm}$)	$\pm 0.127\text{mm}$
59	NON-PLATED SLOT TOLERANCE	$\pm 0.08\text{mm}$)
60	V—CUT REMAINING THICKNESS TOLERANCE (MIN)	$\pm 0.10\text{mm}$)
61	V—CUT ANGLE TOLERANCE($30^\circ \sim 60^\circ$)(MIN)	$\pm 5^\circ$
62	V—CUT MISREGISTRATION (MIN)	$\pm 0.127\text{mm}$)
63	BOARD THICKNESS THAT CAN BE V—CUT(MIN)	0,8mm
64	V—CUT TO HOLE TOLERANCE (MIN)	$\pm 0.150\text{mm}$
65	V—CUT TO V—CUT POSITION TOLERANCE(MIN)	$\pm 0.100\text{mm}$)
67	IMAGE TO HOLE TOLERANCE(MIN)	$\pm 0.100\text{mm}$



IMS (aluminium substrate (I)

LAYOUT			
Dimension tolerance		±0.10mm	-
Min. track width	1oz/35um	0.20 ±20%	0.18 ±20%
	2oz/70um	0.20 ±20%	0.20 ±15%
	3oz/105um	0.30 ±20%	0.30 ±15%
Min. track spacing	1oz/35um	0.20 ±20%	0.18 ±20%
	2oz/70um	0.20 ±20%	0.20 ±15%
	3oz/105um	0.30 ±20%	0.30 ±15%
Min. clearance to	Drilling	0.20mm	0.15mm
	Routing	0.30mm	0.20mm
	Punching	0.60mm	-
	Scoring line	1.00mm	0.80mm



IMS (aluminium substrate (II))

SOLDERMASK

Colors	Green/Black/White	
Thickness tolerance	10–	
30µm	10–40µm Min.	
thickness on corner	5µm	
Min. width	0.20mm	
Min. clearance to	Copper	0.15mm
	0.10mm	
	Drilling	0.25mm
		0.20mm
	Routing	0.30mm
		0.20mm
	Punching	0.40mm
		0.20mm
	Scoring line	0.50mm
		0.40mm

SILKSCREEN OR LEGEND

Colors	Green/Black/White/Blue/Yellow	
Min. text height	1.00mm	
Min. legend line width	0.20mm	
Min. gap between to Cu or SM	0.20mm	



IMS (aluminium substrate (III))

		STANDARD	FINE
DRILLING			
Drilling offset		±0.10mm	±0.05mm
Hole diameter	Max. drill	4.00mm	Larger by routing
	Min. drill	1.30mm	1.00mm
	Tolerance	±0.05mm	-
Min. gap between holes		0.75mm	0.40mm
ROUTING			
Routing offset		±0.10mm	-
Hole diameter tolerance (for $\phi > 4,00$)		±0.10mm	±0.05mm
Oblong	Witdh	±0.10mm	±0.05mm
	Lenght	±0.10mm	-
Min. slot		2.00mm	1.80mm
Smallest routed diameter		1.80/2.00mm	1.60mm
PUNCHING			
Min. punch hole/slot		1.5mm	Smaller by routing
Min. gap between slots		1.5mm	Smaller by routing
Hole/slot tolerance		±0.10mm	±0.05mm
Max. shock		30.000 sets	-
SCORING			
Web thickness		0.40 ±0.10mm	-
Blades Depth (Top & Bottom)		Symmetric ±0.10mm	Asymmetric ±0.10mm
Angle		30° ±5°	35° ±5°
Symmetry blades		±0.10mm	-
Min. Jumpscore		1.50mm	-
Scoring offset		±0.10mm	-
Pcb Size (After separation)		±0.30mm	-



IMS (aluminium substrate (IV))

SURFACE FINISHES

	HASL LEAD FREE	OSP	ENIG
Thickness	1–40 μm	$\geq 0.2 \mu\text{m}$	Ni: 3–7 μm Au: 0.05–0.15 μm
Max. size panel	610x533mm	500x450mm	610x450mm RoHS, Pb
free	✓	✓	✓
Storage life	12 months	6 months	12 months





KUNSHAN PLANT (CHINA)

FR4 2L PTH / MULTILAYER / HDI

Raw Material: FR4

Certificates: ISO9001 – IATF16949 – ISO14001 – ISO45001

Lead time Production 4 weeks + 1 week transport by plane or +
8 weeks transport by boat for delivery in Europe

PRODUCTION CAPACITY	
PCB TECHNOLOGY	SQM/month
FR4 2 LAYERS	50000
FR4 MULTILAYER	30000
HDI	10000



FR4 2 LAYERS / MULTILAYER / HDI (I)

No.	项目 Item	江苏苏杭电子/昆山苏杭电路板有限公司 Jiangsu Suhang Electronics/Kunshan Suhang Circuit Board Co.,Ltd.
1	层数 No. of Layer	2 - 50 Layers
2	完成板尺寸 (最大) Finished Board Size (Max)	24.8"×43"(630mm×1092mm)
3	完成板尺寸 (最小) Finished Board Size (Min)	2.0"×2.0"(50mm×50mm)
4	板厚度 (最大) Board Thickness (Max)	0.2559"(6.5mm)
5	板厚度 (最小) Board Thickness (Min)	0.008" (0.2mm)
6	机械钻孔孔径 (最小) Mechanical drilling hole diameter (Min) 激光钻孔孔径 (最小) Laser drilling hole diameter(min)	φ0.004" (0.10mm) φ0.004" (0.10mm)
7	钻孔精度 Drilling precision	±3mil (±0.076mm)



FR4 2 LAYERS / MULTILAYER / HDI (II)

No.	项目 Item	江苏苏杭电子/昆山苏杭电路板有限公司 Jiangsu Suhang Electronics/Kunshan Suhang Circuit Board Co.,Ltd.
8	孔径公差 (镀通孔) Hole Diameter Tolerance (PTH)	$\pm 2\text{mil}$ ($\pm 0.051\text{mm}$)
9	孔径公差 (非镀通孔) Hole Diameter Tolerance (NPTH)	$\pm 2\text{mil}$ ($\pm 0.051\text{mm}$)
10	外层设计线宽 / 间距 (最小) Design Line Width/Space of Outer Layer (Min)	2.5mil/2.5mil (0.063mm)
11	内层设计线宽 / 间距(最小) Design Line Width/Space of Inner Layer (Min)	2.5mil/2.5mil (0.063mm)
12	厚径比 Thickness to radial dimension	15: 1
13	外层对位精度 Outer layer contraposition precision	$\pm 1\text{ mil}$ ($\pm 0.025\text{mm}$)
14	阻焊对位精度 SM contraposition precision	$\pm 1\text{ mil}$ ($\pm 0.025\text{mm}$)
15	成型精度 Routing precision	$\pm 3\text{mil}$ ($\pm 0.076\text{mm}$)



FR4 2 LAYERS / MULTILAYER / HDI (III)

No.	项目 Item	江苏苏杭电子/昆山苏杭电路板有限公司 Jiangsu Suhang Electronics/Kunshan Suhang Circuit Board Co.,Ltd.
16	内层铜厚 (最大) Inner copper thickness(Max)	5OZ
17	外层铜厚 (最大) Outer copper thickness(Max)	5OZ
18	内层孔到线路的距离 Distance from hole to track of inner layer	5mil
19	阻焊桥宽度 (最小) Width of SM dam(Min)	3mil
20	HDI孔径及介质层厚度 HDI hole diameter and thickness of dielectric layer	Diameter 孔径3-6mil Thickness of dielectric layer 介质层厚度 2-5mil
21	表面处理 Surface finishing	抗氧化, 有铅喷锡, 无铅喷锡, 化金, 化锡, 镍钯金 OSP\HASL\HASL LF\ENIG\IMT\NiPdAu

