MICROPLACER TECHNOLOGIES PCB MANUFACTURING TECHNICAL CAPABILITIES

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Technical Capabilities

SR	SPECIFICATION	VALUE
a)	**Max. no. of layers**	**6**
b)	**Max. board size (L x W) in mm.**	**415 x 565**
c)	**Max. board thickness (in mm.)**	**3.20**
d)	**Min. finished board thickness (in mm.)**	**0.40 (No HAL)**

Base Material

SR	SPECIFICATION	VALUE
a)	**Base Material**	**FR4**
b)	**Inner layer Copper cladding**	
	* Max. Cu Wt. For Planes (Oz.)	2
	* Max. Cu Wt. For Signals (Oz.)	2
	* Min. Cu Wt. (Oz.)	0.5
c)	**Outer layer Copper cladding**	
	*Max Cu Wt. (Oz.)	3
	*Min Cu Wt. (Oz.)	0.5

Circuit Layers (Minimum capabilities in mm)

SR	SPECIFICATION			VALUE
	For Start copper thickness of 0.5 Oz.	For Outer Layer	Min track width	0.10
		For Outer Layer	Min. Spacing	0.10

	For Inner Layer	Min track width	0.125
	For Inner Layer	Min. Spacing	0.125
For Start copper thickness of 1.0 Oz.		Min track width	0.15
		Min. Spacing	0.15
For Start copper thickness of 2.0 Oz.		Min track width	0.175
		Min. Spacing	0.20

Drilling (All Values are in mm)

SR	SPECIFICATION	VALUE
a)	Min. finished via hole size	0.10
b)	Min. finished via pad size	0.45
c)	Min. annular ring	0.10
d)	Drill to drill clearance	0.15
e)	Min. slot size for PTH slots (Tool size)	0.50
f)	Blind & Buried vias manufacturable	YES
g)	Drill to track clearance for Inner layers (upto 6 layer)	0.25
	Drill to track clearance for Inner layers (>6 layer)	0.35
h)	Min. drill size for plated holes on board edge	0.80
i)	Min. drill to drill clearance for plated holes on board edge	0.80

Surface Finish

SR	SPECIFICATION	VALUE
a)	HASL (Lead free & PB/Sn both)	YES
b)	Electrolytic Gold	YES
c)	Electroless Nickle / Gold	YES
d)	Immersion Silver	YES

e)	Immersion Tin	YES
f)	SMOBC with OSP	YES

Layer construction & Impedance Design

SR	SPECIFICATION	VALUE
a)	Min. core thickness	0.15 mm
b)	Min. possible dielectric thickness	0.15 mm
c)	Controlled Impedance merasurement	YES

Solder Mask

SR	SPECIFICATION	VALUE
a)	Mask opening Green masking	0.06 mm
b)	Min. soldermask web width between pads	0.08 mm
c)	Mask opening Other than Green	0.120 mm
d)	Min. soldermask web width between pads	0.120 mm
e)	SM to trace clearance	0.10 mm
f)	Via fill max drill size	0.40 mm

Legend

SR	SPECIFICATION	VALUE
a)	Legend line width	0.15 mm to 0.20 mm
b)	Min. character height	1.00 mm

Scoring

SR	SPECIFICATION	VALUE
a)	Angle for v-cut	30 degree
b)	Jump scoring	Yes

Routing

SR	SPECIFICATION	VALUE
a)	Min. router size	0.80 mm

Copper Clearance from PCB Edge

SR	SPECIFICATION	VALUE
a)	For routing	0.25 mm
b)	For scoring	0.45 mm
c)	For inner layer	0.4 mm

Carbon

SR	SPECIFICATION	VALUE
a)	Min. line width	0.30 mm
b)	Min. carbon – carbon spacing	0.25 mm

Peelable

SR	SPECIFICATION	VALUE
a)	Minimum width of any Peel-off element	0.50 mm
b)	Maximum coverable hole ENDSIZE	6.00 mm
c)	Minimum overlap on copper pattern	0.254 mm
d)	Minimum clearance to free copper	0.254 mm
e)	Minimum distance from PCB outline	0.50 mm

Drill Tolerances

PTH HOLE SIZE	PTH TOLERANCE	NPTH HOLE SIZE	NPTH TOLERANCE
0.50-3.50 mm	+/- 0.10 mm	<3 mm	+/- 0.10 mm
>3.50 mm	+/- 0.15mm	>3 mm	+/- 0.15 mm

Other Tolerances

PCB Size	+/- 0.20 mm
PCB Thickness	+/- 20% (Up to 0.8 mm thickness)
	+/- 10% (Above 1.0 mm thickness)
Trace Width / Spacing	+/- 0.20 %
Copper Thickness Inside Hole	>= 0.20 um
Bow & twist tolerance	+/- 1%

Availabale Finishes

- ✓ Lead Free HAL
- ✓ Immersion Tin
- ✓ Electroless Nickel Immerssion Gold (0.075-0.1 um AU + 3-5 um Ni)
- ✓ OSP

- Non-ROHS Finish :
- ✓ HAL(sn PB)

Legend Colours

- ✓ White
- ✓ Black
- ✓ Yellow

Solder Mask Colours

- ✓ Green
- ✓ Black
- ✓ White
- ✓ Blue
- ✓ Red

Special Technologies

- ✓ Impedance Control
- ✓ Blind / Buried Vias
- ✓ Carbon Printing
- ✓ Hard Gold Tabs
- ✓ Peelable Sodler Mask