

● Stack Up ●

Stack Up						
Propose PCB Stack Up				Impedance		
Layer	Type	Thickness (mil)		Differential	Theory value	Ref
Top side solder mask		0.70	mils			
L1	TOP	copper+plating	1.58 mils	5/5/5 mils · 100Ω±5% adjust 4/6/4 · 100Ω±5%	98.66Ω	L2
		Prepreg	4.50 mils			
L2	PWR	copper	2.80 mils			
		core	6.00 mils			
L3	Signal	copper	0.70 mils	5/5/5 mils · 100Ω±5% adjust 3.6/6.4/3.6 · 100Ω±5% Copper 0.5oz	97.94Ω	L2 & L4
		Prepreg	4.50 mils			
L4	PWR	copper	2.80 mils			
		core	6.00 mils			
L5	Signal	copper	0.70 mils	5/5/5 mils · 100Ω±5% adjust 3.6/6.4/3.6 · 100Ω±5% Copper 0.5oz	97.94Ω	L4 & L6
		Prepreg	4.50 mils			
L6	PWR	copper	2.80 mils			
		core	3.00 mils			
L7	PWR	copper	2.80 mils			
		Prepreg	4.50 mils			
L8	PWR	copper	2.80 mils			
		core	3.00 mils			
L9	PWR	copper	2.80 mils			
		Prepreg	4.50 mils			
L10	Signal	copper	0.70 mils	5/5/5 mils · 100Ω±5% adjust 3.6/6.4/3.6 · 100Ω±5% Copper 0.5oz	97.94Ω	L9 & L11
		core	6.00 mils			
L11	PWR	copper	2.80 mils			
		Prepreg	4.50 mils			
L12	Signal	copper	0.70 mils	5/5/5 mils · 100Ω±5% adjust 3.6/6.4/3.6 · 100Ω±5% Copper 0.5oz	97.94Ω	L11 & L13
		core	6.00 mils			
L13	PWR	copper	2.80 mils			
		Prepreg	4.50 mils			
L14	Bottom	copper+plating	1.58 mils	5/5/5 mils · 100Ω±5% adjust 4/6/4 · 100Ω±5%	98.66Ω	L13
Bottom side solder mask		0.70	mils			
TOTAL		91.26 mils		Suggested Thickness 0.094" +/-0.010"		
		2.32 mm				

Picture :

Edge-coupled Coated Microstrip

Height H 4.5 Calculate

Height1 H1 0.7 Calculate

Width W 3.5 Calculate

Width1 W1 4 Calculate

Separation S 6 Calculate

Thickness T 1.58 Calculate

Dielectric Er 4.3 Calculate

Diff. Impedance Zo 98.66 Calculate

More...

Notes

Units

Edge-coupled Offset Stripline

Height H 11.2 Calculate

Height1 H1 6 Calculate

Width W 3.1 Calculate

Width1 W1 3.6 Calculate

Separation S 6.4 Calculate

Thickness T 0.7 Calculate

Dielectric Er 4.3 Calculate

Diff. Impedance Zo 97.94 Calculate

More...

Notes

Units