



Layer	Base CU / Plt	Thick	Type	Stackup	Subs	Imp	Material
Soldermask		0.60					Taiyo-SM - Green
Lyr1	0.5oz / Std	1.80	S			1,2,3,4	
Prepreg		3.76					FR408HR - 1080_71%
Lyr2	0.5oz	0.60	P				
Core		4.00					FR408HR - 4.0mils
Lyr3	0.5oz	0.60	P				
Prepreg		2.48					FR408HR - 1080_65%
Lyr4	0.5oz	0.60	S			5,6,7,8	
Core		4.00					FR408HR - 4.0mils
Lyr5	0.5oz	0.60	S			9,10,11,12	
Prepreg		2.48					FR408HR - 1080_65%
Lyr6	0.5oz	0.60	P				
Core		4.00					FR408HR - 4.0mils
Lyr7	0.5oz	0.60	P				
Prepreg		3.76					FR408HR - 1080_71%
Lyr8	0.5oz / Std	1.80	S			13,14,15,16	
Soldermask		0.60					Taiyo-SM - Green

### Required Thickness

Type	Req. Thick	Tol% +	Tol% -	Act. Thick	Measured
Overall	31.0	10.0	10.0	32.9	
Over lamination	27.4	10.0	10.0	29.3	
Over laminate	26.2	10.0	10.0	28.1	
Over metal	29.8	10.0	10.0	31.7	

### Impedance Constraints

#	Type	Layer	Design Line	Actual Line	Spacing (traces)	Spacing (ground)	Ref Lyrs	Target (ohms)	Tolerance (ohms)	Predicted (ohms)
1	Single Ended	Lyr1	6.8	6.8			0 / 2	50.0	5.0	50.3
2	Differential	Lyr1	6.3	6.3	4.7		0 / 2	85.0	8.5	84.9
3	Differential	Lyr1	5.3	5.3	4.7		0 / 2	90.0	9.0	90.9
4	Differential	Lyr1	4.0	4.0	4.5		0 / 2	100.0	10.0	99.2
5	Single Ended	Lyr4	3.6	3.6			3 / 6	50.0	5.0	49.7
6	Differential	Lyr4	4.5	4.5	6.5		3 / 6	85.0	8.5	84.9
7	Differential	Lyr4	4.0	4.0	6.0		3 / 6	90.0	9.0	89.7
8	Differential	Lyr4	3.5	3.5	11.5		3 / 6	100.0	10.0	100.0
9	Single Ended	Lyr5	3.6	3.6			3 / 6	50.0	5.0	49.7
10	Differential	Lyr5	4.5	4.5	6.5		3 / 6	85.0	8.5	84.9
11	Differential	Lyr5	4.0	4.0	6.0		3 / 6	90.0	9.0	89.7
12	Differential	Lyr5	3.5	3.5	11.5		3 / 6	100.0	10.0	100.0
13	Single Ended	Lyr8	6.8	6.8			7 / 0	50.0	5.0	50.3

## Impedance Constraints

#	Type	Layer	Design Line	Actual Line	Spacing (traces)	Spacing (ground)	Ref Lyrs	Target (ohms)	Tolerance (ohms)	Predicted (ohms)
14	Differential	Lyr8	6.3	6.3	4.7		7 / 0	85.0	8.5	84.9
15	Differential	Lyr8	5.3	5.3	4.7		7 / 0	90.0	9.0	90.9
16	Differential	Lyr8	4.0	4.0	4.5		7 / 0	100.0	10.0	99.2

## Comments