Impedance Model

Customer:
Part Number:
Rev: 1
Project: Whizz 8955

Date: February 9, 2018
Whizz Engineer: Ghulam Qadir

Material: Isola 408HR

Notes / Comments:
1- Impedance calculations on L5, 7, 12 and 14 are as same as are on L3.

Notes / Comments:

			Est. Thick.	Single Ended Model				Differential Model						Dk	Df
				Original L/W	Modified L/W	Reference Plane	Calculated Impedance	Original L/W	Original space	Modified L/W	Modified space	Reference Plane	Calculated Impedance		
1	S	(3/8 oz+plating) 3/8	2.25	11	11.2	2	36	9.5	5	9.55	4.95	2	66		
				10	9.8	2	39	5.2	4.8	4.85	5.15	2	90		
		1x1086RC 65% PP =>	3.38	6	6.1	2	50	4	6	4	6	2	100	3.24	0.0098
2	P	H	0.60												
		Core =>	3.00											3.37	0.0092
3	S	H	0.60	6.2	5.95	2,4	36	7	5	6.55	5.45	2,4	66		
		1X106RC 70%+106RC 75% =>	3.60	5.5	5.25	2,4	39	5.5	6.5	5.3	6.7	2,4	76	3.08	0.0093
4	P	H	0.60	3.5	3.3	2,4	50	4.1	3.9	3.9	4.1	2,4	86		
		Core =>	3.00					4	5	3.8	5.2	2,4	90	3.37	0.0092
5	S	H	0.60					3.4	8.6	3.3	8.7	2,4	100		
		1X106RC 70%+106RC 75% =>	3.60											3.08	0.0093
6	P	H	0.60												
		Core =>	3.00											3.37	0.0092
7	S	H	0.60												
		1X106RC 70%+106RC 75% =>	3.60											3.08	0.0093
8	P	H	0.60												
		Core =>	2.00											3.1	0.0101
9	P	1	1.20												
		1x1086RC 65% PP =>	3.02											3.24	0.0098
10	P	1	1.20												
		Core =>	2.00											3.1	0.0101
11	P	H	0.60												
		1X106RC 70%+106RC 75% =>	3.60											3.08	0.0093
12	S	H	0.60												
		Core =>	3.00											3.37	0.0092
13	P	H	0.60												
		1X106RC 70%+106RC 75% =>	3.60											3.08	0.0093
14	S	H	0.60												
		Core =>	3.00											3.37	0.0092
15	P	H	0.60												
		1x1086RC 65% PP =>	3.38	11	11.2	15	36	9.5	5	9.55	4.95	15	66	3.24	0.0098
				10	9.8	15	39	5.2	4.8	4.85	5.15	15	90		
16	S	(3/8 oz+plating) 3/8	2.25	6	6.1	15	50	4	6	4	6	15	100		

Thickness After plating	60.88	not including solder mask	Units	Mils	
Target Thickness	62+/-10%	over All	Imp. Tolerance (SE)	+/- 10%	(Diff) +/- 10%