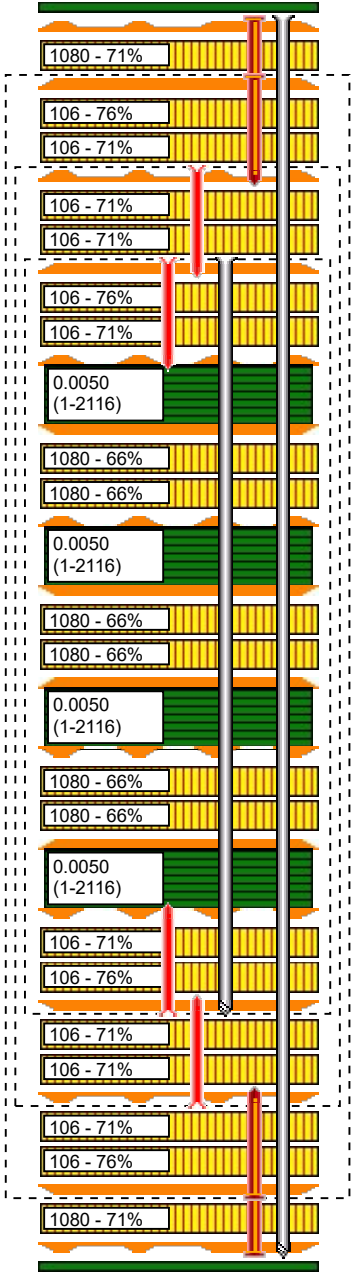























































Layer	Calc Thickness	Primary Stack	Description	Dk / Df
Layer - 1	0.0010 0.0020 0.0034		Taiyo 4000-HFX DI 1/4oz Mix (Std Plt)	3.50 / 0.0190
Layer - 2	0.0008		370H 1/4oz P/G (0.0005 Plt)	3.77 / 0.0250
Layer - 3	0.0038 0.0008		370H 1/4oz Sig (0.0005 Plt)	3.66 / 0.0256
Layer - 4	0.0038 0.0015		370H 1/4oz P/G (0.0012 Plt)	3.63 / 0.0250
Layer - 5	0.0038 0.0006		370H 1/2oz Sig	3.66 / 0.0256
Layer - 6	0.0050 0.0012		370H 1oz P/G	4.08 / 0.0210
Layer - 7	0.0046 0.0012		370H 1oz Sig	3.73 / 0.0236
Layer - 8	0.0050 0.0012		370H 1oz P/G	4.08 / 0.0210
Layer - 9	0.0052 0.0012		370H 1oz P/G	3.73 / 0.0236
Layer - 10	0.0050 0.0012		370H 1oz Sig	4.08 / 0.0210
Layer - 11	0.0046 0.0012		370H 1oz P/G	3.73 / 0.0236
Layer - 12	0.0050 0.0006		370H 1/2oz Sig	4.08 / 0.0210
Layer - 13	0.0038 0.0015		370H 1/4oz P/G (0.0012 Plt)	3.66 / 0.0256
Layer - 14	0.0038 0.0008		370H 1/4oz Sig (0.0005 Plt)	3.63 / 0.0250
Layer - 15	0.0038 0.0008		370H 1/4oz P/G (0.0005 Plt)	3.66 / 0.0256
Layer - 16	0.0034 0.0020 0.0010		370H 1/4oz Mix (Std Plt) Taiyo 4000-HFX DI	3.77 / 0.0250 3.50 / 0.0190




Materials: Isola 370H Isola370HR High-Tg FR4

Requirement	Req. Thickness	Tol +	Tol -	Calc Thick
Incl. Plating & Mask	0.0850	0.0085	0.0085	0.0846
Incl. Mask over Laminate	0.0810	0.0081	0.0081	0.0806
Incl. Plating	0.0830	0.0083	0.0083	0.0826
After Lamination	0.0796	0.0040	0.0040	0.0792
Over Laminate	0.0790	0.0079	0.0079	0.0786
Sub Assembly L2 - L15				0.0708
Sub Assembly L3 - L14				0.0616
Sub Assembly L4 - L13				0.0510

Impedance Type	Layer	Design	Actual	Pitch	Plane	Target	Tol (ohms)	Predict
1  Surface MS	L1	-	0.0050	-	-	50	5.0	50.72
	-	-	-	-	L2			
2  EC Microstrip	L1	0.00520	0.0052	0.0110	-	85	8.5	84.70
	-	0.00520	0.0052	-	L2			
3  EC Microstrip	L1	0.00475	0.00475	0.00975	-	85	8.5	84.99
	-	0.00475	0.00475	-	L2			
4  EC Microstrip	L1	-	0.0045	0.0105	-	90	9.0	90.18
	-	-	0.0045	-	L2			
5  EC Microstrip	L1	0.0040	0.0040	0.0090	-	90	9.0	90.32
	-	0.0040	0.0040	-	L2			
6  EC Microstrip	L1	-	0.0037	0.0110	-	100	10.0	100.49
	-	-	0.0037	-	L2			
7  EC Microstrip	L1	0.00310	0.0031	0.0085	-	100	10.0	99.76
	-	0.00310	0.0031	-	L2			
8  EC Microstrip	L1	0.0030	0.0030	0.0110	-	110	11.0	109.46
	-	0.0030	0.0030	-	L2			
9  Stripline	L3	-	0.00525	-	L2	40	4.0	39.48
	-	-	-	-	L4			
10  Stripline	L3	-	0.0035	-	L2	50	5.0	48.79
	-	-	-	-	L4			
11  Stripline	L3	0.00301	0.00301	-	L2	53	5.3	52.26
	-	-	-	-	L4			
12  EC Stripline	L3	-	0.0050	0.0120	L2	80	8.0	79.11
	-	-	0.0050	-	L4			
13  EC Stripline	L3	0.00450	0.0045	0.0120	L2	85	8.5	84.05
	-	0.00450	0.0045	-	L4			
14  EC Stripline	L3	0.00410	0.0041	0.0091	L2	85	8.5	84.72
	-	0.00410	0.0041	-	L4			
15  EC Stripline	L3	-	0.0040	0.0100	L2	90	9.0	87.58
	-	-	0.0040	-	L4			

Impedance Type	Layer	Design	Actual	Pitch	Plane	Target	Tol (ohms)	Predict
16  EC Stripline	L3	0.00360	0.0036	0.0086	L2	90	9.0	90.06
	-	0.00360	0.0036	-	L4			
17  EC Stripline	L3	-	0.0033	0.0113	L2	100	10.0	98.18
	-	-	0.0033	-	L4			
18  EC Stripline	L3	0.00310	0.0031	0.0096	L2	100	10.0	99.22
	-	0.00310	0.0031	-	L4			
19  EC Stripline	L3	0.0030	0.0030	0.0110	L2	102	10.2	102.39
	-	0.0030	0.0030	-	L4			
20  Stripline	L5	-	0.0060	-	L4	40	4.0	40.08
	-	-	-	-	L6			
21  Stripline	L5	-	0.0040	-	L4	50	5.0	50.17
	-	-	-	-	L6			
22  EC Stripline	L5	-	0.0055	0.0110	L4	80	8.0	80.02
	-	-	0.0055	-	L6			
23  EC Stripline	L5	0.0050	0.0050	0.0110	L4	85	8.5	85.05
	-	0.0050	0.0050	-	L6			
24  EC Stripline	L5	0.00475	0.00475	0.00975	L4	85	8.5	85.53
	-	0.00475	0.00475	-	L6			
25  EC Stripline	L5	-	0.0045	0.0100	L4	90	9.0	88.98
	-	-	0.0045	-	L6			
26  EC Stripline	L5	0.00425	0.00425	0.00925	L4	90	9.0	90.48
	-	0.00425	0.00425	-	L6			
27  EC Stripline	L5	-	0.0039	0.0119	L4	100	10.0	99.01
	-	-	0.0039	-	L6			
28  EC Stripline	L5	0.00350	0.0035	0.0085	L4	100	10.0	99.06
	-	0.00350	0.0035	-	L6			
29  EC Stripline	L5	0.0030	0.0030	0.0110	L4	112	11.2	111.80
	-	0.0030	0.0030	-	L6			
30  Stripline	L7	-	0.0043	-	L6	50	5.0	49.74
	-	-	-	-	L8			
31  Stripline	L10	0.00875	0.00875	-	L9	33	3.3	33.11
	-	-	-	-	L11			
32  Stripline	L10	-	0.0043	-	L9	50	5.0	49.74
	-	-	-	-	L11			
33  EC Stripline	L10	0.00820	0.0082	0.0142	L9	66	6.6	65.59
	-	0.00820	0.0082	-	L11			
34  Stripline	L12	-	0.0060	-	L11	40	4.0	40.08
	-	-	-	-	L13			

Impedance Type	Layer	Design	Actual	Pitch	Plane	Target	Tol (ohms)	Predict
35  Stripline	L12	-	0.0040	-	L11	50	5.0	50.17
	-	-	-	-	L13			
36  EC Stripline	L12	-	0.0055	0.0110	L11	80	8.0	80.02
	-	-	0.0055	-	L13			
37  EC Stripline	L12	0.0050	0.0050	0.0110	L11	85	8.5	85.05
	-	0.0050	0.0050	-	L13			
38  EC Stripline	L12	-	0.0045	0.0100	L11	90	9.0	88.98
	-	-	0.0045	-	L13			
39  EC Stripline	L12	-	0.0039	0.0119	L11	100	10.0	99.01
	-	-	0.0039	-	L13			
40  EC Stripline	L12	-	0.0040	0.0140	L11	100	10.0	99.06
	-	-	0.0040	-	L13			
41  EC Stripline	L12	0.0030	0.0030	0.0110	L11	112	11.2	111.80
	-	0.0030	0.0030	-	L13			
42  Stripline	L14	0.00750	0.0072	-	L13	33	3.3	32.55
	-	-	-	-	L15			
43  Stripline	L14	-	0.00525	-	L13	40	4.0	39.48
	-	-	-	-	L15			
44  Stripline	L14	-	0.0035	-	L13	50	5.0	48.79
	-	-	-	-	L15			
45  EC Stripline	L14	0.00670	0.0067	0.0120	L13	66	6.6	65.36
	-	0.00670	0.0067	-	L15			
46  EC Stripline	L14	-	0.0050	0.0120	L13	80	8.0	79.11
	-	-	0.0050	-	L15			
47  EC Stripline	L14	0.00450	0.0045	0.0120	L13	85	8.5	84.05
	-	0.00450	0.0045	-	L15			
48  EC Stripline	L14	-	0.0040	0.0100	L13	90	9.0	87.58
	-	-	0.0040	-	L15			
49  EC Stripline	L14	-	0.0033	0.0113	L13	100	10.0	98.18
	-	-	0.0033	-	L15			
50  EC Stripline	L14	-	0.0033	0.0130	L13	100	10.0	99.18
	-	-	0.0033	-	L15			
51  EC Stripline	L14	0.0030	0.0030	0.0110	L13	102	10.2	102.39
	-	0.0030	0.0030	-	L15			
52  Surface MS	L16	-	0.0050	-	L15	50	5.0	50.72
	-	-	-	-	-			
53  EC Microstrip	L16	0.00520	0.0052	0.0110	L15	85	8.5	84.70
	-	0.00520	0.0052	-	-			

Impedance Type	Layer	Design	Actual	Pitch	Plane	Target	Tol (ohms)	Predict
54  EC Microstrip	L16	-	0.0045	0.0105	L15	90	9.0	90.18
	-	-	0.0045	-	-			
55  EC Microstrip	L16	-	0.0037	0.0110	L15	100	10.0	100.50
	-	-	0.0037	-	-			
56  EC Microstrip	L16	0.0030	0.0030	0.0110	L15	110	11.0	109.46
	-	0.0030	0.0030	-	-			