



L#		Base	Finish	Isolation Distance	Er	Resin Content	Controlled Impedance	Colour	Type	Supplier	Supplier Desc	Filename
Primary												
	Peelable Mask	8.000	8.000					Blue	Peelable	Polar Samples	PE/001	Primary-Side-Peelable-P1.ger
	Screened Ident	2.000	2.000					White	Ident	Polar Samples	ID/001	Primary-Side-Ident-I1.ger
	Liquid Photolimageable Mask	1.000	1.000		4.000			Green	SolderMask	Polar Samples	SM/001	Primary-Side-Solder-Mask-S1.ger
1	Copper Foil	0.700	1.400			1			Copper	Polar Samples	FO/001	Primary-Side-L 1.ger
	2113	3.800	3.230	3.073	4.070	54			PREPREG	ISOLA	FR406B3	
	2113	3.800	3.230	3.073	4.070	54			PREPREG	ISOLA	FR406B3	
2	FR406	1.400	2.100									Ground-Plane/Inner-Tracking-L2.ger
	FR406	8.000	8.000	8.000	4.290	45				ISOLA	2-2116	
3	FR406	1.400	1.400			2						Inner-Tracking-L3.ger
	2113	3.800	3.420	2.860	4.070	54			PREPREG	ISOLA	FR406B3	
	2113	3.800	3.420	2.860	4.070	54			PREPREG	ISOLA	FR406B3	
4	FR406	1.400	1.400									3V3-Power-Plane-L4.ger
	FR406	8.000	8.000	8.000	4.290	45				ISOLA	2-2116	
5	FR406	1.400	1.400									1V5/2V5-Power-Plane-L5.ger
	2113	3.800	3.420	2.860	4.070	54			PREPREG	ISOLA	FR406B3	
	2113	3.800	3.420	2.860	4.070	54			PREPREG	ISOLA	FR406B3	
6	FR406	1.400	1.400			3						Inner-Tracking-L6.ger
	FR406	8.000	8.000	8.000	4.290	45				ISOLA	2-2116	
7	FR406	1.400	2.100			4						Ground-Plane/Inner-Tracking-L7.ger
	2113	3.800	3.230	3.073	4.070	54			PREPREG	ISOLA	FR406B3	
	2113	3.800	3.230	3.073	4.070	54			PREPREG	ISOLA	FR406B3	
8	Copper Foil	0.700	1.400			5			Copper	Polar Samples	FO/001	Secondary-Side-L8.ger
	Liquid Photolimageable Mask	1.000	1.000		4.000			Green	SolderMask	Polar Samples	SM/001	Secondary-Side-Solder-Mask-S8.ger
Secondary												

ID	Structure Name	TL 1	TL 2	PL 1	PL 2	W1	W2	S1	G1	G2	O1	D1	Imp.	T-Imp.	Tol. %
1	Coated Microstrip 1B	1	0	2	0	11.0000	10.0000	0.0000	0.0000	0.0000	0.0000	0.0000	50.55	50	10
2	Offset Coplanar Strips 1B1A	3	0	2	4	14.5000	13.5000	0.0000	10.0000	9.0000	0.0000	10.0000	27.62	28	10
3	Offset Stripline 1B1A	6	0	5	7	16.7500	15.7500	0.0000	0.0000	0.0000	0.0000	0.0000	25.1	25	10
4	Diff Embedded Coplanar Waveguide With Lower Ground 2B1A	7	0	5	0	10.0000	9.0000	11.0000	0.0000	0.0000	0.0000	28.0000	100.06	100	10
5	Coated Microstrip 1B	8	0	5	0	19.5000	18.5000	0.0000	0.0000	0.0000	0.0000	0.0000	74.86	75	10

Notes

- PCB Thickness = 1.6 mm (+/- 10%) -
- 1) Finished thicknesses (i.e. isolation distances) must be complied (within a +/- 10% manufacturing tolerance) with to ensure consistent crosstalk characteristics and impedance.
 - 2) Track and gap width may be modified to meet target impedances. This must be approved by engineering Dept. before PCB manufacture can commence.
 - 3) If impedance targets cannot be met by modifying track geometries alone then dielectric thicknesses may be modified. This must be approved by engineering Dept. before PCB manufacture can commence.
 - 4) To aid manufacturing via sizes may be modified and Cross-hatching may be added to outer layers, but must be placed a least 250 thou (6.35mm) away from any tracks, pads or board outline.

StackName: 8-Layer Sample Stack	Version: A	Revision: 1	Copper Thickness	12.600	Speedstack - PCB polarinstruments.com
Date: 17/10/2006	Associated Documents:		Dielectric Thickness	47.730	
Author: James Stapley			Overall Thickness	60.330	
Department: Engineering			Page 1		
Site: Waterlooville					