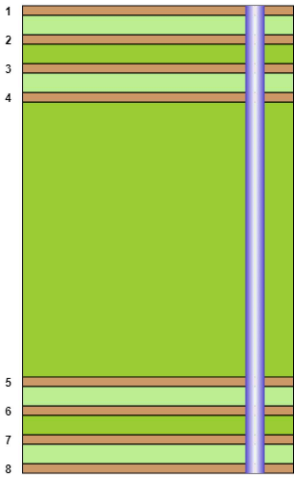
Play Demo Video

Stack Report (STKNONBGA853)

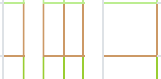
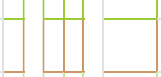
Customer Input

Project Name / Rev	mianboard/C
PCB Size	3 inches X 3 inches
Board Type	Rigid
Material	N7000-2HT
Finished Thickness	0.062 inches
Layer Count	8
STD / HDI	STD
1 Oz Stackup	☑
Layer Combination	4Signal 4Plane
Layer Sequence	SPSP-PSPS



8L_0-8-0_4S

Stackup

Layer#	Material	Layer Type	Copper %		Finished Thickness (Mils)	Dielectric or Copper Base Thickness (Mils)	Copper Plating Thickness (Mils)	Dielectric Description (Mils)	Er (Dk @10 GHz)	Material Construction Details
	Solder Mask				0.5	0.5 mils		Soldermask 0.5 mils	4.2	
1	Foil	Signal	24%		1.45	0.35 (0.25 oz)	1.1			
	Prepreg				4.096	4.6		N7000-2HT Prepreg 4.6 mils	3.41	2x106-72%
2	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Core				5	5		N7000-2HT Core 5 mils 1 oz / 1 oz	3.79	(1x2113 +1x106)-53%
3	Copper	Signal	24%		1.4	1.4 (1 oz)				
	Prepreg				6.932	8.5		N7000-2HT Prepreg 8.5 mils	3.41	1x106-72%+1x1080-68%+1x106-72%
4	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Core				16	16		N7000-2HT Core 16 mils 1 oz / 1 oz	4.19	(2x7628+1x1080)-41%
5	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Prepreg				6.932	8.5		N7000-2HT Prepreg 8.5 mils	3.41	1x106-72%+1x1080-68%+1x106-72%
6	Copper	Signal	24%		1.4	1.4 (1 oz)				
	Core				5	5		N7000-2HT Core 5 mils 1 oz / 1 oz	3.79	(1x2113 +1x106)-53%
7	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Prepreg				4.096	4.6		N7000-2HT Prepreg 4.6 mils	3.41	2x106-72%
8	Foil	Signal	24%		1.45	0.35 (0.25 oz)	1.1			
	Solder Mask				0.5	0.5 mils		Soldermask 0.5 mils	4.2	
Total					60.356					

Impedance Calculator

Sr. No.	Signal Layer	Target Impedance (ohm) (tol-10%)	Tx Line model	Ref 1	Ref 2	Trace Width (mils)	Trace Spacing (mils)	TPS = W + S (mils)	Coplanar Spacing (mils)	Calculated Impedance (Ω)	Calculated Impedance before Mask (Ω)	Propagation Delay (ps/inch)
1	1	50	Coplanar Coated Microstrip Single Ended	2		7.15			10	49.895	54.28	144.154
2	3	90	Stripline Differential Pair	2	4	6.15	12	18.15		89.861	0	160.454

Technology Parameters and Cost Index

PCB TECHNOLOGY LEVELS	Level 1	Level 2	Level 3
Mechanical Via Diameter (in mils)	8	7	6
Mechanical Via Pad Diameter (in mils)	14	13	12
Trace Width Top Layer (in mils)	5	4	4
Trace Width Inner Layers (in mils)	4	3.5	3
Trace Width Bottom Layer (in mils)	5	4	4
Cost Index	2.27	2.8	3.6

Via Set Information

This Stackup supports the following Via Set
L1-L8

www.protoexpress.com
+1 (800) 763-7503