

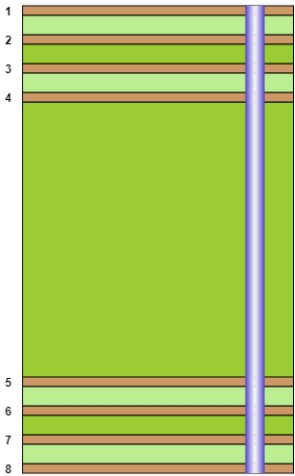
Play Demo Video

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	<input checked="" type="checkbox"/>
Layer Combination	4Signal 4Plane
Layer Sequence	SPSP-PSPS

8L_0-8-0_45



Hey there 🤖 You're back! Ready to get connected with an expert?



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

Disclaimer:

No representations or warranties of any kind are expressed or implied, about the completeness, accuracy, or reliability of these tools. Sierra Circuits, in no event, will be liable to any user of these tools for any loss or damages, including without limitation, indirect or consequential damages arising out of or associated with the use of these tools.

 www.protoexpress.com

 +1 (800) 763-7503

©2021 Sierra Circuits, Inc