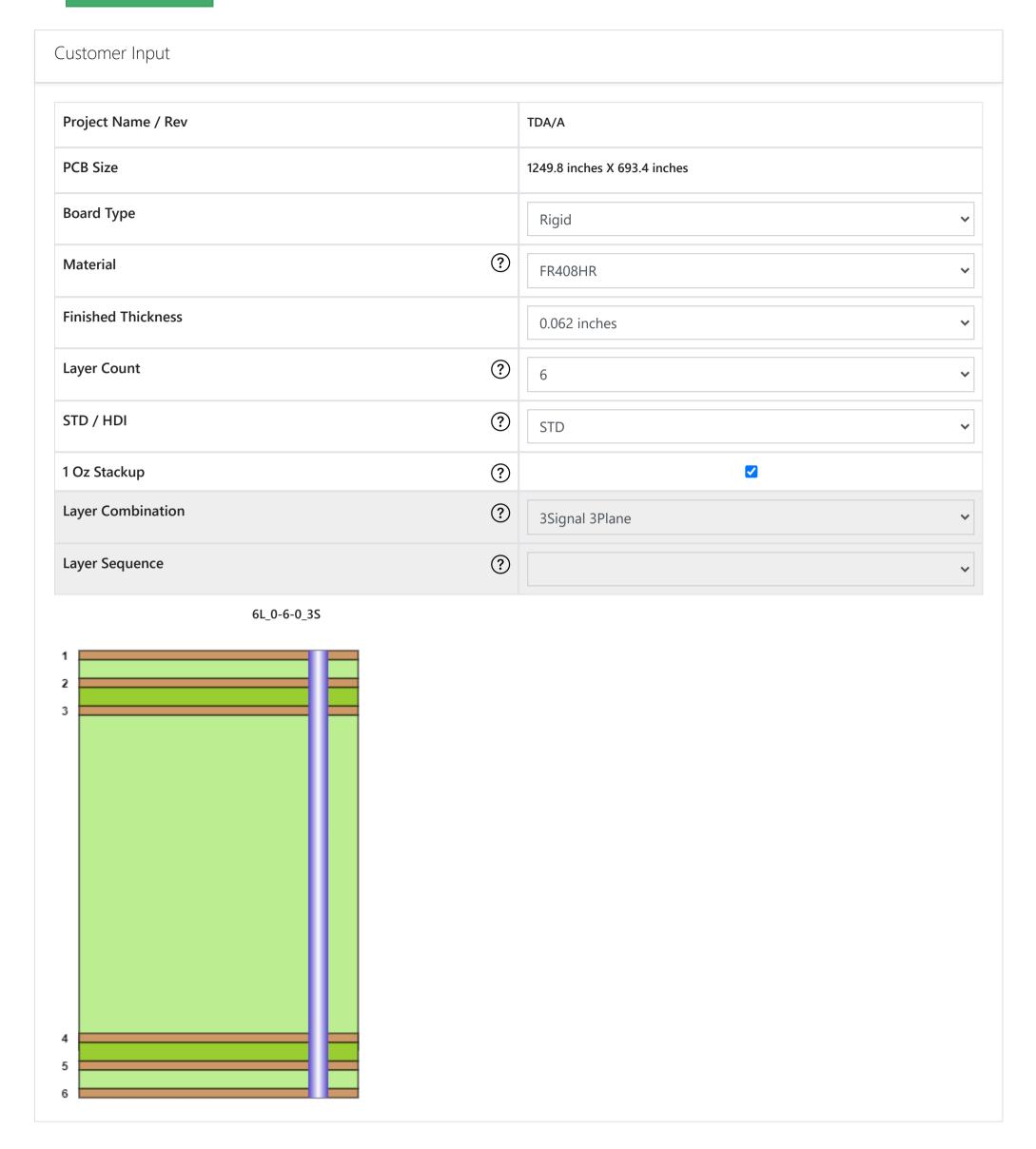
▶ Play Demo Video



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				2.996	3.5		FR408HR Prepreg 3.5 mils	3.42	1x1086-65.0%
2	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Core				5	5		FR408HR Core 5 mils 1 oz / 1 oz	3.67	1x2116-54%
3	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Prepreg				36.632	38.2		FR408HR Prepreg 38.2 mils	3.53	1x106- 75%+1x1080- 71%+1x106- 75% + 1x21 Mil Core 0/0- 50% + 1x106- 75%+1x1080- 71%+1x106- 75%
4	Copper	Signal	24%		1.4	1.4 (1 oz)				
	Core				5	5		FR408HR Core 5 mils 1 oz / 1 oz	3.67	1x2116-54%
5	Copper	Plane	64%		1.4	1.4 (1 oz)				
	Prepreg				2.996	3.5		FR408HR Prepreg 3.5 mils	3.42	1x1086-65.0%
6	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					62.124					

Impedance Calculator

Sr. No.	Signal Layer	Target Impedance (ohm) (tol- 10%)	Tx Line model	Ref	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	90	Coated Microstrip Differential Pair	2		4.7	5.5	10.2		89.809	101.916	143.323
2	1	50	Coated Microstrip Single Ended	2		5.05				50.067	54.948	146.444
3	4	90	Stripline Differential Pair	5	3	5.55	5.5	11.05		90.193	0	160.667

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	1.73	2.11	2.68

Via Set Information

This Stackup supports the following Via Set

L1-L6

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