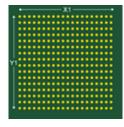
HDI Stackup Planner — Detailed Report for HSP-189471 Option C

Sierra Circuits, Inc.

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Customer Input

Part Number/ Rev amINO/ 1.0

PCB Size in X : 0.51 inches X 0.59 inches

: Signal Outer Layer **BGA Pitch** : 0.65 mm

Total Number of Pins : 49

: X1 = 7 Pins Y1 = 7 Pins **BGA Pins Pattern**

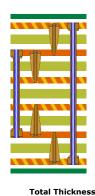
Material : 0.59

PCB Thickness : 0.031 inches

Number of Signal :36



All MicroVias shown as mare STACKED MICROVIAS **SOLDER MASK** TOP SIGNAL L-1 DIELECTRIC PLANE L-2 DIELECTRIC L-3 SIGNAL DIELECTRIC **SIGNAL DIELECTRIC** L-5 **PLANE** DIELECTRIC **BOTTOM SIGNAL** L-6 SOLDER MASK



0.0306 (inches)
1 Oz
0.5 Oz
0.5 Oz
0.5 Oz
0.5 Oz

Finished Copper Weight

1 Oz

Finished Thicknes (inches)				
0.0005				
0.0014				
0.0035				
0.0007				
0.0035				
0.0007				
0.0100				
0.0007				
0.0035				
0.0007				
0.0035				
0.0014				
0.0005				

Customer Saved Impedance Results					
Layer	Impedance Model	Impedance (ohms)	Trace Width (mils)	Space (mils)	
Layer 1	Soldermask Coated Microstrip Single-ended	51.7	5		
Layer 1	Soldermask Coated Microstrip Differential Pair	90.03	5	6	
Laver 3	Stripline Single-ended	51.04	4		

Stackup Details

Number of Layers	Number of Signal Layers	Number of Sequential Laminations	Number of Plane Layers	Maximum Number of Laser Drills	Mechanical Drills
б	4	1	2	4	2

BGA Fan out Recommendations

BGA Area Trace Geometry

	Trace/Space within BGA area	Maximum number of Traces between adjacent BGA pads/vias		
Top Layer	5 mils	0	0	0
Inner Layers	5 mils	0	0	0
Bottom Layer	5 mils	0	0	0

BGA Area Detail

MicroVia Pad Diameter : 13.5 mils MicroVia Drill Diameter : 7 mils Mechanical MicroVia Pad Diameter : 16 mils Mechanical MicroVia Drill Diameter : 8 mils

Outside of BGA Area

MicroVia Pad Diameter : 13.5 mils
MicroVia Drill Diameter : 7 mils
Mechanical MicroVia Pad Diameter : 16 mils
Mechanical MicroVia Drill
Diameter : 8 mils

Via Set Information

This stack up supports the following via set L1-L2 L1-L3 L1-L5 L1-L6 L2-L3 L2-L5 L2-L6 L4-L5 L4-L6 L5-L6

6L_HDI_1-4-1_4S-2P_OS_T031_A

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