

HDI Stackup Planner — Detailed Report for HSP-106895 Option B

Sierra Circuits, Inc.

www.protoexpress.com/hdi**Customer Input**

Part Number/ Rev : harley_cam/ c
 PCB Size in X : 1.3 inches X 1.77 inches
 Number of layers : 10 PCB Thickness : 0.062 inches
 Material : NP175 Outer Layer : Signal

MicroVias depicted by



Finished Copper Weight

Finished Thickness
(inches)

	SOLDER MASK			
L-1	TOP SIGNAL		1 Oz	0.0014
	DIELECTRIC			0.0035
L-2	PLANE		0.5 Oz	0.0007
	DIELECTRIC			0.0040
L-3	SIGNAL		0.5 Oz	0.0007
	DIELECTRIC			0.0045
L-4	SIGNAL		0.5 Oz	0.0007
	DIELECTRIC			0.0040
L-5	PLANE		0.5 Oz	0.0007
	DIELECTRIC			0.0205
L-6	PLANE		0.5 Oz	0.0007
	DIELECTRIC			0.0040
L-7	SIGNAL		0.5 Oz	0.0007
	DIELECTRIC			0.0045
L-8	SIGNAL		0.5 Oz	0.0007
	DIELECTRIC			0.0040
L-9	PLANE		0.5 Oz	0.0007
	DIELECTRIC			0.0035
L-10	BOTTOM SIGNAL		1 Oz	0.0014
	SOLDER MASK			0.0005
Total Thickness			0.0619 (inches)	

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 3	Stripline Single-ended	46.88	5	--

Stackup Details

Number of Layers	Number of Signal Layers	Number of Sequential Laminations	Number of Plane Layers	Maximum Number of Laser Drills	Mechanical Drills
10	6	0	4	2	1

Technology Parameters and Cost Index

PCB TECHNOLOGY LEVELS	Level 1	Level 2	Level 3	Level 4
Mechanical Micro via Drill diameter (in mils)	8.00	8.00	7.00	6.00
Mechanical Micro via Pad diameter (in mils)	16.00	14.00	13.00	12.00
Micro Via Drill Diameter (in mils)	6.00	6.00	6.00	4.00
Micro Via Pad Diameter (in mils)	14.00	12.00	12.00	10.00
Trace Width Top Layer (in mils)	5.00	4.50	4.00	4.00
Trace width Inner Buildup Layers (in mils)	4.50	4.00	3.50	3.00
Trace Width Inner Core Layers (in mils)	4.50	4.00	3.50	3.00
Trace Width Bottom Layer (in mils)	5.00	4.50	4.00	4.00
Cost Index	2.7	3.2	4.1	5.1

Via Set Information

This stack up supports the following via set

L1-L2 L1-L10
L9-L10