

Sierra Circuits, Inc.
www.protoexpress.com/hdi

Customer Input

Part Number/ Rev : MOM-S/ 1.0
PCB Size in X : 0.63 inches X 0.71 inches
Number of layers : 4 PCB Thickness : 0.031 inches
Material : NP175 Outer Layer : Signal

MicroVias depicted by 

| | | Finished Copper Weight | Finished Thickness (inches) |
|-----------------|---------------|------------------------|-----------------------------|
| | SOLDER MASK | | 0.0005 |
| L-1 | TOP SIGNAL | 1 Oz | 0.0014 |
| | DIELECTRIC | | 0.0035 |
| L-2 | PLANE | 1 Oz | 0.0014 |
| | DIELECTRIC | | 0.0180 |
| L-3 | PLANE | 1 Oz | 0.0014 |
| | DIELECTRIC | | 0.0035 |
| L-4 | BOTTOM SIGNAL | 1 Oz | 0.0014 |
| | SOLDER MASK | | 0.0005 |
| Total Thickness | | 0.0316 (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 1 | Soldermask Coated Microstrip Differential Pair | 90.03 | 5 | 6 |

Stackup Details

| Number of Layers | Number of Signal Layers | Number of Sequential Laminations | Number of Plane Layers | Maximum Number of Laser Drills | Mechanical Drills |
|------------------|-------------------------|----------------------------------|------------------------|--------------------------------|-------------------|
| 4 | 2 | 0 | 2 | 0 | 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 | 6.00 |
| Micro Via Pad Diameter (in mils) | 14.00 | 12.00 | 12.00 | 12.00 |
| 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 | 2.5 | 2.5 | 2.5 | 2.5 |

Via Set Information

This stack up supports the following via set
L1-L4