Suggested Stack Up

1 oz Cu + 0.5 oz Plate
0.035 Cu
0.025 Cu
1 oz Cu + 0.5 oz Plate

Impedance Control Trace Width/Space Impedance
Differential 4.5 / 7 / 4.5 (mil) 100 ohm 5%
Single Ended 5 (mil) 50 ohm 10%

Signal traces on L1 reference L2 plane & Signal traces on L4 reference L3 plane
* Manufacturer should change the stack up to match the impedance control based on the PCB material used.

Board Thickness: 1.6mm ± Layers FR4

Top Solder
Top Overlay
Mechanical 1
Mechanical 2

Board shall be fabricated - Performance Class II as per IPC-6011 & IPC-6012
Material: Per IPC-4101A/24/26/28/36, Copper Clad,
High Temperature C-24 Class Epoxy Glass Rated UL94V-0,
0.05 oz Copper for External Layers & 0.04 oz Copper for Internal Layers,
Must be RoHS compliant, & survive a Lead-Free Assembly Max reflow of 260 DEG C (6 Passes)
T(f) Rating > 190 DEG C
Z Axis CTE < 35%
Tg > 170 DEG C (min)

Solder Mask: SMOBC Per IPC-2150, Class T, Must be RoHS Compliant
Typ LPI, 0.0002 Min to 0.0008 Max measured over copper plating,
must clear all lands as indicated on gerber solder mask layers, (Color = Red)

Finish: Electroless Nickel 25um Gold ENIG, 2.5 Micron Handpolished 150-250 Micron Inches Nickel
This Assembly shall be RoHS Compliant, Vendor shall deliver assembly with accompanying certificate of compliance.