



For 100 Ohm differential stripline:
Trace width = 0.105 mm
Differential pair trace gap = 0.15 mm
Zdiff (assume er=4.6) = 83.775 Ohms
Zdiff (assume er = 4.25) = 87.157 Ohms

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Differential Pairs

Conductor Width (W) **0.105 mm** Target Zdiff **85 Ohms** Differential Protocol **PCIe Gen4**

Conductor Spacing (S) **0.15 mm** +/- Tolerance = 10%

Conductor Height (H1) **0.1088 mm** Target Zdiff Plus **95.625 Ohms** Send to Via Calculator Zdiff differential **83.775 Ohms**

Conductor Height (H2) **0.55 mm** Target Zdiff Minus **74.375 Ohms** Zo **52.143 Ohms**

Applied Voltage **1 Volts** Formula Restrictions: 0.1 < W/H < 3.0 0.1 < S/H < 3.0 Zodd **41.888 Ohms**

Coupled Length **2.54 mm** Zeven **64.908 Ohms**

Signal Risetime **1 ns** Kb' (Term) **0.1091** Kb' (Unterm) **0.2156**

-19.247 dB **-13.329 dB**

NEXT Voltage **0.0040 V** NEXT Voltage **0.0078 V**

Options

Base Copper Weight
9um
18um
35um
53um
70um
88um
106um
142um
178um

Units
Imperial
Metric

Substrate Options
Material Selection
Custom
Er **4.6** Tg (°C) **130**

Plating Thickness
Bare PCB
18um
35um
53um
70um
88um
106um

Temp Rise (°C) **20**

Temp in (°F) = 36.0

Ambient Temp (°C) **22**

Temp in (°F) = 71.6

Differential Layer
Edge Cpld Ext
Edge Cpld Int Sym
Edge Cpld Int Asym
Edge Cpld Embed
Broad Cpld Shld
Broad Cpld NShld

Print Solve!

Information
Total Copper Thickness 18 um
Via Thermal Resistance N/A
W/H = 0.155
S/H = 0.222
Lsat = 69.87 mm
Via Count: 10
Via Voltage Drop N/A

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