

4-Layer Impedance Control Stackup

Thickness

0.8mm

1.0mm

1.2mm

1.6mm

2.0mm

Current layer:4-layer

a) JLC7628 Stackup:

Layer	Material Type	Thickness	
Top Layer1	Copper	0.035 mm	
Prepreg	7628*1	0.2 mm	
Inner Layer2	Copper	0.0175 mm	1.1mm (with copper core)
Core	Core	1.065 mm	
Inner Layer3	Copper	0.0175 mm	
Prepreg	7628*1	0.2 mm	
Bottom Layer4	Copper	0.035 mm	

Using standard JLCPCB 1.6mm stackup, <https://cart.jlpcb.com/impedance>

All tolerances +/- 10%

Single Ended	DEZ	SEZ	LW	LineGap	Ref (above)	Ref (below)
TOP		50	0.1016			L2
BOTTOM		50	0.1016		L3	

Target impedance for USB pairs is 90 Ohm. Target impedance for HDMI pairs is 100 Ohm.

Differential (edge)	DEZ	SEZ	LW	LineGap	Ref (above)	Ref (below)
TOP	85		0.2	0.102		L2
TOP	90		0.18	0.102		L2
TOP	95		0.1524	0.102		L2
TOP	100		0.1524	0.1524		L2
TOP	105		0.1524	0.179		L2
BOTTOM	85		0.2	0.102	L3	
BOTTOM	90		0.18	0.102	L3	
BOTTOM	95		0.1524	0.102	L3	
BOTTOM	100		0.1524	0.1524	L3	
BOTTOM	105		0.1524	0.179	L3	