J@LC JLCPCB (/)

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Multilayer high precision PCB's with impedance control

CALCULATE (/quote

JLCPCB can produce High-precision multilayer board with capabilities listed in below table.

Min. Trace width/Spacing	Min. Via	Min. BGA
3.5mil	0.2mm	0.3mm

It is very convenient for customers to conduct impedance matching design according to JLCPCB's laminated s the following stackup strictly.

Controlled Impedance PCB Parameters and Stackup

1.Prepreg dielectric constant:

Prepreg type	Dielectric constant
7628	4.6
2313	4.05
2116	4.25

2.Solder mask Parameters

Solder mask thickness over the laminate	Solder mask thickness over traces	Sc
0.8mil	0.5mil	3.8

For your convenience, we have designed a Impedance Calculator to help you calculate the impedance and tra

4-Layer Impedance Control Stackup

Thickness

0.8mm   1.0mm   1.2mm   1.6mm   2.0mm   Current layer:4-layer

Accept

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	
Core	Core	1.065 mm	1.1mm (with
Inner Layer3	Copper	0.0175 mm	
Prepreg	7628*1	0.2 mm	
Bottom Layer4	Copper	0.035 mm	

b) JLC2313 Stackup:

Layer	Material Type	Thickness	
Top Layer1	Copper	0.035 mm	
Prepreg	2313*1	0.1 mm	
Inner Layer2	Copper	0.0175 mm	
Core	Core	1.265 mm	1.3 mm (with
Inner Layer3	Copper	0.0175 mm	
Prepreg	2313*1	0.1 mm	
Bottom Layer4	Copper	0.035 mm	

6-Layer Impedance Control Stackup

Thickness

| 1.2mm | | 1.6mm | | 2.0mm | Current layer:6-layer

b) JLC2313 Stackup:

Layer	Material Type	Thickness	
Top Layer1	Copper	0.035 mm	
Prepreg	2313*1	0.1 mm	

Inner Layer2	Copper	0.0175 mm	
Core	Core	0.565 mm	0.6 mm (with (
Inner Layer3	Copper	0.0175 mm	
Prepreg	2116*1	0.127 mm	
Bottom Layer4	Copper	0.0175 mm	
Core	Core	0.565 mm	0.6 mm (with (
Inner Layer5	Copper	0.0175 mm	
Prepreg	2313*1	0.1 mm	
Bottom Layer6	Copper	0.035 mm	

Note: The 6-Layer board temporarily only provides JLC2313 Stackup.

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