

Quick-teck Standard PCB Stack-up Construction






Terms of using this article

This article lists Quick-teck standard PCB stack-up construction information. These are the default construction using in our factory. Due to material availability and other manufacturing factors, Quick-teck keeps the right to change the standard stack-up without notice. If you need specific stack-up, or have your own stack-up configuration (this is quite common for impedance controlled PCB orders) please ensure this information added in the manufacturing data package when place the order.

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4-layer, 1.0mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4.5mil	
FR4	L2/L3		0.51mm 35/35um	35/35um
PrePreg			4.5mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.0mm (+/-10%)


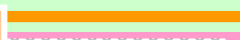


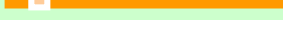
Stackup thickness: 0.85mm (+0.05/-0.06mm)

Note:

0.5oz (18um), 1.0oz (35um), 2.0oz (70um) and 3oz (105um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) (default) and 2.0oz (70um) are available for inner layers' copper;

4-layer, 1.2mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4.5mil	
FR4	L2/L3		0.71mm 35/35um	35/35um
PrePreg			4.5mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.2mm (+/-10%)




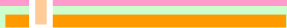
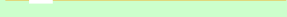
Stackup thickness: 1.05mm (+0.07/-0.05mm)

Note:

0.5oz (18um), 1.0oz (35um), 2.0oz (70um) and 3oz (105um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) (default) and 2.0oz (70um) are available for inner layers' copper;

4-layer, 1.6mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4.8mil	
FR4	L2/L3	 Core FR4	1.2mm 35/35um	35/35um
PrePreg			4.8mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.6mm (+/-10%)



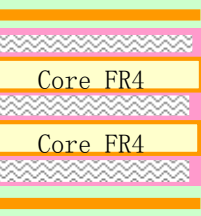

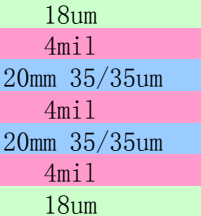


Stackup thickness: 1.48mm (+0.07/-0.08mm)

Note:

0.5oz(18um), 1.0oz(35um), 2.0oz(70um) and 3oz(105um) are available for outer layers' copper;

0.5oz(18um), 1.0oz(35um) (default) and 2.0oz(70um) are available for inner layers' copper;

6-layer, 1.0mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4mil	
FR4	L2/L3	 Core FR4	0.20mm 35/35um	35/35um
PrePreg			4mil	
FR4	L4/L5	 Core FR4	0.20mm 35/35um	35/35um
PrePreg			4mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.0mm (+/-10%)




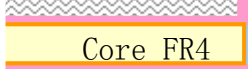

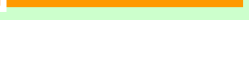
Stackup thickness: 0.88mm (+0.05/-0.07mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

6-layer, 1.2mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			5.2mil	
FR4	L2/L3	 Core FR4	0.25mm 35/35um	35/35um
PrePreg			5.2mil	
FR4	L4/L5	 Core FR4	0.25mm 35/35um	35/35um
PrePreg			5.2mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.2mm (+/-10%)







Stackup thickness: 1.07mm (+0.08/-0.07mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

6-layer, 1.6mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		12um	35um
PrePreg			67*2um	
FR4	L2/L3	Core FR4	250um 35/35um	35/35um
PrePreg			180*1um	
FR4		Bare FR4	250mm	
PrePreg			180*1um	
FR4	L4/L5	Core FR4	250um 35/35um	35/35um
PrePreg			67*2um	
Copper	Bottom		12um	35um

Finished PCB thickness: 1.6mm (+/-10%)



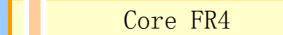


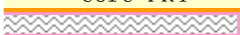



Stackup thickness: 1.542mm (+0.05/-0.1mm)

Note:

0.5oz (18um), 1.0oz (35um), 2.0oz (70um) and 3oz (105um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

8-layer, 1.0mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4mil	
FR4	L2/L3	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
FR4	L4/L5	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
FR4	L6/L7	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.0mm (+/-10%)


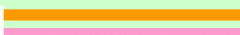





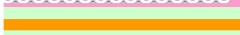
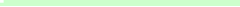
Stackup thickness: 0.85mm (+0.05/-0.07mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

8-layer, 1.2mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4.2mil	
FR4	L2/L3		0.13mm 35/35um	35/35um
PrePreg			4.2mil	
FR4	L4/L5		0.13mm 35/35um	35/35um
PrePreg			4.2mil	
FR4	L6/L7		0.13mm 35/35um	35/35um
PrePreg			4.2mil	
Copper	Bottom		18um	35um

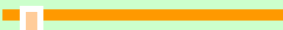

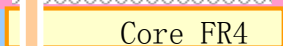






Finished PCB thickness: 1.2mm (+/-10%)
 Stackup thickness: 1.06mm (+0.08/-0.06mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

8-layer, 1.6mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4.5mil	
FR4	L2/L3		0.25mm 35/35um	35/35um
PrePreg			4.5mil	
FR4	L4/L5		0.25mm 35/35um	35/35um
PrePreg			4.5mil	
FR4	L6/L7		0.25mm 35/35um	35/35um
PrePreg			4.5mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.6mm (+/-10%)

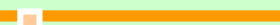

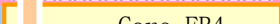




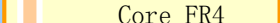

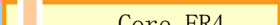

Stackup thickness: 1.45mm (+0.08/-0.1mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for inner layers' copper;

10-layer, 1.2mm PCB Standard Stackup Construction

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4mil	
FR4	L2/L3	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
FR4	L4/L5	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
FR4	L6/L7	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
FR4	L8/L9	 Core FR4	0.10mm 18/18um	18/18um
PrePreg			4mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.2mm (+/-10%)

Stackup thickness: 1.075mm (+0.08/-0.1mm)

Note:

0.5oz (18um), 1.0oz (35um) and 2.0oz (70um) are available for outer layers' copper;

10-layer, 1.6mm PCB Standard Stackup Construction

Option1, 35um(1oz) copper thickness as inner layer

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			5.2mil	
FR4	L2/L3	Core FR4	0.13mm 35/35um	35/35um
PrePreg			5.2mil	
FR4	L4/L5	Core FR4	0.13mm 35/35um	35/35um
PrePreg			5.2mil	
FR4	L6/L7	Core FR4	0.13mm 35/35um	35/35um
PrePreg			5.2mil	
FR4	L8/L9	Core FR4	0.13mm 35/35um	35/35um
PrePreg			5.2mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.6mm (+/-10%)
 Stackup thickness: 1.46mm (+0.08/-0.08mm)

Note:

0.5oz(18um), 1.0oz(35um) and 2.0oz(70um) are available for outer layers' copper;

Option2, 18um(0.5oz) copper thickness as inner layer

Material	Layer	Cross section	Raw material thickness	Finished copper weight
Copper	Top		18um	35um
PrePreg			4mil	
FR4	L2/L3	Core FR4	0.20mm 18/18um	18/18um
PrePreg			4mil	
FR4	L4/L5	Core FR4	0.20mm 18/18um	18/18um
PrePreg			4mil	
FR4	L6/L7	Core FR4	0.20mm 18/18um	18/18um
PrePreg			4mil	
FR4	L8/L9	Core FR4	0.20mm 18/18um	18/18um
PrePreg			4mil	
Copper	Bottom		18um	35um

Finished PCB thickness: 1.6mm (+/-10%)
 Stackup thickness: 1.46mm (+0.08/-0.08mm)

Note:

0.5oz(18um), 1.0oz(35um) and 2.0oz(70um) are available for outer layers' copper;