

Standard Multi-layer PCB Stackup

The tables below represent standard multi-layer PCB stack up carried by Bittelle Electronics during PCB manufacturing process. All the typical PCB's listed below have the final thickness of $0.62" \pm 10\%$ and 1 ounce of Copper weight. For custom layer stack-up, the following data may not apply. The unit of measurement for the tables below are listed in inches. The data and values listed below are subject to change without prior notice and will remain in Bittelle's discretion.

2 Layer Stack-up

Layer Order	Layer Name	Material Type	Material Description	Dielectric Constant	Thickness	Copper Weight
1	Top	Copper	Signal		0.0014"	1 oz
		Core	Core	4.2	0.057"	
2	Bottom	Copper	Signal		0.0014"	1 oz

Final board thickness: $0.062" \pm 10\%$

4 Layer Stack-up

Layer Order	Layer Name	Material Type	Material Description	Dielectric Constant	Thickness	Copper Weight
1	Top	Copper	Signal		0.0014"	1 oz
		2116 (2 sheets)	Prepreg	4.2	0.0091"	
2	Inner 1	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.037"	
3	Inner 2	Copper	Plane		0.0014"	1 oz
		2116 (2 sheets)	Prepreg	4.2	0.0091"	
4	Bottom	Copper	Signal		0.0014"	1 oz

Final board thickness: $0.062" \pm 10\%$

6 Layer Stack-up

Layer Order	Layer Name	Material Type	Material Description	Dielectric Constant	Thickness	Copper Weight
1	Top	Copper	Signal		0.0014"	1 oz
		2116 and 3313	Prepreg	4.2	0.0081"	
2	Inner 1	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.013"	
3	Inner 2	Copper	Plane		0.0014"	1 oz
		2116 (2 sheets)	Prepreg	4.2	0.0091"	
4	Inner 3	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.013"	
5	Inner 4	Copper	Plane		0.0014"	1 oz
		2116 and 3313	Prepreg	4.2	0.0081"	
6	Bottom	Copper	Signal		0.0014"	1 oz

Final board thickness: $0.062" \pm 10\%$

8 Layer Stack-up

Layer Order	Layer Name	Material Type	Material Description	Dielectric Constant	Thickness	Copper Weight
1	Top	Copper	Signal		0.0014"	1 oz
		1080 (2 sheets)	Prepreg	4.2	0.0059"	
2	Inner 1	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.009"	
3	Inner 2	Copper	Plane		0.0014"	1 oz
		7628	Prepreg	4.2	0.0073"	
4	Inner 3	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.0051"	
5	Inner 4	Copper	Plane		0.0014"	1 oz
		7628	Prepreg	4.2	0.0073"	
6	Inner 5	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.009"	
7	Inner 6	Copper	Plane		0.0014"	1 oz
		1080 (2 sheets)	Prepreg	4.2	0.0059"	
8	Bottom	Copper	Signal		0.0014"	1 oz

Final board thickness: 0.062" ± 10%

10 Layer Stack-up

Layer Order	Layer Name	Material Type	Material Description	Dielectric Constant	Thickness	Copper Weight
1	Top	Copper	Signal		0.0014"	1 oz
		1080 (2 sheets)	Prepreg	4.2	0.0059"	
2	Inner 1	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.0051"	
3	Inner 2	Copper	Plane		0.0014"	1 oz
		2116	Prepreg	4.2	0.0045"	
4	Inner 3	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.0051"	
5	Inner 4	Copper	Plane		0.0014"	1 oz
		1080 (2 sheets)	Prepreg	4.2	0.0059"	
6	Inner 5	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.0051"	
7	Inner 6	Copper	Plane		0.0014"	1 oz
		2116	Prepreg	4.2	0.0045"	
8	Inner 7	Copper	Plane		0.0014"	1 oz
		Core	Core	4.2	0.0051"	
9	Inner 8	Copper	Plane		0.0014"	1 oz
		1080 (2 sheets)	Prepreg	4.2	0.0059"	
10	Bottom	Copper	Signal		0.0014"	1 oz

Final board thickness: 0.062" ± 10%