

## Allegro PCB Editor v 16.6 Stackup for Testcase 2

File: testcase2-stackup-only.xml

Layout Cross Section										
	Subclass Name	Type	Material	Thickness (MIL)	Conductivity (mho/cm)	Dielectric Constant	Loss Tangent	Negative Artwork	Shield	Width (MIL)
1		SURFACE	AIR			1	0			
2		DIELECTRIC	CONFORMAL_COAT	0.7	0	2.5	0.035			
3	TOP	CONDUCTOR	PLATED_COPPER_FOIL	1.7	343000	2.5	0	<input type="checkbox"/>		5.00
4		DIELECTRIC	FR-4	2.7	0	3.7	0.035			
5	INT1	PLANE	COPPER	1.2	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6		DIELECTRIC	FR-4	4	0	4	0.035			
7	INT2	CONDUCTOR	COPPER	0.6	595900	4	0	<input type="checkbox"/>		4.00
8		DIELECTRIC	FR-4	4	0	4	0.035			
9	INT3	PLANE	COPPER	1.2	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10		DIELECTRIC	FR-4	3	0	3.7	0.035			
11	INT4	CONDUCTOR	COPPER	0.6	595900	4	0	<input type="checkbox"/>		4.00
12		DIELECTRIC	FR-4	8	0	4	0.035			
13	INT5	PLANE	COPPER	2.4	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
14		DIELECTRIC	FR-4	3.2	0	4	0.035			
15	INT6	PLANE	COPPER	2.4	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
16		DIELECTRIC	FR-4	8	0	4	0.035			
17	INT7	CONDUCTOR	COPPER	0.6	595900	4	0	<input type="checkbox"/>		4.00
18		DIELECTRIC	FR-4	3	0	3.7	0.035			
19	INT8	PLANE	COPPER	1.2	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
20		DIELECTRIC	FR-4	4	0	4	0.035			
21	INT9	CONDUCTOR	COPPER	0.6	595900	4	0	<input type="checkbox"/>		4.00
22		DIELECTRIC	FR-4	4	0	4	0.035			
23	INT10	PLANE	COPPER	1.2	595900	4	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
24		DIELECTRIC	FR-4	2.7	0	3.7	0.035			
25	BOTTOM	CONDUCTOR	PLATED_COPPER_FOIL	1.7	343000	2.5	0	<input type="checkbox"/>		5.00
26		DIELECTRIC	CONFORMAL_COAT	0.7	0	2.5	0.035			
27		SURFACE	AIR			1	0			

Total Thickness: 63.4 MIL

Layer Type: ALLMaterial: ALLField to Set: ThicknessValue to Set: Update Fields

OKApplyCancelRefresh Materials ->

☐ Show Single Impedance☐ Show Diff Impedance

ReportHelp

## Allegro PCB Editor v 16.6 Stackup for Testcase 3

File: test-3\_r2-stackup-only.xml

Layout Cross Section										
	Subclass Name	Type	Material	Thickness (MIL)	Conductivity (mho/cm)	Dielectric Constant	Loss Tangent	Negative Artwork	Shield	Width (MIL)
		SURFACE	AIR			1	0			
	TOP	CONDUCTOR	COPPER	1.2	595900	1	0	<input type="checkbox"/>		8
		DIELECTRIC	FR-4	8	0	4.5	0.035			
	GND	PLANE	COPPER	1.2	595900	1	0	<input type="checkbox"/>	<input type="checkbox"/>	
		DIELECTRIC	FR-4	8	0	4.5	0.035			
	IS1	CONDUCTOR	COPPER	1.2	595900	1	0	<input type="checkbox"/>		8
		DIELECTRIC	FR-4	8	0	4.5	0.035			
	IS2	CONDUCTOR	COPPER	1.2	595900	1	0	<input type="checkbox"/>		8
		DIELECTRIC	FR-4	8	0	4.5	0.035			
	VCC	PLANE	COPPER	1.2	595900	1	0	<input type="checkbox"/>	<input type="checkbox"/>	
		DIELECTRIC	FR-4	8	0	4.5	0.035			
	BOTTOM	CONDUCTOR	COPPER	1.2	595900	1	0	<input type="checkbox"/>		8
		SURFACE	AIR			1	0			

Total Thickness: 47.2 MIL

Layer Type: ALLMaterial: ALLField to Set: ThicknessValue to Set: Update Fields

OKApplyCancelRefresh Materials ->

☐ Show Single Impedance☐ Show Diff Impedance

ReportHelp

## Allegro PCB Editor v 16.6 Stackup for Testcase 5

File: testcase5-stackup-only.xml

Layout Cross Section										
	Subclass Name	Type	Material	Thickness (MM)	Conductivity (mho/cm)	Dielectric Constant	Loss Tangent	Negative Artwork	Shield	Width (MM)
1		SURFACE	AIR			1	0			
2		DIELECTRIC	SOLDERMASK	0.0127	0	1	0			
3	TOP	CONDUCTOR	CU_0.5_WPLATING	0.0457	595900	1	0	<input type="checkbox"/>		0.1300
4		DIELECTRIC	-----FILL-----	0.1956	0	4.3	0			
5	GND2	PLANE	CU_2.0_COPPER	0.0636	595900	1	0.0035	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6		DIELECTRIC	-----CORE-----	0.0889	0	4.3	0			
7	L10	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
8		DIELECTRIC	-----FILL-----	0.0813	0	4.3	0			
9	L9	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
10		DIELECTRIC	-----CORE-----	0.0889	0	4.3	0			
11	VCC2	PLANE	CU_1.0_COPPER	0.0305	595900	4.3	0.0035	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
12		DIELECTRIC	-----FILL-----	0.0864	0	4.3	0			
13	L7	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
14		DIELECTRIC	-----CORE-----	0.1016	0	4.3	0			
15	DRILLPAD5	CONDUCTOR	FNC_0.00_FR4	0.0001	595900	4.3	0.0035	<input type="checkbox"/>		0.1000
16		DIELECTRIC	FNC_0.00_FR4	0.0001	0	4.5	0.0035			
17	L6	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
18		DIELECTRIC	-----FILL-----	0.0864	0	4.3	0			
19	VCC	PLANE	CU_1.0_COPPER	0.0305	595900	4.3	0.0035	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
20		DIELECTRIC	-----CORE-----	0.0889	0	4.3	0			
21	L4	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
22		DIELECTRIC	-----FILL-----	0.0813	0	4.3	0			
23	L3	CONDUCTOR	CU_0.5_COPPERINT	0.0152	595900	1	0	<input type="checkbox"/>		0.1000
24		DIELECTRIC	-----CORE-----	0.0889	0	4.3	0			
25	GND	PLANE	CU_2.0_COPPER	0.0636	595900	4.3	0.0035	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
26		DIELECTRIC	-----FILL-----	0.1956	0	4.3	0			
27	BOTTOM	CONDUCTOR	CU_0.5_WPLATING	0.0457	595900	1	0	<input type="checkbox"/>		0.1000
28		DIELECTRIC	SOLDERMASK	0.0127	0	1	0			
29		SURFACE	AIR			1	0			

Total Thickness:  
1.5802 MM

Layer Type: ALL  
Material: ALL  
Field to Set: Thickness  
Value to Set:   
Update Fields

OK Apply Cancel Refresh Materials ->

☐ Show Single Impedance  
☐ Show Diff Impedance  
Report Help

## Allegro PCB Editor v 16.6 Stackup for Testcase 6

File: testcase\_6-stackup-only.xml

Layout Cross Section										
	Subclass Name	Type	Material	Thickness (MM)	Conductivity (mho/cm)	Dielectric Constant	Loss Tangent	Negative Artwork	Shield	Width (MM)
1		SURFACE	AIR			1	0			
2		DIELECTRIC	SOLDERMASK	0.0203	0	1	0			
3	TOP	CONDUCTOR	CU_0.5_WPLATING	0.0559	595900	1	0	<input type="checkbox"/>		0.1300
4		DIELECTRIC	FR4_[0.2095]_FILL	0.0978	0	4.3	0			
5	L7	CONDUCTOR	CU_1.0_COPPER	0.0318	595900	4.5	0.035	<input type="checkbox"/>		0.1300
6		DIELECTRIC	FR4_[0.1524]_CORE	0.1016	0	4.3	0			
7	L6	CONDUCTOR	CU_1.0_COPPER	0.0152	595900	4.5	0.035	<input type="checkbox"/>		0.1300
8		DIELECTRIC	FR4_[0.2095]_FILL	0.0884	0	4.3	0			
9	L5	CONDUCTOR	CU_1.0_COPPER	0.0152	595900	4.5	0.035	<input type="checkbox"/>		0.1300
10		DIELECTRIC	FR4_[0.1524]_CORE	0.7112	0	4.3	0			
11	DRILLPAD5	CONDUCTOR	-----COPPER-----	1e-005	595900	0	0	<input type="checkbox"/>		0.1300
12		DIELECTRIC	DRILL_0_COPPER	0	0	0	0			
13	L4	CONDUCTOR	CU_1.0_COPPER	0.0152	595900	4.5	0.035	<input type="checkbox"/>		0.1300
14		DIELECTRIC	FR4_[0.2095]_FILL	0.0914	0	4.3	0			
15	L3	CONDUCTOR	CU_1.0_COPPER	0.0152	595900	4.5	0.035	<input type="checkbox"/>		0.1300
16		DIELECTRIC	FR4_[0.1524]_CORE	0.1016	0	4.3	0			
17	L2	CONDUCTOR	CU_1.0_COPPER	0.0318	595900	4.5	0.035	<input type="checkbox"/>		0.1300
18		DIELECTRIC	FR4_[0.2095]_FILL	0.0978	0	4.3	0			
19	BOTTOM	CONDUCTOR	CU_0.5_WPLATING	0.0559	595900	1	0	<input type="checkbox"/>		0.1300
20		DIELECTRIC	SOLDERMASK	0.0203	0	1	0			
21		SURFACE	AIR			1	0			

Total Thickness:  
1.56661 MM

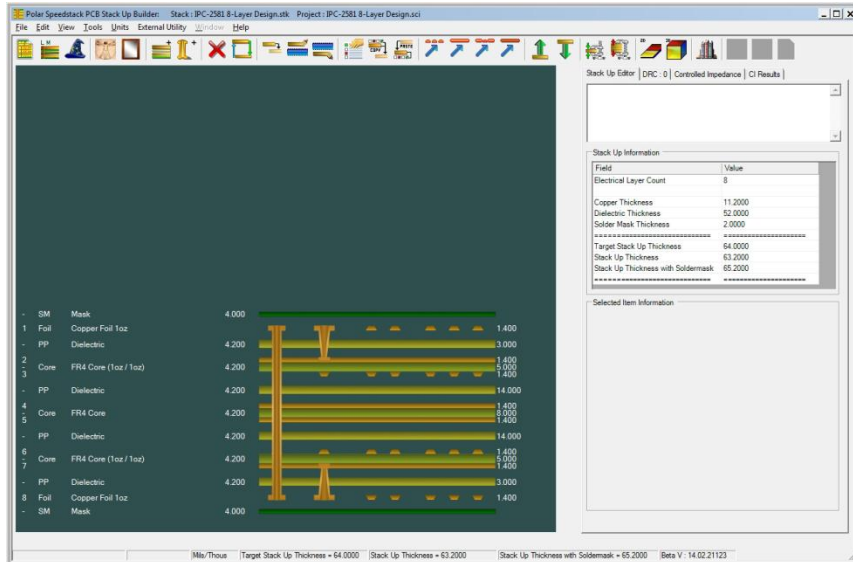
Layer Type: ALL  
Material: ALL  
Field to Set: Thickness  
Value to Set:   
Update Fields

OK Apply Cancel Refresh Materials ->

☐ Show Single Impedance  
☐ Show Diff Impedance  
Report Help

## Polar Speedstack Layer stack up (Design view)

File: ipc-2581-8-layer-Design.xml



## Layer stack up (Fabricator view)

File: ipc-2581-8-layer-Fabricator.xml

