

Product Capability



world class craftsmanship

BOARD CONSTRUCTION	Standard Capability	Special Capability
Panel size	12" x 18"	
	18" x 24"	24" x 27"
	24" x 24"	
Maximum board size	22" x 22"	22" x 25"
Maximum number of layers	Up to 40	40 +
Maximum finished PCB thickness	0.400"	
Board thickness tolerance (Applicable on panels with a thickness less than 0.062")	±10% or ±0.006"	±5%
Warpage (With balanced construction)	0.7%	0.5%
Minimum dielectric thickness	0.004"	
Minimum core thickness (rigid)	0.0027"	
Minimum core thick. Flex	0.0005"	
Layer to layer registration	± 0.004"	
Dimensions – hole location	± 0.003"	
Minimum router size	0.031"	0.020"
Dimensional tolerance for routing	± 0.005"	± 0.0025"
Minimum space, PCB edge to conductor	0.005"	
Angle of beveling	±2 degrees	
Dimensional tolerance for beveling	±0.005"	
Scoring web thickness tolerance	± 0.003"	
Jump scoring	yes	

BOARD CONSTRUCTION	Standard Capability	Special Capability
Inner layer:		
Minimum line width	0.004"	0.003"
Minimum space trace/pad	0.004"	0.002"
Minimum space trace/trace	0.004"	0.003"
Tolerance-line width & spacing	± 0.00025"	
Outer layer:		
Minimum line width	0.004"	0.003"
Minimum space trace/pad	0.004"	0.003"
Minimum space trace/trace	0.004"	0.003"
Tolerance-line width & spacing	± 0.0005"	± 0.00025"
Minimum SMT size	0.005"	0.004"

- For 1/2 oz Outer layers add 0.001" to all linewidths on artworks
- For 1 oz Outer layers add 0.0015" to all linewidths on artworks

LAMINATES	IPC specification sheet	Tg	Dielectric constant	RoHS compliant	Lead-free assembly compatible	Maximum available panel size	Core thicknesses in stock
1.1 Epoxy base (standard)							
Isola FR406	IPC-4101 /24, /26, /28	170 °C	4.10-4.50	Yes	No	24 x 27	All Standard
Isola IS410	IPC-4101 /24, /26, /28	180 °C	3.90-4.60	Yes	Yes	18 x 24	Standard thicknesses from 0.004" to 0.059"
Electroply GFB-125_black	IPC-4101 /21	140 °C	4.10-4.50	Yes	No	18 x 24	Standard thicknesses from 0.005" to 0.059"
1.2 Epoxy base (high speed, low loss)							
Nelco 4000-13 & 4000-13SI	IPC-4101 /29	210 °C	3.60-3.90	Yes	Yes	18 x 24	Standard thicknesses from 0.0027" to 0.093"
Nelco 4000-13	IPC-4101 /29	210 °C	3.60-3.90	Yes	Yes	24 X 27(**)	See note below
1.3 Polyimide							
Arlon 33N	IPC-4101 /40, /41	>250 °C	4.00	Yes	Yes	18 x 24	All Standard
1.4 Rogers ceramic filled PTFE							
Rogers 4003	IPC-4103	>280 °C	3.38	Yes	Yes	18 x 24	0.008", 0.012", 0.020", 0.032"
Rogers 4350	IPC-4103	>280 °C	3.48	Yes	Yes	24 X 27(**)	0.0066", 0.010", .0133", 0.020", 0.030", 0.060"
1.5 Rogers RT/Duroid							
Rogers 3003	IPC-4103	N/A	3.00	Yes	Yes	12 x 18 (*)	0.005", 0.010", 0.020", 0.030", 0.060"
Rogers 3010	IPC-4103	N/A	10.20	Yes	Yes	12 x 18 (*)	0.010", 0.025, 0.030"
Rogers 3203	IPC-4103	N/A	3.02	Yes	Yes	12 x 18 (*)	0.005", 0.010", 0.020", 0.030", 0.060"
Rogers 5870	IPC-4103	N/A	2.33	Yes	Yes	12 x 18 (*)	0.020"
Rogers 5880	IPC-4103	N/A	2.20	Yes	Yes	12 x 18 (*)	0.005", 0.010", 0.012", 0.020", 0.025", 0.031", 0.045", 0.062"
Rogers 6002	IPC-4103	N/A	2.94	Yes	Yes	12 x 18 (*)	0.005", 0.010", 0.015", 0.020", 0.030", 0.040"
Rogers 6010	IPC-4103	N/A	10.20	Yes	Yes	12 x 18 (*)	0.025"
1.6 Other high-speed materials							
Rogers TMM3	IPC-4103	N/A	3.27	Yes	Yes	12 x 18	0.015", 0.030"
Taconic TLX-8	IPC-4103	N/A	2.55	Yes	Yes	18 x 24	0.015", 0.031", 0.062"
1.7 Flexible material							
Dupont Pyralux LF series	IPC-4203 /1, /18	N/A	3.60	Yes	Yes	18 x 24	0.5 mil and 1.0 mil kapton
1.8 Thermally conductive material							
Thermagon T-preg series	None	105 °C	4.10-4.30	Yes	Yes	18x24	0.006", 0.008"

(*) 18x24 is available on a limited amount of core thicknesses

(**) 24 X 27 is available on a limited amount of core thicknesses

Whether your next requirement is a quotation or just simply more information
feel free to contact us at:

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It will be our pleasure to be of service to you

Thank you

