

Toll Free: 1-800-979-4PCB (4722)

www.4pcb.com sales@4pcb.com

## **CAPABILITIES**

	If Your Spec is in This Column:	If Your Spec is in This Column:
	You Can Acquire an Instant Quote on our Website	Contact Your Salesperson
Layer Count	0.101	11 1/
Material	0-10 Layers	11 - 16 Layers
Material	FR4	IS410
	FR406	FR408
	370 HR	Black FR4
		Arlon AR350
		Getek
		CEM-1 Hybrid (Rogers and FR4)
		Nelco 4013
		Rogers Ultralam 2000
		Rogers RO4350
		Rogers RO4003
		Polyimide
		Teflon Duroid
		Aluminum Clad Thermal Substrates/Thermagon
		Kapton
		Kapton "Flex Application"
		Adhesive Based Polyimide "Flex Application"
		Adhesive less Polyimide "Flex Application"
		PEN [Polyethylene Napthalate] "Flex Application"
		GI/Polyimide "Flex Application"  GF/FR4 Adhesive "Flex Application"
		Teflon/Duroid "Flex Application"
Stiffeners "Flex App"		
		Thermo Set & PSA Based
		FR4
		Polyimide Aluminum
		Stainless Steel
Final Thickness		Stalliless Steel
	2-Layer Min .020" Max .125"	2-Layer Min .010" Max .150"
	2-Layer Min .010" Bare Copper	4-Layer Min .015" Max .150"
	4-Layer Min .020" Max .125"	6-Layer Min .025" Max .150"
	6-Layer Min .031" Max .125" 8-Layer Min .047" Max .125"	8-Layer Min .031" Max .150" 10-Layer Min .040" Max .150"
	8-Layer Min .047" Max .125" 10-Layer Min .062" Max .125"	10-Layer Min .040" Max .150" 12-Layer Min .047" Max .150"
	10 Edyer 14iii 1.002 14idx 1.120	14-Layer Min .054" Max .150"
		16-Layer Min .062" Max .150"
Max Board Size		
2-Layer	16 x 22	Send Quote Request
4-Layer 6-Layer	16 x 22 16 x 22	19.5 x 24.5 19.5 x 24.5
8-Layer	14 x 20	19.5 x 24.5
10-Layer	14 x 20	19.5 x 24.5
12-Layer		19.5 x 24.5
14-Layer		19.5 x 24.5
16-Layer		16 x 21
Finish Plating	HASL\Leaded Solder	Immersion Electroless Soft Gold
	HASL\Lead Free Solder	Wire Bondable Soft Gold
	Bare Copper	Flash Gold
	Nickel	OSP
	Electroless Nickel Immersion Gold	White Tin
	Electrolytic\Hard Gold	Selective Gold
	Immersion Silver	Mixed Finishes Upon Review
		Carbon Ink

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	- 104 Out 11 tequite at this tank Caoke of our 11 epsile	
Finished Cu		
Weight / Trace / Space		
Outer Layers	1 oz. Cu (Min005" Trace /Space)	1 oz. Cu (Min004" Trace /Space)
	2 oz. Cu (Min006" Trace /Space)	2 oz. Cu (Min005" Trace /Space)
	3 oz. Cu (Min010" Trace /Space)	3 oz. Cu (Min008" Trace /Space)
	4 oz. Cu (Min012" Trace /Space)	4 oz. Cu (Min000 Trace /Space)
	4 oz. Cu (Min. 1012 Trace /Space)	
		5 oz. Cu (Min012" Trace /Space)
Inner Layers		
	.5 oz. Cu (Min005" Trace /Space)	2 oz. Cu (Min006" Trace /Space)
	1 oz. Cu (Min005" Trace /Space)	3 oz. Cu (Min010" Trace /Space)
	2 oz. Cu (Min006" Trace /Space)	4 oz. Cu (Min012" Trace /Space)
Inner Layer Clearances		
	.010"	.008"
Smallest Finished Hole Size		
S. Idilose I Illisilea I lole Size	Final Thickness <=.062" .008" Hole	Final Thickness <=.062" .006" Hole
	Final Thickness .093" .012" Hole	Final Thickness <=.002 .008 Hole
C IIIE	Final Thickness .125" .015" Hole	Final Thickness <=.150" .014" Hole
Gold Fingers		
	1 Edge	
	2 Edges	
Soldermask Type		
	LPI	SR1000
		Peelable Soldermask
LPI Soldermask Colors		- Coldate Coldatinuot
Li i solderillask colors	Green/Green Matte	Top & Bottom Mix
	Blue	Side to side Mix
	= 10.0	
	Black/Black Matte	Gray
	Red	
	Clear	
	White	
Silkscreen Legend Options		
	White	Red
	Yellow	Blue
	Black	Top & Bottom Mix
CNC Functions		iop of Bottom mix
CIAC I diletions	Skip Scoring > .25" Spacing	Scoring Panel Edge to Panel Edge
	30 Degree, Standard Score Angle (60 degree option-please call)	30 & 45 Degree Countersinks
	60, 82, 90, 100 Degree Countersink	Plated Countersinks
	15, 20, 30, 45 Degree Gold Finger Bevel	Counterbores
		Milling
		Laser Drilling
		Blind or Buried Vias
		Controlled Z Axis Rout
		Castellated Barrels Min .050"
		Offset or Recessed Beveling
Other Services		Onset of Necessed Develling
Other Services	Plated Clate Min 024"	Plated Clate Min 019" Dvillad au Davitad
	Plated Slots Min .026"	Plated Slots Min .018" Drilled or Routed
	Controlled Dielectric	Tented Vias
	Plated Edges	Plugged Vias
	Tented Vias (prior inquiry)	Conductive Filled Vias
	Gold Fingers up to 18" Long	Controlled Impedance 2-16 Layers
	ITAR	.003" Cores
		Via caps (Soldermask)
Quality and Testing		The super tool do in the super
Quality and lesting	Inspect to IPC Class 2	Inspect to IPC Class III
	Inspect to IPC Class 2	Inspect to IPC Class III
		Mil Spec 55110

Subject to change without prior notice.