

Copper Clad Boards



500 Series



We offer [1/16"](#), [1/32"](#) and [1/64"](#) FR4 laminate with 1 ounce copper per square foot. This flame retardant laminate is translucent in color and made of continuous woven glass cloth impregnated with epoxy resin. The copper on 1 ounce boards is 1.34mil thick (0.0341mm, 34.1 microns). The boards are made of FR4 which is a flame retardant version of G-10 material.

Developed specifically for the circuit processing industries' requirements. Complies with UL #E214381 (select boards comply to UL #E213990). Provides ultraviolet blocking and fluorescence when using automated optical inspection (AOI).

Our presensitized boards provide high resolution and excellent fine line control. They are ideal for prototypes, small production runs, and student training.

Easy Cutting!! We also offer a large thin (12" x 18" x 1/32 inch) cat#675 paper phenolic presensitized board, perfect for cutting into smaller boards with no special equipment - perfect for the classroom.

Specifications

Property	Treatment Condition	Unit	FR-4 Index
Peel Strength (As received)	A	lb/in	>= 8.0
(After thermal stress)	A	lb/in	>= 8.0
Surface Resistivity at elevated temperature	E-24/125	M Ohm	>= 10 ³
Volume Resistivity	E-24/125	M Ohm · cm	>= 10 ³
Water Absorption (0.1-0.77MM)	E-1/105+des+D-24/23	%	<=0.8
(0.78-3.20MM)	E-1/105+des+D-24/23	%	<=0.35
Flexural Strength (Lengthwise)	A	Mpa	>=410
(Crosswise)	A	Mpa	<=340
Dielectric Breakdown Parallel to laminate	D-48/50+D-0.5/23	KV	>=40

Dielectric Constant Permittivity at 1MHZ	C-40/23/50		<=5.4
Bow and Twist (Double sided)	A	%	<=1.0
Flammability Rating	A&E-1/105+des		UL 94 V-0
Thermal stress(288°C, 20 seconds)	Unetched,	A	No defect
	After etched	A	No defect
Pressure vessel thermal stress	A		No defect
Dimensional stability	E-4/105+des+E-2/150	Um/em	+/-5.0
TG	DSC	°C	>= 130°C
TD	(°C/TGA 5% wt loss)	°C	300-310°C

Available Sizes

Cat.No.	Plain (metric)	(approx. in imperial)
FR4 1/16" (1.60mm), single sided		
503	76 x 172 mm	3" x 5"
506	101 x 152 mm	4" x 6"
509	152 x 152 mm	6" x 6"
512	152 x 228 mm	6" x 9"
515	203 x 254 mm	8" x 10"
521	304 x 304 mm	12" x 12"
573	304 x 457 mm	12" x 18" (BULK - 25 pack)
575	609 x 914 mm	24" x 36"
580	914 x 1219 mm	36" x 48"
FR4 1/16" (1.60mm), double sided		
550	152 x 152 mm	6" x 6"
555	304 x 304 mm	12" x 12"
576	609 x 914 mm	24" x 36"
585	914 x 1219 mm	36" x 48"
FR4 1/32" (0.80mm), single sided		
586	101 x 152 mm	4" x 6"
588	152 x 228 mm	6" x 9"
590	304 x 304 mm	12" x 12"
FR4 1/32" (0.80mm), double sided		
587	101 x 152 mm	4" x 6"
589	152 x 228 mm	6" x 9"
591	304 x 304 mm	12" x 12"
596	914 x 1219 mm	36" x 48"
FR4 1/64" (0.40mm), single sided		
597	152 x 228 mm	6" x 9"
FR4 1/64" (0.40mm), double sided		
598	152 x 228 mm	6" x 9"

Prototyping : Copper Clad Boards

Copper Clad Board

Standard 500 SERIES



A 1/16", 1/32", 1/64" laminate with 1 ounce copper. This flame retardant laminate is made of continuous woven glass cloth impregnated with epoxy resin. Developed specifically for the circuit processing industries' requirements. Provides ultraviolet blocking and fluorescence when using automated optical inspection (AOI).

Format	Cat. No.	Approximate Size
Single sided 1/16" (1.60mm)	503	3"x 5" (76mm x 127mm)
	506	4"x 6" (101mm x 152mm)
	509	6"x 6" (152mm x 152mm)
	512	6"x 9" (152mm x 228mm)
	515	8"x 10" (203mm x 254mm)
	521	12" x 12" (304mm x 304mm)
	575	24" x 36" (609mm x 914mm)
	580	36" x 48" (914mm x 1219mm)
Double sided 1/16" (1.60mm)	550	6"x 6" (152mm x 152mm)
	555	12" x 12" (304mm x 304mm)
	576	24" x 36" (609mm x 914mm)
	585	36" x 48" (914mm x 1219mm)
Single sided 1/32" (0.80mm)	586	4"x 6" (101mm x 152mm)
	588	6"x 9" (152mm x 228mm)
	590	12" x 12" (304mm x 304mm)
Double sided 1/32" (0.80mm)	587	4"x 6" (101mm x 152mm)
	589	6"x 9" (152mm x 228mm)
	591	12" x 12" (304mm x 304mm)
	596	36" x 48" (914mm x 1219mm)
Double sided 1/64" (0.40mm)	598	6"x 9" (152mm x 228mm)

Positive Presensitized 600 SERIES



Available in 1/16" (62 mil) and 1/32" (30 mil) laminate with 1 ounce copper. Provides high resolution and excellent fine line control. Ideal for prototypes, small production runs, student training.

Format	Cat. No.	Approximate Size
Single sided 1/16" (1.60mm)	603	3"x 5" (75mm x 125mm)
	606	4"x 6" (100mm x 150mm)
	609	6"x 6" (150mm x 150mm)
	612	6"x 9" (150mm x 230mm)
	630	8"x 12" (200mm x 300mm)
Double sided 1/16" (1.60mm)	650	6"x 6" (150mm x 150mm)
	660	6"x 9" (150mm x 230mm)
Single sided 1/32" (0.80mm)	687	4"x 6" (100mm x 150mm)
	689	6"x 9" (150mm x 230mm)
Double sided 1/32" (0.80mm)	690	6"x 9" (150mm x 230mm)
Double sided 1/64" (0.40mm)	698	6"x 9" (152mm x 228mm)

Paper Phenolic Positive Presensitized CCB

1/32" laminate with one ounce copper

Easily cut this material into custom sizes.

Score on both sides with a utility knife and snap in half.

Format	Cat. No.	Size
Single sided 1/32" (0.80mm)	675	12"x 18" (300mm x 450mm)
Double sided 1/32" (0.80mm)	676	8"x 12" (200mm x 300mm)