

## FLEXIBLE PCB'S MATERIAL, FCCL, COVERLAY, PREPREG & CU FOILS



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We offer the best choice of Copper clad laminates for different applications in the PCB Fabrication process with competitive pricing, excellent quality and reliable delivery. Most importantly, having over 30 years of experience with these materials and their applications, our expertise in this arena is unsurpassed. We specialize in custom thickness, coppers and other metal clad applications for short runs, prototypes and production runs.

## Flexible Copper Clad Laminates (FCCL) 2&3 Layers; Coverlay.

Adhesive less copper clad polyimide film can be used in the fabrication of flexible PCB's, furnished in the form of laminates with copper foil on one or both sides. Adhesive less composites are designed for a wide variety of flexible circuit application which can increase material performance, temperature resistance, fine pitch & high reliability. Featuring Excellent dimensional stability; thermal resistance & flexibility; Good bonding strength for sheet & prepreg; High tensile strength & elongation; Plasma treatment & low CTE. Coverlay films can be used to encapsulate etched details in flexible/rigid-flex MLB constructions for environmental protections and electrical insulation, composed of polyimide film coated on one side with flame retardant modified epoxy adhesives, opposite side of adhesive layer is covered with releasing paper. Quality: UL. ISO9001 & ISO14001 Approved

While Ordering FCCL 2L & 3L please define; Copper foil 1/3, 1/2, 1, or 2 (Oz) on single or both sides, Copper foil type RA Cu foil or ED Cu foil, Polyimide film thickness 0.5, 0.8, 1(mil), Plasma treatment, Core Type Paper, and for 3L additionally please define Polyimide type K-Kaneka, T-Taimide; Adhesive thickness 10, 12, 15, 18, 20 25 (um) and 2<sup>nd</sup> Copper foil Single or Double layer, etc. While Ordering Coverlay please define; PI film thickness 0.5, 1 (mil); Adhesive thickness 10, 15, 20, 25 (um). Standard Width 250/500mm and Length 50M/100M Roll.

\*Special requirement subject to negotiations (Technical specifications Data Sheet available on request)



## **Bonding Prepreg for various types of FR4 Laminates.**

Prepreg is a basic raw material of multi-layer PCB process; used for bonding and insulating inner layers. The main features of our Prepreg material are; Excellent bonding strength, Excellent cure stability with various processing cycles, Good handling (no resin dust), Low flow, High Tg, Low CTE, Excellent solder resistance and Compatible with lead-free soldering. Quality: UL, ISO9001 & ISO14001 Approved

While Ordering Prepreg please define: Glass fabric type i.e. #106, #1080, #2112, #2113, #2313, ##3313, #2116, #2165, #1500, #7628, #7630 and for compatibility please indicate FR4 CCL type i.e. Standard, UV Blocking, Natural color/UV Blocking, Low Dk, High Tg 150°C/170°C, Halogen Free, High Performance Epoxy, High CTI, High Tg/Low Dk, CAF resistance (Anti CAF), Standard Width as per GF Type and Length 125/250 Yards.

Storage Conditions: Please store at low temperature and low humidity environment; i.e. at Temperature 20°C and humidity 50% the durability shall be 90 days; if Temp 5°C and air proof environment durability 180 days.

\*Special requirement subject to negotiations (Technical specifications Data Sheet available on request)



## SICS-III General purpose copper foil for MLB's

Copper foil is attached and etched on the insulated polymer constitutes a micro circuit that mounts active and passive components. Specially designed for thin-core and general purpose multi-layer PCB's, Main features are uniform surface profile with high peel strength, Stable thermal Et chemical resistance, Very clean etching, ITY (Yellow) and ITP (Pink) treatments are available. Same as HTE foil (IPC grade III). Available in various thickness i.e. 12um, 18um, 35um, 70um, and 105um <a href="Quality:UL">Quality: UL</a>, ISO9001 & ISO14001 Approved <a href="Standard Width 640mm">Standard Width 640mm</a> and sold as per weight per Kg.

Properties 2 4 1			

Thick-	*Peel Strength	Area Weight	Surface P	Profile(µm)	Tensile strength (Kgf/mm²) At R.T	Elongation (%)	
ness	(kgf/cm)	(g/ m <sup>2</sup> )	Shiny Side (Ra)	Matte Side (Rz)		At R.T	At 180°C
12µm	1.00	107±5%	≤ 0.43	≤ 4.5	≥ 30	≥5	≥3
18µm	1.43	155±5%	≤ 0.43	≤ 6.0	≥ 28	≥5	≥6
35µm	1.80	285±5%	≤ 0.43	≤ 8.0	≥ 28	≥5	≥6
70µm	2.40	585±5%	≤ 0.43	≤ 12.0	≥ 28	≥ 5	≥6
105µm	3.00	915±5%	≤ 0.43	≤ 20.0	≥ 28	≥ 10	≥6



<sup>\*</sup>Special requirement subject to negotiations (Technical specifications Data Sheet available on request)

