

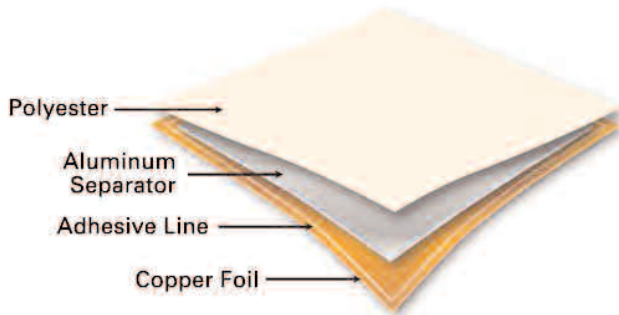


C2X LAMINATE

For PWB Lamination Application

DESCRIPTION

C2X is a high-performance lamination foil used in the manufacture of multilayer circuit boards. C2X is assembled by placing a clean aluminum sheet between a copper and thin polyester sheet. An adhesive strip is applied on the copper foil in a boarder around the edge of the separator. The upper polyester sheet is then adhered to the lower copper foil creating a “tight” envelope for the aluminum separator sheet. All four sides are sealed to ensure the cleanliness of the critical internal surfaces.



ADVANTAGES

- Critical surface integrity and packaging
 - Less material handling and operator labor
 - Eases use of thin-foils & eliminates wrinkles
 - Improved dimensional stability
- Critical Surface Integrity and Packaging

Critical Surface Integrity and Packaging

C2X improves post-electrical test and final yields with the degree of improvement keyed to circuit density, line width and spacing. C2X is manufactured in a class 100 clean room ensuring that the critical copper surface remains free from foreign material, epoxy dust and other airborne particulate during the lay-up process. Additionally, our patented technology totally encloses the aluminum separator. This guarantees no aluminum fines from the edges of the aluminum can fall off during lay-up and result in an internal short.

Less Material Handling and Operator Labor

A single sheet of C2X is laid-up versus copper foil and aluminum. This reduces labor lay-up time by as much as 50%.

Eases Use of Thin-Foils & Eliminates Wrinkles

Our C2X package is easy to handle during lay-up. Thin foils are very difficult to handle without a carrier and often wrinkles are induced as a result. C2X eliminates this issue.

Improved Dimensional Stability

Compared to other techniques our C2X product line can often improve registration of the PWB since our aluminum separator is “floating” inside our package. Other materials bond the aluminum to the copper creating potential for stresses being transferred into the PWB due to the CTE mismatch between the bonded copper and aluminum.

COPPER FOILS

C2X is available with Gould and Iljin proven lines of copper foils including: reverse treat, shiny, double treat. Copper weights from 0.25–5 ounces.

PANELS SIZES

Panels sizes are available from 12–30 in. dimensions (length and width).

SEPARATORS

C2X is available with a variety of high-performance separators based on the application requirements. Aluminum, steel and other alloys are available from 2–25 mil thickness. Please consult with your technical sales representative to define the separator type that is best for your needs.

TOP SHEET

Our standard C2X uses a 2–3 mil polyester as the top sheet in the package. The polyester does not deform or wrinkle during lamination and is very easy to tear down.

TOOLING CONFIGURATION

All panel sizes are available with standard multi-line tooling (0.188 in. offset in short dimension). Other configurations are available on a special order basis.

STORAGE

Store C2X flat and at your ambient temperatures.

WASTE TREATMENT

Due to the nature of C2X, disposal and residues there from, should be made in compliance with federal, state and local environmental laws.

**MANUFACTURED IN A TWO-TIER CLEAN ROOM ENVIRONMENT**

The manufacturing environment is inside a class 100 clean room that is housed inside a class 10,000 clean room. The class 10,000 clean room utilizes a 90/10-air exchange (only 10% of air is drawn from outside, the balance is continually re-circulated through the clean room filters). The class 100 clean room draws 100% of its air from the class 10,000 room's environment.

The results are that the air gets continuously cleaner and cleaner. The relatively small footprint of the C2X manufacturing equipment allows for extremely high standards of cleanliness while still remaining cost effective.

