



Association Connecting Electronics Industries



IPC Workshop: Design for Manufacture

September 14-15, 2011 – Hosted by Colonial Circuits, Fredericksburg, VA

Printed board design today is about tough choices and trade-offs between increasingly sophisticated fabrication technologies. This workshop will address tolerance characteristics that make sense using the capabilities of today's manufacturing equipment. Here is a unique opportunity to learn about design issues first-hand, with a tour of a printed board manufacturer.

Who Should Attend

This workshop is a must for all involved directly in printed circuit board design. Recommended for: process, manufacturing, packaging, reliability, and purchasing engineers, managers, and staff. Great background for your marketing and sales team.

What You Will Learn

- Design parameters (rigid, flex & tolerances)
- Material selection (lamine & platings)
- Leaded parts vs. lead-free
- Small hole technology (through-hole, blind, buried and micro-vias)
- Imaging, conductor definition, and lamination
- Solder mask and legend (plugged vias and surface finishes)
- Final fabrication and quality control (defect verification)
- Component requirements (new plating and size restrictions)
- Board design for assembly (components clearances and test nodes)
- Assembly material properties (new material impact on design)
- Land pattern design (mathematical models and library tools)
- Assembly considerations (new process restrictions on materials)
- Electrical testing (techniques and data transfer methods)
- Future changes contemplated for IC packaging)

Agenda

Two full days of instruction begin at 8:30 am and conclude by 5:00 pm, with a tour of the facility on September 14. Lunches and refreshment breaks are included.

Please note: Colonial Circuits is an ITAR-certified facility, and only US citizens may join the tour.

Location

Colonial Circuits, Inc.
1026 Warrenton Road
Fredericksburg, Virginia

Colonial Circuits is a full service manufacturer of high quality circuit boards, serving the military, space, and commercial markets from its 40,000 square foot facility. Colonial's capabilities include multilayer constructions, a collection of rigid, flexible, and rigid/flex materials, blind/buried vias, and a variety of other skills not found in many shops. Lead times as short as 24 hours make Colonial a prime choice for low volume, high reliability needs.

www.colonialcircuits.com

Registration

The registration fee for this workshop is \$350 for IPC members and Designers Council participants or \$425 for nonmembers. For more information, contact IPC at +1 847-597-2861.



Accommodations

Country Inn & Suites
656 Warrenton Road
Fredericksburg, VA 22406.

Make your reservations by telephone at 540-656-2398.

Special Rate Courtesy of Colonial Circuits is \$85 plus tax – promotional code COLCIR

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