Certified Interconnect Designer (CID) Workshop and Exam

AGENDA

Two Full Days of Coursework Review, Exam on Third Day

Day One

DESIGN CONSIDERATIONS
Interrelated Considerations for Design
Copper Clad Laminates
Thermal Management Techniques for Printed Boards
Thermal Management Techniques for Assemblies
Testing Techniques and Procedures
Reliability Terms and Design Issues
Purpose of Tooling Holes
Purpose of Stiffeners

LAYOUT PRINCIPLES
Printed Board and Assembly Viewing Principles
Functional Electrical Characteristics
Schematic/Logic Symbols and Transformation
Placement and Routing Techniques
Characteristics of Grid systems
Features Formed in Copper
Legend and Polarity Marking
Legend Marking Location

COMPONENT AND ASSEMBLY ISSUES
Considerations for Component Mounting
Axial and Radial lead Mounting Differences
Design Differences for SMT vs. Through Hole
Automatic/Manual Placement and Insertion

Day Two

COMPONENT AND ASSEMBLY ISSUES (Continued from Day 1)
Component Profiles and Socket Techniques
Clinched and Unclinched Leads
Bus Bar Mounting Characteristics
Point-to-Point (Jumper) Wires

PRINTED BOARD CHARACTERISTICS
Board and Assembly Panelization
Tolerancing Methods
Hole Types and Their Tolerances
Through Hole Land and Tolerance Requirements
Purpose of Eyelets
Conductive Pattern Location to Datum References
Edge Board Connectors
Solder Mask and Coating on Printed Boards

DOCUMENTATION AND DIMENSIONING
Minimum Drawing Requirements
Minimum Requirements for Master Drawing
Datum Dimensioning and Tolerancing Concepts
Hole and Conductor Location Principles
Tooling Hole Location Documentation
Artwork Acceptance Criteria
Non-Standard Parts Information
Documenting Fastening Hardware

Day Three or at the end of Day 2
Certification Testing Begins – Test booklets distributed (104 Questions)

Allotted exam time ends

Review of examination