DfR Solutions
reliability designed, reliability delivered

True Design for Reliability – Understanding What Is and What Is Not DfR **1/2 Day Course**

ABSTRACT

As the "design for" philosophy has expanded and spread through the electronics marketplace and has become identified with best practices, an expected dilution of understanding DfR has occurred. True DfR requires a technical knowledge of electronic packaging, discrete components, printed board, solder assembly, and connectors - and how these aspects of electronics can fail in regards to environmental stresses. This course will NOT discuss DFMEA, HALT, accelerated life testing, field performance or failure analysis.

OUTLINE

- Recognizing what is DfR, and what is not DfR
- Common mistakes in part selection and placement
- A common-sense approach to derating and uprating
- Guidelines for part placement and orientation
- Design rules for printed board fabrication
- Design for assembly - hand vs. wave vs. reflow soldering
- Wearout mechanisms and physics of failure
- Predicting degradation in today's electronics and wear-out of the next generation of ICs

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