

## **Design for Warranty (DfW) Seminar**

### **OBJECTIVES**

This 1 day seminar will introduce a proven warranty event cost model and supporting methodologies that help teams identify warranty cost reduction solutions which integrate both component fail rate reduction strategies and strategies that shift the support process mix to less expensive processes. The warranty cost model constructs the cost of warranty events from both event frequencies and the specific support process costs used to resolve each event.

### **WHO SHOULD ATTEND**

This course is intended for those involved in design, test, or analysis, who want a better understanding of their warranty contributors, how to calculate, and how to reduce these costs.

### **OUTLINE**

Warranty costs for the computer and other high tech industries were greater than \$6.2 billion in 2004. Less than 35% of that was material costs; the majority was related to support process costs. Consequently, product design teams are being challenged to reduce the warranty costs by both improving product reliability (AFR) and designing in less expensive warranty support processes (i.e., customer self diagnostics and repair).

Case studies will be presented describing how teams used this model to: analyze warranty costs by event type, prioritize what events needed cost reduction options, and develop cost saving estimates for each prioritized event. In the afternoon the class will explore and practice using methods to rank the feasibility of proposed design options by identifying all diagnostic tools, product features and support tools/capabilities needed to realize its potential cost savings. Finally, how these models and tools integrate with FMEA and other reliability planning tools will be explored.