

## Stop Torturing Your Board

**Bed of Nails test fixtures** can damage your components during In Circuit Testing (ICT) by placing too much pressure on the circuit card. Improperly or incorrectly placed pogo pins can cause the components on the circuit card to experience stresses great enough to break solder joints. This has become a serious problem with the increasing size of large ball grid array (BGA) packages and the presence of Pb-free solder.

### Earlier is Better

With Sherlock Automated Design Analysis™ Software, by DfR Solutions, designers can identify potential bed of nails damage early in the layout process, before a bed of nails tester is ever designed, allowing for tradeoff analyses, saving costly board damage and redesign.

### Automatically Eliminate Bed of Nails Damage

Sherlock eliminates potential bed of nails damage by automatically identifying any and all components on the circuit card that could experience cracking or failure during bed of nails testing. Prior to the ICT, the designer can seamlessly change test points, change pogo pin pressure, or board supports to optimize this process and reduce the likelihood of solder joint cracking or pad cratering caused by the bed of nails fixture. And the Sherlock analysis is component-specific, allowing for more precise identification of at-risk areas whether you are testing a large BGA or simple chip resistor.

### Save Time and Money

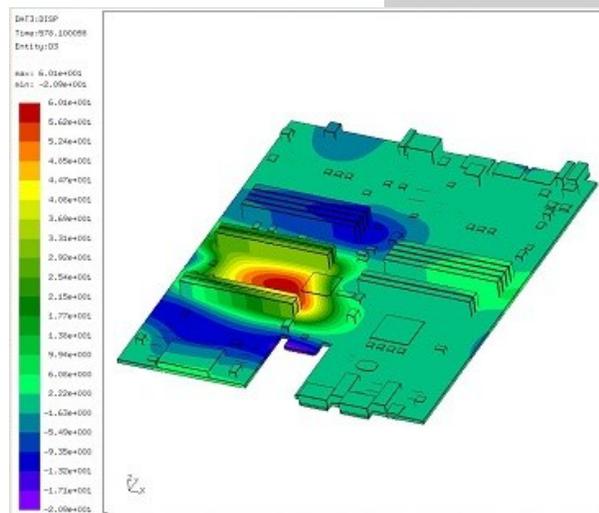
By incorporating Sherlock Automated Design Analysis™ Software earlier in the design process, in-house designers, not specialized outside contractors, can quickly and inexpensively eliminate the possibility of damage during bed of nails testing, saving time and money.

Sherlock is:

**Fast:** Automatically eliminate potential damage early in design process

**Easy:** No need for specialized outside contractors

**Unique:** Component-specific, more precise



Call for more information

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## About Sherlock

Sherlock Automated Design Analysis™ Software, by DfR Solutions, is a unique software tool that analyzes, grades and certifies the expected reliability of products at the circuit card assembly level.

Based on the Physics of Failure Sherlock takes the most requested qualification tests and most common customer environments and packages them for you allowing you to predict design weaknesses sooner and improve designs earlier and more cost effectively.

By evaluating material properties against the use environment to estimate product life under actual operating conditions the Sherlock analysis can be far more accurate than classic statistical or actuarial probabilistic methods.

Understanding the reliability of your product and its drivers sooner in your design cycle can result in better products being delivered sooner for significantly lower development costs.

### Fast

Get Rapid feedback on product designs

Generate reports in minutes

### Intuitive

Easy to deploy and use

Perfect for all levels of engineering and management

### One of a Kind

Physics of Failure (PoF) analysis provides more accurate reliability predictions

Deeper and broader analysis than any other tool on the market

Sherlock is the backbone to one of the most powerful reliability tools to be released for use not just by the reliability group, but by the entire engineering design and management team. Sherlock is the future of Automated Design Analysis™ (ADA), the integration of design rules, best practices and a return to a physics based understanding of product reliability.

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