

# Announcing Advanced Modeling Capabilities: Sherlock Version 4.2!

- ✓ Potting Materials
- ✓ Wire Bonds
- ✓ Housing Elements
- ✓ BGA Solder Balls

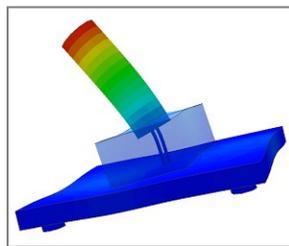


## Flexibility to model all physical geometry in semiconductor packaging and electronic hardware

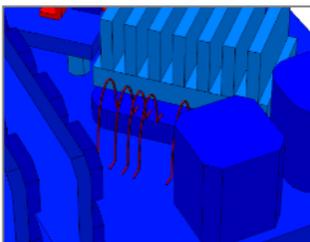
Now Sherlock includes modeling of potting materials, wire bonds, housing elements (such as stiffeners), and BGA solder balls. Combined, these sophisticated modeling capabilities enable electronics designers to perform rapid tradeoff analysis, predict failures earlier in the design process and make changes to mitigate the causes of potential product failures in test or in the field.

### Polymers: Potting, Coating, Underfills, Encapsulants and Staking Materials

Model the effects of different potting, coating, and staking materials with a click of a button. Rapid model development and accurate material properties allow for easy prediction of potential failures under both accelerated test and real world conditions.



### Wire Bonds

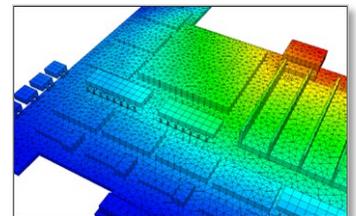


Quickly and easily modeled directly in Sherlock, enabling designers to predict possible failures caused by vibration, and correct product designs

before a prototype has been built. Tradeoffs between wirebond material (copper vs. aluminum), wirebond height, and even potting material can all be rapidly quantified for the product team.

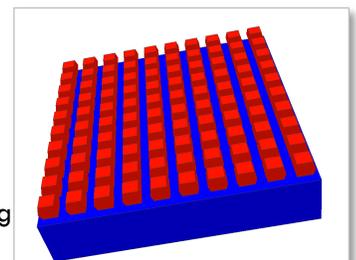
### Housing Elements

In Sherlock Version 4.2, designers can quickly and easily add complex housing elements and other mechanical parts directly to the board and model their possible effects.



### BGA Solder Balls

This newest interconnect geometry (along with the other existing surface mount and through hole geometries) can help identify manufacturing challenges and potential reliability concerns when boards are subjected to thermal or mechanical stresses.



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### **Exclusively Focused on Electronics**

Sherlock is the only tool on the market that is exclusively focused on electronics and based on Physics of Failure. Sherlock extracts information from industry standard design files and creates intelligent and accurate 3D FEA models of semiconductor packaging and electronic hardware in just minutes. This acceleration of model development, compared to the traditional time period of 4 to 6 weeks, allows design and engineering management to more effectively integrate simulation and modeling into the new product development (NPD) process. Numerous case studies have repeatedly demonstrated that Sherlock helps get products to market faster, with higher reliability and at lower cost.

### **Test Sherlock FREE**

*Quickly learn how Sherlock  
accelerates your electronics design process!*

[dfrsolutions.com/software/sherlock-free-trial](https://dfrsolutions.com/software/sherlock-free-trial)

**Or call**

**301-474-0607**