**Validated Models for Particulate TIMs**

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**Objective**

Develop validated numerical models for predicting the effective thermal conductivity of particulate thermal interface materials (TIMs), and provide design guidelines for developing enhanced TIMs.

**Impact**

Enhanced Thermal Interface Materials can:
- Significantly reduce junction to case thermal resistance
- Facilitate faster and more reliable microprocessors
- Reduce the total thermal budget

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**Approach**

- Full-field simulations of TIM microstructures
- Comparison of numerical modeling results with experiments

**Selected Publications**