

## **Liquid Metal Innovations for High-Performance TIMs**

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### **Abstract**

The thermal conductivity values of metals make them highly sought after as a thermal interface material (TIM). In reality, the hardness of metals limits their effectiveness due to high interfacial resistance. There are a number of alloys that are liquid at or near room temperature. A liquid alloy is intriguing as you maintain the high thermal conductivity of metals, while mitigating the interfacial resistance issues that exist with solids. In this study, we explore methodologies and techniques that can enable liquid metal to be used in a wider array of TIM1 and TIM2 applications.