

## **Highlights from the 2009 iNEMI Technology Roadmap**

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### **Abstract**

The iNEMI 2009 roadmap strives to plot the future manufacturing technology needs of the global electronics industry. This biannual roadmap was developed by Technology Working Groups in response to inputs from over 550 individuals from 250 plus enterprises located in 18 countries worldwide. It identifies major trends in the evaluation of technologies across numerous disciplines, with an emphasis on identifying potentially disruptive events. In particular it provides the information needed to identify critical technology and infrastructure gaps, prioritize R&D needs to meet those gaps and initiate activities that address industry needs in response to market demands over the next 10 years.

The pace of change in packaging technology today has accelerated to the highest rate in history. This has been driven by the penetration of electronics into virtually every segment of society; Communication, transportation, education, agriculture, entertainment, healthcare, environmental controls, defense and research all rely heavily upon electronics today. This diversity of applications and the never ending demand for both lower cost and higher performance cannot be achieved without major changes in architecture, materials and manufacturing processes. These new packaging technologies include System in Package, wafer level packaging, wafer thinning and Through Silicon Vias, as well as developments in nano materials. This presentation will discuss highlights from the "Packaging" Chapter of the Roadmap that may give insight into areas that are forecast to impact the growth of the electronics industry over the next ten year horizon.