10th iNEMI Roadmap Reflects Life 'In the Cloud'

Written by Chelsey Drysdale
Tuesday, 14 May 2013 14:35 -

HERNDON, VA – **iNEMI's** recently released 2013 Roadmap identifies trends that will shape the landscape of the electronics manufacturing industry over the next decade. Cloud computing, growth of MEMS and sensors, and sustainability issues, including recycling, are common themes.

The roadmap also pinpoints technology gaps and areas where R&D efforts should be focused.

Cloud computing figures prominently in this latest edition, and has the potential to create the most significant paradigm shifts, bringing about changes to business models in the next four to five years, says iNEMI. Similarly, the increased use of MEMS and sensors in a growing number of applications (cellphones, medical electronics, automotive) has repercussions across multiple product sectors.

Concerns about sustainability are still at the forefront, while companies continue to grapple with the lack of industry-wide assessment methodologies to evaluate alternative materials and the need for data to assess and quantify environmental impact of products in a consistent way, the consortium says.

Faster rates of change in miniaturization, driven by the explosion of smartphones, tablets and other mobile devices, are resulting in increased use of complex, 3D assemblies and solutions, such system-in-package. These solutions, however, come with their own sets of challenges. Lack of test access, pick-and-place of 3D thin chips or bare 3D stacked chips with irregular shapes, rework processes and heat sink attachment all become more difficult.

This tenth edition represents an estimated eight years of work by more than 650 individuals from over 350 corporations, consortia, government agencies and universities in 18 countries.

For select trends, visit http://thor.inemi.org/webdownload/RM/2013_RM/Trends.pdf .

For more information, visit http://thor.inemi.org/webdownload/RM/2013_RM/2013_RM_Ex_Sum.pdf   .