



ZEISS Techtalks at SEMICON India

ZEISS Correlative Solutions Designed for Failure Analysis and Quality Inspection for 3D Stacked Packages

Location: ZEISS Booth (H1.X11)

Date & Time: 11th - 12th September, 12:30 pm - 12:50 pm

The increasing complexity and miniaturization of semiconductor packaging, driven by trends like heterogeneous integration and More-than-Moore, have escalated the challenges associated with failure analysis and process characterization. To address these demands, advanced analysis tools and techniques are essential.

ZEISS X-ray microscopes, in conjunction with other microscopy tools and data analysis software, offer a comprehensive solution for semiconductor packaging inspection and analysis. By integrating these technologies, manufacturers can establish connected workflows that streamline failure analysis, accelerate defect identification, and improve overall yield and reliability.

This presentation will delve into the application of advanced failure analysis techniques, such as X-ray microscopy (XRM), scanning electron microscopy (SEM), focused ion beam (FIB), and laser-based methods. We will explore how these techniques can be combined to provide a comprehensive understanding of failures, enabling high-resolution 3D imaging, targeted sub-surface analysis, and ultra-high resolution surface characterization. Discover how this integrated approach can enhance throughput and increase success rates in semiconductor package failure analysis.



Scan to learn more!



Seeing beyond