

Advanced Stacked Die Packaging Technology: More than 2D

Half day short course



John Y. Xie, Ph.D., Altera Corp.

Objectives of this short course

In this 3 hour highly concentrated course, you will be able to learn a wide range of the advanced stacked die packaging technologies, understand their advantages, limitations, applications and availabilities. You will be able to establish both basic concept of the advanced die packaging solution and options, and also a visionary view of the semiconductor packaging field's past, today and future. The knowledge learnt through this course can be immediately applied to your work, study and business processes.

Short course outline

1. Semiconductor and packaging technology trend and roadmap
2. System integration challenge and memory need
3. 3DIC and advanced stacked die packaging overview
4. 2.5D stacking solution using silicon interposer
5. 2.1D stacking using high density organic technology
6. 2.01D high density and cost effective stacking technology
7. F2F (3D-) high density and low cost stacking technology
8. Glass interposer and its status
9. Advanced stacked die packaging design and SIPI considerations
10. Summary

Who should attend?

Engineers, managers, executives, scientists and students who are responsible, studying, researching, or interested in architecting, design, process, manufacturing and business planning of advanced IC electronic components, interconnect technology and packaging.

Dr. John Yuanlin Xie

Director, Packaging Technology Research and Development, Altera Corp.

Dr. Xie has been with Altera Corporation (San Jose, CA) over 15 years. He leads Packaging Technology Research and Development team at Altera. His responsibilities include interconnect and packaging technology research and development, new product development and introduction, 2.5D/3DIC integration design and manufacturing enablement, strategic supply chain development and strategic customer engagement.

Dr. Xie has 28 published patents; and over 50 academic and technical publications.