Mechanical Engineering Seminar Series

- Date: Wednesday, March 30th, 2022
- Time: 17:00 ~ 18:00 KST Online
- Zoom Meeting ID: 951 4959 4171 / PW: 100269

Semiconductor Packaging Technologies for System Integration – Development History and Its Future

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Dr. Bongtae Han is Keystone Professor and APT Chair of the Mechanical Engineering Department of the University of Maryland. He has published 13 book chapters and over 300 journal and conference papers in the field of microelectronics, photonics and experimental mechanics. He holds 2 US patents and 4 invention disclosures. He was named the 2015 American Society of Mechanical Engineering (ASME) Mechanics Award winner in Electronic and Photonic Packaging Division. He is currently serving as Co-Editor-in-Chief for Microelectronics Reliability.

Abstract

To form a microelectronics device, an active silicon chip requires mechanical and electrical connections to the surrounding components as well as protection from the environment. The technology dealing with these requirements is called “Semiconductor Packaging”.
This seminar will review the last 30 year history of semiconductor packaging, and the advanced semiconductor packaging concepts that will enable the industry to achieve the integration goal. The future trend in Fan-out Wafer Level Package (FO-WLP), 2-D and 3-D integrations will be discussed in conjunction with System-on-Chip (SOC), Multi-Chip Module (MCM), Multi-Chip Package (MCP), and System-on-Chip (SOP).

Note: some pre-knowledge about the current issue can be obtained from:
https://www.youtube.com/watch?v=2BnogXAaboI&t=2201s&ab_channel=%EB%94%94%EC%9D%BC%EB%A0%89THEELEC