Course subject：

Recent Advances in Semiconductor Package Warpage Management

Course leader：Xuejun Fan—Lamar University, Beaumont, TX

Speech Description/Objective:

One critical challenge faced in the semiconductor packaging industry is package warpage, which can impact the overall quality and functionality of integrated circuits. More recently, the warpage issue became even more challenging due to various heterogeneous integration solutions, including package-on-package (PoP) technology, fan-out wafer-level packaging (FO-WLP), and embedded technologies. This webinar delves into the complexities of semiconductor package warpage management, offering insights into the causes and advanced strategies to mitigate warpage, such as innovative material selection, advanced manufacturing processes, and the role of simulation and modeling in predicting and addressing warpage, and the measurement tools. Additionally, the webinar will address the implications of package warpage on device reliability, thermal management, and overall system performance.

Introduction of Speaker：

Xuejun Fan is a Regents' Professor of Texas State University System, and a Mary Ann and Lawrence E. Faust Endowed Professor at Lamar University, Beaumont, Texas. Dr. Fan is an IEEE Fellow, and an IEEE Distinguished Lecturer. He received the Outstanding Sustained Technical Contribution Award in 2017, and the Exceptional Technical Achievement Award in 2011 from Electronic Packaging Society of IEEE. Dr. Fan is a co-chair of Modeling and Simulation in Heterogeneous Integration Roadmap committee. Dr. Fan was a Senior Staff Engineer at Intel from 2004 to 2007 with Q&R Division in Chandler, Arizona.