EPS Webinar Series 2021

Title: Sintered Silver As Die Attach Materials

Date : 6-July-2021 (Tue)
Time : 10.00am – 11.00am
Platform : IEEE CISCO WebEx
Speaker : Dr. Siow Kim Shyong

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- *Research Fellow / Senior Lecturer, Institute of Microengineering and Nanoelectronics, Universiti Kebangsaan Malaysia*
- *IEEE CPMT Malaysia Chairperson from Y2014-2016*

Moderator : Chua SK, Infineon
Registration : Coming soon!!!!
Please check out our website for registration details, https://www.ieee-epsmalaysia.org/events-activities/upcoming-events/

Abstract:
This talk introduces the motivation for using sintered silver (Ag) as die-attach material and associated processes used in forming this Ag joint in bonding application. In addition, the talk also addresses the main factors influencing the mechanical properties (die shear strength) of the Ag joint, namely, sintering temperature, pressure, time, heating rate, atmosphere, substrate metallization and its roughness, and die-size. Comparison with sintered Cu is also included in this talk. This talk is expected to be useful to those new to this die attach materials and interested to explore this bonding technique further in their process.

Biography:
Dr. Siow Kim Shyong is a Research Fellow at the Institute of Microengineering and Nanoelectronics, Universiti Kebangsaan Malaysia. Before joining UKM, he worked as a Materials Engineer in Infineon Technologies Singapore, ON Semiconductor Seremban, and the National University of Singapore, and a technology transfer officer at A*STAR research institute Singapore. With both theoretical and practical experiences in sintered bonding for past 10 years, he has published extensively, included editing a Springer Nature-published book on this topic, as well as provided 1 day training to companies. He also served as International Electronics Initiative (iNEMI) High Temp, Pb-free Die Attach Material Project, Phase 1, 2017 and Institute of Printed Circuits, Institute for Interconnecting and Packaging Electronic Circuits (IPC) IPC Task Group Sintering Materials 5-21P, May 2020-2021.

Dr Siow received his Phd in Engineering from University of South Australia under the UniSA President Scholarship, Master and Bachelor of Applied Science in Materials Engineering (Hons.) from Nanyang Technological University (Singapore), and Master of Law in Intellectual Properties from the University of Turin (Italy) under WIPO Scholarship.

His most recent book is here: Die Attach Materials for High Temperature Applications in Microelectronics Packaging (Springer-Nature).