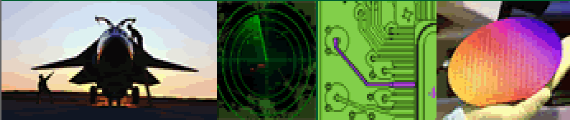
INTERNATIONAL MICROELECTRONICS AND PACKAGING SOCIETY



San Diego Chapters

Tuesday, June 27th, 2017 at 12:00

Technical presentation and lunch

RDL Multilayer Metallization Approaches for Through Glass Via Technology

Presented by

Dr. Rouppen Keusseyan

Abstract: Significant advances have been accomplished in the field of Through Glass Via (TGV) technology, enabling a new generation of electronic designs that achieve higher performance, while leveraging low cost system solutions. Glass wafer types include: fused silica, borosilicate, sapphire, display and other types.
Through-hole creation methods in glass have been optimized for mass production with consistent via diameter, shape and wall chemistry/morphology. This has enabled the development of unique copper via metallization materials that exhibit very high conductivity, thermal expansion matching and hermeticity.
This paper will discuss post via metallization processes for multilayer RDL (Redistribution Layer) metallization on both sides of the glass wafer.

Unique Chemical Mechanical Polishing (CMP) development approaches for glass wafers with copper thick film vias will be explained. Thin film deposited adhesion layer on glass, followed by a deposited metallization layer will be described. Types of deposited adhesion layer on glass for optimized adhesion and electrical contact with the vias will be examined. Furthermore, copper plating approaches for higher conductivity and fine line circuit patterning are examined. Polymeric dielectric material systems for multilayer RDL on both sides of the glass will also be reviewed.

Biography: Roupen Keusseyan is the Chief Scientist at SAMTEC, located in Carlsbad, California. Roupen received his Ph.D. in Materials Science from Cornell University. Roupen has been involved in a number of fields in electronics, displays, energy, biotech and others. He has more than 75 publications and over 32 patents and inventions. Roupen received numerous corporate and division awards for inventions of new technologies and material systems, he also received the John A. Wagnon Technical Achievement Award and the William D. Ashman Outstanding Technical Achievement Award from the Microelectronics Society. Roupen is a lifetime member of IMAPS.

Logistics:

Tuesday, June 27th at 12:00 PM. Lunch will be provided.
6450, Lusk Blvd, Suite E100, San Diego, CA 92121
In the Business complex of Torrey Hills Technology

RSVP required. Space is limited to 40 registrants due to room size; please sign up quickly.
$20.00 for IMAPS members. $25.00 for non-members. Free for students with an ID. Please advise if you are non-U.S. citizen when you register.

To register and pay online (preferred), please click HERE, or to register via email please contact Iris Labadie ----- iris.labadie@kyocera.com or call 858-614-2592.

Please contact our Sponsorship Chair for information on meeting sponsorships for 2017.