

Solder/Microsolder Interconnect Reliability Relevance

Enhanced reliability of solder-substrate interface in flexible, bendable and wearable advanced electronic products is becoming a necessity with the inevitable integrated demands of Tsensors, IoT and eHealth.

Solder and lead-free solder Interconnects with tighter pitches, higher volumes and lower costs have been a constant change and challenge till today for micro bonding landscape.

In spite of tremendous volumes of R&D work on manufacturing issues associated with lead-free electronic package and assembly, by the industry, national labs, consortia and academic worldwide in the last decade, reliability advancement of lead-free solder interconnects however are still scientifically significant, industrially important and socially relevant.

This inaugural symposium provides an overview of technology trends, development challenges in methods, materials and applications in solder-joint engineering arena with special emphasis on upcoming technologies for electronic cluster industries.

The primary purpose is to bring together the solder/surface engineering professionals, the end users at Asia and ASEAN for R&D and business collaboration initiation at YOUR SINGAPORE.

Technology topics to be addressed but not limited to

- *Micro structural evolution and interfacial interactions in lead-free solder interconnects (LFSI)*
- *Lead-free solder joint reliability status and trends*
- *Chemical interactions and reliability testing for LFSI*
- *Tin Whisker growth on lead free solder finishes*
- *Accelerated testing methodology for LFSI.*
- *Thermomechanical reliability prediction, DfR, FEM of LFSI.*
- *Characterization and failure analysis of Lead free solder defects.*
- *LFSI reliability outlook at micron landscape.*
- *Surface finishing/coating development*
- *Surface finish at PCB and chip bond (Substrate pad finish (NiAu, OSP, SoP,ImSn, ENPIG)*

Secretariat

The symposium is organized by NUS/Singapore, UMD/USA and A-IATS(Singapore) in association with SSEA. All correspondence should be addressed to :

The Symposium Secretariat

Advanced Integrated Analytical Test Services (S) PTE LTD
No 9, Kaki Bukit Road
#02-16 , Gordon Warehouse Building
Singapore 417842

Attention : **Mr. Yaadhav Raaj or Ms Suzianna**
Tel/Fax no : 6841 1236 / 6841 1237
Email : raj@a-iats.com
Website : <http://www.a-iats.com/>

or

The Chair, Organizing Committee

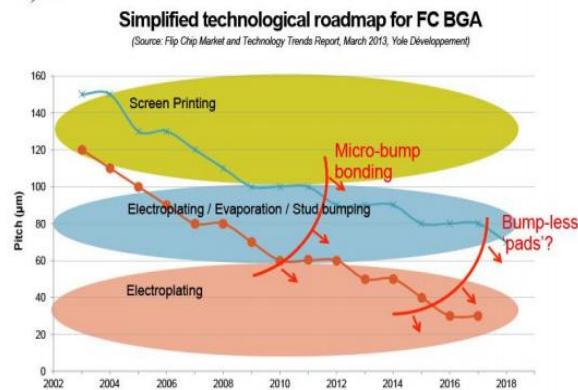
R. Gopala Krishnan PhD
Department of Physics,
National University of Singapore
Email: phvrgk@nus.edu.sg

Prof Michael Pecht

Director, CALCE
University of Maryland, USA

Technical Chair

A/P Tok Eng Soon
Department of Physics,
National University of Singapore



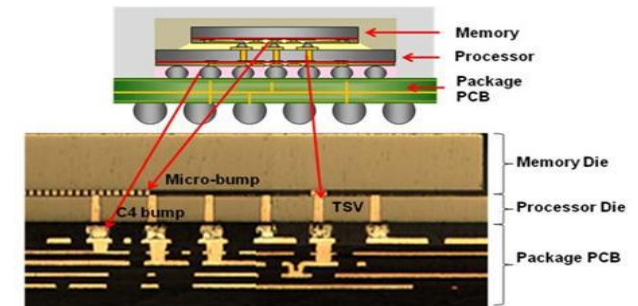
Symposium

on

Solder Interconnect Reliability

8-11 December 2015

UTown, NUS, Singapore



Schematic and micrograph of advanced interconnect architecture

Organized by



in association with



Please refer <http://www.a-iats.com/> for new updates

Technical Symposium

Keynote talk, invited presentations, poster contributions will be in 9-10 Dec 2015 from 0900am to 0530pm. The abstracts are requested on or before 20th Nov 2015.

Education Courses

Solder interconnect reliability is an integration of applied sciences and engineering and hence currently there is a need to groom engineers and researchers from various levels - technicians, graduate and postgraduates in multidisciplinary areas. The courses will be conducted at UTown, NUS from 0900am to 0530pm. They are

a) Solder and Solder – Surface Finish Reliability:

This topic will be conducted on Tuesday, 8th Dec 2015.

b) Practical Surface Engineering Process and Interface Analysis:

This topic will be conducted on Friday, 11th Dec 2015.

Table-Top Exhibition

An exhibition will be held in conjunction with the symposium in UTown, NUS at Singapore. It will be open on 9-10th Dec 2015 from 1000am to 0500pm to facilitate a communication channel between the users and manufacturers in solder – Joint interconnect engineering technologies. If you wish to meet your potential customers and market your products/services face to face in a cost – effective way, mark your calendar. For information on how to exhibit, please contact the Secretariat.

Symposium/Exhibition Venue

The technical symposium, Table top exhibition and the education courses will be held in 8-11 Dec 2015 appropriately in

UTown Auditorium 1
Level 1, Town Plaza
National University of Singapore
College Ave West, 138607

<http://utown.nus.edu.sg/about-university-town/town-plaza/>

Registration

Registration fee for Symposium* (9-10 December 2015)

| | on or before 20 th Nov 15 | after 20 th Nov15 | on-site registration |
|----------------------|---|---------------------------------|-------------------------|
| SSEA/SMTA member | S\$300 | S\$350 | S\$400 |
| Non-member | S\$400 | S\$450 | S\$500 |
| Student (full time) | S\$250 | S\$250 | S\$300 |
| Speakers | S\$150 | | |

Registration fee for Courses** (08&11 December 2015)

| | on or before 20 th Nov 15 | after 20 th Nov15 | on-site registration |
|----------------------|---|---------------------------------|-------------------------|
| SSEA/SMTA member | S\$300 | S\$350 | S\$400 |
| Non-member | S\$350 | S\$400 | S\$450 |
| Student (full time) | S\$200 | S\$250 | S\$250 |

* This includes course notes, two tea break and lunch.

** This includes , tea breaks, lunch, abstract booklet and visit.

- A 10% discount will be given for participant attending both the course and symposium.

- Discounts are not applicable after 20th Nov 2015.

Target Industries & Audience

Semiconductor & disk drive component manufacturing industries, equipment builders, suppliers/makers of substrates, leadframes, passive components, bondwires, connectors, flux/mold compounds, assembly houses, electronic test centre, PCB manufacturers and surface finishing sub-cons.

Technical officers, Engineers, Managers, R&D personnel, company CEOs, graduate students , Polytechnic lecturers and all those engaged in the electronic package @ assembly /Surface Finishing Industries at ASIA and ASEAN.

Visits

Arrangements for visits to key Research Centre at NUS are planned on 10th Dec 2015 from 1500hrs onwards.

Sponsorship

Opportunities are available to advertise your company products and services in abstract booklet and poster display. Please contact symposium secretariat for more details.