

# European Semiconductor Packaging, Assembly and Test

APC Initiative to found  
„Industry Interest Group“

Plan Q2/2015

To establish SEMI – SIG  
„Special Interest Group“



# Who is interested in ESPAT (Status OCT/05, 2014)



# Members Expectations 1/3 (based on 18 returned surveys)



- First-hand view on current industrial goals and initiatives for developments in the field (substantial for adjustment of research activities)
- How to answer increasing demands coming from system integration (reliability and testing challenges)
- New regular and direct contact to European leading industrial groups, in order to support the definition of research goals
- Prepare common public and private funded research projects and join them
- Strengthen the backend activities in Europe
- Support growth of regions based companies and support settlement of new projects and companies in the region
- Making each other stronger by sharing information, cooperate on projects (accelerate development and enhance roadmap)
- Establish a closer dialogue with Semicon Back-End community in Europe
- Collaboration in R&D projects in assembly and packaging materials, bringing real value for industrialization level
- Strategy alignment and adoption (components, technologies, form-factors)
- Better understanding of microelectronic demands in Europe

## Members Expectations 2/3 (based on 18 returned surveys)



- Networking to find new partners for joint approaches towards challenges
- Looking for opportunities to invest in Europe in order to better address the security and automotive markets
- Wish this group not to limit itself to semiconductors but to EMS board assembly too
- Networking between the partners
- Cooperate in new potential business areas
- Learn if there a potential for manufacturing in Europe (Benefits? Costs? Long-term opportunities?)
- Overview of the companies working in this sector and it could be a know-how platform
- Cooperation with other companies for product development and start-up of production lines
- To form a European assembly and test solution against the competition outside Europe
- Support European customers especially in the ramp-up as well as in industrialization phase
- A lobbying for the assembly possibilities still available in the regions, improving the position of the assembly companies
- Bringing together companies that require specific assembly and suppliers

## Members Expectations 3/3 (based on 18 returned surveys)



- Find business partner to improve our supply chain for our product in Europe
- Find opportunities and business partner to develop & manufacture more complex products in Europe
- Identification of solution providers and their capabilities (capabilities matrix of the members)
- Sharing and definition of best practice
- Stronger cooperation between the players in the field
- ...

# Members Contribution 1/3 (based on 18 returned surveys)



- Bring in our view on current development topics needs
- Experience coming from broad spectrum of customers and an intensive international presence
- Experience in product and technology development
- Reliability department with advanced research activities for Finite Element Analysis & failure modeling; material, component and system characterization; component and system accelerated and power testing
- Work closely with technology and product development groups
- Be industrial consultant analyzing the current state of methods, tools to provide efficient failure avoidance strategies
- Component and device reliability testing
- Contribute to respective publications (white papers, articles)
- Preparing analyses and statements for funding organizations, as well as join later on projects
- Contribute to standardization activities
- Information about business locations and cooperation partners in the region

## Members Contribution 2/3 (based on 18 returned surveys)



- Knowledge on back-end processes and equipment (technologically ahead of our Asian competitors)
- Actively cooperate in EU funded projects on packaging
- Innovation in back-end materials
- Technical dialogue between partners
- Assembly services for sensors and modules from samples to series
- Contribution to joint projects, roadmap inputs
- Market analysis based knowledge about WW trends and European specificities in the WW context
- Technical, operational and market know-how
- Customer network and interest understanding
- Support to standardize processes in the back-end
- Packaging development services, cooperation with other companies, finding new customers and new applications for the offered and new technologies

## Members Contribution 3/3 (based on 18 returned surveys)



- Test-, Qualification-, Failure mode and analysis Technology Know How
- Operation capacity and experience
- Increase of capacity & capability for more demanding and complex system integration solutions
- Manufacturing and R&D, Hi-Rel and COB manufacturing knowledge
- Solutions for industrial/commercial prototype package and test requirements
- Potential partner in new capability investment (subject to commercial ROI plan)
- Package terminal conversion facilities for a variety of solder types
- Help to make the production more effective and efficient achieving higher yield (respective environmental conditions will be more necessary for the back-end manufacturing, particularly MEMS and MOEMS and Nanotechnology)
- ...