Institute of Electrical and Electronics Engineers

IEEE Component, Packaging and Manufacturing Technology Society

SEMICONDUCTOR ADVANCED PACKAGING WORKSHOP

G HOTEL, PENANG, 7th SEPTEMBER, 2015
SHANGRI-LA HOTEL, PUTRAJAYA, 8th SEPTEMBER, 2015

Electronic packaging has undergone a tremendous evolution in terms of processes, concepts and technology to suit brand new applications in our everyday lives. These evolutions include key areas such as TSV and 3DIC integration. Miniaturization is a key word for most electronic packaging engineers, particularly when it comes to the Internet-of-Things (IoT). Such concepts lend new challenges for device packaging. The CPMT Malaysian chapter is organizing a 1-day Advanced Packaging workshop in Penang and Kuala Lumpur which visits 2 key areas of interest; advanced packaging for wearables and IoT. This workshop will examine the related technology trends, main market players and offer a prospective outlook on future growth in this area. Participants will be able to discuss the pros and cons of each packaging technology, related manufacturing issues and overall manufacturing/production process roadmap to resolve these issues. An introduction will also be offered on the packaging service suppliers and available state-of-the-art manufacturing processes, including supply chain patterns across foundry partners and OEMs. Key trends are examined, among them manufacturing roadmaps and production process roadmaps. This exciting workshop offers 2 talented speakers who will impart their knowledge on the attendees.

PART I – 8:30 AM – 12:00 NOON

LATEST TRENDS IN ADVANCED PACKAGING: DRIVING PACKAGE VOLUMES WITH MOBILE AND WEARABLE PRODUCTS

E. Jan Vardaman
President
TechSearch International, Inc.
Austin, Texas

SPEAKER'S BIOGRAPHY

E. Jan Vardaman is president and founder of TechSearch International, Inc., which has provided market research and technology trend analysis in semiconductor packaging since 1987. She is the co-author of How to Make IC Packages (published in Japanese by Nikkan Kogyo Shinbunsha), a columnist with Printed Circuit Design & Fab/Circuits Assembly, and the author of numerous publications on emerging trends in semiconductor packaging and assembly. She is a member of IEEE CPMT, SMTA, MEPTEC, IPC, IMAPS and SEMI. She was elected to two terms on the IEEE CPMT Board of Governors and is a CPMT Distinguished Lecturer. Before founding TechSearch International, she served on the corporate staff of Microelectronics and Computer Technology Corporation (MCC), the electronics industry's first pre-competitive research consortium. She has made numerous presentations worldwide on developments in advanced packaging.

COURSE CONTENTS

In the last decade, advanced packaging has emerged as an enabler of today's electronic products. Advanced packaging will continue to be a critical factor in the successful introduction of next silicon technology nodes. The impact of packaging, assembly, and test is increasingly felt in the semiconductor industry and package choice is important in achieving device performance and form factor. Flip chip and wafer level packaging are some of the main package choices for expanding range of applications and device types.

Mobile devices such as smartphones are driving the unit volume growth in semiconductor packaging today. A variety of packages support the IC packaging needs for these applications. Flip chip CSPs (FC-CSPs) have seen strong growth driver by performance requirements that could not be met with wire bond CSPs, yet wire bond remains the choice for many QFNs with strong growth. Growth in wafer level packages (WLPs) continues to be driven by the strong preference for small form factor, low profile packages. Fan-out WLPs (FO-WLPs) are receiving increased interest for more than just single die package and are emerging as a new potential format for SiP. A variety of SiP versions are emerging. Package-on-package (PoP) remains the major choice for memory and logic, but the variety of PoP choices is increasing and includes embedded die. Emerging areas such as wearable electronics will require low-cost and small form factor packages. The key question is which semiconductor package will show the strongest future growth?

As companies design the next generation of products which package will best meet the needs? This presentation examines application trends for packages, explains the many package choices and why each one is selected, and discusses growth trends for each package type.

PART II – 1:30 PM – 5:00 PM

INTERNET OF EVERYTHING – LATEST TREND, CHALLENGES, APPLICATIONS AND CASE STUDIES

Hamid Syed
Director, Supply Chain
Cisco (HK) Ltd
Hong Kong

SPEAKER'S BIOGRAPHY

Hamid Syed is a Director of Supply Chain at Cisco based in Hong Kong. He holds a Master's degree in Electrical Engineering from Arizona State University and has 18 years of experience in various Supply Chain leadership roles across North America, South Asia and Greater China regions. His experience includes engineering roles across Manufacturing Test & Process, Quality and New Product Introduction as well as Operational roles at regional and global levels. In his current role, Hamid is responsible for Cisco's Virtual Manufacturing Platform (vMES) used to manage the company's outsourced manufacturing operations around Product Transformation, Test, Quality and Compliance. His organization delivers IT and OT capabilities (Automation, Cloud, Big Data Analytics and Mobility) to meet Cisco Supply Chain's fast growing needs.

COURSE CONTENTS

According to the Cisco Internet Business Solutions Group, there will be about 15 billion devices connected by 2015, and around 40 billion by 2020, We are rapidly beginning to experience what we call the "Internet of Everything" (IOE): the intelligent connection of people, process, data, and things on the network. IOE makes all these connections more relevant and valuable. It's not the act of getting connected – or even the number of connections – that creates the value. Rather, it's the outcomes the connections make possible. The Internet of Everything is a $19 trillion global opportunity over the next decade.

Harnessing the Internet of Everything (IoE) promises breakthrough value for customers and stakeholders. However, to realize this value, organizations must transform their traditional supply chains to digital ones. Cisco is doing just that by experimenting with different areas of IoE - cloud, big data, analytics and mobility. These innovations and calculated risks offer the opportunity for breakthrough value in customer experience, productivity and operational efficiency. And the industry is taking note. In May, Cisco's supply chain was ranked No. 6 in the world, according to Gartner. The session will cover Cisco Supply Chain's innovation journey, its successes and challenges using multiple case studies involving Cisco and its eco-system partners.

REGISTRATION

Registration Fees*	Professionals	Students
Early Bird (before 15th August 2015)	RM 480.00	RM 350.00
After 15th August 2015	RM 580.00	RM 450.00

- Registration fees are inclusive of 6% GST

Special Offer: Free 1 seat for every 10 seats booking

All payment must be made in Ringgit Malaysia and payable to **IEEE CPMT MALAYSIA**. Registration fee includes seminar, lunch, coffee breaks and a copy of the training material.

Submission of completed form (by email or fax) with your remittance to:
IEEE CPMT Advanced Packaging Workshop
Att : Azhar Aripin PIDC
ON Semiconductor
SCG Ind. Malaysia Sdn. Bhd.,
Lot 122, Senawang Industrial Estate,
70450 Seremban, Negeri Sembilan.
Email : azhar.aripin@onsemi.com
Tel : 06–682 1059 /Fax : 06-678-2262

Registration And Cancellation Policy
Notification of cancellation of a confirmed registration must be in writing and received at least 1 week before the seminar. Otherwise, a full fee will be charged. Replacement is allowed provided the secretariat is notified before the commencement of the seminar.

G HOTEL, PENANG, 7th SEPTEMBER, 2015 ☐
SHANGRI-LA HOTEL, PUTRAJAYA, 8th SEPTEMBER, 2015 ☐
(Please thick one)

1. Name : ……..... Designation: ……..
2. Name : …… Designation: ....……..

Organization : …….
Company/University Address : …….....
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Tel : …… Email : ……..……

I am attending as professional ☐ I am attending as student ☐
(Please provide a photocopy of student ID)

I hereby enclose a crossed cheque no: _____ valued at RM _____ made payable to **IEEE CPMT MALAYSIA**. Registration and payment must be received by **31st August, 2015**.

.....…….. ……..
Signature Date

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