

2012 Call for Abstracts

South East Asia Technical Conference on Electronics Assembly Technologies

April 18-20, 2012
Eastin Hotel Penang, Malaysia

Welcome to SMTA

Developing Solutions In Electronics Assembly

The Surface Mount Technology Association (SMTA) is an international network of professionals who build skills, share practical experience and develop solutions in electronic assembly technologies, including microsystems, emerging technologies, and related business operations.



Supported by



You are cordially invited to submit an abstract to the SMTA's newest technical event in Penang, Malaysia.

Presentations are sought in the following key technology tracks:



- **0201/01005 Components and Assembly**
- **Consumer Applications**
- **Counterfeit Electronics**
- **Electronic Printing Technology**
- **Embedded Technology / Actives and Assembly**
- **Flexible Electronics**
- **MEMS/RF**
- **MEMS/MOEMS**
- **Nanoelectronics**
- **Reliability of Nanodevices**
- **New Materials and Processes**
- **Optoelectronics**
- **Sensors and Manufacturing**
- **Solar Technology**
- **System in a Package**
- **Thermal Interface Materials**
- **Wireless Applications including Bluetooth and Wi-Fi**



Harsh Environment Applications

- ❖ **Components and Component Reliability**
- ❖ **Lead-Free Issues for Harsh Environments**
- ❖ **Substrates**
- ❖ **Thermal Management**



Process Control

- 🍏 **Acoustic Imaging**
- 🍏 **AOI**
- 🍏 **CIM**
- 🍏 **In-Circuit Test**
- 🍏 **Process Modeling**
- 🍏 **Software**
- 🍏 **Test Strategies**
- 🍏 **X-Ray**

Assembly



- ✚ Medical Electronics
- ✚ Placement
- ✚ Printing
- ✚ Reflow Soldering
- ✚ Rework and Repair of QFNs
- ✚ RFID Assembly
- ✚ Selective Soldering
- ✚ Set Up Reduction
- ✚ Solder Paste
- ✚ Solder Voids
- ✚ Supplier Engineering
- ✚ Underfill
- ✚ Vapor Phase Reflow for High Reliability Assemblies
- ✚ Wave Soldering
- ✚ Yield Improvement



- ✚ Adhesives, Alternate Alloys, BGA/CSP Assembly
- ✚ Cleaning – Connector Technology
- ✚ Copper Erosion
- ✚ DFX/Design for Six Sigma
- ✚ Equipment Selection
- ✚ Facility Layout
- ✚ Flux and Solder
- ✚ Halogen and Halogen-Free
- ✚ Head-in-Pillow Defect
- ✚ Land Pattern Design
- ✚ Lead-Free Soldering (including case studies)
- ✚ Lead-Free Reliability
- ✚ Lean Manufacturing
- ✚ Low Volume / Prototype Assembly

PCB Technology



- **Black Pad and Surface Finish Defects**
- **Embedded Passive and Active Components**
- **Halogen Free**
- **HDI**
- **Microvias (including filled and unfilled)**
- **Moisture Sensitivity**
- **Soldermask**
- **Substrate Reliability & Solderability**
- **Surface Finish Pros and Cons**



Components

- BGA
- Battery Interactions
- BTCs (Bottom Termination Components)
- CSP (including Wafer-Level Packages)
- Component Solderability
- Component Reliability
- Connectors
- Embedded Passives
- Failure Analysis
- Fine Pitch Technology
- Flip Chip / Direct Chip Attach
- Lead/Termination Finish
- Leadless Packaging
- Multichip Packages (including 3-D Packaging & Package-on-Package)
- Tin Whiskers

Business

- 🍏 Capacity Modeling
- 🍏 Contract Manufacturing
- 🍏 Doing Business in Asia
- 🍏 Environmental Issues
- 🍏 Lean Manufacturing / Quality Initiatives
- 🍏 Operations Management
- 🍏 Remaining Competitive
- 🍏 RoHS Compliance
- 🍏 Supplier Management
- 🍏 Technology Roadmap



Abstract Submission Schedule & Conditions:

December 22, 2011

Abstract Submission Deadline

(Not More Than 300 Words)



Please submit your abstract to www.smta.org/education/education.cfm#penang. The abstract and presentation must be non-commercial in nature and emphasize the technology and not the company portfolio.

Please include your contact information (address, phone number, email address) and a presentation title with your abstract submission.

Contact SMTA Director of Education, Patti Hvidhyld at Patti@smta.org, with questions or comments.



The Betel Nut Tale

Before Penang, the Pearl of the Orient, was known to the world as a beautiful, exotic holiday destination, she was Pulau Pinang – a virgin paradise that got her name from the abundance of betel nut palms scattered across her soft, sandy beaches.

Literally translated, Pulau Pinang means the “Isle of the Betel Nut” in Malay – Malaysia's national language. Steeped in history, “Penang” was born when charismatic English captain Francis Light persuaded the Sultan of Kedah to cede Pulau Pinang to the British East India Company.

In 1786, Light landed on what is known as the scenic Esplanade today. Local folklore tells of how he fired gold coins into the surrounding jungle to induce his men to clear the area. Fourteen years later, the Sultan of Kedah further ceded a strip of land on the mainland across the channel to a very persuasive Light.



The state of Penang then comprised of an island originally named Prince of Wales Island, after George V, and the strip on the mainland which was christened Province Wellesley, after the Governor of India. The former was later named George Town, after King George III.

In 1832, Penang formed part of the Straits Settlement with Malacca and Singapore. The Penang maritime port was among the busiest in the region, attracting rich merchants involved in the lucrative trade of tea, spices, porcelain and cloth.

Settlers and fortune-seekers from the all over called Penang home and it was from this interesting mix of Chinese, Malay, Indian and Siamese (to name a few) cultures that Penang became a melting pot for hybrid communities – the most famous being the Baba Nyonya, Jawi Peranakan and Eurasians.

For more than a century, the major trading post remained under British colonial rule until 1957, when Malaysia gained independence. George Town was accorded city status by Queen Elizabeth II on January 1, 1957, thereby becoming the first town in the Federation of Malay – after Singapore – to become a city.

Although she is Malaysia's electric and electronic manufacturing hub, Penang has successfully retained her old world charm. As recognition of her rich heritage, George Town, together with Malacca, was listed as the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site on July 7, 2008.

