Dallas Expo & Tech Forum
Tuesday March 19th, 2019

Location:
Plano Center 2000 E. Spring Creek Pkwy. Plano, TX 75074

7:30 AM  8:30 AM  10:00AM
Registration  Tech Sessions  Exhibit Hall
Begins  Begins  Opens

Thanks to our Breakfast Sponsor:
Free Technical Program & Schedule:

8:30AM – 9:15AM

You Design & You Manufacture Complex Multilayer Circuits with 3D Printing

Ofer Maltiel, Nano Dimension

The presentation will discuss innovative 3D printed electronics capabilities, including:

- The role of additive electronics manufacturing in Industry 4.0
- The increasing synergy between the additive manufacturing of electronics and the IoT

Industry timelines for production-scale 3D printed electronics

9:15AM – 10:00AM

Speaker: Mike Bixenman, Kyzen

On-Going Cleanliness Testing on Production Hardware

The performance and cost advances over the past 20 years have enabled technologies to advance beyond what anyone could have imagined. In spite of these technology advances, the cleanliness standards that contractors rely on to ensure the design, production, and quality of next-generation Class 2 & 3 electronic hardware has remained unchanged. As technologies advance, the companies who build the device need guidance on what to do and how to do it.

Flux residues trapped under low standoff leadless components on Pb-Free assemblies may still be active due to blocked outgassing channels, even when using a no-clean solder paste. Quantifying the risk of site-specific residues under problematic components is commonly done during the materials and process validation using chemical and electrical test methods. Process verification and validation are done to characterize and prove out the process on the materials used to build production hardware. Once the printed circuit assembly is placed into production, process control test methods to assure conformance are lacking.

10:00AM

Expo Exhibit Hall Opens
11:00AM – 11:45

**BGA’s, LGA’s, QFN/DFN’s - Oh My, Can Traditional DFM Survive**

*Dale Lee, Plexus Corporation*

Today’s electronic product designs are rapidly increasing the use of bottom terminated components (BTC’s), whether they are collapsible/non-collapsible ball grid array (BGA), solder bump grid array (BGA?), land grid array (LGA), quad-flatpack no-lead (QFN) or dual-flatpack no-lead (DFN) component packaging technologies. However, with some BTC package designs vary greatly in solder pad design and pitch within the same package. This variability impacts the ability to incorporate good DFM practices and selection of applicable assembly workmanship rules for these and other standard BTC component package designs. This presentation will highlight impact elements these

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Special Thanks to Our Lunch Sponsor: **NPI Technologies**

**12:00PM  Complimentary Lunch**

Join us for Complimentary lunch and Networking on the Show Floor - PLUS Door Prize Drawings!

Special Thanks to Our Door Prize Sponsor: **SVTronics, Inc**

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**Technical Program & Schedule Cont:**

1:30PM – 2:15PM

**Women in the Electronics Industry**

*Billi Curtin, ITW Contamination Control Electronics*

It is not easy being a woman in the electronics industry. We are strong ladies who have chosen to flaunt convention and work in a traditionally male-dominated field. However in doing so, we often struggle with feelings of isolation, frustration, and anger. But why? Is it due to the patronizing comments from male coworkers, the gender wage gap, the lack of work-life balance, or simply because the "thick skin" you've had to develop over the years isn't really that impervious? Regardless of the reasons, tapping into sources of empowerment, not blame, are key.

Completely bypassing social commentary on gender issues, this presentation will focus on tools and techniques to identify personal strengths and leverage them to neutralize gender-bias, silence your critics, avoid gender-based pitfalls without ostracism in the workplace, influence and lead (even without authority), and gain recognition and respect from your male counterparts.
Get an exclusive look at the latest SMTA online training course, Rework 101, to close out the expo!

Bio: Industry veteran, Viswam Puligandla, Ph.D., will step through the basic rework process for both SMT and through-hole components.

Abstract: Learn about critical temperature and moisture considerations, heating methods, types of acceptance criteria, and more. This course is intended for entry-level technicians or operators, engineers new to the industry, or even someone who has been away from the process for a while.

Topics Covered:
- Rework, Repair and Modification Definitions
- Rework Temperature Considerations
- Moisture Sensitivity
- Rework Equipment
- Basic Process Steps
- Rework Process Flow Chart Examples
- Rework of Surface Mount Components
- Rework of Insertion Mount Components
- Board Repair
- Acceptance Criteria
Current Exhibitor List: Companies in **bold** are SMTA corporate members

- AIM Solder
- Air Products and Chemicals, Inc.
- Amitron Corporation
- ASM Assembly Systems, LLC
- Austin American Technology Corporation
- Aven Inc.
- B2P Solutions
- BBM, Inc.
- BlueRing Stencils
- BPM Microsystems, Inc.
- Brady Corporation
- CalcuQuote
- Chem Logic
- Cirexx International
- Condair Inc.
- Conductive Containers, Inc.
- DG Marketing Corporation
- Eatman Associates
- Electronics Alliance
- Element Materials Technology
- Eltek USA Inc.
- EO Technics International, Inc.
- Europlacer Americas
- Fancort Industries, Inc.
- FHP Reps
- Fuji America Corporation
- GEI, Inc.
- General Magnaplate Texas
- GSC - Garland Service Company
- Heller Industries, Inc.
- Hisco
- HumCap
- I Source Technical Services, Inc.
- IKEUCHI USA, INC.
- JBC Tools USA Inc.
- KIC
- Krayden, Inc.
- Krypton Solutions
- Kurtz Ersa, Inc.
- KYZEN Corporation
- LPKF Laser & Electronics

- MacDermid Alpha Electronics Solutions
- Metallurgical Engineering Services
- METCAL
- MicroScreen
- Microtech Laboratories LLC
- National Circuits Assembly, Inc.
- Nikon Metrology, Inc.
- Nordson ASYMTEK
- Nordson Test and Inspection
- NPI Technologies, Inc.
- PAC Global, Inc.
- PACE Worldwide
- PalPilot International Corp.
- Panasonic
- PARMI USA, INC.
- Precision PCB Services, Inc.
- Precision Technology Inc.
- ProActive Process Solutions Group, LLC
- Production Automation Corporation
- Restronics Southwest
- Rich Sales
- SEHO North America
- Seica Inc.
- Seika Machinery, Inc.
- Shenmao America, Inc.
- SmtXtra USA, Inc.
- Southwest Systems Technology, Inc.
- STI Electronics, Inc.
- Summit Interconnect, Inc.
- Sunshine Global Circuits
- Super PCB
- Superior Flux & Mfg. Co.
- SVTronics, Inc.
- TAGARNO USA
- Texmac/Takaya, Inc.
- The IPS Group, LLC
- Trilogy Circuits, Inc.
- Universal Instruments Corporation
- University of Texas at Arlington
- Viscom Inc.
- Vision Engineering
- Westak
- Yamaha - Trans Tec America
- ZESTRON

AIM Solder
Presidents Message

Seems like just yesterday we were celebrating the end of 2018 during our Member Appreciation party at Dave & Busters. And now we’re in March! A big thank you to the SMTA Dallas Members and Guests who came out for our monthly chapter luncheon this January where we got to learn from Jonathan Wol about Selective Solder Technology. But the learning and fun events don't stop there.

If you’ve been curious about how the SMTA can add value to your professional career or just want to make friends in the industry, now is as good a time as any! Join us on March 19th for the SMTA Dallas Expo where there will be several industry experts presenting on cutting edge topics related to the electronics industry. Afterwards, we’ll have a social event to celebrate what I know is going to be a well attended and engaging expo.

Hope to see you soon,
Chintan Sutaria - Dallas Chapter President

Dallas Chapter Membership Rolls— 110 Members !!

We welcome our newest members to the SMTA family:

- David Hill, BAE Systems Dallas, Individual
- Dennis O'Donnel, Precision PCB Services, Inc., Professional

Corporate Members: 32  Corp Participating members: 14,  Individual Members: 48,
Global Members: 5,  Participating Members: 15,
Associate/Student Members: 8  Lifetime Members: 2

Dallas Chapter  Corporate Member List - March 2019

ASSET InterTech  GSC (Garland Service Co.)  Precision Technology, Inc.
Barry Sales, Inc.  JTAG Technologies  Roper Resources, Inc.
BBM, Inc.  Keysight Technologies  Southwest Systems Technology Inc
Circuitronics  Krypton Solutions  SPEA America
Conecsus LLC  Leemah Electronics  .Summit Interconnect
CVInc.  Libra Industries  Sunshine Global PCB Group
CR Assembly Corp  Lockheed Martin  SVTronics, Inc
DG Marketing Corporation  Mek Americas LLC  The IPS Group, LLC
Dragon Circuits  Morgan Newton Company  Techni-Tool, Inc.-
Electrolab Inc.  NPI Technologies, Inc.  Variosystems, Inc.
EWD Solutions  One Source Group  VI Technology
FHP Reps  PAC Global, Inc.
Fujitsu Network Comm.  Philips Entertainment
Upcoming Chapter meetings

Chapter Calendar for 2019:

March 19th 2019
Dallas Expo & Tech Forum

May 3rd—Chapter Meeting
Matt Osborne, Regional Territory Manager, Trans-Tec America
Topic: LED Do’s and Don’ts

June 7th—Chapter Meeting
Robert Boguski, President, Datast
Topic: New Developments in Digital Computed Tomography (CT) for Nondestructive Failure Analysis of PCBA’s and PCBF’s

September 7th 2018—Chapter Meeting
SMT Specific Industry 4.0

November 2nd 2018—Chapter Meeting
PCB Failure Analysis

MEETING LOCATION
Aboca’s Italian Grill,
100 S Central Expwy #63,
Richardson, TX 75080

11:00 am (doors open for networking)
Lunch buffet with multiple entrees, salad and dessert.
To attend, we ask that you RSVP from our website.

Agenda
11:00-11:30 check-in & Networking
11:30 Lunch Begins
11:45 Meeting Begins
   Welcome & Introductions
   Chapter Announcements
12:00 Technical Presentation by the Speaker
1:00 Technical Round Table Conversation

Pricing (includes lunch):

- FREE for New Members since prior meeting
- $10 for Committee Members
- $20 Members, employees of Corporate member companies, 1st time guests, and students
- $25 non-members, students & guests – same price
- Cash at the door or credit card on-line
Our Chapter Leaders

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Special Thanks to the following volunteers!!

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Technical Committee (Appointed): Riki G. Brown,
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Technical Committee Chair (Appointed): James Boyd
Krypton Solutions
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Board Liaison: Richard Coyle
Nokia Bell Labs
Phone: 908-516-3926
REASONS TO JOIN YOUR LOCAL SMTA CHAPTER

- Do you have something to share such as new technologies or new products?
- Are you new in a sales territory – do you know all the players? Do they know you?

Be informed and involved on the Local Chapter level:

- Take advantage of technical information provided at local meetings Get to know colleagues in your local area
- Network for technical information and get to know companies and people in your local area
  - Share information with colleagues on new products and services

THE MISSION OF SMTA

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

MEMBERSHIP DUES

Participating: $50 - If your company (same location/division) holds a Corporate Membership it’s employees are eligible to receive the full range of benefits at a discounted price.

Individual: $75 - This membership is designed for individuals who wish to join SMTA to receive all the benefits independent of a Corporate Membership.

Corporate: $450 - A corporate membership in SMTA provides discounts to employees located in the same location/division where the Corporate Membership is held.

Member and Student $19 The Student/Retiree Membership is available to all full-time post-secondary students and retirees.

Non Members: $25

HOW TO JOIN

On-line at www.smta.org