



2018 EEE&M Show

**ELECTRONICS, ELECTRICAL, ENGINEERING AND
MANUFACTURING SHOW 2018**

Orlando's Event Center
Maryland Heights, MO

Wednesday, April 11, 2018
9:00AM – 5:00PM

Welcome to the 2018 edition of the EEE&M Show, sponsored by the Spirit of St. Louis Chapter of the Electronic Representative's Association (ERA). This is the only show in the area that brings together the electronics community, featuring local sales representatives, local, regional and national distributors & local and international manufacturers.

The show features 59 exhibitors and 8 technical seminars throughout the day. We hope that you find value in meeting so many companies in one location and in one day.

Table of Contents

Map of Show Floor

Seminar Schedule

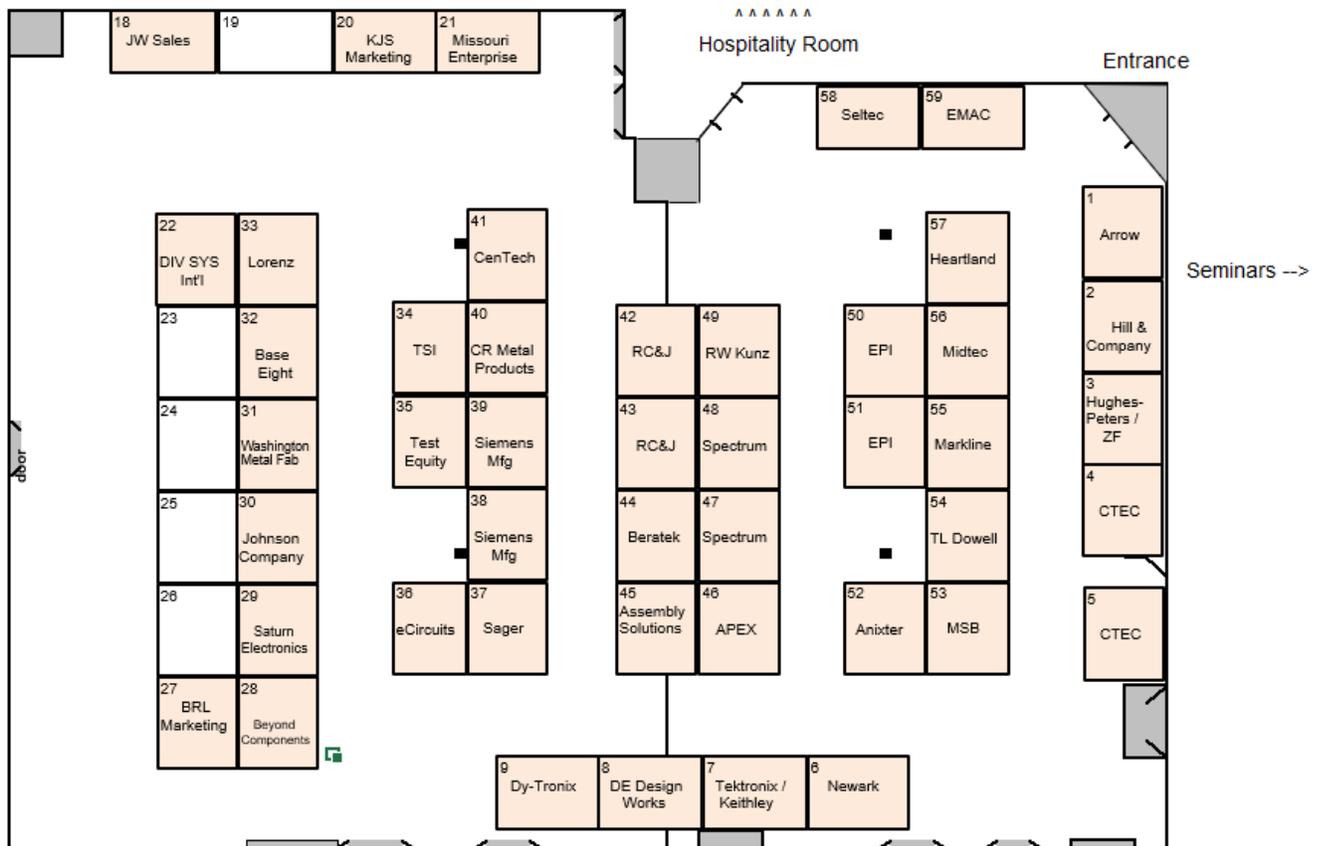
Seminar Descriptions

Become an ERA Member

Show Committee



Map of Show Floor





Seminar Schedule

	Milano Ballroom – Room 1	Milano Ballroom – Room 2
9:15AM – 10:45AM	<p style="text-align: center;">Laird Protecting Electronics & Managing Waste Energy</p> <p style="text-align: center;">9:15AM – 10:45AM To register – please contact Nancy Sebestyen at 314-291-4777 or nsebestyen@dy-tronix.com</p>	<p style="text-align: center;">TDK PowerHap™ and PiezoHapt™ Haptics Actuator Discussion and Demonstration</p> <p style="text-align: center;">9:15AM – 10:45AM To register – please contact Christy Meyer, christy.meyer@seltec-sales.com, or (636) 447-4636</p>
11:00AM – 12:30PM	<p style="text-align: center;">Microchip Securely Connecting Your IoT Device to the Cloud – Insight into a secure means of wireless and wired cloud connections</p> <p style="text-align: center;">11AM – 12:30PM To register – please contact Nancy Sebestyen at 314-291-4777 or nsebestyen@dy-tronix.com</p>	<p style="text-align: center;">EMAC Designing Low Power Embedded Systems</p> <p style="text-align: center;">11AM – 12:30PM To register – please contact Carrie Lessel at 314-324-8873 or clessel@emacinc.com</p>
12:45PM – 2:15PM	<p style="text-align: center;">ZF Electronics Wireless Switch and Sensor Products (ZF & .steute) Technologies, Applications & Advantages</p> <p style="text-align: center;">12:45PM – 1:45PM To register – please contact Dan Garvey at 314-707-0281 or dgarvey@hughespeters.com</p>	<p style="text-align: center;">Missouri Enterprise Marketing Assessment 101: What are You Driving? And Where?</p> <p style="text-align: center;">12:45PM – 2:15PM To register – please contact Jeff Sterling at 573-201-1272 or jsterling@missourienterprise.org</p>
2:00PM – 4:00PM	<p style="text-align: center;">DIV SYS International Advanced Selective Soldering Class</p> <p style="text-align: center;">2PM – 4PM To register – please contact Nick Mates at 317-501-4774 or nick.mates@divsys.com</p>	

Seminar Descriptions



Wednesday, April 11th, 2018

9:30 AM to 11:00 AM

In conjunction with the EEE&M Show at Orlando Gardens

TOPIC: Protecting Electronics & Managing Waste Energy

ABOUT US:

Laird takes materials science, innovates and creates breakthroughs in protecting advanced electronics. Our engineers design, develop and deliver solutions enabling customers to push the boundaries of technology.

WHAT WILL BE DISCUSSED:

- Thermal Interface Materials – Innovations in Gap Fillers and Dispensables. Charting a path to >9W/MK
- Precision Metals – Thinner, more versatile board level shields, some which bend
 - Deep drawn parts and cold forging techniques to handle very small functional features
- New EMI materials – Selective coating, new conductive fabrics and foams, microwave absorbing materials suitable for applications of every size and description
- Multi-Functional Solutions – Combining technologies to enable improved cooling, reduced EMI, added flexibility and FEWER suppliers. Plus: EMI implications with thermal coupling (e.g., Laird CoolZorb)

** Please bring your applications and parts. You'll learn from our "Ask the Expert" session to follow.

OUR SPEAKERS:

Sean Honer: Product Manager (Precision Metals)

Michael Poulsen: Product Manager (Multi-Functional Solutions)



PowerHap™ and PiezoHapt™ Haptics Actuator Discussion and Demonstration

ERA EEE&M Show
April 11th, 2018
9:15AM – 10:45AM

To register please contact – Christy Meyer, christy.meyer@seltec-sales.com,
or (636) 447-4636

TDK's Piezo Actuators with Haptic Feedback provide new dimensions in performance. Compared with conventional electromagnetic solutions such as eccentric rotary motors (ERMs) and linear resonant actuators (LRAs), the PowerHap™ features high acceleration and force combined with low insertion height and the fastest response time – and all with extremely low energy consumption per click. TDK's new ultra-thin PiezoHapt™ actuator features a very short response time of just 4 ms. With a thickness of a mere 0.35 mm the new haptic actuator is much thinner than conventional rotary motors and linear resonant actuators.

Sonja Brown, Director of Marketing, will present a detailed discussion of these technologies followed by a hands-on demonstration.



Wednesday, April 11th, 2018

11:00AM – 12:30PM

To register please contact:

Nancy Sebestyen

nsebestyen@dy-tronix.com

(314)291-4777

Securely Connecting your IoT Device to the Cloud – Insight into a secure means of wireless and wired cloud connections.

How do I connect my embedded product to the cloud...AND do it in a secure method? This is a question that many of us are asking ourselves today. In a world where weekly headlines are filled with data breaches and cyber risk exposures, many of us struggle with a safe and secure means to connect our products to the cloud. Microchip in partnership with Dy-Tronix would like to welcome you to join us in exploring this very topic. Gain insight into a complete host of solutions available to you today that will efficiently allow for your organization to add or enhance your cloud enabled products.

Speaker: Jim Russell – Worldwide Team Leader – Wireless Connectivity

Please stop by our booth to explore more about how our solutions can assist in reducing risk, reduce total costs and innovate.

Learn more about our solutions:

<http://www.dy-tronix.com/>

<https://www.microchip.com/>

EMAC, inc.

EQUIPMENT MONITOR AND CONTROL

Our Products Make Your Products Better®

Wednesday, April 11, 2018 @ 11:00 am – 12:30 pm (Lunch Provided)
Orlando Gardens, 2050 Dorsett Village Plaza, Maryland Heights, MO 63043

Designing Low Power Embedded Systems



SBCs, Embedded Servers, SOMs and Carrier Boards

Summary:

Low power has become the norm in the IoT world. Devices are required to run for years from a battery without replacement. Mission critical devices that are wall powered often have a battery backup in the event there is a power outage. Other systems are designed to be low power in order to reduce heat and power consumption.

EMAC's presentation will examine both high level microprocessor and low level microcontroller systems to include TI, NXP/Freescale, ST Micro, Intel and Microchip. A number of case studies will be presented to demonstrate methods of reducing power consumption. Topics will encompass different low power modes, low power strategies and controlling peripherals for low power.

REGISTER NOW!!! (Space is limited)

Carrie Lessel

clessel@emacinc.com

314-324-8873



Wireless Switch and Sensor Products from ZF and .steute; Technologies, Applications and Advantages



Wednesday, April 11th, 2018

12:45PM – 1:45PM

In conjunction with Hughes-Peters at the EEE&M Show at Orlando Gardens

ZF is global company with over 135,000 employees at 230 locations in 40 countries around the world. As part of this organization, ZF Electronic Systems, a world leader in switches and magnetic sensors, has developed a line of Energy Harvesting RF Switches. <http://switches-sensors.zf.com/us/energy-harvesting/>
In addition, ZF Electronic Systems Pleasant Prairie, LLC has partnered with .steute to be the exclusive sales agent for its Wireless Products in North America. <http://www.steutewireless.com/us/wireless/products.html>

This seminar will delve into the following areas:

- A demonstration of the ZF and .steute products
- Energy Harvesting and battery sources used to power the RF signal transmitters
- RF frequencies and protocols employed
- The types of switch and sensor products offered
- Transmission ranges of the products
- Receiver capabilities
- A discussion of the benefits of going wireless
- Real world applications for wireless switches and sensors

Hughes-Peters is one of the top 15 electronic/electromechanical distributors in the US. We are a multi-regional distributor of interconnect, passive, and electromechanical products with value-added services that provide solutions to our partnered customers. Corporately located in Dayton, Ohio, Hughes-Peters has several branch locations in the Midwest, Texas, and Southeast.

To register for this seminar please contact Dan Garvey of Hughes-Peters, 314-707-0281 or dgarvey@hughespeters.com

Missouri Enterprise
Wednesday, April 11th, 12:45PM – 2:15PM



Are your marketing efforts driving sales? When it comes to Marketing, are you limping along with a clunker that might not get you there? Or do you drive a reliable vehicle you can count on consistently? Maybe you're behind the wheel of a high-performance Sales & Marketing machine?

Michael Gantner of Nth Impressions goes over the basics of B2B marketing research, vehicles and strategies that form today's successful marketing mix. Whether you're looking to tune up your current marketing plan or if you need ideas to get the motor started, this program is full of useful information. You'll also receive a quick Marketing Assessment Quiz to help you assess your current strategy. Topics will include easy to understand, quick overviews on topics including:

- Customer Profiling
- Messaging
- Email & eMarketing
- Collateral Material
- Market Research
- Websites and SEO
- Social Media
- Direct Mail
- Branding
- Data
- Telemarketing
- Marketing Mix

To register please contact Jeff Sterling at 573-201-1272 or jsterling@missourienterprise.org

DIV SYS International

Advanced Selective Soldering Class

Wednesday, April 11th, 2PM-4PM

Attendees will leave this seminar with an enriched understanding of the interaction between the characteristics of the PCB and selective soldering. The basic soldering concepts will be discussed including solders, fluxes, and management of heat, including the impact of the PCB options of surface finish, laminate, and copper thickness.

The objective of the seminar is to raise an awareness that soldering is a system in which all of the elements must be understood to properly evaluate process problems and achieve optimal solder joints.

Appropriate Audience

- Process Engineers
- Production Managers
- Quality Engineers
- Upper Management

Process and Laboratory Overview

- Measurement instruments for PCB characteristics
- Measurement Instruments for Solder joints
- Overview of Assembly Process equipment

Soldering Overview

- Solders
- Intermetallic Formation
- Wetting Forces
- The Flux Cycle
- Capillary Attraction

Basic Selective Solder Programming

- Off-line programming software
- Programming techniques

PCB characteristics that impact the soldering process

- Laminate choices, glass transition temperature and lead-free compatibility
- Surface finishes (OSP, HASL, immersion silver and ENIG)
- Cleanliness (ionic contamination, organic contamination and intermetallic growth)
- Soldermask
- TH plating thickness
- Internal stress
- Moisture and Baking
- Copper weight
- Board thickness & Layer count
- Delamination and measling

Wrap up and Questions

Provided: Outline handouts for notes

Mr. Bentley holds a BSEE from the University of Kentucky, is a Registered Professional Engineer, and a GE certified LSS Black Belt. He has over 40 years of experience in Printed Circuit Fabrication and Assembly. Mr. Bentley owned companies that offered Electronic Design, PCB Fabrication, and PCB Assembly. He currently teaches classes in advanced Electronic Assembly Processes and consults for companies worldwide that have issues with PC boards or Assemblies. He has over a dozen US patents and is a member of the IEEE, NSPE and SMTA.

Contact information:

Stan.bentley@divsys.com

DIVSYS International, llc
8110 Zionsville Road

To Register for this Seminar – Please contact

Nick Mates at: 317-501-4774 or nick.mates@divsys.com

Thank You for Attending!

**If you have any feedback or comments, please submit to
attendee@erastl.org**

Our Next Show will be in April of 2020

To become a member of ERA Spirit of St. Louis:

**Please contact info@erastl.org, or contact any of our
members listed on the website, www.erastl.org**



EEE&M 2018 Show Committee

Show Chairman	Rich Sartori – CenTech, Inc.
Exhibitor Co-Chairman	Dave Willand – Newark Electronics
Exhibitor Co-Chairman	Jeff Wagner – Apex Microtechnology
Attendee Co-Chairman	Carrie Lessel – EMAC
Attendee Co-Chairman	Jeremey Krueger – Spectrum Sales
Registration Chairman	Marshell Haas – Midtec Associates
Show Treasurer	Jim Amberg – MSB & Associates
Promotions Chairman	Chris Robertson – Heartland Electronics
Planning Committee	Brian Main – CTec Connector Technology
Planning Committee	Diana Daniels – Dy-Tronix

And all of our chapter members for promoting the show...

Hope to see you in 2020

