

2015

Del Mar Electronics & Design Show

FREE Technical Seminars Mission Towers

Visit www.MFGshow.com for registration speaker bios, in-depth descriptions and last minute changes.

Wednesday, May 6th

10:00 AM

ROOM A - Registration Suggested

HOW TO RETURN MANUFACTURING TO AMERICA

The presentation will focus on how to decide what parts/assemblies to bring back and when and how to do so. It will feature stories of companies that have returned manufacturing to America from data collected by the Reshoring Initiative as well as new data on how many companies have returned to California and other states.

ROOM B

PCB MFG. TECHNOLOGIES AND CAPABILITIES TODAY, AND INTO THE NEXT 10 YEARS

The Future of printed circuit board manufacturing technology. The next ten years and how it will affect your designs

ROOM C

WHAT'S NEW IN WIRE AND CABLE

New materials and methods for manufacturing lead wires and cables for Medical, Aerospace, Robotic and other critical applications. New conductor materials for increased flex life and EMI requirements. New insulations for improved temperature and environmental reqs discussed.

ROOM D

INTRO TO PCB MANUFACTURING (PCB 101)

The Intro to PCB Manufacturing seminar (PCB 101) gives those unfamiliar with PCB manufacturing an overview of the steps required to manufacture and test multilayer printed circuit boards. Product samples of the various manufacturing steps are shown throughout the seminar for an interactive approach to this topic.

11:00 AM

ROOM A

NEARLY EVERYTHING YOU EVER WANTED TO KNOW ABOUT LEDS AND DRIVERS FOR SSL

This seminar is a combination of two presentations the speaker has given: THE ABCS OF LEDS and DRIVERS and LED DRIVERS - the DEVIL is in the DETAILS. Between them they contain NEARLY EVERYTHING YOU EVER WANTED TO KNOW ABOUT LEDS AND DRIVERS FOR SSL. The speaker will provide attendees with a plethora of information, insights, technical details, and additional reference and bonus material.

ROOM B

BASICS OF QUADRIFILAR ANTENNAS

Mobile and hand-held applications put tight constraints on antenna size while good CP and hemispherical coverage are required. The quadrifilar helix (QFH) is ideal for these applications. We will present how the QFH works and discuss how varying the dimensional relationships between helix radius and arm lengths, and the winding sense and arm phasing, alter polarization and radiation pattern.

ROOM C

HOW TO USE LINKEDIN TO ADVANCE YOUR CAREER

Are you dissatisfied in your current position and looking to move up or out? Do you see the next round of layoffs looming? Nowadays, professionals change jobs every 3.5 years! Since 93% of hiring managers search LinkedIn for recruits, you need to have a strong presence. Learn how to build out your LinkedIn profile and become recognized as the obvious choice for the position you want.

ROOM D

3D FUNCTIONAL INKJET PRINTING OF SOLDER MASK & LEGEND ON PCBs

The traditional solder mask and legend deposition processes in the manufacture of PCBs has gone unchanged for many years...until now! The introduction of 3D functional inkjet printing of solder mask and legend is changing the game for both PCB manufacturers and design engineers. Learn how this exciting new technology significantly improves the accuracy, reliability and yield of the process.

12:00 PM

ROOM A

LITHIUM BATTERY TECHNOLOGY UPDATE

Update on the latest developments in lithium rechargeable cells and batteries. Different cell chemistries and types will be discussed as well as battery management systems and regulatory issues related to lithium rechargeable cell and batteries.

ROOM B

MIL/AERO CONNECTOR PERFORMANCE IMPACT DUE TO HARSH ENVIRONMENT EXPOSURE

Connector harnesses are deployed into many different harsh environments. During qualification, the manufacturer needs to ensure that these components will withstand these environments, i.e. vibration, shock, temperature, etc. This talk will focus on three of the harshest test parameters, vibration, shock and thermal shock, which are key to a successful completion of a qualification program.

Wednesday, May 6th

12:00 PM (continued)

ROOM C

SOLIDWORKS TIPS AND TRICKS 2015

Experience a fast paced session of tips focusing on how to use SolidWorks 2015 in the real world. These will not be found in the help file, they come from years of learning, teaching, and using it daily in a small dynamic design environment.

ROOM D - Registration Suggested

HOW TO SUCCESSFULLY SELECT & REDUCE THE COSTS OF YOUR NEXT BUSINESS SYSTEM ~ ERP, CRM, PDM AND MORE

Selecting a new business system is a daunting, expensive and a confusing project. The speaker will provide a proven process that eliminates much of the confusion and gives the buyer a chance to avoid being sold on a system that is not appropriate for their business. Also discussed: governance tips common to successful implementations; cost savings recommendations; funding source(s) to offset costs.

PADDOCK LOUNGE - IPC Designers Council Open Meeting 12:00-2:00

SAN DIEGO IPC DESIGNERS COUNCIL MEETING

Two Sessions; 1.) PCB Design and Fabrication Influences which Affect Insertion Loss 2.) Materials and Manufacturing Considerations: A review for Engineers with High-speed Digital and RF applications concerned with performance and reliability.

1:00 PM

ROOM A

DISPLAY'S - OLED, LCD & TOUCH SCREEN "AWARD WINNING", FUN, TECHNICAL SEMINAR - ALL YOU NEED TO KNOW ABOUT DISPLAY'S

LCD, OLED, Display, Technical Seminar: An informative, FUN, technical, comprehensive, easy to follow, step-by-step presentation covering all aspects of LCD's displays. Also displays technologies, OLED & TFT. With an assessment of the current display industry. Also, Touch Screens: Resistive, Capacitive, etc. Completely learn HOW the LCD works. Learn the time table for OLED's. How to make sure you have the best Display Manufacture for your project.

ROOM B

VENDOR & CUSTOMER TRANSACTIONS - LEGAL INSIGHTS TO SAVE YOU MONEY

Rely on strategies to prevent costly problems or lost income opportunities. Unpaid change orders, tricks in invoice processing, vague specifications and ambiguous design ownership cost companies significant amounts of money unless they know the strategies I'll reveal. Missing this opportunity is missing out on money.

ROOM C

PROTECTION OF HIGH SPEED COMMUNICATION CIRCUITS FROM ELECTROSTATIC DISCHARGE, FAST TRANSIENT SURGES

What is the cost of an electronics failure? Does it hurt your business and reputation? Learn ways to protect your electronics from failure due to Electrostatic Discharge, Inductive Load Fluctuations and Lighting Surges. Protect the communication and power interfaces to your equipment with Bourns, a proven Circuit Protection Leader.

ROOM D

3D PRINTING PROCESSES AND MATERIALS

We will discuss all the major 3D printing processes and materials. We will start from the three core material types (filament, powder, and resin) and branch out from there, outlining the advantages and disadvantages of each. This will not be a marketing pitch for Incept 3D. Also, a free copy of Michael's ebook "A Brief Synopsis of 3D Printing" will be distributed.

2:00 PM

ROOM A

BASICS OF PATCH ANTENNAS

We introduce the basic concepts of patch antennas. We use a simple rectangular, half wave long, probe-fed patch operating in its fundamental mode as an example. Topics include principles of operation, impedance matching, radiation patterns, circular polarization, bandwidth, efficiency, alternative feed types, stacked patches and higher mode behavior.

ROOM B - Registration Suggested

3D EXPERIENCE PLATFORM: SIMULATING REALITY WITH SIMULIA

As an integral part of the Dassault Systèmes 3DEXPERIENCE Platform, SIMULIA applications accelerate the process of evaluating performance, reliability and safety of materials and products before committing to physical prototypes. This presentation will highlight the benefits of Dassault Systèmes 3D EXPERIENCE Platform in the context of the Aerospace & Defense Electronics and High-Tech industry.

ROOM C - Registration Suggested

(IoT) INTERNET OF THINGS - THE QUALCOMM WAY

Talk will be on Qualcomm's view of the IoT market place and how Qualcomm devices are helping to deliver value in that space.

Wednesday, May 6th

2:00 PM (continued)

ROOM D - PARTS I & II - 2:00PM - 4:00 PM

BATTERIES YESTERDAY, TODAY, TOMORROW

Seminar will help in understanding the batteries used in today's markets while finding ways to improve battery life expectancies, and different options for your battery needs. We will also discuss the process of battery rebuilding, and what it means to your market

3:00 PM

ROOM A - 3:00 PM - 4:30 PM

STARTING BLOCK TO SUCCESS - UTILIZING SAN DIEGO'S RESOURCES FOR STARTING AND GROWING YOUR BUSINESS

A Line up of Great Organizations to help you start and grow your idea or business. They will discuss how to get capital for your startup. Many organizations in San Diego will be represented to create a customized package of support for high tech small businesses to help them grow, commercialize their product, and bring it to the market.

ROOM B

MINIATURE CONNECTORS; ANTI-VIBRATION SOLUTIONS; COMBO FIBER/ELECTRICAL CABLE PIGTAILS

The abc's. a) Miniature IP67 circular threaded brass-shelled connectors. b) Anti-vibration solutions for Miniature IP67 circular threaded brass-shelled connectors. c) Combo fiber optic/electrical miniature circular threaded brass-shelled connectors on pigtail cable assemblies made to desired length.

ROOM C

NEW APPLICATIONS ENABLED BY GALLIUM NITRIDE (EGAN) FETS FROM EPC

Innovations in power MOSFETs are fast approaching the physical limit of silicon. This talk will provide an overview of EPC's eGaN FET technology and describe how eGaN FETs can not only displace silicon MOSFETs in traditional power supply designs, but also enable fascinating new industries due to their superior switching characteristics.

4:00 PM

ROOM B - Registration Suggested

INTERNET OF THINGS SOLVING PROBLEMS IN AGRICULTURE

Long distance Internet of Things (in particular agricultural applications) have been ignored if the application cannot be shoehorned into Bluetooth, Wifi, Wi Max and Cellular. Practical IoT alternatives (solutions) will be presented solving the agricultural transmission problems. As an example an IoT soil moisture sensor potentially solving California's water wasting crisis will be presented.

ROOM C

ELECTRONICALLY CONTROLLED OPTICS BASED ON LIQUID LENS TECHNOLOGY FROM VARIOPTIC

Varioptic develops, designs and markets electronically controlled miniature optics based on its proprietary and patented programmable Liquid Lens technology. See their latest product technology which enables tilt control in addition to focus control, enabling beam deviation and Optical Image Stabilization with absolutely no moving parts.

ROOM D - Registration Suggested

HOW TO REDUCE COSTS USING RAPID PROTOTYPING TECHNIQUES

Manufacturing is coming back to America, the need of more plastic mold injection methods are being required as well as tools to reduce costs through innovation tools such as silicon molding.

Thursday, May 7th

9:00AM - Early Bird Talks

ROOM A - Registration Suggested

INTEGRATE MOBILE AND CLOUD TECHNOLOGY IN YOUR NEXT ELECTRONIC PRODUCT

Learn how to integrate Mobile and Cloud technology into your next electronic product. Learn about your options for controlling your electronic product wirelessly from an iPhone or Android, using Wifi or Bluetooth LE, and also for communicating with the Cloud. You will leave this seminar with a solid understanding of how to integrate Mobile and Cloud technologies into your next electronic product.

ROOM B

A NEW APPROACH TO SYSTEM LEVEL POWER DESIGN

System Designers have been developing power systems as an afterthought for decades. Typically this involves a bench full of rack mount or lab power supplies feeding the prototype(s). Usually at the last moment someone on the team notices that "we have to get all these power supplies into the product chassis". Learn how to approach this issue while saving time and money, getting to market faster while still keeping the flexibility you need.

Thursday May 7th

10:00 AM

ROOM A

SYSTEM LEVEL CONSIDERATIONS IN THE DESIGN OF BATTERY PACKS AND CHARGERS

System level issues must be considered when designing the power section of a portable device. Matching battery pack voltage, capacity, and load profile to hosts are important, but designers must be sure to also look at fuel gauging, cell balancing, charging, and device interactions such as signaling to avoid incompatibilities later in the design cycle.

ROOM B - Registration Suggested

INTERNET-OF-THINGS (IoT) AND HOW IT WILL CHANGE YOUR WORLD

What is Internet-of-Things (IoT)? Why is Cisco, Microsoft, Intel, Oracle, Texas Instrumentation, Linear, Freescale, Arrow and many other companies now brand their division as IoT? In this seminar, we will go over the various applications including driverless car, healthcare, machine-to-machine scenarios and discuss how you can prepare for this new phenomenon.

11:00 AM

ROOM A - Registration Suggested

ELECTRONICS SYSTEMS QUALIFICATION BY ANALYSIS

Electronics systems must go through rigorous MIL-STD-810, DO-160, NAVSEA 0908 compliance and performance testing, including thermal, shock and vibration integrity evaluations. The Speaker specializes in the qualification of electronics equipment by analysis using Computer Simulation methods.

ROOM B - Registration Suggested

MEDICAL DEVICE MARKET OVERVIEW AND PRODUCT LAUNCH

This seminar will cover the latest trends in digital health, mHealth, applications of technology in hospitals and home healthcare. What are some of the trends in the next five years and what are the factors driving growth. Additionally, there will be a brief discussion of healthcare standards and how to launch a medical device? *Attendees will receive a new eBook free.*

12:00 PM

ROOM A - Registration Suggested

GROWTH STRATEGY: HOW TO USE MARKET INTELLIGENCE TO SHORTEN THE SALES CYCLE

In this session you will learn key strategies that will help you: develop a value proposition, gather market intelligence, and translate this intelligence into meaningful action plans that will allow you to add innovation to and grow your business

ROOM B

INVENTORS HELPING INVENTORS

Inventors unite! SDIF helps inventors start businesses by motivating, educating and networking. Launch your new product idea with local help! San Diego is Americas #1 Invention City, second in the world. Create your future as a successful American Inventor.

1:00 PM

ROOM A

VERY HIGH WATTAGE (400 - 1,200) SINGLE AND MULTI-CHANNEL LED DRIVERS FOR VERY BIG LED LIGHTS.

LEDs continue to grow in power with 200-500 watt engines now available. Typical applications for so much light are horticultural grow lamps, stage lights, stadium and flood lights, UV curing systems, and medical surgery lamps. This seminar will go over a new Powerbox white paper entitled HIGH WATTAGE SINGLE and MULTI-CHANNEL LED DRIVERS for powering such high wattage LED applications.

ROOM B

USING DIGITAL MARKETING TO ACCELERATE YOUR SALES CYCLE

Many businesses find that customers are finding them on the internet. Even B2B buyers will research potential suppliers online prior to first contact. This is a quick overview of digital marketing strategies that will cover PPC (Pay Per Click), Online Advertising, Re targeting, Email Marketing, Newsletters and how to use Google Analytics to identify warm prospects.

2:00 PM

ROOM A

COMPLETE SMD CIRCUIT PROTECTION SOLUTION FOR LED LIGHTING

As the demand for LED lighting continues to grow, so does the need for protection from both overcurrent and overvoltage events. This presentation will demonstrate how AEM has developed a line of SMD components that can provide the complete circuit protection solution.

ROOM B

THERMOFORMING WITH STYLE

See how thermoforming is used in a wide variety of unique products. Learn how you can have a high appearance designer look in a lower cost, lower volume process. Rich will show how by using advanced tooling technology you can create and achieve close tolerance fits and high performance parts without adding significant cost. Great for medical, aircraft, and electronic enclosures