Avnet Technology Showcase

Technology Explore

Don't miss the Avnet Technology Showcase! This unique Showcase includes 17 interactive industry leading supplier booths and 12 supplier led classes. Learn about a wide span of technology featuring Power Management, FPGAs, Microcontrollers, Wireless Technology, Automotive Networking and more.

Event Details

Date: June 14, 2016
Time: 8:00am to 5:00pm
Location: The Pinnacle Center
3330 Highland Drive
Hudsonville, MI 49426

Register Now

Agenda

Time	Description	Location
8:00am – 5:00pm	**Registration**	Main Hall
8:30am – 8:45am	**Opening Remarks**	Main Hall
9:00am – 9:50am	**Broadcom:** Designs Utilizing Optical Sensors Measuring Proximity, Gesture and Linear/Rotary Motion **ISSI:** Linear LED Drivers – How to Get the Most Out of Them!	Room 1 Room 2
10:00am - 10:50 am	**OSRAM:** Eye Safety Calculations for Infrared LED Applications **ST Microelectronics:** Low Voltage Integrated Smart Power Drivers and Application	Room 1 Room 2
11:00am – 11:50am	**ON Semiconductor:** ON Semiconductor's Battery Free Wireless Sensors **Infineon:** Relay Replacement in a 12 V system. Has the time come to replace mechanical relays and fuses in 12 V systems?	Room 1 Room 2
11:50am – 1:00pm	**Lunch**	Main Hall
1:00pm – 1:50pm	**Analog Devices:** How to Design Precision Analog Front Ends for Today's Demanding Sensor Applications **Microchip:** Simplifying Data Acquisition Systems Using the Latest Digitally-Enhanced Analog to Digital Converter Technology from Microchip	Room 1 Room 2
2:00pm – 2:50pm	**NXP:** Motor Control Fundamentals **Silicon Labs:** Understanding Tradeoffs of Low Power Wireless Solutions	Room 1 Room 2
3:00pm – 3:50pm	**Xilinx:** Ultra High Performance Computing Using the Xilinx MPSoC Processor System and SDSoC System Development Tool **Texas Instruments:** Learn about SIGFOX and Enable SIGFOX with CC1120+CC1190 LaunchPad Based Kits	Room 1 Room 2
4:00pm – 5:00pm	**Closing Remarks, Happy Hour & Raffle**	Main Hall

As part of our continued commitment to serving the community, Avnet will be partnering with Detroit Cristo Rey School on the Avnet Technology Showcase. We are asking all attendees to donate school supplies or make a monetary donation to Cristo Rey. Avnet Cares will match the funds raised during the Avnet Technology Showcase.

Class topics

Vendor	Topic	Abstract
Analog Devices	How to Design Precision Analog Front Ends for Today's Demanding Sensor Applications	In this course we will analyze the precision system circuit to define amplification challenges providing the class with an overview of sensor, signal, and op amp characteristics for various design requirements.
Broadcom	Designs Utilizing Optical Sensors Measuring Proximity, Gesture and Linear/Rotary Motion	Broadcom will present technical guides and techniques for using miniature optical sensors for measuring motion; including proximity, gesture and linear/rotary motion. Gesture sensing technology, utilizing a combination of active IR and embedded low-res cameras, will be discussed.
Infineon	Relay Replacement in a 12 V system. Has the time come to replace mechanical relays and fuses in 12 Volt systems?	Infineon will explore the pros and cons of replacing mechanical relays and fuses with a solid state solution. We will review the cost, quality, and energy saving benefits of smart power solutions, and when it makes sense to choose one solution over the other given today's current technology.
ISSI	Linear LED Drivers – How to Get the Most Out of Them!	Linear LED drivers are so simple to use that some engineers may overlook their limitations. Discuss the challenges in selecting the right linear driver architecture for a quality lighting design.
Microchip	Simplifying Data Acquisition Systems Using the Latest Digitally-Enhanced Analog to Digital Converter Technology from Microchip	In this class you will discover how "built-in" unique digital signal post-processing features can greatly simplify your data acquisition system and improve your overall system performance. During this session attendees will see first-hand a demonstration of the advanced integrated features of Microchip's new family of High Speed ADCs. These advanced features include: decimation filtering, fractional delay recovery, digital down-conversion and more. So, if you are developing (or planning to develop) data acquisition systems this class is for you.
NXP	Motor Control Fundamentals	Basics of motor control focusing on 3-phase brushless motors, including synchronous and trapezoidal control as well as control of induction motors. There will be a brief demo of available development systems.
ON Semiconductor	ON Semiconductor's Battery Free Wireless Sensors	Learn how Battery-free Wireless Sensors utilize RFID to create the world's first sensors that get 100% of their power through energy harvesting, eliminating the need for batteries and enabling form factors as thin as a piece of tape. We will overview the technology that makes this sensing on RFID possible and educate on the ecosystem considerations to implement the technology.
OSRAM	Eye Safety Calculations for Infrared LED Applications	Join the Osram class on Eye Safety Calculations for Infrared LED Applications where we touch on eye safe limits for the Cornea and retina for IR LEDs, definitions and explanations of the various factors utilized for eye safety and how they are combined to calculate the respective limits and more!
Silicon Labs	Understanding Tradeoffs of Low Power Wireless Solutions	With an estimated 50 billion sensing nodes by 2020, wireless connectivity is the primary means of communicating to these devices. The design tradeoffs for wireless communications usually involve cost, range, latency, power and data rate. The aim of this class is to educate engineers at the forefront of low power wireless development about these tradeoffs.
ST Microelectronics	Low Voltage Integrated Smart Power Drivers and Application	Learn to select optimal integrated driver ICs for driving and protecting resistive, capacitive, and inductive loads of all types!
Texas Instruments	Learn about SIGFOX and Enable SIGFOX with CC1120+CC1190 LaunchPad Based Kits	The focus will be on applications which are looking to connect to a public network operated by SIGFOX over a long distance with ultra-low power. This session will provide introduction to the SIGFOX network operation and will have a demo on how to connect to the SIGFOX network using TI's CC1120+CC1190 LaunchPad based kits
Xilinx	Ultra High Performance Computing Using the Xilinx MPSoC Processor System and SDSoC System Development Tool	A presentation on the latest in very high performance design products and methods featuring Xilinx's revolutionary MPSoC multi-processor SoC.

Sponsors

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