

# Twentieth Annual Automotive Electronics Reliability Workshop

## Call for Presentations and Registration Notice



21111 Haggerty Road  
Novi, Michigan 48375  
(248) 349-4000

organized by the AEC Component Technical Committee:



# Automotive Electronics Council

Component Technical Committee

## 2018 - Twentieth Annual Automotive Electronics Reliability Workshop

April 24-26, 2018  
Sheraton Detroit Novi Hotel  
Novi, MI

The 2018 Automotive Electronics Reliability Workshop will be held at Sheraton Detroit Novi Hotel from April 24<sup>th</sup> to 26<sup>th</sup>. Previous workshops have been providing a forum and structured environment to discuss quality and reliability problems and philosophies related to all aspects of passive component, discrete semiconductor, and integrated circuit design, test, analysis, fabrication, assembly, and field performance. The environment is a highly interactive technical presentation and panel discussion format promoting open and frank communications within the international automotive component supplier base.

### Call For Presentations

This call for presentations solicits your submission of abstracts of less than 200 words dealing with current automotive electronic component issues. The abstracts and topics will be reviewed and selected for presentation based upon technical merit, innovation, automotive focus, and relevancy. Company commercials and/or endorsements are not allowed. Company logos may be used on presentation slide borders only. Each presentation will be allotted 20-25 minutes, followed by a question and answer session.

Some areas and topics that are relevant to and presented by workshop participants previously are listed below. Items in bold text are those of particular interest for this year's workshop. Works involved in Integrated Circuits, Discrete and Passive Components are welcome. Presentations and late breaking contributions relevant to today's activities and tomorrow's ideas are also requested.

#### **Q100/Q101/Q200 new revisions - Impact**

Field Quality Performance  
Accelerated Stresses  
Wafer Level Reliability  
Product Characterization  
Board Level Simulation

#### **MCM qualification/screen**

Reliability Simulation  
Emerging Challenges  
FMEA  
Advanced Packaging

#### **Technical Issues with 40nm and below**

Influence from OEM Automotive Environment

#### **OEM/End-Customer Requirements**

New Test/Screen Techniques  
Quality System/Methodology Trends  
Reliability Monitoring Usefulness  
Burn-In/Test Screen Elimination  
Application Specific Qualification  
OEM System Reliability  
Mission Profiles  
EOS/ESD/NTF Reduction

#### **Cu Wire Reliability**

Best Practices  
Field Performance

#### **Emerging Technology**

Autonomous Driving  
Driver Assist/RF/Radar  
MEM's  
LED's  
ISO Specification/ASIL  
EMC/Latch-Up  
Vehicle Communications/V2V  
Internet-of-Things (IoT) in Vehicles

#### **"Zero Defects" Implementation**

New/Suspect Failure Mechanisms  
Known Good Die (KGD)  
Maverick Lot/Wafer Methodology

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Submit an electronic version of your abstract (in both Word & PDF format) and finished presentation (in both PowerPoint & PDF format) to:

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**Andy Mackie**  
**Indium Corporation**  
Office Phone: (315) 266-7007  
Email: amackie@indium.com

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**Steven Sibrel**  
**Harman International**  
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**AEC Objective:** The purpose of this workshop is to continuously improve communications between automotive electronic component users and their supplier base. The goal of the Automotive Electronics Council is the development of uniform automotive industry specifications and requirements to improve automotive product quality and reliability while reducing cost and time to market.

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**Who Should Attend:** Engineers and managers who are involved in the qualification, testing, reliability, and failure analysis of automotive passive components, discrete semiconductor devices, and integrated circuit devices. It would also be helpful to those who are responsible for establishing quality and reliability policies for automotive components.

**Registration Fee:** There is **NO REGISTRATION FEE**, but workshop participants must register with the hotel before Monday, April 2, 2018 to ensure that the block room rate of \$159 per night is available. Hotel room reservations requests received after 5:00 pm (EST) on Monday, April 2, 2018 will be accepted at the prevailing rate.

The AEC negotiated a minimum hotel room commitment to minimize room rates and meeting expenses. In order to remain a free Workshop event for attendees, the AEC must meet the sleeping room commitment. Please use the Sheraton Detroit Novi Hotel when making your room reservation, and clearly state that you are attending the 2018 AEC Reliability Workshop.

This is your workshop. Please come with an open mind and be prepared to share and learn about new ideas and accomplishments. Your ideas on how to improve future workshops are always welcomed.

### Workshop Registration

Registering for the workshop can be done by accessing the AEC website at <http://www.aecouncil.com> and clicking on "**Updated: Annual AEC Reliability Workshop & Registration Information**", then click on "Registration Form" to fill out and submit the form. Please complete all fields on the registration form.

### Hotel Reservation

Reserving a room at the hotel can be accomplished by accessing the hotel reservation website for the 2018 AEC Reliability Workshop at the following link and entering the requested information:

<https://www.starwoodmeeting.com/Book/AutomotiveElectronicsReliability2018>

If you choose to make your reservations by phone at (248) 349-4000 or (866) 837-4180, request a room from the block reserved under the meeting "Automotive Electronics Reliability Workshop". The room rate for the block is \$159 per night. Room block rates will be accepted until the Monday, April 2 cut-off date. Reservation requests received after 5:00 pm (EST) on Monday, April 2 will be accepted at the prevailing rate.

# Tentative Agenda

(subject to change based on abstracts received)

## Tuesday, April 24, 2018

7:30 am - 8:00 am	Refreshments/Registration
8:00 am - 8:30 am	<b>Opening Remarks</b>
8:30 am - 10:00 am	<b>Session 1: Passive Components</b>
10:00 am - 10:30 am	Break
10:30 am - 12:00 noon	<b>Session 2: Discrete Semiconductors</b>
12:00 noon - 1:30 pm	Lunch (on own)
1:30 pm - 2:30 pm	<b>Workshop W.1 (TBD)</b>
2:30 pm - 3:00 pm	Break
3:00 pm - 4:00 pm	<b>Workshop W.2 (TBD)</b>
4:00 pm - 5:00 pm	<b>Workshop W.3 (TBD)</b>

## Wednesday, April 25, 2018

7:30 am - 8:00 am	Refreshments/Registration
8:00 am - 8:30 am	<b>Opening Remarks</b>
8:30 am - 10:00 am	<b>Session 3: Integrated Circuits</b>
10:00 am - 10:30 am	Break
10:30 am - 12:00 noon	<b>Session 4: Integrated Circuits</b>
12:00 noon - 1:30 pm	Lunch (on own)
1:30 pm - 3:00 pm	<b>Session 5: Integrated Circuits</b>
3:00 pm - 3:30 pm	Break
3:30 pm - 5:00 pm	<b>Session 6: Integrated Circuits</b>
5:00 pm - 6:00 pm	<b>Workshop W.4 (TBD)</b>

## Thursday, April 26, 2018

7:30 am - 8:00 am	Refreshments/Registration
8:00 am - 10:00 am	<b>Session 7: Integrated Circuits</b>
10:00 am - 10:30 am	Break
10:30 am - 11:30 am	<b>Workshop W.5 (TBD)</b>
11:30 am - 12:00 noon	<b>Workshop W.6 (TBD)</b>
12:00 noon - 12:30 pm	<b>Closing Remarks</b>

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## Key Workshop Dates

Preliminary Call for Presentations	January 15, 2018
Abstract Submittal Deadline	February 23, 2018
Presentation Selection & Final Agenda	March 4, 2018
Hotel Reservation Deadline **	April 2, 2018
Final Copy of Presentation Due	April 13, 2018
Workshop Pre-Registration Closes **	April 13, 2018
Workshop Begins	April 24, 2018

**\*\* Walk-ins welcome pending space availability**

**[Recording devices \(video and/or audio\) are prohibited at the workshop](#)**

**Lodging:** A block of rooms has been set aside for workshop participants at the Sheraton Detroit Novi Hotel in Novi, Michigan. Participants should make reservations directly with the hotel by clicking on the hotel reservation link shown on the previous page, or by phone at (248) 349-4000 or (800) 325-3535, no later than April 2, 2018. When making reservations, mention the 2018 AEC Reliability Workshop to get the group rate of \$159 per night. Failure to identify yourself as an AEC Workshop attendee will result in a higher room rate. **Room block rates will be accepted until the April 2 cut-off date. Reservation requests received after 5:00 pm (EST) on April 2 will be accepted at the prevailing rate.**

**Ground Transportation:** Car rental, limousine and taxi service are available at the Detroit Metropolitan Airport.

**Directions:** The Sheraton Detroit Novi Hotel is located within 25 miles of the Detroit Metropolitan Airport (see map below). **From Detroit Metropolitan Airport:** Take the service road to Interstate 94 West. Proceed on I-94 to Interstate 275 North. Continue on I-275 and exit onto 8 Mile Road. Take 8 Mile Road west to Haggerty Road. Turn right (North) and continue 0.25 miles to the hotel. **Detailed directions are available via the Sheraton Detroit Novi Hotel webpage:**  
(<http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=2019>).



## Sheraton Detroit Novi Hotel

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