

**Automotive Electronics Council**  
Component Technical Committee

# Twenty-Second Annual Automotive Electronics Reliability Workshop

## Call for Presentations and Registration Notice



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

organized by the AEC Technical Committee:



# Automotive Electronics Council

Component Technical Committee

## 2024 – Twenty-Second Annual Automotive Electronics Reliability Workshop

April 23-25, 2024  
Sheraton Detroit Novi Hotel  
Novi, MI

The 2024 Automotive Electronics Reliability Workshop will be held at Sheraton Detroit Novi Hotel from April 23<sup>rd</sup> to April 25<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 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 28nm and Below**

Influence of OEM Automotive Environment  
New Failure Analysis Methodologies

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

New Test/Screen Techniques  
Quality System/Methodology Trends  
Reliability Monitoring Usefulness  
Burn-In/Test Screen Elimination  
Application Specific Qualification  
Criteria for Using Non-Automotive Parts  
OEM System Reliability  
Mission Profile Standardization  
Extended Qualification Duration  
EOS/ESD/NTF Reduction

#### **New Package Concepts**

Flip Chip Packages  
Wafer Level Packages

#### **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  
Wide Band Gap Semiconductors

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

New/Suspect Failure Mechanisms  
Known Good Die (KGD)  
Maverick Lot/Wafer Methodology  
Design for Test/Analysis/FA/etc.  
Safe Launch

---

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

---

**Andy Mackie**

**Indium Corporation**

Office Phone: (315) 266-7007

Email: [amackie@indium.com](mailto:amackie@indium.com)

---

**Steven Sibrel**

**Harman International**

Office Phone: (248) 985-0061

Email: [steven.sibrel@harman.com](mailto:steven.sibrel@harman.com)

---

# Automotive Electronics Council

Component Technical Committee

## 2024 – Twenty-Second Annual Automotive Electronics Reliability Workshop

April 23 – 25, 2024  
Sheraton Detroit Novi Hotel  
Novi, MI

---

**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.

---

**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 Wednesday, March 22, 2024 to ensure that the block room rate of \$162 per night is available. Hotel room reservations requests received after 5:00 pm (EST) on Wednesday, March 22, 2024 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 2024 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 2024 AEC Reliability Workshop at the following link and entering the requested information:

[Book your Group Rate Room for the 2024 AEC Reliability Workshop](#)

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 \$162 per night. Room block rates will be accepted until the Wednesday, March 22 cut-off date. Reservation requests received after 5:00 pm (EST) on Wednesday, March 22 will be accepted at the prevailing rate.

# Tentative Agenda

(subject to change based on abstracts received)

## Tuesday, April 23, 2024

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 - 11:30 am	<b>Workshop W.1 – Q200 Review</b>
11:30 am - 1:00 pm	Lunch (on own)
1:00 pm - 2:30 pm	<b>Session 2: Discrete Semiconductors</b>
2:30 pm - 3:00 pm	Break
3:00 pm - 4:00 pm	<b>Workshop W.2 – Q101 Review</b>
4:00 pm - 5:00 pm	<b>Workshop W.3 – Q102 Review</b>

## Wednesday, April 24, 2024

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 – Q100 Review</b>

## Thursday, April 25, 2024

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>

**Automotive Electronics Council**  
Component Technical Committee

## Key Workshop Dates

Preliminary Call for Presentations	December 15, 2023
Abstract Submittal Deadline	February 14, 2024
Presentation Selection & Final Agenda	February 26, 2024
Hotel Reservation Deadline **	March 22, 2024
Final Copy of Presentation Due	April 9, 2024
Workshop Pre-Registration Closes **	April 9, 2024
Workshop Begins	April 23, 2024

**\*\* 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 March 22, 2024. When making reservations, mention the 2024 AEC Reliability Workshop to get the group rate of \$162 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 March 22 cut-off date. Reservation requests received after 5:00 pm (EST) on March 22 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

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