Automotive Electronics Council

Component Technical Committee

Third European **Automotive Electronics Reliability Workshop**

Call for Presentations



150 Rue Pierre Gilles de Gennes 31670 Labège, France diagora-congres.com

organized by the AEC Component Technical Committee in cooperation with ESREF 2023*:

* 34th European Symposium on Reliability of Electronic Devices, Failure Physics and Analysis





Automotive Electronics Council

Component Technical Committee

2023 – Third European Automotive Electronics Reliability Workshop

October 4-5, 2023 Diagora Congress Center Labège / Toulouse, France

The Third European Automotive Electronics Reliability Workshop will be held at Diagora Congress Center on October 4 and 5, 2023. In total 21 preceding workshops in the US and 2 in Europe, have been providing a forum and structured environment to discuss quality and reliability problems and philosophies related to all aspects of passive components, discrete semiconductor devices, integrated circuit devices, LEDs, wide band gap semiconductor devices, multi-chip modules in terms of design, test, analysis, fabrication, assembly, and field performance. Building upon this rich history, the environment will be a highly interactive technical presentation and panel discussion format promoting open and frank communications within the international automotive component supplier base.

This edition is organized in parallel with 34th ESREF international symposium that focuses on recent developments and future directions in quality and reliability of materials, devices and circuits for micro-, nano-, and optoelectronics. Consequently, there is a possibility to attend symposium sessions as well as visit the exhibition area during the 2 days' workshop.

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 passive components, discrete semiconductor devices, integrated circuit devices, LEDs, wide band gap semiconductor devices, and multi-chip modules are welcome. Presentations and late breaking contributions relevant to today's activities and tomorrow's ideas are also requested.

Q10x/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 28nm and below

Influence 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

New Package Concepts

Flip Chip Packages Wafer Level Packages

Emerging Technology

Autonomous Driving
Driver Assist/RF/Radar
MEMS
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

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

AEC Registration aec.registration@hella.com*

* for registration details (refer to workshop registration on next page)

Automotive Electronics Council

Component Technical Committee

2023 – Third European Automotive Electronics Reliability Workshop

October 4-5, 2023 Diagora Congress Center Labège / Toulouse, France

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, integrated circuit devices, LEDs, wide band gap semiconductor devices, and multi-chip modules. It would also be helpful to those who are responsible for establishing quality and reliability policies for automotive components.

<u>Registration Fee</u>: Registration fee is 200 Euros (and includes lunch for 2 days). The fee is to be paid by credit card during registration (see below).

This is <u>your</u> 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 filling out the registration form on the ESREF website and clearly indicate that you want to attend for the AEC workshop:

https://esref2023.sciencesconf.org/

Note (1): you will be requested to use or create an account on "SciencesConf.org", the platform used by ESREF organizing committee; then register by selecting "AEC-RW Workshop registration fee (€ 200 incl. tax)" Note (2): only if you also intend to attend the ESREF conference outside the 2-day workshop, register by selecting "ESREF Regular Registration fee (€ 850 incl. tax)" and send an email just with the subject "Registered for ESREF and AEC-RW" to: aec.registration@hella.com. AEC-RW fee is covered by the ESREF fee in that case.

Hotel Reservation

Hotels are available close to the Diagora Congress Center or down-town Toulouse (reachable by subway and bus, for those who come by car: there is a large free parking area next to the congress center). Hotel rooms have to be booked by yourself. Suggestions for hotels can be found on ESREF website:

https://esref2023.sciencesconf.org/

Looking forward to welcome you at AEC-RW again after more than 3 years:

Organizing Committee of AEC-RW 2023

René Rongen NXP Semiconductors rene.rongen@nxp.com Ulrich Abelein Infineon Technologies ulrich.abelein@infineon.com Ludger Kappius Forvia (Hella) ludger.kappius@forvia.com Wilhelm Binder
Microchip
wilhelm.binder@microchip.com

Zhongning Liang NXP Semiconductors zhongning.liang@nxp.com

Tentative Agenda (subject to change based on abstracts received)

Wednesday, October 4, 2023

8:00 am	-	8:30 am	Registration
8:30 am	-	9:00 am	Welcome
9:00 am	-	10:30 am	Technical Session 1
10:30 am	-	11:00 am	Break
11:00 am	-	11:45 am	Q100
11:45 am	-	12:30 noon	CDCQ
12:30 noon	-	1:30 pm	Lunch
1:30 pm	-	3:00 pm	Technical Session 2
3:00 pm	-	4:00 pm	Q006
4:00 pm	-	4:30 pm	Break
4:30 pm	-	5:15 pm	Q200
5:15 pm	-	5:45 pm	Q104
5:15 pm	-	5:30 pm	Wrap-up day 1

Thursday, October 5, 2023

8:15 am	-	8:30 am	Opening Day 2
8:30 am	-	9:00 am	Q004
9:00 am	-	10:30 am	Technical Session 1
10:30 am	-	11:00 am	Break
11:00 am	-	12:00 noon	Wide Band Gap
12:00 noon	-	12:30 noon	Q101
12:30 noon	-	1:30 pm	Lunch
1:30 pm	-	3:00 pm	Technical Session 3
3:00 pm	-	4:00 pm	Q007
4:00 pm	-	4:30 pm	Break
4:30 pm	-	5:15 pm	Q102-003
5:15 pm	-	5:30 pm	Wrap-up and closure

Automotive Electronics Council

Component Technical Committee

Key Workshop Dates

Preliminary Call for Presentations	May 16, 2023
Registration Start	May 16, 2023
Abstract Submittal Deadline	August 4, 2023
Presentation Selection & Final Agenda	August 14, 2023
Workshop Registration Closes	September 15, 2023
Final Copy of Presentation Due	September 29, 2023
Workshop Begins	October 4, 2023

Recording devices (video and/or audio) are prohibited at the workshop

Lodging: It is advised to make hotel room reservations in time.

<u>Ground Transportation</u>: Car rental, taxi service and public transportation are available at International Airport "Toulouse-Blagnac".

<u>Directions</u>: The Diagora Congress center is located within 25 kilometers of Toulouse International Airport and 15 kilometers of Toulouse down town (see map below).



Diagora Congress Center

150 Rue Pierre Gilles de Gennes 31670 Labège, France diagora-congres.com