

5th International

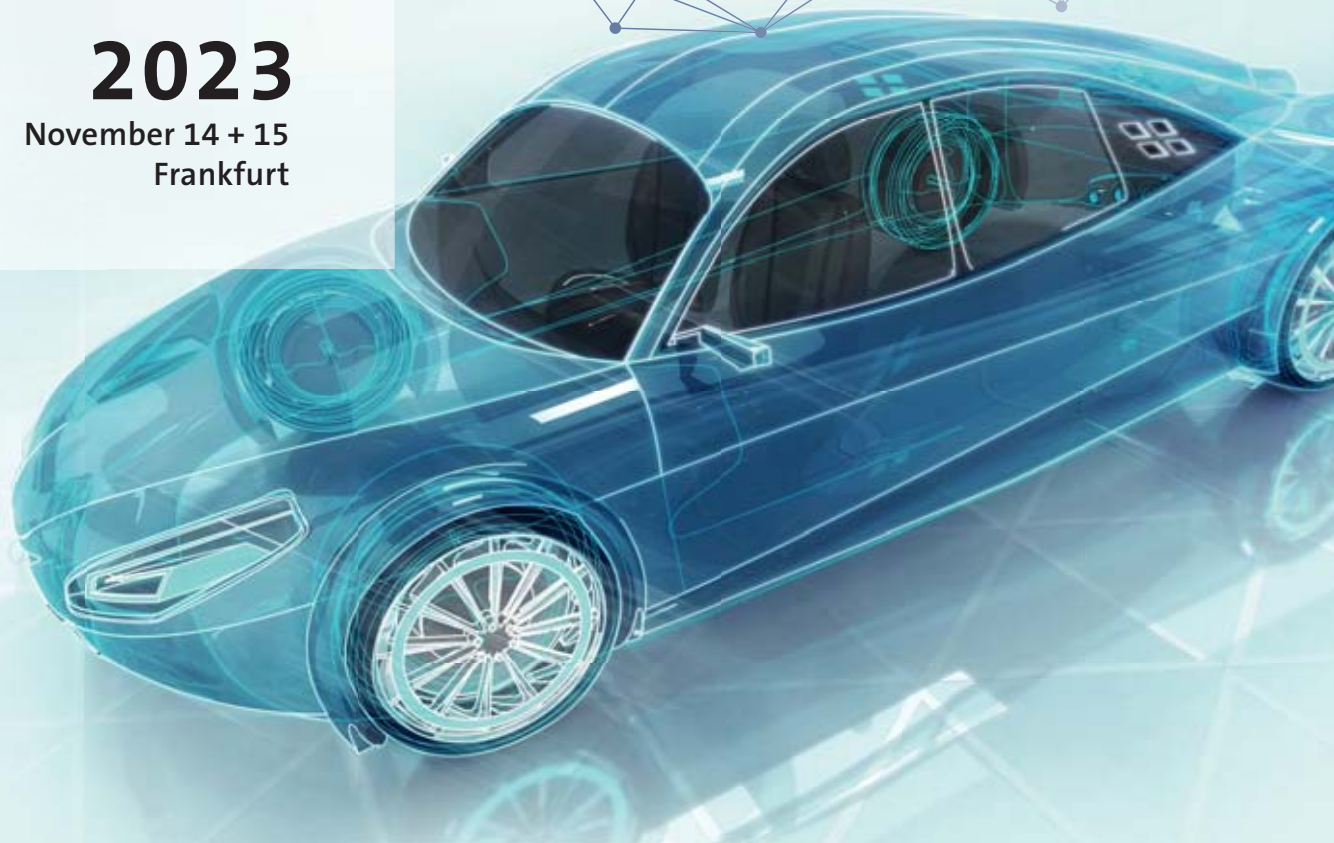
AUTOMOTIVE COMPUTING CONFERENCE

2023

November 14 + 15
Frankfurt



You can participate
live on site or remote!



Main Topics

- Central Computers in Software Defined Vehicles Architecture
- Latest Trends in Automotive High Performance Computing
- How does Central Compute Platforms change Technologies and Partnerships?
- Chiplet Standardization – Challenges for the Automotive Industry
- Balancing Intelligence between Zone Controllers, Central Compute and the Cloud
- Virtual Platforms and Zone Based Architecture in Automotive

Preview of Top Speakers



Katrin Matthess
Renault



Dr. Karsten Michels
Continental



Stefan Rinkenauer
ZF



Björn Schuh
AUDI



Ralph Schleifer
CARIAD



Marc Salsona-Palomar
AWS

A conference organized by:



Founding Partners:



1st Conference Day, Tuesday, November 14, 2023

09:00 Reception, Check-In & Networking

09:30 Welcome and Opening



Anne von Türckheim-Horch,
Project Manager,
SV Veranstaltungen GmbH



Martin Schleicher,
Head of Software Strategy,
Continental AG

09:40 **Key-Note: Software Defined Vehicle – Transformation through Software**

Katrin Matthes,
CTO Renault Software & Systems,
Director Upstream & Technology, Renault Group

Central/Zonal E/E Architectures and SDV

10:15 **The Role of Central Computers in Vehicle EE Architecture**

- Adoption of central computers
- Zone control as supporting architecture
- The view of central compute at Chinese OEMs

Richard Dixon, Associate Director,
Senior Principal Analyst, S&P Global Mobility

10:40 **Key-Note: How does Central Compute Platforms changes Technologies and Partnerships?**

- Change of HW and SW architectures and impacts to partner models
- Controlling complexity through virtualization and accelerate partnerships and time to market

Björn Schuh, Head of ADAS / AD components, AUDI AG

11:15 **Coffee break and networking**11:45 **Overview of Ongoing Third-Party funded Projects at National and EU Level for Future Vehicle Architectures and Promising Development Processes.**

- Current projects
- Development processes against the background of generative AI

Gereon Hinz, Managing Director, STTech GmbH

12:10 **Open-source, Collaboration, ASPICE, Safety - How Development for the SDV actually works**

Dr. Moritz Neukirchner,
Head of Architecture, Elektrobit Automotive GmbH

12:35 **Q&A with speakers**12:45 **Joint Lunch and Networking**14:00 **Challenges of Qualifications of SDV Architectures in context of Timecritical Effect Chains**

- Trend of SDV architecture
- V & V of timecritical functions like ADAS considering weaknesses and strengths of test tools and sensors

Stefan Rinkenauer, Head of Global Account Management for System & SW Applications, ZF Group

14:35 **Cloud-Driven Advancements in Development for Automotive Embedded Systems**

- Cloud computing to enable seamless collaboration among development teams
- Cloud-based tools and services
- Scalable and Secure Infrastructure

Justin Moon, Senior Director, OEM Direct Engineering, BlackBerry QNX

15:00 **Q&A with speakers**

Virtual Prototyping / Simulation

15:10 **Opening of the Second Session**

Bernhard Rill,
Director Automotive Partnerships GTM EMEA,
Arm Ltd

15:15 **Virtual Platforms in Automotive - What is the right Abstraction Level?**

- There is no single solution
- Interoperability is key

Ralph Schleifer,
Head of HW/SW CoDesign & Virtual Prototypes, CARIAD SE

15:40 **Q&A with speakers**15:50 **Coffee break and networking**16:20 **Analysis of Dynamic Event Chains as a Key Enabler for getting Latencies and Load under Control**

Dr. Ralf Münzenberger,
CEO & Co-Founder, INCHRON AG

16:45 **Seamless ADAS/AD Testing**

- A partnership approach

Bernhard Müller-Bessler,
Senior Director Autonomous Simulation, Hexagon

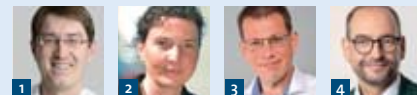
17:10 **Virtualizing Electronic Control Unit (ECUs) in the Cloud**

- Building blocks of vECU architecture
- Cross-organization benefits

Marc Salsona-Palomar,
General Manager, Automotive Technology, AWS

17:35 **Panel: How do we find Common Ground in E/E Architecture?**

Panelists:



- 1 Simon Fürst**, Cooperation Manager Automated Driving, BMW Group
- 2 Katrin Matthes**, CTO Renault Software & Systems, Director Upstream & Technology, Renault Group
- 3 Björn Schuh**, Head of ADAS/AD components, AUDI AG
- 4 Dr. Karsten Michels**, Head of Product Line High-Performance Computer, Continental Automotive Technologies GmbH

18:15 **Conclusion by the chairman**End of the 1st conference day18:30 **Evening Event with Networking Opportunities**



2nd Conference Day, Wednesday, November 15, 2023

08:25 Welcome and Opening of the 2nd conference day



Christian Malter,
Senior Director Business Development,
Synopsys

Hardware abstraction for software-defined vehicles

08:30 **Key-Note: Changing World of an Automotive Tier1**



- From electronic control units to high-performance computer/s
- From hardware to software

Dr. Karsten Michels, Head of Product Line High-Performance Computer, Continental Automotive Technologies GmbH

09:05 **Use of a Safe and Secure Software Platform to bridge the Conflicting Goals of the OEM and Silicon Vendors**



- Integration of specific or proprietary hardware accelerators
- Practical example of how a safe and secure software platform bridges the OEM/silicon vendors goals
- How to reduce ECUs without compromising system safety



Arnaud Van Den Bossche, Business Development Director, EMEA, Green Hills Software GmbH and
Nikola Velinov, Senior Business Development Engineer, Green Hills Software GmbH



09:30 **Mastering the Complexity of High-Performance Computers**



- Model-based approach for designing high-performance computers as key components of modern vehicle architectures.
- Defining base and application software architecture, communication design and network topology of high-performance computers



Alexander Haliulin, Product Management Engineer, Vector Informatik GmbH and
Marcelino Varas, Product Area Manager, Vector Informatik GmbH

09:55 Q&A with speakers

10:05 Coffee break and networking

Semiconductor Technologies

10:35 **A Single Chip Implementation of Autonomous Driving**



- Implementation of an autonomous driving task in a single-chip, a low-power solution



Pier Paolo,
Director of Automotive Marketing, Ambarella Inc.

11:00 **Automotive Chiplets, A Pivotal Moment**



- Why automotive chiplets and why now
- Value of chiplets
- How to make the righthand turn



Bart Placklé,
Vice President Automotive, imec

11:25 **The Software Defined Car Requires Flexible Hardware**



- Addressing architectural concerns of automotive compute platforms
- How to realise high integrity, flexible, scalable and secure compute platforms
- Topics covered include FuSa, emerging APIs, digital twins, chiplet technology



Jake Kochnowicz,
Vice President of Product Management, Imagination Technologies

11:50 **High Performance Compute Solutions for the next decade of Automotive Designs**



- What computing solutions do we expect to see in the decade ahead
- How can the ecosystem address the road ahead to enable these solutions



Vasanth Nanjundes Waran,
Senior Director Product and Strategy,
Renesas Corp.

12:15 Q&A with speakers

12:25 Joint Lunch and Networking

13:40 **Opening of the Final Session**



Dirk Diekhoff,
Senior Director Head of Partner Management,
Elektrobit

13:45 Slot reserved for a start-up pitch
N.N.

14:10 **Software Defined Processors for SDV?**



- Software optimized abstraction of microcontroller platforms

Robert Leibinger,
Solution Marketing Director, NXP Semiconductors

14:35 **Automotive Compute, A Pivotal Moment**



- Insights into the breadth of Arm IP
- How does the Software Defined Vehicle benefit from Arm IP?
- Solving big problems with Arm - deep dive into Functional Safety



Dennis Laudick,
VP Automotive GTM, Arm Ltd

15:00 **SDV or „Can Software Destroy the Vehicle?“**



- New and changing use cases of Flash Memory in Automotive Systems
- OEM and Flash Memory expert view on observed behavior, identified challenges
- Suggestions how to mitigate identified risk



Bernd Niedermeier,
Head of Automotive Business
Development, Tuxera Inc
Michael Huonker,
Architect Computing Platforms,
Mercedes-Benz AG

15:25 Q&A with speakers

15:35 **Closing words**

Dirk Diekhoff

15:40 **End of the conference**

Please register online
www.automotive-computing-conference.com/registration



Members of the Advisory Board



Dirk Diekhoff
Senior Director
Head of Partner
Management,
Elektrobit



Alexander Lenk
Global Automotive
Solutions Architecture
Leader,
Amazon Web Services



Christian Malter
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Business Development,
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Bernhard Rill
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EMEA, Arm



Martin Schleicher
Head of Software
Strategy,
Continental



Björn Schuh
Head of ADAS/AD
components,
AUDI

5th International

AUTOMOTIVE COMPUTING CONFERENCE



Registration information

Tuesday November 14 and Wednesday November 15, 2023

Event location

Hilton Frankfurt Airport
THE SQUARE, Am Flughafen,
60600 Frankfurt/Main - Airport (Deutschland)
Phone: +49 (0)69 2601 2000
frankfurtairport.events@hilton.com
€ 229 breakfast included

Please book directly at the hotel with the keyword „SV Events“
Please note that the room contingent is only available until
October 2, 2023

Alternative Accommodation

Motel One Frankfurt-Airport

Colmarer Straße 2; D-60528 Frankfurt am Main
Phone: +49 (69) 660 53 60
frankfurt-airport@motel-one.com
€ 94,90 breakfast included
Please book directly at the hotel with the reservation number
„509.725.166“ and the keyword „SV Events“
Please note that the room contingent is only available until
October 2, 2023



We will offer a shuttle service from the
Motel One Niederrad to Hilton Airport Hotel

Delegate Fee + VAT

- Early bird (until September 15, 2023) € 1,695
- Regular fee € 1,795
- Free participation in the evening event on November 14, 2023
- Virtual participation € 790
- Ordering of digital conference documentation for (available from November 16, 2023) € 310

Services

The regular fee includes the following services (on-site):

- Participation in the conference
- Conference documentation
- Refreshments during the breaks
- Lunch on both conference days
- Get-together on November 14, 2023
- Opportunity to visit the accompanying trade exhibitor



Profit from the early bird till
September 15 and save € 100!

Sponsors



Exhibitors



Your contacts



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