Main Topics 2024:

- Harness Trends in the Automotive Industry
- Wiring Harness Production Automation
- Glass Fiber Optics
- Digital Wiring Harness Development
- OEM Views
- Virtual Tools / Digitalization
- Safety & Sustainability

Company presentations by:

Astotec ++ AUDI ++ APTIV ++ BMW ++
Caresoft ++ CARIAD ++ Corning ++ DRÄXLMAIER ++
Föhrenbach ++ Fujikura ++ GG Group ++Hydro ++
Kromberg & Schubert ++ Mercedes-Benz ++
Molex ++ Robert Bosch ++ SEI Automotive Europe ++
TE Connectivity ++ TMT CoPilots ++ tesa ++
Vector Informatik ++ Volkswagen

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A conference organized by:

SV Veranstaltungen
1st Day: Tuesday, May 7, 2024

08:50 Welcome and Kick-Off by Chairman, Georg Sterler

09:00 Industry Transformation – Adapting to Win
- Legacy companies and working models under pressure
- Assessment of culture, technology, customer and business model
- Combining hardware, software and AI platform to win
  Joachim Langenwalter, Senior Industry Advisor, Founder, TMT CoPilots

09:30 Change in Electrical Systems: Time to Switch on 48V?
- Why is this new discussion strongly recommended?
- What requirements and prerequisites have changed?
- How does future energy architecture may look like?
  Ole Mende, Director for Electrical Distribution Systems, AUDI AG
  Bodo Specht, Head of Vehicle Electrical System Development, Volkswagen AG

10:00 OEM View on Wiring Harness Production Automation
- Advantages of a production automation
- Standards as an enabler
- Common industry wide focus
  Rainer König, Senior Manager Wiring Harness, Mercedes-Benz AG
  Mario Spoljarec, General Manager Wiring Harness, BWM AG

10:30 Coffee break & Networking

11:00 Flexible Circuits in the Automotive and Battery Industries
- Flexible circuit compositions in electric vehicles
- Advantages + Comparison with common wiring harnesses used in a vehicle
  Robert Wuyts, General Manager, Föhrenbach Application Tooling NV

11:30 Advanced Multigigabit Automotive Ethernet Link
  Michael Linder, Senior Manager Commercial Technology, Automotive Glass Solutions, Corning
  Gordon Mueller-Schloemka, Senior Product Development Engineer for Optical Applications, Corning

12:00 Harness Trends in the Automotive Industry
- Harness design trends supporting electrical architectures for EU-, China- and US-OEM
- Harness packaging and vehicle integration techniques
  Matt Schroeder, Chief Engineer, Caresoft Global Technologies, Inc.

12:30 Joint Lunch sponsored by Schunk & Networking in the Trade Exhibition

14:00 Ready for the Digital, Automated Future of the Wiring Harness
- Automation in the wiring harness and new possibilities
- Creating the value of digital transformation
  Ingo Busche, Head of Development/Design Engineering Wiring Harness Concept & Package, AUDI AG
  Andreas Weber, CEO, semantic PDM

14:30 Systems Approach to 48V Wiring Harness Optimization
- New features
- Transition to 48V systems will help drive optimization of WH
- 48V architectures can provide benefits as long as design guidelines are followed to mitigate risk
  Kurt Seifert, Innovation Manager, APTIV

15:00 The Next Generation of Connectors in the Wiring System – Further Optimization of Packing Density
  Martin Bleicher, Director Engineering, TE Connectivity Germany GmbH

15:30 The Contribution of Tape for Automizing Wire Harnessing Production
- Specific characteristics of tape in production
- Contribution of tape towards automation
- Opportunities of automatic tape wrapping
  Christian Oswald, International Product Manager, tesa SE
  David Tuffe, Head of Customer Solution Center, tesa SE

16:00 Coffee break & Networking

16:30 Model-based Schematic Generation in the Digital Wiring Harness Development
- Motivation and intended added value
- Strategic and operative objectives
- Solution concept, status and outlook
  Rainer König, Senior Manager Wiring Harness, Mercedes-Benz AG
  Georg Zimmermann, Director Product Line Process Tools, Vector Informatik GmbH

17:00 CAN XL: With a View to Optimizing the Wiring System – Implementation and Protection
- CAN XL is real-time capable, performant and easy to implement in the wiring harness, as is familiar with CAN
- Practical example: Application for chassis/drive functions
  Marko Moch, Senior System Development Engineer, CARIAD SE

17:30 Green W/H – Analysis and Potentials for CO2 Reduction on Examples of different W/H
- Development of an LCA tool based on the IMDS and secondary data
- CO2 emission analysis of typical W/Hs and potentials for reduction
- Availability of recycling material and actual recycling technologies for W/H
  Stefan Trippler, Coordinator – Environment & Sustainability, SEI Automotive Europe GmbH

18:00 End of Conference Day 1 – Conclusions by Chairman, Georg Sterler

19:00 Get-together at the Reithaus
2nd Day: Wednesday, May 8, 2024

08:25 Welcome by Conference Chairman, Georg Sterler

08:30 Optimized Zonal Power Grid Architecture with eFuses
- Power grid architectures
- Advantages with eFuses
- Challenges with eFuses
  Ingo Weber, Head of Power Grid 12V, 48V, BMW AG

09:00 Software Engineering Methods for Future Wiring Harness Development
- GitHub as a model of efficient and collaborative software development
- VOBES 2025: Cloud-based wiring system development inspired by software methods
  Tobias Carsten Müller, Head of VOBES, Libraries and System Schematics, Volkswagen AG

09:30 Enabling Future Automotive Wire Harnesses – Digital Connector Models and Virtual Design Evaluation
- Impact of zonal in-vehicle architectures to connectors
- Simulation of thermo-electric characteristics of power contacts for harness design and optimization
- Signal integrity simulation of data connections for virtual design evaluation
  Michael Ludwig, Principal Engineer, TE Connectivity Germany GmbH
  Bert Bergner, Fellow R&D Engineer, TE Connectivity Germany GmbH

10:00 Coffee break & Networking

10:30 Lean HV Connector: Improved Performance by close Collaboration along the Supply Chain
- Innovative design concept for a HV connector
- Simultaneous engineering product / process
- Performance benefits: packaging, derating, system cost
  Thomas Kaiser, Director Engineering Connectors, Robert Bosch GmbH
  Till Beck, General Manager Advanced Engineering, Kromberg & Schubert

11:00 Solid Extruded Aluminium Cables for Electrical Vehicle Applications
- Al alloys and tempers for extruded HV cables
- Connections and surface treatment for extruded Al
- Sustainability – CO2 footprint and recycling of Al
  Jonas Kristoffer Sundén, Research Engineer – Alloy Development, Hydro

11:30 Charging Parks: Safety-critical Significance of the Wire Inductance for Pyro-fuses
- Short circuits in a charging station must be handled by the charging vehicle’s on-board protection system
- High inductive energies are a major challenge for used pyro-fuses
- Rapid overcurrent diagnostics and pyrotechnic triggering are crucial for safe allround protection
  Dietmar Haba, Lead Product Engineer, Astrotec Automotive Safety GmbH

12:00 Joint Lunch sponsored by Schunk & Networking in the Trade Exhibition

13:00 Innovative Solutions for High-Speed Databable Design to Develop Automotive Standards
- Latest digitalization activities e.g. modelling (2D/3D, digital twin)
- Innovative cable design based on new developments
- Suitable datacables for any application leading to new standards
  Tobias Kupka, Manager Wires Development, GG Group
  Stefan Gianordoli, Head of Global Wires Development, GG Group

13:30 Optical Data Transmission Systems for EDS
- Technology: from data center to automotive data transmission
- Advantages and properties of GOF in vehicles
- Trend - or revolution?
  Kazuhsa Itoi, General Manager, Technical Marketing Department, R&D Strategy Center, Fujikura Ltd.

14:00 Selectivity and Scalability in the Context of Safe 12V Supply in Vehicle E/E-System
- Selectivity in the context of eFusing
- Impact of 12V Li-Ion Battery
- Scalability vs. selectivity
  Michael Wortberg, Product Line Manager Smart Energy Supply, DRÄXLMAIER Group

14:30 Effect of Wire Quality on Crimp Performance
- Quantification of wire surface quality
- Effect of wire surface quality on crimp reliability
- Role of terminal and wire suppliers
  James Lowrie, Project Leader & Crimp Subject Matter Expert, Molex, LLC

15:00 Concluding remarks by Chairman Georg Sterler & End of the 12th International Conference
12th International Conference
BORDNETZE IM AUTOMOBIL

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12th International Conference
BORDNETZE IM AUTOMOBIL

Registration information
May 7 + 8, 2024

Event location
Forum am Schlosspark Ludwigsburg
Stuttgarter Straße 33
71638 Ludwigsburg
Phone: +49 7141 910 3910
www.forum.ludwigsburg.de

Accommodation
You can book these hotels with the keyword
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Please note that there is only a limited number of
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The participation fee until March 31 for the
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From April 1, the participation fee will
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Services included in the participation fee
• Participation in the conference
• Conference documentation
• Refreshments in the breaks
• Lunch on both conference days
• Evening event on the first day of the event

Registration
We request your registration via Internet at
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