

AUTOMOTIVE ETHERNET CONGRESS

February 18 - 20, 2025
Science Congress
Center Munich

Powered by

Elektronik
automotive

CARIAD
A VOLKSWAGEN GROUP COMPANY

WHERE THE
AUTOMOTIVE
ETHERNET
COMMUNITY
MEETS

DAY 2

Wednesday | February 19, 2025

09:00 - 09:15 Welcome & Introduction by Frank Bähren, Dr. Olaf Krieger, Cariad

Keynote Session

09:15 - 09:45 E/E architecture challenges and solutions from the perspective of a global OEM's software company Marcus Wärmer, CARIAD SE

09:45 - 10:15 Data Aggregation and Edge Node Control using ASA-ML and RCP for Zonal Architecture Patrice Ancel, BMW Group; Sojan James, Acsia Technologies GmbH

Session 1: Asymmetric Ethernet

10:15 - 10:45 Software Define IVN for SerDes and Ethernet in Zonal E/E Architecture Conrad Zerna, Aviva Links Inc.; Dr. Hoai Hoang Bengtsson, Volvo Car Corporation

10:45 - 11:15 Revolutionizing Automotive Sensor Streaming: IEEE 1722b Video Encapsulation for Real-world Automotive Challenges Hari Parmar, Marvell Semiconductor

11:15 - 11:45 COFFEE BREAK – Let's connect at the Exhibition

Session 2: Network/Architecture

11:45 - 12:15 Adding QoS to SOME/IP with Autosar Classic Max Turner, Ethernovia

12:15 - 12:45 Software-Defined Vehicle architectures with remote controlled hardware Karthik Sivaramakrishnan, NXP Semiconductors; Dr. Ashutosh Tomar, Jaguar Land Rover

12:45 - 13:15 Automotive Ethernet Switching rebooted Dr. Lars Völker, Iago Alvarez, Technica Engineering GmbH; Stefany Chourakorn, BMW AG

Workshop by Corning

11:45 - 13:15

Glass Optical Fiber Connectivity for Multigig In-Vehicle Networking
Dr. Suresh Donthu, Georges Kechichian, Corning Inc.; Oscar Ciordia, KD

13:15 - 14:30 LUNCH BREAK – Let's meet at the Exhibition

14:30 - 15:00 Ethernet-based lighting-architecture - edge rendering for high-resolution light functions Bernhard Kreipe, Volkswagen AG; Thomas Hase, TES Electronic Solutions GmbH

15:00 - 15:30 Resource allocation method for systems with heterogeneous delay intolerant traffic types Dr. Sami Akin, CARIAD SE

15:30 - 16:00 HPC Network Stack – Learnings from utilizing data center technology to increase throughput Mark Harsch, Vector Informatik GmbH

16:00 - 16:30 COFFEE BREAK – Let's chat at the Exhibition

Session 3: 10Base-T1s

16:30 - 17:00 Democratizing 10BASE-T1S: System-Costs & System-Timings Karl Budweiser, BMW AG; Jonas Edele, BMW Group

17:00 - 17:30 Broadband Ethernet Deterministic Multidrop backbone for Automotive Zonal architectures Dr. Ashutosh Tomar, Sohan Pookolayil Varghese, Jaguar Land Rover

17:30 - 18:00 10BASE-T1S Ethernet: New technology, new challenges Abdelkader Hessainia, Renault Group; John Simon, Intrepid Control Systems

18:00 - 20:00 Networking Evening

Platinum Partners



Gold Partners



WIFI AEC2025
PW ethernet

SCAN FOR
PROGRAM



DAY 3

Thursday | February 20, 2025

08:30 - 09:00	Let's start the day with a coffee at the Exhibition		
	Session 4: RCP/OPEN TC18		Advanced Workshop by TSN Systems
09:00 - 09:30	United we stand(ardize)	Gumersindo Veloso Cauce, BMW AG	Transforming Automotive Validation: Practical Applications of TSN enabled Systems for Zone Architectures and Software-Defined Vehicles
09:30 - 10:00	Remote Control – Enabling the Software Defined Vehicle	Martin Miller, Microchip Technology	
10:00 - 10:30	Centralised Sensorless Motor Control with 10BASE-T1S E2B	Dr. Anthony Sonnenberg, Marelli; Fionn Hurley, Analog Devices	10:00 - 11:00 Part 1: Redefine Your Toolchain Daniel Bayer, Robby Gurdan, TSN Systems
10:30 - 11:00	Design Considerations for Remote Control Protocols	Adriaan Niess, Robert Bosch GmbH	
11:00 - 11:30	COFFEE BREAK – Let's meet at the Exhibition		
	Session 5: Safety/Security		
11:30 - 12:00	Functional safety in zonal architectures – is Ethernet diverse enough?	Steffen Lorenz, NXP Semiconductors Germany GmbH	11:30 - 12:15 Part 2: Rethink Validation Daniel Bayer, Robby Gurdan, TSN Systems
12:00 - 12:15	Results of MACsec-Plugfest	Ionel Ghita, Keysight Technologies	
	Session 6: Time Sync/TSN		
12:15 - 12:45	Challenges in nanosecond-precise ETH time synchronization	Manuel Kalmbach, Vector Informatik GmbH	12:30 - 13:15 Part 3: Redefine Validation Daniel Bayer, Robby Gurdan, TSN Systems
12:45 - 13:15	802.1AS time sync over half-duplex: Testing P802.1ASds and P802.3da	Alon Regev, Keysight Technologies	
13:15 - 14:30	LUNCH BREAK – Let's chat at the Exhibition		
	Session 7: Phy/Cable		
14:30 - 15:00	Multidrop Power over Ethernet (MPoE)	Michael Paul, Analog Devices	
15:00 - 15:30	Ethernet cables for agricultural vehicles, trucks and other machinery	Marijan Rogic, Gebauer und Griller GmbH	
15:30 - 16:00	Real-time Physical Layer Analysis of the PLCA Protocol	Jithu Abraham, Rohde & Schwarz; Takahashi Miki, GRL	
16:00 - 16:30	Exploring the Differences and Challenges of MultiGBase-T1 Physical Layer Testing	Jason Sisk, UNH-IOL; Jae-yong Chang, Keysight Technologies; Yash Pathak, Bitifeye Digital Test Solutions GmbH	

Silver Partners



Exhibitors



as at Feb 14, 2025