

FROM ADAS TO AUTOMATED DRIVING

EVENT GUIDE

October 9-11, 2018 | Detroit, MI



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FROM ADAS TO AUTOMATED DRIVING

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Should a catastrophic event occur, attendees should follow the safety and security instructions issued by the facility at the time of the event. This includes listening for instructions provided through the public address system and following posted evacuation routes if required.

In the event of an emergency or a major disruption to the schedule of events at the event, attendees and exhibitors may call this number to receive further information about the resumption of this event. Updates will also be provided via the SAE website at www.sae.org.

EVENT INFORMATION

ORGANIZING COMMITTEE

Carla Bailo, Center for Automotive Research

Michael Carpenter, General Motors

Dennis Craggs, Dennis L Craggs LLC

Scott Craig, ON Semiconductor

Joseph Frikken, Autoliv Nissan Braking Systems

Ismail Hamieh, National Research Council Canada

Fred Huntzicker, General Motors

Joseph Kianthra, Active Safety Engineering LLC

Kai Konrad, Infineon Technologies AG

Ibro Muharemovic, Continental Corporation

Mahendra Muli, dSPACE Inc.

Robert Neff, Intrass Corporation

Donald Parker, Exponent

Taufiq Rahman, National Research Council Canada

Rini Sherony, Toyota Motor Corporation

Oliver Spiess, ZF

Registration

360 Foyer

Monday, October 8
Noon-6 p.m.

Tuesday, October 9
7:30 a.m.-3 p.m.

Wednesday, October 10
7:30 a.m.-3 p.m.

Thursday, October 11
8 a.m.-Noon

Exhibit Hours

360 Foyer

Tuesday, October 9
8 a.m.-6:30 p.m.

Wednesday, October 10
8 a.m.-6 p.m.

Thursday, October 11
8 a.m.-1:30 p.m.

Networking Breaks

Tuesday, October 9
10:30-11 a.m.
3:30-4 p.m.

Wednesday, October 10
9:30-10:00 a.m.
2:30-3 p.m.

Thursday, October 11
10:30-11 a.m.
3:30-4 p.m.

Networking

Lunches

360 Foyer

Tuesday, October 9
Noon-1 p.m.

Wednesday, October 10
11:30 a.m.-12:30 p.m.

Thursday, October 11
12:30-1:30 p.m.

Networking

Reception

360 Foyer

Tuesday, October 9
5:30-6:30 p.m.

Wifi Informaton

SSID: CoboFree

A password is not required

Sponsored by





Keynote Speakers

Tuesday, October 9
9-10 a.m.

Kirk Steudle

Secretary, Michigan Dept. of Transportation

Connected Automation: Vision, Planning and Initiatives at MDOT



Wednesday, October 10
8-8:30 a.m.

John Capp

Director Global Safety Technology Strategy
General Motors



Thursday, October 11
9-9:30 a.m.

Carla Bailo

President and CEO
Center for Automotive Research
2018 SAE Vice President, Automotive

The Future of Mobility - From ADAS to Automated and beyond



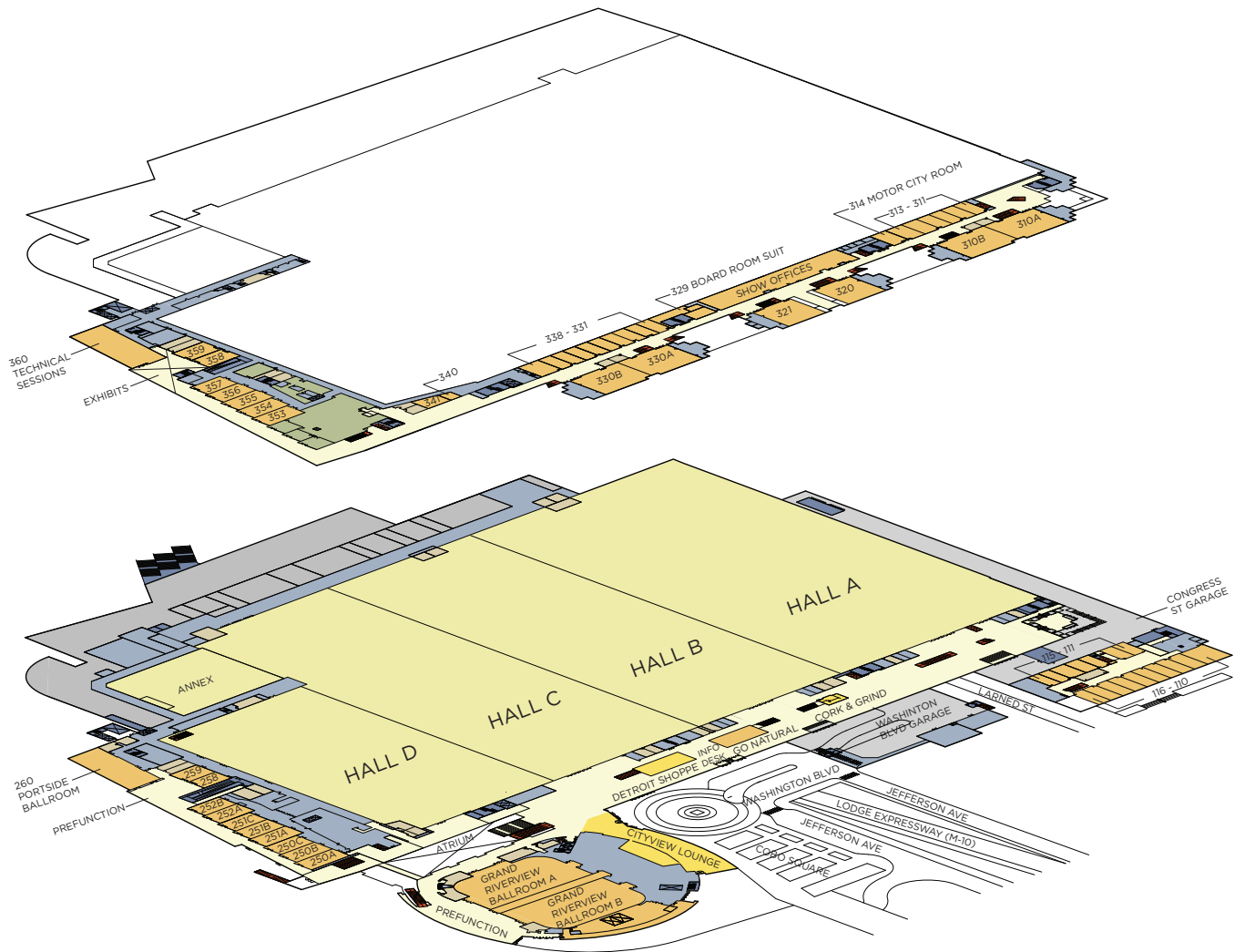
1:30 p.m.-2 p.m.

David Zuby

Executive Vice President and Chief Research Officer
Insurance Institute for Highway Safety

Consumer Information Testing of Advanced Driver Assistance Systems

COBO CENTER FLOOR PLAN



EVENT-AT-A-GLANCE

October 9

TUESDAY

9-10 a.m. Welcome and Opening Keynote
360

10-10:30 a.m. Market Analysis and Outlook
360

10:30-11 a.m. Networking Break 360 Foyer

11 a.m.-Noon Deployment Strategies
360

Noon-1 p.m. Networking Lunch 360 Foyer

1-3:30 p.m. Safety
360

3:30-4 p.m. Networking Break 360 Foyer

4-5:30 p.m. Technical Breakouts
360, 355, 354

5:30-6:30 p.m. Networking Reception 360 Foyer

October 10

WEDNESDAY

8-8:30 a.m. Keynote
360

8:30-9:30 a.m. Testing and Data Collection
360

9:30-10 a.m. Networking Break 360 Foyer

10-11:30 a.m. AI & Machine Learning for Autonomous Systems
360

11:30 a.m.-12:30 p.m. Networking Lunch 360 Foyer

12:30-2:30 p.m. Sensor Fusion
360

2:30-3 p.m. Networking Break 360 Foyer

3-4 p.m. Maintenance
360

4-5:30 p.m.

Technical Breakouts
360, 355, 354

October 11

THURSDAY

9-9:30 a.m. Keynote
360

9:30-10:30 a.m. Car Architecture
360

10:30-11 a.m. Networking Break 360 Foyer

11 a.m.-12:30 p.m. Panel Discussion
360

12:30-1:30 p.m. Networking Lunch 360 Foyer

1:30-2 p.m. Keynote
360

2-3:30 p.m. Human Experience

3:30-4 p.m. Networking Break 360 Foyer

4-5:05 p.m. Insurance/Legal and Closing Remarks
360

AGENDA

Tuesday, October 9

360

Time	Title
9 a.m.	Welcome and Introductions <i>Tim A. Cavanaugh, SAE International</i>
9:05 a.m.	Keynote presentation: Connected Automation: Vision, Planning and Initiatives at MDOT <i>Kirk Steudle, Secretary, Michigan Dept. of Transportation</i>
10 a.m.	ADAS to Autonomy, a Means to an End? <i>Roger Lanctot, Strategy Analytics Inc.</i>
10:30 a.m. - Networking Break	
11 a.m.	Vehicle Communications (V2X) <i>Robert L. Neff, Intrass</i>
11:30 a.m.	Current simulation shortcomings and how revolutionary solutions will make AVs a reality <i>Jeffery Blackburn, Metamoto</i>
Noon - Networking Lunch	



Access speaker bios
and presentation
abstracts

AGENDA

Tuesday, October 9

360

Time	Title
1 p.m.	Hardware-in-the-Loop (HIL) Implementation and Validation of SAE Level 2 Autonomous Vehicle with Subsystem Fault Tolerant Fallback Performance for Takeover Scenarios <i>Adit Joshi, Ford Motor Company</i>
1:30 p.m.	The Two Pathways to Safe Mobility <i>Joseph Kaniathra, retired, NHTSA</i>
2 p.m.	Observations on ADAS and Automated Driving in the Wild <i>Bryan Reimer, Massachusetts Institute of Technology</i>
2:30 p.m.	Integrated Safety <i>Frank Laakmann, ZF Friedrichshafen AG</i>
3 p.m.	Challenges and Opportunities in Crashworthiness Evaluation of Autonomous Vehicles <i>Priya Prasad, Prasad Engg LLC</i>
3:30 p.m. - Networking Break	
4 p.m.	Technical Breakout Sessions (Rooms: 360, 354, and 355) <i>Topics: Market Analysis, Deployment Strategies, and Safety</i>
5:30 p.m. - Networking Receptions	

AGENDA *continued*

Wednesday, October 10

360

Time	Title
8 a.m.	Keynote Presentation <i>John P. Capp, General Motors</i>
8:30 a.m.	Evolving V&V Testing to Support an Automated Future <i>Ryan Harrington, Exponent Inc.</i>
9 a.m.	Testing & Data Collection for ADS Safety <i>David LeBlanc, UMTRI</i>
9:30 a.m. - Networking Break	
10 a.m.	AI-enabled Smart Sensors <i>Barry Behnken, AEye Inc.</i>
10:30 a.m.	AI and Self Driving Cars <i>Luke Harvey, NVIDIA</i>
11 a.m.	Managing System Complexity with the Rise of AI for Autonomous Systems <i>Maarten Koning, Wind River Systems</i>
11:30 a.m. - Networking Lunch	



Access speaker bios
and presentation
abstracts

AGENDA

Wednesday, October 10

360

Time	Title
12:30 p.m.	The new generation of 3D Solid State LiDAR for Autonomous Driving <i>Mario Brumm, IBEO Automobile Systems</i>
1 p.m.	Knocking Down the Barriers to Autonomous Driving: Enabling Technologies that will Define the Adoption Curve <i>Chris Jacobs, Analog Devices Inc.</i>
1:30 p.m.	Technical and Market Evaluation of Sensor Fusion Concepts <i>Modar Horani, P3 North America Inc.</i>
2 p.m.	Virtual Testing of Autonomous Vehicles with Simulation <i>Sandeep Sovani, ANSYS Inc.</i>
2:30 p.m. - Networking Break	
3 p.m.	Predictive Analytics for Mobile Mining Equipment <i>Brian Schissler-Boichot, Caterpillar Inc.</i>
3:30 p.m.	Automotive Prognostics Emerges <i>Steven W. Holland, General Motors</i>
4 p.m.	Technical Breakout Sessions (Rooms: 360, 354, and 355) <i>Topics: Testing & Data Collection, AI & Machine Learning/Sensor Fusion, Maintenance</i>

Time	Title
9 a.m.	<p>Keynote Presentation: The Future of Mobility - From ADAS to Automated and beyond <i>Carla Bailo, Center for Automotive Research</i></p>
9:30 a.m.	<p>Power Distribution in Automated Driving Vehicles <i>Stefan Schumi, Infineon Technologies AG</i></p>
10 a.m.	<p>Pathway to Decreasing ADAS & AV Sensor Complexity <i>Brunno Moretti, General Motors</i></p>
10:30 a.m. - Networking Break	
11 a.m.	<p>Panel Discussion: System Integration <i>Onboard vehicle ADAS and Safety Systems need to be defined, designed, produced and tested so that the integration of their functions operate in a manner expected and acceptable to their human passengers and other vehicles on the roadway. This panel will discuss how we can get there.</i></p> <p><i>Moderator: Carla Bailo, Center for Automotive Research</i></p> <p><i>Panelists:</i> <i>Jace Allen, dSPACE Inc.</i> <i>TBD, ON Semiconductor</i> <i>Aaron M. Jefferson, ZF - TRW</i> <i>Akash Maheshwari, Continental Automotive</i> <i>Rini Sherony, Toyota Motor Corp.</i> <i>Christopher Thibodeau, Ushr Inc.</i></p>
12:30 p.m. - Networking Lunch	



Access speaker bios
and presentation
abstracts

AGENDA

Thursday, October 11

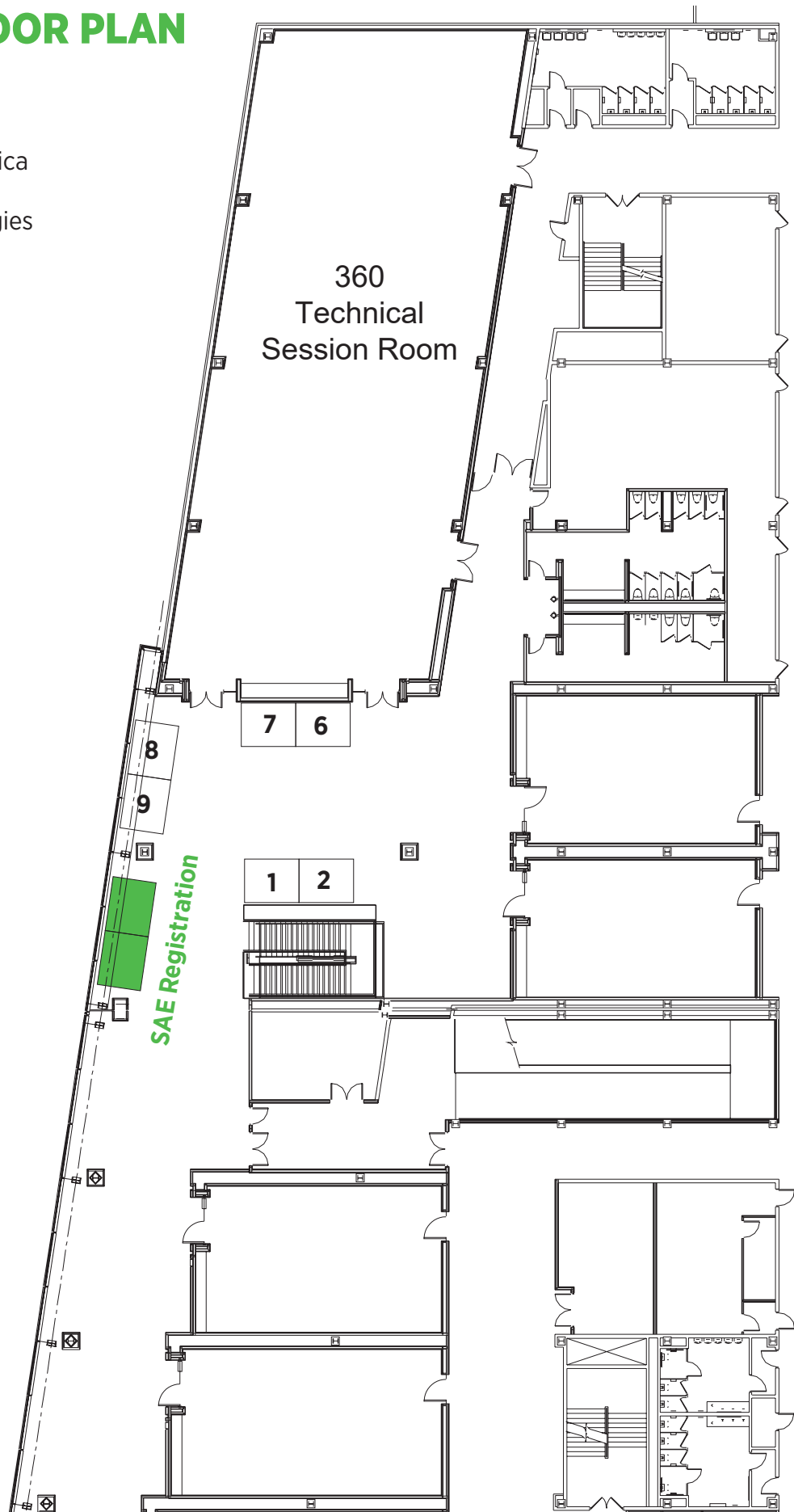
360

Time	Title
1:30 p.m.	Keynote Presentation: Consumer Information Testing of Advanced Driver Assistance Syst <i>David S. Zuby, Insurance Institute for Highway Safety</i>
2 p.m.	Human Factors of Automated Driving Systems: How well do we understand these systems? <i>Anuj Pradhan, Univ. of Michigan</i>
2:30 p.m.	Consumers' Perception, Understanding and Training with Advanced Driver Assistance Systems <i>David M. Cades, Exponent Failure Analysis</i>
3 p.m.	Computer Vision and AI – Aftermarket Applications in Commercial Fleets: Case study of risk reduction with ADAS and other in-cab notifications <i>Dale Willis, Netradyne</i>
3:30 p.m. - Networking Break	
4 p.m.	Legal Challenges for Automated and Autonomous Driving <i>Dagmar Thimm, ZF Global Electronics</i>
4:30 p.m.	Design for Legal Risk Mitigation: How Accidents, Disengagements and Regulatory Uncertainty Impact the Development of Autonomous Technology <i>Jennifer Dukarski, Butzel Long</i>
5 p.m.	Event Wrap-Up <i>Tim A. Cavanaugh, SAE International</i>

EXHIBIT FLOOR PLAN

EXHIBITOR LIST

1. Vector North America
2. Cadence
6. Infineon Technologies
7. ETAS
8. FTT Tech
9. dSpace Inc.



EXHIBITOR PROFILE

Exhibitor Directory text is published as submitted by exhibiting companies.

CADENCE Booth 2

2655 Seely Ave
San Jose, CA 95134
United States
cadence.com

Cadence software, hardware and semiconductor IP are used by customers to deliver products to market faster. The company's System Design Enablement strategy helps customers develop differentiated products—from chips to boards to systems—in mobile, consumer, cloud datacenter, automotive, aerospace, IoT, industrial and other market segments. Learn more at our website.

DSPACE INC Booth 9

50131 Pontiac Trl
Wixom, MI 48393
United States
dspaceinc.com

Get your autonomous driving functions safely on the road with the dSPACE tool chain. Whether you are developing software functions, modeling vehicles, environment sensors and traffic scenarios, or running virtual test drives, dSPACE offers an integrated tool set perfectly matched for ADAS and automated driving function development.

ETAS, INC. Booth 7

3021 Miller Rd
Ann Arbor, MI 48103
United States
etas.com

ETAS provides a comprehensive product portfolio of tools designed to increase quality and efficiency in embedded systems development, with solutions for software modeling/integration, hardware-in-the-loop simulation, virtual and rapid-prototyping, measurement/calibration and functional safety and security. Our tools are widely deployed in automotive, off-highway, and adjacent segments of the embedded industry.

FT TECHNO OF AMERICA LLC Booth 8

GOLD SPONSOR
1750 Smith Rd
Fowlerville, MI 48836
United States
ftt-a.com

FTTA is a 950 acre proving ground in Fowlerville, MI offering test track rental and independent testing services. Specializing in NHTSA NCAP, EURO NCAP – AEB/VRU; IIHS AEB/Headlamp; benchmark performance; field testing and Vehicle dynamics. New ADAS track coming in November 2018: Urban/Rural intersections with V2X, round-a-bout, multi-purpose pad, 3D GVT and VRU.

INFINEON TECHNOLOGIES NORTH AMERICA CORP Booth 6

CONFERENCE SUPPORTER
640 N McCarthy Blvd
Milpitas, CA 95035
United States
infineon.com

Infineon designs, develops, manufactures and markets a broad range of semiconductors and system solutions. The focus of its activities is on automotive electronics, industrial electronics, RF applications, mobile devices and hardware-based security. Combining entrepreneurial success with responsible action, at Infineon we make the world easier, safer and greener.

VECTOR NORTH AMERICA Booth 1

39500 Orchard Hill Pl Ste 400
Novi, MI 48375
United States
vector.com

Vector offers engineers a complete solution for the various tasks involved in developing ADAS systems. Our products; CANape and the Driver Assistance option, vADASdeveloper tool, BASELABS create and our VX1000 hardware and BRICK PC allow you to fully develop and test your ADAS application.

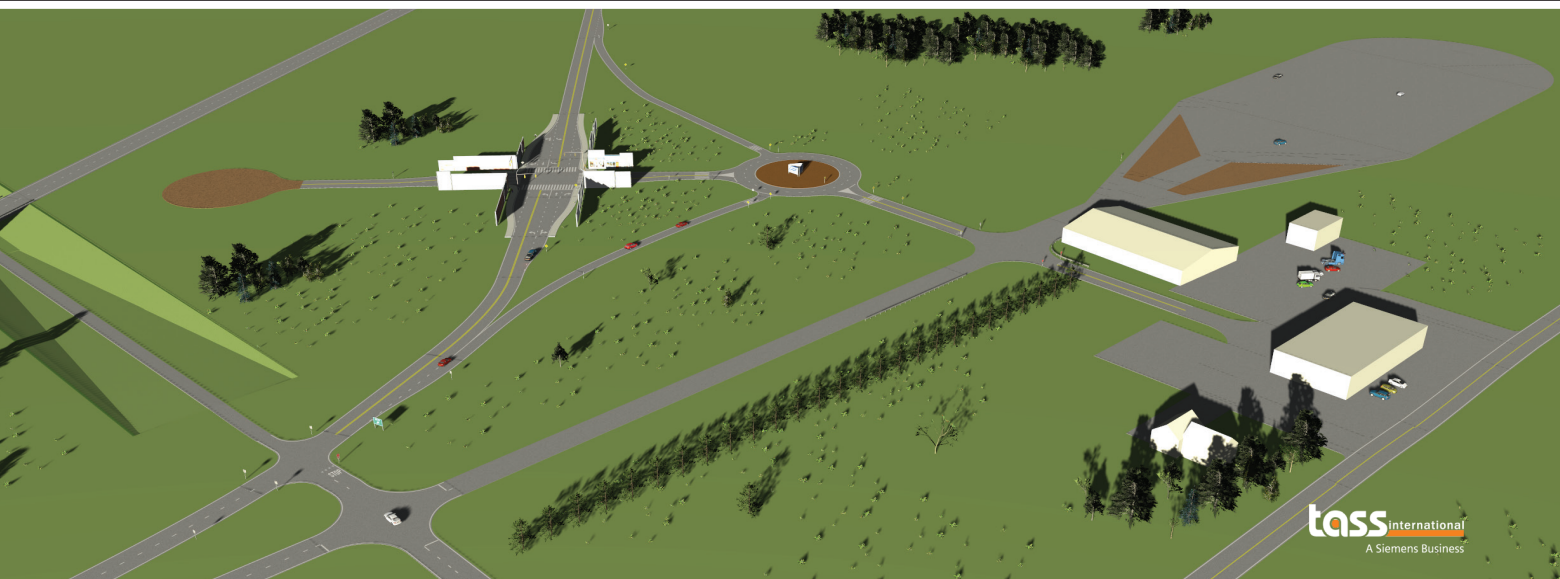
AD INDEX

Company	Booth#	Page	Web Address
FT Techno of America	8	back cover	ftt-a.com



Opening October 2018

ADAS / Autonomous Track



Fowlerville Proving Ground is an Independent, Global Leader in Active Safety Testing and Driver Assistance Technology

Our New ADAS/Autonomous Track Features:

- 5 lane intersection with configurable traffic signals and V2X capability
- 3.5 acre multi-purpose dynamic pad with 1,500' straightaway approach for high speed scenarios
- 100' diameter round-a-bout, highway entry/exits, rural intersection, tunnel/overpass
- 3D GVT Vehicle Platform/Target and Pedestrian VRU platform test equipment and support

Advanced Driver Assistance Systems Activities:

- Development, certification and benchmark testing
- Standardized test procedure execution that includes:
 - NHTSA NCAP – FCW, LDW, DBS, CIB, LKS
 - EURO NCAP – AEB Vehicle, VRU Pedestrian, and LSS
 - IIHS headlight evaluation and frontal crash prevention tests
 - ISO, SAE and OEM-specific procedures
- NHTSA and EURO NCAP approved static and dynamic vehicle and pedestrian targets
- Test equipment with data and video acquisition, RTK GPS range positioning and driver robotics



Fowlerville Proving Ground, located in Southeast Michigan, USA, is a world-class proving ground facility, with the equipment, professional engineering staff and operations management to exceed your expectations. For more information or to have us develop a custom package for your precise needs, contact us today!

