IEEE-SA Ethernet & IP at Automotive Technology Day 2022

Panel Session
Theme: Ethernet as an Enabler for Software Defined Vehicles

Osami Wada, Kyoto University
Yoshihiro Ito, Nagoya Institute of Technology
Moderators and Panelists

■ Moderators
  Prof. Osami Wada (Kyoto Univ.)
  Prof. Yoshihiro Ito (Nagoya Institute of Technology)

■ Panelists & Temporary Presentation order
  1. Christoph Gollob (BMW)
  2. Illia Safiulin (Elektrobit)
  3. Christopher Mash (Ethernovia)
  4. Amir Bar-Niv (Marvell)
  5. Naoshi Serizawa (YAZAKI)
  6. Martin Gubow (Keysight)
Panel Theme and Motivation

Theme: Ethernet as an Enabler for Software-Defined Vehicles

Objective/Motivation:
1. Thinking ahead to raise awareness in the Automotive industry for the need to timely evaluate in-vehicle Ethernet connectivity aspects (HW & SW) that serve as enablers for SDV

2. To address current open areas requiring input/contributions to/from the Automotive industry to expedite the aforementioned aspects
Panel Format (Time schedule)

- **Welcome (Moderator)**
- **Introduction & Presentation (Panelists)**
- **Q&A & Discussion (Panelists & Moderators)**
- **Open Q&A & Discussion for Audience (Moderator)**

5 min. each

60 min.
<table>
<thead>
<tr>
<th>Questions/Discussion Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Why is there a need to this discussion on SDVs now?</td>
</tr>
<tr>
<td>2  What is the state-of-the-art of SDV activities in the Automotive industry?</td>
</tr>
<tr>
<td>3  What makes a software defined vehicle?</td>
</tr>
<tr>
<td>What new functionalities are enabled with the software defined vehicle?</td>
</tr>
<tr>
<td>4  Which feature(s) of Ethernet-based communication are required to enable the SDVs?</td>
</tr>
<tr>
<td>5  Is a different in-vehicle (E/E) network architecture required to support SDVs?</td>
</tr>
<tr>
<td>6  How data rate is important for communication of the SDV?</td>
</tr>
<tr>
<td>7  What role do optical communication technologies play?</td>
</tr>
<tr>
<td>Is the Automotive Optical Ecosystem All Set for Next Generation (NG) In-Vehicle Ethernet Connectivity?</td>
</tr>
<tr>
<td>8  What still needs to be done to ensure a timely roll-out of SDV in the industry?</td>
</tr>
</tbody>
</table>

Panelists will answer these questions based on their expertise.
Thanks!