

“Automotive Industry Trends and Their Impact on the Future Vehicle”

Kamal Khouri,

NXP Semiconductors

We experience 1.3 million global road fatalities a year. Policies are being put in place to curb greenhouse gases; the US, for example, is mandating 163 grams/mile and 54.5mpg by 2025 per vehicle. On average, humans spend 1 hour per day in a vehicle. How are these three statistics related? They represent the megatrends in the automotive industry that are transforming the vehicle as we know it today.

Driver replacement, electrification and connectivity are driving and requiring new and more creative innovations in automotive semiconductor technology. In this talk, we discuss these megatrends and the increase in application complexity, compute requirements and data sources and volume they require. We also touch upon the semiconductor needs and requirements to meet the demands of the future vehicle. We hope to motivate the audience to explore and invent new solutions that can support these elements of automotive growth and innovation.