# THE HANSEN REPORT ON AUTOMOTIVE ELECTRONICS

# **Editorial Notes**

Dear Reader,

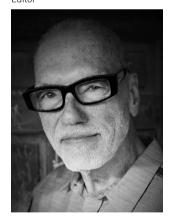
Not long after the United States passed its monumental climate bill that will, in the coming years, strongly bend the future toward electric vehicles, I was dining alfresco at a restaurant adjacent to a busy city street. It was nice to be outside despite the noise and noxious fumes coming from the slow-moving traffic near my table. I smiled thinking about how the scene will be different in the not very distant future as electric vehicles displace cars with combustion engines. The air will be clean, and I will comfortably be heard at my table without having to shout.

But wait. Each of those electric vehicles slowly driving by my table of the future will be equipped with a pedestrian warning system designed to emit noise. Electric vehicles operate in near silence when driven at speeds below 18.5 mph and can be a danger to pedestrians without the mandated acoustic vehicle alerting system. NHTSA has established a minimum sound standard for hybrids and EVs that governs the decibel level, pitch and morphology of the warning signals, but has given carmakers considerable latitude to uniquely brand their alerts, a different sound for each model vehicle.

Here are some questions for EV developers. Have you considered what fleets of EVs will do to a city's soundscape as each vehicle emits its individual branded alert that's loud enough to be heard above the city's ambient noise? Will it be an improvement compared with today? Or will it turn the city's soundscape into a discordant hellscape?

Sincerely Yours,

Paul Hansen Editor



#### THE HANSEN REPORT

- 25 Editorial Notes
- 26 Three-Net Physical Architecture Can Lead to Mass Produced Wire Harnesses
- 27 Safety Certified Linux Operating System for Autos Coming Soon
- 30 People + Companies
- 32 Products

#### IN THE SPOTLIGHT

36 Electrification by 2030 – The OEMs' Plans

## IMPRINT

### THE HANSEN REPORT

on Automotive Electronics 10/2022, Volume 35 / ISSN (Online) 2192-91143 Springer Vieweg I Springer Fachmedien Wiesbaden GmbH

Fachmedien Wiesbaden GmbH P. O. Box 15 46 · 65173 Wiesbaden · Germany Abraham-Lincoln-Straße 46 · 65189 Wiesbaden · Germany

www.springerprofessional.de/en/ atzelectronics-worldwide/5013758 Amtsgericht Wiesbaden, HRB 9754 USt-IdNr. DE81148419

Managing Directors: Stefanie Burgmaier, Andreas Funk, Joachim Krieger Director Production: Ulrike Drechsler

Head of Media Sales: Volker Hesedenz Editor in Chief: Dr. Alexander Heintzel

Editors: Paul Hansen, Robert Unseld Head of Sales and Marketing: Jens Fischer

**Production I Layout:** Kerstin Brüderlin, Heiko Köllner

Offprints: Martin Leopold, Medien-Kontor Leopold, Kreuzstr. 1, 53489 Sinzig · phone +49 2642/90 75 96 leopold@medien-kontor.de

Sales Management Automotive: Rouwen Bastian,

phone +49 611 7878-399 · fax +49 611 7878-78399 rouwen.bastian@springernature.com

Display Ad Manager: Carmen Calvo-Zeller, phone +49 611 7878-616 fax +49 611 7878-78616 carmen.calvo-zeller@springernature.com

ATZ electronics worldwide 1012022 25