

# THE HANSEN REPORT ON AUTOMOTIVE ELECTRONICS

## Editorial Notes

Dear Reader,

I have had the opinion for a while that the ultimate electric vehicle platform will feature four in-wheel traction motors. I spoke recently with Luka Ambrozic, the Chief Marketing Officer for Elaphe Propulsion Technologies. His company developed the in-wheel motor system used on Lordstown Motors' Endurance, the world's first production vehicle to employ the technology. He said: "There is nothing that beats the controllability and the bandwidth of our in-wheel motor solution. It is as close as it comes to a fully software-defined platform."

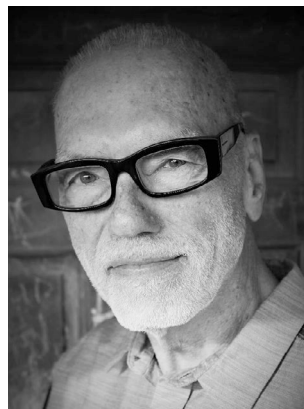
Another huge benefit of in-wheel motor technology is the packaging flexibility gained by moving the motors off the chassis to the wheels. There are no axles, no differentials, no gearboxes and no half shafts. The vehicle can be configured to whatever customer segment the carmaker is targeting. And further, "if you build a car from the ground up with in-wheel drives, you can have market-leading efficiency," said Ambrozic. In partnership with the solar vehicle developer Lightyear, Elaphe built a vehicle with in-wheel motors that achieved 40 % more range compared with anything on the market with the same battery size.

Elaphe is working with multiple electric vehicle developers and is close to booking another mass-market order, this one with a well-known carmaker. I'll have much more about in-wheel motors and Elaphe in the next Hansen Report.

Sincerely Yours,



Paul Hansen  
Editor



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