



## Power Electronics in Electric Vehicles: It's not only about cost

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### Abstract:

There are a number of power electronics components within an electrical vehicle performing various applications such as main traction inverter, DCDC converter, On board charger etc. Over time the automotive industry has an expectation to reduce the costs for these components, but this is a unidimensional thinking and needs to be challenged. There can be much more value generated when one starts to utilize the power electronics for providing additional functions or when one starts to integrate multiple functions into a single working unit. The transition to wide band gap semiconductors also is an enabler here that can provide highly efficient solutions across multiple applications for the electric vehicle.

### Curriculum Vitae:



Kunal Goray is responsible for the Power Electronics Hardware (HW) Engineering Centre within the HW Electronics Segment in AVL SFR. He and his team are creating customized power electronics hardware solutions for the e-mobility sector focusing on traction inverters, DCDC converters and On/Off-Board chargers. He has a strong track record over 20 years creating electrical hardware technologies for transportation, renewable energy, and healthcare sectors. He has further a deep technical expertise in reliability of electrical systems with 10+ issued patents and is Six Sigma Blackbelt certified including lean and TRIZ techniques.

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