



Tutorial Title:

Practical Application of Silicon Carbide(SiC) in the E-Mobility Ecosystem

Organizer:

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Abstract:

This tutorial will cover the impact that Wolfspeed's Silicon Carbide (SiC) can make on electric vehicles and associated power ecosystem. A multitude of applications from solar panels for charging infrastructure, off-board chargers, on-board chargers, DC-DC converters and drivetrain can benefit from the application of SiC. Along every step of the ecosystem, Silicon Carbide saves cost and space while bringing higher efficiency as compared to Silicon. This session will review system and board level application of SiC in the E-Mobility ecosystem followed by hands on design sessions that will be conducted using online simulators as well as physical hardware demonstrators.

Bio:

Anuj Narain is Director, Power Platforms at Wolfspeed. At Wolfspeed, his team is responsible for accelerating adoption of Silicon Carbide (SiC) into power conversion and motor drive applications through design support, reference designs and ecosystem development. Prior to Wolfspeed, Anuj spent 15 years at Texas Instruments. He holds an MS in Chemical Engineering from the University of Southern California (USC), an MS in Electrical Engineering from the University of Texas at Dallas (UTD) and is a certified Functional Safety Engineer from TUV SUD

Adam Anders, manager of Power Platforms at Wolfspeed, leads a team that supports customer adoption of SiC through a variety of tools including SpeedFit, LTSpice models, evaluation boards, and application notes. Additionally, his team works with other complimentary industry leading partners to support the complete SiC ecosystem needs including gate drivers, capacitors, magnetics, and test and measurement equipment. He holds an MS in Electrical Engineering from the University of Wisconsin- Madison (WEMPEC) and worked in a variety of power electronics design roles for 10 years prior to joining Wolfspeed.