

# ICT Architecture as an Engine for the Electromobility of the Future

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**Abstract:** Electromobility is a promising approach to address the challenges of demographic change, urbanization and in particular sustainability. As shown by the rapid raise of new market players, electromobility has the potential to change markets dramatically in a disruptive way. But electric drives for the drive train are only the catalyst for the real change: most significantly, the architecture and role of in-vehicle information technology will change for the vehicle of the future. We outline existing research activities towards radically new architectures and the expected benefits in terms of functionality, such as "Plug&Play" and new functions up to fully automated driving.

## BRIEF BIOGRAPHY

Cornel Klein is Software Architect and Project Manager for the Technology & Innovation Project "eCar" at Siemens Corporate Technologies in Munich. He is project manager and coordinator for RACE (Robust and reliable Automotive Computing Environment for future eCars) which aims at the development of an advanced automotive E/E architecture. In various positions at Siemens, he has been responsible for software technologies and SW based innovations. Starting his career 1998 at Siemens Public Networks, he has gained an extensive knowledge in communication networks, embedded systems, IT platforms and SW architecture as well as in application domains like eCars and smart environments. He holds a master and a PhD degree in Computer Science from the Technical University of Munich.