

The challenge of EM simulation for the design of automotive radar frontends

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Abstract

RADAR has proved its reliability and performance in ADAS applications like adaptive cruise control, and it is expected that its use will be extended. This presentation analyses the trends for automotive radar systems, including high-definition imaging and new sensor architectures. The focus will be on RF performance and its impacts on the frontend design. Design bottlenecks like the interface between the MMIC and the radar board, electromagnetic interference or the effect of the casing and the fascia will be discussed.