Putting Real Production Software in the Loop, Methodologies enabling SW co-development between OEMs and Tier 1s

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Abstract With software gaining importance as the main contributor both to functionality and differentiation in the automotive market place and its relevance to quality, safety and customer satisfaction, its place in the development process and the methods available to ensure short development cycles and a simultaneously high level of quality are coming under strain. Both model-based and abstracted code – not specific to the final production target, are in use in the earlier phases but these often do not provide code which is testable in a meaningful way for the final product. In this paper we will explore methodologies which allow target independent code to be produced and managed as a product within the development process – establishing clear linkage between development code and the final product and accountability and traceability throughout the process. We will leverage the increasing implementation of Autosar and proliferation of model based sw development techniques in the process.

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