Domain Specific Model Driven Design for Automotive Electronic Control Units

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Abstract

To enhance efficiency and reliability in the design of distributed electronic control units with hard real-time constraints new methods and computer aided tools are required, especially to support early system design phases. Domain specific tools are required to support design space exploration in the concept phase of electric/electronic systems. Design and verification based on heterogeneous models (closed loop control systems, reactive systems and UML based software intensive systems) and using a CASE-tool integration platform will allow for a seemless design flow.