

AUTOSAR DSL

Simulator demonstration

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Agenda

- Quick background and motivation
- Demonstration of ABS component written in Haskell DSL
- (Component source code)
- Questions

AUTOSAR EDSL

Embedded DSL in Haskell w. simulator.

Some key points:

- Implementation and hardware independent:
Simulate components in the abstract, individually or entire system
- Property-based testing using QuickCheck:
Identify failing cases, and shrink them
- Code brevity, good overview, short build times
(shorter testing cycle)

Anti-lock Braking System demo

Anti-lock Braking System modelled in AUTOSAR
(~300-400 lines Haskell code) connected to a simple
model of a physical car (MATLAB/Simulink).

Questions?