

Airbag ECU Test Bench



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Airbag ECU Test Bench

Contents

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Common Test Bench Concepts 1

automatic test execution

- all physical test can be done
- must be operated by specialists
- expensive
- only few test-towers available



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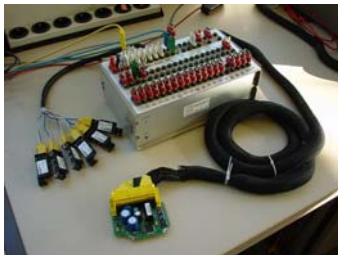
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Common Test Bench Concepts 2

- manual manipulation of ECU-Pins
- manual simulation of crashes
- great amount of time required
- result is difficult to reproduce



manual test execution

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BEG Test Bench Concept



- Less expensive than previous test bench for automatic testing
- all advantages of automatic testing
- reproducible results
- more functionality as manual test bench

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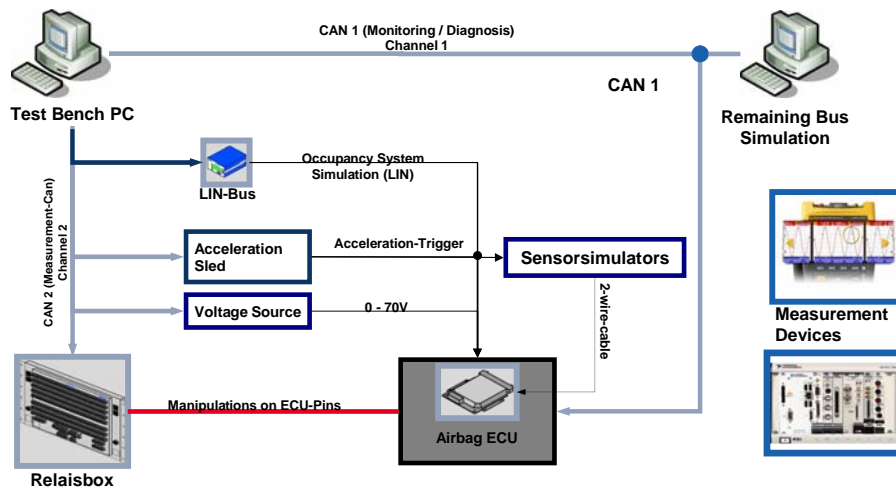
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BEG Test Bench Concept



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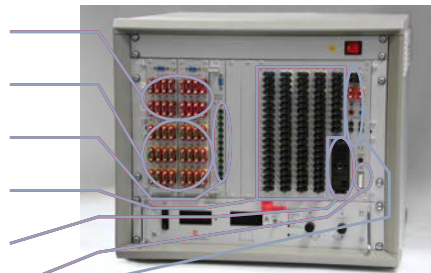
BEG Test Bench Concept

Features:

- automatic and manual testing (as isolating adapter)
- simulation of simple crashes (with acceleration sled)
- adjustable voltage source for the ECU
- resistance and short circuit cards for simulation and manipulation
- automated subroutines or batches can be implemented
- extensible Hard- and Software

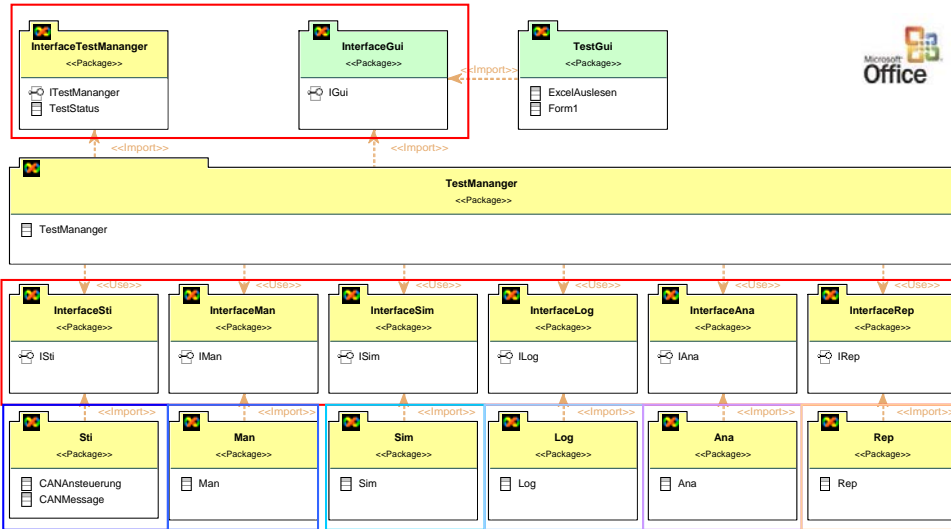
Hardware implementation: Manipulationbox

- switches
- fire loops
- resistance decade
- connectors ECU-Pins
- zero force plug for ECU
- sensor connector (PAS)
- ECU warning lamps, short circuit cards, voltage connector, etc.



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BEG Software Concept



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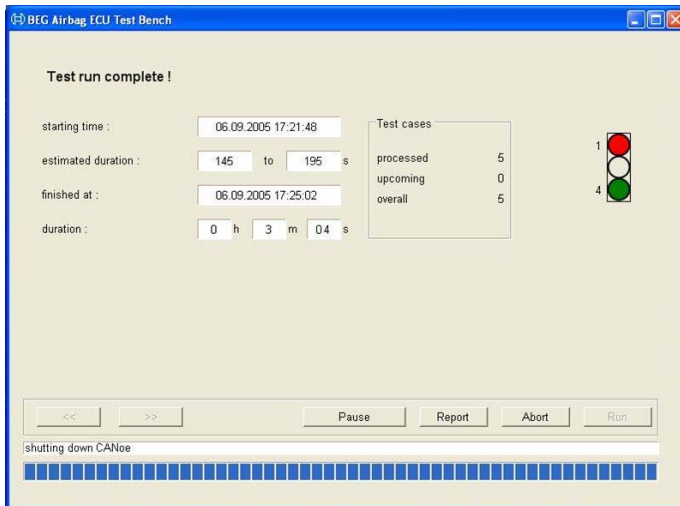
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User Interface



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Benefits

- Easy to use and easy to adapt
- future proof Software technology
- More tests are possible
- Every advantage of an automation
- Ready for many upcoming requirements



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