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# **COVER STORY**

# **Linking Virtual and Real Testing**



With the development of the Vehicle in the Loop, a test and simulation environment for driver assistance systems is presented by Audi, combining the advantages of a real test vehicle with the safety and reproducibility of driving simulators. Virtual outside traffic, road demarcations, or other simulated objects are visualized to the driver realistically.

# **COVER STORY**

#### **Electronics Integration:**

Vehicle in the Loop – An Innovative Approach to Linking Virtual and Real Testing

Thomas Bock, Markus Maurer, Franciscus van Meel and Thomas Müller

# **DEVELOPMENT**

#### **Assistant Systems:**

- 10 Darpa Urban Challenge 2007 -Safe and Autonomous Driving Roland Schedel
- Autonomous Driving Object Tracking and Path Planning for the Team-Lux Robot Vehicle **Holger Salow**

#### **Transmission:**

Mercedes Powershift - A New Generation of 20 **Automated Gearboxes** 

> Stefan Gast, Albrecht Köllermeyer, Bernhard Schropp, Carsten Schupp and Jürgen Vollmar

### **Lightweight Design:**

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# **Vibration and Damping:**

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