

Table of Contents

Introduction.....1

Papers 13

Adaptation of a “Virtual Prototype” for Systems and Verification Engineering Development (2008-21-0043) Chandrashekar, M. S., Manjunath, B. C., Lumpkin, E. R., and Winters, F. J. 13

Verification and Validation According to IEC 61508: A Workflow to Facilitate the Development of High-Integrity Applications (2009-01-2929) Conrad, M., Friedman, J., and Sandmann, G..... 23

Hardware/Software Design and Development Process (2006-01-0170) Lumpkin, E., and Gabrick, M. 29

Using VHDL-AMS as a Unifying Technology for HW/SW Co-verification of Embedded Mechatronic Systems (2004-01-0718) Egel, T. R., and Elias, N. J. 41

Virtual Prototypes as Part of the Design Flow of Highly Complex ECUs (2005-01-1342) Krech, J., Mayer, A., and Raab, G. 51

To Test the Need and the Need to Test—Testing the Smart Controller Network for the Chassis of Tomorrow (2008-21-0041) Deiss, H., Krimmel, H., and Maschmann, O. 59

A Systems Engineering Approach to Verification of Distributed Body Control Applications Development (2010-01-2328) Yang, J., Bauman, J., and Beydoun, A. 67

Highly Scalable and Cost Effective Hardware/Software Architecture for Car Entertainment and/or Infotainment Systems (2004-21-0071) Troemel Jr., H. A., and Burk, M. 79

Analysis of Interfaces and Interface Management of Automobile Systems (2008-01-0279) Fritzsche, R. 91

Advancements in Hardware-in-the-Loop Technology in Support of Complex Integration Testing of Embedded System Software (2011-01-0443) Himmler, A., Waeltermann, P., and Khoee-Fard, M. 99

About the Editor113