Model Reduction For Circuit Simulation

DOWNLOAD HERE

From the contents: Part I Invited Papers. 1 The need for novel model order reduction techniques in the electronics industry; W.H.A. Schilders. 1.1 Introduction. 1.2 Mathematical problems in the electronics industry. 1.3 Passivity and realizability. 1.4 Structure preservation. 1.5 Reduction of MIMO networks. 1.6 MOR for delay equations. 1.7 Parameterized and nonlinear MOR. 1.8 Summary: present and future needs of the electronics industry. References. - 2 The SPRIM Algorithm for Structure-Preserving Order Reduction of General RCL Circuits; Roland W. Freund. 2.1 Introduction. 2.2 RCL Circuit Equations. 2.3 Projection-Based Order Reduction. 2.4 The SPRIM Algorithm. 2.5 Treatment of Voltage Sources. 2.6 Numerical Examples. 2.7 Concluding Remarks. References. - 3 Balancing-Related Model Reduction of Circuit Equations Using Topological Structure; Tatjana Stykel. 3.1 Introduction. 3.2 Circuit equations. 3.3 Balancing-related model reduction. 3.4 Numerical methods for matrix equations. 3.5 Numerical examples. 3.6 Conclusions and open problems. References. - 4 Topics in Model Order Reduction with Applications to Circuit Simulation; Sanda Lefteriu and Athanasios C. Antoulas. 4.1 Introduction and Motivation. 4.2 Background. 4.3 Theoretical Aspects. 4.4 Tangential interpolation for modeling Y-parameters. 4.5 Numerical Results. 4.6 Conclusion. References. - Part II Contributed Papers. - 5 Forward and Reverse Modeling of Low Noise Amplifiers based on Circuit Simulations; L. De Tommasi, J. Rommes, T. Beelen, M. Sevat, J. A. Croon and T. Dhaene. 5.1 Introduction. 5.2 Forward and reverse modeling: problem descriptions. 5.3 Forward Modeling. 5.3.1 Performance Figures via Surrogate Models. 5.4 Reverse Modeling with the NBI method. 5.5 Reverse modeling using transistor level simulations. 5.6 Discussion and conclusions. References. - 6 Recycling Krylov Subspaces for Solving Linear Systems with Successively Changing Right-Hand Sides Arising in Model Reduction; Peter Benner and Lihong Feng. 6.1 Introduction. 6.2 Methods Based on Recycling Krylov Subspaces. 6.3 Application to Model Order Reduction. 6.4 Simulation Results. 6.5 Conclusions. References.... EAN/ISBN : 9789400700895 Publisher(s): Springer, Berlin, Springer Science & Business Media Format: ePub/PDF Author(s): Hinze, Michael - Benner, Peter - Maten, E. Jan W.

DOWNLOAD HERE

Similar manuals: