

2016 11th International Symposium on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC 2016)

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Monday - June 27

Keynote - Jan Madsen "The Future of Advanced Microsystems"

Session 1 - Network-on-Chip

Miltos D. Grammatikakis, Kyprianos Papadimitriou, Polydoros Petrakis, Michael Soulie and Marcello Coppola. Address Interleaving for Low-cost NoCs ^{***}

Manuel Selva, Abdoulaye Gamatie, David Novo and Gilles Sassatelli. Speed and Accuracy Dilemma in NoC Simulation: What about Memory Impact? ^{***}

Tripti Jain, Klaus Schneider and Anoop Bhagyanath. The Selector-Tree Network: A New Self-Routing and Nonblocking Interconnection Network ^{***}

Session 2 - Special Session: Emerging Technologies for Reconfigurable Systems in the Manycore Era

Luca Pezzarossa, Martin Schoeberl and Jens Sparsø. Reconfiguration in FPGA-Based Multi-Core Platforms for Hard Real-Time Applications ^{***}

Dirk Stroobandt, et.al. Towards the Exploitation of Exascale Technology for Reconfigurable Architectures ^{***}

David Andrews and Marco Platzner. Programming Models for Reconfigurable Manycore Systems ^{***}

Invited talk - Eduardo de La Torre "Hardware Adaptation by Means of DPR: How and What For?"

Tuesday - June 28

Session 3 - Special Session: Secure multi/many-core architectures in the era of Internet-of-Things

Martha Johanna Sepulveda, Daniel Florez, Guy Gogniat, Ramon Fernandes, Cesar Marcon and Georg Sigl. Towards Risk Aware NoCs for Data Protection in MPSoCs ^{****}

Teng Xu, Hongxiang Gu and Miodrag Potkonjak. An Ultra-Low Energy PUF Matching Security Platform Using Programmable Delay Lines ...

Maria Méndez Real, Vincent Migliore, Vianney Lapotre, Guy Gogniat, Philipp Wehner and Diana Göhringer. Dynamic Spatially Isolated Secure Zones for NoC-based Many-core Accelerators ...

Muhammad Rashid, Malik Imran and Atif Raza Jafri. Comparative Analysis of Flexible Cryptographic Implementations ...

Session 4 - Mixed-Criticality

George Tsamis, Stamatis Kavvadias, Antonis Papagrighoriou, Miltos Grammatikakis and Kyprianos Papadimitriou. Efficient Bandwidth Regulation at Memory Controller for Mixed Criticality Applications ...

Siavoosh Payandeh Azad, Behrad Niazmand, Peeter Ellervee, Jaan Raik, Gert Jervan and Thomas Hollstein. SoCDep²: A framework for dependable task deployment on many-core systems under mixed-criticality constraints ...

Othon Tomoutzoglou, Dimitrios Mbakoyannis, Georgios Kornaros and Marcello Coppola. Efficient Communication in Heterogeneous SoCs with Unified Address Space ...

Session 5 - Reliability

Poona Bahrebar and Dirk Stroobandt. Online Reconfigurable Routing Method for Fault-tolerant NoC-based Manycore Systems ...

Elham Kashefi, Hamid R. Zarandi and Ann Gordon-Ross. Postponing Wearout Failures in Chip Multiprocessors Using Thermal Management and Thread Migration ...

Luca Sterpone, Luca Boragno and David Merodio Codinachs. Analysis of Radiation-Induced SEUs on Dynamic Reconfigurable Systems ...

Wednesday - June 29

Invited Talk - Artur Jutman "Managing Faults in Many-Core Systems During Operation"

Session 6 - System Design for Heterogeneous 3D-Architectures

Jan Moritz Joseph, Sven Wrieden, Christopher Blochwitz, Alberto Garcia-Ortiz and Thilo Pionteck. A Simulation Environment for Design Space Exploration for Asymmetric 3D-Network-on-Chip '''

Wolfgang Büter, Dominic Oehlert and Alberto Garcia-Ortiz. ERRCA: A buffer-efficient reconfigurable optical Network-on-Chip with permanent-error recognition '''

Session 7 - Reconfigurable Computing

Tobias Wiersema and Marco Platzner. Verifying Worst-Case Completion Times for Reconfigurable Hardware Modules using Proof-Carrying Hardware '''

William Harrison, Ian Graves, Adam Procter, Michela Becchi and Gerard Allwein. A Programming Model for Reconfigurable Computing Based in Functional Concurrency '''

Ayad Dalloo and Alberto Garcia-Ortiz. A Programmable and Reconfigurable Core for Binary Image Processing '''