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Action-Level Real-Time Network-on-Chip Modeling

September 2017 · Simulation Modelling Practice and Theory 77:272-291

DOI: 10.1016/j.simpat.2017.06.004

Soroosh Gholami · Hessam Sarjoughian

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Mar 2017 · Simulation Modelling Practice and Theory

 Javad Zarrin ·  Rui L. Aguiar ·  João Paulo Barraca

The architecture design of peta-scale computing systems is complex and presents lots of difficulties to designs, as current tools lack support for relevant features of future scenarios. Novel systems must be designed with great care and tools, such as manycore architecture simulators, must be adapted...

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Article

Sep 2015 · SIMULATION: Transactions of The Society for Modeling and Simulation International

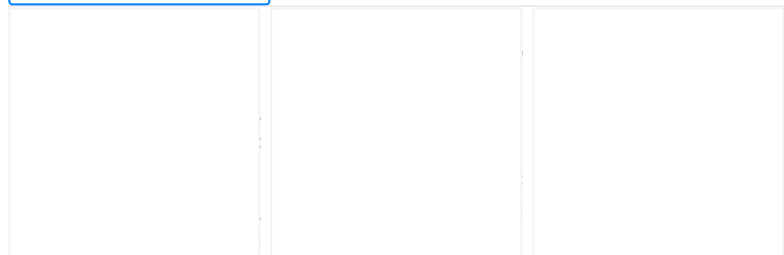
 Hessam Sarjoughian ·  Soroosh Gholami

For some classes of systems, it is advantageous to develop real-time models instead of step-wise or logical-time models. Toward this goal, the action-level real-time (ALRT) discrete-event system specification (DEVS) modeling and simulation approach is proposed. Modeling of actions is introduce...

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 Roberto Pasqua ·  Damien Foures ·  Vincent Albert ·  Alexandre Nketsa

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Dec 2013

 Hessam Sarjoughian ·  Soroosh Gholami ·  Thomas Jackson

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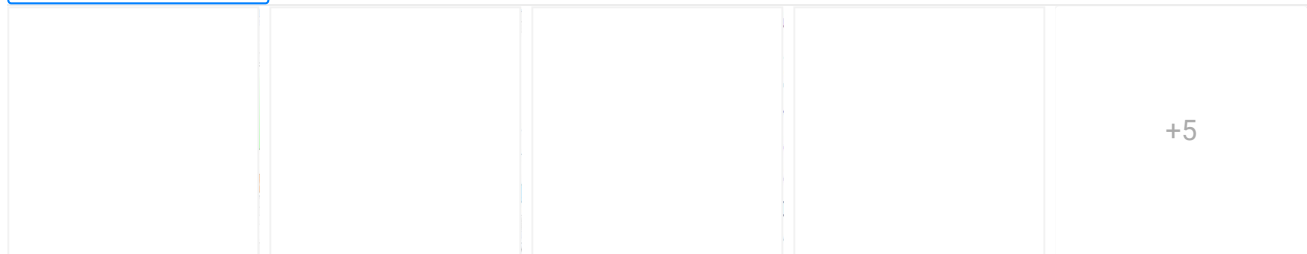
Conference Paper

Jan 2012

 Soroosh Gholami ·  Hessam Sarjoughian

We present a Network on Chip (NoC) model with basic support for execution in constrained real-time. Actions for the processing element, switch, network interface, and channel components of NoC are specified in RT-DEVS, an extension of the DEVS formalism for real-time modeling. A desirable simulators...

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 Hesham Saadawi ·  G. A. Wainer

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Jul 2005 · Geophysical Research Letters

 Zhiqu Lu

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