Analytical Approaches for Performance Evaluation of Networks on Chip

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ESWeek Tutorial
October 7, 2012, Tampere, Finland
Analytical Approaches for Performance Evaluation of Networks on Chip

8:00 Introduction, Axel Jantsch
8:10 Dataflow Models, Marco Bekooij
8:55 Schedulability Analysis, Alan Burns

9:40 Break

10:10 Network Calculus, Zhonghai Lu
10:55 Queuing Theory, Abbas E. Kiasari
11:40 Summary and Conclusion, Axel Jantsch

12:00 Lunch
Design Objectives

- Minimize cost for given performance

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Average or Worst Case Performance

Average performance:
Optimize the common case

Worst case performance:
Optimize the worst case
Performance Modeling

Analytic analysis

Simulation

Event Model

detailed

Resource Model

detailed

abstract
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