

Physically Aware HW/SW Partitioning for
Reconfigurable Architectures with Partial
Dynamic Reconfiguration

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Outline

- ▶ Introduction
- ▶ Target System Architecture
- ▶ Placement Issues
- ▶ Proposed Approach
- ▶ Placement Example
- ▶ Experimental Results
- ▶ Conclusions

Introduction

- ▶ **Hardware / Software Partitioning**
 - ▶ Used in systems with reconfigurable hardware (FPGA) operated in conjunction with a software processor
 - ▶ Hardware and Software tasks can execute concurrently
 - ▶ Partitioning divides task graph into HW executed and SW executed tasks to reduce time to completion