

2010 Fourth International Workshop on High-Performance Reconfigurable Computing Technology and Applications

(HPRCTA 2010)

**New Orleans, Louisiana, USA
14 November 2010**



**IEEE Catalog Number: CFP1015F-PRT
ISBN: 978-1-4244-9516-0**

TABLE OF CONTENTS

Investigating Resilient High Performance Reconfigurable Computing with Minimally-Invasive System Monitoring	1
<i>B. Huang, A. Schmidt, A. Mendon, R. Sass</i>	
An Application of High-Performance Reconfigurable Computing in Radio Astronomy Signal Processing.....	9
<i>J. Ford, J. Ray</i>	
Comparative Analysis of HPC and Accelerator Devices: Computation, Memory, I/O, and Power	16
<i>J. Richardson, S. Fingulin, D. Raghunathan, C. Massie, A. George, H. Lam</i>	
Optimization and Performance Study of Large-scale Biological Networks For Reconfigurable Computing.....	26
<i>M. Bhuiyan, A. Nallamuthu, M. Smith, V. Pallipuram</i>	
Towards Production FPGA-Accelerated Molecular Dynamics: Progress and Challenges	35
<i>M. Chiu, M. Herbordt</i>	
A Parallel Hardware Architecture for Information-Theoretic Adaptive Filtering.....	43
<i>S. Craciun, A. George, H. Lam, J. Principe</i>	
Author Index	