

First International Workshop on
FPGAs for Software Programmers (FSP 2014)
September 1, 2014, Munich, Germany
Program

8:45 – 9:00	Welcome and Introduction
9:00 – 9:45	Session 1: Open Source High-Level Synthesis
9:00 – 9:45	<i>Invited Talk: LegUp High-Level Synthesis of Processor/Accelerator FPGA Systems</i> Jason H. Anderson, University of Toronto
9:45 – 10:05	Fast-Forward Presentation of Posters
	<i>P1: High-Level Design of Portable and Scalable FPGA Accelerators</i> Markus Weinhardt, Rainer Höckmann, and Thomas Kinder
	<i>P2: A Software Parallel Programming Approach to FPGA-Accelerated Computing</i> Ruediger Willenberg and Paul Chow
	<i>P3: Stream Processor Generator for HPC to Embedded Applications on FPGA-based System Platform</i> Kentaro Sano, Hayato Suzuki, Ryo Ito, Tomohiro Ueno, and Satoru Yamamoto
	<i>P4: High Level Programming for Heterogeneous Architectures</i> Oren Segal, Martin Margala, Sai Rahul Chalamalasetti, and Mitch Wright
	<i>P5: A Domain Specific Approach to Heterogeneous Computing: From Availability to Accessibility</i> Gordon Inggis, David Thomas, and Wayne Luk
	<i>P6: OpenHEC: A Framework for Application Programmers to Design FPGA-based Systems</i> Zhilei Chai, Zhibin Wang, Wenmin Yang, Shuai Ding, and Yuanpu Zhang
	<i>P7: An Automatic Mixed Software Hardware Pipeline Builder for CPU-FPGA Platforms</i> Takaaki Miyajima, David Thomas, and Hideharu Amano
	<i>P8: A Many-Core Overlay for High-Performance Embedded Computing on FPGAs</i> Mário Véstias and Horácio Neto
	<i>P9: High-Level Synthesis Case Study: Implementation of a Memcached Server</i> Kimon Karras, Michaela Blott, and Kees Vissers
10:05 – 10:50	Coffee Break and Posters
10:50 – 12:15	Session 2: FPGA Programming for Everyone
10:50 – 11:35	<i>Invited Talk: Beyond C-to-Gates: Enabling Full System Design Using OpenCL</i> Peter Yannacouras, Altera
11:35 – 11:55	<i>Tools and Techniques for Efficient High-Level System Design on FPGAs</i> Adrian J. Chung, Kathryn Cobden, Mark Jarvis, Martin Langhammer, Bogdan Pasca
11:55 – 12:15	<i>Making FPGAs Accessible to Scientists and Engineers as Domain Expert Software Programmers with LabVIEW</i> Hugo A. Andrade, Simon Hogg, and Stephan Ahrends
12:15 – 13:30	Lunch
13:30 – 15:00	Session 3: Domain-Specific Methods and Tools
13:30 – 13:50	<i>Enabling FPGAs for the Masses</i> Janarbek Matai, Dustin Richmond, Dajung Lee, and Ryan Kastner
13:50 – 14:10	<i>Code Generation for High-Level Synthesis of Multiresolution Applications on FPGAs</i> Moritz Schmid, Oliver Reiche, Christian Schmitt, Frank Hannig, and Jürgen Teich
14:10 – 14:30	<i>High Level Hardware/Software Embedded System Design with Redsharc</i> Sam Skalicky, Andrew G. Schmidt, and Matthew French
14:30 – 14:50	<i>Offloading MPI Parallel Prefix Scan (MPI_Scan) with the NetFPGA</i> Omer Arap and Martin Swamy
15:00 – 15:30	Coffee Break
15:30 – 16:55	Session 4: OpenSPL (organized by Georgi Gaydadjiev, Chalmers University of Technology and Maxeler Technologies)
15:30 – 16:15	<i>Invited Talk: Programming Dataflow Engines and OpenSPL</i> Oskar Mencer, Maxeler Technologies
16:15 – 16:25	Wayne Luk, Imperial College, UK
16:25 – 16:35	Apostolos Dollas, Technical University of Crete, Greece
16:35 – 16:45	Peter Zinterhof, University of Salzburg, Austria
16:45 – 16:55	Carsten Trinitis, TU Munich, Germany
16:55 – 17:00	Closing

Co-Organizers:

Frank Hannig
Friedrich-Alexander University Erlangen-Nürnberg (FAU)

Dirk Koch
University of Manchester

Daniel Ziener
Friedrich-Alexander University Erlangen-Nürnberg (FAU)

Technical Program Committee:

Hideharu Amano, Keio University, Japan
Jason H. Anderson, University of Toronto, Canada

Gordon Brebner, Xilinx Inc., USA
João M. P. Cardoso, University of Porto, Portugal
Jason Cong, University of California, Los Angeles, USA
Andreas Koch, TU Darmstadt, Germany
Miriam Leeser, Northeastern University, USA
Wayne Luk, Imperial College London, UK

Christian Plessl, University of Paderborn, Germany
Dan Poznanovic, Cray Inc., USA
Rodric Rabbah, IBM Research, USA
Deshanand Singh, Altera Corp., Canada
Satnam Singh, Google Inc., USA
Dirk Stroobandt, Ghent University, Belgium
Kazutoshi Wakabayashi, NEC Corp., Japan
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