

ASAP 2012 Program

Monday						
Time	Duration	Section	Room	Title	Authors	
8:00	1:00	Registration	Hallway			
9:00	0:05	Opening	Auditorium	Welcome and Opening		
9:05	0:45	Keynote 1	Auditorium	Embedded Multicore Design Technologies: The Next Generation	Rainer Leupers	
9:50	0:50	Coffee break	Business Lounge	Break + Poster Session I		
10:40	1:15	Reconfigurable Logic and Graphics Engines				
10:40	0:00		Auditorium	Real-Time Iris Segmentation on FPGA	Hau Ngo, Jennifer Shafer, Robert Ives, Ryan Rakvic and Randy Broussard	
10:40	0:25		Auditorium	A Reconfigurable Computing Approach for Efficient and Scalable Parallel Graph Exploration	Brahim Betkaoui, Yu Wang, David Thomas and Wayne Luk	
11:05	0:25		Auditorium	High Performance Parallel JPEG2000 Streaming Decoder Using GPGPU-CPU Heterogeneous System	Roto Le, Joseph Mundy and Iris Bahar	
11:30	0:25		Auditorium	A Performance Model for Memory Bandwidth Constrained Applications on Graphics Engines	Lin Ma and Roger Chamberlain	
11:55	1:05	Lunch	Business Lounge			
13:00	5:00	Special Session on Ongoing EU Projects			Koen Bertels	
13:00	1:45		Auditorium	Cluster 1 Session: Presentations (Smecy, iFEST, 2Parma, ALMA, Faster, Reflect, Madness)		
			Business Lounge	Cluster 2 Session: Presentations (ERA, DeSyRe, EPICS, ASAM, EURETILE, PEPHER)		
14:45	0:25	Coffee break	Business Lounge	Break + Demo		
15:10	1:20		Auditorium	Cluster 1 Session: Brainstorming (Smecy, iFEST, 2Parma, ALMA, Faster, Reflect, Madness)		
			Business Lounge	Cluster 2 Session: Brainstorming (ERA, DeSyRe, EPICS, ASAM, EURETILE, PEPHER)		
16:30	1:00	Plenary session	Business Lounge	Drinks + informal discussion outcome of brainstorm	Final comments by: G. Kuzmanov	
17:30	1:00	Reception	Business Lounge			
18:30		End of day				
Tuesday						
Time	Duration	Section	Room	Title	Authors	
8:00	1:00	Registration	Hallway			
9:00	0:45	Keynote 2	Auditorium	Application-driven FPGA-based Supercomputing: Janus and Janus2	Lele Tripiccione	
9:45	2:30	Advances in Arithmetic				
9:45	0:25		Auditorium	(M,p,k)-friendly points: a table-based method for trigonometric function evaluation	Nicolas Brisebarre, Milos Ercegovic and Jean-Michel Muller	
10:10	0:25		Auditorium	On-line decimal adder with RBCD representation	Carlos Garcia Vega, Sonia Gonzalez Navarro, Julio Villalba Moreno and Emilio Lopez	
10:35	0:50	Coffee break	Business Lounge	Break + Poster Session II		
11:25	0:25		Auditorium	Virtual Floating-point Units for Low-power Embedded Processors	Syed Gilani, Nam Kim and Michael Schulte	
11:50	0:25		Auditorium	Simultaneous floating-point sine and cosine for VLIW integer processors	Claude-Pierre Jeannerod and Jingyan Jourdan-Lu	
12:15	1:05	Lunch	Business Lounge			
Digital Signal Processing Applications						
13:20	0:25		Auditorium	A High-Rate, Low-Power, ASIC Speech Decoder Using Finite State Transducers	Jeff Johnston and Rob Rutenbar	
13:45	0:25		Auditorium	Partial Expansion Graphs: Exposing Parallelism and Dynamic Scheduling Opportunities for DSP Applications	George Zaki, William Plishker, Shuvra Bhattacharyya and Frank Fruth	
14:10	0:25		Auditorium	SIMD/MIMD dynamically-reconfigurable architecture for high-performance embedded vision systems	A. Nieto, D.L. Vilariño, and V.M. Brea	
14:35	0:50	Coffee break	Business Lounge	Break + Poster Session III		
15:25	2:35	Free time				
18:00	1:30	Tour of Delft	Market			
19:30	2:30	Conference Dinner	van der Dussen			
22:00		End of day				

Wednesday					
Time	Duration	Section	Room	Title	Authors
9:00	0:45	Keynote 3	Auditorium	Designing Ultra Low Power SIMD Processors	Henk Corporaal
Cryptology and Security					
9:45	0:25		Auditorium	A Speed Area Optimized Embedded Co-processor for McEliece Cryptosystem	Santosh Ghosh, Jeroen Delvaux, Leif Uhsadel, and Ingrid Verbauwhede
10:10	0:25		Auditorium	Interface design for mapping a variety of RSA exponentiation algorithms on a HW/SW co-design platform	Leif Uhsadel, Markus Ullrich, Ingrid Verbauwhede and Bart Preneel
10:35	0:25		Auditorium	Instruction Set Extensions for Cryptographic Hash Functions on a Microcontroller Architecture	Jeremy Constantin, Andreas Burg and Frank K. Gürkaynak
11:00	0:50	Coffee break	Business Lounge	Break + Poster Session IV	
Application-specific Acceleration					
11:50	0:25		Auditorium	Design Automation Framework for Application-Specific Logic-in-Memory Blocks	Qiuling Zhu, Kaushik Vaidyanathan, Ofer Shacham, Mark Horowitz, Larry Pileggi and Franz Franchetti
12:15	0:25		Auditorium	Viterbi Accelerator for Embedded Processor Datapath	Muhammad Waqar Azhar, Magnus Sjölander, Hasan Ali, Akshay Vijayashekar, Tung Thanh Hoang, Kashan Khurshid Ansari and Per Larsson-Edefors
12:40	0:25		Auditorium	Accelerating NoC-based MPI Primitives via Communication Architecture Customization	Libo Huang, Zhiying Wang and Nong Xiao
13:05	End of Conference				
Posters					
		Session	Title	Authors	
		I	A Linear Algebra Core Design For Efficient Level-3 BLAS	Ardavan Pedram, Syed Gilani, Nam Sung Kim, Robert Van De Geijn, Michael Schulte and Mehdi Modarressi and Hamid Sarbazi-Azad	
		I	Reconfigurable Cluster-based Networks-on-Chip for Application-specific MPSoCs	Mehdi Modarressi and Hamid Sarbazi-Azad	
		I	Automated synthesis of FSM-based accelerators for hardware compilation	Nikolaos Kavvadias and Kostas Masselos	
		I	Design Space Exploration for the Implementation of a Predictive Current Controller based on FPGA	Pedro Martín, Osmell Machado, Francisco J. Rodríguez and Emilio J. Bueno	
		II	Design of Low Power On-Chip Processor Arrays	Vahid Lari, Shravan Muddasani, Srinivas Boppu, Frank Hannig and Jürgen Teich	
		II	Novel Application of Genetic Sequencing Algorithms to Optimization of Hardware Resource Sharing for DSP	Stephen McKeown and Roger Woods	
		II	Enabling Automatic Pipeline Utilization Improvement in Polyhedral Process Network Implementations	Sven van Haastregt and Bart Kienhuis	
		III	Long Residue Checking for Adders	Michael Sullivan and Earl Swartzlander	
		III	FPGA based Particle Identification in High Energy Physics Experiments	Fatih Ugurdag, Ali Basaran, Taylan Akdogan, Ugur Guney and Sezer Gören	
		III	Real-Time Iris Segmentation on FPGA	Hau Ngo, Jennifer Shafer, Robert Ives, Ryan Rakvic and Randy Broussard	
		IV	Reconfigurable design automation by high-level exploration	Tim Todman and Wayne Luk	
		IV	MARTHA: A Multicore Architecture for Control and Emulation of Power	Michel Kinsy	
		IV	Exploiting FPGA-Aware Merging of Custom Instructions for Runtime R	Siew Kei Lam, Thambipillai Srikanthan and Christopher T. Clarke	