

VETENSKAPLIGA PUBLIKATIONER/SCIENTIFIC PUBLICATIONS 2006

Elektroniska komponenter/Electronic Devices

Sriram Vangal, Y. Hoskote, N. Borkar and Atila Alvandpour: "A 6.2-GFlops Floating-Point Multiply-Accumulator With Conditional Normalization, in IEEE Journal of Solid-State Circuits, vol. 41, No. 10, October 2006, pp. 2314-2323.

Leif Lindgren: "A new simultaneous multislope ADC architecture for array implementations". In: IEEE Transactions on Circuits and Systems II: Express briefs, vol. 53, No. 9, September 2006, pp 921-925.

Stefan Andersson, Jacek Konopacki, Jerzy Dabrowski, and Christer Svensson: "SC Filter for RF Sampling and Downconversion with Wideband Image Rejection", in Journal of Analog Integrated Circuits and Signal Processing, vol 49, 2006, pp. 115-122.

Rashad Ramzand and Jerzy Dabrowski: "CMOS Blocks for on-Chip RF Test", in Journal of Analog Integrated Circuits and Signal Processing", vol 49, 2006, pp. 151-160.

Peter Caputa and Christer Svensson: "An on-chip delay- and skew-insensitive multi-cycle communication scheme", in Proceedings of IEEE International Solid-State Circuits Conference, pp.444-445, San Fransisco, USA, February 2006.

Martin Hansson, Behzad Mesgarzadeh, and Atila Alvandpour: "1.56 GHz On-chip Resonant Clocking in 130nm CMOS", in Proceedings of IEEE Custom Integrated Circuits Conference (CICC), pp. 241-244, San Jose, California, USA, September 10-13 2006.

B. Mesgarzadeh and A. Alvandpour, "First-Harmonic Injection-Locked Ring Oscillators", in Proceedings of IEEE Custom Integrated Circuits Conference (CICC), pp. 733-736, San Jose, USA, 10-13 Sept. 2006.

Behzad Mesgarzadeh, Martin Hansson, and Atila Alvandpour: "Jitter Characteristic in Resonant Clock Distribution", in Proceedings of IEEE European Solid-State Circuit Conference (ESSCIRC), pp. 464-467, Montreux, Switzerland, Sept. 18-22 2006.

H. Lakdawala, J. Zhan, A. Ravi, S. Andersson, B.R. Carlton, R.B. Nicholls, N. Yaghini, R.E. Bishop, S.S. Taylor, K. Soumyanath: "Multi-band (1-6GHz) Sampled, Sliding-IF Receiver With Discrete-Time-Filtering in 90nm Digital CMOS Process", in Proceedings of the VLSI Symposium conference, pp. 230-231, Hawaii, USA, 15-17 June, 2006.

Steven K. Hsu, Martin Hansson, Amit Agarwal, Sanu K. Mathew, Atila Alvandpour, and Ram K. Krishnamurthy: "A 9GHz 320x80bit Low Leakage Microcode Read Only Memory in 65nm CMOS", in Proceedings of IEEE European Solid-State Circuit Conference (ESSCIRC), pp 299-302, Montreux, Switzerland, September 18-22 2006.

Henrik Fredriksson and Christer Svensson: "Blind adaptive mixed-signal DFE for Gb/s, multi-drop buses", in Proceedings of International symposium on VLSI design, automation, and test VLSI-DAT, pp. 223-226, Hsinchu, Taiwan, May 2006.

Martin Hansson and Atila Alvandpour: "A Leakage Compensation Technique for Dynamic Latches and Flip-flops in Nano-scale CMOS", in Proceedings of IEEE System-on-Chip Conference (SoCC), pp. 83-84, Austin, Texas, USA, September 24-27 2006.

Stefan Andersson, Jacek Konopacki, Jerzy Dabrowski, and Christer Svensson: "Noise Analysis and Noise Estimation of an RF Sampling Front-End using an SC Decimation Filter", in Proceedings of the MIXDES 2006 conference, pp. 343-348, Gdynia, Poland, June 22-24, 2006.

Stefan Andersson, Jacek Konopacki, Jerzy Dabrowski, and Christer Svensson: "SC Filter for RF Downconversion with Wideband Image Rejection", in Proceedings of the ISCAS 2006 conference, pp. 3542-3545, Kos, Greece, May 21-24, 2006.

Anton Blad, Christer Svensson, Håkan Johansson, and Stefan Andersson: "An RF sampling radio frontend based on Σ -conversion", in Proceedings of 24th Norchip Conference, pp. 133-136, Linköping, Sweden, 20-21 November 2006.

Jerzy J. Dabrowski and Rashad M. Ramzan: "Offset loopback test for IC RF transceivers", in Proceedings of MIXDES 2006, pp. 583-586, Gdynia, Poland, June 2006.

Jerzy Dabrowski, Stefan Andersson, Jacek Konopacki, and Christer Svensson: "SC Filter Design for RF Applications", in Proceedings of the ICSES 2006 conference, pp. 341-344, Lodz, Poland, Sept. 17-20, 2006.

Behzad Mesgarzadeh and Atila Alvandpour: "A wide-tuning range 1.8 GHz quadrature VCO utilizing coupled ring oscillators", in Proceedings of 2006 IEEE International Symposium on Circuits and Systems ISCAS, pp. 5143-5146, Kos, Greece, May 2006.

Behzad Mesgarzadeh and Atila Alvandpour: "A 24-mW, 0.02-mm², 1.5-GHz DLL-Based Frequency Multiplier in 130-nm CMOS", in Proceedings of IEEE Intl. System-on-Chip Conference (SoCC), pp. 257-260, Austin USA, 24-27 Sept. 2006.

Nasir Mehmood, Martin Hansson, and Atila Alvandpour: "An Energy-Efficient 32-bit Multiplier Architecture in 90-nm CMOS", in Proceedings of 24th Norchip Conference, pp 35-38, Linköping, Sweden, 20-21 November 2006.

Peter Caputa and Christer Svensson: "A 3Gb/s/wire global on-chip bus with near velocity-of-light latency", in Proceedings of 2006 IEEE International Solid-State Circuits Conference, pp. 117-122, Hyderabad, India, January 2006.

Rashad Ramzan and Jerzy Dabrowski: "CMOS RF/DC Voltage Detector for on-Chip Test", in Proceedings of IEEE International Multitopic Conference (INMIC), pp. 472-476, Islamabad, Pakistan, December 2006.

Rashad Ramzan, Lei Zou, and Jerzy Dabrowski: "LNA design for on-chip RF test", in Proceedings of 2006 IEEE International Symposium on Circuits and Systems ISCAS, pp. 4236-4239, Kos, Greece, May 2006.

Christer Svensson: "Software Defined Radio – Vision or Reality", in Proceedings of 24th Norchip Conference, p. 149, Linköping, Sweden, 20-21 November 2006. *Invited speaker.*

Christer Svensson, Stefan Andersson, and Peter Bogner: "On the power consumption of analog to digital converters", in Proceedings of 24th Norchip Conference, pp. 49-52, Linköping, Sweden, 20-21 November 2006.

Kevin Tom and Atila Alvandpour; "Curvature compensated CMOS bandgap with sub 1V supply", in Proceedings of Third IEEE International Workshop on Electronic Design, Test and Applications, Melbourne, Australia, Page(s): 4 pp, 17-19, Jan. 2006.

Martin Hansson, Behzad Mesgarzadeh, and Atila Alvandpour: "A Low-Power On-chip Resonant Clocking Technique", in Proceedings of Swedish System-on-Chip Conference (SSoCC) 2006, Kolmården, Sweden, May 4-5 2006. *Best Student Paper Award*.

Stefan Andersson, Rashad Ramzan, Jerzy Dabrowski, and Christer Svensson; "Direct RF Sampling Receiver Front-End for WLAN", in Proceedings of the national SSoCC'06 conference, Kolmården, Sweden, 4-5 May, 2006.

Henrik Fredriksson and Christer Svensson: "Blind adaptive mixed-signal DFE for a four drop memory bus", in Proceedings of Swedish System-on-Chip Conference (SSoCC) 2006, Kolmården, Sweden, May 4-5 2006.

Behzad Mesgarzadeh and Atila Alvandpour: "First-harmonic injection locking in ring oscillators", in Proceedings of Swedish System-on-Chip Conference (SSoCC) 2006, Kolmården, Sweden, May 4-5 2006.

Rashad Ramzan, Stefan Andersson, Muhammad Wasim, and Jerzy Dabrowski: "On-chip BIST for radio RF testing", in Proceedings of the national SSoCC'06 conference, Kolmården, Sweden, 4-5 May, 2006.

Naveed Ahsan, Aziz Ouacha, and Jerzy Dabrowski: "A tunable LNA for flexible RF front-end", in Proceedings of the national SSoCC'06 conference, Kolmården, Sweden, 4-5 May, 2006.

Christer Svensson and Dake Liu: "Presenting efficient hardware solutions for SDR terminals", Software Defined Radio 2006, London, GB, 6-8 December 2006. *Invited paper*.

Stefan Andersson: "Multiband LNA design and RF-sampling front-ends for flexible wireless receivers", Linköping University 2006-10-27, Dissertation No. 1036, ISBN: 91-85523-22-4, ISSN: 0345-7524.

Peter Caputa: "Efficient high-speed on-chip global interconnects", Linköping University, 2006-01-27, Dissertation No. 992, ISBN: 91-85457-87-6, ISSN: 0345-7524.

Martin Hansson: "Low-Power Multi-GHz Circuit Techniques for On-chip Clocking" LiU-TEK-LIC-2006:21, Linköping University, Linköping 2006, ISBN: 91-85497-39-8, ISSN: 0280-7971.

Behzad Mesgarzadeh: "Circuit techniques for on-chip clocking and synchronization", LiU-TEK-LIC-2006:22, Linköping University, Linköping 2006, ISBN: 91-85497-44-4, SSN: 0280-7971.

Sriram R. Vangal: "Performance and energy efficient building blocks for network-on-chip architectures", LiU-TEK-LIC-2006:36, Linköping University, Linköping 2006, ISBN: 91-85523-54-2, ISSN: 0280-7971.

Stefan Andersson: "Software Defined Radio – Visions, Challenges and Solutions", Book chapter 3 in: "Radio Design in Nanometer Technologies", Mohammed Ismail (Editor), Delia Rodríguez de Llera González (Editor). Publisher: Springer; 1 edition (November 2006), ISBN: 1-4020-4823-8.

Atila Alvandpour & Ram Krishnamurthy: Fast static receiver with input dependent inversion threshold. US Patent: 2006-02-21.

Peter Hazucha & Atila Alvandpour: Dynamic gate with conditional keeper for soft error rate reduction. US Patent: 2006-05-30.