

SCIENTIFIC PUBLICATIONS 2014 (VETENSKAPLIGA PUBLIKATIONER)

*Journals and International Conferences*

*Journal papers:*

1. A. Fazli, F. Qazi, A. Alvandpour, "Low-Power DT  $\Delta\Sigma$  Modulators Using SC Passive Filters in 65 nm CMOS", in IEEE Transactions on Circuits and Systems I, Vol. 61, No. 2, pp. 358-370, Feb. 2014
2. T. Johansson, J. Fritzin, "A Review of Watt-level CMOS RF power amplifiers", IEEE Transactions on Microwave Theory and Techniques, Vol. 62, Issue 1, pp. 111-124, 2014.
3. D. Zhang, A. Alvandpour, "Analysis and Calibration of Non-Binary-Weighted Capacitive DAC for High-Resolution SAR ADCs", in IEEE Transactions on Circuits and System II, Vol. 61, No. 9, pp. 666-670, Sept. 2014.
4. Q.T. Duong, J. Dabrowski, A. Alvandpour, "Design and Analysis of High Speed Capacitive Pipeline DACs," in Analog Integrated Circuits and Signal Processing, Volume 80, Issue 3, pp 359-374, September 2014.
5. E. Nilsson, C. Svensson, "Power Consumption of Integrated Low-Power Receivers", in IEEE Journal on Emerging and Selected Topics in Circuits and Systems, Vol. 4, Issue 3, pp. 273-283, September 2014.
6. N.U. Andersson, M. Vesterbacka, "A Vernier Time-to-Digital Converter With Delay Latch Chain Architecture," in IEEE Transactions on Circuits and System II, vol. 61, no. 10, pp. 773-777, Oct. 2014.
7. A. Ojani, B. Mesgarzadeh, A. Alvandpour, "Modeling and Analysis of Harmonic Spurs in DLL-Based Frequency Synthesizers," IEEE Transactions on Circuits and Systems I, Vol. 66, No. 11, PP. 3075-3084, Nov. 2014.
8. V. Unnikrishnan, M. Vesterbacka, "Time-mode analog-to-digital conversion using standard cells," in IEEE Transactions on Circuits and Systems I, Vol. 61, Issue 12, pp. 3348 - 3357, December 2014.
9. A. Ojani, B. Mesgarzadeh, A. Alvandpour, "Monte Carlo-Free Prediction of Spurious Performance for ECDLL-Based Synthesizers," in IEEE Transactions on Circuits and Systems I, Accepted for Publication, Aug. 2014, DOI: 10.1109/TCSI.2014.2347231.
10. F. Qazi, Q.T. Duong, J. Dabrowski, "Two-Stage Highly Selective Receiver Front-End Based on Impedance Transformation Filtering," IEEE Transactions on Circuits and Systems II: Express Briefs, Oct 2014. (Accepted for publication)

*Papers in international conferences*

1. N. Farahini, A. Hemani, A. Lansner, F. Clermidy, C. Svensson, "A Scalable Custom Simulation Machine for the Bayesian Confidence Propagation Neural Network model of the Brain", in 19th Asia and South Pacific Design Automation Conference (ASP-DAC), pp. 578-585, January 2014.
2. A. Ojani, B. Mesgarzadeh, A. Alvandpour, "A Self-Calibration Technique for Fast-Switching Frequency-Hopped UWB Synthesis," 21th IEEE International Conference Mixed Design of Integrated Circuits and Systems, pp. 154-159, Jun. 2014.
3. P. Harikumar, P. Angelov, R. Hägglund, "Design of a reference voltage buffer for a 10-bit 1-MS/s SAR ADC," in Mixed Design of Integrated Circuits and Systems Conference, pp. 185-188, June 2014.

## **Avdelningen för Elektroniska kretsar och system (Division of Integrated Circuits and Systems)**

4. P. Harikumar, J. J. Wikner, "Design of a Sampling Switch for a 0.4-V SAR ADC Using a Multi-Stage Charge Pump," in IEEE Norchip Conference, pp. 1-4, October 2014.
5. M. R. Sadeghifar, J.J. Wikner, O. Gustafsson, "Linear Programming Design of Semi-Digital FIR Filter and  $\Sigma\Delta$  Modulator for VDSL2 Transmitter", in Proc. IEEE International Symposium on Circuits Syst. (ISCAS) Melbourne, Australia, 2014.
6. M. Nielsen-Lönn, J. J. Wikner, A. Alvandpour, "Design considerations for interface circuits to low-voltage piezoelectric energy harvesters," in Norchip Conference, October 2014.
7. M.T. Pasha, M. Vesterbacka, in Proc. Norchip Conference, "A Modified Switching Scheme for Multiplexer Based Thermometer-to-Binary Encoders", Norchip'14, Tampere, Finland, Oct. 27-28, 2014.
8. Quoc-Tai Duong, A. Alvandpour, "Low Noise Linear and Wideband Transconductance Amplifier Design for Current-mode Frontend", in IEEE International Symposium on Integrated Circuit Conference (ISIC 2014), Singapore; December, 2014.
9. A.Bhide, A. Alvandpour, "Timing Challenges in high-speed Interleaved Delta Sigma DACs", International Symposium on Integrated Circuits (ISIC), pp. 46-49, December 2014.
10. A. Ojani, B. Mesgarzadeh, A. Alvandpour, "A Low-Power Direct IQ Upconversion Technique Based on Duty-Cycled Multi-Phase Sub-Harmonic Passive Mixers for UWB Transmitters," International Symposium on Integrated Circuits (ISIC), pp. 42-45, Dec. 2014.

### *Papers in national conferences*

1. T. Johansson, M. Salter, M. Vignetti, "Strategies to Multi-Watt PAs in nanometer CMOS", Gigahertz Symposium 2014, Gothenburg, Sweden, Mar 11-12, 2014.
2. M. F. U. Haque, T. Johansson, D. Liu, "Modified Multilevel PWM Switch Mode Power Amplifier", SSoCC14, Vadstena, Sweden, May 12-13, 2014.
3. T. Johansson, M. Salter, M. Vignetti, "Multi-Watt PA design in 28 nm CMOS on SOI", SSoCC14, Vadstena, Sweden, May 12-13, 2014.
4. F. Qazi, J. Dabrowski "Tunable Selective Receiver Front-End with Impedance Transformation Filtering", Swedish System-on-Chip Conference (SSOCC), 2014.

### **PhD thesis (2014)**

1. D. Zhang, "Ultra-Low-Power Analog-to-Digital Converters for Medical Applications", Linköping Studies in Science and Technology. Dissertations, ISBN: 978-91-7519-264-2, Linköping, October 2014.
2. A.F. Yeknami, "Low-Power Delta-Sigma Modulators for Medical Applications", Dissertation, ISBN: 978-91-7519-446-2, Linköping 2014
3. A. Ojani, "Analysis and Design of DLL-Based Frequency Synthesizers for Ultra-Wideband Communication", Dissertations, ISBN: 978-91-7519-248-2, Linköping 2014