## **VETENSKAPLIGA PUBLIKATIONER/SCIENTIFIC PUBLICATIONS 2011**

# **Elektroniska komponenter/Electronic Devices**

#### Journals and International Conferences

- T. Sundström, C. Svensson, and A. Alvandpour, "A 2.4 GS/s, Single-Channel, 31.3 dB SNDR at Nyquist, 8-bit Pipeline ADC in 65nm CMOS," in Journal of Solid State Circuits, vol. 46, issue 7, pp. 1575-1584, July 2011.
- J. Fritzin, Y. Jung, P.N. Landin, P. Händel, M. Enqvist, and A. Alvandpour, "Phase Predistortion of a Class-D Outphasing RF Amplifier in 90nm CMOS," IEEE Transactions on Circuits and Systems-II: Express Briefs, vol. 58, no. 10, pp. 642-646, October 2011.
- N. Ahsan, C. Svensson, R. Ramzan, J. Dabrowski, and C. Samuelsson, "1.1 V 6.2 mW, wideband RF Front-end for 0 dBm Blocker Tolerant Receivers in 90 nm CMOS," in Analog Integrated Circuits and Signal Processing, June 2011.
- R. Ramzan, J. Fritzin, J. Dabrowski, and C. Svensson, "Wideband Low Reflection Transmission Line for Bare Chip on Multilayer PCB," in ETRI Journal, vol. 33, no. 3, pp. 335-343, June 2011.
- M. Gustavsson, F. Amin, A. Björklid, A. Ehliar, C. Xu, and C. Svensson, "A High-Rate Energy-Resolving Photon-Counting ASIC for Spectral Computed Tomography," in IEEE Trans. of Nuclear Science, December 2011.
- J. Fritzin, C. Svensson, and A. Alvandpour, "Design and Analysis of a Class-D Stage with Harmonic Suppression," accepted for publication in the IEEE Transactions on Circuits and Systems-I: Regular Papers, 2011.
- T. Johansson, N. Solati, and J. Fritzin, "A High-Linearity SiGe RF Power Amplifier for 3G and 4G Small Basestations," accepted for publication in the International Journal of Electronics, 2011.
- J. Fritzin, C. Svensson, and A. Alvandpour, "A +32dBm 1.85GHz Class-D Outphasing RF PA in 130nm CMOS for WCDMA/LTE," in IEEE European Solid-State Circuits Conference (ESSCIRC), pp. 127-130, September 2011.
- D. Zhang, A. Bhide, and A. Alvandpour, "A 53-nW 9.12-ENOB 1-kS/s SAR ADC in 0.13- $\mu$ m CMOS for Medical Implant Devices," in IEEE European Solid-State Circuits Conference (ESSCIRC), pp. 467-470, September 2011.
- B. Mesgarzadeh, I. Esmail Zadeh, and A. Alvandpour, "A Multi-Segment Clocking Scheme to Reduce On-Chip EMI," in proc. IEEE International SoC Conference (SoCC), pp. 251-255, September 2011.
- S. Ahmad, J. Dabrowski, "On-Chip Spectral Test for High-Speed ADCs by  $\Sigma\Delta$  Technique," in European Conference on Circuit Theory and Design (ECCTD), pp. 661 664, September 2011.

- Q-T. Duong and J. Dabrowski, "Low Noise Transconductance Amplifier Design for Continuous-Time Delta Sigma Wideband Frontend," in European Conference on Circuit Theory and Design (ECCTD), pp. 825 - 828, 2011.
- A. Fazli Yeknami, M. Savadi Osgooei, and A. Alvandpour, "A Programmable-Bandwidth Amplifier for Ultra-Low-Power Switched-Capacitor Application," in IEEE European Conference on Circuit Theory and Design (ECCTD), pp. 761-764, August 2011.
- J. Fritzin, C. Svensson, and A. Alvandpour, "A Wideband Fully Integrated +30dBm Class-D Outphasing RF PA in 65nm CMOS," in IEEE International Symposium on Integrated Circuits (ISIC), December 2011.
- F. Qazi, Q-T Duong, and J. Dabrowski, "Wideband RF Frontend Design for Flexible Radio Receiver," in International Symposium on Integrated Circuits (ISIC), December 2011.
- E. Nilsson and C. Svensson, "Envelope detector sensitivity and blocking characteristics," in European Conference on Circuit Theory and Design (ECCTD), pp. 802-805, August 2011.
- C. Xu, M. Danielsson, S. Karlsson, C. Svensson, and H. Bornefalk, "Performance Characterization of a Silicon Strip Detector for Spectral Computed Tomography Utilizing a Laser Testing System," in Proc. SPIE, pp. 79610S-79610S-10, 2011.
- D. Zhang, C. Svensson, and A. Alvandpour, "Power Consumption Bounds for SAR ADCs," in IEEE European Conference on Circuit Theory and Design (ECCTD), pp. 556-559, August 2011.

#### National Conferences

- T. Sundström, C. Svensson, and A. Alvandpour, "A Power Efficient 1GS/s Single Channel Pipeline ADC in 65nm CMOS Utilizing Analog Gain Trimming," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011. (Best Student Paper Award)
- Q-T. Duong and J. Dabrowski, "Design of Low Noise Transconductance Amplifier for Current-Mode Wideband RF Frontend," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011.
- J. Fritzin, C. Svensson, and A. Alvandpour, "A Fully Integrated High Power CMOS Power Amplifier," in Swedish System-on-Chip Conference (SSoCC), Varberg, 2011.
- E. Nilsson and C. Svensson, "Envelope Detector for Wake-Up Radio," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011.
- F. Qazi and J. Dabrowski, "Design Study on Current-Mode Mixer for Wideband RF Receiver," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011.
- C. Svensson, "A 10Gb/s Radio Link Prototype," invited paper, in Radio Frequency Measurement Technology Conference (RFMTC), Gävle, 2011.

- D. Svärd, C. Jansson, and A. Alvandpour, "A Readout Circuit for an Uncooled IR Camera with Mismatch and Self Heating Compensation," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011.
- D. Zhang, C. Svensson, and A. Alvandpour, "Power Analysis of Charge-Redistribution SAR ADCs," in Swedish System-on-Chip Conference (SSOCC), Varberg, 2011.

### Book Chapter

J. Dabrowski, "A/D and D/A data conversion for wireless communications transceivers," in Digital Front-End in Wireless Communications and Broadcasting, Fa-Long Luo (Ed.), pp.380-412, Cambridge University Press, 2011.

## Dissertations - Compilations

- T. Sundström, "Design of High-Speed Analog-to-Digital Converters using Low-Accuracy Components," Linköping Studies in Science and Technology. Dissertations, ISBN: 978-91-7393-203-5, Linköping, November 2011.
- J. Fritzin, "CMOS RF Power Amplifiers for Wireless Communications," Linköping Studies in Science and Technology. Dissertations, ISBN: 978-91-7393-059-8, Linköping, November 2011.

### Other

- T. Johansson, "Behovet av mobil beräkningskapacitet ökar snabbare än teknikutvecklingen," in Elektronik i Norden, 6/2011.
- T. Johansson, "11th Swedish System-on-Chip Conference Sponsored by SSCS-Sweden in May," in IEEE Solid-State Circuits Magazine, No. 4, p. 58, 2011.