

## VETENSKAPLIGA PUBLIKATIONER/SCIENTIFIC PUBLICATIONS 2010

### Elektroniska komponenter/Electronic Devices

#### *Journals and International Conferences*

S. Azam, C. Svensson, Q. Wahab, and R. Jonsson, "Comparison of Two GaN Transistor Technologies in Broadband Power Amplifiers", in *Microwave Journal*, vol. 53, no 4, pp. 184-192, 2010.

H. Bornefalk, C. Xu, C. Svensson and M. Danielsson, "Design considerations to overcome cross talk in a photon counting silicon strip detector for computed tomography", in *Nuclear Instruments and Methods in Physics Research section A-Accelerators Spectrometers Detectors and associated Equipment*, vol. 621, no. 1-3, pp. 371-378, 2010.

J. Dabrowski and R. Ramzan, "Built-in Loopback Test for IC RF Transceivers", in *Trans. VLSI Systems*, Vol. 18 , Issue: 6, pp. 933 – 946, 2010.

J. Fritzin and A. Alvandpour, "A 3.3V 72.2Mbit/s 802.11n WLAN Transformer-Based Power Amplifier in 65nm CMOS" in *Journal of Analog Integrated Circuits and Signal Processing*, pp. 53-56, 2010.

A.-U. Kashif, C. Svensson, K. Hayat, S. Azam, N, Akhter, M, Imran, and Q. Wahab, "A TCAD approach for non-linear evaluation of microwave power transistor and its experimental verification by LDMOS", in *Journal of Computational Electronics*, vol. 9, no 2, pp. 79-86, 2010.

R. Ramzan, N. Ahsan, and J. Dabrowski, "On-Chip Stimulus Generator for Gain, Linearity, and Blocking Profile Test of Wideband RF Front Ends", in *Trans. Instrumentation and Measurement*, Vol.59, pp. 2870-2876, November 2010.

T. Sundström and A. Alvandpour, "A 6-bit 2.5-GS/s flash ADC using comparator redundancy for low power in 90 nm CMOS, " in *Analog Integrated Circuits and Signal Processing*, Volume 64, Issue 3, pp. 215 - 222, August 2010.

C. Svensson and J. J. Wikner, "Power consumption of analog circuits: a tutorial", in *Analog Integrated Circuits and Signal Processing*, vol. 65, issue 2, pp. 171-184, November 2010.

C. Svensson, "The blocker challenge when implementing software defined radio receiver frontends", in *Analog Integrated Circuits and Signal Processing*, vol. 62, issue 2, pp. 81-89, August 2010.

S. Ahmad and J. Dabrowski, "Cancellation of spurious spectral components in one-bit stimuli generator", *IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pp. 393 - 396, 2010.

S. Ahmad, K. Azizi, I. Esmail Zadeh, and J. Dabrowski, "Two-Tone PLL for IP3 on-Chip Test", in *proc. IEEE International Symposium on Circuits and Systems (ISCAS)*, pp. 3549 – 3552, 2010.

S. Azam, R. Jonsson, J. Fritzin, A. Alvandpour, and Q. Wahab, "High Power, Single Stage SiGaN HEMT Class E Power Amplifier at GHz Frequencies", in proc. IEEE International Bhurban Conference on Applied Sciences and Technology (IBCAST), 2010.

H. Bornefalk, C. Xu, C. Svensson, and M. Danielsson, "Simulation study of an energy sensitive photon counting silicon strip detector for computed tomography: identifying strengths and weaknesses and developing work-arounds", in Proc. SPIE, Vol. 7622, 76223P (2010), March 2010.

J. Dabrowski, "On-chip test for RF IC transceivers", in proc. EuMWIT Workshop, RF mmWave DFT/BiST, WHS03 pp.16-30, 2010.

A. Fazli Yeknami, M. Hansson, B. Mesgarzadeh, and A. Alvandpour, "A low voltage and process variation tolerant SRAM cell in 90-nm CMOS", in Proc. International Symp. on VLSI Design, Automation and Test (VLSI-DAT), pp. 78-81, 2010.

A. Fazli Yeknami, F. Qazi, J. J. Dabrowski, and A. Alvandpour, "Design of OTAs for ultra-low-power sigma-delta ADCs in medical applications", in Proc. International Conf. on Signals and Electronic Systems (ICSES), pp. 229-232, 2010.

J. Fritzin, C. Svensson, and A. Alvandpour, "A Class-D Outphasing RF Amplifier with Harmonic Suppression in 90nm CMOS", in proc. IEEE European Solid-State Circuits Conference (ESSCIRC), pp. 310-313, September 2010.

J. Fritzin, T. Sundström, T. Johansson, and A. Alvandpour, "Reliability Study of a Low-Voltage Class-E Power Amplifier in 130nm CMOS", in proc. IEEE International Symposium on Circuits and Systems, (ISCAS), pp. 1907-1910, May 2010.

H. Khan, J. Fritzin, A. Alvandpour, and Q. Wahab, "A 900 MHz 26.8 dBm Differential Class-E CMOS Power Amplifier", in proc. IEEE German Microwave Conference (GeMiC), pp. 276-279, 2010.

F. Qazi and J. Dabrowski, "IP2 calibration of ADC for SDR receiver", in Proc. International Conf. on Signals and Electronic Systems (ICSES), pp. 233-236, 2010.

F. Qazi, T. Sundström, J. Wikner, C. Svensson and J. Dabrowski, "A/D conversion for software defined radio", in Proc. 6th Karlsruhe Workshop on Software Radios, pp. 70-76, 2010.

R. Ramzan, N. Ahsan, J. Dabrowski, and C. Svensson, "A 0.5–6GHz low gain linear RF front-end in 90nm CMOS", in Proc. 17th International Conference Mixed Design of Integrated Circuits and Systems (MIXDES), pp. 168-171, 2010.

T. Sundström, C. Svensson, and A. Alvandpour, "A 2.4 GS/s, 4.9 ENOB at Nyquist, Single-Channel Pipeline ADC in 65nm CMOS, " in IEEE European Solid-State Circuits Conference (ESSCIRC), pp. 370-373, September 2010.

D. Svärd, A. Cichocki, and A. Alvandpour, "Design and Evaluation of a Capacitively Coupled Sensor Readout Circuit, toward Contact-less ECG and EEG", in proc. Biomedical Circuits and Systems Conference, pp. 302-305, 2010.

B. Mesgarzadeh and A. Alvandpour, "EMI reduction by resonant clock distribution networks", in proc. IEEE International Symposium on Circuits and Systems (ISCAS), pp. 977-980, May 2010.

O. E. Najari, T. Arnborg, and A. Alvandpour "Wideband Inductroless LNA Employing Simultaneous 2nd and 3rd Order Distortion Cancellation ", in proc. Norchip conference, Finland, 2010.

F. Ul Amin, C. Svensson, and M. Gustavsson, "Low-power, high-speed, and low-noise X-ray readout channel in 0.18 $\mu$ m CMOS" , in Proc. 17th International Conference Mixed Design of Integrated Circuits and Systems (MIXDES), pp. 289 – 293, 2010.

D. Zhang, A. Bhide, and A. Alvandpour, "Design of CMOS Sampling Switch for Ultra-Low Power ADCs for Biomedical Applications, " in proc. Norchip conference, Finland, 2010.

### *National Conferences*

S. Ahmad, K. Azizi, I. Esmaeil Zadeh, and J. Dabrowski, "Two-Tone PLL for on-Chip IP3 Test", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

A. Fazli Yeknami, F. Qazi, J. Dąbrowski, and A. Alvandpour, "Design of OTAs for Ultra-Low-Power Sigma-Delta ADCs in Medical Applications", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

J. Fritzin, C. Svensson, and A. Alvandpour, "A Digital Linear CMOS RF Amplifier", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

C. Jansson, D. Svärd, "Readout Circuit for an Infrared Bolometer Array Operating at Ambient Temperature", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

F. Qazi, T. Sundström, J. Wikner, A. Shakeel, C. Svensson, and J. Dabrowski, "A/D conversion for software defined radio", in Proc. GigaHerz Symposium 2010, Lund, 2010.

F. Qazi, T. Sundström, J. Wikner, C. Svensson, and J. Dąbrowski, "Direct RF Sampling by  $\Sigma\Delta$  Modulator for SDR", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

T. Sundström, C. Svensson and A. Alvandpour "A Single-channel, 2.4 GS/s, 4.7 ENOB at Nyquist, Pipeline ADC in 65nm CMOS," in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

D. Svärd, A. Cichocki, and A. Alvandpour, "Design and Evaluation of a Capacitively Coupled Sensor Readout Circuit, toward Contact-less ECG and EEG", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

D. Svärd, C. Jansson, and A. Alvandpour, "Read-Out Electronics for Infrared Network Cameras for Surveillance", in proc. National Symposium on Technology and Methodology for Security and Crisis Management (TAMSEC), pp. 18, 2010.

B. Mesgarzadeh and A. Alvandpour, "EMI reduction by resonant clock distribution networks", in proc. Swedish System-on-Chip Conference (SSoCC), Kolmården, 2010.

### *Dissertations – Compilations*

S. Ahmad, "Stimuli Generation Techniques for On-Chip Mixed-Signal Test" Linköping Studies in Science and Technology. Dissertations, ISBN: 978-91-7393-288-2, Linköping, December 2010.