



Publication List

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1. PUBLICATIONS

1.1. Awards

Bram De Muer and M. Steyaert, "A 1.8 GHz CMOS fractional-N Frequency Synthesizer" ESSCIRC Best Paper Award 2001 European Solid-State Circuits Conference, Villach, September 2001.

M. Steyaert, **Bram De Muer**, J. Janssens and M. Borremans "A 1.8 GHz CMOS Cellular Transceiver Front-End: From Integrated Circuit to integrated System Design" Student Design Contest, Honorable Mentions, Operational Category 38th Design Automation Conference, Las Vegas, June 2001.

1.2. Books

Bram De Muer and M. Steyaert, CMOS Fractional-N Synthesizers: Design for High Spectral Purity and Monolithic Integration, Kluwer Academic Publishers, 2003.

Tim Piessens and Michiel Steyaert. Advances in Analog Design, chapter Class D self-oscillating, Line Drivers. Kluwer Academic Publishers, 2003.

Yves Geerts, Michiel Steyaert and Willy Sansen, Design of Multi-Bit Delta-Sigma A/D Converters , Kluwer academic publishers, 2002.

Wim Claes, Willy Sansen en Robert Puers, Design of Wireless Autonomous Datalogger ICs, Springer, 2005

Bert Serneels, M. Steyaert, "Design of High Voltage xDSL Line Drivers in Standard CMOS," Springer, 2008

Wouter Bracke, R. Puers, C. Van Hoof, "Ultra low power capacitive sensor interfaces," Springer, 2008

Jeroen Van Ham, R. Puers, "Design and instrumentation of implants for force sensing and actuation," 2008

Carolien Hermans, M. Steyaert, "Broadband Opto-Electrical Receivers in Standard CMOS," Springer 2007

1.3. Journal papers

Bert Serneels, **Eldert Geukens**, **Bram De Muer** and **Tim Piessens**, "A 1.5W, 10V Output Class D Amplifier Using a Boosted Supply from a Single 3.3V Input in standard 1.8V / 3.3V 0.18 μ m CMOS" , ISSCC Digest of Technical Papers, Feb 2012.

Yashodhan Moghe, Torsten Lehmann, and **Tim Piessens**, "Nanosecond Delay Floating High Voltage Level Shifters in a 0.35 μ m HV-CMOS Technology", IEEE Journal of Solid-State Circuits vol. SC-46, No2, Feb 2011 485

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M. Steyaert, J. Janssens, **Bram De Muer**, M. Borremans, N. Itoh, "A 2V CMOS cellular transceiver front-end", IEEE Journal of Solid-State Circuits, vol. 35, No. 12, pp. 1895-1907, December 2000.

Bram De Muer, M. Borremans and M. Steyaert, "A 2GHz low-phase-noise integrated LC-VCO set with flicker noise upconversion minimization", IEEE Journal of Solid-State Circuits, vol. 35, No. 7, pp. 1034-1038, July 2000

Tim Piessens and Michiel Steyaert. "Highly efficient xDSL line drivers in 0.35 μ m CMOS using a self-oscillating power amplifier" IEEE J. Solid-State Circuits, 38(1):22-29, January 2003.

Bert Serneels, **Tim Piessens**, Michiel Steyaert and Wim Dehaene, "A High-Voltage Output driver in a 2.5V 0.25 μ m CMOS Technology", IEEE J. Solid-State Circuits, Vol. 40, no. 3, pp. 576-583, March 2005.

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Jeroen Van Ham Ignace E. Naert Robert Puers , " Design and Packaging of a Fully Autonomous Medical Monitoring System for Dental Applications", IEEE Transactions on Circuits and Systems I: Regular Papers, Vol. 1, no 1, pp. 200-208, Jan 2007

1.4. International conference papers

Johan Van der Borgh (1), Sven Van Wijmeersch (1), **Bert Serneels** (2), Chris Goodings (3), "Protection of a 3.3V Domain and Switchable 1.8V/3.3V I/O in a 40nm pure 1.8V Process", EOS/ESD symposium, September 2011. (1. Sofics, 2. **ICsense**, 3. Icera).

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Peev P., **Bart De Vuyst**, Rombouts P., Hamoui A.A., "An anti-aliasing filter inspired by continuous-time Delta Sigma modulation", IEEE International conference on Electronics, Circuits and Systems (ICECS 2008), pp. 854-857, 2008

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B. Serneels, M. Steyaert, and W. Dehaene, "A 237mW aDSL2+ CO line driver in a standard 1.2V 130nm CMOS technology," ISSCC Digest of Technical Papers, pp. 524-525, February 2007.

M. Steyaert, F. Gobert, **C. Hermans**, P. Reynaert, **B. Serneels**. " Digital Communication Systems: the Problem of Analog Interface Circuits," in *Proceedings of the IEEE European Solid-State Circuits Conference*, pp. 423-426, Grenoble, France, Sept. 2005.

J. Van Ham, M. De Cooman, **W. Claes**, R. Puers, I. Naert, C. Van Lierde, J.L. Beckers, "An Autonomous Smart Dental Prosthesis for Fast Rehabilitation", International Workshop on Wearable and Implantable Body Sensor Networks (BSN 2006), Boston, 3-5 April, 2006

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C. De Ranter, **B. De Muer**, G. Van der Plas, P. Vancorenland, M. Steyaert, G. Gielen, "CYCLONE: Automated Design and Layout of RF LC-Oscillators" Proc. of the Design Automation Conference 2000 (DAC00), pp. 11-14, Los Angeles, June 2000.

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1.5. Papers published in workshop proceedings

Tim Piessens, "Low power RF power harvesting enabling more active tag functionality", 20th Workshop on Analog Advances in Circuit Design, AACD 2011, April 2011

Wim Claes, W. Sansen and R. Puers, "Evolution in Miniaturized Autonomous Data Loggers for Biomedical Applications" World Congress on Medical Physics and Biomedical Engineering, Chicago, USA, CDROM, July 23-28, 2000.

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1.6. Articles published in books

M. Steyaert, M. Borremans, J. Janssens and **Bram De Muer**, "RF Communication Circuits", The VLSI Handbook, Chapter 56, CRC Press & IEEE Press, 1999

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