

Nicolas DEHAESE

Laboratoire IM2NP, Equipe Conception de Circuits Intégrés

Liste des publications

1) Articles et communications publiés dans des revues à comité de lecture (ACL) :

Fourquin O., Bourdel S., Gaubert J., Vauché, R., Dehaese N., Chami A., Dauvignac J-Y., Kossiavas G., Fortino N., Brachat P., "Chip on Board 3-10 GHz IR-UWB Transmitter with Optimized Die to Antenna Wire Bond Transition", *IEEE Transactions on Components, Packaging and Manufacturing Technology*, Vol. 3, Issue 5, pp. 749-758, May 2013.

Ramos Sparrow O., Vauché R., Dehaese N., Bourdel S., Gaubert J., Ben amor I., Muhr E., Losco P., Fourquin O., "High Rate UWB CMOS Transceiver Chipset for WBAN and biomedical Applications", *Analog Integrated Circuits and Signal Processing (AICSP)*, Vol. 81, Issue 1, pp. 215-227, Oct. 2014.

Pons J., Dehaese, N., Bourdel, S., Gaubert, J., Paille, B., "Analysis of Binary CPFSK with Non-Uniform Sampled Reception," *IEEE Transactions on Communications*, Vol. 63, Issue: 3, pp. 844-856, March 2015.

Vauché R., Bourdel S., Dehaese N., Gaubert J., Ramos Sparrow O, Muhr E., Barthélemy H., "High Efficiency UWB Pulse Generator for Ultra Low Power Applications", *International Journal of Microwave and Wireless Technologies*, DOI: <http://dx.doi.org/10.1017/S1759078715000355>, March 2015.

Pons J., Dehaese, N., Bourdel, S., Gaubert, J., Paille, B., "Fast dichotomic supervised I/Q imbalance compensation algorithm," *Electronics Letters*, Vol. 51, Issue: 14, pp. 1113-1115, July 2015.

Pons J., Dehaese, N., Bourdel, S., Gaubert, J., Paille, B., "RF Power-Gating: A Low Power Technique for Adaptive Radios," *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, Issue: 99, July 2015, DOI: 10.1109/TVLSI.2015.2449243.

2) Communications avec actes dans un congrès international (ACTI) :

Vauché R., Bergeret E., Gaubert J., Bourdel S., Fourquin O., Dehaese N. "A Remotely UHF Powered UWB Transmitter for High Precision Localization of RFID Tag", *Proceedings of the IEEE International Conference on Ultra-Wideband (ICUWB)*, pp. 494-498, Bologna, Italy, Sept 2011.

Tall N., Dehaese N., Bourdel S., Bonat B. "An All-Digital Clock and Data Recovery Circuit for Low-to-Moderate Data Rate Applications", *Proceedings of the 18th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pp. 37-40, Beirut, Lebanon, Dec. 2011.

Tall N., Dehaese N., Bourdel S., Fourquin O., Vauché R., Gaubert J. "Low-Power Clock and Data Recovery Circuit for IR-UWB Receiver Power Management", *Proceedings of the 9th IEEE International Multi-Conference on Systems, Circuits and Devices (SSD)*, pp. 1-6, Chemnitz, Germany, March 2012.

Muhr E., Vauché R., Bourdel S., Gaubert J., Ramos Sparrow O., Dehaese N., Barthélemy H. "High Output Dynamic UWB Pulse Generator for BPSK Modulations", *Proceedings of the IEEE International Conference on Ultra-Wideband (ICUWB)*, Sydney, pp. 170-174, Australia, Sept 2013.

Bourdel S., Vauché R., Ramos Sparrow O., Muhr E., Gaubert J., Dehaese N., Barthélemy H. "An Inductorless CMOS UWB Pulse Generator with Active Pulse Shaping Circuit", *Proceedings of the IEEE International Conference on Ultra-Wideband (ICUWB)*, pp. 175-179, Sydney, Australia, Sept 2013.

Losco P., Bourdel S., Gaubert J., Dehaese N., Meillere S., Ramos Sparrow O., Vauché R., Barthélemy H. "Analysis of the IEEE 802.15.4a UWB PHY layer for optimizing the power consumption of the transmitter", *Proceedings of the IEEE International Conference on Ultra-Wideband (ICUWB)*, pp. 189-194, Sydney, Australia, Sept 2013.

Ben Amor I., Dehaese N., Gaubert J., Bourdel S., Ramos Sparrow O., "Fast Power Switching Low-Noise Amplifier for 6-10 GHz Ultra-Wideband Applications", *Proceedings of the 20th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pp. 759-762, Abu Dhabi, December 2013.

[Conf Inv] Bourdel, S.; Ben Amor, I.; Pons, J.F.; Dehaese, N.; Vauche, R.; Gaubert, J., "RF power gating techniques for ultra low power communication," *Proceedings of the 10th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*, Grenoble, June 2014

Ben Amor I., Dehaese N., Gaubert J., Bourdel S., "Fast Turn On/Off Low Noise Amplifier for Duty Cycled Ultra-Wideband Impulse Radio", *Proceedings of the IEEE International Conference on Ultra-Wideband (ICUWB)*, pp. 331-336, Paris, France, Sept 2014.

[Conf Inv] Ouvry, L.; Masson, G.; Pezzin, M.; Piaget, B.; Caillat, B.; Bourdel, S.; Dehaese, N.; Fourquin, O.; Gaubert, J.; Meillere, S.; Vauche, R., "A 4GHz CMOS 130 nm IR-UWB dual front-end transceiver for IEEE802.15 standards," *Proceedings of the 21st IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pp.798,801, Marseille, France, Dec. 2014.

Remy Vauche, Eloi Muhr, Ndiogou Tall, Abderrahmane Haloua, Sylvain Bourdel, Jean Gaubert, Nicolas Dehaese and Herve Barthelemy, "Ultra-WideBand Voltage Controlled Oscillator with Commutable Phases for BPSK Implementation", *Proceedings of the 13th International New Circuits and Systems Conference (NEWCAS)*, pp. 1-4, Grenoble, Jun. 2015.

Pons J., Dehaese, N., Bourdel, S., Gaubert, J., Paille B., "Digital cubic interpolation and synchronization for RF receiver using power-gated ADC," *Proceedings of the 58th International Midwest Symposium on Circuits and Systems (MWSCAS)*, pp. 1-4, Fort Collins, USA, Aout 2015.

Ben Amor I., Tall N., Dehaese N., Gaubert J., Vauché R., Ramos sparrow O., Meillere S., "A Fully Differential 7.2-8.5GHz LNA for a Self Synchronized and Duty-Cycled UWB OOK Receiver," *Proceedings of IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB)*, pp. 1-5, Montréal, Oct. 2015.

[Conf Inv] Vauche R., Bourdel S., Gaubert J., Dehaese N. and Barthelemy H., "Emitters and Receivers for Impulse Radio Ultra-WideBand and Their Healthcare Applications", *Proceedings of IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB)*, pp. 1-5, Montréal, Oct. 2015.