

Publication List of Professor Alex Ka Nang LEUNG

Refereed Journal Publications

1. **K.N. Leung**, P.K.T. Mok, W.H. Ki and J.K.O. Sin, "Three-Stage Large Capacitive Load Amplifier with Damping-Factor-Control Frequency Compensation," *IEEE Journal of Solid-State Circuits*, Vol. 35, No. 2, pp. 221-230, Feb. 2000.
2. **K.N. Leung** and P.K.T. Mok, "Nested Miller Compensation in Low-Power CMOS Design," *IEEE Transactions on Circuits and Systems II*, Vol. 48, No. 4, pp. 388-394, Apr. 2001.
3. **K.N. Leung** and P.K.T. Mok, "Analysis of Multi-Stage Amplifier - Frequency Compensation," *IEEE Transactions on Circuits and Systems I*, Vol. 48, No. 9, pp. 1041-1056, Sept. 2001.
 - o Top downloaded TCAS-I papers in 2005, 2008, 2009 and 2010
4. **K.N. Leung** and P.K.T. Mok, "A Sub-1-V 15-ppm/°C CMOS Bandgap Voltage Reference without Requiring Low Threshold Voltage Device," *IEEE Journal of Solid-State Circuits*, Vol. 37, No. 4, pp. 526-530, Apr. 2002.
5. **K.N. Leung** and P.K.T. Mok, "A CMOS Voltage Reference Based on Weighted ΔV_{GS} for CMOS Low-Dropout Linear Regulators," *IEEE Journal of Solid-State Circuits*, Vol. 38, No. 1, pp. 146-150, Jan. 2003.
6. **K.N. Leung**, P.K.T. Mok and C.Y. Leung, "A 2-V 23- μ A 5.3-ppm/°C Curvature-Compensated CMOS Bandgap Reference," *IEEE Journal of Solid-State Circuits*, Vol. 38, No. 3, pp. 561-564, Mar. 2003.
 - o Invited paper
7. H. Lee, **K.N. Leung** and P.K.T. Mok, "A Dual-Path Bandwidth Extension Amplifier Topology with Dual-Loop Parallel Compensation," *IEEE Journal of Solid-State Circuits*, Vol. 38, No. 10, pp. 1739-1744, Oct. 2003.
8. **K.N. Leung** and P.K.T. Mok, "A Capacitor-Free CMOS Low-Dropout Regulator with Damping-Factor-Control Frequency Compensation," *IEEE Journal of Solid-State Circuits*, Vol. 38, No. 10, pp. 1691-1702, Oct. 2003.
9. C.Y. Leung, P.K.T. Mok, **K.N. Leung** and M. Chan, "An Integrated CMOS Current-Sensing Circuit for Low-Voltage Current-Mode Buck Regulator," *IEEE Transactions on Circuits and Systems II*, Vol. 52, No. 7, pp. 394-397, Jul. 2005.
 - o Top downloaded TCAS-II papers in Mar., Aug. and Nov. 2011
10. H. Lee, P.K.T. Mok and **K.N. Leung**, "Design of Low-Power Analog Drivers Based on Slew-Rate Enhancement Circuits for CMOS Low-Dropout Regulators," *IEEE Transactions on Circuits and Systems II*, Vol. 52, No. 9, pp. 563-567, Sept. 2005.
 - o Top downloaded TCAS-II papers in Aug. 2011
11. C.Y. Leung, P.K.T. Mok and **K.N. Leung**, "A 1-V Integrated Current-Mode Boost Converter in Standard 3.3/5-V CMOS Technologies," *IEEE Journal of Solid-State Circuits*, Vol. 40, No. 11, pp. 2265-2274, Nov. 2005.
12. M. Siu, P.K.T. Mok, **K.N. Leung**, Y. H. Lam and W. H. Ki, "A Voltage-Mode PWM Buck Converter with End-Point Prediction," *IEEE Transactions on Circuits and Systems II*, Vol. 53, No. 4, pp. 294-298, Apr. 2006.
 - o Top downloaded TCAS-II papers in Oct. 2011
13. S.K. Lau, P.K.T. Mok and **K.N. Leung**, "A Low-Dropout Regulator for SoC with Q -Reduction," *IEEE Journal of Solid-State Circuits*, Vol. 42, No. 3, pp. 658-664, Mar. 2007.

14. **K.N. Leung**, C.H. Lo, P.K.T. Mok, Y.Y. Mai, W.Y. Leung and M. Chan, "A Temperature-Compensated CMOS Ring Oscillator for Power-Management Circuits," *Electronics Letters*, Vol. 43, Issue 15, pp. 786-787, Jul. 2007.
 - Undergraduate research done at HKUST
15. J.B. Jia and **K.N. Leung**, "An Integrated Ramp Generator with an Auto-Set Hysteretic Comparator for PWM Voltage Regulators," *Electronics Letters*, Vol. 43, Issue 24, pp. 1385-1387, Nov. 2007.
16. T.Y. Man, **K.N. Leung**, C.Y. Leung, P.K.T. Mok and M. Chan, "Development of Single-Transistor-Control LDO Based on Flipped Voltage Follower for SoC," *IEEE Transactions on Circuits and Systems I*, Vol. 55, No. 5, pp. 1392-1401, Jun. 2008.
 - Top downloaded TCAS-I papers in 2008, 2009, 2010 and Oct. 2011
17. S.K. Tang, K.P. Pun, C.S. Choy, C.F. Chan and **K.N. Leung**, "A Fully Differential Band-Selective Low Noise Amplifier for MB-OFDM UWB Receivers," *IEEE Transactions on Circuits and Systems II*, Vol. 55, No. 7, pp. 653-657, Jul. 2008.
18. A.K.Y. Wong, K.P. Pun, Y.T. Zhang and **K.N. Leung**, "A Low-Power CMOS Front-End for Photoplethysmographic Signal Acquisition with Robust DC Photocurrent Rejection," *IEEE Transactions on Biomedical Circuits and Systems*, Vol. 2, No. 4, pp. 280-288, Dec. 2008.
19. P.Y. Or and **K.N. Leung**, "An Output-Capacitorless Low-Dropout Regulator with Direct Voltage-Spike Detection," *IEEE Journal of Solid-State Circuits*, Vol. 45, No. 2, pp. 458-466, Feb. 2010.
 - Undergraduate research done at CUHK
 - Top downloaded JSSC papers in Feb. and Mar. 2010
20. C.F. Chan, K.P. Pun, **K.N. Leung**, J.P. Guo, L.L.K. Leung and C.S. Choy, "Low-Power Continuously-Calibrated Clock Recovery Circuit for UHF RFID EPC Class-1 Generation-2 Transponders," *IEEE Journal of Solid-State Circuits*, Vol. 45, No. 3, pp. 587-599, Mar. 2010.
21. **K.N. Leung**, F.K.M. Cheung, M. Ho, H.C. Poon and P.Y. Or, "A 1.9 μ W Transient-Enhanced Low-Dropout Regulator with Voltage-Spike Suppression," *Journal of Low Power Electronics*, Vol. 6, No. 1, pp. 126-132, Apr. 2010.
 - Undergraduate research done at CUHK
22. **K.N. Leung**, C.S. Choy, K.P. Pun, L.L.K. Leung, J.P. Guo, Y.S. Ng, C.F. Chan, W.W. Shi, Y. Hong, M. Ho, K.L. Mak and Y.Q. Ai, "RF Module Design of Passive UHF RFID Tag Implemented in CMOS 90-nm Technology," *Journal of Low Power Electronics*, Vol. 6, No. 1, pp. 141-149, Apr. 2010.
23. R.P.K. Chan, C.S. Choy, C.F. Chan, K.P. Pun and **K.N. Leung**, "Analysis of the Behaviors of Phase and Amplitude Mismatch Compensators to Achieve 82.5dB Image Rejection Ratio," *International Journal of Electronics*, Vol. 97, No. 5, pp. 553-568, May 2010.
24. M.J. Wong, M. Ho and **K.N. Leung**, "High Slew-Rate Voltage Follower Based on Double-Sided Dynamic Biasing," *Electronics Letters*, Vol. 46, Issue 12, pp. 824-825, Jun. 2010.
 - Undergraduate research done at CUHK
25. A.K.Y. Wong, **K.N. Leung**, K. P. Pun and Y. T. Zhang, "A 0.5 Hz Highpass-Cutoff Dual-Loop Transimpedance Amplifier for Wearable NIR Sensing Device," *IEEE Transactions on Circuits and Systems II*, Vol. 57, No. 7, pp. 531-535, Jul. 2010.
26. S. Yeung, J.P. Guo and **K.N. Leung**, "25mA LDO with -63dB PSRR at 30MHz for WiMAX," *Electronics Letters*, Vol. 46, Issue 15, pp. 1080-1081, Jul. 2010.
 - Undergraduate research done at CUHK
 - Top downloaded EL papers in Aug. 2010

27. J.P. Guo and **K.N. Leung**, "A 6- μ W Chip-Area-Efficient Output-Capacitorless LDO in 90-nm CMOS Technology," *IEEE Journal of Solid-State Circuits*, Vol. 45, No. 9, pp. 1896-1905, Sept. 2010.
 - Regarded as "most read" JSSC paper in Sept. 2010
 - Top downloaded JSSC papers in Oct. and Nov. 2010
 - Top 100 downloaded papers in Sept. 2010 (Ranked 14th) and Nov. 2010 (Ranked 100th) in IEEE overall
28. **K.N. Leung** and Y.S. Ng, "A CMOS Low Dropout Regulator with a Momentarily Current-Boosting Voltage Buffer," *IEEE Transactions on Circuits and Systems I*, Vol. 57, No. 9, pp. 2312-2319, Sept. 2010.
 - Ranked 1st of the Top downloaded TCAS-I papers in Oct. 2010
29. P.Y. Or and **K.N. Leung**, "A Low-Dropout Regulator with Load-Tracking Impedance Reduction and Loop-Gain Boosting," *IEEE Transactions on Circuits and Systems II*, Vol. 57, No. 10, pp. 757-761, Oct. 2010.
 - Ranked 1st of the Top downloaded TCAS-II papers in Oct. 2010
 - Top downloaded TCAS-II papers in Nov. 2010, Mar. 2011 and May 2011
30. M. Ho, **K.N. Leung** and K.L. Mak, "A Low-Power Fast-Transient 90-nm Low-Dropout Regulator with Multiple Small-Gain Stages," *IEEE Journal of Solid-State Circuits*, Vol. 45, No. 11, pp. 2466-2475, Nov. 2010.
 - Top downloaded JSSC papers in Oct. and Nov. 2010
 - Top 100 downloaded papers in Oct. 2010 (Ranked 79th) and Nov. 2010 (Ranked 33rd) in IEEE overall
31. **K.N. Leung**, Y.Y. Mai and P.K.T. Mok, "A Chip-Area Efficient Voltage Regulator for VLSI Systems," *IEEE Transactions on VLSI Systems*, Vol. 18, No. 12, pp. 1757-1762, Dec. 2010.
 - Top downloaded TVLSI papers in Dec. 2010
32. **K.N. Leung**, Y.K. Sun, L.L.K. Leung and P.Y. Or, "A Gain-Optimizing Regulated Charge Pump," *International Journal of Electronics*, Vol. 98, No. 2, pp. 197-205, Feb. 2011.
 - Undergraduate research done at CUHK
33. M. Ho and **K.N. Leung**, "Dynamic Bias-Current Boosting Technique for Ultra-Low-Power Low-Dropout Regulator in Biomedical Applications," *IEEE Transactions on Circuits and Systems II*, Vol. 58, Vol. 3, pp. 174-178, Mar. 2011.
 - Ranked 1st of the Top downloaded TCAS-II papers in Mar. 2011
 - Top downloaded TCAS-II papers in Mar., Apr., May, Jun., Jul. and Oct. 2011
34. **K.N. Leung**, Y.S. Ng and H. Chen, "A Fully Integrated CMOS Direct-Conversion Transmitter Front-End for WiMAX," *International Journal of Electronics*, Vol. 99, No. 2, pp. 255-266, Feb. 2012.
35. J.B. Jia and **K.N. Leung**, "Improved Active-Diode Circuit Used in Voltage Doubler," *International Journal of Circuit Theory and Applications*, Vol. 40, Issue 2, pp. 165-173, Feb. 2012.
36. J.P. Guo and **K.N. Leung**, "A CMOS Voltage Regulator for Passive RFID Tag ICs," *International Journal of Circuit Theory and Applications*, Vol. 40, Issue 4, pp. 329-340, Apr. 2012.
37. J.B. Jia and **K.N. Leung**, "A Digital-Control Single-Inductor Triple-Output DC-DC Converter with Pre-Sub-Period Inductor-Current Control," *IEEE Transactions on Power Electronics*, Vol. 27, No. 4, pp. 2028-2042, Apr. 2012.

38. Y.Q. Zheng, H. Chen and **K.N. Leung**, "A Fast-Response Pseudo-PWM Buck Converter with PLL-Based Hysteresis Control," *IEEE Transactions on VLSI Systems*, accepted for publication.
39. H. Chen and **K.N. Leung**, "A Transient-Improved LDO with Nested Flipped Voltage Follower Structure," *International Journal of Circuit Theory and Applications*, accepted for publication.
 - o Undergraduate research done at CUHK
40. K.W. Li, **K.N. Leung** and L.L.K. Leung, "Sub-mW LC Dual-Input Injection-Locked Oscillator for Autonomous WBSNs," *IEEE Transactions on VLSI Systems*, accepted for publication.

Refereed Conference Publications

1. **K.N. Leung**, P.K.T. Mok, W.H. Ki and J.K.O. Sin, "Damping-Factor-Control Frequency Compensation Technique for Low-Voltage Low-Power Large Capacitive Load Applications," *IEEE International Solid-State Circuits Conference (ISSCC)*, San Francisco, California, USA, pp. 158-159, Feb. 1999.
2. **K.N. Leung**, P.K.T. Mok and W.H. Ki, "Optimum Nested Miller Compensation for Low-Voltage Low-Power CMOS Amplifier Design," *IEEE International Symposium on Circuits and Systems*, Orlando, Florida, USA, Vol. II, pp. 616-619, May 1999.
3. **K.N. Leung**, P.K.T. Mok and W.H. Ki, "A Novel Frequency Compensation Technique for Low-Voltage Low-Dropout Regulator," *IEEE International Symposium on Circuits and Systems*, Orlando, Florida, USA, Vol. V, pp. 102-105, May 1999.
4. **K.N. Leung**, P.K.T. Mok and W.H. Ki, "Right-Half-Plane Zero Removal Technique for Low-Voltage Low-Power Nested Miller Compensation CMOS Amplifiers," *the 6th IEEE International Conference on Electronics, Circuits and Systems*, Paphos, Cyprus, Vol. II, pp. 599-602, Sept. 1999.
5. **K.N. Leung**, P.K.T. Mok, W.H. Ki and J.K.O. Sin, "Analysis of an Alternative Structure of Damping-Factor-Control Frequency Compensation," *IEEE International Symposium on Circuits and Systems*, Geneva, Switzerland, Vol. II, pp. 545-548, May 2000.
6. **K.N. Leung** and P.K.T. Mok, "A CMOS Voltage Reference Based on Weighted Difference of Gate-Source Voltages between PMOS and NMOS Transistors for Low Dropout Regulator," *the 27th European Solid-State Circuits Conference*, Villach, Austria, pp. 88-91, Sept. 2001.
7. **K.N. Leung**, P.K.T. Mok and C.Y. Leung, "A 2-V 23- μ A 5.3-ppm/ $^{\circ}$ C 4th-Order Curvature-Compensated CMOS Bandgap Reference," *IEEE Custom Integrated Circuits Conference*, Orlando, Florida, USA, pp. 457-460, May 2002.
8. **K.N. Leung** and P.K.T. Mok, "High-Performance Low-Dropout Regulator Designs," *the 5th Hong Kong IEEE Workshop on Switch Mode Power Supplies*, Hong Kong, pp. 68-75, Jun. 2002.
9. S.K. Lau, **K.N. Leung** and P.K.T. Mok, "Analysis of Low-Dropout Regulator Topologies for Low-Voltage Regulation," *IEEE Conference on Electron Devices and Solid-State Circuits*, Hong Kong, pp. 379-382, Dec. 2003.
10. C.Y. Leung, P.K.T. Mok and **K.N. Leung**, "A 1.2-V Buck Converter with a Novel On-Chip Low-Voltage Current-Sensing Scheme," *IEEE Symposium on Circuits and Systems*, Vancouver, Canada, Vol. V, pp. 824-827, May 2004.
11. C.Y. Leung, **K.N. Leung** and P.K.T. Mok, "Design of a 1.5-V High-Order Curvature-Compensated CMOS Bandgap Reference," *IEEE Symposium on Circuits and Systems*, Vancouver, Canada, Vol. I, pp. 49-52, May 2004.

12. **K.N. Leung**, P.K.T. Mok and S.K. Lau, "A Low-Voltage CMOS Low-Dropout Regulator with Enhanced Loop Response," *IEEE Symposium on Circuits and Systems*, Vancouver, Canada, Vol. I, pp. 385-388, May 2004.
13. P.K.T. Mok and **K.N. Leung**, "Design Considerations of Recent Advanced Low-Voltage Low-Temperature-Coefficient CMOS Bandgap Voltage Reference," *IEEE Custom Integrated Circuits Conference*, Orlando, Florida, USA, pp. 635-642, Oct. 2004.
 - Invited paper
14. W.P. Lee, C.T. Hsu, C.Y. Tsoi, A. Bermak and **K.N. Leung**, "Synchronization Analysis in Spiking Pixel Architecture - Hardware Implementation and Mismatch Analysis," *IEEE TENCON*, Chiang Mai, Thailand, Vol. D, pp. 274-277, Nov. 2004.
 - Undergraduate research done at HKUST
15. H. Lee, **K.N. Leung** and P.K.T. Mok, "Low-Voltage Analog Circuit Design Methodology Based on Bias-Current Reutilization, Self-Biasing and Signal Superposition," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, pp. 533-536, Dec. 2005.
16. A.K.Y. Wong, K.P. Pun, Y.T. Zhang and **K.N. Leung**, "A NIR CMOS Preamplifier with DC Photocurrent Rejection for Pulsed Light Source," *IEEE Biomedical Circuits & Systems Conference*, London, pp. 9-12, Nov. 2006.
17. J.B. Jia and **K.N. Leung**, "A Review of Charge-Pump Design," *International Ph.D. Student Workshop on SoC*, Taipei, Taiwan, Jul. 2007.
18. K.W. Li and **K.N. Leung**, "Biomedical Filter Design in CMOS Technology," *International Ph.D. Student Workshop on SoC*, Taipei, Taiwan, Jul. 2007.
 - Best presentation award
19. Y.Q. Zheng and **K.N. Leung**, "A Review of Advanced Low Dropout Regulators," *International Ph.D. Student Workshop on SoC*, Taipei, Taiwan, Jul. 2007.
20. A.K.Y. Wong, K.P. Pun, Y.T. Zhang and **K.N. Leung**, "A Low Power CMOS Front-End for Photoplethysmographic Signal Acquisition with Robust DC Photocurrent Rejection," *IEEE/EMBS International Summer School and Symposium on Medical Devices and Biosensor*, pp. 53-56, Aug. 2007.
21. H.Y. Lo, P.Y. Or, **K.N. Leung**, L.L.K. Leung, C.S. Choy and K.P. Pun, "Design Challenges of Voltage Multiplier in a 0.35- μm 2-Poly 4-Metal CMOS Technology for RFID Passive Tags," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Taiwan, Vol. I, pp. 433-436, Dec. 2007.
 - Undergraduate research done at CUHK
22. **K.N. Leung**, Y.S. Ng, K.Y. Yim and P.Y. Or, "An Adaptive Current-Boosting Voltage Buffer for Low-Power Low Dropout Regulators," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Taiwan, Vol. I, pp. 485-488, Dec. 2007.
 - Undergraduate research done at CUHK
23. **K.N. Leung** and Y.Q. Zheng, "Compensation-Capacitor Free Pseudo Three-Stage Amplifier with Large Capacitive Loads," *IEEE International Symposium on Electronic Design Test and Applications*, Hong Kong, pp. 7-10, Jan. 2008.
24. C.Y. Cheng, **K.N. Leung**, Y.K. Sun and P.Y. Or, "Design of a Low-Voltage CMOS Charge Pump," *IEEE International Symposium on Electronic Design Test and Applications*, Hong Kong, pp. 342-345, Jan. 2008.
 - Undergraduate research done at CUHK
25. J.B. Jia and **K.N. Leung**, "A Single-Inductor Dual-Output Pseudo-DCM/CCM Buck and Boost Converter in 90nm CMOS Technology," *the 9th International Conference on Solid-State and Integrated-Circuit Technology*, Beijing, China, pp. 1937-1940, Oct. 2008.

26. M.P.K. Chan, C.S. Choy, K.P. Pun, C.F. Chan and **K.N. Leung**, "Enhanced channel selection using digital low-IF in Weaver receiver architecture," *IEEE Asia Pacific Conference on Circuits and Systems*, Macao, China, pp. 33-36, Dec. 2008.
27. Y. Hong, C.F. Chan, J.P. Guo, Y.S. Ng, W.W. Shi, L.L.K. Leung, **K.N. Leung**, C.S. Choy and K.P. Pun, "Design of Passive UHF RFID Tag in 130nm CMOS Technology," *IEEE Asia Pacific Conference on Circuits and Systems*, Macao, China, pp. 1371-1374, Dec. 2008.
28. Y. Hong, C.F. Chan, J.P. Guo, Y.S. Ng, W.W. Shi, M. Ho, L.L.K. Leung, **K.N. Leung**, C.S. Choy and K.P. Pun, "Design and Challenges of Passive UHF RFID Tag in 90nm CMOS Technology," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, Dec. 2008.
29. M. Ho and **K.N. Leung**, "Two-Stage Miller-Compensated Amplifier with Embedded Negative Current Buffer," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, Dec. 2008.
30. P.Y. Or and **K.N. Leung**, "A Slew-Rate Enhancement Technique Based On Current Comparator and Capacitive-Coupled Push-Pull Output Stage for CMOS Amplifiers," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, Dec. 2008.
31. J.B. Jia and **K.N. Leung**, "A Single-Inductor Dual-Output Pseudo-DCM/CCM Buck and Boost Converter with Adaptive DC Current Compensation," *IEEE Symposium on Circuits and Systems*, Taipei, Taiwan, pp. 2641-2644, May 2009.
32. J.P. Guo and **K.N. Leung**, "A Fold-Back Current-Limit Circuit with Load-Insensitive Quiescent Current for CMOS Low Dropout Regulator," *IEEE Symposium on Circuits and Systems*, Taipei, Taiwan, pp. 2417-2420, May 2009.
33. C.F. Chan, W.W. Shi, K.P. Pun, L.L.K. Leung, **K.N. Leung** and C.S. Choy, "A Low-Power Signal Processing Front-End and Decoder for UHF Passive RFID Transponders," *IEEE Symposium on Circuits and Systems*, Taipei, Taiwan, pp. 1581-1584, May 2009.
34. W. Fan, C.S. Choy and **K.N. Leung**, "Robust and Low Complexity Packet Detector Design for MB-OFDM UWB," *IEEE Symposium on Circuits and Systems*, Taipei, Taiwan, pp. 693-696, May 2009.
35. Y.S. Ng, L.L.K. Leung and **K.N. Leung**, "A 3-GHz Fully-Integrated CMOS Class-AB Power Amplifier," *IEEE International Midwest Symposium on Circuits and Systems*, Cancun, Mexico, pp. 995-998, Aug. 2009.
36. Y. Hong, Y.S. Ng, C.F. Chan, J.P. Guo, W.W. Shi, M. Ho, Y.Q. Ai, K.L. Mak, **K.N. Leung**, C.S. Choy, K.P. Pun and L.L.K. Leung, "A Passive RFID Tag IC Development Platform," *International Conference on Anti-counterfeiting, Security and Identification in Communications*, pp. 286-289, Hong Kong, Aug. 2009.
37. J.P. Guo and **K.N. Leung**, "A Sub-1 μ A Improved-Transient CMOS Low-Dropout Regulator without Minimal ESR Requirement," *IEEE TENCON*, pp. 1-6, Singapore, Nov. 2009.
38. K.W. Li, L.L.K. Leung and **K.N. Leung**, "Low Power Injection Locked Oscillators for MICS Standard," *IEEE Biomedical Circuits & Systems Conference*, pp. 1-4, Beijing, China, Nov. 2009.
39. W.W. Shi, C.S. Choy, C.F. Chan, **K.N. Leung** and K.P. Pun, "A 0.4V Low Power Baseband Processor for UHF Passive RFID Tags," *IEEE International NEWCAS Conference*, Montreal, Canada, pp. 65-68, Jun. 2010.
40. W.W. Shi, C.S. Choy, C.F. Chan, **K.N. Leung** and K.P. Pun, "A 90nm RFID Tag's Baseband Processor with Novel PIE Decoder and Uplink Clock Generator," *IEEE*

International Midwest Symposium on Circuits and Systems, Seattle, WA, USA, pp. 644-647, Aug. 2010.

41. J.P. Guo, W.W. Shi, **K.N. Leung** and C.S. Choy, "Power-On-Reset Circuit with Power-Off Auto-Discharging Path for Passive RFID Tag ICs," *IEEE International Midwest Symposium on Circuits and Systems*, Seattle, WA, USA, pp. 21-24, Aug. 2010.
42. J.B. Jia and **K.N. Leung**, "Optimization of Output Voltage and Stage Number of UHF RFID Power Rectifier," *International Conference on Solid-State and Integrated-Circuit Technology*, Shanghai, China, pp. 412-414, Nov. 2010.
43. K.Y. Kwong and **K.N. Leung**, "Slew-Rate Enhancement Circuit of CMOS Current-Mirror Amplifier by Edge-Detecting Technique," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, Dec. 2010.
44. H. Chen and **K.N. Leung**, "A Fast-Transient LDO Based on Buffered Flipped Voltage Follower," *IEEE International Conference on Electron Devices and Solid-State Circuits*, Hong Kong, Dec. 2010.
 - o Undergraduate research done at CUHK
45. **K.N. Leung**, M. Ho, J.P. Guo and P.Y. Or, "Development of Energy-Efficient Fast-Transient CMOS Low-Dropout Regulators for SoC Applications," *IEEE Symposium on Circuits and Systems*, Rio de Janeiro, Brazil, presented in Special Session: Emerging Energy & Power Integrated Circuits, pp. 305-308, May 2011.

Presentations

1. J.P. Guo and **K.N. Leung** "High PSRR LDO with Embedded Ripple Feed-Forward Path," *IEEE International Solid-State Circuits Conference (ISSCC)*, San Francisco, California, USA, Student Research Preview, Feb. 2011.
2. M. Ho and **K.N. Leung**, "A High-Loop-Gain-Bandwidth Nanoscale Low-Dropout Regulator with All Minimum-Channel-Length Transistors," *Student Symposium of ED/SSC*, Dec. 2012.
3. H.C. Poon and **K.N. Leung**, "A Transient-Enhanced Low-Dropout Regulator with Non-Static Impedance," *Student Symposium of ED/SSC*, Dec. 2012.

Patents

1. **K.N. Leung**, P.K.T. Mok, W.H. Ki and J.K. O. Sin, "Frequency Compensation Techniques for Low-Power Multistage Amplifiers," *U.S. Patent 6,208,206*, Mar. 27, 2001, licensed.
2. **K.N. Leung**, P.K.T. Mok and K.C. Kwok, "CMOS Voltage Reference," *U.S. Patent 6,441,680*, Aug. 27, 2002, licensed.
3. **K.N. Leung** and P.K.T. Mok, "Low Dropout Regulator Capable of On-Chip Implementation," *U.S. Patent 7,205,827*, Apr. 17, 2007, licensed.
4. T.Y. Man, C.Y. Leung, **K.N. Leung**, P.K.T. Mok and M. Chan, "Single-Transistor-Control Low-Dropout Regulator," *U.S. Patent 7,285,942*, Oct. 23, 2007, licensed.
5. P.K.T. Mok, S.K. Lau and **K.N. Leung**, "Area-Efficient Capacitor-Free CMOS Low-Dropout Regulator," *U.S. Patent 7,495,422*, Feb. 24, 2009, licensed.
6. P.K.T. Mok, M. Siu and **K.N. Leung**, "End-Point Prediction Scheme for Voltage Regulators," *U.S. Patent 7,619,395*, Nov. 17, 2009, licensed.
7. **K.N. Leung**, and P.K.T. Mok, "Low Dropout Regulator Capable of On-Chip Implementation," *US Patent RE42,116*, Feb. 8, 2011, re-issued.

8. T.Y. Man, C.Y. Leung, **K.N. Leung**, P.K.T. Mok, and M. Chan, “Single-Transistor-Control Low-Dropout Regulator,” *US Patent RE42,335*, May 10, 2011, re-issued.