

PUBLICATIONS 2003

Electronic Devices

1. S Hsu, Alvandpour A, Mathew S, Shih-Lien L, Krishnamurthy RK, Borkar S: "A 4.5-GHz 130-nm 32 KB LO cache with a leakage-tolerant self reverse-bias bitline scheme", IEEE Journal of Solid-State Circuits, vol 39, issue 5, pp 755-761, May 2003.
2. R Jonsson, Wahab Q, Rudner S, Svensson C: Computational load pull simulations of SiC microwave power transistors, IEEE Journal of Solid-State Electronics, vol 47, issue 11, pp 1921-1926, Nov 2003.
3. C. Svensson: "Forty years of Feature-Size Predictions (1962-2002)", 2003 IEEE International Solid-State Circuits Conference, Digest of Technical Papers, Vol. 46, pp. S28-S29, 2003.
4. Söderquist: "Globally updated mesochronous design style", IEEE Journal of Solid-State Circuits, vol 38, No. 7, pp 1242-1249, July 2003.
5. A Alvandpour, R Krishnamurthy, D Eckerbert, S Apperson, B Bloechel, S Borkar: "A 3.5 GHz 32mW 150nm multiphase clock generator for high-performance microprocessors", IEEE Int. solid-state circuits conference, pp 112-113, Feb 9, 2003.
6. A Alvandpour, D Somasekhar, R Krishnamurthy, V De, S Borkar, C Svensson: "Bitline leakage equalization for sub-100nm caches" Proc. of ESSCIRC, Estoril, Portugal, Nov 16-18, pp 401-404, 2003.
7. M Andersson, Elbornsson J, Eklund Jan-Erik, Alvbrant J, Fredriksson H: "Verification of a blind mismatch error equalization method for randomly interleaved ADCs using a 2.5 V/12b/30MSs PSAADC". Proceedings of ESSCIRC, Estoril Portugal, Sept 16-18, pp 473-476, 2003.
8. S Andersson, Svensson C, Drugge O: "Wideband LNA for a multistandard wireless receiver in 0.18 μm CMOS". Proceedings of ESSCIRC, Estoril, Portugal, Sept 16-18, pp 655-658, 2003.
9. J Dabrowski: "BiST model for IC RF-transceiver front-end". Proceedings of Int. symposium on defect and fault tolerance in VLSI Systems, Cambridge, USA, Nov 3-5, pp 295-302, 2003.
10. J Dabrowski: "Loopback BiST for RF front-ends in digital transceivers", Int. symposium on SoC, Tampere, Finland, Nov 19-21, pp 143-146, 2003.
11. H Eriksson, Larsson-Edefors P, Henriksson T, Svensson C: "Full-custom vs. standard-cell design flow—An adder case study". Design automation conference, 2003. Asia and South Pacific, pp 507-510, Jan 21-24, 2003.
12. K Folkesson, Svensson C: "An accurate ADC model in radar system simulation", Proceedings of IWADC, Perugia, Italy, pp 25-28, Sept 8-10, 2003.
13. S Hsu, Chatterjee B, Sachdev M, Alvandpour A, Krishnamurthy RK, Borkar S: "A 90nm 6.5ghz 256x64b dual supply register file with split decoder scheme". Symposium on VLSI Circuits, Digest of Technical Paper, pp 237-238, June 12-14, 2003.
14. D. Jakonis, C. Svensson: "A 1.6 GHz downconversion sampling mixer in CMOS". Proceedings of the 2003 IEEE ISCAS conference, Bangkok, Thailand, pp 725-728, May, 2003.
15. D. Jakonis, J. Dabrowski, C. Svensson: "Noise analysis of downconversion sampling mixer". Proceedings of ECCTD, vol 1, pp 181-184, Kraków, Poland, July, 2003.
16. D. Jakonis, K. Folkesson, J. Dabrowski, C. Svensson: "Downconversion sampling mixer for wideband low-IF receiver". Proceedings of MIXDES, pp 208-213, Lodz, Poland, July, 2003.
17. CH Kim, Roy K, Hsu S, Alvandpour A, Krishnamurthy RK, Borkar S: "A process variation compensating technique for sub-90nm dynamic circuits". Symposium on VLSI Circuits. Digest of Technical Papers, pp 205-207, June 12-14, 2003.
18. S Natarajan, A Alvandpour: "High performance and SER insensitive memories", SPIE's International Symposium on Microelectronics, MWMS, and Nanotechnology, Perth, Australia, 9-12 December, 2003.

19. S Natarajan, A Alvandpour: "Ultra low power ferroelectric memory for SoC's", SPIE's international Symposium on Microelectronics, MEMS, pp 144-151, Perth, Australia, Dec, 2003.
20. S Natarajan, A Alvandpour: "SoC versus SIP: What makes sense?", SPIE's International Symposium on Microelectronics, MWMS, and Nanotechnology, Perth, Australia, 9-12 December 2003.
21. S.T. Oskulii, A Alvandpour: "Comparative study on low power, high performance standard cell flip flops", SPIE's International Symposium on Microelectronics, MEMS, pp 390-398, Perth, Australia, 9-12 December, 2003.
22. M Sinha, A Alvandpour, W Burleson: "High-performance and low-voltage sense-amplifier techniques for sub-90nm SRAM", to be presented at IEEE Int. SOC conference, Portland, Oregon, Sept 17-20, pp 113-116, 2003.
23. M Sinha, S Hsu, A Alvandpour, W Burleson, R Krishnamurthy, S Borkar: "Low voltage sensing techniques and secondary design issues for sub90nm caches", proc. Of ESSCIRC, Perugia, Portugal, pp. 413-416, Sept 16-18, 2003.
24. C. Svensson: "Forty years of Feature-Size predictions (1962-2002)", Proc. of IEEE International Solid-State Circuits Conference, Digest of Technical Papers. Vol 46, pp S28-S29, 2003.
25. C Svensson, Caputa P: "High bandwidth, low latency global interconnect", VLSI Circuits and Systems, Proc. of SPIE, vol 5117, pp 126-134, 2003.
26. S Andersson, Svensson C: "Wideband LNA for a multistandard wireless receiver in 0.18 Um CMOS", Proceedings of SSoCC'03, Eskilstuna, April 8-9, 2003.
27. S Andersson Svensson: "An active recursive RF filter in 0.35 Um BiCMOS", GigaHerz Conference, Linköping, Nov 4-5, 2003.
28. H Bengtsson, Svensson C: "Speed study of a 2.5 Gb/s equalizer for optical communication in a 3 V 0.35 um CMOS process", Proc SSoCC'03, Eskilstuna, April 8-9, 2003.
29. K Folkesson, Jakonis D, Svensson C: "A jitter measurement technique for high-speed sampling systems", Proceedings of SSoCC'03, Eskilstuna, April 8-9, 2003.
30. M Hansson, Alvandpour A: "Crosstalk analysis considering power and delay on interconnects", Proceedings of Norchip'03, Riga, Estland, Nov 10-11, pp 196-199, 2003.
31. D Jakonis, J Dabrowski, C Svensson: "Noise reduction by sampling frequency choice in subsampling mixer", Proc of SSoCC'03, Eskilstuna, Sweden, April 8-9, 2003.
32. R Johansson, Lindgren L, Melander J, Möller B: "A multi-resolution 100 GOPS 4 Gpixels/s programmable CMOS image sensor for machine vision". The 03 IEEE workshop on charge coupled devices and advanced image sensors, Elmau, Tyskland, May 15-17, 2003.
33. R Malmqvist, Hansson M: "SiGe BiCMOS LNA's and tunable active filter for future wide-band multi-purpose array antennas". Proceedings of GigaHertz conference, Linköping, Nov 4-5, 2003.
34. C. Svensson: "Prospects and limits of electrical interconnects", invited paper, Symposium of Short-Distance Optical Interconnects – From Backplanes to Intrachip Communication, Chalmers Univ. of Technology, Gothenburg, March 7, 2003.
35. T Nilsson, Samuelsson C, Alfredsson M, Ouacha A: "Key circuits for a reconfigurable and Bi-directional beamformer for ultra wideband applications". Proceedings of European Microwave Week, München, Tyskland, Oct 6-10, 2003.
36. A Ouacha, Boman T, Frennberg H: "A microwave-based multifunction system concept: A necessity for network centric warfare", Proceeding of CIMI, Enköping, May, 2003.
37. Rantzer: "Photo diodes for machine vision". Linköping University, Dissertation No.799, ISBN 91-7373-602-3, Mach 21, 2003.
38. K. Folkesson: "ADC Modeling for system simulation". Linköping University, Thesis No. 1027, LiU-TEK-LIC-2003:26, June 19, 2003.

39. S Andersson, Caputa C, Hansson M, Alvandpour A: "Project and laboratory manual; TSEK01, VLSI design project 2004", December 2003.
40. S Andersson: "Digital integrated circuits- Manchester carry-chain adder". Laboratory exercise manual in TSTE86 Digital integrated circuits.