

# Scientific Publications

Dr. Stephan Henzler, August 31, 2009

1. M. Weis, A. Pfizner, D. Kasprowicz, R. Emling, T. Fischer, S. Henzler, W. Maly, and D. Schmitt-Landsiedel, "Stacked 3-Dimensional 6T SRAM Cell with Independent Double Gate Transistors," in *International Conference on Integrated Circuit Design and Technology (ICICDT)*, 2009.
2. M. Eireiner, D. Schmitt-Landsiedel, P. Wallner, A. Schoene, and S. Henzler, "Adaptive Circuit Block Model for Power Supply Noise Analysis of Low Power System-on-Chip," in *International Symposium on System-on-Chip*, 2009.
3. S. Henzler, S. Koeppe, D. Lorenz, W. Kamp, R. Kuenemund, and D. Schmitt-Landsiedel, "A Local Passive Interpolation Concept for Variation Tolerant High Resolution Time-to-Digital Conversion," *Journal of Solid State Circuits*, vol. 43/7, pp. 1666–1676, 7/2008.
4. S. Henzler and S. Koeppe, "Design and Application of Power Optimized High-Speed CMOS Frequency Dividers," *Transactions on Very Large Scale Integration Systems*, vol. 16/11, pp. 1513–1520, 11/2008.
5. S. Henzler, S. Koeppe, W. Kamp, H. Mulatz, and D. Schmitt-Landsiedel, "90nm 4.7ps-Resolution 0.7-LSB Single-Shot Precision and 19pJ-per-Shot Local Passive Interpolation Time-to-Digital Converter with On-Chip Characterization," in *International Solid State Circuits Conference (ISSCC)*, 2008.
6. S. Henzler, S. Koeppe, D. Lorenz, W. Kamp, R. Kuenemund, and D. Schmitt-Landsiedel, "Variation Tolerant High Resolution and Low-Latency Time-to-Digital Converter," in *European Solid State Circuits Conference (ESSCIRC)*, 2007.
7. M. Eireiner, S. Henzler, G. Georgakos, J. Berthold, and D. Schmitt-Landsiedel, "In-Situ Delay Characterization and Local Supply Voltage Adjustment for Compensation of Local Parametric Variations," *Journal of Solid State Circuits (JSSC)*, vol. 42/7, no. 7, pp. 1583–1592, 2007.
8. T. Lueftner, J. Berthold, C. Pacha, G. Georgakos, G. Sauzon, O. Hoemke, J. Beshenar, P. Mahrla, K. Just, P. Hober, S. Henzler, D. Schmitt-Landsiedel, A. Yakovleff, A. Klein, Knight R., P. Acharya, A. Bonnardot, S. Buch, and M. Sauer, "A 90-nm CMOS Low-Power GSM/EDGE Multimedia-Enhanced Baseband Processor with 380-MHz ARM926 Core and Mixed-Signal Extensions. *Journal of Solid State Circuits*, Vol. 42, No.2, 2007.," *Journal of Solid State Circuits (JSSC)*, vol. 1/42, pp. 134–144, 1/2007.
9. M. Eireiner, S. Henzler, X. Zhang, J. Berthold, and Schmitt-Landsiedel. D., "Impact of On-Chip Inductance on Power Supply Integrity," *Advances in Radio Science, URSI Kleinheubacher Berichte*, vol. 6, 2007.
10. S. Henzler, *Power Management of Digital Circuits in Deep Sub-Micron CMOS Technologies*, Number ISBN 1-4020-5080-1 in Springer Series in Advanced Microelectronics. Springer Verlag, 10/2006.

11. S. Henzler, *Power Management of Digital Circuits in Deep Sub-Micron CMOS Technologies*, Dissertation, Technische Universitaet Muenchen, 10/2006.
12. T. Nirschl, S. Henzler, J. Fischer, B. Fulde, A. Bargagli-Stoffi, M. Sterkel, J. Sedlmeir, C. Weber, R. Heinrich, U. Schaper, J. Einfeld, R. Neubert, U. Feldmann, K. Stahrenberg, E. Ruderer, G. Georgakos, A. Huber, R. Kakoschke, W. Hansch, and D. Schmitt-Landsiedel, "Scaling Properties of the Tunneling Field Effect Transistor (TFET): Device and Circuit," *Solid State Electronics*, vol. 50, pp. 44–51, 2006.
13. S. Henzler, M. Eireiner, J. Berthold, G. Georgakos, and D. Schmitt-Landsiedel, "Activation Technique for Sleep-Transistor Circuits for Reduced Power Supply Noise," in *European Solid State Circuits Conference (ESSCIRC)*, 9/2006.
14. M. Eireiner, S. Henzler, G. Georgakos, J. Berthold, and D. Schmitt-Landsiedel, "Local Supply Voltage Adjustment for Low-Power Parametric Yield Increase," in *European Solid State Circuits Conference (ESSCIRC)*, 9/2006.
15. M. Eireiner, S. Henzler, T. Missal, J. Berthold, and D. Schmitt-Landsiedel, "Power Supply Network Design: A Case Study Driven Approach," *Advances in Radio Science, URSI Kleinheubacher Berichte*, vol. 5, pp. 279–284, 2006.
16. S. Henzler and S. Koeppel, "High-Speed Low-Power Frequency Divider With Intrinsic Phase Rotator," in *International Symposium on Low-Power Electronics and Design (ISLPED)*, 10/2006.
17. S. Henzler, G. Georgakos, M. Eireiner, T. Nirschl, Pacha. C., J. Berthold, and D. Schmitt-Landsiedel, "Dynamic State Retention Flip-Flop for Fine-Grained Power Gating With Small Design and Power Overhead," *Journal of Solid State Circuits (JSSC)*, vol. 41/7, pp. 1654–1661, 7/2006.
18. S. Henzler, P. Teichmann, M. Koban, J. Berthold, G. Georgakos, and D. Schmitt-Landsiedel, *VLSI-SOC: From Systems to Chips (IFIP International Federation for Information Processing)*, chapter Impact of Gate Leakage on Efficiency of Circuit Block Switch-Off Schemes, pp. 229–245, Number ISBN: 978-0387334028. Boston Springer, 6/2006.
19. T. Lueftner, J. Berthold, C. Pacha, G. Georgakos, G. Sauzon, Ol. Hoemke, P. Beshenar, J. Mahrla, K. Just, S. Hober, P. Henzler, D. Schmitt-Landsiedel, A. Yakovleff, A. Klein, R. Knight, P. Acharya, H. Mabrouki, G. Juhoor, and M. Saur, "A 90nm CMOS Low-Power GSM/EDGE Processor with 380MHz ARM9 and Mixed-Signal Extensions," in *International Solid State Circuits Conference (ISSCC)*, 2/2006.
20. S. Henzler, T. Nirschl, C. Pacha, P. Spindler, P. Teichmann, M. Fulde, J. Fischer, M. Eireiner, T. Fischer, G. Georgakos, J. Berthold, and D. Schmitt-Landsiedel, "Dynamic State Retention FlipFlop for Fine-Grained Sleep Transistor Scheme," in *European Solid State Circuits Conference (ESSCIRC)*, 9/2005.
21. T. Nirschl, S. Henzler, J. Fischer, A. Bargagli-Stoffi, M. Fulde, M. Sterkel, P. Teichmann, U. Schaper, J. Einfeld, C. Linnenbank, J. Sedelmeir, C. Weber, R. Heinrich, M. Ostermayr, A. Olbrich, B. Dobler, E. Ruderer, R. Karkoschke, K. Schrfel, G. Georgakos, W. Hansch, and D. Schmitt-Landsiedel, "The 65nm Tunneling Field Effect Transistor (TFET) 0.68 $\mu$ m<sup>2</sup> 6T Memory Cell and Multi Vth Device," in *European Solid State Device Research Conference (ESSDERC)*, 9/2005.
22. T. Nirschl, S. Henzler, J. Fischer, M. Fulde, A. Bargagli-Stoffi, M. Sterkel, J. Sedelmeir, C. Weber, R. Heinrich, U. Schaper, J. Einfeld, E. Ruderer, G. Georgakos, A. Huber, R. Kakoschke, W. Hansch, and D. Schmitt-Landsiedel, "Scaling Down the Tunneling Field Effect Transistor (TFET) from 130nm to the 65nm CMOS process flow," in *European Conference on Ultimate Integration of Silicon (ULIS)*, 4/2005.
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  26. S. Henzler, T. Nirschl, M. Eireiner, E. Amirante, and D. Schmitt-Landsiedel, “Making Adiabatic Circuits Attractive for Today’s VLSI Industry by Multi-Mode Operation,” in *Computing Frontiers*, 5/2005.
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