

Bibliography on Energy Analysis

- [ABR01] Andrea Acquaviva, Luca Benini, and Bruno Ricc6. Energy characterization of embedded real-time operating systems. In *Proceedings of the Workshop on Compilers and Operating Systems for Low Power (COLP'01)*, September 2001. URL <http://research.ac.upc.es/pact01/colp/paper05.pdf>
- [BCF⁺01] Kathleen Baynes, Chris Collins, Eric Fiterman, Brinda Ganesh, Paul Kohout, Christine Smit, Tiebing Zhang, and Bruce Jacob. The performance and energy consumption of three embedded real-time operating systems. In *Proceedings of the International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES'01)*, pages 203–210, November 2001. URL <http://www.ee.umd.edu/~blj/papers/cases2001-simbed.pdf>
- [BCF⁺03] K. Baynes, C. Collins, E. Fiterman, B. Ganesh, P. Kohout, C. Smit, T. Zhang, and B. Jacob. The performance and energy consumption of embedded real-time operating systems. *IEEE Transactions on Computers*, 52(11):1454–1469, November 2003. DOI 10.1109/TC.2003.1244943
- [BJ05] Robert H. Bell and Lizy K. John. Efficient power analysis using synthetic testcases. In *Proceedings of the IEEE International Symposium on Workload Characterization (IISWC'05)*, pages 110–118, October 2005. DOI 10.1109/IISWC.2005.1526007
- [BSS⁺02] Andrea Bona, Mariagiovanna Sami, Donatella Sciuto, Cristina Silvano, Vittorio Zaccaria, and Roberto Zafalon. Energy estimation and optimization of embedded VLIW processors based on instruction clustering. In *Proceedings of the 39th Design Automation Conference (DAC'02)*, June 2002. DOI 10.1145/513918.514137
- [BVLJ05] W. L. Bircher, M. Valluri, J. Law, and L. K. John. Runtime identification of microprocessor energy saving opportunities. In *Proceedings of the 2005 International Symposium on Low-Power Electronics and Design (ISLPED'05)*, pages 275–280, New York, NY, USA, August 2005. ACM Press. DOI 10.1145/1077603.1077668
- [CKE00] Todd Cignetti, Kirill Komarov, and Carla Ellis. Energy estimation tools for the palm. In *Proceedings of the 9th ACM Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems MSWiM 2000*, August 2000. URL <http://www.cs.duke.edu/~carla/research/mswim00.pdf>
- [FBA⁺00] J. Flinn, G. Back, J. Anderson, K. Farkas, and D. Grunwald. Quantifying the energy consumption of a pocket computer and a java virtual machine. In *Proceedings of the International Conference on Measurement and Modeling of Computer Systems (SIGMETRICS'00)*, June 2000. URL <http://www.acm.org/pubs/articles/proceedings/metrics/339331/p252-farkas/p252-farkas.pdf>
- [FFA00] J Flinn, K. Farkas, and J. Anderson. Power and energy characterization of the itsy pocket computer. Technical Report TN-56, COMPAQ Western Research Lab, February 2000. URL <ftp://gatekeeper.dec.com/pub/DEC/WRL/research-reports/WRL-TN-56.pdf>
- [IM03a] Canturk Isci and Margaret Martonosi. Identifying program power phase behavior using power vectors. In *Proceedings of the Sixth IEEE International Workshop on Workload Characterization (WWC-6)*, pages 108–118, October 2003. DOI 10.1109/WWC.2003.1249062
- [IM03b] Canturk Isci and Margaret Martonosi. Runtime power monitoring in high-end processors: Methodology and empirical data. Technical report, Princeton University Dept. of Electrical Engineering, 2003. URL <http://parapet.ee.princeton.edu/papers/canturkmicro.pdf>
- [IM03c] Canturk Isci and Margaret Martonosi. Runtime power monitoring in high-end processors: Methodology and empirical data. In *Proceedings of the 36th Annual IEEE/ACM International Symposium on Microarchitecture (MIRCO'03)*, pages 93–104, Washington, DC, USA, 2003. IEEE Computer Society. URL <http://www.microarch.org/micro36/html/pdf/isci-RunTimePowerMonitoring.pdf>
- [IM06] Canturk Isci and Margaret Martonosi. Phase characterization for power: Evaluating control-flow-based and event-counter-based techniques. In *Proceedings of the Twelfth International Symposium on High-Performance Computer Architecture (HPCA'06)*, February 2006. DOI 10.1109/HPCA.2006.1598119

- [IMB05] Canturk Isci, Margaret Martonosi, and Alper Buyuktosunoglu. Long-term workload phases: Duration predictions and applications applications to DVFS. *IEEE Micro*, 25(5):39–51, September 2005. DOI 10.1109/MM.2005.93
- [JML06] Ramkumar Jayaseelan, Tulika Mitra, and Xianfeng Li. Estimating the worst-case execution energy of embedded software. In *Proceedings of the Twelfth Real-Time and Embedded Technology and Applications Symposium (RTAS'06)*, April 2006. URL <http://www.comp.nus.edu.sg/~tulika/rtas06.pdf>
- [KDG⁺04] Ramakrishna Kotla, Anirudh Devgan, Soraya Ghiasi, Tom Keller, and Freeman Rawson. Characterizing the impact of different memory-intensity levels. In *Proceedings of the Seventh IEEE International Workshop on Workload Characterization (WWC-7)*, 2004. DOI 10.1109/WWC.2004.1437388
- [KKN⁺01] Kaoru Kawamoto, Jonathan Koomey, Bruce Nordman, Richard Brown, Mary Piette, Michael Ting, and Alan Meier. Electricity used by office equipment and network equipment in the U.S.: Detailed report and appendices. Technical Report LBNL-45917, Energy Analysis Department, Lawrence Berkeley National Laboratory, February 2001. URL <http://enduse.lbl.gov/Info/LBNL-45917b.pdf>
- [LJ03] Tao Li and Lizy Kurian John. Run-time modeling and estimation of operating system power consumption. In *Proceedings of the International Conference on Measurement and Modeling of Computer Systems (SIGMETRICS'03)*, pages 160–171, June 2003. DOI 10.1145/781027.781048 URL <http://projects.ece.utexas.edu/ece/lca/ps/tao-sigmetrics-2003.pdf>
- [LM06] Jian Li and Jose F. Martinez. Dynamic power-performance adaptation of parallel computation on chip multiprocessors. In *Proceedings of the Twelfth International Symposium on High-Performance Computer Architecture (HPCA'06)*, pages 77–87, February 2006. DOI 10.1109/HPCA.2006.1598114 URL <http://m3.csl.cornell.edu/papers/hpca06.pdf>
- [Lor95] J. Lorch. A complete picture of the energy consumption of a portable computer. Master's thesis, University of California at Berkeley, 1995. URL <http://research.microsoft.com/en-us/um/people/lorch/papers/masters.ps>
- [MJ01] Jennifer Mitchell-Jackson. Energy needs in an internet economy: A closer look at data centers. Master's thesis, Energy and Resources Group, University of California at Berkeley, July 2001. URL <http://enduse.lbl.gov/Info/datacenterreport.pdf>
- [MJKNB03] J. Mitchell-Jackson, J.G. Koomey, B. Nordmanb, and M. Blazek. Data center power requirements: measurements from silicon valley. *Energy*, 28(8):837–850, March 2003. DOI 10.1016/S0360-5442(03)00009-4
- [NSMT04] Luca Negri, Mariagiovanna Sami, David Macii, and Alessandra Terranegra. FSM-based power modeling of wireless protocols: the case of bluetooth. In *Proceedings of the 2004 International Symposium on Low-Power Electronics and Design (ISLPED'04)*, pages 369–374, New York, NY, USA, August 2004. ACM Press. DOI 10.1145/1013235.1013323
- [SBP⁺03] H. Shafi, P. Bohrer, J. Phelan, C. Rusu, and J. Peterson. Design and validation of a performance and power simulator for PowerPC systems. *IBM Journal of Research and Development*, 47(5):641–651, 2003. DOI 10.1147/rd.475.0641
- [TRJ02] T. K. Tan, A. Raghunathan, and N. K. Jha. Embedded operating system energy analysis and macro-modeling. In *Proceedings of the 2002 IEEE International Conference on Computer Design (ICCD'02)*, 2002. DOI 10.1109/ICCD.2002.1106822 URL <http://www.princeton.edu/~cad/emsim/research/iccd2002.pdf>
- [TVK⁺01] S. Tomar, N. Vijaykrishnan, M. Kandemir, A. Sivasubramaniam, and M. J. Irwin. Energy behavior of java applications from the memory perspective. In *Proceedings of the Java Virtual Machine Research and Technology Symposium (JVM'01)*, April 2001.
- [WJY⁺06] Wei Wu, Lingling Jin, Jun Yang, Pu Liu, and Sheldon X.-D. Tan. A systematic method for functional unit power estimation in microprocessors. In *Proceedings of the 43rd Design Automation Conference (DAC'06)*, pages 554–557, New York, NY, USA, 2006. ACM Press. DOI 10.1145/1146909.1147053

- [YBM02] Terry Tao Ye, Luca Benini, and Giovanni De Micheli. Analysis of power consumption on switch fabrics in network routers. In *Proceedings of the 39th Design Automation Conference (DAC'02)*, June 2002. DOI 10.1145/513918.514051