

The Design and Application of Parallel Digital Processors, 11-15 April 1988, ISSN 0537-9989. 1988. 9780852963661. Institution of Electrical Engineers, 1988

The context of parallel processing. The field of digital computer architecture has grown explosively in the past two decades. Through a steady stream of experimental research, tool-building efforts, and theoretical studies, the design of an instruction-set architecture, once considered an art, has been transformed into one of the most quantitative branches of computer technology. CPUs can no longer be designed and verified in isolation. Rather, an integrated processor/memory design optimization is required, which makes the development even more complex and costly. VLSI technology now allows us to put more transistors on a chip than required by even the most advanced superscalar processor. This book provides design methods for Digital Signal Processors and Application Specific Instruction set Processors, based on the author's extensive, industrial design experience. Top-down and bottom-up design methodologies are presented, providing valuable guidance for both students and practicing design engineers. Coverage includes design of internal-external data types, application specific instruction sets, micro architectures, including designs for datapath and control path, as well as memory sub systems. Marwedel, P. (1984). The MIMOLA design system: Tools for the design of digital processors, 21st Design Automation Conference . 1984. Google Scholar Cross Ref. Krüger, G. (1980). Computer Science Applications. Computer Vision and Pattern Recognition. Computers in Earth Sciences. This indicator counts the number of citations received by documents from a journal and divides them by the total number of documents published in that journal. The chart shows the evolution of the average number of times documents published in a journal in the past two, three and four years have been cited in the current year. The two years line is equivalent to journal impact factor $\hat{\alpha}, \phi$ (Thomson Reuters) metric. Cites per document. ISSN 0537-9989. LCCN QA76.58.I567 1991. Beguelin:1991:HNS. Second International Specialist Seminar. number 91CH3058-5. on the Design and Application of Parallel Digital Processors: 15 April 1991, venue, the Gulbenkian Foundation, Lisbon, Portugal, number 334 in IEE conference publication, page ?? IEE, London, UK, 1991. ISBN 0-85296-519-2. ISSN 0537-9989. LCCN QA76.58 .I567 1991. Demmel:1991:DPHa. Parallel loops "a test suite for parallelizing compilers: description and example results. Parallel Computing, 17(10):1247-1255, December 1991. CODEN PACOEJ. ISSN 0167-8191.