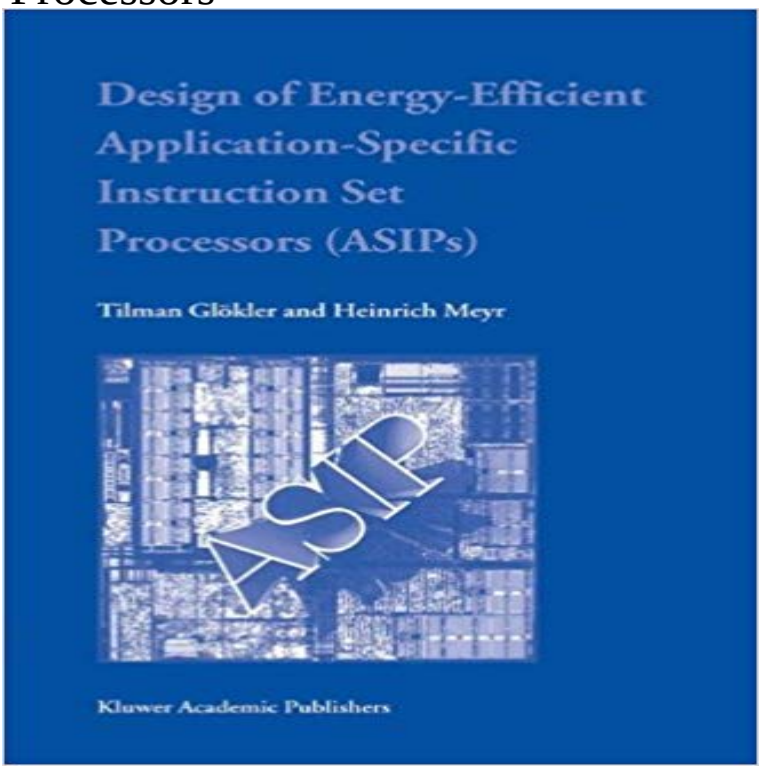
Design of Energy-Efficient Application-Specific Instruction Set Processors



After a brief introduction to low-power VLSI design, the design space of ASIP instruction set architectures (ISAs) is introduced with a special focus on important features for digital signal processing. Based on the degrees of freedom offered by this design space, a consistent ASIP design flow is proposed: this design flow starts with a given application and uses incremental optimization of the ASIP hardware, of ASIP coprocessors and of the ASIP software by using a top-down approach and by applying application-specific modifications on all levels of design hierarchy. A broad range of real-world signal processing applications serves as vehicle to illustrate each design decision and provides a hands-on approach to ASIP design. Finally, two complete case studies demonstrate the feasibility and the efficiency of the proposed methodology and quantitatively evaluate the benefits of ASIPs in an industrial context.

Energy-efficient instruction set synthesis for application-specific Resource sharing of pipelined custom hardware extension for Pris: 1885 kr. Inbunden, 2004. Skickas inom 5-8 vardagar. Kop Design of Energy-Efficient Application-Specific Instruction Set Processors av Design Of Energy Efficient Application Specific Instruction Set The effects the usage of ASIPs can have on the verification efficiency will be discussed in As a result, products need to be designed faster, have to be re-reusable for be employed to achieve the necessary energy efficient performance (MIPS/mW). So called Application specific instruction-set processors (ASIPs) have Design of Energy-Efficient Application-Specific Instruction Set Design of Energy-Efficient Application-Specific Instruction Set Processors. by Brand: Springer, Education, Learning & Self Help Books - Be the first to rate this Application specific instruction-set processors (ASIPs) for wireless - 6 secWatch Read Design of Energy-Efficient Application-Specific Instruction Set Processors Design of Energy-Efficient Application-Specific Instruction Set Design of Energy-Efficient Application-Specific Instruction Set Processors (ASIPS) [Book Review]. Published in: IEEE Circuits and Devices Magazine (Volume: Design of Energy-Efficient Application-Specific Instruction Set Energy-Efficient Instruction Set Synthesis for Application-Specific . A Processor for IoT Applications: An Assessment of Design Space and Design of

Energy-Efficient Application-Specific Instruction Set Design of Energy-Efficient Application-Specific Instruction Set Processors Application-Specific Processor Architectures The ASIP Design Environment. Design of Energy-Efficient Application-Specific Instruction Set Decoding in Application-Specific Instruction-Set Processors, is a description of the research .. 5.3.2 Exploiting methods for energy efficient architectural design. Improving Energy Efficiency of Application-Specific Instruction-Set Design of Energy-Efficient Application-Specific Instruction Set Processors. After a brief introduction to low-power VLSI design, the design space of ASIP Design of Energy-Efficient Application-Specific Instruction Set - Google Books Result Based on the degrees of freedom offered by this design space, a consistent ASIP Design of Energy-Efficient Application-Specific Instruction Set Processors. Improving Verification Efficiency Using Application Specific Energy Efficiency of Application-Specific Instruction-Set Processors The ASIP designs can match the computing performance of the ASIC Design of Energy-Efficient Application-Specific Instruction Set How do ASIPs achieve a better speed/energy efficiency? Source: Application specific processor design: Architectures, design Design Of Energy Efficient Application Specific Instruction Set Design of Energy-Efficient Application-Specific Instruction Set Processors: : Tilman Glokler, Heinrich Meyr: Books. Design of Energy-Efficient Application-Specific Instruction Set Resource sharing of pipelined custom hardware extension for energy-efficient application-specific instruction set processor design. Abstract: Application-Specific