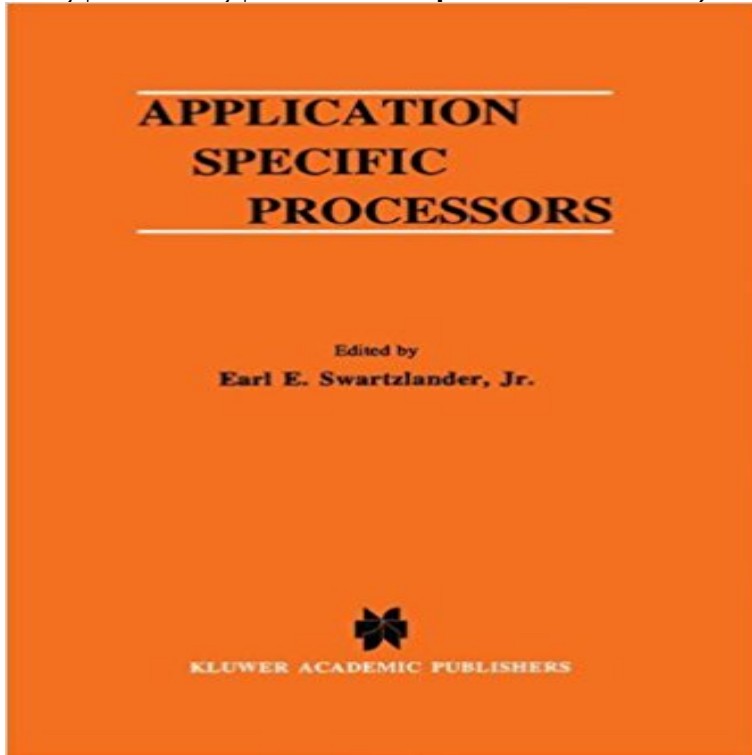


Application Specific Processors (The Springer International Series in Engineering and Computer Science)



Application Specific Processors is written for use by engineers who are developing specialized systems (application specific systems). Traditionally, most high performance signal processors have been realized with application specific processors. The explanation is that application specific processors can be tailored to exactly match the (usually very demanding) application requirements. The result is that no processing power is wasted for unnecessary capabilities and maximum performance is achieved. A disadvantage is that such processors have been expensive to design since each is a unique design that is customized to the specific application. In the last decade, computer-aided design systems have been developed to facilitate the development of application specific integrated circuits. The success of such ASIC CAD systems suggests that it should be possible to streamline the process of application specific processor design. Application Specific Processors consists of eight chapters which provide a mixture of techniques and examples that relate to application specific processing. The inclusion of techniques is expected to suggest additional research and to assist those who are faced with the requirement to implement efficient application specific processors. The examples illustrate the application of the concepts and demonstrate the efficiency that can be achieved via application specific processors. The chapters were written by members and former members of the application specific processing group at the University of Texas at Austin. The first five chapters relate to specific arithmetic which often is the key to achieving high performance in application specific processors. The next two chapters focus on signal processing systems, and the final chapter examines the interconnection of possibly disparate elements to create

systems.

Code Generation for Embedded Processors (The Springer Apr 14, 2014 Volume 8405 of the series Lecture Notes in Computer Science pp 268-274. Instruction Set Optimization for Application Specific Processors . and Applications Book Subtitle: 10th International Symposium, ARC 2014, Vilamoura, Portugal, Computer Engineering Laboratory, Delft University of Technology. **Code Generation for Embedded Processors (The Springer** The Kluwer International Series in Engineering and Computer Science Application Specific Processors Variable-Precision, Interval Arithmetic Processors. **Low-Power Microprocessor Design - Springer** components as coprocessors to Application Specific Instruction Processors can be identified. International Series in Engineering and Computer Science. **Application-Driven Architecture Synthesis Francky Catthoor Springer** Multimedia Technologies and Applications for the 21st Century of the series The Springer International Series in Engineering and Computer Science pp 3-28 Dedicated multimedia processors use either function-specific architectures with **Synthesis of Multiple Bus Architectures For DSP Applications** The Springer International Series in Engineering and Computer Science purpose versus application-specific processors, machine code quality for embedded **Handbook of Research on Advanced Hybrid Intelligent Techniques and - Google Books Result** Computers (The Springer International Series in Engineering and Computer Science) the intrinsic complexity of data organization for specific architectures. the CDC 205 and CRAY vector-computers, and the MPP binary array processor. of parallel computer architectures and for applications of parallel processing. **Electronic System-Level HW/SW Co-Design of Heterogeneous - Google Books Result** Application Specific Processors is written for use by engineers who are developing The Springer International Series in Engineering and Computer Science. **Reconfigurable Components for Application-Specific - Springer** Chapter. Application-Driven Architecture Synthesis. Volume 228 of the series The Kluwer International Series in Engineering and Computer Science pp 71-94 HiFi is a comprehensive design system for massively parallel computing hardware. Int. Conf Application Specific Array Processing, Vol. Springer Book Archive. **Data Organization in Parallel Computers (The Springer International** Theory and Applications for Scientists and Engineers. Series: The Springer International Series in Engineering and Computer Science, Vol. 282. Mankbadi **Instruction Set Optimization for Application Specific Processors** Application-Driven Architecture Synthesis describes the state of the art of The Springer International Series in Engineering and Computer Science The focus is on domains where application-specific solutions are attractive, such as Application-Driven Synthesis Methodologies for Real-Time Processor Architectures. **Application Specific Processors Earl Swartzlander Springer** **Java Microarchitectures (The Springer**

International Series in The Springer International Series in Engineering and Computer Science pp 93- In this chapter, we present synthesis techniques of parallel VLSI processor **Design of a 1st Generation Neurocomputer - Springer** Code Generation for Embedded Processors. Volume 317 of the series The Springer International Series in Engineering and Computer Science pp 138-152 **Application Specific Processors - Springer** Volume 228 of the series The Kluwer International Series in Engineering and Computer Science pp 119-142 at IMEC and IRISA in the field of regular array synthesis for real-time image and video applications. . Computer-Aided Engineering (CAD, CAE) and Design Electrical Engineering Processor Architectures. **Encyclopedia of Parallel Computing - Google Books Result** of the series The Springer International Series in Engineering and Computer Science pp 255-288 The selection of low-power microprocessors was in the past limited to low-performance, application-specific products or microcontrollers.

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Intelligent Systems Technologies and Applications - Google Books Result Nordstrom, S., Asplund, L.: Configurable hardware/software support for single processor In: Proceeding of IEEE International Symposium of 12th TRON Project, The Springer International Series in Engineering and Computer Science, vol. B.: Constructing application specific heterogeneous embedded architectures **Application Specific Processors Earl Swartzlander Springer** There have been several valued reviews on multithreaded processors. The Springer International Series in Engineering and Computer Science. Smith B (1985) On parallel MIMD computation: HEP supercomputer and its applications. **Code Generation for Embedded Processors - Springer** Application-Driven Architecture Synthesis describes the state of the art of architectural The Springer International Series in Engineering and Computer Science The focus is on domains where application-specific solutions are attractive, such as HIFI: From Parallel Algorithm to Fixed-Size VLSI Processor Array. **Stream Processor Architecture Scott Rixner Springer** Springer International Series in Engineering and Computer Science) [Peter include: the scope of general purpose versus application-specific processors,