Innovations in Reconfigurable, Application Specific Systems

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Abstract

The architecture of the Convey Series of Hybrid reconfigurable computers will be described. The memory system, the instructions set architectures and the software tools and compilers. Additionally several production applications, their structures and performance will be highlighted

Biography

Steve Wallach is a founder of Convey Computer Corporation and is an adviser to venture capital firms CenterPoint Ventures, Sevin-Rosen and InterWest Partners. Previously, he served as vice president of technology for Chiaro Networks Ltd., and as co-founder, chief technology officer and senior vice president of development of Convex Computer Corporation. After Hewlett-Packard Co. bought Convex, Wallach became chief technology officer of HP's Enterprise Systems Group. Wallach served as a consultant to the U.S. Department of Energy's Advanced Simulation and Computing Program at Los Alamos National Laboratory from 1998 to 2007. He was also a visiting professor at Rice University in 1998 and 1999, and was manager of advanced development for Data General Corporation. His efforts on the MV/8000 are chronicled in Tracy Kidder's Pulitzer Prize winning book, "The Soul of a New Machine." Wallach, who has 37 patents, is a member of the National Academy of Engineering, an IEEE Fellow, and was a founding member of the Presidential Information Technology Advisory Committee. He is the 2008 recipient of IEEE's prestigious Seymour Cray Award. He is currently a member of a national research council study on Cyber Security.