

## CONTENTS

Preface <i>N. Ranganathan</i>	1
ENPASSANT: An Environment for Evaluating Massively Parallel Array Architectures for Spatially Mapped Applications <i>M. C. Herbordt &amp; C. C. Weems</i>	3
A Reconfigurable Architecture for Image Processing and Computer Vision <i>S. M. Bhandarkar, H. R. Arabnia &amp; J. W. Smith</i>	29
A Design Methodology for Very Large Array Processors — Part 1: GIPOP Processor Array <i>N. Venkateswaran, S. Pattabiraman, R. Devanathan, B. Kumaran, A. Ahmed, S. Narayanan &amp; Radharamanan</i>	59
A Design Methodology for Very Large Array Processors — Part 2: PACUBE VLSI Arrays <i>N. Venkateswaran, S. Pattabiraman, J. Desouza, G. Sriram, R. Srinivasan, R. Shankar &amp; G. Suresh</i>	93
A VLSI Implementation of the Inverse Discrete Cosine Transform <i>A. K. Bhattacharya &amp; S. S. Haider</i>	133
Systolic Merging and Ranking of Votes for the Generalized Hough Transform <i>M. Albanesi &amp; M. Ferretti</i>	145
High-Speed Parallel VLSI Architectures for Image Decorrelation <i>T. Acharya &amp; A. Mukherjee</i>	173
PMAC: A Polygon Matching Chip <i>R. Sastry &amp; N. Ranganathan</i>	197
Quadtree Algorithms for Template Matching on Mesh Connected Computer <i>H. Senoussi &amp; A. Saoudi</i>	217
Fast Pattern-Matching Algorithm on Modular Mesh-Connected Computers with Multiple Buses <i>K. L. Chung</i>	243
A VLSI Parallel Architecture for Fuzzy Expert Systems <i>V. Catania &amp; G. Ascia</i>	253
VLSI Implementation of an Efficient ASIC Architecture for Real-Time Rotation of Digital Images <i>I. Ghosh &amp; B. Majumdar</i>	281