<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A High-Performance Low-Power H.264/AVC Video Decoder Accelerator for Embedded Systems</td>
<td>(Huang-Chih Kuo, Jian-Wen Chen, Youn-Long Lin)</td>
</tr>
<tr>
<td>9</td>
<td>A High-Throughput Pipelined Architecture for JPEG XR Encoding</td>
<td>(Koichi Hattori, Hiroshi Tsutsui, Hiroyuki Ochi, Yukihiro Nakamura)</td>
</tr>
<tr>
<td>18</td>
<td>A High-Throughput, Area-Efficient Hardware Accelerator for Adaptive Deblocking Filter in H.264/AVC</td>
<td>(Muhammad Nadeem, Stephan Wong, Georgi Kuzmanov, Ahsan Shabbir)</td>
</tr>
<tr>
<td>28</td>
<td>An Effective Dictionary-Based Display Frame Compressor</td>
<td>(Hui-Ting Yang, Jian-Wen Chen, Huang-Chih Kuo, Youn-Long Lin)</td>
</tr>
<tr>
<td>35</td>
<td>Efficient Execution of Kahn Process Networks on Multi-Processor Systems Using Protothreads and Windowed FIFOs</td>
<td>(Wolfgang Haid, Lars Schor, Kai Huang, Iuliana Bacivarov, Lothar Thiele)</td>
</tr>
<tr>
<td>45</td>
<td>Inter-Kernel Data Reuse and Pipelining on Chip-Multiprocessors for Multimedia Applications</td>
<td>(Luis Angel D. Bathen, Yongjin Ahn, Nikil D. Dutt, Sudeep Pasricha)</td>
</tr>
<tr>
<td>55</td>
<td>Fast Configuration of MEMS-Based Storage Devices for Streaming Applications</td>
<td>(Mohammed G. Khatib, Hylke W. van Dijk)</td>
</tr>
</tbody>
</table>
QoS Management

64  QoS Management of Dynamic Video Tasks by Task Splitting and Skipping
    (Rob Albers, Eric Suijs, Peter H.N. de With)

70  The Wizard of OS: A Heartbeat for Legacy Multimedia Applications
    (Tommaso Cucinotta, Luca Abeni, Luigi Palopoli, Fabio Checconi)

Design Space Exploration

80  System-Level MP-SoC Design Space Exploration Using Tree Visualization
    (Toktam Taghavi, Andy D. Pimentel, Mark Thompson)

89  Design Space Exploration for Optimal Memory Mapping of Data and Instructions in
    Multimedia Applications to Scratch-Pad Memories
    (Ali R. Iranpour, Krzysztof Kuchcinski)

96  Exploring Trade-Offs Between Performance and Resource Requirements for
    Synchronous Dataflow Graphs
    (Yang Yang, Marc Geilen, Twan Basten, Sander Stuijk, Henk Corporaal)
Software Optimization and System Robustness

106 Robust Image Processing for an Omnidirectional Camera-Based Smart Car Door
(Christian Scharfenberger, Samarjit Chakraborty, Georg Färber)

116 Optimal Stack Frame Placement and Transfer for Energy Reduction Targeting Embedded Processors with Scratch-Pad Memories
(Lovic Gauthier, Tohru Ishihara)

126 Software Parallel CAVLC Encoder Based on Stream Processing
(Ju Ren, Yi He, Wei Wu, Mei Wen, Nan Wu, Chunyuan Zhang)

134 Variability-Tolerant Workload Allocation for MPSoC Energy Minimization Under Real-Time Constraints
(Francesco Paterna, Luca Benini, Andrea Acquaviva, Francesco Papariello, Giuseppe Desoli)