1. Record Nr. UNINA9910299734103321

Autore	Elarabi Tarek
Titolo	Real-Time Heterogeneous Video Transcoding for Low-Power Applications / / by Tarek Elarabi, Ahmed Abdelgawad, Magdy Bayoumi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-06071-6
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (92 p.)
Disciplina	006.6 006.696 620 621.3815
Soggetti	Electronic circuits Signal processing Image processing Speech processing systems Computer graphics Circuits and Systems Signal, Image and Speech Processing Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Conventional Transcoder -- Efficient MPEG-2 to H. 264/AVC Transcoding -- Real-time MPEG-2 to H.264/AVC Transcoding -- Full-Search Free Intra Predication for H.264 Decoder.
Sommario/riassunto	This book introduces a novel transcoding algorithm for real time video applications, designed to overcome inter-operability problems between MPEG-2 to H.264/AVC. The new algorithm achieves 92.8% reduction in the transcoding run time at a price of an acceptable Peak Signal-to-Noise Ratio (PSNR) degradation, enabling readers to use it for real time video applications. The algorithm described is evaluated through simulation and experimental results. In addition, the authors present a hardware implementation of the new algorithm using Field

Programmable Gate Array (FPGA) and Application-specific standard products (ASIC). • Describes a novel transcoding algorithm for real time video applications, designed to overcome inter-operability problems between H.264/AVC to MPEG-2; • Implements algorithm presented using Field Programmable Gate Array (FPGA) and Application-specific Integrated Circuit (ASIC); • Demonstrates the solution to real problems, with verification through simulation and experimental results.