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   Autore   Zatt Bruno

   Titolo   3D Video Coding for Embedded Devices [[electronic resource]] : Energy
                      Efficient Algorithms and Architectures / / by Bruno Zatt, Muhammad
                      Shafique, Sergio Bampi, Jörg Henkel

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   Descrizione fisica 1 online resource (219 p.)

   Disciplina   004.1
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   Soggetti   Electronic circuits
                      Electronics
                      Microelectronics
                      Microprocessors
                      Circuits and Systems
                      Electronics and Microelectronics, Instrumentation
                      Processor Architectures

   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 and index.

   Nota di contenuto Introduction -- Background and Related Work -- Multiview Video
                      Coding Analysis for Energy and Quality -- Energy-Effiecient Algorithms
                      for Multiview Video Coding -- Energy-Efficient Architectures for
                      Multiview Video Coding -- Results and Comparison -- Conclusion and
                      future Works.

   Sommario/riassunto This book shows readers how to develop energy-efficient algorithms
                      and hardware architectures to enable high-definition 3D video coding
                      on resource-constrained embedded devices. Users of the Multiview
                      Video Coding (MVC) standard face the challenge of exploiting its 3D
                      video-specific coding tools for increasing compression efficiency at the
                      cost of increasing computational complexity and, consequently, the
                      energy consumption. This book enables readers to reduce the

multiview video coding energy consumption through jointly considering the algorithmic and architectural levels. Coverage includes an introduction to 3D videos and an extensive discussion of the current state-of-the-art of 3D video coding, as well as energy-efficient algorithms for 3D video coding and energy-efficient hardware architecture for 3D video coding.   ·   Discusses challenges related to performance and power in 3D video coding for embedded devices; ·   Describes energy-efficient algorithms for reducing computational complexity at multiple hierarchical levels; ·   Presents energy-efficient hardware architectures along with methods for reducing on-chip and off-chip energy related to both data processing and memory access; ·   Shows how to leverage jointly the algorithm and hardware architecture layers of the system.