Record Nr. UNINA9910739432103321 Autore Sun Tianjia Titolo Wireless power transfer for medical microsystems // Tianjia Sun, Xiang Xie, Zhihua Wang New York:,: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4614-7702-6 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xi, 183 pages): illustrations (some color) Collana Gale eBooks Disciplina 610.28 Soggetti Biomedical engineering Medical electronics 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 at the end of each chapters and index. Nota di contenuto Introduction -- Systematic Designs -- Wireless Power Antennas --Wireless Power Converters -- Wireless Power Management -- Power Regulations -- Design Cases -- Contributions and Future Work. This book equips readers with tools for computer architecture of high Sommario/riassunto performance, low power, and high reliability memory hierarchy in

computer systems based on emerging memory technologies, such as STTRAM, PCM, FBDRAM, etc. The techniques described offer advantages of high density, near-zero static power, and immunity to soft errors, which have the potential of overcoming the "memory wall." The authors discuss memory design from various perspectives: emerging memory technologies are employed in the memory hierarchy with novel architecture modification; hybrid memory structure is introduced to leverage advantages from multiple memory technologies; an analytical model named "Moguls" is introduced to explore quantitatively the optimization design of a memory hierarchy; finally, the vulnerability of the CMPs to radiation-based soft errors is improved by replacing different levels of on-chip memory with STT-RAMs. • Provides a holistic study of using emerging memory technologies in different levels of the memory hierarchy; . Equips readers with techniques for memory design with improved performance, energy consumption, and reliability; . Includes coverage of all memory levels, ranging from cache to storage; . Explains how to choose the proper

memory technologies in different levels of the memory hierarchy