Record Nr. UNINA9910373902303321 Autore Peón Quirós Miguel Titolo Heterogeneous Memory Organizations in Embedded Systems: Placement of Dynamic Data Objects // by Miguel Peón Quirós, Francky Catthoor, José Manuel Mendías Cuadros Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-37432-7 ISBN Edizione [1st ed. 2020.] 1 online resource (XII, 208 p. 77 illus., 76 illus. in color.) Descrizione fisica Disciplina 005.435 Soggetti Electronic circuits Microprocessors **Electronics** Microelectronics Circuits and Systems **Processor Architectures** Electronics and Microelectronics, Instrumentation Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Nota di contenuto Introduction -- Methodology for the Placement of Dynamic Data Objects -- Design of a Simulator of Heterogeneous Memory Organizations -- Experiments on Data Placement: Results and Discussion -- Conclusion. This book defines and explores the problem of placing the instances of Sommario/riassunto

dynamic data types on the components of the heterogeneous memory organization of an embedded system, with the final goal of reducing energy consumption and improving performance. It is one of the first to cover the problem of placement for dynamic data objects on embedded systems with heterogeneous memory architectures, presenting a complete methodology that can be easily adapted to real cases and work flows. The authors discuss how to improve system performance and energy consumption simultaneously. Discusses the problem of placement for dynamic data objects on embedded systems with heterogeneous memory architectures; Presents a complete

methodology that can be adapted easily to real cases and work flows; Offers hints on how to improve system performance and energy consumption simultaneously.