Record Nr. UNINA9910483793903321 Model-based engineering of embedded real-time systems: **Titolo** International Dagstuhl Workshop, Dagstuhl Castle, Germany, November 4-9, 2007 : revised selected papers / / Holger Giese ... [et al.] (eds.) Berlin; New York, : Springer, 2010 Pubbl/distr/stampa **ISBN** 3-642-16277-0 Edizione [1st ed. 2010.] Descrizione fisica 1 online resource (XV, 385 p. 94 illus.) Lecture notes in computer science., 0302-9743;; 6100 Collana LNCS sublibrary. SL 2, Programming and software engineering 004620 Classificazione Altri autori (Persone) GieseHolger Disciplina 004.21 Soggetti Model-driven software architecture Real-time data processing Embedded computer systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto Thetopicof"Model-BasedEngineeringofReal-TimeEmbeddedSystems" brings together a challenging problem domain (real-time embedded systems) and a - lution domain (model-based engineering). It is also at the forefront of integrated software and systems engineering, as software in this problem domain is an essential tool for system implementation and integration. Today, real-time - bedded software plays a crucial role in most advanced technical systems such as airplanes, mobile phones, and cars, and has become the main driver and - cilitator for innovation. Development, evolution, veri?cation, con? guration, and maintenance of embedded and distributed software nowadays are often serious challenges as drastic increases in complexity can be observed in practice. Model-based engineering in general, and model-based software development in particular. advocates the notion of using models throughout the development and

life-cycle of an engineered system. Model-based software engineering re-forces this notion by promoting models not only as the tool of abstraction, but also as the tool for veri?cation, implementation, testing, and maintenance. The application of such model-based

engineering techniques to embedded real-time systems appears to be a good candidate to tackle some of the problems arising in the problem domain.