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New generations of embedded control systems address criteria such as flexibility and agility. To reduce their cost, these systems have to be changed and adapted to their environment without any disturbances.

Reconfigurable Embedded Control Systems: Applications for Flexibility and Agility addresses the development of reconfigurable embedded control systems and describes various problems in this important research area, which include static and dynamic (manual or automatic) reconfigurations, multi-agent architectures, modeling and verification, component-based approaches, architecture description languages, distributed reconfigurable architectures, real-time and low power scheduling, execution models, and the implementation of such systems. The chapters contained within this reference work propose interesting and useful solutions that can be applied in future industry.

Topics Covered:
- Architecture description languages
- Control of fault-tolerant discrete event reconfigurable systems
- Discrete event reconfigurable systems
- Formal methods for timed and probabilistic reconfigurable systems
- Industrial communication control systems
- Interdisciplinary approaches for dependability improvement
- Monitoring and diagnosis of discrete event reconfigurable systems
- Networked embedded control systems
- Recent advances in fault-forecasting methods
- Software engineering in industry

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

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