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13 Synchronous Language Argos13.1 Argos Constructs; 13.2 Illustrative Example; 13.3 Discussions; PART IV: Verification of Synchronous Programs; Summary; 14 Verification of Esterel Programs; 14.1 Transition System Based Veri cationy of Esterel Programs; 14.1.1 Detailed Discussion; 14.2 Esterel Transition System; 14.2.1 Abstraction and Hiding; 14.2.2 Observation Equivalence Reduction; 14.2.3 Context Filtering; 14.3 Temporal Logic Based Verification; 14.4 Observer-based Verification; 14.5 First Order Logic Based Verification; 15 Observer Based Verification of Simple Lustre Programs
15.1 A Simple Auto Controller

Sommario/riassunto

The primary aim of this monograph is to present the current research efforts that have gone into/or going on in the systematic design of real-time programs. Such an effort would help researchers and users in the area to get a clear picture of the issues of specification, verification and design of real-time reactive programs. It will clearly enable us to identify languages that can be used for different kinds of applications. Obviously, in an upcoming area like this, this presentation is far from complete. The quintessence of the monograph can be captured by the following question: How can