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Nota di contenuto	Validation of Communications Systems with SDL; Contents; Preface; Foreword; 1 Introduction; 1.1 Validation of Communications Systems; 1.2 SDL, Language to Master Complex Systems Development; 1.2.1 Overview of SDL; 1.2.2 Benefits provided by SDL; 1.3 Simulation Life Cycle; 1.4 Contents of the Book; 1.5 Tools and Platforms Used; 2 Quick Tutorial on SDL; 2.1 Structure of an SDL Model; 2.1.1 System, block and process; 2.1.2 Scope of declarations; 2.1.3 Process; 2.1.4 Procedure; 2.2 Communication; 2.2.1 Signals; 2.2.2 Channel; 2.2.3 Signal route; 2.3 Behavior; 2.3.1 Structure of a transition 2.3.2 Start2.3.3 States; 2.3.4 Input; 2.3.5 Save; 2.3.6 Variables; 2.3.7 Stop; 2.3.8 Task; 2.3.9 Create; 2.3.10 Output; 2.3.11 Decision; 2.3.12 Timers; 2.4 Data Types; 2.4.1 Predefined data; 2.4.2 Array; 2.4.3 Synonym and syntype; 2.4.4 Newtype; 2.5 Constructs for Better Modularity and Genericity; 2.5.1 Package; 2.5.2 Types, instances and gates; 2.5.3 Specialization; 3 The V.76 Protocol Case Study; 3.1 Presentation; 3.2 Specification of the V.76 Protocol; 3.2.1 Abbreviations used; 3.2.2 Exchange identification procedures (XID); 3.2.3

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3.2.4 Information transfer modes3.2.5 Release of a DLC; 3.3 Analysis MSCs for the V.76 Protocol; 3.4 The SDL Model of V.76; 3.4.1 The simulation configuration of V.76; 3.4.2 The package V76; 3.4.3 The block dataLink; 4 Interactive Simulation; 4.1 Principles; 4.2 Case Study with Tau SDL Suite; 4.2.1 Prepare the Simulator; 4.2.2 Validate against the main scenarios; 4.2.3 Detect a bug in the SDL model; 4.2.4 Detect nonsimulated parts; 4.2.5 Validate against more scenarios; 4.2.6 Write a script for automatic validation; 4.2.7 Other Simulator features; 4.3 Case Study with ObjectGeode
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5.3.6 More details on GOAL observers

Sommario/riassunto

Validation of Communications Systems with SDL provides a clear practical guide to validating, by simulation, a telecom system modelled in SDL. SDL, the Specification and Description Language standardised by the International Telecommunication Union (ITU-T), is used to specify and develop complex systems such as GSM, GPRS, UMTS, IEEE 802.11 or Hiperlan. Since the downturn in the telecom industry, validating a system before its implementation has become mandatory to reduce costs. This volume guides you step by step through the validation of a simplified protocol layer, from interactive