

1. Record Nr.	UNINA9910785116003321
Autore	Moreira Jose <1975->
Titolo	An engineer's guide to automated testing of high-speed interfaces // Jose Moreira, Hubert Werkmann
Pubbl/distr/stampa	Boston : , : Artech House, , ©2010 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2010]
ISBN	1-60783-984-9
Descrizione fisica	1 online resource (590 p.)
Collana	Artech House microwave library
Altri autori (Persone)	WerkmannHubert
Disciplina	621.381548
Soggetti	Very high speed integrated circuits Automatic test equipment
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	An Engineer's Guide to Automated Testing of High-Speed Interfaces; Contents; Preface; Acknowledgments; 1 Introduction; 2 High-Speed Digital BasicsThis; 3 High-Speed Interface Standards; 4 ATE Instrumentation for DigitalApplications; 5 Tests and Measurements; 6 Production Testing; 7 Support Instrumentation; 8 Test Fixture Design; 9 Advanced ATE Topics; A Introduction to the Gaussian Distribution and Analytical Computation of the BER; B The Dual Dirac Model and RJ/DJ Separation; C Pseudo-Random Bit Sequences and Other Data Patterns; D Coding, Scrambling, Disparity, and CRC E Time Domain Reflectometry and Time Domain Transmission(TDR/TDT) F S-Parameters; G Engineering CAD Tools; H Test Fixture Evaluation and Characterization; I Jitter Injection Calibration; About the Authors; Index
Sommario/riassunto	Providing a complete introduction to the state-of-the-art in high-speed digital testing with automated test equipment (ATE), this practical resource is the first book to focus exclusively on this increasingly important topic. Featuring clear examples, this one-stop reference covers all critical aspects of the subject, from high-speed digital basics, ATE instrumentation for digital applications, and test and measurements, to production testing, support instrumentation and test fixture design. This in-depth volume also discusses advanced ATE

topics, such as multiplexing of ATE pin channels and testing of high-speed bi-directional interfaces with fly-by approaches.