Preface

The Asian Test Symposium (ATS) has become a regular annual event since it was first held in Hiroshima, Japan in November 1992. Since then the other cities where the conference has been held are Beijing, Nara, Bangalore, Hsinchu, Akita, Singapore, Shanghai, Taipei, and now in Kyoto. All these are beautiful historic cities and have actively integrated science and technology in their infrastructure. The cover page of this compendium illustrates the locations of these cities.

Through the years the ATS has been sponsored by the IEEE Computer Society and the IEEE Test Technology Technical Committee (now called Test Technology Technical Council). ATS provides an international forum for engineers and researchers from Asia and from all over the world to present and discuss various aspects of system, board, chip and device testing with design, manufacturing, and field considerations in mind. The number of submitted papers and the number of attendees to ATS has been growing in the past ten years. I believe that this is indicative of increasing popularity of research in the area of design and test in Asia.

This compendium of papers is being published on behalf of the Tenth Anniversary Committee of the Asian Test Symposium (ATS-TAC) to commemorate the accomplishments of the ATS community in the past ten years. The papers that appear in this compendium are a subset of papers from the past ten ATS proceedings. An editorial board was formed to make a selection of the papers. The board consisted of all program chairs, co-chairs, and vice-chairs of the past ATS conferences.

The process and criteria for inclusion of papers in this compendium determined by the editorial board was as follows. The Editorial Board decided to select approximately an equal number of excellent papers from each of the past ten years. Consideration was also given to the area of research covered by these papers. The editorial board searched ten volumes of the proceedings of symposia from 1992 to 2001 and identified a total of 55 papers after extensive re-reviewing for inclusion in this compendium. The minimum number of selected papers from a year was five and the maximum was seven. It was a difficult and lengthy task to select such a limited number of papers from among the many excellent papers. The selected papers are arranged in the table of contents by year instead of topic order. However, if the selected papers were grouped by topic, the top three topics would have been Design for Testability, Test Generation, and Built-in Self-Test. This reflects the trend of the research activities in the past ten years in Asian countries.

I hope that this book, the Tenth Anniversary Compendium of Papers from Asian Test Symposium, will be a useful addition to the library of many who have been and are interested in the ATS and in the area of digital testing. I also hope that this commemorative edition will provide guidance for the future developments of the ATS community. Finally, I would like to thank Paolo Prinetto, the IEEE CS TTTC Chair, Kozo Kinoshita, ATS-TAC Chair, and all the members of the ATS-TAC for their support and efforts in making this commemoration a success. Thanks are also due to all the members of the Editorial Board for their hard work and cooperation.

Hideo Fujiwara
July 2001