Welcome, members of the test and design community, to the 2004 International Test Conference, our 35th. As the premier conference for test technology, ITC continues its well-established format for ITC Test Week™ by starting with two days of tutorials, followed by a three-day conference program, and finishing with two days of workshops. This package has been put together with a focus on the conference theme—Testing from Fab to Field. Test Week tutorials include both basic and advanced material for the technical development of the test professional, with much new and updated material to help test experts keep up-to-date with current developments. The first day of the conference technical program begins with the plenary. Bernd Koenemann, Fellow at Cadence Design Systems, will speak on Test In the Era of What You See Is NOT What You Get. Robert Madge, Director of Product Engineering for LSI Logic, will deliver the invited address, New Test Paradigms for Yield and Manufacturability. In the exhibit hall, opening right after the plenary, you will find the newest equipment, software, services and tools for solving test problems.

The 2004 conference year will focus on the test thread that runs from IC test through board and system test, and how test features in ICs can be leveraged at higher levels. This theme is supported by the return of the special track on board and system test, including sessions on the use of boundary-scan for RF and high-speed serial testing, board test effectiveness, BIST at board and system levels, and on-line testing and fault tolerance.

The conference opens with sessions targeting the conference theme, including microprocessor test, built-in self-test, design for testability, test for jitter, memory test, and IC diagnosis. The first set of panels in the evening will include a range of topics covering open-architecture ATE, the conflict between security and test quality, analog test, and ways of measuring the effectiveness of board test.

The second conference day includes sessions on ATE software standards, fault tolerance, test economics and delay test, as well as papers on new advances in system-on-chip testing, automatic test generation, RF testing, test compression, and ATE for the fastest chips. The first two sessions of the 2004 lecture and application series occur on the second day with a session on test trends and one on board and system-level test and DFT.

The third day sees sessions on design-for-availability, tester architectures and ADC testing, as well as two more application series sessions on wafer probe technology and jitter test. The final five panels debate the cost of test, solutions to jitter, physical failure analysis and diagnosis, improving yield for memories in SOCs, and how to pry data out of testers.

Workshops dedicated to critical topics are a regular feature of Test Week. The three workshops this year, Infrastructure IP, Electronic System Test and GHz/Gbps Test, run after the panels and continue on the next day. The workshops offer an excellent opportunity to discuss topics in your chosen field.

Don’t forget that Test Week is also a good place for networking. ITC brings together active workers in test. What better place to exchange ideas, forge new friendships, and learn about what is so hot in the field that it hasn’t made it into a paper yet? Fringe meetings are held throughout Test Week—you’ll find a list of them in the Conference Guide. These meetings have been formed by interested groups of test professionals who use the attraction of ITC to bring together people all over the world to discuss important issues. We encourage you to get involved with these meetings and the groups that put them on, and to consider how you can participate in the 2005 Test Week, in Austin, Texas, as a paper presenter, panelist, or meeting participant or organizer.

We at ITC, including our many volunteers who give freely of their time to help create and deliver the program, welcome you to Charlotte. We are confident that you will find the program to be both informative and interesting, but please be sure to fill in the session feedback forms. These provide feedback to the Program Committee and to the Steering Committee and provide guidance for our future events. Thank you for helping to make ITC’04 a success.