

**Homegrown Tools and Equipment versus EDA and ATE Vendors:  
The Future of Design to Test Product Lines**

**Bozena Kaminska**

Recent years have seen many changes related to the market and economy, company structures, and new tool-methodology adoption. To meet rising challenges and cost-performance requirements, organizations have been through deep analysis, followed by development of the most promising business models for the future. The updated strategies concern various methodologies, tools and equipment for prototyping and production, support of innovation, and preservation or creation of the leadership position in the marketplace.

The complexity of new technologies and products requires the integration of the development and production environments – from design to test. While the fact is well understood, it is still not clear what it means for electronics companies and their vendors. Even though Electronic Design Automation (EDA) and Automated Test Equipment (ATE) providers are constantly innovating and meeting challenging requirements, their customers are not fully satisfied. In response, some companies develop solutions internally, for both EDA and ATE.

Integration and managing complexity are often viewed as the solution to meet cost/performance figures where Design for Test (DFT) techniques and compatible software and hardware should work together in the same environment. The ideal vision is to have EDA/DFT/ATE ready to use from a set of design specifications to production. There is a series of associated questions, however, of which the following are typical:

- Which will win, homegrown or commercial solutions?
- What are the costs and benefits of each approach?
- What about a mixed approach?
- What role will service play?
- How will the EDA and ATE industries evolve? Any changes for SOC support?
- Are new start-ups in ATE-DFT market trying to establish a new set of rules?

**Moderator: Bozena Kaminska**

**Panelists: Antun Domic, Synopsys  
Dale Hoffman, IBM  
Bill Bottoms, 3<sup>rd</sup> Millennium Test Solutions  
Rene Segers, Philips Semiconductors  
Greg S. Spirakis, Intel  
Thomas Newsom, Agilent Technologies**