The Semiconductor Industry Association (SIA) has just revised its National Technology Roadmap for Semiconductors (NTRS-97), working with numerous industry analysts and forecasters. The NTRS-97 Design and Test sections were developed by EDA and chip industry leaders and visionaries.

The NTRS-97 Design and Test sections raise a number of new design, test, and EDA industry issues. These issues will have to be resolved in order to avoid and resolve the impending Design Productivity Crisis identified in the previous edition of the NTRS. If these issues are not resolved, the integrated circuit product and its associated EDA industries face a number of design and design-related manufacturing issues that will potentially cause lengthening of design cycle times, increases of design team sizes, increases in design errors, loss of the amount of functionality that can be designed into a chip, and limits on the clock rates, feature size, and number of transistors that can be effectively used for a integrated-circuit related product.

The panel is composed of key contributors to NTRS-97 who will share their personal and technical views on the key NTRS-97 design and test needs, and the impact and implications on both the EDA industry and its industry customer base.

During the panel, an overview of the Design and Test portion of NTRS-97 will first be presented, as well as NTRS-97 implications on interoperability and standards, methodologies, verification, technology.

Key industry panel members will then discuss the specific NTRS-97 impact from their individual points of view. Discussions will be presented in the areas of ASIC and advanced-ASIC chip industry needs, large complex high-performance structured-custom chip industry needs, implications on EDA industry's directions, and needs for long range research.

Moderator:

Greg Ledenbach (SEMATECH, USA)

Panel members:

Richard Newton (University of California, Berkeley, USA)
— Academia and long range research directions

Steve Schulz (Texas Instruments, USA)
— Complex Structured-Custom Chip Industry needs

Ray Ambershambi (LSI Logic, USA)
— ASIC Chip Industry needs

Kurt Keutzer (Synopsys, USA)
— Implications for EDA Industry directions