TSMC Adopts Synopsys TetraMAX for Yield Diagnostics

TetraMAX Diagnostics Enable TSMC to Accelerate Yield Ramp on Deep Submicron Designs

Synopsys Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, announced that Taiwan Semiconductor Manufacturing Company (TSMC) has adopted Synopsys' TetraMAX® yield diagnostic tools for its scan diagnostics service. TSMC uses TetraMAX diagnostics to quickly and accurately isolate manufacturing defect locations. Efficiently locating defects is critical to identifying yield issues quickly during the production ramp of deep submicron designs.

"We are pleased that Synopsys was proactive in working with us as an early partner to support a yield diagnostics flow for our innovative 3D graphics processors manufactured by TSMC," said Dan Smith, director of hardware engineering, NVIDIA Corporation. "Synopsys is not only providing us with an advanced diagnostics solution, but also is allowing us to easily and securely transfer the necessary design data to TSMC in order for them to run TetraMAX diagnostics."

As process geometries shrink, resolving manufacturing defects becomes more challenging and it becomes critical to use tester-generated failure data to isolate the defect location. Synopsys' TetraMAX allows designers to generate high quality test patterns in the shortest time, and then allows process engineers to easily diagnose parts which fail those test patterns. A seamless and simple flow from design to manufacturing is key to the adoption of yield diagnostics in a production environment.

"TSMC differentiates itself by helping its customers achieve fast time to revenue. Clearly, fast time-to-production yield is part of that initiative and TetraMAX is an extremely effective tool in furthering that initiative," said Ed Wan, senior director of marketing at TSMC.

"Synopsys is pleased to help both our customers and TSMC achieve their yield goals in the timeliest and most cost effective manner," said Antun Domic, senior vice president and general manager, Synopsys Implementation Group. "TetraMAX is an essential technology in the Galaxy Design Platform for both our design-for-test, as well as our design-for-yield solutions."

About Synopsys

Synopsys, Inc. is a world leader in EDA software for semiconductor design. The company delivers technology-leading semiconductor design and verification platforms and IC manufacturing software products to the global electronics market, enabling the development and production of complex systems-on-chips (SoCs). Synopsys also provides intellectual property and design services to simplify the design process and accelerate time-to-market for its customers. Synopsys is headquartered in Mountain View, California and has offices in more than 60 locations throughout North America, Europe, Japan and Asia. Visit Synopsys online at: https://www.synopsys.com/ .

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