

Sagantec and TSMC Collaborate on Sagantec DFM-Fix

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FREMONT, Calif., Oct 25, 2007 (BUSINESS WIRE) -- Sagantec today announced the results of its ongoing work with Taiwan Semiconductor Manufacturing Company to provide new automated capabilities for lithography hotspot correction at advanced process technology nodes with DFM-Fix.

DFM-Fix speeds turnaround time by automatically addressing hotspots in all critical layers at all design levels, including key building blocks such as library, memory, IP and custom blocks. It also provides automated handling of post-implementation hotspots caused by boundary proximities and inter-level effects.

Currently available fixing flows address hotspots in higher metal layers and at the routing implementation level. With DFM-Fix, designers can automatically correct hotspots in all layers, as well as hotspots caused by inter-cell placement or interaction between IP and routing. This expands automated DFM correction encompasses the whole chip, at every design level and for every mask layer.

TSMC and Sagantec tested DFM-Fix on multiple complete designs with hotspots in various layers. In all test cases, DFM-Fix automatically corrected most of the hotspots, with correction rates of 95% and above in most cases. The flow also proved highly time-efficient, running all test cases in under three hours on a standard quad-CPU platform.

"DFM-Fix addresses a void in today's DFM-aware flows," explained Coby Zelnik, Sagantec's executive vice president of Marketing. "Most lithography-related hotspots are found at the front-end and low metal critical layers in the IP infrastructure and macros of SoCs, as well as in memory and custom designs. These hotspots cannot be fixed by routing-level solutions. DFM-Fix addresses these hotspots very effectively for our mutual customers."

"Sagantec's DFM-Fix reduces time-to-silicon by automating the backend repair flow," said Kuo Wu, deputy director of Design Service Marketing at TSMC. "TSMC's collaboration with Sagantec links analysis tools with layout creation tools to provide a greater level of transparency for designers."

About DFM-Fix

DFM-Fix uses information generated by lithography analysis to identify hotspots and correct them in the physical design database. DFM-Fix corrects the physical shapes with minimal impact on the design. At the core of the product is a hierarchical layout optimization engine that makes subtle polygon movements at minimum increments, and maintains design rule check (DRC) compliance while performing model-based optimization. The subtle geometry corrections made by DFM-Fix make a big difference for the lithography and manufacturing process, but are below a meaningful threshold for electrical extraction and timing analysis. DFM-Fix can move and size any wire, edge and shape to required location, size and width to fix the hotspot while maintaining DRC correctness of all related polygons across all relevant layers and hierarchy levels. If the only way to fix a hotspot is by violating a design rule, the user can specify their preference and priority. A sign-off DRC tool should be run to confirm the design rule integrity prior to tape-out.

About Sagantec

Sagantec accelerates design to silicon in advanced process technologies. Sagantec's EDA products enable a dramatic shortcut in the successful deployment of new silicon technology through the use of physical design reuse, automatic process migration and DFM optimization. Sagantec's migration tools are used to redirect designs to either the newest technology or to a different process at the same technology node. Sagantec's DFM solutions accelerate delivery of high-yielding silicon through physical-design optimization. Privately held and funded, its corporate headquarters is at 46485 Landing Parkway, Fremont, CA. 94538. Telephone: (510) 360-5200. Facsimile: (510) 360-5255. On the Web at: <http://www.sagantec.com>

SOURCE: Sagantec

Symbol	Last Trade	Change
TSM	10.50	-0.15
<ul style="list-style-type: none">• Capex Cutback At TSMC - (Forbes) - [External]• Sagantec and TSMC Collaborate on Sagantec DFM-Fix - (Business Wire)• Cadence Announces Collaboration Award Winners for Advancing Design Chain Effectiveness - (Market Wire)• Q3 2007 TSMC Earnings Conference Call set for 8:00am on 10/25/2007 - (Thomson)• TSMC Reports Third Quarter EPS of NT\$1.15 - (PR Newswire)		
More...		

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