



## **ALTOS AND EXTREME DA CREATE PROVEN, VARIATION-AWARE STATISTICAL DESIGN FLOW FOR ICs PRODUCED AT 65-NANOMETERS AND BELOW**

*Altos Variety generates approved SSTA libraries for Extreme DA GoldTime*

**San Jose and Santa Clara, California – October 23, 2007** – Altos Design Automation Inc. and Extreme DA™ today announced that they have jointly developed an essential statistical design flow for integrated circuit (IC) designs manufactured at process nodes of 65-nanometers (nm) and below. Successful statistical static timing analysis (SSTA) using Altos' Variety™ models with the Extreme DA GoldTime™ analyzer has been verified by several mutual customers.

### **Statistical, Variation-Aware Timing Analysis Required at 65-nm and Below**

At advanced manufacturing process nodes, a statistically-enabled, variation-aware design flow is required for effectively managing the systematic and random process variations inherent in IC manufacturing. The SSTA flow featuring the Variety and GoldTime technologies enables designers to accurately account for these variations. It eliminates the need for designers to use pessimistic guard bands, which cause longer design cycles, bigger chip areas, and increased power consumption.

The accuracy of the underlying cell library used by GoldTime to predict the effects of variation on a design's timing and yield is essential for success. The development of this verified flow has qualified Altos as an Extreme DA-approved source for the nominal and statistical libraries required by GoldTime.

"We have worked with Extreme DA for more than eighteen months and have validated Variety's statistical timing models and Liberate's nominal timing models with GoldTime timing analysis," said Jim McCanny, Altos CEO. "Our joint customers are benefiting from improved characterization throughput and considerably lower disc space requirements especially for the creation of accurate statistical timing models."

"Statistical timing analysis relies on detailed characterization of variations in the cell libraries used by designers," said Mustafa Celik, president and CEO of Extreme DA. "Our collaboration

with Altos has produced a powerful, verified statistical flow that can improve IC quality, increase yields, and accelerate time to market.”

### **Availability and Pricing**

Extreme DA GoldTime for use with Altos Variety and Liberate models is available now from Extreme DA. Pricing varies depending on configuration. Altos Variety and Liberate approved libraries for Extreme DA GoldTime are available now from Altos.

### **About Altos Variety**

Variety creates statistical timing cell models that represent the non-linear impact of any number of systematic and random parameter variations. All library timing data is characterized for variation including delays, transitions, timing constraints, and pin capacitances. Variety generates SSTA models for a number of commercial SSTA products, including Extreme DA GoldTime, from a single characterization run.

### **About Altos**

Altos Design Automation provides ultra-fast, fully automated, characterization technology for the creation of library views for timing, signal integrity and power analysis and optimization. Altos advanced modeling solutions are used by both corner-based and statistical-based design implementation flows to reduce time to market and improve yield.

Privately held, Altos was founded in 2005 in Santa Clara, CA. Its corporate headquarters is at 4020 Moorpark Ave., Suite 100, San Jose, CA 95117. Telephone: (408) 980-8056. On the Web at: <http://www.altos-da.com>

### **About Extreme DA GoldTime**

GoldTime™ provides timing analysis for performance sign-off of integrated circuit (IC) designs manufactured in advanced nanometer (nm) processes. With its unique, patent-pending ThreadWave™ technology, GoldTime delivers 5X better speed and capacity over popular solutions in use today. GoldTime works with both nominal and statistical model libraries and supports corner-based and statistical design flows.

**About Extreme DA**

Headquartered in Santa Clara, Calif., venture-funded Extreme DA develops and licenses software products that verify and improve the performance and yield of nanometer integrated circuits before manufacturing. The company's investors include Foundation Capital, IT-Farm Corporation, and Lanza techVentures. For the latest news on Extreme DA, visit [www.extreme-da.com](http://www.extreme-da.com) or write to [info@extreme-da.com](mailto:info@extreme-da.com).

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