

### **SEMICONDUCTOR COMPANY USES SIMULATION SOFTWARE TO IMPROVE FAB OPERATIONS** *Extend Software Used to Optimize FABs*

San Jose, California, July 25, 2002 - Imagine That, Inc. today announced its Extend simulation software is being used to optimize semiconductor fabrication facilities (FABs). ACADZ, Inc., a semiconductor consulting company in Phoenix, AZ ran simulations of process improvements for a Fortune 100 semiconductor company. The company revamped three of its FABs, obtaining significant productivity improvements - just as the simulation models had predicted.

According to D'Arcy Collins of ACADZ, "Extend easily modeled the entire factory, an extremely complex task. And it was so flexible, we could mold it to what we needed." Extend accurately simulated the production mix and flows, the numerous recipes and variable processing times, equipment time-between-failures, time-to-repair, and labor.

#### **High-Risk/High-Reward**

"...cycle time decreased 32.9% over a five-month period."

For a semiconductor manufacturer, making operational changes is both high-risk and high-reward. On one hand, there is inherent danger and extreme difficulty in changing operational strategies in a productive FAB. On the other hand, even small improvements can provide substantial benefits. A 1% increase in yield could be worth hundreds of thousands of dollars per month.

Before making changes at a FAB, it is imperative to demonstrate significant improvement at a low level of risk. Not only must the process of exploring options be noninvasive, but there must also be ample evidence to support the change. The semiconductor company chose to simulate a target FAB using Extend software, which could model all the intricacies of the plant and statistically analyze the results without disrupting operations. Plus, the Open Source Development Environment in Extend allowed ACADZ to create custom components and icons specific to the semiconductor industry.

#### **Implementation**

As predicted in the Extend model, productivity in the FAB was substantially improved. After the introduction of the new process, cycle time decreased 32.9% over a five-month period. Since then, the manufacturer has introduced these production policies in three other semiconductor fabrication facilities with 15-45% reductions in cycle time.

#### **About Imagine That!**

Imagine That Inc., incorporated in 1987, is the leading developer and supplier of simulation software. The Extend™ family of simulation tools allows dynamic modeling of processes in virtually any field. You can test hypotheses and explore new processes without having to run pilot programs. For additional information, visit [www.imaginethatinc.com](http://www.imaginethatinc.com).