

# Cadence Extends DFM Solution with Acquisition of Design-Side Litho and Variability Leader Clear Shape Technologies

## Addition of Clear Shape Helps Cadence Bring Advanced Physical and Electrical DFM Modeling to Design Engineers

SAN JOSE, CA--(MARKET WIRE)--Aug 16, 2007 -- Cadence Design Systems, Inc. (NasdaqGS:[CDNS](#) - [News](#)), the leader in global electronic-design innovation, today announced that it has acquired Clear Shape Technologies, Inc., an innovative design for manufacturing (DFM) technology company specializing in design-side solutions to minimize yield loss for advanced semiconductor integrated circuits (ICs). Combined with Cadence's existing DFM methodologies and capabilities, the acquisition uniquely positions Cadence® as the only EDA company that can deliver manufacturing awareness and lithographic correctness for all layers in an IC from transistor through interconnect, in designs ranging from SoCs to full-custom and all design domains including analog, digital and mixed signal.

Traditional manufacturing-side lithography analysis products take days or weeks to run, which is unacceptable for competitive chip design. Clear Shape's breakthrough technology not only offers orders-of-magnitude performance improvements in detecting lithographic "hot spots," but also models the impact of optical processing variations on the electrical performance of the chip. This combination significantly improves and extends pre-tapeout DFM capabilities. As a result, Clear Shape's InShape and Outperform products have found significant favor with chip design teams in both cell-based and transistor-level applications at sub-90-nanometer process nodes.

"We think there's a lot of momentum to be gained by integrating Clear Shape's predictive, manufacturing-OPC-tool independent, validated-in-silicon lithography capabilities into the Cadence DFM environment," said Atul Sharan, president and chief executive officer of Clear Shape. "We've always believed that the combination of rule-based and model-based technologies is the future of DFM, and Cadence shares this belief. This synergy allows us to provide the industry leading support for the widest range of advanced IC designs."

"This synergy is crucial for chip designs at 65nm and below, where lithographic effects are more numerous and complex. Designers who can tackle these effects early during the design phase, will ramp their chips to production faster than those who have to wait," said Richard Brashears, corporate vice president of manufacturing, modeling and implementation (MMI) at Cadence. "This will allow us to make litho-awareness pervasive throughout our design flow."

Clear Shape's products are in the DFM qualification programs of the major semiconductor foundries. Clear Shape's InShape technology is the first qualified TSMC Reference Flow 8.0 lithography process checker for all levels (transistor through interconnect) for devices at 65 nm, 55 nm and 45nm.

The acquisition was completed on Aug. 15. Terms of the agreement have not been disclosed.

### About Cadence

Cadence enables global electronic-design innovation and plays an essential role in the creation of today's integrated circuits and electronics. Customers use Cadence software and hardware, methodologies, and services to design and verify advanced semiconductors, consumer electronics, networking and telecommunications equipment, and computer systems. Cadence reported 2006 revenues of approximately \$1.5 billion, and has approximately 5,200 employees. The company is headquartered in San Jose, Calif., with sales offices, design centers, and research facilities around the world to serve the global electronics industry. More information about the company, its products, and services is available at [www.cadence.com](http://www.cadence.com).

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