

# ProMOS Technologies Deploys Proteus OPC for Advanced Technology Production to Reduce Mask Synthesis Cost-of-Ownership

Proteus Delivers Improved OPC Modeling Accuracy, Reduced Time-to-Model and Enhanced Model Predictability

MOUNTAIN VIEW, Calif. and HSINCHU, Taiwan, July 19 [PRNewswire-FirstCall](#)/ -- Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, and ProMOS Technologies, a major DRAM manufacturer, today announced that ProMOS has adopted Synopsys' Proteus optical proximity correction (OPC) software as the production standard for its advanced process technologies. A cornerstone of Synopsys' design-for-manufacturing (DFM) solutions, Proteus can enable the world-leading memory integrated circuit (IC) provider to realize better critical dimension (CD) control, further reduce the OPC cost of ownership (CoO), and deliver the stringent accuracy and performance needed.

"We selected Proteus OPC following a detailed evaluation of different vendors in the market," said Dr. Peter Zhao, senior director for R&D, ProMOS Technologies. "Using Proteus, we achieved the most accurate OPC correction, as well as impressive cost-of-ownership improvements, at the advanced technology node. Synopsys' leading-edge DFM tool suite provides us with the industry's most scalable and flexible solution, delivering manufacturing-process improvements for our memory devices."

"ProMOS' decision to standardize on Proteus OPC further reinforces Synopsys' DFM technology leadership," said Dr. Wolfgang Fichtner, senior VP and general manager, Silicon Engineering Group at Synopsys. "Our commitment to delivering best-in-class DFM solutions to customers like ProMOS helps ensure the manufacturability of their devices without sacrificing ProMOS' process investment."

Further delivering on its commitment to address manufacturing needs at the 45nm node and beyond, Synopsys recently incorporated dual-domain simulation (DDS) capability into the Proteus OPC engine to address manufacturing requirements of 45nm and below processes. Manufacturers can now leverage the flexibility of using either flash-based or field-based simulation, or both, depending on the degree of correction needed. Synopsys has also entered into joint collaborations with leading metrology equipment vendors to provide better predictive lithography models for Proteus customers and help them reduce the time required to develop lithography processes.

## About Synopsys DFM

Synopsys, Inc. (NASDAQ: SNPS) is a world leader in electronic design automation (EDA) software for semiconductor design. With its design for manufacturing (DFM) tools, Synopsys is expanding on what is already the industry's most comprehensive DFM solution that spans from RTL to silicon. Synopsys' DFM product family addresses critical manufacturability and yield issues with the following products: IC Compiler physical design solution, PrimeYield LCC, PrimeYield CMP, Hercules™ PVS, Proteus OPC, CATS® mask data preparation product, SiVL® lithography verification tool, patented PSM technology, IC WorkBench Viewer and Editor tool, and physics-based TCAD suite of simulation products. Synopsys' Manufacturing Yield Management (MYM) solutions extend directly into the fab, providing customers real time access to yield data and the analysis capability needed to reduce random, systematic and parametric defects. Visit Synopsys online at <https://www.synopsys.com/>.

## About ProMOS Technologies

ProMOS Technologies, headquarters in Hsin-chu, Taiwan, is a comprehensive memory solution provider and renowned in the global DRAM industry for its outstanding performance in manufacturing excellence and technology advancement. The company manufactures high-performance and high-density commodity DRAM memory chips as well as pseudo-SRAM, lower power SDRAM products. ProMOS is listed on Taiwan GreTai Securities Market. For more information, please visit <http://www.promos.com.tw/>.

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