Magma's QuickCap NX Sets New Standard in Parasitic Capacitance Extraction for 90nm Designs

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Magma Design Automation Inc., a provider of chip design solutions, today announced QuickCap NX, an enhanced version of its gold-standard QuickCap parasitic capacitance extraction tool. The key capabilities that have been added allow the tool to better address design challenges that occur in 90-nanometer (nm) and smaller process technologies. With advanced new process modeling, technology model encryption, a parallel execution mode, reference-level SPICE netlist generation and a new 3D graphics viewer, users can shorten the design cycle by more accurately predicting silicon performance.

“As we move to 90 nanometers, accurate modeling of new process effects becomes critical to enabling our customers to better predict silicon performance and avoid time-consuming and costly re-spins," said Matthew Graf, manager of Foundry Design Automation of IBM's System and Technology Group. "We use QuickCap NX based on its ability to provide accurate modeling of IBM 90-nm process effects and to encrypt critical process information required by our customers."

“Accurate optical proximity correction (OPC) and chemical mechanical planarization (CMP) modeling are important at 90 nanometers and absolutely critical at 65 nanometers,” said Premal Buch, general manager of Magma’s Design Implementation Business Unit. “We’re pleased that with QuickCap NX we are able to provide our foundry partners and customers with these advanced capabilities as well as accelerated

operating speed and ease of use.”

About QuickCap NX

QuickCap NX is a highly accurate 3D solver that precisely models advanced process effects such as OPC, CMP and trapezoidal wires. Its capabilities build on those available in QuickCap, which is already in use by many major semiconductor companies as the reference tool for parasitic extraction. With better process models, QuickCap NX users can do more accurate noise and timing analysis and achieve design closure faster. QuickCap NX also includes technology file encryption capabilities that provide foundries with a secure method of sharing additional process information with their customers, allowing them to further enhance the accuracy of their parasitic extraction. Magma has added a 3D graphics viewer to simplify and accelerate the debug of new complex circuit structures and technology files. QuickCap NX also provides parallel operation to reduce runtime. With these advanced capabilities QuickCap NX sets a new standard for faster, more accurate parasitic capacitance extraction that enables more accurate prediction of 90-nm silicon performance.

QuickCap NX is currently in limited release with a list price of $200K per year for a three-year license. Current QuickCap users can easily upgrade to the NX version to fully leverage their existing investment and have confidence in quality of the tool.