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PRESS RELEASE

**For Immediate Release
August 3, 2006**

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The Compact Model Council Announces Release of Guidelines

Arlington, VA – The GEIA Compact Model Council (CMC) today has announced the first release of the Guidelines for Extracting Well Proximity Effect Instance Parameters document, available on the CMC website. Well proximity effects are defined as the influence of scattered implant ions on key device parameters such as threshold voltage. Ions can be scattered off the edge of photoresist layers, into the channel region during the fabrication of the devices. Including well proximity effects in transistor models is increasingly important with smaller geometries but determining correct values based on layout geometries can be difficult. The guidelines provided by the Council are intended to help clarify the problem, define the instance parameters need for the model to calculate the effect, and provide recommended methods for calculating the necessary parameters.

"Measuring all of the necessary physical dimensions to calculate the well proximity parameters is non-trivial and goes far beyond simple parameters like source / drain area and perimeter that we've had to deal with in the past. It was important that the Council work closely with the physical verification tool suppliers to make certain that what we were asking for was practical," says Dr. Joe Watts, Chairman of the Compact Model Council. "These guidelines and recommendations should help simplify the task of rule deck writers to extract and calculate the necessary well proximity parameters."

Currently the BSIM4.5 (Berkeley Short-channel Igfet Model-version 4.5) transistor model incorporates well proximity effects and other models will soon follow suit. The guidelines document may be found at: <http://www.eigroup.org/cmc/>

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About the Government Electronics and Information Technology Association (GEIA)

GEIA is a trade association representing the "high-tech" industry doing business with government. Our member companies are active in serving the electronics- and information technology-related needs of government customers. We connect industry to government through a unique forecasting process, conducting hundreds of customer interviews in which our companies directly participate. We analyze and issue reports on the federal market for IT solutions, technologies, and advanced electronics products and services of all kinds, producing: An annual 10-Year Defense Forecast; an annual 5-year Federal IT Forecast; and special market studies of the government market such as Services & Support, Homeland Security, etc. Details on GEIA may be found at www.geia.org.