Magma’s Parasitic Extraction Capability Validated on UMC's 0.13-micron Processes

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Magma Design Automation Inc., a provider of chip design solutions, announced that Blast Fusion(R)’s built-in parasitic extraction capability has been validated by UMC for its 0.13-micron process. The extraction capability is an integral part of Magma’s RTL-to-GDSII design tool suite and provides accurate timing correlation with advanced timing verification tools. Magma’s and UMC’s mutual customers can leverage Magma’s RTL-to-GDSII design flow for accurate parasitic extraction and modeling of 0.13-micron and smaller geometries. The RTL-to-GDSII tool suite includes Blast Create(TM), Blast Plan(TM) Pro and Blast Fusion.

Ken Liou director of UMC's Design Support Division said, " UMC continues to expand its design resources in order to provide the most comprehensive support for our customers developing complex SOC designs on our advanced processes. The validation of Magma’s Blast Fusion parasitic extraction capability on our 0.13-micron technology means that customers can now access a valuable EDA tool suite to help them achieve silicon success in a shorter amount of time.”

Magma’s RTL-to-GDSII tool suite integrates all design and analysis engines into a system that operates on a unified data model, providing all the design and analysis engines with continuous access to complete design data and allowing them to make fast and accurate design decisions throughout the flow. The Magma system incorporates highly accurate extraction rules computed using Magma’s QuickCap®, the gold standard for parasitic extraction. Magma’s extraction also includes

modeling of process bias effects, on-chip variations (OCV) and metal fill to ensure highly accurate modeling of parasitic effects in nanometer designs.

“AMCC has completed a 622MHz design with 3.4 million placeable objects using Blast Fusion, Blast Noise®, Blast Plan Pro, and Blast Rail™," said Peter Colyer, senior principal engineer at AMCC. "We are pleased to see the close relationship between our major supply chain partners. The added level of collaboration has the potential to significantly reduce the turnaround time of 0.13-micron and below designs."

“Our customers’ migration to nanometer process technologies is growing, and so are their demands for EDA technology that allows them to leverage it for their most complex designs. To meet these demands, Magma is working with industry leaders such as UMC so our customers can access leading-edge technology,” said Michael Ma, vice president of business development at Magma. “Blast Fusion’s extraction capability is an integral part of Magma’s RTL-to-GDSII tool suite, allowing customers to achieve timing closure without having to take the design out of the Magma environment. By offering highly accurate parasitic extraction within the system, Magma shortens design cycles and enables customers to get to nanometer silicon faster.”

The Magma integrated RTL-to-GDSII reference flow together with the Magma capacitance rules are available to UMC customers starting from 0.13 micron today. For more information, contact your local Magma sales office.

The original press release can be found here.