Advanced Design System 2011 EDA Platform to Debut via YouTube and Webcast

Agilent Technologies Inc. today announced the latest version of its flagship RF and microwave design and simulation platform, Advanced Design System 2011. The new platform will debut on YouTube and in an “Innovations in EDA” webcast with Microwave Journal, scheduled for March 1.

Advanced Design System 2011 delivers exciting new features for new and existing Advanced Design System users, including electromagnetic technologies for faster, more accurate simulations; a new use model that makes electromagnetic simulation easy for all engineers; and layout improvements for easier physical design. Advanced Design System 2011 also features dozens of new capabilities and improvements designed to enhance the platform’s functionality and usability.

Also being introduced today is a breakthrough capability in Advanced Design System 2011 for multi-technology co-design, like that inherent in RF modules and system-in-package designs. With this capability, Advanced Design System 2011 becomes the industry’s first and only true multi-technology design environment. Using it, engineers can do the following:

o Design individual RF and microwave integrated circuits with different technologies (e.g., GaAs, SiGe, GaN, and Silicon CMOS).

o Assemble these integrated circuits in a package or on a laminate.

o Simulate multiple integrated circuits, laminate and package with Agilent’s industry-leading simulation technology (e.g., circuit simulators, Momentum and FEM electromagnetic simulators, and Ptolemy simulator with standards-compliant wireless libraries for performance verification).

o Uncover 3-D electromagnetic interactions of bondwires, solder balls, packages, including traces and spiral inductors on the integrated circuits and laminates.

Designs that work when isolated may experience electromagnetic interactions when mounted, packaged, flipped, and placed on laminate or printed circuit board. That is when engineers often see, for the first time, the impact of spiral inductors’ mutual inductance, non-ideal ground planes/paths, via placement, and complex trace-routing interactions.

Advanced Design System 2011 features capabilities that help uncover and resolve integration issues early in the design process, before fabrication of wireless components like power amplifiers and RF front-end modules. It also offers engineers the ability to design multiple RF and microwave integrated circuits (implemented with a variety of technologies), assemble them in a package or on a multilayer

laminate, and simulate electrical and 3-D electromagnetic performance – all within a single platform. Together, these capabilities represent a significant breakthrough in electronic design automation. With Advanced Design System 2011, design verification no longer needs to stop at the boundary of a single integrated circuit's or module's technology.