

Models are Key in Design and Manufacturing Partnerships

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AWR and TriQuint Announce New Customer Incentive Program for GaAs MMIC Designs

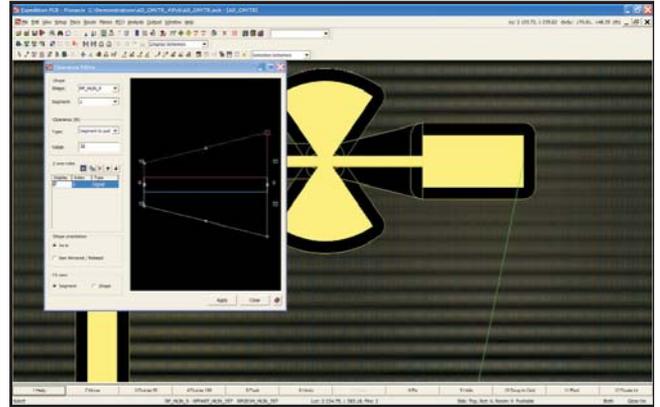
AWR® and TriQuint Semiconductor, Inc. have announced Project JumpStart, a program designed to provide first-time AWR and TriQuint customers with a low-cost introduction to the benefits of design and fabrication of gallium arsenide (GaAs) microwave monolithic integrated circuits (MMICs). Project Jumpstart includes free process design kits (PDKs), a free 90-day lease for AWR's flagship high-frequency design software, Microwave Office® design suite, and a reduced-rate prototype development quickturn (PDQ) shared-wafer foundry run using TriQuint's TQPED 0.5 μm pHEMT process.

AWR's Microwave Office software encompasses all the tools essential for high-frequency design: linear and non-linear circuit simulators, electromagnetic (EM) analysis tools, integrated schematic and layout, statistical design capabilities, and parametric cell libraries with built-in design-rule check (DRC). The TriQuint process design kits include the necessary models and design rule information for accurate simulation of its foundry process using AWR's tools.

Agilent EEs of EDA and Mentor Graphics Collaborate on PCB Design

Agilent and Mentor have announced a fully-interactive link between Agilent's Advanced Design System (ADS) RF/microwave design tools and Mentor's Expedition and Board Station printed circuit board layout products. The result of this partnership is an integrated solution to the design of mixed technology PCBs including RF circuitry (digital, analog, RF).

This solution adds RF circuitry design capabilities to Mentor's Board Station XE and Expedition Enterprise flows, schematic and layout and creates a dynamic integration between the Mentor flows and Agilent's ADS system for RF design and simulation. This dynamic integration replaces any previous data translation interfaces that were manual and error-prone. With the new collaboration, integration is so tight that real-time cross-probing between the systems can be performed, with automated synchronization of the libraries and databases. It is now possible to have seamless design team collaboration so RF sections can be designed in the context of the rest of the PCB.



The primary element in the Mentor-Agilent printed circuit board design collaboration is recognition by the layout program that the metal structures are RF circuits, not just “dumb metal.” Using the same physical models, layout data can be seamlessly exchanged between Mentor's PCB layout tools and Agilent's ADS circuit design, simulation and analysis tools.

Mentor has added significant functionality to the Expedition Enterprise and Board Station XE flows to support the design RF circuitry. DxDesigner, the schematic entry system, can now be used to design RF circuitry as well as digital and analog. The libraries and databases now understand and leverage RF circuitry using parametrically synthesized shapes. Generic RF shapes are in the libraries and can be synthesized into actual board shapes, driven by parameters defined in the schematic or in pop down menus.

Tight integration between the systems is achieved through a dynamic link that is fully interactive, not just a data translator. This fast and efficient link enables a designer using a Mentor product to open ADS with a click and access its full suite of RF specific design and analysis tools. This brings together the entire PCB systems design team in close collaboration so the RF circuits can be designed in the context of the rest of the PCB, making simulation easy and eliminating costly design iterations. RF designers can fully collaborate with the designers of analog, digital and power circuitry, enabled by Mentor's ability to support up to 15 simultaneous users of its PCB design tools, sharing a common database.