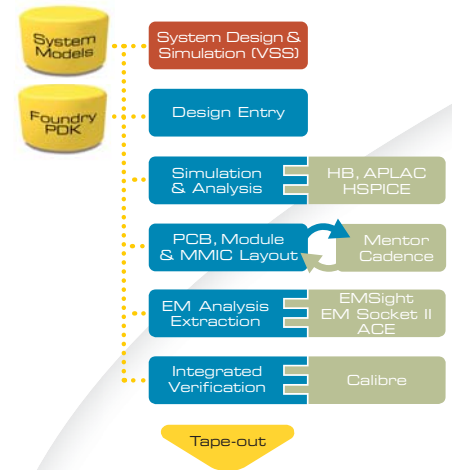


2007 Microwave Office Design Suite

Industry's most open RF/Microwave design platform

Key Features

- Powerful, concurrent, unified design and analysis environment for microwave chip, module, and PCB design
- Complete integration with APLAC's incomparable RF simulation technology including APLAC® native netlists support in AVR XML libraries enabling model creation in APLAC scripting language
- ACE™ automatic circuit extraction technology for fast, accurate interconnect modeling
- Integration with VSS RF Inspector™ enabling frequency-domain simulation
- Intelligent Nets™ (iNets) technology with MMIC, module, and PCB design capability
- iNets coupled with circuit extraction capability enables creation of a schematic model instead of doing time-consuming full wave EM analysis



Complete RF/microwave design flow



- Open EM Socket™ interface enables integration with the industry's best EM tools
- EMediacy™ integrated EM and layout editor eliminates need for separate EM editor by directly combining EM into schematics and layout
- Proprietary Xmodels available through EM Socket
- EMSight™ multi-core support provides scaled speed improvement for even a single frequency sweep
- Integrated filter synthesis solution from Nuhertz Technologies
- Ideal platform for high-speed system-in-package SiP and module design
- HSPICE AC and noise analysis
- Open circuit simulation socket offers integration with the industry's most powerful simulators
- ERC/DRC enhancements

Overview

Microwave Office® 2007 design suite provides the most powerful and flexible RF/microwave design environment available in the industry. Built on the unique AVR® high-frequency design platform with its open design environment and advanced unified data model, Microwave Office software offers unprecedented openness and interoperability, enabling ease-of-use and the ability to integrate best-in-class tools for each part of the design process. The single, object-oriented

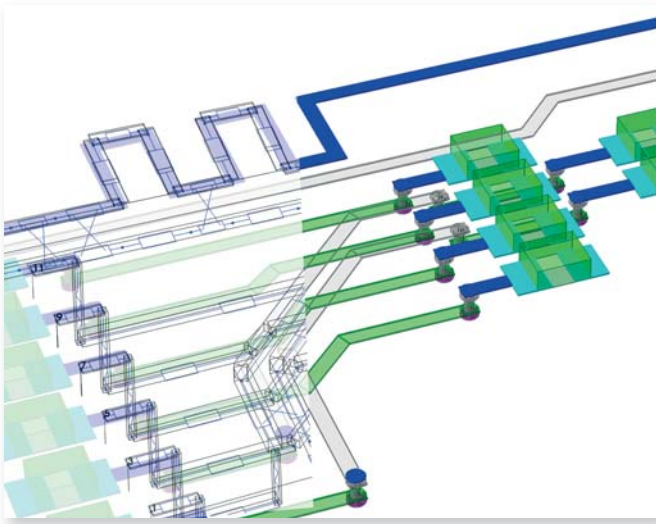
database is inherently synchronized with schematic, simulation, and layout data providing everything a designer needs to take an idea from concept through simulation, and directly into physical implementation, all in one platform. This latest product release continues to deliver key productivity improvements to microwave designers, shortening design cycle time and speeding time-to-market for RF/microwave products.

ACE

Microwave Office Technology

ACE automated circuit extraction for modeling of complex interconnects

Microwave Office 2007 design suite introduces innovative circuit extraction technology that dramatically reduces from hours to seconds the time required to do the initial modeling of complex interconnects. The new technology enables designers to perform interconnect modeling at the earliest stages of the design flow, where problems can be identified and corrected before costly and time-consuming redesigns are required. Microwave Office users can now leverage layout-based models for circuit extraction as opposed to traditional schematic-based designs / flows. The tool provides a dramatic and revolutionary methodology shift to layout-driven simulation through a sophisticated mechanism for automating the bookkeeping and partitioning of structures into pre-existing models.

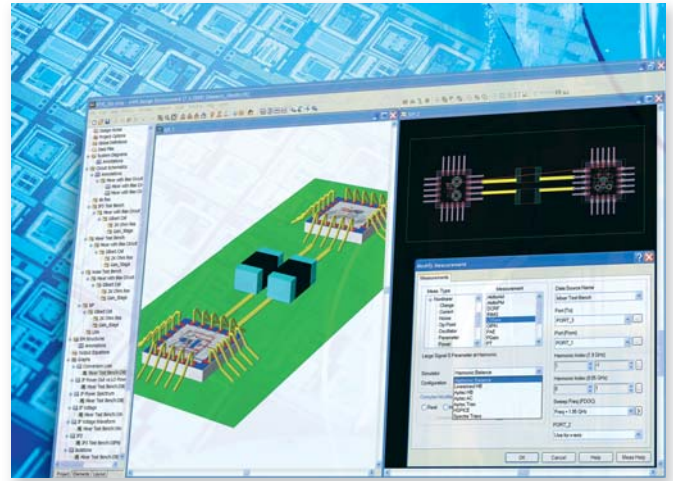


ACE technology for modeling your most complex interconnects

Complete integration with APLAC world class, foundry-approved circuit simulation engine

Microwave Office design suite offers a combination of APLAC's incomparable RF simulation technology and AWR's own robust simulators within the unique, open AWR design environment. This provides designers with the best of both worlds: powerful, speedy simulation capabilities for both large and highly nonlinear designs within an easy-to-use, integrated design platform. APLAC linear, AC and noise, harmonic balance, and transient assisted harmonic balance simulators are integrated and available for appropriate measurements. APLAC native netlists for model creation purposes are now allowed in AWR XML libraries.

With APLAC any type of models are easily developed using extensive programming capabilities of APLAC scripting language.

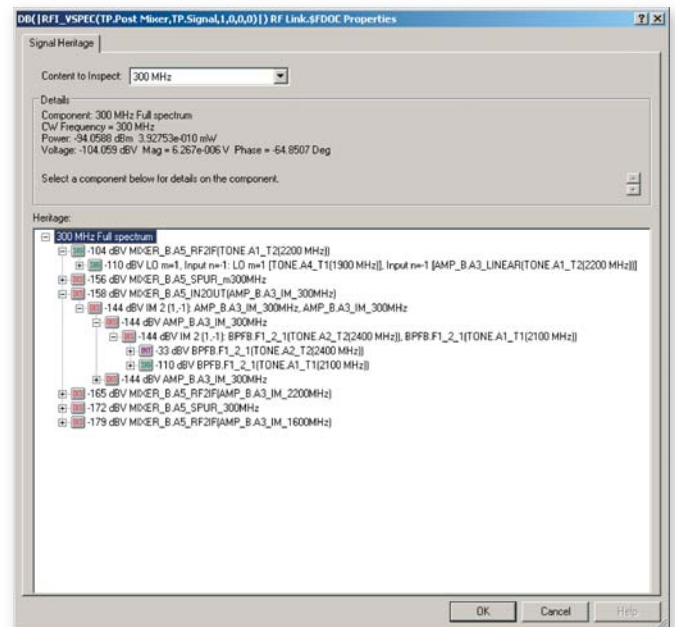


APLAC's first class foundry-approved circuit simulator

APLAC's RF design technology has been widely used by Nokia Mobile Phones for years, and has been used in designing over 30 percent of all mobile phone RF integrated circuits (ICs) worldwide.

Integration with VSS RF Inspector for frequency-domain simulation

Microwave Office 2007 software is now integrated with AWR's new Visual System Simulator™ (VSS) RF Inspector technology, enabling frequency-domain simulation from within the Microwave Office environment. The new RF Inspector tool helps find potential pitfalls early in the design process, at the system-level design phase, thus saving

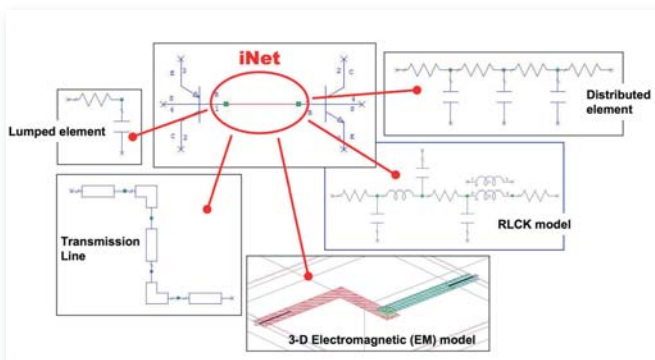


The RF Inspector interface provides a clean and efficient means of determining the individual contributions to a particular tone

significant design cycle time and speeding products to market. Users can determine the root cause or heritage of any inter-modulation product of an RF link, including the effects of conversions, harmonics, inter-modulation, and noise. This enables users to isolate the sources of unwanted interferers and to better architect their RF systems.

Intelligent Nets (iNets) technology with MMIC, module, and PCB design capability

Now integrated into Microwave Office 2007 software is AWR's industry-first iNet technology. Similar to a timing-driven or wire-driven digital design methodology, the iNet methodology focuses on accurate RF interconnect modeling and analysis throughout the entire design process to reduce or eliminate design iterations, shorten the design cycle, and ensure first-time design success. iNets coupled with the ACE circuit extraction capability now enables designers to create a schematic model instead of doing time-consuming full wave EM analysis. AWR's iNet technology can be used to automate layout implementation of the interconnects in any technology—RFIC, monolithic microwave IC (MMIC), PCB, low temperature co-fired ceramic (LTCC), etc.



The Microwave Office 2007 iNet technology features "on-the-fly" extraction of interconnect parasitics

The ACE technology can be implemented at any time during the formation of the schematic; ACE structures can be instantly re-analyzed during final design verification with any EM solver connected to AWR tools through AWR's EM Socket™ open industry standard interface for the direct integration of popular EM solvers into the AWR design environment. The iNets automation and EM Socket open integration speeds design completion because all EM solvers can share the same structures that the ACE software uses.

EM Socket II supports visualizations for integrated third-party tools

As part of its ongoing commitment to providing customers with greater flexibility and choice in their design methodology, AWR has created the EM Socket™ open standard interface, which enables users to access a broad variety of EM tools from leading vendors, without leaving the Microwave Office design environment. All EM manipulation and visualization features that were a valuable part of AWR's EMSight

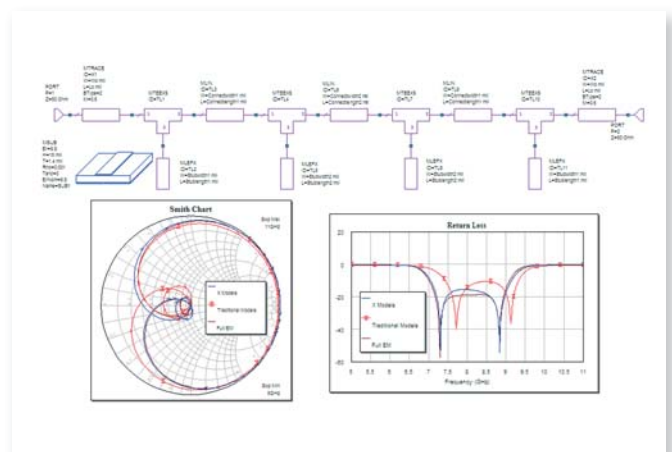
technology are now part of the EM Socket II interface to third-party tools. This enables EM Socket integrators like CST, Flomerics, Optimal, Sonnet, Zeland etc., to access current animations and E-field display.

EMediacy integrated EM and layout editor

The separate EM and layout editors that accomplish the creation of artwork are combined into one, reducing design time by removing one editor that engineers need to learn, as well as the associated tasks required when combining the two original editors. Microwave Office 2007 design suite also provides new time-domain waveform measurements for use with harmonic balance and time-domain simulators. Eye diagrams and time-domain waveforms in general diagrams can now be broken down into certain well-known parameters. These parameters can be explicitly measured and used for optimization, design centering, and yield analysis.

Open access to proprietary AWR Xmodels

AWR provides open access of its proprietary Xmodels technology to third-party EM analysis software vendors who wish to integrate with Microwave Office design suite. AWR's Xmodels are a group of discontinuity models that use the results of full-wave EM solutions of the parameterized discontinuity in order to estimate the electrical performance of the discontinuity. These models are a result of ongoing internal research and development at AWR in order to provide designers with the most accurate discontinuity models at a computational speed adequate for tuning, optimization, and yield analysis. The AWR Xmodels have proven to be an efficient and reliable complement to full-wave EM simulation that not only enable the performance of various other important circuit analyses within the Microwave Office platform, but also offer significant improvements in the accuracy of circuit simulations.



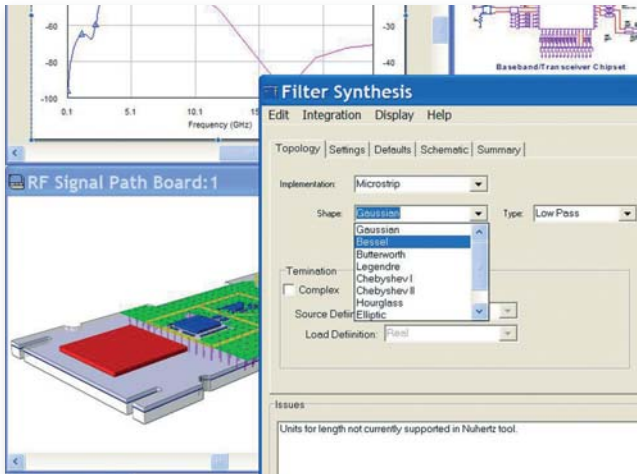
AWR provides open access of its proprietary Xmodels technology to third-party EM analysis software vendors

Integrated filter synthesis solution

The industry-leading Nuhertz Technologies' filter synthesis technology is integrated into Microwave Office 2007 design suite. High-frequency circuit designers can now perform accurate filter synthesis quickly and easily from within the unified AWR design platform.

The feature offers complete synthesis capability for passive and transmission line filters, as well as two graphical user interfaces (GUIs), one for the power user who requires advanced options and capabilities, and one for the mainstream user who needs ease-of-use.

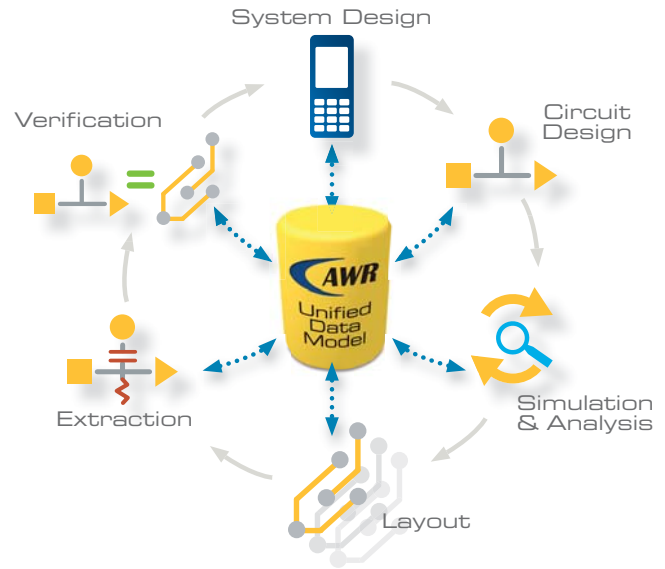
The intuitive, easy-to-use, wizard-like GUI walks the occasional filter designer quickly through the required data steps for the specification and synthesis of all the popular filter topologies and implementations, including diplexers. For power users, one mouse-click leads to the comprehensive Nuhertz GUI, which enables the designer to quickly generate data for detailed analysis, design centering, and manufacturing trade-offs. Synthesized schematics and related analyses can then be stored and viewed directly in the AWR design platform.



Nuhertz Technologies filter synthesis solution offers complete synthesis capability for passive and transmission line filters

Ideal platform for high-speed SiP and module design

Microwave Office 2007 is the only RF/microwave design platform to explicitly support concurrent SiP and module design. Multiple technologies can be co-designed in real time, layed out simultaneously and co-simulated at all levels of hierarchy and content.



AWR open design platform

Whether it is a MMIC, IC, module, package, or PCB, no representative layout cells or simulation behavioral models are necessary. What's more, AWR's proprietary BWIRES model, with real 3D EM built in and IC-packaging tuning and optimization, make concurrent design standard practice and not just part of the "wish-list" for future design flows.

The future of EDA

AWR was founded on the concept of providing a superior solution through best-in-class technologies, tool interoperability, and open third-party tool interfaces. The company continues to develop its own robust design flow in Microwave Office 2007 design suite, which includes industry-leading technology such as the APLAC simulation engine. At the same time, its open architecture enables third-party tools to be easily integrated into the design flow, thus encouraging new solutions to be created that address emerging design challenges and new applications.

The Microwave Office 2007 design suite includes the most innovative integration technologies in the industry, such as the EM Open Socket interface. The software embodies AWR's commitment to the open design platform philosophy and its leadership position in providing designers with the flexibility to integrate tools of choice at different stages of the design process for a superior design methodology.



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