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Press Release

Sonnet Software, Inc. Introduces SONNET[®] Suites Professional[™] Release 12

Syracuse, NY, December 9, 2008: Sonnet Software, Inc. a leading provider of High Frequency Electromagnetic (EM) Simulation Software, introduces the latest SONNET[®] Suites Professional[™] Release 12. Complementing Sonnet's legendary accuracy, Sonnet now introduces dramatically faster simulations through parallel processing on multi-core CPUs. Each frequency point is computed in parallel within the same computer. Sonnet's matrix solve algorithms have successfully achieved a speed increase that is nearly seven-fold on a typical workstation with dual quad-core processors.

Two new versions of Sonnet's EM analysis engine, *em*[™] are introduced. The Sonnet Desktop Solver engine is aimed at typical engineering desktop PCs, and utilizes 2 cores in parallel for analysis time reduction. The Sonnet High Performance Solver engine is aimed at high-end workstations with dual quad-core CPUs, and uses up to 8 cores for 8-way parallel processing on a single frequency. Combined with an improved meshing algorithm, the new Sonnet analysis engines provide analyses as much as 50x faster than the previous release.

For the ultimate in processing speed, Sonnet's Desktop and High-Performance Solvers may be combined with their existing emCluster computing capability. Sonnet's proven emCluster technology can now employ multiple High-Performance solvers implemented on multiple dual processor multi-core systems to yield incredible analysis time improvements of 100x or more through ultra-parallel computing—without reduction of accuracy or need to turn to iterative computing methods.

Geometry and circuit structure variables have been enhanced in Release 12. Sonnet now permits nearly all geometrical and material properties to be written as equations, including frequency variation and dependence on other variables. Each variable can even be specified in a table that is cubic spline interpolated as needed. For example, circuit and substrate dimensions and characteristics (like

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dielectric constant, thickness and loss) can all be user specified functions of temperature and frequency. A designer may then conduct a variable sweep over the operating temperature range in a single analysis run to yield and display a family of response curves.

New technology in Sonnet Professional Release 12 is introduced to analyze uniaxial anisotropy in substrates. Uniaxial anisotropy allows the vertical dielectric constant and loss tangent to be different from horizontal. This is critical when designing with certain high-tech ceramics, sapphire, many RF and microwave substrates, and any substrate that incorporates glass fibers. Now the designer can completely eliminate the risk of failure to include anisotropy and board manufacturers no longer have any need to compromise mechanical characteristics in an attempt to achieve isotropy.

Additional features included in this new release include a new CAD model file translator for Gerber import and export, and user defined hot keys for model editing and post-processing applications. All new technologies are easily accessed from every one of the major open microwave frameworks: Agilent ADS, Agilent Genesys, AWR Microwave Office, and Cadence Virtuoso.

For more information on SONNET[®] Suites Professional[™] Release 12, please visit <u>www.sonnetsoftware.com</u> or call Sonnet Software at +1(315)453-3096. A free evaluation package is available by request.

A high resolution version of this graphic is available upon request.



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About Sonnet Software, Inc.

Founded in 1983, Sonnet Software, Inc. is a worldwide leader in developing High Frequency Electromagnetic (EM) Simulation Software for microwave and millimeter-wave design engineers. The company offers a wide range of EM simulation packages as well as interfaces with major design frameworks well suited for engineers across all levels and platforms. Its core product, SONNET® Suites Professional[™] is the industry-standard planar EM simulation software for S-parameter and full-wave SPICE extraction of high frequency circuit components. For more information, please, contact:

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