SONNET®

Introducing V16

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Release 16 expands the Sonnet Professional feature set to facilitate more freedom, flexibility, and optimum results for design projects. The automation and integration with third party EDA vendors leads to more accuracy in circuit designs, all with increased efficiency.



64-Bit Sonnet Interface for NI AWR MWO V13

New in Version 16.54, Sonnet's Microwave Office Interface provides a completely integrated "solver on request" interface between NI AWR's Microwave Office (Version 13 and above) and Sonnet Suites.

Improved HPS Capability

The maximum thread count for the HPS has increased from 32 to 48 threads for Release 16, providing up to a 50% speed boost in larger projects.

Performance



Enhanced ABS

ABS preview allows an adaptive sweep that has not yet reached convergence to be paused in order to preview and evaluate the data and, if needed, improve the analysis band for the simulation.

ABS DC point evaluation allows users to start an ABS sweep with 0.0 GHz entered, automatically generating data for a DC point by extrapolation from the ABS sweep data.

Pinpoint Resonance Detection

Ideal for superconductor applications, the automatic Adaptive Band Synthesis (ABS) resolution adjustment will detect and resolve extremely narrowband resonances like never before.



Extreme Q Resonance Detected by ABS



Metal extruded up from layer 0, down from layers 1 and 3.

Thick Metal Extrusion

Options for metal cross-sectioning with the thick metal extrusion feature have been expanded. Users may now extrude thick metal upwards as well as downwards from the layer intersection that metalization is drawn at. This allows for unprecedented control of simulations.



A Sonnet project within a Sonnet project.

Project Components

Through Project Components, users can place projects within other Sonnet Projects in a hierarchical fashion. This allows for a whole new level of design compartmentalization and organization.

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Custom User Model Components

Release 16 has been designed to better incorporate internal models from other sources into current geometry with its Model Components feature. Users can place models in the geometry from a source library containing purchases as well as in-house model designs.

Parts by Type/Capacitors/ATC/ATC 100A/CAP-ATC-100A-001

AP-ATC-100A-001 AP-ATC-100A-001 AP-ATC-100A-001 AP-ATC-100A-001

AP-ATC-100A-001 CAP-ATC-100A-001

AP-ATC-100A-001 AP-ATC-100A-001

P-ATC-100A-00

AP-ATC-100A-001

CAP-ATC-100A-001

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AP-ATC-100A-001 AP-ATC-100A-001 AP-ATC-100A-001 AP-ATC-100A-001 AP-ATC-100A-001

AP-ATC-100A-001

AP-ATC-100A-00

CAP-ATC-100A-001 CAP-ATC-100A-001

Description 2.4 pF ATC 100A 2.7 pF ATC 100A 3.0 pF ATC 100A 3.3 pF ATC 100A 3.6 pF ATC 100A 3.9 pF ATC 100A

4.3 pF ATC 100A

4.7 pF ATC 1004 5.1 pF ATC 1004

7.5 pF ATC 100

8.2 pF ATC 1004

9.1 pF ATC 1004

10 pF ATC 100/

16 pF ATC 100/

18 pF ATC 1004 20 pF ATC 1004

22 pF ATC 100/

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User Model	Terminal Width
MODcatc100A001	Feedline Width •
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Ground Node Connection	
Sonnet Box	
	Sonnet Box
ОК Арріу	Cancel Help

Documentation

Modelithics® Integration

adds the Modelithics[®] CLR Library V16 integration capability to Sonnet's Model Components feature. The Modelithics[®] CLR Library contains models representing over 12,000 components from 25 vendors, available to users in list format within the software. This provides for easy access to powerful scalable models in Sonnet simulations.



Modelithics[®] library in Sonnet[®]

Cancel



New Boolean Editing

The updated project editor gives the designer four new intuitive controls: union, intersect, trim, and subtract for easy editing of your geometries.

Boolean Subtract in Action

Unified Ground Connection

A circuit ground can be placed in any spot a standard port can be located. An ideal short circuit can be added to a circuit in positions other than the analysis box sidewall, which is particularly useful for grounding any internal shields and/or ground planes.



Additional New Features:

- Robust Loss Models
- ODB++® Translator
- Resistance Per Via
- Automatic Bar Vias
- Polygon Edge Checking Support for Tech
- Layers
- Efficient Via Simplification for RFIC Circuits
- GDSII[™] 64 Bit Support
- 64 Bit Support for Cadence[®] Virtuoso[®]

Interface

Keysight[®] ADS[™] Interface Enhancements

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Experience Version 16

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