Simberian News: October 12, 2023

We are thrilled to introduce Simbeor 2023.01 (beta), the latest version of our software for signal integrity (SI) analysis of PCB interconnects. With the new features, **Simbeor becomes a unique SI interconnect compliance analysis tool** that suits both experienced SI practitioners and PCB designers without SI background.

The highlight of this version is the automatic PCB interconnects compliance verification that allows you to check the compliance of your PCB interconnects with various industry standards, such as IEEE, OIF, PCI Express, etc., using S-parameters, step and pulse responses, and eye diagrams. Building on the success of the intuitive simulation-based ERC analysis of reference integrity, impedance continuity and local coupling that we introduced in version 2022.02 and that received great feedback from our customers, we extended this approach to the **system-level compliance analysis of reflections, losses, delays and crosstalk** with Fast SI analysis for instant performance evaluation and with 3D SI analysis for more accurate results. With minimal setup and one-click compliance analysis, you can get clear pass/fail results for each standard and each parameter, along with detailed graphs and reports. Now you can easily verify the compliance of your PCB interconnects with various standards and optimize their performance in Simbeor (here is more on that).

The new features include (click here for details and instructions on how to use them):

- **Compliance conditions and automatic pass/fail analysis** in Fast SI & 3DSI modes of SI Compliance Analyzer (SI CA);
- **Interactive simulation results visualization** in Board Analyzer 3D View;
- **One-click analysis in Fast SI & 3DSI modes of SI CA**;
- **Auto-detection of minimal resolution** required for electromagnetic analysis in 3DSI mode;
- **Absorbing Boundary Conditions** in Simbeor 3DML solver, to remove box resonances at high frequencies and extend model bandwidth above 50 GHz;
- **Transmission lines with de-embedded ports along the Z-axis**, to enable decomposition of at BGA balls or bottom conductors of coaxial and other connectors and PCB launches;
- **Simbeor SDK is updated for Python 3.10** + additional functions for geometry description (see description at HowToBuildAdvancedViaModels.docx);

To download Simbeor 2023.01 (beta) and try out these new features, please visit our website www.simberian.com. It can be installed and used alone with the previous version of Simbeor. We hope that you will enjoy using Simbeor 2023.01 (beta) and find it useful for your projects. If you have any feedback or questions, please do not hesitate to contact us at info@simberian.com. We are always happy to hear from you and assist you.

Thank you for choosing Simbeor – **Be the SI Expert!**

Sincerely,
Team Simberian

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