Driving Innovation and Productivity

Whether you are designing an imaging or display device and using a traditional full-custom schematic-based analog methodology or adopting the latest mixed-signal approach with HDL design, you require a tool flow that offers full flexibility with all the capabilities that you need today to get your design done quickly and easily. Tanner EDA provides all that in a tool flow that evolves to meet your future design needs, coupled with unrivalled application support.

No other EDA vendor offers a tool flow so closely aligned with these needs than Tanner EDA. Unlike most other vendors chasing Moore’s Law and aiming at SoC design in nanometer process geometries, Tanner focuses on supporting companies working in application areas that include imaging and displays, power management, medical devices, sensors, full-custom IP, and MEMS.

Turn the page to see how we can help you achieve success by using Tanner design tools and read about others in this field who rely on Tanner EDA to deliver their innovations.

FEATURES AND BENEFITS:

- Complete tool flow, optimized for imaging and display
- Unified and intuitive user interface
- Quick learning curve
- Unrivalled customer support
- Industry-leading price/performance
- Flexible design methodology that supports the traditional analog flow and use of HDL design for digital with co-simulation
- Full flow that covers design, simulation, layout, and verification of large-area, mixed-signal designs
- Digital Verilog simulation
- Analog simulation
- AMS co-simulation
- Synthesis
- Place and route (P&R)
- Full-custom and schematic driven analog layout
- Foundry-certified PDKs and verification
- iPDK and Open Access database support

The Tanner analog/mixed-signal design flow drives innovation and productivity for imaging and display design and verification.
Tanner AMS Design Suite

Tanner EDA’s analog/mixed-signal IC design flow supports all aspects of imaging and display design, from design entry through simulation and physical layout, to post-layout verification.

Using the S-Edit design environment, you can create system level views of an entire design, create custom analog schematics, and connect them with digital blocks written in Verilog. You can create testbenches and manage all digital, analog, and mixed-signal simulations from one easy view.

SUCCESS STORY

A highly innovative, wafer-scale digital image sensor that targets medical imaging applications was developed at the Science and Technology Facilities Council’s (STFC) Rutherford Appleton Laboratory (RAL). One of the key aspects for developing this CMOS imaging sensor was the STFC’s CMOS Sensor Design Group was the use of the Tanner advanced analog tools for the design, layout, and verification for this analog/mixed-signal IC. Measuring 120 X 145mm and effectively using an entire 200mm silicon wafer in its production, this image sensor is manufactured by TowerJazz®, a leading global specialty semiconductor foundry that uses its cutting-edge, high-yield CMOS sensor process.

Digital Design

Using Verilog, you can create digital designs using the context-sensitive text editor in S-Edit, simulate using the ModelSim® digital simulator, synthesize the design with the integrated Incentia® Design Craft tool, and then, perform place and route with the Tanner P&R tool. Any timing/power optimizations can be performed pre/post layout using the Incentia tools.

Analog Design

You can create custom analog designs using SPICE and/or Verilog-A in S-Edit, and then simulate using Tanner’s full-featured analog simulator T-Spice. Layout is then performed in L-Edit that supports both full-custom and auto-assisted schematic driven layout (SDL).

Design Verification

After completing your design, the Tanner netlist and parasitic extraction tools help you fully simulate the resulting physical design. The leading-edge Tanner Calibre® One verification tools ensure compliance to foundry manufacturing rules, helping you “design right the first time.”

Foundry Support

Tanner EDA works closely with the leading providers of imaging and display technologies such as TowerJazz and X-Fab® to ensure that the best design, modelling, and layout options are available to you.

Please contact us to learn more about the Tanner EDA solution and to request a free, 30-day tool suite evaluation.