

COMPANIES

Up and Comers on the Leading Edge

TO WATCH

Tanner EDA: Finding Ways to Alleviate Design Headaches

Software provider's cost-effective and easy-to-use tools help



Up and-Comer
At-a-Glance

Tanner

EDA

Headquarters:

Pasadena, Calif.

Line of business:

EDA tools aimed at improving IC and MEMS design, layout and verification processes

No. of employees: 75

Key products:

HiPer Verify design rule-checking software; L-Edit layout and verification tool, and T-Spice Pro analog/mixed signal design solution

Top customers:

- Catalyst Semiconductor Inc.
- CSR plc
- Honeywell International Inc.
- Jet Propulsion Laboratory
- Linear Technology Corp.
- NEC Corp.
- Sarnoff Corp.
- Semiconductor Technology Associates Inc.
- Ricoh Company Ltd.
- Xerox Corp.

Why to watch:

Tanner EDA tools are efficient, enable innovation and support rapid development cycles

Even before Dr. John Tanner graduated from the California Institute of Technology 17 years ago, he co-founded a company that designed integrated circuits and quickly discovered that existing tools were expensive and difficult to work with. He also found that creating layout, verifying its correctness and simulating circuits were time-consuming and awkward processes.

Determined to find a better solution, Tanner set out to create a software platform that would be cost-effective, easy to use and flexible enough to handle even the most complex design processes.

That philosophy remains the driving force behind Tanner EDA today.

The Pasadena, Calif.-based company, now on its 11th release of its original software, has developed a breadth of tools geared to improving the design process, reducing design cycle times, increasing productivity and reaching time-to-market goals.

"If we fast-forward 17 years, you'll see a worldwide company that is still true to its roots and cares about the needs of its customers," says Daniel Hamon, Tanner EDA general manager.

Building on Its Heritage

Determining the needs of its customers – engineers hailing from the aerospace, biomimetics, electronics, industrial and medical industries – has long been a fundamental principle for Tanner EDA. To keep a pulse on what customers want, Tanner EDA has stacked its staff with engineers and industry experts who have firsthand knowledge of how the design process works and understand the pain points that come with it.

"The tools are designed with a great deal of input from designers who know what customers need from the user interface," adds Hamon.

Besides having industry know-how embedded in the software development process, Tanner EDA also strives to offer value-priced solutions that can be easily implemented by start-ups, mid-size and multi-million dollar top-tier players.

On that front, Tanner EDA tools run on the Windows platform and tackle a range of design issues, including design capture, layout, tapeout and verification. The software, which has been used by customers designing innovative components for Bluetooth capabilities, the Mars Rover space

program and advanced medical devices, is also compatible with other back-end EDA systems and import and export industry-standard formats like GDS, CIF and DXF. Another advantage: These user-friendly tools can be installed and integrated into the design process quickly.

We believe that tools are meant to help the design process. They are not meant to be an obstacle in getting a product to silicon.

— Daniel Hamon, Tanner EDA general manager

"The beauty of the tool is that it is incredibly flexible," says Dr. Massimo Sivilotti, Tanner EDA chief technology officer. "We have architected the tools so they are easy to use and easy to configure."

And, that's what engineers are looking for – more powerful tools that they don't have to fumble with but, at the same time, can handle complex design flows. In turn, an easier-to-use solution brings with it increased productivity and shortened design cycles, which are things that impact overall operations, revenues and profits.

"If you are a start-up or have a limited budget or tight time-to-market goals, you can't afford to spend a great deal of time or money building your infrastructure," says Dr. Sivilotti. "You need to be able to work in the most efficient way."

Take Your Pick

With engineering efficiency in mind, Tanner EDA, which has issued 25,000 licenses for its software products, has developed a suite of tools to help customers achieve that goal.

Its L-Edit series, for example, handles layout and verification processes for analog, mixed-signal and MEMS products. Meanwhile, Tanner EDA's HiPer Verify provides foundry-compatible design rule checking that meets submicron DRC requirements. And, T-Spice Pro gives designers the ability to do table-based modeling for simulations.

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