Protel's Proteus

Jerry Ascierto - September 13, 1999

Protel International Ltd. is quick to point out how contrary its approach to the EDA market is. The Australian provider of Windows-based design tools is also quick to point out how consistently profitable the last 10 years have been, by virtue of that approach.

While the Sydney-based company has only been publicly traded for less than a year on the Australian Exchange, its inception can be traced back to 1985, back to the days of a Unix-dominated EDA market.

"We were the first company to have a PCB design system in Windows," explained Bruce Edwards, Protel's president of technology. "Our main competitor OrCad didn't arrive at Windows until three years later. Conventional wisdom back then was that engineers would never use Windows at all."

But sometimes conventional wisdom is flat-out wrong. According to EDAC, the EDA Consortium, the market for Windows-based EDA tools reached $186.6 million last year, growing over the 1996-1998 time-span with a CAGR of 33 percent. And market research firm Dataquest is calling for that market to triple in size by 2002.

Protel's contrary approach can also be seen in its streamlined sales/support teams, eschewing traditional commissioned salespeople and replacing them instead with a support team that sells products directly to the end user.

But undoubtedly the most contrary aspect of its business model lies in its flagship product, Protel '99, a board-level design system for Windows NT/95/98. In that design environment, the company commoditizes many formerly exotic technologies, rendering its package a one-stop shop through constant and sometimes superfluous integration.

The company likens it to Microsoft's Office software, wherein many formerly standalone technologies, such as Spreadsheets and Power Point documents, have become standard fare.

"The idea in the EDA industry was that you had to charge big prices to get back your R&D investment from a limited market," Edwards said. "And our view was: What if the market isn't so limited? Part of our philosophy is that every engineer should have the full range of tools already on his desktop, ready to use."

And while Edwards concedes that most engineers may only need half of what Protel's design environment offers, he feels that Protel is defining what a standard EDA environment should include. He said that Protel often uses acquisitions of young companies to integrate nascent technology.

Toward that end, the company today is rolling out a new add-in server product for Protel '99, a 3D PCB Viewer, acquired from a very young, garage-shop company. The viewer provides a detailed 3D...
view of a finished printed circuit board.

Available immediately, this feature joins a growing list that includes multisheet, hierarchical schematic entry, full-featured PCB layout with intelligent design synchronization; extensive component libraries with free online updates; gridless manual routing with interactive push-and-shove; shape-based auto-routing with auto-placement; fully integrated signal integrity analysis; Spice-based mixed signal simulation; and an intuitive design explorer, among others.

Analysts see this level of integration as a strong business model in the burgeoning Windows-based EDA tools market. "The difference between Protel and other companies is they bundle into a single package what other companies sell as point tools," explained Rita Glover, president and principal analyst of market research firm EDA Today. "Their price point for that package is quite low ($4,995). It's a decent channel for low-end users to get some pretty robust technology."

Bruce Edwards, Protel's president of technology

Of course, there will be some performance trade-offs amid all this integration. For the Fortune 500 companies seeking the most cutting edge tools, Edwards said they would be well served by the Cadences of the world. But Protel's sites are on that other 80 percent of the market that can't afford the bleeding edge.

"Obviously, you don't have the freedom of choice as you would if you were selecting your own point tools, but the real benefit here is in all the integration work they've done, and that's got real value," Glover added.

Looking forward, the company sees more integration in its crystal ball. "We're looking at field programmable gate array synthesis and embedded design, some embedded software applications. If you think about the breadth of what Cadence offers the Fortune 500 companies, we want to provide that same kind of breadth to that other 80 percent of the market."