

EETIMES

EE Times: Design News

Nanometer age R&D costs a concern, says TI's Stork

By Brian Fuller

(03/15/2005 5:33 AM EST)

URL: <http://www.eet.com/news/design/showArticle.jhtml?articleID=159900089>

CHANDLER, Ariz. — Research and development costs are outpacing the growth of semiconductor industry revenue by about 4 percent per year, which could squeeze innovation in coming years, a leading technologist said Monday (Mar. 14). "If the industry was a single company, that (situation) wouldn't last too long," said Hans Stork, chief technologist with leading chipmaker Texas Instruments.

In an address to the annual Semico Summit conference here and in an interview, Stork said the issue of funding next generation technologies is a thorny one. "I could spend \$30 million on a scanner but I could make better use of that \$30 million if I spread it around, to university research programs and consortia work," Stork said.

But Chia Song Hwee, chief executive officer of Singapore foundry Chartered Semiconductor, who participated on the panel with Stork, said in an interview that the gap between R&D and revenues is not quite so acute for the foundry industry.

"Our challenge is there, but it's not as significant. The growth of the R&D rate is not exceeding the revenue rate. At least for the next five years, we believe that to be the case."

Chartered itself has leveraged alliances, such as its highly publicized deal with IBM for the development of 90-, 65- and 45-nanometer manufacturing processes, to ease the burden on its customers and shareholders.

Stork identified the selection of a high-k material at the 45-nm node to be among the thorniest issues facing the industry. If the industry doesn't identify something soon, the node's time line might change. "Time is running out," Stork said.

Stork also called on the EDA industry to engage in next-generation tools development with its silicon customers better than it has in the past, and instead work in a way similar to how semiconductor equipment vendors do now. "We don't want to be in their business, but everyone's boundaries are shifting," Stork said.

All material on this site Copyright © 2005 CMP Media LLC. All rights reserved.