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Chip design costs may go up

SAN JOSE: Costs of chip design are likely to go up, but software, and not hardware, is playing a much greater role in the problematic equation, a top executive of Mentor Graphics Corporation has said.

The shift in the equation will require a new type of EDA technology – embedded software automation (ESA) – as a means to attack the problem, according to Walden Rhines, chairman and chief executive of Mentor Graphics Corporation.

Rhines has cautioned that IC design costs for many devices are projected to reach as much as \$100 million within the next 3 years. Even now, IC design costs range between \$20 million and \$50 million.

At the Semico Outlook Conference, Walden Rhines said the \$100-million figure is “scary” for EDA vendors because there are fears that designers will no longer buy tools owing to the rising IC design costs. However, EDA will remain relevant in that equation, Rhines, added.

The total non-recurring engineering costs to develop the Snapdragon chip of Qualcomm Incorporated was about \$60 million, according to Alex Shubat, president and CEO of Virage Logic Corporation, the IP house. To break even, Qualcomm must sell 6 million units at \$30 per chip, Alex Shubat said.

According to Shubat, the other factors facing chip makers like Qualcomm are finite market size, increasing NRE costs, and shrinking TAM, and exploding complexity.

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