PrimeTime Smart ECO Technology Cuts Compute Costs by 10X

5X Fewer Resources, 2X Performance Boost, Industry-Leading Fix Rate

MOUNTAIN VIEW, Calif., July 21, 2016 /PRNewswire/ --

Highlights:

- Delivers industry-leading single-pass fix rate with 10X lower compute cost
- Enables signoff-accurate ECO with all scenarios on a single, affordable compute server
- Offers flexible distribution to take advantage of customers' private compute clouds

Synopsys, Inc. (Nasdaq: SNPS) today announced that the 2016.06 release of thePrimeTime® static timing analysis tool includes a major enhancement to cut compute costs for timing closure by 10X. Through the use of smart engineering change order (ECO) technology, this latest release reduces memory requirements by 5X and speeds runtime by 2X while maintaining industry-leading first-pass fix rate of 95 plus percent. The significant increase in efficiency enables signoff-accurate ECO with all scenarios on a single, affordable compute server or the flexibility to distribute across customers' private compute cloud to take advantage of smaller more readily available machines.

"Our customers want to continue to use their existing investment in compute hardware, even as their designs continue to grow in size," said Robert Hoogenstryd, senior director of marketing for design analysis and signoff tools at Synopsys. "To that end, our new PrimeTime release provides smarter, more resource-efficient technology for timing closure and ECO to improve signoff schedules and reduce risk."

Flexible Cost Reductions of ECO Runs

Employing smarter and more efficient ECO techniques, this PrimeTime release delivers single-pass fix rates of 95 plus percent using 5X less memory and with 2X faster runtimes. As a result, PrimeTime users can reduce their resource usage in several ways. The first option is to use significantly fewer large-memory machines by packing more scenarios on a single server. This reduces the potentially long wait times for access to multiple rarer machines. As a second option, users can utilize common, readily available, small-memory compute slots by distributing the scenarios across their private compute cloud. This option virtually eliminates wait times. Both of these options can provide significant cost savings and reductions to signoff schedules, while utilizing current compute resources.

Signoff ECO of All Scenarios on a Single Box or Distributed to Multiple Boxes

	Design Size	Resources Needed	Scenarios		Runtime
Option 1)	100M Instances	1 x 256 Gigabyte Machine	8 Scenarios ->	-	3.5 Hours
Option 2)	100M Instances	8 x 32 Gigabyte Machines	8 Scenarios >	--	3.5 Hours

"In delivering our innovative automotive infotainment products to our partners, efficiency and dependability are critical to our combined success," said Yasunori Matsumoto, Chief Professional of Backend Design Department 1, Development Division 4 at Renesas System Design Co., Ltd. "Synopsys PrimeTime delivers the accurate timing analysis and high ECO fix rates we need. Having the flexibility the new PrimeTime ECO technology provides will help our teams meet their demanding schedules while utilizing our existing compute resources."

Availability and Resources

The PrimeTime 2016.06 release is available now. For additional information, visit the SynopsysGalaxy™ Signoff Solution page, watch one of the many webinars or videos or contact your local account team.

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is the Silicon to Software™ partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 15th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and is also growing its leadership in software quality and security solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest quality and security, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

Editorial Contact:
Sheryl Gulizia
Synopsys, Inc.
650-584-8635
sgulizia@synopsys.com

SOURCE Synopsys, Inc.