# Synopsys' Custom Compiler Enabled for Samsung Foundry's 14-nm FinFET Process

Samsung and Synopsys Collaborate to Deliver Custom Compiler-ready iPDK

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#### **Highlights:**

- Custom Compiler support is available for the Samsung Foundry 14LPP and 14LPC processes
- Custom Compiler design kit supports the groundbreaking visually-assisted automation flow
- Along with Custom Compiler, Samsung 14-nm support is available for the full suite of Galaxy<sup>™</sup> Platform tools

Synopsys, Inc. (Nasdaq: SNPS) today announced that the company's Custom Compiler™ tool has been enabled by Samsung for 14-nanometer (nm) LPP and LPC FinFET production. The process delivers high performance for compute-intensive designs and lower power consumption for mobile applications. Custom Compiler is a pioneering custom design solution from Synopsys that was announced on March 30<sup>th</sup> of this year (see https://news.synopsys.com/2016-03-30-Custom-Compiler-Pioneers-New-Era-of-Visually-Assisted-Automation ). Custom Compiler support is provided through a jointly developed interoperable process design kit (iPDK)format design kit. Unified with Synopsys' circuit simulation, physical verification and digital implementation tools, Custom Compiler provides Samsung 14nm LPP and LPC process users with a comprehensive custom design solution.

"Samsung support for Custom Compiler is very important to our mutual customers," said Bijan Kiani, vice president of product marketing at Synopsys. "Through close collaboration, the two companies were able to deliver a design kit and set of tool features that enable Custom Compiler's visually-assisted automation flow for Samsung Foundry customers."

### **About Custom Compiler**

Custom Compiler shortens the time it takes to complete custom design tasks from days to hours—especially for FinFET process nodes. Its visually-assisted automation leverages the graphical use model familiar to layout designers while eliminating the need to write complicated code and constraints. With Custom Compiler, routine and repetitive tasks are dealt with automatically without extra setup. Custom Compiler's visually-assisted automation provides four types of assistants: Layout, In-Design, Template and Co-Design. Layout Assistants speed layout with user-guided automation of device placement and routing. In-Design Assistants reduce design iterations by catching physical and electrical errors before signoff verification. Template Assistants help designers reuse existing know-how by making it easy to apply previous layout decisions to new designs. Co-Design Assistants combine the IC Compiler™ place-and-route tool and Custom Compiler into a unified solution for custom and digital implementation. Custom Compiler is based on the industry standard OpenAccess database. It provides an open environment spanning schematics, simulation analysis and layout. Unified with Synopsys' circuit simulation, physical verification and digital implementation tools, Custom Compiler provides a comprehensive custom design solution. For more information about Custom Compiler, visit https://www.synopsys.com/implementation-and-signoff/custom-implementation/custom-compiler.html .

#### **About Synopsys**

Synopsys, Inc. (Nasdaq: SNPS) is the Silicon to Software<sup>™</sup> partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 16<sup>th</sup> 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:**

Monica Marmie Synopsys, Inc. 650-584-2890 monical@synopsys.com