# Synopsys and GLOBALFOUNDRIES Collaborate to Develop DesignWare IP for 22FDX® Process

DesignWare Interface and Analog IP Enables Faster Time-to-Volume for Energy-Efficient IoT and Mobile SoCs

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#### **Highlights:**

- DesignWare Interface IP portfolio for GLOBALFOUNDRIES' 22FDX® process includes USB 3.1/3.0/2.0, USB-C 3.1/DisplayPort, PCI Express® 3.1/2.0 and HDMI 2.0 TX PHYs
- DesignWare Data Converters for the 22FDX process are optimized for analog sensor interfaces and wireless communication applications such as WiFi and LTE, including NB-IoT and LTE-M
- High-quality DesignWare IP for the 22FDX process enables designers to reduce the risk of integrating standard interfaces into their SoCs
- Long-standing relationship between the two companies has resulted in the successful development of DesignWare IP from 180-nm to 7-nm

Synopsys, Inc. (Nasdaq: SNPS) today announced its collaboration with GLOBALFOUNDRIES (GF) to develop DesignWare® IP, including PHYs for USB 3.1/3.0/2.0, USB-C 3.1/DisplayPort, PCI Express® 3.1/2.0 and HDMI 2.0 TX, as well as data converters, for GF's 22FDX® process technology. Synopsys DesignWare IP on the 22FDX process enables designers to implement the latest interface and analog IP standards in their system-on-chips (SoCs) on GF's 22-nm Fully-Depleted Silicon-On-Insulator (22FDX) technology that delivers 25 percent smaller die size and 40 percent lower power than 28-nm HKMG technologies. The collaboration extends Synopsys' history of successful IP development on GF's processes for small, energy-efficient IoT and mobile SoCs.

"GF and Synopsys share a long track record of delivering high-quality DesignWare IP on GF's processes, enabling volume production of millions of units," said Jai Durgam, vice president of design enablement at GF. "The combination of our 22FDX process with Synopsys' DesignWare interface and analog IP enables our mutual customers to meet compliance requirements as well as their performance, power and area targets with reduced risk and faster time-to-market."

"As a leading provider of physical IP, Synopsys continues to provide a broad portfolio of DesignWare IP in the latest process technologies to help designers achieve silicon success in low-power, high-performance applications," said John Koeter, vice president of marketing for IP at Synopsys. "By offering DesignWare IP for the 22FDX process, Synopsys enables designers to more easily meet their goals of creating differentiated products with less risk and faster time to volume production."

### **About DesignWare IP**

Synopsys is a leading provider of high-quality, silicon-proven IP solutions for SoC designs. The broad DesignWare® IP portfolio includes logic libraries, embedded memories, embedded test, analog IP, wired and wireless interface IP, security IP, embedded processors and subsystems. To accelerate prototyping, software development and integration of IP into SoCs, Synopsys' IP Accelerated initiative offers IP prototyping kits, IP software development kits and IP subsystems. Synopsys' extensive investment in IP quality, comprehensive technical support and robust IP development methodology enable designers to reduce integration risk and accelerate time-to-market. For more information on DesignWare IP, visit www.synopsys.com/designware.

## **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 security and quality solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest security and quality, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

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