

# Kyocera Selects Synopsys VC Formal for High-Performance Property Verification

## VC Formal Delivers Faster Convergence for Complex Multi-Functional Product Designs

MOUNTAIN VIEW, Calif., Jun 28, 2017 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that Kyocera, a leading supplier of telecommunications equipment, information equipment, semiconductor packages and electronic components, has selected Synopsys' VC Formal™ solution for high-performance formal property verification of their Multi-Functional Product (MFP) designs. Kyocera used VC Formal's next-generation high-performance formal engines and heuristic performance algorithms to achieve faster formal property verification. Through its native integration with VCS®, Verdi® and Certitude™ technologies, VC Formal also enabled Kyocera to build a highly efficient and robust formal verification methodology.

"Kyocera designs complex SoCs to provide industry-leading printing solutions," said Motohide Murao, General Manager of Software 1 R&D Division at Kyocera Document Solution Inc. "To efficiently perform comprehensive verification of these complex SoCs, static, dynamic and formal verification is required. With VC Formal and Certitude's fault injection and mutation technology, we addressed a potential problem for a specific bus access timing scenario in our past MFP products. By using a CPU model that could synthesize the logic with VC Formal, we also proved that the issue would not occur under the use conditions of the product. This enabled us to enhance the verification quality of our products and shorten time to market."

Synopsys VC Formal delivers faster property convergence through a set of unique engines and smart engine orchestration. Its innovative, high-capacity word-level data model enables formal apps to run on large SoCs, where traditional formal products fail. VC Formal's native debug with Verdi enables simulation experts to quickly leverage formal technologies for faster verification closure. Additionally, unified compile with VCS accelerates creation of VC Formal setup from a simulation environment, reducing valuable time to market. Through its integrated flow with Certitude, users can also apply fault injection techniques to identify and eliminate any gaps in formal verification testbench, eliminating bug escapes altogether.

"We have long collaborated with Kyocera on the delivery of advanced verification solutions for their multi-function printers," said Mo Movahed, vice president of R&D in the Synopsys Verification Group. "We are committed to providing the fastest, high capacity, formal verification solution that can scale with the growing complexity and shorter time-to-market of modern SoC designs."

### 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 15<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 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](http://www.synopsys.com).

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