AImotive Deploys Synopsys VCS to Verify Next-Generation Automated Driving Technologies

VCS Significantly Improves Design Verification Quality of aiWare Neural Network Hardware Accelerator IP and Design Team Productivity

MOUNTAIN VIEW, Calif., Dec. 9, 2020 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that AImotive has adopted Synopsys VCS® simulation and Verdi® debug, part of the Verification Continuum® Platform, to help verify its innovative aiWare™ hardware IP for Neural Network (NN) acceleration for automated driving applications.

AImotive is building a comprehensive portfolio of complementary hardware and software technologies to enable automotive OEMs and Tier1s to rapidly develop and deploy high volume production solutions. AImotive's products include aiDrive™, a modular automated driving software stack and aiSim™, a comprehensive simulation and design validation environment built around its proprietary physics-accurate rendering engine. The aiWare hardware IP is a highly optimized neural network acceleration hardware IP particularly targeting camera-centric AI solutions.

The smooth integration of Synopsys' VCS, Verdi and VC SpyGlass™ RTL static signoff tools enabled AImotive to significantly improve the coverage of its regression testing and overall team productivity, and meet aggressive goals for verification of a range of scalable implementations of aiWare to meet a growing number of automated driving challenges set by their customers and partners.

"AImotive's products are developed to the most demanding standards such as ISO 26262 to solve some of the toughest automated driving challenges to the highest levels of robustness under all operating conditions," said Marton Feher, SVP hardware engineering at AImotive. "The integration of VCS with Verdi debug delivered superior performance and improved regression turn-around time, enabling us to significantly improve overall productivity as well as accelerate new product development projects. The ability to natively compile in VCS and leverage unified debug in Verdi, alongside industry-wide recognition of VC SpyGlass for validating our RTL for multiple foundries and customers made Synopsys' functional verification solutions an excellent choice for our needs."

In addition to enabling a unified debug platform across all Synopsys verification technologies, Synopsys' Verdi debug solution provides advanced coverage analysis and verification planning to link tests and checks to industry standard specifications like ISO 26262. Synopsys' next-generation VC SpyGlass platform allows early identification of critical design issues including design reuse compliance checks such as STARC and OpenMORE to enforce a consistent style throughout the design, ease the integration and promote design reuse.

"Synopsys is addressing the need for faster time-to-market with our leading portfolio of verification software technologies," said Rajiv Maheshwary, VP of marketing and business development in the Verification Group at Synopsys. "We are pleased to support AImotive as it enables more rapid deployment of advanced automated driving technology."

Additional Resources

Learn more about Synopsys Verification Continuum Platform.

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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