Synopsys Releases LucidShape Version 2017.03

Latest Release Supports New IIHS Headlight Safety Test and New Design Feature for Automotive Signal Lights and Tail Lights

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Highlights:

- Provides automotive headlight analysis based on Insurance Institute for Highway Safety guidelines
- Includes new feature for designing pillow optics and other decorative styling elements in automotive lighting fixtures

Synopsys, Inc. (Nasdaq: SNPS) today announced the availability of version 2017.03 of itsLucidShape® software for the design, simulation and analysis of automotive exterior lighting. Synopsys LucidShape version 2017.03 includes new capabilities for testing the safety of headlight designs based on Insurance Institute for Highway Safety (IIHS) guidelines, as well as a new feature for designing decorative styling in signal lights and tail lights.

IIHS Headlight Test

The IIHS, an organization funded by the U.S. insurance industry, has developed a set of safety standards for headlights based on criteria such as how well headlights allow drivers to see down roads on straightaways and in curves, and for how much glare headlights direct at oncoming traffic. Accordingly, the IIHS test capability in LucidShape version 2017.03 allows designers to perform two types of analysis on headlight designs:

- Illuminance-based visibility range tests
- Glare test for oncoming traffic

The LucidShape IIHS test capability presents headlight performance results using the IIHS rating scale of Good, Acceptable, Marginal and Poor.

"Headlight designs need to meet both safety and stylistic requirements," saidGeorge Bayz, vice president and general manager of Synopsys' Optical Solutions Group. "The new IIHS test in LucidShape software provides a quick, simple way to evaluate a headlight design versus IIHS standards prior to manufacture. Designers can then determine how to adjust their headlight designs to help achieve improved vehicle safety ratings."

MacroFocal Torus Optic Tool

The LucidShape MacroFocal Torus Optic tool creates pillow optics and cylinder flutes for decorative styling in automotive lighting products such as signal lights and tail lights. It works with the proprietary algorithms in LucidShape software to automatically calculate and construct optical surfaces based on user-defined illuminance and intensity patterns. The Torus Optic tool augments LucidShape software's unique coupling of design functions for precise light distribution and styling features to achieve a desired appearance in automotive lighting fixtures.

About Synopsys' LucidShape Products

Synopsys' LucidShape products provide a complete set of design and analysis tools for automotive lighting. With dedicated algorithms optimized for automotive applications, LucidShape software facilitates the design of automotive forward, rear and signal lighting and reflectors. In addition, the LucidDrive® tool provides night-driving simulations that generate realistic lighting scenes in real time, which allow designers to quickly and accurately evaluate beam patterns of vehicle headlamps prior to expensive fabrication and testing. Learn more at http://optics.synopsys.com/lucidshape.

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 http://www.synopsys.com/.

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