

# Synopsys and Dassault Systèmes Partner to Enable Industry's First Holistic Lighting Design Platform

Synopsys Optical Design Solutions Integrated with Dassault Systèmes' 3DEXPERIENCE Platform Facilitates Creation of Smarter, Safer and Distinctive Optical Systems

MOUNTAIN VIEW, Calif. and VELIZY-VILLACOUBLAY, France, Oct. 12, 2021 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) and Dassault Systèmes (Euronext Paris: FR0014003TT8, DSY.PA) today announced their partnership to integrate Synopsys optical design solutions into the Dassault Systèmes 3DEXPERIENCE platform to facilitate the development of safer, smarter vehicles. By integrating complete optical systems design tools with world-leading virtual twin experience and product lifecycle management software, designers gain access to the industry's first holistic design portfolio for automotive lighting.

Designers using Synopsys optical software on the 3DEXPERIENCE platform will benefit from a multidisciplinary development process that empowers them to define, simulate and validate driving experiences. The integration allows the development of safer vehicles and enables distinctive illumination styling – all while accelerating delivery to market. Designers will also benefit from the 3DEXPERIENCE platform's collaborative virtual environment, which connects product teams to help them interact and innovate together.

"Lighting is becoming more and more intelligent and a key component of active safety and ADAS. Its development cost has significantly increased. Our extended partnership with Synopsys complements our existing offerings to provide a first-of-its-kind solution for vehicle manufacturers and suppliers to define, test and experience lighting and sensors for intelligent driving systems from functional requirements to manufacturing within the 3DEXPERIENCE platform," said Olivier Sappin, CEO, CATIA, Dassault Systèmes.

Dassault Systèmes' 3DEXPERIENCE platform provides comprehensive industry solution experiences, such as "Smart, Safe, and Connected" for intelligent vehicles. The Synopsys Optical Solutions Group and Dassault Systèmes have extended their current CATIA applications partnership to the 3DEXPERIENCE platform to address the challenges of vehicles equipped with a range of advanced lighting and optical systems, including adaptive front-lighting, cameras, LIDAR and other sensors. These technologies play a crucial role in ensuring that vehicles detect driving hazards and assist drivers in safely navigating roads.

3DEXPERIENCE platform users will be able to access the Synopsys LucidShape®, LightTools® and CODE V® tools from within the platform, taking advantage of advanced, accurate technologies to model vehicle lighting – including LED pixel lights and laser headlights – as well as sensor systems. In turn, Dassault Systèmes will offer a unique opportunity for OEMs and suppliers to design the entire value chain of intelligent vehicles within the 3DEXPERIENCE platform. This includes the ability to virtually position and test vehicle driving systems.

The integration of Synopsys optical design tools on the 3DEXPERIENCE platform also creates future opportunities to extend these solutions to 3DEXPERIENCE platform users across a wide range of industries, from aerospace and defense, to life science and healthcare, industrial equipment, high tech and consumer goods.

"Synopsys LucidShape products are used by industry-leading automotive OEMs as well as Tier 1 and Tier 2 suppliers to develop lighting systems that meet their evolving functionality, branding and safety requirements," said Stuart David, vice president of applications engineering in the Synopsys Optical Solutions Group. "Since 2017, LucidShape has been integrated within Dassault Systèmes' CATIA environment and the market is quickly adopting this solution because of its powerful automotive and aeronautic lighting simulations and analyses. By extending our partnership to the 3DEXPERIENCE platform to include our LucidShape, LightTools and CODE V products, we are offering Dassault Systèmes customers a complete set of optical design, simulation and analysis tools for any type of optical application imaginable."

## About the Synopsys Optical Solutions Group

The Synopsys Optical Solutions Group provides design tools that model all aspects of light propagation. With intelligent, easy-to-use solutions and an expert support team anchored by optical engineers, Synopsys helps organizations deliver superior optics to market faster. Learn more at <https://www.synopsys.com/optical-solutions.html>.

## 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 an S&P 500 company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and offers the

industry's broadest portfolio of application security testing tools and services. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing more secure, high-quality code, Synopsys has the solutions needed to deliver innovative products. Learn more at [www.synopsys.com](http://www.synopsys.com).

## About Dassault Systèmes

Dassault Systèmes, the 3DEXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative 3D virtual environments to imagine sustainable innovations. By creating virtual twin experiences of the real world with our 3DEXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production. Dassault Systèmes brings value to more than 290,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com)

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## Synopsys Editorial Contact:

Simone Souza  
Synopsys, Inc.  
650-584-6454  
[simone@synopsys.com](mailto:simone@synopsys.com)

## Dassault Systèmes Press Contacts

Corporate / France  
Arnaud MALHERBE  
[arnaud.malherbe@3ds.com](mailto:arnaud.malherbe@3ds.com)  
+33 (0)1 61 62 87 73

North America  
Suzanne MORAN  
[suzanne.moran@3ds.com](mailto:suzanne.moran@3ds.com)  
+1 (781) 810 3774

EMEAR  
Virginie BLINDENBERG  
[virginie.blindenberg@3ds.com](mailto:virginie.blindenberg@3ds.com)  
+33 (0) 1 61 62 84 21

China  
Grace MU  
[grace.mu@3ds.com](mailto:grace.mu@3ds.com)  
+86 10 6536 2288

India  
Santanu BHATTACHARYA  
[santanu.bhattacharya@3ds.com](mailto:santanu.bhattacharya@3ds.com)  
+91 9717972875

Japan  
Yukiko SATO  
[yukiko.sato@3ds.com](mailto:yukiko.sato@3ds.com)  
+81 3 4321 3841

Korea  
Jeemin JEONG  
[jeemin.jeong@3ds.com](mailto:jeemin.jeong@3ds.com)  
+82 2 3271 6653

AP South  
Pallavi MISRA  
[pallavi.misra@3ds.com](mailto:pallavi.misra@3ds.com)  
+65 90221874

