

## Sierra Space to revolutionize space exploration with Siemens' Xcelerator

- **Siemens' Xcelerator portfolio of software and services is central to Sierra Space's plans for its next-generation digital engineering platform.**
- ***Dream Chaser*® spaceplane, the world's only winged commercial spaceplane is being designed, engineered, built and tested using Siemens' Xcelerator portfolio.**
- ***LIFE*™ habitat to provide commercial habitation and science platform to be developed in a Digital Twin approach.**

Siemens Digital Industries Software today announced that Sierra Space, a leading commercial space company at the forefront of creating and building the future of space transportation and infrastructure for Low Earth orbit (LEO) commercialization, has implemented Siemens' Xcelerator portfolio of software and services as the foundation of its next-generation digital engineering program. The company is implementing Xcelerator to establish a fully digital environment from engineering to manufacturing through sustainment, which will help realize goals to develop the future of space transportation, commercial space destination and infrastructure, and create enabling technologies that will build a vibrant, growing and accessible commercial space economy.

"At Sierra Space, we are building a platform in space that will be the catalyst for the next breakthrough innovations to benefit life on Earth. Our revolutionary new space platform is being developed using a next generation digital engineering environment that we've created in collaboration with Siemens," Tom Vice, CEO, Sierra Space.

"Siemens' solutions will significantly accelerate development of our unique space platform - the first to combine all aspects of space transportation, space destinations and space applications in a holistic ecosystem."

Siemens' tools have been foundational during the development of Dream Chaser, and Sierra Space is building on this long-standing collaboration with Siemens as the company fully embraces a digital enterprise. Sierra Space will use Siemens' Xcelerator in all phases of next-generation Dream Chaser development, including structural, thermal, mechanical, electrical, and software design, vehicle manufacture, requirements verification and complete lifecycle maintenance.

The spaceplane is uniquely capable of a smooth 1.5 low-g re-entry for crew and cargo transportation with the ability to land on compatible existing commercial runways worldwide. Representing the next generation of space transportation, NASA contracted Dream Chaser to perform cargo supply and return missions to the International Space Station (ISS), where it can deliver up to 12,000 pounds of cargo in a single trip. Sierra Space is expanding on this long-standing collaboration with Siemens as the company fully embraces the transformation to become a digital enterprise.

In addition to Dream Chaser, Sierra Space is also working to design, develop, build, operate, and support a customer-centric destination in Earth orbit. In partnership with Blue Origin, they have developed the Large Integrated Flexible Environment (LIFE) habitat, a key component in the Orbital Reef project. This modular, three-story commercial habitation and science platform and will provide opportunities for businesses including manufacturing, pharmaceuticals, and other sectors, to optimize zero gravity benefits. It can be deployed in low-Earth orbit, on the lunar surface, or lunar orbit and as a transport vehicle to Mars. Sierra Space will use Siemens' Xcelerator in all phases of LIFE Habitat development and other space destination missions.

"We are honored to collaborate with Sierra Space on its mission to democratize access to space. Our work with the team at Sierra Space is well established - we look forward to standing alongside the team as they mature the Dream Chaser product line and the LIFE Habitat with the world's most comprehensive digital twin technology at the core of their technology strategy." said Tony Hemmelgarn, CEO and Chairman, Siemens Digital Industries Software. "This is another in a long list of recent announcements demonstrating that the today's pioneers are adopting Siemens' Xcelerator as their platform of choice for true innovation."

Sierra Space will be presenting at the 37th Space Symposium, Colorado Springs, Colorado, April 4 to 7 2022.

**Siemens Digital Industries Software** is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. The [Xcelerator portfolio](#) helps companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit [siemens.com/software](https://www.siemens.com/software) or follow us on [LinkedIn](#), [Twitter](#), [Facebook](#) and [Instagram](#). Siemens Digital Industries Software – Where today meets tomorrow.

### **About Sierra Space**

Sierra Space ([www.sierraspace.com](https://www.sierraspace.com)) is a leading commercial space company with more than 30 years and 500 missions of space flight heritage looking to lead the new space economy and benefit life on Earth. Sierra Space is the developer of the Large Integrated Flexible Environment (LIFE™) Habitat, a modular, three-story commercial habitation and science platform. Designed for the burgeoning LEO marketplace, the company is also rapidly advancing toward the expected early 2023 launch of the Dream Chaser® spaceplane, the world's only winged commercial space vehicle. Dream Chaser is reusable and uniquely capable of a smooth, 1.5 low-g re-entry for crew and cargo transportation with the ability to land on existing commercial airport runways. The Dream Chaser spaceplane and LIFE platform are central components of the Orbital Reef commercial space station and mixed-use business park, under development in joint partnership with Blue Origin.

Note: Exports, sales, and offerings of the products and technologies discussed herein are subject to U.S. Government approval.

### **Contact for journalists:**

Siemens Digital Industries Software PR Team  
[press.software.sisw@siemens.com](mailto:press.software.sisw@siemens.com)

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**Siemens Digital Industries (DI)** is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 76,000 employees internationally.

**Siemens AG (Berlin and Munich)** is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power.

In fiscal 2021, which ended on September 30, 2021, the Siemens Group generated revenue of €62.3 billion and net income of €6.7 billion. As of September 30, 2021, the company had around 303,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).